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Hubble Space Telescope

The GO and GTO Observing Programs

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THE GO AND GTO OBSERVING PROGRAMS

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THE GO AND GTO OBSERVING PROGRAMS

1. Introduction

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a) General Policies

A portion of the observing time with the Hubble Space Telescope (HST) has been awarded by NASA to scientists involved in the development of the HST and its instruments. These scientists are the Guaranteed Time Observers (GTOs). Observing time was also awarded to General Observers (GOs) on the basis of the proposal reviews in 1989 and 1991. The majority of the 1989 programs have been completed during "Cycle 1", while the 1991 programs will be completed during "Cycle 2", nominally a 12-month period beginning July 1992. This document presents abstracts of these GO and GTO programs, and detailed listings of the specific targets and exposures contained in them. These programs and exposures are protected by NASA policy, as detailed in the HST Call for Proposals (CP), and are not to be duplicated by new programs.

According to NASA policy, the observing programs of the GTOs and those already allocated to GOs are to be protected, in the sense that their observations may not be duplicated by any new General Observer (GO) program. Only specific scientific programs on specific targets will be protected. There will be no protection rights for entire classes of objects (e.g., quasars), nor for broad scientific programs (e.g., morphological classification of galaxies in distant clusters of galaxies). Therefore, the protection applies in a strict sense only to the specific observations and their scientific objectives which are listed in the following catalogs.

The one-year proprietary data-rights policy applies equally to both GO and GTO observations. At the conclusion of each round of GO selection, the GTOs are permitted to modify their remaining programs, subject to similar duplication constraints. Updated catalogs of the GO and GTO protected programs will be produced and circulated with future calls for proposals.

The protection of the GTO observing programs will expire, and GOs will be entitled to propose making the corresponding observations, if either (1) a GTO observation has not been carried out when the GTO period has ended, or (2) an observation has been dropped from a GTO program.

b) Impact of Policy 14 and Reassessment TAC

The spherical aberration encountered with HST has made certain originally planned programs difficult or impossible to execute before a refurbishment mission scheduled for late 1993. As a result, the GTOs were given the option to defer some of their exposures until after the problem is corrected, by NASA HQ Policy 14. Such exposures are marked in this catalog as projected for Cycle 9. These GTO exposures are NOT PROTECTED, provided a proposer can convince the Time Allocation Committee (TAC) that the program goals can be achieved by a new innovative proposal in Cycle 3 before the 1993 refurbishment mission.

The GTOs are also allowed by Policy 14 to AUGMENT their "baseline" programs by a total of up to 3 months equivalent spacecraft time (total for all GTOs) over Cycles 2-3 and subject to approval by the Cycle 2 TAC. The approved AUGMENTATION proposals are included in the catalog, and are subject to the same protections as "baseline" GTO programs.

GO programs with long-term status will be re-evaluated by the Cycle 3 TAC. While this catalog presents the information given to us by the GOs for their continuation plans, GO exposures for Cycle 3 are not guaranteed or protected, and will not be executed unless approved by a future TAC.

2. The GO and GTO Catalogs - Explanation

The GO catalog contains the TAC-approved observations submitted to ST ScI in April 1992. The GTO catalog contains the observations that were submitted to ST ScI in April 1992. These are to be protected in the sense discussed above. The exposure catalogs contain all targets whose coordinates have been specified fully. Although the observations of generic targets are not protected, they are included in the catalog for an illustration of the scientific goals of these projects.

The catalog contains two parts:

1. Abstracts of all GO and GTO programs, arranged separately by program ID number.
2. Exposure lists of the specific targets, arranged in order of J2000 right ascension for Fixed Targets, and alphabetically for all others. The detailed contents of these two parts are discussed below. The exposures are listed separately for GO and GTO programs.

2.1 Abstracts

The abstract catalogs for the GO and GTO programs provide the program ID number, title, PI and his/her Institution, the scientific category, and a concise abstract of each program. The catalogs are ordered by program ID number. There are instances where, due to technical reasons, it has been necessary to split large programs into two or more separate parts with different ID numbers; for these the summaries appear substantially the same. In these cases, the parent proposal is identified by the statement "Continuation of Program Number . . . ." after the title.

2.2 Exposures

Part 2 contains the merged exposure list of all GO programs, and a separately merged list of all GTO exposures. Each list is subdivided into four subsections: i) Fixed target observations, ordered by right ascension; ii) Solar system observations; iii) Generic target observations; iv) Parallel target observations. For each exposure the table displays the following quantities.

Column 1: Target name.

Column 2: Right ascension (in hours, minutes and seconds of time; precessed to year 2000) provided by the observers. When not specified by the observer, the year of the equinox for the coordinates was assumed to be 1950.0 before the precession was calculated.

Column 3: Declination (in degrees, minutes and seconds of arc; precessed to year 2000). When not specified by the observer, the year of the equinox for the coordinates was assumed to be 1950.0 before the precession was calculated.

Column 4: An asterisk in this column indicates that the coordinates have been calculated from the coordinates of, and the offset relative to, an offset target defined by the observers.

Column 5: Instrument and configuration with which the target is to be observed.

Column 6: Operating mode for the observation.

Column 7: Aperture or field of view used for observation.

Column 8: Spectral elements (including filters, gratings, polarizers, etc.).

Column 9: Central wavelength or range when using a grating or prism (in angstroms in the observer's frame).

Column 10: Number of exposures, as specified in the original proposal.

Column 11: Exposure time in seconds; in all cases it is the time requested for an individual exposure (Note: the exposure time does not refer to any internal segment of time such as STEP-TIME or SAMPLE-TIME that may be used in some high-time-resolution observations).

Column 12: ID number of the program (for reference to the corresponding Abstract Catalog, section 3).

Column 13: Cycle in which exposure is to be executed.

Column 14: This column flags the presence of some of the special requirements relevant to the exposure, as contained in the programs. ACQUISITION (ACQ), CALIBRATION (CAL), CONDITIONAL (CON), SELECT (SEL) and PARALLEL (PAR).

Column 15: Number of times that the observations specified in this line will be executed. Typically, these repeats are executed at different epochs pre-selected by the observers.

The exposures that are marked with either CON or SEL are not protected in a strict sense, because only a fraction of them will be selected by the observers for actual execution. On the other hand, since their selection frequently depends on other events such as the results of other protected observations (that will become public only after the one-year proprietary data rights expire) GO proposals to carry out these observations will be carefully reviewed by TAC as for the scientific justification involved.

3.0 THE ABSTRACT CATALOG

3.1 GO PROGRAMS

ABSTRACT CATALOG FOR ACCEPTED GO PROPOSALS FOR SEMESTERS "87A" and "91A"

KEY :

KP = Key Project
LP = Large Project
LT = Long Term Program
CT = Continuation Program
GO/DD = GO at Director's Discretion
GO/AM = Amateur Program

Prop. Type: GO

GALAXIES CLUSTERS -- (PECULIAR/INTERACTING) --

2067 - "HIGH RESOLUTION MORPHOLOGY OF GALAXIES WITH ANOMALOUS REDSHIFTS"

Keywords : PECULIAR GALAXY, DISTANCES OF GALAXIES, PHOTOMETRY, SPIRAL STRUCTURE, MORPHOLOGY, REDSHIFTS

Proposers: Jack W. Sulentic (PI; Alabama, University Of), H.Arp (Max Planck Institute For Astrophysics; Germany)

We propose to obtain high resolution images of galaxies involved in four of the best studied discordant redshift associations. Even short exposures in one color with the PC will give critical information on the nature of these systems. The data could be decisive in establishing whether the discordant galaxies are projected back-ground objects or are at a distance much closer than their redshifts would imply. The observations will 1) clarify the uncertain morphology of the discordant galaxy components and 2) allow a direct comparison of resolved detail (eg. HII regions, spiral arm width) for objects with different redshift, within each discordant pair or group. Large ground based telescopes have already established 1) that the discordant redshift components in galaxy systems are morphologically peculiar and 2) that direct signs of physical interaction exist between members of different redshift within the groups. Statistical studies also suggest that too many such discordant redshift groups are found. With a very small allotment of HST time, we have the opportunity to explore the nature of these objects which are critically important tests of one of the fundamental assumptions in astronomy.

Prop. Type: GO

QUASARS _AGN -- (SEYFERTS) --

2077 - "SPECTROPOLARIMETRY OF TYPE 2 SEYFERTS "

Keywords : GALAXY; SEYFERT GALAXY

Proposers: Robert Antonucci (PI; Univ. Of Calif., Santa Barbara), J.Miller (Lick Observatory)

We have discovered that the POLARIZED FLUX (scattered light) spectra of NGC1068 and other Seyfert 2 nuclei look like the FLUX spectra of Seyfert 1 nuclei. This implies that these objects would appear as Seyfert 1's if viewed from another direction, so the distinction between the two classes could be a largely an orientation effect. (The polarization position angles of Seyfert 2's are always perpendicular to the radio source axes. This scattering geometry indicates that the Seyfert 2's would appear as Seyfert 1's if viewed along the radio jet axis.) We need to find out whether or not the polarized flux spectra of Seyfert 2's are really INDISTINGUISHABLE from the flux spectra of Seyfert 1's by looking for the high excitation lines, the Fe II, and the continuum shape in the UV. We also need to measure the wavelength-dependence of continuum polarization in the UV to determine the nature of the scatterers.

Prop. Type: GO

GALAXIES _CLUSTERS -- (GAS _DUST) --

2078 - "A SEARCH FOR PRIMORDIAL GAS; IS IZW18 A YOUNG GALAXY ? "

Keywords : DWARF GALAXY, ABUNDANCE, UV SPECTROSCOPY.

Proposers: James Lequeux (PI; Meudon Observatory; France), D.Kunth (Institut D'Astrophysique, Paris; France), W.Sargent (Caltech), F.Viallefond (Paris Observatory; France)

Amongst blue compact galaxies, IZw 18 has the lowest heavy-element abundances in its HII regions and is by far the best candidate for a young galaxy experiencing its first star formation. If this is the case, its HII-region heavy elements may have been produced by the present burst of star formation and the surrounding neutral gas may be primeval, without heavy elements. We aim at checking this possibility by obtaining upper limits or measuring the abundance of neutral oxygen in this gas using the strong OI line at 1302A in absorption in front of the star cluster that ionizes the HII region.

Prop. Type: GO

QUASARS _AGN -- (QUASAR EMISSION) --

2123 - "POLARIZATION AND BROAD ABSORPTION LINES IN QUASARS "

Keywords : QUASAR

Proposers: Robert Antonucci (PI; Ucsb), A.Kinney (Stsci), J.Ulvestad (Jet Propulsion Laboratory)

OI 287 is a unique extragalactic source. It appears to take one property from each class of object. It is either some kind of missing link, or a new type of activity. Because of the high optical polarization, OI 287 has been classified with the blazars. However, every other blazar is variable in optical flux, polarization, and polarization angle., while OI 287 is constant at V=17, P=8%, and theta=145 degrees. Also, every other blazar has a radio source dominated by an intense flat-spectrum core, while OI 287 has an upper limit of 2% of the total 20cm flux in the core. The only group of quasars which ever shows even moderate (2-5%) constant optical polarization is the broad absorption line (BAL) objects, e.g. PHL 5200 and H1413+113. Among the BAL quasars, PHL 5200 and H1413+113 have exceptionally smooth deep, attached absorption lines, and also the highest polarization. We want to know whether OI 287 is a BAL quasar. It would be the first definite radio loud example. If it is a BAL quasar then the high polarization is really related to (and perhaps the key to) the BAL phenomenon, and we can use the techniques of spectropolarimetry to help unlock the BAL geometry. The UV spectral shape would also provide help determining the cause of polarization.

Prop. Type: GO

QUASARS _AGN -- (RADIO GALAXIES) --

2177 - "THE EXTENDED FEATURELESS CONTINUUM SOURCE IN CYGNUS A "

Keywords : GALAXY; RADIO GALAXY

Proposers: Robert Antonucci (PI; Stsci), A.Kinney (Stsci)

Cygnus A is by far the nearest luminous Classical Double radio galaxy.The nuclear spectrum shows the canonical mix of light from old stars, a strong featureless continuum (FC), and a very strong, high ionization emission line spectrum. Several observers have recently come to the astonishing conclusion that the featureless continuum is spatially resolved.(There is no reason to think Cygnus A is unusual in this respect: if other luminous Classical Doubles had the same size optical source, their angular sizes would be too small to resolve from the ground).Furthermore, the obvious explanations of scattered light from a point source, and of optical synchrotron radiation, are strongly disfavored by optical polarization mapping. The only idea seriously considered in the literature for such an extended, unpolarized continuum is the Warmer theory, which unequivocally predicts Fv=v1 in the UV. We want to know whether the spectrum is Fv=v-1 as for quasars, or whether it rises rapidly with frequency as for Warmers. Also, if the 1550A continuum is dominated by normal O stars as in the starburst and some Warmer models we can diagnose it unequivocally via the CIV wind absorption. We cannot reliably determine the spectrum of the featureless continuum from the ground because of contamination by the light of old stars.We would also like to take a WFC picure in the UV, to understand the morphology of the featureless continuum source without confusion with the old stars.

Prop. Type: GO

SOLAR SYSTEM -- (

2215 - "DETERMINATION OF THE MASS DENSITIES OF PLUTO AND CHARON "

Keywords : PLUTO, CHARON, IMAGING, OPTICAL, MASS, DENSITY

Proposers: George W. Null (PI; Jet Propulsion Laboratory), W.Owen, Jr. (Jet Propulsion Laboratory), D.Pascu (Us Naval Observatory), S.Synnott (Jet Propulsion Laboratory), E.Tedesco (Jet Propulsion Laboratory)

WE PROPOSE TO ACQUIRE SEVEN WF CCD OBSERVATIONS OF PLUTO, CHARON, AND A SINGLE NEARBY STAR FOR THE PURPOSE OF MEASURING THE STAR-RELATIVE PLUTO "WOBBLE" INDUCED BY CHARON'S MASS. THIS WILL DETERMINE THE CHARON/PLUTO MASS RATIO TO ABOUT 19% AND, WHEN COMBINED WITH A MASS-SUM SOLUTION FROM KEPLER'S 3RD LAW, WILL DETERMINE THE DENSITIES OF PLUTO AND CHARON TO ABOUT 4% AND 16%, RESPECTIVELY. THESE DENSITIES ARE PRESENTLY POORLY KNOWN, IMPROVED VALUES WILL PROVIDE CRUCIAL BOUNDARY CONDITIONS FOR MODELS OF PLUTO AND CHARON'S INTERIOR COMPOSITION, ATMOSPHERIC DYNAMICS, AND EVOLUTIONARY HISTORY. THE MASS SOLUTIONS REQUIRE ACCURATE ASTROMETRIC MEASUREMENTS OF THE SEPARATE IMAGES OF PLUTO AND CHARON, WHICH CAN ONLY BE OBTAINED WITH HST'S ANGULAR RESOLUTION AND FREEDOM FROM ATMOSPHERIC DISTORTION. IF AN ACCURATE HST/WF SCALE-VALUE CAN BE OBTAINED INDEPENDENTLY OF THE PLUTO SYSTEM MEASUREMENTS, IT SHOULD BE POSSIBLE TO IMPROVE THE CHARON DENSITY SOLUTION ACCURACY BY ABOUT A FACTOR OF TWO.

Prop. Type: GO

GALAXIES_CLUSTERS -- (

2227-KP - "DETERMINATION OF THE EXTRAGALACTIC DISTANCE SCALE: I. M81 "

Keywords : DISTANCE SCALE, HUBBLE CONSTANT, SPIRAL GALAXY, STELLAR POPULATION, COSMOLOGY, CEPHEID, SUPERGIANT, STAR CLUSTER

Proposers: Jeremy Mould (PI; Caltech), S.Faber (California, University Of, Santa Cruz), H.Ford (Stsci), W.Freedman (Mt Wilson _Las Campanas Observatories), J.Graham (Department Of Terrestrial Magnetism, Ciw), J.Gunn (Princeton University), J.Hoessel (Wisconsin, University Of), J.Huchra (Cfa), G.Illingworth (California, University Of, Santa Cruz), R.Kennicutt Jr. (Arizona, University Of), B.Madore (Caltech), P.Stetson (Dominion Astrophysical Observatory; Canada)

Many fundamental problems in cosmology and astrophysics remain undetermined because the value of the expansion rate is uncertain to a factor of two. HST will provide the opportunity to break this impasse. We propose a program which in combination with other GTO and GO work should lead to a measurement of Ho to 10 % accuracy. Our main goal is the observation of

Cepheids in two dozen fields in nearby galaxies, for the primary purpose of calibrating the infrared Tully-Fisher relation. The accumulated data will also allow investigation of other secondary distance indicators, including the brightest resolved stars, supernovae, and calibration of the Faber Jackson relation. Measurement of Cepheids in the Virgo and Fornax clusters will also be attempted. A necessary associated goal of our proposal is strengthening the calibration of the Cepheid PL relation itself, largely via resolved study of star clusters in the LMC, M31, and M33.

Prop. Type: GO

SOLAR SYSTEM -- (COMET) --
2231 - "HETEROGENEITY OF DUST AND GAS EMISSIONS ON A COMETARY NUCLEUS "
Keywords : COMET
Proposers: Philippe L. Lamy (PI; Laboratoire D' Astronomie Spatiale, Marseille; France), E.Grun (Mpi For Atomic Physics; Frg), U.Keller (Mpi For Aeronomy; Frg), Z.Sekanina (Jet Propulsion Laboratory), R.West (European Southern Observatory; Frg)

We propose to observe with the planetary camera (PC) of HST the short-period comet P/Faye at its closest approach to the Earth (0.6 AU). The high spatial resolution (40 km) over a large field will allow to image the dust and gas jets "down to the nucleus" and to follow their temporal evolution over a period of approximately 10 days. Combined with ground-based observations as a model of the dust/gas expansion, it will be possible to map the discrete sources of emission on the nucleus and study its rotational properties. HST will extend the present insight we have of comet Halley to another comet, an important step in the current exploration and understanding of primitive bodies in the solar system.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (STELLAR ATMOSPHERES) --
2233- CT - "THE PHYSICS OF MASSIVE O-STARS IN DIFFERENT PARENT GALAXIES. THE MAGELLANIC CLOUDS - PART 1"
Continuation of Program Number 2233
Keywords : EXTRAGALACTIC STAR, STELLAR ATMOSPHERES, ABUNDANCE, UV, MASS-LOSS, EVOLUTION, NUCELOSYNTHESIS, SPECTROSCOPY, STELLAR PARAMETERS
Proposers: Rolf-Peter Kudritzki (PI; Munich University; Frg), D.Baade (European Southern Observatory; Frg), B.Bohannan (Noao), K.Butler (Munich University; Frg), P.Conti (Colorado, University Of), C.Garmany (Colorado, University Of), H.Groth (Munich University; Frg), S.Heap (Nasa, Goddard), D.Hummer (Munich University), D.Husfeld (Munich University; Frg), A.Pauldrach (Munich University; Frg), J.Puls (Munich University; Frg), S.Voels (Munich University; Frg), N.Walborn (Stsci)

A detailed quantitative spectroscopic analysis of massive O-stars in the

Magellanic Clouds is proposed. The objective is to determine precisely the intrinsic stellar parameters of luminosity, effective temperature, gravity, mass, and chemical composition; and the stellar wind parameters of mass-loss rate and velocity structure in these metal poor irregular galaxies. These parameters will be obtained from detailed NLTE model atmosphere analyses of HST UV-spectra (obtained using the FOS) and ground-based optical high resolution, high S/N spectra already obtained using the ESO 3.6 m telescope. These results in conjunction with our present parallel work on galactic O-stars will give important observational constraints on the evolution of massive stars and the strength of stellar winds as a function of metallicity. This will be a crucial test of stellar and galactic evolutionary scenarios which are all dependent on the rate of mass-loss during the different stellar evolutionary stages.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (

2237 - "OBSERVATIONS OF THE ECLIPSING MILLISECOND PULSAR "

Keywords : PULSARS, PULSARS: BINARY, PULSARS: MILLISECOND BINARIES: LOW MASS X-RAY, NEUTRON STARS.

Proposers: Jay Bookbinder (PI; Cfa), C.Bailyn (Cfa), A.Fruchter (Department Of Terrestrial Magnetism, Carnegie Inst.), P.Judge (Colorado, University Of), J.Taylor (Princeton University)

FRUCHTER et al. (1988a) HAVE RECENTLY DISCOVERED a 1.6 MSEC PULSAR (PSR 1957+20) IN A 9.2 HOUR ECLIPSING BINARY SYSTEM. THE UNUSUAL BEHAVIOR OF THE DISPERSION MEASURE AS A FUNCTION OF ORBITAL PHASE, AND THE DISAPPEARANCE OF THE PULSAR SIGNAL FOR 50 MINUTES DURING EACH ORBIT, IMPLIES THAT THE ECLIPSES ARE DUE TO A PULSAR-INDUCED WIND FLOWING OFF OF THE COMPANION. THE OPTICAL COUNTERPART IS A 21ST MAGNITUDE OBJECT WHICH VARIES IN INTENSITY OVER THE BINARY PERIOD; ACCURATE GROUND-BASED OBSERVATIONS ARE PREVENTED BY THE PROXIMITY (0.7") OF A 20TH MAGNITUDE K DWARF. WE PROPOSE TO OBSERVE THE OPTICAL COUNTERPART IN A TWO-PART STUDY. FIRST, THE WF/PC WILL PROVIDE ACCURATE MULTICOLOR PHOTOMETRY, ENABLING US TO DETERMINE UNCONTAMINATED MAGNITUDES AND COLORS BOTH AT MAXIMUM (ANTI-ECLIPSE) AS WELL AS AT MINIMUM (ECLIPSE). SECOND, WE PROPOSE TO OBSERVE THE EXPECTED UV LINE EMISSION WITH FOS, ALLOWING FOR AN INTIAL DETERMINATION OF THE TEMPERATURE AND DENSITY STRUCTURE AND ABUNDANCES OF THE WIND THAT IS BEING ABLATED FROM THE COMPANION. STUDY OF THIS UNIQUE SYSTEM HOLDS ENORMOUS POTENTIAL FOR THE UNDERSTANDING OF THE RADIATION FIELD OF A MILLISECOND PULSAR AND THE EVOLUTION OF LMXRBs AND MSPs IN GENERAL. WE EXPECT THESE OBSERVATIONS TO PLACE VERY SIGNIFICANT CONTRAINTS ON MODELS OF THIS UNIQUE OBJECT.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (

2238 - "LYMAN-ALPHA OBSERVATIONS OF HIGH RADIAL VELOCITY STARS "

Keywords : STARS: CHROMOSPHERES; STARS: LYMAN-ALPHA EMISSION, STARS: FLUORESCENCE, ISM: DEUTERIUM ABUNDANCE.

Proposers: Jay Bookbinder (PI; Cfa), A.Brown (Colorado, University Of), P.Judge (Colorado, University Of), W.Landsman (St Systems Corporation), J.Linsky (Colorado, University Of), J.Neff (Nasa, Goddard)

H I LYMAN -ALPHA (LY-A) IS ONE OF THE MOST IMPORTANT LINES EMITTED BY PLASMA IN THE TEMPERATURE RANGE OF 7000 TO 10 TO THE FIFTH POWER K IN LATE-TYPE STARS. IT IS A MAJOR COMPONENT OF THE TOTAL RADIATIVE LOSS RATE, AND IT PLAYS A CRUCIAL ROLE IN DETERMINING THE ATMOSPHERIC STRUCTURE AND IN FLUORESCING OTHER UV LINES. YET IT IS ALSO THE LEAST STUDIED MAJOR LINE IN THE FAR UV, BECAUSE MOST OF THE LINE FLUX IS ABSORBED BY THE ISM ALONG THE LINE OF SIGHT AND BECAUSE IT IS STRONGLY CONTAMINATED BY THE GEOCORONAL BACKGROUND. A KNOWLEDGE OF THE Ly-A PROFILE IS ALSO IMPORTANT FOR STUDIES OF DEUTERIUM IN THE INTERSTELLAR MEDIUM. BY OBSERVING HIGH RADIAL VELOCITY STARS WE WILL OBTAIN FOR THE FIRST TIME HIGH RESOLUTION SPECTRA OF THE CORE OF A STELLAR H I LYMAN-A EMISSION LINE PROFILE.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (

2243 - "THE SHOCK WAVE STRUCTURE OF HERBIG-HARO OBJECTS "

Keywords : HERBIG-HARO OBJECTS

Proposers: Richard D. Schwartz (PI; Missouri, University Of, St Louis), K.Bohm (Washington, University Of), M.Cohen (California, University Of, Berkeley), M.Dopita (Mt Stromlo _Siding Spring Observatories; Australia), L.Hartmann (Cfa), B.Jones (California, University Of, Santa Cruz), R.Mundt (Mpi For Astronomy; Frg), J.Raymond (Cfa)

Herbig-Haro (HH) nebulae are a class of objects produced by shock waves in supersonic jets (often bipolar) from young stellar objects. The shock wave structure can reveal much useful information concerning the physical conditions in the jets and the ambient medium. The detailed geometrical struc- ture of the shocks is still unclear, especially for the semi-stellar knots found in many HHs. Some studies suggest that they may be manifestations of radiative bow shocks, but see- ing limitations of ground-based imaging have precluded a determination of the shock structure of the knots. We pro- pose to obtain images of HH 2 with the PC over a wide range of excitation in order to allow a detailed shock wave analy- sis which incorporates information on the geometrical struc- ture of the objects. The goal is to obtain information on the flow parameters in the shock wave and to incorporate theoretical shock wave modeling to interpret the flow. Such information is crucial toward developing a more complete understanding of processes which occur in the early history of star formation.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (DUST) --

2245- CT - "ULTRAVIOLET INTERSTELLAR POLARIZATION "

Continuation of Program Number 2245

Keywords : INTERSTELLAR DUST, POLARIZATION, ULTRAVIOLET EXTINCTION

Proposers: W. B. Somerville (PI; London, University College; Uk), D.Carnochan (London, University College; Uk), P.Martin (Toronto, University Of; Canada), D.Mcnally (London, University College; Uk), D.Morgan (Royal Observatory, Edinburgh; Uk), K.Nandy (Royal Observatory, Edinburgh; Uk), D.Whittet (Lancashire Polytechnic; Uk), R.Wilson (London, University College; Uk)

We propose to study interstellar polarization in the spectra of reddened early-type stars, throughout the ultraviolet range, an observation that has not previously been possible. This is an extension of work done in the optical and infrared and addresses three principal observational questions: (1) does the same empirical polarization curve (Serkowski's Law) extend into the uv?; (2) does the 2175 A absorption feature show polarization?; (3) in the far ultraviolet, does the polarization reflect the strong rise seen in the extinction curve? The results will provide vital new information about the composition and the size and shape distributions of the grains, and the nature of the carrier of the 2175 A feature. Targets are selected to have a variety of ultraviolet extinction and optical polarization properties, to enable us to examine whether the ultraviolet polarization is related to any of these.

Prop. Type: GO

STAR -- (

2248 - "ULTRAVIOLET SPECTROSCOPY OF LOW MASS X-RAY BINARIES "

Keywords : X-RAY STAR, NEUTRON STAR; BLACK HOLE; SPECTROSCOPY; UV

Proposers: Paul Barr (PI; Esa, Estec; Netherlands), M.Gottwald (Mpe Garching; Germany), I.Howarth (London, University College; Uk), M.Klis (Amsterdam University; Netherlands), A.Pollock (Esa, Estec; Netherlands), N.White (Esa, Estec; Netherlands)

We propose to use the HST FOS to study the UV spectra of threelow-mass X-ray binaries (LMXRB). Our goals are to investigate the physical structure of their accretion disks and investigate the effects of X-ray heating in these systems. Studies of their UV spectra will lead to; -constraints on the accretion disk thickness and the effects of X-ray heating from comparison of the UV and X-ray luminosities, and from the studies of the UV spectral shape; -a probe of the sites of UV line emission. Possible locations for the emission line region are the accretion disk itself and the irradiated photosphere of the companion star. Only space-borne instrumentation can study the far UV spectra of these objects. Most LMXRB are too faint to have been observed with IUE. Only five have been studied with IUE and only Cen X-4 (in outburst) and Sco X-1 have yielded data of even moderate signal-to-noise ratio. It is highly desirable to extend this sample to include LMXRB of various types - bursters, dippers, accretion disk corona and 'normal' bulge sources - to search for systematic differences between them. The HST is uniquely suitable for obtaining moderate resolution UV spectra of these objects.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (
2251- CT - "THE PROPERTIES OF SINGLE INTERSTELLAR CLOUDS: MODIFIED CYCLE 1 OBSERVATIONS"
Continuation of Program Number 2251
Keywords : INTERSTELLAR CLOUDS
Proposers: L. M. Hobbs (PI; Chicago, University Of), D.Morton (Herzberg Institute Of Astrophysics; Canada), D.Welty (Chicago, University Of), D.York (Chicago, University Of)

WE PROPOSE TO USE THE ECHELLE AND 160M GRATINGS OF THE HIGH RESOLUTION SPECTROGRAPH OVER A TWO-YEAR PERIOD TO OBSERVE THE PROFILES OF INTERSTELLAR ABSORPTION LINES. THE COLUMN DENSITES OF 18 NEUTRAL OR IONIZED FORMS OF THE ELEMENTS C,N,O,Mg,Si,P,S,Fe, AND Zn WILL BE MEASURED IN THE APPROXIMATELY 100 INDIVIDUAL INTERSTELLAR CLOUDS ALONG THE LIGHT PATHS TO 18 BRIGHT, BROAD-LINED STARS OF EARLY SPECTRAL TYPE WITHIN 1 KPC OF THE SUN. THE PRIMARY PURPOSE OF THE OBSERVATIONS IS TO DETERMINE MORE ACCURATELY THAN WAS HITHERTO POSSIBLE THE FUNDAMENTAL PHYSICAL PROPERTIES OF THE RESOLVED CLOUDS, INCLUDING LINEAR SIZE, TEMPERATURE, TOTAL DENSITY, FRACTIONAL IONIZATION AND THE RELATIVE ABUNDANCES OF THE 9 SELECTED ELEMENTS. THE REST OF THIS OBSERVING PROGRAM IS CONTAINED IN APPROVED PROPOSAL ID = 3993; THE PROGRAM ENUMERATED HERE CONSISTS OF THAT PART OF OUR ORIGINAL PROGRAM, ID = 2251, WHICH REQUIRED MODIFICATION IN ORDER TO BE CARRIED OUT USING ONLY SIDE 2 OF THE GHRS. THIS PROGRAM THEREFORE CONSISTS OF ECH-B AND G160M OBSERVATIONS OF EACH OF 8 STARS AT 14 OR MORE WAVELENGTHS. PROGRAMS 2251 AND 3993 SHOULD BE CONSULTED FOR ADDITIONAL DETAILS.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --
2257- CT - "PHYSICAL CONDITIONS IN THE GASEOUS GALACTIC HALO "
Continuation of Program Number 2257
Keywords : GAS, UV, INTERSTELLAR, HALO
Proposers: Blair D. Savage (PI; Wisconsin, Universiy Of), J.Cardelli (University Of Wisconsin-Madison), R.Edgar (University Of Wisconsin-Madison)

We will obtain high and intermediate resolution HRS observations of interstellar absorption produced by N V, C IV, Si IV, Al III and Mn II toward 2 halo stars. The target stars have been carefully selected from the existing IUE data base of high resolution spectra of distant B stars in the galactic halo. The data will be used to study the line broadening of N V, C IV and Si IV to determine if there is evidence that these lines are formed in collisionally ionized gas at temperatures in the range log T = 4.8 to 5.3 or formed in photoionized gas near log T = 4. In addition, we will study the general prevalence of interstellar N V absorption, the distribution of the various species away from the galactic plane and the velocity correspondance between the lines of high, intermediate and low ionization. Our overall goal is to obtain new information about the physical conditions of the gas in the galactic halo. With this information we hope to better understandd the origin of galactic halo gas. The HRS is required for these observations because of its superior resolution and signal to noise characteristics over the spectrographs of the IUE satellite.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (EARLY EVOLUTION) --

2265-LP - "THE FORMATION AND EVOLUTION OF SOLAR NEBULAE SURROUNDING PRE-MAIN SEQUENCE STARS: CYCLE 1 OBSERVATIONS"

Keywords : CIRCUMSTELLAR DISKS; MASS LOSS;PMS STARS, T TAU STARS

Proposers: Stephen Strom (PI; Massachusetts, University Of), S.Beckwith (Cornell University), R.Brown (Stsci), B.Campbell (New Mexico, University Of), L.Carrasco (Mexico, Autonomous University Of; Mexico), S.Edwards (Smith College), G.Grasdalen (Wyoming, University Of), L.Hartmann (Cfa), D.Padgett (Massachusetts, University Of), S.Persson (Mt Wilson Las Campanas Observatories), F.Shu (California, University Of, Berkeley), M.Simon (Suny, Stony Brook), T.Simon (Hawaii, University Of), R.Stachnik (Nasa, Washington), J.Stauffer (Nasa, Ames), F.Vrba (Us Naval Observatory)

This proposal requests time to bring the power of HST to bear on the problems of solar nebula formation and evolution. During Cycle 1, we plan to use the Planetary Camera to image the circumstellar environment of 3 nearby pre-main sequence stars in order to search for evidence of disks via light scattered earthward by dust embedded in circumstellar disks and investigate the morphology of energetic winds driven by these stars. Our longer term goals (Cycle 2 and beyond) are to image a much larger sample of pre-main sequence stars in order to: determine the frequency with which disks form around single and multiple stars; characterize the morphology of circumstellar disks for a sample of pre-main sequence stars spanning the time soon after stellar birth, to the epoch when disks become optically thin, perhaps following planet-building episodes; understand the degree of interaction between winds and circumstellar disks, estimate more accurate mass loss rates for PMS stars, and to assess thereby the effect of PMS star winds on the evolution of disks and the planet-forming environment.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (LATE EVOLUTION) --

2266 - "POST ASYMPTOTIC GIANT BRANCH EVOLUTION IN THE MAGELLANIC CLOUDS. "

Keywords : STARS:HB STAR, INTERSTELLAR MEDIUM:PLANETARY NEBULA, GALAXY:MAGELLANIC CLOUDS, ASTROPHYSICS:EVOLUTION, STELLAR POPULATION, ABUNDANCE

Proposers: Michael A. Dopita (PI; Mt. Stromlo And Siding Spring Observatories; Australia), R.Bohlin (Space Telescope Science Institute), H.Ford (Space Telescope Science Institute), P.Harrington (University Of Maryland), S.Maran (Goddard Space Flight Center), S.Meatheringham (Mount Stromlo And Siding Spring Observatories; Australia), T.Stecher (Goddard Space Flight Center), L.Webster(Deceased) (University Of New South Wales; Australia), P.Wood (Mount Stromlo And Siding Spring Observatories; Australia)

Planetary Nebulae (PN) represent a critical stage of stellar evolution which is still poorly understood. We still lack reliable observational estimates of stellar luminosity, mass, effective temperature and age, which could be used to constrain evolutionary models, and determine key data such as mass-loss rates, He shell flash phases and the role of dredge-up. This proposal represents the first stage in a systematic and definitive study using HST observations, which will require approximately a further 150 hours for completion, of a large sample of nebulae at known distance in the Magellanic Clouds. The following observations allow us to derive all parameters needed for proper confrontation between theory and observation: * Direct PC imaging to detect central stars and to derive the physical dimensions, masses, ages, and spatial structure of the nebulae. * FOS spectrophotometry of the central stars and nebulae in the range 1150 - 2332 Angstroms. This data will be used in combination with stellar models to derive the effective temperature, bolometric luminosity, and mass of each of the exciting stars. The combination of these parameters with the dynamical age of the PN will define the evolutionary tracks in the Luminosity/T-eff diagram. We will use two independent ionisation codes to interpret the FOS spectra, optical and IR spectra, and the ionisation structure derived from the PC images. This analysis will yield chemical abundances of many elements, including the astrophysically important species He, C, N, O, and Si.

Prop. Type: GO

GALAXIES _CLUSTERS -- (

2269 - "GALAXY POPULATIONS IN INTERMEDIATE REDSHIFT CLUSTERS "

Keywords : DISTANT GALAXY CLUSTERS, GALAXY EVOLUTION, GALAXY MORPHOLOGY

Proposers: Warrick J Couch (PI; University Of New South Wales; Australia), R.Ellis (Durham University; Uk), R.Sharples (Durham University; Uk)

We request WF/PC time to image at high resolution the members of the rich southern cluster AC 114 at z=0.31 which we have studied extensively at the AAT using both fiber-optic spectroscopy and multi-colour photometry. Our comprehensive ground-based data has allowed us to measure precise line indices and colours for individual galaxies in this cluster and, along with data on other distant clusters, to construct a unifying picture for the various phenomena associated with the Butcher-Oemler effect whereby different galaxies are seen at different stages of star-formation activity within a simple cycle. The WF/PC data will allow us to morphologically classify galaxies at various stages in this cycle and resolve many of the questions left unanswered by the ground based data. The AAT catalogue is the largest, most complete spectroscopic and photometric data set where, by virtue of the moderate redshift, detailed information is available for all galaxies to a fixed magnitude limit. As such, our sample forms the ideal first target for HST studies of the evolution of galaxies in dense environments.

Prop. Type: GO

QUASARS _AGN -- (QUASAR EMISSION) --

2288 - "SPECTROSCOPY OF THE UV BRIGHTEST KNOWN HIGH RED SHIFT QUASAR "

Keywords : QUASAR, SPECTROSCOPY, CONTINUUM, LYMAN FOREST, INTERGALACTIC MATTER

Proposers: Dieter Reimers (PI; Hamburg Observatory; Frg), J.Clavel (Esa, Iue Observatory; Spain), D.Engels (Hamburg Observatory; Frg), D.Groote (Hamburg Observatory; Frg), H.Hagen (Hamburg Observatory; Frg), W.Wamsteker (Esa, Iue Observatory; Spain)

The luminous, high redshift quasar (v=16.1, z=2.72) HS 1700 + 6416, discovered recently by us, has been found with IUE to be in the UV the brightest known QSO. Its flux increases from 1500 to 1200A with shorter wavelength. This up to now unique object offers the possibility to conduct spectroscopic observations in the UV at a resolution of 103 with the aim i. to study the energy distribution of a luminous QSO down to rest wavelengths of 320 A ii. to search for QSO emission lines below 1000A to 320A iii. to study the distribution of the Lyman forest and of IGM in one line of sight between z=0 and z=2.72

Prop. Type: GO

INTERSTELLAR MEDIUM -- (SN _SNR) --

2290 - "CHEMICAL ABUNDANCES IN LOCAL GROUP SUPERNOVA REMNANTS "

Keywords : ASTROPHYSICS:EVOLUTION,STELLAR POPULATION,ABUNDANCE,

Proposers: Michael A. Dopita (PI; Mt. Stromlo And Siding Spring Observatories; Australia), P.Benvenuti (Space Telescope Coordinating Facility;), R.Chevalier (University Of Virginia), S.D'Odorico (European Southern Observatory;), J.Danziger (European Southern Observatory;), D.Mathewson (Mt. Stromlo And Siding Spring Observatories; Australia), F.Matteucci (European Southern Observatory;), S.Russell (Mt. Stromlo And Siding Spring Observatories; Australia), I.Tuohy (Mt. Stromlo And Siding Spring Observatories; Australia)

There is an increasing body of data, based on abundance analyses of the interstellar medium, which suggests that Local Group disk galaxies have had a star-formation history which is quite different from the region of the Galaxy about the sun. For example, the solar region appears to have undergone a burst of high-mass star formation at the time of disk collapse, unlike Local Group systems of low metallicity. The evolved, radiative supernova remnants (SNR) can be used as a powerful probe of the chemical abundances in the Interstellar Medium (ISM). This proposal is to obtain FOS UV spectrophotometry of the brightest radiative SNR discovered by us in Local Group Galaxies. This data will complement our ground-based data in the optical to give abundances of a variety of elements with different nucleogenic origins. The data to be obtained in the LMC will complement the abundance analysis of the spectra of many supergiant stars, already performed, to give us a complete picture of the "cosmic" abundances of most

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Prop. Type: GO

GALAXIES _CLUSTERS -- (NUCLEI/CORES) --

2295 - "BLACK HOLES IN ELLIPTICAL GALAXIES "

Keywords :

Proposers: Giuseppina Fabbiano (PI; Cfa), G.Trinchieri (Cfa)

We propose to observe at high resolution the central regions of eight early-type galaxies, for which X-ray and radio continuum data are available. Four of these have radio core power comparable with that of M87, and four are radio quiet. We seek to measure the UV emission of a nonthermal nuclear source, and/or to find evidence of a central stellar spike, which could indicate the presence of a central mass concentration. These measurements will enable us to investigate the origin of nuclear activity in ellipticals with particular reference on the mass of the central black hole as a crucial element.

Prop. Type: GO

GALAXIES _CLUSTERS -- (NEARBY GALAXIES) --

2298 - "STELLAR CONTENT OF GALAXIES AND GLOBULAR CLUSTERS "

Keywords : GALAXIES: STELLAR POPULATIONS; GLOBULAR CLUSTERS: INTEGRATED SPECTRA

Proposers: David Burstein (PI; Arizona State University), J.Frogel (Ohio State University), R.O'Connell (Virginia, University Of), M.Rieke (Arizona, University Of), J.Rose (North Carolina, University Of), C.Wu (Stsci)

Our goal is to establish a spectroscopic method which can reliably distinguish the effects of age from those of chemical composition in the integrated light of stellar populations older than one billion years. This program forms an essential link between two of HST's most powerful capabilities: detailed color-magnitude diagram (CMD) studies of nearby galaxies and globular clusters, and integrated light studies of high redshift galaxies in early phases of evolution. As a first step, we propose to obtain high precision FOS ultraviolet spectroscopy of bright, nearby extragalactic systems, to combine this with ground-based and IUE data in a comprehensive spectral synthesis analysis, and to compare the results with independent CMD studies by HST. Our results will help us to develop an effective method for interpreting the lower S/N data which will be available for distant objects at large lookback times.

Prop. Type: GO

QUASARS _AGN -- (SEYFERTS) --
2306- LT - "PHYSICAL CONDITIONS IN THE NARROW-LINED REGION "
Keywords : ACTIVE GALACTIC NUCLEUS: AGN, SEYFERT GALAXY
Proposers: Jack A. Baldwin (PI; Cerro Tololo Inter-American Obs. National Optical Astron.Obs), G.Ferland (Ohio State University), H.Netzer (Tel Aviv University; Israel), D.Wills (Texas, University Of), B.Wills (Texas, University Of)

We will make a comprehensive study of the emission-line gas in the narrow-lined region (NLR) of active galactic nuclei (AGN). We will concentrate on Seyfert 2 galaxies in order to avoid possible confusion with the spectrum of the broad line region (BLR). We wish to use a wide variety of the HST instruments, to insure that a comprehensive and high-quality data set is built up for a representative sample of nearby Seyfert 2 galaxies. These data should immediately allow us to address several important, inter-related questions about AGN: a. What is the velocity field in the innermost part of the NLR? b. Where does the reddening occur in AGN? c. What is the chemical composition of the gas associated with the AGN? d. How do the Seyfert 1 and Seyfert 2 continuum sources differ? e. Do most Seyfert 2 galaxies contain "hidden" BLRs? We will exploit both the high UV response and high spatial resolution of HST, using PC images to map out the NLR structure in a few strong lines, FOS and HRS to obtain detailed nuclear spectra over a wide wavelength range, and most importantly, FOC in its long slit mode to study spatial variations in the UV and optical spectra.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (STELLAR ATMOSPHERES) --
2321 - "SEARCH FOR ENERGETIC PROTONS IN THE IMPULSIVE PHASE OF STELLAR FLARES - AU MIC"
Keywords : STELLAR FLARES, PROTONS, CHARGE-EXCHANGE, ENERGETICS
Proposers: Bruce E. Woodgate (PI; Nasa, Goddard), K.Carpenter (Nasa, Goddard), M.Kundu (Colorado, University Of), J.Linsky (Colorado, University Of), S.Maran (Nasa, Goddard)

We propose to search for energetic protons in stellar flares, by monitoring the stellar H Lyman alpha profile with high time resolution. Protons accelerated in a flare may dominate the total energy released, but have not previously been observed below 1 Mev. In the impulsive phase, predictions show that some of the 10-300 kev protons accelerated down into the stellar chromosphere will charge-exchange with neutral hydrogen and emit Lyman alpha photons in the red wing, up to 20a from line center. Impulsive bursts may last from 0.5- 30 sec, spread over several minutes. Simultaneous observations of transition region, chromospheric, and coronal lines will identify the impulsive phase, and provide measurements of the emission measure, temperature distribution, and density. Observations of AU Mic totalling 6 hours with GHRS in medium resolution mode (R= 20000), to cover 1198-1234 A with 0.4 sec time resolution are required.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (X-RAY BINARIES) --

2334 - "ULTRAVIOLET SPECTROSCOPY OF THE BLACK HOLE A0620-00 "

Keywords : STAR ; LMXRB ; NOVA ; BLACK HOLE ; NEUTRON STAR ; ACCRETION DISK

Proposers: Jeffrey Mcclintock (PI; Cfa), K.Horne (Stsci), R.Remillard (Mit)

There is compelling dynamical evidence that the X-ray nova A0620-00 contains a black hole. For more than ten years now, the nova has been in hibernation. It's quiescent optical spectrum is composed of two distinct components: a K5V stellar part and an accretion disk component. We propose to observe A0620-00 for a full binary orbit (7.8 hours) with the FOS. Two factors make the proposed UV observations a unique and exciting prospect: 1) the simplicity of the black hole event horizon eliminates the complex disk-star boundary layer in other accreting systems, and 2) the K5V secondary is completely invisible at UV wavelengths. Consequently, the UV spectrum of A0620-00 is expected to be the pure spectrum of an accreting black hole. We also propose to observe Cen X-4 (a quescent X-ray nova that contains a neutron star) in order to compare black-hole accretion and neutron-star accretion. This proposal is part of an 8 year, ongoing study of A0620-00.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (MASSIVE STARS) --

2338 - "SPECTROSCOPY OF THE SPECKLE-RESOLVED ETA CARINAE POINT SOURCES "

Keywords : EARLY TYPE STARS, ATMOSPHERES, UV SPECTROSCOPY, STELLAR EVOLUTION, NUCLEOSYNTHESIS, ABUNDANCES, LBVS, LUMINOUS STARS, MASSIVE ST

Proposers: Kris Davidson (PI; Minnesota, University Of), R.Humphreys (Minnesota, University Of), R.Kudritzki (Munich University; Frg), M.Rosa (European Southern Observatory; Frg), K.Simon (Munich University; Frg), N.Walborn (Stsci), G.Weigelt (Max-Planck-Institut F. Radioastronomie; Frg), B.Wolf (Heidelberg State Observatory; Frg)

Eta carinae is thought to be the most extreme known Luminous Blue Variable (LBV), marking the unstable upper boundary of the HR Diagram. It is crucial for theories of the LBV outburst phenomenon, only recently beginning to be developed. Recently the "central object" in Eta Carinae has been found by speckle techniques to be multiple. Combined with the presence of circumstellar emission and scattering, this multiplicity means that high spatial resolution is needed in order to obtain spectral data specifically on the primary component, the very massive LBV star. The fainter components are also important -- if they are stars, then this is a unique chance to study a truly coeval system of very massive stars of known age (known because the LBV is present), and if they are nebular objects, then we need spectra in order to understand why they are so unexpectedly bright. For these reasons we propose to us the FOS to obtain spectra of the primary star and of its companion objects. The stellar spectra will be used for a quantitative analysis by NLTE methods, aiming for estimates of Teff, g, chemical composition, mass, mass-loss rate, wind velocity field, and luminosity.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (ERUPTIVE BINARIES) --
2342 - "THE SYMBIOTIC PHENOMENA "
Keywords : INTERACTING BINARY, SYMBIOTIC STAR, ACCRETION
Proposers: A. G. Michalitsianos (PI; Nasa, Goddard), . (Stsci), R.Fahey (Nasa, Goddard Space Flight Center), M.Kafatos (George Mason University), H.Nussbaumer (Zurich Astronomy Institute; Switzerland)

Symbiotic stars are interacting binaries. The relevant interaction processes include mass expulsion from a common envelope between the two stars, collimated flows, accretion disk formation around the compact hot star, evolution of outbursts, as well as mass outflow leading to jet-like features with particularly intriguing characteristics. However, the nature of these systems and the physical processes that explain their behavior remain unsettled. Spectroscopy with HRS will decisively advance our knowledge of the kinematical and ionization structure of the central HII region that surrounds the binary. It is hoped that this will finally answer the controversial question concerning the nature of the hot object in symbiotics. High spatial resolution radio

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Prop. Type: GO

INTERSTELLAR MEDIUM -- (
2344 - "HIGH VELOCITY LYMAN ALPHA ABSORPTION IN THE VELA REMNANT "
Keywords : SUPERNOVA REMNANT, SHOCKWAVES
Proposers: Edward B. Jenkins (PI; Princeton University), G.Wallerstein (Washington, University Of)

To detect the primary supernova shock in the intercloud medium of the Vela Remnant we propose to look for very high velocity (500<v<1500 km s{-1}) components of Lyman alpha in absorption. Models by Cowie et al. indicate that such line may be detectable, and we have seen possible components of

HI and O VI near 400 km s(-1) with Copernicus satellite.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (SN SNR) --
2347 - "CLOSE SPACIAL SAMPLING OF SHOCKED CLOUDS IN THE VELA REMNANT "
Keywords : SUPERNOVA REMNANT, SHOCKWAVES, GAS
Proposers: George Wallerstein (PI; Washington, University Of), E.Jenkins (Princeton University)

To study the spatial correlation of ionization and excitation in the Vela Remnant clouds we propose to observe both components of 2 visual binaries within or behind the remnant. This will provide data along lines of sight by 1700 to 2500 A.U. The degree of correlation of column densities and ionization states over these short distances should help to distinguish among various theories of the origin of the high velocity and high ionization clouds in supernova remnants.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (
2348 - "ABUNDANCE ENHANCEMENTS IN HALO GAS "
Keywords : HALO, SUPERNOVA REMNANT, ABUNDANCES, GAS
Proposers: Edward B. Jenkins (PI; Princeton University), G.Wallerstein (Washington, University Of)

We propose to use HRS in its moderate resolution mode to examine interstellar absorption lines in the spectra of stars situated ~1 kpc or more from the galactic plane. We will compare Fe II, S II, Si II and Al II to see if their relative abundances differ from ordinary interstellar gas, as indicated by a conservative interpretation of some IUE data. We will equate possible abundance enhancements in halo gas, if they are indeed real, with element replenishments found in shocked gases in the plane (associated with the Vela SNR) to see if the pattern from element to element differs from that resulting from the destruction of grains. This differentiation will indicate whether the principal enhancements are from grain evaporation as the gas is ejected from the plane, or whether element injection from Type I supernovae plays an important role.

Prop. Type: GO

QUASARS _AGN -- (GRAVITATIONAL LENSES) --

2350 - "WF/PC IMAGING OF GRAVITATIONAL LENSES AND GRAVITATIONAL LENS CANDIDATES"

Keywords : EXTRAGALACTIC, IMAGING, GRAVITATIONAL LENS, COSMOLOGY

Proposers: Edwin L. Turner (PI; Princeton University), B.Burke (Mit), E.Falco (Cfa), J.Hewitt (Mit), J.Huchra (Cfa), S.Kent (Cfa), C.Lawrence (Caltech), J.Ostriker (Princeton University), D.Schneider (Institute For Advanced Study), I.Shapiro (Cfa)

WF/PC broad band imaging of ten specific systems believed to be gravitational lenses on the basis of existing observations and of 37 objects divided among five categories of quasars in which lensing might be very common is proposed. Observations of objects in the first category (i.e., lens candidates) would consist of images in two bands (F555W and F785LP) and have the goals of further testing the lens hypothesis for each system, of allowing very accurate measurement of the relative positions of the multiple source images and the lensing object(s), of revealing details of the lensing object's structure, of identifying additional source images and/or lensing objects, and of resolving possibly magnified source images. Proposed observations in the second category (i.e., search for new lens candidates) would consist of images in a single band (F555W or F702W) and have the goal of searching for evidence of lensing, either multiple source images or nearly superimposed foreground galaxies and/or galaxy clusters. This second imaging program may be thought of as a series of mini-surveys for new lens systems, each exploring a potential high yield search strategy. The proposed observations exploit the potential of HST's high angular resolution for gravitational lens studies and would play a central role in a multi-investigator, multi-institutional effort which is already underway using ground based optical and radio observations plus theoretical investigations. This larger program is ultimately aimed at utilizing

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Prop. Type: GO

INTERSTELLAR MEDIUM -- (SN _SNR) --

2356 - "THE IDENTIFICATION OF SUPERNOVA REMNANTS IN M83 AND OTHER SPIRAL GALAXIES"

Keywords : SUPERNOVA REMNANTS

Proposers: Knox S. Long (PI; Johns Hopkins University), W.Blair (Johns Hopkins University), R.Kirshner (Cfa), J.Raymond (Cfa), P.Winkler (Middlebury College)

This is a proposal to use narrow-band Wide Field Camera (WFC)images to identify supernova remnants in the nearest large Sc galaxy M83. SNRs will be identified on the basis of spatial extent and the ratio of observed emission in [S II]:H-alpha and [O III]:H-alpha. Based on our recent ground-based success in locating SNRs in M33 and other very nearby galaxies, we expect to find 40-80 small diameter, high surface brightness SNRs in M83, including the remnants of one or more of the 5 historical supernovae in M83. The observations will serve as a test case to demonstrate that HST can be used to inventory the SNR populations of many types of galaxies. The resulting catalogue of M83 will be used to test models of SNR evolution, to compare the supernova rate in M83 to that of local and Sculptor group spirals, to estimate the numbers of oxygen-rich to "normal" SNRs, to locate individual SNRs for future spectroscopic observations, and to relate the positions of detected SNRs to other morphological features in this galaxy. This is also a proposal to extend our ground-based surveys of SNRs to smaller diameter objects in confused regions of M33, NGC 300, and NGC 2403 by using the WFC in parallel mode. These observations will help reduce selection effects in the ground-based surveys and will incidentally produce images of known SNRs in these galaxies for future planning

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Prop. Type: GO

INTERSTELLAR MEDIUM -- (SN _SNR) --
2360 - "R-PROCESS EJECTA IN THE VELA SUPERNOVA REMNANT "
Keywords : SUPERNOVA REMNANT, NUCLEOSYNTHESIS HEAVY ELEMENTS
Proposers: George Wallerstein (PI; Washington, University Of), E.Jenkins (Princeton University)

Groundbased, X-ray and radio studies reveal many properties of supernovae but none except for the neutrinos from SN1987A have been able to tell us anything about the mechanism of the explosion. By looking for r-process and heavy iron-peak isotopes we can estimate the amount of neutronized material ejected and hence get a grip on what actually happened during the explosion. We will search for interstellar absorption lines of KrI, HgII, Os II, W II, and Pt II in stars within and behind the Vela supernova remnant. Substantial quantities of these elements are expected to be ejected in supernova explosions. However, recent competing theories of the supernova explosion mechanism predict differing amounts of r-process ejecta and in this way our observation will provide important constraints on these models. This will be a direct observational input on the supernova mechanism, a theoretical problem on which much time, effort, and manpower have been expended.

Prop. Type: GO

GALAXIES _CLUSTERS -- (DISTANT GALAXIES) --
2365 - "HST IMAGING OF GROUND-BASED ULTRA-DEEP SURVEY FIELDS "
Keywords : GALAXIES, ANONYMOUS, FORMATION, EVOLUTION
Proposers: Simon J. Lilly (PI; Toronto, University Of; Canada), L.Cowie (Hawaii, University Of)

A deep ground based multi-color survey of several small areas of sky is being used to search for young galaxies in order to study galaxy formation and early evolution. Extremely deep images in five colors spread between the ultraviolet atmospheric cut-off at 3200 A and the thermal infrared at 2.4 micron have been obtained, and spectroscopic redshifts obtained for almost all of the galaxies with B < 24 and I < 22.5. The aim of this proposal is to use the FOC to obtain complementary deep images at a wavelength of 2200 A. This will enable us to degine the spectral energy distributions of these galaxies over a full decade of wavelength. This project representa a fundamental attempt to study the Universe at faint ultraviolet wavelengths.

Prop. Type: GO

GALAXIES CLUSTERS -- (EVOLUTION/COSMOLOGY) --
2373- LT - "MORPHOLOGY OF GALAXIES IN CLUSTERS AT Z = 0.5 : CYCLE 1 OBSERVATIONS "

Keywords : GALAXY MORPHOLOGY, EVOLUTION, GALAXY CLUSTER
Proposers: Alan Dressler (PI; The Observatories Of The Carnegie Institution Of Washington), H.Butcher (Kapteyn Observatory; Netherlands), A.Oemler (Department Of Astronomy, Yale University)

Our program is intended to study galaxy evolution through the investigation of galaxy morphology as a function of lookback time. The development of disks and bulges, the role of mergers, interactions, and other environmental influences, are expected to be visible over the range $0 < z < 1$ as judged by the spectrophotometric evolution already observed over this redshift The approved Cycle I version of this two year program called for imaging with the Wide Field Camera 5 fields in four rich clusters of galaxies at $z = 0.35 - 0.55$ for which extensive photometry and spectroscopy already exist. The fields included a wide range of environments from the dense cores of clusters to isolated field galaxies. These data were to be used to classify images according to traditional morphological categories and will be used to determine quantitative measures of surface brightness distributions and bulge-to-disk ratios. Due to the SA of the HST optical system, the new goal is to image a single field in one color for three times the exposure (10 hours total) in order to assess the feasibility of these goals with the present performance of the system.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (
2378- LT - "DETECTING THE NEUTRON STAR IN GAMMA-RAY BURSTERS "
Keywords : GAMMA-RAY BURSTERS
Proposers: Bradley E. Schaefer (PI; Universities Space Research Association), C.Chevalier (Haute Provence Observatory; France), T.Cline (Nasa, Goddard), K.Hurley (California, University Of, Berkeley), S.Ilovaisky (Haute Provence Observatory; France), C.Motch (Besancon Observatory; France), H.Pedersen (European Southern Observatory; Chile)

The nature of the gamma-ray burst (GRB) phenomena remains a puzzle in spite of the wealth of observational data because no source object has been identified. Great effort has therefore already been expended in counterpart searches; yet, even at the limit of current technology, no counterpart is known. The unique ultraviolet imaging capabilities of HST allow for a qualitatively new type of search--where we seek emission from the neutron star component. If we can find a counterpart, we could for the first time measure distance and temperature. We would be likely to eliminate most of the many GRB models and provide a significant observational base for theory. Hence, we believe that an HST counterpart would represent the biggest advance in knowledge in this field since the discovery of GRB's.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (ERUPTIVE BINARIES) --

2380 - "INSTABILITIES IN ACCRETION DISCS AND THE OUTBURSTS OF DWARF NOVAE "

Keywords : WHITE DWARF DWARF NOVA ACCRETION BOUNDARY LAYER INTER- ACTING BINARY

Proposers: Keith Horne (PI; Stsci), T.Marsh (Stsci)

We will use the HST with the FOS to observe eclipses of a dwarf nova at 5 epochs in the quiescent period between outbursts. From the eclipse data we will determine the secular evolution of the white dwarf, the accretion disc, and the bright spot. This evidence will be a clean test of the two competing theories for the instability which triggers dwarf nova outbursts. In the disc instability model the transition of the disc from a cool to hot state triggers the outburst, whereas in the red star instability model the cool binary companion transfers a short burst of material into the disc which then becomes brighter. During quiescence the disc instability model predicts an increasing accretion rate and hence an increasing ultraviolet flux, whereas the red star model predicts a decreasing accretion rate and ultraviolet flux. Therefore the variation of the ultraviolet flux with time will distinguish which of the two current models is correct. Only the HST is able to resolve the rapid variations seen in an eclipsing dwarf nova, and therefore determine the ultraviolet flux from the accretion disc. The observations that we propose will also probe the nature of the boundary layer between the disc and the white dwarf, a region too small and hot to be well constrained by any previous observations. In particular, we will measure the extent of heating of the white dwarf by the boundary layer, and the cooling

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Prop. Type: GO

GALAXIES CLUSTERS -- (NEARBY GALAXIES) --

2389 - "SUPER STAR CLUSTERS IN NEARBY GALAXIES "

Keywords : STAR CLUSTERS STAR FORMATION IRREGULAR GALAXIES

Proposers: Robert W. O'Connell (PI; Virginia, University Of), J.Gallagher, Iii (Wisconsin, University Of), D.Hunter (Lowell Observatory)

"Super star clusters" are unusually compact, luminous star clusters found in galaxies with high star formation rates. They are barely resolvable with ground-based telescopes and have luminosity densities up to 1000 times higher than normal giant H II regions. They evidently represent an extreme mode of star formation, perhaps related to globular cluster formation during protogalaxy collapse. We propose to take advantage of the superb resolution of the Planetary Camera to study the structure of selected super star clusters and their surroundings with four color imagery.

Prop. Type: GO

SOLAR SYSTEM -- (INNER PLANETS) --

2393 - "D/H RATIO OF VENUS AND MARS FROM LYMAN ALPHA EMISSION "

Keywords : VENUS, MARS, ATMOSPHERE, EVOLUTION, UV SPECTROSCOPY

Proposers: Jean-Loup Bertaux (PI; Cnrs, Department Of Aeronomy; France), J.Clarke (Michigan, University Of), M.Mumma (Nasa, Goddard), T.Owen (Suny, Stony Brook)

It is proposed to measure with HRS the D/H ratio of Lyman alpha intensities from the visible disks of Venus and Mars in order to have a key clue on the evolution of water on these two planets. Whereas the D/H ratio for Earth is 1.6x10-4, indicating no substantial water escape since origin, one single measurement (through in situ mass spectrometry) for Venus indicated a ratio of 1.6 x 10-2 (enrichment 100). However, IUE La observations pushed to IUE ultimate capabilities failed to show the D La emission at 1.5 x 10-2 of the H La emission, implying a D/H radio significantly smaller than previously reported (factor 8). This important finding needs to be confirmed with a positive detection at a lower level. On Mars, HDO has been detected, showing an enrichment of about 6 in the lower atmosphere. HST observation in the upper atmosphere would bring strong constraints on differentiation and escape of D probably valid for both planets. Even with the Earth's ratio of 1.6x 10-4, D La can be detected both on Venus and Mars with HST/HRS. The two lines D and H are separated by 0.33 A and well resolved with HRS Echelle A. The D/H ratio in the bulk lower atmosphere transfers into a different D/H La emission ratio because of atmospheric processes, different solar excitation rates, and radiative transfer. All these effects require modellings which are well mastered by the proposers, with computer codes used in

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Prop. Type: GO

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --

2403 - "HOT GAS IN THE INTERSTELLAR MEDIUM "

Keywords : INTERSTELLAR MEDIUM, GAS, HOT ISM

Proposers: Lennox L. Cowie (PI; Hawaii, University Of), E.Jenkins (Princeton University), A.Songaila (Hawaii, University Of)

The enormous gain in sensitivity and resolution of the HRS over previous instruments will at last allow us to make a detailed study of the distribution of thermally ionized N V and C IV absorption in the galactic disk. A survey of these ions in 8 carefully chosen stars ranging in distance from 80 pc to 3 kpc will provide a crucial test of the distribution of the hot gas in the interstellar medium and in particular of evaporation-front models of O VI production. The ratios of C IV and N V to

O VI and Si IV will allow us to test the predicted ionization ratios, while the evolution of equivalent with and velocity spread wtih distance will allow us to measure the number of components. Comparisons with lower ionization stages will test if the hot gas producing this absorption is physically associated with cooler material.

Prop. Type: GO

GALAXIES _CLUSTERS -- (EVOLUTION/COSMOLOGY) --

2405- LT - "WFPC STUDIES OF VERY HIGH REDSHIFT ELLIPTICAL GALAXIES: THE MORPHOLOGICAL EVOLUTION OF GIANT ELLIPTICALS AT 0.4<Z<2.5"

Keywords : ELLIPTICAL GALAXIES, DISTANT GALAXIES, MORPHOLOGICAL EVOLUTION, GALAXY FORMATION -

Proposers: Rogier A. Windhorst (PI; Arizona State University), J.Hester (Arizona State University), W.Keel (University Of Alabama), D.Mathis (Arizona State University), L.Neuschaefer (Arizona State University), M.Oort (Sterrewacht, University Of Leiden; Netherlands)

We propose to spend 9 hours with WFPC to image a well defined, homogeneous sample of giant elliptical galaxies with redshifts 0.4<z<2.5. Our goal is to study the kpc structure of normal giant elliptical galaxies out to z=2.5, and their morphological evolution with cosmic time. During the last decade, we have performed extensive deep surveys, in the radio down to microJansky levels, and in the optical down to V=26 mag direct, and to V=24 mag spectroscopically. At milliJansky levels, the weak radio source population is dominated by red, high surface brightness galaxies with colors and absorption feature spectra like passively evolving giant ellipticals with current ages of 14-15 Gyr. They almost never have emission lines and are in all respects like normal, optically selected giant ellipticals, except that our ultradeep radio selection has found them out to z=2.5. We propose to obtain two color WFPC images of five carefully selected high surface brightness elliptical galaxies in the redshift range of 0.4<z<2.5 (19<V<23 mag). One of these is a young, compact elliptical galaxy at z=2.389 in a forming protocluster. WFPC images are crucial to study their optical morphology, surface brightness distribution, and color gradients at kpc scales. We will investigate their morphological evolution out to redshifts of 2.5, and see if their nuclear structure is different from that of optically selected high redshift ellipticals.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --

2415 - "PHYSICAL AND CHEMICAL PROCESSES IN DENSE INTERSTELLAR CLOUDS "

Keywords : INTERSTELLAR, ABUNDANCE, UV, HI CLOUD, MOLECULAR CLOUD, DUST, MOLECULES

Proposers: Theodore P. Snow (PI; Colorado, University Of), J.Black (Arizona, University Of), R.Crutcher (Illinois, University Of), B.Lutz (Lowell Observatory), E.Van Dishoeck (Leiden, University Of; Netherlands)

We propose to take advantage of the high sensitivity and spectral resolution afforded by the GHRS to carry out a comprehensive study of abundances in "transluscent" interstellar clouds (Av=2-5 mag) in order to: (1) determine physical conditions such as density, kinetic and molecular excitation temperatures, and radiation field intensities; (2) measure abundances relative to hydrogen, learn about the gas-dust interaction and depletion processes; and (3) determine the abundances of several molecular species, so that we can apply recent chemical models toward a better understanding of molecular processes in transluscent and denser clouds. The clouds to be observed are dense enough to produce detectable millimeter-wave emission from molecular species, yet transparent enough to yield absorption-line data from the infrared through the visible, and now through the UV. We have developed a two-part strategy (1) carry out detailed analyses of two selected clouds using 19 grating settings to obtain coverage of 64 multiplets of 33 atomic species as well as 27 bands of 14 molecules; and (2) conduct a survey of a few species in a number of stars, in order to sample more clouds and to analyze any trends that may appear as functions of varying cloud conditions.

Prop. Type: GO

GALAXIES _CLUSTERS -- (NEARBY GALAXIES) --

2416 - "IMAGERY AND SPECTROSCOPY OF SUPER METAL POOR GALAXIES "

Keywords : DWARF GALAXY, IRREGULAR GALAXY, NEARBY GALAXY, NEBULA, HII REGION

Proposers: Reginald J. Dufour (PI; Rice University), D.Clayton (Clemson University), K.Davidson (Minnesota, University Of), M.Mccall (York University; Canada), J.Roy (Laval University; Canada), G.Shields (Texas, University Of), E.Skillman (Minnesota, University Of), C.Wu (Computer Sciences Corporation)

We propose to obtain WF and FOC/48 imagery of one of the nearest of the super-metal-poor blue irregular galaxies known, GR8. The imagery will be obtained through wide band UV, B, V, R, and I filters and narrow-band filters isolating H-alpha and [OIII]5007. The wide-band imagery will be used to evaluate the massive star IMF, determination of the age distribution of groups of unresolved stars in the galaxies, and detect possible extended halo indicative of an old stellar population. The narrow band imagery will be used to identify the amount and spectral index of the ionizing radiation from OB stars, and detect supernova remnants, planetary nebulae, and emission-line stars. It is hoped that the results will enable us to evaluate the chemical and stellar evolutionary history of these relatively rare systems and their place in the larger picture of galaxy formation and evolution.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (SN _SNR) --
2417 - "CAS A: THE REMNANT OF A MASSIVE SUPERNOVA "
Keywords : ABUNDANCES, NUCLEOSYNTHESIS, SUPERNOVA REMNANTS
Proposers: Robert P. Kirshner (PI; Cfa), W.Blair (Johns Hopkins University), K.Long (Johns Hopkins University), J.Raymond (Cfa), P.Winkler (Middlebury College)

The remnants of recent supernovae provide the best opportunity to probe the evolution of massive stars and the synthesis of heavy elements. Among the remnants with fast moving, undiluted debris, the best known is Cas A. We have obtained extensive ground-based data on Cas A. The results provide valuable insights into the ages, composition, and kinematics of the remnant, but are imcomplete in tantalizing ways that HST can resolve. While we are confident Cas A results from the violent destruction of a massive star after advanced nuclear burning, essential features of the explosion physics, the excitation of the debris, the chemical composition of the ejecta, and the age, distance, and kinematics still elude our grasp. HST images will allow us to isolate the chemical inhomogeneities in the debris. The images will allow an unprecedented probe of the excitation mechanism, and will provide 10 times the angular resolution for proper motion studies to determine ages.

Prop. Type: GO

STELLAR POPULATIONS -- (
2419 - "THE CHRONOLOGY OF THE FORMATION OF THE GALACTIC HALO AND DISK "
Keywords : GLOBULAR CLUSTERS, POPULATION II
Proposers: Robert J. Zinn (PI; Yale University), B.Carney (North Carolina, University Of), C.Christian (University Of California At Berkeley), G.Da Costa (Yale University), P.Demarque (Yale University), J.Heasley (Hawaii, University Of), K.Janes (Boston University), E.Olszewski (Arizona, University Of), P.Seitzer (Michigan, Universiy Of)

Observations with the PC will be used to construct color-magnitude diagrams that reach more than 2 mag. below the main-sequence turnoffs in 2 globular clusters. One is a very metal-poor cluster near the galactic center, and the other is a metal-rich cluster that belongs to the disk system. The HST is needed because only it can provide the high resolution necessary for photometry in the very crowded fields of these clusters. The ages of the clusters will be measured from the c-m diagrams using several techniques, and will be compared with each other and with the ages derived for other clusters from ground-based observations. The chronologies of the halo and the disk that result from these data will constrain theories of galactic evolution, for they will indicate the time scale of halo formation and lag-time between halo and disk formation.

Prop. Type: GO

QUASARS _AGN -- (

2424-KP - "QUASAR ABSORPTION LINE SURVEY: CYCLE 1 OBSERVATIONS-FOS "

Keywords : SPECTROSCOPY QUASARS, ABSORPTION/EMISSION LINES, GALAXIES, HALOS/CLUSTERS/VOIDS, INTERGALACTIC MEDIUM

Proposers: John N. Bahcall (PI; Institute For Advanced Study, Princeton), J.Bergeron (Institute For Astrophysics, Paris; France), A.Boksenberg (Royal Greenwich Observatory; Uk), G.Hartig (Space Telescope Science Institute), B.Jannuzi (Institute For Advanced Study, Princeton), W.Sargent (California Institute Of Technology), B.Savage (Wisconsin, University Of), D.Schneider (Institute For Advanced Study, Princeton), D.Turnshek (University Of Pittsburgh), R.Weymann (Observatory Of The Carnegie Institution In Washington), A.Wolfe (Astrophysics And Space Sciences, Ucsd)

The establishment of a homogeneous data base of quasar absorption lines using the diagnostic survey proposed here will form the basis for an attack on fundamental cosmological and astrophysical problems: What are the physical, dynamical and evolutionary properties of the intergalactic medium? What is the strength, shape and origin of the UV background radiation? What limits can be set upon the primordial He/H and D/H ratios? What has been the chemical and dynamical evolution of gaseous galactic disks and halos? What physical processes govern the ionization of this gas? What physical processes govern the acceleration of thermal and relativistic plasma in radio quiet and radio loud quasars? How has gaseous structure in the universe evolved on scales of 1 Mpc to 100 Mpc? The discrimatory power of the survey and the efficient use of HST were the primary criteria used in constructing the survey, which takes account of all relevant GTO observations. Exposure times are based upon IUE archival data. Ground-based observations of all program objects will be made to monitor variability and to complement the HST observations. The survey contains a primary list of 103 quasars with 0.3 < Zem < 2.0, 18 additional bright quasars to be observed with the FOS to provide candidates for future HRS follow up, and a supplementary list of 49 fainter quasars for a damped Ly-alpha survey. A plausible extrapolation of ground-based data suggests that the primary survey will detect 275 Ly-alpha and 60 CIV systems.

Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --
2428- LT - "A CRITICAL TEST OF THE GALACTIC ESCAPE VELOCITY AT R(SUN): CYCLE 1 OBSERVATIONS"
Keywords : GALACTIC ESCAPE VELOCITY, HIGH VELOCITY STARS, PARALLAXES, PROPER MOTIONS
Proposers: Darrell J. Macconnell (PI; Computer Sciences Corporation), W.Osborn (Central Michigan University)

We propose to measure the trigonometric parallaxes and proper motions of the three high-proper motion stars which Carney, Latham, and Laird (1988) identify as having the most extreme velocities known in the galactic rest frame. Using these stars, they conclude that the local value of the escape velocity, V(esc), is at least 500 k/s, and this leads them to draw other important conclusions regarding the distribution of mass in the galactic disk. However, their assigned distances, and hence the tangential velocities and V(esc) value, depend on uncertain photometric corrections and reddening estimates. The photometric distances they find are in the range 400-550 pc, so the parallaxes are expected to be of the order of 2 milliarcsec. If these distances are approximately correct, it will be possible to measure them at the 4-sigma level using an FGS on the HST if care is taken with the observations and reductions. It will be of great interest if the parallaxes turn out to be smaller than the estimates of Carney, et al., since this would lead to a higher value for the escape velocity and a larger mass for the galaxy. Alternatively, if the parallaxes are found to be considerably larger than they adopted, either V(esc) is considerably smaller than 500 k/s or these three stars are not the most appropriate for setting a limit on V(esc). NOTE added 16-Apr-1991: Three targets mentioned above changed to two, G166-37 and G233-27, as result of Reassessment in early 1991. What follows is Cycle 1 only.

Prop. Type: GO

SOLAR SYSTEM -- (
2432 - "EXCEPTIONAL SOLAR-SYSTEM OBJECTS "
Keywords : ASTEROID, COMET, MINOR PLANET, ANOMALOUS OBJECT
Proposers: B. Zellner (PI; Computer Sciences Corporation), R.Brown (Stsci), E.Helin (Jet Propulsion Laboratory), C.Kowal (Computer Sciences Corporation), B.Marsden (Cfa), A.Milani (Pisa University; Italy), D.Pascu (Us Naval Observatory), P.Seidelmann (Us Naval Observatory)

This is a target-of-opportunity proposal for HST observations to be executed if a previously unknown, truly exceptional solar-system object or phenomenon is discovered either in the normal course of HST work or by anyone, anywhere. Trails due to unknown moving objects will often appear on HST images made for other purposes. A short trail seen near the opposition point or at high ecliptic latitude could represent a major addition to our knowledge of the solar system. Thus we further propose that all short trials seen on HST images taken in favorable regions of the sky be given a quick analysis in the Observation Support System for their possible significance. If an unusual object is found we propose to: (1) Seek from the owner of data rights permission to proceed as may be appropriate; (2) Contact the Minor Planet Center for an evaluation of the significance of the discovery; and (3) For an object that appears to be of great significance where effective groundbased followup appears unlikely, request the HST schedule be replanned for followup images and physical studies using HST.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (SN SNR) --
2434 - "A STUDY OF THE CHEMICAL COMPOSITION AND VELOCITY STRUCTURE OF THE YOUNG SUPERNOVA REMNANT AD 1006"
Keywords : SUPERNOVA REMNANT, SUPERNOVA, NULEOSYNTHESIS, SUBDWARF
Proposers: Chi-Chao Wu (PI; Computer Sciences Corporation), R.Fesen (Colorado, University Of), A.Hamilton (Colorado, University Of), M.Leventhal (AtT Bell Labs), C.Sarazin (Virginia, University Of)

We propose to observe an sdOB star situated behind the young remnant of the type Ia SN 1006 in order to study the remnant's kinematic and chemical properties through absorption lines induced on the star's spectrum. Our exhaustive analysis of IUE data has firmly established that the star's UV spectrum exhibits broad FeII resonance line absorptions with radial velocity dispersions of approximately +/- 5000 km/s. Other broad, nonstellar features are tentatively identified as SII, SiII, SiIV, and OI resonance lines redshifted over the range 5200 to 6500 km/s. The UV absorption features provide a direct probe through this young SN Ia remnant, and thus a powerful test of theoretical SN models. However, the 17th mag star is at the limit of IUE capabilities, restricting detailed knowledge of the SNR's structure and composition. We propose FOS observations producing 10 to 20 better S/N and a 5-fold increase in resolution which will provide: 1) data on the density profile of the unshocked FeII core material, 2) a precise measurement of the reverse shock velocity, 3) insight into the nature of the O, Si and S 'knots', and 4) limits on the column density of enriched blueshifted ejecta.

Prop. Type: GO

GALAXIES CLUSTERS -- (DISTANT GALAXIES) --
2438- LT - "A STUDY OF THE MOST DISTANT GALAXIES "
Keywords : FORMATION, EVOLUTION, AGN, RADIO GALAXY, MORPHOLOGY, RADIO
Proposers: George K. Miley (PI; Leiden University; Netherlands), K.Chambers (Institute For Astronomy, University Of Hawaii), F.Macchetto (Stsci), W.Van Breugel (Igpp, Lawerence Livermore Nat. Lab.)

We have recently developed the most efficient technique known for finding distant galaxies. In our sample of 33 4C sources, at least 8 are galaxies with z < 2, and 2 have z > 3.7 The galaxies emit bright narrow Lyman alpha which is extended, usually by several arcseconds. Their optical contin ua are also extended. These high-redshift objects show the striking align ment between their optical and radio emission that we (unexpectedly) found to be a general property of distant radio galaxies. Here we propose to study two z > 2 galaxies with the HST. Our program is directed towards imaging the galaxies in Lyman alpha and in t he continuum with the WF to obtain morphological information about the var ious components. Our distant radio galaxies are the only high-redshift objects that can be mapped in detail with the HST. This project will provide unique information about the properties of galaxies in the early universe, close to the epoch of their formation.

Prop. Type: GO

STELLAR POPULATIONS -- (OPEN CLUSTERS) --

2441 - "SEARCH FOR WOLF-RAYET STARS IN LOCAL GROUP GIANT HII REGIONS "

Keywords : WOLF-RAYET STARS - HII REGIONS - STELLAR POPULATION - IMAGERY

Proposers: Anthony Moffat (PI; Montreal, Universite De; Canada), L.Drissen (Stsci), M.Shara (Stsci)

Wolf-Rayet (WR) stars represent a common, advanced evolutionary phase for the most massive stars. Their strong and broad emission lines (caused by high mass-loss rates) make them easily detectable, even in distant and crowded regions. Because of their high massive star content, Giant HII Regions (GHR) are priviledged sites to study extreme population I stars at their birthplace. We propose to take advantage of the high resolution provided by the HST and to use PC imagery with an interference filter centered on the prominent HeII 4686 emission line to detect and locate precisely WR stars in three key GHR of the Local Group (NGC 3603, NGC 604 and NGC 595) that cannot be completely resolved from the ground. The purpose of this project is mainly twofold: to check if WR stars in GHR are normal compared to WR stars in the field and to study how population ratios (WR/O and WC/WN) can be affected by the conditions inside GHR.

Prop. Type: GO

SOLAR SYSTEM -- (COMETS) --

2442- CT - "COMETARY PARENT MOLECULES "

Continuation of Program Number 2442

Keywords : COMETS, SPECTROSCOPY, ULTRAVIOLET

Proposers: Paul D. Feldman (PI; Johns Hopkins University), M.A'Hearn (Maryland, University Of), H.Weaver (Stsci)

We propose to use HRS observations of a suitable target-of-opportunity comet to study two outstanding problems related to the composition of the volatile component of the cometary nucleus. These problems concern two species, CO and S2, which have been observed in the cometary coma and identified as "parent" molecules sublimating directly from the nucleus. Both of these molecules have their principal fluorescent emissions in the vaccuum ultraviolet. The high spectral resolution will allow the determination of the rotational temperature of CO, which is diagnostic of the source temperature and the excitation mechanism of the observed emission. The determination of the abundance of both CO and S2 in the primarily water ice of the nucleus can serve to constrain current models of comet formation in the primordial solar nebula.

Prop. Type: GO

QUASARS _AGN -- (
2443 - "ULTRA-HIGH RESOLUTION STUDIES OF AGN'S WITH THE FGS "
Keywords : AGN, RADIO GALAXY, QUASAR, JET, NUCLEUS, INTERFEROMETRY
Proposers: Ethan J. Schreier (PI; Stsci), A.Fresneau (Strasbourg Observatory; France), G.Miley (Leiden University; Netherlands)

We wish to use the FGS to study the morphology of bright AGN's known to have radio structure on the scale of several milliarcseconds. Because their structures are linear, these objects are ideal for investigating the feasibility of using the HST FGS to attain ultra-high resolutions. We will also compare our results with relevant FOC observations to help model the larger scale structure and to compare deconvolution techniques. Several exciting problems concerning AGNs (and their jets) can be tackled uniquely by this experiment, including: the relation of optical continuum in AGNs to synchrotron jets; a search for superluminal jet expansion in the optical; and spatial resolution of the broad-line region. Following detailed analysis of the observations proposed here, we would propose repeat observations of those source where structure is detected, in order to search for superluminal motion or other time variability.

Prop. Type: GO

QUASARS _AGN -- (JETS) --
2451 - "POLARIZATION MAPPING OF THE OPTICAL JET IN 3C273 "
Keywords : QUASAR, JET, IMAGING, POLARIZATION
Proposers: R. C. Thomson (PI; Institute Of Astronomy, Cambridge; Uk), M.Disney (University Of Wales, Cardiff; Uk), A.Wright (Csiro, Parkes; Australia)

3C273 is one of the nearest known quasars and has a (relatively) high surface brightness optical jet extending 25" from the nucleus. We expect that high resolution optical polarization maps will reveal much structure unresolved from the ground. These maps will be compared with computer simulations which include the magnetic field. Radio polarization maps of comparable resolution will be used to further define the physical state of the jet by providing depolarization and rotation measure maps. By such means it is hoped to identify the in situ acceleration mechanism powering the optical emission, and to set limits on the properties of the surrounding medium.

Prop. Type: GO

QUASARS AGN -- (RADIO GALAXIES) --

2456 - "PEN-NUCLEAR REGIONS OF RADIO GALAXIES "

Keywords : ACTIVE GALAXIES, RADIO GALAXIES, BROAD LINE EMISSION REGIONS, NUCLEUS

Proposers: S. M. Simkin (PI; Michigan State University), E.Sadler (Anglo-Australian Observatory; Australia)

We have picked THE closet known Broad Line Radio Galaxy, Pictor A, to observe with the HST PC. Recent ground-based observations of this object show that it is an excellent candidate to use as a test case for theories which describe the nuclear "feeding" process in active galaxies. Its proximity and very bright nuclear emission-lines will allow us to use deconvolution techniques with the HST data to resolve the inner 40 to 50 pc near the nucleus where the transition between the VLBI-Broad Line Emission region and the Narrow Line Emission region takes place. We plan to follow up these test imaging observations with additional observations of this and other suitable, nearby radio galaxies during the second cycle of the HST program.

Prop. Type: GO

STELLAR POPULATIONS -- (GALACTIC CENTER) --

2459 - "THE CENTRAL STAR CLUSTER OF THE GALAXY "

Keywords : GALACTIC NUCLEUS, CENTRAL STAR CLUSTER, ACTIVE GALACTIC NUCLEI

Proposers: Kwok Y. Lo (PI; Illinois, University Of), J.Biretta (Nrao)

We propose to use the Planetary Camera on the HST to image the Galactic center at 0.1" (850 AU at 8.5 kpc) at 10326 and 8750 A. Recent observations have revealed a multitude of unusual phenomena at the center, suggesting that the Galactic center may be a low energy verion of an active galactic nucleus and may harbor a massive collapsed object. Unambiguous delineation of the central star cluster, which would provide an important constraint on the central mass distribution has been hampered by the inadequate angular resolution of ground-based observations. The HST observations will map directly the structure of the near-IR source, IRS16, which has been the focus of previous ground-based observations to define the central star cluster. The resolution and sensitivity of the proposed observations can also detect and resolve the individual K and M giant stars of the central star cluster, despite the large extinction to the center. Understanding the nearest galactic nucleus will be important for the interpretation of the more energetic active galactic nuclei.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (LOCAL MEDIUM) --

2461 - "INTERPLANETARY/INTERSTELLAR GAS CONNECTION: SEARCH FOR THE LOCAL CLOUD"

Keywords : INTERPLANETARY MEDIUM, HI CLOUD

Proposers: Rosine Lallement (PI; Cnrs, Department Of Aeronomy; France), J.Bertaux (Cnrs, Department Of Aeronomy; France), E.Chassefiere (Cnrs, Department Of Aeronomy; France), R.Ferlet (Institute For Astrophysics, Paris; France), A.Vidal-Madjar (Institute For Astrophysics, Paris; France)

We propose to use HST/HRS (R=10E5) in order to detect interstellar lines on some of the nearest stars: alpha Cen-A(1.3 pc), alpha CMa(2.7 pc), alpha Aql (5 pc), alpha Lyr (8.1 pc). Up to now, no optical lines have been detected towards those stars, except for alpha Aql (faint CaII, NaI absorptions). In the UV, lines can be found which are much stronger than in the visible, giving at high resolution the precise velocity and density structure of the nearby gas. The aim of this study is the determination of the characteristics of the parcel of ISM in which the sun is embedded (the "local" cloud): its heliocentric velocity vector (3 components), its temperature and state of ionization. Absorption lines to be observed are NI, OI,CI,SI,MgI,CII,FeII,SII,MgII,SiII, SIII,SiIII. These results will be compared to UV backscattered emissions of H and He in the solar system, which indicate V(H)=20 Km/s, T(H)=8000K, n(H)=.06at/cc and give precisely (within 3 degrees) the direction of the flow. If these characteristics are not compatible, it will bring constraints on the modifications of the neutral interstellar gas when penetrating the heliosphere. At present, nothing is known about the nature and the dimensions of the transition region between the interstellar and the solar plasma. HST/HRS will provide a unique opportunity to gather primary information on this interaction.

Prop. Type: GO

STELLAR POPULATIONS -- (GLOBULAR CLUSTERS) --

2472 - "INTERACTING BINARY STARS IN THE CORES OF GLOBULAR CLUSTERS "

Keywords : BINARY; GLOBULAR CLUSTER

Proposers: Michael Shara (PI; Stsci), F.Paresce (Stsci)

If Theorists' suggestions are correct, dozens of cataclysmic binaries (formed by tidal capture) and W UMa contact binaries, (and perhaps a few massive disk stars and/or 1 or 2 low-mass X-ray binaries) should be found in the inner few core radii of every globular cluster. These objects (if they exist) are the dominant dynamical energy sources and sinks of their host clusters. Testing the long-standing prediction of these objects' existence is crucial in advancing our understanding of the structures and evolution of globulars, and is the main thrust of this proposal. We will use the expected time variability and/or the extremely blue colors of these binaries, and the HST Faint Object Camera to: 1) demonstrate that these objects exist in globular cores, and 2) determine preliminary orbital period distributions, radial gradients in globulars, and luminosity functions. The high angular resolution and ultraviolet sensitivity of HST and the FOC are crucial to the success of this program. All three targets are in HST's continuous viewing zone, and thus the proposed observations make extremely efficient use (75%) of HST time.

Prop. Type: GO

SOLAR SYSTEM -- (COMET) --
2481 - "HST OBSERVATIONS OF PERIODIC COMETS "
Keywords : COMET
Proposers: Harold A. Weaver (PI; Stsci), M.A'Hearn (Maryland, University Of), C.Arpigny (Liege University; Belgium), P.Feldman (Johns Hopkins University)

The volatile composition of comets is a key diagnostic of cometary formation enviroments. The trace molecular composition of cometary nuclei, in particular, can be used to infer the physical and chemical state of the solar nebula or of the interstellar cloud from which the nebula condensed. Measuring these molecular abundances is extremely difficult due to the intrinsic weakness of the emissions from the trace species and can normally be attempted only on exceptionally bright comets. The advent of HST extends the feasibility of observing trace molecules to relatively faint, periodic comets. Thus, the compositions of "new" and "old" comets can be compared systematically. We propose using the FOS to obtain the volatile inventory in the brightest periodic comet appearing during the first HST GO cycle. Current the best candidate appears to be Comet Hartley-2 which reaches perihelion during September 1991. Simultaneous UV and visible spectra will be used to measure the abundances of the important carbon-, nitrogen-, and sulfur-bearing species in the nucleus. The geometry of Hartley-2's apparition is particularly favorable making it an excellent candidate for HST observations.

Prop. Type: GO

SOLAR SYSTEM -- (COMET) --
2483- CT - "THE VOLATILE COMPOSITION OF NEW COMETS "
Continuation of Program Number 2483
Keywords : COMET
Proposers: Harold A. Weaver (PI; Stsci), M.A'Hearn (Maryland, University Of), C.Arpigny (Liege University; Belgium), P.Feldman (Johns Hopkins University)

The volatile composition of a comet is a sensitive indicator of its formation environment. In particular, the relative abundances of trace molecules in cometary nuclei can be used to infer the physical and chemical state of either the solar nebula or the interstellar cloud from which the nebula condensed. We propose using the FOS to obtain the volatile inventory in a bright, new comet that appears during the first GO cycle. Simultaneous UV and visible spectra will be used to measure the abundances of the important carbon-, nitrogen-, and sulfur-bearing species in the nucleus (e.g., CO, CH4, CO2, NH3, N2, HCN , CS2, S2). Serendipitously our program will also provide sensitive observations of any possible new cometary species, including a variety of diatomic molecules (e.g, SO, NO, SH, H2). By using a pair of FOS apertures, information will be obtained on the spatial brightness distribution of the species allowing discrimination between molecules that are present as ice in the nucleus and those that are produced by the destruction of more complex molecules in the nucleus (e.g., from the breakup of organic molecules which coat cometary grains).

Prop. Type: GO

STELLAR ASTROPHYSICS -- (EARLY EVOLUTION) --

2485- LT - "SLEUTHING THE DYNAMO: CYCLE 1 OBSERVATIONS "

Keywords : OPEN CLUSTER, DWARF, MS STAR, CHROMOSPHERE, CORONA

Proposers: Thomas R. Ayres (PI; Colorado, University Of), S.Antiochos (Us Naval Research Laboratory), G.Basri (California, University Of, Berkeley), J.Bookbinder (Cfa), A.Brown (Colorado, University Of), G.Doschek (Us Naval Research Laboratory), J.Linsky (Colorado, University Of), L.Ramsey (Penn State University), T.Simon (Hawaii, University Of), J.Stauffer (Cfa), R.Stern (Lockheed Palo Alto Research Labs), F.Walter (New York, State University Of (Stony Brook))

Innovative technologies of the 1990s will open new windows to the interior of the Sun and its hidden dynamics: the GONG project for helioseismology; rare-earth detectors for solar neutrinos; and SOLAR PROBE for high-order moments of the mass distribution. At the same time, newly-commissioned space observatories will provide unprecedented views of the vacuum-UV and X-ray emissions of stars in our Galactic neighborhood. These seemingly unrelated developments are in fact deeply connected. A central issue of solar-stellar physics is the nature and origin of magnetic activity: the profound link between the interior dynamics of a late-type star and the violent state of its outermost million-degree coronal layers. As solar physicists are unlocking the secrets of the hydromagnetic dynamo deep inside the Sun, we will apply one of the powerful new astronomical tools of the decade -- the HST -- to document the early evolution of the dynamo and its associated external gas-dynamic activity. In particular, we will obtain high-S/N FUV spectra of solar-type stars in young galactic clusters ranging in age from 1/10-th to 1/100-th that of the Sun.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (

2492 - "CONDUCTIVE INTERFACES IN STELLAR WIND BUBBLES "
Keywords : WIND, NEBULA, TEMPERATURE, DENSITY
Proposers: Richard Mccray (PI; Colorado, University Of), Y.Chu (Illinois, University Of), M.Mac Low (California, University Of), J.Slavin (Colorado, University Of), D.Van Buren (Caltech)

We propose to observe the conductive interfaces of the stellar wind bubble Sharpless 308 using NV, SiIV and CIV in absorption against the central star HD50896. Our goal is to determine column densities and kinematics in the intermediate temperature gas to help us understand the physics of conductive interfaces. We expect equivalent widths in the range 1-10 mA. We will use the GHRS G160M grating with the A2 mirror to optimize signal and spectral resolution. The data will be modeled with a non-equilibrium ionization code with conductive energy transport.

Prop. Type: GO

QUASARS AGN -- (

2493 - "NARROW BAND IMAGING OF MARKARIAN 78 "
Keywords : SEYFERT GALAXY, EMISSION LINES, JETS, DYNAMICS
Proposers: D. Mark Whittle (PI; Virginia, University Of), A.Wilson (Maryland, University Of)

NOTE: Due to the reduced image quality of HST, we have deleted the FOC spectroscopic observations from this project. The original abstract follows We aim to study the interaction between jets and the interstellar medium in the central few kpc of the Seyfert galaxy Markarian 78. In a recent long-slit survey of Seyfert galaxies, MKN 78 was identified as the outstanding example in which [OIII] lambda5007 profile structure clearly reveals the interaction between radio jets and the interstellar medium. Even in this optimum case, however, the important structures are within a few arcsec of the nucleus, and HST resolution is needed to trace the interaction in detail. We shall take a narrow band [OIII] image with the PC and, using image reconstruction, identify emission structures on equivalent scales tothe radio structure revealed by a new 2 cm VLA radio map (0."1 resolution). These observations will allow us to define the intensity distributions of the emission components over the nuclear regions. We aim to test two current models: acceleration and compression behind the lobe bow shock and entrainment along the length of the jet. In a number of ways, these observations will match those of NGC1068 recently made by HST.

Prop. Type: GO

QUASARS AND AGNS -- (

2498 - "THE NARROW AND VARIABLE EMISSION LINES IN NGC 4151 "

Keywords : SEYFERT, JET, SPECTRA

Proposers: Marie-Helene Ulrich (PI; European Southern Observatory; Frg), A.Altamore (Instituto Astronomico Dell'Universita, Rome; Italy), A.Boksenberg (Royal Greenwich Observatory, Cambridge; Uk), G.Bromage (Rutherford And Appleton Laboratory, Chilton; Uk), J.Clavel (Esa Iue Observatory, Madrid; Spain), A.Elvius (Stockholm Observatory; Sweden), R.Fosbury (St-Ecf; Frg), G.Perola (Instituto Astronomico Dell'Universita, Rome; Italy), M.Pettini (Royal Greenwich Observatory; Uk), M.Snijders (Astronomisches Institut Tuebingen; Frg)

Two narrow emission lines at 1518A and 1594A respectively (hereafter called L1 and L2) with intensities varying on time scales of day(s) have been found in the UV spectrum of NGC 4151. These lines are too narrow to be emitted by the entire broad line region. Therefore, regardless of their identifications, they must come from localized regions with a special excitation mechanism, possibly a two-sided jet. We propose to observe the structure of L1 and L2 with a resolution of 15-30 km/s and to study its variations on a time scale of 2 days by taking ~ 1 hour spectra each of L1 and L2 with GHRS G160M and to repeat these 2 spectra 2 days later. We propose to complement these high resolution spectra with a shorter exposure using FOS/BL (G130H) to measure the continuum and the entire profile of the CIV line. Similar low resolution spectra taken 2 and 4 days before and after the high resolution observations will provide information on the time delay between the intensity variations of L1 and L2.

Prop. Type: GO

QUASARS _AGN -- (

2502- CT - "GRAVITATIONAL MICROLENSING "

Continuation of Program Number 1059

Keywords : QUASAR, PHOTOMETRY

Proposers: Sjur Refsdal (PI; Hamburg Observatory; Frg), P.Crane (European Southern Observatory; Frg)

Images of QSO 2237+0305 will be compared to look for variations in the luminosity ratios of the components. Such variations would be an observational proof of microlensing. Variations of about 0.05 mag/year are expected in two of the images if the quasar radius is 0.1 light years or less. HST spatial resolution is required to allow the precise comparison of the QSO components of the lensed system.

Prop. Type: GO

QUASARS AGN -- (QUASAR EMISSION) --

2524 - "SPECTROPOLARIMETRY OF BRIGHT QUASARS "

Keywords : QUASAR, CONTINUUM, RADIATION

Proposers: Chris Impey (PI; Arizona, University Of), M.Malkan (California, University Of, Los Angeles)

We request 10.5 hours with the FOS to obtain the first ultraviolet polarimetry of the five bright quasars. They have been specifically selected from a large optical polarimetric survey; their measured U,B,V,R and I colors and polarizations indicate the absence of contaminating starlight,dust or blazar components. These observations will be combined with quasi-simultaneous ground based polarimetry and spectrophotometry, to double the spectral coverage into the critical UV region. These data will be analyzed with multiwavelength fitting techniques. Several emission mechanisms contribute to the optical- ultraviolet continuum in quasars, including a power law of slope ~ 1(Sv proportional to v -1), an optically thick thermal component which peaks in the ultraviolet, and occasionally a highly polarized and variable synchroton power law. The combined UV and optical spectropolarimetry will determine, for the first time, the polarization of these individual components, including that of the strong ultraviolet excess. We will check to see if the observed polarization can be fully explained by a synchrotron component or external scatterers (electrons or dust). If, however, the observed rise of polarization into the blue is attributable to an accretion disk with an electron scattering atmosphere, we will infer its optical thickness, shape and orientation. Thus HST spectropolarimetry provides a unique test of the physical emission mechanisms which produce the energy of quasars.

Prop. Type: GO

STELLAR POPULATIONS -- (GALACTIC CENTER) --

2534- CT - "HIGH RESOLUTION IMAGING OF THE GALACTIC CENTER AT 1 MICRON "

Continuation of Program Number 2534

Keywords : STELLAR CLUSTER ; GALACTIC NUCLEUS

Proposers: Eric E. Becklin (PI; Ucla), J.Henry (Hawaii, University Of), D.Simons (Hawaii, University Of)

We propose to acquire a deep 1 micron image of the Galactic center using the PC configuration of the HST. With such an image, it will be possible to resolve structure on a scale of about 1000 AU at the Galactic center, thereby providing valuable morphological information about the complex IRS 16 region. The acquired data will also provide intrinsic color information about stars in the Galactic center and establish an astrometric base that can be used in the future to measure the proper motions of the stars in and around IRS 16.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (LOCAL MEDIUM) --

2536 - "DEUTERIUM IN THE LOCAL INTERSTELLAR GAS "

Keywords : INTERSTELLAR DEUTERIUM ABUNDANCE; LOCAL INTERSTELLAR MEDIUM

Proposers: Alfred Vidal-Madjar (PI; Institute For Astrophysics, Paris; France), R.Ferlet (Institute For Astrophysics, Cnrs, Paris; France), R.Lallement (Cnrs, Department Of Aeronomy; France)

Evaluation of the primordial deuterium abundance is one of the few crucial observational constraint one may be able to place on cosmological models. Several approaches were attempted, but none up to now has produced a clear-cut answer. Even the best available estimations, completed in the interstellar medium through the Lyman lines of HI and DI, lead to evidences of variations up to a factor of four. In the local interstellar medium, fluctuations seem to exist over scales of few parsecs. It is of prime importance to check the existence of these local variations and eventually understand their causes. HST with HRS is best adapted to perform this analysis started with Copernicus and the IUE. In particular, its high sensitivity allows to use also white dwarfs as target stars at the Lambda/Delta Lambda = 105 resolution. These observations will dramatically improve the previous error bars because: 1)the stellar continuum is well known, 2)the detailed line of sight structure is observable; 3)the HI content in each individual component is accessible. Furthermore, from an extensive high resolution ground-based survey we have completed toward nearby stars, we pointed out the presence of several local velocity components. In consequence, we have eliminated regions in the sky where only averaged cloud properties are accessible-we are looking for local fluctuations-and selected regions where confusion is minimized. The expected refined evaluation of the deuterium

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Prop. Type: GO

INTERSTELLAR MEDIUM -- (

2537 - "PHYSICAL CONDITIONS OF INTERSTELLAR GAS WITHIN 50 PARSECS "

Keywords : PHYSICS OF THE INTERSTELLAR MEDIUM, LOCAL INTERSTELLAR MEDIUM

Proposers: Roger Ferlet (PI; Institute For Astrophysics, Paris; France), J.Ballet (Atomic Energy Commission, France; France), R.Lallement (Cnrs, Department Of Aeronomy; France), A.Vidal-Madjar (Cnrs, Institute For Astrophysics, Paris; France)

Models of the diffuse interstellar medium still lack definite observational proofs, in particular on small scale lengths (<10pc). They predict interfaces between cold dense clouds and a hot "coronal" very tenuous widely spread phase. These interfaces need to be directly obseved and studied because they offer a unique chance to understand the role of shocks, the nature of the evaporation zones, the grain destruction, the extent of the warm gas phase. All these problems can only tackled in details in the very local interstellar medium where the low column-densities of individual absorption regions are not hidden and can be well enough located. From ground-based studies, we have pointed out a new image of the nearby instellar medium. At least four velocity components are present within 20 pc. For two of them, we were able to delineate approximate frontiers toward which it is very promissing to search for interfaces. Furthermore, we found some evidence for a temperature structure within one of these components, providing therefore a prime target. Since visual observations do not offer adequate diagnostic lines and available UV data do not have the needed spectral resolution, we propose to perform with HRS a much more complete physical study of the cold and warm local gas. The selected diagnostic lines are those of AlII, FeII, MnII, MgI, and CIV, to be observed toward nearby stars in directions where confusion betwee

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Prop. Type: GO

GALAXIES _CLUSTERS -- (
2547 - "CALIBRATION OF SUPERNOVAE OF TYPE I AS STANDARD CANDLES "
Keywords : TYPE I SUPERNOVAE-CEPHEIDS-HUBBLE CONSTANT
Proposers: A. Sandage (PI; Carnegie Institution Of Washington), F.Macchetto (Stsci), N.Panagia (Stsci), G.Tammann (Basel, University Of; Switzerland)

We propose to determine Cepheid distances to nearby, highly resolved, late type galaxies, which have produced type I supernovae (SNeI). The purpose is to determine how good such SNe are as standard candles in the V band. The distances to these nearby galaxies and the galaxy groups of which they are members will also be directly important in mapping the very local Hubble expansion field. The present program is for IC 4182. We propose to determine the corrected distances using observations of a selected field in the program galaxy in the V, as well as in the I bands, so as to determine the internal absorption of each Cepheid by Freedman's method. Optimized periods and accurate mean magnitude determinations of the Cepheids are the main requirements. Color-magnitude diagrams of the brightest resolved stars will also be obtained and will improve our knowledge of this secondary calibrator. The ultimate purpose is to calibrate the SNeI, freed of absorption effects, for the determination of Ho. We do not propose to begin again the many steps required for the fundamental calibration of the P-L relation.Our more restricted program, which is a necessary complement to the more extensive Key "Hubble Constant" Project is complete within itself for the stated purpose.

Prop. Type: GO

QUASARS _AGN -- (QUASAR ABSORPTION) --
2553- LT - "THE ABSORPTION CROSS-SECTIONS OF NEARBY GALAXIES "
Keywords : NEARBY GALAXIES, ABSORPTION CROSS-SECTIONS, INTERSTELLAR MEDIUM, ABSORPTION LINES, HALOS, DISKS, QSOS
Proposers: J. Chris Blades (PI; Space Telescope Science Institute), M.Penston (Royal Greenwich Observatory; Uk), M.Pettini (Anglo-Australian Observatory; Australia)

Absorption redshift systems found in the spectra of QSOs with Zabs<Zem are

generally thought to arise in intervening galaxies. They can provide unique information on the physical conditions and distribution of galaxies at earlier epochs which otherwise are difficult to study. Yet, we have little knowledge of the nature and extent of absorbing gas in external systems via direct observations of QSOs shining through intervening galaxies. In this proposal we seek HST time to carry out a statistical determination of the sizes of halos of nearby galaxies to an equivalent width limit of 35 mA in C IV and 70 mA in MgII absorption, for direct comparisons with estimates established from high-redshift QSO systems. For this purpose, we have assembled samples of background QSOs close to low-redshift galaxies for both CIV and MgII. In many cases, these GSO-galaxy pairs were found by ourselves either through searching UK Schmidt objective prism plates or literature surveys.

Prop. Type: GO

STELLAR POPULATIONS -- (GLOBULAR CLUSTERS) --

2555 - "CATACLYSMIC VARIABLES AND MILLISECOND PULSARS IN GLOBULAR CLUSTER CUSPS"

Keywords : GLOBULAR CLUSTER, CORE COLLAPSE, STELLAR EVOLUTION, CATACLYSMIC VARIABLE, X-RAY BINARY, WHITE DWARF, NEUTRON STAR, MILLISECOND PULSA

Proposers: Jonathan E. Grindlay (PI; Cfa), C.Bailyn (Cfa), H.Cohn (Indiana University), P.Lugger (Indiana University)

We propose to use the PC to obtain H-alpha and comparison wide band red images of the nearby globular cluster NGC6752 which appears to be in an advanced stage of dynamical evolution. We will use these data for a color map analysis (Bailyn et al. 1988) and DAOPHOT crowded field photometry, in order to:(1) search for H-alpha emission objects including cataclysmic variables and nebulae surrounding millisecond pulsars (MSPs) and planetary nebulae, (2) search for diffuse H-alpha emission from a centrally concentrated population of the former two types of objects, and (3) study the radial distribution of H-alpha absorption line objects including faint blue horizontal branch stars (FBHBs). The central goal of our study is to test predictions of models for cluster dynamical evolution that predict the production of a substantial population of compact binaries due to a high rate of close stellar encounters in dense collapsed cluster cores. Our choice of one of this cluster that shows evidence of having undergone core collapse enhances the likelihood that the emission line objects expected from stellar encounters can be directly detected and resolved. Our search is distinctly different from, and more sensitive than, compact binary searches being planned by several GTO investigators.

Prop. Type: GO

SOLAR SYSTEM -- (GIANT PLANETS) --

2560- LT - "INTEGRATED DYNAMICAL AND SPECTROSCOPIC OBSERVATIONS OF JUPITER AND SATURN"

Keywords : SOLAR SYSTEM-PLANETS, JUPITER AND SATURN, BELTS, ZONES, WIND, ATMOSPHERE, PLUMES, RED SPOT, OVALS, BARGES, ACTIVE CONVECTION SITES

Proposers: Reta Beebe (PI; New Mexico State University), S.Atreya (Michigan, University Of), M.Belton (National Optical Astr Obs), G.Danielson (Caltech), T.Encrenaz (Paris Observatory; France), P.Gierasch (Cornell University), A.Ingersoll (Caltech), S.Lamaye (Wisconsin, University Of), T.Owen (Hawaii, University Of), W.Rossow (Nasa, Goddard), L.Trafton (Texas, University Of), R.West (Jet Propulsion Laboratory)

An integrated set of multispectral images and ultraviolet spectra provides the basis for comparative analysis of the atmospheres of Jupiter and Saturn. The spatial resolution and the spectral range of the Hubble Space Telescope, combined with the ability to continue similar observations for at least 17 years, assure that this data will contribute to a valuable database for interpreting the high resolution data from Voyager, Galileo and Cassini. The basic problems that are addressed with these data are: temporal variations of the ammonia clouds, characterization of convection in the upper tropospheres, meridional stratospheric circulation, variation in the troposphere-stratosphere dynamic coupling and seasonal variability.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (

2563-LP - "SINS: THE SUPERNOVA INTENSIVE STUDY: CYCLE 1 OBSERVATIONS "

Keywords : SUPERNOVA, NUCLEOSYNTHESIS, INTERSTELLAR ABSORPTION, GALAXY DISTANCES

Proposers: Robert P. Kirshner (PI; Cfa), J.Blades (Stsci), D.Branch (Oklahoma, University Of), R.Chevalier (Virginia, University Of), C.Fransson (Stockholm Observatory; Sweden), N.Panagia (Stsci), J.Wheeler (Texas, University Of)

Supernovae are stars at the end of stellar evolution. They mark the moment of stellar destruction, act as the key process in the chemical evolution of the universe, serve as agitators and probes of the interstellar medium, and provide sharp and useful tools for cosmological investigations. The spatial resolution and ultraviolet ability of Space Telecope make it an essential tool in furthering all of these aspects of supernova research. As SN 1987A has demonstrated, the best progress in this field comes from the detailed study of the brightest objects. Many of the central problems of supernova research can be attacked by intensive and extensive observations of a handful of moderately bright supernovae using the HST cameras and spectrographs over an extended period of time. Observations at the latest times may be the simplest to interpret and provide the best probe of the stellar interior. SN 1987A provides a unique opportunity to connect the evolution of a supernova with the development of a supernova remnant and will be studied in this program. Because supernovae touch on so many fields of astronomy, the results of this study will affect a broad range of areas from stellar interiors to cosmology.

Prop. Type: GO

SOLAR SYSTEM -- (

2564- LT - "AEROSOLS IN PLANETARY ATMOSPHERES: CYCLE 1 OBSERVATIONS "

Keywords : PLANETS, PLANETARY ATMOSPHERES, AEROSOLS, CLOUDS

Proposers: Martin Tomasko (PI; Arizona, University Of), R.West (Jet Propulsion Laboratory)

Our goal is to determine the vertical and horizontal distribution and optical properties of stratospheric aerosols in the atmospheres of the outer planets Jupiter and Saturn to constrain models of their photochemical production, vertical and horizontal transport, absorption of solar and thermal radiation, and role in forcing atmospheric dynamics. Observations needed for this purpose include photometry which 1) spans a wide range of wavelengths to permit discrimination in particle size; 2) refers to limited pressure ranges; 3) tracks specific planetary features. Carefully timed HST WFPC successive telescope orbits permit a wide spread in airmass factors at many planetary longitudes for good vertical discrimination both by the 8888A methane band at long wavelengths and by Rayleigh scattering at short wavelengths. These images at wavelengths separated by a factor >3 also provides good discrimination in the size of small stratospheric aerosols. No other technique is available which can provide either the simultaneous wide wavelength coverage or the spatial resolution to use center-to-limb variations to limit the vertical region probed on the outer planets. In addition, repeating such observations yearly permits temporal changes to be monitored for a new understanding of seasonal variations and the role of the solar cycle in these stratospheres.

Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --

2565- CT - "LINKING HIPPARCOS TO THE EXTRAGALACTIC REFERENCE FRAME PART 1 OF 6, BRIGHT0-11, CYCLE 2,CONTINUATION OF 2565."

Continuation of Program Number 2565

Keywords : REFERENCE FRAMES, HIPPARCOS, QUASARS

Proposers: Paul D Hemenway (PI; University Of Texas At Austin), N.Argue (The Observatories; England), C.Devegt (Hamburger Sternwarte; Fgr), R.Duncombe (University Of Texas At Austin), J.Hughes (U.S. Naval Observatory), D.Jauncey (C.S.I.R.O.; Australia), K.Johnston (U.S. Naval Research Lab), J.Kovalevsky (C.E.R.G.A.; France), J.Kristian (Caltech), J.Lestrade (Bureau De Longitude; France), M.Perryman (E.S.T.E.C.; Holland), R.Preston (Jet Propulsion Lab), B.Tapley (Univ Of Texas At Austin), C.Turon (Observatoire De Meudon; France), H.Walter (Anstronomische Recheninstitut; Fgr), G.White (C.S.I.R.O.; Australia)

Determination of a non-rotating Reference Frame is crucial to progress in many areas, including: Galactic motions, local (Oort's A and B) and global (RO) parameters derived from them, solar system motion discrepancies (Planet X); and in conjunction with the VLBI radio reference frame, the registration of radio and optical images at an accuracy well below the resolution limit of HST images (0.06 arcsec). The goal of the Program is to tie the HIPPARCOS and Extra- galactic Reference Frames together at the 0.0005 arcsec and 0.0005 arcsec/year level. The HST data will allow a deter- mination of the brightness distribution in the stellar and extragalactic objects observed and time dependent changes therein at the 0.001 arcsec/year level. The Program requires targets distributed over the whole sky to define a rigid Reference Frame. GTO observations will provide initial first epoch data and preliminary proper motions. The observations will consist of relative positions of Extra- galactic objects (EGOs) and HIPPARCOS stars, measured with the FGSs, or with the FGSs and PC together in "transit circle mode". The combination of HST and HIPPARCOS observations will provide

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Prop. Type: GO

SOLAR SYSTEM -- (MINOR PLANETS) --

2569 - "UV ROTATIONAL LIGHT CURVES FOR PLUTO, AND CHARON'S UV SPECTRUM"
Keywords : PLUTO, PLANET SOLAR SYSTEM, CHARON, SATELLITE
Proposers: Laurence M. Trafton (PI; Texas, University Of), A.Stern (Southwest Research Institute)

We propose to use the unique capabilities of the HST to spatially resolve synchronously rotating Pluto from Charon for a variety of orbital phases and obtain low resolution (20-70A)spectral light curves from 3300A to below 2100A Our objectives include a search for longitudinally varying spectral features, a characterization of the longitudinally varying surface scattering properties, and a determination of the UV survey spectra from 3300A to 2400a of opposite faces of Charon near its elongations. Since significant changes are expected for Pluto's surface over HST's lifetime, and the present perihelion changes will not recur until 2233 Ad, data should be obtained now to serve as a baseline for later comparison or else the oportunity will be irretrievably lost. Only HST can observe below 3000A with the spatial resolution to separate Pluto from Charon and with the sensitivity to get usable signal to noise ratios at spectral resolutions of 20-70A.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (LATE EVOLUTION) --

2570 - "RECENT MASS EJECTION FROM PLANETARY-NEBULA NUCLEI "

Keywords : WHITE DWARF, PLANETARY NEBULAE, CENTRAL STARS, STELLAR EVOLUTION, MASS LOSS

Proposers: Howard E. Bond (PI; Stsci), J.Liebert (Arizona, University Of), A.Renzini (Bologna, University Of; Italy)

We propose HST FOC imagery of two unusual central stars of planetary nebulae. V605 Aql, the central star of Abell 58, appeared as a 10th-mag red giant for several years around 1920, but is now fainter than 20th mag and appears to lie inside a compact knot of very hydrogen-deficient nebulosity. HST UV images can directly establish that the central star is now extremely hot, providing the first direct evidence for thermal pulses that are predicted to occur in hot pre-white-dwarfs. 0950+139, the central star of EGB 6, is presently a hot white dwarf, surrounded by a compact, unresolved nebula. FOC imagery in the [O III] and H-beta emission lines will establish one of the following. (1) The compact nebula remains unresolved from HST, implying ongoing mass loss from the white dwarf, for which there is no physical understanding at present. (2) The nebula shows sub-arcsecond structure (a hollow shell, blobs, or jets). implying a discrete mass-ejection event, most probably associated with a "self-induced nova" outburst in the fairly recent past. The latter would again provide evidence for an event theoretically predicted to occur in some hot white dwarfs. (3) The nebula shows disk-like structure, suggesting that it arises from ablation of a planetary companion.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (X-RAY BINARIES) --

2572 - "TIME RESOLVED UV SPECTROMETRY OF VELA X-1 "

Keywords : X-RAY, SOURCE, BINARY STARS

Proposers: Richard Mccray (PI; Colorado, University Of), T.Kallman (Nasa, Goddard), M.Klis (Esa, Estec; Netherlands), B.Margon (Washington, University Of), F.Nagase (Isas, Japan; Japan), Y.Tanaka (Isas, Japan; Japan)

We propose to observe HD77581, the optical counterpart of the X-ray source Vela X-1 (4U0900-40), in order to study the effects of X-ray ionization on the stellar wind from this star. UV Resonance line profile changes with orbital phase predicted by Hatchett and McCray (1977) are a familiar phenomenon in this system. The goals of this observing program are to search for theoretically predicted line profile changes correlated with the 283s pulse period of the compact X-ray source and to study correlations of the UV resonance line variability with X-ray variability in coordinated observations by the GINGA satellite. Observations of such line profile variability can tell us about the geometry of the radiation pattern from the pulsar and the dynamics of the accretion flow.

Prop. Type: GO

QUASARS AGN -- (QUASAR EMISSION) --
2578- LT - "THE INNER REGIONS OF QUASARS: CYCLE 1 OBSERVATIONS "
Keywords : QUASARS, SPECTRA
Proposers: Beverley J. Wills (PI; Texas, University Of), J.Baldwin (Ctio (Noao)), I.Browne (Manchester, University Of; Uk), G.Ferland (Ohio State University), H.Netzer (Tel Aviv University; Israel)

An axisymmetric geometry for the inner few parsesc of quasars is strongly suggested by several new investigations. A mass-luminosity relation has been suggested as well as a dependence of ionization of the Broad Line Region on continuum luminosity. These recent studies offer exciting prospects for probing the innermost regions by means of orientation-dependent emission line ratios, equivalent widths and profiles, and continuum spectra, including luminosities in the radio, UV, and X-ray regions.We propose to measure the UV line and continuum (FOS) spectra (rest wavelengths>1170A) in a complete sample of 3CR radio quasars extended to include quasars with measured X-ray flux densities and a range of radio core-dominance. These spectra are being extended by ground-based observations to ~8000A, to cover high and low ionization lines in the same quasar, and the HST sample itself is being complemented by higher redshift quasars where the strong lines of Ly-alpha,CIV lambda 1549, and CIIIlambda1909 are being observed from the ground. Some of several questions that we hope to answer are: 1. Is their evidence for massive accretion disks? (via equivalent width distributions and correlations with radio core-dominance for lines of different ionization).2. Are the line widths and fluxes correlated with the radio, UV or X-ray continuum properties? Is the result the same for all lines, in particular Fe II, C IV and H-Beta? What can this tell us about the kinematics and geometry of the BLR 3? What is the origin

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Prop. Type: GO

STELLAR ASTROPHYSICS -- (
2581 - "STELLAR WINDS OF MASSIVE STARS IN NEARBY GALAXIES "
Keywords : EXTRAGALACTIC STARS, STELLAR WINDS, MASS LOSS, UV, SPECTROSCOPY.
Proposers: Luciana Bianchi (PI; Astronomical Observatory Torino; Italy), J.Hutchings (Dominion Astrophysical Observatory; Canada), R.Kudritzki (Munich University; Frg), H.Lamers (Utrecht Laboratory For Space Research; Netherlands), P.Massey (Kpno, Noao)

We propose to study the stellar wind characteristics of hot massive stars in M31 and M33 by observing with the HST-FOS the profiles of UV resonance lines which are the main wind indicators. The immediate aim is to understand how mass loss rates, and other characteristics of the stellar winds, such as the velocity-laws (i.e. the acceleration) and the ionization, depend on metallicity. The final goal is to understand the evolution of massive stars in galaxies of different chemical composition. The dependence of hot star winds on metallicity is in fact predicted by the theory of radiation-pressure driven winds, but it could be observed so far only in the MCs stars (Hutchings, 1982; Garmany and Conti 1985; Kudritzski et al, 1987). In the past years we have pushed IUE to its limits to observe far UV spectra of the brightest/hottest stars in M31 and M33. In spite of the very low resolution (insuffiecent for quantitative line analysis) we observed for all the stars of our sample significantly lower terminal velocities and weaker P Cygni profiles than for galactic stars of similar type. The results of this pioneer study (that involved also an extensive ground based observing program) on one hand, and the recent significant improvements of the radiation driven wind theory and treatment of ionization equilibrium in the stellar atmospheres and envelopes on the other hand, show that a higher resolution study of the UV lines will be very interesting.

Prop. Type: GO

STELLAR POPULATIONS -- (GLOBULAR CLUSTERS) --

2583 - "SURFACE PHOTOMETRY OF A SAMPLE OF GLOBULAR CLUSTERS IN M31 "

Keywords :

Proposers: Flavio Fusi Pecci (PI; Bologna Observatory;), P.Battistini (Bologna, University Of; Italy), F.Bonoli (Bologna, University Of; Italy), R.Buonanno (Roma Observatory; Italy), C.Cacciari (Bologna Observatory; Italy), G.Djorgovski (Caltech), L.Federici (Bologna Observatory; Italy), I.King (California, University Of, Berkeley), R.Walterbos (California, University Of, Berkeley)

The purpose of the present program is to derive the surface brightness profiles of a number of globular clusters in M31, in order to study their morphology (e.g. King model vs. post- core-collapse) and their occurrence and frequency as a function of a number of physical and dynamical parameters of the clusters. The FOC/96 has been chosen for giving the best combination of space resolution and field of view, since most of the cluster light falls within the central region 3-4 arcsec radius wide. The space resolution of 0.022 arcsec offered by the FOC/96 is necessary in order to reveal the central cusps of post-core- collapse morphologies which may occur within a radial distance of 0.1 arcsec. For this reason, the deconvolution with an accurate PSF is very important for a correct interpretation of the data, and we plan to take also a few observations of stars and use the PSF thus determined, along with the jitter information for each cluster image and whatever information on the PSF the STScI will provide us, for the reduction of the cluster data.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (

2584 - "VELOCITY STRUCTURE OF THE INTERSTELLAR SHOCKWAVES "

Keywords : INTERSTELLAR MEDIUM

Proposers: Wang Zhong (PI; Ipac/Caltech), Z.Wang (Ipac/Caltech)

High velocity (VLSR~=100km/sec) radiatively cooling shocks may exist in the interstellar medium, but have never been directly confirmed in observation. Theories predict that for the interstellar near-uv absoprtion lines associated with the postshock gas, their relative velocities should correlate with the stages of ionization of the absorbing atoms. Hence they are sensitive to the temperature distributions in the shocked gas and are ideal probes of the shock structure. Measurements of the expected velocity differences (on the order of 6 km/sec) were not achievable in previous space-based observations, but are within the easy reach of the HRS. We propose to examine this phenomena by observing early type stars in the Orion OB Association with the high resolution mode of the HRS. The proposed program requires only a minimum amount of the HST observing time, since the two target stars chosen are bright and known to have well separated high velocity interstellar absorption features. If confirmed, this could be the most unambiguous evidence for the radiatively cooling interstellar shockwaves.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (MASSIVE STARS) --

2590 - "DEEP IMAGING OF THE SITE OF SN 1961V, A POSSIBLE EXTRAGALACTIC ETA CARINAE ANALOGUE"

Keywords : EXT-STAR; SN; LBV; HOST=NGC1058 IMAGING

Proposers: Alexei V. Filippenko (PI; California, University Of, Berkeley), R.Goodrich (California Institute Of Technology), A.Porter (Kpno, Noao), G.Stringfellow (Mount Stromlo Observatory; Australia)

Analysis of new and old ground-based observations leads us to hypothesize that the unique "Type V Supernova" 1961V in NGC1058 was not a SN (the explosion of a massive star at the end of its life). Rather, it was the super-outburst of a luminous blue variable --- an exaggerated eta Car-type outburst of a very massive, evolved star near the end of core hydrogen burning. The long plateau in the light curve following outburst, at nearly the same brightness as the pre-outburst star, suggests that the progenitor survived the outburst; it later faded only because of the formation of optically thick dust in the ejecta. The underlying star should be a hot Of/WN star. Our observations suggest a circumstellar extinction of Av=5mag, if the surviving star resembles eta Car. The present brightness of the star should be near V=27, but perhaps as bright as V=23. We will determine whether the star is present by imaging the site of SN1961V with the WFC. The faint star cannot be seen from the ground because of contamination by the underlying HII regions.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (LATE EVOLUTION) --

2593- CT - "WHITE DWARF STARS "

Continuation of Program Number 2593

Keywords : WHITE DWARF, CHEMICALLY PECULIAR STAR

Proposers: Harry Shipman (PI; Delaware, University Of), G.Basri (California, University Of, Berkeley), H.Bond (Stsci), F.Bruhweiler (Cathhholic University), F.Cordova (Los Alamos National Laboratory), D.Finley (California, University Of, Berkeley), G.Fontaine (Montreal, University Of; Canada), P.Hintzen (Nasa, Goddard), J.Holberg (Arizona, University Of), K.Jensen (Nasa, Goddard), D.Koester (Louisiana State University), J.Liebert (Arizona, University Of), J.Nousek (Penn State University), T.Oswalt (Florida Institute Of Technology), E.Sion (Villanova University), S.Starrfield (Arizona State University), D.Tytler (Columbia University), G.Vauclair (Toulouse Observatory; France), G.Wegner (Dartmouth College), V.Weidemann (Kiel University; Frg), F.Wesemael (Montreal, University Of; Canada)

HST's unprecedented spectroscopic capabilities, supplemented important cases by its high spatial resolution, can address a outstanding scientific problems relating to white-dwarf the number of solid mass and radius determinations from 6, either placing our understanding of the fundamental on a secure observational footing (at last High qualitiy spectra from HST will permit us to address about the origin of the chemical diversity of white-dwarf far greater than that found anywhere else on the HR diagram. critically affect other important areas of stellar stellar superwinds, the origin and evolution of planetary close binaries, mass loss, and red giant envelope evolution. many astronomers who have been active in the field for years collaborate in this enterprise. Our target list, while towards doing outstanding science with the first year of HST comprehensive enough to establish HST's potential and guide proposals in this field.

Prop. Type: GO

STELLAR POPULATIONS -- (OPEN CLUSTERS) --

2595 - "THE LUMINOSITY FUNCTION OF THE TRAPEZIUM CLUSTER - AN OBSERVATIONAL TEST OF BI-MODAL STAR FORMATION MODELS"

Keywords : PMS STAR, OPEN CLUSTER, LUMINOSITY FUNCTION

Proposers: John R. Stauffer (PI; Smithsonian Institute, Astrophysical Observatory), D.Depoy (Ohio State University), L.Hartmann (Smithsonian Institute, Astrophysical Observatory), B.Jones (California, University Of, Santa Cruz), M.Mccaughrean (Arizona, University Of), D.Soderblom (Stsci), M.Werner (Jet Propulsion Laboratory)

We propose to use the Planetary Camera to extend the search for low mass members of the "Trapezium Cluster" to M ~ 0.1 solar masses in order to test theories of bimodal star formation. The immediate goal of these observations is to identify cluster members to V ~ 19.5, and to derive the cluster luminosity function to that limit. By combining these images with ground-based spectroscopy and IR images, we will derive the initial mass function and test for coeval star formation in the densest star-forming region near the Sun.

Prop. Type: GO

GALAXIES CLUSTERS -- (
2600-LP - "CORES OF EARLY-TYPE GALAXIES: CYCLE 1 OBSERVATIONS "
Keywords : ELLIPTICAL GALAXY, S0 GALAXY, DWARF GALAXY, LOCAL GROUP, GALACTIC NUCLEUS, GALACTIC BULGE, IMAGING
Proposers: Sandra M. Faber (PI; California, University Of, Santa Cruz), A.Dressler (Mt Wilson Las Campanas Observatories), J.Kormendy (Hawaii, University Of), T.Lauer (Kitt Peak National Observatory), D.Richstone (Michigan, University Of), S.Tremaine (Toronto, University Of; Canada)

We are conducting a comprehensive imaging survey of the cores of early-type galaxies and spiral bulges. The high spatial resolving power of deconvolved HST images will be used to measure core structure parameters over a wide range of core size and luminosity. PC images in F555W will be taken of 45 galaxies covering a range of 9 magnitudes in luminosity. Ground-based photometry and kinematic data will be obtained to augment HST data at larger radii. Observations will be used to construct dynamical models of the core regions using a maximum-entropy technique. Ground-based spectroscopy will be used in conjunction with HST-ground luminosity profiles. We may be able to obtain strong evidence of black holes in certain selected BH candidates. A major question which we will address is the core structure of small early-type galaxies and the differences between low-luminosity Es on the one hand and dwarf spheroidals and giant Es on the other.

Prop. Type: GO

SOLAR SYSTEM -- (
2602 - "THE EXCITATION OF THE ATMOSPHERES OF PLANETARY SATELLITES "
Keywords : PLANETARY SATELLITE, PLASMA TORUS, AURORA
Proposers: John T. Clarke (PI; Michigan, University Of), J.Ajello (Jet Propulsion Laboratory), J.Luhmann (California, University Of, Los Angeles), N.Schneider (University Of Colorado)

We will observe Io at near and far UV wavelengths in a set of observations designed to study the excitation of the satellite atmospheres. The distinguishing element of this program is the design of the observations to separate the following processes: resonant scattering of solar emission, charged particle excitation by magnetospheric plasma, and (in the case of Io) the decay of the atmosphere in the absence of solar-driven sublimation from the surface. Io will be observed with the FOS/HST combination in the far-UV over a period of time centered on the passage of Io into eclipse to separate the solar emissions (while sunlit) from particle excited emissions (while in shadow) and the near UV SO2 aurora will be observed while Io is in shadow. The far UV lines of atomic sulfur and oxygen emanate from an extended atmosphere, and are produced by a combination of resonant scattering of solar emission and plasma impact relatively high in the atmosphere. The near-UV bands of SO reflect particle impact on SO2, the parent molecule believed to be driven by sublimation vapor pressure from the surface, and may be excited relatively closer to Io's surface (due to the 3 times smaller scale height) by incident plasma and/or ionospheric processes.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (
2603- CT - "PARALLEL OBSERVATIONS OF H LY ALPHA EMISSION FROM THE LOCAL ISM "
Continuation of Program Number 2603
Keywords : INTERPLANETARY MEDIUM, LISM GAS, SOLAR WIND
Proposers: John T. Clarke (PI; Michigan, University Of), J.Bertaux (Cnrs, Department Of Aeronomy; France), H.Fahr (Bonn University; Frg), R.Lallement (Cnrs, Department Of Aeronomy; France), F.Paresce (Stsci)

We propose to observe the sky background H Ly alpha emission in parallel with scheduled observations to study the emission generated by local ISM hydrogen penetrating into the solar system. This component can be observed when the earth orbital motion Doppler-shifts the geocoronal line from the LISM vector. By defining the velocity vector of the interstellar wind (ISW) in the solar system we may identify which of several local clouds in the LISM encompasses the solar system. By a careful measurement of the ISW line shape we may study the temperature of the LISM and interaction of the ISW with the heliospheric bow shock and solar wind. This proposal is solely for parallel observing time.

Prop. Type: GO

GALAXIES _CLUSTERS -- (
2607- LT - "BLACK HOLES, STELLAR DYNAMICS AND POPULATIONS IN THE NUCLEI OF A COMPLETE SAMPLE OF ELLIPTICAL GALAXIES: CYCLE 1 OBSERVATIONS"
Keywords : MASSIVE BLACK HOLES; GALACTIC NUCLEI; STELLAR DYNAMICS, STELLAR POPULATIONS, ACTIVITY
Proposers: Walter Jaffe (PI; Leiden University; Netherlands), H.Ford (Jhu And Stsci), R.O'Connell (Virginia, University Of)

We will determine the prevalence of massive black holes in a complete sample of bright Virgo ellipticals using FOS spectra and WFPC surface photometry. We will correlate the dynamical evidence for massive black holes with indicators of nuclear activity (radio and optical emission, and star formation). Additionally, we will use our data to study the stellar dynamics and demography of the 'cores' of these elliptical galaxies. Our observations will establish the fundamental properties of the nuclear regions: photometric profiles, rotation and dispersion velocities, and spectroscopic metallicity indicies. FOC-UV images will reveal the presence of young stars and/or nonthermal emission. We will determine black hole masses by comparing the predictions of self-consistent dynamical models of the core to the observed surface photometry and kinematics. We wil model the stellar populations by comparing the observed metallicities and spectral energy distributions to synthetic spectra constructed from stellar libraries.

Prop. Type: GO

QUASARS _AGN -- (
2608 - "CONSTRAINTS ON CONTINUUM MODELS OF ACTIVE NUCLEI: FAST ULTRAVIOLET VARIATIONS"
Keywords : ACTIVE NUCLEII/RAPID CONTINUUM VARIABILITY
Proposers: M. J. Ward (PI; Oxford, University Of; Uk), C.Done (Goddard), M.Elvis (Cfa), A.Fabian (Cambridge, University Of; Uk), A.Lawrence (Queen Mary Westfield College, London; Uk)

We propose to use the Fast Photometer to observe fast-timescale ultraviolet continuum variations in Active Nuclei. The two objects selected have the fastest observed X-ray variations down to 100 seconds, an observational limit set by the satellite sensitivity. Importantly, the Fourier Power-Spectrum of the X-ray data shows no sign that we have yet sampled the fastest variations. The large contribution of starlight, even through the smallest apertures, means that no ground-based experiment can approach the sensitivity to short timescales variations that the HSP can potentially observe. The proposed ultraviolet observations can be made near-simultaneously through two ultraviolet filters, giving crude two color spectral information that will help define the characteristics of the variable component. Using the HSP we can improve the time resolution by an order of magnitude, thus setting strong constraints of models of compact source energy generation.

Prop. Type: GO

SOLAR SYSTEM -- (GIANT PLANETS) --
2625- LT - "EXCITATION PROCESSES FOR THE OUTER PLANET UV EMISSIONS: CYCLE 1 OBSERVATIONS"
Keywords : JUPITER
Proposers: H. W. Moos (PI; Johns Hopkins University), J.Clarke (Michigan, University Of), M.Mcgrath (Johns Hopkins University), D.Shemansky (Arizona, University Of), D.Strobel (Johns Hopkins University)

A set of observations of Jupiter in the far-ultraviolet spectral region will be used to determine the process(es) exciting UV ('electroglow') emissions in the upper atmosphere. Utilizing the increased sensitivity and spectral resolution of the ST/HRS over IUE and Voyager systems, emission lines in two 35A bandpasses centered at 1254A and 1594A will be used to distinguishbetween the suggested processes of electron excitation and fluorescence.

Prop. Type: GO

SOLAR SYSTEM -- (SATELLITES) --

2627 - "IO'S ATMOSPHERE AND ITS INTERACTION WITH THE PLASMA TORUS "

Keywords : JUPITER, IO, IO PLASMA TORUS, JOVIAN MAGNETOSPHERE

Proposers: H. W. Moos (PI; Johns Hopkins University), G.Ballester (Johns Hopkins University), P.Feldman (Johns Hopkins University), M.Mcgrath (Johns Hopkins University), D.Strobel (Johns Hopkins University)

A simple yet comprehensive set of UV observations of the Io plasma torus and near-Io environment with the FOS and HRS at low and medium resolutions is proposed with the goal of understanding the interaction between the plasma torus and Io's atmosphere. Spatial scans of Io will yield the radial dependence of sulfur (S) and oxygen (O) densities, spatially resolve the interaction region of neutral S and O emission discovered by IUE, and determine its electron temperature (Te). The detection of OII 2470 will also be attempted.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (STELLAR ATMOSPHERES) --

2634 - "B AND BE AS PROBES OF COSMIC RAY SPALLATION AND STELLAR STRUCTURE "

Keywords : DWARF, POPULATION II, COSMIC RAYS, HALO, STELLAR STRUCTURE, OPEN CLUSTER

Proposers: Douglas K. Duncan (PI; Stsci), D.Soderblom (Stsci)

I. We propose to observe Boron and Beryllium in one intermediate metallicity halo stars ([Fe/H]~-1.5) which appears to have formed at the time when the galaxy was just beginning to syntheize those two light elements through the spallation reactions of cosmic rays on C,N,O nuclei in the interstellar medium. The B and Be abundances and their ratio yield knowledge of the energetic particle flux at this epoch and on the time of formation of the halo, in the same way that the current interstellar medium light element abundances are used to constrain theories of present cosmic rays. II. We propose to observe B in two stars in the "Li gap," the mysterious narrow temperature range in F stars in which Li is depleted by more than an order of magnitude compared to stars just a few 100 K hotter or cooler. Knowledge of whether B is depleted in the same star should help decide whether turbulent diffusion, gravitational settling, or some other as yet unknown mixing process is responsible for the gap.

Prop. Type: GO

QUASARS _AGN -- (QUASAR ABSORPTION) --

2638- LT - "THE NEAR ULTRAVIOLET SPECTRUM OF 0215+015 "

Keywords : ABUNDANCES, COSMOLOGY, BL LAC OBJECT: LINE IDENTS, UV: SPECTRA

Proposers: J. Chris Blades (PI; Space Telescope Science Institute), R.Hunstead (University Of Sydney; Australia), M.Pettini (Aao; Australia)

The radio source 0215+015 is a remarkable QSO. Originally classified as a featureless BL Lac object, weak emission lines at Z(em) = 1.72 have been detected recently. The object has a complex absorption spectrum with seven redshifts identified from our optical spectra. The source shows large (around 5 mag) optical variations, and when bright (14-16mag) can be studied at high resolution, making it a unique and important object for absorption line studies. Our proposal seeks Target-of-Opportunity (ToO) time to study the region 2200-3200A, during the next bright period. Our aim is to study absorption lines belonging to the three most complex redshift systems. We shall use the GHRS at R=27,500 for a detailed study of the Ly-alpha region z = 1.345 and the Ly-beta - O VI regions at z = 1.549 and 1.649.

Prop. Type: GO

QUASARS _AGN -- (QUASAR ABSORPTION) --

2644 - "THE ENVIRONMENTS OF STARBURST GALAXIES: ABSORPTION-LINE STUDIES OF GALACTIC OUTFLOWS"

Keywords : GALAXIES,STARBURSTS,INTERSTELLAR MEDIUM, STAR FORMATION, GALAXY EVOLUTION, QUASAR ABSORPTION LINES.

Proposers: Colin A. Norman (PI; Stsci), J.Blades (Stsci), L.Danly (Stsci), T.Heckman (Stsci)

Starburst galaxies are known to pump prodigious amounts of mass, energy and momentum into their circumgalactic halos and the surrounding intergalactic medium. Outflows from starbursts are seen with both narrow band images and optical spectroscopic studies. The physics of these flows is fascinating. The most plausible explanation of their origin is that they are driven by a continuous energy and momentum input from the supernovae explosions. We propose here a coherent, in-depth study of the physical state of these outflows. We shall study in detail the absorption line spectra of five quasars behind starburst outflows at projected galactocentric distances of order 10-100 kpc to learn about the ionisation state, metallicity, filling factor, geometry and kinematics of the outflowing gas. With HST the studies will be of comparable sensitivity and resolution to the studies of gas surrounding our own galaxy and we emphasize that there is no other way to get the information needed to determine the physical state of these flows.

Prop. Type: GO

QUASARS AGN -- (GRAVITATIONAL LENSES) --

2649 - "SPECTROPHOTOMETRY OF THE LENSED, 'CLOVER LEAF,' BROAD ABSORPTION LINE QSO 1413+11"

Keywords : GRAVITATIONAL LENSING, BROAD ABSORPTION LINES, NARROW ABSORPTION LINES, IMAGING, POLARIMETRY, SPECTROPHOTOMETRY

Proposers: David A. Turnshek (PI; University Of Pittsburgh), O.Lupie (Computer Sciences Corporation)

Observations of the lensed, 'clover leaf', Broad Absorption Line (BAL) QSO 1413+11 are proposed in order to achieve the following goals: (1) An early acquisition PC image must first be obtained and anlyzed to measure accurate locations for the four images which will be observed with FOS. An additional PC image of the lensed QSO wil be taken at the time of the FOS observations so that relative photometry of the four QSO images can be performed. The results of this photometry will allow contamination from overlapping PSFs to be removed from the four FOS spectra. (2) FOS observations of the four QSO images will be used to check for sight-line dependent differences in the BAL profiles. The results can be used to place constraints on small-scale BAL cloud sizes and shapes. (3) The same FOS observations will be used to check for sight-line dependent differences in intervening, narrow metal absorption line systems. The results can be used to place constraints on narrow line system cloud sizes and shapes. All observations will be made at optical wavelengths. HST's high spatial resolution is required in order to obtain observations of the individual lens components.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (PULSATING STARS) --

2680 - "CROSS DISPERSION IMAGING OF HOT + COOL BINARIES "

Keywords : BINARY STARS - COSMIC DISTANCE SCALE - MASSIVE STAR EVOLUTION

Proposers: D. Massa (PI; Applied Research Corporation), A.Endal (Applied Research Corporation), N.Evans (York University; Canada), S.Parsons (Computer Sciences Corporation)

We propose to evaluate an observing strategy which could accurately measure separations ~ 10E-3" for binaries with evolved F-M primaries and main sequence B or A secondaries. These include binaries whose primaries are Cepheid variables and supernova progenitors. When combined with spectroscopic orbits, the spatial information will enable the masses and distances to such stars to be determined from Newton's laws and Euclidean geometry. Determining distances for the Cepheids in this way amounts bypassing two rungs of the cosmic distance ladder. For the Non-variable evolved stars, the mass determinations will provide sorely needed information on the poorly understood mass loss processes which occur in the latter stages of the evolution of massive stars.

Prop. Type: GO

GALAXIES _CLUSTERS -- (
2684-KP - "HST MEDIUM-DEEP SURVEY: CYCLE 1 "
Keywords : GALAXIES AND QUASARS, STARS, GALACTIC, EXTRAGALACTIC, BLANK SKY
Proposers: Richard E. Griffiths (PI; Stsci), R.Doxsey (Stsci), G.Gilmore (Cambridge, University Of; Uk), J.Huchra (Cfa), G.Illingworth (California, University Of, Santa Cruz), D.Koo (California, University Of, Santa Cruz), S.Lilly (Toronto, University Of; Canada), K.Ratnatunga (Gsfc), M.Schmidt (Caltech), T.Shanks (Durham University; Uk), J.Tyson (AtT Bell Labs), D.Weedman (Penn State University), R.Windhorst (Arizona State University)

We propose to conduct a Medium-Deep Survey as a Key Project. In doing so, we plan to increase the overall efficiency of HST, mainly by taking deep multicolor images with the WF/PC in parallel mode, but also by including UV images with the FOC when the WF/PC is primary. In addition to the great potential for serendipitous discoveries, the parallel data are needed to undertake a number of scientifically important programs, both in Galactic and extra-galactic astronomy. In particular, we will concentrate on areas ranging from the evolution of galaxies to Galactic structure, and on serendipitous searches for objects from the solar system to goal of measuring variability and proper motions, and to optimize the limiting magnitudes and color baselines for fields of particular interest. Our access to large ground-based telescopes is a major strength of the team that will ensure that the HST survey is optimized and followed up in a timely and coordinated way, using HST only for its unique properties of UV sensitivity, high resolution and low background.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (ERUPTIVE BINARIES) --
2686 - "THE ULTRAVIOLET EMISSION FROM MAGNETIC VARIABLES "
Keywords : INTERACTING BINARY, ACCRETION, UV, EMISSION, DIAMETER
Proposers: H. S. Stockman (PI; Stsci), J.Holberg (Arizona, University Of), J.Liebert (Arizona, University Of), G.Schmidt (Arizona, University Of)

We propose to use the time-resolved spectroscopy mode of the FOS to study the origins of UV emission in the AM Her-type or magnetic variables. Since the magnetic variables are "naked" (they have no obscuring or diluting accretion disk), they have proved to be invaluable in increasing our understanding of cataclysmic variables and accretion binaries. While these systems are relatively well understood in a qualitative sense, the origin of the UV "upturn" around 1250-1500A is still a major mystery. When first discovered in AM Her by IUE, this flux was interpreted as either evidence for steady nuclear burning or direct energy deposition into the accreting white dwarf photosphere. The implied luminosities, L ~10E35 erg/s, are several orders of magnitude greater than observed in hard X-ray or optical bands. While several theories address this "soft X-ray/UV" excess, we propose to establish the size and positions of the emission regions using HST observations of eclipses by the red companion and the W.D. itself.

Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --
2691- LT - "PRECISION PARALLAXES OF CEPHEIDS AND RR LYRAES USING THE WF/PC "
Keywords : STARS: CEPHEIDS, ASTROMETRY, PARALLAXES.
Proposers: Douglas K. Duncan (PI; Stsci), R.Gilliland (Stsci), D.Van Buren (Canadian Inst. For Theoretical Astrophysics; Canada)

A new technique using the WF/PC should allow astrometric positions to be determined with an accuracy of 0.0002 arcsec 0.2 m.a.s. from two PC frames. We propose an initial test of the technique. Our new technique involves trailing HST during exposures to help alleviate the problem of undersampling inherent in the WF/PC. Once our technique of precision astrometry is proven, it should have numerous applications.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (
2693 - "A SEARCH FOR MASS LOSS FROM TWO RED GIANTS IN NGC 6752 "
Keywords : GIANT, GLOBULAR CLUSTER, POPULATION II, CHROMOSPHERE, MASS LOSS
Proposers: A. K. Dupree (PI; Cfa), L.Hartmann (Cfa), I.King (California, University Of, Berkeley), G.Smith (Stsci)

To reproduce the observed color magnitude diagram of globular clusters with stellar evolution codes, it has been necessary to assume that substantial amounts of mass are lost from metal-poor stars ascending the red giant branch for the first time. Currently however, there is no direct observational detection of mass loss from such stars. We propose to obtain high resolution spectra of the 2795.5 and 2802.7 Mg II (h and k) lines for two red giants in the globular cluster NGC 6752. The profiles of these well known chromospheric lines can establish the presence of stellar mass loss from and circumstellar material around red giant stars in globular clusters. The High Resolution Spectrograph is the only instrument available that is capable of high resolution ultraviolet spectroscopy of stars as faint as globular cluster red giants. The rate of any mass loss, as well as the outflow velocity, can be derived from fitting the observed Mg II profiles will represent fundamental data necessary for understanding late stages of the evolution of low-mass stars.

Prop. Type: GO

QUASARS _AGN -- (

2695 - "MORPHOLOGY OF PKS 1614+051, A QUASAR-GALAXY PAIR AT Z=3.21 "
Keywords : QUASARS-HIGH-REDSHIFT-GALAXIES-GALAXY INTERACTIONS- GALAXY FORMATION.
Proposers: S. Djorgovski (PI; Caltech), M.Dickinson (California, University Of, Berkeley), P.Mccarthy (Ociw), J.Smith (Caltech), H.Spinrad (California, University Of, Berkeley), M.Strauss (Caltech), D.Thompson (Caltech), N.Weir (Caltech)

The galaxy companion to the quasar PKS 1614+051 at z = 3.21 is one of the most distant non-QSO objects known. Ground-based observations suggest that the quasar and its galaxy companion are interacting, and that the galaxy may harbor an active nucleus. This putative interaction occurs at an epoch when quasars first appear in large numbers, and we may be witnessing an event responsible for the turn-on of the quasar activity in this system. The redshift of this system implies that it is less than 20% the current age of the universe, giving us a unique opportunity to study the star formation history and stellar population of a young and possibly forming galaxy, or a compact group of galaxies. High-resolution imaging with the HST will reveal the nature of the interaction between the companion and the quasar, and allow us to address basic questions of the nature and evolution of galaxies at extremely high redshifts, and the origins of galactic activity in the early universe. We propose imaging in the band containing the Ly alpha emission line, as well as in a broad-band line-free band to sample the stellar continuum.

Prop. Type: GO

GALAXIES _CLUSTERS -- (

2698 - "LYMAN-ALPHA IMAGING OF YOUNG AND FORMING GALAXIES AT LARGE REDSHIFTS "
Keywords : GALAXIES: FORMATION-GALAXIES: RADIO-GALAXIES:EMISSION LINE-COSMOLOGY.
Proposers: S. Djorgovski (PI; Caltech), M.Dickinson (California, University Of, Berkeley), P.Mccarthy (Ociw), J.Smith (Caltech), H.Spinrad (California, University Of, Berkeley), M.Strauss (Caltech), D.Thompson (Caltech), W.Van Breugel (California, University Of, Berkeley), N.Weir (Caltech)

A number of the recently discovered optical counterparts of powerful radio sources such as 3C 326.1 at z ~= 1.8 have properties which can be interpreted as those of giant galaxies or cluster cores in the process of formation. Among these are the galaxies' large size, clumpy appearance, strong Ly alpha emission, low continuum surface brightness, large velocity fields, and estimated star formation rates of several hundred Mo/yr. While the presence of strong radio lobes marks these objects as atypical, they are the best candidates for primeval galaxies now known. UV imaging with the HST can check this hypothesis, and provide further insights into their nature. We propose to do imaging in intermediate width bands containing the Ly alpha line of 3C 326.1, our primary primeval galaxy candidate, and 3C 256, a radio galaxy with comparable redshift which shows a strong Ly alpha, bright and compact stellar continuum, and is an excellent example of the radio-optical alignment effects. The initial burst of star formation in 3C 256 may be over, but it is still very young and actively evolving. Ly alpha imaging will reveal the distribution of star formation in these galaxies, and constrain estimates of star formation rate, jet-galaxy interaction, and and gas ionization mechanisms.

Prop. Type: GO

QUASARS _AGN -- (QUASAR ABSORPTION) --

2717 - "PROBING THE VOIDS "

Keywords : QUASARS, SEYFERT GALAXY, VOID.

Proposers: John Stocke (PI; Colorado, University Of), J.Case (Colorado, University Of), J.Shull (Colorado, University Of)

We propose to use the HST + FOS to verify and characterize absorption systems at the positions and velocities of cosmic voids discovered in IUE archive spectra of very bright QSOs. For the last two yers we have been re-extracting and co-adding spectra of over 200 QSOs and Seyferts whose sight-lines penetrate the nearby, well-defined voids in the directions of Coma, Bootes, Perseus-Pisces and Hercules. We propose to observe only our 4 best candidates. The purpose of this investigation is to detect hot and/or cold gas associated with the voids and eventually how they were formed. At first sight using the low resolution and SNR spectra obtained with IUE for such a project seems difficult at best. But the UV absorption lines accessible to IUE (and to HST) are often over a factor of 10 stronger than their optical counterparts (CaII and NaI) making IUE competitive with large ground-based reflectors for this purpose (see our examples in the scientific justification section).

Prop. Type: GO

STELLAR POPULATIONS -- (OLD FIELD STARS) --

2719 - "PAGB STARS IN ELLIPTICAL AND BULGE-DOMINATED NEARBY GALAXIES "

Keywords : PAGB STARS, POPULATION II, ELLIPTICAL GALAXIES, UV IMAGING

Proposers: Francesco Bertola (PI; Department Of Astronomy Padua University; Italy), D.Burstein (Arizona State University), L.Buson (Astronomical Observatory Padua; Italy), C.Chiosi (Department Of Astronomy Padua University; Italy), S.Di Serego Alighieri (Arcetri Astrophysical Observatory; Italy)

We propose to search for the stellar population which produces the far ultraviolet rising branch from 1200-1800 A in the spectral energy distributions of early-type galaxies. One of the most likely sources of this hot emission are evolved post-asymptotic giant branch (PAGB) stars. We estimate that the brightest PAGB stars at the distance of M31 can be unambiguously detected using the far-UV imaging capabilities of HST+FOC. The possible presence of other kinds of hot stellar components that could contribute flux to the rising branch (e.g. young stars, accreting white dwarf stars in binaries) can also be detected in these images, as they will be intrinsically brighter than PAGB stars, but less numerous. If the source of this far -UV flux is PAGB stars, their absolute magnitudes in galaxies of different mean metallicities are critical tests of current theories of PAGB evolution.

Prop. Type: GO

STELLAR POPULATIONS -- (OLD FIELD STARS) --

2735 - "A SURVEY OF THE GIANT BRANCH IN THE BULGE OF M31 "

Keywords : NUCLEAR BULGE - M GIANTS - ABUNDANCES

Proposers: R. M. Rich (PI; Columbia University)

I propose to survey the space distribution and abundances of the M giant population of the nuclear bulge of M31 using the F875M and F1042M filters of the WF/PC. The two filters isolate continuum points in the spectra of la giants, thus allowing measurement of the metallicity range of the population, which is predicted by theories of galaxy formation to become very narrow and metal rich near the nucleus. It is expected that the giant population will be resolved to within a few arc-seconds of the nucleus, allowing a test of whether the metal rich population is more centrally concentrated than the general stellar population, as predicted by dissipative models of galaxy formation. The luminosities and colors will also place strong constraint on the fraction of intermediate-age stars in the bulge of M31

Prop. Type: GO

STELLAR ASTROPHYSICS -- (

2741 - "NLTE SPECTRAL ANALYSIS OF THE PRE WHITE DWARF PG1159-035 "

Keywords : STARS: WHITE DWARFS; NON-LTE ANALYSIS

Proposers: K. Hunger (PI; Kiel University; Frg), U.Heber (Kiel University; Frg), T.Rauch (Kiel University; Frg)

PG1159-035 is the prototype of a new class of hydrogen-deficient pre white dwarfs (PWD) representing the hottest episode (Teff.GE.100,000K) of PWD-evolution. It also shows low-amplitude multi-periodic variations which have been identified as non-radial g-mode pulsations. Because of these properties, PG1159-035 is a rosetta stone for our understanding of the late phase of stellar evolution. Modelling of the pulsations not only allows the stellar mass to be determind but also the internal structure to be probed. However, the position of PG1159-035 in the HR diagram and its chemical surface composition are a prerequisite for the pulsational models as well as for the discussion of its evolutionary status. Due to the lack of adequate model atmospheres, these basic atmospheric parameters have not yet been determined. To construct such models is a challenging problem because non-LTE effects are large and a very peculiar composition (He-, C- and O-rich) has to be accounted for. Since available model atmosphere techniques fail, we have developed a new computer code based on operator perturbation techniques which gave way to a new generation of highly sophisticated non-LTE model atmospheres. Proposed HST spectroscopy of crucial UV lines will allow the basic atmospheric parameters to be determined with high precision. These will set important constraints to be met by pulsational and evolutionary models.

Prop. Type: GO/AM

INTERSTELLAR MEDIUM -- (
2797- CT - "SEARCH FOR OORT COMET CLOUD UV EMISSION, SUITABLE NOVA OF OPPORTUNITY -- EPOCH 1"
Continuation of Program Number 2797
Keywords : COMET, NOVA, UV, EMISSION
Proposers: T. J. Hewitt (PI; Amateur Astronomers Working Group)

The aim of this proposal is to search for evidence of an Oort Cloud of comets surrounding the system of a bright galactic nova (target of opportunity), using the nova's light pulse as a "probe." Oort Cloud objects are believed to be rich in frozen volatiles (chiefly water) and organic molecules. The energetic flux of a bright nova may trigger significant activity from a large fraction of an Oort Cloud's population. The HST's unique ability to obtain high-resolution filtered images in the ultraviolet is critical to this proposal, since the OH (3085 A and 2820 A bands) products of water evaporation and dissociation processes in a remote Oort Cloud are potentially observable using the Wide Field Camera. Detection of an Oort Cloud would be a substantial result. Images obtained at two epochs (20 and 120 days from maximum luminosity) will be used to search for evidence of an Oort Cloud and may reveal information about the composition, total mass, and spatial distribution of material in the cloud.

Prop. Type: GO/AM

SOLAR SYSTEM -- (
2798 - "SO2 CONCENTRATION AND BRIGHTENING FOLLOWING ECLIPSES OF IO "
Keywords : IO, POSTECLIPSE BRIGHTENING, SO2 FROST, ATMOSPHERE, SULFUR
Proposers: James J Secosky (PI; Bloomfield Central Junior-Senior High School)

Since 1964, photometric observations have sometimes reported a temporary brightening (about 0.1 magnitude of increase, lasting 10-15 minutes) of the Galilean satellite Io(JI) following eclipse. This study will image Io in 2 filters-peak wavelengths 3577 and 7120 A. This investigation attempts to determine areas of increased brightness and concentrations if SO2frost which is a hypothesised cause of the effect.

Prop. Type: GO/AM

STELLAR ASTROPHYSICS -- (
2800- CT - "MAGNETIC FIELDS OF PECULIAR TYPE A VARIABLE STARS "
Continuation of Program Number 2800
Keywords : VARIABLE, CHEMICALLY PECULIAR STAR, LINE, ABSORPTION UV, MAGNETIC FIELD
Proposers: Peter J. Kandefer (PI; Hst- Amateur Astronomer)

High resolution spectrograph (HRS) is used to observe one peculiar type A star to study spectral lines indicating the presence of a strong magnetic field. Light variations during the target star's 5.0887-day period are already correlated to magnetic field variations. A sequence of observations on a single star is required to obtain the desired data.

Prop. Type: GO/AM

GALAXIES CLUSTERS -- (
2801 - "IMAGING THE ARC IN THE GALAXY CLUSTER 2244-02 "
Keywords : INTERACTING GALAXY, DISTANT GALAXY CLUSTER, GRAVITATIONAL LENS, STELLAR WINDS, STAR BURST, INTRACLUSTER GAS
Proposers: Ray Sterner (PI; Applied Physics Lab (Jhu))

It is proposed to image the arc in the galaxy cluster 2244-02 to search for evidence that it is composed of stars and not a gravitationally lensed background galaxy, as currently thought. A galaxy collision model has been found that appears able to explain both the morphology of the arc and also possibly the color and brightness. This collision model also fits with the newly discovered double radio source in this cluster. The model suggests that the amount of intracluster gas passing through the arc is sufficient to account for the observed luminosity if a reasonable fraction of it were converted into high mass stars. One of the goals is to look for any trace of nebulosity along the edge of the arc that would indicate that such gas is actually being collected. If the model is verified it would be the first case of propagating star formation in an intracluster medium. High spatial resolution is needed so the HST WF/PC would be used.

Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --
2859- CT - "LINKING HIPPARCOS TO THE EXTRAGALACTIC REFERENCE FRAME PART 2 OF 6, BRIGHT12-23, CYCLE 2,CONTINUATION OF 2565."
Continuation of Program Number 2565
Keywords : REFERENCE FRAMES, HIPPARCOS, QUASARS
Proposers: Paul D Hemenway (PI; University Of Texas At Austin), N.Argue (The Observatories; England), C.Devegt (Hamburger Sternwarte; Fgr), R.Duncombe (University Of Texas At Austin), J.Hughes (U.S. Naval Observatory), D.Jauncey (C.S.I.R.O.; Australia), K.Johnston (U.S. Naval Research Lab), J.Kovalevsky (C.E.R.G.A.;

France), J.Kristian (Caltech), J.Lestrade (Bureau De Longitude; France), M.Perryman (E.S.T.E.C.; Holland), R.Preston (Jet Propulsion Lab), B.Tapley (Univ Of Texas At Austin), C.Turon (Observatoire De Meudon; France), H.Walter (Anstronomische Recheninstitut; Fgr), G.White (C.S.I.R.O.; Australia)

Determination of a non-rotating Reference Frame is crucial to progress in many areas, including: Galactic motions, local (Oort's A and B) and global (R0) parameters derived from them, solar system motion discrepancies (Planet X); and in conjunction with the VLBI radio reference frame, the registration of radio and optical images at an accuracy well below the resolution limit of HST images (0.06 arcsec). The goal of the Program is to tie the HIPPARCOS and Extra- galactic Reference Frames together at the 0.0005 arcsec and 0.0005 arcsec/year level. The HST data will allow a deter- mination of the brightness distribution in the stellar and extragalactic objects observed and time dependent changes therein at the 0.001 arcsec/year level. The Program requires targets distributed over the whole sky to define a rigid Reference Frame. GTO observations will provide initial first epoch data and preliminary proper motions. The observations will consist of relative positions of Extra- galactic objects (EGOs) and HIPPARCOS stars, measured with the FGSs, or with the FGSs and PC together in "transit circle mode". The combination of HST and HIPPARCOS observations will provide

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Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --

2860- CT - "LINKING HIPPARCOS TO THE EXTRAGALACTIC REFERENCE FRAME PART 2 OF 6, BRIGHT12-23, CYCLE 2,CONTINUATION OF 2565."

Continuation of Program Number 2565

Keywords : REFERENCE FRAMES, HIPPARCOS, QUASARS

Proposers: Paul D Hemenway (PI; University Of Texas At Austin), N.Argue (The Observatories; England), C.Devegt (Hamburger Sternwarte; Fgr), R.Duncombe (University Of Texas At Austin), J.Hughes (U.S. Naval Observatory), D.Jauncey (C.S.I.R.O.; Australia), K.Johnston (U.S. Naval Research Lab), J.Kovalevsky (C.E.R.G.A.; France), J.Kristian (Caltech), J.Lestrade (Bureau De Longitude; France), M.Perryman (E.S.T.E.C.; Holland), R.Preston (Jet Propulsion Lab), B.Tapley (Univ Of Texas At Austin), C.Turon (Observatoire De Meudon; France), H.Walter (Anstronomische Recheninstitut; Fgr), G.White (C.S.I.R.O.; Australia)

Determination of a non-rotating Reference Frame is crucial to progress in many areas, including: Galactic motions, local (Oort's A and B) and global (R0) parameters derived from them, solar system motion discrepancies (Planet X); and in conjunction with the VLBI radio reference frame, the registration of radio and optical images at an accuracy well below the resolution limit of HST images (0.06 arcsec). The goal of the Program is to tie the HIPPARCOS and Extra- galactic Reference Frames together at the 0.0005 arcsec and 0.0005 arcsec/year level. The HST data will allow a deter- mination of the brightness distribution in the stellar and extragalactic objects observed and time dependent changes therein at the

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Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --

2861- CT - "LINKING HIPPARCOS TO THE EXTRAGALACTIC REFERENCE FRAME PART 4 OF 6, NEWB, CYCLE 2,CONTINUATION OF 2565"

Continuation of Program Number 2565

Keywords : REFERENCE FRAMES, HIPPARCOS, QUASARS

Proposers: Paul D Hemenway (PI; University Of Texas At Austin), N.Argue (The Observatories; England), C.Devegt (Hamburger Sternwarte; Fgr), R.Duncombe (University Of Texas At Austin), J.Hughes (U.S. Naval Observatory), D.Jauncey (C.S.I.R.O.; Australia), K.Johnston (U.S. Naval Research Lab), J.Kovalevsky (C.E.R.G.A.; France), J.Kristian (Caltech), J.Lestrade (Bureau De Longitude; France), M.Perryman (E.S.T.E.C.; Holland), R.Preston (Jet Propulsion Lab), B.Tapley (Univ Of Texas At Austin), C.Turon (Observatoire De Meudon; France), H.Walter (Anstronomische Recheninstitut; Fgr), G.White (C.S.I.R.O.; Australia)

Determination of a non-rotating Reference Frame is crucial to progress in many areas, including: Galactic motions, local (Oort's A and B) and global (R0) parameters derived from them, solar system motion discrepancies (Planet X); and in conjunction with the VLBI radio reference frame, the registration of radio and optical images at an accuracy well below the resolution limit of HST images (0.06 arcsec). The goal of the Program is to tie the HIPPARCOS and Extra- galactic Reference Frames together at the 0.0005 arcsec and 0.0005 arcsec/year level. The HST data will allow a deter- mination of the brightness distribution in the stellar and extragalactic objects observed and time dependent changes therein at the 0.001 arcsec/year level. The Program requires targets distributed over the whole sky to define a rigid Reference Frame. GTO observations will provide initial first epoch data and preliminary proper motions. The observations will consist of relative positions of Extra- galactic objects (EGOs) and HIPPARCOS stars, measured with the FGSs, or with the FGSs and PC together in "transit circle mode". The combination of HST and HIPPARCOS observations will provide

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Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --

2862- CT - "LINKING HIPPARCOS TO THE EXTRAGALACTIC REFERENCE FRAME PART 5 OF 6, NEWC, CYCLE 2,CONTINUATION OF 2565"

Continuation of Program Number 2565

Keywords : REFERENCE FRAMES, HIPPARCOS, QUASARS

Proposers: Paul D Hemenway (PI; University Of Texas At Austin), N.Argue (The Observatories; England), C.Devegt (Hamburger Sternwarte; Fgr), R.Duncombe (University Of Texas At Austin), J.Hughes (U.S. Naval Observatory), D.Jauncey (C.S.I.R.O.; Australia), K.Johnston (U.S. Naval Research Lab), J.Kovalevsky (C.E.R.G.A.; France), J.Kristian (Caltech), J.Lestrade (Bureau De Longitude; France), M.Perryman (E.S.T.E.C.; Holland), R.Preston (Jet Propulsion Lab), B.Tapley (Univ Of Texas At Austin), C.Turon (Observatoire De Meudon; France), H.Walter (Anstronomische Recheninstitut; Fgr), G.White (C.S.I.R.O.; Australia)

Determination of a non-rotating Reference Frame is crucial to progress in many areas, including: Galactic motions, local (Oort's A and B) and global (R0) parameters derived from them, solar system motion discrepancies (Planet X); and in conjunction with the VLBI radio reference frame, the registration of radio and optical images at an accuracy well below the resolution limit of HST images (0.06 arcsec). The goal of the Program is to tie the HIPPARCOS and Extra- galactic Reference Frames together at the 0.0005 arcsec and 0.0005 arcsec/year level. The HST data will allow a deter- mination of the brightness distribution in the stellar and extragalactic objects observed and time dependent changes therein at the 0.001 arcsec/year level. The Program requires targets distributed over the whole sky to define a rigid Reference Frame. GTO observations will provide initial first epoch data and preliminary proper motions. The observations will consist of relative positions of Extra- galactic objects (EGOs) and HIPPARCOS stars, measured with the FGSs, or with the FGSs and PC together in "transit circle mode". The combination of HST and HIPPARCOS observations will provide

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Prop. Type: GO/DD

INTERSTELLAR MEDIUM -- (

2955 - "UV IMAGING AND SPECTROSCOPY OF S ANDROMEDAE IN M31 "

Keywords : SUPERNOVA REMNANT, SUPERNOVAE, M31

Proposers: Robert A. Fesen (PI; Dartmouth College), A.Hamilton (University Of Colorado, Boulder)

We recently discovered the long sought after remnant of the famous historical supernova, commonly known as S Andromedae, which occurred in 1885 in the bulge of M31. The remnant is detected optically as a dark spot of Fe I absorption at precisely the observed position of the SN event. Our detection shows that S And contains a large quantity of cold iron freely expanding at velocities up to 5000 km/s, consistent with its historical Type I classification. The remnant's inferred diameter is 0.3 - 0.5 arcsec. We propose to obtain UV FOC imaging and FOS spectroscopy of S And's remnant. From observed absorption line profiles it should be possible to determine directly density and composition as a function of radius in the freely expanding ejecta. This is a uniquely powerful observation made possible by HST's UV capability. It is important to establish first epoch observations of S And's evolving remnant at the earliest opportunity.

Prop. Type: GO/DD

SOLAR SYSTEM -- (

2957 - "HIGH RESOLUTION UV SPECTROSCOPY OF TRITON "
Keywords : TRITON, SATELLITE OF PLANET, SOLAR SYSTEM
Proposers: Alan Stern (PI; University Of Colorado), J.Clarke (University Of Michigan), D.Cruikshank (Nasa/Ames Research Center), M.Delitsky (Jpl), R.Gladstone (University Of California At Berkeley), R.Thompson (Cornell University), L.Trafton (University Of Texas)

TRITON IS AMONG THE MOST SCIENTIFICALLY INTERESTING OBJECTS IN THE SOLAR SYSTEM. ITS ATMOSPHERE AND SURFACE ARE KNOWN TO CONSIST OF $CH4+N2$, AND LIKELY CONTAIN ADDITIONAL HYDROCARBONS. WE PROPOSE TO CONDUCT UV SPECTROSCOPY OF TRITON FROM 1800-3200 ANGSTROMS; VOYAGER DID NOT COVER THIS SPECTRAL REGION. A KEY OBJECTIVE IS TO OBTAIN ABSOLUTELY CALIBRATED SPECTRA. OUR DETAILED SCIENTIFIC OBJECTIVES CENTER ON ATMOSPHERIC AND SURFACE STUDIES AS DETAILED BELOW. THEY'LL BE INTERPRETED IN THE CONTEXT OF THE VOYAGER 2 ENCOUNTER RESULTS. IN GENERAL, WE PLAN TO USE THE SUPERIOR SPECTRAL RESOLUTION, BANDWIDTH, AND SENSITIVITY OF HST IN THE UV TO ENHANCE THE CHARACTERIZATION OF THE ATMOSPHERE AND SURFACE OF TRITON BEGUN BY VOYAGER 2.

Prop. Type: GO/DD

SOLAR SYSTEM -- (

3064 - "HST OBSERVATIONS OF COMET LEVY (1990C) "
Keywords : COMET
Proposers: Harold A. Weaver (PI; Stsci)

Comet Levy (1990c) is a bright, new comet that passes very close to the Earth in Sept., 1990. Imaging observations of this comet by HST will provide unprecedented spatial resolution of the near nucleus region. WFPC images of the comet should be obtained as often as possible during this period. The optimum observing period is during the first week of September +/- two weeks (approximately). However, observations made anytime up until the end of September will provide excellent spatial resolution at the comet.

Prop. Type: GO/DD

SOLAR SYSTEM -- (

3090 - "SATURN WHITE SPOT - TARGET OF OPPORTUNITY "
Keywords : SATURN, ATMOSPHERE DYNAMICS
Proposers: James A. Westphal (PI; Caltech)

This program will obtain two-color exposure sets to measure atmospheric motion in the recently discovered new White Spot. The first set should be obtained when the feature is near the Central Meridian Followed about twenty hours 28 minutes later (2 Saturn revs) by the 2nd set. At about 61 hours 24 minutes (6 revs from the first set) the final set should be taken. Each set consists of three orbits of 8 exposures each.

Prop. Type: GO

SOLAR SYSTEM -- (INNER PLANETS) --

3103- CT - "SYNOPTIC MONITORING OF SEASONAL PHENOMENA ON MARS - DAUGHTER OF 2379 (12/90 VISIT)"
Continuation of Program Number 2379
Keywords : MARS
Proposers: Philip B. James (PI; Toledo, University Of), R.Clancy (Colorado, University Of), R.Kahn (Jet Propulsion Laboratory), S.Lee (Colorado, University Of), L.Martin (Lowell Observatory), R.Singer (Arizona, University Of), R.Zurek (Jet Propulsion Laboratory)

The combination of spatial and spectral resolution provided by the HST is ideally suited to a synoptic study of seasonal and interannual variability on Mars. We propose a three year program of Mars observations which will enable us to address the following objectives: multispectral mapping of geological surface units, quantitative study of seasonal and interannual variations in albedo features, the diurnal behavior of martian clouds, observation of a classic dust storm season, measurements of the atmospheric concentration of ozone and the derived water vapor abundance, and observations of seasonal polar cap changes for comparison with earlier data sets. Thirteen sequences of observations are proposed to map the martian globe and to provide repeated observations of the regions of greatest scientific interest; these use the PC to observe Mars in visible and near UV wavelengths and the FOS to map ozone absorption. The sequences are designed for particular martian seasonal dates relevant to the scientific objectives.

Prop. Type: GO

SOLAR SYSTEM -- (
3107- CT - "SYNOPTIC MONITORING OF SEASONAL PHENOMENA ON MARS - DAUGHTER OF 2379 (12/90 VISIT) -PART 2"
Continuation of Program Number 2379
Keywords : MARS
Proposers: Philip B. James (PI; Toledo, University Of), R.Clancy (Colorado, University Of), R.Kahn (Jet Propulsion Laboratory), S.Lee (Colorado, University Of), L.Martin (Lowell Observatory), R.Singer (Arizona, University Of), R.Zurek (Jet Propulsion Laboratory)

The combination of spatial and spectral resolution provided by the HST is ideally suited to a synoptic study of seasonal and interannual variability on Mars. We propose a three year program of Mars observations which will enable us to address the following objectives: multispectral mapping of geological surface units, quantitative study of seasonal and interannual variations in albedo features, the diurnal behavior of martian clouds, observation of a classic dust storm season, measurements of the atmospheric concentration of ozone and the derived water vapor abundance, and observations of seasonal polar cap changes for comparison with earlier data sets. Thirteen sequences of observations are proposed to map the martian globe and to provide repeated observations of the regions of greatest scientific interest; these use the PC to observe Mars in visible and near UV wavelengths and the FOS to map ozone absorption. The sequences are designed for particular martian seasonal dates relevant to the scientific objectives.

Prop. Type: GO/DD

GALAXIES CLUSTERS -- (
3156 - "NON-PROPRIETARY ("SNAPSHOT") SURVEY - 3 "
Keywords : GALAXIES
Proposers: John N. Bahcall (PI; Institute For Advanced Study, Princeton), R.Doxsey (Space Telescope Science Institute), J.Gunn (Princeton University), O.Lahav (Institute Of Astronomy, Cambridge; England), D.Schneider (Institute For Advanced Study, Princeton)

Whenever the automatic scheduler produces a substantial gap between observations, the Wide Field/Planetary Camera will be used to image a nearby object selected from a list of several hundred low redshift quasars, normal galaxies, peculiar galaxies, and standard survey fields. HST observations will reveal details of the immediate environment of quasars, the nuclei of normal galaxies, the morphology of peculiar galaxies, and the star density in selected fields. The purpose of this program is to increase the efficiency of the HST and to provide scientific data that can be used by many different astronomers. The images acquired in this program will be non-proprietary and will be made available to qualified astronomers via the HST archival system. With the approval of the Director of STScI, the images can also be used for public relations purposes by appropriate NASA anad STScI personnel.

Prop. Type: GO/DD

GALAXIES CLUSTERS -- (
3157 - "NON-PROPRIETARY ("SNAPSHOT") SURVEY - 4 "
Keywords : GALAXIES
Proposers: John N. Bahcall (PI; Institute For Advanced Study, Princeton), R.Doxsey (Space Telescope Science Institute), J.Gunn (Princeton University), O.Lahav (Institute Of Astronomy, Cambridge; England), D.Schneider (Institute For Advanced Study, Princeton)

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Prop. Type: GO/DD

GALAXIES CLUSTERS -- (
3158 - "NON-PROPRIETARY ("SNAPSHOT") SURVEY - 1 "
Keywords : GALAXIES
Proposers: John N. Bahcall (PI; Institute For Advanced Study, Princeton), R.Doxsey (Space Telescope Science Institute), J.Gunn (Princeton University), O.Lahav (Institute Of Astronomy, Cambridge; England), D.Schneider (Institute For Advanced Study, Princeton)

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Prop. Type: GO/DD

GALAXIES CLUSTERS -- (
3159 - "NON-PROPRIETARY ("SNAPSHOT") SURVEY - 2 "
Keywords : GALAXIES
Proposers: John N. Bahcall (PI; Institute For Advanced Study, Princeton), R.Doxsey (Space Telescope Science Institute), J.Gunn (Princeton University), O.Lahav (Institute Of Astronomy, Cambridge; England), D.Schneider (Institute For Advanced Study, Princeton)

Whenever the automatic scheduler produces a substantial gap between observations, the Wide Field/Planetary Camera will be used to image a nearby object selected from a list of several hundred low redshift quasars, normal galaxies, peculiar galaxies, and standard survey fields. HST observations will reveal details of the immediate environment of quasars, the nuclei of normal galaxies, the morphology of peculiar galaxies, and the star density in selected fields. The purpose of this program is to increase the efficiency of the HST and to provide scientific data that can be used by many different astronomers. The images acquired in this program will be non-proprietary and will be made available to qualified astronomers via the HST archival system. With the approval of the Director of STScI, the images can also be used for public relations purposes by appropriate NASA anad STScI personnel.

Prop. Type: GO/DD

INTERSTELLAR MEDIUM -- (NOVAE) --
3232 - "OBSERVATIONS OF X-RAY NOVA MUSCAE 1991 "
Keywords : X-RAY NOVA
Proposers: Nino Panagia (PI; Space Telescope Science Institute), M.Della Valle (European Southern Observatory; Germany), R.Gilmozzi (Space Telescope Science Institute), K.Horne (Space Telescope Science Institute), N.Lund (Danish Space Research Institute; Denmark), F.Paresce (Space Telescope Science Institute), C.Shrader (Goddard Space Flight Center)

We propose to observe the X-ray Nova Muscae 1991 both in imaging (FOC) and spectroscopy (FOS and GHRS) to determine the expansion and the structure of the ejecta, and to study their kinematics and energetics. Moreover, we will study the distribution of circumstellar material around the nova and interstellar material in that direction to refine the distance determination we will obtain from imaging and from the expansion properties of the ejecta.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (

3240 - "MULTIWAVELENGTH OBSERVATIONS OF AD LEO "

Keywords : STARS: CHROMOSPHERES; STARS: LYMAN-ALPHA EMISSION, STARS: TRANSITION REGIONS.

Proposers: Jay Bookbinder (PI; Cfa), T.Bastian (Nrao), G.Dulk (Colorado, University Of), J.Linsky (Colorado, University Of), F.Walter (Suny, Stony Brook)

Prop. Type: GO

SOLAR SYSTEM -- (

3365- LT - "AEROSOLS IN PLANETARY ATMOSPHERES: CYCLE 1 OBSERVATIONS JUPITER ONLY"

Keywords : PLANETS, PLANETARY ATMOSPHERES, AEROSOLS, CLOUDS

Proposers: Martin Tomasko (PI; Arizona, University Of), R.West (Jet Propulsion Laboratory)

Our goal is to determine the vertical and horizontal distribution and optical properties of stratospheric aerosols in the atmospheres of the outer planets Jupiter and Saturn to constrain models of their photochemical production, vertical and horizontal transport, absorption of solar and thermal radiation, and role in forcing atmospheric dynamics. Observations needed for this purpose include photometry which 1) spans a wide range of wavelengths to permit discrimination in particle size; 2) refers to limited pressure ranges; 3) tracks specific planetary features. Carefully timed HST WFPC successive telescope orbits permit a wide spread in airmass factors at many planetary longitudes for good vertical discrimination both by the 8888A methane band at long wavelengths and by Rayleigh scattering at short wavelengths. These images at wavelengths separated by a factor >3 also provides good discrimination in the size of small stratospheric aerosols. No other technique is available which can provide either the simultaneous wide wavelength coverage or the spatial resolution to use center-to-limb variations to limit the vertical region probed on the outer planets. In addition, repeating such observations yearly permits temporal changes to be monitored for a new understanding of seasonal variations and the role of the solar cycle in these stratospheres.

Prop. Type: GO/DD

INTERSTELLAR MEDIUM -- (NOVAE) --
3381 - "OBSERVATIONS OF X-RAY NOVA MUSCAE 1991 - REPEAT "
Keywords : X-RAY NOVA
Proposers: Nino Panagia (PI; Space Telescope Science Institute), M.Della Valle (European Southern Observatory; Germany), R.Gilmozzi (Space Telescope Science Institute), K.Horne (Space Telescope Science Institute), N.Lund (Danish Space Research Institute; Denmark), F.Paresce (Space Telescope Science Institute), C.Shrader (Goddard Space Flight Center)

The UV spectrum of the X-ray Nova Muscae 1991 is going to be observed with the FOS: the full range 1150-4500 is going to be covered this time.

Prop. Type: GO/DD

STELLAR ASTROPHYSICS -- (HOT STARS) --
3412 - "HIGH RESOLUTION OBSERVATIONS OF NOVA LMC 1991 "
Keywords : NOVAE, MASS LOSS, NUCLEOSYNTHESIS
Proposers: Steven N. Shore (PI; Computer Sciences Corporation), G.Sonneborn (Nasa/Gsfc), S.Starrfield (Arizona State University)

We propose to obtain low and intermediate dispersion GHRS observation sof Nova LMC 1991, a unique, super- Eddington apparently classical nova. With this high S/N data, we will study the shell dynamics and abundances during the optically thick and nebular stages. This nova is the intrinsically brightest one ever observed in the LMC and one of the most luminous ever observed in the Local Group.

Prop. Type: GO

QUASARS AGN -- (
3418-KP - "QUASAR ABSORPTION LINE SURVEY: CYCLE 1 FOS PART II "
Continuation of Program Number 2424
Keywords : SPECTROSCOPY QUASARS, ABSORPTION/EMISSION LINES, GALAXIES, HALOS/CLUSTERS/VOIDS, INTERGALACTIC MEDIUM
Proposers: John N. Bahcall (PI; Institute For Advanced Study, Princeton), J.Bergeron (Institute For Astrophysics, Paris; France), A.Boksenberg (Royal Greenwich Observatory; Uk), G.Hartig (Space Telescope Science Institute), B.Jannuzi (Institute For Advanced Study, Princeton), W.Sargent (California Institute Of Technology), B.Savage (Wisconsin, University Of), D.Schneider (Institute For Advanced Study, Princeton), D.Turnshek (University Of Pittsburgh), R.Weymann (Observatory Of The Carnegie Institution In Washington), A.Wolfe (Astrophysics And Space Sciences,Ucsd)

The establishment of a homogeneous data base of quasar absorption lines using the diagnostic survey proposed here will form the basis for an attack on fundamental cosmological and astrophysical problems: What are the physical, dynamical and evolutionary properties of the intergalactic medium? What is the strength, shape and origin of the UV background radiation? What limits can be set upon the primordial He/H and D/H ratios? What has been the chemical and dynamical evolution of gaseous galactic disks and halos? What physical processes govern the ionization of this gas? What physical processes govern the acceleration of thermal and relativistic plasma in radio quiet and radio loud quasars? How has gaseous structure in the universe evolved on scales of 1 Mpc to 100 Mpc? The discrimatory power of the survey and the efficient use of HST were the primary criteria used in constructing the survey, which takes account of all relevant GTO observations. Exposure times are based upon IUE archival data. Ground-based observations of all program objects will be made to monitor variability and to complement the HST observations. The survey contains a primary list of 103 quasars with 0.3 < Zem < 2.0, 18 additional bright quasars to be observed with the FOS to provide candidates for future HRS follow up, and a supplementary list of 49 fainter quasars for a damped Ly-alpha survey. A plausible extrapolation of ground-based data suggests that the primary survey will detect 275 Ly-alpha and 60 CIV systems.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (X-RAY BINARIES) --

3432- CT - "CIR-X1 REVISITED: SPECTROSCOPY THROUGHOUT THE 16.6 DAY CYCLE OF THE REAL OPTICAL CANDIDATE."

Continuation of Program Number 3432

Keywords :

Proposers: Patrizia A Caraveo (PI; Istituto Di Fisica Cosmica Del Cnr; Italy), G.Bignami (Istituto Di Fisica Cosmica Del Cnr; Italy)

Circinus X-1 is a very strong and highly variable X-ray, IR and radio source. Its optical identification was, until very recently, wrongly attributed to a star which recent NTT observations, done in superb seeing, have resolved in three objects.Of these one, very red, coincides with the accurate VLA position for the radio source (varying in phase with the X-ray), and is thus the real candidate. Only HST can now do meaningful work on the true counterpart of Cir X-1: even small seeing conditions variations would render incomparable measurements taken from the ground over the 16.6 day (binary?) source cycle. A WFPC exposure for target acquisition and a sequence of 4 FOS spectra, taken at critical time during the cycle, will probably suffice to understand this 17-19 mag variable object, responsible for a truly bizarre X-ray/radio object.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (LATE EVOLUTION) --
3441- CT - "POST ASYMPTOTIC GIANT BRANCH EVOLUTION IN THE MAGELLANIC CLOUDS."
Continuation of Program Number 2266
Keywords :
Proposers: Michael A. Dopita (PI; Mt. Stromlo And Siding Spring Observatories; Australia), R.Bohlin (Space Telescope Science Institute), H.Ford (Space Telescope Science Institute), P.Harrington (University Of Maryland), S.Maran (Goddard Space Flight Center), S.Meatheringham (Mount Stromlo And Siding Spring Observatories; Australia), T.Stecher (Goddard Space Flight Center), L.Webster (Deceased) (University Of New South Wales; Australia), P.Wood (Mount Stromlo And Siding Spring Observatories; Australia)

Planetary Nebulae (PN) represent a critical stage of stellar evolution which is still poorly understood. We still lack reliable observational estimates of stellar luminosity, mass, effective temperature and age, which could be used to constrain evolutionary models, and determine key data such as mass-loss rates, He shell flash phases and the role of dredge-up. This proposal represents the first stage in a systematic and definitive study using HST observations, which will require approximately a further 150 hours for completion, of a large sample of nebulae at known distance in the Magellanic Clouds. The following observations allow us to derive all parameters needed for proper confrontation between theory and observation:
* Direct PC imaging to detect central stars and to derive the physical dimensions, masses, ages, and spatial structure of the nebulae. * FOS spectrophotometry of the central stars and nebulae in the range 1150 - 2332 Angstroms. This data will be used in combination with stellar models to derive the effective temperature, bolometric luminosity, and mass of each of the exciting stars. The combination of these parameters with the dynamical age of the PN will define the evolutionary tracks in the Luminosity/T-eff diagram. We will use two independent ionisation codes to interpret the FOS spectra, optical and IR spectra, and the ionisation structure derived from the PC images. This analysis will yield chemical abundances of many elements, including the astrophysically important species He, C, N, O, and Si.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (PULSATING STARS) --
3447 - "THE BLUE EDGE OF THE ZZ CETI INSTABILITY STRIP "
Keywords :
Proposers: Detlev G. Koester (PI; Dept.Physics And Astronomy, Louisiana State University), N.Allard (Observatoire De Paris-Meudon; France), G.Vauclair (Observatoire Midi-Pyrenees, Toulouse; France)

ZZ Ceti stars are variable white dwarfs of spectral type DA. The theoretically predicted instability strip depends on several uncertain assumptions, most importantly the efficiency of convective energy transport and the detailed structure of the outer stellar layers (chemical stratification, thickness of hydrogen layers). Empirical determinations are so far not as accurate as desirable for a comparison, because: (i) the Balmer lines in the optical region reach maximum strengths within the instability strip and therefore vary only little with temperature, and (ii) the use of the ultraviolet spectrum, which is dominated by the line wing of Lyman alpha with quasimolecular satellites at 1400 and 1600 A has been hampered by the lack of an adequate theoretical description of the line shape. This theory has now been developed by one of us (N.Allard) and incorporated into stellar atmosphere programs, allowing us to determine effective temperatures in this range with an accuracy of 200 K or better. As a pilot study we have selected the apparently hottest ZZ Ceti object (G117-B15A) to demonstrate this accuracy and at the same time get a good estimate for the blue edge of the instability region.

Prop. Type: GO

GALAXIES CLUSTERS -- (EVOLUTION/COSMOLOGY) --

3448 - "ULTRAVIOLET EVOLUTION OF ELLIPTICAL GALAXIES AT MODERATE REDSHIFT"

Keywords :

Proposers: Alvio Renzini (PI; University Of Bologna, Department Of Astronomy; Italy), R.Gilmozzi (Space Telescope Science Institute), L.Greggio (Universita' Di Bologna; Italy), E.Held (Osservatorio Astronomico Di Bologna; Italy)

FOS ultraviolet spectroscopy of a sample of early-type galaxies with redshift in the range from 0.15 to 0.37 is proposed to determine the evolution with lookback time of the ''UV rising branch''commonly exhibited by nearby elliptical galaxies. This feature can be attributed to various types of old, hot stars in advanced evolutionary stages. The most promising of these hot star candidates appear to be hot, super metal rich horizontal branch stars, in combination with ''Post-early-AGB'' stars; other candidates include various types of binary stars, in particular accreting white dwarfs. Among the various complications of the problem, one attractive characteristics however exist: the strength and slope of UV rising branch is predicted to evolve very rapidly with redshift, and in a few Gyr lookback time the rest frame (1550A-V) color should have reddened by over one magnitude. The proposed observations provide an elegant way of indeed checking the nature of the hot stars present in ellipticals, while at the same time opening the way to a first attempt at directly measuring the lookback time to galaxies at low to moderate redshifts.

Prop. Type: GO

STELLAR POPULATIONS -- (GLOBULAR CLUSTERS) --

3458 - "STELLAR POPULATION GRADIENTS IN POST-CORE-COLLAPSE GLOBULAR CLUSTERS "

Keywords :

Proposers: Stanislav G Djorgovski (PI; California Institute Of Technology), D.Chernoff (Cornell University), I.King (Univ. Of California Berkeley), G.Meylan (Space Telescope Science Institute; Switzerland), S.Phinney (California Institute Of Technology), G.Piotto (Universita Di Padova; Italy), N.Weir (California Institute Of Technology)

The nature of color and population gradients in globular clusters is one of the major outstanding puzzles in modern globular cluster reseach. Clusters with central cusps (collapsed cores) become bluer towards their centers, while no clear gradients are seen in clusters with King-model morphology. The effect involves at least a few percent of the total visible light. The color gradients seem to be caused by the demise of red giants and/or subgiants, and possibly an increased number of faint blue objects. These effects represent a strong evidence that dynamical evolution of star clusters can physically modify their stellar populations. These phenomena are not yet understood, but a population of centrally concentrated binaries is most likely responsible for them. The underlying physical cause of these effects may be also related to the origin of millisecond pulsars and low mass x-ray binaries in globular clusters. Star counts in the UV near the centers of highly concentrated clusters with the HST can probe the regions where the gradients should be the strongest and which are very difficult to study from the ground. In addition to extending the counts of HB and RGB stars into the central regions we expect to find a new population of faint blue objects near the centers of these clusters, for which tantalizing hints have been seen in the best-seeing ground-based data, and in the UV colors measured by the IUE and ANS satellites.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --

3463 - "HIGHLY IONIZED NITROGEN IN THE GALACTIC HALO "

Keywords :

Proposers: Blair D. Savage (PI; University Of Wisconsin-Madison), L.Lu (University Of Wisconsin-Madison), K.Sembach (University Of Wisconsin-Madison)

We will obtain GHRS intermediate resolution observations with the G160M grating (FWHM = 15 km/s) of the N V 1240 A doublet in absorption toward 1 distant halo star and two bright AGN's. These measurements will provide high quality data for the most important high temperature gas diagnostic accessible with the HST. The data will be used to study the line broadening and component structure of the N V absorption and to probe the general prevalence of this important ion in Galactic halo gas. We will study the velocity correspondence between the N V and cooler gas traced by Mg II, S II, and Si II. We will obtain information about high temperature Galactic halo gas along 3 sight lines, including two extragalactic ones. With this information we aim to better understand the origin of Galactic halo gas, the ionization of the gas, and those processes occurring in the Galactic disk which result in the venting of energy into the Galactic halo.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (CIRCUMSTELLAR MATTER) --
3468 - "UV MOLECULAR BANDS IN HD44179 "
Keywords :
Proposers: Michael L. Sitko (PI; Univ. Of Cincinnati)

HD 44179, the central star of the Red Rectangle Nebula, may be a natural molecular factory. It is unique in exhibiting molecular emission bands in the ultraviolet that are as strong as the continuum, even at low spectral resolution. It is important to understand where these molecules are formed, whether they are free or adsorbed onto grain surfaces, and how the molecular emission region is related to the dusty region as a whole (geometrically). Furthermore, a proper identification of the molecular species and their physical state will make it possible to understand part of the nature of molecular formation in stars and the ejection of this material into the interstellar medium. The goals of this project are to understand the chemical and physical nature of the material giving rise to the UV bands, using high resolution spectroscopy and low resolution spectropolarimetry. The Phase I proposal was for 12.08 hours of exposure time, and 18.05 hours of spacecraft time. Phase I approval was for 18.04 hours of spacecraft time. For Phase II submission, the RPSS Source Estimator gives 11.984 hours of exposure and 18.01 hours of spacecraft time (using the revised ACQ times of 10 March 1992). At the recommendation of the Phase I review committee, the budget has been revised.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (
3472- CT - "THE PROPERTIES OF SINGLE INTERSTELLAR CLOUDS CYCLE 2"
Continuation of Program Number 2251
Keywords : INTERSTELLAR CLOUDS
Proposers: L. M. Hobbs (PI; Chicago, University Of), D.Morton (Herzberg Institute Of Astrophysics; Canada), D.Welty (Chicago, University Of), D.York (Chicago, University Of)

IN THIS CONTINUATION PROPOSAL, WE PROPOSE TO USE THE ECHELLE AND 160M GRATINGS OF THE HIGH RESOLUTION SPECTROGRAPH TO OBSERVE THE PROFILES OF INTERSTELLAR ABSORPTION LINES, DURING THE SECOND YEAR OF A TWO-YEAR PROGRAM. IN THE TWO CYCLES TOGETHER, THE COLUMN DENSITES OF 17 NEUTRAL OR IONIZED FORMS OF THE ELEMENTS C,N,O,Mg,Si,P,S,Fe, AND Zn WILL BE MEASURED IN THE APPROXIMATELY 100 INDIVIDUAL INTERSTELLAR CLOUDS ALONG THE LIGHT PATHS TO 12 BRIGHT, BROAD-LINED STARS OF EARLY SPECTRAL TYPE WITHIN 1 KPC OF THE SUN. THE PRIMARY PURPOSE OF THE OBSERVATIONS IS TO DETERMINE MORE ACCURATELY THAN WAS HITHERTO POSSIBLE THE FUNDAMENTAL PHYSICAL PROPERTIES

OF THE RESOLVED CLOUDS, INCLUDING LINEAR SIZE, TEMPERATURE, TOTAL DENSITY, FRACTIONAL IONIZATION AND THE RELATIVE ABUNDANCES OF THE 9 SELECTED ELEMENTS. THIS SECOND-YEAR PROGRAM CONSISTS OF ECH-B AND G160M OBSERVATIONS OF EACH OF 4 STARS AT 21 OR MORE WAVELENGTHS, AND OF A SUBSET OF THESE OBSERVATIONS FOR A FIFTH STAR, PI SCO. PROGRAMS 2251 AND 3993 SHOULD BE CONSULTED FOR DETAILS OF THE PREVIOUS OBSERVATIONS OBTAINED DURING CYCLE 1.

Prop. Type: GO

QUASARS AGN -- (QUASAR ABSORPTION) --
3477 - "ECHELLE OBSERVATIONS OF THE LOW REDSHIFT LYMAN ALPHA FOREST IN 3C273 "
Keywords :
Proposers: Ray J. Weymann (PI; Carnegie Observatories), R.Carswell (Institute Of Astronomy; Uk), R.Gilliland (Carnegie Observatories), S.Morris (Carnegie Observatories)

We will observe a Lyman alpha forest absorption line in 3C273 at very high (approx 4 km/s) resolution using the GHRS Echelle-A Grating and the large science aperture. Our objective is to understand the nature of the (formal) super-thermal doppler parameters frequently found in the Lyman alpha forest, and confirm that such doppler parameters actually occur at very low redshifts. In particular, we will search for sub-components and/or departures from a Voigt profile in the line.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (STELLAR ATMOSPHERES) --
3479 - "BORON IN POPULATION II DWARFS - PRIMEVAL OR SPALLATED? "
Keywords :
Proposers: Bengt Edvardsson (PI; Uppsala Astronomical Observatory; Sweden), G.Gilmore (Cambridge, University Of; United Kingdom), S.Johansson (Lund, University Of; Sweden), D.Lambert (Texas, University Of), P.Nissen (Aarhus, University Of; Denmark)

We propose to observe the B I 2496-97A lines with the GHRS in the echelle mode (SSA) in the spectra of 2 metal-poor, unevolved stars, in which beryllium has recently been found and with a new probable identification of boron in one of them. The goal is to find out whether Be and B in Pop. II dwarfs were synthesized in the Big Bang or by cosmic ray induced spallation in the early Galaxy, and in either case significantly constrain the multitudinous possibilities currently being debated in the literature. The programme will contribute significantly to the understanding of possible inhomogeneities induced by the quark to hadron phase transition in the Early Universe and of spallation processes and cosmic ray fluxes in the early Galaxy.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (CIRCUMSTELLAR MATTER) --

3482- LT - "THE NATURE OF THE VARIABLE INFALLING MATERIAL ON THE STAR BETA PICTORIS: CYCLE 2 OBSERVATIONS"

Keywords : STAR;A4-A9 V-IV;IRREGULAR VARIABLE; PROTOPLANETARY DISK;DISK;SHELL.

Proposers: Alfred Vidal-Madjar (PI; Institute Of Astrophysics Of Paris, Cnrs; France), H.Beust (Institute Of Astrophysics Of Paris, Cnrs; France), M.Deleuil (Laboratory Of Space Astronomy, Marseille, Cnrs; France), P.Feldman (Johns Hopkins University, Baltimore, Md), R.Ferlet (Institute Of Astrophysics Of Paris, Cnrs; France), C.Gry (Laboratory Of Space Astronomy, Marseille, Cnrs; France), L.Hobbs (Yerkes Observatory, Ma), A.Lagrange-Henri (Observatory Of Grenoble, Grenoble; France), J.Lissauer (State University Of New York, Stony Brook, Ny), W.Moos (Johns Hopkins University, Baltimore, Md)

We propose to obtain spectroscopic diagnostics of the gaseous disk observed around the star Beta Pictoris. The high quality data produced by the unprecedented resolution and sensitivity of the GHRS in the UV is needed to answer the questions raised from a large body of observations from the ground and from always very noisy IUE data. Many questions about the intriguing behaviour of this gas are still to be answered quantitatively. Are the strong lines of depleted elements produced by dust grains evaporating near the star ? Where and how are highly ionized species like AlIII and possibly CIV produced ? What mechanism induces the strong variability observed in several UV lines and in the CaII lines ? What is the density inferred from the measurements of the CI multiplets ? Can we confirm the presence of the CO 4th positive system bands marginally detected by their variations ? We have developed complete simulations able to describe most of the observational facts and predict new characteristics of spectral lines in the hypothesis of evaporation of falling cometary like bodies perturbed by the presence of larger bodies. High quality UV observations as proposed here linked to a ground-based CaII survey, will allow to check our hypothesis and will bring new stringent constraints for the description of this probable young planetary system.

Prop. Type: GO

GALAXIES CLUSTERS -- (DISTANT GALAXIES) --

3483 - "LYMAN-ALPHA EMISSION IN GALAXIES: THE CASE OF GALAXIES CAUSING THE Z=0.5 MGII ABSORPTION-LINE SYSTEMS IN QSO SPECTRA"

Keywords :

Proposers: Jean-Michel Deharveng (PI; Laboratoire Astronomie Spatiale; France), J.Bergeron (Institut D Astrophysique; France), V.Buat (Laboratoire Astronomie Spatiale; France)

Ly-alpha emission is potentially the best tracer of star formation at high redshift. At $z > 1.7$, Ly-alpha emission has been detected in powerful radio galaxies and recently in a few proto-galactic disks which give rise to damped Ly-alpha absorption in the spectra of background quasars. At low redshift, it has been detected in some starburst galaxies. However, not all the nearby starburst galaxies show Ly-alpha emission which may be due to either absorption by dust grains and/or the presence of an underlying B star population. At intermediate redshifts (z=0.5), objects giving rise to MgII absorption systems in quasar spectra have been identified with field galaxies of very extended gaseous envelopes. These galaxies show signs of stellar formation activity, revealed by their blue continuum and [OII]3727 emission and which should also be traced by their Ly-alpha emission. We propose to observe the Ly-alpha emission of a few of these absorbing starburst galaxies with fairly strong [OII]3727 (and H-beta) emission. This will help to ascertain their activity, to provide a link between the z=0.5 MgII absorbers and the z=2 proto-galactic disks, and to clarify the interpretation of Ly-alpha emission in high redshift galaxies.

Prop. Type: GO

QUASARS _AGN -- (SEYFERTS) --

3484 - "PROBING THE NUCLEAR REGIONS OF THE SEYFERT GALAXY NGC 5548 "

Keywords :

Proposers: Bradley M Peterson (PI; Ohio State University), D.Alloin (Observatoire De Paris - Section De Meudon; France), K.Anderson (New Mexico State University), B.Balick (University Of Washington), T.Balonek (Colgate Univ.), P.Barr (Exosat Observatory, European Space Agency, Estec; Netherlands), P.Barthel (Kapteyn Astronomical Institute; Netherlands), R.Blandford (California Institute Of Technology), C.Boisson (Observatoire De Paris - Daec; France), T.Carone (University Of California, Berkeley), J.Christensen (Space Telescope Science Institute), J.Clavel (Infrared Space Observatory, European Space Agency, Estec; Netherlands), R.Cohen (University Of California, San Diego), T.Courvoisier (Observatoire De Geneve; Switzerland), D.Crenshaw (Computer Sciences Corporation), R.Cutri (Steward Observatory), M.Dietrich (Universitats-Sternwarte Gottingen; Germany), D.Dultzin-Hacyan (Instituto De Astronomia-Unam; Mexico), M.Elvis (Center For Astrophysics), B.Espey (University Of Pittsburgh), I.Evans (Space Telescope Science Institute), G.Ferland (Ohio State University), A.Filippenko (University Of California, Berkeley), C.Gaskell (University Of Oklahoma), M.Goad (University College London; United Kingdom), P.Gondhalekar (Rutherford Appleton Laboratory; United Kingdom), K.Horne (Space Telescope Science Institute), D.Kazanas (Nasa, Goddard Space Flight Center), W.Kollatschny (Universitats-Sternwarte Gottingen; Germany), A.Koratkar (Space Telescope Science Institute), K.Korista (Observatories Of The Carnegie Institution Of Washington), G.Kriss (Johns Hopkins University), J.Krolik (Johns Hopkins University), A.Laor (Institute For Advanced Study), J.Luminet (Observatoire De Paris - Section De Meudon; France), G.Macalpine (University Of Michigan), J.Mackenty (Space Telescope Science Institute), M.Malkan (University Of California, Los Angeles), D.Maoz (Institute For Advanced Study), P.Martin (Canadian Institute For Theoretical Astrophysics; Canada), B.Mccollum (Computer Sciences

Corporation), C.Mckee (University Of California, Berkeley), H.Miller (Georgia State University), S.Morris (Observatories Of The Carnegie Institution Of Washington), H.Netzer (Wise Observatory, Tel Aviv University; Israel), P.O'Brien (University College London; United Kingdom), M.Pastoriza (Universidade Federal Do Rio Grande Do Sul; Brazil), D.Pelat (Observatoire De Paris - Section De Meudon; France), E.Perez (Instituto De Astrofisica De Canarias; Spain), G.Perola (Instituto Astronomico, Universita Di Roma; Italy), R.Pogge (Ohio State University), R.Ptak (Bowling Green State University), M.Recondo-Gonzalez (Iue Observatory, Vilspa; Spain), G.Reichert (Universities Space Research Association), A.Robinson (Institute Of Astronomy, University Of Cambridge; United Kingdom), J.Rodriguez Espinoza (Instituto De Astrofisica De Canarias; Spain), P.Rodriguez-Pascual (Iue Observatory, Vilspa; Spain), E.Rokaki (Institut D'Astrophysique De Paris; France), W.Romanishin (University Of Oklahoma), A.Sadun (Agnes Scott College), I.Salamanca (Observatoire De Paris - Section De Meudon; France), M.Santos-Lleo (Instituto Astronomia, Universidad Complutense Madrid; Spain), J.Sanz (Iue Observatory, Vilspa; Spain), K.Sekiguchi (South African Astronomical Observatory; South Africa), J.Shields (Ohio State University), J.Shull (University Of Colorado), M.Sitko (University Of Cincinnati), T.Snijders (Astronomisches Institut Tuebingen; Germany), L.Sparke (University Of Wisconsin, Madison), G.Stirpe (Osservatorio Astronomico Di Bologna; Italy), R.Stoner (Bowling Green State University), T.Storchi-Bergmann (Universidade Federal Do Rio Grande Do Sul; Brazil), W.Sun (Institute Of Physics And Astronomy; Republic Of China), Z.Tsvetanov (University Of Maryland), D.Turnshek (University Of Pittsburgh), E.Van Groningen (Uppsala Astronomical Observatory; Sweden), S.Veilleux (Institute For Astronomy, University Of Hawaii), R.Wagner (Ohio State University), S.Wagner (Landessternwarte Heidelberg-Konigstuhl; Germany), W.Wamsteker (Iue Observatory, Vilspa; Spain), T.Wang (University Of Science And Technology; China (Prc)), M.Ward (Oxford University; United Kingdom), W.Welsh (Space Telescope Science Institute), R.Weymann (Observatories Of The Carnegie Institution Of Washington), B.Wilkes (Smithsonian Astrophysical Observatory), B.Wills (University Of Texas), C.Winge (Universidade Federal Do Rio Grande Do Sul; Brazil), C.Wu (Computer Sciences Corporation)

We propose to carry out an intensive, short-term spectroscopic monitoring program on the galaxy NGC 5548 to address fundamental problems on the nature of the continuum emission from AGNs and the structure and dynamics of the broad-emission line region. The goal of this program is to answer questions on short-time scale phenomena which arose out of our International Ultraviolet Explorer program on this same galaxy, but which require higher quality data than have been obtained previously and which require the unique capabilities of HST. The specific problems we will address are (1) the dynamics of the line-emitting gas, (2) the size and geometry of the very compact high-ionization emission- line region, and (3) whether or not the ultraviolet and optical continua arise in the same region.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (X-RAY BINARIES) --

3489 - "BLACK HOLE BINARIES IN THE LMC "

Keywords :

Proposers: John B Hutchings (PI; Dominion Astrophysical Observatory; Canada), A.Cowley (Arizona State University), D.Crampton (Dominion Astrophysical Observatory; Canada), P.Schmidke (Arizona State University)

The endpoints of stellar evolution - white dwarfs, neutron stars and black holes - can be most directly studied when they occur in binary systems such as cataclysmic variables and X-ray binaries. However, only a handful of black-hole candidates have been found, and thus very little is known about their physical properties and associated accretion disks. Two black-hole X-ray binaries, LMC X-3 and CAL 87, are particularly suitable for investigation in the UV, where important diagnostic emission lines are present and where the disk structure can be modelled from the continuum. LMC X-3 has recently been found to have a precessing accretion disk (P = 200 days) allowing different parts of the disk to be observed over a timescale of months. CAL 87 (P orb 10.6hr) is the only known eclipsing black hole, so that observation throughout the eclipse will yield detailed information about the disk structure, particularly very near the collapsed star itself.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (STELLAR ATMOSPHERES) --

3496 - "AN ULTRAVIOLET ATLAS OF SIRIUS: CONSTRAINING MODEL STELLAR ATMOSPHERES"

Keywords :

Proposers: Glenn M Wahlgren (PI; Computer Sciences Corporation), S.Johansson (University Of Lund; Sweden), R.Kurucz (Smithsonian Astrophysical Observatory), D.Leckrone (Nasa, Goddard Space Flight Center)

The GHRS will be utilized to obtain a high signal-to-noise, intermediate resolution (R=25000), ultraviolet spectrum of the bright A1V star Sirius for the wavelength range 1280 to 3180 A. Such a spectrum will place severe constraints upon flux distributions generated by stellar model atmospheres. Modeled flux distributions consistently over-estimate the ultraviolet flux as a result of an incomplete treatment of the atomic line opacity. The modeled effective temperatures are therefore too hot and systematic errors propagate into subsequent analyses, such as for elemental abundances. Treatment of the ultraviolet opacity is especially poor below 2000A. Of particular interest are the singly and doubly ionized elements of the iron-group (Z=21-28) since they represent a vast number of discrete transitions that are responsible for the bulk of the ultraviolet opacity in warm stars. The spectral atlas obtained for Sirius will provide the high quality line profiles over an extended wavelength range that are necessary for determining consistent atomic parameters and elemental abundances. Even though Sirius has been well studied in the visual region the majority of its flux and the dominant opacity species lie in the ultraviolet. Many elemental species that have few or no transitions in the visual region will have their abundances determined for the first time.

Prop. Type: GO

QUASARS AGN -- (SEYFERTS) --

3507 - "ULTRAVIOLET SPECTROSCOPY AND HIGH-RESOLUTION IMAGING OF NGC 4395, THE LEAST LUMINOUS AND NEAREST KNOWN SEYFERT 1 NUCLEUS"

Keywords :

Proposers: Alexei V Filippenko (PI; University Of California At Berkeley), W.Sargent (California Institute Of Technology)

We have discovered the least luminous known Seyfert 1 nucleus, in the very nearby (d = 2.6 Mpc), Sd III-IV galaxy NGC 4395. Seyfert 1 nuclei have never before been seen in galaxies of such late Hubble type, and so nearby. The luminosity of the broad H-alpha emission line is a factor of 10 lower than in M81, the previous champion. The blue continuum magnitude of the nucleus is -10, no brighter than a cluster of luminous stars; thus, it is remotely possible that the object itself can be explained by purely stellar phenomena, rather than by accretion onto a black hole. In order to test this hypothesis, and to further explore the unique properties of the active nucleus in NGC 4395, we propose to obtain UV spectra as part of an ongoing multi-wavelength study of this object. Detailed comparisons will be made with the spectra of typical luminous Seyfert 1 nuclei. A search will be made for absorption features produced by hot stars. We will determine whether the continuum has a "big blue bump" (like other type 1 Seyferts), and we will examine various emission-line intensity ratios to see whether a nonstellar photoionizing continuum is required. Since the active nucleus is in a spatially well-resolved galaxy, the spectra will not be contaminated by starlight from a galactic bulge. A direct image of NGC 4395, obtained with the PC, will show whether the active nucleus is a true point source less than 1 pc in size, rather than an extended source (such as a collection of very hot stars).

Prop. Type: GO

SOLAR SYSTEM -- (GIANT PLANETS) --

3511 - "H LY ALPHA DAYGLOW EMISSION LINE PROFILES FROM THE OUTER PLANETS "

Keywords :

Proposers: John T. Clarke (PI; University Of Michigan), L.Ben Jaffel (University Of Arizona), R.Gladstone (University Of California, Berkeley), R.Prange (Institut D'Astrophysique Spatiale; France), A.Vidal-Madjar (Observatoire De Paris; France)

One of the outstanding scientific questions about the outer planets following the Voyager tour is why the upper atmospheres have bright FUV airglow emissions and very high exospheric temperatures of 400 - 1200 K on the 4 planets. IUE observations of Jupiter's H Ly alpha emission line profile have shown that the equatorial lines are broad, and can be fit by the inclusion of a velocity distribution in addition to thermal motions (although the physical process leading to this additional component has not been identified). It is clear that if the bright H Ly alpha emissions from the outer planets are due mainly to resonant scattering of solar and interplanetary emissions, as observed on Jupiter and Saturn from long term correlations with the solar Ly alpha flux, then the lines from all 4 planets must be broad to explain the observed high albedos. The H Ly alpha lineshapes certainly provide a discriminant between processes of resonant scattering and charged particle excitation. We propose to obtain good signal H Ly alpha line profile measurements at the center and limb of Jupiter, and single sub-solar point measurements from Saturn and Uranus, to resolve the questions about the excitation processes and to explore the possibility that the upper atmospheric line broadening process is also the source of the observed thermospheric heating.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (LATE EVOLUTION) --

3513 - "NON-LTE ANALYSIS OF THE POPULATION II POST-AGB STARS ROB 162 AND K648"

Keywords :

Proposers: Ulrich Heber (PI; Institut F. Theor. Physik U. Sternwarte Der Uni. Kiel; Germany), S.Dreizler (Institut F. Theor. Physik U. Sternwarte Der Uni. Kiel; F.R.G.), T.Rauch (Institut F. Theor. Physik U. Sternwarte Der Uni. Kiel; F.R.G.), K.Werner (Institut F. Theor. Physik U. Sternwarte Der Uni. Kiel; F.R.G.)

Post-AGB stars in galactic globular clusters are Rosetta stones for our understanding of late phase of stellar evolution of low mass stars. They are also important objects to study the early phases of the chemical evolution of our galaxy because they are amongst very few cluster stars for which the helium abundance can be determined directly. ROB 162 (in NGC 6397) and K 648, the central star of a PN in M 15, are two post-AGB stars in very metal poor clusters. Quantitative optical spectroscopy indicated that these two stars have a very different evolutionary history with respect to dredge-up events of nuclear processed matter. K 648 is strongly enriched in carbon indicating strong dredge-up from interior layers of the progenitor star. ROB 162, on the other hand, does not show any indication for dredge-up from optical spectroscopy. It is proposed to determine C, N and O abundances from UV-spectroscopy with the FOS using appropriate NLTE model atmospheres developed by our group. These cannot be derived from optical spectra and will put important constraints on the dredge-up history of the two stars. In the case of K 648, it gives the unique possibility to study different layers of the progenitor star, since we can compare the photospheric abundance to that of the Planetary Nebula. In the case of ROB 162, these abundances can prove or disprove the absence of dredge-up. If proven, a direct determination the primordial helium abundance results.

Prop. Type: SNAP

GALAXIES _CLUSTERS -- (NEARBY GALAXIES) --

3519 - "UV IMAGING OF NEARBY GALAXIES "

Keywords :

Proposers: Dan Maoz (PI; Institute For Advanced Study, Princeton), J.Bahcall (Institute For Advanced Study, Princeton), R.Doxsey (Space Telescope Science Institute), A.Filippenko (University Of California, Berkeley), F.Macchetto (Space Telescope Science Institute), D.Schneider (Institute For Advanced Study, Princeton)

A random sample from among 256 nearby galaxies in the UGC and ESO catalogs will be imaged in the ultraviolet (2200 A) in a Snapshot Survey. Brief (10-minute) exposures will be obtained with the FOC in its F/48 mode with a 44"x22" field of view. The images will be used to search for low-luminosity AGNs that appear as unresolved UV point sources in the nuclei of galaxies. These weak AGNs, which can be detected directly only with HST, will help define the relations between quasars, active galaxies, and normal galaxies. The images will also be used to identify regions of active star formation and to search for compact galactic cores indicative of possible central massive black holes. The sample includes a variety of Hubble types of normal galaxies, as well as peculiar and interacting galaxies. For late-type galaxies, the visible-light leak to the detector will be small (a few %) and the UV light distribution will determine the spatial distribution of young stellar populations. The small field-of-view, high-resolution images will complement rocket-borne and ASTRO observations, and will provide the community with a valuable database. All objects that will be imaged in the UV by other Cycle 2 programs have been removed from the sample.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --

3525 - "THE INTERSTELLAR MEDIUM OF NEARBY GALAXIES USING SUPERNOVAE AS PROBES "

Keywords :

Proposers: Chris Blades (PI; Space Telescope Science Institute;), D.Bowen (Space Telescope Science Institute; U.S.A.), M.Pettini (Royal Greenwich Observatory; U.K.)

We propose using the GHRS and ECH-B grating to observe bright (< 12.5 mag) supernovae which explode in external galaxies. The supernovae will serve as probes of the interstellar gas in the disk and halo, enabling us to search for Mg II and Mg I absorption lines arising from the host galaxy. The 6 km/s resolution of the echelle will allow us to resolve individual components which comprise the line. The accurate measurments of column densities _doppler parameters of each component and the large-scale multicomponent velocity structure of the lines will allow an unprecedented analysis of the chemical, ionization and kinematic conditions within the absorbing gas. For galaxies with low recession velocities, similar information may be obtained for local Milky Way absorption lines observed simultaneously. Because the galaxy which hosts the supernova will be obvious, the detected absorption can be compared with lines seen at higher redshifts in QSO spectra, providing an example of absorption from a KNOWN environment. A collation of all supernovae discovered over the last 10 years shows that roughly one supernova will be found during Cycle 2 with a magnitude brighter than our limit. We therefore request Target of Opportunity time to observe one supernova. Complementary observations of Ca II and Na I absorption will be made from ground-based telescopes.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (

3527 - "ULTRAVIOLET SPECTRUM OF THE MAGNETIC NOVA V1500 CYGNI "

Keywords : CLASSICAL NOVA, POLAR, INTERACTING BINARY, WHITE DWARF

Proposers: Gary D Schmidt (PI; University Of Arizona), J.Liebert (University Of Arizona), H.Stockman (Space Telescope Science Institute)

V1500 Cygni, the host system of the brilliant Nova Cyg 1975, contains a strongly magnetic white dwarf primary star, and thus is related to the AM Herculis class of magnetic catalcysmic variable (Polars). This proposed study will attempt to 1) confirm that the energy distribution of the primary is a hot Rayleigh-Jeans spectrum persisting from the nova outburst; 2) search for photospheric features which characterize the field strength and composition of the atmosphere; and 3) search for strong emission features due to CNO-enriched gas which was processed in the nova event and is now being re-accreted by the white dwarf.

Prop. Type: GO

GALAXIES CLUSTERS -- (NEARBY GALAXIES) --

3532 - "DISK AND HALO GLOBULAR CLUSTERS IN THE EDGE-ON SPIRAL GALAXY NGC 5170"

Keywords :

Proposers: Pieter C Van Der Kruit (PI; Kapteyn Astronomical Institute, Groningen; The Netherlands), K.Freeman (Mt. Stromlo And Siding Spring Observatories; Australia), J.Gallagher (University Of Wisconsin-Madison)

The system of globular clusters of our Galaxy is known to consist of two sub-systems, the disk and halo sub-systems. The halo sub-system has metal-poor globular clusters, is at most moderately flattened and and is slowly rotating. Ths disk sub-system has more metal-rich globulars, is much flatter and has significant rotation. The latter resembles the ''thick disk'' of Gilmore and Wyse. These sub-systems relate to different phases in the formation of the Galaxy; the halo sub-system to the very early phases of Population II formation and the disk-system probably to a stage much later related to disk formation or satellite capture. The structure of the globular cluster system thus contains much information about disk galaxy formation. In this project we will determine how common this phenomenon is. By mapping with WPC the distribution in an edge-on spiral we can uniquely determine the spatial relation of any disk sub-system to the thin disk, which is not possible in our Galaxy or moderately inclined systems (e.g. M31). We will use colors to discriminate between the two sub-systems, since metallicity differences predict a color-index difference in our proposed system of at least 0.6 mag. We will make parallel observations with the FOC to search for outlying clusters and dwarf companions.

Prop. Type: GO

QUASARS_AGN -- (HOST GALAXIES) --
3538- CT - "UV SPECTROSCOPY OF EXTENDED EMISSION-LINE REGIONS AROUND QSOS "
Continuation of Program Number 3538
Keywords :
Proposers: Alan N Stockton (PI; Institute For Astronomy, University Of Hawaii), E.Hu (Inst. For Astronomy, Univ. Of Hawaii), J.Mackenty (Space Telescope Science Institute)

Studies of QSO extended emission-line regions by optical spectroscopy and narrow-band imaging show intimate connections between the presence and strength of such emission and properties such as steep-spectrum radio luminosity and strength of the classical nuclear narrow-line component. There is strong circumstantial evidence that the mechanism responsible for the presence of this extended gas may be connected to that ultimately responsible for feeding the nuclear engine that powers the QSO, so the nature of this extended emission is of considerable interest. We propose to use the FOS to observe Ly-alpha in a strong emission-line region well separated from a QSO. These data will be combined with ground-based observations of the Balmer lines in the same region. The Ly-alpha/H-alpha ratio provides an extremely sensitive diagnostic to small amounts of dust and offers a means of discriminating between the two alternative suggestions that have been made for the origin of the extended gas: debris from tidal interactions (where dust is expected at significant levels) and deposition from cooling flows (where dust will have been destroyed in the hot phase). These UV observations of a nearby QSO will also be important for comparison with current ground-based studies of extended Ly-alpha emission around high-redshift QSOs.

Prop. Type: GO

GALAXIES_CLUSTERS -- (DISTANT GALAXIES) --
3543 - "THE DEEP ULTRAVIOLET SKY "
Keywords :
Proposers: Simon J. Lilly (PI; University Of Toronto; Canada), L.Cowie (University Of Hawaii), E.Hu (University Of Hawaii)

It is proposed to obtain deep images of the extragalactic sky using the FOC on HST. These will reach a limiting magnitude of about 27.0 on the AB system and will complement existing ground-based data that reaches a comparable depth in the optical U, B, V and I bands and in the infrared K band. These data will thus extend our photo- metric survey to a full decade of wavelength. The data will define (a) where and at what rate star-formation is occuring in the Universe at redshifts around z = 0.5 and (b) will define the spectral energy distributions and hence constrain the redshifts of the population of very blue "flat-spectrum" galaxies. We propose to observe one more ground-based survey fields to complement our Cycle 1 program 2365 which is obtaining similar data on the first two of our survey fields.

Prop. Type: GO

GALAXIES _CLUSTERS -- (EVOLUTION/COSMOLOGY)

3545- - "THE EVOLUTION OF THE UV SPECTRA IN EARLY TYPE GALAXIES OUT TO Z=0.7: CLUES TO THE STELLAR POPULATION AND AGN'S IN WEAK RADIO GALAXIES."

Keywords : ELLIPTICAL GALAXIES, RADIO GALAXIES, AGN, STELLAR POPULATIONS, GALAXY EVOLUTION, GALAXY FORMATION

Proposers: Rogier A. Windhorst (Arizona State University), William C. Keel (Univ. of Alabama), Francesco Bertola (Universita di Padova), Patrick J. Mccarthy (Carnegie Obs.), Robert W. O'Connell (Univ. of Virginia), Alvio Renzini (Dept. di Astronomia), Hyron Spinrad (Univ. of California)

We request 26 hr in each of Cycle 2 _3 with FOS or GHRS to take low resolution UV spectra of a WELL DEFINED HOMOGENEOUS SAMPLE OF 12 EARLY TYPE WEAK RADIO GALAXIES WITH 0.1<z<0.7. A small subset of these are scheduled for deep HST imaging in Cycle 1. For the remaining objects, we propose to take WFPC or FOC images in PARALLEL to the FOS/GHRS time, as the surface density of weak radio sources is large enough to do BOTH AT ONCE. The end product will be a sample of early type galaxies uniformly distributed in z with HOMOGENEOUS UV SPECTROSCOPY AND HST IMAGES. Recent IUE data show a strong correlation between radio power and Lyman alpha luminosity, and a UV upturn (<2000 A) in nearby early type radio galaxies similar to that seen in luminous field ellipticals. HST UV spectroscopy will push this sample to intermediate redshifts (0.1<z<0.7), so that we can study: 1) their stellar UV continuum and the evolution of their stellar population. Does their UV upturn come from the OLD stellar population, and does it therefore disappear (uniformly?) beyond a given redshift? 2) their emission lines, and the relation between Lyman-alpha luminosity and radio power at higher redshifts; 3) their morphology at kpc scales, tracing the UV stellar population and any scattered nonthermal contribution; 4) any connection between their weak AGN and the history of their (nuclear) stellar population. This will provide important constraints to the evolution of their stellar population, their weak AGN, and the radio galaxy population as a whole.

Prop. Type: GO

GALAXIES _CLUSTERS -- (GAS _DUST) --
3550- CT - "DETECTION OF ABSORPTION LINES FROM GAS IN THE COOLING FLOW IN THE PERSEUS CLUSTER"
Continuation of Program Number 3550
Keywords :
Proposers: Roderick M Johnstone (PI; Institute Of Astronomy, University Of Cambridge, Uk; Uk), C.Crawford (Institute Of Astronomy; Uk), A.Edge (Institute Of Astronomy; Uk), A.Fabian (Institute Of Astronomy; Uk)

We wish to take a deep FOS spectrum of the Seyfert nucleus in NGC1275 to search for absorption lines of CIV(1550A), SiIV(1400A) and CII(1335). These data will provide a vital link between the cooling flow gas seen at X-ray energies and the much colder gas seen through the emission of optical lines and the absorption of X-rays. Detailed study of the relative line strengths will give information on the presence of heating mechnisms in this temperature range. Detection of these lines will also provide direct evidence in support of the hypothesis that metal-line systems commonly observed in QSO spectra are formed in cooling flows present along the line of sight.

Prop. Type: GO

GALAXIES _CLUSTERS -- (NUCLEI/CORES) --
3551 - "ELLIPTICALS WITH KINEMATICALLY-DISTINCT NUCLEI "
Keywords :
Proposers: Garth D Illingworth (PI; Uco/Lick Observatory), M.Franx (Smithsonian Astronomical Observatory)

The discovery by Franx and Illingworth of a kinematically-distinct stellar com- ponent in the nucleus of the giant radio elliptical IC 1459, and the confirma- tion that such components are quite common, has added a valuable diagnostic tool for understanding the structure and the formation of ellipticals. Fifteen examples are now known, from a sample of 77 ellipticals. The angular momenta of the distinct components are anti-parallel, perpendicular, or parallel to the angular momenta of the outer parts. These substantial (1010 solar masses for IC 1459) components are a valuable diagnostics of the dynamical state of the nuclei of ellipticals. Further study will address their formation by investigating whether these components could be the end result of a 'starburst' event, or of the accretion and settling of a stellar companion, or of the merging of primordial subclumps. We propose to take advantage of the high resolution imaging capability of HST through a PC imaging program of the 7 galaxies that are not part other imaging programs, with the goal of detecting central surface brightness cusps in the central regions of the galaxies with kinematically distinct cores. A comparative study of normal galaxies (observed by other programs) and galaxies with kinematically distinct cores can provide unique information on the formation of these components. These data are an essential complement to an extensive ground-based spectroscopic and CCD imaging survey, and will allow a much better modeling of the spectroscopic data.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (NEUTRON STARS) --
3557 - "POLARIMETRIC OBSERVATIONS OF THE CRAB PULSAR IN THE UV "
Keywords :
Proposers: Francis Graham-Smith (PI; Nuffield Radio Astronomy Laboratories; Uk), J.Biggs (Universities Space Research Association), J.Dolan (Nasa/Goddard Space Flight Center), A.Lyne (Nuffield Radio Astronomy Laboratories; U.K.), S.Shemar (Nuffield Radio Astronomy Laboratories; U.K.)

The UV polarization of the Crab Pulsar (PSR0531+21) will be observed as a function of pulse phase in order to determine the sweep of position angle across the pulse and the associated variation in percentage polarisation. These observations will test the predictions of the geometrical model of pulsed radiation from the Crab Pulsar. According to the model, the optical and radio emission from the pulsar originate in different regions of the pulsar magnetosphere. The optical emission is part of a continuum which extends without a break from infrared to gamma-rays. The pulse profile and polarisation should be similar over this entire wavelength range because they are determined entirely by the geometry of the emitting region. These observations offer the only known method of determining the geometry of the emitting region.

Prop. Type: GO

QUASARS _AGN -- (SEYFERTS) --
3573 - "GEOMETRY AND GENERALIZABILITY OF THE REFLECTED LIGHT MODEL FOR SEYFERT 2 GALAXIES"
Keywords :
Proposers: Ross D Cohen (PI; University Of California, San Diego), R.Antonucci (University Of California, Santa Barbara), L.Kay (Barnard College), J.Krolik (The Johns Hopkins University)

The polarized flux spectra of a few Seyfert 2 galaxies look like the flux spectra of Seyfert 1 nuclei, and the polarization position angles are perpendicular to the radio structure axes. This and other evidence suggests that all Seyfert 2 galaxies may have Seyfert 1 spectra visible only in reflected light. The broad-line regions can be viewed directly in the cases where the otherwise obscuring tori are viewed pole on, and such objects would be classified as Seyfert 1 galaxies. It is crucial to determine whether this generalization of the polarization results is correct, and in particular whether all Seyfert 2 galaxies have polarized nuclear continuua with position angles perpendicular to the radio source axes. We argue that contamination by host-galaxy starlight usually renders this virtually impossible to determine from the ground, while from space, the observations would be easy and straightforward. We can use the FOS on the HST as a polarimeter, cutting down drastically on the starlight by observing in the UV where the stellar flux is weak. We can also determine the geometry of the obscuring regions, and for about half of the objects, we can determine whether the mechanism of the polarization is dust or electron scattering. We can determine continuum slopes and identify broad Fe II features from the flux spectra we receive as a by-product of the polarimetry.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (ERUPTIVE BINARIES) --

3578- CT - "LINE ECLIPSE MAPPING OF AN ACCRETION DISK WIND "

Continuation of Program Number 3578

Keywords :

Proposers: Keith O. Mason (PI; Mullard Space Science Laboratory; Uk), F.Cordova (Pennsylvania State University; U.S.A.), J.Drew (University Of Oxford; U.K.), T.Marsh (University Of Oxford; U.K.), C.Mauche (Lawrence Livermore Laboratory; U.S.A.), J.Raymond (Harvard Center For Astrophysics; U.S.A.)

We propose to measure changes in the profiles of wind-formed lines in the nova-like variable UX UMa as they are eclipsed by the companion star. Models predict that these changes are dramatic when viewed at high enough spectral resolution, and the measurements we make will allow us to map out the kinematics and density profile of an accretion disk wind for the first time. By comparing lines of different species we will determine the ionization structure of the wind, which is important for determining the total mass-loss rate. The proposed observations are well suited to the capabilities of the GHRS on HST, and will provide the raw material for a quantum leap in our understanding of accretion disk winds, a phenomenon encountered in a wide range of astrophysical settings.

P-2

Prop. Type: GO

STELLAR ASTROPHYSICS -- (X-RAY BINARIES) --

3579 - "THE UV ORBITAL LIGHT CURVE OF THE X-RAY BINARY X1822-371 "

Keywords :

Proposers: Keith O. Mason (PI; Mullard Space Science Laboratory; Uk), P.Charles (University Of Oxford; U.K.), F.Cordova (Pennsylvania State University; U.S.A.), S.Ilovaisky (Observatoire Haute Province; France), J.Thorstensen (Dartmouth College; U.S.A.), J.Van Paradijs (University Of Amsterdam; Netherlands)

We are proposing to obtain the first far-UV orbital light curve of an eclipsing low-mass X-ray binary by making FOS observations of the V=15 system X1822-371. The shape of the UV light curve as a function of energy will be used to determine the geometry of the hottest, X-ray illuminated parts of the accretion disk and will provide information that is crucial to determining whether the disk in this X-ray binary has a thick, structured rim. The FOS data will also permit us to construct light curves of the flux in the high excitation UV emission lines such as CIV 1549 and NV 1249, allowing us to determine where they are formed in the system and investigate how they are excited. This will be the first detailed study of UV orbital variations in a member of this important class of X-ray binary, and can only be done with HST. This proposal was approved at supplemental priority in cycle-1 but has not yet been scheduled.

Prop. Type: GO

SOLAR SYSTEM -- (COMETS) --
3582 - "ULTRAVIOLET OBSERVATIONS OF COMETARY METHANOL "
Keywords :
Proposers: Cora E. Randall (PI; University Of Colorado), J.Brandt (University Of Colorado), D.Lynch (The Aerospace Corporation), R.Russell (The Aerospace Corporation), S.Shore (Goddard Space Flight Center)

We plan to observe a bright target-of-opportunity comet (TBD) using the high resolution grating 130H on the FOS. Our intent is to search for methanol emission in the 1400-1608 A region. Methanol has been identified in other comets by its IR and radio wave transitions, but has not yet been identified in the UV region. There are two electronic (Rydberg) transitions of methanol, with bandheads at 1606.9 A and at 1492.5 A, which in absorption are not dissociative transitions. It has been proposed that the production rate for methanol, as derived from the IR and radio wave measurements, is about 0.01 that of H2O. With sensitive observations emission at these UV wavelengths from methanol should be detectable. Such a detection would be a significant precedent for other UV searches of larger organic parent molecules in comets. These observations will be accompanied by high resolution IR measurements, with the goal of definitively correlating the electronic transitions observed in the UV with the vibrational transitions seen in the IR. We expect that the combination of UV and IR spectral measurements will significantly advance our understanding of the organic 3.4 micron band observed previously in comets.

Prop. Type: GO

QUASARS_AGN -- (QUASAR ABSORPTION) --
3584- CT - "PROBING THE VOIDS - II "
Continuation of Program Number 3584
Keywords :
Proposers: John T. Stocke (PI; University Of Colorado)

We propose to obtain medium-resolution GHRS (G160M) exposures of 4 AGNs behind two well-studied galaxy voids (Coma and Perseus) to search for H I (Lyman-alpha) absorption systems with equivalent width greater than 50 mA. A detection of HI absorbers within galaxy voids will help resolve a basic question of whether the 3C-273 H I absorbers are survivors from the high redshift population or are recently formed (ejected?) due to starburst activity in nearby galaxies. These observations will also increase our knowledge of the clustering properties of the surprising low-z H I systems. Based on the line density seen by GHRS toward 3C-273 (one Ly-alpha system per 4000 km/s of pathlength) we expect to observe at least 4 absorbers (EW greater than 50 mA) within 16,000 km/s of pathlength through the two galaxy voids. We may actually see more absorbers if the H I clouds are more frequent within voids. Theoretical scenarios for the production and confinement of intergalactic Ly-alpha clouds predict that this might be the case. Only HST, with its UV sensitivity, can find out.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (H II REGIONS) --

3589- CT - "PARALLEL HIGH RESOLUTION IMAGING OF DIFFUSE OBJECTS IN THE MAGELLANIC CLOUDS"

Continuation of Program Number 3589

Keywords :

Proposers: Jeremy R Walsh (PI; Space Telescope European Coordinating Facility; Germany), M.Azzopardi (Observatoire De Marseille; France), Y.Chu (University Of Illinois), D.Garnett (Space Telescope Science Institute), M.Heydari-Malayeri (European Southern Observatory; Chile), B.Lasker (Space Telescope Science Institute), J.Lequeux (Observatoire De Meudon; France), J.Meaburn (Manchester University; England), N.Meyssonnier (Observatoire De Marseille; France)

The Magellanic Clouds, because of their well-determined distance and small extinction, allow an unprecedented opportunity to observe many ISM phenomena occurring in a whole galaxy. The HST resolution (0.1" = 0.025 pc) offers detail hitherto poorly studied in the extragalactic context on the morphology and spatial relationships in various ISM processes associated with the evolution of Population I systems. This long term (13 yr) parallel program exploits these opportunities by obtaining WF/PC images of appropriate targets that are accessible at the same time as primary spectroscopic pointings. The number of parallel observations per Cycle is estimated at 50; and our intent is to accumulate a significant archive of Magellanic Cloud direct images over the life of the program. The parallel targets, to be specified in Phase II of each HST Cycle, will include (or search for) compact H II regions, proto-stellar and maser regions, reflection nebulae, Herbig-Haro objects, stellar ejecta, SNR and wind-driven shells, supershells, planetary nebulae, Very Low Excitation nebulae and candidates for proto-planetary nebulae. The observations will be primarily in the Balmer lines and the stronger forbidden lines, with supplemental continuum images as required.

Prop. Type: GO

STELLAR POPULATIONS -- (MASSIVE STARS/BURSTS) --

3591 - "MASSIVE STARS IN STARBURST GALAXIES "

Keywords :

Proposers: Timothy M. Heckman (PI; Stsci), D.Garnett (Stsci), A.Kinney (Stsci), C.Leitherer (Stsci), C.Robert (Stsci)

Starburst galaxies are ideal laboratories to study both the physics of massive stars and processes important in galaxy formation and evolution. Observations of these galaxies at ultraviolet wavelengths are crucial to our understanding of the starburst phenomenon, because only in this spectral regime can we directly observe the spectroscopic signatures of the hot, massive stars that power the emission at other wavebands. Indeed, we believe that the investigation of the UV properties of starburst galaxies is one of the most valuable tasks to be undertaken with HST. We have identified what we believe to be an optimal sample of the UV-brightest starburst galaxies in the local universe. These span as broad a range as possible in metal abundance and starburst luminosity. We describe an HST program designed to both give us a broad overview of the UV properties and stellar content of starbursts and to answer some important specific questions about starbursts. We anticipate that observations like these will be the prelude to a decade of fundamental and exciting HST research on massive stars and starburst galaxies.

Prop. Type: GO/DD

QUASARS _AGN -- (JETS) --

3594 - "IMAGING POLARIZATION OF THE M87 NUCLEUS AND JET "

Keywords :

Proposers: Ferdinando Macchetto (PI; Space Telescope Science Institute), J.Biretta (National Radio Astronomy Observatory), A.Boksenberg (Royal Greenwich Observatory; United Kingdom), W.Sparks (Space Telescope Science Institute)

We propose to map the distribution of polarized emission in the jet of M87 and measure the polarization of the nucleus from visual to ultra-violet wavelengths. This will for the first time enable the nuclear polarization to be measured free of Faraday rotation effects and allow firm limits on the strength of non-thermal emission versus a compact nuclear star cluster to be obtained. Within the jet, quantitative comparison with VLA flux and polarization measurements at the same resolution as the VLA data will provide stringent constraints for emission mechanism theories and on the physical nature of the jet. We also propose to determine the proper motion of the jet and to monitor the nucleus for variability in flux and polarization properties.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (ERUPTIVE BINARIES) --
3600 - "OSCILLATIONS, FLARES, AND TOMOGRAPHY OF AE AQUARII "
Keywords :
Proposers: Keith Horne (PI; Stsci), T.Marsh (Oxford University; Uk), E.Robinson (University Of Texas At Austin), J.Wood (University Of Texas At Austin)

AE Aquarii is the most rapidly spinning of the magnetic cataclysmic variables. Its 16.5 and 33s oscillations and large aperiodic flaring have been studied at radio, optical, x-ray, and TeV gamma-ray energies but never before in the UV. Accretion onto the magnetic poles of the white dwarf is thought to produce rotating x-ray searchlight beams that irradiate the surrounding accretion flow. The impressive flares may represent accretion rate fluctuations gated by magnetic reconnection near the co-rotation radius, where disk material enters the magnetosphere. The source of relativistic electrons producing the highly variable spectrum of unpolarized radio emission is uncertain. We propose FOS,G160L observations in RAPID (1s) readout mode for 7 consecutive HST orbits covering one 9.88h binary period to measure the oscillations and flares as a function of wavelength and binary phase, and to investigate relationships between the oscillations and flares. We predict 1-20 percent oscillations in the UV, making this the only spectral region in which the oscillations can be studied with good S/N. HST has sufficient sensitivity and time resolution to make this an easy experiment. Besides clarifying the nature of the oscillations and flares, we will perform doppler and time-delay tomography of the UV emission-line regions in the system.

Prop. Type: SNAP

INTERSTELLAR MEDIUM -- (PLANETARY NEBULAE) --
3603 - "SNAPSHOTS OF PROTOPLANETARY NEBULAE "
Keywords :
Proposers: Matthew Bobrowsky (PI; Cta Incorporated)

We propose to undertake a "snapshot" survey of protoplanetary nebulae (PPNe) based on a list of approx. 100 candidate targets. Theoretical models of the formation of planetary nebulae have indicated that observable changes can take place on timescales as short as decades, i.e., the lifetime of HST. Such predictions have since been confirmed by observations. So it is now known that the evolution of many PPNe can be studied if snapshots of them are taken in the near future and again five or ten years later. The evolution which will be detected by the proposed (and future) snapshots results from various processes depending on the phase in which the target is currently viewed -- old asymptotic giant branch stars, OH/IR stars, or more advanced PPNe. Even before a future generation of snapshots is acquired, important information in the short term will result from these snapshots. The deconvolved images obtained from this initial program will immediately distinguish among differing models of planetary nebula formation. For example, some PPNe will show evidence of ionization fronts or shocks. While many phases of stellar evolution do not lend themselves to this sort of scrutiny, PPNe present observable changes on a short enough timescale that it is highly desirable to take snapshots of as many of them as possible and establish a baseline from which the evolution of these objects can be analyzed. Furthermore, evolutionary changes which are detected in individual PPNe will enable distances to be determined for these objects.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (MASSIVE STARS) --

3605- CT - "EXTREME STELLAR WINDS AND POST-MAIN-SEQUENCE EVOLUTION IN THE UPPER HERTZSPRUNG-RUSSELL DIAGRAM"

Continuation of Program Number 3605

Keywords : MASS LOSS, MASSIVE STARS

Proposers: Claus Leitherer (PI; Stsci), L.Drissen (Space Telescope Science Institute), I.Hubeny (Goddard Space Flight Center), N.Langer (Universitaetssternwarte Goettingen; Germany), A.Moffat (Universite De Montreal; Canada), A.Nota (Space Telescope Science Institute), C.Robert (Space Telescope Science Institute), W.Schmutz (Eth Zuerich; Switzerland), N.St.-Louis (Universite De Montreal; Canada)

We propose to obtain spectroscopy of 7 Ofpe/WNL stars in the LMC with the FOS + gratings G130H,G190H. Ofpe/WNL stars are hot luminous objects with spectral characteristics intermediate between WR and Of stars. Their wind densities make them ideal test cases to study BOTH wind AND photospheric properties: the mass loss is significantly higher than in normal O stars so that different wind regions can be sampled by numerous lines, yet it is not so high as to completely veil the photosphere, as occurs in W-R stars. We will take advantage of this unique opportunity and perform a detailed non-LTE analysis using the most sophisticated model atmospheres in existence. A complete set of stellar parameters, including the mass- loss rate and velocity field, will be derived empirically. The results will be compared to the predictions of the theory of radiatively driven winds. We will assess the question if radiation pressure can IN PRINCIPLE drive mass loss in this part of the HRD, and we will investigate if the current hot star wind theory makes QUANTITATIVELY correct predictions for Ofpe/WNL and related O stars. A second goal of this proposal is to evaluate the evolutionary status of Ofpe/WNL stars. Based on the stellar parameters --- including abundances --- found in our analysis, we will test the suggestion that these objects are the evolutionary link between O and W-R stars.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (ERUPTIVE BINARIES) --
3607 - "QUASI-PERIODIC OSCILLATIONS IN AM HERCULIS BINARIES "
Keywords :
Proposers: Ganesar Chanmugam (PI; Louisiana State University), H.Bond (Space Telescope Science Institute)

AM Her variables are close-binary systems in which a white dwarf with a magnetic field of 20--70 MG accretes matter from a companion star. Theoretical studies of magnetically channeled accretion flows in such systems predict that the shock formed near the white dwarf should oscillate with periods of order 0.1--1 s. Optical high-speed photometry has indeed shown the existence of such rapid, quasi-periodic oscillations in some AM Her binaries, but not in others. We will use HST to obtain simultaneous UV and optical high-speed photometry of several AM Her systems, in order to explore further the nature of the oscillations, and to extend the search into the UV. HSP observations of two systems (VV Pup and ST LMi, in which the accreting magnetic pole periodically passes behind the limb of the white dwarf) will allow detailed eclipse mapping of the accretion column and the shock oscillations to be carried out. This proposal was initially accepted for Cycle 1, but ultimately received Supplementary status in the reassessment. We are therefore resubmitting it for Cycle 2.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (PLANETARY NEBULAE) --
3608 - "THE 12C TO 13C ISOTOPE RATIO IN PLANETARY NEBULAE "
Keywords :
Proposers: Robin ES Clegg (PI; Royal Greenwich Observatory; Uk), P.Storey (University College London; England), J.Walsh (Space Telescope European Coordinating Facility; Germany)

Abundances of C,N and O in red giant stars and planetary nebulae (PNs) provide important diagnostics of stellar evolution theory. CNO isotope ratios (eg 12C/13C, 15N/14N and 16O/18O) have given many extra constraints on all the mixing processes occurring between the main sequence and PN ejection. In general, observations show more mixing occurs than is predicted. The CNO abundances for Galactic and Magellanic Cloud PNs show that the '3rd dredge-up' of 12C is more efficient in metal-poor environments. However, until now it has not been possible to measure important diagnostics such as the 12C/13C ratio in nebulae so as to relate red giant _PN populations. We propose to use the GHRS, Echelle and Large Science Aperture to measure C12/13 ratios in 3 PNs with a novel spectroscopic method. As 12C has zero nuclear spin, the normal C III 1S(J=F=0) - 3P(J=F=0,1,2) transition has only two components (1906.7, 1908.7A). But the nuclear spin (I=1/2) of 13C gives a finite line strength to an F=1/2-1/2 transition at 1909.6A, which is absent in 12C. Measurement of all three lines will provide the C12/13 ratio. In an allocation of under 9 hours we can reach 3-4 sigma limits for a C-rich Galactic nebula, a C-rich SMC nebula, and a Type I (He and N-rich, and having C<O) PN in the LMC. We can measure to limiting isotope ratios between 30 and 90. Our LMC

Type I target is probably descended from the group of N-rich M/MS/S stars, found by Smith _Lambert to have 12C/13C ratios between 5 and 30.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (STELLAR ATMOSPHERES) --
3614- LT - "BORON AS A PROBE OF STELLAR STRUCTURE AND MASS LOSS "
Keywords :
Proposers: Douglas K Duncan (PI; Space Telescope Science Institute), C.Deliyannis (Yale Univ./Univ. Of Hawaii), M.Pinsonneault (Yale Univ.)

Observations of Boron, an easily destroyed element, will be used to probe processes which circulate or remove and destroy material in cool stars. These include mass loss, diffusion, meridional circulation, convective overshoot, and turbulence and rotationially-driven mixing. 1. The destruction of light elements in the sun is not understood but is a key to understanding internal mixing in cool stars. Alpha Centauri A and B will be measured to study mixing in stars respectively slightly more and less massive than the sun. Beta Hyi will be studied as an example of a 1.0 solar mass, partially evolved star. 2. The rates of mixing processes, especialy those which are expected to operate only on long timescales, will be studied by observing two stars in the intermediate age cluster NGC 752. One star will be from inside the "Lithium Gap" region in the F stars, and one star from outside the gap. 3. Two red giants and subgiants will be observed to help measure the amount of mass lost on the giant branch. . . . . NOTE: THIS PROPOSAL ONLY USES SIDE 2 OF THE GHRS. We are aware of the GHRS condition (as the P.I. is GHRS Instrument Scientist.)

Prop. Type: GO

SOLAR SYSTEM -- (GIANT PLANETS) --
3616 - "THE UPPER ATMSPHERES OF URANUS AND NEPTUNE "
Keywords :
Proposers: Melissa A. Mcgrath (PI; Space Telescope Science Institute), J.Clarke (University Of Michigan), R.Yelle (University Of Arizona)

Far-ultraviolet observations of the planets Uranus and Neptune are proposed to detect and accurately measure the upper-atmospheric molecular hydrogen emissions with higher S/N and spectral resolution than has been achievable previously. Until the advent of the HST, the only previous remote detection of these planets at wavelengths below 1800A has been Ly-alpha emission from Uranus. The proposed program is the logical extension of a currently-approved program (GO 2625) for similar observations of Jupiter and Saturn, which is designed to facilitate detailed intercomparisons among all the outer planets by making a thorough inventory of their far-UV emissions. These observations will determine the dominant excitation process for the upper atmospheric emissions, which is a critical question because of its possible link to the unexpectedly high exospheric temperatures revealed by the Voyager flybys. Planet to planet variations in the excitation mechanism(s) and their variation with solar input will also be determined.

Prop. Type: GO

SOLAR SYSTEM -- (SATELLITES) --

3617 - "THE ULTRAVIOLET EMISSIONS OF TITAN "

Keywords :

Proposers: Melissa A. Mcgrath (PI; Space Telescope Science Institute), P.Feldman (Johns Hopkins University), W.Moos (Johns Hopkins University), D.Strobel (Johns Hopkins University)

Observations are proposed using the FOS to accurately measure the far-ultraviolet (~1200-1800A) spectrum of Titan at ~3A resolution, which has been observed previously only by the Voyager Ultraviolet Spectrometer (UVS) at very low spectral resolution (~30A). Models of the bright emissions from atomic and molecular nitrogen and N+ in the Voyager data provide poor fits longward of Ly-alpha. In addition, several unidentified emissions remain which cannot be explained by N2 or its dissociation products, including a strong feature at ~1336A. Positive identifications of these emissions will help determine the relative contributions by magnetospheric particle precipitation, photoelectrons, and direct solar excitation to the observed UV dayglow, and will allow comparison with UV observations of the Earth's airglow and aurora. In addition, solar reflected light longward of Ly-alpha will be detected and complements the dayglow observations, allowing detections or upper limits to be placed on the abundance, distribution and chemistry of minor constituents such as hydrocarbons, nitriles, and hazes, which are of considerable interest because of the striking resemblance between Titan's atmosphere and the primitive atmosphere of the Earth.

Prop. Type: GO

SOLAR SYSTEM -- (GIANT PLANETS) --

3618- CT - "EXCITATION PROCESSES FOR THE OUTER PLANET UV EMISSIONS: FUTURE-CYCLE CONTINUATION"

Continuation of Program Number 2625

Keywords :

Proposers: Melissa Mcgrath (PI; Space Telescope Science Institute), J.Clarke (University Of Michigan), W.Moos (Johns Hopkins University), D.Strobel (Johns Hopkins University)

A set of observations of Jupiter (Cycle 1) and Saturn (Cycle2) in the far-ultraviolet spectral region will be used to determine the process(es) exciting UV ('electroglow') emissions in the upper atmospheres of these planets. Utilizing the increased sensitivity and spectral resolution of the

ST/HRS over IUE and Voyager systems, emission lines from 1200-1800A will be used to distinguish between the two suggested processes of electron excitation and fluorescence.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (SN _SNR) --
3621 - "THE PARTIALLY BURNED EJECTA OF SUPERNOVA 1006 "
Keywords :
Proposers: Chi-Chao Wu (PI; Computer Sciences Corporation), D.Crenshaw (Computer Sciences Corporation), R.Fesen (Dartmouth College), A.Hamilton (University Of Colorado), M.Leventhal (Bell Laboratories), M.Mccollough (Computer Sciences Corporation)

We propose to use the FOS to observe a 17th mag sdOB star situated behind the young remnant of the Type Ia SN 1006 in order to study the absorption spectrum of the SNR. IUE spectra show strong, broad Fe II UV absorption features, along with several Si, and possibly S and O lines redshifted by about 5000 km/sec. These features have provided the first direct observational evidence for high velocity, heavy element enriched ejecta within a young Type Ia SNR. In the first GO cycle, we were granted "high priority" HST time to observe the Fe II lines with the FOS (2200-2800 angstroms). Here, we request time to observe the Si II, III, IV, O I, S II, and possibly other lines which appear at shorter wavelengths (1200-1600 angstroms). These lines have been observed and reobserved by us with IUE, but the noisiness of the IUE spectra has made interpretation of features inevitably uncertain. The HST FOS spectrum will have about 10 times better S/N and 5 times better resolution which are essential to establish accurate profiles, equivalent widths, and wavelengths. Accurate HST measurements will: (1) confirm unambiguously the presence of partially burned heavy element material in SN 1006; and (2) provide firm evidence of the mass, composition, velocity distribution, and ionization state of this material. A rigorous and quantitative analysis of these features will substantially advance the understanding of Type Ia SN.

Prop. Type: GO

STELLAR POPULATIONS -- (GALACTIC CENTER) --
3623 - "THE CENTRAL STAR CLUSTER OF THE GALAXY: DEEP IMAGING "
Keywords :
Proposers: Kwok-Yung Lo (PI; University Of Illinois), J.Biretta (National Radio Astronomy Observatory)

We propose to use the HST Wide Field Camera to obtain deep images of the Galactic center with 0.1" (850 AU at 8.5 kpc) resolution at 1.03 micron wavelength. Recent observations have revealed a multitude of unusual phenomena at the center, suggesting that the Galactic center may be a low energy version of an active galactic nucleus and may harbor a massive collapsed object. Unambiguous delineation of the central star cluster, which would provide an important constraint on the central mass distribution, has been hampered by the inadequate angular resolution of ground-based observations. A 20 min. HST observation by us has already detected components of IRS16, which has been the focus of previous efforts to define the central star cluster. The proposed observation will map the structure of IRS16 in much greater detail. The resolution and sensitivity of the proposed observations can also detect and resolve individual K and M gaint stars of the central star cluster, despite the large visual extinction to the center; several late M giants may already be detected by the previous HST data. Understanding the nearest galactic nucleus will be important for the interpretation of more energetic active galactic nuclei.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (STELLAR ATMOSPHERES) --

3626- CT - "EMPIRICAL DETERMINATION OF THE WIND VELOCITY AND DENSITY LAWS FOR THE K SUPERGIANT ZETA AURIGAE"

Continuation of Program Number 3626

Keywords : K4IB+B8 ECLIPSING BINARY SYSTEM

Proposers: Alexander Brown (PI; Colorado, University Of), R.Baade (Hamburg, University Of; Germany), T.Kirsch (Hamburg, University Of; Germany), J.Linsky (Colorado, University Of), D.Reimers (Hamburg, University Of; Germany), R.Weyman (Mt. Wilson And Las Campanas Observatories)

We will derive the velocity and density laws and mass loss rate for the K4 supergiant in the eclipsing Zeta Aurigae binary system. The slow passage of the geometrically small B dwarf with its bright UV continuum behind the extended atmosphere of the K supergiant provides a splendid opportunity to probe the column densities and velocities of many absorption lines of various strengths as a function of stellar impact parameter. Our empirical determination of the wind physical parameters throughout the acceleration region will place tight constraints on the physical processes responsible for mass loss in evolved, massive stars that contribute significantly to the enrichment of the interstellar medium with chemically processed material. We request time for observations of lines of Fe I-II, Si II, Ti II, and V II at 6 orbital phases, including the terminal velocity wind, wind aceleration region, eclipse by the K star chromosphere, and total eclipse. This program is time critical but with typical tolerances of 1-7 days due to the long (972 day) orbital period.

Prop. Type: GO

SOLAR SYSTEM -- (GIANT PLANETS) --

3644 - "A SEARCH FOR THE HYDROXYL RADICAL IN SATURN'S MAGNETOSPHERE "

Keywords :

Proposers: Donald E. Shemansky (PI; Univ. Of Southern California), D.Hall (Univ. Of Southern California), P.Matheson (Univ. Of Southern California)

We propose to observe the Saturn magnetosphere to investigate the abundance and distribution of the hydroxyl radical (OH). This species is diagnostic of basic properties of the magnetosphere and erosion rates of the icy satellites and rings. The presence of significant numbers of heavy neutrals in the magnetosphere have been inferred from energy loss rates required to explain the observed population of cold electrons. If this interpretation is correct large source rates are required. We have constructed a physical chemistry model for the Saturn magnetosphere that predicts neutral and plasma species partitioning. The parametric requirements to match observed plasma conditions with this model results in the prediction of large amounts of neutral oxygen and moderate amounts of OH, with sensitivity to ion diffusive loss rates. The abundance of OH inside 8 Saturn radii is predicted to be observable with HST through its fluorescent emission centered near 3085A. Direct estimates of OH densities, coupled with the chemical kinetic model, will provide a definitive constraint on icy satellite erosion rates.

Prop. Type: GO

GALAXIES _CLUSTERS -- (NEARBY GALAXIES) --

3647 - "THE STAR-FORMING HISTORIES OF ELLIPTICAL GALAXIES "

Keywords :

Proposers: Henry C. Ferguson (PI; University Of Cambridge, Institute Of Astronomy; England), R.Bohlin (Space Telescope Science Institute), K.Borne (Space Telescope Science Institute), A.Davidsen (The Johns Hopkins University), W.Sparks (Space Telescope Science Institute), R.Thomson (University Of Cambridge, Institute Of Astronomy; England), B.Whitmore (Space Telescope Science Institute), S.Zepf (Physics Deptartment, University Of Durham; England)

We propose to obtain high S/N UV spectra to investigate the history of star formation in elliptical galaxies. These observations will provide an order of magnitude improvement in spectral signal-to-noise over that previously attainable with IUE. The data will also supplement and complement the limited set of elliptical-galaxy observations made in December 1990 with Astro-1. The HST spectra promise additional important constraints on the metallicity distribution and ages of the hot stellar component in these galaxies.

Prop. Type: GO

QUASARS _AGN -- (BL LACS) --
3648 - "IMAGING OF BL LAC HOST GALAXIES AND ENVIRONMENTS "
Keywords :
Proposers: Chris D. Impey (PI; University Of Arizona), R.Green (National Optical Astronomy Observatories), B.Jannuzi (Institute For Advanced Study)

We propose to take deep Planetary Camera images of 4 BL Lac objects in the I(795LP) filter. Image deconvolution techniques will be used to a) measure luminosities and basic morphological information for the nebulosity, b) determine the degree of centering of the AGN on the nebulosity, and c) study the cluster environment of the AGN. The BL Lac objects are selected from complete X-ray and radio-selected samples and lie in the redshift range $0.34 < z < 0.55$. We will derive structural information unobtainable from the ground, and will be able to measure evolutionary effects by comparison with ground-based data obtained for objects at lower redshift. There is good evidence that the continuum properties of BL Lac objects are affected by two quite distinct physical mechanisms: relativistic beaming and gravitational lensing. If beaming models are generally applicable, the data will yield a test of the parent population of BL Lacs (the misdirected jets) via the distribution of host galaxy luminosities and morphologies. If (micro)lensing is common, it will manifest itself as off-centered nebulosity around the AGN, and an inferred host galaxy that is too luminous to be at the redshift of the BL Lac object. Either way, we will be able to detect cosmic evolution in the environment, or differences between X-ray and radio- selected BL Lacs.

Prop. Type: GO

QUASARS _AGN -- (RADIO GALAXIES) --
3654 - "HIGH RESOLUTION MORPHOLOGIES AND COLORS IN DISTANT RADIO GALAXIES "
Keywords : RADIO GALAXIES, HIGH Z GALAXIES
Proposers: Hyron Spinrad (PI; University Of California, Berkeley; Us), M.Dickinson (University Of California, Berkeley), S.Djorgovski (California Institute Of Technology), P.Mccarthy (Observatories Of The Carnegie Institute Of Washington)

We request HST time with the WFC to observe a luminous radio galaxy at z=1 in order to resolve its morphologies on kiloparsec scales. The elongated continuum structures seen for these galaxies commonly align with the axes of their double lobed radio sources, suggesting large scale star formation induced by the passage of the radio jet through the host galaxy. Seen at the best attainable ground based resolution, the rest-frame ultraviolet continuum breaks up into multiple knots and subcomponents; it may be expected that a comparable gain in detail is to be had with 0".1 HST resolution. The spherical aberration of the HST primary makes achieving such resolution a challenge, but the successful experiences of King et al. (1991) with faint galaxy WFC and FOC imaging and image restoration demonstrate its feasibility, even for 22nd magnitude galaxies, if proper observing strategy is followed and adequate signal-to-noise can be achieved. Deconvolved images taken through two bandpasses will be used to study the kiloparsec scale morphologies of the star forming regions, their detailed correlation with centimeter wavelength radio structure, and their colors, indicative of ages and temperatures of the recently formed stellar populations. With this data in hand, we can begin to test in detail the scenarios which have been advanced to explain the activity which appears to trigger the formation of the bulk of the stellar content of the radio galaxy.

Prop. Type: GO

QUASARS _AGN -- (HOST GALAXIES) --

3657 - "THE HOST GALAXIES OF BL LACERTAE OBJECTS "

Keywords : BL LACS, HOST GALAXIES, AGN,

Proposers: Ian M Mchardy (PI; Southampton University; Uk), R.Abraham (Dominion Astrophysical Observatory; Canada), C.Crawford (Cambridge University; U.K.)

In the currently popular 'unified schemes' for AGN, BL Lac objects are thought to be ordinary double radio sources seen end-on. As the host galaxies of double radio sources are almost all large elliptical galaxies, we expect that the same will be true of BL Lac objects. We have undertaken a deep CCD imaging survey of BL Lacs with the 4.2m William Herschel Telescope and, although we find many elliptical galaxies, we also find some disc systems. These results are very exciting but are hard to reconcile with standard 'unified schemes'. We have now done as much as we can from the ground. We propose here to extend these observations to confirm the morphology of one of our proposed disc hosts which is an excellent candidate for HST observations as the very red BL Lac core contributes very little to the total visual light from the galaxy. These observations will be a significant advance on ground based work but will not attempt to push the HST beyond its realistic capabilities.

Prop. Type: GO

QUASARS _AGN -- (QUASAR ABSORPTION) --

3660 - "THE LEVEL OF IONIZATION AND CHEMICAL COMPOSITION OF QSO BAL REGION GAS"

Keywords :

Proposers: David A. Turnshek (PI; University Of Pittsburgh), B.Espey (University Of Pittsburgh)

About 10% of all radio quiet QSOs exhibit broad absorption lines (BALs) in their spectra. The BALs come from a mostly highly ionized region which is outflowing from the central source at speeds ranging from a few to many tens of thousands of km/s. Observational constraints on models require that the covering factor of the BAL region be relatively small (e.g., normally < 0.2), therefore many QSOs must have BAL regions which do not lie along our lines- of-sight. Fairly accurate ionic column densities can be derived as a function of velocity for BAL gas. This is unlike the case for broad emission from QSOs, which at any observed velocity originates in various components with a range of ionizations. Based on column density analyses, a considerable amount of evidence suggests that the chemical composition of the BAL region gas is enhanced by factors of 10 to 100 or more times solar values. Since this conclusion is remarkable, we propose to carefully check it. One problem with past analyses is that different ionic species of the same element in an object have not been studied. We will remedy this situation by observing the UV spectrum of this specially selected BAL QSO which shows evidence for enhanced abundance and whose BAL profile is simple enough to reduce complications due to overlapping of the absorption due to different species. Constraints on the ionization state and chemical composition of the BAL gas will be derived using Ferland's photoionization code CLOUDY.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (MASSIVE STARS) --

3663- CT - "ULTRAVIOLET SPECTROPOLARIMETRY OF AG CAR IN ITS CURRENT OUTBURST "

Continuation of Program Number 3882

Keywords : LBV'S, MASS LOSS, MASSIVE STARS, JETS

Proposers: Claus Leitherer (PI; Stsci), L.Drissen (Space Telescope Science Institute), O.Lupie (Space Telescope Science Institute), A.Nota (Space Telescope Science Institute), F.Paresce (Space Telescope Science Institute), C.Robert (Space Telescope Science Institute), W.Schmutz (Eth Zuerich; Switzerland)

We propose to obtain high-resolution (R=1000) spectropolarimetry of the Luminous Blue Variable AG Carinae with the FOS. AG Car undergoes quasi-periodic outbursts on a time-scale of about 15 years. The on-set of such an outburst has recently been detected. During the outburst, the stellar mass-loss rate increases by a factor of 100, leading to the ejection of discrete shells. The relicts of previous (10e4 yr ago) mass ejections are visible as a bipolar jet and other nebulous filaments within 30" around AG Car. It is intended to measure the linear polarization of strong ultraviolet resonance lines originating in the wind of AG Car, such as Fe II (1) and Mg II (1) in the wavelength region 2300A - 3100A. Such SCATTERING lines are the most sensitive probe to study asymmetries in the wind by spectropolarimetric techniques. The scientific goal is to search for evidence for asymmetry in the stellar wind of AG Car within 10 stellar radii and to correlate the derived geometry with the morphology of the bipolar, spatially resolved structures at a distance of 0.1 pc from the star. The results will be interpreted in terms of the outburst mechanism of AG Car, and of Luminous Blue Variables in general. We request a total of 2 sets of observations, separated in time by the flow-time scale of AG Car (4 months), in order to study the temporal evolution of the flow geometry.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --
3664 - "PROBING THE IS GAS OF THE SUPERBUBBLE LMC2 "
Keywords :
Proposers: Adeline M. Caulet (PI; Space Telescope European Coordinating Facility; Germany), G.Hasinger (Max Planck Institut For Extraterrestrial Physics; Germany), W.Pietsch (Max Planck Institut For Extraterrestrial Physics; Germany), A.Smith (Nasa Goddard Space Flight Center; U.S.A.)

Supershells are gigantic bubbles of hot gas blown in galactic disks by stellar winds and supernovae. Providing an enormous energy input to the ISM, they have an important effect on local dynamics and on galactic halos. One of them, LMC2 in the Large Magellanic Cloud, has been well studied at radio, optical and X-ray wavelengths. We have shown its optical filaments to be expanding in LMC disk gas. Our recent ROSAT observations reveal that the diffuse X-ray emission covers a larger sky area than the optical filaments do. Did LMC2 burst open in the halo?. What is the dynamics of the optically invisible IS gas layers within and around LMC2?. To probe the IS gas of LMC2, we propose to obtain GHRS medium resolution UV spectra of 7 supergiant stars in the LMC2 field. The observational goal is to measure the velocities and strengths of UV IS absorption lines arising in the cold, warm and hot LMC2 gas. HST has the only existing UV spectrograph that can detect individual velocity components of IS hot gas (CIV and NV absorption) in connection with the X-ray diffuse emission seen towards the LMC supershells. The scientific goals are to find a satisfactory model of LMC2 that describes the physical characteristics of the superbubble and the effects of supershell expansion or break-out into the LMC halo.

Prop. Type: GO

QUASARS _AGN -- (RADIO GALAXIES) --
3667- CT - "PEN-NUCLEAR REGIONS OF RADIO GALAXIES (CONTINUED) "
Continuation of Program Number 3667
Keywords :
Proposers: Susan M Simkin (PI; Michigan State University), E.Sadler (Anglo-Australian Observatory; Australia)

In our original Cycle 1 proposal, we carefully picked 3 of the nearest radio galaxies to observe with the HST PC. Recent ground-based observations have shown that these galaxies are excellent candidates to use as test cases for theories which describe the nuclear "feeding" process in active galaxies. We were rescheduled to observe only one of these objects in one color during Cycle 1. This is Pictor A (PKS 0518-24), which is THE closest BLRG known. Its proximity and very bright nuclear emission lines allow us to use the HST, in its present form, to resolve the inner 40 to 50 pc near the nucleus where the transition between the VLBI/Broad Emission Line region and the Narrow Emission Line region takes place. We are requesting time in Cycle 2 to obtain enough multi-band images of Pictor A to differentiate between peri-nuclear structures which arise from star-forming regions and those which are signatures of gravitationally-induced nuclear inflow. We plan to follow up these imaging observations with HST UV spectroscopy during Cycle 3.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (PLANETARY NEBULAE) --
3671 - "ULTRAVIOLET SPECTROSCOPY OF HYDROGEN-POOR PLANETARY NEBULAE "
Keywords :
Proposers: Patrick Harrington (PI; University Of Maryland, Dept. Of Astronomy, College Park), K.Borkowski (University Of Maryland, Dept. Of Astronomy, College Park), R.Clegg (Royal Greenwich Observatory, Cambridge; Uk), Z.Tsvetanov (Johns Hopkins U., Dept. Physics And Astronomy, Baltimore)

Planetary nebulae (PNe) form in the final stages of evolution of intermediate- and low-mass stars, and show abundances consistent with contamination by modest amounts of processed material. There is however an exceptional group of PNe with nebular gas that consists of nearly undiluted products of nuclear burning. These hydrogen-poor PNe are thought to result when a final helium shell flash occurs after the complete removal of the hydrogen envelope. We propose to study 5 of the 6 currently known H-poor PNe with HST. The best studied object, Abell 30, shows that the majority of the emission line radiation is in the UV, and thus UV spectrophotometry is indispensable for quantitative analysis. Our proposed HST observations (in conjunction with our ground based work) will provide fundamental information (1) on helium-burning nucleosynthesis, by determining the ionic concentrations of H and He burning products; (2) on the physics of very dusty gas, by determining the energy balance; this is crucial since it now appears that due to the high dust-to-gas ratio, the energy input may be partially, and in some cases, primarily, due to photoelectric ejection by grains rather than by photoionization; and (3) on the interaction of the several thousand km/sec stellar winds with the nearby clumps of nebular material, by analysis of the velocity structure of the C IV 1550 line.

Prop. Type: GO

GALAXIES CLUSTERS -- (STARBURSTS) --
3676 - "QUASAR ABSORPTION LINE STUDIES OF STARBURST GALAXY ENVIRONMENTS"
Keywords :
Proposers: Colin A. Norman (PI; Space Telescope Science Institute), C.Blades (Space Telescope Science Institute), L.Danly (Space Telescope Science Institute), T.Heckman (Space Telescope Science Institute)

Starburst galaxies are now known to pump prodigious amounts of mass, energy, and momentum into their circumgalactic halos and the surrounding intergalactic medium. Outflows from starbursts are seen with both narrow band images and optical spectroscopic studies. The physics of these flows is fascinating. The most plausible explanation of their origin is that they are driven by a continuous energy and momentum input from the supernovae explosions. We propose here a coherent, in depth study of the physical state of these outflows. We shall study in detail the absorption line spectra of six quasars behind starburst outflows at projected galactocentric distances of order 10-100 kpc to learn about the ionisation state, metallicity, filling factor, geometry and kinematics of the outflowing gas. With HST the studies will be of comparable sensitvity and resolution to the studies of gas surrounding our own Galaxy and we emphasise that there is no other way to get the information needed to determine the physical state of these flows.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (ERUPTIVE BINARIES) --

3683 - "ACCRETION DISK MAPPING IN ECLIPSING CATACLYSMIC VARIABLES "

Keywords :

Proposers: Keith D Horne (PI; Stsci), H.Barwig (University Of Munich; Germany), K.Long (Stsci), K.Mantel (University Of Munich; Germany), T.Marsh (Oxford University; Uk), R.Polidan (Nasa/Gsfc), J.Raymond (Center For Astrophysics), E.Robinson (University Of Texas), R.Rutten (Sterrenkundig Instituut "Anton Pannekoek", Amsterdam; Netherlands), A.Shafter (San Diego State University), P.Szkody (University Of Washington), R.Wade (Penn State Univerity), J.Wood (University Of Keele; United Kingdom), E.Zhang (University Of Texas At Austin)

We will use the FOS in RAPID readout mode to obtain time-resolved ultraviolet spectrophotometry of accretion disk eclipses in two long-period cataclysmic variables, the nova-like variable UX UMa and the dwarf nova IP Peg in outburst and quiescence. From the eclipse data in the UV lines and continuum, we will map the structure of the hot inner accretion disk, boundary layer, and stream-disk interaction region using a combination of light-curve synthesis and maximum entropy mapping techniques. The principle goal of this experiment is to study the structure of accretion disks in order to test accretion disk models that are applied widely throughout astrophysics, e,g, in models of protostars and active galactic nuclei. The observations will also permit a study of the geometry of winds in these systems, and more accurate determinations of the masses, radii, and temperatures of the primary and secondary stars, which will contribute to our understanding of the evolution of close binary systems. NOTE: TAC has cut the UX UMa observations from this proposal.

Prop. Type: SNAP

QUASARS AGN -- (HOST GALAXIES) --

3698 - "A SNAPSHOT SURVEY OF THE NUCLEAR REGIONS OF 102 MARKARIAN GALAXIES II "

Keywords :

Proposers: John W Mackenty (PI; Space Telescope Science Institute), R.Griffiths (Space Telescope Science Institute), S.Simkin (Michigan State University)

We propose to use the HST PC in snapshot mode with the broad F785LP filter to obtain high resolution images of the inner regions of a sample of 102 Markarian (Seyferts and starburst) galaxies. In the chosen redshift range, these images will have a resolution of 15 to 60 pc and will cover the inner 500 to 800 pc near the nucleus. The F785LP band-pass will image the stellar continuum in a region with little internal absorption and will be free of atmospheric OH emission. We will use these images to analyze the morphology and to measure the stellar nuclear luminosity function for this matched sample of active galaxies. Comparing these with similar data for "normal" galaxies from the HST archives will allow us to search for any features which differentiate the host galaxies Seyferts from those of normal galaxies and may help identify the large-scale mechanisms responsible for replenishing the material which gives rise to the Seyfert phenomenn. These observations will also help answer the question of whether differences exist between the hosts of Seyfert 1 and Seyfert 2 galaxies.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --

3706- CT - "THE NATURE OF GASEOUS LOOPS IN THE MILKY WAY HALO "

Continuation of Program Number 3706

Keywords :

Proposers: Laura Danly (PI; Space Telescope Science Institute), E.Albert (United States Naval Academy; U.S.A.), R.Benjamin (University Of Texas At Austin; U.S.A.), K.Kuntz (Space Telescope Science Institute; U.S.A.), P.Shapiro (University Of Texas At Austin; U.S.A.)

Recent evidence has shown that the nature of the gaseous halos of galaxies both depends upon and contributes to the nature of the underlying disk. "Galactic fountain" theories propose that hot gas produced in the disk rises to large scale height where it cools and flows back to the disk in a rain of cool clouds. Because of their anomolous negative velocities, the high latitude neutral hydrogen clouds are thought to be the returning gas in this halo circulation scheme. Most of the infalling gas is found in large, coherent loop-like structures toward the North Galactic Pole. We propose to study halo circulation by observing the kinematics and ionization balance the intermediate velocity clouds through absorption line observations of both high and low ionization species. By studying the ionization balance, we hope to determine the nature of the gas heating and cooling processes. Together with the kinematic information available through high spectral resolution GHRS data, we expect to be able to place severe constraints upon galactic circulation models.

Prop. Type: GO

SOLAR SYSTEM -- (COMETS) --

3707- LT - "HST OBSERVATIONS OF PERIODIC COMETS "

Keywords :

Proposers: Harold A. Weaver (PI; Space Telescope Science Institute), M.A'Hearn (University Of Maryland), C.Arpigny (Universite De Liege; Belgium)

The volatile composition of comets is a key diagnostic of cometary formation environments. The trace molecular composition of cometary nuclei, in particular, can be used to infer the physical and chemical state of the solar nebula or of the interstellar cloud from which the nebula condensed. Measuring these molecular abundances is extremely difficult due to the intrinsic weakness of the emissions from the trace species and can normally be attempted only on exceptionally bright comets. The advent of HST extends the feasibility of observing trace molecules to relatively faint, periodic comets, thus allowing a systematic comparison of ''new'' and ''old'' comets. We propose using the FOS to obtain the volatile inventory in Comet P/Schaumasse which will be observable during the spring of 1993. A comprehensive spectrum from 1150 A to 6820 A will be used to measure the abundances of the important carbon, nitrogen, oxygen, and sulfur bearing species in the nucleus. In addition, the short and long term variability of the gas and dust emission from the comet will be monitored using a combination of temporally resolved FOS spectra and WFC images taken through a broadband red filter.

Prop. Type: GO

QUASARS _AGN -- (SEYFERTS) --

3724 - "IONIZING CONES, OBSCURING TORI AND THE NARROW LINE REGIONS OF SEYFERT GALAXIES"

Keywords :

Proposers: Andrew S. Wilson (PI; Space Telescope Science Institute), R.Griffiths (Stsci; U.S.A.), T.Heckman (Johns Hopkins University; U.S.A.), J.Krolik (Johns Hopkins University; U.S.A.), G.Miley (Leiden Observatory; The Netherlands)

We propose to investigate a model of Seyfert 2 galaxies in which a dusty, obscuring torus of material hides a Seyfert 1 nucleus. This model is supported by: 1) morphological evidence, which comprises bi-conical regions of high excitation gas symmetrically disposed about the nucleus and with axis coincident with the radio axis; 2) energetic considerations , from which the emission-line gas along the cone's axis is found to be illuminated by much more intense ionizing radiation than is inferred by extrapolation of the directly observed IUE/soft X-ray continua; and 3) spectropolarimetric observations, which reveal a Seyfert 1-like broad line spectrum when the Seyfert 2 is viewed in linearly polarized light. We shall obtain emission-line and continuum images of eight bright Seyferts, selected to have very strong emission lines, extended high excitation gas in ground-based observations, and "linear" (double, triple or jet-like) radio sources on the arc sec scale. These images will be used to a) determine the incidence and properties of "ionizing cones", b) investigate the detailed relationship between the jet-like radio sources and the ionized gas, c) search for direct evidence of dusty tori through reddening effects on the continuum images, and d) investigate the ionization balance of the emission-line knots, as a probe of anisotropic nuclear ionizing radiation.

Prop. Type: GO

STELLAR POPULATIONS -- (GLOBULAR CLUSTERS) --

3726 - "GLOBULAR CLUSTERS IN M31 "

Keywords : EXT-CLUSTER

Proposers: Flavio Fusi Pecci (PI; Bologna Observatory; Italy), P.Battistini (University Of Bologna; Italy), O.Bendinelli (University Of Bologna; Italy), F.Bonoli (University Of Bologna; Italy), R.Buonanno (Roma Observatory; Italy), C.Cacciari (Bologna Observatory; Italy), G.Djorgovski (Caltech), L.Federici (Bologna Observatory; Italy), I.King (University Of California, Berkeley), G.Parmeggiani (Bologna Observatory; Italy), R.Walterbos (New Mexico State University), F.Zavatti (University Of Bologna; Italy)

The original aim of this proposal was to observe 27 globular clusters in M31 using FOC/96 over a period of three years with the following scientific rationale: a) during cycle 2 and 3, B and UV images in order to obtain surface brightness profiles and blue upper parts of CMDs (e.g. Post-AGB and blue HB stars). This is essential for understanding the dynamical properties of the clusters and the galaxy, and the stellar population characteristics also in comparison with other LG galaxies (MW, MCs). 13 clusters are planned to be observed in cycle 1 in B and surface brightness profiles have been obtained. b) On the assumption that in cycle 4 HST is restored to its original optical performance, we proposed to observe 10 top-priority clusters using B and V filters, in order to obtain accurate (0.1 mag) CMDs down to the HB level. This would allow to derive the slope of the HB luminosity vs metallicity relation, a key ingredient in globular cluster distance and age determinations, with well known cosmological implications. Within this framework, the TAC has recommended that the time allocated to this proposal (2.5hrs) be used to observe one cluster in two filters during cycle 2, in order to test the feasibility and obtain the blue upper part of the CMD (i.e. UV-bright, Post-AGB and blue HB stars).

Prop. Type: GO

GALAXIES CLUSTERS -- (STELLAR POPULATIONS) --

3728 - "IMAGING THE HOT STELLAR CONTENT OF EARLY--TYPE GALAXIES "

Keywords :

Proposers: Francesco Bertola (PI; Dept.Of Astronomy,University Of Padova; Italy), P.Amico (Department Of Astronomy Padova; Italy), D.Burstein (Arizona State University; U.S.A.), S.Di Serego Alighieri (Osservatorio Astrofisico Di Arcetri; Italy), L.Greggio (Department Of Astronomy Bologna; Italy), A.Renzini (Department Of Astronomy Bologna; Italy)

WE PROPOSE TO IMAGE WITH THE FOC IN THE F/48 CONFIGURATION FIVE EARLY TYPE GALAXIES IN FOUR PASSBANDS CENTERED AT 1500 A, 2200 A, 2800 A AND 3400 A. WHEN COUPLED WITH PHOTOMETRY OBTAINED FROM THE GROUND OUR OBSERVATIONS WILL ALLOW US TO DERIVE COMPLETE SED OF THESE GALAXIES AS A FUNCTION OF THE DISTANCE FROM THE CENTER. THIS IS A KEY STEP TOWARDS THE UNDERSTANDING OF STELLAR POPULATIONS - IN PARTICULAR THE ONE RESPONSIBLE FOR THE UV EMISSION - IN EARLY TYPE GALAXIES AND WILL PROVIDE IMPORTANT INSIGHT IN THEIR FORMATION AND EVOLUTION. WE PLAN TO OBSERVE NGC 1399, NGC 2681, NGC 4552, NGC 5018 AND NGC 4627 WHICH SAMPLE A WIDE RANGE OF INTRINSIC PROPERTIES AS INDICATED BY PREVIOUS IUE OBSERVATIONS. FOR NGC 4627 THERE IS EVIDENCE OF ONGOING STAR FORMATION AND THE HST WILL BE ABLE TO SHOW THE CHARACTERISTIC CLUMPINESS. NGC 2681 HAD A STARBUST OF AGE GREATER THAN 1 GYR. NGC 4552 IS ONE OF THE MOST METAL RICH GALAXY KNOWN. NGC 1399 HAS THE SAME METALLICITY AND LUMINOSITY OF THE PREVIOUS GALAXY BUT IS A MUCH STRONGER X-RAY EMITTER. NGC 5018 IS A VERY GOOD CANDIDATE FOR ONGOING STAR FORMATION. WE BELIEVE IN THIS WAY WE CAN OBTAIN SED FOR THE TWO-DIMENSIONAL IMAGES OF EARLY TYPE GALAXIES FROM BROAD BAND IMAGING ALONE. THE CALIBRATION OF OUR FILTER SYSTEM WILL ALLOW US TO APPLY IT TO THE BIDIMENSIONAL ANALYSIS OF THE GENERAL SAMPLE OF EARLY TYPE GALAXIES.

Prop. Type: GO

QUASARS AGN -- (QUASAR EMISSION) --

3732 - "SPECTRPOLARIMETRY OF HIGH REDSHIFT QUASARS "

Keywords :

Proposers: Chris D. Impey (PI; University Of Arizona), M.Malkan (U. California, Los Angeles)

We request 10.0 hours to obtain FOS UV spectropolarimetry of 2 luminous high-redshift normal radio-quiet quasars, selected from a large survey to have exceptional UV brightness and clearly detectable polarization. By obtaining spectropolarimetry to much shorter rest wavelengths than have ever before been measured, these observations offer a unique opportunity to (a) identify the polarizing mechanism(s), and possibly (b) detect the signature of a black hole accretion flow, and (c) make the first test of general relativity outside of the weak-field limit. New measurements of wavelength-dependent optical polarization show two competing models to be consistent with our spectropolarimetry of a dozen quasars. Choosing between these requires the extended spectral coverage (particularly to the shortest wavelengths) which can only be obtained by combining HST data with quasi-simultaneous ground-based polarimetry. The proposed observations will determine whether the polarization is produced by scattering from dust grains or free electrons, and indicate their location and properties. In AGNs where the contamination from starlight is, we can measure, for the first time, the polarization of the strong UV excess. If this component is thermal emission from an accretion flow, we will infer its physical properties (e.g. geometry and opacity), and search for the short wavelength posn. angle rotation predicted by GR.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (ACTIVE STARS) --

3737 - "THE ONSET OF CHROMOSPHERIC ACTIVITY "

Keywords : MS STAR, CHROMOSPHERE, ULTRAVIOLET

Proposers: Theodore Simon (PI; University Of Hawaii), R.Gilliland (Stsci), W.Landsman (St Systems Corp.)

IUE observations of main sequence stars have established that late A and early F type stars with $0.23 < B - V <= 0.42$ exhibit chromospheric emission as in- tense as that of much cooler and much more deeply convective dwarf stars like the Sun. It is suspected that the source of chromospheric heating in the hot- ter stars is the shock dissipation of acoustic waves, not the MHD waves impli- cated in solar activity. If this is so, then, on the basis of theoretical estimates of the acoustic flux produced by stellar convection, this UV chromo- spheric emission should reach maximum brightness at $B - V = 0.29$, near spectral type F0 V, and should decline by an order of magnitude among the middle and early A stars at $B - V = 0.14$. Our program with HST is designed to look for this predicted weakening of UV chromospheric emission in a group of A stars with $0.11 <= B - V <= 0.23$ as a test of the acoustic heating idea. For this purpose, we are proposing to measure the strength of the chromospheric emis- sion in the resonance lines of C II near 1335 A. The spectral resolution and quality of GHRS spectra needed for such a study far exceed the capabilities of IUE, and so it only with HST that such a test of competing models of chromospheric excitation can be conducted.

Prop. Type: GO

SOLAR SYSTEM -- (SATELLITES) --

3744- CT - "SPECTROPHOTOMETRY OF PHOBOS AND DEIMOS "

Continuation of Program Number 2435

Keywords :

Proposers: Benjamin H. Zellner (PI; Computer Sciences Corporation), J.Bell (Hawaii, University Of), J.Caldwell (York University; Canada), U.Fink (Arizona, University Of), J.Gradie (Hawaii, University Of), W.Grundy (Arizona, University Of), K.Pang (Jet Propulsion Laboratory), D.Tholen (Hawaii, University Of), P.Thomas (Cornell University), J.Veverka (Cornell University), E.Wells (Computer Sciences Corporation)

The satellites of Mars have been studied by the Mariner 9, Viking, and Phobos 2 missions. They are small, dark, and irregularly shaped, and have often been described as analogues of C-type mainbelt asteroids and some carbonaceous chondrites. Being the only such objects closely inspected by rendezvous spacecraft, they provide benchmarks for comparison of disk-integrated with disk-resolved objects, and thus thus are vital in interpretation of astronomical data for many solar system objects. Also Phobos and Deimos have substantially different surface features, and promise substantial interpretive benefit by their variety. However groundbased observations that would allow direct comparisons with the asteroids are very difficult to obtain, and recent observa- tions call into serious question the analogy with both carbonaceous chondrites and C-type asteroids. Also the connection with meteorites is poorly established because of severe limitations of available reflectance data obtained from rendezvous spacecraft. Thus we propose HST spectrophotometry of both satellites and three comparison asteroids.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (LOCAL MEDIUM) --

3746 - "THE COOLING OF THE LOCAL DIFFUSE INTERSTELLAR MEDIUM "

Keywords :

Proposers: Cecile Gry (PI; Laboratoire D'Astronomie Spatiale; France), F.Boulanger (Observatoire De Paris-Meudon; France), J.Lequeux (Observatoire De Paris-Meudon; France)

We want to study the cooling processes of the local interstellar medium by observing the population of the excited fine-structure states in the ground electronic level of ionized carbon and neutral atomic oxygen. Far-IR line emission between these excited states and the ground states of these ions is the main cooling agent of the cold and warm neutral atomic gas respectively. The corresponding column densities in front of bright stars will be obtained from GHRS observations of electronic transitions originating from these states. In order to study the structure of the interstellar matter along the lines of sight, other transitions will be observed with the GHRS and from the ground: this is necessary to correctly derive the column densities of the different individual components by fitting the lines with theoretical profiles and to separate the neutral from the ionized medium along the lines of sight. A comparison of the results with direct observations of the FIR fine-structure lines from COBE and later from ISO and SIRTF will allow to determine to what extent the local interstellar medium is representative of the general medium at galactic scales, and in particular to compare the far-UV interstellar radiation fields.

Prop. Type: GO

QUASARS AGN -- (QUASAR ABSORPTION) --

3755 - "THE ABSORPTION CROSS-SECTIONS OF NEARBY GALAXIES "

Keywords :

Proposers: Chris Blades (PI; Space Telescope Science Institute;), D.Bowen (Space Telescope Science Institute; U.S.A.), M.Pettini (Royal Greenwich Observatory; U.K.)

We wish to examine the hypothesis that low-redshift galaxies are surrounded by extended gaseous haloes and disks. Specifically, we propose using the GHRS to search for Mg II and C IV absorption lines in the haloes of low-redshift galaxies lying fortuitously in front of background quasars. We aim to reach sensitive equivalent widths limits of 60 mA and 40 mA (2 sigma) for each of the ions, and hence to infer the chemical, ionization and kinematic conditions within the absorbing gas by accurately measuring column densities, doppler parameters, and the large-scale multicomponent structure of the lines. Comparisons of the absorption in nearby galaxies with the lines seen at higher redshifts in QSO spectra should help settle the issue of how the metal-line systems originate. The recent discovery of Ly alpha absorption at very low redshift in 3C 273 with the GHRS makes our proposal timely and relevant.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (DUST) --

3759 - "DUST, MOLECULAR, ATOMIC COMPOSITION AND THE PHYSICAL CONDITIONS IN MOLECULAR CLOUDS"

Keywords :

Proposers: Francois Boulanger (PI; Radioastronomie - Ecole Normale Superieure; France), E.Falgarone (Radioastronomie - Ecole Normale Superieure; France), C.Gry (Laboratoire D'Astronomie Spatiale; France), J.Lequeux (Observatoire De Paris-Meudon; France)

IRAS images of nearby molecular clouds show that the mid-IR (12 and 25um) emission, supposed to come from small particules, is distributed very differently from the 100 um emission from large grains. These variations in the IR colors probably result from variations in the abundance of the small particules. We have performed observations of clouds of different colors ("blue" and "red") in the Chamaeleon at sub-mm, visible and UV wavelengths. They show that the variations in the IR colors are accompa nied by variations in the extinction curve, in the abundance of molecules (CO, CH+), as well as in temperature and density. The observation with the GHRS of several atomic and molecular absorption lines in the spectra of stars located behind both red and blue clouds will give access to important information on the clouds : H column densities from the lines of SII, depletion processes from the Si abundance, density and temperature from lines of the different CO rotation levels, pressure independently from lines of different CI excitation levels, cooling rates and heating processes in cold and warm phases from respectively CII and OI excited levels... All these quantities compared with our models will in addition to the study of the color variations and their implications, constitute a valuable data base to understand the physics and chemistry of these molecular clouds.

Prop. Type: GO

QUASARS AGN -- (SEYFERTS) --

3761 - "PROBING THE STARBURST PHENOMENON: UV SPECTROSCOPY OF CO IN SEYFERT GALAXIES"

Keywords :

Proposers: John C. Blades (PI; Stsci), T.Heckman (Stsci And John Hopkins University; U.S.A.), S.Levshakov (Pti Ussr Academy Of Sciences; U.S.S.R.)

A spectrum of the nucleus of NGC 1068 will be obtained with GHRS in the R=20000 mode in the wavelength region 1468 - 1500 A, to search for the CO (2,0) fourth positive band absorptions. The Seyfert galaxy has been selected for observation because it is known to have strong molecular emission in the nuclear regions. In conjunction with existing mm-line observations of CO,our proposed HST data will be used to study the physical properties of the molecular gas lying in the direct line of sight to the galactic nucleus and to attempt a measure of the rotational temperature of CO in the circumnuclear molecular clouds which are associated with star formation. Keywords - SEYFERT GALAXY, AGN, CO ABSORPTION

Prop. Type: GO

SOLAR SYSTEM -- (INNER PLANETS) --

3763- CT - "SYNOPTIC MONITORING OF SEASONAL PHENOMENA ON MARS "

Continuation of Program Number 3107

Keywords :

Proposers: Philip B James (PI; University Of Toledo), T.Clancy (Univ. Colorado), R.Kahn (Jpl), S.Lee (Univ. Colorado), L.Martin (Lowell Obs), R.Singer (Univ Of Arizona), R.Zurek (Jpl)

This proposal is for the continuation of an approved longterm project to monitor atmospheric and surface changes on the planet Mars. The first segment of this project was successfully completed during Cycle 0. During that cycle Mars was observed on five different dates using a variety of WFPC filters and on two occasions using FOS spectral scans. Except for one set of targets which fell partially off of the chip, all of the data have been excellent. Initial analyses confirm the potential value of HST observations for identifying phenomena on Mars for the entire range of angular sizes encountered during its synodic cycle. Mars will be outside of the 50 degree elongation limit for essentially all of Cycle 2. This period includes a large portion of the classic dust storm season on Mars, and frequent monitoring of the two primary regions of dust activity is proposed for that period. Observing strategy also includes repeat coverage of (martian) dates monitored during Cycle 0; comparison of data collected on identical seasonal dates in two consecutive (martian) years will constrain interannual variations in surface albedos and atmospheric phenomena. Finally, the Cycle 2 observations include the 1993 opposition of Mars when global maps in several different wavelengths are proposed. Data will help provide the context for the Mars Observer Mission.

Prop. Type: GO

SOLAR SYSTEM -- (COMETS) --

3769 - "THE STRUCTURE OF THE INNER COMA OF COMET CHIRON: IMAGING THE EXOPAUSE "

Keywords :

Proposers: Karen J. Meech (PI; Institute For Astronomy, University Of Hawaii), M.Belton (National Optical Astronomy Observatories), M.Buie (Lowell Observatory)

We propose to use the Planetary Camera to obtain a series of images of 2060 Chiron. The radial brightness distribution obtained from these images will be used (i) to locate an exopause structure which would indicate gravitational control by the nucleus over the structure of the inner coma, and (ii) to explore the inner coma for indications of active regions which will reveal the number and location of major sources on the nucleus. The detection of the exopause, when combined with particle size information obtained from ground-based observations of color gradients in the outer coma, will constrain models of the structure of the dust coma and allow us to make a rough estimate of the mass of Chiron. The exopause is expected to be located between 0.3-0.4 arcseconds from the nucleus during 1993 (Cycle 2), thus the resolution capabilities of HST are required for this project.

Prop. Type: GO

GALAXIES _CLUSTERS -- (PECULIAR/INTERACTING) --

3784 - "HIGH-RESOLUTION IMAGING OF COLLIDING AND MERGING GALAXIES "

Keywords :

Proposers: Bradley C. Whitmore (PI; Space Telescope Science Institute), K.Borne (Space Telescope Science Institute; U.S.A.), C.Leitherer (Space Telescope Science Institute; U.S.A.), C.Robert (Space Telescope Science Institute; U.S.A.), F.Schweizer (Department Of Terrestrial Magnetism; U.S.A.)

We propose to obtain high-resolution images, using the WF/PC, of two colliding and merging galaxies (i.e., NGC 4038/4039 = "The Antennae" and NGC 7252 ="Atoms-for-Peace Galaxy". Our goal is to use HST to make critical observations of each object in order to gain a better understanding of the various phases of the merger process. Our primary objective is to determine whether globular clusters are formed during mergers?

Prop. Type: GO

QUASARS AGN -- (RADIO GALAXIES) --

3790 - "POLARIZATION IMAGING OF RADIO GALAXIES "

Keywords :

Proposers: Robert R Antonucci (PI; Univ. Of Cal., Santa Barbara), R.Cohen (Univ. Of California, Santa Diego), A.Kinney (Space Telescope Sci. Inst.), J.Krolik (Johns Hopkins Univ.)

Spectropolarimetry of the narrow line radio galaxy 3C234 was used to show in 1982 that there is a hidden broad line region occulted by an opaque torus oriented perpendicular to the radio structure axis. Given the luminosity of the reflected light, it follows that 3C234 would be called a quasar if its orientation with respect to the line of sight were different. Since then similar results were found for five Seyfert 2's. If many NLRG's are occulted quasars in the sky plane, several statistical anomalies in the beam model for superluminal motion are understandable. However, further optical spectropolarimetry has been disappointing in this regard, at least partially because of severe dilution of reflected light by starlight, sometimes polarized, from the host galaxies. We can solve this problem by observing in the UV. Furthermore, recent observations of two NLRGs have revealed OFF- NUCLEAR dust clouds reflecting and strongly "bluening" nuclear light in two NLRG's. Such dust clouds, abundant in the merger debris surrounding many luminous radio galaxies, should show up spectacularly in UV polarization images, providing information on the beam pattern and time history of nuclear emission. We request FOC polarization images of a sample of radio galaxies. We will also get for free and with high efficiency total flux images, suitable for studying the nuclei and the anomalous young stellar populations seen in merging radio galaxies from the ground.

Prop. Type: GO

QUASARS AGN -- (QUASAR ABSORPTION) --

3791-KP - "QUASAR ABSORPTION LINE SURVEY: CYCLE 2 OBSERVATIONS "

Continuation of Program Number 2424

Keywords :

Proposers: John N. Bahcall (PI; Institute For Advanced Study, Princeton, N.J.), J.Bergeron (Institute For Astrophysics, Paris; France), A.Boksenberg (Royal Greenwich Observatory; Uk), G.Hartig (Space Telescope Science Institute), B.Jannuzi (Institute For Advanced Study, Princeton), W.Sargent (California Institute Of Technology), B.Savage (Wisconsin, University Of), D.Schneider (Institute For Advanced Study, Princeton), D.Turnshek (University Of Pittsburgh), R.Weymann (Observatory Of The Carnegie Institution In Washington), A.Wolfe (Astrophysics And Space Sciences, Ucsd)

The Quasar Absorption Line Survey of bright sources is an efficient observing program designed to provide a homogeneous data base of absorption features. The data will reveal absorption regions in galaxies, in clusters of galaxies, in voids, in large-scale structures, in Lyman ALPHA clouds, and wi provide information about damped Lyman ALPHA and Lyman-limit systems. The survey will determine, with high SNR, the profiles of > 200 emission lines. Using the estimated numbers of observed absorption lines, including archi val data, the program was designed to determine the cosmic evolution of absorption systems. High resolution spectra of a sample of quasars will be obtained with the FOS; the spectra will have a rest frame equivalent width detection limit for unresolved absorption lines of 0.3 A. The survey data base will address fundamental questions, for example: What is the strength and origin of the UV background radiation? How do gaseous galactic disks and halos evolve with redshift? What processes govern the ionization of absorbing gas? How has gaseous structure in the universe evolved on scales of 1 Mpc to 100 Mpc? Do absorbing systems show evidence of the large-scale structure seen in the distribution of galaxies and clusters?

Prop. Type: GO

GALAXIES _CLUSTERS -- (PECULIAR/INTERACTING) --

3792 - "UV MORPHOLOGY OF STARBURSTS IN INTERACTING GALAXIES"

Keywords : STARBURST

Proposers: Susan G. Neff (PI; Nasa / Goddard Space Flight Center), M.Joy (Nasa / Marshall Space Flight Center), S.Stanford (Astronomy Department, Uc-Berkeley)

We propose UV imaging observations of the colliding galaxy system NGC 3690 / IC 694, which contains several regions of intense starburst activity. The morphology of the early-type stellar population will be used to determine the relationship between the galaxy interaction and the resultant starburst activity. The UV images will be compared with images of the system in the optical continuum, H alpha line, near IR, mid-IR, CO line, 21cm line, and radio continuum to understand the spatial relationship of the starburst component to the older stars, hot dust, and molecular and atomic gas. The UV morphology will be compared with the kinematics of the ionized and molecular gas to determine the connection of the starburst location and intensity to the system kinematics. Previous IUE observations show that this system has detectable UV emission, making it an excellent candidate for UV imaging studies.

Prop. Type: GO

GALAXIES _CLUSTERS -- (GALAXY MORPHOLOGY) --

3797 - "WFC IMAGING OF FAINT BLUE GALAXIES "

Keywords :

Proposers: David C Koo (PI; Lick Observatory, University Of California, Santa Cruz), M.Bershady (Dept Of Astronomy And Astrophysics, Univ Of Chicago), S.Majewski (Observatories Of The Carnegie Institution Of Washington), J.Smetanka (Dept Of Astronomy And Astrophysics, Univ Of Chicago), S.Stanford (Dept Of Astronomy, Univ Of California, Berkeley), G.Wirth (Dept Astron And

Astrophysics, Univ Of California, Santa Cruz)

We propose a pilot program of 5.6 hours of WFC imaging to study the structure of 7 faint (B=21 to 22) compact galaxies at redshifts z from 0.1 to 0.35. These galaxies are important as possible links to three puzzles that may be intimately related: the nature of very faint, very blue galaxies; the rate of close-encounter merging of field galaxies as a function of look-back time; and the connection between starbursts and "weak" AGN. The sub-arcsec morphology from HST will be correlated with existing ground-based spectroscopy, multi-band color photometry, long-term variability information, and similar data for neighboring galaxies. As a bonus, the structure of galaxy neighbors close enough to be within the WFC field will be measured. The feasibility of our proposal was verified in SAO 3121 (The Ability of HST to Do Morphology of Medium Redshift Galaxies).

Prop. Type: GO

STELLAR ASTROPHYSICS -- (PULSATING STARS) --

3798 - "A SEARCH FOR RADIAL PULSATIONS IN WHITE DWARFS "

Keywords :

Proposers: Steven D. Kawaler (PI; Iowa State University), H.Bond (Space Telescope Science Institute)

Several classes of NONRADIALLY pulsating white dwarfs are known, with pulsation periods of several minutes. Theoretical work predicts that DB and DA white dwarfs that are slightly hotter than the known nonradial instability strips should be unstable to RADIAL pulsations with periods of about 0.1--1 second. However, ground-based observations have failed to reveal such periodicities. We propose to use HST's High Speed Photometer to search for the predicted radial pulsations in DB and DA white dwarfs. UV high-speed photometry offers the advantages of larger stellar fluxes (the effective temperatures of our three targets are 13,000--30,000 K) and significantly larger pulsation amplitudes (factors of 2 to 3) compared to ground-based photometry, along with freedom from atmospheric scintillation, giving HST a distinct gain over any ground-based facility. The presence (or absence) of the predicted rapid oscillations will provide significant new information for (or challenges to) the theory of white-dwarf pulsations, structure, and evolution.

Prop. Type: SNAP

QUASARS _AGN -- (QUASAR ABSORPTION) --
3801- LT - "SEARCH FOR QSOS SUITABLE FOR SUBSEQUENT OBSERVATION OF HE II 304 ABSORPTION ARISING IN THE IGM, LY-ALPHA, AND ... PART1"
Keywords :
Proposers: David R. Tytler (PI; California, University Of, San Diego), C.Hazard (Pittsburgh, University Of; U.S.A.), K.Lanzetta (California, University Of, San Diego; U.S.A.), R.Mcmahon (Cambridge, University Of; England)

Ultraviolet images will be obtained in snapshot mode of the 500 known high-redshift (z > 2.8) QSOs in order to identify the few (about 20) targets which have sufficient ultraviolet flux for subsequent FOC/FOS or GHRS observations of He II 304. The detection of absorption by the Helium II Lyman-alpha line at 304 A, one of the most exciting prospects of the HST, will provide the first direct detection of the diffuse intergalactic medium (IGM). The absence of Gunn-Peterson H I 1215 absorption shows that the IGM is hot and/or of very low density, thus He I 584 is not expected to be observable. He II 304--the most promising line--should be observable from three sources: the diffuse IGM, the discrete Ly-alpha clouds, and the much rarer metal line absorption systems. The Gunn-Peterson continuum optical depth is not well constrained by models (range 0.3-3000). The mere detection of only one QSO below 304 A would rule out many models, limiting the IGM density, temperature, and ionization mechanisms. Similarly the total absence of flux from several targets would rule out other models. Of the 500 targets, 40 should be bright enough for subsequent FOC imaging in bands above and below 304A, 10 for FOC prism spectra, and 3 for FOS spectra, which will allow measurement of the He II/H I ratio in Ly-alpha clouds and the spectral slope of the background ionizing radiation.

Prop. Type: GO

SOLAR SYSTEM -- (MINOR PLANETS) --
3803 - "PLUTO'S FUV SPECTRUM: CO ABUNDANCE AND FUV SURVEY"
Keywords :
Proposers: Laurence M Trafton (PI; Texas, University Of), S.Stern (Southwest Research Institute)

We propose FUV observations of Pluto using the FOS/RD with G190H to survey the spectral region 2200-1800 A for absorption features, and the FOS/BL with G130H to survey the spectral region 1608-1200 A for emission features, or fluorescence, in Pluto's atmosphere. The spectral resolutions are delta lambda = 2.3 A and 1.6 A, respectively. A high priority will be to search for the cosmogonically important molecule CO using two vibrational Cameron bands in absorption at 2060 A and 1989 A, and the (1-0) and other 4th positive vibrational bands in emission near 1500 A, in order to determine an accurate CO column abundance and to constrain the rotational temperature of CO. Detection of both emission and absorption bands would set constraints on models of atmospheric escape by providing information on the radial distribution of CO in Pluto's lower atmosphere. We also search for other species, such as NO. Only HST has the sensitivity and spatial resolution to obtain Pluto's FUV spectrum.

Prop. Type: GO

STELLAR POPULATIONS -- (GLOBULAR CLUSTERS) --
3804 - "IMAGING OF UV BRIGHT STARS IN METAL RICH GLOBULAR CLUSTERS "
Keywords : GLOBULAR CLUSTERS
Proposers: R. Michael Rich (PI; Columbia University), I.King (Uc, Berkeley), J.Liebert (Steward Observatory, Univ. Of Arizona)

The FOC will be used to obtain high resolution images of the cores of 6 metal rich globulars, 4 of which are known to have far-UV flux based on IUE observations. Photometry with FOC will give luminosities, temperatures, and total numbers of far-UV sources. These data will permit the stars to be placed in an HR diagram, and will constrain the evolutionary lifetimes in the UV bright phases. It will be possible to determine whether the UV bright stars are extreme horizontal branch, post-AGB, blue stragglers or accreting binaries.

Prop. Type: GO

GALAXIES CLUSTERS -- (STARBURSTS) --
3807 - "MINKOWSKI'S OBJECT "
Keywords :
Proposers: Kenneth C. Chambers (PI; Institute For Astronomy, Univ. Of Hawaii), S.Charlot (Stsci), W.Van Breugel (Iggp)

Minkowski's Object is the best low redshift example of a rare phenomena - a starburst triggered by a radio jet. Our recent IUE observations of MO (Chambers et al. 1992) have detected Lyman alpha emission and SIV and CIV absorption, confirming that Minkowski's Object is undergoing a spectacular starburst. Ultraviolet and high spatial resolution images by HST will provide an extraordinary view of this potentially very important physical process. We propose to trace spatially the star formation history along the path of the shock front. We will model this stellar chromography with the recent stellar population synthesis code of Charlot and Bruzual 1991. With this tool, and multi- color HST data we will be able to: (1) investigate the nature of the star burst and its stellar population, (2) date the evolution and thus the speed of propagation of star formation outward with the radio jet, and (3) study the details of the jet interaction with the star forming regions at the bow shock. This will provide absolutely unique data on stellar populations, the propogation of radio jets in dense media, and on starbursts triggered by radio jets.

Prop. Type: GO

STELLAR POPULATIONS -- (YOUNG FIELD STARS) --

3810- CT - "THE STELLAR CONTENT OF WOLF-RAYET GALAXIES (FOC IMAGES) "

Continuation of Program Number 3810

Keywords : LBV'S, WOLF-RAYET STARS, STARBURSTS

Proposers: Peter S. Conti (PI; Jila), A.Filippenko (University Of California, Berkeley), C.Leitherer (Space Telescope Science Institute), C.Robert (Space Telescope Science Institute), W.Sargent (California Institute Of Technology), W.Vacca (University Of California, Berkeley)

We propose to observe a comprehensive sample of Wolf-Rayet (W-R) galaxies --- starburst galaxies in which broad 4686 He II emission of stellar origin has been detected. These galaxies generally contain far more W-R stars than the Milky Way, M31, and other normal galaxies. The ultraviolet FOC images and FOS spectra will be combined with optical and infrared data as part of a large effort to perform a broad, systematic analysis of the properties of W-R galaxies. The UV data obtained with HST will provide crucial constraints on the hot star (O and W-R) populations, and will lead to a better understanding of the physical conditions, initial mass functions, and starburst parameters of these galaxies. The overall continuum will be analyzed within the framework of evolutionary and spectral synthesis models that we are developing. Quantitative spectroscopy of UV resonance lines will allow us to study the hot star populations in detail, and to directly measure the number of OB stars within these galaxies. Our main goal is to determine which physical properties of W-R galaxies (e.g., IMF slope, chemical composition, age, strength and duration of the starburst) have led to the production of large numbers of W-R stars. The results of this study will have important implications for our understanding of W-R galaxies, and also of starburst and emission-line galaxies in general.

Prop. Type: GO

STELLAR POPULATIONS -- (MASSIVE STARS/BURSTS) --

3813 - "FORMATION AND EVOLUTION OF MASSIVE STARS, AND THE CHEMICAL EVOLUTION OF GALAXIES"

Keywords :

Proposers: Michael R. Rosa (PI; The Space Telescope European Coordinating Facility; Germany), P.Benvenuti (The Space Telescope European Coordinating Facility; Germany)

FOS spectra at R = 560, completely covering thewavelength range 1150 A to 9260 A will be obtained of the cores of 4 giant H IIregions in M 101. Taken through one and the same aperture, the UV, visualand far-red emission line spectra of the ionized gas will allow for the firsttime an accurate determina- tion of the C/O abundance ratio in an extragalacticobject over a wide range of O/H abundances. Furthermore, the S/O abundance ratiowill be obtained with much higher precision than possible from ground using theprominent [S III] 9036 A line, unaffected by strong H2O atmosphericabsorption. Finally, the spatially integrated spectra of the ionizing star clusterswill be analyzed usingwfc evolutionary population synthesis models. Because the whole spectral range is observed through the same aperture, scaling errorsbetween ground based and IUE UV data, which have been so far a major obstaclein such an analysis, will be absent. The nebular continuous emission, which iscontributing typically 50 % of the total flux at 3000 A, can be veryaccurately estimated using the H BETA line flux obtained through the same aperture.The data will be discussed in the context of galactic chemical evolution, forwhich C/O and S/O gradients, which are indicative of contributions from differentstellar mass ranges, are of particular interest. The stellar initial massfunction and the evolutionary scenarios for massive stars will be studied over arange of metallicity from 1/5 to 2 times the solar neighborhood value.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (MASSIVE STARS) --

3815 - "UV OBSERVATIONS OF THE HUBBLE-SANDAGE VARIABLES IN M31 AND M33 "

Keywords :

Proposers: Roberta M. Humphreys (PI; University Of Minnesota), I.Appenzeller (Landessternwarte, Heidelberg; Germany), K.Davidson (University Of Minnesota), O.Stahl (Landessternwarte, Heidelberg; Germany), N.Walborn (Space Telescope Science Institute), B.Wolf (Landessternwarte, Heidelberg; Germany), F.Zickgraf (Landessternwarte, Heidelberg; Germany)

The Hubble-Sandage variables in M31 and M33 are luminous blue variables (LBVs) -- very luminous, eruptively unstable stars in the same general class as S Dor, Eta Car, and P Cyg. UV observations of H-S variables will significantly enhance the limited information available to us concerning the evolution and structure of the most massive stars. ---- LBVs are important in several major astrophysical connections and are only beginning to be understood. Since the LBV stage of evolution is brief, only a few examples are available in our Galaxy and in the Magellanic Clouds, close enough for UV observations with IUE. Therefore our coverage of the wide parameter space embraced by LBVs has been so sparse that theoretical development has been hindered. ---- With the ST, we can significantly increase this coverage by adding the H-S variables in M31 and M33 to the set of "useful" LBVs. UV spectroscopy is needed to determine their temperatures, luminosities, and mass-loss rates. These parameters are required to clarify their relations to other LBVs and very massive stars in general, and to provide more information on evolutionary origin of LBVs, physical causes of the violent eruptions, and other problems.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (LATE EVOLUTION) --

3816- CT - "WHITE DWARF STARS "

Continuation of Program Number 2593

Keywords : WHITE DWARF, CHEMICALLY PECULIAR STAR

Proposers: Harry Shipman (PI; Delaware, University Of), G.Basri (California, University Of, Berkeley), H.Bond (Stsci), F.Bruhweiler (Cathhholic University), F.Cordova (Los Alamos National Laboratory), D.Finley (California, University Of, Berkeley), G.Fontaine (Montreal, University Of; Canada), P.Hintzen (Nasa, Goddard), J.Holberg (Arizona, University Of), K.Jensen (Nasa, Goddard), D.Koester (Louisiana State University), J.Liebert (Arizona, University Of), J.Nousek (Penn State University), T.Oswalt (Florida Institute Of Technology), E.Sion (Villanova University), S.Starrfield (Arizona State University), D.Tytler (Columbia University), G.Vauclair (Toulouse Observatory; France), G.Wegner (Dartmouth College), V.Weidemann (Kiel University; Frg), F.Wesemael (Montreal, University Of; Canada)

HST's unprecedented spectroscopic capabilities, supplemented important cases by its high spatial resolution, can address a outstanding scientific problems relating to white-dwarf the number of solid mass and radius determinations from 6, either placing our understanding of the fundamental on a secure observational footing (at last High qualitiy spectra from HST will permit us to address about the origin of the chemical diversity of white-dwarf far greater than that found anywhere else on the HR diagram. critically affect other important areas of stellar stellar superwinds, the origin and evolution of planetary close binaries, mass loss, and red giant envelope evolution. many astronomers who have been active in the field for years collaborate in this enterprise. Our target list, while towards doing outstanding science with the first year of HST comprehensive enough to establish HST's potential and guide proposals in this field.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (ERUPTIVE BINARIES) --

3820- CT - "INSTABILITIES IN ACCRETION DISCS AND THE OUTBURSTS OF DWARF NOVAE RETAKE OF SAFING"

Continuation of Program Number 2380

Keywords : WHITE DWARF DWARF NOVA ACCRETION BOUNDARY LAYER INTER- ACTING BINARY

Proposers: Keith Horne (PI; Stsci), T.Marsh (Stsci)

We will use the HST with the FOS to observe eclipses of a dwarf nova at 5 epochs in the quiescent period between outbursts. From the eclipse data we will determine the secular evolution of the white dwarf, the accretion disc, and the bright spot. This evidence will be a clean test of the two competing theories for the instability which triggers dwarf nova outbursts. In the disc instability model the transition of the disc from a cool to hot state triggers the outburst, whereas in the red star instability model the cool binary companion transfers a short burst of material into the disc which then becomes brighter. During quiescence the disc instability model predicts an increasing accretion rate and hence an increasing ultraviolet flux, whereas the red star model predicts a decreasing accretion rate and ultraviolet flux. Therefore the variation of the ultraviolet flux with time will distinguish which of the two current models is correct. Only the HST is able to resolve the rapid variations seen in an eclipsing dwarf nova, and therefore determine the ultraviolet flux from the accretion disc. The observations that we propose will also probe the nature of the boundary layer between the disc and the white dwarf, a region too small and hot to be well constrained by any previous observations. In particular, we will measure the extent of heating of the white dwarf by the boundary layer, and the cooling

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Prop. Type: GO

STELLAR ASTROPHYSICS -- (PECULIAR BINARIES) --

3824 - "A SEARCH FOR SILICON AND CARBON IN GP COM "

Keywords :

Proposers: Janet H Wood (PI; University Of Texas), K.Horne (Space Telescope Science Institute), D.Lambert (University Of Texas), T.Marsh (University Of Oxford; Uk)

The spectra of the 46 minute period binary white dwarf GP Com show emission lines from an accretion disk supplied from the hydrogen-exhausted core of a star, providing us with an opportunity to see the products of nucleosynthesis directly. The optical and ultraviolet data taken to date show evidence for CNO processing, but the abundances of elements such as silicon, calcium and iron appear anomalously low. The only plausible explanation for this involves the transfer of nitrogen-rich material from the progenitor of the accreting white dwarf to its companion in a common envelope stage. Confirmation of the low abundance of the heavier elements is a critical test of this model. We will take high signal-to-noise ultraviolet spectra of GP Com to search for emission from the SiIV 1400 doublet, CIV 1550 and other Si and C ions. We will measure the emission from NV 1239, 1243. This will allow us to determine the extent of CNO equilibrium and enhancement of nitrogen. These data will constrain both the evolution of GP Com and the poorly understood common envelope phase of binary evolution.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (ERUPTIVE BINARIES) --

3825- CT - "GHRS OBSERVATIONS OF NOVAE IN OUTBURST IN THE MAGELLANIC CLOUDS"

Continuation of Program Number 3825

Keywords :

Proposers: Steven N Shore (PI; Computer Sciences Corporation), J.Krautter (Landesternwarte Heidelberg; Germany), G.Sonneborn (Nasa/Goddard Space Flight Center), S.Starrfield (Arizona State University)

We propose to obtain intermediate dispersion (20-30 km/sec) spectra of the nebular phase of Magellanic Cloud (primary) and bright Galactic (secondary) novae in outburst. These observations will enable us to determine accurate elemental abundances, study the dynamics of the ejected material in the nebular stage, estimate the mass and luminosity of the hot remnant star, and test models for its post-outburst evolution. Novae in the Magellanic Clouds are the objects of choice for this program because they occur with sufficient frequency (1-2 per year), are observable 12 months per year, and have known distances and low reddening, permitting both the quantitative study of nova energetics and the comparison, on an absolute basis, of different types of novae arising from different stellar populations. With the high resolution and photon counting capabilities of the GHRS, we will be able to study the detailed structure and dynamics of novae at intermediate stages of their expansion, determining abundances for key species in the ejecta, and also measure for the first time the post-outburst UV continuum of rapidly evolving hot central star.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (ERUPTIVE BINARIES) --

3836- CT - "SPECTROSCOPIC OBSERVATIONS OF THE EXPOSED WHITE DWARFS IN THE DWARF NOVAE WZ SAGITTAE, U GEMINORUM AND VW HYDRI"

Continuation of Program Number 3836

Keywords :

Proposers: Edward M. Sion (PI; Villanova University; U.S.A.), R.Gilliland (St Sci), K.Horne (St Sci), K.Long (St Sci), J.Pringle (St Sci; Uk), P.Szkody (University Of Washington), J.Wood (University Of Texas, Austin)

The central accreting object in compact binaries and other accreting systems is usually hidden from direct observation, enshrouded by optically thick accretion disks which are opaque to the radiation emitted by the central object as it accretes matter. However there are three dwarf novae which clearly reveal their underlying white dwarf accretor in the far UV during dwarf nova quiescence. By probing these degenerate stars before and after their disk accretion events, fundamental insight about the physics of accretion through a disk/boundary layer onto the central object would be attainable. With the HST sensitivity and velocity resolution we will probe the physics of the accretion process in a way never before possible and test/constrain theoretical models of (a) boundary layer heating, depth and mass of heated layers following dwarf nova mass/energy deposition; (b) shear mixing of matter with angular momentum (with conversion of rotational kinetic energy into heat) versus radial accretion; (c) physical processes in the white dwarf envelope (diffusion, convection, mixing and dilution, dredgeup from deeper layers, magnetic channelling etc.) which control/modify the flow of accreted elements. The carbon in WZ Sge may provide the only evidence, independent of often uncertain nova shell abundances, that heavy element dredgeup of core material occurs during the accretion process in cataclysmic variables.

Prop. Type: GO

QUASARS _AGN -- (QUASAR EMISSION) --
3837 - "SPECTROPOLARIMETRY OF LOW RED-SHIFT ACTIVE GALACTIC NUCLEI: TEST OF THE QUASAR EMISSION MECHANISM"
Keywords :
Proposers: Anuradha P. Koratkar (PI; Space Telescope Science Institute), R.Antonucci (University Of California Santa Barbara; U.S.A.), A.Kinney (Space Telescope Science Institute; U.S.A.)

Models of accretion disks have invoked scattering atmospheres to explain the dearth of detected Lyman edges in quasars, which are otherwise predicted by the thin accretion disk. Scattering could possibly broaden any Lyman edge feature beyond recognition. Unfortunately, alleviating one problem generates another problem: Scattering of UV emission results in strong polarization and the polarization vector is perpendicular to the radio jets. According to Laor, Netzer and Piran, the polarization is quenched below 912 A. We propose to use the FOS to determine the amount of polarization from below the Lyman limit to Lyman ALPHA in 3 low red-shift (0.5 - 1.6) quasars with moderate resolution and signal-to-noise ratio of >90. The targets are the objects whose IUE spectra show broad, partial edges at the systemic redshifts, and no corresponding absoprtion lines: these are the expected properties for simple thin disks. These observations will be used to test the predictions of the thin accretion disk models. The results will provide critical constraints and help in the development of the accretion disk models.

Prop. Type: GO

GALAXIES _CLUSTERS -- (GAS _DUST) --
3840- CT - "THE ABUNDANCES AND TIME EVOLUTION OF CARBON, NITROGEN AND OXYGEN IN STAR-FORMING GALAXIES"
Continuation of Program Number 3840
Keywords :
Proposers: Evan D. Skillman (PI; University Of Minnesota), R.Dufour (Rice University), D.Garnett (Space Telescope Science Institute), M.Peimbert (Unam; Mexico), G.Shields (University Of Texas), E.Terlevich (Royal Greenwich Observatory; United Kingdom), R.Terlevich (Royal Greenwich Observatory; United Kingdom), S.Torres-Peimbert (Unam; Mexico)

We propose to observe UV emission lines of carbon, nitrogen, and oxygen from high-surface brightness extragalactic H II regions drawn from a sample of irregular and spiral galaxies having a large spread of known oxygen abundance (2% solar to nearly solar). From the emission-line data we will derive C/O and N/O abundance ratios for which systematic uncertainties - due to reddening corrections, temperature and density effects, and mismatched aperture sizes (typical in IUE+optical studies) - are greatly reduced. We will use the derived abundances to study the time evolution of C/O and N/O in nearby galaxies, and compare the results with those obtained from observations of stars in our own Galaxy. We will be able to test the suggestion (from far-infrared observations of H II regions) that nitrogen abundances derived from optical spectra are systematically in error by factors of two or more. We will also be able to measure the gas phase abundance of silicon, allowing us to study Si depletion as a function of metallicity. Our target sample size of 28 is sufficiently large to study both trends in relative abundances and search for anomalous regions (for example, those affected by the presence of WR stellar winds). The order of magnitude increase in s/n over IUE will allow the measurement of C/O and C/N with the requisite accuracy for the first time.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (EARLY EVOLUTION) --

3842- CT - "MASSES OF PRE-MAIN SEQUENCE BINARY STARS "

Continuation of Program Number 3842

Keywords :

Proposers: Michal Simon (PI; State Univ. Of New York At Stony Brook), L.Taff (Space Telescope Science Institute)

There are still no pre-main sequence stars with reliably known masses. This represents a serious gap in our understanding of low-mass star formation. The goal of this long-term program is to measure the masses of pre-main sequence binaries selected from our survey (ref. 3) of the Taurus star forming region by IR lunar occultation and imaging. We propose to use the Fine Guide Sensors in the Transfer Function Mode to determine the apparent orbits of the binaries. Since the distance to the region is known, the apparent orbits will yield the total masses of the binaries.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (EARLY EVOLUTION) --

3845- CT - "DECIPHERING THE UV EMISSION LINES IN T TAURI SYSTEMS "

Continuation of Program Number 3845

Keywords :

Proposers: Gibor Basri (PI; Univ. Of California, Berkeley), N.Calvet (Centro De Investigaciones De Astronomia; Venezuela), L.Hartmann (Harvard-Smithsonian Center For Astrophysics), F.Walter (State Univ. Of New York At Stony Brook)

Currently there is complete confusion as to the physical origin of the UV emission lines in T Tauri stars, although they are the strongest known UV emissions from cool stars. Possibilities include closed magnetic field loops in analogy to active main sequence stars, a hot region in an Alfven wind, the accretion boundary layer between star and disk, accretion columns in the stellar magnetic field, or some other region associated with a disk-generated wind. Emission measure analyses have been unable to distinguish between the possibilities listed above. What is clearly needed is line profile information: in particular a good measurement of the breadth of the profiles and a reasonable idea of their symmetry. Narrow lines will indicate plasma originating either on the stellar surface or in closed magnetic loops. Broad lines will indicate a turbulent boundary layer or wind region. The asymmetry of the lines will indicate whether they arise in accretion, outflow, or relatively static plasma, and something about the size of the region (via occulation effects). Taken with some emission measures, density diagnostics, and wind diagnostic information, the current mystery about the origin of these strong hot emission lines can be illuminated. We propose to measure enough profiles and emission measures in a representative small sample of stars to constrain, support or eliminate the above hypotheses.

Prop. Type: GO

SOLAR SYSTEM -- (MINOR PLANETS) --

3848- LT - "SEPARATE LIGHTCURVES OF PLUTO AND CHARON "

Keywords :

Proposers: Marc W. Buie (PI; Lowell Observatory), D.Tholen (University Of Hawaii), L.Wasserman (Lowell Observatory)

With this program we will begin a systematic effort to collect separate lightcurve data on the Pluto and Charon system. Such observations will continue to improve the albedo mapping of their surfaces by splitting the present ground-based ambiguity in the combined lightcurve. The observations must be done at the such times when it is within 25 arcseconds of a star of similar brightness. Such data will provide both the lightcurves and the phase angle behavior of each object. In addition to the photometry, astrometric measurements of Pluto and Charon relative to each of the background field stars can be made from the imaging data. In sufficient quantity, these data will further refine our knowledge of the sizes and relative masses of Pluto and Charon. Continued work on the photometry will allow us to watch the lightcurve evolution as Pluto moves away from the sun and as the Sun progresses to higher and higher latitudes.

Prop. Type: GO

STELLAR POPULATIONS -- (GLOBULAR CLUSTERS) --

3851- CT - "DEEP SEARCH FOR CVS AND COMPACT BINARIES IN THE COLLAPSED CLOSE GLOBULAR NGC6397"

Continuation of Program Number 3851

Keywords : GLOBULAR CLUSTERS

Proposers: Jonathan E. Grindlay (PI; Harvard University), C.Bailyn (Yale University; U.S.A.), P.Callanan (Harvard University; U.S.A.), H.Cohn (Indiana University; U.S.A.), A.Cool (Harvard University; U.S.A.), P.Lugger (Indiana University; U.S.A.)

We propose to obtain deep H-ALPHA and R exposures with the PC on the closest core-collapsed globular cluster, NGC 6397. This will allow the most sensitive search to date for cataclysmic variables (CVs) and other compact binaries in the core of this dynamically evolved cluster. The search is sensitive to CVs with increasingly faint luminosities, which are distinguished by increasingly strong H-ALPHA emission, and thus will provide the most definitive test yet for the possible deficit of CVs in globulars. Comparison of these images with archived HST uv images that we have recently received, with our ground-based H-ALPHA and uv images (for regions outside the core), and with our ROSAT x-ray images will allow the long-standing question of the nature of the population of low luminosity x-ray sources in globulars (CVs ?) to be probed in unprecedented detail. The search will also be sensitive to the populations and distributions of blue subdwarfs (H-ALPHA absorbers, and possibly WD-stellar merger products) and millisecond pulsar emission nebulae, so that models of binary formation and evolution in globulars will be tested.

Prop. Type: GO

GALAXIES CLUSTERS -- (STARBURSTS) --

3852 - "THE NATURE OF THE LUMINOUS STARBURST KNOTS IN NGC1068 AND THEIR SURROUNDING INTERSTELLAR MEDIUM"

Keywords : MASS LOSS, MASSIVE STARS

Proposers: Frederick Bruhweiler (PI; Catholic University Of America), D.Ebbets (Ball Aerospace Group), A.Home (Catholic University Of America), J.Hutchings (Dominion Astrophysical Obs.; Canada), W.Landsman (Stx Corporation), A.Smith (Nasa/Goddard Space Flight Center)

We propose to use the FOS to observe bright and luminous starburst knots within the inner 3 Kpc region of NGC 1068. The FOS G130H and G190H spectra of the knots will be modeled with our population synthesis code, which incorporates a new library of high dispersion IUE stellar spectra. The resulting models produce real spectra at a resolution of 0.25A. The use of this powerful new tool, in conjuntion with ~ 3A resolution data from the FOS and complementary ground-based data, will place strong constraints on the stellar ages and the star formation history in the knots.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (SN SNR) --
3853-LP - "SINS: THE SUPERNOVA INTENSIVE STUDY - CONT OF 2563 "
Continuation of Program Number 2563
Keywords :
Proposers: Robert P. Kirshner (PI; Harvard College Observatory), J.Blades (Stsci), D.Branch (Oklahoma, University Of), R.Chevalier (Virginia, University Of), C.Fransson (Stockholm Observatory; Sweden), N.Panagia (Stsci), J.Wheeler (Texas, University Of)

Supernovae are stars at the end of stellar evolution. They mark the moment of stellar destruction, act as the key process in the chemical evolution of the universe, serve as agitators and probes of the interstellar medium, and provide sharp and useful tools for cosmological investigations. As SN 1987A demonstrated, the best progress in this field comes from detailed study of the brightest objects. Many central problems of supernova research can be attacked by intensive and extensive observations of a handful of moderately bright supernovae using the HST cameras and spectrographs. SN 1987A provides a unique opportunity to connect the evolution of a supernova with the development of a supernova remnant and will be intensively studied in this program. Because supernovae touch on so many fields of astronomy, the results of this Supernova Intensive Study (SINS) will affect a broad range of areas from stellar interiors to cosmology so a diverse team of investigators has been assembled which includes experts on all these aspects of astronomy. While the first cycle observations concentrate on SN 1987A and on a fresh supernova to be studied at intermediate age, the second and third cycle will include target-of-opportunity observations of freshly-discovered supernovae which will strive for good UV coverage at early phases of the outburst.

Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --
3856- CT - "A CRITICAL TEST OF THE GALACTIC ESCAPE VELOCITY AT R(SUN)-CONT OF 2428"
Continuation of Program Number 2428
Keywords :
Proposers: Darrell J. Macconnell (PI; Computer Sciences Corporation), W.Osborn (Central Michigan University)

We propose to measure the trigonometric parallaxes and proper motions of the three high-proper motion stars which Carney, Latham, and Laird (1988) identify as having the most extreme velocities known in the galactic rest frame. Using these stars, they conclude that the local value of the escape velocity, V(esc), is at least 500 k/s, and this leads them to draw other important conclusions regarding the distribution of mass in the galactic disk. However, their assigned distances, and hence the tangential velocities and V(esc) value, depend on uncertain photometric corrections and reddening estimates. The photometric distances they find are in the range 400-550 pc, so the parallaxes are expected to be of the order of 2 milliarcsec. If these distances are approximately correct, it will be possible to measure them at the 4-sigma level using an FGS on the HST. It will be of great interest if the parallaxes are smaller than the estimates of Carney, et al., since this would lead to a higher value for the escape velocity and a larger mass for the galaxy. Alternatively, if the parallaxes are found to be larger than they adopted, either V(esc) is considerably smaller than 500 k/s or these three stars are not the most app- ropriate for setting a limit on V(esc). NOTE added 16-Apr-1991: Three targets changed to two, G166-37 and G233-27. This is Cycle 2 POS mode only. NOTE added 09-Mar-1992: Target G23327 dropped after TRANS obs. failed due to spoiler 4" away. New target, G16-25, was substituted and is included here.

Prop. Type: GO

GALAXIES _CLUSTERS -- (GALAXY MORPHOLOGY) --
3857- CT - "MORPHOLOGY OF GALAXIES IN CLUSTERS AT Z = 0.5 - CONT OF 2373 "
Continuation of Program Number 2373
Keywords :
Proposers: Alan Dressler (PI; Carnegie Observatories), H.Butcher (Kapteyn Observatory; Netherlands), A.Oemler (Department Of Astronomy, Yale U.)

We outline a continuing program to study galaxy evolution through the investigation of galaxy morphology as a function of lookback time. The development of disks and bulges, the role of mergers, interactions, and other environmental influences, are expected to be visible over the range 0 < z < 1 as judged by the spectrophotometric evolution already observed over this redshift range. We propose in Cycle 2 to continue our efforts by imaging with the Wide Field Camera three fields containing rich clusters of galaxies at z = 0.5 for which extensive photometry and spectroscopy already exist. The fields include a range of environments, from the dense cores of clusters to isolated field galaxies. These data will be used primarily to classify images according to traditional morphological categories and will be used, within the constraints implied by deconvolution techniques, to measure surface brightness distributions and bulge-to-disk ratios. A brief description is given of how the data are applicable to specific questions, like the cause of enhanced starburst activity found for high-z galaxies.

Prop. Type: GO/DD

QUASARS _AGN -- (QUASAR EMISSION) --
3858- CT - "THE INNER REGIONS OF QUASARS: CYCLE 2 CONTINUATION "
Continuation of Program Number 2578
Keywords : QUASARS, SPECTRA
Proposers: Beverley J. Wills (PI; Texas, University Of), J.Baldwin (Ctio (Noao)), I.Browne (Manchester, University Of; Uk), G.Ferland (Ohio State University), H.Netzer (Tel Aviv University; Israel)

This is an updated proposal for the second half of our previously-approved program to investigate a well defined sample of 50 luminous AGN. For the first time, out HST/FOS and quasi-simultaneous ground-based spectroscopy will allow an accurate comparison of line strengths, profiles and profile shifts, and continuum energy distributions over a very wide wavelength range from about 0.1 to 1.0 micron in the SAME SPECTRUM. Our sample is selected to cover a limited range in radio lobe luminosity, and orientation-independent luminosity. It also covers a wide range of radio core-dominance to allow test of the dependence of various parameters on inclination of the inner regions (~<1 pc) to the line-of- sight. Potentially this dependence is a powerful probe of the kinematics and geometry of the broad line region (BLR), and axisymmetry of continuum emission. Statistical relations among emission line and continuum parameters, radio and X-ray luminosity will allow us to investigate many questions, including: Are there inclined accretion disks? Is there stratification of the BLR? Is there angle-dependent and luminosity-dependent ionization of the BLR? What is the origin of the Fe II emission? What is the importance of the line and continuum reddening? How is X-ray and radio emission related to the optical-UV properties? The spectroscopy proposed here is being complemented by our VLA mapping, and variability monitoring of optical (B,R) and radio core emission (VLA). The sample size is min. requ'd for meaningful statistical investigation.

Prop. Type: GO

SOLAR SYSTEM -- (

3862 - "THE EXCITATION OF THE ATMOSPHERES OF PLANETARY SATELLITES "

Keywords : PLANETARY SATELLITE, PLASMA TORUS, AURORA

Proposers: John T. Clarke (PI; Michigan, University Of), J.Ajello (Jet Propulsion Laboratory), J.Luhmann (California, University Of, Los Angeles), N.Schneider (University Of Colorado)

We will observe Io at near and far UV wavelengths in a set of observations designed to study the excitation of Io's atmosphere. The distinguishing element of this program is the design of the observations to separate the following processes: resonant scattering of solar emission, charged particle excitation by magnetospheric plasma, and the decay in surface. Io will be observed with the FOS/HST in the near-UV over a period of time centered Io emerging from eclipse to separate the solar emissions (sunlit) from particle excited emissions (while in shadow) and the near UV SO2 aurora will be observed while Io is in shadow. Two far-UV multiplets of O and S will be observed with the GHRS as Io goes into eclipse to determine the light curve by which these lines rapidly decrease in intensity when Io is in shadow, discovered in Cycle 1. The far UV lines of atomic sulfur and oxygen emanate from an extended atmosphere, and are produced by a combination of ionospheric currents and torus plasma impact relatively high in the atmosphere. The near-UV bands of SO reflect particle impact on SO2, the parent molecule believed to be driven by sublimation vapor pressure from the surface, and may be excited relatively closer to Io's surface (due to three times smaller scale height) by incident plasma and/or ionospheric processes.

Prop. Type: GO

STELLAR POPULATIONS -- (GLOBULAR CLUSTERS) --

3872 - "BLUE STRAGGLERS IN THE CORES OF GLOBULAR CLUSTERS "

Keywords :

Proposers: Michael M. Shara (PI; Space Telescope Science Institute), I.King (Uc Berkeley), G.Meylan (St Sci), F.Paresce (St Sci)

We have discovered an extremely large population of blue stragglers (on HST Science Verification focus frames) at the very center of 47 Tucanae. The extraordinarily high surface density we found is in stark contrast with Hesser et al's almost complete lack of detection of blue stragglers further from the core. We are proposing to use the PC to map the distributions of blue stragglers in seven globular clusters of systematically increasing central density. Our goals are to determine and to compare the numbers, mean masses and distributions of the blue stragglers in globulars of widely differing central density. These observational results will be used to test theoretical predictions and numerical simulations of stellar density distributions and stellar collision rates in globular cluster cores. The proposed observations demand high spatial resolution imaging of moderately bright point sources near 3000 Angstroms...exactly what HST does best. Most of the target clusters are in, or close to, HST's Continuous Viewing Zone. Thus the proposed observations can make high efficiency use of HST time. In the event of a serious PC failure, (e.g. worsening contamination for the F284W filter) these observations can be carried out with the F439W filter of the PC, or with the F220W and F150W filters with FOC by doubling the allocated observing time.

Prop. Type: GO

QUASARS _AGN -- (QUASAR EMISSION) --

3879 - "FE II EMISSION IN AGNS "

Keywords :

Proposers: Richard F. Green (PI; Kitt Peak National Observatory), T.Boroson (Kitt Peak National Observatory)

We propose to obtain high S/N spectra of 3 AGNs noted for their strong optical Fe II emission, in order to study the properties of the Fe II UV multiplets in the 2000-3000 A range. This study builds on our development of a unique empirical technique for determining the strength and velocity profile of Fe II based on a template constructed from one of the proposed objects, I Zwicky 1. Our analysis will allow an accurate measure of the relative strengths and profile widths of the UV and optical multiplets, testing for saturation of the UV multiplets and estimating relative contributions of collisional excitation, X-ray heating and fluorescence. The total Fe II cooling rate will yield a better estimate of the BLR covering factor. The Fe II emission can then be subtracted, allowing measurement of the Mg II profile and those of weaker features such as C II] 2325. A clean determination of the continuum allows more sensitive searches for Mg II doublets in absorption and the strength of any 2175 A dust feature. The narrow lines of I Zw 1 and PG 1404+226 will enable us to identify the individual lines of the multiplets and compare an object with

[Fe II] to one without. A comparison of the Mg II and H beta profiles will constrain the relative geometry and kinematics of the BLR cloud distribution for the two species. PG 0804+761 shows much stronger emission in multiplet 42, prompting a search for other anomalies.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (PLANETARY NEBULAE) --

3880 - "CIRCUMSTELLAR AND INTERSTELLAR ABSORPTION LINES IN PLANETARY NEBULA CENTRAL STARS"

Keywords :

Proposers: Harriet L. Dinerstein (PI; University Of Texas), L.Danly (Space Telescope Science Institute), S.Heap (Goddard Space Flight Center), C.Sneden (University Of Texas)

We propose to use GHRS observations of planetary nebula central stars to detect and study massive envelopes of residual neutral material around the ionized gas. Discovery of these envelopes has major implications for understanding the process that transforms a star from a red giant into a white dwarf. Previous radio and infrared work has shown that a significant fraction of planetaries (20 - 33%) contain 0.1-1 solar masses of molecules. Neutral atomic material, although harder to detect from the ground, may be even more common and contain substantial mass. This conclusion is supported by the results of a pilot study by the proposers in the optical Na I lines. Observations of UV resonance lines of abundant species offer the most sensitive means for detecting neutral material, and will provide unique information on the physical and velocity structure of the nebular envelopes. The far-UV also offers the oppor- tunity to detect small amounts of vibrationally-excited H2. The GHRS is the only instrument that can provide sensitive measurements of these faint stars with high enough spectral resolving power to separate the nebular from interstellar absorption lines and to optimize detection of weak lines needed to determine accurate column densities. These obser- vations will also provide serendipitous information about the central stars and the ISM along new lines of sight through the galactic halo.

Prop. Type: GO/DD

STELLAR ASTROPHYSICS -- (MASSIVE STARS) --

3882 - "ULTRAVIOLET SPECTROPOLARIMETRY OF AG CAR IN ITS CURRENT OUTBURST "

Keywords : LBV'S, MASS LOSS, MASSIVE STARS, JETS

Proposers: Claus Leitherer (PI; Stsci), L.Drissen (Space Telescope Science Institute), O.Lupie (Space Telescope Science Institute), A.Nota (Space Telescope Science Institute), F.Paresce (Space Telescope Science Institute), C.Robert (Space Telescope Science Institute), W.Schmutz (Eth Zuerich; Switzerland)

We propose to obtain high-resolution (R=1000) spectropolarimetry of the Luminous Blue Variable AG Carinae with the FOS. AG Car undergoes quasi-periodic outbursts on a time-scale of about 15 years. The on-set of such an outburst has recently been detected. During the outburst, the stellar mass-loss rate increases by a factor of 100, leading to the ejection of discrete shells. The relicts of previous (10e4 yr ago) mass ejections are visible as a bipolar jet and other nebulous filaments within 30" around AG Car. It is intended to measure the linear polarization of strong ultraviolet resonance lines originating in the wind of AG Car, such as Fe II (1) and Mg II (1) in the wavelength region 2300A - 3100A. Such SCATTERING lines are the most sensitive probe to study asymmetries in the wind by spectropolarimetric techniques. The scientific goal is to search for evidence for asymmetry in the stellar wind of AG Car within 10 stellar radii and to correlate the derived geometry with the morphology of the bipolar, spatially resolved structures at a distance of 0.1 pc from the star. The results will be interpreted in terms of the outburst mechanism of AG Car, and of Luminous Blue Variables in general. We request a total of 3 sets of observations, separated in time by the flow-time scale of AG Car (4 months), in order to study the temporal evolution of the flow geometry.

Prop. Type: GO

SOLAR SYSTEM -- (GIANT PLANETS) --

3887- CT - "INTEGRATED DYNAMICAL AND SPECTROSCOPIC OBSERVATIONS OF JUPITER AND SAT URN"

Continuation of Program Number 2560

Keywords :

Proposers: Reta F. Beebe (PI; New Mexico State University), S.Atreya (Michigan, University Of), M.Belton (National Optical Astr Obs), G.Danielson (Caltech), T.Encrenaz (Paris Observatory; France), P.Gierasch (Cornell University), A.Ingersoll (Caltech), S.Limay (Wisconsin, University Of), T.Owen (Hawaii, University Of), W.Rossow (Nasa, Giss), L.Trafton (Texas, University Of), R.West (Jet Propulsion Laboratory)

An integrated set of multispectral images and ultraviolet spectra provides the basis for comparative analysis of the atmospheres of Jupiter and Saturn. The spatial resolution and the spectral range of the Hubble Space Telescope, combined with the ability to continue similar observations for at least 17 years, assure that these data will contribute to a valuable database for interpreting the high resolution data from Voyager, Galileo and Cassini. The basic problems that are addressed with these data are: temporal variations of the ammonia clouds, characterization of convection in the upper tropospheres, meridional stratospheric circulation, variation in the troposphere-stratosphere dynamic coupling and seasonal variability.

Prop. Type: GO

SOLAR SYSTEM -- (SATELLITES) --

3899 - "TITAN'S NORTH - SOUTH ALBEDO CONTRAST "

Keywords :

Proposers: Peter H. Smith (PI; University Of Arizona)

I propose to obtain a series of high signal-to-noise Titan images spanning the available filter set from violet to the NIR in order to study the mysterious north-south albedo contrast discovered in 1979. It is important to obtain a wide wavelength coverage for several reasons. The haze optical depth decreases rapidly longward of 5000A such that redder light penetrates to deeper and deeper levels within the atmosphere. Hopefully, it will be possible to probe to the surface by 1 micron. Previous observations have shown conclusively that the contrast decreases between 5500A and 6500A. It is also possible that the contrast reverses polarity at some wavelengths, particularly in the strong methane band at 8890A. There has never been a simultaneous set of images taken which compares the violet to the red and NIR as well as the methane band. This data set will be analyzed and the effects of the PSF will be removed for comparison with microphysical models of a haze which is modulated with different incident forcing functions: seasonal and solar cycle periodicities are of foremost importance. Variations of the contrast with altitude and time will be the basis for understanding the complex interaction of Titan's stratospheric hazes with the solar flux.

Prop. Type: GO

GALAXIES _CLUSTERS -- (DISTANCE SCALE) --

3905-LP - "DETERMINATION OF THE EXTRAGALACTIC DISTANCE SCALE. II. M81 _M101"

Continuation of Program Number 2227

Keywords :

Proposers: Jeremy R. Mould (PI; Caltech), S.Faber (California, University Of, Santa Cruz), H.Ford (Stsci), W.Freedman (Mt Wilson _Las Campanas Observatories), J.Graham (Department Of Terrestrial Magnetism, Ciw), J.Gunn (Princeton University), J.Hoessel (Wisconsin, University Of), J.Huchra (Cfa), G.Illingworth (California, University Of, Santa Cruz), R.Kennicutt Jr. (Arizona, University Of), B.Madore (Caltech), P.Stetson (Dominion Astrophysical Observatory; Canada)

Many fundamental problems in cosmology and astrophysics remain unsettled because the value of the expansion rate is uncertain to a factor of two. HST will provide the opportunity to break this impasse. We propose a program which in combination with other GTO and GO work should lead to a measurement of Ho to 10 % accuracy. Our main goal is the observation of Cepheids in two dozen fields in 20 nearby galaxies, for the purpose of calibrating the infrared Tully-Fisher relation as well as other secondary distance indicators, including the Planetary Nebula Luminosity Function, the Globular Cluster Luminosity Function, the Luminosity Variance method, supernovae, and the Faber-Jackson relation. Much of this work must wait for the availability of WFPC2; so our limited goals for Cycles 2 and 3 are: (a) to learn how to find Cepheids and measure their periods and amplitudes from WFC images, (b) to complete the determination of a reliable distance to M81 (and thus to furnish an important calibrator for four of the secondary distance indicators listed above), (c) to discover Cepheids in two radially different (and chemically distinct) fields in the giant spiral galaxy M101. The primary purpose here is to perform an end-to-end test of our method of determining reddening and metallicity independent distances.

Prop. Type: GO

GALAXIES CLUSTERS -- (PECULIAR/INTERACTING) --
3906 - "IMAGING OF A COMPLETE SAMPLE OF THE NEAREST INFRARED QUASARS "
Keywords :
Proposers: David B. Sanders (PI; University Of Hawaii), G.Neugebauer (Caltech), N.Scoville (Caltech), B.Soifer (Caltech), N.Weir (Caltech)

We propose high resolution imaging with the Faint Object Camera (FOC/96) of a complete sample of the nearest infrared quasars that have been discovered in the IRAS database. These objects appear to represent a critical evolutionary link between ultraluminous infrared galaxies and optical quasars. The FOC obseravtions will provide an important test of the hypothesis that all quasars form through the merger of gas-rich spirals. Ground-based optical and near-infrared images of our complete sample of IRAS bright galaxies now indicate that all of the most luminous objects are mergers. A strong correlation has been discovered between the incidence of AGN spectra, warmer infrared colors, decreased nuclear separation, and stronger - more pointlike - optical nuclei with increasing infrared luminosity. The infrared quasars that we are proposing to observe with HST provide direct evidence for the transition stage from ultraluminous infrared galaxy to optical quasar if it can be demonstrated that there exists a continuity in morphological properties with those observed in the cooler infrard objects. FOC images in U,B, and V filters will be used to identify double nuclei and to measure nuclear separations and magnitudes. HST images will provide a factor 10 - 30 increased resolution over that attainable from the ground.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (EARLY EVOLUTION) --
3908- CT - "SLEUTHING THE DYNAMO: CYCLE 2 CONTINUATION "
Continuation of Program Number 2485
Keywords : OPEN CLUSTER, DWARF, MS STAR, CHROMOSPHERE, CORONA
Proposers: Thomas R Ayres (PI; Colorado, University Of), S.Antiochos (Us Naval Research Laboratory), G.Basri (California, University Of, Berkeley), J.Bookbinder (Cfa), A.Brown (Colorado, University Of), G.Doschek (Us Naval Research Laboratory), J.Linsky (Colorado, University Of), L.Ramsey (Penn State University), T.Simon (Hawaii, University Of), J.Stauffer (Cfa), R.Stern

(Lockheed Palo Alto Research Labs), F.Walter (New York, State University Of (Stony Brook))

Innovative technologies of the 1990s will open new windows to the interior of the Sun and its hidden dynamics: the GONG project for helioseismology; rare-earth detectors for solar neutrinos; and SOLAR PROBE for high-order moments of the mass distribution. At the same time, newly-commissioned space observatories will provide unprecedented views of the vacuum-UV and X-ray emissions of stars in our Galactic neighborhood. These seemingly unrelated developments are in fact deeply connected. A central issue of solar-stellar physics is the nature and origin of magnetic activity: the profound link between the interior dynamics of a late-type star and the violent state of its outermost million-degree coronal layers. As solar physicists are unlocking the secrets of the hydromagnetic dynamo deep inside the Sun, we will apply one of the powerful new astronomical tools of the decade -- the HST -- to document the early evolution of the dynamo and its associated external gas-dynamic activity. In particular, we will obtain high-S/N FUV spectra of solar-type stars in young galactic clusters ranging in age from 1/10-th to 1/100-th that of the Sun.

Prop. Type: GO

GALAXIES CLUSTERS -- (NUCLEI/CORES) --

3912- CT - "CORES OF EARLY-TYPE GALAXIES "

Continuation of Program Number 2600

Keywords : ELLIPTICAL GALAXY, SO GALAXY, DWARF GALAXY,LOCAL GROUP, GALACTIC NUCLEUS, GALACTIC BULGE, IMAGING

Proposers: Sandra M. Faber (PI; California, University Of, Santa Cruz), A.Dressler (Carnegie Observatories), J.Kormendy (University Of Hawaii), T.Lauer (Kitt Peak National Observatory), D.Richstone (University Of Michigan), S.Tremaine (University Of Toronto; Canada)

We are conducting a comprehensive imaging survey of the cores of early-type galaxies and spiral bulges. The high spatial resolving power of deconvolved HST images will be used to measure core structure parameters over a wide range of core size and luminosity. PC images in F555W will be taken of 45 galaxies covering a range of 9 magnitudes in luminosity. Ground- based photometry and kinematic data will be obtained to augment small-radii HST data. Observations will be used to constuct dynamical models of the core regions using a maximum-entropy technique with the particular goal of searching for BHs in selected galaxy candidates. Existing HST images of galaxy cores are revealing a wide variety of different types of structure including the prevalence of nuclear cusps. At the same time, ground-based data suggest that cores can retain information about merger processes and accretion events for up to Gyrs after they occur. In studying systematic core properties over a wide range of galaxies, we expect to learn much about how spheroidal galaxies were formed.

Prop. Type: GO

GALAXIES _CLUSTERS -- (STARBURSTS) --

3913 - "ULTRAVIOLET IMAGING OF IRAS STARBURST GALAXIES "

Keywords :

Proposers: John Kormendy (PI; University Of Hawaii), L.Cowie (University Of Hawaii), D.Sanders (University Of Hawaii)

We propose to obtain ultraviolet FOC images of three IRAS starburst galaxies with luminosities LIR > 1012 Lsun. The observations will provide approximate spectral energy distributions that will be used to predict magnitudes and colors for similar objects seen at redshifts of z = 1 to 4. We can then search for them in groundbased multicolor surveys of faint galaxies. Two applications are planned. (1) If starbursting merger remnants can be identified over a range of redshifts, then we can estimate the time dependence of the merger rate for massive galaxies. This will put on a firmer observational footing the present theoretical estimates of how many ellipticals were made by mergers. (2) We plan to pursue a suggestion by Kormendy, Sanders _Cowie (1991) that ultraluminous IRAS galaxies are local analogs of protogalaxies. The proposed objects have precisely the properties expected of elliptical galaxies forming by dissipative collapse. They contain intense starbursts that are shrouded by dust. Since even the oldest giant ellipticals have solar or higher metallicities, all giant ellipticals must have formed from gas as enriched as that in IRAS merger progenitors. Therefore, ellipticals forming at redshifts z > 1 may also have been shrouded. Optical and infrared searches require that we know restframe spectra in the ultraviolet. No such spectra are available. The observations will therefore help to improve protogalaxy search strategies.

Prop. Type: GO

GALAXIES _CLUSTERS -- (

3917-KP - "HST MEDIUM-DEEP SURVEY: CYCLE 2 PART 1 "

Continuation of Program Number 2684

Keywords : GALAXIES AND QUASARS, STARS, GALACTIC, EXTRAGALACTIC, BLANK SKY

Proposers: Richard E. Griffiths (PI; Stsci), R.Doxsey (Stsci), G.Gilmore (Cambridge, University Of; Uk), J.Huchra (Cfa), G.Illingworth (California, University Of, Santa Cruz), D.Koo (California, University Of, Santa Cruz), K.Ratnatunga (Stsci), M.Schmidt (Caltech), T.Shanks (Durham University; Uk), J.Tyson (AtT Bell Labs), D.Weedman (Penn State University), R.Windhorst (Arizona State University)

We propose to continue the Medium-Deep Survey as a Key Project. In doing so, we plan to increase the overall efficiency of HST, mainly by taking deep multicolor images with the WF/PC in parallel mode, but also by including UV images with the FOC when the WF/PC is primary. In addition to the great potential for serendipitous discoveries, the parallel data are needed to undertake a number of scientifically important programs, both in Galactic and extra-galactic astronomy. In particular, we will concentrate on areas ranging from the evolution of galaxies to Galactic structure, and on serendipitous searches for objects from the solar system to goal of measuring variability and proper motions, and to optimize the limiting magnitudes and color baselines for fields of particular interest. Our access to large ground-based telescopes is a major strength of the team that will ensure that the HST survey is optimized and followed up in a timely and coordinated way, using HST only for its unique properties of UV sensitivity, high resolution and low background.

Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --

3918- CT - "LINKING HIPPARCOS TO THE EXTRAGALACTIC REFERENCE FRAME PART 6 OF 6, NEWD, CYCLE 2,CONTINUATION OF 2565."

Continuation of Program Number 2565

Keywords : REFERENCE FRAMES, HIPPARCOS, QUASARS

Proposers: Paul D Hemenway (PI; University Of Texas At Austin), N.Argue (The Observatories; England), C.Devegt (Hamburger Sternwarte; Fgr), R.Duncombe (University Of Texas At Austin), J.Hughes (U.S. Naval Observatory), D.Jauncey (C.S.I.R.O.; Australia), K.Johnston (U.S. Naval Research Lab), J.Kovalevsky (C.E.R.G.A.; France), J.Kristian (Caltech), J.Lestrade (Bureau De Longitude; France), M.Perryman (E.S.T.E.C.; Holland), R.Preston (Jet Propulsion Lab), B.Tapley (Univ Of Texas At Austin), C.Turon (Observatoire De Meudon; France), H.Walter (Anstronomische Recheninstitut; Fgr), G.White (C.S.I.R.O.; Australia)

Determination of a non-rotating Reference Frame is crucial to progress in many areas, including: Galactic motions, local (Oort's A and B) and global (R0) parameters derived from them, solar system motion discrepancies (Planet X); and in conjunction with the VLBI radio reference frame, the registration of radio and optical images at an accuracy well below the resolution limit of HST images (0.06 arcsec). The goal of the Program is to tie the HIPPARCOS and Extra- galactic Reference Frames together at the 0.0005 arcsec and 0.0005 arcsec/year level. The HST data will allow a deter- mination of the brightness distribution in the stellar and extragalactic objects observed and time dependent changes therein at the 0.001 arcsec/year level. The Program requires targets distributed over the whole sky to define a rigid Reference Frame. GTO observations will provide initial first epoch data and preliminary proper motions. The observations will consist of relative positions of Extra- galactic objects (EGOs) and HIPPARCOS stars, measured with the FGSs, or with the FGSs and PC together in "transit circle mode". The combination of HST and HIPPARCOS observations will provide

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Prop. Type: GO

STELLAR ASTROPHYSICS -- (

3969 - "OBSERVATIONS OF THE ECLIPSING MILLISECOND PULSAR SCIENCE OBSERVATIONS OF PROGRAM 2237"

Keywords : PULSARS, PULSARS: BINARY, PULSARS: MILLISECOND BINARIES: LOW MASS X-RAY, NEUTRON STARS.

Proposers: Jay Bookbinder (PI; Cfa), C.Bailyn (Cfa), A.Fruchter (Department Of Terrestrial Magnetism, Carnegie Inst.), P.Judge (Colorado, University Of), J.Taylor (Princeton University)

FRUCHTER et al. (1988a) HAVE RECENTLY DISCOVERED a 1.6 MSEC PULSAR (PSR 1957+20) IN A 9.2 HOUR ECLIPSING BINARY SYSTEM. THE UNUSUAL BEHAVIOR OF THE DISPERSION MEASURE AS A FUNCTION OF ORBITAL PHASE, AND THE DISAPPEARANCE OF THE PULSAR SIGNAL FOR 50 MINUTES DURING EACH ORBIT, IMPLIES THAT THE ECLIPSES ARE DUE TO A PULSAR-INDUCED WIND FLOWING OFF OF THE COMPANION. THE OPTICAL COUNTERPART IS A 21ST MAGNITUDE OBJECT WHICH VARIES IN INTENSITY OVER THE BINARY PERIOD; ACCURATE GROUND-BASED OBSERVATIONS ARE PREVENTED BY THE PROXIMITY (0.7") OF A 20TH MAGNITUDE K DWARF. WE PROPOSE TO OBSERVE THE OPTICAL COUNTERPART IN A TWO-PART STUDY. FIRST, THE WF/PC WILL PROVIDE ACCURATE MULTICOLOR PHOTOMETRY, ENABLING US TO DETERMINE UNCONTAMINATED MAGNITUDES AND COLORS BOTH AT MAXIMUM (ANTI-ECLIPSE) AS WELL AS AT MINIMUM (ECLIPSE). SECOND, WE PROPOSE TO OBSERVE THE EXPECTED UV LINE EMISSION WITH FOS, ALLOWING FOR AN INTIAL DETERMINATION OF THE TEMPERATURE AND DENSITY STRUCTURE AND ABUNDANCES OF THE WIND THAT IS BEING ABLATED FROM THE COMPANION. STUDY OF THIS UNIQUE SYSTEM HOLDS ENORMOUS POTENTIAL FOR THE UNDERSTANDING OF THE RADIATION FIELD OF A MILLISECOND PULSAR AND THE EVOLUTION OF LMXRBs AND MSPs IN GENERAL. WE EXPECT THESE OBSERVATIONS TO PLACE VERY SIGNIFICANT CONTRAINTS ON MODELS OF THIS UNIQUE OBJECT.

Prop. Type: GO/DD

QUASARS _AGN -- (

3981 - "GRAVITATIONAL LENS CANDIDATE 1208+101: PHOTOMETRY "

Keywords : QUASAR, GRAVITATIONAL LENS

Proposers: John N. Bahcall (PI; Institute For Advanced Study), R.Doxsey (Space Telescope Science Institute), G.Hartig (Space Telescope Science Institute), D.Maoz (Institute For Advanced Study), D.Schneider (Institute For Advanced Study)

Planetary Camera images of the high-redshift quasar 1208+101 will be obtained with several broad band filters. These observations will determine whether the colors of the three unresolved sources located within a region 0.6" are the same; if so, then the objects are likely to be gravitationally lensed images of the quasar. Only HST can provide sufficient spatial resolution to provide accurate photometry on the individual images.

Prop. Type: GO

QUASARS _AGN -- (SEYFERTS) --

3982- CT - "PHYSICAL CONDITIONS IN THE NARROW-LINED REGION PART TWO"

Continuation of Program Number 2306

Keywords : ACTIVE GALACTIC NUCLEUS: AGN, SEYFERT GALAXY

Proposers: Jack A. Baldwin (PI; Cerro Tololo Inter-American Obs. National Optical Astron.Obs), G.Ferland (Ohio State University), H.Netzer (Tel Aviv University; Israel), D.Wills (Texas, University Of), B.Wills (Texas, University Of)

We will make a comprehensive study of the emission-line gas in the narrow-lined region (NLR) of active galactic nuclei (AGN). We will concentrate on Seyfert 2 galaxies in order to avoid possible confusion with the spectrum of the broad line region (BLR). We wish to use a wide variety of the HST instruments, to insure that a comprehensive and high-quality data set is built up for a representative sample of nearby Seyfert 2 galaxies. These data should immediately allow us to address several important, inter-related questions about AGN: a. What is the velocity field in the innermost part of the NLR? b. Where does the reddening occur in AGN? c. What is the chemical composition of the gas associated with the AGN? d. How do the Seyfert 1 and Seyfert 2 continuum sources differ? e. Do most Seyfert 2 galaxies contain "hidden" BLRs? We will exploit both the high UV response and high spatial resolution of HST, using PC images to map out the NLR structure in a few strong lines, FOS and HRS to obtain detailed nuclear spectra over a wide wavelength range, and most importantly, FOC in its long slit mode to study spatial variations in the UV and optical spectra.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (NEUTRON STARS) --

3984- CT - "DETECTING THE NEUTRON STAR IN GAMMA-RAY BURSTERS CYCLE 2 (CONTINUATION OF 2378)"

Continuation of Program Number 2378

Keywords : GAMMA-RAY BURSTERS

Proposers: Bradley E. Schaefer (PI; Universities Space Research Association), C.Chevalier (Haute Provence Observatory; France), T.Cline (Nasa, Goddard), K.Hurley (California, University Of, Berkeley), S.Ilovaisky (Haute Provence Observatory; France), C.Motch (Besancon Observatory; France), H.Pedersen (European Southern Observatory; Chile)

The nature of the gamma-ray burst (GRB) phenomena remains a puzzle in spite of the wealth of observational data because no source object has been identified. Great effort has therefore already been expended in counterpart searches; yet, even at the limit of current technology, no counterpart is known. The unique ultraviolet imaging capabilities of HST allow for a qualitatively new type of search--where we seek emission from the neutron star component. If we can find a counterpart, we could for the first time measure distance and temperature. We would be likely to eliminate most of the many GRB models and provide a significant observational base for theory. Hence, we believe that an HST counterpart would represent the biggest advance in knowledge in this field since the discovery of GRB's.

Prop. Type: GO/DD

QUASARS _AGN -- (

3992- CT - "GRAVITATIONAL LENS CANDIDATE 1208+101: SPECTROSCOPY "
Continuation of Program Number 3981
Keywords : QUASAR, GRAVITATIONAL LENS
Proposers: John N Bahcall (PI; Institute For Advanced Study), R.Doxsey (Space Telescope Science Institute), G.Hartig (Space Telescope Science Institute), D.Maoz (Institute For Advanced Study), D.Schneider (Institute For Advanced Study)

We will obtain low resolution FOS spectra of the high-redshift quasar 1208+101 and the brightest of two candidate gravitational lens images, located about .5 arcsec from the primary image. The 0.3 arcsec circular aperture will be used to spatially resolve the images, to test the gravitational lens hypothesis. Only HST can provide sufficient spatial resolution to permit sufficiently accurate spectrophotometry of the individual images.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (

3993- CT - "THE PROPERTIES OF SINGLE INTERSTELLAR CLOUDS: CYCLE 1, SIDE-2 OBSERVATIONS"
Continuation of Program Number 2251
Keywords : INTERSTELLAR CLOUDS
Proposers: L. M. Hobbs (PI; Chicago, University Of), D.Morton (Herzberg Institute Of Astrophysics; Canada), D.Welty (Chicago, University Of), D.York (Chicago, University Of)

WE PROPOSE TO USE THE ECHELLE GRATING OF THE HIGH RESOLUTION SPECTROGRAPH OVER A TWO-YEAR PERIOD TO OBSERVE THE PROFILES OF INTERSTELLAR ABSORPTION LINES. THE COLUMN DENSITES OF 18 NEUTRAL OR IONIZED FORMS OF THE ELEMENTS C,N,O,Mg,Si,P,S,Fe, AND Zn WILL BE MEASURED IN THE APPROXIMATELY 100 INDIVIDUAL INTERSTELLAR CLOUDS ALONG THE LIGHT PATHS TO 18 BRIGHT, BROAD-LINED STARS OF EARLY SPECTRAL TYPE WITHIN 1 KPC OF THE SUN. THE PRIMARY PURPOSE OF THE OBSERVATIONS IS TO DETERMINE MORE ACCURATELY THAN WAS HITHERTO POSSIBLE THE FUNDAMENTAL PHYSICAL PROPERTIES OF THE RESOLVED CLOUDS, INCLUDING LINEAR SIZE, TEMPERATURE, TOTAL DENSITY, FRACTIONAL IONIZATION AND THE RELATIVE ABUNDANCES OF THE 9 SELECTED ELEMENTS. THE REST OF THIS OBSERVING PROGRAM IS CONTAINED IN APPROVED PROPOSAL ID = 2251; THE PROGRAM EUNUMERATED HERE CONSISTS OF THAT PART OF OUR ORIGINAL PROGRAM WHICH CAN BE CARRIED OUT USING ONLY SIDE 2 OF THE GHRS. THIS PROGRAM THEREFORE CONSISTS OF ECH-B OBSERVATIONS OF EACH OF 4 STARS AT 7 WAVELENGTHS. PROGRAM 2251 SHOULD BE CONSULTED FOR ADDITIONAL DETAILS.

Prop. Type: GO/DD

SOLAR SYSTEM -- (

4005 - "HST UV IMAGING OF JUPITER TO SUPPORT THE INTERPRETATION OF ULYSSES XRAY MEASUREMENTS"

Keywords : JUPITER, PLANET, SOLAR SYSTEM

Proposers: Alan Stern (PI; Southwest Research Institute), K.Hurley (University Of California At Berkeley), M.Mcgrath (Johns Hopkins University), L.Trafton (University Of Texas), H.Waite (Southwest Research Institute)

The critical issue in Jovian x-ray production is whether the X-RAYS are electron bremsstrahlung- or precipitating ion-generated. Near-simultaneous UV and x-ray measurements are required to resolve this. Ulysses will make x-ray measurements of the Jovian aurora during its flyby on 7-9 Feb 1992. However, these x-ray observations will be ambiguous unless the power of the aurora is known. This can be accomplished by FOC imaging Jovian auroral region UV Lyman band H2 emissions. We will make 4 images of Jupiter's polar regions (two each north and south at specified times coordinated with Ulysses measurements), using the f/96 chain with filters F130M and F140W in series. The F130M filter contains our key H2 band; the F140W filter is used to reduce effects of red leaks. Adopting unzoomed pixels (z=1), exposure times of 39 minutes should yield an S/N of 9-11 in binned 1 arc-sec resolution elements, assuming an H2 brightness of 7 kR. The H2 could be much brighter.

Prop. Type: GO

GALAXIES CLUSTERS -- (EVOLUTION/COSMOLOGY) --

4014- CT - "MORPHOLOGY OF GALAXIES IN CLUSTERS AT Z = 0.5 : CYCLE 1 OBSERVATIONS - PART 2"

Continuation of Program Number 2373

Keywords : GALAXY MORPHOLOGY, EVOLUTION, GALAXY CLUSTER

Proposers: Alan Dressler (PI; The Observatories Of The Carnegie Institution Of Washington), H.Butcher (Kapteyn Observatory; Netherlands), A.Oemler (Department Of Astronomy, Yale University)

Our program is intended to study galaxy evolution through the investigation of galaxy morphology as a function of lookback time. The development of disks and bulges, the role of mergers, interactions, and other environmental influences, are expected to be visible over the range $0 < z < 1$ as judged by the spectrophotometric evolution already observed over this redshift The approved Cycle I version of this two year program called for imaging with the Wide Field Camera 5 fields in four rich clusters of galaxies at $z = 0.35 - 0.55$ for which extensive photometry and spectroscopy already exist. The fields included a wide range of environments from the dense cores of clusters to isolated field galaxies. These data were to be used to classify images according to traditional morphological categories and will be used to determine quantitative measures of surface brightness distributions and bulge-to-disk ratios. Due to the SA of the HST optical system, the new goal is to image a single field in one color for three times the exposure (10 hours total) in order to assess the feasibility of these goals with the present performance of the system.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (
4016-LP - "SINS: THE SUPERNOVA INTENSIVE STUDY: CYC 1 OPPORTUNITY "
Continuation of Program Number 2563
Keywords : SUPERNOVA, NUCLEOSYNTHESIS, INTERSTELLAR ABSORPTION, GALAXY DISTANCES
Proposers: Robert P. Kirshner (PI; Cfa), J.Blades (Stsci), D.Branch (Oklahoma, University Of), R.Chevalier (Virginia, University Of), C.Fransson (Stockholm Observatory; Sweden), N.Panagia (Stsci), J.Wheeler (Texas, University Of)

Supernovae are stars at the end of stellar evolution. They mark the moment of stellar destruction, act as the key process in the chemical evolution of the universe, serve as agitators and probes of the interstellar medium, and provide sharp and useful tools for cosmological investigations. The spatial resolution and ultraviolet ability of Space Telecope make it an essential tool in furthering all of these aspects of supernova research. As SN 1987A has demonstrated, the best progress in this field comes from the detailed study of the brightest objects. Many of the central problems of supernova research can be attacked by intensive and extensive observations of a handful of moderately bright supernovae using the HST cameras and spectrographs over an extended period of time. Observations at the latest times may be the simplest to interpret and provide the best probe of the stellar interior. SN 1987A provides a unique opportunity to connect the evolution of a supernova with the development of a supernova remnant and will be studied in this program. Because supernovae touch on so many fields of astronomy, the results of this study will affect a broad range of areas from stellar interiors to cosmology.

Prop. Type: SNAP

GALAXIES CLUSTERS -- (
4017- CT - "NON-PROPRIETARY ("SNAPSHOT") SURVEY REPEAT EXPOSURES OF 3156 3157 3158 3159"
Continuation of Program Number 3158
Keywords : GALAXIES
Proposers: John N. Bahcall (PI; Institute For Advanced Study, Princeton), R.Doxsey (Space Telescope Science Institute), J.Gunn (Princeton University), O.Lahav (Institute Of Astronomy, Cambridge; England), D.Schneider (Institute For Advanced Study, Princeton)

Whenever the automatic scheduler produces a substantial gap between observations, the Wide Field/Planetary Camera will be used to image a nearby object selected from a list of several hundred low redshift quasars, normal galaxies, peculiar galaxies, and standard survey fields. HST observations will reveal details of the immediate environment of quasars, the nuclei of normal galaxies, the morphology of peculiar galaxies, and the star density in selected fields. The purpose of this program is to increase the efficiency of the HST and to provide scientific data that can be used by many different astronomers. The images acquired in this program will be non-proprietary and will be made available to qualified astronomers via the HST archival system. With the approval of the Director of STScI, the images can also be used for public relations purposes by appropriate NASA anad STScI personnel.

Prop. Type: GO

GALAXIES CLUSTERS -- (

4018-KP - "HST MEDIUM-DEEP SURVEY: CYCLE 1 PART 2 "

Continuation of Program Number 2684

Keywords : GALAXIES AND QUASARS, STARS, GALACTIC, EXTRAGALACTIC, BLANK SKY

Proposers: Richard E. Griffiths (PI; Stsci), R.Doxsey (Stsci), G.Gilmore (Cambridge, University Of; Uk), J.Huchra (Cfa), G.Illingworth (California, University Of, Santa Cruz), D.Koo (California, University Of, Santa Cruz), S.Lilly (Toronto, University Of; Canada), K.Ratnatunga (Gsfc), M.Schmidt (Caltech), T.Shanks (Durham University; Uk), J.Tyson (AtT Bell Labs), D.Weedman (Penn State University), R.Windhorst (Arizona State University)

We propose to conduct a Medium-Deep Survey as a Key Project. In doing so, we plan to increase the overall efficiency of HST, mainly by taking deep multicolor images with the WF/PC in parallel mode, but also by including UV images with the FOC when the WF/PC is primary. In addition to the great potential for serendipitous discoveries, the parallel data are needed to undertake a number of scientifically important programs, both in Galactic and extra-galactic astronomy. In particular, we will concentrate on areas ranging from the evolution of galaxies to Galactic structure, and on serendipitous searches for objects from the solar system to goal of measuring variability and proper motions, and to optimize the limiting magnitudes and color baselines for fields of particular interest. Our access to large ground-based telescopes is a major strength of the team that will ensure that the HST survey is optimized and followed up in a timely and coordinated way, using HST only for its unique properties of UV sensitivity, high resolution and low background.

Prop. Type: GO

INTERSTELLAR MEDIUM -- (
4022-LP - "SINS: THE SUPERNOVA INTENSIVE STUDY: REVISIT "
Continuation of Program Number 2563
Keywords : SUPERNOVA, NUCLEOSYNTHESIS, INTERSTELLAR ABSORPTION, GALAXY DISTANCES
Proposers: Robert P. Kirshner (PI; Cfa), J.Blades (Stsci), D.Branch (Oklahoma, University Of), R.Chevalier (Virginia, University Of), C.Fransson (Stockholm Observatory; Sweden), N.Panagia (Stsci), J.Wheeler (Texas, University Of)

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Prop. Type: SNAP

GALAXIES CLUSTERS -- (
4027- CT - "NON-PROPRIETARY ("SNAPSHOT") SURVEY I ROUND 2 "
Continuation of Program Number 3156
Keywords : GALAXIES
Proposers: John N. Bahcall (PI; Institute For Advanced Study, Princeton), R.Doxsey (Space Telescope Science Institute), J.Gunn (Princeton University), O.Lahav (Institute Of Astronomy, Cambridge; England), D.Schneider (Institute For Advanced Study, Princeton)

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Prop. Type: SNAP

GALAXIES CLUSTERS -- (
4028- CT - "NON-PROPRIETARY ("SNAPSHOT") SURVEY II ROUND 2 "
Continuation of Program Number 3156
Keywords : GALAXIES
Proposers: John N. Bahcall (PI; Institute For Advanced Study, Princeton), R.Dorsey (Space Telescope Science Institute), J.Gunn (Princeton University), O.Lahav (Institute Of Astronomy, Cambridge; England), D.Schneider (Institute For Advanced Study, Princeton)

Whenever the automatic scheduler produces a substantial gap between observations, the Wide Field/Planetary Camera will be used to image a nearby object selected from a list of several hundred low redshift quasars, normal galaxies, peculiar galaxies, and standard survey fields. HST observations will reveal details of the immediate environment of quasars, the nuclei of normal galaxies, the morphology of peculiar galaxies, and the star density in selected fields. The purpose of this program is to increase the efficiency of the HST and to provide scientific data that can be used by many different astronomers. The images acquired in this program will be non-proprietary and will be made available to qualified astronomers via the HST archival system. With the approval of the Director of STScI, the images can also be used for public relations purposes by appropriate NASA anad STScI personnel.

Prop. Type: GO

GALAXIES CLUSTERS -- (
4029-KP - "HST MEDIUM-DEEP SURVEY: CYCLE 1 PART 3 LOW-LATITUDE "
Continuation of Program Number 2684
Keywords : GALAXIES AND QUASARS, STARS, GALACTIC, EXTRAGALACTIC, BLANK SKY
Proposers: Richard E. Griffiths (PI; Stsci), R.Doxsey (Stsci), G.Gilmore (Cambridge, University Of; Uk), J.Huchra (Cfa), G.Illingworth (California, University Of, Santa Cruz), D.Koo (California, University Of, Santa Cruz), S.Lilly (Toronto, University Of; Canada), K.Ratnatunga (Gsfc), M.Schmidt (Caltech), T.Shanks (Durham University; Uk), J.Tyson (AtT Bell Labs), D.Weedman (Penn State University), R.Windhorst (Arizona State University)

We propose to conduct a Medium-Deep Survey as a Key Project. In doing so, we plan to increase the overall efficiency of HST, mainly by taking deep multicolor images with the WF/PC in parallel mode, but also by including UV images with the FOC when the WF/PC is primary. In addition to the great potential for serendipitous discoveries, the parallel data are needed to undertake a number of scientifically important programs, both in Galactic and extra-galactic astronomy. In particular, we will concentrate on areas ranging from the evolution of galaxies to Galactic structure, and on serendipitous searches for objects from the solar system to goal of measuring variability and proper motions, and to optimize the limiting magnitudes and color baselines for fields of particular interest. Our access to large ground-based telescopes is a major strength of the team that will ensure that the HST survey is optimized and followed up in a timely and coordinated way, using HST only for its unique properties of UV sensitivity, high resolution and low background.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (LATE EVOLUTION) --

4040- CT - "POST ASYMPTOTIC GIANT BRANCH EVOLUTION IN THE MAGELLANIC CLOUDS. CONT OF 2266"

Continuation of Program Number 2266

Keywords : STARS:HB STAR, INTERSTELLAR MEDIUM:PLANETARY NEBULA, GALAXY:MAGELLANIC CLOUDS, ASTROPHYSICS:EVOLUTION, STELLAR POPULATION, ABUNDANCE

Proposers: Michael A. Dopita (PI; Mt. Stromlo And Siding Spring Observatories; Australia), R.Bohlin (Space Telescope Science Institute), H.Ford (Space Telescope Science Institute), P.Harrington (University Of Maryland), S.Maran (Goddard Space Flight Center), S.Meatheringham (Mount Stromlo And Siding Spring Observatories; Australia), T.Stecher (Goddard Space Flight Center), L.Webster(Deceased) (University Of New South Wales; Australia), P.Wood (Mount Stromlo And Siding Spring Observatories; Australia)

Planetary Nebulae (PN) represent a critical stage of stellar evolution which is still poorly understood. We still lack reliable observational estimates of stellar luminosity, mass, effective temperature and age, which could be used to constrain evolutionary models, and determine key data such as mass-loss rates, He shell flash phases and the role of dredge-up. This proposal represents the first stage in a systematic and definitive study using HST observations, which will require approximately a further 150 hours for completion, of a large sample of nebulae at known distance in the Magellanic Clouds. The following observations allow us to derive all parameters needed for proper confrontation between theory and observation: * Direct PC imaging to detect central stars and to derive the physical dimensions, masses, ages, and spatial structure of the nebulae. * FOS spectrophotometry of the central stars and nebulae in the range 1150 - 2332 Angstroms. This data will be used in combination with stellar models to derive the effective temperature, bolometric luminosity, and mass of each of the exciting stars. The combination of these parameters with the dynamical age of the PN will define the evolutionary tracks in the Luminosity/T-eff diagram. We will use two independent ionisation codes to interpret the FOS spectra, optical and IR spectra, and the ionisation structure derived from the PC images. This analysis will yield chemical abundances of many elements, including the astrophysically important species He, C, N, O, and Si.

Prop. Type: GO/DD

QUASARS AGN -- (QUASAR EMISSION) --
4051 - "POLARIZATION AND BROAD ABSORPTION LINES IN QUASARS-REPEAT "
Keywords : QUASAR
Proposers: Robert Antonucci (PI; Ucsb), A.Kinney (Stsci), J.Ulvestad (Jet Propulsion Laboratory)

OI 287 is a unique extragalactic source. It appears to take one property from each class of object. It is either some kind of missing link, or a new type of activity. Because of the high optical polarization, OI 287 has been classified with the blazars. However, every other blazar is variable in optical flux, polarization, and polarization angle., while OI 287 is constant at V=17, P=8%, and theta=145 degrees. Also, every other blazar has a radio source dominated by an intense flat-spectrum core, while OI 287 has an upper limit of 2% of the total 20cm flux in the core. The only group of quasars which ever shows even moderate (2-5%) constant optical polarization is the broad absorption line (BAL) objects, e.g. PHL 5200 and H1413+113. Among the BAL quasars, PHL 5200 and H1413+113 have exceptionally smooth deep, attached absorption lines, and also the highest polarization. We want to know whether OI 287 is a BAL quasar. It would be the first definite radio loud example. If it is a BAL quasar then the high polarization is really related to (and perhaps the key to) the BAL phenomenon, and we can use the techniques of spectropolarimetry to help unlock the BAL geometry. The UV spectral shape would also provide help determining the cause of polarization.

Prop. Type: GO/DD

STELLAR ASTROPHYSICS -- (HOT STARS)
4053- - "HIGH RESOLUTION ULTRAVIOLET SPECTROSCOPY OF NOVA CYGNI 1992 IN THE NEBULAR PHASE"
Keywords : NOVAE, MASS LOSS, NUCLEOSYNTHESIS
Proposers: Steven N. Shore (Computer Sciences Corporation)

We propose to obtain intermediate dispersion GHRS observations of Nova Cygni 1992, one of the brightest classical novae of the century. With this high S/N data, we will study the shell dynamics, shell structure, and ejecta abundances during the optically thin nebular stages.

Prop. Type: GO

QUASARS AGN -- (SEYFERTS) --
4054- CT - "PROBING THE NUCLEAR REGIONS OF THE SEYFERT GALAXY NGC 5548 - CONTINUATION"
Continuation of Program Number 3484
Keywords :
Proposers: Bradley M Peterson (PI; Ohio State University), D.Alloin (Observatoire De Paris - Section De Meudon; France), K.Anderson (New Mexico State University), B.Balick (University Of Washington), T.Balonek (Colgate Univ.), P.Barr (Exosat Observatory, European Space Agency, Estec; Netherlands), P.Barthel (Kapteyn Astronomical Institute; Netherlands), R.Blandford (California Institute Of Technology), C.Boisson (Observatoire De Paris - Daec; France), T.Carone (University Of California, Berkeley), J.Christensen (Space Telescope Science Institute), J.Clavel (Infrared Space Observatory, European Space Agency, Estec; Netherlands), R.Cohen (University Of California, San Diego), T.Courvoisier (Observatoire De Geneve; Switzerland), D.Crenshaw (Computer Sciences Corporation), R.Cutri (Steward Observatory), M.Dietrich (Universitats-Sternwarte Gottingen; Germany), D.Dultzin-Hacyan (Instituto De Astronomia-Unam; Mexico), M.Elvis (Center For Astrophysics), B.Espey (University Of Pittsburgh), I.Evans (Space Telescope Science Institute), G.Ferland (Ohio State University), A.Filippenko (University Of California, Berkeley), C.Gaskell (University Of Oklahoma), M.Goad (University College London; United Kingdom), P.Gondhalekar (Rutherford Appleton Laboratory; United Kingdom), K.Horne (Space Telescope Science Institute), D.Kazanas (Nasa, Goddard Space Flight Center), W.Kollatschny (Universitats-Sternwarte Gottingen; Germany), A.Koratkar (Space Telescope Science Institute), K.Korista (Observatories Of The Carnegie Institution Of Washington), G.Kriss (Johns Hopkins University), J.Krolik (Johns Hopkins University), A.Laor (Institute For Advanced Study), J.Luminet (Observatoire De Paris - Section De Meudon; France), G.Macalpine (University Of Michigan), J.Mackenty (Space Telescope Science Institute), M.Malkan (University Of California, Los Angeles), D.Maoz (Institute For Advanced Study), P.Martin (Canadian Institute For Theoretical Astrophysics; Canada), B.Mccollum (Computer Sciences Corporation), C.Mckee (University Of California, Berkeley), H.Miller (Georgia State University), S.Morris (Observatories Of The Carnegie Institution Of Washington), H.Netzer (Wise Observatory, Tel Aviv University; Israel), P.O'Brien (University College London; United Kingdom), M.Pastoriza (Universidade Federal Do Rio Grande Do Sul; Brazil), D.Pelat (Observatoire De Paris - Section De Meudon; France), E.Perez (Instituto De Astrofisica De Canarias; Spain), G.Perola (Instituto Astronomico, Universita Di Roma; Italy), R.Pogge (Ohio State University), R.Ptak (Bowling Green State University), M.Recondo-Gonzalez (Iue Observatory, Vilspa; Spain), G.Reichert (Universities Space Research Association), A.Robinson (Institute Of Astronomy, University Of Cambridge; United Kingdom), J.Rodriguez Espinoza (Instituto De Astrofisica De Canarias; Spain), P.Rodriguez-Pascual (Iue Observatory, Vilspa; Spain),

E.Rokaki (Institut D'Astrophysique De Paris; France), W.Romanishin (University Of Oklahoma), A.Sadun (Agnes Scott College), I.Salamanca (Observatoire De Paris - Section De Meudon; France), M.Santos-Lleo (Instituto Astronomia, Universidad Complutense Madrid; Spain), J.Sanz (Iue Observatory, Vilspa; Spain), K.Sekiguchi (South African Astronomical Observatory; South Africa), J.Shields (Ohio State University), J.Shull (University Of Colorado), M.Sitko (University Of Cincinnati), T.Snijders (Astronomisches Institut Tuebingen; Germany), L.Sparke (University Of Wisconsin, Madison), G.Stirpe (Osservatorio Astronomico Di Bologna; Italy), R.Stoner (Bowling Green State University), T.Storchi-Bergmann (Universidade Federal Do Rio Grande Do Sul; Brazil), W.Sun (Institute Of Physics And Astronomy; Republic Of China), Z.Tsvetanov (University Of Maryland), D.Turnshek (University Of Pittsburgh), E.Van Groningen (Uppsala Astronomical Observatory; Sweden), S.Veilleux (Institute For Astronomy, University Of Hawaii), R.Wagner (Ohio State University), S.Wagner (Landessternwarte Heidelberg-Konigstuhl; Germany), W.Wamsteker (Iue Observatory, Vilspa; Spain), T.Wang (University Of Science And Technology; China (Prc)), M.Ward (Oxford University; United Kingdom), W.Welsh (Space Telescope Science Institute), R.Weymann (Observatories Of The Carnegie Institution Of Washington), B.Wilkes (Smithsonian Astrophysical Observatory), B.Wills (University Of Texas), C.Winge (Universidade Federal Do Rio Grande Do Sul; Brazil), C.Wu (Computer Sciences Corporation)

We propose to carry out an intensive, short-term spectroscopic monitoring program on the galaxy NGC 5548 to address fundamental problems on the nature of the continuum emission from AGNs and the structure and dynamics of the broad-emission line region. The goal of this program is to answer questions on short-time scale phenomena which arose out of our International Ultraviolet Explorer program on this same galaxy, but which require higher quality data than have been obtained previously and which require the unique capabilities of HST. The specific problems we will address are (1) the dynamics of the line-emitting gas, (2) the size and geometry of the very compact high-ionization emission- line region, and (3) whether or not the ultraviolet and optical continua arise in the same region.

Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --

4064- CT - "A CRITICAL TEST OF THE GALACTIC ESCAPE VELOCITY AT R(SUN): CYCLE 1 OBSERVATIONS; POS MODE ONLY"

Continuation of Program Number 2428

Keywords : GALACTIC ESCAPE VELOCITY, HIGH VELOCITY STARS, PARALLAXES, PROPER MOTIONS

Proposers: Darrell J. Macconnell (PI; Computer Sciences Corporation), W.Osborn (Central Michigan University)

We propose to measure the trigonometric parallaxes and proper motions of the three high-proper motion stars which Carney, Latham, and Laird (1988) identify as having the most extreme velocities known in the galactic rest frame. Using these stars, they conclude that the local value of the escape velocity, V(esc), is at least 500 k/s, and this leads them to draw other important conclusions regarding the distribution of mass in the galactic disk. However, their assigned distances, and hence the tangential velocities and V(esc) value, depend on uncertain photometric corrections and reddening estimates. The photometric distances they find are in the range 400-550 pc, so the parallaxes are expected to be of the order of 2 milliarcsec. If these distances are approximately correct, it will be possible to measure them at the 4-sigma level using an FGS on the HST. It will be of great interest if the parallaxes are smaller than the estimates of Carney, et al., since this would lead to a higher value for the escape velocity and a larger mass for the galaxy. Alternatively, if the parallaxes are found to be larger than they adopted, either V(esc) is considerably smaller than 500 k/s or these three stars are not the most app- ropriate for setting a limit on V(esc). NOTE added 16-Apr-1991: Three targets changed to two, G166-37 and G233-27. This is Cycle 1 POS mode only. NOTE added 09-Mar-1992: Target G233-27 dropped after TRANS obs. failed due to spoiler 4" away. New target, G16-25, was substituted and is included here.

Prop. Type: GO

GALAXIES CLUSTERS -- (

4082-KP - "HST MEDIUM-DEEP SURVEY: CYCLE 2 PART 2 LOW-LATITUDE "

Continuation of Program Number 4029

Keywords : GALAXIES AND QUASARS, STARS, GALACTIC, EXTRAGALACTIC, BLANK SKY

Proposers: Richard E. Griffiths (PI; Stsci), R.Doxsey (Stsci), G.Gilmore (Cambridge, University Of; Uk), J.Huchra (Cfa), G.Illingworth (California, University Of, Santa Cruz), D.Koo (California, University Of, Santa Cruz), K.Ratnatunga (Gsfc), M.Schmidt (Caltech), T.Shanks (Durham University; Uk), J.Tyson (AtT Bell Labs), D.Weedman (Penn State University), R.Windhorst (Arizona State University)

We propose to conduct a Medium-Deep Survey as a Key Project. In doing so, we plan to increase the overall efficiency of HST, mainly by taking deep multicolor images with the WF/PC in parallel mode, but also by including UV images with the FOC when the WF/PC is primary. In addition to the great potential for serendipitous discoveries, the parallel data are needed to undertake a number of scientifically important programs, both in Galactic and extra-galactic astronomy. In particular, we will concentrate on areas ranging from the evolution of galaxies to Galactic structure, and on serendipitous searches for objects from the solar system to goal of measuring variability and proper motions, and to optimize the limiting magnitudes and color baselines for fields of particular interest. Our access to large ground-based telescopes is a major strength of the team that will ensure that the HST survey is optimized and followed up in a timely and coordinated way, using HST only for its unique properties of UV sensitivity, high resolution and low background.

Prop. Type: SNAP

QUASARS _AGN -- (HOST GALAXIES) --

4093 - "A SNAPSHOT SURVEY OF THE NUCLEAR REGIONS OF 102 MARKARIAN GALAXIES I - CONT OF 3698"

Keywords :

Proposers: John W Mackenty (PI; Space Telescope Science Institute), R.Griffiths (Space Telescope Science Institute), S.Simkin (Michigan State University)

We propose to use the HST PC in snapshot mode with the broad F785LP filter to obtain high resolution images of the inner regions of a sample of 102 Markarian (Seyferts and starburst) galaxies. In the chosen redshift range, these images will have a resolution of 15 to 60 pc and will cover the inner 500 to 800 pc near the nucleus. The F785LP band-pass will image the stellar continuum in a region with little internal absorption and will be free of atmospheric OH emission. We will use these images to analyze the morphology and to measure the stellar nuclear luminosity function for this matched sample of active galaxies. Comparing these with similar data for "normal" galaxies from the HST archives will allow us to search for any features which differentiate the host galaxies Seyferts from those of normal galaxies and may help identify the large-scale mechanisms responsible for replenishing the material which gives rise to the Seyfert phenomenn. These observations will also help answer the question of whether differences exist between the hosts of Seyfert 1 and Seyfert 2 galaxies.

Prop. Type: GO

GALAXIES _CLUSTERS -- (

4105-KP - "HST MEDIUM-DEEP SURVEY: CYCLE 1 HI LATITUDE "

Continuation of Program Number 2684

Keywords : GALAXIES AND QUASARS, STARS, GALACTIC, EXTRAGALACTIC, BLANK SKY

Proposers: Richard E. Griffiths (PI; Stsci), R.Doxsey (Stsci), G.Gilmore (Cambridge, University Of; Uk), J.Huchra (Cfa), G.Illingworth (California, University Of, Santa Cruz), D.Koo (California, University Of, Santa Cruz), S.Lilly (Toronto, University Of; Canada), K.Ratnatunga (Gsfc), M.Schmidt (Caltech), T.Shanks (Durham University; Uk), J.Tyson (At_T Bell Labs), D.Weedman (Penn State University), R.Windhorst (Arizona State University)

We propose to conduct a Medium-Deep Survey as a Key Project. In doing so, we plan to increase the overall efficiency of HST, mainly by taking deep multicolor images with the WF/PC in parallel mode, but also by including UV images with the FOC when the WF/PC is primary. In addition to the great potential for serendipitous discoveries, the parallel data are needed to undertake a number of scientifically important programs, both in Galactic and extra-galactic astronomy. In particular, we will concentrate on areas ranging from the evolution of galaxies to Galactic structure, and on serendipitous searches for objects from the solar system to goal of measuring variability and proper motions, and to optimize the limiting magnitudes and color baselines for fields of particular interest. Our access to large ground-based telescopes is a major strength of the team that will ensure that the HST survey is optimized and followed up in a timely and coordinated way, using HST only for its unique properties of UV sensitivity, high resolution and low background.

Prop. Type: GO

GALAXIES _CLUSTERS -- (
4106-KP - "HST MEDIUM-DEEP SURVEY: CYCLE 1 LOW LATITUDE "
Continuation of Program Number 2684
Keywords : GALAXIES AND QUASARS, STARS, GALACTIC, EXTRAGALACTIC, BLANK SKY
Proposers: Richard E. Griffiths (PI; Stsci), R.Doxsey (Stsci), G.Gilmore (Cambridge, University Of; Uk), J.Huchra (Cfa), G.Illingworth (California, University Of, Santa Cruz), D.Koo (California, University Of, Santa Cruz), S.Lilly (Toronto, University Of; Canada), K.Ratnatunga (Gsfc), M.Schmidt (Caltech), T.Shanks (Durham University; Uk), J.Tyson (AtT Bell Labs), D.Weedman (Penn State University), R.Windhorst (Arizona State University)

We propose to conduct a Medium-Deep Survey as a Key Project. In doing so, we plan to increase the overall efficiency of HST, mainly by taking deep multicolor images with the WF/PC in parallel mode, but also by including UV images with the FOC when the WF/PC is primary. In addition to the great potential for serendipitous discoveries, the parallel data are needed to undertake a number of scientifically important programs, both in Galactic and extra-galactic astronomy. In particular, we will concentrate on areas ranging from the evolution of galaxies to Galactic structure, and on serendipitous searches for objects from the solar system to goal of measuring variability and proper motions, and to optimize the limiting magnitudes and color baselines for fields of particular interest. Our access to large ground-based telescopes is a major strength of the team that will ensure that the HST survey is optimized and followed up in a timely and coordinated way, using HST only for its unique properties of UV sensitivity, high resolution and low background.

Prop. Type: SNAP

QUASARS _AGN -- (QUASAR ABSORPTION) --
4107- CT - "SEARCH FOR QSOS SUITABLE FOR SUBSEQUENT OBSERVATION OF HE II 304 ABSORPTION ARISING IN THE IGM, LY-ALPHA, AND ... PART2"
Continuation of Program Number 3801
Keywords :
Proposers: David R. Tytler (PI; California, University Of, San Diego), C.Hazard (Pittsburgh, University Of; U.S.A.), K.Lanzetta (California, University Of, San Diego; U.S.A.), R.Mcmahon (Cambridge, University Of; England)

THIS IS PART TWO OF PROPOSAL 3801, CONTAINING 55 TARGETS OF PRIORITY 7,8

AND 9. EXCEPT FOR TARGETS, THIS PROPOSAL IS IDENTICAL TO 3801, WHICH HAS 87 TARGETS OF PRIORITY 3,4,5 AND 6. Ultraviolet images will be obtained in snapshot mode of the 500 known high-redshift (z > 2.8) QSOs in order to identify the few (about 20) targets which have sufficient ultraviolet flux for subsequent FOC/FOS or GHRS observations of He II 304. The detection of absorption by the Helium II Lyman-alpha line at 304 A, one of the most exciting prospects of the HST, will provide the first direct detection of the diffuse intergalactic medium (IGM). The absence of Gunn-Peterson H I 1215 absorption shows that the IGM is hot and/or of very low density, thus He I 584 is not expected to be observable. He II 304--the most promising line--should be observable from three sources: the diffuse IGM, the discrete Ly-alpha clouds, and the much rarer metal line absorption systems. The Gunn-Peterson continuum optical depth is not well constrained by models (range 0.3-3000). The mere detection of only one QSO below 304 A would rule out many models, limiting the IGM density, temperature, and ionization mechanisms. Similarly the total absence of flux from several targets would rule out other models.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (STELLAR ATMOSPHERES) --

4110- CT - "THE PHYSICS OF MASSIVE O-STARS IN DIFFERENT PARENT GALAXIES, THE MAGELLANIC CLOUDS - PART 2"

Continuation of Program Number 2233

Keywords : EXTRAGALACTIC STAR, STELLAR ATMOSPHERES, ABUNDANCE, UV, MASS-LOSS, EVOLUTION, NUCELOSYNTHESIS, SPECTROSCOPY, STELLAR PARAMETERS

Proposers: Rolf-Peter Kudritzki (PI; Munich University; Frg), D.Baade (European Southern Observatory; Frg), B.Bohannan (Noao), K.Butler (Munich University; Frg), P.Conti (Colorado, University Of), C.Garmany (Colorado, University Of), H.Groth (Munich University; Frg), S.Heap (Nasa, Goddard), D.Hummer (Munich University), D.Husfeld (Munich University; Frg), A.Pauldrach (Munich University; Frg), J.Puls (Munich University; Frg), S.Voels (Munich University; Frg), N.Walborn (Stsci)

A detailed quantitative spectroscopic analysis of massive O-stars in the Magellanic Clouds is proposed. The objective is to determine precisely the intrinsic stellar parameters of luminosity, effective temperature, gravity, mass, and chemical composition; and the stellar wind parameters of mass-loss rate and velocity structure in these metal poor irregular galaxies. These parameters will be obtained from detailed NLTE model atmosphere analyses of HST UV-spectra (obtained using the FOS) and ground-based optical high resolution, high S/N spectra already obtained using the ESO 3.6 m telescope. These results in conjunction with our present parallel work on galactic O-stars will give important observational constraints on the evolution of massive stars and the strength of stellar winds as a function of metallicity. This will be a crucial test of stellar and galactic evolutionary scenarios which are all dependent on the rate of mass-loss during the different stellar evolutionary stages.

Prop. Type: GO

STELLAR POPULATIONS -- (YOUNG FIELD STARS)
4122-CT - "THE STELLAR CONTENT OF WOLF-RAYET GALAXIES(FOS SPECTRA)"
Continuation of Program Number 3810
Keywords : LBV'S, WOLF-RAYET STARS, STARBURSTS
Proposers: Peter S. Conti (University of Colorado), Alexei V. Filippenko (University of California), Claus Leitherer (Space Telescope Science Institute), Carmelle Robert (Space Telescope Science Institute), Wallace L. Sargent (California Institute Of Technology), William D. Vacca (University of California)

We propose to observe a comprehensive sample of Wolf-Rayet (W-R) galaxies --- starburst galaxies in which broad 4686 He II emission of stellar origin has been detected. These galaxies generally contain far more W-R stars than the Milky Way, M31, and other normal galaxies. The ultraviolet FOC images and FOS spectra will be combined with optical and infrared data as part of a large effort to perform a broad, systematic analysis of the properties of W-R galaxies. The UV data obtained with HST will provide crucial constraints on the hot star (O and W-R) populations, and will lead to a better understanding of the physical conditions, initial mass functions, and starburst parameters of these galaxies. The overall continuum will be analyzed within the framework of evolutionary and spectral synthesis models that we are developing. Quantitative spectroscopy of UV resonance lines will allow us to study the hot star populations in detail, and to directly measure the number of OB stars within these galaxies. Our main goal is to determine which physical properties of W-R galaxies (e.g., IMF slope, chemical composition, age, strength and duration of the starburst) have led to the production of large numbers of W-R stars. The results of this study will have important implications for our understanding of W-R galaxies, and also of starburst and emission-line galaxies in general.

Prop. Type: GO

QUASARS _AGN -- (QUASAR ABSORPTION) --
4125-KP - "QUASAR ABSORPTION LINE SURVEY: FUTURE CYCLE CONTINUATION "
Continuation of Program Number 2424
Keywords :
Proposers: John N. Bahcall (PI; Institute For Advanced Study, Princeton, N.J.), J.Bergeron (Institute For Astrophysics, Paris; France), A.Boksenberg (Royal Greenwich Observatory; Uk), G.Hartig (Space Telescope Science Institute), B.Jannuzi (Institute For Advanced Study, Princeton), W.Sargent (California Institute Of Technology), B.Savage (Wisconsin, University Of), D.Schneider (Institute For Advanced Study, Princeton), D.Turnshek (University Of Pittsburgh), R.Weymann (Observatory Of The Carnegie Institution In Washington), A.Wolfe (Astrophysics And Space Sciences, Ucsd)

The Quasar Absorption Line Survey of bright sources is an efficient observing program designed to provide a homogeneous data base of absorption features. The data will reveal absorption regions in galaxies, in clusters of galaxies, in voids, in large-scale structures, in Lyman ALPHA clouds, and wi provide information about damped Lyman ALPHA and Lyman-limit systems. The survey will determine, with high SNR, the profiles of > 200 emission lines. Using the estimated numbers of observed absorption lines, including archi val data, the program was designed to determine the cosmic evolution of absorption systems. High resolution spectra of a sample of quasars will be obtained with the FOS; the spectra will have a rest frame equivalent width detection limit for unresolved absorption lines of 0.3 A. The survey data base will address fundamental questions, for example: What is the strength and origin of the UV background radiation? How do gaseous galactic disks and halos evolve with redshift? What processes govern the ionization of absorbing gas? How has gaseous structure in the universe evolved on scales of 1 Mpc to 100 Mpc? Do absorbing systems show evidence of the large-scale structure seen in the distribution of galaxies and clusters?

Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --

4143- CT - "LINKING HIPPARCOS TO THE EXTRAGALACTIC REFERENCE FRAME PART 6 OF 6, NEWD, CYCLE 3,CONTINUATION OF 2565."

Continuation of Program Number 2565

Keywords : REFERENCE FRAMES, HIPPARCOS, QUASARS

Proposers: Paul D Hemenway (PI; University Of Texas At Austin), N.Argue (The Observatories; England), C.Devegt (Hamburger Sternwarte; Fgr), R.Duncombe (University Of Texas At Austin), J.Hughes (U.S. Naval Observatory), D.Jauncey (C.S.I.R.O.; Australia), K.Johnston (U.S. Naval Research Lab), J.Kovalevsky (C.E.R.G.A.; France), J.Kristian (Caltech), J.Lestrade (Bureau De Longitude; France), M.Perryman (E.S.T.E.C.; Holland), R.Preston (Jet Propulsion Lab), B.Tapley (Univ Of Texas At Austin), C.Turon (Observatoire De Meudon; France), H.Walter (Anstronomische Recheninstitut; Fgr), G.White (C.S.I.R.O.; Australia)

Determination of a non-rotating Reference Frame is crucial to progress in many areas, including: Galactic motions, local (Oort's A and B) and global (R0) parameters derived from them, solar system motion discrepancies (Planet X); and in conjunction with the VLBI radio reference frame, the registration of radio and optical images at an accuracy well below the resolution limit of HST images (0.06 arcsec). The goal of the Program is to tie the HIPPARCOS and Extra- galactic Reference Frames together at the 0.0005 arcsec and 0.0005 arcsec/year level. The HST data will allow a deter- mination of the brightness distribution in the stellar and extragalactic objects observed and time dependent changes therein at the 0.001 arcsec/year level. The Program requires targets distributed over the whole sky to define a rigid Reference Frame. GTO observations will provide initial first epoch data and preliminary proper motions. The observations will consist of relative positions of Extra- galactic objects (EGOs) and HIPPARCOS stars, measured with the FGSs, or with the FGSs and PC together in "transit circle mode". The combination of HST and HIPPARCOS observations will provide

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Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --
4144- CT - "LINKING HIPPARCOS TO THE EXTRAGALACTIC REFERENCE FRAME PART 5 OF 6, NEWC, CYCLE 3,CONTINUATION OF 2565"
Continuation of Program Number 2565
Keywords : REFERENCE FRAMES, HIPPARCOS, QUASARS
Proposers: Paul D Hemenway (PI; University Of Texas At Austin), N.Argue (The Observatories; England), C.Devegt (Hamburger Sternwarte; Fgr), R.Duncombe (University Of Texas At Austin), J.Hughes (U.S. Naval Observatory), D.Jauncey (C.S.I.R.O.; Australia), K.Johnston (U.S. Naval Research Lab), J.Kovalevsky (C.E.R.G.A.; France), J.Kristian (Caltech), J.Lestrade (Bureau De Longitude; France), M.Perryman (E.S.T.E.C.; Holland), R.Preston (Jet Propulsion Lab), B.Tapley (Univ Of Texas At Austin), C.Turon (Observatoire De Meudon; France), H.Walter (Anstronomische Recheninstitut; Fgr), G.White (C.S.I.R.O.; Australia)

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Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --
4145- CT - "LINKING HIPPARCOS TO THE EXTRAGALACTIC REFERENCE FRAME PART 4 OF 6, NEWB, CYCLE 3,CONTINUATION OF 2565"
Continuation of Program Number 2565
Keywords : REFERENCE FRAMES, HIPPARCOS, QUASARS
Proposers: Paul D Hemenway (PI; University Of Texas At Austin), N.Argue (The Observatories; England), C.Devegt (Hamburger Sternwarte; Fgr), R.Duncombe (University Of Texas At Austin), J.Hughes (U.S. Naval Observatory), D.Jauncey (C.S.I.R.O.; Australia), K.Johnston (U.S. Naval Research Lab), J.Kovalevsky (C.E.R.G.A.; France), J.Kristian (Caltech), J.Lestrade (Bureau De Longitude; France), M.Perryman (E.S.T.E.C.; Holland), R.Preston (Jet Propulsion Lab), B.Tapley (Univ Of Texas At Austin), C.Turon (Observatoire De Meudon; France), H.Walter (Anstronomische Recheninstitut; Fgr), G.White (C.S.I.R.O.; Australia)

Determination of a non-rotating Reference Frame is crucial to progress in many areas, including: Galactic motions, local (Oort's A and B) and global (R0) parameters derived from them, solar system motion discrepancies (Planet X); and in conjunction with the VLBI radio reference frame, the registration of radio and optical images at an accuracy well below the resolution limit of HST images (0.06 arcsec). The goal of the Program is to tie the HIPPARCOS and Extra- galactic Reference Frames together at the 0.0005 arcsec and 0.0005 arcsec/year level. The HST data will allow a deter- mination of the brightness distribution in the stellar and extragalactic objects observed and time dependent changes therein at the 0.001 arcsec/year level. The Program requires targets distributed over the whole sky to define a rigid Reference Frame. GTO observations will provide initial first epoch data and preliminary proper motions. The observations will consist of relative positions of Extra- galactic objects (EGOs) and HIPPARCOS stars, measured with the FGSs, or with the FGSs and PC together in "transit circle mode". The combination of HST and HIPPARCOS observations will provide

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Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --
4146- CT - "LINKING HIPPARCOS TO THE EXTRAGALACTIC REFERENCE FRAME PART 3 OF 6, NEWA, CYCLE 3,CONTINUATION OF 2565."
Continuation of Program Number 2565
Keywords : REFERENCE FRAMES, HIPPARCOS, QUASARS
Proposers: Paul D Hemenway (PI; University Of Texas At Austin), N.Argue (The Observatories; England), C.Devegt (Hamburger Sternwarte; Fgr), R.Duncombe (University Of Texas At Austin), J.Hughes (U.S. Naval Observatory), D.Jauncey (C.S.I.R.O.; Australia), K.Johnston (U.S. Naval Research Lab), J.Kovalevsky (C.E.R.G.A.; France), J.Kristian (Caltech), J.Lestrade (Bureau De Longitude; France), M.Perryman (E.S.T.E.C.; Holland), R.Preston (Jet Propulsion Lab), B.Tapley (Univ Of Texas At Austin), C.Turon (Observatoire De Meudon; France), H.Walter (Anstronomische

Recheninstitut; Fgr), G.White (C.S.I.R.O.; Australia)

Determination of a non-rotating Reference Frame is crucial to progress in many areas, including: Galactic motions, local (Oort's A and B) and global (R0) parameters derived from them, solar system motion discrepancies (Planet X); and in conjunction with the VLBI radio reference frame, the registration of radio and optical images at an accuracy well below the resolution limit of HST images (0.06 arcsec). The goal of the Program is to tie the HIPPARCOS and Extra- galactic Reference Frames together at the 0.0005 arcsec and 0.0005 arcsec/year level. The HST data will allow a deter- mination of the brightness distribution in the stellar and extragalactic objects observed and time dependent changes therein at the 0.001 arcsec/year level. The Program requires targets distributed over the whole sky to define a rigid Reference Frame. GTO observations will provide initial first epoch data and preliminary proper motions. The observations will consist of relative positions of Extra- galactic objects (EGOs) and HIPPARCOS stars, measured with the FGSs, or with the FGSs and PC together in "transit circle mode". The combination of HST and HIPPARCOS observations will provide

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Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --

4147- CT - "LINKING HIPPARCOS TO THE EXTRAGALACTIC REFERENCE FRAME PART 2 OF 6, BRIGHT12-23, CYCLE 3,CONTINUATION OF 2565."

Continuation of Program Number 2565

Keywords : REFERENCE FRAMES, HIPPARCOS, QUASARS

Proposers: Paul D Hemenway (PI; University Of Texas At Austin), N.Argue (The Observatories; England), C.Devegt (Hamburger Sternwarte; Fgr), R.Duncombe (University Of Texas At Austin), J.Hughes (U.S. Naval Observatory), D.Jauncey (C.S.I.R.O.; Australia), K.Johnston (U.S. Naval Research Lab), J.Kovalevsky (C.E.R.G.A.; France), J.Kristian (Caltech), J.Lestrade (Bureau De Longitude; France), M.Perryman (E.S.T.E.C.; Holland), R.Preston (Jet Propulsion Lab), B.Tapley (Univ Of Texas At Austin), C.Turon (Observatoire De Meudon; France), H.Walter (Anstronomische Recheninstitut; Fgr), G.White (C.S.I.R.O.; Australia)

Determination of a non-rotating Reference Frame is crucial to progress in many areas, including: Galactic motions, local (Oort's A and B) and global (R0) parameters derived from them, solar system motion discrepancies (Planet X); and in conjunction with the VLBI radio reference frame, the registration of radio and optical images at an accuracy well below the resolution limit of HST images (0.06 arcsec). The goal of the Program is to tie the HIPPARCOS and Extra- galactic Reference Frames together at the 0.0005 arcsec and 0.0005 arcsec/year level. The HST data will allow a deter- mination of the brightness distribution in the stellar and extragalactic objects observed and time dependent changes therein at the 0.001 arcsec/year level. The Program requires targets distributed over the whole sky to define a rigid Reference Frame. GTO observations will provide initial first epoch data and preliminary proper motions. The observations will consist of relative positions of Extra- galactic objects (EGOs) and

HIPPARCOS stars, measured with the FGSs, or with the FGSs and PC together in "transit circle mode". The combination of HST and HIPPARCOS observations will provide

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Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --

4148- CT - "LINKING HIPPARCOS TO THE EXTRAGALACTIC REFERENCE FRAME PART 1 OF 6, BRIGHT0-11, CYCLE 3,CONTINUATION OF 2565."

Continuation of Program Number 2565

Keywords : REFERENCE FRAMES, HIPPARCOS, QUASARS

Proposers: Paul D Hemenway (PI; University Of Texas At Austin), N.Argue (The Observatories; England), C.Devegt (Hamburger Sternwarte; Fgr), R.Duncombe (University Of Texas At Austin), J.Hughes (U.S. Naval Observatory), D.Jauncey (C.S.I.R.O.; Australia), K.Johnston (U.S. Naval Research Lab), J.Kovalevsky (C.E.R.G.A.; France), J.Kristian (Caltech), J.Lestrade (Bureau De Longitude; France), M.Perryman (E.S.T.E.C.; Holland), R.Preston (Jet Propulsion Lab), B.Tapley (Univ Of Texas At Austin), C.Turon (Observatoire De Meudon; France), H.Walter (Anstronomische Recheninstitut; Fgr), G.White (C.S.I.R.O.; Australia)

Determination of a non-rotating Reference Frame is crucial to progress in many areas, including: Galactic motions, local (Oort's A and B) and global (R0) parameters derived from them, solar system motion discrepancies (Planet X); and in conjunction with the VLBI radio reference frame, the registration of radio and optical images at an accuracy well below the resolution limit of HST images (0.06 arcsec). The goal of the Program is to tie the HIPPARCOS and Extra- galactic Reference Frames together at the 0.0005 arcsec and 0.0005 arcsec/year level. The HST data will allow a deter- mination of the brightness distribution in the stellar and extragalactic objects observed and time dependent changes therein at the 0.001 arcsec/year level. The Program requires targets distributed over the whole sky to define a rigid Reference Frame. GTO observations will provide initial first epoch data and preliminary proper motions. The observations will consist of relative positions of Extra- galactic objects (EGOs) and HIPPARCOS stars, measured with the FGSs, or with the FGSs and PC together in "transit circle mode". The combination of HST and HIPPARCOS observations will provide

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Prop. Type: GO/DD

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --
4149- CT - "COMPOSITION OF GAS IN INDIVIDUAL INTERSTELLAR CLOUDS: FUTURE-CYCLE CONTINUATION OF GTO 1071"
Continuation of Program Number 1071
Keywords : INTERSTELLAR LINES
Proposers: Lyman Spitzer (PI; Princeton University), C.O'Dell (Rice University)

Column densities of interstellar atoms of 17 atomic species of 10 elements will be measured in the line-of-sight to 4 early-type stars in the galactic disk, using the Goddard High Resolution Spectrograph to obtain precise measures in the ultraviolet with the highest available spectral resolution. These data will be analyzed to determine relative abundances in the several individual clouds present along each line of sight, and thus to determine how the composition of the gas in such clouds and the various physical processes occurring vary with cloud parameters such as H column density, velocity, ionization level, and distance z from the galactic plane. This information should help to clarify the many physical processes occurring in interstellar gas. The program should also increase our understanding of the balance between formation and destruction of interstellar dust grains.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (EARLY EVOLUTION) --
4150- LT - "MASSES OF PRE-MAIN SEQUENCE BINARY STARS: FUTURE CYCLE CONTINUATION"
Keywords :
Proposers: Michal Simon (PI; State Univ. Of New York At Stony Brook), L.Taff (Space Telescope Science Institute)

There are still no pre-main sequence stars with reliably known masses. This represents a serious gap in our understanding of low-mass star formation. The goal of this long-term program is to measure the masses of pre-main sequence binaries selected from our survey (ref. 3) of the Taurus star forming region by IR lunar occultation and imaging. We propose to use the Fine Guide Sensors in the Transfer Function Mode to determine the apparent orbits of the binaries. Since the distance to the region is known, the apparent orbits will yield the total masses of the binaries.

Prop. Type: GO

STELLAR ASTROPHYSICS -- (ERUPTIVE BINARIES) --

4162- CT - "THE SYMBIOTIC PHENOMENA:CONTINUATION OF EARLY ACQ PT 2 "

Continuation of Program Number 2342

Keywords : INTERACTING BINARY, SYMBIOTIC STAR, ACCRETION

Proposers: A. G. Michalitsianos (PI; Nasa, Goddard), . (Stsci), R.Fahey (Nasa, Goddard Space Flight Center), M.Kafatos (George Mason University), H.Nussbaumer (Zurich Astronomy Institute; Switzerland)

Symbiotic stars are interacting binaries. The relevant interaction processes include mass expulsion from a common envelope between the two stars, collimated flows, accretion disk formation around the compact hot star, evolution of outbursts, as well as mass outflow leading to jet-like features with particularly intriguing characteristics. However, the nature of these systems and the physical processes that explain their behavior remain unsettled. Spectroscopy with HRS will decisively advance our knowledge of the kinematical and ionization structure of the central HII region that surrounds the binary. It is hoped that this will finally answer the controversial question concerning the nature of the hot object in symbiotics. High spatial resolution radio

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Prop. Type: GO

STELLAR ASTROPHYSICS -- (EARLY EVOLUTION) --

4163-LP - "FORMATION AND EVOLUTION OF SOLAR NEBULAE SURROUNDING PRE-MAIN SEQUENCE STARS: CYCLE 1 OBSERVATIONS"

Continuation of Program Number 2265

Keywords : CIRCUMSTELLAR DISKS; MASS LOSS;PMS STARS, T TAU STARS

Proposers: Stephen Strom (PI; Massachusetts, University Of), S.Beckwith (Cornell University), R.Brown (Stsci), B.Campbell (New Mexico, University Of), L.Carrasco (Mexico, Autonomous University Of; Mexico), S.Edwards (Smith College), G.Grasdalen (Wyoming, University Of), L.Hartmann (Cfa), D.Padgett (Massachusetts, University Of), S.Persson (Mt Wilson _Las Campanas Observatories), F.Shu (California, University Of, Berkeley), M.Simon (Suny, Stony Brook), T.Simon (Hawaii, University Of), R.Stachnik (Nasa, Washington), J.Stauffer (Nasa, Ames), F.Vrba (Us Naval Observatory)

This proposal requests time to bring the power of HST to bear on the problems of solar nebula formation and evolution. During Cycle 1, we plan to use the Planetary Camera to image the circumstellar environment of 3 nearby pre-main sequence stars in order to search for evidence of disks via light scattered earthward by dust embedded in circumstellar disks and investigate the morphology of energetic winds driven by these stars. Our longer term goals (Cycle 2 and beyond) are to image a much larger sample of pre-main sequence stars in order to: determine the frequency with which disks form around single and multiple stars; characterize the morphology of circumstellar disks for a sample of pre-main sequence stars spanning the time soon after stellar birth, to the epoch when disks become optically thin, perhaps following planet-building episodes; understand the degree of interaction between winds and circumstellar disks, estimate more accurate mass loss rates for PMS stars, and to assess thereby the effect of PMS star winds on the evolution of disks and the planet-forming environment.

Prop. Type: GO/DD

STELLAR ASTROPHYSICS -- (ERUPTIVE BINARIES) --

4164- CT - "INSTABILITIES IN ACCRETION DISCS AND THE OUTBURSTS OF DWARF NOVAE -- REPEAT FOR HOPR 57"

Continuation of Program Number 2380

Keywords : WHITE DWARF DWARF NOVA ACCRETION BOUNDARY LAYER INTER- ACTING BINARY

Proposers: Keith Horne (PI; Stsci), T.Marsh (Stsci)

We will use the HST with the FOS to observe eclipses of a dwarf nova at 5 epochs in the quiescent period between outbursts. From the eclipse data we will determine the secular evolution of the white dwarf, the accretion disc, and the bright spot. This evidence will be a clean test of the two competing theories for the instability which triggers dwarf nova outbursts. In the disc instability model the transition of the disc from a cool to hot state triggers the outburst, whereas in the red star instability model the cool binary companion transfers a short burst of material into the disc which then becomes brighter. During quiescence the disc instability model predicts an increasing accretion rate and hence an increasing ultraviolet flux, whereas the red star model predicts a decreasing accretion rate and ultraviolet flux. Therefore the variation of the ultraviolet flux with time will distinguish which of the two current models is correct. Only the HST is able to resolve the rapid variations seen in an eclipsing dwarf nova, and therefore determine the ultraviolet flux from the accretion disc. The observations that we propose will also probe the nature of the boundary layer between the disc and the white dwarf, a region too small and hot to be well constrained by any previous observations. In particular, we will measure the extent of heating of the white dwarf by the boundary layer, and the cooling

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Prop. Type: GO/DD

STELLAR ASTROPHYSICS -- (X-RAY BINARIES) --

4165 - "ASTROMETRY OF THE 4U1543-47 X-RAY TRANSIENT OPTICAL COUNTERPART"

Keywords : X-RAY TRANSIENTS, OPTICAL COUNTERPARTS ASTROMETRY

Proposers: Sergio A. Ilovaisky (PI; Observatoire De Haute-Provence; France), C.Chevalier (Observatoire De Haute-Provence; France), H.Pedersen (Copenhagen University Observatory; Danemark)

We propose to obtain relative WF/PC astrometry of the optical counterpart of the 4U1543-47 soft X-ray transient, currently in outburst. Ground-based observations made in 1989 during the quiescent state show that an apparently normal V=16.7 A-type star is located (within +/- 0.1 arc-sec) at the position of the V=14.6 image seen during outburst. While it is highly unlikely that the A star is the companion of the X-ray source, it appears nevertheless to be located at the same distance from us. Accurate relative astrometry between images obtained with the WF/PC during outburst and later, during quiescence, will allow us to find whether or not, on the basis of position alone, the A-star is somehow related to the X-ray source. If not, the images may allow us to discover the true optical counterpart of 4U1543-47.

Prop. Type: GO

STELLAR POPULATIONS -- (ASTROMETRY) --

4200- CT - "A CRITICAL TEST OF THE GALACTIC ESCAPE VELOCITY AT R(SUN): CYCLE 1 OBSERVATIONS; TRANS MODE ONLY"

Continuation of Program Number 4064

Keywords : GALACTIC ESCAPE VELOCITY, HIGH VELOCITY STARS, PARALLAXES, PROPER MOTIONS

Proposers: Darrell J. Macconnell (PI; Computer Sciences Corporation), W.Osborn (Central Michigan University)

We propose to measure the trigonometric parallaxes and proper motions of the three high-proper motion stars which Carney, Latham, and Laird (1988) identify as having the most extreme velocities known in the galactic rest frame. Using these stars, they conclude that the local value of the escape velocity, V(esc), is at least 500 k/s, and this leads them to draw other important conclusions regarding the distribution of mass in the galactic disk. However, their assigned distances, and hence the tangential velocities and V(esc) value, depend on uncertain photometric corrections and reddening estimates. The photometric distances they find are in the range 400-550 pc, so the parallaxes are expected to be of the order of 2 milliarcsec. If these distances are approximately correct, it will be possible to measure them at the 4-sigma level using an FGS on the HST. It will be of great interest if the parallaxes are smaller than the estimates of Carney, et al., since this would lead to a higher value for the escape velocity and a larger mass for the galaxy. Alternatively, if the parallaxes are found to be larger than they adopted, either V(esc) is considerably smaller than 500 k/s or these three stars are not the most app- ropriate for setting a limit on V(esc). NOTE added 16-Apr-1991: Three targets changed to two, G166-37 and G233-27. This is Cycle 1 POS mode only. NOTE added 09-Mar-1992: Target G233-27 dropped after TRANS obs. failed due to spoiler 4" away. New target, G16-25, was substituted and is included here.

Prop. Type: GO

GALAXIES _CLUSTERS -- (NEARBY GALAXIES) --
4206- CT - "IMAGING AND SPECTROSCOPY OF SUPER METAL POOR GALAXIES SPECTROSCOPY PART"

Continuation of Program Number 2416

Keywords : DWARF GALAXY, IRREGULAR GALAXY, NEARBY GALAXY, NEBULA, HII REGION

Proposers: Reginald J. Dufour (PI; Rice University), D.Clayton (Clemson University), K.Davidson (Minnesota, University Of), M.Mccall (York University; Canada), J.Roy (Laval University; Canada), G.Shields (Texas, University Of), E.Skillman (Minnesota, University Of), C.Wu (Computer Sciences Corporation)

We propose to obtain WF and FOC/48 imagery of one of the nearest of the super-metal-poor blue irregular galaxies known, GR8. The imagery will be obtained through wide band UV, B, V, R, and I filters and narrow-band filters isolating H-alpha and [OIII]5007. The wide-band imagery will be used to evaluate the massive star IMF, determination of the age distribution of groups of unresolved stars in the galaxies, and detect possible extended halo indicative of an old stellar population. The narrow band imagery will be used to identify the amount and spectral index of the ionizing radiation from OB stars, and detect supernova remnants, planetary nebulae, and emission-line stars. It is hoped that the results will enable us to evaluate the chemical and stellar evolutionary history of these relatively rare systems and their place in the larger picture of galaxy formation and evolution.

3.2 GTO PROGRAMS

ABSTRACT CATALOG FOR GTO PROPOSALS

KEY :

KP = Key Project
LP = Large Project
LT = Long Term Program
CT = Continuation Program
GTO/AST or AUG/AST or SAT/AST or ERO/AST = GTO Astrometry Team Programs
GTO/FOC or AUG/FOC or SAT/FOC or ERO/FOC = GTO FOC Team Programs
GTO/FOS or AUG/FOS or SAT/FOS or ERO/FOS = GTO FOS Team Programs
GTO/HRS or AUG/HRS or SAT/HRS or ERO/HRS = GTO GHRS Team Programs
GTO/HSP or AUG/HSP or SAT/HSP or ERO/HSP = GTO HSP Team Programs
GTO/WFC or AUG/WFC or SAT/WFC or ERO/WFC = GTO WF/PC Team Programs
GTO/OS or AUG/OS or SAT/OS or ERO/OS = GTO Observatory Scientist Programs

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Prop. Type: GTO/AST

STELLAR ASTROPHYSICS -- (ASTROMETRY) --

1003- LT - "ASTROMETRIC COMPANION SEARCH "

Keywords : LOW-MASS COMPANIONS; 'UNSEEN' COMPANIONS; ASTROMETRIC COMPANIONS; STELLAR PERTURBATONS; EXTRASOLAR PLANETS

Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

One of groundbased, long-focus photographic astrometry's most challenging and most challenged research activities has been the search for "unseen" companions to nearby stars based upon analyses of perturbations in their observed proper motions. We propose to examine with FGS in the trans/moving mode six late-type dwarf stars claimed to have low-mass companions of magnitudes and angular separations such as to make direct detection by FGS scans feasible. Any direct detection would not only extend importantly our knowledge on stars of very low mass and luminosity, but would also provide proof of the validity of a classical observational technique widely used in searches for other planetary systems.

Prop. Type: GTO/AST

STELLAR ASTROPHYSICS -- (ASTROMETRY) --
1004- LT - "DUPLICITY AMONG HYADES STARS "
Keywords : DUPLICITY; BINARIES; MULTIPLE STARS; HYADES
Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

We propose to use FGS in the trans/moving mode to examine, at high angular resolution, a representative sample of probable Hyades cluster members in an effort to establish the incidence of duplicity among Hyades stars. The frequency of multiple stars in stellar systems and populations represents a significant aspect of star formation and stellar evolution. Among Hyades stars brighter than V ~ 12.0, companions should be observable to Delta m ~ 2. Binaries of small Delta m should be readily detectable at V ~ 15. Any multiple stars found will be reobserved in an effort to detect orbital motion.

Prop. Type: GTO/AST

STELLAR POPULATIONS -- (ASTROMETRY) --
1009- LT - "PARALLAXES OF HYADES CLUSTER MEMBERS "
Keywords : HYADES, DISTANCE SCALE, POP I, PROPER MOTIONS
Proposers: William H. Jefferys (PI; University Of Texas), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

The goal of this project is to determine trigonometric parall Hyades cluster members and to define the Population I zero ag The ZAMS is used to determine the distances to open clusters the zero point of the Cepheid Period-Luminosity relationship, fundamental distance indicator in the universe. A secondary g project is to search for new Hyades cluster members which mig the 25th magnitude, or M(v)=22. This part of the project will through coordinated parallel observations with the WFC to det motions of very faint stars over a one year base line. FGS parallax observations of the thirteen Hyades members shou in the distance modulus of the Hyades Cluster good to approxi This accuracy should be sufficient to eliminate the Hyades as in determining the galactic distance scale.

Prop. Type: GTO/AST

SOLAR SYSTEM -- (

1010 - "GRAVITATIONAL DEFLECTION OF LIGHT (BY JUPITER) "

Keywords : GRAVITATION; RELATIVITY

Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of), A.Whipple (Texas, University Of)

We propose to measure the gravitational deflection of light by Jupiter. This will extend this classical test of general relativity to a mass regime three orders of magnitude lower than previously possible, with an expected accuracy of a few percent.

Prop. Type: GTO/AST

GALAXIES _CLUSTERS -- (

1012 - "HIGH-RESOLUTION SURFACE PHOTOMETRY OF NGC 4314 : CYCLE 0 "

Keywords : GALAXIES, BARRED GALAXIES, PECULIAR GALAXIES, NUCLEAR RINGS

Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

We propose to obtain ST WF/PC surface photometry of NGC 4314. NGC 4314 exhibits anomalous nuclear activity indicative of on-going star formation. Multicolor surface photometry with 0.1 to 0.4 arcsec resolution will afford an opportunity to explore the global interrelationships between gas clouds, dust, star formation, and stellar populations with detail never before obtained. The expected maximum resolution for for NGC 4314 is 10 parsecs. While most of the data will be secured after the refurb mission with WFPC II, these early I-band exposures will allow studies of structures.

Prop. Type: GTO/AST

QUASARS _AGN -- (ASTROMETRY) --

1013- LT - "EXTRAGALACTIC ASTROMETRY AND ASTROPHYSICS - AST/PC PART ONE OF FIVE - PROPOSAL 1013 (WFPC OBSERVATIONS)"

Keywords : QUASARS, BL LACS, AGNS, HIPPARCOS, REFERENCE FRAMES FUNDAMENTAL ASTROMETRY, QUASAR INTERNAL MOTION

Proposers: William H. Jefferys (PI; University Of Texas At Austin), J.Westphal (California Institute Of Technology)

The goal of this project is the determination of the rotation of the HIPPARCOS Reference Frame with respect to an Extragalactic Frame. The program will derive the internal optical motions of extragalactic objects

(QSOs, BL Lacs, AGNs) at the +/- 0.002 arcsecond per year level of accuracy. 160 SAO stars within the FGSFOV of all selected QSOs, BL Lacs, and AGNs are included in the HIPPARCOS catalog. Ground based speckle observations have been used to pre-detect doubles which would cause problems for the FGS. The FGSs will measure the relative positions of SAO stars with respect to objects brighter than 17 mag. Fainter objects will be observed with the WFPC and FGS together. The objects have been selected in conjunction with the recommendations of the IAU working group in Radio/Optical Identifications, and have been selected for compactness and intensity. Most of the objects are recommended as ultimate position calibrators.

Prop. Type: GTO/AST

SOLAR SYSTEM -- (MINOR PLANETS) --

1014- CT - "OBSERVATIONS OF MINOR PLANETS AT CROSSING POINTS FOR COORDINATE SYSTEM STUDIES (OMP)"

Continuation of Program Number 1014

Keywords : FUNDAMENTAL ASTROMETRY, MINOR PLANET DYNAMICS RELATIVITY, HIPPARCOS

Proposers: William H. Jefferys (PI; University Of Texas At Austin), G.Benedict (University Of Texas At Austin), R.Duncombe (University Of Texas At Austin), O.Franz (Lowell Observatory), L.Fredrick (University Of Virginia), P.Hemenway (University Of Texas At Austin), P.Shelus (University Of Texas At Austin)

The goal of this project is to determine systematic corrections to the Fundamental Coordinate System and to aid in the formation of a dynamical basis for future revisions of the System. Observations of relative positions are intrinsically more accurate than absolute positions, because of the global nature of the latter. Crossing points provide a means of bringing the relative positional accuracy to bear on global problems. The technique is being applied to small minor planets to provide a more accurate coordinate system, to study small effects in the gravitational field of the solar system, and to look for differences between a dynamical (inertial) and extragalactic reference frame. The FGS accuracy of 0.002 per observation is expected to be an order of magnitude better than a comparable ground based measurement. Some benefits to accrue from these studies are (a) improved galactic dynamics (b) an improved basis for absolute parallaxes, and (c) the determination of the rotation of the HIPPARCOS reference frame with respect to a dynamical frame directly.

Prop. Type: GTO/OS

QUASARS _AGN -- (

1018 - "IMAGING AND SPECTROSCOPY OF A COMPLETE SAMPLE OF BRIGHT NEARBY QUASARS: II. SPECTROSCOPY: CYCLE 2 BASELINE"

Keywords : QUASAR, SPECTROSCOPY, EMISSION LINES, ABSORPTION LINES, INTERGALACTIC, HOST GALAXY

Proposers: John N. Bahcall (PI; Institute For Advanced Study), R.Green (Noao, Kitt Peak National Observatory), D.Schneider (Institute For Advanced Study)

FOS spectra will be obtained for seven optically bright PG quasars [3C 273, PG 0953+415, PG 1116+215, PKS 1302-102, PG 1700+518, GQ Com, and 3C 249.1] with Mb </= -25.0 mag and z </= 0.35, as well as V </= 15.7 mag. The spectra will be analyzed for both absorption and emission features. ST observations are required because the spectral features of greatest interest in these small redshift objects are in the far ultraviolet, inaccessible from the ground.

Prop. Type: GTO/OS

STELLAR POPULATIONS -- (

1019 - "THE STELLAR DENSITY DISTRIBUTIONS IN THE CENTERS OF GALACTIC GLOBULAR CLUSTERS"

Keywords : GLOBULAR CLUSTER, POPULATION II, BLACK HOLE

Proposers: John N. Bahcall (PI; Institute For Advanced Study)

Short exposures will be made of all galactic globular clusters with distance moduli less than 15.5 mag and galactic latitude above or below 15 degrees. A search will be made for cusps in the stellar density distributions and the colors will be measured for the brightest stars in the cores of the clusters. ST observations are required in order to reach the innermost regions of the clusters with sufficient resolution to separate individual stars.

Prop. Type: GTO/OS

QUASARS _AGN -- (

1022 - "DO GALAXIES PRODUCE QUASAR ABSORPTION LINES? (CYCLE 0) "

Keywords : QUASAR, SPECTROSCOPY, ABSORPTION LINE, GALAXY, GRAVITATIONAL LENS

Proposers: John N. Bahcall (PI; Institute For Advanced Study), K.Ratnatunga (Institute For Advanced Study)

SPECTRA WILL BE OBTAINED WITH THE FOS FOR A NUMBER OF QUASARS SMALL ANGULAR SEPARATION ON THE SKY FROM GALAXIES OR GALAXY V MARK 205, 3C 232, PKS 2020-370, THE GRAVITATIONALLY LENSED QU OBJECTS BEHIND THE BOOTES GALAXY VOID, US 1329 (BEHIND THE BA GALAXY VOID), AND 5C 03.44 (BEHIND M 31). THE SPECTRA WILL BE HYPOTHESIS THAT SOME METALLIC QUASAR ABSORPTION SYSTEMS ARE

C LARGE GALAXY HALOS OR DISKS. WF/PC IMAGES WILL ALSO BE OBTAIN GALAXY, 2237+0305, IN ORDER TO LOCATE ACCURATELY THE QUASAR P MEASURE THE SURFACE BRIGHTNESS OF THE INNER REGION OF THE GAL OBSERVATIONS ARE REQUIRED BECAUSE, FOR THE SMALL REDSHIFTS AT WITH LARGE ANGULAR SIZE ARE FOUND, THE RESONANT ATOMIC LINES ULTRAVIOLET.

Prop. Type: GTO/OS

QUASARS _AGN -- (

1025 - "EVOLUTION OF LYMAN-ALPHA AND CIV ABSORPTON SYSTEMS "

Keywords : QUASAR, SPECTROSCOPY, ABSORPTION LINES, EMISSION LINES, EVOLUTION

Proposers: John N. Bahcall (PI; Institute For Advanced Study), R.Green (Noao, Kitt Peak National Observatory)

The evolution of Lyman-alpha and CIV absorption line systems in quasar spectra will be investigated using 21 optically bright quasars with a wide range of redshifts; the wavelength at which the Lyman cutoff appears will also be determined. All of the prominent emission and absorption lines will be measured. ST observations are required because the spectral features of interest are in the far ultraviolet and are inaccessible from the ground.

Prop. Type: GTO/FOS

QUASARS _AGN -- (

1026 - "UV SPECTRA OF LOW-REDSHIFT-QSOS (FOS-1) -- CYCLE 0 "

Keywords : UV SPECTRA, LOW-Z QSOS, EMISSION LINES, LYMAN ALPHA ABSORPTIONS, NEARBY GALAXIES, EVOLUTION.

Proposers: E. Margaret Burbidge (PI; Uc, San Diego), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Three main scientific goals are to determine the emission-line properties in the UV of low-z QSOs, to look for L alpha -forest absorption shortward of L alpha emission to examine evolutionary effects, and to observe L alpha absorption in QSOs which have known metallic-line narrow absorption-line systems at z(absorption) << z(emission). There are objects of special interest included in the sample (e.g. 1548 + 114 A, B).

Prop. Type: GTO/FOS

QUASARS _AGN -- (
1027 - "UV SPECTRA OF QSOS WITH Z > 3.1: CYCLE 0 OBSERVATIONS "
Keywords : HIGH REDSHIFT QSOS; HELIUM, INTERGALACTIC HELIUM.
Proposers: E. Margaret Burbidge (PI; Uc, San Diego), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Observe for the first time the extreme UV rest spectrum of QSOs with z > 3.1, to examine HeI and HeII in absorption and/or emission; perform Gunn-Peterson test for smooth intergalactic helium, determine and compare density of Lyman alpha forests of narrow absorptions per unit z; look for correlations of strongest narrow Lyman alpha absorptions with narrow helium absorptions; look for associated or intervening galaxies.

Prop. Type: GTO/FOS

QUASARS _AGN -- (GTO/FOS) --
1028- CT - "SPECTRA AT LAMBDA <3000 ANGSTROMS FOR QSOS WITH Z~2 (FOS 3): CYCLE 3 OBSERVATIONS"
Continuation of Program Number 1028
Keywords :
Proposers: E. Margaret Burbidge (PI; University Of California, San Diego), R.Allen (University Of Arizona), J.Angel (University Of Arizona), F.Bartko (Unaffiliated), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute), B.Margon (University Of Washington)

Scientific goals are to determine and compare the density and density evolution of Lyman alpha forests of narrow absorptions per unit z over an extended range of Lambda < Lambda (L alpha emission). We will also study known metal line systems in these objects at z(absorption) << z(emission), and we shall look for intervening galaxies. One of these objects is one of the brightest BAL QSOs. In this object we will study the physical conditions in the absorbing object with observations of high ionization UV lines. We will also detect presently unobserved high ionization emission lines. This data set will yield high quality absorption line data for studies of specific absorption line systems and an independent sample for studies of absorption line evolution.

Prop. Type: GTO/FOS

QUASARS _AGN -- (

1029 - "SPECTROPOLARIMETRY OF QSOS, BLAZARS AND AGN -- CYCLE 0 "
Keywords : QSOS, BLAZARS, SEYFERT, AGN, POLARIZATION
Proposers: J. Roger P Angel (PI; University Of Arizona), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Measurement of the spectrum of polarization has proven to be a powerful tool in deciphering emission processes and source geometry in AGN. This program will extend these observations into the UV below 3000A.

Prop. Type: GTO/FOS

QUASARS _AGN -- (

1033 - "SEARCH FOR MISDIRECTED BL LAC OBJECTS -- CYCLE 0 "
Keywords : BL LAC OBJECTS, RELATIVISTIC BEAMS, RADIO GALAXIES
Proposers: J. Roger P Angel (PI; University Of Arizona), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (University Of Washington)

FOC images will be obtained in the UV and visible of galaxies whose isotropic properties are the same as those of BL Lac objects. A search will be made for weak unresolved UV nuclei that would be expected if the relativistic beaming theory of normal BL Lac emission is correct. Candidate nuclei found this way will be studied with the FOS.

Prop. Type: GTO/FOS

QUASARS _AGN -- (

1034 - "M87'S JET, NUCLEUS, AND HOT CORONA (FOS NO. 12): CYCLE 0 OBSERVATIONS"
Keywords : JET, CORONA, M87, IONIZED GAS
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

WF/PC narrow band images of M87 will be used to isolate emission line regions near the nucleus and jet. FOS spectra of these clouds will be used to i) map the velocity field near the nucleus, ii) understand physical conditions and ionization mechanisms in these clouds, and iii) measure chemical composition of the clouds. FOS spectra of the stellar nucleus and synchotron knots in the jet will be used to establish long-base-line spectral indices and to look for spectral features. Long exposure ultraviolet spectra of the nucleus and jet will be used to look for absorption lines from M87's hot corona.

Prop. Type: GTO/FOS

QUASARS _AGN -- (GTO/FOS) --

1035- CT - "BL LAC OBJECTS: AO 0235 + 164: CYCLE 3 AND 9 OBSERVATIONS"

Continuation of Program Number 1035

Keywords :

Proposers: E. Margaret Burbidge (PI; University Of California, San Diego), R.Allen (University Of Arizona), J.Angel (University Of Arizona), F.Bartko (Unaffiliated), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute), B.Margon (University Of Washington)

AO0235+164 is an unusual case of a BL Lac object with very weak emission lines, 2 metallic line absorptions at z = 0.524, 0.851, and variable 21-cm absorption at z = 0.524. It has a faint emission-line companion 2 arc sec south with z = 0.524 and another companion 1.3 arc sec East. Special goals for it will be examination of L alpha absorption at both absorption redshifts, search for UV emission lines, search for luminosity between AO0235+164 and the (variable?) companion, or around AO itself, and study of all intervening objects. UV spectropolarimetry of all objects is planned in another program.

Prop. Type: GTO/FOS

QUASARS _AGN -- (

1036 - "IMAGING AND SPECTROPHOTOMETRY OF SEYFERT NUCLEI (FOS 14): CYCLE 0 OBSERVATIONS"

Keywords : SEYFERT, AGN, IONIZED GAS, NUCLEUS, NARROW LINE REGION, BROAD LINE REGION

Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

WF/PC narrow band images will be used to isolate clouds near the nucleus and to look for organized structure such as disks, bubbles, and jets. FOS spectrophotometry from 1200A to 7000A will be used to establish density, temperature, chemical composition, ionization mechanisms, and reddening in the emission regions near the nucleus. Line profiles and radial velocities will be used to investigate broadening mechanisms near the nucleus such as turbulence, gas flows, and rotation. Small aperture FOS spectra of the nuclei will be used to separate the broad line region from the narrow line region. The spectra will be used to investigate physical conditions and gas dynamics in the broad line region. Absorption lines in the nuclear spectra will be used to measure the amount and distribution of gas along the line of sight through the parent galaxy.

Prop. Type: GTO/FOS

QUASARS _AGN -- (
1038 - "IMAGING AND SPECTROPHOTOMETRY OF NUCLEAR ACTIVITY IN LINERS (FOS 15): CYCLE 0 OBSERVATIONS"
Keywords : LINER, AGN, IONIZED GAS, NUCLEUS
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

WF/PC narrow band images will be used to isolate ionized gas clouds near the nuclei and to look for organized structure such as disks, bubbles and jets. FOS spectrophotometry from 1200A to 7000A will be used to establish density, temperatures, chemical composition, ionization mechanisms, and reddening in the emission regions near the nucleus. Line profiles and radial velocities will be used to investigate broadening mechanisms such as turbulence, gas flows, and rotation. Small aperture spectra of the nucleus will be used to look for a photoionizing continuum and for line broadening in the nucleus, and will be used to establish physical conditions and dynamics of the nuclear gas. UV absorption lines will be searched for in the nuclear continuum in order to measure the amount and distribution of gas along the line-of-sight through the parent galaxy.

Prop. Type: GTO/FOS

QUASARS _AGN -- (GTO/FOS) --
1039 - "UV AND OPTICAL SPECTROSCOPY AND IMAGING OF THE COMPLEX OBJECT 3C 303: CYCLE 9 OBSERVATIONS"
Keywords : RADIO GALAXY, JET, SYNCHROTRON, ACTIVE NUCLEUS
Proposers: E. Margaret Burbidge (PI; Uc, San Diego), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Interaction between high-energy electrons and ambient cluster gas may produce faint optical or UV radiation. A good case, demanding the spatial resolution of ST and the UV capability of the FOS, is 3C 303, a very complex radio/optical object with jets, surrounding knots, and a candidate optical synchrotron emission patch.

Prop. Type: GTO/FOS

GALAXIES _CLUSTERS -- (

1040 - "VELOCITY DISPERSIONS IN THE NUCLEI OF GIANT ELLIPTICALS (FOS 17): FUTURE-CYCLE CONTINUATION"

Keywords : GALAXIES,VELOCITY DISPERSION,ROTATION,NUCLEUS STELLAR POPULATION

Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

The FOS will be used with small apertures to map the stellar velocity dispersion and rotation in the central 1" of NGC4486, NGC4472 and NGC6251. The velocity dispersion maps will be used to discriminate between the large M/Ls required by massive black holes, velocity anisotropy, and isothermal velocity distributions. Line strengths will be used to measure changes in the stellar population in the central 1".

Prop. Type: GTO/FOS

GALAXIES _CLUSTERS -- (

1041 - "THE NUCLEUS OF NORMAL AND STARBURST GALAXIES (FOS 20): CYCLE 0 OBSERVATIONS"

Keywords : GALACTIC NUCLEUS

Proposers: Ralph Bohlin (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Try to understand the energies of normal galactic nuclei. Are the main sources of ionizing radiation nonthermal, or due to a blue stellar population? High spatial resolution of ST is essential to this problem; FOS spectra can distinguish between a population of hot young stars or HB stars. Use the 0.3" aperture at any central point sources and off nucleus at the appropriate spot determined from WFPC data. Choose this spot within 1", along the major axis in accord with the techniques of FOS program 24, "Dynamics near Cores of Normal Galaxies."

Prop. Type: GTO/FOS

QUASARS _AGN -- (
1043 - "SEARCH FOR EXTENDED GALACTIC HALOS (FOS 23): CYCLE 2 OBSERVATIONS"
Keywords : GALACTIC HALOS, QUASAR
Proposers: Ralph Bohlin (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Use QSOs projected close to nearby galaxies to search for halos sufficiently extended to explain the observed statistics of QSO absorption line spectra. Different candidate galaxies have been chosen, including some known to have extended 21 cm halos, galaxies in and out of clusters, etc. Galaxies are chosen with z>0.001 where possible, so that local Lyman alpha absorption can be resolved from a galaxian column density of 2E19 of HI in our R=1200 mode. This is a UV specific problem that requires ST collecting area. A positive detection will produce a point on the rotation curve far into the galaxy halo, as well as crude information on the physical conditions of the halo gas. Each spectrum will also contain information on the gas distribution of our galaxy.

Prop. Type: GTO/FOS

GALAXIES _CLUSTERS -- (
1044 - "STELLAR AND GAS DYNAMICS IN NORMAL GALAXIES (FOS 24): CYCLE 0 OBSERVATIONS"
Keywords : GALAXIES, STELLAR DYNAMICS, IONIZED GAS, SUPERNOVAE
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applies Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

The FOS will be used with small apertures to map the stellar velocity dispersion and rotation in the central 1" of NGC221 (M32), NGC224 (M31), and NGC3031 (M81). The velocity disperions and rotation curves will be used to model the nuclear dynamics and to measure nuclear M/Ls. Line strengths will be use to measure changes in the stellar populations in the central 1". WF/PC pictures will be used to isolate nuclear emission line regions in M31 and M81. FOS spectra of the regions will be used to measure the physical characteristics, ionization mechanisms, and dynamics of the clouds. A special search will be made for the remnant of the supernova S-And (1885). FOS spectra will be taken of any candidate nebulosity.

Prop. Type: GTO/FOS

GALAXIES CLUSTERS -- (DISTANT GALAXIES) --
1045 - "SEARCH FOR PRIMEVAL GALAXIES (FOS 25): FUTURE-CYCLE CONTINUATION"
Keywords : HIGH REDSHIFT QUASARS, GALAXIES-EVOLUTION
Proposers: Arthur F. Davidsen (PI; Johns Hopkins University), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corp.), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

The purpose of this program is to locate and obtain spectra of several primeval galaxies (i.e., galaxies at very high redshifts). The method employed is to obtain deep WF/PC exposures of the regions near known high redshift quasars and search for faint, extended objects, including anything associated with the quasars themselves. Out of the three WF/PC fields, the three brightest extended objects will be chosen for follow-up with the FOS. Depending on the magnitudes of the objects, long integrations with G650L or the prism will be used to compare the spectral energy distributions of the primeval galaxies to lower redshift objects to study the evolution of galaxies.

Prop. Type: GTO/FOS

INTERSTELLAR MEDIUM -- (
1046 - "IMAGING AND UV SPECTROPHOTOMETRY OF LOCAL GROUP PLANETARY NEBULAE (FOS 26) -- CYCLE 0"
Keywords : NEBULA, PLANETARIES, CENTRAL STARS, GALAXIES, K648
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

WF/PC interference filter pictures will be used to resolve the shells of planetary nebulae in the LMC and to resolve the shell of K648 in M15. The angular diameters of the shells will be combined with echelle expansion velocities to derive the ages of nebulae. Ultraviolet spectra of the central stars will be used to derive the stars' effective temperatures and magnitudes, with objective of placing the stars on evolutionary tracks in an M-Teff diagram. UV spectra of the LMC nebulae, K648, and the brightest nebula in M32, NGC205, and NGC185 will be used to derive chemical compositions and physical conditions in the nebulae.

Prop. Type: GTO/FOS

INTERSTELLAR MEDIUM -- (SN _SNR) --
1048 - "SUPERNOVA REMNANTS AND NUCLEOSYNTHESIS (FOS 30) -- CYCLE 0 "
Keywords : SUPERNOVA REMNANTS, NUCLEOSYNTHESIS
Proposers: Arthur F. Davidsen (PI; Johns Hopkins University), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corp.), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

UV and optical spectra of six supernova remnants (SNRs) will be used to study a number of problems related to abundances, grain destruction, interstellar medium properties and physical conditions in SNR shocks. Representatives of three of the main classes of SNRs (Crab-nebula like, Balmer-line and "normal") will be studied in the LMC, where reasonably low reddening permits UV observations. Two SNRs in M33 will be observed to study abundances and abundance gradients of elements not readily available from optical spectra and that are too faint for IUE. An oxygen-rich SNR in NGC 4449 will be observed, taking advantage of the small FOS slits to isolate the SNR from surrounding H II emission.

Prop. Type: GTO/FOS

STELLAR ASTROPHYSICS -- (
1049 - "SPECTROPOLARIMETRY OF MAGNETIC WHITE DWARFS -- CYCLE 1 "
Keywords : WHITE DWARFS, HIGH MAGNETIC FIELDS
Proposers: J. Roger P Angel (PI; University Of Arizona), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (University Of Washington)

Spectropolarimetry and spectrophotometry will be used to study the ultraviolet Zeeman spectra of magnetic white dwarfs with fields in excess of 20 MG.

Prop. Type: GTO/FOS

STELLAR ASTROPHYSICS -- (

1050 - "SPECTROPHOTOMETRY OF COOL WHITE DWARFS "

Keywords : COOL WHITE DWARFS

Proposers: J. Roger P Angel (PI; University Of Arizona), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (University Of Washington)

Ultraviolet spectrophotometry will be used to determine whether the ultraviolet blanketing of the coolest DA, DC and DK degenerate stars differ due to the presence of molecular hydrogen and/or heavy metallic elements and/or carbon and whether the coolest DC-DK stars have hydrogen-rich atmospheres. The second question may hold implications for the apparent "cut-off" in the white dwarf luminosity function at Log L/L(sun) = -4, the disk star formation history and age.

Prop. Type: GTO/FOS

STELLAR ASTROPHYSICS -- (

1051 - "MASS EXCHANGE BINARIES (FOS 34) -- CYCLE 0 "

Keywords : X-RAY STAR

Proposers: Bruce Margon (PI; Washington, University Of), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation)

FOS UV spectra will be used to probe the effect of ionizing radiation from the compact star on the atmosphere of the normal companion, gaining information on the unobservable soft X-ray spectrum of the system which may, in some cases, dominate the energy budget. The FOS time resolved mode permits data also to be obtained as a function of pulse phase for X-ray pulsars, especially in the UV, where the strong resonance lines are available, and the FOS polarimeter will be used to examine the orbital phase dependence of polarization in these lines in the polars, providing new data on the complex structure of the accretion column.

Prop. Type: GTO/FOS

STELLAR POPULATIONS -- (
1052 - "GLOBULAR CLUSTER CORE STRUCTURE AND DYNAMICS (FOS 36) -- CYCLE 0 "
Keywords : GLOBULAR CLUSTER
Proposers: Ralph Bohlin (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of), L.Spitzer Jr. (Princeton University)

Obtain data on the stellar populations in the central cores of globular clusters. Clusters with and without central unresolved cusps, and with and without central X-ray sources will be observed. Spectra will be obtained at the center of the UV brightness, and at a distance within about one core radius. We might expect these spectra to differ; massive objects formed in collisions may produce unexpected spectral features, as well as relatively intense UV radiation in the central core.

Prop. Type: GTO/FOS

STELLAR ASTROPHYSICS -- (
1053- LT - "BINARIES IN GLOBULAR CLUSTERS (FOS 37) -- CYCLE 0 "
Keywords : X-RAY STAR, NOVA, GLOBULAR CLUSTER, NEUTRON STAR
Proposers: Bruce Margon (PI; Washington, University Of), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation)

Imaging and spectroscopy will be used to probe the nature of the luminous, central X-ray burst sources; to attempt optical identifications of the lower luminosity X-ray sources removed from the cores (and thus to verify the conjecture that they are related to CVs); and to attempt to recover the two historical novae seen in clusters (possibly resulting in expansion parallaxes for the clusters).

Prop. Type: GTO/OS

GALAXIES CLUSTERS -- (NUCLEI) --
1055 - "STUDIES OF THE 'NORMAL' SPIRAL M81 -- CYCLE 0 "
Keywords : SPIRAL GALAXY, GALACTIC NUCLEII
Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West), I.King (Uc, Berkeley)

M81 is a very nearby spiral galaxy with an extremely compact nucleus and weak Seyfert like activity. Studies with the FOC will provide unprecedented resolution in the nuclear regions. Imaging at f/96 and spectroscopy at f/48 are proposed to study both the gas and the stars in the nuclear region.

Prop. Type: GTO/OS

GALAXIES CLUSTERS -- (NUCLEI) --
1056 - "STUDIES OF SPIRAL NUCLEI "
Keywords : GALAXIES, SPIRAL
Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West), J.Deharveng (Marseille Observatory; France)

The high resolution of the FOC f/96 imaging mode will be used to study the nuclear regions of several nearby spiral galaxies. A first image in the UV continuum will be used to see if there is a nuclear condensation which would merit further study either spectroscopically or at a higher spatial resolution. The major objective is to discover heretofore unknown phenomena in the nuclei on physical scales which cannot be reached from the ground.

Prop. Type: GTO/OS

GALAXIES CLUSTERS -- (NUCLEI) --
1057 - "IMAGING AND SPECTROSCOPY OF ELLIPTICAL GALAXIES -- CYCLE 0 "
Keywords : GALAXIES, ELLIPTICAL; ASTROMETRY
Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West), M.Disney (University College, Cardiff; United Kingdom), I.King (Uc, Berkeley), C.Mackay (Cambridge University; United Kingdom)

This proposal has several objectives. First, the imaging data will be used to determine the precise positions of the centers of the galaxies, to see if the central region is bright enough to do long slit spectroscopy with the FOC f/48 spectrograph, and finally to study the radial intensity and color profile in the spectral region between 2200A and 4500A. In addition, f/288 data will be obtained in those few cases where it is warranted by the f/96 exposures. The spectroscopy will be attempted only in the cases where the central region is bright enough to determine a good velocity dispersion.

Prop. Type: GTO/OS

QUASARS AGN -- (GAS) --

1058 - "OPTICAL EMISSION IN DOUBLE RADIO GALAXY LOBES -- CYCLE 1 "

Keywords : RADIO GALAXIES

Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West), F.Macchetto (Space Telescope Science Institute), C.Mackay (Cambridge University; United Kingdom), G.Miley (Space Telescope Science Institute)

Radio hot spots associated with radio galaxies will be studied either to learn about the detailed optical morphology of optical emission already found in the vicinity of the radio emission or to search for new regions where optical emission can be seen. The observations proposed here are of double radio galaxies with compact unresolved components (at 3C resolution). Objects with known emission will be searched using the PC.

Prop. Type: GTO/OS

QUASARS AGN -- (

1059 - "GRAVITATIONAL LENSES "

Keywords : GRAVITATIONAL LENSES

Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West), J.Schneider (Meudon Observatory; France), H.Sol (Meudon Observatory; France)

We intend to detect new features in gravitationally lensed QSO's. In particular, we will look for the predicted extra images, optical counter-parts to VLA and VLBI jets and if possible at the morphology of the deflecting mass. Quantitative knowledge of these is necessary for the astrophysical use of the phenomenon.

Prop. Type: GTO/OS

STELLAR ASTROPHYSICS -- (SUBLUMINOUS STARS) --

1061 - "BINARY PULSAR PSR1913+16 IMAGING "

Keywords : PULSARS, ASTROMETRY, GRAVITATIONAL RADIATION

Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West)

A candidate star for the binary pulsar has previously been identified but the precision of the astrometric measurement needs to be improved in order to finally put to rest the question of whether or not this object lies at the radio position. A single 10 minute PC image in the R band will provide the initial data to determine if it is worth using the FGS to get results at the 2 milliarcsec level of precision.

6-3

Prop. Type: GTO/OS

SOLAR SYSTEM -- (EXTRASOLAR PLANETS) --

1062 - "A PHOTOMETRIC SEARCH FOR PLANETS OF NEARBY STARS; GTO PROPOSAL 1062"
Keywords : PHOTOMETRIC EXTRA SOLAR PLANETS, PESP GTO PROPOSAL 1062
Proposers: William G Fastie (PI; Johns Hopkins University), J.Caldwell (York University; Canada), D.Schroeder (Beloit College)

The proposed research is a search for planets of nearby stars. The technique involves use of the Planetary Camera with narrow and wide band pass filters to photometrically measure the presence of resolved dark companions. The exposures are calculated to provide 70000 electrons per pixel at 1.2 arcsec from the target stars. Multiple exposures will be required.

Prop. Type: GTO/OS

STELLAR ASTROPHYSICS -- (HOT STARS) --

1064- CT - "BORON IN MAIN SEQUENCE STARS:CYCLE 3 OBSERVATIONS "
Continuation of Program Number 1064
Keywords : NUCLEOSYNTHESIS - BORON - HIGH GALACTIC LATITUDE B TYPE STARS
Proposers: David L Lambert (PI; Texas, University Of)

Boron abundances have been obtained for a sample of Pop. I and Pop. II stars from GHRS grating/echelle spectra of the BI resonance lines at 2497 A. Stars to be observed in Cycle 3 include high galactic latitude early type stars. Boron will sought thro' the B II resonance doublet at 1362A. A second region at 1305A will provide profiles of SiIII lines; a SiIII line is blended with the B II line. Boron will provide a new clue to origins of these young solar-metallicity massive stars in the halo.

Prop. Type: GTO/OS

INTERSTELLAR MEDIUM -- (

1065 - "ISOTOPIC ABUNDANCES OF CARBON AND OXYGEN AND FRACTIONATION IN INTERSTELLAR CARBON MONOXIDE"
Keywords : INTERSTELLAR MOLECULES-CO. ABUNDANCES AND NUCLEOSYNTHESIS-ISOTOPES OF C AND O - MOLECULAR PROCESSES - FRACTIONATION
Proposers: David L. Lambert (PI; Texas, University Of), S.Federman (Jet Propulsion Laboratory), R.Gilliland (Space Telescope Science Institute)

HRS observations of the CO A-X system between 1250 and 1550 A will be acquired and analyzed to obtain abundances of 12C16O, 13C16O, 12C17O, and 12C18O, and to study the rotational excitation of the CO molecule. Additional observations of the weak inter-combination line of C II at 2324

A have provided the C+ abundance which plays an important role in chemical fractionation. Diffuse interstellar gas towards local stars (e.g. Zeta Oph) will be observed lines of the less abundant isotopic species of CO. A check on the Galactic gradient in the 12C/13C ratio will be attempted by observing stars about 1 kpc towards and away from the Galactic center.

Prop. Type: GTO/OS

INTERSTELLAR MEDIUM -- (
1066- CT - "CARBON CHEMISTRY IN INTERSTELLAR DIFFUSE CLOUDS - THE C2 MOLECULE :CYCLE 1 OBSERVATIONS"
Continuation of Program Number 1066
Keywords : INTERSTELLAR MOLECULES - C2 - MOLECULAR PROCESSES - CHEMISTRY OF C2
Proposers: David L. Lambert (PI; Texas, University Of), A.Danks (Goddard Spaceflight Center)

Observations of the C2 molecule in interstellar diffuse clouds are based on the Phillips near-infrared system. The ultraviolet D-X (lambda ~2310 A) and F-X (lambda ~1341 A) transitions should provide detectable C2 lines on HRS echelle spectra for lines-of-sight for which Phillips system lines are essentially undetectable. Observations of C2 will be attempted for line of sight containing rather little H2 (log N(H2) <~ 20.6). The D-X and F-X bands transitions will be calibrated against the Phillips system through observations of zeta Oph. The relation between C2, H2, and other abundant molecules will be interpreted using cloud models and thorough chemical reaction networks. Rotational excitation will also be measured and interpreted.

Prop. Type: GTO/OS

STELLAR ASTROPHYSICS -- (SUBLUMINOUS STARS) --
1067- CT - "OLD NOVAE - DQ HER: CYCLE 3 OBSERVATIONS "
Continuation of Program Number 1067
Keywords : VARIABLE STARS: NOVAE INDIVIDUAL: DQ HER
Proposers: David L. Lambert (PI; Texas, University Of), G.Ferland (Ohio, State University)

The classical nova DQ Her is the prototype of the dust-forming novae with the 1934 ejecta well resolved on the sky providing an emission line spectrum corresponding to an electron temperature of just T ~ 500K. FOS spectra and WF/PC images of the shell will be obtained to study the nebular dust and gas.

Prop. Type: GTO/OS

STELLAR ASTROPHYSICS -- (COOL STARS) --
1068- CT - "EPSILON AURIGAE - A SEARCH FOR THE SECONDARY :CYCLE 2 OBSERVATIONS"
Continuation of Program Number 1068
Keywords : STARS: BINARIES - EPSILON AUR
Proposers: David L. Lambert (PI; Texas, University Of)

Observations with IUE of the recent eclipse of Epsilon Aur by its enigmatic secondary showed that the source of the ultraviolet flux, Lambda </~ 1400 A, was not eclipsed. This flux is probably provided by a hot star embedded within the large dusty disk around the secondary. A FOS spectrum will be obtained to provide the first detailed look at the secondary.

Prop. Type: GTO/OS

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --
1071 - "COMPOSITION OF GAS IN INDIVIDUAL INTERSTELLAR CLOUDS -- CYCLE 0 "
Keywords : INTERSTELLAR LINES
Proposers: C. R. O'Dell (PI; Rice University), L.Spitzer Jr. (Princeton University)

Column densities of interstellar atoms of some ten atomic species will be measured in the line of sight to 27 early-type stars, using the High-Resolution Spectrograph to obtain precise measures in the ultraviolet with highest spectral resolution. These data will be analyzed to determine relative abundances in the several individual clouds present along each line of sight, and thus to determine how the composition of the gas in such clouds varies with cloud parameters such as H column density, velocity, ionization level and distance z from the galactic plane. This information should help to clarify the equilibrium between gas and grains,--i.e., how the gas condenses on the grains and how the grains are destroyed by a variety of phenomena occurring in interstellar clouds.

Prop. Type: GTO/OS

INTERSTELLAR MEDIUM -- (
1072 - "SIZE DISTRIBUTION OF BOK GLOBULES-CYCLE9 "
Keywords : BOK GLOBULES
Proposers: C. R. O'Dell (PI; Rice University), L.Spitzer Jr. (Princeton University)

The Bok globules in HII regions will be characterized in terms of their forms and distribution of sizes.

Prop. Type: GTO/OS

GALAXIES _CLUSTERS -- (

1073 - "EXTRAGALACTIC DISTANCE INDICATORS-CYCLE9 "

Keywords : HII REGIONS, EXTRAGALACTIC DISTANCES

Proposers: C. R. O'Dell (PI; Rice University), L.Spitzer Jr. (Princeton University)

Ground based observations have shown that extragalactic H II Complexes can be fit by a simple standard model, whose parameters can be determined by observation of the recombination line surface brightness. WF/PC H-beta images will be obtained of a series of H II Complexes in successively more distant galaxies in order to refine the zero point calibration and to apply this method to distant galaxies.

Prop. Type: GTO/OS

INTERSTELLAR MEDIUM -- (

1074 - "OORT CLOUD IN PLANETARY NEBULAE-CYCLE9 "

Keywords : PLANETARY NEBULAE

Proposers: C. R. O'Dell (PI; Rice University), L.Spitzer Jr. (Princeton University)

Under the assumption that the Oort Cloud of Comets is a common feature of stars with planetary systems and the planetary nebulae nuclei are advanced stages of evolution of intermediate mass stars, it is proposed to use the WF/PC to look for evidence of evaporation of massive comets by the strong stellar wind and radiation field of these stars.

Prop. Type: GTO/OS

INTERSTELLAR MEDIUM -- (

1075 - "TURBULENCE IN H II REGIONS-CYCLE9 "

Keywords : HII REGIONS

Proposers: C. R. O'Dell (PI; Rice University), L.Spitzer Jr. (Princeton University)

The WF/PC will be used to characterize the internal structure of the inner parts of the Orion Nebula (NGC 1976). The data will be combined with ground based velocity studies to determine the nature and source of fine scale turbulence in this object.

Prop. Type: GTO/HSP

SOLAR SYSTEM -- (

1080- CT - "THE SIZE AND COMPOSITION OF PLANETARY RING PARTICLES "

Continuation of Program Number 1080

Keywords : PLANETARY RINGS, RING PARTICLES, OCCULTATIONS, RINGS SPECTRA, RING COMPOSITION

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The size and composition of planetary ring particles are of interest for two reasons. First, these parameters provide important clues as to the age and source of the particles. The second reason for the interest in the size and composition of ring particles is that these quantities determine the fate of the particles in their present environment. In this regard, the size of the particles tells us the relative importance of gravitational forces (resonances with satellites, gravitational interaction with other ring particles, and the planetary gravity potential) and non-gravitational forces (particle collisions, radiation drag, and electromagnetic forces) in the present dynamical evolution. Clearly, the sizes and compositions of ring particles are central to our understanding of ring systems. Using the unique capabilities of ST, we propose to make major advances in knowledge of the size and composition of planetary ring particles through a combination of spectral and occultation

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Prop. Type: GTO/HSP

SOLAR SYSTEM -- (

1081 - "SATURN RING DYNAMICS "

Keywords : SATURN'S RINGS, OCCULTATIONS, RING DYNAMICS

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

Understanding the dynamics of the rings is essential to our eventual understanding of their origin. Did they form recently or along with Saturn itself? We propose a series of stellar occultation observations in order to continue the dynamical investigation of Saturn's rings, at high spatial resolution, begun by the Voyager spacecraft. Revision History: Received on RPS 9/1/89; Added to SCCS 9/5/89 RPSS V7.2 local _remote; fixed up small syntax errors - SALM 9/5/89 Updated for cycle 1 -- amanda bosh (MIT) 28 Sept 89 asb @ MIT 19 Mar 1990: Updated cycle 1 targets; SPATIAL SCANs, GUID TOL changes etc. - asb@MIT 23May90; Small logic errors fixed--BJW 7/9/90; revised changes to SEQ--BJW 7/31/90; Change cycle 0 to cycle 8 on line 110.040--BJW 11/28/90; Changes to observations/targets--amanda; Split proposal by cycle--BJW 5/2/91; Added reference for target positions--BJW 7/18/91;

Prop. Type: GTO/HSP

SOLAR SYSTEM -- (

1082 - "HELIUM ABUNDANCE IN JOVIAN PLANET UPPER ATMOSPHERES "

Keywords : JOVIAN PLANETS, OCCULTATIONS, UPPER ATMOSPHERES, HELIUM ABUNDANCES

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The large masses of the Jovian planets make it likely that they have retained their primordial abundance of material accreted from the solar nebula. The helium abundance in the upper atmospheres of these planets reflects the primordial abundance and the structural evolution of the planet. We propose to determine the Helium fraction in the upper atmosphere of each Jovian planet by measuring the ratio of the refractivities of its atmosphere for two wavelengths during stellar occultations. Revision History: Updated for Cycle 2 submission--ASB 3/20/92;

Prop. Type: GTO/HSP

SOLAR SYSTEM -- (

1083 - "DYNAMICS OF PLANETARY UPPER ATMOSPHERES "

Keywords : PLANETARY ATMOSPHERES, JOVIAN PLANETS, MARS, UPPER OCCULTATIONS, TEMPERATURE PROFILES

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

Observations of planetary upper atmospheres through stellar occultations are of interest because they provide information about the radiative and dynamical processes at work in these rarefied regions (number density range: 10super13 - 10super15 cmsuper-3), which could be otherwise measured only through direct atmospheric probe launched from a spacecraft. One of the problems with interpretation of the temperature profiles obtained from ground-based occultation observations has been that the numerical inversion of the data is highly sensitive to photometric errors--especially in obtaining the mean temperature of the atmosphere. The much greater stability of photometry that is possible with the ST will allow us to obtain more accurate temperature profiles and permit a comparison of the atmospheric structures of the Jovian planets with much greater precision than has been possible in the past. We propose a series of three occultation observations for each Jovian

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Prop. Type: GTO/HSP

SOLAR SYSTEM -- (

1086 - "DO NEPTUNE AND PLUTO HAVE RINGS? "

Keywords : NEPTUNE, PLUTO, PLANETARY RINGS, OCCULTATIONS, RING IMAGING

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The origin of planetary ring systems remains unknown. One common property of the known ringed planets--Jupiter, Saturn, and Uranus--is that each possesses a regular satellite system, which would point to a close connection between the formation of rings and satellites. However, the dynamical lifetimes of several important features in Saturn's are short, which would lead to the conclusion that these rings are young. Continuing this line of reasoning, one would conclude that rings are not formed concurrently with planets--perhaps the formation of rings depends on encounters of planets with small bodies, or other random events: ring systems come and go. The discovery of ring systems around Neptune and/or Pluto would shift opinion toward this latter view, while the lack of detectable rings would greatly strengthen their apparent connection with regular satellite systems. The August, 1989 Voyager encounter with Neptune discovered complete rings with shepherd satellites, and perhaps ring arcs around Neptune. We propose to further probe the structure of the system of rings and ring arcs around Neptune, to determine the dynamical processes which could create rings as well as ring arcs, and to search for rings around Pluto. To achieve this, we will use occultations, which are most sensitive to (possibly dark) material clumped into narrow rings. Revision History: Received on RPS 9/1/89; Added to SCCS 9/5/89 Updated to V2 prop. instr.; RPSS V7.2 local _remote - SALM 9/6/89;

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (SUBLUMINOUS STARS) --

1090 - "PERIODIC VARIATIONS IN DQ HERCULIS STARS "

Keywords : CATACLYSMIC VARIABLE STARS

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The DQ Herculis Stars are cataclysmic variables showing rapid, strictly periodic luminosity variations at either optical or X-ray wavelengths, and usually both. The periods range from 33 sec in AE AQR through 71 sec in DQ Her to 18690 sec in TV Col. The cataclysmic variables are all close binary stars consisting of a late-type star transferring mass to its companion white dwarf star. The white dwarf in the DQ Her stars is magnetized. The periodicities of the DQ Her stars are caused by rotation of the magnetized, acreting white dwarf. We propose to observe the DQ Her stars at ultraviolet wavelengths using the high speed photometer on the space telescope. The purpose of the observations is to investigate the physics of accretion onto compact stars. Revision History: Received on RPS 9/1/89; Added to SCCS 9/5/89 RPSS V7.2 remote _local; Typos corrected; Added data-fmt - SALM 9/7/89 Updated text - SALM 9/28/89; Moved 5 targ to cycle 2 - SALM 2/12/90 Switched 1 targ in cycles 1 _2 - SALM

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (

1091 - "ULTRAVIOLET PULSATIONS FROM X-RAY PULSARS "

Keywords : X-RAY PULSARS

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

We propose to obtain high-speed photometry at ultraviolet wavelengths of all the pulsing X-ray heated stellar atmospheres of the companion stars to the neutron stars in the binaries and to create list of X-ray pulsars with optical pulsations that can be further observed for such purposes as determining the mass ratios of the binary system. Revision History: Prepared for future cycles submission-- BJW 4/24/92;

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (

1092 - "ECLIPSES OF CATACLYSMIC VARIABLE STARS "

Keywords : CATACLYSMIC VARIABLE STARS

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The cataclysmic variables are close binary stars consisting of a late-type star and white dwarf. Mass is being transferred from the late-type star to the white dwarf. Unless the white dwarf has an extremely strong magnetic field, the transferred mass forms an accretion disk around the white dwarf. An important reason to observe the cataclysmic variables is that they provide an unparalled way to study nearly all aspects of the accretion of gas onto compact objects. We propose to observe the eclipses of several cataclysmic variables. The eclipse light curves can be used to find information about the geometry and physical conditions in the accretion disk. One star we propose to observe, Z Cha, is a dwarf nova. Eclipse observations of this star will provide information about changes in the structure of the accretion disk over the outburst cycle. Revision History: Received on RPS 9/1/89; Added to SCCS 9/5/89 Updated V2 prop instr; RPSS

V7.2 remote _local; fixed typos; Added data-fmt; added period _zero-phase uncertainties - SALM 9/7/89 Text changes; ACQ added to repeat visits - SALM 9/28/89; Move 1 targ to cycle2, spread out repeats - SALM 2/14/90; Added ACQ to repeat visits - SALM 6/27/90; Revised cycle 1 time--BJW 2/27/91; Split proposal by cycle-- BJW 3/20/91; Split up observations of Z Cha--BJW 9/6/91;

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (

1093- CT - "OBSERVATIONS OF ZZ CETI STARS "

Continuation of Program Number 1093

Keywords : PULSATING WHITE DWARFS

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The ZZ Ceti Stars are pulsating DA white dwarfs with temperatures near 11,000K. They are all pulsating in the non-radial g-modes, and are multi-periodic with periods between 200 sec and 1200 sec. Two major uncertainties about the ZZ Ceti stars are first, the exact temperature limits of the ZZ Ceti instability strip, and second, whether the luminosity variations are entirely due to temperature variations - as they should be if the pulsations are g-mode pulsations. We propose to observe the ZZ Ceti stars with the high speed photometer to measure their mean colors (and thus mean temperatures) and their color variations (and thus their temperature variations). Revision History: Received on RPS 9/1/89; Added to SCCS 9/5/89 Updated to V2 prop instr; RPSS V7.2 remote _local; Added data-fmt - SALM 9/7/89; Text changes - SALM 9/28/89; Reduce Texp to 6H - SALM 2/14/90 MJN 3/20/92 - removed prism mode and moved observation to UV2. Split observation to two 3 hour runs in the F184W and F284M filters.

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (

1094 - "SEARCH FOR OPTICAL VARIABILITY ASSOCIATED WITH BLACK HOLES "

Keywords : VARIABLE, INTERACTING BINARIES, BLACK HOLES

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

It has been suggested that luminous matter passing through an accretion disk towards the event horizon of a black hole is likely to emit a short series of pulses at an increasing frequency. These so-called dying pulses trains would have a period of the order of milliseconds for stellar mass black holes. A search for such pulse trains will be made among candidate objects. Revision History: Received on RPS 9/1/89; Added to SCCS 9/5/89 RPSS V7.2 remote _local; Added data-fmt - SALM 9/7/89; Removed target NGC7078; Added target A0620-00 _related changes; Changed "contiguous exposures" to "NON-INT" - Dolan 9/26/89; Changed fluxval, ONBRD ACQ, and SAMPLETIME - SALM 2/14/90; Added acq to repeat sequence - SALM 6/25/90; revised timeperexp line 0.500--BJW 7/11/90; Changed cycle 1 to cycle 2--BJW 2/26/91; Split up proposal by cycle--BJW 3/22/91; Update target positions--BJW 7/5/91; Changed timing of observations of Cyg X-1 --BJW 9/20/91;

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (
1095 - "VARIABILITY OF HIGH LUMINOSITY STARS "
Keywords : SUPERGIANT, VARIABLE
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

Some of the most luminous and massive stars in our galaxy and in the Large Magellanic Cloud will be monitored for variability in light. Knowledge of the time scales and amplitudes of luminosity fluctuations can perhaps place useful constraints on various stellar models. Revision History: Received on RPS 9/1/89; Added to SCCS 9/5/89 RPSS V7.2 remote _local - SALM 9/8/89; Text changes _added ACQ to repeat visits - SALM 9/28/89; Move 9 targ to cycle2 - SALM 2/14/90 Move 3 targ to cycle 2; add UV2 obs for P-CYG - SALM 3/26/90; Expanded illegally nested repeat - SALM 6/21/90; Moved REPEAT to USE - SALM 6/28/90; Defer all targets to cycle 1--BJW 11/26/90; Split proposal by cycle--BJW 3/22/91; Changes to observations of HD193237--BJW 6/19/91; Update target list--BJW 6/27/91;

Prop. Type: GTO/HSP

QUASARS _AGN -- (
1096- LT - "GRAVITATIONAL LENSES PART I "
Keywords : GRAVITATIONAL LENSES; BLACK HOLES; HUBBLE CONSTANT
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

Photometric and polarimetric observations will be made of systems whose properties are ascribed to the effect of a gravitational lens. The similarity of the images in the previously unobserved UV region of the spectrum, both photometrically and polarimetrically, is necessary for these objects to be gravitational lens systems; any differences found will be carefully studied to determine what constraints they put on the system. Systems whose properties appear consistent with a point mass deflector (i.e., a black hole) will be monitored to determine whether photometric or polarimetric variability exists in the images. The distance to the deflecting mass in this case can be related to the path length difference between the two image paths from the imaged quasar to the observer. The path length difference can be derived directly from the time difference between the same variation occurring in each image. The parallaxes of objects at E+3 Mpc distances are of obvious importance to a

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Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (

1097- CT - "X-RAY BINARIES PART 2 "

Continuation of Program Number 1097

Keywords : X-RAY BINARIES: NEUTRON STARS: BLACK HOLES

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The extreme conditions existing in the near vicinity of neutron stars which are the secondaries in close binaries provide a laboratory in which we may observationally confirm or refine many of our basic theories of astrophysics. This program will monitor the photometric and polarimetric light curves of X-ray binaries at several different phases of the binary orbit in several different wavelength bands in the UV. The results will be related to the structure of, and physical conditions existing in, the gas streams (and possibly, the accretion disk) in these systems. Revision History: Clone 2958 v1.1

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (

1098 - "REMNANT STARS IN SUPERNOVA REMNANTS "

Keywords : SUPERNOVA REMNANTS; NEUTRON STARS

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

In this proposal we will search for a remnant star associated with SN1987A. Once detected, we will study the photometric variability in an attempt to place important constraints on the mechanisms by which neutron stars originate. REVISION HISTORY: Created 11/18/91;

Prop. Type: GTO/HSP

QUASARS _AGN -- (
1099- CT - "ACTIVE GALACTIC NUCLEI "
Continuation of Program Number 1099
Keywords : QUASARS; BL LAC OBJECTS; ACTIVE GALACTIC NUCLEI
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The discovery of QSO's and (other) active galactic nuclei have radically altered the classical view of galactic evolution as a slow process occuring over cosmological time-scales. From the growing body of observations there are many varied theories developing to explain these highly energetic phenomena. To be successful, a theory must explain the large amplitude, rapid variations in both flux and polarization that characterize these objects. Variability in all parts of the spectrum has been observed, in some cases on time scales as short as minutes, placing constraints on the volume over which the phenomenon occurs. Observations on even shorter time scales would significantly affect these constraints. This program will monitor the intensity of the radiation emitted by AGN's and relate the results to the structure of their nuclei and the nature of their central power source. Revision History: Split from 3248--MJN 3/19/92;

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (
1101 - "OPTICAL AND ULTRAVIOLET OBSERVATIONS OF RADIO PULSARS "
Keywords : PULSARS, NEUTRON STARS, SUPERNOVAE
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation)

In spite of extensive efforts only two definite (Crab and Vela) and one probable (in SNR 0540-693) radio pulsars have been detected at optical wavelengths. Most efforts at modeling the optical emission mechanism are constrained only by the Crab Pulsar observations. To provide better model constraints, visual and ultraviolet observations of the Crab, Vela, and LMC pulsars will be obtained (see HSP 1101). The HSP recently acquired high time resolution data of the Crab pulsar in the visual. Before choosing the central wavelength and width of several ultraviolet filters, an exploratory observation of the Crab in a broad-band UV filter is necessary.

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (
1103 - "VISIBLE AND ULTRAVIOLET LIGHT CURVES OF SHORT PERIOD RR LYRAE-TYPE (RRS) VARIABLE STARS"
Keywords : PULSATING STARS, STELLAR ATMOSPHERES, HYDRODYNAMICS
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation)

Almost all studies of short-period RR Lyrae stars have mentioned the possibility of small-scale fluctuations in light curves or short time-scale changes in absorption line strengths. While careful examination of high signal-to-noise ratio visible light curves has failed to confirm such behavior, fluctuations may still be detectable in the ultraviolet region. These would reflect such phenomena as shock waves generated by the pulsation in the outer stellar envelope. We propose high time resolution, high signal-to noise ratio observations of a sample of such stars to characterize the ultraviolet pulsation and investigate the pulsation effects in the upper atmosphere. Revision History: Defer to Cycle 2--BJW 12/24/91; Added comment lines concerning deferment of test until PRISM mode calibration--BJW 3/18/92;

Prop. Type: GTO/WFC

GALAXIES CLUSTERS -- (
1105 - "PECULIAR AND INTERACTING GALAXIES (WF/PC-01) "
Keywords : PECULIAR GALAXIES, INTERACTING GALAXIES
Proposers: James A. Westphal (PI; Caltech)

Imaging observations with the WFC and PC are specified for a small sample of peculiar and interacting galaxies. In each instance the observations will benefit variously from the spatial resolution and ultraviolet sensitivity afforded by the Space Telescope and may reveal important facts concerning the nature of the objects observed.

Prop. Type: GTO/WFC

STELLAR POPULATIONS -- (
1106 - "STELLAR POPULATION IN THE GALACTIC BULGE (WF/PC-02) CYCLE 1"
Keywords : STELLAR POPULATIONS, GALACTIC BULGE, BAADE'S WINDOW
Proposers: James A. Westphal (PI; Caltech)

The goal of this WF/PC project is to extend our knowledge of the stellar population in the nuclear bulge of our own Galaxy. During GTO time, our targets include a selected field within Baade's Window (about 4 degrees from the galactic nucleus) and another bulge field about 8 degrees from the nucleus. Stepped exposures with U, V, and I filters will enable us to correct for reddening on a small spatial scale, to extend the color-magnitude diagram several magnitudes, and to investigate the low-mass portion of the luminosity function.

Prop. Type: GTO/WFC

INTERSTELLAR MEDIUM -- (

1107 - "PLANETARY NEBULAR STRUCTURE (WF/PC-03) "
Keywords : PLANETARY NEBULAE, MASS LOSS, EVOLUTION, NEBULA
Proposers: James A. Westphal (PI; Caltech)

Observations of planetary nebulae utilizing the WF/PC are based upon the high angular resolution. Structure at the level of E+14 cm is seen in only one planetary NGC7293, Helix nebula. It is in the size range from E+14 to E+15 cm that the origin of long lived condensation is expected. Are the features seen in the Helix common to most planetaries? Do these condensations result in shadowing that can explain the ionization structure? The other objective of this program is to repeat the measurements on a few years baseline in order to study the temporal variations of well defined condensation. This may provide distance determinations as well as dynamic information.

Prop. Type: GTO/WFC

STELLAR ASTROPHYSICS -- (

1108 - "PLANETARY NEBULAE NUCLEI DISCOVERY (WF/PC-04) "
Keywords : PLANETARY NEBULAE, EVOLUTION MASS LOSS, NEBULA
Proposers: James A. Westphal (PI; Caltech)

The central star for some planetary nebulae have not been observed. It is believed that these PN nuclei have temperatures in excess of 100000dK and the large flux in the far ultraviolet produces a nebular surface brightness that overwhelms the stellar radiation in the visual when resolution is seeing limited. The WF/PC spatial resolution will enhance the contrast by the order of 100 while an additional enhancement will be achieved by observing in the UV. This program should result in the detection of these central stars and provide sufficient photometric data to determine the nature of the central star and interstellar extinction.

Prop. Type: GTO/WFC

STELLAR POPULATIONS -- (
1110 - "STELLAR POPULATIONS IN DWARF SPHEROIDAL GALAXIES (WF/PC-06): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : DWARF GALAXIES, LOCAL GROUP, STELLAR POPULATIONS, HR DIAGRAM
Proposers: James A. Westphal (PI; Caltech)

HR diagrams to deep levels using the F555W and F785LP filters and the WFC will be used to study the stellar populations of the dwarf spheroidal galaxies Carina, Ursa Minor and Fornax. Aspects to be studied include the star formation histories based on the location and distribution of stars near the main-sequence turnoff; the luminosities, colors, and metallicities of stars on the giant branch; the relation of horizontal-branch morphology to stellar ages and metallicities; distance moduli via main sequence fitting; the absolute magnitude of the horizontal branch; the main-sequence luminosity function; the possible incidence of binaries on the main sequence; and an estimate of the overall mass-to-light ratio and space density of baryonic matter in stars. In Fornax, the proposed field also contains the metal-poor cluster Fornax 4, whose HR diagram and radial density gradient will also be measured.

Prop. Type: GTO/WFC

GALAXIES _CLUSTERS -- (
1111 - "A DEEP SURVEY AT HIGH GALACTIC LATITUDES (WF/PC-07): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : FAINT SURVEY
Proposers: James A. Westphal (PI; Caltech)

Very deep exposures will be taken in broadband V and I colors in each of two fields at high galactic and ecliptic latitudes, in order to observe objects as faint as possible. Fourteen dark-side exposures should yield S/N of about 4 at magnitude 29.5 for neutral-colored point sources. The data will be used for counts and morphology of faint and distant galaxies and to study the distribution and luminosity function of galactic stars to very faint levels. Parallel FOC observations will be taken to give additional color information in nearby fields.

Prop. Type: GTO/WFC

STELLAR POPULATIONS -- (
1112 - "GALACTIC GLOBULAR CLUSTERS (WF/PC-08): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : GLOBULAR CLUSTER, POPULATION II, DWARF, WHITE DWARF, DYNAMICS, STELLAR POPULATION
Proposers: James A. Westphal (PI; Caltech)

Two classes of observations will be performed on a small sample of galactic globular star clusters. In one, a set of V and I frames will be obtained at two radii to study the faint end of the luminosity function and mass segregation; in one cluster (NGC6752) the data will also reach the bright end of the white dwarf luminosity function. In the other, the nuclei of a number of clusters will be imaged in the U band to study the core properties and the existance of a collapsed cusp if any. The clusters are relatively nearby and their core properties span the range from extremely regular to extremely cusplike.

Prop. Type: GTO/WFC

STELLAR POPULATIONS -- (
1113 - "STELLAR POPULATIONS OF THE MAGELLANIC CLOUDS (WF/PC-09): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : GLOBULAR CLUSTERS, CLUSTERS, STELLAR POPULATIONS, LOCAL GROUP, IRREGULAR GALAXIES, HR DIAGRAMS
Proposers: James A. Westphal (PI; Caltech)

HR diagrams with the Wide Field Camera in filters F336W,F555W and F785LP will be obtained for several clusters and background fields in the Large and Small Clouds. The proposed clusters span a range of age and metallicity, and the background fields are located at a variety of radial distances within the galaxies. The data will be used to study cluster ages, the history of star formation for field stars, the cluster and field luminosity functions, and distance moduli based on main-sequence fitting. Tidal radii of clusters and the stellar mass-to-light ratios of cluster and field populations will also be estimated.

Prop. Type: GTO/WFC

STELLAR POPULATIONS -- (
1114 - "STELLAR POPULATIONS AND CLUSTERS IN ELLIPTICAL GALAXIES (WF/PC-11): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : STELLAR POPULATIONS, GALAXIES, GLOBULAR CLUSTERS, DISTANCE INDICATORS, HUBBLE CONSTANT
Proposers: James A. Westphal (PI; Caltech)

Much of the luminous matter in the universe lies in large ellipitcal galaxies, but they are the type for which we know the least about stellar content. With WF/PC, incipient resolution of individual stars can be expected for ellipticals out to a modulus of 30.5 mag., while significant new information about the retinue of globular clusters surrounding ellipticals can be learned out to a modulus of 35.5 mag. A pixel-histogram technique, tested by simulations, will permit the top of the H-R diagram and the top of the stellar luminosity function to be characterized. The luminosity function for globular clusters in ellipticals will be more completely determined and their role as distance indicators more completeley developed, with possible application to improving the distance to the Coma Cluster (z = 0.022) and the determination of Ho.

Prop. Type: GTO/WFC

GALAXIES _CLUSTERS -- (

1115 - "FAINT CLUSTERS OF GALAXIES (WF/PC-10): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"

Keywords : BRIGHTEST GALAXY, COSMOLOGY, SPIRAL GALAXY, GALAXY EVOLUTION, GALAXY MORPHOLOGY, DISTANT GALAXY CLUSTER

Proposers: James A. Westphal (PI; Caltech)

Ten distant clusters of galaxies, with redshifts from 0.39 to about 1.2, will be imaged in two colors corresponding to rest wavelengths of about 3600 and 5000 angstroms. The primary object of the study is to investigate the color and morphological evolution of cluster galaxies. Sufficient signal-to-noise will be obtained for all objects to see spiral structure if present in the brighter galaxies, and the morphologies of the clusters cover the range from extremely open to extremely compact. In addition, the data will yield structural parameters for the bright cluster ellipticals in the sample, which will aid in interpreting the classical Hubble diagram for the determination of the deceleration parameter. Several of the nearby clusters exhibit the Butcher-Oemler excess of blue galaxies and these data should elucidate their nature.

Prop. Type: GTO/WFC

QUASARS _AGN -- (

1116 - "STRUCTURE OF QUASARS AND RELATED OBJECTS (WF/PC-12) "

Keywords : QUASAR, AGN,RADIO GALAXY, EMISSION LINE GALAXY,BL LAC OBJECT

Proposers: James A. Westphal (PI; Caltech)

The aims of the program are (1) to detect, and to study the morphology of galaxies underlying QSOs and AGNs, galaxies associated with them in groups and clusters, and associated structures such as jets; (2) to detect bright nuclear and extranuclear structure on small angular scales; (3) to detect and examine additional images and lensing galaxies in gravitational lenses; (4) to detect extended emission line structure in quasars.

Prop. Type: GTO/WFC

STELLAR POPULATIONS -- (

1117 - "GLOBULAR CLUSTERS IN M31 AND NGC205 (WF/PC-13): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"

Keywords : GLOBULAR CLUSTERS, LOCAL GROUP, POPULATION II, HR DIAGRAMS, HALOS, STELLAR POPULATIONS, SPIRAL GALAXIES

Proposers: James A. Westphal (PI; Caltech)

HR diagrams and radial density profiles will be studied for three globular clusters in M31 and one in NGC205 using direct Wide Field Camera images in filters F555W and F785LP. The clusters span a range in line strength from H VIII and M IV (very metal-poor), through M II, to K58 (slightly sub-solar). Problems to be studied include the luminosity fuction of stars on the cluster giant branch, their spread in temperature, horizontal-branch morphology, and the tidal radii of the clusters. Of special interest is the apparent magnitude of the horizontal branch and its possible utility as a distance indicator. The HR diagram of any background stellar population in the halo of M31 and the general field of NGC205 will also be compiled, and the age and metallicity distribution of the background population studied.

Prop. Type: GTO/WFC

GALAXIES CLUSTERS -- (

1118 - "NUCLEI OF NEARLY NORMAL GALAXIES (WF/PC-14) CYCLE 0"

Keywords : GALACTIC NUCLEI, GALACTIC BULGES, LOCAL GROUP, DUST LANES, GLOBULAR CLUSTERS, SURFACE PHOTOMETRY

Proposers: James A. Westphal (PI; Caltech)

Direct images of the nuclei of nearby galaxies taken with the Planetary Camera will be used to measure the space density profile of luminous material and the nuclear color gradients in these objects. Galaxies will be imaged with the F555W and F785LP filters. Serveral objects known to contain ionized gas will also be imaged in narrow-band filters to obtain the gas distribution. In M31 a special series of ultra-violet exposures will be taken to study the hot stellar population. The sample of objects contains several normal ellipticals covering a broad range in nuclear surface brightness and concentration class, several nearby galaxies covering a range of Hubble types, and a few Seyfert and otherwise slightly abnormal nuclei.The images taken will also be searched for bright stars, inner globular clusters, and absorbing interstellar dust.

Prop. Type: GTO/WFC

GALAXIES CLUSTERS -- (

1119 - "CEPHEID DISTANCE SCALE (WF/PC-15): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"

Keywords : SPIRAL GALAXY, CEPHEID, SUPERGIANT, DISTANCE SCALE, HUBBLE CONSTANT, COSMOLOGY

Proposers: James A. Westphal (PI; Caltech)

The most reliable distance indicators we have at the nearby end of the extragalactic distance scale are Cepheid variables. The extension of the Cepheid scale to distances of the order of the Virgo Cluster has been one of the major promises that ST has offered since its inception. We will study five galaxies, three somewhat nearer than Virgo (NGC 2903, 4559, and 5033) and two Virgo galaxies (4535 and 4321), all with the aim of both determining a distance for its own sake and for the calibration of secondary indicators, primarily (with the obvious exception of 4321) the infrared Tulley-Fisher relation, but including brightest stars, globular clusters, and others. The scheme involves ten exposures on each galaxy with a sequence of exposure times designed to allow discovery and period determination to sufficient accuracy for stars with periods of ten to thirty days, and supplementary multicolor photometry to make use of period-luminosity-color/reddening-bucking relations.

Prop. Type: GTO/WFC

STELLAR POPULATIONS -- (

1120 - "STELLAR POPULATIONS IN LOCAL GROUP GALAXIES (WF/PC-16): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"

Keywords : STELLAR POPULATIONS, GALAXIES, SPIRAL ARMS, DISKS, BULGES, M31.

Proposers: James A. Westphal (PI; Caltech)

The goal of this WF/PC project is to extend our knowledge of the stellar population in arms, disks, and bulges of some of the nearest star-producing galaxies. (Other populations in nearby galaxies are dealt with in other parts of the WF/PC teams's GTO program). Our targets include young associations in M31 and M33, disk regions in M31 and M33, bulge regions in M31 and M81, and the general field in IC1613. The fields in M31 lie at stepped distances from the nucleus out to the vicinity of Baade Field IV. Deep U, V, I frames will be used to construct color-magnitude and color-color diagrams, and to derive age, metallicity, reddening, and luminosity functions.

Prop. Type: GTO/WFC

STELLAR ASTROPHYSICS -- (
1121 - "STELLAR FORMATION AND EVOLUTION (WF/PC-17) "
Keywords : STAR FORMATION, STELLAR EVOLUTION
Proposers: James A. Westphal (PI; Caltech)

High resolution images will be obtained for a small number of T Tauri stars, Herbig-Haro objects, and objects whose evolutionary state is uncertain. Most of the young stellar objects are in the Taurus complex, which is near enough that the high resolution afforded by ST will explore physical scales never before seen in these objects. Limited temporal coverage will also be obtained to search for structural variations at small scales.

Prop. Type: GTO/WFC

STELLAR ASTROPHYSICS -- (
1122 - "CIRCUMSTELLAR MATERIAL (WF/PC-18) CYCLE 1"
Keywords : CIRCUMSTELLAR MATERIAL, PROTO-PLANETARY DISCS
Proposers: James A. Westphal (PI; Caltech)

The cold circumstellar material discovered around a number of nearby stars by IRAS will be examined to determine the spatial distribution of the material around the individual stars, including estimates of the amount of distributed mass as a function of distance from the star. Such studies should provide insight into the formation and evolution of the proto-planetary disc that once surrounded the Sun.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
1123 - "MERCURY JOINT PROJECT WITH CALDWELL (WF/PC-19): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : MERCURY, SURFACE PHOTOMETRY, CRATER COUNTS
Proposers: James A. Westphal (PI; Caltech)

We propose to take high resolution, multispectral images of the planet Mercury with the WF/PC using the Earth to shield the Sun. The data will be taken as Mercury rises above the Earth's limb. These data should obtain images with a resolution of 30 km on the side of Mercury not seen by the Mariner 10 spacecraft.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
1124 - "VENUS (WF/PC-20): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : VENUS, ATMOSPHERE, UV MARKINGS
Proposers: James A. Westphal (PI; Caltech)

These observations will obtain high resolution views of the upper atmosphere of Venus in the UV. Ground-based and spacecraft images of the atmosphere show low contract markings in the upper atmosphere of Venus. The observations will explore the imaging possibilities deeper into the UV, probing different depths into the atmosphere.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
1125 - "ASTEROIDS (WF/PC-21): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : ASTEROIDS, SATELLITES
Proposers: James A. Westphal (PI; Caltech)

There have been a number of visual and photo-electric observations of secondary events associated with occulations of stars by minor planets. These observations are suggestive of satellites for those minor planets. If one minor planet satellite is found, then it is expected that many minor planets would have satellites, unless there is a feature in the process of formation and evolution of the minor planets which favors uniqueness. In addition to the significance of satellites of minor planets to the theory of the formation of the solar system, the discovery of satellites and the determination of their periods will permit the determination of the masses of the minor planets. This is the only way to determine accurate values for the masses and hence the densities and compositions. These observations will be used to search for direct images of satellites brighter than 22nd magnitude around several asteroids where unconfirmed observations of satellites have been reported.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
1126 - "JUPITER - SOLAR SYSTEM (WF/PC-22) "
Keywords : JUPITER, ATMOSPHERE DYNAMICS
Proposers: James A. Westphal (PI; Caltech)

This program will obtain two four-color complete 360 degree maps with the WF/PC to measure the Jovian atmospheric motion. The first set will be obtained within a ten-hour period to allow for adequate overlap between the longitudinal strips. Then twenty hours later a second map set will be obtained to complete the dynamical set. Since Jupiter rotates approximately fifty degrees per HST orbit, these dynamical sets should be obtained for eight sequential orbits. UV imaging at the high spatial resolution of HST provides an excellent method of studying the upwelling processes, especially in the time domain.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (

1127 - "JOVIAN RING - SOLAR SYSTEM (WF/PC-23): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"

Keywords : JUPITER RING SYSTEM, JUPITER INNER SATELLITES

Proposers: James A. Westphal (PI; Caltech)

The newly discovered ring of Jupiter has only 3 or 4 data sets to describe the nature and characteristics of the very tenuous ring. The best data set were obtained by the Voyager spacecraft. HST will give much higher spatial resolution of the ring in a back scattering lighting condition at very low phase angles. These high signal-to-noise data will allow much better radius and albedo limits to be set. The observations would require Jupiter to be situated on one CCD and allow the ring, which is some six magnitudes fainter, to be imaged on an adjacent chip. These data would allow detection of the inner moons of Jupiter, including Adrastea which is located on the edge of the bright ring component of the Jovian ring system. The long time base since first discovery by Voyager would allow a very accurate determination of the orbital period. Spectral coverage will give some additional information on albedo and surface composition.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (

1128 - "IO VOLCANISM (WF/PC-24): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"

Keywords : IO, VOLCANISM

Proposers: James A. Westphal (PI; Caltech)

Voyager observed volcanos on Io. These volcanos should be evident when they are observed in the UV and the volcanic plumes are located on the satellite limb. The observations will determine if the same volcanos that Voyager observed are still active and also if new volcanic activity is present.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
1129 - "SATURN - SOLAR SYSTEM (WF/PC-25): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : SATURN, ATMOSPHERE DYNAMICS
Proposers: James A. Westphal (PI; Caltech)

This program will obtain two four-color complete 360 degree maps with the WF/PC to measure the Saturnian atmospheric motion. The first set will be obtained within a ten-hour period to allow for adequate overlap between the longitudinal strips. Then twenty hours later a second map will be obtained to complete the dynamical data set. Since Saturn rotates approximately fifty degrees per HST orbit, these dynamical sets should be obtained for seven sequential orbits. UV imaging at the high spatial resolution of HST provides an excellent method of studying the upwelling processes, especially in the time domain.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
1130 - "SATURN B-RING SPOKES (WF/PC-26): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : SATURN, B-RING, SPOKES
Proposers: James A. Westphal (PI; Caltech)

Voyager S/C detected some low contrast features in the B-ring of Saturn which were dubbed 'spokes'. The origin, evolution, composition and dynamics of the spokes are not well understood. The objective of these observations is to determine the photometric properties of the spokes as a function of time and other external circumstances, such as solar elevation, and Saturn phase. The proposed observational sequence includes multispectral imaging over a 12 hour period.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
1131 - "SATURN SATELLITE SEARCH (WF/PC-27): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : SATURN, SATELLITES, JANUS, EPIMETHEUS, TELESTO, CALYPSO, ATLAS
Proposers: James A. Westphal (PI; Caltech)

The purpose of these observations is to determine the positions of satellites that cannot be observed from the ground (coorbital and shepherding satellites), and that have been indicated by Voyager but not confirmed (satellites in the orbits of the coorbitals, Mimas, Tethys, and Dione), and to do a completeness survey for satellites in the Saturnian system down to 22nd magnitude between the A ring and Dione.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
1132 - "URANUS AND RINGS (WF/PC-28): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : URANUS, PLANETARY ATMOSPHERES, URANUS RING SYSTEM
Proposers: James A. Westphal (PI; Caltech)

WF/PC obsevations will provide high-resolution images of Uranus and its rings in spectral regions not covered by Voyager imaging cameras and/or not possible from the Earth-based observations. At short wavelengths, the global reflectivity of Uranus is less than that of a pure Rayleight atmosphere; thus structure may be visible. The set of observations will be repeated one month later to study secular changes. The ring system and the associated satellites will be observed with the Planetary Camera.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
1133 - "URANUS SATELLITE AND RING SEARCH (WF/PC-29): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : SATELLITES, URANUS, RINGS
Proposers: James A. Westphal (PI; Caltech)

The narrow rings of Uranus have been discovered and observed by occulations of stars. Images of the individual rings have not been achieved. These observations are an attempt at direct imaging of the individual rings. The narrow rings of Uranus, according to theory, are constrained by shepherding satellites. The observations will be searched for shepherding satellites brighter than 22nd magnitude and a completeness survey of inner satellites of Uranus down to that magnitude will be performed. The short exposures will provide accurate positions of the known satellites and a means of determining the positions of the faint discovery satellites with respect to Uranus.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
1134 - "NEPTUNE AND RINGS (WF/PC-30) "
Keywords : NEPTUNE, PLANETARY ATMOSPHERES, NEPTUNE RING SYSTEM
Proposers: James A. Westphal (PI; Caltech)

Observations will provide high-resolution images of Neptune and its rings in spectral regions not covered by Voyager spacecraft cameras and/or not possible from the Earth-based observations. At short wavelengths, the global reflectivity of Neptune is less than that of a pure Rayleigh atmosphere; thus structure may be visible. Observations will be made in four sequences, distributed over 18 hours. The tenuous ring system and the associated satellites will be observed with the Planetary Camera.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
1135 - "NEPTUNE SATELLITE AND RING SEARCH (WF/PC-31): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : SATELLITES, NEPTUNE, RINGS
Proposers: James A. Westphal (PI; Caltech)

There have been reports of the detection of a ring around Neptune and also of negative results. The Neptune satellite system is unusual with two satellites of very different types. These observations are designed for a search for rings and satellites around Neptune to a completeness limit of 23rd magnitude or fainter. The short exposures will provide reference positions.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
1136 - "PLUTO AND ITS SATELLITE (WF/PC-32): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : PLUTO, CHARON, PLANET, SATELLITE
Proposers: James A. Westphal (PI; Caltech)

These observations are intended to obtain high resolution, high S/N pictures of Pluto and its satellite so that surface colors, diameters, separations and orbital characteristics can be determined. The observations will be taken as a series at three wavelengths and the series will be taken separated in time to give different sides of Pluto and positions of the satellite in its orbit for accurate orbital characteristics.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
1137 - "COMPOSITION AND STRUCTURE OF COMETARY COMAE (WF/PC-33): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : COMETS, HALLEY'S COMET
Proposers: James A. Westphal (PI; Caltech)

A "target of opportunity" comet will be imaged to resolve the profile shape and comet coronal properties of this nearby comet. The observations will be planned to allow the sublimation process to be monitored for comparison to other comet coronae and with coronal models.

Prop. Type: GTO/WFC

STELLAR ASTROPHYSICS -- (
1138 - "MISCELLANEOUS (WF/PC-34) CYCLE 0 "
Keywords : X-RAY STAR, SUPERNOVA REMNANT, BIPOLAR NEBULA, PULSAR, POLARIMETRY, PHOTOMETRY
Proposers: James A. Westphal (PI; Caltech)

This WF/PC GTO program covers a small group of targets all but one of which are related to the birth and death of stars. These include the Crab, Eta Carina, SS433, and Cygnus Loop, and four bipolar outflow sources. In each case high spatial and S/N imaging will be conducted to better understand the morphology and motions in these unusual objects. Transmission grating, UV and V exposures of NGC 6712, a globular cluster with a central X-ray source, will be taken to identify sources with unusual spectra.

Prop. Type: GTO/AST

QUASARS _AGN -- (ASTROMETRY) --
1139- CT - "EXTRAGALACTIC ASTROMETRY AND ASTROPHYSICS - AST/PC PROPOSAL 1139 (JOINT OBSERVATIONS)"
Continuation of Program Number 1013
Keywords : QUASARS, BL LACS, AGNS, HIPPARCOS, REFERENCE FRAMES FUNDAMENTAL ASTROMETRY, QUASAR INTERNAL MOTION
Proposers: William H. Jefferys (PI; University Of Texas At Austin), J.Westphal (California Institute Of Technology)

The goal of this project is the determination of the rotation of the HIPPARCOS Reference Frame with respect to an Extragalactic Frame. The program will derive the internal optical motions of extragalactic objects (QSOs, BL Lacs, AGNs) at the +/- 0.002 arcsecond per year level of accuracy. 160 SAO stars within the FGSFOV of all selected QSOs, BL Lacs, and AGNs are included in the HIPPARCOS catalog. Ground based speckle observations have been used to pre-detect doubles which would cause problems for the FGS. The FGSs will measure the relative positions of SAO stars with respect to objects brighter than 17 mag. Fainter objects will be observed with the WFPC and FGS together. The objects have been selected in conjunction with the recommendations of the IAU working group in Radio/Optical Identifications, and have been selected for compactness and intensity. Most of the objects are recommended as ultimate position calibrators.

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR ABSORPTION) --
1140 - "WEAK ABSORPTION LINES IN 3C273 "
Keywords : QUASAR, ABSORPTION LINES, HALO
Proposers: Ray J. Weymann (PI; Carnegie Observatories), J.Brandt (U. Of Colorado)

HRS spectra of 3C273 will be obtained in the R=20000 mode over the range 1210-1425A and at selected longer wavelengths to detect weak absorption lines. Detections of, or upper limits on low column density remnants of the Lyman Alpha Forest at low redshifts will be made as well as profiles of such lines. Profiles of lines arising in the halo of our galaxy will also be obtained.

Prop. Type: GTO/HRS

QUASARS _AGN -- (SEYFERTS) --
1141- CT - "HIGH RESOLUTION SPECTROSCOPY OF THE NUCLEUS OF NGC 4151: CYCLE 1 OBS "
Continuation of Program Number 1141
Keywords : SEYFERT GALAXY, AGN, EMISSION LINE, HALO, ABSORPTION LINES
Proposers: Ray J. Weymann (PI; Mount Wilson And Las Campanas Obs.), E.Beaver (Uc, San Diego), A.Boggess (Nasa, Goddard Space Flight Center), S.Heap (Nasa, Goddard Space Flight Center), J.Hutchings (Dominion Astrophysical Observatory; Canada), B.Savage (Wisconsin, University Of)

Spectra of the Nucleus of NGC 4151 will be obtained in the R=20000 mode with HRS to study detailed emission and absorption structure of selected features as well as obtain spectra of halo absorption. A repeat nuclear observation will check for changes that may have occurred in fine detail in the C IV emission line profile.

Prop. Type: AUG/HRS

QUASARS _AGN -- (QUASAR ABSORPTION) --
1144- CT - "LINEAR EXTENT AND ION. COND. IN LY ALPHA CLOUDS: CYCLE 2 OBSERVATIONS "
Continuation of Program Number 1144
Keywords : QUASARS, ABSN LINES, HELIUM
Proposers: Ray J. Weymann (PI; Ociw)

Spectra of the QSO pair Ton 155,156 will be obtained over the range 1220-1500 A to search for any absorption systems which may or may not be in common with the two, thus setting limits on the linear size of the clouds. observations will be made in the region 1314-1600 A of PG 1115+08 to find any HeI counterparts of the Lyman Alpha forest.

Prop. Type: GTO/HRS

QUASARS _AGN -- (HOST GALAXY) --
1145- CT - "IMAGING AND SPECTROSCOPY OF THE LOW REDSHIFT BALQSO PG 1700+518 "
Continuation of Program Number 1145
Keywords : QUASAR, ABSORPTION LINES, UNDERLYING GALAXY, MORPHOLOGY
Proposers: Ray J. Weymann (PI; Mount Wilson And Las Campanas Obs.), D.Turnshek (Space Telescope Science Institute)

Imaging with FOC will be carried out on the low redshift BALQSO PG 1700+518 to study the physics and morphology of the absorbing clouds and their relations to the galaxy morphology.

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR EMISSION) --
1146 - "SPECTROSCOPIC STUDIES OF SEVERAL HIGH REDSHIFT BALQSOS: CYCLE 1 "
Keywords : QUASARS, ABSORPTION LINES
Proposers: Ray J. Weymann (PI; Mount Wilson And Las Campanas Obs.), E.Burbidge (Uc, San Diego), R.Cohen (Uc, San Diego), C.Foltz (Arizona, University Of), G.Hartig (Space Telescope Science Institute), V.Junkkarinen (Uc, San Diego), D.Turnshek (Space Telescope Science Institute)

A survey of the UV spectra of 7 high redshift Broad Absorption Line Quasars (BALQSOs) will be carried out with the prism and low dispersion mode of FOS. Depending upon the flux levels and the features detected, one or two of these objects will be studied further at the R=1200 resolution mode.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (HOT STARS) --
1150 - "STELLAR WINDS IN M31, M33 "
Keywords : HOT STARS, MASS-LOSS, STELLAR WINDS
Proposers: John B. Hutchings (PI; Dominion Astrophysical Observatory; Canada), P.Massey (Noao, Kitt Peak National Observatory)

We will obtain UV spectra of OB supergiant stars in M33 AND M31 to study stellar wind phenomena (resonance line profiles and velocities, stellar effective temperatures). We will also derive approximate UV extinction curves for these galaxies. These observations relate to global comparisons between galaxies of different types. WFC UV grating images are requested in parallel to study the OB star population and extinction in these galaxies.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (X-RAY SOURCES) --

1151 - "LMC X-RAY SOURCES "

Keywords : X-RAY BINARY, HOT STAR, STELLAR WIND

Proposers: John B. Hutchings (PI; Dominion Astrophysical Observatory; Canada)

FOS high and low dispersion spectra wil be obtained in the UV to study stellar wind lines at selected orbital phases. In LMC X-4, these will be carried out at two precessional phases as well. The data will be used to study stellar wind ionisation and velocity changes with X-ray binary phase, and with variable accretion disk obscuration of X-rays. WFC images with UV grating and UV filter in parallel to study LMC hot star population.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (HOT STARS) --

1152 - "STELLAR WIND VARIATIONS -- CYCLE 1 "

Keywords : OB STARS, STELLAR WINDS, BINARIES, TIME VARIATIONS

Proposers: John B. Hutchings (PI; Dominion Astrophysical Observatory; Canada)

UV spectroscopy will be done at 2 x 10super4 resolution on the principal stellar wind lines of OB stars with mass-loss. Each star will be observed twice to study time changes in line profiles. Several stars are interacting binaries. These will also be observed at key binary phases to study phase dependent wind variations. WFC parallel observations with UV grating are requested on one SMC star.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (SUBLUMINOUS STARS) --

1155 - "UV LINE PROFILES OF AM HER STARS:LATER CYCLE "

Keywords : AM HER STARS, EMISSION LINE PROFILES, MAGNETIC FIELDS

Proposers: John B. Hutchings (PI; Dominion Astrophysical Observatory; Canada), A.Cowley (Arizona State University), D.Crampton (Dominion Astrophysical Observatory; Canada)

AM Her type binaries contain highly magnetic accreting White Dwarf stars. Emission lines originate in complex columns of accreting material and their profiles change significantly in times of a few minutes as the line of sight geometry alters with binary phase. IUE data reveal that emission lines are present in the UV spectrum but lack the spectral and time resolution to study profile changes. The UV resonance lines arise in different parts of the accretion column from the visible - so will allow new insights into the accretion mechanisms.

Prop. Type: GTO/HRS

QUASARS AGN -- (HOST GALAXY) --
1157 - "IMAGING OF DISTANT ACTIVE GALAXIES -- CYCLE 1 "
Keywords : HOST GALAXIES, IMAGING OF QUASARS
Proposers: John B. Hutchings (PI; Dominion Astrophysical Observatory; Canada), A.Gower (Victoria, University Of; Canada)

WF/PC will be used to image two objects of interest in various wavelengths. 1) The quasar 2305+187 which is marginally resolved as interacting from the ground; 2) The galaxy NGC 4874 which is marginally resolved as having a bright nucleus and dust lane from the ground.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --
1158 - "CORONAL FLARES -- CYCLE 1 "
Keywords : CORONAE, FLARE STARS, X-RAY STARS, M DWARFS
Proposers: Stephen P. Maran (PI; Nasa, Goddard Space Flight Center), J.Brandt (Colorado, University Of), K.Carpenter (Colorado, University Of), J.Linsky (Colorado, University Of), R.Shine (Lockheed Palo Alto Res. Lab.), F.Walter (Colorado, University Of), B.Woodgate (Nasa, Goddard Space Flight Center)

We will observe coronal flares in AU Mic with the HRS. Spectral coverage is traded in favor of time resolution; a single grating setting in medium resolution mode, however, allows us to observe emissions from Fe XXI, Fe XII, and O V, so that the emissions from flare plasmas at 1E7 K, 1.6E6 K, and 2.5E5 K can be compared. The same setting allows us to monitor bright lines of O I and C I, so that coronal flares can be related to activity in the 10,000 K plasma. Groundbased observations will be scheduled to determine the response of photospheric gas to the coronal flare; radio and X-ray observations will also be arranged or solicited if possible.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --
1159- CT - "CORONAL LINE SURVEY IN LATE-TYPE STARS: CYCLE 3 "
Continuation of Program Number 1159
Keywords : CORONAE, LATE-TYPE STARS, X-RAY STARS, CORONAL ACTIVITY
Proposers: Stephen P. Maran (PI; Nasa, Goddard Space Flight Center), J.Brandt (Colorado, University Of), K.Carpenter (Nasa, Goddard), J.Linsky (Colorado, University Of), R.Shine (Lockheed Palo Alto Res. Lab.), F.Walter (Colorado, University Of), B.Woodgate (Nasa, Goddard Space Flight Center)

This is the first survey of coronal lines in the ultraviolet spectra of late-type stars. The the target was chosen on the basis of large apparent X-ray fluxes and large ratio of hot-to-cool component in X-ray fluxes. The objectives are to detect and measure coronal lines, together with transition region and chromospheric lines that can be observed at the same HRS grating setting, to investigate the temperature, density distribution in the outer atmospheres of late-type stars, and to look for possible activity in the coronal lines, since even targets that are not recognized flare stars on the basis of present data on chromospheric and photospheric activity may produce detectable flares when observed in coronal lines. For maximum signal-to-noise in the coronal lines, assuming the corona is quiet, all of the observing time allocated per star is used at a single grating setting. However, brief exposures are made in repeat observation mode so that if the lines are bright, presumably due to flaring, variability information will be preserved. The results will be analyzed together with available X-ray data and other relevant observations from other facilities.

Prop. Type: GTO/HRS

QUASARS _AGN -- (SEYFERTS) --

1160 - "ABSORPTION CLOUD PHYSICS IN SEYFERT GALAXY NUCLEI -- CYCLE 1 "
Keywords : SEYFERT GALAXIES, BROAD LINE CLOUDS, X-RAY SOURCES
Proposers: Stephen P. Maran (PI; Nasa, Goddard Space Flight Center), J.Brandt (Colorado, University Of), J.Hutchings (Dominion Astrophysical Observatory; Canada), R.Mushotzky (Nasa, Goddard Space Flight Center), A.Smith (Nasa, Goddard Space Flight Center), R.Weymann (Mt. Wilson _Las Companas Obs.)

There are two targets: NGC 3783 and NGC 3516. Visit NGC 3783 three times and NGC 3516 twice. Each target will be observed using grating 160M at two settings. The two grating settings must be scheduled during a single visit. The visits for each target should be separated by at least 6 months. The three observations of NGC 3783 should therefore cover at least 18 months. If target acquisitions are trivial on revisits, reallocate the time allotted to target acquisition so as to prolong the spectral exposures.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --

1162- CT - "INTERSTELLAR ABUNDANCE TOWARD A STAR WITH HIGH DEPLETION CYCLE 1"
Continuation of Program Number 1162
Keywords : INTERSTELLAR, GAS, SPECTROSCOPY, UV
Proposers: Blair D. Savage (PI; Wisconsin, University Of), J.Cardelli (Wisconsin, University Of)

5 HRS 10 resolution spectra of many interstellar lines will be obtained for Beta 1 Sco . The data will be used to study the heavy element depletion and gas physical conditions.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (
1165 - "SPECTROSCOPY OF MILKY WAY HALO GAS -- CYCLE 0 "
Keywords : INTERSTELLAR, GAS SPECTROSCOPY, UV, HALO
Proposers: Blair D. Savage (PI; Wisconsin, University Of), D.Ebbets (Space Telescope Science Institute)

Milky Way halo gas will be studied at resolutions of E+5 and 2xE+4 by observing selected interstellar lines toward galactic and extragalactic objects. Information about kinematics, physical condition, and abundances in the as will be obtained.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --
1168- CT - "INTERSTELLAR CARBON AND OXYGEN CYCLE 2"
Continuation of Program Number 1168
Keywords : INTERSTELLAR ABUNDANCES
Proposers: Michael Jura (PI; Uc, Los Angeles)

This work is to observe interstellar oxygen and carbon within 1 kpc of the sun.The goal is to measure the gas phase abundaces of these species, the densities and temperatures within the clouds, the amount of CO, the electron densities, and the mean intensity of the ultraviolet radiation field. These numbers will greatly improve our understanding of the interstellar medium.

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR EMISSION) --
1170 - "UV SPECTROSCOPY OF LOW-REDSHIFT ACTIVE GALAXIES -- CYCLE 0 "
Keywords : ACTIVE GALACTIC NUCLEI, SEYFERT, LINE PROFILES, BROAD LINE REGION, NARROW LINE REGION
Proposers: Albert Boggess (PI; Nasa, Goddard Space Flight Center), C.Wu (Computer Science Corporation)

HRS will be used to measure the ultraviolet spectrum of active galaxies. Complementary and simultaneous visual and infrared data will also be obtained. The profile of the emission lines will provide information on the broadening mechanism and dynamics of the emitting regions. Comparison of the profile and radial velocity of the emission lines produced by species of different ioni- zation potential will allow the study of the thermal and density stratification of the emitting regions. The degree of asymmetry of lines at different wave- lengths will allow the absorbing material be identified and located. The ratio of the UV to visible lines, such as those for O I and He II will be used to estimate the reddening along the line of sight. Ratio of emission line fluxes will be compared with models in order to derive the ionization mechanism, elec- tron temperature and density, and chemical composition of the emitting gas. The emission line properties of low luminosity will be compared with those of high luminosity objects in order to investigate the covering factor and evolutionary effects. The continumm spectrum from the UV to the IR will be used to establish the emission mechanism and the nature and luminosity of the energy source. The weak absorption lines will be used to establish the physical conditions and the chemical composition of the gas in: our Galaxy, intergalactic medium and the parent galaxy. Absorption produced by broad line clouds will give information on cloud motion and covering factor.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --

1171 - "STUDIES OF THE LOCAL INTERSTELLAR MEDIUM -- CYCLE 1 "

Keywords : INTERSTELLAR LINES - UV- SPECTROSCOPY - GAS

Proposers: Albert Boggess (PI; Nasa, Goddard Space Flight Center), F.Bruhweiler (Catholic University Of America), Y.Kondo (Nasa, Goddard Space Flight Center)

Interstellar absorption line data obtained by the HRS for four selected nearby A and B stars with large v sin (i) will be used to probe the physics of the local interstellar medium. Special emphasis will be placed on understanding the phsical conditions in the region within 25 pc, especially the local cloud. Data will also be obtained for the possible protoplanetary system, beta Pic, to search for molecular OH and place constraints upon te phsical condition in the circumstellar nebula.

Prop. Type: GTO/HRS

QUASARS _AGN -- (BL LAC) --

1172 - "SPECTROSCOPY OF BL LAC OBJECTS -- CYCLE 0 "

Keywords : (1) ACTIVE GALACTIC NUCLEI - BL LAC OBJECTS; (2) INTERSTELLAR MEDIUM - GALACTIC HALO

Proposers: Albert Boggess (PI; Nasa, Goddard Space Flight Center), F.Bruhweiler (Catholic University Of America), Y.Kondo (Nasa, Goddard Space Flight Center), C.Urry (Massachusetts Institute Of Technology)

Two of the brightest X-ray emitting BL Lac objects, PKS 2155-304 and MK 421, will be observed for dual scientific purposes. The first objective is to look for the possible shortward shifted absorption in strong UV lines (e.g. C IV, Si IV and N V) to follow up on the report of shortward-shifted absorption in the X-ray by Canizares and Kruper (Ap.J., 278, 199 - 1984). A detection of such absorption would provide additional support to the relativistic jet model, in which a gas jet from BL Lac nucleus is moving toward us. The second objective is to probe the galactic halo gas using those bright BL Lac objects as continuum background source. The lines to be probed include N V, C IV, Si IV, Mg II, Mg I, C I and H I. Based on the X-ray absorption, the absorption lines occurring in the putative jet are expected to be significantly broader than the absorption lines occurring in the halo.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (HOT STARS) --

1174- CT - "SPECTROSCOPY OF INTERACTING BINARIES, CYCLE 3 "

Continuation of Program Number 1174

Keywords : STAR - BINARY STARS - MASS FLOW - EVOLUTION

Proposers: Albert Boggess (PI; Nasa, Goddard Space Flight Center), F.Bruhweiler (Catholic University Of America), Y.Kondo (Nasa, Goddard Space Flight Center), G.Mccluskey Jr. (Lehigh University)

Two interacting binaries with accretion disks have been selected to determine the nature of the stellar components, and mass flow characteristics of the systems. These objects are the well-known x-ray binaries Sco X-1 and HZ Her. GHRS observations with the medium resolution G160M grating will be used to provide superior signal-to-noise and resolution than presently available using IUE.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --

1175 - "LOCAL INTERSTELLAR MEDIUM AND D/H RATIO -- CYCLE 0 "

Keywords : HYDROGEN COLUMN DENSITY, DEUTERIUM COLUMN DENSITY, DEUTERIUM ABUNDANCE

Proposers: Jeffrey L. Linsky (PI; Colorado, University Of), S.Heap (Nasa, Goddard Space Flight Center), M.Jura (Uc, Los Angeles), W.Landsman (Nasa, Goddard Space Flight Center), B.Savage (Wisconsin, University Of), A.Smith (Nasa, Goddard Space Flight Center)

We will observe the Lyman alpha line at 100,000 spectral resolution towards 7 late-type local stars. The purpose is to derive the hydrogen and deuterium column densities and D/H ratios along lines of sight towards nearby stars. High resolution spectra of the MgII and FeII lines will be obtained to help determine the broadening parameter and whether material along these lines of sight has more than one velocity component.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --

1176 - "DYNAMICS AND ENERGY BALANCE IN STELLAR TRANSITION REGIONS "
Keywords : STELLAR CHROMOSPHERES, STELLAR TRANSITION REGIONS, F-M DWARF STARS, G-K GIANT STARS, STELLAR ACTIVITY
Proposers: Jeffrey L. Linsky (PI; Colorado, University Of), A.Brown (Colorado, University Of)

We propose to study the dynamics of stellar transition regions by measuring the redshifts, indicative of downflows, in lines of C III, C IV, Si IV, and O IV.The energy balance and heating rates in stellar chromospheres and transition regions will be derived from an emission measure analysis of emission line fluxes and densities inferred from density sensitive line ratios. Stars of interest include dwarf stars of spectral type F-M, active G and K giants, and RS CVn binary systems.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --

1177 - "SEARCH FOR HOT PLASMAS IN THE OUTER ATMOSPHERES OF K GIANTS CYCLE 2"
Keywords : K III STARS, K I STARS, GIANTS, SUPERGIANTS, CHROMOSPHERES, CORONAE
Proposers: Jeffrey L. Linsky (PI; Colorado, University Of), A.Brown (Colorado, University Of)

We will measure the amount of plasma hotter than 10,000 K (or establish small upper limits) in the outer atmospheres of K giant stars now thought not to have for hot material. A second goal is to derive models of the hot plasma in the transition regions of early K giants with very low heating rates due to slow rotation and very weak magnetic field generation. We will search for emission lines of C III, Si III, C IV, Si IV, and N V in very deep specta. Upper limits to the strength of these emission lines will place stringent constraints on possible nonradiative heating processes. Observations of weak intersystem lines will provide estimates of the electron density needed for atmospheric modeling. We will attempt to determine whether the hot plasma (and the required heating) are global or isolated to small regions on the star due to magnetic fields or stochastic heating processes. Two of these stars are Hyades Cluster giants, one with no evidence of hot lines and the other with strong emission lines that may be due to the presence of a close binary component.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --

1179 - "HYBRID STAR WINDS AND TRANSITION REGIONS CYCLE 2"

Keywords : STAR, K III-I, CHROMOSPHERES, CORONAE, WINDS

Proposers: Jeffrey L. Linsky (PI; Colorado, University Of), A.Brown (Jila, University Of Colorado)

Hybrid-chromosphere stars are G-K bright giants that show weak high-temperature emission lines and blue-shifted absorption in low-temperature lines indicating mass loss. We will determine the temperature distribution and densities in the outer atmosphere, and measure the outflow velocity and mass loss rate in a representative hybrid star, Alpha TrA. We will determine whether the hot plasma participates in the outflow or whether the wind consists entirely of cool gas. Atmospheric models will be derived for both the hot and cool gas using an emission measure analysis and density-sensitive line ratios. This work will settle the question of whether the hybrid nature of these stars is due to two distinct components in the stellar atmosphere (perhaps one with strong, closed magnetic fields and the other with weak, open fields) or whether a more complex geometry is needed to explain the data.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --

1180 - "TRANSITION REGIONS IN VERY LATE M DWARFS CYCLE LATER OBSERVATIONS"

Keywords : MS STAR, MV STARS, X-RAY STAR, FLARE STAR

Proposers: Jeffrey L. Linsky (PI; Colorado, University Of), C.Ambruster (Jila, University Of Colorado), A.Brown (Jila, University Of Colorado), M.Giampapa (National Solar Observatory), S.Maran (Nasa, Goddard Space Flight Center)

We propose to search for transition region emission lines indicative of 1.0E+5 K plasma in the ultraviolet spectra of the coolest M dwarf stars of both the dM and dMe types. With such data we will study the heating rates and energy balance in the transition regions of these stars and compare such data with stars of earlier spectral type. An important question is whether transition regions disappear or have significantly smaller heating rates in the late M dwarfs as is suggested by the X-ray data.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (

1182- LT - "ELEMENTAL ABUNDANCES IN EARLY-TYPE STARS "

Keywords : MS STAR, HB STAR, CHEMICALLY PECULIAR STAR, ABUNDANCE, SPECTROSCOPY, UV

Proposers: David S. Leckrone (PI; Nasa, Goddard Space Flight Center), J.Brandt (University Of Colorado), K.Carpenter (Nasa, Goddard Space Flight Center)

The resolving power and photometric quality of HRS data are exploited in an extensive investigation of the elemental abundances, atmospheric properties and evolutionary characteristics of sharp-lined B and A stars. Three classes of stars are included - chemically peculiar (CP) non-magnetic late B stars of the HgMn class, an early-A type horizontal branch star and sharp-lined normal stars ranging from B6 to A2. Analyses of the CP stars will establish constraints on models for the production of abundance anomalies. The field horizontal branch star's CNO abundances, obtained from low-excitation UV lines, will provide a critical check of abundances derived from high excitation transtions observed in the red and near-IR, the latter being susceptible to large non-LTE effects. Abundances obtained from the spectra of the normal stars provide a framework of comparison standards for the study of CP stars and allow us to place limits on star-to-star variations in abundance, perhaps reflecting local patterns of nucleosynthesis. The program is divided into seven research topics. The R=100,000 mode is used to investigate specific issues raised by previous studies. The R=20,000 mode is used to obtain complete UV spectra of selected CP and normal stars to be used for global abundance analyses.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (

1183 - "A HIGH RESOLUTION UV SPECTRAL SURVEY OF THE SHARP-LINED, CHEMICALLY PECULIAR B STAR, CHI LUPI, LATER CYCLE"

Keywords : CHEMICALLY PECULIAR STAR, ABUNDANCE, SPECTROSCOPY, UV

Proposers: David S. Leckrone (PI; Nasa, Goddard Space Flight Center)

These observations constitute a GHRS Team project to complete an extensive survey of key wavelength regions in the rich UV spectrum of the remarkable, sharp-lined peculiar star, chi Lupi. The time required for a full GHRS echelle spectral atlas is prohibitive. However, an intelligently planned survey will provide an enormous spectroscopic data base for use in elemental abundance analyses and as a standard of reference for the study of other normal and peculiar B and A stars. As the atomic data base is progressively improved, the chi Lupi spectrum will continue to be studied for years to come. The starting point for the survey is the set of wavelength intervals observed under proposal 1182. The present observations will approximately double the size of that wavelength sample. Wavelengths have been selected to provide data on transitions from the ground or low excitation states of the dominant stage of ionization of as many elements as possible. However, it is expected that the selection of wavelength settings will be refined, based on what is learned from the observations of proposal 1182.

Prop. Type: GTO/HRS

SOLAR SYSTEM -- (COMETS) --
1184 - "ULTRAVIOLET ATLAS OF BRIGHT, SUITABLE COMET OF OPPORTUNITY "
Keywords :
Proposers: John C. Brandt (PI; Lasp-University Of Colorado)

This project is a replacement for the Halley's Comet observations by the HRS outlined in our original proposal. Our intention is to select a comet of opportunity that is bright enough to obtain useful observations in the ultraviolet and that has an orbit which permits acquisition and tracking by the Space Telescope over an extended period of time. The goal is to obtain basically an HRS atlas concentrating on 20,000 spectral resolution. The strategy will be to take FOS spectra covering the entire wavelength region of interest, and then to take HRS medium and high resolution spectra of specific regions. The detailed plan for this project depends on the current capabilities of the HST, and is subject to change. original limits of GTO time. This is a priority 1 observing program, cycle TBD.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (HOT STARS) --
1186 - "IMAGERY AND UV SPECTROSCOPY OF MATTER EJECTED FROM ETA CARINAE "
Keywords : STELLAR EVOLUTION, MASS LOSS, NUCLEOSYNTHESIS
Proposers: Dennis C. Ebbets (PI; Ball Aerospace Corporation), K.Davidson (Univ Of Minnesota), N.Walborn (Space Telescope Science Institute), A.Warnock (Nasa/Gsfc)

The Planetary Camera and the High Resolution Spectrograph will be used to study the knots of material which have been ejected from Eta Carinae. Two sets of PC images in the light of H-Alpha will be taken at widely separated epochs. Analysis of the images will provide new information about the distribution, morphology and motions of the ejecta. Ultraviolet spectra of two bright knots will be obtained with the HRS. The spectral region 1150-1950A will be observed with configuration G140L, allowing emission line fluxes, profiles, and velocities to be studied. A signal to noise ratio of 25 in the brighter lines is anticipated. Searches for as yet undetected lines of carbon and oxygen will be possible to much fainter limits on the fluxes. REVISED 7/20/88 FOR PHASE 2 UPDATED 9/15/89 FOR CYCLE 1 PHASE 2 WF/PC images revised 10/89 REVISED 11/16/90 FOR CYCLE 0 WFC AND PC IMAGES

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (

1188 - "UV SPECTROSCOPY OF THE COMPONENTS OF R136 -- CYCLE 0 "
Keywords : SUPERGIANT STAR, WOLF-RAYET STAR, MASS LOSS, LMC 30 DORADUS
Proposers: Dennis C. Ebbets (PI; Ball Aerospace Corporation), B.Savage (Wisconsin, University Of)

R136 is the bright central object of the 30 Doradus nebula in the LMC. It contains an unusually tight grouping of very massive and luminous O and Wolf-Rayet type stars. The brightest recognizeable component, called R136A1, may be an unresolved group of several stars, or may be a single object with a mass of order 800 Mo. Detailed studies of the individual components have been hampered by a lack of sufficient spatial resolution. The High Resolution Spectrograph will be used to obtain detailed ultraviolet spatial and spectral information about the five or so brightest discrete components. The goal of the program is to study the spectral morphology, stellar wind characteristics, ultraviolet luminosities and ultimately the masses included in this unusual and interesting object. redlined for phase 2, 7/19/88, dce updated for cycle 1 phase 2 9/21/89 revised lines 1-7 for cycle zero 11/15/90

Prop. Type: AUG/HRS

INTERSTELLAR MEDIUM -- (

1189 - "ZETA OPH INTERSTELLAR MOLECULES - CYCLE 2 "
Keywords : INTERSTELLAR GAS, INTERSTELLAR MOLECULES
Proposers: Dennis C. Ebbets (PI; Ball Aerospace Corporation), J.Brandt (Lasp, University Of Colorado)

Zeta Oph is one of the best studied lines of sight for interstellar absorption lines. Interstellar observations represent one of the primary scientific objectives of the Goddard High Resolution Spectrograph. The goal of this program is to observe weak absorption lines of interstellar molecules with the highest possible spectral resolution, S/N ratio, photometric precision and wavelength accuracy. These observations will demonstrate the limits of GHRS performance for measurements of very weak spectral features. submitted March 1992 for revised cycle 2 without side 1 use augmentation time if available, baseline time if not Potential augmentation time is 5.0 hours.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (
1190 - "FUV EMISSION LINE PROFILES OF W SERPENTIS BINARIES: CYCLE 1 OBSERVATIONS"
Keywords : INTERACTING BINARIES - W SERPENTIS - RX CAS - SX CAS
Proposers: Edward Beaver (PI; Uc, San Diego), J.Weiland (General Sciences Corporation)

We propose to use the HRS at intermediate resolution for the study of FUV emission line profiles in W Serpentis (which is the prototype of the 'W Serpentis' class of interacting binaries). The FUV spectrum of the W Ser systems is characterized by strong emissions at N V 1240, CII 1335, Si IV 1400, Si II 1533, C IV 1550 and Al II 1670. In cycle 1, we will concentrate on observations of the Si IV 1400 doublet in W Ser. Although these lines may be observed with IUE at low dispersion, all profile information is lost at this resolution, and the W Ser systems in general are too faint to be observed at IUE high dispersion. The emission lines are believed to arise from a high excitation wind powered by the accretion process. Modelling of observed line profiles will yield information about the physical properties of the mass outflow in these systems, as well as providing insight into a stage of evolution which many close binaries appear to undergo.

Prop. Type: AUG/HRS

QUASARS _AGN -- (QUASAR ABSORPTION) --
1191- CT - "PHYSICAL CONDITIONS IN LOW Z ABSORPTION LINE SYSTEMS IN QSOS AUGMENTATION: CYCLE 2 OBSERVATIONS"
Continuation of Program Number 1191
Keywords : QUASAR, SPECTROSCOPY, ABSORPTION LINES
Proposers: Edward Beaver (PI; Uc, San Diego), R.Cohen (Uc, San Diego)

In PKS 2135-147, we will measure absorption of Ly-alpha and C IV at the emission-line redhift. We will study the properties of z(a)=z(e) absorption lines in this, the lowest redshift QSO with a z(a)=z(e) absorption system. Wavelengths and line strengths, combined with future imaging, will elucidate the properties of these systems.

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR EMISSION) --
1192 - "ULTRAVIOLET LINE PROFILES OF OX 169 (2141+174) -- CYCLE 0 "
Keywords : QUASARS, ABSORPTION LINES
Proposers: Edward Beaver (PI; Uc, San Diego), R.Cohen (Uc, San Diego), H.Smith (Uc, San Diego)

We will observe Lyman-alpha and CIII] in the QSO OX 169, whose Balmer lines show a feature which is either due to self absorption or narrow-line emission. These observations will resolve the issue and may provide unique information about QSO broad-line clouds.

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR ABSORPTION) --
1193 - "LYMAN-ALPHA REGION OF QSOS WITH STRONG ABSORPTION LINES: CYCLE 1"
Keywords : QUASARS, ABOSORPTION LINES, 21-CM
Proposers: Edward Beaver (PI; Uc, San Diego), R.Cohen (Uc, San Diego), A.Davidsen (Johns Hopkins University), B.Margon (Washington, University Of)

FOS Spectra will be obtained of the L-alpha region of 3 quasars with 21 cm absorption. Measurement of the spin temperature and column depth will allow us to discriminate between different models for the absorbing gas.

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR ABSORPTION) --
1194 - "IMAGING AND SPECTROSCOPY OF THE NEARBY QSO 2130+099: FUTURE-CYCLE CONTINUATION"
Keywords : QUASARS, SPIRAL GALAXY, STELLAR POPULATION, MORPHOLOGY
Proposers: Sara Heap (PI; Nasa/Gsfc)

We will make four types of observations of the nearby QSO 2130+099: (1) images with the PC: (2) UV maps of the nucleus with the GHRS N2 mirror; (3) UV spectrum of the nucleus with either FOS or GHRS/D1 and (4) UV spectrum of a knot in the spiral arm of the host galaxy.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --
1195 - "WINDS OF COOL LUMINOUS STARS: DENSITIES, TEMPERATURES, GEOMETRIC EXTENTS, AND VELOCITY STRUCTURES -- CYCLE 0"
Keywords : COOL STARS: WINDS, CHROMOSPHERES, MASS-LOSS.
Proposers: Kenneth G. Carpenter (PI; Nasa - Goddard Space Flight Center), J.Linsky (Colorado, University Of), R.Robinson (Csc - Astronomy Program)

The goals of this program are to determine the physical characteristics of the winds/chromospheres around cool luminous stars. GHRS observations of the C II (UV 1) 1335 A and (UV 0.01) 2325 A multiplets will be used along with observations of the C I lines near 1655 and 1994 A to constrain the temperatures and densities in model chromospheres. The C II (UV 0.01) lines will also be used to estimate the turbulence in these chromospheres. The (confusing) far UV spectrum of the M supergiants will be explored with the GHRS. GHRS echelle observations of a set of Fe II lines in the 2700 - 2800

A region will be used to study the dependence of the wind velocity on radial distance above the photosphere. High quality Mg II profiles will be acquired to search for discrete velocity features and the presence of circumstellar absorption within the profiles. The photospheric absorption-line spectrum (2579-2675 A) of Arcturus will be observed in the echelle mode. Medium resolution observations of Fe II and Mg II in the dusty, very luminous star Mu Cep will provide information on the effect of dust and very low gravity on the wind velocity field.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --
1198- CT - "PHYSICAL CONDITIONS AND VELOCITY STRUCTURES IN THE RED GIANT WINDS IN THE BINARIES CI CYG AND EG AND -- CYCLE 1"
Continuation of Program Number 1198
Keywords : COOL STARS; CHROMOSPHERES, WINDS, MASS LOSS, BINARIES; SYMBIOTIC STARS
Proposers: Kenneth G. Carpenter (PI; Nasa - Goddard Space Flight Center), J.Linsky (Colorado, University Of), R.Robinson (Csc - Astronomy Program), R.Stencel (Colorado, University Of)

This proposal represents a two pronged attack aimed at understanding the detailed chracteristics of red giant winds in binary star systems. Red giant winds can provide the most massive, sustained form of mass transfer in binaries. The symbiotic and related stars, which contain red giant and hot companion stars, permit line of sight studies through a range of red giant atmospheric heights. The goal of this work is to attempt to define both the mechanism of rapid mass loss in red giant stars and the details of mass transfer to the companion stars. Such results can provide important constraints for both stellar and binary evolution theories. In each case we expect to derive density and temperature values for the red giant wind region and compare this to the present understanding of single star conditions where low temperature, dust and molecule forming, circumstellar envelopes prevail.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --
1199- CT - "ALPHA ORIONIS GHRS TEAM PROJECT -- CYCLE 1 "
Continuation of Program Number 1199
Keywords : COOL STARS: WINDS, CHROMOSPHERES, MASS-LOSS, UV SPECTRA, PHOTOSPHERES
Proposers: Kenneth G. Carpenter (PI; Nasa - Goddard Space Flight Center), J.Brandt (Nasa, Goddard Space Flight Center), J.Linsky (Colorado, University Of), R.Weymann (Arizona, University Of)

The HRS will be used to obtain high signal/noise spectra of the 1980 - 3300 A spectral region of the M2 Iab supergiant Alpha Orionis. This full wavelength region will be observed at medium resolution, while 3 selected wavelength regions will be observed in the echelle mode. Exposure times have been chosen so that both the chromospheric emission line spectrum and the photospheric continuum and absorption line spectrum will be properly exposed. These observations will be combined and published in atlas format. It is hoped that this atlas will provide a standard against which high-resolution UV observations of other late-type stars can be compared. Detailed analysis of these data are planned by various IDT members.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (
1200- CT - "SEARCH FOR INTERSTELLAR MOLECULES IN SPECTRA OF THREE B STARS -- CYCLES 1,2,3"
Continuation of Program Number 1200
Keywords : MOLECULAR CLOUD, GAS
Proposers: Andrew M. Smith (PI; Nasa, Goddard Space Flight Center), J.Brandt (Nasa, Goddard Space Flight Center), D.Ebbets (Ball Aerospace Corporation), M.Jura (Uc, Los Angeles), B.Savage (Wisconsin, University Of)

The scientfic goal of this program is to check current theoretical understanding of gas phase chemistry in diffuse interstellar clouds and to modify this understanding if necessary. A further goal is to look for evidence of molecule formation other than H2 on interstellar grain surfaces. Signatures of many of the most important molecular species are found in the vaccuum and middle ultraviolet accessible to the HRS. It is proposed to observe HD32656 throughout the HRS wavelength range and HD29647 at a few caroussel settings in the 2.4x104 resolving power mode. These stars are associated with the Taurus Cloud complex. It is also proposed to observe omicron persei in the 105 revolving power mode and combine the new results with those found by observations with the "Copernicus" satellite.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (
1201 - "PHYSICAL PARAMETERS IN THE LOCAL INTERSTELLAR MEDIUM -- CYCLE 0 "
Keywords : HI CLOUD, GAS
Proposers: Andrew M. Smith (PI; Nasa, Goddard Space Flight Center)

Using the 10 (super 5) resolving power mode of the HRS it is proposed to observe neutral as well as multiply ionized species in the local interstellar medium at distances less than 50 pc from the Sun. The primary goal is to determine local hydrogen atom densities using fine structure populations in carbon and silicon atoms. Other goals are to determine electron densities from the populations of fine structure levels in C (super +) and S (super +) ions and to set limits on local gas temperatures by combining observations of line profiles, doppler parameters and ionization equilibria in atoms and first ions of carbon, silicon and magnesium.

Prop. Type: GTO/HRS

SOLAR SYSTEM -- (
1202- CT - "LY-ALPHA AND H2 SURVEY -- CYCLES 4 "
Continuation of Program Number 1202
Keywords : LY-ALPHA, UV SPECTRA, UV EMISSION, PLANETARY ATMOSPHERES
Proposers: Laurence M. Trafton (PI; Texas, University Of)

Measure the Ly-alpha emission and the Lyman and Werner H2 emission for Jupiter, Saturn, Titan, Uranus and Neptune for a low - and medium - resolution survey and comparative study. Calibrate the superposed geocoronal Ly-alpha background emission in parallel HRS observations. Search for emissions for aeronomical species generated by ion chemistry in the intense auroral emissions (such as species recently detected in the 2 - 4 micron aurora of Jupiter). Search for HD emission in order to evaluate the D/H ratio with the aid of the H2 bands. Perform an overall comparative study of the aurorae in reducing atmospheres, including a comparative study of their magnetospheric excitation processes.

Prop. Type: GTO/HRS

SOLAR SYSTEM -- (GIANT PLANETS) --
1203- CT - "JOVIAN AURORAL LY-ALPHA PROFILE-CYCLE 3 "
Continuation of Program Number 1203
Keywords : LY-ALPHA, AURORA, MAGNETOSPHERE, DEUTERIUM
Proposers: Laurence M. Trafton (PI; Texas, University Of)

Observe the Ly-alpha profile for a bright auroral emission on Jupiter to study excitation processes, proton precipitation along field lines, excitation particle flux, and atmospheric properties. A determination of the D/H ratio may result if the signal to noise is high enough.

Prop. Type: GTO/HRS

SOLAR SYSTEM -- (SATELLITES) --
1204- CT - "IO PROTON AURORA? - CYCLE 3 "
Continuation of Program Number 1204
Keywords : LY-ALPHA, IO, TRAPPED RADIATION, MAGNETOSPHERE
Proposers: Laurence M. Trafton (PI; Texas, University Of)

Attempt detection of Ly-alpha emission from Io, caused by protons trapped in magnetosphere interacting with Io.

Prop. Type: GTO/HRS

SOLAR SYSTEM -- (

1206- CT - "SULFUR NEAR IO CYCLE 2"
Continuation of Program Number 1206
Keywords : IO, SULFUR, JOVIAN TORUS
Proposers: Laurence M. Trafton (PI; Texas, University Of)

Neutral sulfur and oxygen, and stages of ionized sulfur have been observed in Jupiter's torus. Io is supposed to be the source of all torus species but the mechanism feeding the torus has not been determined. Neutral S should be densest Io. We will attempt to detect neutral sulfur and oxygen near Io in and out of the plasma torus in order to shed light on this problem.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --

1208 - "DOPPLER IMAGING OF THE CHROMOSPHERES AND TRANSITION REGIONS OF AR LACERTAE -- CYCLE 1"
Keywords : BINARY; DOPPLER IMAGING; CHROMOSPHERE
Proposers: Frederick M. Walter (PI; Suny Stony Brook)

By obtaining high resolution, high S/N profiles of the transition region line in an active chromosphere star, it is possible to apply Doppler Imaging techniques in order to map the surface plages. We propose to obtain 8 spectra of C IV and Mg II lines in AR Lac, spaced around the orbit, to determine the spatial location of the active regions in the transition regions and lower chromspheres of the two stars.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --

1209 - "NON-RADIATIVE HEATING IN PRE-MAIN SEQUENCE STARS: CYCLE 2 CONTINUATION"
Keywords : T TAURI STARS; CHROMOSPHERES; TRANSITION REGIONS
Proposers: Frederick M. Walter (PI; Suny, Stony Brook), J.Linsky (Colorado, University Of)

We shall obtain UV line fluxes and selected line profiles, using the HRS, for a diverse sample of pre-main sequence stars. We propose to study the atmospheric heating, dynamics, and density structure of these stars.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --
1210 - "AGE DEPENDENCE OF NON-RADIATIVE HEATING IN STELLAR CHROMOSPHERES "
Keywords : CHROMOSPHERES; ROTATION; STELLAR AGES; YOUNG STARS
Proposers: Frederick M. Walter (PI; Suny, Stony Brook), J.Linsky (Colorado, University Of)

We propose to observe 23 F and G stars in the alpha Per, Pleiades, UMa and Hyades clusters to study the decay of chromospheric radiative loss rates (as a function of temperature) as a function of stellar age.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (HOT STARS) --
1211- CT - "EXTENDED ATMOSPHERES OF EARLY-TYPE STARS: CYCLE 2 OBSERVATIONS (GTO BASELINE)"
Continuation of Program Number 1211
Keywords : STELLAR WINDS, EXTENDED ATMOSPHERES
Proposers: Sara R. Heap (PI; Nasa, Goddard Space Flight Center), B.Altner (Applied Research Corp.), A.Fullerton (Bartol Inst., Univ. Of Delaware), H.Heinrichs (University Of Amsterdam; Holland), O.Stan (Bartol Inst.)

We will monitor one star, XI Per (HD24912), in order to detect and track absorption components (DAC's) in its wind.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (SUBLUMINOUS STARS) --
1212 - "HIGHLY EVOLVED STARS OF LOW MASS -- CYCLE 0 "
Keywords : PLANETARY NEBULAE, PLANETARY NUCLEI
Proposers: Sara R. Heap (PI; Nasa, Goddard Space Flight Center), J.Harrington (Maryland, University Of)

I propose to use the HRS to study highly evolved stars, particularly the central stars of planetary nebulae. The study includes (1) an attempt to detect and measure the flux from extremely hot stars (T>150,000 K), (2) an investigation of hydrogen and carbon-rich central stars and their recent ejecta, (3) an investigation of the interaction of the wind from a central star with the surrounding nebula, and (4) follow-up spectroscopic studies of uv-bright stars discovered in globular clusters.

Prop. Type: GTO/HRS

GALAXIES _CLUSTERS -- (NUCLEI) --

1213- CT - "THE NUCLEUS OF M83: CYCLE-1 EARLY ACQUISISTION IMAGES"
Continuation of Program Number 1213
Keywords : BARRED SPIRAL, GALACTIC NUCLEI
Proposers: Sara R. Heap (PI; Nasa, Gsfc), E.Malumuth (Computer Sciences Corp.), V.Rubin (Carnegie Institute Of Washington), W.Waller (Nasa, Goddard Space Flight Center)

We will use the HST to survey the nuclear regions of M83, a nearby barred spiral galaxy with a starburst nucleus (Bohlin et al. 1983).

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (

1215 - "ULTRAVIOLET SPECTRAL ATLAS OF O STARS IN THE MILKY WAY AND MAGELLANIC CLOUDS"
Keywords : STELLAR WINDS, EXTENDED ATMOSPHERES
Proposers: Sara R. Heap (PI; Nasa, Goddard Space Flight Center)

We will obtain high S/N far-ultraviolet spectra of O giants and supergiants in the Milky Way and the Large and Small Magellanic Clouds. We will derive the properties of the star/wind systems from the photospheric and wind spectra, and we will investigate the effect of chemical composition on the properties of the wind.

Prop. Type: GTO/FOC

QUASARS _AGN -- (QUASAR EMISSION) --

1225 - "NEBULOSITY ASSOCIATED WITH THE NEARBY QSO MR 2251-178 "
Keywords : QSO - INTERSTELLAR MATTER - KINEMATICS
Proposers: Alec Boksenberg (PI; Royal Greenwich Observatory; United Kingdom), J.Bergeron (Institute Of Astrophysics, Paris; France), F.Macchetto (Esa, Space Telescope Science Institute)

Long-slit spectroscopy of the nearby QSO MR2251-178 will allow us to study the dynamics of its nuclear narrow line region and the link between this region and the surrounding ionized nebulosity, to determine the gas excitation gradients and the total column density of ionized gas. In addition the imaging mode will give the morphology of the ionized gas within the narrow line region and the inner nebulosity and will allow comparison between LyAlpha haloes of low and high redshift QSO's.

Prop. Type: GTO/FOC

QUASARS _AGN -- (OTHER ACTIVE NUCLEI) --

1227 - "HIGH-SPATIAL-RESOLUTION IMAGING AND SPECTROSCOPY OF AGN "

Keywords : EMISSION LINE GALAXY, SEYFERT GALAXY, RADIO GALAXY, BL-LAC OBJECT, QUASAR, IMAGING, SPECTROSCOPY

Proposers: Alec Boksenberg (PI; Royal Greenwich Observatory; United Kingdom), F.Macchetto (Esa, Space Telescope Science Institute)

Images of many objects having AGN will be obtained, representing a range of typed physical properties. Roll deconvolution with the FOC f/288 mode can yield diffraction-limited resolution at short UV wavelengths, for example 0.02 arc sec at 200 nm; selected high-resolution measurements will be made of several nearby and bright AGN. Additional long-slit spectroscopy will complement these observations. The programme is directed at attaining a true physical picture of the nature of the broad line, intermediate and narrow line regions of such objects.

Prop. Type: GTO/FOC

QUASARS _AGN -- (JETS) --

1228 - "STUDY OF OPTICAL EMISSION ASSOCIATED WITH RADIO JETS AND HOT SPOTS -- CYCLE 0"

Keywords : AGN, RADIOEMISSION, JETS

Proposers: F. Duccio Macchetto (PI; Esa, Space Telescope Science Institute), P.Crane (European Southern Observatory; Germany, West), G.Miley (Space Telescope Science Institute)

ST is uniquely equipped to detect optical emission from synchroton jets and to study the interaction of jets with their environment. Here we outline a program of broad and narrow band imaging and limited slit spectroscopy on carefully selected samples of objects designed to exploit ST for these purposes. The aims are to study the following: -morphological relations between radio and optical emission. -optical and UV counterparts of radio jets and hot spots to derive information on particle acceleration mechanisms. -interactions between synchroton jets and in the ambient gas, to use each as a unique probe of the physical conditions within the other. -possible relationship between the propagation of radio jets and star formation.

Prop. Type: GTO/FOC

QUASARS _AGN -- (
1231 - "THE RELATIONSHIP BETWEEN GALACTIC ACTIVITY AND GRAVITATIONAL INTERACTION: CYCLE 1 OBSERVATIONS"
Keywords : INTERACTING GALAXIES, ACTIVE GALAXIES, NUCLEI OF GALAXIES
Proposers: Cesare Barbieri (PI; Padova, University Of; Italy), C.Bonoli (Padova Observatory; Italy), L.Danese (Padova, University Of; Italy), G.De Zotti (Padova, University Of; Italy), P.Rafanelli (Padova Observatory; Italy), H.Schulz (Ruhr University Bochum; Germany, West)

It has long been known that activity in galaxies can be triggered by gravitational interaction. This hypothesis is supported by direct observations which show that a considerable excess of Seyfert galaxies and low redshift QSO's belongs to an interacting or disturbed system. A typical member of this class of objects is the S1 galaxy NGC6240, which is characterized by two close nuclei and is also an outstanding member of the new class of extreme IR galaxies identified by IRAS. High resolution imaging of the region between the two nuclei, using the FOC F/96 camera in combination with narrow band filters, centered on crucial lines and on the continuum, will provide information on the nature and on the effects of the collision between the two nuclei. We propose, in addition, to observe with the FOC, F/48 spectrograph the nucleus of the disturbed S1 galaxy Mkn 231, which belongs also to the IR class of objects identified by IRAS and is interpreted to be in a later evolutionary stage of the collisional phenomenon going on in NGC 6240.

Prop. Type: GTO/FOC

QUASARS _AGN -- (HOST GALAXY) --
1233 - "NARROW BAND IMAGING OF QUASARS -- CYCLE 0 "
Keywords : QUASARS, IMAGING, NARROW LINE EMISSION
Proposers: F. Duccio Macchetto (PI; Esa, Space Telescope Science Institute), S.Di Serego Alighieri (Esa, European Coordinating Facility; Italy), M.Perryman (Esa, Estec; Netherlands), P.Shaver (European Southern Observatory; Germany, West)

It has long been thought that quasars may be powered by the infall of gas, either from within the parent galaxy or from outside. It has also been thought that quasars may expel gas into the intergalactic medium, leading to large-scale enrichment at an early epoch. In either case, one may expect to find gas within the parent galaxies of quasars, and large gaseous halos around them. Other possibilities have been suggested - protogalactic disks, protoclusters, residual pancake structures - the remains of which might also appear as halos around quasars. Narrow-band observations of quasars with the ST will not only address these fundamental issues, but will at the same time touch on several others, including the nature of the parent galaxy, its evolution with redshift, the presence of nearby galaxies and possible protogalaxies, and the nature of the objects causing quasar absorption lines.

Prop. Type: GTO/FOC

QUASARS _AGN -- (
1235 - "FAR-ULTRAVIOLET SPECTRA OF VERY HIGH REDSHIFT QUASARS -- CYCLE 0 "
Keywords : HIGH REDSHIFT QUASARS - INTERGALACTIC MEDIUM
Proposers: Peter Jakobsen (PI; Esa, Estec; Netherlands), J.Blades (Esa, Space Telescope Science Institute), A.Boksenberg (Royal Greenwich Observatory; United Kingdom), F.Paresce (Esa, Space Telescope Science Institute)

We intend to carry out a first exploraory survey of the redshifted Lyman continuum spectra of high redshift quasars. The main objective is to investigate the opacity of the intergalactic medium in the Lyman continuum and to carry out the He+ equivalent of the Gunn-Peterson test for once ionized intergalactic helium.

Prop. Type: GTO/FOC

QUASARS _AGN -- (GRAVITATIONAL LENSES) --
1236 - "A SEARCH FOR NEW GRAVITATIONAL LENSES -- CYCLE 0 "
Keywords : GRAVITATIONAL LENSES, QUASARS
Proposers: Craig D. Mackay (PI; Cambridge University; United Kingdom)

It is proposed to survey the images of known quasars at the highest resolution to look for multiple structure that might be caused by a gravitational lens. Quasars have been selected to have generally high redshift and rich absorption line spectra with multiple Systems to increase the chance of there being intervening material. The FOC at f/288 is the highest resolution instrument on ST and especially well suited to this search.

Prop. Type: GTO/FOC

GALAXIES _CLUSTERS -- (GAS) --
1242 - "DUST LANES AND FILAMENTARY STRUCTURES IN DOMINANT ELLIPTICAL GALAXIES "
Keywords : DOMINANT CLUSTER GALAXY, FILAMENTS, COOLING DUST
Proposers: F. Duccio Macchetto (PI; Esa, Space Telescope Science Institute), H.Norgaard-Nielsen (Copenhagen University Observatory; Denmark)

Observations made with the best obtainable ground based angular resolution are insufficient to determine the kinematic structure of the filaments of dominant galaxies in clusters, the physical relation between the dust and ionized gas, and the origin of the filaments. Therefore, follow-up broad band U and B exposures with the FOC will be obtained. The small extent of the filaments (r~ 10") match well with the field of view of the f/48 relay. From published surface photometry we estimate that we can get good photometric accuracy (~2 per cent) within the allotted time. By exploiting the greater than one order of magnitude improvement in angular resolution we will acquire deeper understanding of these important astrophysical issues, especially the interrelation between the observed dust and ionized gas and an implied cooling flow around the galaxies.

Prop. Type: GTO/FOC

QUASARS _AGN -- (SEYFERTS) --

1244 - "NATURE OF GALAXIES WITH ANOMALOUSLY LARGE IR EMISSION "

Keywords : INFRARED, STARBURST, SEYFERT, IRAS

Proposers: F. Duccio Macchetto (PI; Esa, Space Telescope Science Institute), G.Miley (Esa, Space Telescope Science Institute)

One of the most important discoveries of the IRAS Satellite has been that some galaxies have anomalously large infrared to optical emission. These predominantly interacting "Starburst" systems are probably sites of extremely vigorous star formation. IRAS has also shown that many Seyferts have strong mid-IR components which are most likely due to emission from dust in the nuclear narrow-line regions. We wish to make broad and narrow-band images of extreme-IR galaxies from both of these classes. This is a pilot study. The ultimate aim of such a program will be to (a) determine the morphologies and colour distributions of both classes of objects as a function of distance and (b) investigate possible relations between the Seyfert and starburst phenomena.

Prop. Type: GTO/FOC

STELLAR POPULATIONS -- (NEARBY GALAXIES) --

1246 - "STUDIES OF BLUE COMPACT DWARF GALAXIES "

Keywords : BLUE DWARF GALAXIES, YOUNG STARS

Proposers: J. M. Deharveng (PI; Marseille Observatory; France), C.Barbieri (Padova, University Of; Italy), M.Disney (University College, Cardiff; United Kingdom)

It is proposed to observe a few blue compact dwarf galaxies at high angular resolution. The most massive stars are expected to be resolved and identified by an exposure through a far UV filter. Further exposures with a near UV and visible filters would give their colors. The aim is to determine how star formation may be affected by the extreme conditions known to be present in this category of objects (intense burst of star formation, low heavy element abundances, large amount of neutral hydrogen). An exposure with the WF/PC in the far red is supposed to reveal the possible existence of an older generation of stars.

Prop. Type: GTO/FOC

INTERSTELLAR MEDIUM -- (SUBLUMINOUS STARS) --
1253- LT - "HIGH RESOLUTION OBSERVATIONS OF CATACLYSMIC VARIABLES -- CYCLE 0 "
Keywords : CATACLYSMIC VARIABLES, NOVAE, SYMBIOTICS, SHELLS
Proposers: Francesco Paresce (PI; Space Telescope Science Institute), F.Macchetto (Esa, Space Telescope Science Institute), C.Mackay (Cambridge University; United Kingdom)

It is proposed to explore at high spatial and moderate spectral resolution the close environments of ten cataclysmic variable stars known or suspected to possess complex surrounding emission nebulosities. The study will be conducted using the narrow band and interference filters centered on bright nebular emission features of hydrogen, carbon and oxygen. A wide combination of unique FOC capabilities including coronography, polarimetry and the high resolution apodizer will be employed to study in depth the most representative object of each class of cataclysmic variables. These capabilities will allow shells of ejecta around recent novae to be distinguished from the central star at a much earlier stage in their evolution and to detect very much fainter ejecta from old novae than possible from the ground. The basic aim of this study is to gain insight into the physical conditions of the nebula, the geometry of the nova explosion and the nature of the interstellar medium local to the nova. The proposed study of symbiotic systems, on the other hand, should permit resolving the objects into their postulated compact sources, barely resolving the accretion disk around the hot component, and determining the precise connection of the disk with the jets. The program also aims at assessing the possibility of using novae as extragalactic distance indicators.

Prop. Type: GTO/FOC

STELLAR ASTROPHYSICS -- (SUBLUMINOUS STARS) --
1254 - "CENTRAL STARS OF PLANETARY NEBULAE "
Keywords : PLANETARY NEBULAE, HOT CENTRAL STARS.
Proposers: T. M. Kamperman (PI; Sron Space Research Utrecht; Netherlands), P.Atherton (Groningen, University Of; Netherlands), S.Pottasch (Groningen, University Of; Netherlands), N.Reay (Imperial College, London; United Kingdom), N.Walton (Groningen, University Of; Netherlands)

It has proved impossible to detect the very hot exciting stars of some planetary neblae from the ground. This is probably because these stars emit a great many ionizing photons for each visible quantum. The ionized nebula is therefore so extensive that the nebular emission, both line and continuum, completely dominate the visual continuum emission of the central star, which becomes lost in the noise. Observing above the atmosphere increases the possibility of detection of these central star by a factor of at least 400. A factor ~ 100 because the light of the central star is within an image of. 1" instead of the ~ 1" ground seeing limitation allowing better discrimination of the star against the diffuse nebular continuum and a further factor ~ 4 occurs because the star is that much brighter, relative to the nebula, in the ultraviolet than it is in the visible. With the spherical abberation of HST, the above mentioned factor of 100 is reduced to about 15, but as the UV adventage remains, detectability is still several magnitudes beyond groundobservations.

Prop. Type: GTO/FOC

STELLAR ASTROPHYSICS -- (HOT STARS) --

1255 - "THE VERY MASSIVE OBJECTS R136A IN THE 30 DORADUS NEBULA, NGC 3603 AND ETA CARINAE -- CYCLE 0"

Keywords : R136A, NGC 3603, ETA CAR, HII REGIONS, WR STARS

Proposers: Gerd Weigelt (PI; Max-Planck-Institut Fuer Radioastronomie, Bonn; Germany, West)

R136a is the core of the ionizing cluster NGC 2070 at the center of the 30 Doradus nebula in the Large Magellanic Cloud. The interesting question is whether R136 is a supermassive object or whether it is a dense star cluster. We propose FOC f/288 imaging and roll deconvolution in order to solve the question. Roll deconvolution of FOC f/288 data can yield exactly diffraction-limited resolution, for example, 0.02" at lambda = 200 nm. The same observations are proposed in order to study the nature HD 97950 AB in NGC 3603 and Eta Carinae. HD 97950 in NGC 3603 is probably of similar nature as R136. Objective prism observations are proposed in order to perform speckle spectroscopy of R136a and HD 97950 AB. Speckle interferometry observations (object autocorrelations) show that all 3 objects can be resolved with the ST. Only FOC f/288 measurements can yield the required resolution since only in the case of f/288 data the pixel size is small enough.

Prop. Type: GTO/FOC

INTERSTELLAR MEDIUM -- (SN SNR) --

1259- LT - "OBSERVATIONS OF SUPERNOVAE -- CYCLE 0 "

Keywords : SUPERNOVAE-GALACTIC HALOES-GALACTIC ENVIRONMENTS

Proposers: F. Duccio Macchetto (PI; Esa, Space Telescope Science Institute), J.Blades (Esa, Space Telescope Science Institute), N.Panagia (Esa, Space Telescope Science Institute)

We plan to observe supernovae (SNe) brighter than mB ~17m as soon as they are discovered and to follow their evolution in time by means of spectroscopic observations at early epochs and broad band photometry (imaging) at later epochs. Simultaneous IR, optical and radio observations will also be arranged. As interesting side-products, we will be able to study the properties of the intervening gas along the line of sight toward each SN as well as to reveal and study HII regions, bright planetary nebulae and supernova remnants which are expected to be found within the observing slit of the FOC spectrograph. Moreover, we plan to observe some of the brightest SNe which have been discovered recently and whose early phases have been studied by us in great detail.

Prop. Type: GTO/FOC

STELLAR ASTROPHYSICS -- (X-RAY SOURCES) --

1261 - "OBSERVATIONS OF SS 433 - CYCLE 0 "
Keywords : SS 433; JETS.
Proposers: Alec Boksenberg (PI; Royal Greenwich Observatory; United Kingdom), F.Paresce (Esa, Space Telescope Science Institute)

Jet formation is a widespread phenomenon in the universe. Jets have been identified is such widely disparate sites as AGNs, neutron stars and black holes, accreting hot subwards or white dwarfs and young stars embedded in cocoons of gas and dust. We propose here to study the structure and dynamics of jets in SS 433. This object affords us the best means of directly testing the physics of accretion disk formation and jet activity. Specifically, high spatial resolution images of SS 433 will reveal the presumed jets of material giving rise to the moving spectral features, definitely resolving fundamental questions on the overall geometry encompassing the ballistically flowing material. Sequential images taken at intervals of a few days will record the time development of the bursts of ejection relating to the short-lived spectral structure observed.

Prop. Type: GTO/FOC

INTERSTELLAR MEDIUM -- (HH OBJECTS) --

1263 - "STAR FORMATION REGIONS: HH AND T TAU OBJECTS "
Keywords : STAR FORMATION - INTERSTELLAR MEDIUM - HH OBJECTS - TTAU OBJECTS
Proposers: J. Chris Blades (PI; Esa, Space Telescope Science Institute)

It is proposed to study objects in their early stages of formation to investigate the intrinsic properties of these young objects and to establish the nature of their interaction with the local ISM. Time variablity of these targets is an important parameter, the targets will be revisited several times during the GTO phase. The program requires both the high-resolution, ultraviolet imaging and the long-slit spectrograph of the FOC for its success.

Prop. Type: GTO/FOC

INTERSTELLAR MEDIUM -- (PLANETARY NEBULAE) --

1265 - "STUDY OF SOME RING- AND PLANETARY NEBULAE "
Keywords : RING NEBULAE,PLANETARY NEBULAE,MORPHOLOGY
Proposers: T. M. Kamperman (PI; Space Research Laboratory Utrecht; Netherlands), J.Blades (Esa, Space Telescope Science Institute), J.Deharveng (Cnrs, Laboratory For Space Astronomy; France)

FOC filter and spectrographic observations are proposed of circumstellar HII regions around hot stars: one ring nebula around a Wolf-Rayet star and two planetary nebulae OVI- class central stars. The scientific aim is to study the morphology of the edge of these nebulae in different forbidden and semi- forbidden emission lines of CIII, OIII, Mg V and ArV, and the chemical abundance ratio's in the nebulae. The morphology is a powerful indicator for the origin of the nebulae (e.g.mass loss, ejection). The chemical abundance ratios, notably the C/O ratio, in the nebulae are significant measures on the evolutionary state of the central stars. The FOC enables observations, also in the visible wavelength region, at a spatial resolution at least 100 times as high as has been posssible so far.

Prop. Type: GTO/FOC

INTERSTELLAR MEDIUM -- (PLANETARY NEBULAE) --
1266 - "MAGELLANIC CLOUD PLANETARY NEBULAE "
Keywords : PLANETARY NEBULAE, HIGH RESOLUTION IMAGING, LONG SLIT SPECTROSCOPY
Proposers: J. Chris Blades (PI; Esa, Space Telescope Science Institute)

Using the high resolution f/96 mode of the FOC we shall image Magellanic Cloud Planetary Nebulae - objects whose diameters are less than 2 arcsec. Their known distances will allow nebular masses to be derived from their angular diameters, yielding the distribution of PN shell masses for the first time. In combination with their nebular expansion velocities, known from ground-based studies, it will be possible to determine the age of the objects. We shall obtain spatially resolved long-slit f/48 spectra of the nebulae to determine the electron density distribution and chemical abundances and to enable detailed nebular modelling thereby yielding the central star effective temperatures and luminosities. Comparison of those two parameters will allow a comparison to be made with the masses derived for the ejected envelopes.

Prop. Type: GTO/FOC

SOLAR SYSTEM -- (MINOR PLANETS) --
1268- CT - "PHYSICS OF ASTEROIDS "
Continuation of Program Number 1268
Keywords : SOLAR SYSTEM, ASTEROIDS
Proposers: Rudolf Albrecht (PI; Esa, European Coordinating Facility; Germany, West), J.Caldwell (Space Astrophysics Laboratory, Ists; Canada), T.Kamperman (Space Research Laboratory Utrecht; Netherlands), H.Schober (Graz University; Austria), G.Weigelt (Mpi F. Radioastronomie; Germany, West)

The puropse of these observations is to obtain high resolution images of the asteroid Ceres with the present HST. All information given in the general form text pertains to pre-spherical aberration; observations as described there (DECON and ROT) will be carried out in Cy 9.

Prop. Type: GTO/FOC

SOLAR SYSTEM -- (GIANT PLANETS) --

1269 - "FAR UV OBSERVATIONS OF THE GIANT PLANETS - CYCLE 0 "

Keywords : FAR ULTRAVIOLET, GIANT PLANETS, AURORAE

Proposers: Francesco Paresce (PI; Esa, Space Telescope Science Institute), J.Gerard (Liege, University Of; Belgium), A.Vidal-Madjar (Institute Of Astrophysics, Paris; France)

H and H2 are the main constituents of the upper atmospheres of the giant planets and Titan, H is abundant in their exospheres and magnetospheres and N2, produced by photolysis of NH3, dominates the lower atmosphere of Titan. The spatial distribution of these elements is determined by the photochemical and particle dissociation processes responsible for their production and by the transport mechanisms responsible for their distribution. The presence of these planetary constituents is revealed by emissions of the HI, 1216 A Lyman alpha line, the H2 Lyman and Werner, and the N2 Lyman-Birge-Hopfield bands in the 1000-2000A region, all produced by particle impact excitation and/or resonance scattering of sunlight. Spatial and spectral images of the H, H2 and N2 atmospheres around these objects, consequently, represent key diagnostic tools in the investigation of these fundamental planetary phenomena. Moreover, Lyman alpha images of the giant planets taken at high enough spatial resolution will permit a determination of the abundance of deuterium, an extremely sensitive tracer of primordial nucleosynthesis. We propose to obtain a series of high resolution images of the giant planets' upper atmospheres and near-planetary environments in the far uv that are unobtainable from the ground or from the present generation of planetary probes.

Prop. Type: GTO/FOC

STELLAR POPULATIONS -- (

1274 - "A SEARCH FOR PLANETS AROUND NEARBY STARS - CYCLE 0 "

Keywords : EXTRA-SOLAR PLANETS; SUB-STELLAR MASS COMPANIONS

Proposers: Cesare Barbieri (PI; Padova, University Of; Italy), A.Labeyrie (Cerga; France), A.Nota (Esa, European Space Operations Centre; Italy), H.Zinnecker (Royal Observatory, Edinburgh; United Kingdom)

We propose to take advantage of the very high resolution, sensitivity and attenuation capabilities of the FOC in its coronographic mode to search for planets of other stars, in order to get direct proof of their existence and to obtain data on the formation of planetary systems. Stars like Eps Eri and Barnard's are prime candidates for this search, because they are close to the Sun and their motion seems to be perturbed by unseen low-mass companions. The FOC is very suited to carry out the search, thanks to the photon counting capabilities, to the high attenuation of the coronograph, and to the small pixel size resolving the structure of the PSF of the bright primary star. A roll-blinking technique will be used to improve the detection capabilities.

Prop. Type: GTO/OS

STELLAR POPULATIONS -- (NEARBY GALAXIES) --
1277 - "IMAGING OF M31-GROUP GALAXIES -- CYCLE 0 "
Keywords : M31 -- STELLAR POPULATIONS -- HALO -- GLOBULAR CLUSTERS -- LOCAL GROUP
Proposers: Ivan R. King (PI; Uc, Berkeley), P.Crane (European Southern Observatory; Germany, West), J.Deharveng (Marseille Observatory; France), M.Disney (University College, Cardiff; United Kingdom)

1. Spatially resolved surface photometry at center of M31. 2. Color-magnitude array at edge of M31 central bulge. 3. Spatially resolved surface photometry at center of M32. 4. Color-magnitude array, not far from the center of M32. 5. Detection of stars that contribute the UV light. 6. Counting of Pop II red giants against the background of Pop I light in M31 central bulge, similarly in M32. 7. High-resolution imaging of dust and young stars at the centers of NGC 185 and 205, and old stars in these and NGC 147. 8. Simultaneous PC imaging of M31 globular clusters, the outer-bulge population of M31 and M32, the halo population of M31, and the outer population of NGC 185, 205, and 147.

Prop. Type: GTO/OS

GALAXIES_CLUSTERS -- (NEARBY GALAXIES) --
1278- CT - "SPECTROSCOPY OF THE CENTERS OF M31, M32, AND NGC 205 "
Continuation of Program Number 1278
Keywords : LOCAL GROUP
Proposers: Ivan R. King (PI; University Of California, Berkeley), P.Crane (European Southern Observatory; Germany)

The M31 spectra, taken with the slit along the major axis, will total 2 hours and will produce enough counts to get both the rotation curve and the velocity dispersion as a function of position along the slit, with 1-pixel resolution at the center and resolution degraded to several pixels farther out. The M32 spectra will also total 2 hours and will give a high-resolution rotation curve along the major axis. (The slit is probably too wide to get the velocity dispersion.) The NGC205 spectrum will get the rotation of the sharp nucleus. This program can be done only after the spherical aberration is corrected. Parallel exposures with the PC will be used to derive color-magnitude arrays of two M31 globular clusters and an outer field in NGC 205.

Prop. Type: GTO/OS

STELLAR POPULATIONS -- (
1279 - "STRUCTURE OF GLOBULAR CLUSTERS "
Keywords : GLOBULAR CLUSTERS -- DYNAMICS -- LUMINOSITY FUNCTION
Proposers: Ivan R. King (PI; Uc, Berkeley), S.Djorgovski (Center For Astrophysics), F.Macchetto (Esa, Space Telescope Science Institute)

Four contrasting clusters are studied, to elucidate the differences in their dynamics. Omega Centauri and 47 Tucanae are normal clusters but differ in relaxation time by a factor of 30; they should show interesting differences of structure due to differences in anistropy and equipartition. NGC 6624 has a collapsed core, which has never been resolved. NGC 6752 is a concentrated cluster with a small distance modulus and can be studied quite faint. Each cluster is observed in B and V at the center and at 1 and 3 core radii; ground-based data will be secured to carry the distributions farther out. The distributions of all types of stars should be delineated, down to and including red dwarfs and white dwarfs. Far-UV exposures are made at the centers of M15 and NGC 6624, to search for possible counterparts to the X-ray sources, and in the NGC 6752, to determine the temperatures of the BHB stars. Simultaneous exposures are made in V and I with the WFC, to gain further structural information.

Prop. Type: GTO/OS

GALAXIES CLUSTERS -- (NEARBY GALAXIES) --
1280 - "COLLAPSED CORES OF GLOBULAR CLUSTERS -- CYCLE 0 "
Keywords : GLOBULAR CLUSTER--DYNAMICS
Proposers: Ivan R. King (PI; Uc, Berkeley), S.Djorgovski (Center For Astrophysics)

About a dozen globular clusters are known that have the central density peak that is probably the signature of dynamically collapsed core. These will be imaged for surface photmetry at higher resolution than can be achieved on the ground. Simultaneous WFC exposures will contribute information on the raidal density distribution of faint stars.

Prop. Type: GTO/OS

STELLAR POPULATIONS -- (
1281 - "THE FAINT POPULATION IN BAADE'S WINDOW - CYCLE 1 "
Keywords : BULGE -- STELLAR POPULATION -- LUMINOSITY FUNCTION
Proposers: Ivan R. King (PI; Uc, Berkeley), J.Deharveng (Marseille Observatory; France)

With 1500 sec in each of U, B, and V, at f/96, we will easily reach the main-sequence turnoff in the central bulge of the Milky Way, taking advantage of the low absorption in Baade's Window. FOC resolving power is adequate to separate stars down to the limited magnitude of ST. A by-product of another program will be a pair of V and I parallel WFC exposures, overlapping the same field.

Prop. Type: GTO/OS

SOLAR SYSTEM -- (SATELLITES, RINGS) --

1285 - "IO, EUROPA AND GANYMEDE BELOW 3000 A -- CYCLE 0 "
Keywords : IO, EUROPA, GANYMEDE, SO2
Proposers: John J. Caldwell (PI; York University; Canada)

Observe Io at eastern elongation with HRS G200M at SO2 absorption feature. Observe Ganymede with identical exposure for calibration. L. Trafton/HRS will obtain a similar exposure of Io at the other orbital elongation.

Prop. Type: GTO/OS

SOLAR SYSTEM -- (GIANT PLANETS) --

1286 - "AURORAL IMAGING OF JUPITER WITH THE FOC SIMULTANEOUS OBSERVATIONS DURING ULYSSES JUPITER ENCOUNTER"
Keywords : JUPITER, AURORA, H2
Proposers: John J. Caldwell (PI; York University; Canada)

Observe Jupiter with the FOC for H2 auroral emissions at 1600A, using two filters in series to reduce the red leak. Image the north polar auroral region twice: once 13H before Ulysses CPA and once 3H before Ulysees CPA.

Prop. Type: GTO/OS

STELLAR ASTROPHYSICS -- (

1287 - "BETA PICTORIS ENVIRONMENT "
Keywords : BETA PICTORIS, CIRCUMSTELLAR RINGS
Proposers: John J. Caldwell (PI; York University; Canada)

Images of the Beta Pictoris Ring System will be obtained with the FOC, using the occulting fingers, over a wide wavelength interval to determine gross compositional information. FOS spectroscopy of selected regions will be obtained later.

Prop. Type: GTO/OS

SOLAR SYSTEM -- (GIANT PLANETS) --

1288 - "SPATIALLY RESOLVED SPECTROSCOPY OF JUPITER -- CYCLE 1"

Keywords : ATMOSPHERIC CHEMISTRY, JUPITER

Proposers: John J. Caldwell (PI; York University; Canada)

After a blind-pointing maneuvre, to a point near the center of Jupiter, but offset 0.67 arc sec south along the central meridian, a series of FOS and GHRS spectra, covering the range from approximately 160 to 330 nm, will be obtained. The latitude chosen, 2 deg South, is as zonally uniform as possible. The planet will rotate under the HST aperture about once as the spectra are being acquired. The resultant spectrum will represent the zonal average spectrum at that latitude, at nearly unit local air mass. The spectrum will be analyzed for compositional and vertical information, using such species as NH_3 and C_2H_2. A single FOS exposure will also be made, at high air mass, at the same latitude.

Prop. Type: GTO/OS

SOLAR SYSTEM -- (MINOR PLANETS) --

1289 - "STRUCTURE AND COMPOSITION OF TITAN'S ATMOSPHERE:CYCLE 1 "

Keywords : TITAN, ATMOSPHERIC CHEMISTRY

Proposers: John J. Caldwell (PI; York University; Canada)

Titan will be observed both with ultraviolet imaging and spectroscopy. The ultraviolet imaging is to look for very high altitude atmospheric structure that might be associated with details of the UV spectroscopy. The UV spectroscopy will include a search for discrete absorption features and continuum Rayleigh scattering. Rayleigh scattering has not previously been detected from Titan, despite the very thick atmosphere there, because of strong absorption by quasi-organic material.

Prop. Type: GTO/OS

SOLAR SYSTEM -- (GIANT PLANETS) --

1290 - "URANUS AND NEPTUNE BELOW 3000 A "

Keywords : URANUS, NEPTUNE, ATMOSPHERIC CHEMISTRY

Proposers: John J. Caldwell (PI; York University; Canada), L.Trafton (Utexas)

Uranus and Neptune will be observed with the FOS gratings G270H and G190H to provide spectra from 330 nm down to 180 nm, the lower limit being determined by the noise in the background scattered light within the FOS. Target acquisition will be accomplished through on-board ACQs of planetary satellites. The center of each planet will be targeted. Two apertures will be used, the 1.0 to get maximum throughput with reasonable spectral resolution, and the 0.25x2.0 to achieve better spectral resolution. The latter will achieve poor S/N at the shorter wavelength end of the G190H.

Scientific objectives include C2H2 abundance and vertical distribution in both planets, aerosol properties, Raman scattering and trace molecular species.

Prop. Type: GTO/AST

STELLAR POPULATIONS -- (ASTROMETRY) --

1305- LT - "OBSERVATIONS OF THE Z-MOTIONS IN THE GALAXY "

Keywords : PROPER MOTIONS, Z-VELOCITIES, GALACTIC STRUCTURE, DISK MASS, BINARY STAR

Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

These exposures constitute the first epoch observations for an investigation of the motions perpendicuar to the plane of the Galaxy of stars lying within a cylinder centered on the sun having a radius of 10 kpc and a height of +/-5 kpc. All of the first epoch observations will be made in the parallel mode with the Wide Field or Planetary Camera in cases where the primary observation is at least as long as 45 minutes. This exposure time will enable us to obtain a 20 minute exposure in both the V and R passbands. We plan to repeat the observations after a time interval of five years, which should yield proper motions with an accuracy of 0.0002 "/yr, or 9.5 km/sec at a distance of 10 kpc. Since the local velocity dispersion perpendicular to the galatic plane is about 30 km/sec, we should be able to accurately study the z-motions of stars from the galactic center out to the outer edge of the Galaxy. The result of this analysis will be a determination of th mass density in the disk of the Galaxy over an area of about 3x10dex-8 pc2. Since the observations will extend to at least +/-5 kpc from the galactic plane, the velocity profiles should yield the complete mass distribution of the disk and may provide some information on the thick disk. The first epoch observations will be examined as they are taken to study the frequency distribution of multiple stars from the resolution of the ST to angular separations of about 2".

Prop. Type: GTO/HRS

STELLAR POPULATIONS -- (DIFFUSE MATTER) --

1306- CT - "PARALLEL MODE IMAGING INVESTIGATIONS OF FIELDS AT LOW GALACTIC LATITUDES"

Continuation of Program Number 1306

Keywords : INTERSTELLAR MEDIUM, VISUAL BINARIES, MASS LOSS

Proposers: Frederick M. Walter (PI; Suny Stony Brook), J.Blades (Esa, Space Telescope Science Institute), J.Brandt (Nasa, Goddard Space Flight Center), J.Dolan (Nasa, Goddard Space Flight Center), H.Ford (Space Telescope Science Institute), E.Groth Iii (Princeton University), J.Gunn (Princeton University), S.Heap

(Nasa, Goddard Space Flight Center), J.Hutchings (Dominion Astrophysical Observatory; Canada), S.Maran (Nasa, Goddard Space Flight Center), W.Van Altena (Yale University)

We propose a series of parallel mode observations with the WF/PC as an adjunct to the HRS GTO observing program. This imaging data will be used to study variations in galactic extinction on small angular scales, the luminosity function of very low mass stars, to look for nebulosity about late type giants and pre-main sequence stars to study mass loss, and to search for visual binaries with sub-arc second separations.

Prop. Type: GTO/AST

STELLAR POPULATIONS -- (ASTROMETRY) --
1394- LT - "PARALLAXES OF HYADES CLUSTER MEMBERS "
Keywords : HYADES, DISTANCE SCALE, POP I, PARALLAXES, PROPER MOTIONS
Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

The goal of this project is to determine trigonometric parall Hyades cluster members and to define the Population I zero ag The ZAMS is used to determine the distances to open clusters the zero point of the Cepheid Period-Luminosity relationship, fundamental distance indicator in the universe. A secondary g project is to search for new Hyades cluster members which mig the 25th magnitude, or M(v)=22. This part of the project will through coordinated parallel observations with the WFC to det motions of very faint stars over a one year base line. FGS parallax observations of the thirteen Hyades members shou in the distance modulus of the Hyades Cluster good to approxi This accuracy should be sufficient to eliminate the Hyades as in determining the galactic distance scale.

Prop. Type: GTO/AST

QUASARS AGN -- (ASTROMETRY) --
1475- CT - "EXTRAGALACTIC ASTROMETRY AND ASTROPHYSICS - AST/PC PART TWO OF FIVE - PROPOSAL 1475 (WFPC OBSERVATIONS)"
Continuation of Program Number 1013
Keywords : QUASARS, BL LACS, AGNS, HIPPARCOS, REFERENCE FRAMES FUNDAMENTAL ASTROMETRY, QUASAR INTERNAL MOTION
Proposers: William H. Jefferys (PI; University Of Texas At Austin), J.Westphal (California Institute Of Technology)

The goal of this project is the determination of the rotation of the HIPPARCOS Reference Frame with respect to an Extragalactic Frame. The program will derive the internal optical motions of extragalactic objects (QSOs, BL Lacs, AGNs) at the +/- 0.002 arcsecond per year level of accuracy. 160 SAO stars within the FGSFOV of all selected QSOs, BL Lacs, and AGNs are included in the HIPPARCOS catalog. Ground based speckle observations have been used to pre-detect doubles which would cause problems for the FGS. The FGSs will measure the relative positions of SAO stars with respect to objects brighter than 17 mag. Fainter objects will be observed with the WFPC and FGS together. The objects have been selected in conjunction with the recommendations of the IAU working group in Radio/Optical Identifications, and have been selected for compactness and intensity. Most of the objects are recommended as ultimate position calibrators.

Prop. Type: GTO/AST

QUASARS _AGN -- (ASTROMETRY) --

1532- CT - "EXTRAGALACTIC ASTROMETRY AND ASTROPHYSICS - AST/PC PART THREE OF FIVE - PROPOSAL 1532 (FGS OBSERVATIONS)"

Continuation of Program Number 1013

Keywords : QUASARS, BL LACS, AGNS, HIPPARCOS, REFERENCE FRAMES FUNDAMENTAL ASTROMETRY, QUASAR INTERNAL MOTION

Proposers: William H. Jefferys (PI; University Of Texas At Austin)

The goal of this project is the determination of the rotation of the HIPPARCOS Reference Frame with respect to an Extragalactic Frame. The program will derive the internal optical motions of extragalactic objects (QSOs, BL Lacs, AGNs) at the +/- 0.002 arcsecond per year level of accuracy. 160 SAO stars within the FGSFOV of all selected QSOs, BL Lacs, and AGNs are included in the HIPPARCOS catalog. Ground based speckle observations have been used to pre-detect doubles which would cause problems for the FGS. The FGSs will measure the relative positions of SAO stars with respect to objects brighter than 17 mag. Fainter objects will be observed with the WFPC and FGS together. The objects have been selected in conjunction with the recommendations of the IAU working group in Radio/Optical Identifications, and have been selected for compactness and intensity. Most of the objects are recommended as ultimate position calibrators.

Prop. Type: EROS

ALL -- (

2882 - "IZW1 "

Keywords : PECULIAR GALAXIES, PLANETS, STAR FORMATION

Proposers: J Westphal (PI; Caltech), D.Macchetto (Stsci)

Prop. Type: EROS

ALL -- (

2886 - "R136-LMC "

Keywords : PECULIAR GALAXIES, PLANETS, STAR FORMATION

Proposers: J. Westphal (PI; Caltech)

Prop. Type: EROS

ALL -- (

2887 - "ETA-CAR "

Keywords : PECULIAR GALAXIES, PLANETS, STAR FORMATION

Proposers: J. Westphal (PI; Caltech)

Prop. Type: EROS

ALL -- (

2890 - "SATURN "

Keywords : PECULIAR GALAXIES, PLANETS, STAR FORMATION

Proposers: J. Westphal (PI; Caltech)

Prop. Type: EROS

ALL -- (

2891 - "TITAN "

Keywords : PECULIAR GALAXIES, PLANETS, STAR FORMATION

Proposers: J. Westphal (PI; Caltech)

Prop. Type: EROS

GALAXIES -- (

2895 - "ARP220 - COLLIDING GALAXIES AND A BURIED QUASAR "

Keywords : AGN, RADIOEMISSION, JETS

Proposers: F. Macchetto (PI; Space Telescope Science Institute)

FOC images of the innermost regions of Arp 220 (IC4553) will show the enormously complex distribution of gas and dust responsible for obscuring the central quasar in this collision between galaxies.

Prop. Type: EROS

ISM -- (
2896 - "FILAMENTS IN THE CRAB NEBULA "
Keywords : SUPERNOVA REMNANT
Proposers: F. Macchetto (PI; Space Telescope Science Institute)

FOC images of astronomy's Rosetta stone, the Crab nebula (a supernova remnant), are bound to provide new insight into the physical processes occuring in the nebula in the aftermath of the explosion which gave rise to it.

Prop. Type: EROS

INTERSTELLAR MEDIUM -- (
2897 - "STAR FORMATION REGIONS: HH1 "
Keywords : STAR FORMATION - INTERSTELLAR MEDIUM - HH OBJECTS -
Proposers: F. Macchetto (PI; Space Telescope Science Institute)

An image will be taken of HH1 using the F/96 camera of the FOC and F190M filter. This object consists of at least six semi-stellar knots wrapped in a common nebular envelope. These knots appear to be caused by the interaction of a jet from a central star about 25 arcsec away from HH1. The resulting images will be compared with existing ground-based data and used to show the interaction of a jet or stellar wind with a dense instellar medium and explore the possibility that we are looking at an environment of star-formation.

Prop. Type: EROS

QUASARS _AGN -- (
2908 - "WHAT TYPE OF GALAXY DOES THE QSO TON 256 LIVE IN "
Keywords : QUASAR, GALAXY
Proposers: F Macchetto (PI; Stsci)

TON 256 is one of the nearest quasars. We will use the F/96 camera of the FOC to determine whether the host galaxy is a spiral or elliptical by imaging the quasar in blue light and look for spiral structure.

Prop. Type: GTO/AST

STELLAR POPULATIONS -- (
2929- CT - "PARALLAXES OF ASTROPHYSICALLY INTERESTING OBJECTS PART ONE"
Continuation of Program Number 1000
Keywords : PARALLAX, PLANETARY NEBULA, DWARF NOVA, PECULIAR STAR, CATACLYSMIC VARIABLE, T TAURI
Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

Parallaxes of astrophysically interesting objects are propose objects are planetary nebulae, dwarf novae, peculiar stars, c variables, and T Tauri flare stars. Most of the objects propl study of stellar evolution where absolute fluxes are required can only be estimated because accurate distances are not avai is Feige 24, a hot white dwarf with x ray emission whose dist by various authors to be between 60 pc and 150 pc. A special observing sequence is required.

Prop. Type: GTO/AST

STELLAR POPULATIONS -- (
2930- CT - "PARALLAXES OF ASTROPHYSICALLY INTERESTING OBJECTS PART TWO"
Continuation of Program Number 1000
Keywords : PARALLAX, PLANETARY NEBULA, DWARF NOVA, PECULIAR STAR, CATACLYSMIC VARIABLE, T TAURI
Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

Parallaxes of astrophysically interesting objects are propose objects are planetary nebulae, dwarf novae, peculiar stars, c variables, and T Tauri flare stars. Most of the objects propl study of stellar evolution where absolute fluxes are required can only be estimated because accurate distances are not avai is Feige 24, a hot white dwarf with x ray emission whose dist by various authors to be between 60 pc and 150 pc. A special observing sequence is required.

Prop. Type: GTO/AST

STELLAR POPULATIONS -- (
2931- CT - "PARALLAXES OF ASTROPHYSICALLY INTERESTING OBJECTS-PART THREE "
Continuation of Program Number 1000
Keywords : PARALLAX, PLANETARY NEBULA, DWARF NOVA, PECULIAR STAR, CATACLYSMIC VARIABLE, T TAURI
Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

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Prop. Type: GTO/AST

STELLAR POPULATIONS -- (
2932- CT - "PARALLAXES OF ASTROPHYSICALLY INTERESTING OBJECTS PART FOUR"
Continuation of Program Number 1000
Keywords : PARALLAX, PLANETARY NEBULA, DWARF NOVA, PECULIAR STAR, CATACLYSMIC VARIABLE, T TAURI
Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

Parallaxes of astrophysically interesting objects are propose objects are planetary nebulae, dwarf novae, peculiar stars, c variables, and T Tauri flare stars. Most of the objects propl study of stellar evolution where absolute fluxes are required can only be estimated because accurate distances are not avai is Feige 24, a hot white dwarf with x ray emission whose dist by various authors to be between 60 pc and 150 pc. A special observing sequence is required.

Prop. Type: GTO/AST

STELLAR POPULATIONS -- (
2933- CT - "PARALLAXES OF ASTROPHYSICALLY INTERESTING OBJECTS PART FIVE"
Continuation of Program Number 1000
Keywords : PARALLAX, PLANETARY NEBULA, DWARF NOVA, PECULIAR STAR, CATACLYSMIC VARIABLE, T TAURI
Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

Parallaxes of astrophysically interesting objects are propose objects are planetary nebulae, dwarf novae, peculiar stars, c variables, and T Tauri flare stars. Most of the objects propl study of stellar evolution where absolute fluxes are required can only be estimated because accurate distances are not avai is Feige 24, a hot white dwarf with x ray emission whose dist by various authors to be between 60 pc and 150 pc. A special observing sequence is required.

Prop. Type: GTO/AST

STELLAR POPULATIONS -- (
2934- CT - "PARALLAXES OF ASTROPHYSICALLY INTERESTING OBJECTS PART SIX"
Continuation of Program Number 1000
Keywords : PARALLAX, PLANETARY NEBULA, DWARF NOVA, PECULIAR STAR, CATACLYSMIC VARIABLE, T TAURI
Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

Parallaxes of astrophysically interesting objects are propose objects are planetary nebulae, dwarf novae, peculiar stars, c variables, and T Tauri flare stars. Most of the objects propl study of stellar evolution where absolute fluxes are required can only be estimated because accurate distances are not avai is Feige 24, a hot white dwarf with x ray emission whose dist by various authors to be between 60 pc and 150 pc. A special observing sequence is required.

Prop. Type: GTO/AST

STELLAR ASTROPHYSICS -- (
2935- CT - "UNSEEN AND PLANETARY COMPANIONS PART ONE "
Continuation of Program Number 1005
Keywords : UNSEEN COMPANIONS, PLANETRAY COMPANIONS, BLACK DWARFS
Proposers: William H. Jefferys (PI; University Of Texas At Austin), G.Benedict (University Of Texas), R.Duncombe (University Of Texas), O.Franz (Lowell Observatory), L.Fredrick (University Of Virginia), P.Hemenway (University Of Texas), P.Shelus (University Of Texas)

With observations using the Hubble Space Telescope (HST) we intend to initiate a systematic search for variable proper motion objects in an attempt to discover very low mass objects in orbit around red dwarfs. Using well established astrometric methods we will secure accurate relative positional measurements for selected objects over very long intervals of time looking for systematic perturbations to rectilinear motion. Within the Astrometric Data Reduction System (SDAS), such perturbations will be extracted and reduced further to provide the relevant mass and orbital parameters of the composents. The HST is an instrument, the engineering specifications of which, open up the opportunity to extend this astrometric discipline far beyond the present bounds of ground-based and other observations.

Prop. Type: GTO/AST

STELLAR ASTROPHYSICS -- (
2936- CT - "UNSEEN AND PLANETARY COMPANIONS PART TWO "
Continuation of Program Number 1005
Keywords : UNSEEN COMPANIONS, PLANETRAY COMPANIONS, BLACK DWARFS
Proposers: William H. Jefferys (PI; University Of Texas At Austin), G.Benedict (University Of Texas), R.Duncombe (University Of Texas), O.Franz (Lowell Observatory), L.Fredrick (University Of Virginia), P.Hemenway (University Of Texas), P.Shelus (University Of Texas)

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Prop. Type: GTO/AST

STELLAR ASTROPHYSICS -- (
2937- CT - "UNSEEN AND PLANETARY COMPANIONS PART THREE "
Continuation of Program Number 1005
Keywords : UNSEEN COMPANIONS, PLANETRAY COMPANIONS, BLACK DWARFS
Proposers: William H. Jefferys (PI; University Of Texas At Austin), G.Benedict (University Of Texas), R.Duncombe (University Of Texas), O.Franz (Lowell Observatory), L.Fredrick (University Of Virginia), P.Hemenway (University Of Texas), P.Shelus (University Of Texas)

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Prop. Type: GTO/AST

STELLAR ASTROPHYSICS -- (
2938- CT - "UNSEEN AND PLANETARY COMPANIONS PART FOUR "
Continuation of Program Number 1005
Keywords : UNSEEN COMPANIONS, PLANETRAY COMPANIONS, BLACK DWARFS
Proposers: William H. Jefferys (PI; University Of Texas At Austin), G.Benedict (University Of Texas), R.Duncombe (University Of Texas), O.Franz (Lowell Observatory), L.Fredrick (University Of Virginia), P.Hemenway (University Of Texas), P.Shelus (University Of Texas)

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Prop. Type: GTO/AST

SOLAR SYSTEM -- (

2939- CT - "HIGH SPEED ASTROMETRY - A SEARCH FOR PLANETARY COMPANIONS TO LOW-MASS STARS CYCLE ONE"

Continuation of Program Number 1011

Keywords : FINE GUIDANCE SENSORS, FGS, STELLAR COMPANIONS, EXTRASOLAR PLANETS

Proposers: William H. Jefferys (PI; University Of Texas), G.Benedict (University Of Texas), R.Duncombe (University Of Texas), O.Franz (Lowell Observatory), L.Fredrick (University Of Virginia), P.Hemenway (University Of Texas), P.Shelus (University Of Texas)

We propose to test the hypothesis that jupiter-like planets are formed at distances from the primary dictated by the 'freezing' temperature of the volatiles which comprise jovian planets. Predicted periods for jovian planets orbiting this sample of very late-type, low-mass stars range from 70 to 160 days. We shall monitor the positions of these nearby late-M stars with a time-resolution of 4 to 10 days in an attempt to detect positional perturbations caused by possible jovian companions. Detection limits for these proposed targets lie between 0.4 and one Jupiter mass.

Prop. Type: GTO/AST

SOLAR SYSTEM -- (

2941- CT - "HIGH SPEED ASTROMETRY - A SEARCH FOR PLANETARY COMPANIONS TO LOW-MASS STARS CYCLE THREE"

Continuation of Program Number 1011

Keywords : FINE GUIDANCE SENSORS, FGS, STELLAR COMPANIONS, EXTRASOLAR PLANETS

Proposers: William H. Jefferys (PI; University Of Texas), G.Benedict (University Of Texas), R.Duncombe (University Of Texas), O.Franz (Lowell Observatory), L.Fredrick (University Of Virginia), P.Hemenway (University Of Texas), P.Shelus (University Of Texas)

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Prop. Type: GTO/AST

SOLAR SYSTEM -- (

2942- CT - "HIGH SPEED ASTROMETRY - A SEARCH FOR PLANETARY COMPANIONS TO LOW-MASS STARS CYCLE FOUR"

Continuation of Program Number 1011

Keywords : FINE GUIDANCE SENSORS, FGS, STELLAR COMPANIONS, EXTRASOLAR PLANETS

Proposers: William H. Jefferys (PI; University Of Texas), G.Benedict (University Of Texas), R.Duncombe (University Of Texas), O.Franz (Lowell Observatory), L.Fredrick (University Of Virginia), P.Hemenway (University Of Texas), P.Shelus (University Of Texas)

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Prop. Type: GTO/AST

STELLAR POPULATIONS -- (

2943- CT - "INTERNAL VELOCITY DISTRIBUTION IN GLOBULAR CLUSTERS PART ONE"

Continuation of Program Number 1007

Keywords : GLOBULAR CLUSTERS, PROPER MOTIONS, INTERNAL VELOCITIES

Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

The goal of this project is to study the internal velocity dispersion for six globular clusters with a range of characteristics. We expect to determine the virial mass for each cluster and a kinematic distance (statistical parallax) where radial velocity observations exist. The radial and azimuthal components of the velocity distribution will be analyzed to determine the degree of anisotropy in the velocities as a function of distance from the cluster center for three of the clusters. In addition, the degree to which equipartition of energy exists among the various mass groupings will be studied from the bright giants down to one-half solar mass in three of the clusters. The observations are designed to yield an accuracy of +/- 1 km/sec in the derived cluster velocity dispersion at each location in the cluster for the nearer clusters and +/- 2 km/sec for the more distant clusters.

Prop. Type: GTO/AST

STELLAR POPULATIONS -- (
2944- CT - "INTERNAL VELOCITY DISTRIBUTION IN GLOBULAR CLUSTERS PART TWO"
Continuation of Program Number 1007
Keywords : GLOBULAR CLUSTERS, PROPER MOTIONS, INTERNAL VELOCITIES
Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

The goal of this project is to study the internal velocity dispersion for six globular clusters with a range of characteristics. We expect to determine the virial mass for each cluster and a kinematic distance (statistical parallax) where radial velocity observations exist. The radial and azimuthal components of the velocity distribution will be analyzed to determine the degree of anisotropy in the velocities as a function of distance from the cluster center for three of the clusters. In addition, the degree to which equipartition of energy exists among the various mass groupings will be studied from the bright giants down to one-half solar mass in three of the clusters. The observations are designed to yield an accuracy of +/- 1 km/sec in the derived cluster velocity dispersion at each location in the cluster for the nearer clusters and +/- 2 km/sec for the more distant clusters.

Prop. Type: GTO/AST

STELLAR POPULATIONS -- (
2945- CT - "INTERNAL VELOCITY DISTRIBUTION IN GLOBULAR CLUSTERS PART THREE"
Continuation of Program Number 1007
Keywords : GLOBULAR CLUSTERS, PROPER MOTIONS, INTERNAL VELOCITIES
Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

The goal of this project is to study the internal velocity di globular clusters with a range of characteristics. We expect virial mass for each cluster and a kinematic distance (statis where radial velocity observations exist. The radial and azim of the velocity distribution will be analyzed to determine th anisotropy in the velocities as a function of distance from t for three of the clusters. In addition, the degree to which e energy exists among the various mass groupings will be studie giants down to one-half solar mass in three of the clusters. The observations are designed to yield an accuracy of +/- 1 k derived cluster velocity dispersion at each location in the c nearer clusters and +/- 2 km/sec for the more distant cluster

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Prop. Type: GTO/AST

STELLAR POPULATIONS -- (

2946- CT - "INTERNAL VELOCITY DISTRIBUTION IN GLOBULAR CLUSTERS PART FOUR"

Continuation of Program Number 1007

Keywords : GLOBULAR CLUSTERS, PROPER MOTIONS, INTERNAL VELOCITIES

Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

The goal of this project is to study the internal velocity di globular clusters with a range of characteristics. We expect virial mass for each cluster and a kinematic distance (statis where radial velocity observations exist. The radial and azim of the velocity distribution will be analyzed to determine th anisotropy in the velocities as a function of distance from t for three of the clusters. In addition, the degree to which e energy exists among the various mass groupings will be studie giants down to one-half solar mass in three of the clusters. The observations are designed to yield an accuracy of +/- 1 k derived cluster velocity dispersion at each location in the c nearer clusters and +/- 2 km/sec for the more distant cluster

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Prop. Type: GTO/AST

STELLAR POPULATIONS -- (

2947- CT - "INTERNAL VELOCITY DISTRIBUTION IN GLOBULAR CLUSTERS PART FIVE"

Continuation of Program Number 1007

Keywords : GLOBULAR CLUSTERS, PROPER MOTIONS, INTERNAL VELOCITIES

Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

The goal of this project is to study the internal velocity di globular clusters with a range of characteristics. We expect virial mass for each cluster and a kinematic distance (statis where radial velocity observations exist. The radial and azim of the velocity distribution will be analyzed to determine th anisotropy in the velocities as a function of distance from t for three of the clusters. In addition, the degree to which e energy exists among the various mass groupings will be studie giants down to one-half solar mass in three of the clusters. The observations are designed to yield an accuracy of +/- 1 k derived cluster velocity dispersion at each location in the c nearer clusters and +/- 2 km/sec for the more distant cluster

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Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (
2952- CT - "X-RAY BINARIES "
Continuation of Program Number 1097
Keywords : X-RAY BINARIES: NEUTRON STARS: BLACK HOLES
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The extreme conditions existing in the near vicinity of neutron stars which are the secondaries in close binaries provide a laboratory in which we may observationally confirm or refine many of our basic theories of astrophysics. This program will monitor the photometric and polarimetric light curves of X-ray binaries at several different phases of the binary orbit in several different wavelength bands in the UV. The results will be related to the structure of, and physical conditions existing in, the gas streams (and possibly, the accretion disk) in these systems. Revision History (1097): Prepared for future cycles submission--BJW 4/21/92;

Prop. Type: GTO/FOC

QUASARS AGN -- (
2956- CT - "STUDY OF OPTICAL EMISSION ASSOCIATED WITH RADIO JETS AND HOT SPOTS "
Continuation of Program Number 1228
Keywords : AGN, RADIOEMISSION, JETS
Proposers: F. Duccio Macchetto (PI; Esa, Space Telescope Science Institute), P.Crane (European Southern Observatory; Germany, West), G.Miley (Space Telescope Science Institute)

ST is uniquely equipped to detect optical emission from synchroton jets and to study the interaction of jets with their environment. Here we outline a program of broad and narrow band imaging and limited slit spectroscopy on carefully selected samples of objects designed to exploit ST for these purposes. The aims are to study the following: -morphological relations between radio and optical emission. -optical and UV counterparts of radio jets and hot spots to derive information on particle acceleration mechanisms. -interactions between synchroton jets and in the ambient gas, to use each as a unique probe of the physical conditions within the other. -possible relationship between the propagation of radio jets and star formation.

Prop. Type: SAT/FOC

GALAXIES -- (

2993 - "PKS0521-36 - A RADIO GALAXY WITH OPTICAL JET AND BL-LAC NUCLEUS "
Keywords : AGN, RADIOEMISSION, JETS
Proposers: F.D. Macchetto (PI; Esa, Space Telescope Science Institute), W.Sparks (Space Telescope Science Institute)

PKS0521-36 is a V=14.4 galaxy hosting a V approx 16 BL Lac and an optical synchrotron jet V approx 21.0 starting 1.7arcsec from the nucleus and extending to 6arcsec. The variety of complex structure (galaxy, nucleus, jet), availability of a 0.3arcsec resolution VLA map, ground based NTT imaging and challenge of resolving faint structure in both the galaxy and jet next to the bright nucleus suggest this would be an excellent target for early science assesment. Simulations indicate a nuclear count rate of about 4/sec (assuming 15% of the light in the psf core) and with the jet 100times fainter we should accumulate around 15000 counts in the jet, or about 20 per resolution element peak. Accurate target acquisition capability is an essential prerequisite. Accurate psf images through target filters are essential.

Prop. Type: SAT/FOC

GALAXIES -- (

2994 - "3C66B - A RADIO GALAXY WITH OPTICAL SYNCHROTRON JET "
Keywords : AGN, RADIOEMISSION, JETS
Proposers: F.D. Macchetto (PI; Esa, Space Telescope Science Institute), W.Sparks (Space Telescope Science Institute)

FOC images of the faint (U=23) optical knots in the radio galaxy 3C66B will help assess the ability of the FOC to determine accurate spatial and photometric information at near uv and visible wavelengths for a source whose structure is known from VLA observations. The data will also indicate the quality with which the camera can determine faint galaxy morphology. Scientifically the observations will be most interesting since for the first time we will achieve a resolution actually better than the VLA data, and high spatial resolution optical data on synchrotron jets is currently non-existent. We predict a total of about 4000counts per knot. Accurate target acquisition capability is an essential prerequisite. Accurate psf images through target filters are essential.

Prop. Type: SAT/FOC

STELLAR ASTROPHYSICS -- (
2995 - "OBSERVATIONS OF RAQUARII "
Keywords :
Proposers: F.D. Macchetto (PI; Esa, Space Telescope Science Institute), F.Paresce (Space Telescope Science Institute)

Observe inner nebula of the symbiotic nova RAquarii with the F/96 extended field in 3 filters covering the full FOC sensitivity range.This program will test ability of FOC to detect faint diffuse features in the presence of nearby bright compact objects at various wavelengths.No precursor OV or SV activities are required for this program as necessary instrument signatures are in hand.

Prop. Type: SAT/FOC

QUASARS _AGN -- (
2996 - "VERIFICATION OF POINT SOURCES IN BACKGROUNDS "
Keywords : GRAVITATIONAL LENSES
Proposers: Duccio Macchetto (PI; Space Telescope Science Institute), P.Crane (European Southern Observatory; West Germany)

The objective of this proposal is to verify the separability of point source images from each other in the presence of a bright background. It will test the ability to do photometry of point sources on a bright background. Quantitative knowledge of these parameters is needed to proceed to do the GTO programs which depend on the FOC performance in this area.

Prop. Type: SAT/FOC

STELLAR ASTROPHYSICS -- (
2998 - "THE NATURE OF THE LUMINOUS 'STARS' IN GIANT H II REGIONS "
Keywords : OB-ASSOCIATION-H II REGION-30 DOR NEBULA, 'SUPERMASSIVE STAR'
Proposers: Duccio Macchetto (PI; Space Telescope Science Institute), A.Nota (Space Telescope Science Institute; Baltimore), G.Weigelt (Max-Planck-Institut Fuer Radioastronomie, Bonn; Germany, West)

High spatial resolution optical and UV images will be obtained of the stellar-like luminous object R136 in the core of a giant extragalactic H II region, the 30 Dor complex. This observation will clarify whether it is a very dense clusters of massive early type stars or whether it is a small group of or even if it is a single object in the 500 to 2000 solar masses range. Settling this question for the supermassive star candidates advocated in th Local Group will provide strong constraints for the interpretation of central objects in galaxies where star clusters appear unresolved. Prerequisite for the execution of this program is the assessment of the OTA and camera best focus

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Prop. Type: SAT/FOC

INTERSTELLAR MEDIUM -- (
2999 - "OBSERVATIONS OF SN1987A "
Keywords :
Proposers: F.D. Macchetto (PI; Esa, Space Telescope Science Institute), R.Gilmozzi (Esa, Space Telescope Science Institute), N.Panagia (Esa, Space Telescope Science Institute)

Observe SN 1987A and its environment, aiming, in particular, at studying the structure and properties of the UV line-emitting shell (about 1 arcsec radius around the SN) and the UV echo from the innermost dust shell (inner radius about 5 arcsec). Moreover, it will be possible to detect the presence of a possible neutron star down to a luminosity of few Lsun.

Prop. Type: SAT/FOC

QUASARS _AGN -- (
3000 - "AP LIBRAE - A TEST FOR THE AGN FUZZ PROGRAM "
Keywords : LACERTID, GALAXY
Proposers: F. Duccio Macchetto (PI; Stsci), D.Baxter (Stsci)

AP Librae is one of the closest BL Lac objects, and has been well studied from the ground. We will use the F/96 camera of the FOC to obtain B and UV images. The B images will be used, by comparison with the ground-based imaging, to deter- mine the efficacy of any deconvolution procedures, to examine any variability in the nuclear component over the timescale of the proposal (approx 25 min), and also to search for any evidence of spiral structure in the host galaxy. The UV data should effectively omit the host galaxy and allow us to examine the nuclear component for structure.

Prop. Type: SAT/FOS

QUASARS _AGN -- (
3001 - "IMAGING AND SPECTROPHOTOMETRY OF NGC1068 "
Keywords : SEYFERT, AGN, IONIZED GAS, NUCLEUS, NARROW LINE REGION, BROAD LINE REGION
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Narrow band [O III] 5007A and nearby offband PC images will be used to resolve the narrow line region. The data will be used to determine to what extent reconstructed images can resolve the narrow line regions of AGN. The reconstructed images will be compared to published, high resolution [O III] 5007A speckle observations. Small aperture FOS spectra of the nucleus will be used to determine how well the emission from the broad line region can be separated from emission from the narrow line region in the face of degraded spatial resolution. The spectra will be compared to published ground based (optical) and IUE (ultraviolet) spectrophotometry of the nucleus.

Prop. Type: SAT/FOS

STELLAR ASTROPHYSICS -- (

3002 - "RECOVERY OF THE HISTORICAL NOVA IN M14 "
Keywords : NOVA, GLOBULAR CLUSTER
Proposers: Bruce Margon (PI; Washington, University Of), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation)

Imaging and spectroscopy will be used in an attempt to recover the historical nova in the globular cluster M14. Similar attempts from the ground are tantalizing, but inclusive. The proposed observations will also more generally test the feasibility of both HST spectroscopy and imaging in crowded fields.

Prop. Type: SAT/AST

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3004 - "DUPLICITY AMONG HYADES STARS-PRELUDE "
Keywords : DUPLICITY; BINARIES; MULTIPLE STARS; HYADES
Proposers: William H. Jefferys (PI; Texas, University Of), O.Franz (Lowell Observatory)

We propose to use FGS in TRANSFER mode to examine, at high angular resolution, a representative sample of bright probable Hyades cluster members in an effort to establish the incidence of duplicity among Hyades stars. The frequency of multiple stars in stellar systems and populations represents a significant aspect of star formation and stellar evolution. Among Hyades stars brighter than V ~ 5.0, companions should be observable to Delta m ~ 2. Binaries of small Delta m should be readily detectable at V ~ 10.

Prop. Type: SAT/OS

INTERSTELLAR MEDIUM -- (

3005 - "ISOTOPIC ABUNDANCES OF CARBON AND OXYGEN AND FRACTIONATION IN INTERSTELLAR CARBON MONOXIDE"

Keywords : INTERSTELLAR MOLECULES-CO. ABUNDANCES AND NUCLEOSYNTHESIS-ISOTOPES OF C AND O - MOLECULAR PROCESSES - FRACTIONATION

Proposers: David L. Lambert (PI; Texas, University Of), S.Federman (Jet Propulsion Laboratory), R.Gilliland (Space Telescope Science Institute)

HRS observations of the CO A-X system between 1250 and 1550 A will be acquired and analyzed to obtain abundances of 12C16O, 13C16O, 12C17O, and 12C18O, and to study the rotational excitation of the CO molecule. Additional observations of the weak inter-combination line of C II at 2324 A will provide the C+ abundance which plays an important role in chemical fractionation. Diffuse interstellar gas towards local stars (e.g. Zeta Per and Zeta Oph) will be observed for the C II lines and lines of the less abundant isotopic species of CO. A check on the Galactic gradient in the 12C/13C ratio will be attempted by observing stars about 1 kpc towards and away from the Galactic center.

Prop. Type: SAT/HSP

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3006 - "SAT/HSP 1: EFFECT OF CENTERING ERRORS ON HSP PHOTOMETRY "

Keywords :

Proposers: Richard L. White (PI; Space Telescope Science Institute), L.Walter (Space Telescope Science Institute)

Using a standard star (V=9.6 mag.) in the CVZ near the open cluster NGC188, the effects of centering errors comparable to those expected from the HSP onboard target acquistion are determined by executing a small dwell scan with the target in a 1-arcsec science aperture while collecting data. The test is performed for two apertures on the UV1 detector and one on the POL detector. This test must be preceeded by the aperture location calibration (2949,2951) and the SV target acquisition test (SV 1381). The HSP 10.2/bright earth fix must be installed. Revision history: created by R. White 12 July 1990 jwpapple, change VIS to UV1. jwp, 05 Jan 1991: bigger scan etc.

Prop. Type: SAT/HSP

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3007 - "SAT/HSP 2: EFFECT OF JITTER ON HSP PHOTOMETRY "
Keywords :
Proposers: Richard L. White (PI; Space Telescope Science Institute), L.Walter (Space Telescope Science Institute)

Using a bright target in the CVZ from the HSP SV program which measures the short-term photometric stability of the HSP (SV 1389), the effect of FGS jitter on HSP photometry is determined by taking a 1 hour time series on the target in a 1-arcsec science aperture. The test is performed for two apertures on the UV1 detector and one on the POL detector. This test must be preceeded by the aperture location calibration (OV 1504) and the SV target acquisition test (SV 1381). This test must preceed SV 1389. This may be run optionally at any time, to assess the current state of HST jitter, but MUST be run after the final jitter fix is in in order to estimate the effect of permanent residual jitter on HSP science observations. Revision history: created by R. White 12 July 1990 jwpapple, change VIS to UV1. jwp, 07 Jan 1991, minor fixes

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Prop. Type: SAT/WFC

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3008 - "WF/PC SAT OBSERVATION: LMC YOUNG CLUSTER PHOTOMETRY"
Keywords : PHOTOMETRIC CALIBRATION OF WF/PC
Proposers: James A. Westphal (PI; Caltech), W. (Various)

The purpose of this calibration test is to provide realistic data for stellar photometry over a range of crowding. Two exposure series are taken with the telescope moved between them to test the effects of PSF variability over the field. The target is a moderately crowded field in NGC 1850 in the LMC. PSF exposures are taken in NGC 188, in Proposal 3013. The PSF must be measured once per WF/PC SAT "campaign" or if the mirror position has changed or more than 7 days have passed since the last calibration.

Prop. Type: SAT/WFC

GALAXIES CLUSTERS -- (

3009 - "SAT OBSERVATION: NUCLEUS OF A NEARBY NORMAL GALAXY "
Keywords : GALACTIC NUCLEI, GALACTIC BULGES, LOCAL GROUP, DUST LANES, GLOBULAR CLUSTERS, SURFACE PHOTOMETRY
Proposers: James A. Westphal (PI; Caltech)

Direct images of the nucleus of a nearby early-type galaxy NGC 7457 will be used to assess the utility of WFPC images for deconvolution and other image processing techniques. The galaxy will be imaged with the F555W and F785LP filters. The PSF must be measured once per WF/PC SAT "campaign" or if the mirror position has changed or more than 7 days have passed since the last calibration.

Prop. Type: SAT/WFC

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3010 - "WF/PC SAT OBSERVATION: CROWDED FIELD PHOTOMETRY IN AN INTERMEDIATE-DISTANCE CEPHEID GALAXY"
Keywords : WF/PC CALIBRATION OF CROWDED FIELD
Proposers: James A. Westphal (PI; Caltech), W. (Various)

The purpose of this calibration test is to take data of known crowded star fields and determine the effects on standard automatic data reduction programs. The data will be taken in at two wavelength extremes to isolate the point spread function dependency for this analysis. The PSF must be measured once per WF/PC SAT "campaign" or if the mirror position has changed or more than 7 days have passed since the last calibration.

Prop. Type: SAT/WFC

STELLAR POPULATIONS -- (

3011 - "SAT OBSERVATION: GLOBULAR CLUSTER NUCLEUS M15 "
Keywords : GLOBULAR CLUSTER, POPULATION II, DWARF, WHITE DWARF, DYNAMICS, STELLAR POPULATION
Proposers: James A. Westphal (PI; Caltech)

The nucleus of M15 is imaged in the U band to study the core properties and the existance of a collapsed cusp if any. This is a test of image deconvolution and reconstruction in a crowded field. Excellent ground-based images of this field also exist and will be compared. The exposure sequence is repeated once at a slightly different pointing. Exposures are taken in NGC188 in Prop 3014 to determine the point-spread function.

Prop. Type: SAT/WFC

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3013 - "WF/PC SAT PSF - F547M, F555W, F785LP "
Keywords : PHOTOMETRIC CALIBRATION OF WF/PC
Proposers: James A. Westphal (PI; Caltech), W. (Various)

The purpose of this calibration is to provide the point spread function for the F547M, F555W, and F785LP filters at the focus position the 3008, 3009, and 3010 SAT proposals are performed. This calibration must be run in conjunction with the SAT proposals each time the mirror position has been changed or more than 7 days has passed since the last PSF calibration was run.

Prop. Type: SAT/WFC

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3014 - "WF/PC SAT PSF - F336W "
Keywords : PHOTOMETRIC CALIBRATION OF WF/PC
Proposers: James A. Westphal (PI; Caltech), W. (Various)

The purpose of this calibration is to provide the point spread function for the F336W filter at the focus position the 3011 SAT and 3012 EROS proposals are performed. This calibration must be run in conjunction with these proposals each time the mirror position has been changed or more than 7 days have passed since the last PSF calibration was run.

Prop. Type: SAT/HRS

INTERSTELLAR MEDIUM -- (

3021 - "XI PER INTERSTELLAR SPECTRUM GHRS SAT AND/OR ERO"
Keywords : INTERSTELLAR LINES
Proposers: Dennis C Ebbets (PI; Ball Aerospace), F.Bruhweiler (Catholic University), J.Cardelli (Univ. Wisconsin), M.Jura (Ucla), B.Savage (Univ. Wisconsin), A.Smith (Nasa/Gsfc)

GHRS high resolution spectra of interstellar absorption lines in the spectrum of the 07 star Xi Per

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Prop. Type: SAT/HRS

STELLAR ASTROPHYSICS -- (

3022 - "SCIENCE ASSESSMENT OBSERVATIONS OF THE HG-RICH CP STAR CHI LUP "
Keywords : MS STAR, CHEMICALLY PECULIAR STAR, ABUNDANCE, SPECTROSCOPY, UV
Proposers: Dennis C. Ebbets (PI; Ball Aerospace Systems Group/Ghrs), D.Leckrone (Nasa, Goddard Space Flight Center), G.Wahlgren (Computer Sciences Corp/Ghrs)

The rich ultraviolet absorption spectrum of the ultra-sharp- lined, chemically peculiar star, chi Lup, will be used to ascertain fundamental performance properties of the combined OTA/GHRS in the 1900-2000 angstrom region and will provide important scientific information about the origin of abundance and isotopic anomalies of Hg in the star's photosphere. Intercomparison of high (R=85000) and medium (R=28000) dispersion spectra, centered on the Hg II resonance line at 1942 angstroms, will be obtained in both science apertures to assess the following: 1. spectral resolution, 2. effects of echelle mode scattered light background, photocathode graularity, etc., on the photometric accuracy of the data, 3. overall OTA/GHRS instrumental profile 4. performance of on-board doppler velocity compensation, 5. preservation of information content in deconvolved spectra, and 6. relative throughput of small and large apertures. A single, accurate observation of the Hg II resonance line at 1942 A can directly verify or refute the optical region, 3984 A, claim of an extraordinary Hg isotope anomaly in chi Lup, and yield a more accurate Hg/H abundance ratio, providing information about the origin of this type of abundance anomaly.

Prop. Type: SAT/HRS

STELLAR ASTROPHYSICS -- (
3023 - "DEMONSTRATION SCIENCE: THE CHROMOSPHERE OF ALPHA TAU "
Keywords : COOL STARS: WINDS, CHROMOSPHERES, MASS-LOSS.
Proposers: Dennis C. Ebbets (PI; Ball Aerospace System Group/Ghrs), K.Carpenter (Nasa - Goddard Space Flight Center), R.Robinson (Csc @ Nasa-Gsfc)

The C II intercombination lines (UV 0.01) near 2325 A will be used to estimate the turbulent velocity and electron density in the chromosphere of the K giant Alpha Tau. High S/N Mg II profiles will be acquired to search for discrete absorption features superposed on the emission lines. LSA and SSA observations using echelle B and G270M are made to allow experiments with deconvolution of LSA and medium resolution data.

Prop. Type: SAT/HRS

EXTRAGALACTIC -- (
3024 - "NGC 1068 STARBURST KNOT GHRS SAT AND/OR ERO"
Keywords : AGN, SEYFERT GALAXY, NUCLEUS, SPECTROSCOPY
Proposers: Dennis C Ebbets (PI; Ball Aerospace), A.Boggess (Gsfc), F.Bruhweiler (Catholic Univ Of America)

GHRS low resolution spectra of the UV bright starburst knot in the disk of the Seyfert galaxy NGC 1068.

Prop. Type: EROS

STELLAR ASTROPHYSICS -- (
3030 - "MELNICK 42 - GHRS SAT AND ERO "
Keywords :
Proposers: Dennis C Ebbets (PI; Ball Aerospace), B.Altner (Csc), S.Heap (Gsfc)

GHRS SAT and ERO observations of O3If star Melnick 42, in 30 Dor cluster in LMC

Prop. Type: EROS

STELLAR ASTROPHYSICS -- (
3031 - "CIRCUMSTELLAR MATERIAL AROUND BETA PIC - GHRS SAT AND EROS "
Keywords : SPECTROSCOPY, CIRCUMSTELLAR
Proposers: Dennis C Ebbets (PI; Ball Aerospace), A.Boggess (Nasa/Gsfc), F.Bruwheiler (Catholic University), C.Grady (Catholic University)

GHRS medium and high resolution spectra of Fe absorption lines from the circumstellar disk of material associated with Beta Pictoris. This is one of the GHRS Early Release Observation proposals. Revised July 26 to add onboard acq line 205

Prop. Type: SATSNAP

GALAXIES CLUSTERS -- (
3034 - "NON-PROPRIETARY ("SNAPSHOT") SURVEY "
Keywords : GALAXIES
Proposers: John N. Bahcall (PI; Institute For Advanced Study, Princeton), R.Doxsey (Space Telescope Science Institute), J.Gunn (Princeton University), O.Lahav (Institute Of Astronomy, Cambridge; England), D.Schneider (Institute For Advanced Study, Princeton)

Whenever the automatic scheduler produces a substantial gap between observations, the Wide Field/Planetary Camera will be used to image a nearby object selected from a list of several hundred low redshift quasars, normal galaxies, peculiar galaxies, and standard survey fields. HST observations will reveal details of the immediate environment of quasars, the nuclei of normal galaxies, the morphology of peculiar galaxies, and the star density in selected fields. The purpose of this program is to increase the efficiency of the HST and to provide scientific data that can be used by many different astronomers. The images acquired in this program will be non-proprietary and will be made available to qualified astronomers via the HST archival system. With the approval of the Director of STScI, the images can also be used for public relations purposes by appropriate NASA anad STScI personnel.

Prop. Type: ERO/FOC

SOLAR SYSTEM -- (
3036 - "OBSERVATION OF PLUTO/CHARON "
Keywords :
Proposers: F. Duccio Macchetto (PI; Stsci)

It is proposed to take image of the Pluto-Charon system using the F/96 and F/288 cameras of the FOC. This will give the first true image of this outermost planet in the solar system, the only one of the outer planets that has not been visited by the Voyager probes. Pluto will subtend approximately 20 pixels across at F/288, while Charon, separated from Pluto by about 70 pixels, will be 10 pixels across. The image will add important constraints to ground-based eclipse mapping reconstructions, and greatly improve our knowledge of the orbital elements of this intriguing system

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Prop. Type: SAT/FOC

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3039 - "FOC SAT PSFS "
Keywords :
Proposers: F.D. Macchetto (PI; Esa, Space Telescope Science Institute), W.Sparks (Space Telescope Science Institute)

This proposal will image a UV standard in F/96 mode in order to measure FOC psf structure for SAT proposals. Some short exposures are included to enable quantitative information on target objects to be obtained in the uv.

Prop. Type: EROS

STELLAR POPULATIONS -- (

3040 - "THE STELLAR DENSITY DISTRIBUTION IN THE CENTER OF THE GALACTIC GLOBULAR CLUSTER M15"
Keywords : GLOBULAR CLUSTER, POPULATION II, BLACK HOLE
Proposers: John N. Bahcall (PI; Institute For Advanced Study)

Short exposures in the V and I bands will be made of the Galactic globular cluster M15 with the Planetary Camera. These exposures will be an important test of the ability of the HST to do crowded field photometry. Simulations suggest that the HST observations will be much more powerful than ground-based observations and can provide a useful constraint on a central Massive Black Hole.

Prop. Type: EROS

STELLAR POPULATIONS -- (

3042 - "UV IMAGING OF SIRIUS B "
Keywords : STELLAR POPULATIONS, WHITE DWARFS, SPECTROSCOPY, ABSORPTION LINES
Proposers: John N. Bahcall (PI; Institute For Advanced Study)

UV imaging observations will be made of the white dwarf companion of Sirius A.

Prop. Type: SAT/WFC

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3043 - "PC SAT PSF - F502N, F547M, F555W, F656N, F785LP"
Keywords : PHOTOMETRIC CALIBRATION OF PC
Proposers: James A. Westphal (PI; Caltech), W. (Various)

The purpose of this calibration is to provide the point spread function for the F547M, F555W, and F785LP filters at the focus position the 3009 and other SAT proposals are performed. This calibration must be run in conjunction with the SAT proposals each time the mirror position has been changed or more than 7 days has passed since the last PSF calibration was run.

Prop. Type: SAT/FOC

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3049 - "FOC SAT UV PSFS "
Keywords :
Proposers: F.D. Macchetto (PI; Esa, Space Telescope Science Institute), W.Sparks (Space Telescope Science Institute)

This proposal will image a UV standard in F/96 mode in order to measure FOC uv psf structure for SAT.

Prop. Type: SAT/FOS

QUASARS AGN -- (

3050 - "IMAGING AND SPECTROPHOTOMETRY OF NGC1566 "
Keywords : SEYFERT, AGN, IONIZED GAS, NUCLEUS, NARROW LINE REGION, BROAD LINE REGION
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Narrow band [O III] 5007A, nearby offband, and UV continuum PC images will be used to resolve the narrow and broad line regions. These data will test the ability to resolve the narrow regions of Seyfert 1 galaxies in the vicinity of a bright unresolved nucleus. Small aperture FOS spectra of the nucleus will be used to determine how well the emission from the broad line region can be separated from the narrow line region given the degraded spatial resolution. The spectra will be compared to published ground-based (optical) and IUE (ultraviolet) spectrophhotometry of the nucleus.

Prop. Type: SAT/FOS

QUASARS _AGN -- (QUASAR EMISSION) --

3051 - "HELIUM IN THE EARLY UNIVERSE "

Keywords : UV SPECTROSCOPY, QUASAR, EMISSION LINE PROFILE, ABUNDANCE EVOLUTION,

Proposers: E. Margaret Burbidge (PI; Uc, San Diego), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

We will use the FOS to measure the strength of the He I lambda 584 line in the UV in a QSO which has a good probability of having light at that wavelength. We will test the ability of the FOS to detect weak emission lines against a background of weak absorption lines in a faint object with the degraded performance due to the slit losses, decreased resolution, possible increased scattered light and greater than expected particle-induced background. From this line we will determine the relative abundance of Helium in the early universe.

Prop. Type: SAT/FOS

QUASARS _AGN -- (QUASAR ABSORPTION) --

3054 - "COSMIC ABUNDANCES AT Z=1.0 - SHORT PROGRAM "

Keywords : UV SPECTROSCOPY, QUASAR, INTERGALACTIC ABSORPTION LINE, EMISSION LINE PROFILE, ABUNDANCE EVOLUTION, LYMAN ALPHA

Proposers: E. Margaret Burbidge (PI; Uc, San Diego), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

We will use the FOS to measure the strengths of absorption lines in the UV in a QSO which has known absorption in the optical. This will enable us to determine the ability of the FOS to measure and deconvolve UV absorption lines in faint objects in the light of the degraded performance due to the slit losses, decreased resolution, possible increased scattered light and greater than expected particle-induced background. These observations will enable us to determine the relative abundance of the elements in a galaxy at z=1.0.

Prop. Type: SAT/FOC

QUASARS _AGN -- (
3056 - "FUV PRISM PSF "
Keywords : OBJECTIVE PRISMS
Proposers: Duccio Macchetto (PI; Space Telescope Science Institute),
P.Jakobsen (Esa; Netherlands)

This program is to measure the point spread function of the FUV prism for use with the proposal on FUV prism spectrum of a high z qso.

Prop. Type: SAT/FOC

QUASARS _AGN -- (
3057 - "FUV PRISM SPECTRUM OF A HIGH REDSHIFT QSO "
Keywords : OBJECTIVE PRISMS
Proposers: Duccio Macchetto (PI; Space Telescope Science Institute),
P.Jakobsen (Esa; Netherlands)

Had the OTA PSF been as anticipated, then use of the the ultraviolet objective prisms of the Faint Object Camera would certainly have been the fastest and easiest means of obtaining exploratory low resolution spectra of objects. Whether or not this still is the case can only be checked by observation. One of several key FOC GTO programs employing the prisms involves carrying out an FUV spectroscopic "mini-survey" of a number of Z>3.1 quasars with the aim of identifying one or more objects that are not completely absorbed by intervening HI Lyman continuum absorption at emitted HeII 304 A - thereby permitting the detection of the anticipated "HeII forest" matching that seen in HI Lyman alpha, and the HeII equivalent of the Gunn-Peterson test for intergalactic helium to be carried out. It is proposed that a series of FOC FUV prism exposures of one of the qso's from the FOC GTO program be brought forward in order to evaluate the performance of the FOC prisms in with the present OTA PSF. A suitable target is 2204-409. This quasar is relatively bright (V=17.8) and is known to contain no strong HI Lyman limit or damped Lyman alpha absorption systems down to the atmospheric cutoff.

Prop. Type: SAT/FOC

STELLAR ASTROPHYSICS -- (
3058 - "THE NATURE OF THE LUMINOUS "STARS' IN THE GIANT H II REGIONS "
Keywords : OB-ASSOCIATION-H II REGION-30 DOR NEBULA, 'SUPERMASSIVE STAR'
Proposers: Duccio Macchetto (PI; Space Telescope Science Institute)

High spatial resolution UV images will be obtained of the dense cluster R136 in the core of a giant extragalactic H II region, the 30 Dor complex.

Prop. Type: ERO/FOC

SOLAR SYSTEM -- (

3059 - "OBSERVATION OF PLUTO/CHARON - 2 "
Keywords :
Proposers: F. Duccio Macchetto (PI; Stsci)

It is proposed to take image of the Pluto-Charon system using the F/96 and F/288 cameras of the FOC. This will give the first true image of this outermost planet in the solar system, the only one of the outer planets that has not been visited by the Voyager probes. Pluto will subtend approximately 20 pixels across at F/288, while Charon, separated from Pluto by about 70 pixels, will be 10 pixels across. The image will add important constraints to ground-based eclipse mapping reconstructions, and greatly improve our knowledge of the orbital elements of this intriguing system

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Prop. Type: SAT/WFC

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3060 - "WF/PC OPTICAL CHARACTERIZATION OBSERVATION: LMC YOUNG CLUSTER PHOTOMETRY"
Keywords : PHOTOMETRIC CALIBRATION OF WF/PC
Proposers: James A. Westphal (PI; Caltech), W. (Various)

The purpose of this calibration test is to provide information on the aberrations of the PC-OTA combination as a function of position in the four PC chips. Earlier exposures of the WF in the crowded cluster NGC 1850 revealed unexpected variations in the PSF over the field. It is now desired to repeat this observation in the PC for similar information. The data are needed to understand and remove the optical aberrations of the PC from data taken to characterize the aberrations of the OTA. As the results may have a large bearing on strategy to measure the OTA aberrations, they should be carried out as soon as possible. Only one series of exposures in a single filter and a single pointing is required. No additional PSF observations are needed.

Prop. Type: EROS

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3061 - "ORBITAL PARAMETERS OF KNOWN BINARIES "
Keywords : DUPLICITY; BINARIES; MULTIPLE STARS
Proposers: William H. Jefferys (PI; Texas, University Of), O.Franz (Lowell Observatory)

We propose to use the FGS in TRANSFER mode to examine, at high angular resolution, two known binary pairs in an effort to establish the orbital elements of these pairs near their periastron, which is not possible from the ground. Knowledge of the orbital parameters will lead to a precise determination of the stellar mass of each component. It is expected that the separations of the component stars in each pair is currently about 0.050 seconds of arc with about one magnitude difference in brightness, thus precise measurements with the Hubble Space Telescope can be readily obtained at this time.

Prop. Type: EROS

QUASARS _AGN -- (QUASAR EMISSION) --
3065 - "HIGH SIGNAL-TO-NOISE QSO LINE PROFILES "
Keywords : UV SPECTROSCOPY, QUASAR, EMISSION LINE PROFILE, LYMAN ALPHA
Proposers: E. Margaret Burbidge (PI; Uc, San Diego), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

We will use the FOS to measure the strengths and profiles of emission lines in the UV in a bright, low-redshift QSO. We will present a high signal-to-noise spectrum which is essentially unaffected by the HST optical problems. These observations will be combined with optical observations of similar quality and lead to improved models of the structure of the broad-line region of QSOs.

Prop. Type: EROS

QUASARS _AGN -- (QUASAR EMISSION) --
3066 - "EMISSION LINES IN HIGH REDSHIFT QSOS "
Keywords : UV SPECTROSCOPY, QUASAR, EMISSION LINE PROFILE, ABUNDANCE EVOLUTION
Proposers: E. Margaret Burbidge (PI; Uc, San Diego), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

We will use the FOS to measure the strength of the He I lambda 584 line in the UV in a QSO which has a good probability of having light at that wavelength. We will demonstrate the ability of the FOS to detect weak emission lines against a background of weak absorption lines in a faint object with the degraded performance due to the slit losses, decreased resolution, possible increased scattered light and greater than expected particle-induced background. From this line we will determine the relative abundance of Helium in the early universe.

Prop. Type: SAT/WFC

QUASARS _AGN -- (
3068 - "IMAGING OF THE GRAVITATIONAL LENS 2237+0305 "
Keywords : QUASAR, SPECTROSCOPY, GALAXY, GRAVITATIONAL LENS
Proposers: John N. Bahcall (PI; Institute For Advanced Study), D.Schneider (Institute For Advanced Study)

WFC images of the gravitational lens 2237+0305 will be taken in the F702W and F336W filters.

Prop. Type: SAT/FOS

QUASARS _AGN -- (
3075 - "IMAGING AND SPECTROPHOTOMETRY OF NGC1068-UPDATE "
Keywords : SEYFERT, AGN, IONIZED GAS, NUCLEUS, NARROW LINE REGION, BROAD LINE REGION
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Narrow band [O III] 5007A and nearby offband PC images will be used to resolve the narrow line region. The data will be used to determine to what extent reconstructed images can resolve the narrow line regions of AGN. The reconstructed images will be compared to published, high resolution [O III] 5007A speckle observations. Small aperture FOS spectra of the nucleus will be used to determine how well the emission from the broad line region can be separated from emission from the narrow line region in the face of degraded spatial resolution. The spectra will be compared to published ground based (optical) and IUE (ultraviolet) spectrophotometry of the nucleus.

Prop. Type: SAT/OS

GALAXIES _CLUSTERS -- (
3084 - "THE CENTER OF THE GLOBULAR CLUSTER M15 "
Keywords : GLOBULAR CLUSTER--DYNAMICS
Proposers: Ivan R. King (PI; Uc, Berkeley)

Among the globular clusters that have collapsed cores, M15 is the strangest. The sharp rise of velocity dispersion observed near its center indicates either that it is in the act of collapse or that it has a black hole at its center. No one knows how small its true core is. The high resolution of the FOC f/96 camera offers the best opportunity to "resolve" these problems.

Prop. Type: SAT/OS

QUASARS _AGN -- (GRAVITATIONAL LENSES) --
3087 - "GRAVITATIONAL LENSES "
Keywords : GRAVITATIONAL LENSES
Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West)

We intend to detect new features in gravitationally lensed QSO's. In particular, we will look for the predicted extra images, optical counter-parts to VLA and VLBI jets and if possible at the morphology of the deflecting mass. Quantitative knowledge of these is necessary for the astrophysical use of the phenomenon.

Prop. Type: SAT/OS

QUASARS _AGN -- (
3088 - "SPECTROSCOPY OF 3C 273 "
Keywords : QUASAR, SPECTROSCOPY, EMISSION LINES, ABSORPTION LINES, INTERGALACTIC
Proposers: John N. Bahcall (PI; Institute For Advanced Study), D.Schneider (Institute For Advanced Study)

FOS spectra will be obtained of 3C 273.

Prop. Type: SATSNAP

GALAXIES _CLUSTERS -- (
3092 - "NON-PROPRIETARY ("SNAPSHOT") SURVEY - UPDATED 10-8-90 "
Keywords : GALAXIES
Proposers: John N. Bahcall (PI; Institute For Advanced Study, Princeton), R.Doxsey (Space Telescope Science Institute), J.Gunn (Princeton University), O.Lahav (Institute Of Astronomy, Cambridge; England), D.Schneider (Institute For Advanced Study, Princeton)

Whenever the automatic scheduler produces a substantial gap between observations, the Wide Field/Planetary Camera will be used to image a nearby object selected from a list of several hundred low redshift quasars, normal galaxies, peculiar galaxies, and standard survey fields. HST observations will reveal details of the immediate environment of quasars, the nuclei of normal galaxies, the morphology of peculiar galaxies, and the star density in selected fields. The purpose of this program is to increase the efficiency of the HST and to provide scientific data that can be used by many different astronomers. The images acquired in this program will be non-proprietary and will be made available to qualified astronomers via the HST archival system. With the approval of the Director of STScI, the images can also be used for public relations purposes by appropriate NASA anad

STScI personnel.

Prop. Type: SAT/FOS

STELLAR ASTROPHYSICS -- (
3094 - "RECOVERY OF THE HISTORICAL NOVA IN M14 - SPECTROSCOPY "
Keywords : NOVA, GLOBULAR CLUSTER
Proposers: Bruce Margon (PI; Washington, University Of), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation)

Imaging and spectroscopy will be used in an attempt to recover the historical nova in the globular cluster M14. Similar attempts from the ground are tantalizing, but inclusive. The proposed observations will also more generally test the feasibility of both HST spectroscopy and imaging in crowded fields.

Prop. Type: GTO/FOC

STELLAR POPULATIONS -- (NEARBY GALAXIES) --
3105 - "UV IMAGING OF M31-GROUP GALAXIES "
Keywords : M31 -- STELLAR POPULATIONS -- LOCAL GROUP
Proposers: Ivan R. King (PI; Uc, Berkeley), P.Crane (European Southern Observatory; Germany, West), J.Deharveng (Marseille Observatory; France), M.Disney (University College, Cardiff; United Kingdom)

Detection of stars that contribute the UV light at centers of M31 and M32.

Prop. Type: GTO/OS

STELLAR POPULATIONS -- (
3111- CT - "THE STELLAR DENSITY DISTRIBUTIONS IN THE CENTERS OF GALACTIC GLOBULAR CLUSTERS II. CYCLE 0 MAJOR CHANGES"
Continuation of Program Number 1019
Keywords : GLOBULAR CLUSTER, POPULATION II, BLACK HOLE
Proposers: John N. Bahcall (PI; Institute For Advanced Study)

Short exposures will be made of all galactic globular clusters with distance moduli less than 15.5 mag and galactic latitude above or below 15 degrees. A search will be made for cusps in the stellar density distributions and the colors will be measured for the brightest stars in the cores of the clusters. ST observations are required in order to reach the innermost regions of the clusters with sufficient resolution to separate individual stars.

Prop. Type: SAT/FOS

QUASARS _AGN -- (

3112 - "IMAGING AND SPECTROPHOTOMETRY OF NGC1068 - PART II "
Keywords : SEYFERT, AGN, IONIZED GAS, NUCLEUS, NARROW LINE REGION, BROAD LINE REGION
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Narrow band [O III] 5007A and nearby offband PC images will be used to resolve the narrow line region. The data will be used to determine to what extent reconstructed images can resolve the narrow line regions of AGN. The reconstructed images will be compared to published, high resolution [O III] 5007A speckle observations. Small aperture FOS spectra of the nucleus will be used to determine how well the emission from the broad line region can be separated from emission from the narrow line region in the face of degraded spatial resolution. The spectra will be compared to published ground based (optical) and IUE (ultraviolet) spectrophotometry of the nucleus.

Prop. Type: SAT/OS

GALAXIES _CLUSTERS -- (

3121 - "MORPHOLOGY OF FAINT GALAXIES - PART II "
Keywords : GALAXIES -- COSMOLOGY
Proposers: Ivan R. King (PI; Uc, Berkeley), P.Seitzer (Space Telescope Science Institute)

This proposal is for a scientific assessment of the ability of HST to make morphological classifications of galaxies at redshifts in the range 0.2 to 0.7. Single-orbit images are taken with the WFC and the FOC F48.

Prop. Type: SAT/HRS

STELLAR ASTROPHYSICS -- (

3125 - "SCIENCE ASSESSMENT OBSERVATIONS OF THE HG-RICH CP STAR CHI LUP - PART II"

Keywords : MS STAR, CHEMICALLY PECULIAR STAR, ABUNDANCE, SPECTROSCOPY, UV

Proposers: Dennis C. Ebbets (PI; Ball Aerospace Systems Group/Ghrs), D.Leckrone (Nasa, Goddard Space Flight Center), G.Wahlgren (Computer Sciences Corp/Ghrs)

The rich ultraviolet absorption spectrum of the ultra-sharp- lined, chemically peculiar star, chi Lup, will be used to ascertain fundamental performance properties of the combined OTA/GHRS in the 1900-2000 angstrom region and will provide important scientific information about the origin of abundance and isotopic anomalies of Hg in the star's photosphere. Intercomparison of high (R=85000) and medium (R=28000) dispersion spectra, centered on the Hg II resonance line at 1942 angstroms, will be obtained in both science apertures to assess the following: 1. spectral resolution, 2. effects of echelle mode scattered light background, photocathode graularity, etc., on the photometric accuracy of the data, 3. overall OTA/GHRS instrumental profile 4. performance of on-board doppler velocity compensation, 5. preservation of information content in deconvolved spectra, and 6. relative throughput of small and large apertures. A single, accurate observation of the Hg II resonance line at 1942 A can directly verify or refute the optical region, 3984 A, claim of an extraordinary Hg isotope anomaly in chi Lup, and yield a more accurate Hg/H abundance ratio, providing information about the origin of this type of abundance anomaly.

Prop. Type: SAT/HRS

INTERSTELLAR MEDIUM -- (

3127 - "XI PER INTERSTELLAR SPECTRUM GHRS SAT AND/OR ERO (PART II)"

Keywords : INTERSTELLAR LINES

Proposers: Dennis C Ebbets (PI; Ball Aerospace), F.Bruhweiler (Catholic University), J.Cardelli (Univ. Wisconsin), M.Jura (Ucla), B.Savage (Univ. Wisconsin), A.Smith (Nasa/Gsfc)

GHRS high resolution spectra of interstellar absorption lines in the spectrum of the 07 star Xi Per

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Prop. Type: SAT/FOC

QUASARS _AGN -- (
3130 - "FUV PRISM PSF REVISITED "
Keywords : OBJECTIVE PRISMS
Proposers: Duccio Macchetto (PI; Space Telescope Science Institute), P.Jakobsen (Esa; Netherlands)

This program is to measure the point spread function of the FUV prism for use with the proposal on FUV prism spectrum of a high z qso.

Prop. Type: SAT/FOS

QUASARS _AGN -- (
3136 - "IMAGING AND SPECTROPHOTOMETRY OF NGC1566-PART II "
Keywords : SEYFERT, AGN, IONIZED GAS, NUCLEUS, NARROW LINE REGION, BROAD LINE REGION
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Narrow band [O III] 5007A, nearby offband, and UV continuum PC images will be used to resolve the narrow and broad line regions. These data will test the ability to resolve the narrow regions of Seyfert 1 galaxies in the vicinity of a bright unresolved nucleus. Small aperture FOS spectra of the nucleus will be used to determine how well the emission from the broad line region can be separated from the narrow line region given the degraded spatial resolution. The spectra will be compared to published ground-based (optical) and IUE (ultraviolet) spectrophhotometry of the nucleus.

Prop. Type: GTO/FOC

STELLAR POPULATIONS -- (
3176- CT - "A SEARCH FOR PLANETS AROUND NEARBY STARS: CYCLE 1 OBSERVATIONS "
Continuation of Program Number 1274
Keywords : EXTRA-SOLAR PLANETS; SUB-STELLAR MASS COMPANIONS
Proposers: Cesare Barbieri (PI; Padova, University Of; Italy), A.Labeyrie (Cerga; France), A.Nota (Esa, European Space Operations Centre; Italy), H.Zinnecker (Royal Observatory, Edinburgh; United Kingdom)

We propose to take advantage of the very high resolution, sensitivity and attenuation capabilities of the FOC in its coronographic mode to search for planets of other stars, in order to get direct proof of their existence and to obtain data on the formation of planetary systems. Stars like Eps Eri and Barnard's are prime candidates for this search, because they are close to the Sun and their motion seems to be perturbed by unseen low-mass companions. The FOC is very suited to carry out the search, thanks to the photon counting capabilities, to the high attenuation of the coronograph, and to the small pixel size resolving the structure of the PSF of the bright primary star. A roll-blinking technique will be used to improve the detection capabilities.

Prop. Type: GTO/FOC

QUASARS _AGN -- (
3177- CT - "A SEARCH FOR NEW GRAVITATIONAL LENSES - CYCLE 1 "
Continuation of Program Number 1236
Keywords : GRAVITATIONAL LENSES, QUASARS
Proposers: Craig D. Mackay (PI; Cambridge University; United Kingdom)

It is proposed to survey the images of known quasars at the highest resolution to look for multiple structure that might be caused by a gravitational lens. Quasars have been selected to have generally high redshift and rich absorption line spectra with multiple systems to increase the chance of there being intervening material. The FOC at f/96 is best suited to this search.

Prop. Type: GTO/FOC

SOLAR SYSTEM -- (GIANT PLANETS) --
3178- CT - "FAR UV OBSERVATIONS OF THE GIANT PLANETS-CYCLE1 SATURN/URANUS "
Continuation of Program Number 1269
Keywords : FAR ULTRAVIOLET, GIANT PLANETS, AURORAE
Proposers: Francesco Paresce (PI; Esa, Space Telescope Science Institute), J.Gerard (Liege, University Of; Belgium), A.Vidal-Madjar (Institute Of Astrophysics, Paris; France)

H and H2 are the main constituents of the upper atmospheres of the giant planets and Titan, H is abundant in their exospheres and magnetospheres and N2, produced by photolysis of NH3, dominates the lower atmosphere of Titan. The spatial distribution of these elements is determined by the photochemical and particle dissociation processes responsible for their production and by the transport mechanisms responsible for their distribution. The presence of these planetary constituents is revealed by emissions of the HI, 1216 A Lyman alpha line, the H2 Lyman and Werner, and the N2 Lyman-Birge-Hopfield bands in the 1000-2000A region, all produced by particle impact excitation and/or resonance scattering of sunlight. Spatial and spectral images of the H, H2 and N2 atmospheres around these objects, consequently, represent key diagnostic tools in the investigation of these fundamental planetary phenomena. Moreover, Lyman alpha images of the giant planets taken at high enough spatial resolution will permit a determination of the abundance of deuterium, an extremely sensitive tracer of primordial nucleosynthesis. We propose to obtain a series of high resolution images of the giant planets' upper atmospheres and near-planetary environments in the far uv that are unobtainable from the ground or from the present generation of planetary probes.

Prop. Type: GTO/FOC

QUASARS _AGN -- (
3179- CT - "FAR-ULTRAVIOLET SPECTRA OF VERY HIGH REDSHIFT QUASARS:CYCLE1 "
Continuation of Program Number 1235
Keywords : HIGH REDSHIFT QUASARS - INTERGALACTIC MEDIUM
Proposers: Peter Jakobsen (PI; Esa, Estec; Netherlands), J.Blades (Esa, Space Telescope Science Institute), A.Boksenberg (Royal Greenwich Observatory; United Kingdom), F.Paresce (Esa, Space Telescope Science Institute)

We intend to carry out a first exploraory survey of the redshifted Lyman continuum spectra of high redshift quasars. The main objective is to investigate the opacity of the intergalactic medium in the Lyman continuum and to carry out the He+ equivalent of the Gunn-Peterson test for once ionized intergalactic helium.

Prop. Type: GTO/FOC

QUASARS _AGN -- (
3180- CT - "HIGH-SPATIAL-RESOLUTION IMAGING AND SPECTROSCOPY OF AGN-CYCLE 1 "
Continuation of Program Number 1227
Keywords : EMISSION LINE GALAXY, SEYFERT GALAXY, RADIO GALAXY, BL-LAC OBJECT, QUASAR, IMAGING, SPECTROSCOPY
Proposers: Alec Boksenberg (PI; Royal Greenwich Observatory; United Kingdom), F.Macchetto (Esa, Space Telescope Science Institute)

Images of many objects having AGN will be obtained, representing a range of typed physical properties. Roll deconvolution with the FOC f/288 mode can yield diffraction-limited resolution at short UV wavelengths, for example 0.02 arc sec at 200 nm; selected high-resolution measurements will be made of several nearby and bright AGN. Additional long-slit spectroscopy will complement these observations. The programme is directed at attaining a true physical picture of the nature of the broad line, intermediate and narrow line regions of such objects.

Prop. Type: GTO/FOC

QUASARS _AGN -- (HOST GALAXY) --
3181- CT - "NARROW BAND IMAGING OF QUASARS - CYCLE 1 "
Continuation of Program Number 1233
Keywords : QUASARS, IMAGING, NARROW LINE EMISSION
Proposers: F. Duccio Macchetto (PI; Esa, Space Telescope Science Institute), S.Di Serego Alighieri (Esa, European Coordinating Facility; Italy), M.Perryman (Esa, Estec; Netherlands), P.Shaver (European Southern Observatory; Germany, West)

It has long been thought that quasars may be powered by the infall of gas, either from within the parent galaxy or from outside. It has also been thought that quasars may expel gas into the intergalactic medium, leading to large-scale enrichment at an early epoch. In either case, one may expect to find gas within the parent galaxies of quasars, and large gaseous halos around them. Other possibilities have been suggested - protogalactic disks, protoclusters, residual pancake structures - the remains of which might also appear as halos around quasars. Narrow-band observations of quasars with the ST will not only address these fundamental issues, but will at the same time touch on several others, including the nature of the parent galaxy, its evolution with redshift, the presence of nearby galaxies and possible protogalaxies, and the nature of the objects causing quasar absorption lines.

Prop. Type: GTO/FOC

INTERSTELLAR MEDIUM -- (SUBLUMINOUS STARS) --
3182- CT - "HIGH RESOLUTION OBSERVATIONS OF CATACLYSMIC VARIABLES - CYCLE 1 "
Continuation of Program Number 1253
Keywords : CATACLYSMIC VARIABLES, NOVAE, SYMBIOTICS, SHELLS
Proposers: Francesco Paresce (PI; Space Telescope Science Institute), F.Macchetto (Esa, Space Telescope Science Institute), C.Mackay (Cambridge University; United Kingdom)

It is proposed to explore at high spatial and moderate spectral resolution the close environments of ten cataclysmic variable stars known or suspected to possess complex surrounding emission nebulosities. The study will be conducted using the narrow band and interference filters centered on bright nebular emission features of hydrogen, carbon and oxygen. A wide combination of unique FOC capabilities including coronography, polarimetry and the high resolution apodizer will be employed to study in depth the most representative object of each class of cataclysmic variables. These capabilities will allow shells of ejecta around recent novae to be distinguished from the central star at a much earlier stage in their evolution and to detect very much fainter ejecta from old novae than possible from the ground. The basic aim of this study is to gain insight into the physical conditions of the nebula, the geometry of the nova explosion and the nature of the interstellar medium local to the nova. The proposed study of symbiotic systems, on the other hand, should permit resolving the objects into their postulated compact sources, barely resolving the accretion disk around the hot component, and determining the precise connection of the disk with the jets. The program also aims at assessing the possibility of using novae as extragalactic distance indicators.

Prop. Type: GTO/FOC

STELLAR ASTROPHYSICS -- (
3183- CT - "OBSERVATIONS OF SS 433 - CYCLE 1 "
Continuation of Program Number 1261
Keywords : SS 433; JETS.
Proposers: Alec Boksenberg (PI; Royal Greenwich Observatory; United Kingdom), F.Paresce (Esa, Space Telescope Science Institute)

Jet formation is a widespread phenomenon in the universe. Jets have been identified is such widely disparate sites as AGNs, neutron stars and black holes, accreting hot subwards or white dwarfs and young stars embedded in cocoons of gas and dust. We propose here to study the structure and dynamics of jets in SS 433. This object affords us the best means of directly testing the physics of accretion disk formation and jet activity. Specifically, high spatial resolution images of SS 433 will reveal the presumed jets of material giving rise to the moving spectral features, definitely resolving fundamental questions on the overall geometry encompassing the ballistically flowing material. Sequential images taken at intervals of a few days will record the time development of the bursts of ejection relating to the short-lived spectral structure observed.

Prop. Type: GTO/WFC

GALAXIES_CLUSTERS -- (
3185- CT - "PECULIAR AND INTERACTING GALAXIES (WF/PC-01) CYCLE 1"
Continuation of Program Number 1105
Keywords : PECULIAR GALAXIES, INTERACTING GALAXIES
Proposers: James A. Westphal (PI; Caltech)

Imaging observations with the WFC and PC are specified for a small sample of peculiar and interacting galaxies. In each instance the observations will benefit variously from the spatial resolution and ultraviolet sensitivity afforded by the Space Telescope and may reveal important facts concerning the nature of the objects observed.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
3186- CT - "NEPTUNE AND RINGS (WF/PC-30) CYCLE 1 "
Continuation of Program Number 1134
Keywords : NEPTUNE, PLANETARY ATMOSPHERES, NEPTUNE RING SYSTEM
Proposers: James A. Westphal (PI; Caltech)

Observations will provide high-resolution images of Neptune and its rings in spectral regions not covered by Voyager spacecraft cameras and/or not possible from the Earth-based observations. At short wavelengths, the global reflectivity of Neptune is less than that of a pure Rayleigh atmosphere; thus structure may be visible. Observations will be made in four sequences, distributed over 18 hours. The tenuous ring system and the associated satellites will be observed with the Planetary Camera.

Prop. Type: GTO/WFC

STELLAR ASTROPHYSICS -- (
3188- CT - "STELLAR FORMATION AND EVOLUTION (WF/PC-17) CYCLE 1"
Continuation of Program Number 1121
Keywords : STAR FORMATION, STELLAR EVOLUTION
Proposers: James A. Westphal (PI; Caltech)

High resolution images will be obtained for a small number of T Tauri stars, Herbig-Haro objects, and objects whose evolutionary state is uncertain. Most of the young stellar objects are in the Taurus complex, which is near enough that the high resolution afforded by ST will explore physical scales never before seen in these objects. Limited temporal coverage will also be obtained to search for structural variations at small scales.

Prop. Type: GTO/WFC

INTERSTELLAR MEDIUM -- (
3190- CT - "PLANETARY NEBULAR STRUCTURE (WF/PC-03) CYCLE 1"
Continuation of Program Number 1107
Keywords : PLANETARY NEBULAE, MASS LOSS, EVOLUTION, NEBULA
Proposers: James A. Westphal (PI; Caltech)

Observations of planetary nebulae utilizing the WF/PC are based upon the high angular resolution. Structure at the level of E+14 cm is seen in only one planetary NGC7293, Helix nebula. It is in the size range from E+14 to E+15 cm that the origin of long lived condensation is expected. Are the features seen in the Helix common to most planetaries? Do these condensations result in shadowing that can explain the ionization structure? The other objective of this program is to repeat the measurements on a few years baseline in order to study the temporal variations of well defined condensation. This may provide distance determinations as well as dynamic information.

Prop. Type: GTO/FOS

QUASARS _AGN -- (
3194- CT - "IMAGING AND SPECTROPHOTOMETRY OF NUCLEAR ACTIVITY IN LINERS (FOS 15): CYCLE 1 OBSERVATIONS"
Continuation of Program Number 1038
Keywords : LINER, AGN, IONIZED GAS, NUCLEUS
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

WF/PC narrow band images will be used to isolate ionized gas clouds near the nuclei and to look for organized structure such as disks, bubbles and jets. FOS spectrophotometry from 1200A to 7000A will be used to establish density, temperatures, chemical composition, ionization mechanisms, and reddening in the emission regions near the nucleus. Line profiles and radial velocities will be used to investigate broadening mechanisms such as turbulence, gas flows, and rotation. Small aperture spectra of the nucleus will be used to look for a photoionizing continuum and for line broadening in the nucleus, and will be used to establish physical conditions and dynamics of the nuclear gas. UV absorption lines will be searched for in the nuclear continuum in order to measure the amount and distribution of gas along the line-of-sight through the parent galaxy.

Prop. Type: GTO/FOS

QUASARS _AGN -- (
3195- CT - "IMAGING AND SPECTROPHOTOMETRY OF SEYFERT NUCLEI (FOS 14): CYCLE 1 OBSERVATIONS"
Continuation of Program Number 1036
Keywords : SEYFERT, AGN, IONIZED GAS, NUCLEUS, NARROW LINE REGION, BROAD LINE REGION
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

WF/PC narrow band images will be used to isolate clouds near the nucleus and to look for organized structure such as disks, bubbles, and jets. FOS spectrophotometry from 1200A to 7000A will be used to establish density, temperature, chemical composition, ionization mechanisms, and reddening in the emission regions near the nucleus. Line profiles and radial velocities will be used to investigate broadening mechanisms near the nucleus such as turbulence, gas flows, and rotation. Small aperture FOS spectra of the nuclei will be used to separate the broad line region from the narrow line region. The spectra will be used to investigate physical conditions and gas dynamics in the broad line region. Absorption lines in the nuclear spectra will be used to measure the amount and distribution of gas along the line of sight through the parent galaxy.

Prop. Type: GTO/FOS

INTERSTELLAR MEDIUM -- (
3196- CT - "IMAGING AND UV SPECTROPHOTOMETRY OF LOCAL GROUP PLANETARY NEBULAE (FOS 26): CYCLE 1 OBSERVATIONS"
Continuation of Program Number 1046
Keywords : NEBULA, PLANETARIES, CENTRAL STARS, GALAXIES, K648
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

WF/PC interference filter pictures will be used to resolve the shells of planetary nebulae in the LMC and to resolve the shell of K648 in M15. The angular diameters of the shells will be combined with echelle expansion velocities to derive the ages of nebulae. Ultraviolet spectra of the central stars will be used to derive the stars' effective temperatures and magnitudes, with objective of placing the stars on evolutionary tracks in an M-Teff diagram. UV spectra of the LMC nebulae, K648, and the brightest nebula in M32, NGC205, and NGC185 will be used to derive chemical compositions and physical conditions in the nebulae.

Prop. Type: GTO/FOS

STELLAR ASTROPHYSICS -- (
3198- CT - "BINARIES IN GLOBULAR CLUSTERS (FOS 37): CYCLE 1 OBSERVATIONS "
Continuation of Program Number 1053
Keywords : X-RAY STAR, NEUTRON STAR
Proposers: Bruce Margon (PI; Washington, University Of), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation)

Imaging and spectroscopy will be used to probe the nature of the luminous, central X-ray burst sources.

Prop. Type: GTO/FOS

QUASARS AGN -- (
3199- CT - "UV SPECTRA OF QSOS WITH Z > 3.1: CYCLE 1 OBSERVATIONS "
Continuation of Program Number 1027
Keywords : HIGH REDSHIFT QSOS; HELIUM, INTERGALACTIC HELIUM.
Proposers: E. Margaret Burbidge (PI; Uc, San Diego), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Observe for the first time the extreme UV rest spectrum of QSOs with z > 3.1, to examine HeI and HeII in absorption and/or emission; perform Gunn-Peterson test for smooth intergalactic helium, determine and compare density of Lyman alpha forests of narrow absorptions per unit z; look for correlations of strongest narrow Lyman alpha absorptions with narrow helium absorptions; look for associated or intervening galaxies.

Prop. Type: GTO/FOS

QUASARS AGN -- (
3200- CT - "UV SPECTRA OF LOW-REDSHIFT-QSOS (FOS-1): CYCLE 1 OBSERVATIONS "
Continuation of Program Number 1026
Keywords : UV SPECTRA, LOW-Z QSOS, EMISSION LINES, LYMAN ALPHA ABSORPTIONS, NEARBY GALAXIES, EVOLUTION.
Proposers: E. Margaret Burbidge (PI; Uc, San Diego), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Three main scientific goals are to determine the emission-line properties in the UV of low-z QSOs, to look for L alpha -forest absorption shortward of L alpha emission to examine evolutionary effects, and to observe L alpha absorption in QSOs which have known metallic-line narrow absorption-line systems at z(absorption) << z(emission). There are objects of special interest included in the sample (e.g. 1548 + 114 A, B).

Prop. Type: GTO/FOS

QUASARS _AGN -- (
3201- CT - "SPECTROPOLARIMETRY OF QSOS, BLAZARS AND AGN: CYCLE 1 OBSERVATIONS "
Continuation of Program Number 1029
Keywords : QSOS, BLAZARS, SEYFERT, AGN, POLARIZATION
Proposers: J. Roger P Angel (PI; University Of Arizona), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Measurement of the spectrum of polarization has proven to be a powerful tool in deciphering emission processes and source geometry in AGN. This program will extend these observations into the UV below 3000A.

Prop. Type: GTO/FOS

STELLAR ASTROPHYSICS -- (
3202- CT - "MASS EXCHANGE BINARIES (FOS 34) -- CYCLE 1 "
Continuation of Program Number 1051
Keywords : X-RAY STAR,
Proposers: Bruce Margon (PI; Washington, University Of), J.Angel (Arizona, University Of), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation)

FOS UV spectra will be used to probe the effect of ionizing radiation from the compact star on the atmosphere of the normal companion, gaining information on the unobservable soft X-ray spectrum of the system which may, in some cases, dominate the energy budget. The FOS time resolved mode permits data also to be obtained as a function of pulse phase for X-ray pulsars, especially in the UV, where the strong resonance lines are available.

Prop. Type: GTO/FOS

INTERSTELLAR MEDIUM -- (SN _SNR) --
3205- CT - "SUPERNOVA REMNANTS AND NUCLEOSYNTHESIS (FOS 30) - CYCLE 1 "
Continuation of Program Number 1048
Keywords : SUPERNOVA REMNANTS, NUCLEOSYNTHESIS
Proposers: Arthur F. Davidsen (PI; Johns Hopkins University), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corp.), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation),

B.Margon (Washington, University Of)

UV and optical spectra of six supernova remnants (SNRs) will be used to study a number of problems related to abundances, grain destruction, interstellar medium properties and physical conditions in SNR shocks. Representatives of three of the main classes of SNRs (Crab-nebula like, Balmer-line and "normal") will be studied in the LMC, where reasonably low reddening permits UV observations. Two SNRs in M33 will be observed to study abundances and abundance gradients of elements not readily available from optical spectra and that are too faint for IUE. An oxygen-rich SNR in NGC 4449 will be observed, taking advantage of the small FOS slits to isolate the SNR from surrounding H II emission.

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR EMISSION) --
3206- CT - "UV SPECTROSCOPY OF LOW-REDSHIFT ACTIVE GALAXIES -- CYCLE 1 "
Continuation of Program Number 1170
Keywords : ACTIVE GALACTIC NUCLEI, SEYFERT, LINE PROFILES, BROAD LINE REGION, NARROW LINE REGION
Proposers: Albert Boggess (PI; Nasa, Goddard Space Flight Center), C.Wu (Computer Science Corporation)

HRS will be used to measure the ultraviolet spectrum of active galaxies. Complementary and simultaneous visual and infrared data will also be obtained. The profile of the emission lines will provide information on the broadening mechanism and dynamics of the emitting regions. Comparison of the profile and radial velocity of the emission lines produced by species of different ioni- zation potential will allow the study of the thermal and density stratification of the emitting regions. The degree of asymmetry of lines at different wave- lengths will allow the absorbing material be identified and located. The ratio of the UV to visible lines, such as those for O I and He II will be used to estimate the reddening along the line of sight. Ratio of emission line fluxes will be compared with models in order to derive the ionization mechanism, elec- tron temperature and density, and chemical composition of the emitting gas. The emission line properties of low luminosity will be compared with those of high luminosity objects in order to investigate the covering factor and evolutionary effects. The continumm spectrum from the UV to the IR will be used to establish the emission mechanism and the nature and luminosity of the energy source. The weak absorption lines will be used to establish the physical conditions and the chemical composition of the gas in: our Galaxy, intergalactic medium and the parent galaxy. Absorption produced by broad line clouds will give information on cloud motion and covering factor.

2

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (

3207- CT - "ELEMENTAL ABUNDANCES IN EARLY-TYPE STARS -- CYCLE 1 "
Continuation of Program Number 1182
Keywords : MS STAR, HB STAR, CHEMICALLY PECULIAR STAR, ABUNDANCE, SPECTROSCOPY, UV
Proposers: David S. Leckrone (PI; Nasa, Goddard Space Flight Center), J.Brandt (University Of Colorado), K.Carpenter (Nasa, Goddard Space Flight Center)

The resolving power and photometric quality of GHRS data are exploited in an investigation of the elemental abundances, atmospheric properties and evolutionary characteristics of sharp-lined B and A stars. Three classes of stars are included in the overall program - chemically peculiar (CP) non-magnetic late B stars of the HgMn class, early A-type horizontal branch stars and sharp-lined normal stars ranging from B6 to A2. The Cycle 1 segment of this program continues the systematic study of anomalies in the abundance of Hg and in the mixture of Hg isotopes. Abundances of Hg derived from lines of Hg I, II, and III in the relatively hot Hg-rich star, kappa Cnc, will be used to test diffusion-theory models for the production of abundance and isotope anomalies. The Hg abundance of the normal A1 star, Sirius, will be derived. Abundances of many other species with lines in the observed intervals will also be obtained. A "standard" spectral interval in Sirius, of considerable interest for atomic physics, is included in the program.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (MASSIVE STARS) --

3209- CT - "PC IMAGES OF ETA CARINAE CORE - CYCLE 2 "
Continuation of Program Number 1186
Keywords : STELLAR EVOLUTION, MASS LOSS, NUCLEOSYNTHESIS
Proposers: Dennis C. Ebbets (PI; Ball Aerospace Corporation), K.Davidson (Univ Of Minnesota), E.Malumuth (Computer Sciences Corporation), N.Walborn (Space Telescope Science Institute), R.White (Space Telescope Science Institute)

This is a new proposal submitted in March, 1992 to define PC exposures of the core of Eta Carinae. The new PC images include explicit exposures of a nearby star for the purpose of deriving a valid PSF. The orientation is specified to allow Eta Carinae itself to remain visible on the PC when the pointing is shifted to position the PSF star on PC6. The images are made in a line free violet continuum and in a line free red continuum F631N (this is a O I line filter, but there is negligible O I emission in the core of Eta Carinae.) This proposal uses GTO baseline time.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (
3210- CT - "R136 G160M CYCLE 2 "
Continuation of Program Number 1188
Keywords : ABSORPTION LINE SYSTEM, IGM
Proposers: Dennis C. Ebbets (PI; Ball Aerospace Systems), B.Savage (Wisconsin, University Of)

This is a new proposal submitted in March, 1992 to define GHRS medium resolution spectra (G160M) of R136 for the purpose of observing interstellar N V absrption lines in the LMC and the MW halo. It is based on exposure lines extracted from the previous cycle 2 proposal, modified now to account for the loss of all side 1 capabilities, and the denial of augmentation time. The observation contains an onboard acquisition, several image mode maps, a wavecal with SC2 and LSA spectra at a central wavelength of 1250. The orientation of the HST is specified to cause the brightest components to align with the long axis of the science diodes, minimizing the spatial smearing of the data. REVISION HISTORY: redlined for phase 2, 7/19/88, dce updated for cycle 1 phase 2 9/21/89 revised lines 1-7 for cycle zero 11/15/90 Revised for cycle 1 exposures February 09, 1991 Revised for cycles 2-5 May 22, 1991 Revised for cycle 2 only March 4, 1992 This proposal uses baseline GTO time only.

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR EMISSION) --
3211 - "ULTRAVIOLET LINE PROFILES OF AGN -- CYCLE 1 "
Keywords : SEYFERT GALAXY, EMISSION LINES
Proposers: Edward Beaver (PI; Uc, San Diego)

We will observe various emission lines in the Seyfert galaxy NGC 7469. These data will be compared to optical emission lines to look for line profile differences that would indicate spatial and ionization stratification within the broad-line region. Line ratios will also yield information about the photoionization conditions in the BLR. NGC 7469 is of interest since Hbeta has a strong red asymmetry which is uncommon in Seyfert galaxies.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --

3212- CT - "WINDS AND CHROMOSPHERES OF COOL LUMINOUS STARS -- CYCLE 1 "
Continuation of Program Number 1195
Keywords : COOL STARS: WINDS, CHROMOSPHERES, MASS-LOSS.
Proposers: Kenneth G. Carpenter (PI; Nasa - Goddard Space Flight Center), J.Linsky (Colorado, University Of), R.Robinson (Csc - Astronomy Program)

The goals of this program are to determine the physical characteristics of the winds/chromospheres around cool luminous stars. GHRS observations of the C II (UV 1) 1335 A and (UV 0.01) 2325 A multiplets will be used along with observations of the C I lines near 1655 and 1994 A to constrain the temperatures and densities in model chromospheres. The C II (UV 0.01) lines will also be used to estimate the turbulence in these chromospheres. The (confusing) far UV spectrum of the M supergiants will be explored with the GHRS. GHRS observations of Fe II lines will be used to study the dependence of the wind velocity on radial distance above the photosphere. High quality Fe II and Mg II profiles will be acquired to search for discrete velocity features and the presence of circumstellar absorption within the profiles. The photospheric absorption-line spectrum (2579-2675 A) of Arcturus will be observed in the echelle mode. Medium resolution observations of Fe II and Mg II in the dusty, very luminous star Mu Cep will provide information on the effect of dust and very low gravity on the wind velocity field. *** this file contains the Cycle 1 observations only ***

Prop. Type: GTO/HRS

SOLAR SYSTEM -- (

3214- CT - "SO2 ON IO --CYCLE 1 "
Continuation of Program Number 1205
Keywords : IO, SO2, SPECTRUM
Proposers: Laurence M. Trafton (PI; Texas, University Of), J.Caldwell (York Univ.; Canada)

Observe Io with the HRS at 2180-2230A in attempt to detect SO2 gaseous and solid absorption.

Prop. Type: GTO/OS

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --

3215- CT - "COMPOSITION OF GAS IN INDIVIDUAL INTERSTELLAR CLOUDS: CYCLE 1 OBSERVATIONS"

Continuation of Program Number 1071

Keywords : INTERSTELLAR LINES

Proposers: C. R. O'Dell (PI; Rice University), L.Spitzer (Princeton University)

The observations requested for the one star in Cycle 1 form part of a program in interstellar matter research, using the Goddard High Resolution Spectrograph to obtain precise measures of ultraviolet interstellar absorption lines, using the highest spectral resolution. For each star to be observed in this program, column densities will be determined for atoms of 17 atomic species of 10 elements. These data will be analyzed to determine relative abundances in the several individual clouds present along each line of sight, and thus to determine how the composition of the gas in such clouds varies with cloud parameters such as H column density, velocity, ionization level, and distance z from the galactic plane. This information should help to clarify the equilibrium between gas and grains, i.e., how the gas condenses on the grains and how the grains are destroyed by a variety of phenomena occurring in interstellar clouds.

Prop. Type: GTO/OS

STELLAR POPULATIONS -- (GLOBULAR CLUSTERS) --

3217- CT - "COLLAPSED CORES OF GLOBULAR CLUSTERS "

Continuation of Program Number 1280

Keywords : GLOBULAR CLUSTER

Proposers: Ivan R. King (PI; University Of California, Berkeley)

Among the globular clusters that have collapsed cores, M15 is the strangest. The sharp rise of velocity dispersion observed near its center indicates either that it is in the act of collapse or that it has a black hole at its center. No one knows how small its true core is. The high resolution of the FOC f/96 camera offers the best opportunity to "resolve" these problems.

Prop. Type: GTO/OS

STELLAR POPULATIONS -- (
3218- CT - "STRUCTURE OF GLOBULAR CLUSTERS: CYCLE 1 OBSERVATIONS "
Continuation of Program Number 1279
Keywords : GLOBULAR CLUSTERS -- DYNAMICS -- LUMINOSITY FUNCTION
Proposers: Ivan R. King (PI; Uc, Berkeley), S.Djorgovski (Center For Astrophysics), P.Greenfield (Space Telescope Science Institute), F.Macchetto (Esa, Space Telescope Science Institute)

NGC 6624 is a collapsed-core globular cluster with an X-ray source near its center. At ground-based resolution its core profile is unresolved. B and V exposures with the FOC should reach far enough down the main sequence to distinguish stars of different mass. The three FOC fields are the center and two neighboring regions. Simultaneous exposures are made in V and I with the WFC, to gain further structural information. These will go much deeper, since the orientations are arranged so as to keep the WFC on the same field at all times.

Prop. Type: GTO/OS

GALAXIES CLUSTERS -- (NEARBY GALAXIES) --
3219- CT - "IMAGING OF M31-GROUP GALAXIES: FUTURE-CYCLE CONTINUATION "
Continuation of Program Number 1277
Keywords : LOCAL GROUP
Proposers: Ivan R. King (PI; University Of California, Berkeley), P.Crane (European Southern Observatory; Germany), J.Deharveng (Laboratoire D'Astronomie Spatiale, Marseille; France), M.Disney (Univ. Of Cardiff; U.K.)

This is the remainder of proposal OS-1277, consisting of the parts that can be done only after the spherical aberration is corrected. It consists of B and V FOC/96 imaging of M31 and M32, far enough off the centers that there should be resolution down to the limiting magnitude, so that color-magnitude arrays can be derived. Parallel exposures with the PC will be used to derive color-magnitude arrays of two M31 globular clusters.

Prop. Type: GTO/OS

QUASARS AGN -- (
3220- CT - "IMAGING AND SPECTROSCOPY OF A COMPLETE SAMPLE OF BRIGHT NEARBY QUASARS: II. SPECTROSCOPY: CYCLE 1 OBSERVATIONS"
Continuation of Program Number 1018
Keywords : QUASAR, SPECTROSCOPY, EMISSION LINES, ABSORPTION LINES, INTERGALACTIC, HOST GALAXY
Proposers: John N. Bahcall (PI; Institute For Advanced Study), R.Green (Noao, Kitt Peak National Observatory), D.Schneider (Institute For Advanced Study)

FOS spectra will be obtained for seven optically bright PG quasars [3C 273, PG 0953+415, PG 1116+215, PKS 1302-102, PG 1700+518, GQ Com, and 3C 249.1] with Mb </= -25.0 mag and z </= 0.35, as well as V </= 15.7 mag. The spectra will be analyzed for both absorption and emission features. ST observations are required because the spectral features of greatest interest in these small redshift objects are in the far ultraviolet, inaccessible from the ground.

Prop. Type: GTO/OS

QUASARS _AGN -- (

3221- CT - "EVOLUTION OF LYMAN-ALPHA AND CIV ABSORPTON SYSTEMS: CYCLE 1 OBSERVATIONS"

Continuation of Program Number 1025

Keywords : QUASAR, SPECTROSCOPY, ABSORPTION LINES, EMISSION LINES, EVOLUTION

Proposers: John N. Bahcall (PI; Institute For Advanced Study), R.Green (Noao, Kitt Peak National Observatory)

The evolution of Lyman-alpha and CIV absorption line systems in quasar spectra will be investigated using 21 optically bright quasars with a wide range of redshifts; the wavelength at which the Lyman cutoff appears will also be determined. All of the prominent emission and absorption lines will be measured. ST observations are required because the spectral features of interest are in the far ultraviolet and are inaccessible from the ground.

Prop. Type: GTO/OS

QUASARS _AGN -- (

3222 - "IMAGING AND SPECTROSCOPY OF A COMPLETE SAMPLE OF BRIGHT NEARBY QUASARS: II. SPECTROSCOPY: CYCLE 2 BASELINE"

Keywords : QUASAR, SPECTROSCOPY, EMISSION LINES, ABSORPTION LINES, INTERGALACTIC, HOST GALAXY

Proposers: John N. Bahcall (PI; Institute For Advanced Study), R.Green (Noao, Kitt Peak National Observatory), D.Schneider (Institute For Advanced Study)

FOS spectra will be obtained for seven optically bright PG quasars [3C 273, PG 0953+415, PG 1116+215, PKS 1302-102, PG 1700+518, GQ Com, and 3C 249.1] with Mb </= -25.0 mag and z </= 0.35, as well as V </= 15.7 mag. The spectra will be analyzed for both absorption and emission features. ST observations are required because the spectral features of greatest interest in these small redshift objects are in the far ultraviolet, inaccessible from the ground.

Prop. Type: GTO/OS

GALAXIES CLUSTERS -- (NUCLEI) --
3225- CT - "IMAGING AND SPECTROSCOPY OF ELLIPTICAL GALAXIES -- CYCLE 1 "
Continuation of Program Number 1057
Keywords : GALAXIES, ELLIPTICAL; ASTROMETRY
Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West), M.Disney (University College, Cardiff; United Kingdom), I.King (Uc, Berkeley), C.Mackay (Cambridge University; United Kingdom)

This proposal has several objectives. First, the imaging data will be used to determine the precise positions of the centers of the galaxies, to see if the central region is bright enough to do long slit spectroscopy with the FOC f/48 spectrograph, and finally to study the radial intensity and color profile in the spectral region between 2200A and 4500A. In addition, f/288 data will be obtained in those few cases where it is warranted by the f/96 exposures. The spectroscopy will be attempted only in the cases where the central region is bright enough to determine a good velocity dispersion.

Prop. Type: GTO/OS

QUASARS AGN -- (
3226- CT - "GRAVITATIONAL LENSES -- CYCLE 1 "
Continuation of Program Number 1059
Keywords : GRAVITATIONAL LENSES
Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West), J.Schneider (Meudon Observatory; France), H.Sol (Meudon Observatory; France)

We intend to detect new features in gravitationally lensed QSO's. In particular, we will look for the predicted extra images, optical counter-parts to VLA and VLBI jets and if possible at the morphology of the deflecting mass. Quantitative knowledge of these is necessary for the astrophysical use of the phenomenon.

Prop. Type: GTO/OS

STELLAR POPULATIONS -- (
3227- CT - "THE STELLAR DENSITY DISTRIBUTIONS IN THE CENTERS OF GALACTIC GLOBULAR CLUSTERS: CYCLE 1 OBSERVATIONS"
Continuation of Program Number 1019
Keywords : GLOBULAR CLUSTER, POPULATION II, BLACK HOLE
Proposers: John N. Bahcall (PI; Institute For Advanced Study)

Short exposures will be made of all galactic globular clusters with distance moduli less than 15.5 mag and galactic latitude above or below 15 degrees. A search will be made for cusps in the stellar density distributions and the colors will be measured for the brightest stars in the cores of the clusters. ST observations are required in order to reach the innermost regions of the clusters with sufficient resolution to separate individual stars.

Prop. Type: GTO/WFC

QUASARS _AGN -- (
3228- CT - "STRUCTURE OF QUASARS AND RELATED OBJECTS (WF/PC-12) CYCLE 1"
Continuation of Program Number 1116
Keywords : QUASAR, AGN,RADIO GALAXY, EMISSION LINE GALAXY,BL LAC OBJECT
Proposers: James A. Westphal (PI; Caltech)

The aims of the program are (1) to detect, and to study the morphology of galaxies underlying QSOs and AGNs, galaxies associated with them in groups and clusters, and associated structures such as jets; (2) to detect bright nuclear and extranuclear structure on small angular scales; (3) to detect and examine additional images and lensing galaxies in gravitational lenses; (4) to detect extended emission line structure in quasars.

Prop. Type: GTO/WFC

GALAXIES _CLUSTERS -- (
3229- CT - "NUCLEI OF NEARLY NORMAL GALAXIES (WF/PC-14) CYCLE 1"
Continuation of Program Number 1118
Keywords : GALACTIC NUCLEI, GALACTIC BULGES, LOCAL GROUP, DUST LANES, GLOBULAR CLUSTERS, SURFACE PHOTOMETRY
Proposers: James A. Westphal (PI; Caltech)

Direct images of the nuclei of nearby galaxies taken with the Planetary Camera will be used to measure the space density profile of luminous material and the nuclear color gradients in these objects. Galaxies will be imaged with the F555W and F785LP filters. Serveral objects known to contain ionized gas will also be imaged in narrow-band filters to obtain the gas distribution. In M31 a special series of ultra-violet exposures will be taken to study the hot stellar population. The sample of objects contains several normal ellipticals covering a broad range in nuclear surface brightness and concentration class, several nearby galaxies covering a range of Hubble types, and a few Seyfert and otherwise slightly abnormal nuclei.The images taken will also be searched for bright stars, inner globular clusters, and absorbing interstellar dust.

Prop. Type: GTO/FOC

INTERSTELLAR MEDIUM -- (SN _SNR) --
3231- CT - "OBSERVATIONS OF SUPERNOVAE - CYCLE 1 "
Continuation of Program Number 1259
Keywords : SUPERNOVAE-GALACTIC HALOES-GALACTIC ENVIRONMENTS
Proposers: F. Duccio Macchetto (PI; Esa, Space Telescope Science Institute), J.Blades (Esa, Space Telescope Science Institute), N.Panagia (Esa, Space Telescope Science Institute)

We plan to observe supernovae (SNe) brighter than mB ~17m as soon as they are discovered and to follow their evolution in time by means of spectroscopic observations at early epochs and broad band photometry (imaging) at later epochs. Simultaneous IR, optical and radio observations will also be arranged. As interesting side-products, we will be able to study the properties of the intervening gas along the line of sight toward each SN as well as to reveal and study HII regions, bright planetary nebulae and supernova remnants which are expected to be found within the observing slit of the FOC spectrograph. Moreover, we plan to observe some of the brightest SNe which have been discovered recently and whose early phases have been studied by us in great detail.

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (
3234- CT - "X-RAY BINARIES "
Continuation of Program Number 1097
Keywords : X-RAY BINARIES: NEUTRON STARS: BLACK HOLES
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The extreme conditions existing in the near vicinity of neutron stars which are the secondaries in close binaries provide a laboratory in which we may observationally confirm or refine many of our basic theories of astrophysics. This program will monitor the photometric and polarimetric light curves of X-ray binaries at several different phases of the binary orbit in several different wavelength bands in the UV. The results will be related to the structure of, and physical conditions existing in, the gas streams (and possibly, the accretion disk) in these systems. Revision History: Prepared for future cycles submission--BJW 4/21/92;

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (

3237- CT - "JUPITER - SOLAR SYSTEM (WF/PC-22) CYCLE 0 RETAKE"
Continuation of Program Number 1126
Keywords : JUPITER, ATMOSPHERE DYNAMICS
Proposers: James A. Westphal (PI; Caltech)

This program will obtain two four-color complete 360 degree maps with the WF/PC to measure the Jovian atmospheric motion. The first set will be obtained within a ten-hour period to allow for adequate overlap between the longitudinal strips. Then thirty hours later a second map set will be obtained to complete the dynamical set. The slight change in exposure times should not affect the structure of the major frames as taken in the original proposal.

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (

3238- CT - "ECLIPSES OF CATACLYSMIC VARIABLE STARS "
Continuation of Program Number 1092
Keywords : CATACLYSMIC VARIABLE STARS
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The cataclysmic variables are close binary stars consisting of a late-type star and white dwarf. Mass is being transferred from the late-type star to the white dwarf. Unless the white dwarf has an extremely strong magnetic field, the transferred mass forms an accretion disk around the white dwarf. An important reason to observe the cataclysmic variables is that they provide an unparalled way to study nearly all aspects of the accretion of gas onto compact objects. We propose to observe the eclipses of several cataclysmic variables. The eclipse light curves can be used to find information about the geometry and physical conditions in the accretion disk. One star we propose to observe, Z Cha, is a dwarf nova. Eclipse observations of this star will provide information about changes in the structure of the accretion disk over the outburst cycle. Revision History: Prepared for future cycles submission--BJW 4/22/92;

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
3239 - "SATURN TIME LAPSE - TARGET OF OPPORTUNITY CYCLE 0 RETURN"
Keywords : SATURN, ATMOSPHERE DYNAMICS
Proposers: James A. Westphal (PI; Caltech)

This program will obtain sets of exposures of Saturn in several spectral bands. By selecting filters that are sensitive to atmospheric processes (methane absorption and molecular scattering), the dynamic behavior can be mapped at several altitudes within the Saturnian atmosphere. This sequence will utilize chip PC-6 to continue monitoring velocities and proble cloud heights within the complex cloud structures observed in Noverber. These observations will allow us to follow the evolution of the storm.

Prop. Type: GTO/WFC

GALAXIES _CLUSTERS -- (
3242- CT - "NUCLEI OF NEARLY NORMAL GALAXIES (WF/PC-14) CYCLE 0 RETAKE"
Continuation of Program Number 1105
Keywords : GALACTIC NUCLEI, GALACTIC BULGES, LOCAL GROUP, DUST LANES, GLOBULAR CLUSTERS, SURFACE PHOTOMETRY
Proposers: James A. Westphal (PI; Caltech)

Direct images of the nucleus of NGC 4486 (M87) taken with the Planetary Camera will be used to measure the space density profile of luminous material and the nuclear color gradients in this object. The galaxy will be imaged only with the F785LP filter. The images taken will also be searched for bright stars, inner globular clusters, and absorbing interstellar dust.

Prop. Type: GTO/HSP

QUASARS _AGN -- (
3248- CT - "ACTIVE GALACTIC NUCLEI "
Continuation of Program Number 1099
Keywords : QUASARS; BL LAC OBJECTS; ACTIVE GALACTIC NUCLEI
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The discovery of QSO's and (other) active galactic nuclei have radically altered the classical view of galactic evolution as a slow process occuring over cosmological time-scales. From the growing body of observations there are many varied theories developing to explain these highly energetic phenomena. To be successful, a theory must explain the large amplitude, rapid variations in both flux and polarization that characterize these objects. Variability in all parts of the spectrum has been observed, in some cases on time scales as short as minutes, placing constraints on the volume over which the phenomenon occurs. Observations on even shorter time scales would significantly affect these constraints. This program will monitor the intensity and linear polarization of the radiation emitted by AGN's and relate the results to the structure of their nuclei and the nature of their central power source. Revision History: Prepared for future cycles submission--BJW 4/22/92;

Prop. Type: GTO/HSP

QUASARS AGN -- (
3250- CT - "GRAVITATIONAL LENSES PART I "
Continuation of Program Number 1096
Keywords : GRAVITATIONAL LENSES; BLACK HOLES; HUBBLE CONSTANT
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

Photometric and polarimetric observations will be made of systems whose properties are ascribed to the effect of a gravitational lens. The similarity of the images in the previously unobserved UV region of the spectrum, both photometrically and polarimetrically, is necessary for these objects to be gravitational lens systems; any differences found will be carefully studied to determine what constraints they put on the system. Systems whose properties appear consistent with a point mass deflector (i.e., a black hole) will be monitored to determine whether photometric or polarimetric variability exists in the images. The distance to the deflecting mass in this case can be related to the path length difference between the two image paths from the imaged quasar to the observer. The path length difference can be derived directly from the time difference between the same variation occurring in each image. The parallaxes of objects at E+3 Mpc distances are of obvious importance to a

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Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (
3253- CT - "OPTICAL AND ULTRAVIOLET OBSERVATIONS OF RADIO PULSARS "
Continuation of Program Number 1101
Keywords : PULSARS, NEUTRON STARS, SUPERNOVAE
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation)

In spite of extensive efforts only two definite (Crab and Vela) and one probable (in SNR 0540-693) radio pulsars have been detected at optical wavelengths. Only the Crab Pulsar has been observed in the ultraviolet.

Most efforts at modeling the optical emission mechanism are constrained only by the Crab Pulsar observations. To provide better model constraints, visual and ultraviolet observations of the Crab, Vela, and LMC pulsars will be obtained. Likely candidates will also be observed to attempt detection of pulses from pulsars previously undetected in the optical (millisecond pulsars and two binary pulsars). Revision History: Prepared for future cycles submission--BJW 4/24/92;

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (

3255- CT - "SEARCH FOR OPTICAL VARIABILITY ASSOCIATED WITH BLACK HOLES "

Continuation of Program Number 3255

Keywords : VARIABLE, INTERACTING BINARIES, BLACK HOLES

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

It has been suggested that luminous matter passing through an accretion disk towards the event horizon of a black hole is likely to emit a short series of pulses at an increasing frequency. These so-called dying pulses trains would have a period of the order of milliseconds for stellar mass black holes. A search for such pulse trains will be made among 3 candidate objects. Revision History: based on 1094 targets from 3255 with LMCX-3 replaced with V404 Cyg--MJN 3/19/92;

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (SUBLUMINOUS STARS) --

3257- CT - "PERIODIC VARIATIONS IN DQ HERCULIS STARS "

Continuation of Program Number 1090

Keywords : CATACLYSMIC VARIABLE STARS

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The DQ Herculis Stars are cataclysmic variables showing rapid, strictly periodic luminosity variations at either optical or X-ray wavelengths, and usually both. The periods range from 33 sec in AE AQR through 71 sec in DQ Her to 18690 sec in TV Col. The cataclysmic variables are all close binary stars consisting of a late-type star transferring mass to its companion white dwarf star. The white dwarf in the DQ Her stars is magnetized. The periodicities of the DQ Her stars are caused by rotation of the magnetized, acreting white dwarf. We propose to observe the DQ Her stars at ultraviolet wavelengths using the high speed photometer on the space telescope. The purpose of the observations is to investigate the physics of accretion onto compact stars. Revision History: Prepared for future cycles submission--BJW 4/22/92;

Prop. Type: GTO/OS

GALAXIES _CLUSTERS -- (NUCLEI) --

3261- CT - "STUDIES OF THE 'NORMAL' SPIRAL M81:FUTURE CYCLES-CONTINUATION "
Continuation of Program Number 1055
Keywords : SPIRAL GALAXY, GALACTIC NUCLEII
Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West), I.King (Uc, Berkeley)

M81 is a very nearby spiral galaxy with an extremely compact nucleus and weak Seyfert like activity. Studies with the FOC will provide unprecedented resolution in the nuclear regions. Imaging at f/96 and spectrosopy at f/48 are proposed to study both the gas and the stars in the nuclear region.

Prop. Type: GTO/OS

QUASARS _AGN -- (GAS) --

3263- CT - "OPTICAL EMISSION IN DOUBLE RADIO GALAXY LOBES:FUTURE CYCLES CONTINUATION"
Continuation of Program Number 1058
Keywords : RADIO GALAXIES
Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West), F.Macchetto (Space Telescope Science Institute), C.Mackay (Cambridge University; United Kingdom), G.Miley (Space Telescope Science Institute)

Radio hot spots associated with radio galaxies will be studied either to learn about the detailed morphology of optical emission already found in the vicinity of the radio emission or to search for new regions where optical emission can be seen. The observations proposed here are of double radio galaxies with compact unresolved components (at 3C resolution). Objects with known emission will be searched using the PC.

Prop. Type: GTO/OS

GALAXIES _CLUSTERS -- (NUCLEI) --
3264- CT - "STUDIES OF SPIRAL NUCLEI -FUTURE CYCLES CONTINUATION "
Continuation of Program Number 1056
Keywords : GALAXIES, SPIRAL
Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West), J.Deharveng (Marseille Observatory; France)

The high resolution of the FOC f/96 imaging mode will be used to study the nuclear regions of several nearby spiral galaxies. A first image in the UV continuum will be used to see if there is a nuclear condensation which would merit further study either spectroscopically or at a higher spatial resolution. The major objective is to discover heretofore unknown phenomena in the nuclei on physical scales which cannot be reached from the ground.

Prop. Type: GTO/OS

GALAXIES _CLUSTERS -- (NUCLEI) --
3265- CT - "IMAGING AND SPECTROSCOPY OF ELLIPTICAL GALAXIES-CONTINUATION: FUTURE "
Continuation of Program Number 3265
Keywords : GALAXIES, ELLIPTICAL; ASTROMETRY
Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West), M.Disney (University College, Cardiff; United Kingdom), I.King (Uc, Berkeley), C.Mackay (Cambridge University; United Kingdom)

This proposal has several objectives. First, the imaging data will be used to determine the precise positions of the centers of the galaxies, to see if the central region is bright enough to do long slit spectroscopy with the FOC f/48 spectrograph, and finally to study the radial intensity and color profile in the spectral region between 2200A and 4500A.

Prop. Type: GTO/OS

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --
3266- CT - "COMPOSITION OF GAS IN INDIVIDUAL INTERSTELLAR CLOUDS: FUTURE-CYCLE CONTINUATION"
Continuation of Program Number 1071
Keywords : INTERSTELLAR LINES
Proposers: C.R. O'Dell (PI; Rice University), L.Spitzer (Princeton University)

Column densities of interstellar atoms of 17 atomic species of 10 elements will be measured in the line-of-sight to 2 early-type stars, using the Goddard High Resolution Spectrograph to obtain precise measures in the ultraviolet with the highest available spectral resolution. These data will be analyzed to determine relative abundances in the several individual clouds present along each line of sight, and thus to determine how the composition of the gas in such clouds and the various physical processes occurring vary with cloud parameters such as H column density, velocity, ionization level, and distance z from the galactic plane. This information should help to clarify the many physical processes occurring in interstellar gas. The program should also increase our understanding of the balance between formation and destruction of interstellar dust grains.

Prop. Type: GTO/FOS

QUASARS _AGN -- (GTO/FOS) --
3268- CT - "UV SPECTRA OF QSOS WITH Z > 3.1: CYCLE 2 OBSERVATIONS"
Continuation of Program Number 1027
Keywords :
Proposers: E. Margaret Burbidge (PI; University Of California, San Diego), R.Allen (University Of Arizona), J.Angel (University Of Arizona), F.Bartko (Unaffiliated), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute), B.Margon (University Of Washington)

This proposal contains observations which will help to complete one FOS IDT scientific program. In a collaborative programs with the GHRS IDT, we will study absorption from He I and He II in the Lyman alpha forest clouds and in the intergalactic medium at high z to determine conditions in the early universe. We will observe the extreme UV rest spectrum of QSOs with z > 2.9, to examine HeI and HeII in absorption and/or emission, as well as He I in some lower z QSOs. Perform Gunn-Peterson test for smooth intergalactic helium. These observations are primarily exploratory to find quasars with light at these short wavelengths. We will also Study the continuum shape of QSOs from 300 A (rest) to lambda > 2500A (rest).

Prop. Type: GTO/FOS

QUASARS _AGN -- (GTO/FOS) --
3269- CT - "UV SPECTRA OF LOW-REDSHIFT-QSOS: CYCLE 2 OBSERVATIONS"
Continuation of Program Number 1026
Keywords :
Proposers: E. Margaret Burbidge (PI; University Of California, San Diego), R.Allen (University Of Arizona), J.Angel (University Of Arizona), F.Bartko (Unaffiliated), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute), B.Margon (University Of Washington)

This proposal contains observations which will help to complete a number of FOS IDT scientific programs. These programs are not in direct conflict with approved GO or GTO programs, but explore wavelength or signal-to-noise regimes not covered by other programs, or else they concentrate on objects of special interest. These programs will lead to a better understanding of the structure and kinematics of the broad-line region by studies of very high signal-to-noise line profiles in low redshift QSOs. The same data will also provide measurements of weak lines which will lead to improved photoionization models. This data set will yield high quality absorption line data for studies of specific absorption line systems and an independent sample for studies of absorption line evolution.

Prop. Type: GTO/FOS

QUASARS _AGN -- (
3270- CT - "SPECTROPOLARIMETRY OF QSOS, BLAZARS AND AGN: CYCLE 2 OBSERVATIONS"
Continuation of Program Number 1029
Keywords : QSOS, BLAZARS, SEYFERTS, AGN, POLARIZATION
Proposers: J. Roger P Angel (PI; University Of Arizona), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Measurement of the spectrum of polarization has proven to be a powerful tool in deciphering emission processes and source geometry in AGN. This program will extend these observations into the UV below 3000A.

Prop. Type: GTO/FOS

QUASARS _AGN -- (
3272- CT - "SEARCH FOR MISDIRECTED BL LAC OBJECTS: FUTURE-CYCLE CONTINUATION"
Continuation of Program Number 1033
Keywords : BL LAC OBJECTS, RELATIVISTIC BEAMS, RADIO GALAXIES
Proposers: J. Roger P Angel (PI; University Of Arizona), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (University Of Washington)

FOC images will be obtained in the UV and visible of galaxies whose isotropic properties are the same as those of BL Lac objects. A search will be made for weak unresolved UV nuclei that would be expected if the relativistic beaming theory of normal BL Lac emission is correct. Candidate nuclei found this way will be studied with the FOS.

Prop. Type: GTO/FOS

QUASARS _AGN -- (
3273- CT - "M87'S JET, NUCLEUS, AND HOT CORONA (FOS NO. 12): CYCLE 2 OBSERVATIONS"
Continuation of Program Number 1034
Keywords : JET, CORONA, M87, IONIZED GAS
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

WF/PC narrow band images of M87 will be used to isolate emission line regions near the nucleus and jet. FOS spectra of these clouds will be used to i) map the velocity field near the nucleus, ii) understand physical conditions and ionization mechanisms in these clouds, and iii) measure chemical composition of the clouds. FOS spectra of the stellar nucleus and synchotron knots in the jet will be used to establish long-base-line spectral indices and to look for spectral features. Long exposure ultraviolet spectra of the nucleus and jet will be used to look for absorption lines from M87's hot corona.

Prop. Type: GTO/FOS

QUASARS _AGN -- (
3274- CT - "IMAGING AND SPECTROPHOTOMETRY OF SEYFERT NUCLEI (FOS 14): FUTURE-CYCLE CONTINUATION"
Continuation of Program Number 1036
Keywords : SEYFERT, AGN, IONIZED GAS, NUCLEUS, NARROW LINE REGION, BROAD LINE REGION
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

WF/PC narrow band images will be used to isolate clouds near the nucleus and to look for organized structure such as disks, bubbles, and jets. FOS spectrophotometry from 1200A to 7000A will be used to establish density, temperature, chemical composition, ionization mechanisms, and reddening in the emission regions near the nucleus. Line profiles and radial velocities will be used to investigate broadening mechanisms near the nucleus such as turbulence, gas flows, and rotation. Small aperture FOS spectra of the nuclei will be used to separate the broad line region from the narrow line region. The spectra will be used to investigate physical conditions and gas dynamics in the broad line region. Absorption lines in the nuclear spectra will be used to measure the amount and distribution of gas along the line of sight through the parent galaxy.

Prop. Type: GTO/FOS

QUASARS _AGN -- (
3275- CT - "IMAGING AND SPECTROPHOTOMETRY OF NUCLEAR ACTIVITY IN LINERS (FOS 15): CYCLE 2 OBSERVATIONS"
Continuation of Program Number 1038
Keywords : LINER, AGN, IONIZED GAS, NUCLEUS
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

WF/PC narrow band images will be used to isolate ionized gas clouds near the nuclei and to look for organized structure such as disks, bubbles and jets. FOS spectrophotometry from 1200A to 7000A will be used to establish density, temperatures, chemical composition, ionization mechanisms, and reddening in the emission regions near the nucleus. Line profiles and radial velocities will be used to investigate broadening mechanisms such as turbulence, gas flows, and rotation. Small aperture spectra of the nucleus will be used to look for a photoionizing continuum and for line broadening in the nucleus, and will be used to establish physical conditions and dynamics of the nuclear gas. UV absorption lines will be searched for in the nuclear continuum in order to measure the amount and distribution of gas along the line-of-sight through the parent galaxy.

Prop. Type: GTO/FOS

GALAXIES _CLUSTERS -- (
3276- CT - "THE NUCLEUS OF NORMAL AND STARBURST GALAXIES (FOS 20): FUTURE-CYCLE CONTINUATION"
Continuation of Program Number 1041
Keywords : GALACTIC NUCLEUS
Proposers: Ralph Bohlin (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Try to understand the energies of normal galactic nuclei. Are the main sources of ionizing radiation nonthermal, or due to a blue stellar population? High spatial resolution of ST is essential to this problem; FOS spectra can distinguish between a population of hot young stars or HB stars. Use the 0.3" aperture at any central point sources and off nucleus at the appropriate spot determined from WFPC data. Choose this spot within

1", along the major axis in accord with the techniques of FOS program 24, "Dynamics near Cores of Normal Galaxies."

Prop. Type: GTO/FOS

STELLAR ASTROPHYSICS -- (

3280- CT - "MASS EXCHANGE BINARIES (FOS 34): FUTURE-CYCLE CONTINUATION "

Continuation of Program Number 1051

Keywords : X-RAY STAR

Proposers: Bruce Margon (PI; Washington, University Of), J.Angel (Arizona, University Of), F.Bartko (Bartko Science And Technology), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation)

FOC images will be used to search for spatially resolved optical emission from the jets in SS 433.

Prop. Type: GTO/FOS

STELLAR ASTROPHYSICS -- (

3282- CT - "BINARIES IN GLOBULAR CLUSTERS (FOS 37): CYCLE 2 OBSERVATIONS "

Continuation of Program Number 1053

Keywords : X-RAY STAR, NOVA, GLOBULAR CLUSTER, NEUTRON STAR

Proposers: Bruce Margon (PI; Washington, University Of), J.Angel (Arizona, University Of), F.Bartko (Uc, San Diego), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation)

Imaging and spectroscopy will be used to attempt an optical identification of a low luminosity X-ray source removed from the core, and thus to verify the conjecture that these objects are related to CVs.

Prop. Type: GTO/WFC

STELLAR ASTROPHYSICS -- (

3283 - "PLANETARY NEBULAE NUCLEI DISCOVERY (WF/PC-04): CYCLE 3 AND FUTURE-CYCLE CONTINATION"

Keywords : PLANETARY NEBULAE, EVOLUTION MASS LOSS, NEBULA

Proposers: James A. Westphal (PI; Caltech)

The central star for some planetary nebulae have not been observed. It is believed that these PN nuclei have temperatures in excess of 100000dK and the large flux in the far ultraviolet produces a nebular surface brightness that overwhelms the stellar radiation in the visual when resolution is seeing limited. The WF/PC spatial resolution will enhance the contrast by the order of 100 while an additional enhancement will be achieved by observing in the UV. This program should result in the detection of these central stars and provide sufficient photometric data to determine the nature of the central star and interstellar extinction.

Prop. Type: GTO/WFC

STELLAR ASTROPHYSICS -- (

3284 - "MISCELLANEOUS (WF/PC-34): CYCLE 3 AND FUTURE-CYCLE CONTINATION"

Keywords : X-RAY STAR, SUPERNOVA REMNANT, BIPOLAR NEBULA, PULSAR, POLARIMETRY, PHOTOMETRY

Proposers: James A. Westphal (PI; Caltech)

This WF/PC GTO program covers a small group of targets all but one of which are related to the birth and death of stars. These include the Crab, Eta Carina, SS433, and Cygnus Loop, and four bipolar outflow sources. In each case high spatial and S/N imaging will be conducted to better understand the morphology and motions in these unusual objects. Transmission grating, UV and V exposures of NGC 6712, a globular cluster with a central X-ray source, will be taken to identify sources with unusual spectra.

Prop. Type: GTO/WFC

STELLAR ASTROPHYSICS -- (

3285 - "CYCLE 3 AND FUTURE-CYCLE CONTINUATION "

Keywords : STAR FORMATION, STELLAR EVOLUTION

Proposers: James A. Westphal (PI; Caltech)

High resolution images will be obtained for a small number of T Tauri stars, Herbig-Haro objects, and objects whose evolutionary state is uncertain. Most of the young stellar objects are in the Taurus complex, which is near enough that the high resolution afforded by ST will explore physical scales never before seen in these objects. Limited temporal coverage will also be obtained to search for structural variations at small scales.

Prop. Type: GTO/WFC

GALAXIES _CLUSTERS -- (
3286 - "NUCLEI OF NEARLY NORMAL GALAXIES (WF/PC-14): CYCLE 2"
Keywords : GALACTIC NUCLEI, GALACTIC BULGES, LOCAL GROUP, DUST LANES, GLOBULAR CLUSTERS, SURFACE PHOTOMETRY
Proposers: James A. Westphal (PI; Caltech)

Direct images of the nuclei of nearby galaxies taken with the Planetary Camera will be used to measure the space density profile of luminous material and the nuclear color gradients in these objects. Galaxies will be imaged with the F555W and F785LP filters. Serveral objects known to contain ionized gas will also be imaged in narrow-band filters to obtain the gas distribution. In M31 a special series of ultra-violet exposures will be taken to study the hot stellar population. The sample of objects contains several normal ellipticals covering a broad range in nuclear surface brightness and concentration class, several nearby galaxies covering a range of Hubble types, and a few Seyfert and otherwise slightly abnormal nuclei.The images taken will also be searched for bright stars, inner globular clusters, and absorbing interstellar dust.

Prop. Type: GTO/WFC

QUASARS _AGN -- (
3287 - "STRUCTURE OF QUASARS AND RELATED OBJECTS (WF/PC-12): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : QUASAR, AGN,RADIO GALAXY, EMISSION LINE GALAXY,BL LAC OBJECT
Proposers: James A. Westphal (PI; Caltech)

The aims of the program are (1) to detect, and to study the morphology of galaxies underlying QSOs and AGNs, galaxies associated with them in groups and clusters, and associated structures such as jets; (2) to detect bright nuclear and extranuclear structure on small angular scales; (3) to detect and examine additional images and lensing galaxies in gravitational lenses; (4) to detect extended emission line structure in quasars.

Prop. Type: GTO/WFC

STELLAR POPULATIONS -- (
3288 - "LOW MASS COMPANIONS (WF/PC-05): CYCLE 3 AND FUTURE-CYCLE CONTINATION"
Keywords : LOW MASS COMPANIONS, BROWN DWARFS, PLANETS, ASTROMETRY
Proposers: James A. Westphal (PI; Caltech)

The purpose of this observing program is the astrometric detection of Low Mass Companions, e.g., planets around stars other than our Sun. Astrometric observations of the stars are to be made to detect the periodic motion of the stars due to the influence of a planet around the star. The possibility of variations from pixel to pixel should be reduced by taking three exposures of each star field with an offset of a few pixels in the image location at each pointing. Each target field should be observed approximately every three months during the first year, and at maximum and minimum parallax positions during the following year. The observations during the guaranteed time will be the first of a series of observations of these stars to be taken over the lifetime of the Space Telescope. In combinations with ground-based observations, improvements to the parallaxes and proper motions will be investigated.

Prop. Type: GTO/WFC

INTERSTELLAR MEDIUM -- (

3289 - "PLANETARY NEBULAR STRUCTURE (WF/PC-03): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"

Keywords : PLANETARY NEBULAE, MASS LOSS, EVOLUTION, NEBULA

Proposers: James A. Westphal (PI; Caltech)

Observations of planetary nebulae utilizing the WF/PC are based upon the high angular resolution. Structure at the level of E+14 cm is seen in only one planetary NGC7293, Helix nebula. It is in the size range from E+14 to E+15 cm that the origin of long lived condensation is expected. Are the features seen in the Helix common to most planetaries? Do these condensations result in shadowing that can explain the ionization structure? The other objective of this program is to repeat the measurements on a few years baseline in order to study the temporal variations of well defined condensation. This may provide distance determinations as well as dynamic information.

Prop. Type: GTO/WFC

STELLAR POPULATIONS -- (

3290 - "STELLAR POPULATION IN THE GALACTIC BULGE (WF/PC-02): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"

Keywords : STELLAR POPULATIONS, GALACTIC BULGE, BAADE'S WINDOW

Proposers: James A. Westphal (PI; Caltech)

The goal of this WF/PC project is to extend our knowledge of the stellar population in the nuclear bulge of our own Galaxy. During GTO time, our targets include a selected field within Baade's Window (about 4 degrees from the galactic nucleus) and another bulge field about 8 degrees from the nucleus. Stepped exposures with U, V, and I filters will enable us to correct for reddening on a small spatial scale, to extend the color-magnitude diagram several magnitudes, and to investigate the low-mass portion of the luminosity function.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
3291 - "NEPTUNE AND RINGS (WF/PC-30): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : NEPTUNE, PLANETARY ATMOSPHERES, NEPTUNE RING SYSTEM
Proposers: James A. Westphal (PI; Caltech)

Observations will provide high-resolution images of Neptune and its rings in spectral regions not covered by Voyager spacecraft cameras and/or not possible from the Earth-based observations. At short wavelengths, the global reflectivity of Neptune is less than that of a pure Rayleigh atmosphere; thus structure may be visible. Observations will be made in four sequences, distributed over 18 hours. The tenuous ring system and the associated satellites will be observed with the Planetary Camera.

Prop. Type: GTO/WFC

GALAXIES CLUSTERS -- (
3292 - "PECULIAR AND INTERACTING GALAXIES (WF/PC-01): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"
Keywords : PECULIAR GALAXIES, INTERACTING GALAXIES
Proposers: James A. Westphal (PI; Caltech)

Imaging observations with the WFC and PC are specified for a small sample of peculiar and interacting galaxies. In each instance the observations will benefit variously from the spatial resolution and ultraviolet sensitivity afforded by the Space Telescope and may reveal important facts concerning the nature of the objects observed.

Prop. Type: GTO/AST

GALAXIES CLUSTERS -- (
3293- CT - "HIGH-RESOLUTION SURFACE PHOTOMETRY OF NGC 4314 "
Continuation of Program Number 1012
Keywords : GALAXIES, BARRED GALAXIES, PECULIAR GALAXIES, NUCLEAR RINGS
Proposers: William H. Jefferys (PI; Texas, University Of), G.Benedict (Texas, University Of), R.Duncombe (Texas, University Of), O.Franz (Lowell Observatory), L.Fredrick (Virginia, University Of), P.Hemenway (Texas, University Of), P.Shelus (Texas, University Of)

We propose to obtain ST WF/PC surface photometry of NGC 4314. NGC 4314 exhibits anomalous nuclear activity indicative of on-going star formation. Multicolor surface photometry with 0.1 to 0.4 arcsec resolution will afford an opportunity to explore the global interrelationships between gas clouds, dust, star formation, and stellar populations with detail never before obtained. The expected maximum resolution for for NGC 4314 is 10 parsecs. All exposures will be secured with WFPC II after refurb mission.

Prop. Type: AUG/FOC

INTERSTELLAR MEDIUM -- (SUBLUMINOUS STARS) --
3295- CT - "HIGH RESOLUTION OBSERVATIONS OF CATACLYSMIC VARIABLES - CYCLE 3"
Continuation of Program Number 3747
Keywords : CATACLYSMIC VARIABLES, NOVAE, SYMBIOTICS, SHELLS
Proposers: Francesco Paresce (PI; Space Telescope Science Institute), F.Macchetto (Esa, Space Telescope Science Institute), C.Mackay (Cambridge University; United Kingdom)

It is proposed to explore at high spatial and moderate spectral resolution the close environments of two binary stars known or suspected to possess complex surrounding emission nebulosities. The study will be conducted using the medium band UV filters centered on bright nebular emission features of magnesium,carbon and oxygen. The proposed study of binary systems should permit resolving the objects into their postulated compact sources, barely resolving the accretion disk around the hot component, and determining the precise connection of the disk with the jets.

Prop. Type: GTO/FOS

INTERSTELLAR MEDIUM -- (SN_SNR) --
3296- CT - "SUPERNOVA REMNANTS AND NUCLEOSYNTHESIS (FOS 30): CYCLE 2 BASELINE OBSERVATIONS"
Continuation of Program Number 1048
Keywords : SUPERNOVA REMNANTS, NUCLEOSYNTHESIS
Proposers: Arthur F. Davidsen (PI; Johns Hopkins University), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corp.), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Overall program: UV and optical spectra of four supernova remnants (SNRs) will be used to study a number of problems related to abundances, grain destruction, interstellar medium properties and physical conditions in SNR shocks. Representatives of three of the main classes of SNRs (Crab-nebula like, Balmer-line and "normal") will be studied in the LMC, where reasonably low reddening permits UV observations. An oxygen-rich SNR in NGC 4449 will be observed, taking advantage of the small FOS slits to isolate the SNR from surrounding H II emission. Two M33 SNRs that were previously part of this proposal have been dropped due to time limitations.

Prop. Type: GTO/FOC

STELLAR ASTROPHYSICS -- (HOT STARS) --

3305- CT - "THE VERY MASSIVE OBJECTS R136A IN THE 30 DORADUS NEBULA, NGC 3603 AND ETA CARINAE: CYCLE 1 OBSERVATIONS"

Continuation of Program Number 1255

Keywords : R136A, NGC 3603, ETA CAR, HII REGIONS, WR STARS

Proposers: Gerd Weigelt (PI; Max-Planck-Institut Fuer Radioastronomie, Bonn; Germany, West)

R136a is the core of the ionizing cluster NGC 2070 at the center of the 30 Doradus nebula in the Large Magellanic Cloud. The interesting question is whether R136 is a supermassive object or whether it is a dense star cluster. We propose FOC f/288 imaging and roll deconvolution in order to solve the question. Roll deconvolution of FOC f/288 data can yield exactly diffraction-limited resolution, for example, 0.02" at lambda = 200 nm. The same observations are proposed in order to study the nature HD 97950 AB in NGC 3603 and Eta Carinae. HD 97950 in NGC 3603 is probably of similar nature as R136. Objective prism observations are proposed in order to perform speckle spectroscopy of R136a and HD 97950 AB. Speckle interferometry observations (object autocorrelations) show that all 3 objects can be resolved with the ST. Only FOC f/288 measurements can yield the required resolution since only in the case of f/288 data the pixel size is small enough.

Prop. Type: GTO/WFC

STELLAR ASTROPHYSICS -- (

3313 - "CIRCUMSTELLAR MATERIAL (WF/PC-18): CYCLE 3 AND FUTURE-CYCLE CONTINUATION"

Keywords : CIRCUMSTELLAR MATERIAL, PROTO-PLANETARY DISCS

Proposers: James A. Westphal (PI; Caltech)

The cold circumstellar material discovered around a number of nearby stars by IRAS will be examined to determine the spatial distribution of the material around the individual stars, including estimates of the amount of distributed mass as a function of distance from the star. Such studies should provide insight into the formation and evolution of the proto-planetary disc that once surrounded the Sun.

Prop. Type: GTO/HSP

SOLAR SYSTEM -- (
3319- CT - "OPPORTUNITY OCCULTATIONS BY SMALL BODIES "
Continuation of Program Number 1079
Keywords : COMET, ASTEROID, SATELLITE, PLUTO, OCCULTATION
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

Although an occultation by any specific comet, asteroid, satellite, or Pluto is unlikely to be observable from the ST, the scientific return from such an event would be great because of the superior signal-to-noise ratio achievable with the ST for occultation observations. We propose to observe occultations by these bodies with the ST, as the opportunites arise, to probe their atmospheres, determine their sizes and achieve other goals. With such diverse possibilities, one must examine each opportunity as it occurs and formulate an observing strategy to fit that particular case. Revision History: Prepared for future cycles submission--ASB 4/24/92;

Prop. Type: GTO/OS

STELLAR POPULATIONS -- (GLOBULAR CLUSTERS) --
3325- CT - "STRUCTURE OF GLOBULAR CLUSTERS (CYCLE 2) "
Continuation of Program Number 1279
Keywords : GLOBULAR CLUSTERS -- DYNAMICS -- LUMINOSITY FUNCTION
Proposers: Ivan R. King (PI; Uc, Berkeley), S.Djorgovski (Center For Astrophysics), P.Greenfield (Space Telescope Science Institute), F.Macchetto (Esa, Space Telescope Science Institute)

This is part of a study of four contrasting clusters. The first exposures of Omega Centauri wer taken in Cycle 0; these complete the exposures on that cluster. The cluster is observed in B and V at the center (already done) and at 1 and 3 core radii. The distributions of all types of stars should be delineated. Simultaneous exposures are made in V and I with the WFC, so as to go deep in an outer field.

Prop. Type: AUG/FOC

GALAXIES _CLUSTERS -- (NEARBY GALAXIES) --
3335- CT - "BULGE STELLAR POPULATIONS IN SO GALAXIES - CYCLE 3 "
Continuation of Program Number 3487
Keywords : EARLY-TYPE GALAXIES, STAR FORMATION
Proposers: Jean M Deharveng (PI; Laboratoire Astronomie Spatiale; France), B.Rocca-Volmerange (Institute Of Astrophysics, Paris; France)

It is proposed to study the origin of the UV flux in elliptical-type population and to determine the respective contribution from young stars and from hot evolved stars. Two SO galaxies NGC 5102 and NGC 3115, at reasonable distance and with very different gas contents, have been selected. Observations through several filters (especially a far UV filter) will allow to resolve and study the massive stars, if they exist. The UV surface brightness of the unresolved background will be measured and will set constraints on the characteristics of hot evolved stars.

Prop. Type: AUG/FOC

STELLAR ASTROPHYSICS -- (SUBLUMINOUS STARS) --
3336- CT - "CENTRAL STARS OF PLANETARY NEBULAE - CYCLE 3 "
Continuation of Program Number 3747
Keywords : PLANETARY NEBULAE, HOT CENTRAL STARS.
Proposers: T. M Kamperman (PI; Sron Space Research Utrecht; Netherlands), S.Pottasch (Groningen, University Of; Netherlands), N.Walton (University College London; England), A.Zijlstra (Groningen, University Of; Netherlands)

It has proved impossible to detect the very hot exciting stars of some planetary neblae from the ground. This is probably because these stars emit a great many ionizing photons for each visible quantum. The ionized nebula is therefore so extensive that the nebular emission, both line and continuum, completely dominate the visual continuum emission of the central star, which becomes lost in the noise. Observing above the atmosphere increases the possibility of detection of these central star by a factor of at least 400. A factor ~ 100 because the light of the central star is within an image of. 1" instead of the ~ 1" ground seeing limitation allowing better discrimination of the star against the diffuse nebular continuum and a further factor ~ 4 occurs because the star is that much brighter, relative to the nebula, in the ultraviolet than it is in the visible. With the spherical abberation of HST, the above mentioned factor of 100 is reduced to about 15, but as the UV adventage remains, detectability is still several magnitudes beyond groundobservations.

Prop. Type: GTO/FOC

QUASARS _AGN -- (JETS) --

3344- CT - "OPTICAL EMISSION OF RADIO JETS AND HOTSPOTS - CONTINUATION "

Continuation of Program Number 1228

Keywords : AGN, RADIOEMISSION, JETS

Proposers: F. Duccio Macchetto (PI; Esa, Space Telescope Science Institute), P.Crane (European Southern Observatory; Germany, West), G.Miley (Space Telescope Science Institute)

ST is uniquely equipped to detect optical emission from synchroton jets and to study the interaction of jets with their environment. Here we outline a program of broad and narrow band imaging and limited slit spectroscopy on carefully selected samples of objects designed to exploit ST for these purposes. The aims are to study the following: -morphological relations between radio and optical emission. -optical and UV counterparts of radio jets and hot spots to derive information on particle acceleration mechanisms. -interactions between synchroton jets and in the ambient gas, to use each as a unique probe of the physical conditions within the other. -possible relationship between the propagation of radio jets and star formation.

Prop. Type: GTO/HSP

SOLAR SYSTEM -- (

3354- CT - "HELIUM ABUNDANCE IN JOVIAN PLANET UPPER ATMOSPHERES "

Continuation of Program Number 1082

Keywords : JOVIAN PLANETS, OCCULTATIONS, UPPER ATMOSPHERES, HELIUM ABUNDANCES

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The large masses of the Jovian planets make it likely that they have retained their primordial abundance of material accreted from the solar nebula. The helium abundance in the upper atmospheres of these planets reflects the primordial abundance and the structural evolution of the planet. We propose to determine the Helium fraction in the upper atmosphere of each Jovian planet by measuring the ratio of the refractivities of its atmosphere for two wavelengths during stellar occultations. Revision History: Updated for cycle 3 submission--asb, 4/24/92.

Prop. Type: GTO/HSP

SOLAR SYSTEM -- (

3371- CT - "SATURN RING DYNAMICS "

Continuation of Program Number 1081

Keywords : SATURN'S RINGS, OCCULTATIONS, RING DYNAMICS

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

Understanding the dynamics of the rings is essential to our eventual understanding of their origin. Did they form recently or along with Saturn itself? We propose a series of stellar occultation observations in order to continue the dynamical investigation of Saturn's rings, at high spatial resolution, begun by the Voyager spacecraft. Revision History: Updated for cycle 3 submission, 4/24/92, asb.

Prop. Type: GTO/HSP

SOLAR SYSTEM -- (

3373- CT - "THE SIZE AND COMPOSITION OF PLANETARY RING PARTICLES "

Continuation of Program Number 1080

Keywords : PLANETARY RINGS, RING PARTICLES, OCCULTATIONS, RINGS SPECTRA, RING COMPOSITION

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The size and composition of planetary ring particles are of interest for two reasons. First, these parameters provide important clues as to the age and source of the particles. The second reason for the interest in the size and composition of ring particles is that these quantities determine the fate of the particles in their present environment. In this regard, the size of the particles tells us the relative importance of gravitational forces (resonances with satellites, gravitational interaction with other ring particles, and the planetary gravity potential) and non-gravitational forces (particle collisions, radiation drag, and electromagnetic forces) in the present dynamical evolution. Clearly, the sizes and compositions of ring particles are central to our understanding of ring systems. Using the unique capabilities of ST, we propose to make major advances in knowledge of the size and composition of planetary ring particles through a combination of spectral and occultation

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Prop. Type: GTO/HSP

SOLAR SYSTEM -- (

3375- CT - "SATURN RING DYNAMICS - CYCLE 2 "

Continuation of Program Number 1081

Keywords : SATURN'S RINGS, OCCULTATIONS, RING DYNAMICS

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

Understanding the dynamics of the rings is essential to our eventual understanding of their origin. Did they form recently or along with Saturn itself? We propose a series of stellar occultation observations in order to continue the dynamical investigation of Saturn's rings, at high spatial resolution, begun by the Voyager spacecraft. Revision History: Received on RPS 9/1/89; Added to SCCS 9/5/89 RPSS V7.2 local _remote; fixed up small syntax errors - SALM 9/5/89 Updated for cycle 1 -- amanda bosh (MIT) 28 Sept 89 asb @ MIT 19 Mar 1990: Updated cycle 1 targets; SPATIAL SCANs, GUID TOL changes etc. - asb@MIT 23May90; Small logic errors fixed--BJW 7/9/90; revised changes to SEQ--BJW 7/31/90; Change cycle 0 to cycle 8 on line 110.040--BJW 11/28/90; Changes to observations/targets--amanda; Split proposal by cycle--BJW 5/2/91;

Prop. Type: AUG/OS

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --

3444- CT - "COMPOSITION OF GAS IN INDIVIDUAL INTERSTELLAR CLOUDS: CYCLE 2 AUGMENTATION OBSERVATIONS"

Continuation of Program Number 3444

Keywords : INTERSTELLAR LINES

Proposers: Lyman Spitzer (PI; Princeton University), C.O'Dell (Rice University)

Column densities of interstellar atoms of 17 atomic species of 10 elements will be measured in the line-of-sight to 2 early-type stars, using the Goddard High Resolution Spectrograph to obtain precise measures in the ultraviolet with the highest available spectral resolution. These data will be analyzed to determine relative abundances in the several individual clouds present along each line of sight, and thus to determine how the composition of the gas in such clouds and the various physical processes occurring vary with cloud parameters such as H column density, velocity, ionization level, and distance z from the galactic plane. This information should help to clarify the many physical processes occurring in interstellar gas. In particular, measures of stars in the galactic halo should help to identify the mechanisms responsible for the abundant C IV, Si IV, and N V known to be present in the interstellar gas at kiloparsec distances from the galactic plane. The program should also increase our understanding of the balance between formation and destruction of interstellar dust grains.

Prop. Type: AUG/FOC

GALAXIES _CLUSTERS -- (GAS _DUST) --
3487- CT - "COOLING FLOWS IN DISTANT CLUSTERS - CYCLE 2 "
Continuation of Program Number 3487
Keywords :
Proposers: Ferdinando Macchetto (PI; Space Telescope Science Institute),
J.Deharveng (Laboratoire D'Astronomie, Marseille; France),
W.Sparks (Space Telescope Science Institute)

Cooling flow galaxies will be imaged in the light of the emission line [OII]3727 and neighbouring blue/UV continuum. The observations will enable us to locate regions of ongoing star formation, image the emission filaments at high spatial resolution and determine if they are dusty.

Prop. Type: AUG/FOC

QUASARS _AGN -- (OTHER ACTIVE NUCLEI) --
3504- CT - "HIGH-SPATIAL-RESOLUTION IMAGING AND SPECTROSCOPY OF AGN: CYCLE 2"
Continuation of Program Number 3504
Keywords : EMISSION LINE GALAXY, SEYFERT GALAXY, RADIO GALAXY, BL-LAC OBJECT, QUASAR, IMAGING, SPECTROSCOPY
Proposers: F. Duccio Macchetto (PI; Space Telescope Science Institute),
A.Boksenberg (Royal Greenwich Observatory; United Kingdom),
G.Miley (Leiden, Univ. Of; Netherlands), W.Sparks (Space Telescope Science Institute)

It is known from our FOC observations that the nuclear [OIII] emission and probably the Lyman alpha emission in M87 come from a highly compact but resolved region of core radius about 1.6 pc. FOC long-slit spectroscopy of the core of M87 will yield an important estimate of the central mass concentration from the dynamical information present in the structure of the bright lines. With the knowledge that emission in the core of M87 is spatially confined the HST optical aberration does not confuse the observation proposed.

Prop. Type: GTO/OS

STELLAR POPULATIONS -- (
3565- CT - "THE STELLAR DENSITY DISTRIBUTIONS IN THE CENTERS OF GALACTIC GLOBULAR CLUSTERS: CYCLE 2 PROPOSAL 3565"
Continuation of Program Number 1019
Keywords : GLOBULAR CLUSTER, POPULATION II, BLACK HOLE
Proposers: John N. Bahcall (PI; Institute For Advanced Study)

Short exposures will be made of all galactic globular clusters with distance moduli less than 15.5 mag and galactic latitude above or below 15 degrees. A search will be made for cusps in the stellar density distributions and the colors will be measured for the brightest stars in the cores of the clusters. ST observations are required in order to reach the innermost regions of the clusters with sufficient resolution to separate individual stars.

Prop. Type: GTO/OS

GALAXIES _CLUSTER -- (
3566- CT - "DO GALAXIES PRODUCE QUASAR ABSORPTION LINES: CYCLE 2 AUGMENTAION"
Continuation of Program Number 1022
Keywords : QUASAR, SPECTROSCOPY, ABSORPTION LINE, GALAXY, GRAVITATIONAL LENS
Proposers: John N. Bahcall (PI; Institute For Advanced Study), K.Ratnatunga (Institute For Advanced Study)

SPECTRA WILL BE OBTAINED WITH THE FOS FOR A NUMBER OF QUASARS THAT HAVE A SMALL ANGULAR SEPARATION ON THE SKY FROM GALAXIES OR GALAXY VOIDS, INCLUDING MARK 205, 3C 232, PKS 2020-370, THE GRAVITATIONALLY LENSED QUASAR, 2237+0305, 4 OBJECTS BEHIND THE BOOTES GALAXY VOID, US 1329 (BEHIND THE BAHCALL-SONEIRA GALAXY VOID), AND 5C 03.44 (BEHIND M 31). THE SPECTRA WILL BE USED TO TEST THE HYPOTHESIS THAT SOME METALLIC QUASAR ABSORPTION SYSTEMS ARE CAUSED BY VERY LARGE GALAXY HALOS OR DISKS. WF/PC IMAGES WILL ALSO BE OBTAINED OF THE LENSING GALAXY, 2237+0305, IN ORDER TO LOCATE ACCURATELY THE QUASAR POSITION AND MEASURE THE SURFACE BRIGHTNESS OF THE INNER REGION OF THE GALAXY. ST OBSERVATIONS ARE REQUIRED BECAUSE, FOR THE SMALL REDSHIFTS AT WHICH GALAXIES WITH LARGE ANGULAR SIZE ARE FOUND, THE RESONANT ATOMIC LINES ARE IN THE ULTRAVIOLET.

Prop. Type: AUG/WFC

GALAXIES _CLUSTERS -- (
3639- CT - "GALAXIES AND CLUSTERS, WFPC GTO AUGMENTATION, CYCLE 2"
Continuation of Program Number 1118
Keywords : INTERSTELLAR MEDIUM, HII REGIONS, LMC
Proposers: James A. Westphal (PI; Caltech)

We propose to observe 10 galaxy nuclei from the original GTO proposal 1118 that otherwise will be lost for lack of time. These 10 include seven of the nearest normal spiral galaxies, from types S0 through Sc. This is the largest sample of late-type spiral nuclei being done with HST that we know of and is essential to the collection of a representative catalog of all galaxy types. The remaining three galaxies include a classic Seyfert galaxy (NGC 4151), a protype emission- line elliptical (NGC 1052), and a well known blue elliptical that is a post-starburst and merger candidate (NGC 1600).

Prop. Type: AUG/WFC

INTERSTELLAR MEDIUM -- (
3642- CT - "SUPERNOVA REMNANT SHOCKS, STELLAR OUTFLOW, AND EJECTED MATTER, WFPC AUGMENTATION, CYCLE 2"
Continuation of Program Number 1138
Keywords : INTERSTELLAR MEDIUM, SUPERNOVA REMNANTS, PLANETARY NEBULAE, WOLF-RAYET STARS
Proposers: James A. Westphal (PI; Caltech)

Much of the scientific utility of narrow band imaging of nebulae lies in the study of stratification and structural variations among emission lines that trace regions of different density, temperature, and radiation environment. As such, these studies are not as seriously affected as some by the compromised optical performance of HST, so long as adequate signal to noise is obtained to allow reliable deconvolution of the structure present. The spatial resolution of the HST provides access to physically important scales associated with many gasdynamic and radiative processes in the ISM. In the present proposal, we request time to extend our studies of the cooling and recombining flows behind radiative shocks using images of three additional fields that cover a significant cross section of the conditions within the Cygnus Loop. We also request time to continue our study of the stellar jet and "ladder" discovered to the north of Eta Carinae, to study the interaction of the stellar wind and radiation field with a shell of gas in NGC 6888. It is proposed to observe the subarcsecond structure of the planetary nebula NGC 7027 in order to extend the studies of condensation lifetimes and interactions with the ISM.

Prop. Type: AUG/OS

STELLAR POPULATIONS -- (GLOBULAR CLUSTERS) --
3684- CT - "KING, AUGMENTATION, STELLAR POPULATIONS "
Continuation of Program Number 1279
Keywords : GLOBULAR CLUSTER
Proposers: Ivan R. King (PI; University Of California, Berkeley), P.Greenfield (Stsci; U.S.A.), D.Macchetto (Stsci; U.S.A.)

This proposal is devoted completely to globular clusters. It studies the two clusters NGC104 (47 Tuc) and NGC6752 in B and V, down to below 24th magnitude. Fields at the center and at 1 and 3 core radii will allow determination of the luminosity function and its variation with radial position. This will in turn allow a determination of the degree of equipartition, which cannot be observed from the ground. At the same time the WFC will concentrate on a single field in each cluster in V and I, reaching a limit of about 26th magnitude, for the faint luminosity function at a radius of 6.5 arcmin. In addition, a far-UV image is taken of the center of NGC6752, to study the distribution of extremely blue objects.

Prop. Type: AUG/OS

GALAXIES CLUSTERS -- (FAINT GALAXIES) --
3685 - "KING, AUGMENTATION, GALAXIES AND CLUSTERS -- PART I "
Keywords : DISTANT GALAXY, DISTANT GALAXY CLUSTER
Proposers: Ivan R. King (PI; University Of California, Berkeley), P.Crane (European Southern Observatory; Germany), D.Koo (Lick Observatory, Univ Of California; U.S.A.), R.Kron (University Of Chicago; U.S.A.), C.Mackay (University Of Cambridge; U.K.)

This is a proposal to study the morphology of distant galaxies, a field that has lagged far behind what has been learned from spectroscopic work. The targeted galaxies all have been extensively observed from the ground. Nearly all are in the redshift range 0.24-0.65. Ground-based data include broad-baseline 4-color photometry and, in nearly all cases, redshifts. The targets include a rich X-ray cluster that is surprisingly deficient in blue galaxies, and three other fields that each have numerous galaxies that have been richly observed from the ground. Each field will be observed with the WFC, while a parallel observation observes a similarly well-studied galaxy with the FOC at greater resolving power. These observations will take the first crucial step toward investigating the morphology of the rich sample of medium-redshift galaxies in the Koo-Kron redshift surveys.

Prop. Type: AUG/FOC

INTERSTELLAR MEDIUM -- (SUBLUMINOUS STARS) --
3747- CT - "HIGH RESOLUTION OBSERVATIONS OF CATACLYSMIC VARIABLES - CYCLE 2"
Continuation of Program Number 3747
Keywords : CATACLYSMIC VARIABLES, NOVAE, SYMBIOTICS, SHELLS
Proposers: Paresce Francesco (PI; Space Telescope Science Institute), C.Mackay (Cambridge University; United Kingdom), F.Paresce (Space Telescope Science Institute)

It is proposed to explore at high spatial and moderate spectral resolution the close environments of six symbiotic stars known or suspected to possess complex surrounding emission nebulosities. The study will be conducted using the medium band UV filters centered on bright nebular emission features of magnesium,carbon and oxygen. The proposed study of symbiotic systems should permit resolving the objects into their postulated compact sources, barely resolving the accretion disk around the hot component, and determining the precise connection of the disk with the jets.

Prop. Type: AUG/WFC

QUASARS _AGN -- (

3799- CT - "PC IMAGING OF GRAVITATIONAL LENSES, WFPC GTO AUGMENTATION, CYCLE 2"
Continuation of Program Number 1116
Keywords : GRAVITATIONAL LENSES
Proposers: James A. Westphal (PI; Caltech)

We propose to obtain two sets of data: (1) deep images of four gravitational lenses (PG1115, Q0957, MG2016 and 2237) for which we have previously obtained short Cycle 0 observations which indicate that deeper data will provide important information; and (2) imaging of five more recently discovered lenses, for which ground-based observations suggest that the angular resolution of HST will provide critical data. The aim is to obtain data which will help in the complete characterization of the lens systems. All observations will be made with the PC, using filters 555W and 785LP, the former to emphasize the quasar images and the latter the lensing galaxies.

Prop. Type: AUG/OS

GALAXIES _CLUSTERS -- (NEARBY GALAXIES) --

3870- CT - "KING, AUGMENTATION, GALAXIES AND CLUSTERS -- PART II "
Continuation of Program Number 1277
Keywords : LOCAL GROUP
Proposers: Ivan R. King (PI; University Of California, Berkeley), P.Crane (European Southern Observatory; Germany), J.Deharveng (Laboratoire D'Astronomie Spatiale, Marseille; France), M.Disney (Univ. Of Cardiff; U.K.)

This augmentation proposal picks up some high-quality parts of GTO proposal OS-1277 that are in quite serious danger of being lost, as overhead charges reduce the amount of actual exposure. The subject is M31 and its companions; there are two parts. (1) Near the centers of M31 and M32, FOC96 exposures will trace the distribution of metal-poor giants, as well as the distribution of the underlying and dominant metal- rich population, and also attempt to use pixel statistics to investigate the top of the luminosity function of the metal-rich giants. An attempt at the upper part of the color-magnitude array will be made in a field 3 arcmin from the center of M31. The FOC exposures will be accompanied by parallel PC exposures on M31 globular clusters. (2) For the dwarf galaxies NGC 205, 147, and 185, FOC96 exposures in two colors will investigate the centers (where dust and luminous stars are already known to exist in 2 of the 3), while parallel WFC exposures will do the upper part of the HR diagrams farther out.

Prop. Type: AUG/OS

STELLAR ASTROPHYSICS -- (AUG/OS) --

3877- CT - "CRANE,AUGMENTATION, STELLAR ASTROPHYSICS BINARY PULSAR PSR1913+16"
Continuation of Program Number 1061
Keywords : PULSARS, ASTROMETRY, GRAVITATIONAL RADIATION
Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West), P.Boeshaar (Drew University), J.Tyson (Bell Laboritories)

The binary pulsar PSR1913+16, supposedly a prime laboratory for gravitational radiation, may have an optically visible companion, or may be in a visible nebula. WFPC and FOC images will be used to improve the optical astrometry and to study the extension seen in the original images. Since this is such a uniquely important object for our understanding of gravitational radiation, it is crucial to make these definitive observations to clarify the existing uncertainty. If there is an optically luminous companion, or a nebula surrounding the pulsar, this will require modifications to the interpretation of the pulsar timing data.

Prop. Type: AUG/OS

GALAXIES _CLUSTERS -- (

3881- CT - "CRANE, AUGMENTATION, GALAXIES _CLUSTERS "
Continuation of Program Number 1057
Keywords : GALAXIES, ELLIPTICAL, JETS
Proposers: Philippe Crane (PI; European Southern Observatory; Germany), J.Deharveng (Labroitoire D' Astronomie Spatiale, Marseille; France), M.Disney (University College Cardiff; United Kingdom), I.King (University Of California, Berkeley), M.Stiavelli (Scuola Normale Superiore Pisa; Italy)

FOC/96 images of bright nearby ellipticals and spirals in 3 filters extending from V to UV will be obtained to study the stellar content and the shape of the nuclear region. For NGC 6251 which was already observed in cycle 0 observations and appears to possess a peculiar core structure, we intend to perform further observations with additional filters.

Prop. Type: GTO/AST

STELLAR ASTROPHYSICS -- (

3886- CT - "ORBITAL PARAMETER OF KNOWN BINARY, SEQUEL "
Continuation of Program Number 3061
Keywords : S-CURVE MEASUREMENT
Proposers: William H. Jefferys (PI; Texas, University Of), O.Franz (Lowell Observatory), E.Nelan (Stsci)

We propose to use FGS in TRANSFER mode to observe the close known binary ADS11300. According to an orbital analysis incorporating recent HST-FGS results, this pair of 54 orbital period is expected to pass through periastron in 1992.1 +/- 0.6 and should reach a component separation of less than 10 mas. Measurement at this angular separation is not possible by any ground-based technique, and HST observation provides the only opportunity to obtain astrometric data at this critical orbital phase.

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (
3926- CT - "VARIABILITY OF HIGH LUMINOSITY STARS - RETAKE OF 1095 "
Continuation of Program Number 1095
Keywords : SUPERGIANT, VARIABLE
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

Some of the most luminous and massive stars in our galaxy and in the Large Magellanic Cloud will be monitored for variability in light. Knowledge of the time scales and amplitudes of luminosity fluctuations can perhaps place useful constraints on various stellar models. Revision History: Received on RPS 9/1/89; Added to SCCS 9/5/89 RPSS V7.2 remote _local - SALM 9/8/89; Text changes _added ACQ to repeat visits - SALM 9/28/89; Move 9 targ to cycle2 - SALM 2/14/90 Move 3 targ to cycle 2; add UV2 obs for P-CYG - SALM 3/26/90; Expanded illegally nested repeat - SALM 6/21/90; Moved REPEAT to USE - SALM 6/28/90; Defer all targets to cycle 1--BJW 11/26/90; Split proposal by cycle--BJW 3/22/91; Changes to observations of HD193237--BJW 6/19/91; Update target list--BJW 6/27/91; Changed PRISM mode to SINGLE; changed all filters to F152M--BJW 9/3/91;

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (HOT STARS) --
3930- CT - "STELLAR WIND STUDIES ;CYCLE LATER "
Continuation of Program Number 1152
Keywords : OB STARS, STELLAR WINDS
Proposers: John B. Hutchings (PI; Dominion Astrophysical Observatory; Canada)

UV spectroscopy will be done at R=2000 on the principal stellar wind lines of OB stars and associations. The program will bridge studies of individual stars and starburst galaxies.

Prop. Type: GTO/HRS

QUASARS _AGN -- (HOST GALAXY) --

3931- CT - "IMAGING OF DISTANT ACTIVE GALAXIES CYCLE 2"

Continuation of Program Number 1157

Keywords : HOST GALAXIES, IMAGING OF QUASARS

Proposers: John B. Hutchings (PI; Dominion Astrophysical Observatory; Canada), A.Gower (Victoria, University Of; Canada), S.Neff (Nasa Gsfc)

WF/PC will be used to image low redshift QSOs of interest in broad-band wavelengths.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --

3933 - "GAS PHASE ABUNDANCES IN THE ISM TOWARD HD 64760 CYCLES 9"

Keywords : INTERSTELLAR, GAS, SPECTROSCOPY, UV

Proposers: Blair D. Savage (PI; Wisconsin, University Of)

The star HD 64760 is a B0.5 IB star with E(B-V) = 0.07 situated at a distance of about 400 pc. The sight line passes through the Gum Nebula, a region that may have been formed by a recent supernova. Our primary goal is to study the processing of interstellar dust toward HD 64760 by studying the changing gas phase abundances of elements from cloud to cloud toward the star. A second goal is to obtain accurate elemental abundances for clouds exhibiting very little depletion. Extensive G160M and Ech B observations will be obtained of both strong and weak interstellar lines in order to study abundances in the low and high column density portions of the gas toward HD 64760. Spectra with S/N > 50 will be obtained.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --

3934- CT - "PHYSICAL CONDITIONS AND VELOCITY STRUCTURES IN THE RED GIANT WINDS IN THE BINARIES CI CYG AND EG AND -- CYCLE 2"

Continuation of Program Number 1198

Keywords : COOL STARS; CHROMOSPHERES, WINDS, MASS LOSS, BINARIES; SYMBIOTIC STARS

Proposers: Kenneth G. Carpenter (PI; Nasa - Goddard Space Flight Center), J.Linsky (Colorado, University Of), R.Robinson (Csc - Astronomy Program), R.Stencel (Colorado, University Of)

This proposal represents a two pronged attack aimed at understanding the detailed chracteristics of red giant winds in binary star systems. Red giant winds can provide the most massive, sustained form of mass transfer in binaries. The symbiotic and related stars, which contain red giant and hot companion stars, permit line of sight studies through a range of red giant atmospheric heights. The goal of this work is to attempt to define both the mechanism of rapid mass loss in red giant stars and the details of mass transfer to the companion stars. Such results can provide important constraints for both stellar and binary evolution theories. In each case we expect to derive density and temperature values for the red giant wind region and compare this to the present understanding of single star conditions where low temperature, dust and molecule forming, circumstellar envelopes prevail.

Prop. Type: AUG/HRS

SOLAR SYSTEM -- (

3935- CT - "SULFUR NEAR IO CYCLE 2"
Continuation of Program Number 1206
Keywords : IO, SULFUR, JOVIAN TORUS
Proposers: Laurence M. Trafton (PI; Texas, University Of)

Neutral sulfur and oxygen, and stages of ionized sulfur have been observed in Jupiter's torus. Io is supposed to be the source of all torus species but the mechanism feeding the torus has not been determined. Neutral S should be densest Io. We will attempt to detect neutral sulfur and oxygen near Io in and out of the plasma torus in order to shed light on this problem.

Prop. Type: AUG/HRS

QUASARS _AGN -- (SEYFERTS) --

3936 - "ABSORPTION CLOUD PHYSICS IN SEYFERT GALAXY NUCLEI -- CYCLE 2 "
Keywords : SEYFERT GALAXIES, BROAD LINE CLOUDS, X-RAY SOURCES
Proposers: Stephen P. Maran (PI; Nasa, Goddard Space Flight Center), J.Brandt (Colorado, University Of), J.Hutchings (Dominion Astrophysical Observatory; Canada), R.Mushotzky (Nasa, Goddard Space Flight Center), A.Smith (Nasa, Goddard Space Flight Center), R.Weymann (Mt. Wilson _Las Companas Obs.)

There are two targets: NGC 3783 and NGC 3516. Visit NGC 3783 three times and NGC 3516 twice. Each target will be observed using grating 160M at two settings. The two grating settings must be scheduled during a single visit. The visits for each target should be separated by at least 6 months. The three observations of NGC 3783 should therefore cover at least 18 months. More explicitly, line numbers 62 - 65 in this proposal should follow line numbers 50 - 52 in proposal 1160 (the cycle 1 proposal) by 9 months +/- 3 months. If target acquisitions are trivial on revisits, reallocate the time allotted to target acquisition so as to prolong the spectral exposures.

Prop. Type: AUG/HRS

QUASARS _AGN -- (QUASAR ABSORPTION) --
3939- CT - "LYMAN-ALPHA REGION OF QSOS WITH STRONG ABSORPTION LINES AUGMENTATION: CYCLE 2 OBSERVATIONS"
Continuation of Program Number 1193
Keywords : QUASARS, ABSORPTION LINES, 21-CM, SPECTROSCOPY
Proposers: Edward A. Beaver (PI; Uc, San Diego), R.Cohen (Uc, San Diego)

FOS Spectra will be obtained of the Ly-alpha region of 3 quasars with 21 cm absorption, 3CR 196, PKS 1229-021, and 3CR 286. The absorbing object is almost certainly a galaxy disk in each case. Measurement of the damped Ly-alpha line will determine the H I column density in the 21 cm absorption system, and comparison with 21 cm will yield the spin temperature. The number of contributing components will be determined from existing or new 21 cm observations. Comparison with optical observations will allow the determination of chemical abundances with respect to H for elements with low-ionization lines. Images taken after the new WF/PC installation may identify the absorbing galaxy and, if so, will allow us to characterize the impact parameter and Hubble type of galaxies producing damped Ly-alpha absorption at moderate redshift.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (
3941- CT - "PHYSICAL PARAMETERS IN THE LOCAL INTERSTELLAR MEDIUM CYCLE 2"
Continuation of Program Number 1201
Keywords : HI CLOUD, GAS
Proposers: Andrew M. Smith (PI; Nasa, Goddard Space Flight Center)

Using the 10 (super 5) resolving power mode of the HRS it is proposed to observe neutral as well as multiply ionized species in the local interstellar medium at distances less than 50 pc from the Sun. The primary goal is to determine local hydrogen atom densities using fine structure populations in carbon and silicon atoms. Other goals are to determine electron densities from the populations of fine structure levels in C (super +) and S (super +) ions and to set limits on local gas temperatures by combining observations of line profiles, doppler parameters and ionization equilibria in atoms and first ions of carbon, silicon and magnesium.

Prop. Type: AUG/HRS

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --

3943- CT - "LOCAL INTERSTELLAR MEDIUM AND D/H RATIO -- CYCLE 2 "

Continuation of Program Number 1175

Keywords : HYDROGEN COLUMN DENSITY, DEUTERIUM COLUMN DENSITY, DEUTERIUM ABUNDANCE

Proposers: Jeffrey L. Linsky (PI; Colorado, University Of), A.Brown (Colorado, University Of), S.Heap (Nasa, Goddard Space Flight Center), M.Jura (Uc, Los Angeles), W.Landsman (Nasa, Goddard Space Flight Center), B.Savage (Wisconsin, University Of), A.Smith (Nasa, Goddard Space Flight Center)

We will observe with 20,000 spectral resolution the stellar Lyman alpha emission line and interstellar hydrogen and deuterium absorption towards local late-type stars to derive the H and D column densities and D/H ratios along different lines of sight. High resolution (90,000) spectra of the MgII and FeII lines will help determine the interstellar line broadening and whether material along each line of sight has more than one velocity component. This is critical for accurate measurements of D/H, because both the D and H lines are on or near the flat part of the curve of growth. Previous IUE and Copernicus observations, which had low signal/noise and inadequate spectral resolution, provided very crude D/H values and suggested that the D/H ratio may vary within a few parsecs of the Sun. We will measure D/H with at least one order of magnitude improved precision and determine whether the proposed local variations are real. The local value(s) of D/H may be extrapolated to zero metal abundance to estimate the primordial value, which is valuable for constraining cosmological models.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (MASSIVE STARS) --

3945- CT - "G160M SPECTRA OF ETA CAR S CONDENSATION - CYCLE 2 "

Continuation of Program Number 1186

Keywords : STELLAR EVOLUTION, MASS LOSS, NUCLEOSYNTHESIS

Proposers: Dennis C. Ebbets (PI; Ball Aerospace Corporation), K.Davidson (Univ Of Minnesota), E.Malumuth (Computer Sciences Corporation), N.Walborn (Space Telescope Science Institute), R.White (Space Telescope Science Institute)

This is a new proposal submitted in March, 1992 to define one GHRS observation of the S Condensation for augmentation time for cycle 2. (5.23 hrs of augmentation time was awarded) The GHRS exposure records the MgII emission lines at 2800 A with G270M and the LSA to resolve component and velocity structure within the ejecta.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (SUBLUMINOUS STARS) --

3946- CT - "HIGHLY EVOLVED STARS OF LOW MASS CYCLE 2 BASELINE: FOS SPECTRA OF NPN 7027"

Continuation of Program Number 1212

Keywords : PLANETARY NEBULAE, PLANETARY NUCLEI

Proposers: Sara R. Heap (PI; Nasa, Goddard Space Flight Center), P.Harrington (Univ. Of Maryland, College Park), I.Hubeny (Nasa, Goddard Space Flight Center)

The FOS will be used to obtain a spectrum of the central star of the planetary nebulae, NGC 7027. This star is one of the hottest stars known (170,000 K).

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (HOT STARS) --

3947- CT - "ULTRAVIOLET SPECTRAL ATLAS OF O STARS CYCLE 2 OBSERVATIONS (GTO BASELINE)"

Continuation of Program Number 1215

Keywords : STELLAR WINDS, EXTENDED ATMOSPHERES

Proposers: Sara R. Heap (PI; Nasa, Goddard Space Flight Center), B.Altner (Applied Research Corp.), W.Ghrs-Team (Goddard Space Flight Center), I.Hubeny (University Space Research Association (Usra))

The major goal of this program is to derive the most reliable spectroscopic parameters possible for O-type stars, based on comparisons with non-LTE calculations of model atmospheres.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS)

3948- - "DOPPLER IMAGING OF THE CHROMOSPHERES AND TRANSITION REGIONS OF COOL STARS: AB DORADUS LATER CYCLE CONTINUATION"

Keywords : STELLAR CHROMOSPHERES, STELLAR TRANSITION REGIONS, DOPPLER IMAGING, STELLAR ACTIVITY

Proposers: John Brandt (University of Colorado), Alexander Brown (University of Colorado), Ken Carpenter (Goddard Space Flight Center), Douglas Duncan (STScI), Jeffrey L. Linsky (University of Colorado), Frederick M Walter (Suny-Stony Brook), Osmi Vilhu (University of Helsinki)

AB Dor (HD 36705) is one the most active single early K dwarfs known. It is very rapidly-rotating with a period of 0.514 days and vsini=100 km/s. It has been suggested that AB Dor is still contracting to the main sequence, on the basis of a strong Li I absorption line and Pleiades space motions. The phenomena exhibited by this star include flares, a large starspot, saturated emission line fluxes, bright nonthermal radio emission, and a co-rotating disk (or ring) located at two stellar radii that is identified from H-alpha emission. We propose to monitor AB Dor, which is in the continuous viewing zone, continuously for one rotation period to produce Doppler images of the lower chromosphere and the transition region in the light of Mg II, C IV, Si IV, O IV, C II, N V, Si III], and C III], with phase resolution of 0.05 at Mg II and 0.08 in the transition region. We will use these data to produce a 3-D model of the outer atmosphere of this star, using the density-sensitive line ratios and the measured emission line fluxes to infer the total nonradiative heating rate. We will obtain coordinated x-ray, radio, and optical observations.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS)

3949- - "NON-RADIATIVE HEATING IN PRE-MAIN SEQUENCE STARS: FUTURE CYCLE CONTINUATION"

Keywords : T TAURI STARS; CHROMOSPHERES; TRANSITION REGIONS

Proposers: John C. Brandt (University of Colorado), Alex Brown (University of Colorado), Jeffrey L. Linsky (University of Colorado), Frederick M. Walter (SUNY, Stony Brook)

We shall use the GHRS to obtain UV line fluxes and selected line profiles for a selected sample of pre-main sequence stars, 3 early G stars and 2 early K stars. Targets include the classical T Tauri stars SU Aur and RY Tau, the weak-lined T Tauri star V410 Tau, and the naked T Tauri stars HDE283572, and SAO76411A. We will use these spectra to study the atmospheric heating, dynamics, and density structure of these stars. In particular, we will use the density-sensitive lines and emission fluxes to construct atmospheric models. We will be searching for differences in atmospheric structure between the CTTS and the NTTS. We will obtain deep low dispersion observations from 1200 to 1600 Angstroms to search for molecular hydrogen emission from the inner regions of the gas disks, in order to determine whether the gas disk dissipates as fast as the dust disk in the NTTS.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --

3950 - "AGE DEPENDENCE OF NON-RADIATIVE HEATING IN STELLAR CHROMOSPHERES: CYCLE 2"

Keywords : CHROMOSPHERES; ROTATION; STELLAR AGES; YOUNG STARS

Proposers: Frederick M. Walter (PI; Suny, Stony Brook), J.Linsky (Colorado, University Of)

We propose to continue observations of a sample of late A/ early F dwarfs in the Pleiades, UMa and Hyades clusters, and in the field, to study the inception of chromospheric emission as a function of stellar temperature and age. The scope of this program has decreased with time: all we have time to do this cycle is alpha Aql, A7 IV-V.

Prop. Type: AUG/HRS

QUASARS AGN -- (QUASAR ABSORPTION) --

3951- CT - "WEAK ABSORPTION LINES IN 3C273: CYCLE 2 OBSERVATIONS "

Continuation of Program Number 1140

Keywords : QUASAR, ABSORPTION LINES, HALO

Proposers: Ray J. Weymann (PI; Carnegie Observatories), J.Brandt (U. Of Colorado)

HRS spectra of 3C273 will be obtained in the R=20000 mode over the range 1210-1425A and at selected longer wavelengths to detect weak absorption lines. Detections of, or upper limits on low column density remnants of the Lyman Alpha Forest at low redshifts will be made as well as profiles of such lines. Profiles of lines arising in the halo of our galaxy will also be obtained.

Prop. Type: GTO/HRS

QUASARS AGN -- (SEYFERTS) --

3952- CT - "HIGH RES SPECT OF THE NUCLEUS OF NGC 4151: CYCLE 2 "

Continuation of Program Number 1141

Keywords : SEYFERT GALAXY, AGN, EMISSION LINE, HALO, ABSORPTION LINES

Proposers: Ray J. Weymann (PI; Mount Wilson And Las Campanas Obs.), E.Beaver (Uc, San Diego), A.Boggess (Nasa, Goddard Space Flight Center), S.Heap (Nasa, Goddard Space Flight Center), J.Hutchings (Dominion Astrophysical Observatory; Canada), B.Savage (Wisconsin, University Of)

Spectra of the Nucleus of NGC 4151 will be obtained to study detailed emission and absorption structure of selected features as well as obtain spectra of halo absorption. Repeat nuclear observations will check for changes that may have occurred in fine detail in the C IV emission line profile.

Prop. Type: GTO/HRS

QUASARS AGN -- (QUASAR EMISSION) --
3953- CT - "SPECT. STUDIES OF SEVERAL HIGH Z BALQSOS: CYCLE 2 OBSERVATIONS "
Continuation of Program Number 1146
Keywords : QUASARS, ABSORPTION LINES
Proposers: Ray J. Weymann (PI; Mount Wilson And Las Campanas Obs.), E.Burbidge (Uc, San Diego), R.Cohen (Uc, San Diego), C.Foltz (Arizona, University Of), G.Hartig (Space Telescope Science Institute), V.Junkkarinen (Uc, San Diego), D.Turnshek (Space Telescope Science Institute)

A survey of the UV spectra of 2 high redshift Broad Absorption Line Quasars (BALQSOs) will be carried out with the low dispersion mode of FOS.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (HOT STARS) --
3954- CT - "STELLAR WINDS IN M31, M33 CYCLE 2"
Continuation of Program Number 1150
Keywords : HOT STARS, MASS-LOSS, STELLAR WINDS
Proposers: John B. Hutchings (PI; Dominion Astrophysical Observatory; Canada), P.Massey (Noao, Kitt Peak National Observatory)

We will obtain UV spectra of OB supergiant stars in M33 AND M31 to study stellar wind phenomena (resonance line profiles and velocities, stellar effective temperatures). We will also derive approximate UV extinction curves for these galaxies. These observations relate to global comparisons between galaxies of different types.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (
3957- CT - "SEARCH FOR INTERSTELLAR MOLECULES IN SPECTRA OF TWO B STARS -- CYCLE 2"
Continuation of Program Number 1200
Keywords : MOLECULAR CLOUD, INTERSTELLAR MOLECULES
Proposers: Andrew M. Smith (PI; Nasa, Goddard Space Flight Center), F.Bruhweiler (Catholic University Of America), J.Cardelli (Wisconsin, University Of)

We will probe the chemical and physcial processes in diffuse interstellar clouds and look for evidence of molecule formation in gas heated by shocks or intense ultraviolet radiation. We will observe HD62542, a star in the Gum Nebula at seven carousel positions in the medium resolution modes. Optical studies indicate that one of the components of its interstellar spectrum is characterized by high density (approximately 10,000/cubic cm) and highest density per unit visual extinction of any star yet studied. We will also observe omicron Persei using the echelle, and combine the results with previous high quality results obtained by the "Copernicus" satellite.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (
3960- CT - "SPECTROSCOPY OF MILKY WAY HALO GAS CYCLE 2"
Continuation of Program Number 1165
Keywords : INTERSTELLAR, GAS SPECTROSCOPY, UV, HALO
Proposers: Blair D. Savage (PI; Wisconsin, University Of), J.Cardelli (Wisconsin, University Of), D.Ebbets (Space Telescope Science Institute)

Milky Way halo gas will be studied at resolutions of E+5 and 2xE+4 by observing selected interstellar lines toward galactic and extragalactic objects. Information about kinematics, physical condition, and abundances in the as will be obtained.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (
3961- CT - "ELEMENTAL ABUNDANCES IN EARLY-TYPE STARS - CYCLE 2 OBSERVATIONS"
Continuation of Program Number 1182
Keywords : MS STAR, CHEMICALLY PECULIAR STAR, ABUNDANCE, SPECTROSCOPY, UV
Proposers: David S. Leckrone (PI; Nasa, Goddard Space Flight Center)

The resolving power and photometric quality of the GHRS are exploited in an investigation of the elemental abundances, atmospheric properties and evolutionary characteristics of non-magnetic, chemically peculiar (HgMn) B stars. Special emphasis is given to a thorough exploration of the Hg abundance and isotope anomalies to test diffusion scenarios. A wide ranging UV spectral survey at high resolution and high S/N will be conducted in a single archetypical star, chi Lupi, with the objective of deriving accurate elemental abundances over as much of the periodic table as possible. The stellar spectra will also be used as an "atomic physics" laboratory, to obtain basic information about the structure of and configuration interactions within complex atoms and ions.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --

3964- CT - "DYNAMICS AND ENERGY BALANCE IN STELLAR TRANSITION REGIONS CYCLE 2"

Continuation of Program Number 1176

Keywords : STELLAR CHROMOSPHERES, STELLAR TRANSITION REGIONS, F-M DWARF STARS, G-K GIANT STARS, STELLAR ACTIVITY

Proposers: Jeffrey L. Linsky (PI; Colorado, University Of), A.Brown (Colorado, University Of)

Late-type stars with convective zones and magnetic fields have plasma above the photosphere heated to temperatures above 10,000 K. We will use the GHRS to study the dynamics, energy balance, and nonradiative heating rates in these hot regions for a sample of late-type stars spanning a range of spectral type and luminosity. We will study the dynamics of stellar transition regions by measuring the redshifts, indicative of downflows, with high precision in lines of C III, C IV, Si IV, and O IV. The energy balance and local heating rates in stellar transition regions will be derived from an emission measure analysis of emission line fluxes and electron densities inferred from density-sensitive line ratios. Cycle 0 observations of the RS CVn system Capella show that the GHRS can measure ALL of the UV intersystem lines of Si III, C III, O III, N III, O IV, and S IV, which are useful density diagnostics. These data may require atmospheric models with two components (quiet and active regions).

Prop. Type: AUG/HRS

QUASARS _AGN -- (BL LAC) --

3965- CT - "SPECTROSCOPY OF BL LAC OBJECTS CYCLE 2"

Continuation of Program Number 1172

Keywords : (1) ACTIVE GALACTIC NUCLEI - BL LAC OBJECTS; (2) INTERSTELLAR MEDIUM - GALACTIC HALO

Proposers: Albert Boggess (PI; Nasa, Goddard Space Flight Center), F.Bruhweiler (Catholic University Of America), Y.Kondo (Nasa, Goddard Space Flight Center), C.Urry (Massachusetts Institute Of Technology)

One of the brightest X-ray emitting BL Lac objects, PKS 2155-304,will be observed for dual scientific purposes. The first objective is to look for the possible shortward shifted absorption in strong UV lines (e.g. C IV, Si IV and N V) to follow up on the report of shortward-shifted absorption in the X-ray by Canizares and Kruper (Ap.J., 278, 199 - 1984). A detection of such absorption would provide additional support to the relativistic jet model, in which a gas jet from BL Lac nucleus is moving toward us. The second objective is to probe the galactic halo gas using those bright BL Lac objects as continuum background source. A search will also be made for absorption arising in the the intergalactic medium and halos of intervening galaxies.

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR ABSORPTION) --
3967- CT - "HEII FOREST AND GUNN-PETERSON EFFECT IN HIGH Z QSOS - PART II LATER CYCLE"
Continuation of Program Number 3967
Keywords : QUASARS, ABSORPTION LINES, HELIUM
Proposers: Ray J. Weymann (PI; Carnegie Obs.), E.Beaver (Uc, San Diego), J.Brandt (U. Of Colorado), S.Heap (Nasa, Goddard Space Flight Center), S.Morris (Carnegie Obs.)

short spectra with the FOS will be obtained of high z QSOs to identify candidates for followup higher S/N observations. These data will give the greatest chance of separating the HeII Lyman alpha forest from any Gunn-Peterson HeII trough due to a smoothly distributed inter-cloud medium.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (
3987- CT - "PC IMAGING FOR ULTRAVIOLET SPECTRAL ATLAS OF O STARS IN THE MILKY WAY AND MAGELLANIC CLOUDS"
Continuation of Program Number 1215
Keywords : STELLAR WINDS, EXTENDED ATMOSPHERES
Proposers: Sara R. Heap (PI; Nasa, Goddard Space Flight Center)

We will obtain B-band pictures of the 30 Dor region in the Large Magellanic Cloud, which we will combine with existing U and V-band pictures in order to construct a color-magnitude diagram for the region. In later cycles, we will obtain G160M spectra of O stars in the Milky Way in order to carry out a quantitative, non-LTE photospheric analysis.

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR EMISSION) --
3988- CT - "UV SPECTROSCOPY OF LOW-REDSHIFT ACTIVE GALAXIES -- CYCLE 3 "
Continuation of Program Number 1170
Keywords : ACTIVE GALACTIC NUCLEI, SEYFERT, LINE PROFILES, BROAD LINE REGION, NARROW LINE REGION
Proposers: Albert Boggess (PI; Nasa, Goddard Space Flight Center), C.Wu (Computer Science Corporation)

FOS will be used to measure the ultraviolet spectrum of active galaxies. Complementary and simultaneous visual and infrared data will also be obtained. The profile of the emission lines will provide information on the broadening mechanism and dynamics of the emitting regions. Comparison of the profile and radial velocity of the emission lines produced by species of different ioni- zation potential will allow the study of the thermal and density stratification of the emitting regions. The degree of asymmetry of lines at different wave- lengths will allow the absorbing material be identified and located. The ratio of the UV to visible lines, such as those for O I and He II will be used to estimate the reddening along the line of sight. Ratio of emission line fluxes will be compared with models in order to derive the ionization mechanism, elec- tron temperature and density, and chemical composition of the emitting gas. The emission line properties of low luminosity will be compared with those of high luminosity objects in order to investigate the covering factor and evolutionary effects. The continumm spectrum from the UV to the IR will be used to establish the emission mechanism and the nature and luminosity of the energy source. The weak absorption lines will be used to establish the physical conditions and the chemical composition of the gas in: our Galaxy, intergalactic medium and the parent galaxy. Absorption produced by broad line clouds will give information on cloud motion and covering factor.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --
3990- CT - "INTERSTELLAR CARBON AND OXYGEN - CYCLE 3 "
Continuation of Program Number 1168
Keywords : INTERSTELLAR ABUNDANCES
Proposers: Michael Jura (PI; Uc, Los Angeles)

This work is to observe interstellar oxygen and carbon within 1 kpc of the sun.The goal is to measure the gas phase abundaces of these species, the densities and temperatures within the clouds, the amount of CO, the electron densities, and the mean intensity of the ultraviolet radiation field. These numbers will greatly improve our understanding of the interstellar medium.

Prop. Type: GTO/WFC

SOLAR SYSTEM -- (
3994- CT - "JUPITER - UV CAMPAIGN / WFPC "
Continuation of Program Number 1126
Keywords : JUPITER, ATMOSPHERE DYNAMICS
Proposers: James A. Westphal (PI; Caltech)

This program will obtain two four-color complete 360 degree maps with the WF/PC to measure the Jovian atmospheric motion. The first set will be obtained within a ten-hour period to allow for adequate overlap between the longitudinal strips. Then twenty hours later a second map set will be obtained to complete the dynamical set. Since Jupiter rotates approximately fifty degrees per HST orbit, these dynamical sets should be obtained for eight sequential orbits. UV imaging at the high spatial resolution of HST provides an excellent method of studying the upwelling processes, especially in the time domain.

Prop. Type: GTO/FOC

SOLAR SYSTEM -- (GIANT PLANETS) --

3997- CT - "FAR UV OBSERVATIONS OF THE GIANT PLANETS - CYCLE 1 JUPITER "
Continuation of Program Number 1269
Keywords : FAR ULTRAVIOLET, GIANT PLANETS, AURORAE
Proposers: Francesco Paresce (PI; Esa, Space Telescope Science Institute), J.Gerard (Liege, University Of; Belgium), A.Vidal-Madjar (Institute Of Astrophysics, Paris; France)

H and H2 are the main constituents of the upper atmospheres of the giant planets and Titan, H is abundant in their exospheres and magnetospheres and N2, produced by photolysis of NH3, dominates the lower atmosphere of Titan. The spatial distribution of these elements is determined by the photochemical and particle dissociation processes responsible for their production and by the transport mechanisms responsible for their distribution. The presence of these planetary constituents is revealed by emissions of the HI, 1216 A Lyman alpha line, the H2 Lyman and Werner, and the N2 Lyman-Birge-Hopfield bands in the 1000-2000A region, all produced by particle impact excitation and/or resonance scattering of sunlight. Spatial and spectral images of the H, H2 and N2 atmospheres around these objects, consequently, represent key diagnostic tools in the investigation of these fundamental planetary phenomena. Moreover, Lyman alpha images of the giant planets taken at high enough spatial resolution will permit a determination of the abundance of deuterium, an extremely sensitive tracer of primordial nucleosynthesis. We propose to obtain a series of high resolution images of the giant planets' upper atmospheres and near-planetary environments in the far uv that are unobtainable from the ground or from the present generation of planetary probes.

Prop. Type: GTO/HRS

SOLAR SYSTEM -- (

4001- CT - "H2 SURVEY OF JUPITER N. AURORA DURING ULYSSES FLYBY "
Continuation of Program Number 4001
Keywords : UV SPECTRA, UV EMISSION, PLANETARY ATMOSPHERES
Proposers: Laurence M. Trafton (PI; Texas, University Of)

Measure the H2 northern auroral emission of Jupiter during Ulysses flyby. The results will be compared with FOC images and Ulysses X-rays to establish the mechanism of X-ray emission from Jupiter.

Prop. Type: GTO/HSP

SOLAR SYSTEM -- (

4015- CT - "OPPORTUNITY OCCULTATIONS BY SMALL BODIES - CYCLE 2 "

Continuation of Program Number 4015

Keywords : COMET, ASTEROID, SATELLITE, PLUTO, OCCULTATION

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

Although an occultation by any specific comet, asteroid, satellite, or Pluto is unlikely to be observable from the ST, the scientific return from such an event would be great because of the superior signal-to-noise ratio achievable with the ST for occultation observations. We propose to observe occultations by these bodies with the ST, as the opportunites arise, to probe their atmospheres, determine their sizes and achieve other goals. With such diverse possibilities, one must examine each opportunity as it occurs and formulate an observing strategy to fit that particular case. Revision History: Received on RPS 9/1/89; Added to SCCS 9/5/89 Updated to V2 proposal instructions; - SALM 9/5/89 Updated to pass RPSS; asb@MIT 7May90; Small logic errors fixed--BJW 7/9/90; Changed SP. SCAN to SP. SCAN SING.-EXP--BJW 7/10/90; Changes in observations/ targets--amanda; Split proposal by cycle--BJW 4/24/91; Updated target list-- BJW 8/1/91; Updated target list--asb 3/18/92;

Prop. Type: GTO/AST

SOLAR SYSTEM -- (

4031- CT - "HIGH SPEED ASTROMETRY - A SEARCH FOR PLANETARY COMPANIONS TO LOW-MASS STARS CYCLE ONE - NEW AND IMPROVED"

Continuation of Program Number 2939

Keywords : FINE GUIDANCE SENSORS, FGS, STELLAR COMPANIONS, EXTRASOLAR PLANETS

Proposers: William H. Jefferys (PI; University Of Texas), G.Benedict (University Of Texas), R.Duncombe (University Of Texas), O.Franz (Lowell Observatory), L.Fredrick (University Of Virginia), P.Hemenway (University Of Texas), P.Shelus (University Of Texas)

We propose to test the hypothesis that jupiter-like planets are formed at distances from the primary dictated by the 'freezing' temperature of the volatiles which comprise jovian planets. Predicted periods for jovian planets orbiting this sample of very late-type, low-mass stars range from 70 to 160 days. We shall monitor the positions of these nearby late-M stars with a time-resolution of 4 to 10 days in an attempt to detect positional perturbations caused by possible jovian companions. Detection limits for these proposed targets lie between 0.4 and one Jupiter mass.

Prop. Type: GTO/HSP

QUASARS _AGN -- (
4034- CT - "GRAVITATIONAL LENSES PART I "
Continuation of Program Number 3250
Keywords : GRAVITATIONAL LENSES; BLACK HOLES; HUBBLE CONSTANT
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

Photometric and polarimetric observations will be made of systems whose properties are ascribed to the effect of a gravitational lens. The similarity of the images in the previously unobserved UV region of the spectrum, both photometrically and polarimetrically, is necessary for these objects to be gravitational lens systems; any differences found will be carefully studied to determine what constraints they put on the system. Systems whose properties appear consistent with a point mass deflector (i.e., a black hole) will be monitored to determine whether photometric or polarimetric variability exists in the images. The distance to the deflecting mass in this case can be related to the path length difference between the two image paths from the imaged quasar to the observer. The path length difference can be derived directly from the time difference between the same variation occurring in each image. The parallaxes of objects at E+3 Mpc distances are of obvious importance to a

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Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (
4036- CT - "X-RAY BINARIES "
Continuation of Program Number 3249
Keywords : X-RAY BINARIES: NEUTRON STARS: BLACK HOLES
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The extreme conditions existing in the near vicinity of neutron stars which are the secondaries in close binaries provide a laboratory in which we may observationally confirm or refine many of our basic theories of astrophysics. This program will monitor the photometric and polarimetric light curves of X-ray binaries at several different phases of the binary orbit in several different wavelength bands in the UV. The results will be related to the structure of, and physical conditions existing in, the gas streams (and possibly, the accretion disk) in these systems. Revision History (4036): Prepared for augmentation submission--Dolan 5/8/92;

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (

4037- CT - "REMNANT STARS IN SUPERNOVA REMNANTS "
Continuation of Program Number 3251
Keywords : SUPERNOVA REMNANTS; NEUTRON STARS
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The low frequency of occurrence of identified neutron stars located in supernova remnants (SNR's) is an unexplained embarassment to our generally accepted theories of stellar evolution and neutron star formation. We propose to search recent SNR's for any remnant star associated with them, and to study the photometric variability of known examples of neutron stars which are remnants of supernovae. The results will place important constraints on the mechanisms by which neutron stars originate. Revision History: Prepared for augmentation submission--Dolan 5/8/92;

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR EMISSION) --

4045- CT - "UV SPECTROSCOPY OF LOW-REDSHIFT ACTIVE GALAXIES -- RPT FOR 3206"
Continuation of Program Number 1170
Keywords : ACTIVE GALACTIC NUCLEI, SEYFERT, LINE PROFILES, BROAD LINE REGION, NARROW LINE REGION
Proposers: Albert Boggess (PI; Nasa, Goddard Space Flight Center), C.Wu (Computer Science Corporation)

FOS will be used to measure the ultraviolet spectrum of active galaxies. Complementary and simultaneous visual and infrared data will also be obtained. The profile of the emission lines will provide information on the broadening mechanism and dynamics of the emitting regions. Comparison of the profile and radial velocity of the emission lines produced by species of different ioni- zation potential will allow the study of the thermal and density stratification of the emitting regions. The degree of asymmetry of lines at different wave- lengths will allow the absorbing material be identified and located. The ratio of the UV to visible lines, such as those for O I and He II will be used to estimate the reddening along the line of sight. Ratio of emission line fluxes will be compared with models in order to derive the ionization mechanism, elec- tron temperature and density, and chemical composition of the emitting gas. The emission line properties of low luminosity will be compared with those of high luminosity objects in order to investigate the covering factor and evolutionary effects. The continumm spectrum from the UV to the IR will be used to establish the emission mechanism and the nature and luminosity of the energy source. The weak absorption lines will be used to establish the physical conditions and the chemical composition of the gas in: our Galaxy, intergalactic medium and the parent galaxy. Absorption produced by broad line clouds will give information on cloud motion and covering factor.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (
4046- CT - "HIGHLY EVOLVED STARS OF LOW MASS - CYCLE 1 "
Continuation of Program Number 1212
Keywords : PLANETARY NEBULAE, PLANETARY NUCLEI
Proposers: Sara R. Heap (PI; Nasa, Goddard Space Flight Center), J.Harrington (Maryland, University Of)

I propose to use the HRS to study highly evolved stars, particularly the central stars of planetary nebulae. The study includes (1) an attempt to detect and measure the flux from extremely hot stars (T>150,000 K), (2) an investigation of hydrogen and carbon-rich central stars and their recent ejecta, (3) an investigation of the interaction of the wind from a central star with the surrounding nebula, and (4) follow-up spectroscopic studies of uv-bright stars discovered in globular clusters.

Prop. Type: AUG/FOS

STELLAR ASTROPHYSICS -- (
4056- CT - "BINARIES IN GLOBULAR CLUSTERS AUGMENTATION: CYCLE 2 OBSERVATIONS "
Continuation of Program Number 3651
Keywords :
Proposers: Bruce Margon (PI; Washington, University Of), R.Allen (University Of Arizona), S.Anderson (University Of Washington), J.Angel (University Of Arizona), F.Bartko (University Of California, San Diego), E.Beaver (University Of California, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (University Of California, San Diego), A.Davidsen (Johns Hopkins University), R.Downes (Nasa Goddard Space Flight Center), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute)

The pre-launch FOS GTO program proposed a systematic study of degenerate stars in binary systems, both in the field and in globular clusters, plus a handful of related objects. For the isolated field systems, the emphasis is on spectro- photometry (in many cases time-resolved over a pulse or orbital period) and spectropolarimetry, to observe the effects of the intense ionizing flux emitted by the compact object on the nearby normal star and/or accretion disk. While some such effects are seen from the ground, they should be far more spectacular in the UV. The GTO program for the globular cluster systems typically proposes WF/PC or FOC images to locate candidates for cluster X-ray sources, followed by confirming FOS spectroscopy. Our published FOC observations of M14 show that even with the primary's spherical aberration, it is possible to reach flux levels relevant to these problems with angular resolution far better than achievable from the ground. Even one or two new close binaries identified through this program will be extremely important, as these systems are thought to dominate the kinetic energy budget of globular clusters, yet virtually none are currently known. Also proposed for augmentation are two related programs: FOS observations of the Crab pulsar and a study of UV-bright objects in globular cluster cores. The increased FOS integration times caused by the spherical aberration have drastically disrupted the original intended scientific program; augmentation proposed here partially restores these efforts.

Prop. Type: AUG/FOS

QUASARS AGN -- (AUG/FOS) --
4057- CT - "SPECTROPOLARIMETRY OF QSOS, BLAZARS AND AGN AUGMENTATION: CYCLE 2 OBSERVATIONS"
Continuation of Program Number 3646
Keywords : QSOS, BLAZARS, SEYFERT, AGN, POLARIZATION
Proposers: J. Roger P Angel (PI; University Of Arizona), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Measurement of the spectrum of polarization has proven to be a powerful tool in deciphering emission processes and source geometry in AGN. This program will extend these observations into the UV below 3000A.

Prop. Type: AUG/FOS

STELLAR ASTROPHYSICS -- (
4058- CT - "MASS EXCHANGE BINARIES (FOS 34) AUGMENTATION: CYCLE 2 OBSERVATIONS "
Continuation of Program Number 3651
Keywords :
Proposers: Bruce Margon (PI; Washington, University Of), R.Allen (University Of Arizona), S.Anderson (University Of Washington), J.Angel (University Of Arizona), F.Bartko (University Of California, San Diego), E.Beaver (University Of California, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (University Of California, San Diego), A.Davidsen (Johns Hopkins University), R.Downes (Nasa Goddard Space Flight Center), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute)

The pre-launch FOS GTO program proposed a systematic study of degenerate stars in binary systems, both in the field and in globular clusters, plus a handful of related objects. For the isolated field systems, the emphasis is on spectro- photometry (in many cases time-resolved over a pulse or orbital period) and spectropolarimetry, to observe the effects of the intense ionizing flux emitted by the compact object on the nearby normal star and/or accretion disk. While some such effects are seen from the ground, they should be far more spectacular in the UV. The GTO program for the globular cluster systems typically proposes WF/PC or FOC images to locate candidates for cluster X-ray sources, followed by confirming FOS spectroscopy. Our published FOC observations of M14 show that even with the primary's spherical aberration, it is possible to reach flux levels relevant to these problems with angular resolution far better than achievable from the ground. Even one or two new close binaries identified through this program will be extremely important, as these systems are thought to dominate the kinetic energy budget of globular clusters, yet virtually none are currently known. Also proposed for augmentation are two related programs: FOS observations of the Crab pulsar and a study of UV-bright objects in globular cluster cores. The increased FOS integration times caused by the spherical aberration have drastically disrupted the original intended scientific program; augmentation proposed here partially restores these efforts.

Prop. Type: AUG/FOS

QUASARS _AGN -- (
4061- CT - "SEARCH FOR EXTENDED GALACTIC HALOS (FOS 23) AUGMENTATION: CYCLE 2 OBSERVATIONS"
Continuation of Program Number 3646
Keywords : GALACTIC HALOS, QUASAR
Proposers: Ralph Bohlin (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Use QSOs projected close to nearby galaxies to search for halos sufficiently extended to explain the observed statistics of QSO absorption line spectra. Different candidate galaxies have been chosen, including some known to have extended 21 cm halos, galaxies in and out of clusters, etc. Galaxies are chosen with z>0.001 where possible, so that local Lyman alpha absorption can be resolved from a galaxian column density of 2E19 of HI in our R=1200 mode. This is a UV specific problem that requires ST collecting area. A positive detection will produce a point on the rotation curve far into the galaxy halo, as well as crude information on the physical conditions of the halo gas. Each spectrum will also contain information on the gas distribution of our galaxy.

Prop. Type: AUG/FOS

GALAXIES CLUSTERS -- (
4062- CT - "STELLAR AND GAS DYNAMICS IN NORMAL GALAXIES AUGMENTATION: CYCLE 2 OBSERVATIONS"
Continuation of Program Number 3782
Keywords : GALAXIES, STELLAR DYNAMICS, IONIZED GAS
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applies Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

The FOS will be used with small apertures to map the stellar velocity dispersion and rotation in a grid covering the central 1" of NGC224 (M31). The velocity disperions and rotation curves will be used to model the nuclear dynamics and to measure the nuclear M/L. Line strengths will be used to measure changes in the stellar populations in the central 1". FOS spectra of emission-line clouds within the nuclear region will be used to establish their physical characteristics, ionization mechanisms, and dynamics.

Prop. Type: AUG/FOS

STELLAR POPULATIONS -- (
4063- CT - "GLOBULAR CLUSTER CORE STRUCTURE AND DYNAMICS (FOS 36) AUGMENTATION: CYCLE 2 OBSERVATIONS"
Continuation of Program Number 3651
Keywords : GLOBULAR CLUSTER
Proposers: Ralph Bohlin (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of), L.Spitzer Jr. (Princeton University)

Obtain data on the stellar populations in the central cores of globular clusters. Clusters with and without central unresolved cusps, and with and without central X-ray sources will be observed. Spectra will be obtained at the center of the UV brightness, and at a distance within about one core radius. We might expect these spectra to differ; massive objects formed in collisions may produce unexpected spectral features, as well as relatively intense UV radiation in the central core.

Prop. Type: AUG/FOC

QUASARS _AGN -- (QUASAR ABSORPTION) --
4069- CT - "FAR-ULTRAVIOLET SPECTRA OF VERY HIGH REDSHIFT QUASARS "
Continuation of Program Number 3504
Keywords : FOC
Proposers: Peter Jakobsen (PI; Esa - Estec; Netherlands), F.Macchetto (Esa, Space Telescope Science Institute)

This proposal is continuation of an exploratory survey of the redshifted Lyman continuum spectra of high redshift quasars using the FOC far-UV objective prisms (FOC/GTO 1235 and 3179). The main objective is to investigate the opacity of the intergalactic medium in the Lyman continuum and to carry out the He+ equivalent of the Gunn-Peterson test for once ionized intergalactic helium.

Prop. Type: AUG/FOC

GALAXIES _CLUSTERS -- (NEARBY GALAXIES) --
4070- CT - "BULGE STELLAR POPULATIONS IN SO GALAXIES: CYCLE 2"
Continuation of Program Number 3487
Keywords : EARLY-TYPE GALAXIES, STAR FORMATION
Proposers: Jean-Michel Deharveng (PI; Laboratoire Astronomie Spatiale; France), B.Rocca-Volmerange (Institute Of Astrophysics, Paris; France)

It is proposed to study the origin of the UV flux in elliptical-type population and to determine the respective contribution from young stars and from hot evolved stars. Two SO galaxies NGC 5102 and NGC 3115, at reasonable distance and with very different gas contents, have been selected. Observations through several filters (especially a far UV filter) will allow to resolve and study the massive stars, if they exist. The UV surface brightness of the unresolved background will be measured and will set constraints on the characteristics of hot evolved stars.

Prop. Type: AUG/FOC

GALAXIES _CLUSTERS -- (NEARBY GALAXIES) --
4071- CT - "UV STUDIES OF GALAXIES - CYCLE 2 "
Continuation of Program Number 3487
Keywords : EARLY-TYPE GALAXIES, STAR FORMATION, SPIRAL GALAXIES
Proposers: Jean-Michel Deharveng (PI; Laboratoire Astronomie Spatiale; France), A.Boksenberg (Royal Greenwich Observatory; Uk), P.Crane (European Southern Observatory; Germany), M.Disney (University College, Cardiff; Uk)

The complex nuclear regions of a few typical galaxies will be investigated in order to get the structure both in the continuum and in the light of relevant emission lines with the highest possible resolution. The following objects have been selected. NGC 1365 is a case of active nuclear region in a barred spiral galaxy, which contains optical hot spots and a number of compact radio sources. In NGC 4278, massive hot stars, possibly formed from the gas accumulated in the center, will be searched while mapping the distribution of the ionized gas. NGC 5194 displays in an especially favorable fashion the different manifestations of the energy flow in an active galaxy. The radio elliptical 3C285 exhibits a twisting of isophotes all the way to the center.

Prop. Type: AUG/FOC

GALAXIES _CLUSTERS -- (EVOLUTION/COSMOLOGY) --
4072- CT - "STAR FORMATION RATES IN DISTANT CLUSTER GALAXIES: CYCLE 2"
Continuation of Program Number 3487
Keywords : EARLY-TYPE GALAXY, EVOLUTION GALAXY CLUSTER
Proposers: Jean-Michel Deharveng (PI; Laboratoire Astronomie Spatiale; France), R.Ellis (Physics Department, University Of Durham; Uk), C.Mackay (Institute Of Astronomy, Cambridge; Uk)

Multicolor photometry and spectroscopic redshifts are available for a complete sample of faint galaxies in the southern cluster Abell 370 at a redshift of z=0.37. Strong evidence has been found for residual star formation in the red cluster galaxies. This may reflect general evolution in the cluster ellipticals, or it could represent the final transition from infalling gas-rich systems to present-day lenticular galaxies. FOC will be used to extend the spectral energy distributions for cluster members into the far-UV providing direct measures of the proportions of young and evolved stars in a carefully selected sample of red members complete to K=17.0.

Prop. Type: AUG/FOC

STELLAR ASTROPHYSICS -- (HOT STARS) --
4073- CT - "THE VERY MASSIVE OBJECTS R136A IN THE 30 DORADUS NEBULA, NGC 3603 AND ETA CARINAE: CYCLE 2"
Continuation of Program Number 3747
Keywords : R136A, NGC 3603, ETA CAR, HII REGIONS, WR STARS
Proposers: Gerd Weigelt (PI; Space Telescope Science Institute), F.Macchetto (Esa, Space Telescope Science Institute)

R136a is the core of the ionizing cluster NGC 2070 at the center of the 30 Doradus nebula in the Large Magellanic Cloud. The interesting question is whether R136 is a supermassive object or whether it is a dense star cluster. We propose FOC imaging and roll deconvolution in order to solve the question. Roll deconvolution can yield exactly diffraction-limited resolution, for example, 0.02" at lambda = 200 nm. The same observations are proposed in order to study the nature HD 97950 AB in NGC 3603 and Eta Carinae. HD 97950 in NGC 3603 is probably of similar nature as R136.

Prop. Type: AUG/FOC

QUASARS _AGN -- (OTHER ACTIVE NUCLEI) --
4074- CT - "THE RELATIONSHIP BETWEEN GALACTIC ACTIVITY AND GRAVITATIONAL INTERACTION: CYCLE 2"
Continuation of Program Number 3487
Keywords : INTERACTING GALAXIES, ACTIVE GALAXIES, NUCLEI OF GALAXIES
Proposers: Cesare Barbieri (PI; University Of Padova; Italy), F.Macchetto (Esa, Space Telescope Science Institute), P.Rafanelli (Padova Observatory; Italy), H.Schulz (Ruhr University Bochum; Germany, West)

It has long been known that activity in galaxies can be triggered by gravitational interaction. This hypothesis is supported by direct observations which show that a considerable excess of Seyfert galaxies and low redshift QSO's belongs to an interacting or disturbed system. A typical member of this class of objects is the S1 galaxy NGC6240, which is characterized by two close nuclei and is also an outstanding member of the new class of extreme IR galaxies identified by IRAS. High resolution imaging of the region between the two nuclei, using the FOC F/96 camera in combination with narrow band filters, centered on crucial lines and on the continuum, will provide information on the nature and on the effects of the collision between the two nuclei.

Prop. Type: AUG/FOC

INTERSTELLAR MEDIUM -- (PLANETARY NEBULAE) --
4075- CT - "MAGELLANIC CLOUD PLANETARY NEBULAE: CYCLE 2 "
Continuation of Program Number 3747
Keywords : PLANETARY NEBULAE, HIGH RESOLUTION IMAGING
Proposers: J. Chris Blades (PI; Space Telescope Science Institute)

Using the high resolution f/96 mode of the FOC we shall image Magellanic Cloud Planetary Nebulae - objects whose diameters are less than 2 arcsec. Their known distances will allow nebular masses to be derived from their angular diameters, yielding the distribution of PN shell masses for the first time. In combination with their nebular expansion velocities, known from ground-based studies, it will be possible to determine the age of the objects.

Prop. Type: GTO/HSP

SOLAR SYSTEM -- (
4076- CT - "DO NEPTUNE AND PLUTO HAVE RINGS? "
Continuation of Program Number 1086
Keywords : NEPTUNE, PLUTO, PLANETARY RINGS, OCCULTATIONS, RING IMAGING
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The origin of planetary ring systems remains unknown. One common property of the known ringed planets--Jupiter, Saturn, and Uranus--is that each possesses a regular satellite system, which would point to a close connection between the formation of rings and satellites. However, the dynamical lifetimes of several important features in Saturn's are short, which would lead to the conclusion that these rings are young. Continuing this line of reasoning, one would conclude that rings are not formed concurrently with planets--perhaps the formation of rings depends on encounters of planets with small bodies, or other random events: ring systems come and go. The discovery of ring systems around Neptune and/or Pluto would shift opinion toward this latter view, while the lack of detectable rings would greatly strengthen their apparent connection with regular satellite systems. The August, 1989 Voyager encounter with Neptune discovered complete rings with shepherd satellites,

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Prop. Type: AUG/FOS

QUASARS _AGN -- (AUG/FOS) --
4078- CT - "UV SPECTRA OF LOW-REDSHIFT QSOS, HE I AUGMENTATION: CYCLE 2 OBSERVATIONS"
Continuation of Program Number 3646
Keywords :
Proposers: E. Margaret Burbidge (PI; University Of California, San Diego), R.Allen (University Of Arizona), J.Angel (University Of Arizona), F.Bartko (Unaffiliated), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), R.Cohen (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute), V.Junkkarinen (Uc, San Diego), B.Margon (University Of Washington)

This proposal contains observations which will help to complete a number of FOS IDT scientific programs. In a collaborative program with the GHRS IDT, we will study absorption from He I in the Lyman alpha forest clouds and in the intergalactic medium at high z to determine conditions in the early universe.

Prop. Type: AUG/FOS

QUASARS _AGN -- (AUG/FOS) --

4079- CT - "UV SPECTRA OF LOW-REDSHIFT-QSOS AUGMENTATION: CYCLE 2 OBSERVATIONS"
Continuation of Program Number 3646
Keywords :
Proposers: E. Margaret Burbidge (PI; University Of California, San Diego), R.Allen (University Of Arizona), J.Angel (University Of Arizona), F.Bartko (Unaffiliated), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), R.Cohen (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute), V.Junkkarinen (Uc, San Diego), B.Margon (University Of Washington)

This proposal contains observations which will help to complete a number of FOS IDT scientific programs. These programs are not in direct conflict with approved GO or GTO programs, but explore wavelength or signal-to-noise regimes not covered by other programs, or else they concentrate on objects of special interest. These programs will lead to a better understanding of the structure and kinematics of the broad-line region by studies of very high signal-to-noise line profiles in low redshift QSOs. The same data will also provide measurements of weak lines which will lead to improved photoionization models. This data set will yield high quality absorption line data for studies of specific absorption line systems and an independent sample for studies of absorption line evolution.

Prop. Type: AUG/FOS

QUASARS _AGN -- (AUG/FOS) --

4080- CT - "GRAVITATIONALLY LENSED QSOS AUGMENTATION: CYCLE 2 OBSERVATIONS"
Continuation of Program Number 3646
Keywords : GRAVITATIONAL LENSES, QUASARS, UV ABSORPTION LINES.
Proposers: E. Margaret Burbidge (PI; University Of California, San Diego), R.Allen (University Of Arizona), J.Angel (University Of Arizona), F.Bartko (Unaffiliated), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), R.Cohen (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute), V.Junkkarinen (Uc, San Diego), B.Margon (University Of Washington)

This proposal contains observations which will help to complete a number of FOS IDT scientific programs. Evolution of the sizes of the Lyman alpha clouds will be studied with ultraviolet spectra of a well separated pair of QSO images. In two "gravitational lensing" multiple QSOs, we shall ascertain whether the UV spectra of the images are identical, while detecting absorption lines (especially Lyman alpha) which might exhibit differences and hence give information on sizes of absorbing clouds.

Prop. Type: AUG/FOS

QUASARS _AGN -- (AUG/FOS) --
4081- CT - "SPECTRA AT LAMBDA <3000 ANGSTROMS FOR QSOS WITH Z~2 AUGMENTATION: CYCLE 2"
Continuation of Program Number 3646
Keywords :
Proposers: E. Margaret Burbidge (PI; University Of California, San Diego), R.Allen (University Of Arizona), J.Angel (University Of Arizona), F.Bartko (Unaffiliated), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), R.Cohen (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute), V.Junkkarinen (Uc, San Diego), B.Margon (University Of Washington)

Observe one of the brightest broad absorption line QSOs at low redshift to determine whether it has enough light for higher resolution observations. If so, these will be done with another proposal. The goal is to investigate the physical conditions in the BAL region through the study of the high ionization UV lines.

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (
4083- CT - "REMNANT STARS IN SUPERNOVA REMNANTS-CONT OF 1098 "
Continuation of Program Number 1098
Keywords : SUPERNOVA REMNANTS; NEUTRON STARS
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

In this proposal we will search for a remnant star associated with SN1987A. Once detected, we will study the photometric variability in an attempt to place important constraints on the mechanisms by which neutron stars originate. REVISION HISTORY: Created 11/18/91;

Prop. Type: AUG/WFC

STELLAR POPULATIONS -- (
4084- CT - "GLOBULAR CLUSTER CORES, WFPC GTO AUGMENTATION, CYCLE 2"
Continuation of Program Number 3640
Keywords : GLOBULAR CLUSTERS
Proposers: James A. Westphal (PI; Caltech)

Stellar Populations Part III: Globular Cluster Cores. The cores of 4 globular clusters will be imaged in U to study core properties and search for collapsed cusps. The clusters are relatively nearby and span the range from very regular to very cusplike.

Prop. Type: GTO/WFC

STELLAR POPULATIONS -- (
4085- CT - "THE STELLAR POPULATION IN BAADES WINDOW, WFPC GTO AUGMENTATION, CYCLE 2"
Continuation of Program Number 3640
Keywords : BAADES WINDOW, GALACTIC BULGE
Proposers: James A. Westphal (PI; Caltech)

The target is a selected field within "Baade's Window" where the stellar population of the galactic bulge can be observed with less obscuration than in neighboring areas. It lies 3.8 degrees from the direction to the galactic center. The bulge population is known to contain stars more metal-rich than those found anywhere else in the Galaxy, and it is believed to be similar to the stellar population in elliptical galaxies. The goal of this HST-WF/PC program is to extend the H-R diagram and luminosity function of the bulge population to much fainter limits than possible with groundbased tele- scopes. The inferred IMF will be compared with those of less metal-rich populations.

Prop. Type: AUG/WFC

STELLAR POPULATIONS -- (
4086- CT - "COMPACT BLUE OBJECTS IN NGC 1275, WFPC GTO AUGMENTATION, CYCLE 2"
Continuation of Program Number 3640
Keywords : CLUSTERS, NGC 1275
Proposers: James A. Westphal (PI; Caltech)

A population of bright, blue objects around NGC 1275 was detected in an initial PC exposure. These my be luminous globular clusters at an early stage of evolution. Deeper exposures will be used to probe the luminosity function of the objects, and to improve measurements of brightnesses and colors. A medium band picture will confirm that the objects are not emission line sources. Short exposures will be obtained to study the galaxy nucleus. PSF observations will be made to get better photometry, to check if the objects are spatially resolved, and to allow deconvolotuion of the structure in the underlying galaxy light.

Prop. Type: AUG/WFC

INTERSTELLAR MEDIUM -- (
4087- CT - "STRUCTURE AND ENVIRONMENT OF HII REGIONS IN 30 DORADUS, WFPC GTO AUGMENTATION, CYCLE 2"
Continuation of Program Number 3641
Keywords : INTERSTELLAR MEDIUM, HII REGIONS, LMC
Proposers: James A. Westphal (PI; Caltech)

Much of the scientific utility of narrow band imaging of nebulae lies in the study of stratification and structural variations among emission lines that trace regions of different density, temperature, and radiation environment. As such, imaging studies of nebulae are not as seriously affected by HST's optical problems as many programs, so long as adequate signal to noise is obtained to allow reliable deconvolution of the structure present. For nearby objects, HST can resolve physically important scales associated with many gasdynamic and radiative processes in the ISM. In this section of the WFPC HII proposal, we request time augment our study of the 30 Doradus region by investigating the structure of the ionized gas. This investigation will help us understand the structure and physics of H II regions and the ISM in external galaxies.

Prop. Type: AUG/WFC

INTERSTELLAR MEDIUM -- (
4088- CT - "THE STRUCTURE AND ENVIRONMENT OF HII REGIONS IN THE GALAXY AND M33, WFPC AUGMENTATION, CYCLE 2"
Continuation of Program Number 3641
Keywords : INTERSTELLAR MEDIUM, HII REGIONS, MILKY WAY, M33
Proposers: James A. Westphal (PI; Caltech)

Much of the scientific utility of narrow band imaging of nebulae lies in the study of stratification and structural variations among emission lines that trace regions of different density, temperature, and radiation environment. As such, imaging studies of nebulae are not as seriously affected by HST's optical problems as many programs, so long as adequate signal to noise is obtained to allow reliable deconvolution of the structure present. For nearby objects, HST can resolve physically important scales associated with many gasdynamic and radiative processes in the ISM. In the present proposal, we: 1) extend our study of the physical processes in H II regions to two additional regions (NGC 7635 and M 16), with specific goals to study the interface between the H II region and the adjoining photodissociation region, and the interaction between the radiation field and dense clumps of material, and 2) obtain images of two fields in M 33 to start the process of applying our understanding of the structure and physics of Galactic H II regions to the ISM in external galaxies.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (HOT STARS) --
4092- CT - "EXTENDED ATMOSPHERES OF EARLY-TYPE STARS: CYCLE 2 OBSERVATIONS (GTO AUGMENTATION)"
Continuation of Program Number 1211
Keywords : STELLAR WINDS, EXTENDED ATMOSPHERES
Proposers: Sara R. Heap (PI; Nasa, Goddard Space Flight Center), B.Altner (Applied Research Corp.), A.Fullerton (Bartol Inst., Univ. Of Delaware), H.Heinrichs (University Of Amsterdam; Holland), O.Stan (Bartol Inst.)

We will monitor one star, Lambda Cephei (HD210839), in order to detect and track absorption components (DAC's) in its wind.

Prop. Type: AUG/HRS

INTERSTELLAR MEDIUM -- (
4094- CT - "SPECTROSCOPY OF MILKY WAY HALO GAS---AUGMENTED CYCLE 2"
Continuation of Program Number 1165
Keywords : INTERSTELLAR, GAS SPECTROSCOPY, UV, HALO
Proposers: Blair D. Savage (PI; Wisconsin, University Of), J.Cardelli (Wisconsin, University Of), D.Ebbets (Space Telescope Science Institute)

Milky Way halo gas will be studied at resolutions of E+5 and 2xE+4 by observing selected interstellar lines toward galactic and extragalactic objects. Information about kinematics, physical condition, and abundances in the as will be obtained.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (SUBLUMINOUS STARS) --
4100- CT - "HIGHLY EVOLVED STARS OF LOW MASS CYCLE 2 AUGMENTATION"
Continuation of Program Number 1212
Keywords : PLANETARY NEBULAE, PLANETARY NUCLEI
Proposers: Sara R. Heap (PI; Nasa, Goddard Space Flight Center), I.Hubeny (Nasa, Goddard Space Flight Center (Usra))

We will use the GHRS and FOS to study central stars of planetary nebulae, including (1) extremely hot stars (T>150,000 K), (2) carbon-rich central stars and recent ejecta, (3) stars with very strong winds, and (4) stars in globular clusters. In this cycle 2 augmentation time, we will get an FOS spectrum of the extremely hot central star of NGC 2440.

Prop. Type: AUG/HRS

GALAXIES _CLUSTERS -- (NUCLEI) --
4103- CT - "THE NUCLEUS OF M83:FOS SPECTROSCOPY OF NUCLEUS CYCLE-2 (GTO AUG)"
Continuation of Program Number 1213
Keywords : BARRED SPIRAL, GALACTIC NUCLEI
Proposers: Sara R. Heap (PI; Nasa, Goddard Space Flight Center), E.Malumuth (Computer Sciences Corp), V.Rubin (Carnegie Institute Of Washington), T.Stecher (Nasa, Goddard Space Flight Center), W.Waller (Nasa, Goddard Space Flight Center)

We will use the HST/WFC AND FOS to survey the nuclear regions of M83, a nearby barred spiral galaxy with a star-burst nucleus.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (HOT STARS) --
4104- CT - "ULTRAVIOLET SPECTRAL ATLAS OF O STARS -CYCLE 2 OBSERVATIONS (GTO AUGMENTED)"
Continuation of Program Number 1215
Keywords : STELLAR WINDS, EXTENDED ATMOSPHERES
Proposers: Sara R. Heap (PI; Nasa, Goddard Space Flight Center), B.Altner (Applied Research Corp.), W.Ghrs-Team (Goddard Space Flight Center), I.Hubeny (University Space Research Association (Usra))

The major goal of this program is to derive the most reliable spectroscopic parameters possible for O-type stars, based on comparisons with non-LTE calculations of model atmospheres.

Prop. Type: GTO/FOS

INTERSTELLAR MEDIUM -- (SN _SNR) --
4108- CT - "SUPERNOVA REMNANTS AND NUCLEOSYNTHESIS (FOS 30): AUGMENTATION CYCLE 2 OBSERVATIONS"
Continuation of Program Number 3666
Keywords : SUPERNOVA REMNANTS, NUCLEOSYNTHESIS
Proposers: Arthur F. Davidsen (PI; Johns Hopkins University), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corp.), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Overall program: UV and optical spectra of four supernova remnants (SNRs) will be used to study a number of problems related to abundances, grain destruction, interstellar medium properties and physical conditions in SNR shocks. Representatives of three of the main classes of SNRs (Crab-nebula like, Balmer-line and "normal") will be studied in the LMC, where reasonably low reddening permits UV observations. An oxygen-rich SNR in NGC

4449 will be observed, taking advantage of the small FOS slits to isolate the SNR from surrounding H II emission. Two M33 SNRs that were previously part of this proposal have been dropped due to time limitations. This proposal is augmented time to obtain early acq images of two LMC remnants and spectra of N49, which had early acq images in Cy. 0.

Prop. Type: GTO/OS

QUASARS _AGN -- (

4112 - "EVOLUTION OF LYMAN-ALPHA AND CIV ABSORPTON SYSTEMS: CYCLE 2"
Keywords : QUASAR, SPECTROSCOPY, ABSORPTION LINES, EMISSION LINES, EVOLUTION
Proposers: John N. Bahcall (PI; Institute For Advanced Study), R.Green (Noao, Kitt Peak National Observatory)

The evolution of Lyman-alpha and CIV absorption line systems in quasar spectra will be investigated using 21 optically bright quasars with a wide range of redshifts; the wavelength at which the Lyman cutoff appears will also be determined. All of the prominent emission and absorption lines will be measured. ST observations are required because the spectral features of interest are in the far ultraviolet and are inaccessible from the ground.

Prop. Type: GTO/OS

SOLAR SYSTEM -- (GIANT PLANETS) --

4113 - "AURORAL IMAGING OF JUPITER WITH THE FOC CYCLE 2"
Keywords : JUPITER, AURORA, H2
Proposers: John J. Caldwell (PI; York University; Canada)

Observe Jupiter with the FOC for H2 auroral emissions at 1600A, using two filters in series to reduce the red leak. Image the north polar aurora on seven consecutive orbits, to cover one Jupiter rotation. Starting time may be chosen at scheduler's convenience. Image the south polar once, where the central meridian longitude is constrained.

Prop. Type: GTO/OS

QUASARS _AGN -- (

4115 - "IMAGING AND SPECTROSCOPY OF A COMPLETE SAMPLE OF BRIGHT NEARBY QUASARS: II. SPECTROSCOPY: CYCLE 2"
Keywords : QUASAR, SPECTROSCOPY, EMISSION LINES, ABSORPTION LINES, INTERGALACTIC, HOST GALAXY
Proposers: John N. Bahcall (PI; Institute For Advanced Study), R.Green (Noao, Kitt Peak National Observatory), D.Schneider (Institute For Advanced Study)

FOS spectra will be obtained for seven optically bright PG quasars [3C 273, PG 0953+415, PG 1116+215, PKS 1302-102, PG 1700+518, GQ Com, and 3C 249.1] with Mb </= -25.0 mag and z </= 0.35, as well as V </= 15.7 mag. The spectra will be analyzed for both absorption and emission features. ST observations are required because the spectral features of greatest interest in these small redshift objects are in the far ultraviolet, inaccessible from the ground.

Prop. Type: GTO/OS

QUASARS _AGN -- (

4117 - "DO RICH CLUSTERS OF GALAXIES PRODUCE QUASAR ABSORPTION LINES : CYCLE 2"
Keywords : QUASARS, SPECTROSCOPY, ABSORPTION LINES, NEARBY GALAXY CLUSTER, INTERGALACTIC
Proposers: John N. Bahcall (PI; Institute For Advanced Study), R.Green (Noao, Kitt Peak National Observatory), K.Ratnatunga (Institute For Advanced Study)

Five quasars [NAB 0024+22, PKS 0003+15, UM 381, UM 324, and AO 1058+11] that lie behind rich clusters of galaxies will be studied spectroscopically with the FOS to see if the clusters produce ultraviolet absorption lines. All of the quasar spectra will be used also to help determine the statistics of quasar absorption lines, the main goal of the GTO proposal "Evolution of Lyman-alpha and C IV Absorption Systems" (J. Bahcall, PI). ST observations are required in order to observe the ultraviolet absorption lines that may be produced by the nearby rich clusters of galaxies.

Prop. Type: GTO/OS

QUASARS _AGN -- (

4118 - "DO GALAXIES PRODUCE QUASAR ABSORPTION LINES? : CYCLE 2"
Keywords : QUASAR, SPECTROSCOPY, ABSORPTION LINE, GALAXY, GRAVITATIONAL LENS
Proposers: John N. Bahcall (PI; Institute For Advanced Study), K.Ratnatunga (Institute For Advanced Study)

SPECTRA WILL BE OBTAINED WITH THE FOS FOR A NUMBER OF QUASARS THAT HAVE A SMALL ANGULAR SEPARATION ON THE SKY FROM GALAXIES OR GALAXY VOIDS, INCLUDING MARK 205, 3C 232, PKS 2020-370, THE GRAVITATIONALLY LENSED QUASAR, 2237+0305, 4 OBJECTS BEHIND THE BOOTES GALAXY VOID, US 1329 (BEHIND THE BAHCALL-SONEIRA GALAXY VOID), AND 5C 03.44 (BEHIND M 31). THE SPECTRA WILL BE USED TO TEST THE HYPOTHESIS THAT SOME METALLIC QUASAR ABSORPTION SYSTEMS ARE CAUSED BY VERY LARGE GALAXY HALOS OR DISKS. WF/PC IMAGES WILL ALSO BE OBTAINED OF THE LENSING GALAXY, 2237+0305, IN ORDER TO LOCATE ACCURATELY THE QUASAR POSITION AND MEASURE THE SURFACE BRIGHTNESS OF THE INNER REGION OF THE GALAXY. ST OBSERVATIONS ARE REQUIRED BECAUSE, FOR THE SMALL REDSHIFTS AT WHICH GALAXIES WITH LARGE ANGULAR SIZE ARE FOUND, THE RESONANT ATOMIC LINES ARE IN THE ULTRAVIOLET.

Prop. Type: GTO/FOS

QUASARS _AGN -- (GTO/FOS) --

4120- CT - "UV SPECTRA OF LOW-REDSHIFT-QSOS: CYCLE 3 AND LATER OBSERVATIONS"
Continuation of Program Number 1026
Keywords :
Proposers: E. Margaret Burbidge (PI; University Of California, San Diego), R.Allen (University Of Arizona), J.Angel (University Of Arizona), F.Bartko (Unaffiliated), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute), B.Margon (University Of Washington)

This proposal contains observations which will help to complete a number of FOS IDT scientific programs. These programs are not in direct conflict with approved GO or GTO programs, but explore wavelength or signal-to-noise regimes not covered by other programs, or else they concentrate on objects of special interest. These programs will lead to a better understanding of the structure and kinematics of the broad-line region by studies of very high signal-to-noise line profiles in low redshift QSOs. The same data will also provide measurements of weak lines which will lead to improved photoionization models. This data set will yield high quality absorption line data for studies of specific absorption line systems and an independent sample for studies of absorption line evolution.

Prop. Type: GTO/FOS

QUASARS _AGN -- (GTO/FOS) --

4121- CT - "UV SPECTRA OF QSOS WITH Z > 3.1: CYCLE 3 CONTINUATION"
Continuation of Program Number 1027
Keywords :
Proposers: E. Margaret Burbidge (PI; University Of California, San Diego), R.Allen (University Of Arizona), J.Angel (University Of Arizona), F.Bartko (Unaffiliated), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute), B.Margon (University Of Washington)

This proposal contains observations which will help to complete one FOS IDT scientific program. In a collaborative programs with the GHRS IDT, we will study absorption from He I and He II in the Lyman alpha forest clouds and in the intergalactic medium at high z to determine conditions in the early universe. We will observe the extreme UV rest spectrum of QSOs with z > 2.9, to examine HeI and HeII in absorption and/or emission, as well as He I in some lower z QSOs. Perform Gunn-Peterson test for smooth intergalactic helium. These observations are primarily exploratory to find quasars with light at these short wavelengths. We will also Study the continuum shape of QSOs from 300 A (rest) to lambda > 2500A (rest).

Prop. Type: GTO/FOS

QUASARS _AGN -- (
4126- CT - "SEARCH FOR EXTENDED GALACTIC HALOS (FOS 23): FUTURE-CYCLE CONTINUATION"
Continuation of Program Number 1043
Keywords : GALACTIC HALOS, QUASAR
Proposers: Ralph Bohlin (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Use QSOs projected close to nearby galaxies to search for halos sufficiently extended to explain the observed statistics of QSO absorption line spectra. Different candidate galaxies have been chosen, including some known to have extended 21 cm halos, galaxies in and out of clusters, etc. Galaxies are chosen with z>0.001 where possible, so that local Lyman alpha absorption can be resolved from a galaxian column density of 2E19 of HI in our R=1200 mode. This is a UV specific problem that requires ST collecting area. A positive detection will produce a point on the rotation curve far into the galaxy halo, as well as crude information on the physical conditions of the halo gas. Each spectrum will also contain information on the gas distribution of our galaxy.

Prop. Type: AUG/FOS

STELLAR POPULATIONS -- (
4127- CT - "GLOBULAR CLUSTER CORE STRUCTURE AND DYNAMICS (FOS 36) AUGMENTATION: FUTURE-CYCLE CONTINUATION"
Continuation of Program Number 3651
Keywords : GLOBULAR CLUSTER
Proposers: Ralph Bohlin (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of), L.Spitzer Jr. (Princeton University)

Obtain data on the stellar populations in the central cores of globular clusters. Clusters with and without central unresolved cusps, and with and without central X-ray sources will be observed. Spectra will be obtained at the center of the UV brightness, and at a distance within about one core radius. We might expect these spectra to differ; massive objects formed in collisions may produce unexpected spectral features, as well as relatively intense UV radiation in the central core.

Prop. Type: GTO/FOS

QUASARS _AGN -- (GTO/FOS) --
4128- CT - "GRAVITATIONALLY LENSED QSOS: CYCLE 9 OBSERVATIONS"
Continuation of Program Number 1030
Keywords : GRAVITATIONAL LENSES, QUASARS, UV ABSORPTION LINES.
Proposers: E. Margaret Burbidge (PI; University Of California, San Diego), R.Allen (University Of Arizona), J.Angel (University Of Arizona), F.Bartko (Unaffiliated), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), R.Cohen (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute), V.Junkkarinen (Uc, San Diego), B.Margon (University Of Washington)

This proposal contains observations which will help to complete a number of FOS IDT scientific programs. Evolution of the sizes of the Lyman alpha clouds will be studied with ultraviolet spectra of a well separated pair of QSO images. In two "gravitational lensing" multiple QSOs, we shall ascertain whether the UV spectra of the images are identical, while detecting absorption lines (especially Lyman alpha) which might exhibit differences and hence give information on sizes of absorbing clouds.

Prop. Type: AUG/FOS

INTERSTELLAR MEDIUM -- (
4129- CT - "IMAGING AND UV SPECTROPHOTOMETRY OF LOCAL GROUP PLANETARY NEBULAE (FOS 26) AUGMENTATION: FUTURE-CYCLE CONTINUATION"
Continuation of Program Number 3666
Keywords : NEBULA, PLANETARIES, CENTRAL STARS, GALAXIES, K648
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

WF/PC interference filter pictures will be used to resolve the shells of planetary nebulae in the LMC and to resolve the shell of K648 in M15. The angular diameters of the shells will be combined with echelle expansion velocities to derive the ages of nebulae. Ultraviolet spectra of the central stars will be used to derive the stars' effective temperatures and magnitudes, with objective of placing the stars on evolutionary tracks in an M-Teff diagram. UV spectra of the LMC nebulae, K648, and the brightest nebula in M32, NGC205, and NGC185 will be used to derive chemical compositions and physical conditions in the nebulae.

Prop. Type: AUG/FOS

GALAXIES CLUSTERS -- (
4130- CT - "STELLAR AND GAS DYNAMICS IN NORMAL GALAXIES AUGMENTATION: FUTURE-CYCLE CONTINUATION"
Continuation of Program Number 3782
Keywords : GALAXIES, STELLAR DYNAMICS, IONIZED GAS
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applies Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

The FOS will be used with small apertures to map the stellar velocity dispersion and rotation in a grid covering the central 1" of NGC4472. The velocity disperions and rotation curves will be used to model the nuclear dynamics and to measure the nuclear M/L. Line strengths will be used to measure changes in the stellar populations in the central 1". FOS spectra of any emission-line clouds within the nuclear region will be used to establish their physical characteristics, ionization mechanisms, and dynamics.

Prop. Type: GTO/FOS

QUASARS AGN -- (
4131- CT - "M87'S JET, NUCLEUS, AND HOT CORONA (FOS NO. 12): FUTURE-CYCLE CONTINUATION"
Continuation of Program Number 1034
Keywords : JET, CORONA, M87, IONIZED GAS
Proposers: Holland C. Ford (PI; Space Telescope Science Institute), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

WF/PC narrow band images of M87 will be used to isolate emission line regions near the nucleus and jet. FOS spectra of these clouds will be used to i) map the velocity field near the nucleus, ii) understand physical conditions and ionization mechanisms in these clouds, and iii) measure chemical composition of the clouds. FOS spectra of the stellar nucleus and synchotron knots in the jet will be used to establish long-base-line spectral indices and to look for spectral features. Long exposure ultraviolet spectra of the nucleus and jet will be used to look for absorption lines from M87's hot corona.

Prop. Type: GTO/FOS

STELLAR ASTROPHYSICS -- (
4132- CT - "BINARIES IN GLOBULAR CLUSTERS (FOS 37): FUTURE-CYCLE CONTINUATION"
Continuation of Program Number 1053
Keywords : X-RAY STAR, NOVA, GLOBULAR CLUSTER, NEUTRON STAR
Proposers: Bruce Margon (PI; Washington, University Of), J.Angel (Arizona, University Of), F.Bartko (Bartko Science And Technology), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation)

Imaging and spectroscopy will be used to probe the nature of the luminous, central X-ray burst sources; to attempt optical identifications of the lower luminosity X-ray sources removed from the cores (and thus to verify the conjecture that they are related to CVs); and to attempt to recover the historical nova T-Sco in NGC6093 (M80), possibly also resulting in an expansion parallax for the cluster.

Prop. Type: AUG/FOS

STELLAR ASTROPHYSICS -- (
4133- CT - "OPTICAL COUNTERPARTS OF RADIO PULSARS (FOS 38) AUGMENTATION: FUTURE CYCLE OBSERVATIONS"
Continuation of Program Number 3651
Keywords :
Proposers: Bruce Margon (PI; Washington, University Of), R.Allen (University Of Arizona), S.Anderson (University Of Washington), J.Angel (University Of Arizona), F.Bartko (University Of California, San Diego), E.Beaver (University Of California, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (University Of California, San Diego), A.Davidsen (Johns Hopkins University), R.Downes (Space Telescope Science Institute), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute)

The FOS GTO program includes a systematic study of degenerate stars. FOS spectra of the Crab will be used to measure the spectral index (especially UV) of the nonthermal pulsar radiation, to verify synchrotron mechanism and search for spectral breaks. Absorption may be seen due to intervening gas, whose abundance and physical state could then be probed.

Prop. Type: AUG/FOS

STELLAR ASTROPHYSICS -- (
4134- CT - "BINARIES IN GLOBULAR CLUSTER M15 (FOS 37) AUGMENTATION: FUTURE-CYCLE OBSERVATIONS"
Continuation of Program Number 3651
Keywords :
Proposers: Bruce Margon (PI; Washington, University Of), R.Allen (University Of Arizona), S.Anderson (University Of Washington), J.Angel (University Of Arizona), F.Bartko (University Of California, San Diego), E.Beaver (University Of California, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (University Of California, San Diego), A.Davidsen (Johns Hopkins University), R.Downes (Space Telescope Science Institute), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute)

The FOS GTO program includes a systematic study of degenerate stars in binary systems, both in the field and in globular clusters, plus a handful of related objects. The GTO program for the globular cluster systems involves WF/PC or FOC images to locate candidates for cluster X-ray sources (selection based on UV-excess in multicolor HST images), followed by confirming FOS spectroscopy. Even 1 or 2 new close binaries identified through this program will be extremely important, as these systems are thought to dominate the kinetic energy budget of globular clusters, yet virtually none are currently known. This program is for spectroscopic follow-up of AC211 in NGC7078 (M15); a WFPC image is also obtained to aid FOS TA.

Prop. Type: AUG/FOS

STELLAR ASTROPHYSICS -- (
4135- CT - "BINARIES IN GLOBULAR CLUSTERS (FOS 37) AUGMENTATION: FUTURE-CYCLE OBSERVATIONS"
Continuation of Program Number 3651
Keywords :
Proposers: Bruce Margon (PI; Washington, University Of), R.Allen (University Of Arizona), S.Anderson (University Of Washington), J.Angel (University Of Arizona), F.Bartko (University Of California, San Diego), E.Beaver (University Of California, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (University Of California, San Diego), A.Davidsen (Johns Hopkins University), R.Downes (Space Telescope Science Institute), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute)

The FOS GTO program includes a systematic study of degenerate stars in binary systems, both in the field and in globular clusters, plus a handful of related objects. The GTO program for the globular cluster systems involves WF/PC or FOC images to locate candidates for cluster X-ray sources (selection based on UV-excess in multicolor HST images), followed by confirming FOS spectroscopy. Even 1 or 2 new close binaries identified through this program will be extremely important, as these systems are thought to dominate the kinetic energy budget of globular clusters, yet virtually none are currently known. This program is for spectroscopic follow-up of candidates in NGC5139 (Omega-Cen), obtained from WFPC images acquired in earlier cycles.

Prop. Type: AUG/FOS

STELLAR ASTROPHYSICS -- (
4136- CT - "MASS EXCHANGE BINARIES (FOS 34) AUGMENTATION: FUTURE CYCLE OBSERVATIONS"
Continuation of Program Number 3651
Keywords :
Proposers: Bruce Margon (PI; Washington, University Of), R.Allen (University Of Arizona), S.Anderson (University Of Washington), J.Angel (University Of Arizona), F.Bartko (University Of California, San Diego), E.Beaver (University Of California, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (University Of California, San Diego), A.Davidsen (Johns Hopkins University), R.Downes (Space Telescope Science Institute), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), G.Hartig (Space Telescope Science Institute)

The FOS GTO program includes a systematic study of degenerate stars in binary systems, both in the field and in globular clusters, plus a handful of related objects. For the isolated field systems, the emphasis is on spectro- photometry (in many cases time-resolved over a pulse or orbital period) and spectropolarimetry, to observe the effects of the intense ionizing flux emitted by the compact object on the nearby normal star and/or accretion disk. While some such effects are seen from the ground, they should be far more spectacular in the UV. The specific program in this proposal is UV spectropolarimetry of the polar, EF-Eri.

Prop. Type: GTO/OS

GALAXIES_CLUSTERS -- (NEARBY GALAXIES) --
4138- CT - "STRUCTURE OF NGC 4472 "
Continuation of Program Number 1057
Keywords : LOCAL GROUP
Proposers: Ivan R. King (PI; University Of California, Berkeley), P.Crane (European Southern Observatory; Germany)

This is an imaging study of the center of the Virgo elliptical galaxy NGC 4472. HST observations by Crane have shown that no elliptical yet observed has a center without some sort of power law or cusp. This galaxy appears well resolved from the ground and therefore offers a test of whether flat cores exist at all.

Prop. Type: AUG/FOS

INTERSTELLAR MEDIUM -- (SN SNR) --
4141- CT - "SUPERNOVA REMNANTS AND NUCLEOSYNTHESIS (FOS 30): CYCLE 3 AUGMENTATION"
Continuation of Program Number 3666
Keywords : SUPERNOVA REMNANTS, NUCLEOSYNTHESIS
Proposers: Arthur F. Davidsen (PI; Johns Hopkins University), J.Angel (Arizona, University Of), F.Bartko (Applied Research Corp.), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), H.Ford (Space Telescope Science Institute), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Overall program: UV and optical spectra of four supernova remnants (SNRs) will be used to study a number of problems related to abundances, grain destruction, interstellar medium properties and physical conditions in SNR shocks. Representatives of three of the main classes of SNRs (Crab-nebula like, Balmer-line and "normal") will be studied in the LMC, where reasonably low reddening permits UV observations. In earlier parts of the program, an oxygen-rich SNR in NGC 4449 was observed, taking advantage of the small FOS slits to isolate the SNR from surrounding H II emission. Two M33 SNRs that were previously part of this proposal have been dropped due to time limitations.

Prop. Type: AUG/FOC

GALAXIES CLUSTERS -- (EVOLUTION/COSMOLOGY) --
4142- CT - "STAR FORMATION RATES IN DISTANT CLUSTER GALAXIES - CYCLE 3"
Continuation of Program Number 3487
Keywords : EARLY-TYPE GALAXY, EVOLUTION GALAXY CLUSTER
Proposers: Jean-Michel R Deharveng (PI; Laboratoire Astronomie Spatiale; France), R.Ellis (Physics Department, University Of Durham; Uk), C.Mackay (Institute Of Astronomy, Cambridge; Uk)

Multicolor photometry and spectroscopic redshifts are available for a complete sample of faint galaxies in the southern cluster Abell 370 at a redshift of z=0.37. Strong evidence has been found for residual star formation in the red cluster galaxies. This may reflect general evolution in the cluster ellipticals, or it could represent the final transition from infalling gas-rich systems to present-day lenticular galaxies. FOC will be used to extend the spectral energy distributions for cluster members into the far-UV providing direct measures of the proportions of young and evolved stars in a carefully selected sample of red members complete to K=17.0.

Prop. Type: GTO/AST

QUASARS _AGN -- (ASTROMETRY) --
4154- CT - "EXTRAGALACTIC ASTROMETRY AND ASTROPHYSICS FT12-23,PART 2 OF 2 - CONTINUATION OF 1013, CYCLE 3"
Continuation of Program Number 1013
Keywords : QUASARS, BL LACS, AGNS, HIPPARCOS, REFERENCE FRAMES FUNDAMENTAL ASTROMETRY, QUASAR INTERNAL MOTION
Proposers: William H. Jefferys (PI; University Of Texas At Austin)

The goal of this project is the determination of the rotation of the HIPPARCOS Reference Frame with respect to an Extragalactic Frame. The program will derive the internal optical motions of extragalactic objects (QSOs, BL Lacs, AGNs) at the +/- 0.002 arcsecond per year level of accuracy. 160 SAO stars within the FGSFOV of all selected QSOs, BL Lacs, and AGNs are included in the HIPPARCOS catalog. Ground based speckle observations have been used to pre-detect doubles which would cause problems for the FGS. The FGSs will measure the relative positions of SAO stars with respect to objects brighter than 17 mag. Fainter objects will be observed with the WFPC and FGS together. The objects have been selected in conjunction with the recommendations of the IAU working group in Radio/Optical Identifications, and have been selected for compactness and intensity. Most of the objects are recommended as ultimate position calibrators.

Prop. Type: GTO/AST

QUASARS _AGN -- (ASTROMETRY) --
4155- CT - "EXTRAGALACTIC ASTROMETRY AND ASTROPHYSICS FT0-11,PART 1 OF 2 - CONTINUATION OF 1013, CYCLE 3"
Continuation of Program Number 1013
Keywords : QUASARS, BL LACS, AGNS, HIPPARCOS, REFERENCE FRAMES FUNDAMENTAL ASTROMETRY, QUASAR INTERNAL MOTION
Proposers: William H. Jefferys (PI; University Of Texas At Austin)

The goal of this project is the determination of the rotation of the HIPPARCOS Reference Frame with respect to an Extragalactic Frame. The program will derive the internal optical motions of extragalactic objects (QSOs, BL Lacs, AGNs) at the +/- 0.002 arcsecond per year level of accuracy. 160 SAO stars within the FGSFOV of all selected QSOs, BL Lacs, and AGNs are included in the HIPPARCOS catalog. Ground based speckle observations have been used to pre-detect doubles which would cause problems for the FGS. The FGSs will measure the relative positions of SAO stars with respect to objects brighter than 17 mag. Fainter objects will be observed with the WFPC and FGS together. The objects have been selected in conjunction with the recommendations of the IAU working group in Radio/Optical Identifications, and have been selected for compactness and intensity. Most of the objects are recommended as ultimate position calibrators.

Prop. Type: AUG/HRS

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --

4159- CT - "COMPOSITION OF GAS IN INDIVIDUAL INTERSTELLAR CLOUDS: FUTURE-CYCLE AUGMENTATION CONTINUATION"

Continuation of Program Number 3444

Keywords : INTERSTELLAR LINES

Proposers: Lyman Spitzer (PI; Princeton University), C.O'Dell (Rice University)

Column densities of interstellar atoms of 17 atomic species of 10 elements will be measured in the line-of-sight to 2 early-type stars in the galactic halo using the Goddard High Resolution Spectrograph to obtain precise measures in the ultraviolet with the highest available spectral resolution. These data will be analyzed to determine relative abundances in the several individual clouds present along each line of sight, and thus to determine how the composition of the gas in such clouds and the various physical processes occurring vary with cloud parameters such as H column density, velocity, ionization level, and distance z from the galactic plane. This information should help to clarify the many physical processes occurring in interstellar gas. In particular, measures of these two stars in the galactic halo should help to identify the mechanisms responsible for the abundant C IV, Si IV, and N V known to be present in the interstellar gas at kiloparsec distances from the galactic plane. The program should also increase our understanding of the balance between formation and destruction of interstellar dust grains.

Prop. Type: GTO/WFC

GALAXIES CLUSTERS -- (

4167 - "NUCLEI OF NEARLY NORMAL GALAXIES (WF/PC-14): CYCLE 3 AND FUTURE-CYCLE CONTINATION"

Keywords : GALACTIC NUCLEI, GALACTIC BULGES, LOCAL GROUP, DUST LANES, GLOBULAR CLUSTERS, SURFACE PHOTOMETRY

Proposers: James A. Westphal (PI; Caltech)

Direct images of the nuclei of nearby galaxies taken with the Planetary Camera will be used to measure the space density profile of luminous material and the nuclear color gradients in these objects. Galaxies will be imaged with the F555W and F785LP filters. Serveral objects known to contain ionized gas will also be imaged in narrow-band filters to obtain the gas distribution. In M31 a special series of ultra-violet exposures will be taken to study the hot stellar population. The sample of objects contains several normal ellipticals covering a broad range in nuclear surface brightness and concentration class, several nearby galaxies covering a range of Hubble types, and a few Seyfert and otherwise slightly abnormal nuclei.The images taken will also be searched for bright stars, inner globular clusters, and absorbing interstellar dust.

Prop. Type: AUG/WFC

STELLAR ASTROPHYSICS -- (
4168 - "LMC STAR CLUSTER R136: FORMATION AND NATURE OF THE IMF, WFPC GTO AUGMENTATION, CYCLE 3"
Keywords : STAR FORMATION
Proposers: James A. Westphal (PI; Caltech)

The goal of this WF/PC project is to extend our knowledge of young stellar systems by looking more closely at the R136 cluster in the 30 Doradus Nebula of the Large Magellanic Cloud. The resolution that the HST provides will allow us to probe the central regions of the cluster and thus more completely sample its color-magnitude diagram and luminosity function. We will use the augmentation time to improve photometry of the brightest stars and extend the color and magnitude limits 2-3 mag fainter, with the goal of reaching stars still approaching the main sequence. Information on the age and evolution of this cluster may help us better understand the IMF in the LMC and in such stellar systems.

Prop. Type: AUG/WFC

GALAXIES _CLUSTERS -- (
4169- CT - "GALAXIES AND CLUSTERS, WFPC GTO AUGMENTATION, CYCLE 3"
Continuation of Program Number 3639
Keywords : INTERSTELLAR MEDIUM, HII REGIONS, LMC
Proposers: James A. Westphal (PI; Caltech)

We propose to observe 10 galaxy nuclei from the original GTO proposal 1118 that otherwise will be lost for lack of time. These 10 include seven of the nearest normal spiral galaxies, from types S0 through Sc. This is the largest sample of late-type spiral nuclei being done with HST that we know of and is essential to the collection of a representative catalog of all galaxy types. The remaining three galaxies include a classic Seyfert galaxy (NGC 4151), a protype emission- line elliptical (NGC 1052), and a well known blue elliptical that is a post-starburst and merger candidate (NGC 1600).

Prop. Type: AUG/WFC

INTERSTELLAR MEDIUM -- (
4170- CT - "STRUCTURE AND ENVIRONMENT OF HII REGIONS IN THE GALAXY AND M33, WFPC AUGMENTATION, CYCLE 3"
Continuation of Program Number 3641
Keywords : INTERSTELLAR MEDIUM, HII REGIONS, MILKY WAY, M33
Proposers: James A. Westphal (PI; Caltech)

Much of the scientific utility of narrow band imaging of nebulae lies in the study of stratification and structural variations among emission lines that trace regions of different density, temperature, and radiation environment. As such, imaging studies of nebulae are not as seriously affected by HST's optical problems as many programs, so long as adequate signal to noise is obtained to allow reliable deconvolution of the structure present. For nearby objects, HST can resolve physically important scales associated with many gasdynamic and radiative processes in the ISM. In the present proposal, we: 1) extend our study of the physical processes in H II regions to two additional regions (NGC 7635 and M 16), with specific goals to study the interface between the H II region and the adjoining photodissociation region, and the interaction between the radiation field and dense clumps of material, and 2) obtain images of two fields in M 33 to start the process of applying our understanding of the structure and physics of Galactic H II regions to the ISM in external galaxies.

Prop. Type: AUG/WFC

STELLAR POPULATIONS -- (
4171- CT - "GLOBULAR CLUSTER CORES, WFPC GTO AUGMENTATION, CYCLE 3"
Continuation of Program Number 3640
Keywords : GLOBULAR CLUSTERS
Proposers: James A. Westphal (PI; Caltech)

Stellar Populations Part III: Globular Cluster Cores. The cores of 4 globular clusters will be imaged in U to study core properties and search for collapsed cusps. The clusters are relatively nearby and span the range from very regular to very cusplike.

Prop. Type: AUG/WFC

QUASARS _AGN -- (
4172- CT - "PC IMAGING OF GRAVITATIONAL LENSES, WFPC AUGMENTATION, CYCLE 3"
Continuation of Program Number 3799
Keywords : GRAVITATIONAL LENSES
Proposers: James A. Westphal (PI; Caltech)

We propose to obtain two sets of data: (1) deep images of four gravitational lenses (PG1115, Q0957, MG2016 and 2237) for which we have previously obtained short Cycle 0 observations which indicate that deeper data will provide important information; and (2) imaging of five more recently discovered lenses, for which ground-based observations suggest that the angular resolution of HST will provide critical data. The aim is to obtain data which will help in the complete characterization of the lens systems. All observations will be made with the PC, using filters 555W and 785LP, the former to emphasize the quasar images and the latter the lensing galaxies.

Prop. Type: AUG/WFC

INTERSTELLAR MEDIUM -- (
4173- CT - "SUPERNOVA REMNANT SHOCKS, STELLAR OUTFLOW, AND EJECTED MATTER, WFPC AUGMENTATION, CYCLE 3"
Continuation of Program Number 3642
Keywords : INTERSTELLAR MEDIUM, SUPERNOVA REMNANTS, PLANETARY NEBULAE, WOLF-RAYET STARS
Proposers: James A. Westphal (PI; Caltech)

Much of the scientific utility of narrow band imaging of nebulae lies in the study of stratification and structural variations among emission lines that trace regions of different density, temperature, and radiation environment. As such, these studies are not as seriously affected as some by the compromised optical performance of HST, so long as adequate signal to noise is obtained to allow reliable deconvolution of the structure present. The spatial resolution of the HST provides access to physically important scales associated with many gasdynamic and radiative processes in the ISM. In the present proposal, we request time to extend our studies of the cooling and recombining flows behind radiative shocks using images of three additional fields that cover a significant cross section of the conditions within the Cygnus Loop. We also request time to continue our study of the stellar jet and "ladder" discovered to the north of Eta Carinae, to study the interaction of the stellar wind and radiation field with a shell of gas in NGC 6888. It is proposed to observe the subarcsecond structure of the planetary nebula NGC 7027 in order to extend the studies of condensation lifetimes and interactions with the ISM.

Prop. Type: AUG/HRS

SOLAR SYSTEM -- (SATELLITES) --
4174- CT - "IO PROTON AURORA? - CYCLE 3 AUG "
Continuation of Program Number 1204
Keywords : LY-ALPHA, IO, TRAPPED RADIATION, MAGNETOSPHERE
Proposers: Laurence M. Trafton (PI; Texas, University Of)

Attempt detection of Ly-alpha emission from Io, caused by protons trapped in magnetosphere interacting with Io.

Prop. Type: AUG/HRS

SOLAR SYSTEM -- (GIANT PLANETS) --
4175- CT - "JOVIAN AURORAL LY-ALPHA PROFILE-CYCLE 3 AUG "
Continuation of Program Number 1203
Keywords : LY-ALPHA, AURORA, MAGNETOSPHERE, DEUTERIUM
Proposers: Laurence M. Trafton (PI; Texas, University Of)

Observe the Ly-alpha profile for a bright auroral emission on Jupiter to study excitation processes, proton precipitation along field lines, excitation particle flux, and atmospheric properties. A determination of the D/H ratio may result if the signal to noise is high enough.

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR ABSORPTION) --
4176- CT - "LYMAN-ALPHA REGION OF QSOS WITH STRONG ABSORPTION LINES: FUTURE CYCLE OBSERVATIONS"
Continuation of Program Number 1193
Keywords : QUASARS, ABSORPTION LINES, 21-CM
Proposers: Edward Beaver (PI; Uc, San Diego), R.Cohen (Uc, San Diego)

FOS spectra have be obtained of the Ly-alpha region of 3 quasars with 21 cm absorption, 3CR 196, PKS 1229-021, and 3CR 286. The absorbing object is almost certainly a galaxy disk in each case. Measurement of the damped Ly-alpha line will determine the H I column density in the 21 cm absorption system, and comparison with 21 cm will yield the spin temperature. The number of contributing components will be determined from existing or new 21 cm observations. Comparison with optical observations will allow the determination of chemical abundances with respect to H for elements with low-ionization lines. Images taken after the new WF/PC installation may identify the absorbing galaxy and, if so, will allow us to characterize the impact parameter and Hubble type of galaxies producing damped Ly-alpha absorption at moderate redshift. Two of these will be done in this proposal.

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR ABSORPTION) --
4177- CT - "PHYSICAL CONDITIONS IN LOW Z ABSORPTION LINE SYSTEMS IN QSOS: FUTURE OBSERVATIONS"
Continuation of Program Number 1191
Keywords : QUASAR, SPECTROSCOPY, ABSORPTION LINES
Proposers: Edward Beaver (PI; Uc, San Diego), R.Cohen (Uc, San Diego), H.Smith (Uc, San Diego)

In PKS 0735+178, we will observe the Ly-alpha region with the FOS and shorter wavelengths with the HRS. The primary goal will be to measure abundances relative to H I of low ionization ions measured in the optical and in the Ly-alpha exposure. An image should show the absorbing object, indicating where in the ISM of the absorber the measured abundances occur. These observations will allow comparison with higher redshift QSO absorption line systems and with absorption from galaxy halos, the leading candidate for the site of such absorption. In PG 1630+377, we will use the HRS to measure lines of He I at 584A, and we will use the FOS (in a different proposal) to measure associated Ly-alpha and Ly-beta lines. The relative abundance of He I determined this way should yield clues to the conditions in the Lyman-alpha forest clouds and the IGM at high redshift.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (MASSIVE STARS) --

4178- CT - "PC IMAGES OF ETA CAR OUTER CONDENSATIONS AUGMENTATION EXPOSURES FOR CYCLE 3"

Continuation of Program Number 1186

Keywords : STELLAR EVOLUTION, MASS LOSS, NUCLEOSYNTHESIS

Proposers: Dennis C. Ebbets (PI; Ball Aerospace Corporation), K.Davidson (Univ Of Minnesota), E.Malumuth (Computer Sciences Corporation), N.Walborn (Space Telescope Science Institute), R.White (Space Telescope Science Institute)

This proposal defines a set of PC images of the outer condensations of Eta Carinae which should be made during cycle 3, shortly before the first HST service mission. These images should be made with the first generation PC. This proposal uses the balance of the GTO Augmentation time granted to the Eta Carinae project.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (MASSIVE STARS) --

4179- CT - "SPECTRA OF EJECTA FROM ETA CARINAE - BASELINE CYCLE 3 PC II IMAGES OF OUTER CONDENSATIONS - BASELINE CYCLE 4"

Continuation of Program Number 1186

Keywords : STELLAR EVOLUTION, MASS LOSS, NUCLEOSYNTHESIS

Proposers: Dennis C. Ebbets (PI; Ball Aerospace Corporation), K.Davidson (Univ Of Minnesota), E.Malumuth (Computer Sciences Corporation), N.Walborn (Space Telescope Science Institute), R.White (Space Telescope Science Institute)

This proposal defines FOS and GHRS spectra of two knots of ejecta from Eta Carinae. One is the brightest point in the south-east lobe of the Homunculus, the other is the brightest point in the S Condensation. Both oobservations may be made in Cycle 3 using baseline GTO time. A set of images of the outer condensations will be made using the optically corrected PC II after the service mission. These exposures are listed as Cycle 4 in this proposal.

Prop. Type: AUG/HRS

QUASARS _AGN -- (QUASAR ABSORPTION) --
4180- CT - "PHYSICAL CONDITIONS IN LOW Z ABSORPTION LINE SYSTEMS IN QSOS AUGMENTATION: CYCLE 3 OBSERVATIONS"
Continuation of Program Number 1191
Keywords : QUASAR, SPECTROSCOPY, ABSORPTION LINES
Proposers: Edward Beaver (PI; Uc, San Diego), R.Cohen (Uc, San Diego)

In PG 1630+377, we will use the HRS to measure lines of He I at 584A, and we will use the FOS to measure associated Ly-alpha and Ly-beta lines. The relative abundance of He I determined this way should yield clues to the conditions in the Lyman-alpha forest clouds and in the IGM at high redshift.

Prop. Type: GTO/HRS

INTERSTELLAR MEDIUM -- (ABSORPTION LINES) --
4181- CT - "LOCAL INTERSTELLAR MEDIUM AND D/H RATIO -- CYCLE 3 "
Continuation of Program Number 1175
Keywords : HYDROGEN COLUMN DENSITY, DEUTERIUM COLUMN DENSITY, DEUTERIUM ABUNDANCE
Proposers: Jeffrey L. Linsky (PI; Colorado, University Of), A.Brown (Colorado, University Of), S.Heap (Nasa, Goddard Space Flight Center), M.Jura (Uc, Los Angeles), W.Landsman (Nasa, Goddard Space Flight Center), B.Savage (Wisconsin, University Of), A.Smith (Nasa, Goddard Space Flight Center)

We will observe with 20,000 spectral resolution the stellar Lyman alpha emission line and interstellar hydrogen and deuterium absorption towards local late-type stars to derive the H and D column densities and D/H ratios along different lines of sight. High resolution (90,000) spectra of the MgII and FeII lines will help determine the interstellar line broadening and whether material along each line of sight has more than one velocity component. This is critical for accurate measurements of D/H, because both the D and H lines are on or near the flat part of the curve of growth. Previous IUE and Copernicus observations, which had low signal/noise and inadequate spectral resolution, provided very crude D/H values and suggested that the D/H ratio may vary within a few parsecs of the Sun. We will measure D/H with at least one order of magnitude improved precision and determine whether the proposed local variations are real. The local value(s) of D/H may be extrapolated to zero metal abundance to estimate the primordial value, which is valuable for constraining cosmological models.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --

4182- CT - "DYNAMICS AND ENERGY BALANCE IN STELLAR TRANSITION REGIONS CYCLE 3 AUGMENTATION"

Continuation of Program Number 1176

Keywords : HYDROGEN COLUMN DENSITY, DEUTERIUM COLUMN DENSITY, DEUTERIUM ABUNDANCE

Proposers: Jeffrey L. Linsky (PI; Colorado, University Of), A.Brown (Colorado, University Of), S.Heap (Nasa, Goddard Space Flight Center), M.Jura (Uc, Los Angeles), W.Landsman (Nasa, Goddard Space Flight Center), B.Savage (Wisconsin, University Of), A.Smith (Nasa, Goddard Space Flight Center)

We will observe with 20,000 spectral resolution the stellar Lyman alpha emission line and interstellar hydrogen and deuterium absorption towards local late-type stars to derive the H and D column densities and D/H ratios along different lines of sight. High resolution (90,000) spectra of the MgII and FeII lines will help determine the interstellar line broadening and whether material along each line of sight has more than one velocity component. This is critical for accurate measurements of D/H, because both the D and H lines are on or near the flat part of the curve of growth. Previous IUE and Copernicus observations, which had low signal/noise and inadequate spectral resolution, provided very crude D/H values and suggested that the D/H ratio may vary within a few parsecs of the Sun. We will measure D/H with at least one order of magnitude improved precision and determine whether the proposed local variations are real. The local value(s) of D/H may be extrapolated to zero metal abundance to estimate the primordial value, which is valuable for constraining cosmological models.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --

4183- CT - "DYNAMICS AND ENERGY BALANCE IN STELLAR TRANSITION REGIONS LATER CYCLE OBSERVATIONS"

Continuation of Program Number 1176

Keywords : STELLAR CHROMOSPHERES, STELLAR TRANSITION REGIONS, F-M DWARF STARS, G-K GIANT STARS, STELLAR ACTIVITY

Proposers: Jeffrey L. Linsky (PI; Colorado, University Of), A.Brown (Colorado, University Of)

Late-type stars with convective zones and magnetic fields have plasma above the photosphere heated to temperatures above 10,000 K. We will use the GHRS to study the dynamics, energy balance, and nonradiative heating rates in these hot regions for a sample of late-type stars spanning a range of spectral type and luminosity. We will study the dynamics of stellar transition regions by measuring the redshifts, indicative of downflows, with high precision in lines of C III, C IV, Si IV, and O IV. The energy balance and local heating rates in stellar transition regions will be derived from an emission measure analysis of emission line fluxes and electron densities inferred from density-sensitive line ratios. Cycle 0 observations of the RS CVn system Capella show that the GHRS can measure

ALL of the UV intersystem lines of Si III, C III, O III, N III, O IV, and S IV, which are useful density diagnostics. These data may require atmospheric models with two components (quiet and active regions).

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (COOL STARS) --

4184- CT - "SEARCH FOR HOT PLASMAS IN THE OUTER ATMOSPHERES OF K GIANTS CYCLE LATER OBSERVATIONS"
Continuation of Program Number 1177
Keywords : K III STARS, K I STARS, GIANTS, SUPERGIANTS, CHROMOSPHERES, CORONAE
Proposers: Jeffrey L. Linsky (PI; Colorado, University Of), A.Brown (Colorado, University Of)

We will measure the amount of plasma hotter than 10,000 K (or establish small upper limits) in the outer atmospheres of K giant stars now thought not to have for hot material. A second goal is to derive models of the hot plasma in the transition regions of early K giants with very low heating rates due to slow rotation and very weak magnetic field generation. We will search for emission lines of C III, Si III, C IV, Si IV, and N V in very deep specta. Upper limits to the strength of these emission lines will place stringent constraints on possible nonradiative heating processes. Observations of weak intersystem lines will provide estimates of the electron density needed for atmospheric modeling. We will attempt to determine whether the hot plasma (and the required heating) are global or isolated to small regions on the star due to magnetic fields or stochastic heating processes. Two of these stars are Hyades Cluster giants, one with no evidence of hot lines and the other with strong emission lines that may be due to the presence of a close binary component.

Prop. Type: AUG/HRS

STELLAR ASTROPHYSICS -- (HOT STARS) --

4185- CT - "SPECTROSCOPY OF INTERACTING BINARIES - 1174, CYCLE 3 "
Continuation of Program Number 1174
Keywords : STAR - BINARY STARS - MASS FLOW - EVOLUTION
Proposers: Albert Boggess (PI; Nasa, Goddard Space Flight Center), F.Bruhweiler (Catholic University Of America), Y.Kondo (Nasa, Goddard Space Flight Center), G.Mccluskey Jr. (Lehigh University)

GHRS moderate resolution spectra of the enigmatic object, V Sge, will be obtained. IUE data have tentatively shown redshifted emission at ~700 km/s. The GHRS observations will be used to a) confirm the redshift, and b) to obtain details of the accreting gas which are not visible at the signal-to noise and resolution of the IUE spectra.

Prop. Type: GTO/HRS

QUASARS _AGN -- (HOST GALAXY) --
4186- CT - "IMAGING OF DISTANT ACTIVE GALAXIES;CYCLE LATER "
Continuation of Program Number 1157
Keywords : HOST GALAXIES, IMAGING OF QUASARS
Proposers: John B. Hutchings (PI; Dominion Astrophysical Observatory; Canada), A.Gower (Victoria, University Of; Canada), S.Neff (Nasa Gsfc)

WF/PC will be used to image low redshift QSOs of interest in broad-band wavelengths.

Prop. Type: GTO/HRS

QUASARS _AGN -- (SEYFERTS) --
4187- CT - "ABSORPTION CLOUD PHYSICS IN SEYFERT GALAXY NUCLEI -- CYCLE 3 "
Continuation of Program Number 1160
Keywords : SEYFERT GALAXIES, BROAD LINE CLOUDS, X-RAY SOURCES
Proposers: Stephen P. Maran (PI; Nasa, Goddard Space Flight Center), J.Brandt (Colorado, University Of), J.Hutchings (Dominion Astrophysical Observatory; Canada), R.Mushotzky (Nasa, Goddard Space Flight Center), A.Smith (Nasa, Goddard Space Flight Center), R.Weymann (Mt. Wilson _Las Companas Obs.)

There are two targets: NGC 3783 and NGC 3516. Visit NGC 3783 three times and NGC 3516 twice. Each target will be observed using grating 160M at two settings. The two grating settings must be scheduled during a single visit. The visits for each target should be separated by at least 6 months. The three observations of NGC 3783 should therefore cover at least 18 months. More explicitly, line numbers 71 - 73 in this proposal should follow line numbers 62 - 65 in proposal 3936 (the cycle 2 proposal) by 9 months +/- 3 months, and line numbers 170 - 172 should follow line numbers 154 - 156 in proposal 3936 by 9 months +/- 3 months. If target acquisitionsare trivial on revisits, reallocate the time allotted to target acquisition so as to prolong the spectral exposures.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (HOT STARS) --
4188- CT - "STELLAR WINDS IN M31, M33:CYCLE LATER "
Continuation of Program Number 1150
Keywords : HOT STARS, MASS-LOSS, STELLAR WINDS
Proposers: John B. Hutchings (PI; Dominion Astrophysical Observatory; Canada), P.Massey (Noao, Kitt Peak National Observatory)

We will obtain UV spectra of OB supergiant stars in M33 AND M31 to study stellar wind phenomena (resonance line profiles and velocities, stellar effective temperatures). We will also derive approximate UV extinction curves for these galaxies. These observations relate to global comparisons between galaxies of different types.

Prop. Type: AUG/HRS

QUASARS _AGN -- (QUASAR EMISSION) --
4189- CT - "SPECT. STUDIES OF SEVERAL HIGH Z BALQSOS: FUTURE CYCLE CONTINUATION "
Continuation of Program Number 1146
Keywords : QUASARS, ABSORPTION LINES
Proposers: Ray J. Weymann (PI; Mount Wilson And Las Campanas Obs.), E.Burbidge (Uc, San Diego), R.Cohen (Uc, San Diego), C.Foltz (Arizona, University Of), G.Hartig (Space Telescope Science Institute), V.Junkkarinen (Uc, San Diego), D.Turnshek (Space Telescope Science Institute)

A survey of the UV spectra of 2 high redshift Broad Absorption Line Quasars (BALQSOs) will be carried out with the low dispersion mode of FOS.

Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR ABSORPTION) --
4190- CT - "LIN EXTENT _ION. COND. IN LY ALPHA CLDS: FUTURE CYCLE CONTINUATION "
Continuation of Program Number 1144
Keywords : QUASARS, ABSORPTION LINES, HELIUM
Proposers: Ray J. Weymann (PI; Mount Wilson And Las Campanas Obs.)

Spectra of the QSO pair Ton 155,156 will be obtained with GHRS over the range 1220-1500 A to search for any absorption systems which may or may not be in common with the two, thus setting limits on the linear size of the clouds. observations will be made in the region 1314-1600 A of PG 1115+08 to find any HeI counterparts of the Lyman Alpha forest.

Prop. Type: AUG/HRS

QUASARS _AGN -- (QUASAR ABSORPTION) --
4191- CT - "LIN. EXTENT _ION. COND. IN LY ALPHA CLDS: FUTURE CYCLE CONTINUATION "

Continuation of Program Number 1144
Keywords : QUASARS, ABSORPTION LINES, HELIUM
Proposers: Ray J. Weymann (PI; Mount Wilson And Las Campanas Obs.)

Spectra of the QSO pair Ton 155,156 will be obtained with GHRS over the range 1220-1500 A to search for any absorption systems which may or may not be in common with the two, thus setting limits on the linear size of the clouds. observations will be made in the region 1314-1600 A of PG 1115+08 to find any HeI counterparts of the Lyman Alpha forest.

Prop. Type: GTO/HSP

SOLAR SYSTEM -- (
4193- CT - "OPPORTUNITY OCCULTATIONS BY SMALL BODIES - CONT OF 1079 "
Continuation of Program Number 1079
Keywords : COMET, ASTEROID, SATELLITE, PLUTO, OCCULTATION
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

Although an occultation by any specific comet, asteroid, satellite, or Pluto is unlikely to be observable from the ST, the scientific return from such an event would be great because of the superior signal-to-noise ratio achievable with the ST for occultation observations. We propose to observe occultations by these bodies with the ST, as the opportunites arise, to probe their atmospheres, determine their sizes and achieve other goals. With such diverse possibilities, one must examine each opportunity as it occurs and formulate an observing strategy to fit that particular case. Revision History: New targets added, 4/24/92, asb.

Prop. Type: GTO/HRS

STELLAR ASTROPHYSICS -- (
4194- CT - "ELEMENTAL ABUNDANCES IN EARLY-TYPE STARS - CYCLES 3-9 "
Continuation of Program Number 1182
Keywords : MS STAR, CHEMICALLY PECULIAR STAR, ABUNDANCE, SPECTROSCOPY, UV
Proposers: David S. Leckrone (PI; Nasa, Goddard Space Flight Center)

The resolving power and photometric quality of the GHRS are exploited in an investigation of the elemental abundances, atmospheric properties and evolutionary characteristics of B-type stars. Special emphasis is given to a thorough exploration of the Hg abundance and isotope anomalies to test diffusion scenarios. A wide ranging UV spectral survey at high resolution and high S/N will be conducted, with the objective of deriving accurate elemental abundances over as much of the periodic table as possible. Abundances of important r-process species, will be derived for the chemically peculiar B-type star 53 Tau. The stellar spectra will also be used as an "atomic physics" laboratory, to obtain basic information about the structure of and configuration interactions within complex atoms and ions.

Prop. Type: GTO/HSP

SOLAR SYSTEM -- (

4198- CT - "DO NEPTUNE AND PLUTO HAVE RINGS? PART 2 "

Continuation of Program Number 4076

Keywords : NEPTUNE, PLUTO, PLANETARY RINGS, OCCULTATIONS, RING IMAGING

Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

The origin of planetary ring systems remains unknown. One common property of the known ringed planets--Jupiter, Saturn, and Uranus--is that each possesses a regular satellite system, which would point to a close connection between the formation of rings and satellites. However, the dynamical lifetimes of several important features in Saturn's are short, which would lead to the conclusion that these rings are young. Continuing this line of reasoning, one would conclude that rings are not formed concurrently with planets--perhaps the formation of rings depends on encounters of planets with small bodies, or other random events: ring systems come and go. The discovery of ring systems around Neptune and/or Pluto would shift opinion toward this latter view, while the lack of detectable rings would greatly strengthen their apparent connection with regular satellite systems. The August, 1989 Voyager encounter with Neptune discovered complete rings with shepherd satellites,

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Prop. Type: GTO/HRS

QUASARS _AGN -- (QUASAR ABSORPTION) --

4199- CT - "WEAK ABSORPTION LINES IN 3C273: CYCLE 3 "

Continuation of Program Number 1140

Keywords : QUASAR, ABSORPTION LINES, HALO

Proposers: Ray J. Weymann (PI; Carnegie Observatories), J.Brandt (U. Of Colorado)

HRS spectra of 3C273 will be obtained in the R=20000 mode over the range 1210-1425A and at selected longer wavelengths to detect weak absorption lines. Detections of, or upper limits on low column density remnants of the Lyman Alpha Forest at low redshifts will be made as well as profiles of such lines. Profiles of lines arising in the halo of our galaxy will also be obtained.

Prop. Type: GTO/FOS

QUASARS _AGN -- (
4201- CT - "SPECTROPOLARIMETRY OF QSOS, BLAZARS AND AGN: FUTURE-CYCLE CONTINUATION"
Continuation of Program Number 1029
Keywords : QSOS, BLAZARS, SEYFERT, AGN, POLARIZATION
Proposers: J. Roger P Angel (PI; University Of Arizona), F.Bartko (Martin Marietta Corporation), E.Beaver (Uc, San Diego), R.Bohlin (Space Telescope Science Institute), E.Burbidge (Uc, San Diego), A.Davidsen (Johns Hopkins University), H.Ford (Johns Hopkins University), R.Harms (Applied Research Corporation), B.Margon (Washington, University Of)

Measurement of the spectrum of polarization has proven to be a powerful tool in deciphering emission processes and source geometry in AGN. This program will extend these observations into the UV below 3000A.

Prop. Type: GTO/HSP

STELLAR ASTROPHYSICS -- (
4202- CT - "REMNANT STARS IN SUPERNOVA REMNANTS - CONT OF 4083 "
Continuation of Program Number 4083
Keywords : SUPERNOVA REMNANTS; NEUTRON STARS
Proposers: Robert C. Bless (PI; Wisconsin, University Of), J.Dolan (Nasa, Goddard Space Flight Center), J.Elliot (Massachusetts Institute Of Technology), E.Robinson (Texas, University Of), G.Van Citters (National Science Foundation), R.White (Space Telescope Science Institute)

In this proposal we will search for a remnant star associated with SN1987A. Once detected, we will study the photometric variability in an attempt to place important constraints on the mechanisms by which neutron stars originate. REVISION HISTORY: Created 4/24/92;

Prop. Type: AUG/OS

SOLAR SYSTEM -- (GIANT PLANETS) --
4203- CT - "SPATIALLY RESOLVED SPECTROSCOPY OF JUPITER -- CYCLE 2"
Continuation of Program Number 3833
Keywords : ATMOSPHERIC CHEMISTRY, JUPITER
Proposers: John J. Caldwell (PI; York University; Canada)

Obtain spectrophotometry of selected regions of Jupiter from1500 to 3000A, to study chemical composition of the upper atmosphere at various places, with distinctive characteristics, including poles, belts, zones and Great Red Spot.

Prop. Type: GTO/OS

SOLAR SYSTEM -- (GIANT PLANETS) --
4204- CT - "SPATIALLY RESOLVED SPECTROSCOPY OF SATURN CYCLE 2"
Continuation of Program Number 1288
Keywords : ATMOSPHERIC COMPOSITION, ATMOSPHERIC STRUCTURE, SATURN
Proposers: John J. Caldwell (PI; York University; Canada)

Obtain spectrophotometry of selected regions of Saturn from 1500 to 3000A, to study chemical composition of the upper atmosphere. Pointings include the poles, the equator at the central meridian, and the equator at the limb.

Prop. Type: GTO/OS

GALAXIES CLUSTERS -- (NUCLEI) --
4205- CT - "IMAGING AND SPECTROSCOPY OF ELLIPTICAL GALAXIES- FUTURE "
Continuation of Program Number 3265
Keywords : GALAXIES, ELLIPTICAL; ASTROMETRY
Proposers: Philippe Crane (PI; European Southern Observatory; Germany, West), M.Disney (University College, Cardiff; United Kingdom), I.King (Uc, Berkeley), C.Mackay (Cambridge University; United Kingdom)

This proposal has several objectives. First, the imaging data will be used to determine the precise positions of the centers of the galaxies, to see if the central region is bright enough to do long slit spectroscopy with the FOC f/48 spectrograph, and finally to study the radial intensity and color profile in the spectral region between 2200A and 4500A. In addition, f/288 data will be obtained in those few cases where it is warranted by the f/96 exposures. The spectroscopy will be attempted only in the cases where the central region is bright enough to determine a good velocity dispersion.

4.0 THE EXPOSURE CATALOG

4.1 FIXED TARGET OBSERVATIONS FOR GO PROGRAMS

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PKS2357-326	0 0 20.3	-32 21 2	PC	IMAGE	ALL	F555W		1	260	3158	0		1
PKS2358-161	0 1 5.3	-15 51 7	PC	IMAGE	ALL	F555W		1	260	3158	0		1
2359+0653	0 1 40.6	7 9 54	PC	IMAGE	ALL	F555W		1	260	3158	0		1
2359+068	0 1 40.6	7 9 42	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2359+068	0 1 40.6	7 9 42	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
UM196	0 1 50.0	-1 59 40	PC	IMAGE	ALL	F555W		1	260	3158	0		1
NGC7811	0 2 26.4	3 21 7	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
UGC6	0 3 9.8	21 57 35	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
UGC8	0 3 14.9	16 8 43	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q0000-26	0 3 23.0	-26 3 19	PC	IMAGE	ALL	F702W		1	100	2350	1		1
Q0000-26	0 3 23.0	-26 3 19	PC	IMAGE	ALL	F702W		1	350	2350	1		1
UM197	0 5 0.4	-0 33 49	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM18	0 5 20.2	5 24 11	PC	IMAGE	ALL	F555W		1	260	3158	0		1
PKS0003+15	0 5 59.2	16 9 49	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	2	4125	3	ACQ CON	1
PKS0003+15	0 5 59.2	16 9 49	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	16836	4125	3	CON	1
PKS0003+15	0 5 59.2	16 9 49	FOS/BL	ACQ/BINA	4.3	MIRROR		1	13	4125	3	ACQ CON	1
MARK335	0 6 19.5	20 12 10	PC	IMAGE	PC6	F785LP		1	180	4093	2		1
MARK335	0 6 19.5	20 12 10	HRS	ACCUM	2.0	G160M	1240	8	1920	3584	2		1
TEX0004+171	0 6 47.3	17 28 14	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0004-408	0 7 12.6	-40 34 11	PC	IMAGE	ALL	F555W		1	240	4027	1		1
NGC23	0 9 53.4	25 55 24	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
ESO-0007-2514	0 9 56.5	-24 57 49	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
0007-4044	0 10 5.0	-40 26 49	PC	IMAGE	ALL	F555W		1	240	4027	1		1
Q0007-353	0 10 12.4	-35 4 26	PC	IMAGE	ALL	F555W		1	260	3158	0		1
Q0007-353	0 10 12.4	-35 4 26	PC	IMAGE	ALL	F555W		1	240	4017	1		1
Q0007-4239	0 10 13.7	-42 22 56	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM208	0 10 16.5	0 12 27	PC	IMAGE	ALL	F555W		1	260	3158	0		1
IIIZW2	0 10 31.0	10 58 30	FOS/BL	ACQ/BINA	4.3	MIRROR		1	10	2717	1	ACQ	1
IIIZW2	0 10 31.0	10 58 30	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	10	2717	1	ACQ	1
IIIZW2	0 10 31.0	10 58 30	FOS/BL	ACCUM	0.25X2.0	G130H	1379	1	4400	2717	1		1
IIIZW2	0 10 31.0	10 58 30	FOS/BL	ACCUM	0.25X2.0	G270H	2769	1	1600	2717	1		1
0008+008	0 10 57.1	1 10 7	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0008+008	0 10 57.1	1 10 7	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
0316+413INCA221-23	0 12 0.0	19 0 0	FGS	POS	3	PUPIL		1	51	2565	2	CON	3
0316+413INCA221-23	0 12 0.0	19 0 0	FGS	POS	3	PUPIL		1	51	4148	3	CON	3
INCA221-23	0 12 0.0	19 0 0	FGS	POS	3	PUPIL		1	51	2565	2	CON	2
INCA221-23	0 12 0.0	19 0 0	FGS	POS	3	PUPIL		1	51	4148	3	CON	2
UM211	0 12 10.9	-1 22 8	PC	IMAGE	ALL	F555W		1	240	4027	1		1
NGC40	0 13 0.9	72 31 20	HRS	ACCUM	0.25	G160M	1304	1	1800	3880	2		1
NGC40	0 13 0.9	72 31 20	HRS	ACCUM	0.25	G160M	1346	1	1800	3880	2		1
NGC40	0 13 0.9	72 31 20	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	25	3880	2		1
NGC40	0 13 0.9	72 31 20	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	20	3880	2		1
ESO-0011-2327	0 14 4.0	-23 10 52	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UM222	0 14 51.5	0 56 55	PC	IMAGE	ALL	F555W		1	260	3158	0		1
ESO-0012-3929	0 14 54.0	-39 12 3	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UM224	0 16 2.4	-0 12 25	PC	IMAGE	ALL	F555W		1	260	3158	0		1
GAL-001723+160726	0 17 22.9	16 7 26	WFC	IMAGE	WFALL	F555W		1	1200	3797	2		2
GAL-001811+154754	0 18 11.4	15 47 53	WFC	IMAGE	WFALL	F555W		1	1700	3797	2		2
S50016+73	0 19 45.7	73 27 32	PC	IMAGE	ALL	F555W		1	240	4027	1		1
Q0018-422	0 20 53.2	-41 55 45	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0019-15	0 22 8.0	-15 5 39	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0019-15	0 22 8.0	-15 5 39	FOC/96	IMAGE	512X1024	F190M	1975	1	550	4107	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
UM232	0 22 27.5	1 24 13	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0020-408	0 23 20.0	-40 34 18	PC	IMAGE	ALL	F555W		1	240	4027	1		1
UM663	0 23 39.2	-18 15 50	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM30	0 23 43.0	5 52 31	PC	IMAGE	ALL	F555W		1	260	3158	0		1
SMC-SMP1	0 23 59.0	-73 38 5	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	7	3441	2	ACQ	1
SMC-SMP1	0 23 59.0	-73 38 5	FOS/BL	ACCUM	1.0	G130H	1300	1	700	3441	2		1
SMC-SMP1	0 23 59.0	-73 38 5	FOS/BL	ACCUM	1.0	G270H	2700	1	200	3441	2		1
SMC-SMP1	0 23 59.0	-73 38 5	FOS/BL	ACCUM	1.0	G190H	1900	1	350	3441	2		1
SMC-SMP1-PCPOS	0 23 59.0	-73 38 5	PC	IMAGE	P8	F502N		1	3400	2266	1		1
HD1967	0 24 2.0	38 34 39	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD1967	0 24 2.0	38 34 39	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
NGC104-CORE	0 24 6.1	-72 4 53	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC104-CORE	0 24 6.1	-72 4 53	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
NGC104-NORTH1	0 24 6.1	-72 3 53	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC104-NORTH1	0 24 6.1	-72 3 53	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
NGC104-NORTH2	0 24 6.2	-72 2 53	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC104-NORTH2	0 24 6.2	-72 2 53	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
NGC0104	0 24 40.3	-71 57 55	PC	IMAGE	ALL	F555W	5479	1	0	2691	1		1
NGC0104	0 24 40.3	-71 57 55	PC	IMAGE	ALL	F555W	5479	1	2	2691	1		2
NGC0104	0 24 40.3	-71 57 55	PC	IMAGE	ALL	F555W	5479	1	80	2691	1		6
NGC0104	0 24 40.3	-71 57 55	PC	IMAGE	ALL	F555W	5479	3	78	2691	1		2
NGC0104	0 24 40.3	-71 57 55	PC	IMAGE	ALL	F555W	5479	4	78	2691	1		2
0023+171	0 25 37.1	17 28 2	PC	IMAGE	ALL	F555W		1	500	2350	1		1
0023+171	0 25 37.1	17 28 2	PC	IMAGE	ALL	F555W		1	1300	2350	1		1
HD2151	0 25 45.1	-77 15 15	HRS	ACCUM	2.0	ECH-B	3130	1	480	3614	2		1
HD2151	0 25 45.1	-77 15 15	HRS	ACCUM	0.25	G270M	2498	1	1200	3614	2		1
HD2151	0 25 45.1	-77 15 15	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	5	3614	2		1
GAL-CLUS-002400+165300-FLD1	0 26 32.2	17 9 55	WFC	IMAGE	ALL	F702W		1	700	2373	1		1
GAL-CLUS-002400+165300-FLD1	0 26 32.2	17 9 55	WFC	IMAGE	ALL	F702W		8	2100	2373	1		1
GAL-CLUS-002400+165300-FLD1	0 26 32.2	17 9 55	WFC	IMAGE	ALL	F702W		9	2100	2373	1		1
GAL-CLUS-0024+1653-FLD1	0 26 36.3	17 9 46	WFC	IMAGE	WFALL-FIX	F702W		1	700	3857	2		1
GAL-CLUS-0024+1653-FLD1	0 26 36.3	17 9 46	WFC	IMAGE	WFALL-FIX	F702W		3	2200	3857	2		2
NAB0024+22	0 27 15.4	22 41 58	PC	IMAGE	ALL	F555W		1	260	3158	0		1
NAB0024+22	0 27 15.4	22 41 58	FOS/BL	ACQ/BINA	4.3	MIRROR		1	35	2424	1	ACQ	1
NAB0024+22	0 27 15.4	22 41 58	FOS/BL	RAPID	1.0	G160L	1837	1	1500	2424	1		1
0026+129	0 29 13.8	13 16 2	HRS	ACCUM	2.0	G270M	2808	6	900	3755	2		1
UM247	0 29 52.1	2 6 6	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM249	0 30 13.9	1 14 5	PC	IMAGE	ALL	F555W		1	260	3158	0		1
ESO-0027-3331	0 30 21.5	-33 14 50	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UM42	0 30 21.8	5 30 53	PC	IMAGE	ALL	F555W		1	240	4027	1		1
UM664	0 30 23.6	-18 19 56	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM664	0 30 23.6	-18 19 56	PC	IMAGE	ALL	F555W		1	240	4017	1		1
UM665	0 31 43.4	-11 52 42	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0029+0722	0 32 18.3	7 38 32	PC	IMAGE	ALL	F555W		1	260	3158	0		1
SMC-N2	0 32 38.8	-71 41 59	HRS	ACCUM	2.0	ECH-B	1909	2	2610	3608	2		1
MII-EXT-CLUSTER-M31	0 32 46.6	39 34 40	WFC	IMAGE	ALL	F336W		1	700	2298	1	ACQ	1
MII-EXT-CLUSTER-M31	0 32 46.6	39 34 40	FOS/RD	ACCUM	1.0-PAIR	G400H	4000	1	855	2298	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
MII-EXT-CLUSTER-M31	0 32 46.6	39 34 40	FOS/BL	ACCUM	1.0-PAIR	G130H	1300	1	1680	2298	1		1
MII-EXT-CLUSTER-M31	0 32 46.6	39 34 40	FOS/RD	ACCUM	1.0-PAIR	G270H	2700	1	1939	2298	1		1
MII-OFFSET	0 32 46.6	39 34 40*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	24	2298	1	ACQ	1
MII-OFFSET	0 32 46.6	39 34 40*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	24	2298	1	ACQ	1
UGC326	0 33 11.8	48 30 28	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
G2	0 33 33.8	39 31 19	FOC/96	IMAGE	512X512	F430W		1	1900	2583	1		1
G158-100-CALIB	0 33 54.3	-12 7 57	FOC/96	IMAGE	512X512	F430W F4ND		1	900	2583	1	CAL	1
MC40031-707	0 34 5.3	-70 25 52	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	2424	1	ACQ	1
MC40031-707	0 34 5.3	-70 25 52	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2400	2424	1		1
MC40031-707	0 34 5.3	-70 25 52	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1050	2424	1		1
MC40031-707	0 34 5.3	-70 25 52	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	2424	1	ACQ	1
BO289	0 34 20.9	41 47 51	FOC/96	IMAGE	512X512	F430W		1	2500	2583	1		1
SMC-SMP3	0 34 21.9	-73 13 21	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	7	3441	2	ACQ	1
SMC-SMP3	0 34 21.9	-73 13 21	FOS/BL	ACCUM	1.0	G130H	1300	1	700	3441	2		1
SMC-SMP3	0 34 21.9	-73 13 21	FOS/BL	ACCUM	1.0	G270H	2700	1	200	3441	2		1
SMC-SMP3	0 34 21.9	-73 13 21	FOS/BL	ACCUM	1.0	G190H	1900	1	350	3441	2		1
SMC-SMP3-PCPOS	0 34 21.9	-73 13 21	PC	IMAGE	P8	F502N		1	1400	2266	1		1
G11	0 36 20.9	40 53 36	FOC/96	IMAGE	512X512	F430W		1	2300	2583	1		1
4C09.01	0 36 23.8	10 7 59	PC	IMAGE	ALL	F555W		1	260	3158	0		1
Q0034-3308	0 36 38.4	-32 52 37	PC	IMAGE	ALL	F555W		1	260	3158	0		1
HD3360-CALIB	0 36 58.2	53 53 49	WFC	IMAGE	ALL	F502N	5019	1	0	2417	1		1
HD3360-CALIB	0 36 58.2	53 53 49	WFC	IMAGE	ALL	F631N	6307	1	0	2417	1		1
HD3360-CALIB	0 36 58.2	53 53 49	WFC	IMAGE	ALL	F656N	6559	1	0	2417	1		1
HD3360-CALIB	0 36 58.2	53 53 49	WFC	IMAGE	ALL	F673N	6727	1	0	2417	1		1
0035-4213	0 38 8.9	-41 57 25	PC	IMAGE	ALL	F555W		1	240	4027	1		1
PKS0035-39	0 38 25.6	-38 59 39	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
PKS0035-39	0 38 25.6	-38 59 39	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
PKS0035-39	0 38 25.6	-38 59 39	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6834	4125	3	CON	1
PKS0035-39	0 38 25.6	-38 59 39	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2322	4125	3	CON	1
PKS0035-39	0 38 25.6	-38 59 39	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	4125	3	ACQ CON	1
UGC396	0 38 57.2	48 20 15	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UM264	0 40 18.2	-1 37 24	PC	IMAGE	ALL	F555W		1	240	4027	1		1
NGC205-UV-STARS-POS1	0 40 22.6	41 41 1	FOC/48	IMAGE	512X512	F130LP F150W		1	4230	2719	1		2
K58-EXT-CLUSTER-M31	0 40 26.4	41 27 26	WFC	IMAGE	ALL	F336W		1	700	2298	1	ACQ	1
K58-EXT-CLUSTER-M31	0 40 26.4	41 27 26	FOS/RD	ACCUM	1.0-PAIR	G400H	4000	1	483	2298	1		1
K58-EXT-CLUSTER-M31	0 40 26.4	41 27 26	FOS/BL	ACCUM	1.0-PAIR	G130H	1300	1	5905	2298	1		1
K58-EXT-CLUSTER-M31	0 40 26.4	41 27 26	FOS/RD	ACCUM	1.0-PAIR	G270H	2700	1	2756	2298	1		1
K58-OFFSET	0 40 26.4	41 27 26*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	24	2298	1	ACQ	1
K58-OFFSET	0 40 26.4	41 27 26*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	24	2298	1	ACQ	1
G58	0 40 26.4	41 27 26	FOC/96	IMAGE	512X512	F430W		1	1900	2583	1		1
M31-NGC206-231	0 40 29.8	40 44 30	FOS/BL	ACQ/BINA	4.3	MIRROR		1	60	2581	1	ACQ	1
M31-NGC206-231	0 40 29.8	40 44 30	FOS/BL	ACCUM	1.0	G190H	1938	1	1380	2581	1		1
M31-NGC206-231	0 40 29.8	40 44 30	FOS/BL	ACCUM	1.0	G270H	2766	1	420	2581	1		1
M31-NGC206-231	0 40 29.8	40 44 30	FOS/BL	ACCUM	1.0	G130H	1379	1	5344	2581	1		1
M31-OB78-277	0 40 30.3	40 42 33	FOS/BL	ACQ/BINA	4.3	MIRROR		1	20	2581	1	ACQ	1
M31-OB78-277	0 40 30.3	40 42 33	FOS/BL	ACCUM	1.0	G130H	1379	1	6060	2581	1		1
M31-OB78-277	0 40 30.3	40 42 33	FOS/BL	ACCUM	1.0	G190H	1938	1	780	2581	1		1
M31-OB78-277	0 40 30.3	40 42 33	FOS/BL	ACCUM	1.0	G270H	2766	1	420	2581	1		1
G64	0 40 32.4	41 21 44	FOC/96	IMAGE	512X512	F430W		1	800	2583	1		1
Q0038-3936	0 40 46.9	-39 20 18	PC	IMAGE	ALL	F555W		1	260	3158	0		1
G78	0 41 1.1	41 13 45	FOC/96	IMAGE	512X512	F430W		1	550	2583	1		1
SMC-SMP6	0 41 27.7	-73 47 9	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	9	3441	2	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
SMC-SMP6	0 41 27.7	-73 47 9	FOS/BL	ACCUM	1.0	G130H	1300	1	900	3441	2		1
SMC-SMP6	0 41 27.7	-73 47 9	FOS/BL	ACCUM	1.0	G190H	1900	1	400	3441	2		1
SMC-SMP6	0 41 27.7	-73 47 9	FOS/BL	ACCUM	1.0	G270H	2700	1	250	3441	2		1
SMC-SMP6-PCPOS	0 41 27.7	-73 47 9	PC	IMAGE	P8	F502N		1	900	2266	1		1
G105	0 41 43.1	40 12 22	FOC/96	IMAGE	512X512	F430W		1	4500	2583	1		1
Q0039-265	0 42 4.1	-26 14 4	FOS/RD	ACQ/BINA	4.3	MIRROR		1	32	3676	2	ACQ	1
Q0039-265	0 42 4.1	-26 14 4	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	32	3676	2	ACQ	1
Q0039-265	0 42 4.1	-26 14 4	FOS/RD	ACCUM	0.25X2.0	G270H	2759	1	4679	3676	2		1
Q0039-265	0 42 4.1	-26 14 4	PC	IMAGE	ALL	F555W		1	260	3158	0		1
SMC-SMP7-PCPOS	0 42 28.5	-73 20 55	PC	IMAGE	P8	F502N		1	4000	2266	1		1
NGC224-7	0 42 31.7	41 18 30*	WFC	IMAGE	ALL	F702W		3	200	2735	1		1
NGC224-7	0 42 31.7	41 18 30*	WFC	IMAGE	ALL	F875M		4	300	2735	1		1
NGC224-7	0 42 31.7	41 18 30*	WFC	IMAGE	ALL	F785LP		3	200	2735	1		1
NGC224-7	0 42 31.7	41 18 30*	WFC	IMAGE	ALL	F1042M		4	500	2735	1		1
NGC224-8	0 42 31.7	41 16 10*	WFC	IMAGE	ALL	F702W		3	200	2735	1		1
NGC224-8	0 42 31.7	41 16 10*	WFC	IMAGE	ALL	F875M		4	300	2735	1		1
NGC224-8	0 42 31.7	41 16 10*	WFC	IMAGE	ALL	F785LP		3	200	2735	1		1
NGC224-8	0 42 31.7	41 16 10*	WFC	IMAGE	ALL	F1042M		4	500	2735	1		1
NGC224-9	0 42 31.7	41 13 50*	WFC	IMAGE	ALL	F702W		3	200	2735	1		1
NGC224-9	0 42 31.7	41 13 50*	WFC	IMAGE	ALL	F875M		4	300	2735	1		1
NGC224-9	0 42 31.7	41 13 50*	WFC	IMAGE	ALL	F785LP		3	200	2735	1		1
NGC224-9	0 42 31.7	41 13 50*	WFC	IMAGE	ALL	F1042M		4	500	2735	1		1
S-AND-OFFSET-STAR	0 42 33.6	41 15 50	FOS/RD	ACQ/BINA	4.3	MIRROR		1	3	2955	1	ACQ	1
NGC224-10	0 42 37.9	41 15 0*	PC	IMAGE	ALL	F702W		2	200	2735	1		1
NGC224-10	0 42 37.9	41 15 0*	PC	IMAGE	ALL	F875M		3	300	2735	1		1
NGC224-10	0 42 37.9	41 15 0*	PC	IMAGE	ALL	F785LP		2	200	2735	1		1
NGC224-10	0 42 37.9	41 15 0*	PC	IMAGE	ALL	F1042M		4	500	2735	1		1
0040-279	0 42 39.6	-27 42 0	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0040-279	0 42 39.6	-27 42 0	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
NGC221-UV-STARS	0 42 41.7	40 51 54	FOC/48	IMAGE	512X512	F130LP F150W		1	4230	2719	1		2
S-AND-FIELD	0 42 43.1	41 16 4	FOC/96	IMAGE	512X512	F220W F231M	2340	10	600	2955	1		1
S-ANDROMEDAE	0 42 43.1	41 16 4	FOS/RD	ACCUM	1.0-PAIR	G270H	2400	1	7200	2955	1		1
0040-370	0 42 43.9	-36 47 41	PC	IMAGE	ALL	F555W		1	240	4027	1		1
NGC224-2	0 42 44.1	41 13 50*	WFC	IMAGE	ALL	F702W		3	200	2735	1		1
NGC224-2	0 42 44.1	41 13 50*	WFC	IMAGE	ALL	F875M		4	300	2735	1		1
NGC224-2	0 42 44.1	41 13 50*	WFC	IMAGE	ALL	F785LP		3	200	2735	1		1
NGC224-2	0 42 44.1	41 13 50*	WFC	IMAGE	ALL	F1042M		4	500	2735	1		1
NGC224-1	0 42 44.1	41 16 10	PC	IMAGE	ALL	F875M		4	300	2735	1		1
NGC224-1	0 42 44.1	41 16 10	PC	IMAGE	ALL	F622W		1	150	2735	1		1
NGC224-1	0 42 44.1	41 16 10	PC	IMAGE	ALL	F439W		2	150	2735	1		1
NGC224-1	0 42 44.1	41 16 10	PC	IMAGE	ALL	F702W		3	150	2735	1		1
NGC224-1	0 42 44.1	41 16 10	PC	IMAGE	ALL	F1042M		2	30	2735	1		1
NGC224-1	0 42 44.1	41 16 10	PC	IMAGE	ALL	F1042M		3	3	2735	1		1
NGC224-1	0 42 44.1	41 16 10	PC	IMAGE	ALL	F785LP		3	100	2735	1		1
NGC224-1	0 42 44.1	41 16 10	PC	IMAGE	ALL	F1042M		5	500	2735	1		1
NGC224-1	0 42 44.1	41 16 10	WFC	IMAGE	ALL	F702W		3	200	2735	1		1
NGC224-1	0 42 44.1	41 16 10	WFC	IMAGE	ALL	F875M		4	300	2735	1		1
NGC224-1	0 42 44.1	41 16 10	WFC	IMAGE	ALL	F785LP		3	200	2735	1		1
NGC224-1	0 42 44.1	41 16 10	WFC	IMAGE	ALL	F1042M		4	500	2735	1		1
NGC224-6	0 42 44.1	41 18 30*	WFC	IMAGE	ALL	F702W		3	200	2735	1		1
NGC224-6	0 42 44.1	41 18 30*	WFC	IMAGE	ALL	F875M		4	300	2735	1		1
NGC224-6	0 42 44.1	41 18 30*	WFC	IMAGE	ALL	F785LP		3	200	2735	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC224-6	0 42 44.1	41 18 30*	WFC	IMAGE	ALL	F1042M		4	500	2735	1		1
NGC224-UV-STARS	0 42 44.9	41 16 8	FOC/48	IMAGE	512X512	F130LP F150W		1	4230	2719	1		2
NGC224-3	0 42 56.6	41 13 50*	WFC	IMAGE	ALL	F702W		3	200	2735	1		1
NGC224-3	0 42 56.6	41 13 50*	WFC	IMAGE	ALL	F875M		4	300	2735	1		1
NGC224-3	0 42 56.6	41 13 50*	WFC	IMAGE	ALL	F785LP		3	200	2735	1		1
NGC224-3	0 42 56.6	41 13 50*	WFC	IMAGE	ALL	F1042M		4	500	2735	1		1
NGC224-4	0 42 56.6	41 16 10*	WFC	IMAGE	ALL	F702W		3	200	2735	1		1
NGC224-4	0 42 56.6	41 16 10*	WFC	IMAGE	ALL	F875M		4	300	2735	1		1
NGC224-4	0 42 56.6	41 16 10*	WFC	IMAGE	ALL	F785LP		3	200	2735	1		1
NGC224-4	0 42 56.6	41 16 10*	WFC	IMAGE	ALL	F1042M		4	500	2735	1		1
NGC224-5	0 42 56.6	41 18 30*	WFC	IMAGE	ALL	F702W		3	200	2735	1		1
NGC224-5	0 42 56.6	41 18 30*	WFC	IMAGE	ALL	F875M		4	300	2735	1		1
NGC224-5	0 42 56.6	41 18 30*	WFC	IMAGE	ALL	F785LP		3	200	2735	1		1
NGC224-5	0 42 56.6	41 18 30*	WFC	IMAGE	ALL	F1042M		4	500	2735	1		1
AE-AND	0 43 2.6	41 49 12	FOC/96	IMAGE	512X1024	F190M		1	300	3815	2		1
AE-AND	0 43 2.6	41 49 12	FOS/RD	ACQ/BINA	4.3	MIRROR		1	30	3815	2	ACQ CON SEL	1
AE-AND	0 43 2.6	41 49 12	FOS/BL	ACCUM	1.0	G160L	1837	1	1440	3815	2	CON SEL	1
AE-AND	0 43 2.6	41 49 12	FOS/RD	ACCUM	1.0	G190H	1980	1	3720	3815	2	CON SEL	1
AE-AND	0 43 2.6	41 49 12	FOS/RD	ACCUM	1.0	G270H	2753	1	1680	3815	2	CON SEL	1
MIV-EXT-CLUSTER-M31	0 43 17.8	39 49 13	WFC	IMAGE	ALL	F336W		1	700	2298	1	ACQ	1
MIV-EXT-CLUSTER-M31	0 43 17.8	39 49 13	FOS/RD	ACCUM	1.0-PAIR	G400H	4000	1	785	2298	1		1
MIV-EXT-CLUSTER-M31	0 43 17.8	39 49 13	FOS/BL	ACCUM	1.0-PAIR	G130H	1300	1	1680	2298	1		1
MIV-EXT-CLUSTER-M31	0 43 17.8	39 49 13	FOS/RD	ACCUM	1.0-PAIR	G270H	2700	1	2008	2298	1		1
MIV-OFFSET	0 43 17.8	39 49 13*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	24	2298	1	ACQ	1
MIV-OFFSET	0 43 17.8	39 49 13*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	24	2298	1	ACQ	1
Q0041-4023	0 43 28.0	-40 7 34	PC	IMAGE	ALL	F555W		1	260	3158	0		1
AF-AND	0 43 33.1	41 12 10	FOC/96	IMAGE	512X1024	F190M		1	300	3815	2		1
AF-AND	0 43 33.1	41 12 10	FOS/RD	ACQ/BINA	4.3	MIRROR		1	30	3815	2	ACQ CON SEL	1
AF-AND	0 43 33.1	41 12 10	FOS/BL	ACCUM	1.0	G160L	1837	1	1440	3815	2	CON SEL	1
AF-AND	0 43 33.1	41 12 10	FOS/RD	ACCUM	1.0	G190H	1980	1	3720	3815	2	CON SEL	1
AF-AND	0 43 33.1	41 12 10	FOS/RD	ACCUM	1.0	G270H	2753	1	1680	3815	2	CON SEL	1
0041-266	0 43 42.8	-26 22 10	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0041-266	0 43 42.8	-26 22 10	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
G244	0 43 45.5	41 37 0	FOC/96	IMAGE	512X512	F430W		1	1500	2583	1		1
0041-2707	0 43 51.8	-26 51 28	PC	IMAGE	ALL	F555W		1	260	3158	0		1
Q0041-261	0 43 58.7	-25 51 15	PC	IMAGE	ALL	F555W		1	260	3158	0		1
Q0041-261	0 43 58.8	-25 51 15	FOS/RD	ACQ/BINA	4.3	MIRROR		1	27	3676	2	ACQ	1
Q0041-261	0 43 58.8	-25 51 15	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	27	3676	2	ACQ	1
Q0041-261	0 43 58.8	-25 51 15	FOS/RD	ACCUM	0.25X2.0	G270H	2759	1	3600	3676	2		1
G272	0 44 14.3	41 19 19	FOC/96	IMAGE	512X512	F430W		1	700	2583	1		1
M31-004419+412247	0 44 19.5	41 22 47	FOC/96	IMAGE	512X1024	F190M		1	300	3815	2		1
M31-004419+412247	0 44 19.5	41 22 47	FOS/RD	ACQ/BINA	4.3	MIRROR		1	30	3815	2	ACQ CON SEL	1
M31-004419+412247	0 44 19.5	41 22 47	FOS/BL	ACCUM	1.0	G160L	1837	1	1440	3815	2	CON SEL	1
M31-004419+412247	0 44 19.5	41 22 47	FOS/RD	ACCUM	1.0	G190H	1980	1	3720	3815	2	CON SEL	1
M31-004419+412247	0 44 19.5	41 22 47	FOS/RD	ACCUM	1.0	G270H	2753	1	1680	3815	2	CON SEL	1
K280-EXT-CLUSTER-M31	0 44 29.5	41 21 35	WFC	IMAGE	ALL	F336W		1	700	2298	1	ACQ	1
K280-EXT-CLUSTER-M31	0 44 29.5	41 21 35	FOS/BL	ACCUM	1.0-PAIR	G130H	1300	1	5905	2298	1		1
K280-EXT-CLUSTER-M31	0 44 29.5	41 21 35	FOS/RD	ACCUM	1.0-PAIR	G400H	4000	1	858	2298	1		1
K280-EXT-CLUSTER-M31	0 44 29.5	41 21 35	FOS/RD	ACCUM	1.0-PAIR	G270H	2700	1	1934	2298	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
K280-OFFSET	0 44 29.5	41 21 35*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	24	2298	1	ACQ	1
K280-OFFSET	0 44 29.5	41 21 35*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	24	2298	1	ACQ	1
0042-264	0 44 33.8	-26 11 19	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0042-264	0 44 33.8	-26 11 19	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
0042-2627	0 44 34.0	-26 11 21	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0042-2627	0 44 34.0	-26 11 21	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
M31-004451+413037	0 44 50.6	41 30 37	FOC/96	IMAGE	512X1024	F190M		1	300	3815	2		1
M31-004451+413037	0 44 50.6	41 30 37	FOS/RD	ACQ/BINA	4.3	MIRROR		1	30	3815	2	ACQ CON SEL	1
M31-004451+413037	0 44 50.6	41 30 37	FOS/BL	ACCUM	1.0	G160L	1837	1	1440	3815	2	CON SEL	1
M31-004451+413037	0 44 50.6	41 30 37	FOS/RD	ACCUM	1.0	G190H	1980	1	3720	3815	2	CON SEL	1
M31-004451+413037	0 44 50.6	41 30 37	FOS/RD	ACCUM	1.0	G270H	2753	1	1680	3815	2	CON SEL	1
0042-269	0 44 52.3	-26 40 9	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0042-269	0 44 52.3	-26 40 9	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
M31-OB48-444	0 45 15.3	41 37 47	FOS/BL	ACQ/BINA	4.3	MIRROR		1	96	2581	1	ACQ	1
M31-OB48-444	0 45 15.3	41 37 47	FOS/BL	ACCUM	1.0	G130H	1379	1	7380	2581	1		1
M31-OB48-444	0 45 15.3	41 37 47	FOS/BL	ACCUM	1.0	G190H	1938	1	1320	2581	1		1
M31-OB48-444	0 45 15.3	41 37 47	FOS/BL	ACCUM	1.0	G270H	2766	1	420	2581	1		1
0042.8-269	0 45 19.5	-26 40 50	PC	IMAGE	ALL	F555W		1	240	4027	1		1
0043-265	0 45 30.5	-26 17 9	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0043-265	0 45 30.5	-26 17 9	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
0043-3157	0 45 40.5	-31 39 32	PC	IMAGE	ALL	F555W		1	240	4027	1		1
G305	0 45 41.8	41 45 33	FOC/96	IMAGE	512X512	F430W		1	2200	2583	1		1
PG0043+039	0 45 47.2	4 10 24	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PG0043+039	0 45 47.2	4 10 24	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2958	2424	1		1
PG0043+039	0 45 47.2	4 10 24	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	2424	1	ACQ	1
PG0043+039	0 45 47.2	4 10 24	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1050	2424	1		1
0043-259	0 46 9.7	-25 38 48	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0043-259	0 46 9.7	-25 38 48	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
UM275	0 46 13.5	1 4 26	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0043-276	0 46 15.1	-27 17 50	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0043-276	0 46 15.1	-27 17 50	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
0043-307	0 46 16.4	-30 29 36	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0043-307	0 46 16.4	-30 29 36	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
G319	0 46 21.9	40 16 59	FOC/96	IMAGE	512X512	F430W		1	2500	2583	1		1
G322	0 46 27.0	42 1 53	FOC/96	IMAGE	512X512	F430W		1	1600	2583	1		1
NGC188PSF-4	0 46 51.0	85 15 33	WFC	IMAGE	WFALL-FIX	F702W		2	40	3857	2		1
0044-3253	0 46 59.3	-32 35 18	PC	IMAGE	ALL	F555W		1	240	4027	1		1
PKS0044+030	0 47 5.9	3 19 55	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	2424	1	ACQ	1
PKS0044+030	0 47 5.9	3 19 55	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
PKS0044+030	0 47 5.9	3 19 55	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PKS0044+030	0 47 5.9	3 19 55	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	3720	2424	1		1
PKS0044+030	0 47 5.9	3 19 55	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1019	2424	1		1
ESO-0044-2102	0 47 8.3	-20 45 37	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC488	0 47 19.4	14 42 12	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
UM276	0 47 19.7	1 48 13	PC	IMAGE	ALL	F555W		1	260	3158	0		1
NGC188PSF-1	0 47 32.0	85 14 58	WFC	IMAGE	ALL	F702W		2	40	4014	1		1
NGC188PSF-1	0 47 32.0	85 14 58	WFC	IMAGE	WFALL-FIX	F702W		2	40	3857	2		1
ESO-0045-2533	0 47 35.3	-25 17 26	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UM667	0 47 50.1	-3 25 31	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM278	0 48 6.1	-1 3 21	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0046-293	0 48 29.5	-29 3 21	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
0046-293	0 48 29.5	-29 3 21	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
Q0046-293	0 48 29.6	-29 3 21	PC	IMAGE	ALL	F702W		1	100	2350	1		1
Q0046-293	0 48 29.6	-29 3 21	PC	IMAGE	ALL	F702W		1	350	2350	1		1
0046-243	0 48 34.5	-24 42 6	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0046-243	0 48 34.5	-24 42 6	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
0046-267	0 48 48.7	-26 27 4	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0046-267	0 48 48.7	-26 27 4	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
0046+0623	0 48 58.7	6 40 6	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0046+0623	0 48 58.7	6 40 6	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
VM2	0 49 9.9	5 23 19	FOS/RD	ACCUM	1.0	G160L		1	2160	3816	2		1
VM2	0 49 9.9	5 23 19	FOS/RD	ACCUM	1.0	G270H		1	3600	3816	2		1
VM2	0 49 9.9	5 23 19	FOS/RD	ACQ/BINA	4.3	MIRROR		1	0	3816	2	ACQ	1
PKS0046-315	0 49 22.8	-31 16 28	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0046-282	0 49 24.4	-27 59 2	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0046-282	0 49 24.4	-27 59 2	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
G351	0 49 39.8	41 35 29	FOC/96	IMAGE	512X512	F140W		1	4560	3726	2		1
G351	0 49 39.8	41 35 29	FOC/96	IMAGE	512X512	F342W		1	1680	3726	2		1
G352	0 50 9.9	41 41 1	FOC/96	IMAGE	512X512	F430W		1	4900	2583	1		1
0047-308	0 50 20.1	-30 34 21	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0047-308	0 50 20.1	-30 34 21	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
0047-307	0 50 24.4	-30 26 49	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0047-307	0 50 24.4	-30 26 49	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
0048-3506	0 50 29.6	-34 50 44	PC	IMAGE	ALL	F555W		1	240	4027	1		1
UM281	0 51 2.6	-1 2 44	PC	IMAGE	ALL	F555W		1	260	3158	0		1
Q0048-261	0 51 9.2	-25 52 16	PC	IMAGE	ALL	F555W		1	260	3158	0		1
Q0048-261	0 51 9.2	-25 52 16	FOS/RD	ACQ/BINA	4.3	MIRROR		1	54	3676	2	ACQ	1
Q0048-261	0 51 9.2	-25 52 16	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	54	3676	2	ACQ	1
Q0048-261	0 51 9.2	-25 52 16	FOS/RD	ACCUM	0.25X2.0	G270H	2759	1	8280	3676	2		1
CS73	0 51 27.2	-28 4 34	PC	IMAGE	ALL	F555W		1	260	3158	0		1
Q0049-393	0 51 52.4	-39 6 26	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM287	0 52 2.4	1 1 29	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM288	0 52 33.7	1 40 40	PC	IMAGE	ALL	F555W		1	260	3158	0		1
ESO-0050-3128	0 52 41.7	-31 12 28	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q0050-253	0 52 44.7	-25 6 52	FOS/BL	RAPID	1.0	G160L	1840	1	600	3791	2		1
Q0050-253	0 52 44.7	-25 6 52	FOS/RD	ACQ/BINA	4.3	MIRROR		1	9	3791	2	ACQ	1
Q0050-253	0 52 44.7	-25 6 52	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	3791	2	ACQ	1
Q0050-253	0 52 44.7	-25 6 52	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5724	3791	2		1
Q0050-253	0 52 44.7	-25 6 52	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1914	3791	2		1
0050-283	0 53 17.9	-28 4 34	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0050-283	0 53 17.9	-28 4 34	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
IZWI	0 53 34.9	12 41 36	HRS	ACCUM	2.0	G160M	1241	16	1960	3584	2		1
IZW1	0 53 35.0	12 41 36	FOS/RD	ACQ/BINA	4.3	MIRROR		1	2	3879	2	ACQ	1
IZW1	0 53 35.0	12 41 36	FOS/RD	RAPID	1.0	G270H	2700	1	1519	3879	2		1
0051-279	0 54 15.5	-27 42 8	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0051-279	0 54 15.5	-27 42 8	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
Q0051-279	0 54 15.5	-27 42 8	PC	IMAGE	ALL	F702W		1	100	2350	1		1
Q0051-279	0 54 15.5	-27 42 8	PC	IMAGE	ALL	F702W		1	350	2350	1		1
Q0052-410	0 54 29.9	-40 47 45	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0052-390	0 54 45.3	-38 44 15	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0052-390	0 54 45.3	-38 44 15	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
NGC300-PAR1	0 54 52.7	-37 41 9	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
NGC300-PAR1	0 54 52.7	-37 41 9	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC300-PAR1	0 54 52.7	-37 41 9	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
NGC300-PAR2	0 54 52.7	-37 41 9	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
NGC300-PAR2	0 54 52.7	-37 41 9	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1
NGC300-PAR2	0 54 52.7	-37 41 9	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
NGC300-PAR3	0 54 52.7	-37 41 9	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
NGC300-PAR3	0 54 52.7	-37 41 9	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1
NGC300-PAR3	0 54 52.7	-37 41 9	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
NGC300-PAR4	0 54 52.7	-37 41 9	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
NGC300-PAR4	0 54 52.7	-37 41 9	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1
NGC300-PAR4	0 54 52.7	-37 41 9	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
ESO-0052-3757	0 54 53.5	-37 41 0	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
0053-303	0 55 26.8	-30 3 48	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0053-303	0 55 26.8	-30 3 48	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
0053-276B	0 56 5.6	-27 25 22	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0053-276B	0 56 5.6	-27 25 22	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
NEWHIP-65	0 56 8.9	-22 29 26	FGS	POS	3	PUPIL		1	51	3918	2	CON	2
NEWHIP-65	0 56 8.9	-22 29 26	FGS	POS	3	PUPIL		1	51	4143	3	CON	2
POINTNEWEGOB-17NEWHIP-17	0 56 39.2	-22 29 29	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-17NEWHIP-17	0 56 39.2	-22 29 29	S/C	POINTING	V1			1	1	4145	3	CON	1
POINTNEWEGOD-65NEWHIP-65	0 56 59.9	-22 35 36	S/C	POINTING	V1			1	1	3918	2	CON	1
POINTNEWEGOD-65NEWHIP-65	0 56 59.9	-22 35 36	S/C	POINTING	V1			1	1	4143	3	CON	1
NEWEGOB-17NEWHIP-17	0 57 19.0	-22 22 47	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-17NEWHIP-17	0 57 19.0	-22 22 47	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
NEWEGOD-65NEWHIP-65	0 57 19.0	-22 22 47	FGS	POS	3	PUPIL		1	51	3918	2	CON	3
NEWEGOD-65NEWHIP-65	0 57 19.0	-22 22 47	FGS	POS	3	PUPIL		1	51	4143	3	CON	3
Q0055-3844	0 57 22.6	-38 28 32	PC	IMAGE	ALL	F555W		1	260	3158	0		1
NEWHIP-17	0 57 26.2	-22 25 11	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-17	0 57 26.2	-22 25 11	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
BD+64D106	0 57 36.7	64 51 35	FOS/BL	ACCUM	4.3	G270H		1	800	3663	1		2
BD+64D106	0 57 36.7	64 51 35	FOS/BL	ACCUM	4.3	G270H		1	800	3882	1		1
BD+64D106	0 57 36.7	64 51 35	FOS/BL	ACQ/PEAK	0.5	G570H		1	2	3663	1	ACQ	2
BD+64D106	0 57 36.7	64 51 35	FOS/BL	ACQ/PEAK	1.0	G570H		1	2	3663	1	ACQ	2
BD+64D106	0 57 36.7	64 51 35	FOS/BL	ACQ/PEAK	4.3	G570H		1	1	3663	1	ACQ	2
BD+64D106	0 57 36.7	64 51 35	FOS/BL	ACQ/PEAK	0.5	G570H		1	2	3882	1	ACQ	1
BD+64D106	0 57 36.7	64 51 35	FOS/BL	ACQ/PEAK	1.0	G570H		1	2	3882	1	ACQ	1
BD+64D106	0 57 36.7	64 51 35	FOS/BL	ACQ/PEAK	4.3	G570H		1	1	3882	1	ACQ	1
0055-269	0 57 58.1	-26 43 13	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0055-269	0 57 58.1	-26 43 13	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
Q0055-4139	0 58 1.6	-41 23 7	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0055-254	0 58 6.8	-25 8 25	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0055-254	0 58 6.8	-25 8 25	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
UM294	0 58 24.7	0 41 14	PC	IMAGE	ALL	F555W		1	260	3158	0		1
Q0056-3924	0 58 41.2	-39 8 42	PC	IMAGE	ALL	F555W		1	260	3158	0		1
NGC346-1	0 59 4.8	-72 10 25	FOS/BL	ACCUM	0.25X2.0	G130H		1	2803	4110	1		1
NGC346-1	0 59 4.8	-72 10 25	FOS/BL	ACCUM	0.25X2.0	G190H		1	1215	4110	1		1
NGC346-1	0 59 4.8	-72 10 25	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	4110	1	ACQ	1
NGC346-1	0 59 4.8	-72 10 25	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	4110	1	ACQ	1
PC0056+0125	0 59 17.6	1 42 5	PC	IMAGE	ALL	F555W		1	240	4027	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
AV-232	0 59 32.2	-72 10 46	FOS/BL	ACCUM	0.25X2.0	G130H		1	2130	4110	1		1
AV-232	0 59 32.2	-72 10 46	FOS/BL	ACCUM	0.25X2.0	G190H		1	953	4110	1		1
AV-232	0 59 32.2	-72 10 46	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	4110	1	ACQ	1
AV-232	0 59 32.2	-72 10 46	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	4110	1	ACQ	1
0057-398	0 59 53.2	-39 31 58	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0057-398	0 59 53.2	-39 31 58	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
0057-274	1 0 12.3	-27 8 53	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0057-274	1 0 12.3	-27 8 53	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
0057-302	1 0 14.1	-30 0 27	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0057-302	1 0 14.1	-30 0 27	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
PHL938	1 0 54.1	2 11 36	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0059-287	1 1 26.0	-28 29 36	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0059-287	1 1 26.0	-28 29 36	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
Q0059-4110	1 1 59.2	-40 53 52	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0059-304B	1 2 14.6	-30 7 53	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0059-304B	1 2 14.6	-30 7 53	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
0059-2735	1 2 17.0	-27 19 50	PC	IMAGE	ALL	F555W		1	240	4027	1		1
PKS0100-270	1 2 56.3	-26 46 36	PC	IMAGE	ALL	F555W		1	260	3158	0		1
Q0100-3955	1 2 56.5	-39 38 59	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0100-261	1 2 58.1	-25 54 26	PC	IMAGE	ALL	F555W		1	240	4027	1		1
Q0101-4216	1 3 4.4	-42 4 0	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0100-283B	1 3 6.6	-28 3 14	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0100-283B	1 3 6.6	-28 3 14	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
Q0101-304	1 3 37.4	-30 8 59	PC	IMAGE	ALL	F702W		1	100	2350	1		1
Q0101-304	1 3 37.4	-30 8 59	PC	IMAGE	ALL	F702W		1	350	2350	1		1
0101-304	1 3 55.3	-30 9 49	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0101-304	1 3 55.3	-30 9 49	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
Q0102-4238	1 4 34.8	-42 22 7	PC	IMAGE	ALL	F555W		1	260	3158	0		1
IC1613-S8	1 5 2.7	2 8 40	FOS/RD	ACQ/PEAK	4.3	MIRROR		1	30	2290	1	ACQ	1
IC1613-S8	1 5 2.7	2 8 40	FOS/BL	ACCUM	1.0	G130H	1300	2	2000	2290	1		1
IC1613-S8	1 5 2.7	2 8 40	FOS/RD	ACCUM	1.0	G190H	1900	2	1100	2290	1		1
IC1613-S8	1 5 2.7	2 8 40	FOS/RD	ACCUM	1.0	PRISM	5007	2	1100	2290	1		1
UM669	1 5 16.8	-18 46 42	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0103-290	1 5 56.5	-28 45 27	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0103-290	1 5 56.5	-28 45 27	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
0103-260	1 6 4.3	-25 46 53	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0103-260	1 6 4.3	-25 46 53	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
BD+49D292	1 6 4.8	49 51 24	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
BD+49D292	1 6 4.8	49 51 24	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
Q0103-29	1 6 17.7	-28 57 2	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0103+005	1 6 19.2	0 48 23	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0103+005	1 6 19.2	0 48 23	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
WX-PSC	1 6 26.0	12 35 53	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
WX-PSC	1 6 26.0	12 35 53	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
0104+0215	1 6 49.6	2 31 1	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0104+0215	1 6 49.6	2 31 1	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
PC0104+0215	1 6 49.6	2 31 1	PC	IMAGE	ALL	F702W		1	100	2350	1		1
PC0104+0215	1 6 49.6	2 31 1	PC	IMAGE	ALL	F702W		1	350	2350	1		1
Q0105-391	1 7 37.1	-38 53 27	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0105-2634	1 8 12.4	-26 18 20	PC	IMAGE	ALL	F555W		1	240	4027	1		1
0105-265	1 8 12.5	-26 18 20	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0105-265	1 8 12.5	-26 18 20	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1

Target	RA (2000)	Dec (2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
UM86	1 8 21.8	6 23 28	PC	IMAGE	ALL	F555W		1	240	4027	1		1
UGC718	1 9 27.0	35 43 4	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC726	1 9 57.6	-1 44 57	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
POINT0109+224INCA221-2	1 11 36.3	22 54 35	S/C	POINTING	V1			1	1	2565	2	CON	1
POINT0109+224INCA221-2	1 11 36.3	22 54 35	S/C	POINTING	V1			1	1	4148	3	CON	1
INCA221-2	1 11 40.2	22 43 19	FGS	POS	3	F5ND		1	51	2565	2	CON	2
INCA221-2	1 11 40.2	22 43 19	FGS	POS	3	F5ND		1	51	4148	3	CON	2
Q0109-353	1 11 43.5	-35 3 1	PC	IMAGE	ALL	F555W		1	260	3158	0		1
PKS0109+17	1 11 49.8	17 53 51	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0109+224INCA221-3	1 12 5.7	22 44 39	FGS	POS	3	PUPIL		1	51	2565	2	CON	3
0109+224INCA221-3	1 12 5.7	22 44 39	FGS	POS	3	PUPIL		1	51	4148	3	CON	3
0109+224INCA221-2	1 12 5.7	22 44 39	FGS	POS	3	PUPIL		1	51	2565	2	CON	3
0109+224INCA221-2	1 12 5.7	22 44 39	FGS	POS	3	PUPIL		1	51	4148	3	CON	3
UM87	1 12 17.0	2 29 48	PC	IMAGE	ALL	F555W		1	240	4027	1		1
POINT0109+224INCA221-3	1 12 41.9	22 37 21	S/C	POINTING	V1			1	1	2565	2	CON	1
POINT0109+224INCA221-3	1 12 41.9	22 37 21	S/C	POINTING	V1			1	1	4148	3	CON	1
INCA221-3	1 12 53.7	22 50 17	FGS	POS	3	PUPIL		1	51	2565	2	CON	2
INCA221-3	1 12 53.7	22 50 17	FGS	POS	3	PUPIL		1	51	4148	3	CON	2
B20110+29	1 13 24.2	29 58 16	FOS/RD	ACQ/BINA	4.3	MIRROR		1	16	3858	2	ACQ	1
B20110+29	1 13 24.2	29 58 16	FOS/RD	ACCUM	4.3	G190H	1954	1	936	3858	2		1
B20110+29	1 13 24.2	29 58 16	FOS/RD	ACCUM	4.3	G270H	2767	1	438	3858	2		1
0111-28	1 13 44.4	-28 3 17	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0111-28	1 13 44.4	-28 3 17	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
HD7252	1 14 3.7	60 52 59	FOS/BL	ACCUM	4.3	G270H		1	739	2245	1		1
HD7252	1 14 3.7	60 52 59	FOS/BL	ACQ/PEAK	4.3	G570H		1	1	2245	1	ACQ	1
HD7252	1 14 3.7	60 52 59	FOS/BL	ACQ/PEAK	0.5	G570H		1	4	2245	1	ACQ	1
HD7252	1 14 3.7	60 52 59	FOS/BL	ACQ/PEAK	1.0	G570H		1	1	2245	1	ACQ	1
HD7252	1 14 3.7	60 52 59	FOS/BL	ACCUM	4.3	G190H		1	2176	2245	1		1
HD7252	1 14 3.7	60 52 59	FOS/BL	ACCUM	4.3	G130H	1454	1	5004	2245	1		1
PG0112+104	1 14 37.6	10 41 5	HSP/UV2	SINGLE	10.0	F140LP		1	1800	3798	2		1
0112-329	1 14 53.9	-32 38 25	PC	IMAGE	ALL	F555W		1	260	3158	0		1
PKS0112-017	1 15 17.1	-1 27 5	FOS/RD	ACCUM	4.3	G270H	2700	1	918	2578	1		1
PKS0112-017	1 15 17.1	-1 27 5	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
PKS0112-017	1 15 17.1	-1 27 5	FOS/RD	ACCUM	4.3	G400H	4000	1	731	2578	1		1
UGC815	1 15 57.7	5 10 44	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
AV-488	1 15 58.8	-73 21 24	FOS/BL	ACQ/PEAK	0.5	G400H		1	0	4110	1	ACQ	1
AV-488	1 15 58.8	-73 21 24	FOS/BL	ACQ/PEAK	1.0	G400H		1	0	4110	1	ACQ	1
AV-488	1 15 58.8	-73 21 24	FOS/BL	ACCUM	0.25X2.0	G130H		1	3189	4110	1		1
AV-488	1 15 58.8	-73 21 24	FOS/BL	ACQ/PEAK	0.25X2.0	G400H		1	0	4110	1	ACQ	1
AV-488	1 15 58.8	-73 21 24	FOS/BL	ACQ/PEAK	4.3	G400H		1	0	4110	1	ACQ	1
AV-488	1 15 58.8	-73 21 24	FOS/BL	ACCUM	0.25X2.0	G190H		1	1375	4110	1		1
MRK1-OFFSET	1 15 59.2	33 5 43	FOS/BL	ACQ/BINA	4.3	MIRROR		1	13	3573	2	ACQ	1
MRK1	1 16 7.3	33 5 22*	FOS/BL	ACCUM	4.3	G270H		1	1445	3573	2		1
UM670	1 17 23.3	-8 41 32	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0114-089	1 17 23.4	-8 41 33	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0114-089	1 17 23.4	-8 41 33	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
UM314	1 18 28.0	-0 52 40	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM315	1 18 38.6	-1 54 23	PC	IMAGE	ALL	F555W		1	260	3158	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
MARK567	1 19 18.1	4 34 40	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
UM671	1 19 46.5	-17 47 48	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0118+0119	1 20 48.9	1 34 53	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0118+0119	1 20 48.9	1 34 53	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
0119-358	1 22 5.4	-35 35 15	PC	IMAGE	ALL	F555W		1	260	3158	0		1
PKS0119-04	1 22 27.9	-4 21 27	PC	IMAGE	ALL	F555W		1	260	3158	0		1
MARK569	1 22 35.9	1 53 26	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
0121-329	1 23 36.8	-32 38 31	PC	IMAGE	ALL	F555W		1	260	3158	0		1
SMC-SMP28	1 24 11.9	-74 2 32	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	20	3441	2	ACQ	1
SMC-SMP28	1 24 11.9	-74 2 32	FOS/BL	ACCUM	1.0	G130H	1300	1	2000	3441	2		1
SMC-SMP28	1 24 11.9	-74 2 32	FOS/BL	ACCUM	1.0	G190H	1900	1	1000	3441	2		1
SMC-SMP28	1 24 11.9	-74 2 32	FOS/BL	ACCUM	1.0	G270H	2700	1	450	3441	2		1
SMC-SMP28-PCPOS	1 24 11.9	-74 2 32	PC	IMAGE	P8	F502N		3	1700	2266	1		1
Q0122-380	1 24 17.4	-37 44 23	PC	IMAGE	ALL	F555W		1	260	3158	0		1
NGC520.48	1 24 33.2	3 43 34	FOS/RD	ACQ/BINA	4.3	MIRROR		1	76	3676	2	ACQ	1
NGC520.48	1 24 33.2	3 43 34	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	76	3676	2	ACQ	1
NGC520.48	1 24 33.2	3 43 34	FOS/RD	ACCUM	0.25X2.0	G270H	2759	1	9359	3676	2		1
UGC966	1 24 34.0	3 47 49	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC524	1 24 47.8	9 32 19	PC	IMAGE	PC6	F555W		2	500	3912	2		1
NGC524	1 24 47.8	9 32 19	PC	IMAGE	PC6	F555W		1	120	3912	2		1
NGC520.40	1 24 57.6	3 53 48	FOS/RD	ACQ/BINA	4.3	MIRROR		1	39	3676	2	ACQ	1
NGC520.40	1 24 57.6	3 53 48	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	39	3676	2	ACQ	1
NGC520.40	1 24 57.6	3 53 48	FOS/RD	ACCUM	0.25X2.0	G270H	2759	1	5760	3676	2		1
UGC979	1 25 20.8	34 1 32	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q0123-365	1 25 24.5	-36 15 44	PC	IMAGE	ALL	F555W		1	260	3158	0		1
PKS0122-00	1 25 28.8	-0 5 56	PC	IMAGE	ALL	F555W		1	260	3158	0		1
PKS0122-00	1 25 28.9	-0 5 56	FOS/RD	ACQ/BINA	4.3	MIRROR		1	13	2424	1	ACQ	1
PKS0122-00	1 25 28.9	-0 5 56	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	3390	2424	1		1
PKS0122-00	1 25 28.9	-0 5 56	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PKS0122-00	1 25 28.9	-0 5 56	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	821	2424	1		1
MINKOWSKI-OBJECT	1 25 47.3	-1 22 22	PC	IMAGE	PC6	F569W	5609	3	700	3807	2		1
MINKOWSKI-OBJECT	1 25 47.3	-1 22 22	PC	IMAGE	PC6	F791W	7935	3	700	3807	2		1
MINKOWSKI-OBJECT	1 25 47.3	-1 22 22	PC	IMAGE	PC6	F664N	6638	3	384	3807	2		1
MINKOWSKI-OBJECT	1 25 47.3	-1 22 22	FOC/48	IMAGE	512X512	F430W	3920	1	2100	3807	2		1
MINKOWSKI-OBJECT	1 25 47.3	-1 22 22	FOC/48	IMAGE	512X512	F150W	1700	3	2100	3807	2		1
MINKOWSKI-OBJECT	1 25 47.3	-1 22 22	FOC/48	IMAGE	512X512	F220W	2239	3	2100	3807	2		1
0123-368	1 25 54.4	-36 32 36	PC	IMAGE	ALL	F555W		1	240	4027	1		1
UM322	1 26 30.2	-1 53 58	PC	IMAGE	ALL	F555W		1	260	3158	0		1
HD8879	1 26 58.1	-32 32 34	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD8879	1 26 58.1	-32 32 34	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
UM327	1 27 48.3	-0 13 33	PC	IMAGE	ALL	F555W		1	260	3158	0		1
Q0125-400	1 27 52.8	-39 45 27	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM104	1 28 43.7	3 16 50	PC	IMAGE	ALL	F555W		1	260	3158	0		1
ESO-0128-2255	1 30 28.6	-22 40 0	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC596	1 32 52.0	-7 1 55	PC	IMAGE	P6	F555W		1	70	2600	1		1
NGC596	1 32 52.0	-7 1 55	PC	IMAGE	P6	F555W		2	260	2600	1		1
Q0130-403	1 33 1.9	-40 6 28	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0130-403	1 33 2.0	-40 6 28	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0130-403	1 33 2.0	-40 6 28	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
M33-DBB6	1 33 29.2	30 42 17	FOS/RD	ACQ/PEAK	4.3	MIRROR		1	40	2290	1	ACQ	1
M33-DBB6	1 33 29.2	30 42 17	FOS/BL	ACCUM	1.0	G130H	1300	2	2000	2290	1		1
M33-DBB6	1 33 29.2	30 42 17	FOS/RD	ACCUM	1.0	G190H	1900	2	1200	2290	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
M33-DBB6	1 33 29.2	30 42 17	FOS/RD	ACCUM	1.0	PRISM	5007	2	1200	2290	1		1
NGC595	1 33 33.9	30 41 33	PC	IMAGE	ALL	F439W		1	150	2441	1		1
NGC595	1 33 33.9	30 41 33	PC	IMAGE	ALL	F439W		1	1200	2441	1		1
NGC595	1 33 33.9	30 41 33	PC	IMAGE	ALL	F469N		2	3500	2441	1		1
M33-013335+303601	1 33 35.1	30 36 1	FOC/96	IMAGE	512X1024	F190M		1	300	3815	2		1
M33-013335+303601	1 33 35.1	30 36 1	FOS/RD	ACQ/BINA	4.3	MIRROR		1	30	3815	2	ACQ CON SEL	1
M33-013335+303601	1 33 35.1	30 36 1	FOS/BL	ACCUM	1.0	G160L	1837	1	1440	3815	2	CON SEL	1
M33-013335+303601	1 33 35.1	30 36 1	FOS/RD	ACCUM	1.0	G190H	1980	1	3720	3815	2	CON SEL	1
M33-013335+303601	1 33 35.1	30 36 1	FOS/RD	ACCUM	1.0	G270H	2753	1	1680	3815	2	CON SEL	1
PC0131+0120	1 33 48.8	1 36 16	PC	IMAGE	ALL	F555W		1	240	4027	1		1
0131+013	1 33 48.8	1 36 17	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0131+013	1 33 48.8	1 36 17	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
M33-013349+303809	1 33 49.2	30 38 9	FOC/96	IMAGE	512X1024	F190M		1	300	3815	2		1
M33-013349+303809	1 33 49.2	30 38 9	FOS/RD	ACQ/BINA	4.3	MIRROR		1	30	3815	2	ACQ CON SEL	1
M33-013349+303809	1 33 49.2	30 38 9	FOS/BL	ACCUM	1.0	G160L	1837	1	1440	3815	2	CON SEL	1
M33-013349+303809	1 33 49.2	30 38 9	FOS/RD	ACCUM	1.0	G190H	1980	1	3720	3815	2	CON SEL	1
M33-013349+303809	1 33 49.2	30 38 9	FOS/RD	ACCUM	1.0	G270H	2753	1	1680	3815	2	CON SEL	1
M33-PAR1	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
M33-PAR1	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1
M33-PAR1	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
M33-PAR2	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
M33-PAR2	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1
M33-PAR2	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
M33-PAR3	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
M33-PAR3	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1
M33-PAR3	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
M33-PAR4	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
M33-PAR4	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1
M33-PAR4	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
M33-PAR5	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
M33-PAR5	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1
M33-PAR5	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
M33-PAR6	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
M33-PAR6	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1
M33-PAR6	1 33 51.2	30 39 36	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
UM338	1 33 52.7	1 13 46	PC	IMAGE	ALL	F555W		1	260	3158	0		1
M33-013411+303438	1 34 10.9	30 34 38	FOC/96	IMAGE	512X1024	F190M		1	300	3815	2		1
M33-013411+303438	1 34 10.9	30 34 38	FOS/RD	ACQ/BINA	4.3	MIRROR		1	30	3815	2	ACQ CON SEL	1
M33-013411+303438	1 34 10.9	30 34 38	FOS/BL	ACCUM	1.0	G160L	1837	1	1440	3815	2	CON SEL	1
M33-013411+303438	1 34 10.9	30 34 38	FOS/RD	ACCUM	1.0	G190H	1980	1	3720	3815	2	CON SEL	1
M33-013411+303438	1 34 10.9	30 34 38	FOS/RD	ACCUM	1.0	G270H	2753	1	1680	3815	2	CON SEL	1
ESO-0132-2940	1 34 17.9	-29 25 1	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
M33-013418+303837	1 34 18.4	30 38 37	FOC/96	IMAGE	512X1024	F190M		1	300	3815	2		1
M33-013418+303837	1 34 18.4	30 38 37	FOS/RD	ACQ/BINA	4.3	MIRROR		1	30	3815	2	ACQ CON SEL	1
M33-013418+303837	1 34 18.4	30 38 37	FOS/BL	ACCUM	1.0	G160L	1837	1	1440	3815	2	CON SEL	1
M33-013418+303837	1 34 18.4	30 38 37	FOS/RD	ACCUM	1.0	G190H	1980	1	3720	3815	2	CON SEL	1
M33-013418+303837	1 34 18.4	30 38 37	FOS/RD	ACCUM	1.0	G270H	2753	1	1680	3815	2	CON SEL	1
NGC604	1 34 33.0	30 47 0	PC	IMAGE	ALL	F439W		1	150	2441	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC604	1 34 33.0	30 47 0	PC	IMAGE	ALL	F439W		1	1200	2441	1		1
NGC604	1 34 33.0	30 47 0	PC	IMAGE	ALL	F469N		2	3500	2441	1		1
UM672	1 34 38.6	-19 32 7	PC	IMAGE	ALL	F555W		1	260	3158	0		1
NAB0132+20	1 34 58.5	20 45 49	PC	IMAGE	ALL	F555W		1	260	3158	0		1
ESO-0132-4141	1 35 4.7	-41 26 12	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
3C47-0	1 36 24.5	20 57 26	FOS/RD	ACQ/BINA	4.3	MIRROR		1	58	3858	2	ACQ	1
3C47-0	1 36 24.5	20 57 26	FOS/RD	ACCUM	4.3	G190H	1954	1	1884	3858	2		1
3C47-0	1 36 24.5	20 57 26	FOS/RD	ACCUM	4.3	G270H	2767	1	911	3858	2		1
UGC1149	1 36 41.7	15 47 2	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
0135-42	1 37 24.4	-42 24 16	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0135-42	1 37 24.4	-42 24 16	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
3C48.0	1 37 41.3	33 9 34	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
3C48.0	1 37 41.3	33 9 34	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	4125	3	ACQ CON	1
3C48.0	1 37 41.3	33 9 34	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
3C48.0	1 37 41.3	33 9 34	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6438	4125	3	CON	1
3C48.0	1 37 41.3	33 9 34	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2345	4125	3	CON	1
A222-6	1 37 43.1	-12 57 45	FOS/RD	ACCUM	4.3	G190H		1	7200	3448	2		1
A222-6	1 37 43.1	-12 57 45	FOS/RD	ACQ/BINA	4.3	MIRROR		1	300	3448	2	ACQ	1
UM349	1 38 14.5	0 0 4	PC	IMAGE	ALL	F555W		1	260	3158	0		1
PKS0136-231	1 38 57.4	-22 54 48	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM121	1 39 2.3	6 15 37	PC	IMAGE	ALL	F555W		1	240	4027	1		1
PKS0136+176	1 39 42.0	17 53 7	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM356	1 40 18.2	-1 38 6	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0138-381	1 40 25.6	-37 53 3	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0138-381	1 40 25.6	-37 53 3	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
Q0138-381	1 40 25.6	-37 53 3	PC	IMAGE	ALL	F555W		1	260	3158	0		1
Q0140-306	1 42 54.8	-30 23 45	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UGC1201	1 43 6.1	13 39 21	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
B20141+33	1 44 11.8	34 11 56	PC	IMAGE	ALL	F555W		1	240	4027	1		1
0142-100	1 45 17.3	-9 45 12	PC	IMAGE	ALL	F555W		1	100	2350	1		1
0142-100	1 45 17.3	-9 45 12	PC	IMAGE	ALL	F555W		1	500	2350	1		1
UM366	1 45 51.2	-1 20 31	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0143-015	1 45 51.2	-1 20 30	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0143-015	1 45 51.2	-1 20 30	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
UM368	1 46 19.9	-0 46 29	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UGC1249	1 47 30.1	27 19 56	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC1256	1 47 53.9	27 25 56	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UM139	1 48 17.5	4 31 19	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM141	1 49 18.7	1 57 23	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM141	1 49 18.7	1 57 23	PC	IMAGE	ALL	F555W		1	240	4017	1		1
0146+017	1 49 18.7	1 57 23	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0146+017	1 49 18.7	1 57 23	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
UM142	1 49 42.3	2 11 38	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0148-516	1 50 48.9	-51 24 55	PC	IMAGE	ALL	F555W		1	260	3158	0		1
0148-516	1 50 48.9	-51 24 55	PC	IMAGE	ALL	F555W		1	240	4017	1		1
UM674	1 51 6.6	-9 32 0	PC	IMAGE	ALL	F555W		1	260	3158	0		1
Q0149-397	1 51 26.4	-39 27 52	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM675	1 52 27.3	-20 1 7	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM375	1 52 59.1	-1 29 41	PC	IMAGE	ALL	F555W		1	260	3158	0		1
NGC720	1 53 0.5	-13 44 20	PC	IMAGE	P6	F555W		2	700	2600	1		1
0151-00	1 53 40.1	0 40 33	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0151-00	1 53 40.1	0 40 33	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PHL1222	1 53 53.9	5 2 57	PC	IMAGE	ALL	F555W		1	260	3158	0		1
UM148	1 56 36.0	4 45 28	PC	IMAGE	ALL	F555W		1	260	3158	0		1
MRK1014	1 59 49.7	0 23 39	FOC/96	IMAGE	512X512	F480LP		1	600	3906	2		1
MRK1014	1 59 49.7	0 23 39	FOC/96	IMAGE	512X512	F1ND F430W		1	600	3906	2		1
UGC1501	2 1 17.1	28 49 59	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
3C57	2 1 57.2	-11 32 34	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
3C57	2 1 57.2	-11 32 34	FOS/RD	ACQ/BINA	4.3	MIRROR		1	12	4125	3	ACQ CON	1
3C57	2 1 57.2	-11 32 34	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
3C57	2 1 57.2	-11 32 34	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6162	4125	3	CON	1
3C57	2 1 57.2	-11 32 34	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2604	4125	3	CON	1
Q0159+036	2 1 59.7	3 50 42	PC	IMAGE	ALL	F555W		1	100	2350	1		1
Q0159+036	2 1 59.7	3 50 42	PC	IMAGE	ALL	F555W		1	350	2350	1		1
JL280	2 4 18.8	-50 58 4	PC	IMAGE	ALL	F555W		1	240	4027	1		1
B20201+36B	2 4 55.6	36 49 18	PC	IMAGE	ALL	F555W		1	260	3159	0		1
UGC1597	2 6 16.0	-0 17 29	PC	IMAGE	PC6	F785LP		1	180	4093	2		1
Q0205-379	2 7 27.1	-37 41 57	PC	IMAGE	ALL	F555W		1	260	3159	0		1
UM400	2 8 45.5	0 22 36	PC	IMAGE	ALL	F555W		1	260	3159	0		1
Q0207-398	2 9 28.6	-39 39 40	PC	IMAGE	ALL	F555W		1	260	3159	0		1
Q0207-003	2 9 50.6	-0 4 57	PC	IMAGE	ALL	F555W		1	100	2350	1		1
Q0207-003	2 9 50.6	-0 4 57	PC	IMAGE	ALL	F555W		1	350	2350	1		1
UM403	2 9 53.1	0 55 11	PC	IMAGE	ALL	F555W		1	260	3159	0		1
UGC1655	2 10 9.6	39 11 26	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
G74-7	2 11 20.2	39 55 26	FOS/RD	ACCUM	1.0	G160L	2050	1	2400	2593	1		1
G74-7	2 11 20.2	39 55 26	FOS/RD	ACQ/BINA	4.3	MIRROR		1	9	2593	1	ACQ	1
G74-7	2 11 20.2	39 55 26	FOS/RD	ACCUM	1.0	G270H	2759	1	1200	2593	1		1
NGC863	2 14 33.6	-0 45 59	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
UM415	2 16 6.2	1 37 37	PC	IMAGE	ALL	F555W		1	260	3159	0		1
MARK591	2 17 12.0	1 42 18	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
0215+015	2 17 49.0	1 44 50	HRS	ACCUM	2.0	G270M	2630	8	1000	2638	1		1
0215+015	2 17 49.0	1 44 50	HRS	ACCUM	2.0	G270M	2710	8	1000	2638	1		1
0215+015	2 17 49.0	1 44 50	HRS	ACCUM	2.0	G270M	2840	10	1079	2638	1		1
PKS0215+01	2 17 49.0	1 44 50	FOS/BL	ACQ/BINA	4.3	MIRROR		1	18	2424	1	ACQ	1
PKS0215+01	2 17 49.0	1 44 50	FOS/BL	RAPID	1.0	G160L	1837	1	2034	2424	1		1
TEX0215+165	2 18 40.2	16 46 11	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0216+0803	2 18 57.3	8 17 28	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0216+080	2 18 57.4	8 17 28	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0216+080	2 18 57.4	8 17 28	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
HD14386	2 19 20.7	-2 58 28	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD14386	2 19 20.7	-2 58 28	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
TEX0220-142	2 22 38.7	-13 59 7	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0219+428	2 22 39.6	43 2 8	HRS	ACCUM	2.0	G270M	2802	5	1152	2553	1		1
0219+428	2 22 39.6	43 2 8	HRS	ACCUM	2.0	G270M	2861	5	1152	2553	1		1
ESO-0220-2127	2 23 4.8	-21 14 3	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q0222-415	2 24 4.4	-41 17 56	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0224-419	2 26 42.0	-41 44 24	PC	IMAGE	ALL	F555W		1	240	4027	1		1
UGC1913	2 27 16.7	33 34 46	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PKS0225-014	2 28 7.8	-1 15 41	PC	IMAGE	ALL	F555W		1	260	3159	0		1
NGC931	2 28 14.6	31 18 42	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
PKS0226-038	2 28 53.1	-3 37 38	PC	IMAGE	ALL	F555W		1	260	3159	0		1
MARK1044	2 30 5.5	-8 59 54	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
PKS-0229+13-GAL	2 31 45.4	13 22 56*	FOS/RD	ACCUM	4.3	G190H	1900	1	10800	3483	2		1
PKS-0229+13	2 31 45.8	13 22 53	FOS/RD	ACQ/BINA	4.3	MIRROR		1	70	3483	2	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PKS0229+13	2 31 45.9	13 22 54	PC	IMAGE	ALL	F555W		1	260	3159	0		1
NGC985	2 34 37.5	-8 47 10	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
PKS0232-04	2 35 7.3	-4 2 6	PC	IMAGE	ALL	F555W		1	260	3159	0		1
UGC2082	2 36 16.2	25 25 24	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC2080	2 36 27.8	38 58 9	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-0236-6133	2 37 49.3	-61 19 59	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC1019	2 38 27.4	1 54 26	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
AO0235+164	2 38 38.9	16 36 59	PC	IMAGE	ALL	F555W		1	200	2350	1		1
AO0235+164	2 38 38.9	16 36 59	PC	IMAGE	ALL	F555W		1	140	2350	1		1
UGC2137	2 39 17.2	40 52 26	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
A370-24	2 39 52.5	-1 33 42	FOS/RD	ACCUM	4.3	G190H		1	7200	3448	2		1
A370-24	2 39 52.5	-1 33 42	FOS/RD	ACQ/BINA	4.3	MIRROR		1	300	3448	2	ACQ	1
A370-10	2 39 52.7	-1 33 42	FOS/RD	ACCUM	4.3	G190H		1	3600	3448	2		1
A370-10	2 39 52.7	-1 33 42	FOS/RD	ACQ/BINA	4.3	MIRROR		1	300	3448	2	ACQ	1
NGC1023	2 40 23.7	39 3 46	PC	IMAGE	P6	F555W		1	80	2600	1		1
NGC1023	2 40 23.7	39 3 46	PC	IMAGE	P6	F555W		2	400	2600	1		1
UGC2154	2 40 23.9	39 3 48	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
MARK595	2 41 34.7	7 11 7	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
UGC2173	2 41 45.1	0 26 35	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UM677	2 41 56.5	-15 14 42	PC	IMAGE	ALL	F555W		1	260	3159	0		1
NGC1068-KNT1	2 42 40.2	-0 0 38	FOS/BL	ACCUM	4.3	G130H		1	7200	3852	2		1
NGC1068-KNT1	2 42 40.2	-0 0 38	FOS/BL	ACCUM	4.3	G190H		1	1680	3852	2		1
NGC1068-KNT1	2 42 40.2	-0 0 38	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	3852	2	ACQ	1
NGC1068-NUC	2 42 40.6	-0 0 48	WFC	IMAGE	WFALL	F336W		1	240	3852	2	ACQ	1
NGC1068	2 42 40.7	-0 0 48	FOS/BL	ACCUM	4.3	G270H	2700	1	700	2077	1		1
NGC1068	2 42 40.7	-0 0 48	FOS/BL	ACCUM	0.3	G270H	2700	1	430	2077	1		1
NGC1068	2 42 40.7	-0 0 48	FOS/BL	ACCUM	1.0	G270H	2700	1	215	2077	1		1
NGC1068	2 42 40.7	-0 0 48	FOS/BL	ACCUM	4.3	G190H	1900	1	1700	2077	1		4
NGC1068	2 42 40.7	-0 0 48	FOS/BL	ACCUM	4.3	G270H	2700	1	1700	2077	1		3
NGC1068	2 42 40.7	-0 0 48	FOS/BL	ACQ/BINA	4.3	MIRROR		1	66	2077	1	ACQ	2
NGC1068	2 42 40.7	-0 0 48	FOS/BL	ACQ/PEAK	0.3	G270H	2620	1	10	2077	1	ACQ	4
NGC1068	2 42 40.7	-0 0 49	HRS	ACCUM	2.0	G160M	1484	15	1800	3761	2		1
NGC1068-KNT4	2 42 41.3	-0 0 38	FOS/BL	ACCUM	4.3	G190H		1	3600	3852	2		1
NGC1068-KNT4	2 42 41.3	-0 0 38	FOS/BL	ACCUM	4.3	G130H		1	11520	3852	2		1
NGC1068-KNT4	2 42 41.3	-0 0 38	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	3852	2	ACQ	1
SN1961V	2 43 36.4	37 20 43	WFC	IMAGE	W1	F702W		1	1500	2590	1		1
SN1961V	2 43 36.4	37 20 43	WFC	IMAGE	W1	F702W		1	2400	2590	1		1
SN1961V	2 43 36.4	37 20 43	WFC	IMAGE	W1	F555W		2	2400	2590	1		1
SN1961V	2 43 36.4	37 20 43	WFC	IMAGE	W1	F785LP		3	2400	2590	1		1
ESO-0241-2912	2 43 44.5	-29 0 10	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q0242-410	2 43 58.3	-40 51 17	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0241-01	2 44 1.8	-1 34 3	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0241-01	2 44 1.8	-1 34 3	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
PKS0244-128	2 46 58.5	-12 36 31	PC	IMAGE	ALL	F555W		1	260	3159	0		1
MARK599	2 47 47.5	3 9 54	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
0245-06	2 47 56.5	-5 55 59	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0245-06	2 47 56.5	-5 55 59	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
IC1854	2 49 20.7	19 18 14	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
0247+0141	2 49 44.8	1 53 40	PC	IMAGE	ALL	F555W		1	240	4027	1		1
S40248+43	2 51 34.7	43 15 16	PC	IMAGE	ALL	F555W		1	260	3159	0		1
UM678	2 51 40.4	-22 0 27	PC	IMAGE	ALL	F555W		1	260	3159	0		1
UM679	2 51 48.0	-18 14 29	PC	IMAGE	ALL	F555W		1	260	3159	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
0250+0140	2 52 48.1	1 53 3	PC	IMAGE	ALL	F555W		1	240	4027	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1252	1	330	2348	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1318	1	330	2348	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1619	1	660	2348	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1667	1	660	2348	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1817	1	660	2348	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1857	1	660	2348	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	2348	1	ACQ	1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G270M	2600	1	576	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1200	1	1324	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G200M	2045	1	864	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	IMAGE	2.0	MIRROR-A2		1	193	2257	1		2
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	ECH-B24	2373	1	864	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1250	1	1209	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1810	1	1209	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1860	1	1209	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1306	1	979	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1336	1	748	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1398	1	1555	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	G160M	1539	2	1209	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	ECH-B20	2800	1	1209	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	ECH-B25	2260	1	979	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	110	2257	1	ACQ	2
HD18100	2 53 40.8	-26 9 20	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	110	2257	1	ACQ	2
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	ECH-B20	2852	1	1209	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	ECH-B22	2603	1	1209	2257	1		1
HD18100	2 53 40.8	-26 9 20	HRS	ACCUM	0.25	ECH-B27	2063	2	1209	2257	1		1
GSC5290-1064	2 54 4.6	-10 8 43	PC	IMAGE	P5	F555W		1	1	2389	1		1
NGC1140	2 54 33.6	-10 1 44	PC	IMAGE	P5	F336W		1	700	2389	1		1
NGC1140	2 54 33.6	-10 1 44	PC	IMAGE	P5	F336W		1	2800	2389	1		1
NGC1140	2 54 33.6	-10 1 44	PC	IMAGE	P5	F555W		1	120	2389	1		1
NGC1140	2 54 33.6	-10 1 44	PC	IMAGE	P5	F555W		1	480	2389	1		1
NGC1140	2 54 33.6	-10 1 44	PC	IMAGE	P5	F785LP		1	200	2389	1		1
NGC1140	2 54 33.6	-10 1 44	PC	IMAGE	P5	F785LP		1	800	2389	1		1
Q0252+0136	2 55 15.2	1 48 28	PC	IMAGE	ALL	F555W		1	260	3159	0		1
Q0254-404	2 56 34.0	-40 13 1	PC	IMAGE	ALL	F555W		1	260	3159	0		1
US3390	2 56 44.7	0 12 46	PC	IMAGE	ALL	F555W		1	240	4027	1		1
ESO-0255-5446	2 56 50.4	-54 34 17	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q0256-0000	2 59 5.6	0 11 22	PC	IMAGE	ALL	F555W		1	260	3159	0		1
PKS0256-005	2 59 28.5	-0 20 0	PC	IMAGE	ALL	F555W		1	260	3159	0		1
MRK1066-OFFSET	2 59 46.7	36 48 42	FOS/BL	ACQ/BINA	4.3	MIRROR		1	2	3573	2	ACQ	1
UGC2456	2 59 58.6	36 49 14	PC	IMAGE	PC6	F547M		1	600	3724	2		1
UGC2456	2 59 58.6	36 49 14	PC	IMAGE	PC6	F664N		1	1000	3724	2		1
UGC2456	2 59 58.6	36 49 14	PC	IMAGE	PC6	F718M		1	600	3724	2		1
UGC2456	2 59 58.6	36 49 14	PC	IMAGE	PC6	F492M		1	1200	3724	2		1
MRK1066	2 59 58.6	36 49 14*	FOS/BL	ACCUM	4.3	G270H		1	1445	3573	2		1
NGC1172	3 1 36.0	-14 50 14	PC	IMAGE	PC6	F555W		1	80	3912	2		1
NGC1172	3 1 36.0	-14 50 14	PC	IMAGE	PC6	F555W		2	300	3912	2		1
HD18978	3 2 23.5	-23 37 28	HRS	ACCUM	2.0	G160M	1335	1	1197	3737	2		1
ESO-0300-2303	3 2 37.5	-22 52 1	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-0300-1905	3 2 38.3	-18 53 54	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
GD-40	3 2 53.1	-1 8 33	FOS/BL	ACCUM	1.0	G270H	2700	1	600	2593	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
GD-40	3 2 53.1	-1 8 33	FOS/BL	ACCUM	1.0	G130H	1380	1	3600	2593	1		1
GD-40	3 2 53.1	-1 8 33	FOS/BL	ACCUM	1.0	G190H	1944	1	600	2593	1		1
GD-40	3 2 53.1	-1 8 33	FOS/BL	ACQ/BINA	4.3	MIRROR		1	5	2593	1	ACQ	1
Q0301-0035	3 3 41.0	-0 23 22	PC	IMAGE	ALL	F555W		1	260	3159	0		1
Q0301-0035	3 3 41.0	-0 23 22	PC	IMAGE	ALL	F555W		1	240	4017	1		1
EX0302-223	3 4 49.8	-22 11 52	PC	IMAGE	ALL	F555W		1	260	3159	0		1
Q0302-0019	3 4 49.8	-0 8 14	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0302-003	3 4 50.4	0 31 29	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0302-003	3 4 50.4	0 31 29	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
0302+1705	3 5 4.9	17 16 53	PC	IMAGE	ALL	F555W		1	240	4027	1		1
Q0304-392	3 6 12.8	-39 6 12	PC	IMAGE	ALL	F555W		1	260	3159	0		1
ESO-0306-2314	3 8 27.4	-23 3 16	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-0307-4113	3 9 38.2	-41 1 56	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-0307-2046	3 9 45.2	-20 34 46	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
0307+0222	3 9 51.3	2 33 22	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0307+0222	3 9 51.3	2 33 22	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
PC0307+0222	3 9 51.3	2 33 22	PC	IMAGE	ALL	F702W		1	100	2350	1		1
PC0307+0222	3 9 51.3	2 33 22	PC	IMAGE	ALL	F702W		1	350	2350	1		1
ESO-0308-5331	3 10 1.3	-53 20 9	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UM682	3 10 28.1	-19 9 44	PC	IMAGE	ALL	F555W		1	260	3159	0		1
EF-ERI	3 14 13.0	-22 35 41	HSP/VIS	PRISM	1.0	F551W/F240W		1	1642	3607	2		1
MRK1073-OFFSET	3 14 55.9	42 0 45	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3573	2	ACQ	1
MRK1073	3 15 1.4	42 2 9*	FOS/BL	ACCUM	4.3	G270H		1	1445	3573	2		1
ESO-0315-4117	3 17 18.3	-41 6 26	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
STAR-0317+4850	3 17 36.9	48 50 10	FOS/BL	ACCUM	4.3	G270H	2700	1	300	3908	2		1
STAR-0317+4850	3 17 36.9	48 50 10	FOS/BL	ACCUM	4.3	G130H	1300	1	5350	3908	2		1
STAR-0317+4850	3 17 36.9	48 50 10	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3908	2	ACQ	1
0316-346	3 18 6.5	-34 26 37	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	4125	3	ACQ CON	1
0316-346	3 18 6.5	-34 26 37	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	768	4125	3	CON	1
0316-346	3 18 6.5	-34 26 37	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	9276	4125	3	CON	1
0316-346	3 18 6.5	-34 26 37	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2088	4125	3	CON	1
0316-346	3 18 6.5	-34 26 37	FOS/RD	ACQ/BINA	4.3	MIRROR		1	3	4125	3	ACQ CON	1
0316-346	3 18 6.5	-34 26 37	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
ESO-0317-6640	3 18 15.5	-66 30 5	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-0317-1935	3 19 40.9	-19 24 39	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC2669	3 19 48.1	41 30 44	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC1275	3 19 48.2	41 30 44*	FOS/BL	ACCUM	0.25X2.0	G130H		1	9100	3550	2		1
3C84	3 19 48.2	41 30 42	FGS	TRANS	3	F550W		1	1414	2443	1	CON SEL	1
3C84	3 19 48.2	41 30 42	FGS	TRANS	3	F583W		1	1414	2443	1	CON SEL	1
3C84	3 19 48.2	41 30 42	FGS	TRANS	3	PUPIL		1	1414	2443	1	CON SEL	1
GSC2856.01162-OFFSET	3 19 51.2	41 31 26	FOS/BL	ACQ/BINA	4.3	MIRROR		1	8	3550	2	ACQ	1
GSC2856.01162-OFFSET	3 19 51.2	41 31 26	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	8	3550	2	ACQ	1
POINT0316+413INCA221 -23	3 20 18.5	41 19 0	S/C	POINTING	V1			1	1	2565	2	CON	1
POINT0316+413INCA221 -23	3 20 18.5	41 19 0	S/C	POINTING	V1			1	1	4148	3	CON	1
ESO-0320-3723	3 22 41.4	-37 12 30	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC1316	3 22 41.7	-37 12 30	FOC/96	IMAGE	512X512	F1ND F342W		1	240	2295	1		1
NGC1316	3 22 41.7	-37 12 30	FOC/96	IMAGE	512X512	F175W		1	2039	2295	1		1
NGC1316	3 22 41.7	-37 12 30	FOC/96	IMAGE	512X512	F1ND F2ND F480LP		1	460	2295	1		1
G5-32-CALIB	3 23 22.2	11 41 13	PC	IMAGE	ALL	F875M		1	5	2265	1	CAL	32
G5-32-CALIB	3 23 22.2	11 41 13	PC	IMAGE	ALL	F875M		1	5	4163	1	CAL	32

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
0321-421	3 23 24.9	-41 58 17	PC	IMAGE	ALL	F555W		1	240	4027	1		1
Q0321-337	3 23 38.0	-33 34 24	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0321-397	3 23 40.8	-39 35 10	PC	IMAGE	ALL	F555W		1	240	4027	1		1
0321-375	3 23 53.4	-37 15 57	PC	IMAGE	ALL	F555W		1	240	4027	1		1
ESO-0322-2143	3 24 25.4	-21 32 37	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
MARK609	3 25 25.3	-6 8 38	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
ESO-0324-2130	3 26 17.1	-21 20 4	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q0324-407	3 26 17.4	-40 36 50	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0324-407	3 26 17.5	-40 36 34	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0324-407	3 26 17.5	-40 36 34	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
NGC1331	3 26 28.3	-21 21 19	PC	IMAGE	PC6	F555W		1	80	3912	2		1
NGC1331	3 26 28.3	-21 21 19	PC	IMAGE	PC6	F555W		2	400	3912	2		1
V384-PER	3 26 29.4	47 31 58	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
V384-PER	3 26 29.4	47 31 58	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
STAR-0326+4954	3 26 43.9	49 54 35	FOS/BL	ACCUM	4.3	G270H	2700	1	300	3908	2		1
STAR-0326+4954	3 26 43.9	49 54 35	FOS/BL	ACCUM	4.3	G130H	1300	1	5350	3908	2		1
STAR-0326+4954	3 26 43.9	49 54 35	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3908	2	ACQ	1
0326-403	3 28 46.4	-40 12 29	PC	IMAGE	ALL	F555W		1	240	4027	1		1
MARK612	3 30 40.9	-3 8 16	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
0329-378	3 30 55.8	-37 38 46	PC	IMAGE	ALL	F555W		1	240	4027	1		1
Q0329-385	3 31 6.3	-38 24 5	PC	IMAGE	ALL	F555W		1	260	3159	0		1
ESO-0329-3347	3 31 7.9	-33 37 42	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PKS0329-255	3 31 8.9	-25 24 44	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0330-368	3 32 8.0	-36 34 57	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
0330-368	3 32 8.0	-36 34 57	FOS/RD	ACQ/BINA	4.3	MIRROR		1	12	4125	3	ACQ CON	1
0330-368	3 32 8.0	-36 34 57	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
0330-368	3 32 8.0	-36 34 57	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	7590	4125	3	CON	1
0330-368	3 32 8.0	-36 34 57	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2508	4125	3	CON	1
NGC1358	3 33 39.6	-5 5 22	PC	IMAGE	PC6	F785LP		1	120	4093	2		1
ESO-0332-2506	3 35 1.5	-24 56 0	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UZ-FOR	3 35 28.6	-25 44 22	FOS/BL	RAPID	1.0	G160L		1	1560	2686	1		2
UZ-FOR	3 35 28.6	-25 44 22	FOS/BL	ACQ/BINA	4.3	MIRROR		1	120	2686	1	ACQ	1
HD22586	3 35 38.0	-52 33 24	HRS	ACCUM	0.25	G160M	1252	1	440	2348	1		1
HD22586	3 35 38.0	-52 33 24	HRS	ACCUM	0.25	G160M	1318	1	440	2348	1		1
HD22586	3 35 38.0	-52 33 24	HRS	ACCUM	0.25	G160M	1619	1	880	2348	1		1
HD22586	3 35 38.0	-52 33 24	HRS	ACCUM	0.25	G160M	1667	1	880	2348	1		1
HD22586	3 35 38.0	-52 33 24	HRS	ACCUM	0.25	G160M	1817	1	880	2348	1		1
HD22586	3 35 38.0	-52 33 24	HRS	ACCUM	0.25	G160M	1857	1	880	2348	1		1
HD22586	3 35 38.0	-52 33 24	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	2348	1	ACQ	1
0334-335	3 36 22.2	-33 17 5	PC	IMAGE	ALL	F555W		1	240	4027	1		1
UM683	3 36 26.9	-20 19 39	PC	IMAGE	ALL	F555W		1	240	4027	1		1
SN1992A	3 36 27.4	-34 57 32	FOC/96	IMAGE	256X256	F175W		1	2000	4016	1		1
SN1992A	3 36 27.4	-34 57 32	FOC/96	IMAGE	256X256	F175W		1	4000	4016	1		1
SN1992A	3 36 27.4	-34 57 32	FOC/96	IMAGE	512X512	F175W		1	1000	4022	1		2
SN1992A	3 36 27.4	-34 57 32	FOC/96	IMAGE	512X512	F275W		1	500	4022	1		2
SN1992A	3 36 27.4	-34 57 32	HRS	ACCUM	2.0	G270M	2809	4	1000	4016	1		1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	4016	1	ACQ	1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	4022	1	ACQ	1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACCUM	1.0	G400H	4040	1	1000	4016	1		1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACCUM	1.0	G400H	4040	1	1000	4022	1		1
SN1992A	3 36 27.4	-34 57 32	FOC/96	IMAGE	512X512	F2ND F342W		1	500	4022	1		2
SN1992A	3 36 27.4	-34 57 32	FOC/96	IMAGE	256X256	F275W F2ND		1	1000	4016	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
SN1992A	3 36 27.4	-34 57 32	FOC/96	IMAGE	256X256	F275W F2ND		1	2000	4016	1		1
SN1992A	3 36 27.4	-34 57 32	FOC/96	IMAGE	256X256	F342W F4ND		1	1000	4016	1		1
SN1992A	3 36 27.4	-34 57 32	FOC/96	IMAGE	256X256	F342W F4ND		1	2000	4016	1		1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACCUM	1.0	G160L	2076	1	1500	4016	1		1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACCUM	1.0	G270H	2769	1	1500	4016	1		1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACCUM	1.0	G160L	2076	1	1500	4022	1		1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACCUM	1.0	G270H	2769	1	1500	4022	1		1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACCUM	1.0	G160L	2076	1	2699	4016	1		1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACCUM	1.0	G270H	2769	1	2699	4016	1		1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACCUM	1.0	G400H	4040	1	1799	4016	1		1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACCUM	4.3	G160L	2076	1	2699	4022	1		1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACCUM	4.3	G270H	2769	1	2699	4022	1		1
SN1992A	3 36 27.4	-34 57 32	FOS/RD	ACCUM	4.3	G400H	4040	1	1799	4022	1		1
SN1992A	3 36 27.4	-34 57 32	HRS	IMAGE	2.0	MIRROR-N2	2809	1	96	4016	1		1
SN1992A	3 36 27.4	-34 57 32	HRS	ACQ/PEAK	2.0	MIRROR-N2	2809	1	9	4016	1	ACQ	1
H0335-336	3 37 21.8	-33 29 13	PC	IMAGE	ALL	F555W		1	240	4027	1		1
ESO-0335-2440	3 37 28.9	-24 30 7	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
0335-363	3 37 37.3	-36 6 5	PC	IMAGE	ALL	F555W		1	240	4027	1		1
SBS0335-052	3 37 44.0	-5 2 39*	FOS/RD	ACCUM	1.0	G190H		1	5400	3840	2		1
SBS0335-052-OFFSET	3 37 45.7	-5 3 31	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	3840	2	ACQ	1
UGC2792	3 37 49.7	72 34 17	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
0335-122	3 37 55.4	-12 4 5	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0335-122	3 37 55.4	-12 4 5	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
NGC1399	3 38 28.7	-35 27 5	PC	IMAGE	P6	F555W		2	700	2600	1		1
NGC1399	3 38 29.0	-35 27 0	FOS/BL	ACCUM	1.0	G130H		1	10800	3647	2		1
NGC1399	3 38 29.0	-35 27 0	FOS/RD	ACCUM	1.0	G190H		1	5400	3647	2		1
NGC1399	3 38 29.0	-35 27 0	FOS/RD	ACCUM	1.0	G270H		1	3600	3647	2		1
NGC1399	3 38 29.0	-35 27 0	FOS/RD	ACQ/PEAK	1.0	MIRROR		1	35	3647	2	ACQ	1
NGC1399	3 38 29.1	-35 27 3	FOC/48	IMAGE	512X512	F275W		1	600	3728	2		1
NGC1399	3 38 29.1	-35 27 3	FOC/48	IMAGE	512X512	F342W		1	420	3728	2		1
NGC1399	3 38 29.1	-35 27 3	FOC/48	IMAGE	512X512	F220W		1	1019	3728	2		1
NGC1399	3 38 29.1	-35 27 3	FOC/48	IMAGE	512X512	F130LP F150W		1	1500	3728	2		1
0336-359	3 38 46.9	-35 47 18	PC	IMAGE	ALL	F555W		1	240	4027	1		1
ESO-0336-2629	3 38 52.0	-26 20 13	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC1400	3 39 30.7	-18 41 17	PC	IMAGE	PC6	F555W		1	100	3912	2		1
NGC1400	3 39 30.7	-18 41 17	PC	IMAGE	PC6	F555W		2	350	3912	2		1
Q0338-394	3 40 1.3	-39 14 43	PC	IMAGE	ALL	F555W		1	260	3159	0		1
MARS-FOS1	3 40 10.0	21 57 58	FOS/RD	RAPID	0.25-PAIR	G270H	2800	1	720	3107	0		1
MARS-J1	3 40 10.1	21 57 56	PC	IMAGE	P6	F502N		1	2	3107	0		1
MARS-J1	3 40 10.1	21 57 56	PC	IMAGE	P6	F413M		1	1	3107	0		1
MARS-J1	3 40 10.1	21 57 56	PC	IMAGE	P6	F673N		1	0	3107	0		1
NGC1409	3 41 10.5	-1 18 9	PC	IMAGE	PC6	F785LP		1	180	4093	2		1
0339-367	3 41 41.3	-36 29 15	PC	IMAGE	ALL	F555W		1	240	4027	1		1
PK147-02D1	3 41 43.4	52 17 1	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK147-02D1	3 41 43.4	52 17 1	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
ESO-0340-4722	3 42 1.5	-47 13 20	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-0340-3003	3 42 11.4	-29 53 36	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC1427	3 42 19.6	-35 23 35	PC	IMAGE	PC6	F555W		1	500	3551	2		1
NGC1426	3 42 49.1	-22 6 30	PC	IMAGE	PC6	F555W		1	80	3912	2		1
NGC1426	3 42 49.1	-22 6 30	PC	IMAGE	PC6	F555W		2	300	3912	2		1
HD23249	3 43 14.9	-9 45 48	HRS	ACCUM	0.25	G270M	2498	2	1800	3614	2		1
STAR-HD23169	3 43 49.4	25 43 21	PC	IMAGE	P6	F230W		1	100	3107	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
STAR-HD23169	3 43 49.4	25 43 21	PC	IMAGE	P6	F336W		1	1	3107	0		1
STAR-HD23169	3 43 49.4	25 43 21	PC	IMAGE	P6	F588N		1	0	3107	0		1
STAR-HD23169	3 43 49.4	25 43 21	PC	IMAGE	P6	F673N		1	0	3107	0		1
STAR-HD23169	3 43 49.4	25 43 21	PC	IMAGE	P6	F439W		1	0	3107	0		1
STAR-HD23169	3 43 49.4	25 43 21	PC	IMAGE	P6	F502N		1	1	3107	0		1
STAR-HD23169	3 43 49.4	25 43 21	PC	IMAGE	P6	F413M		1	0	3107	0		1
STAR-HD23169	3 43 53.0	25 43 33	PC	IMAGE	P6	F230W		1	100	3103	0		1
STAR-HD23169	3 43 53.0	25 43 33	PC	IMAGE	P6	F336W		1	1	3103	0		1
STAR-HD23169	3 43 53.0	25 43 33	PC	IMAGE	P6	F588N		1	0	3103	0		1
STAR-HD23169	3 43 53.0	25 43 33	PC	IMAGE	P6	F673N		1	0	3103	0		1
STAR-HD23169	3 43 53.0	25 43 33	PC	IMAGE	P6	F889N		1	1	3103	0		1
STAR-HD23169	3 43 53.0	25 43 33	PC	IMAGE	P6	F439W		1	0	3103	0		1
STAR-HD23169	3 43 53.0	25 43 33	PC	IMAGE	P6	F502N		1	1	3103	0		1
STAR-0344+2447	3 44 20.1	24 47 47	FOS/BL	ACCUM	4.3	G270H	2700	1	300	3908	2		1
STAR-0344+2447	3 44 20.1	24 47 47	FOS/BL	ACCUM	4.3	G130H	1300	1	5350	3908	2		1
STAR-0344+2447	3 44 20.1	24 47 47	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3908	2	ACQ	1
ESO-0342-4448	3 44 31.1	-44 38 42	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC1439	3 44 50.0	-21 55 15	PC	IMAGE	PC6	F555W		1	640	3551	2		1
UGC2824	3 45 16.8	76 38 19	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-0344-3505	3 46 18.6	-34 56 28	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
STAR-0346+2434	3 46 22.7	24 34 13	FOS/BL	ACCUM	4.3	G270H	2700	1	300	3908	2		1
STAR-0346+2434	3 46 22.7	24 34 13	FOS/BL	ACCUM	4.3	G130H	1300	1	5350	3908	2		1
STAR-0346+2434	3 46 22.7	24 34 13	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3908	2	ACQ	1
UGC2847	3 46 48.5	68 5 47	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD023630	3 47 29.1	24 6 18	HRS	IMAGE	2.0	MIRROR-A2		1	96	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	ACCUM	0.25	G160M	1608	1	428	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	WSCAN	0.25	ECH-B	1744	1	378	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	WSCAN	0.25	ECH-B	1827	1	378	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	WSCAN	0.25	ECH-B	1807	1	453	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	WSCAN	0.25	ECH-B	1858	1	361	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	ACCUM	0.25	G160M	1175	1	781	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	ACCUM	0.25	G160M	1290	1	176	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	ACCUM	0.25	G160M	1398	1	302	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	ACCUM	0.25	G160M	1554	1	459	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	ACCUM	0.25	G160M	1663	1	422	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	3472	2	ACQ	1
HD023630	3 47 29.1	24 6 18	HRS	ACCUM	0.25	ECH-B	2324	1	88	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	WSCAN	0.25	ECH-B	2059	1	197	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	WSCAN	0.25	ECH-B	2519	1	146	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	WSCAN	0.25	ECH-B	2371	1	105	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	WSCAN	0.25	ECH-B	2799	1	92	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	WSCAN	0.25	ECH-B	2026	1	184	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	ACCUM	0.25	ECH-B	2325	1	88	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	ACCUM	0.25	ECH-B	2326	1	88	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	ACCUM	0.25	G160M	1133	1	963	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	ACCUM	0.25	G160M	1249	1	233	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	ACCUM	0.25	G160M	1345	1	207	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	WSCAN	0.25	ECH-B	2484	1	134	3472	2		1
HD023630	3 47 29.1	24 6 18	HRS	WSCAN	0.25	ECH-B	2249	1	79	3472	2		1
STAR-0347+2421	3 47 40.4	24 21 53	FOS/BL	ACCUM	4.3	G270H	2700	1	300	3908	2		1
STAR-0347+2421	3 47 40.4	24 21 53	FOS/BL	ACCUM	4.3	G130H	1300	1	5350	3908	2		1
STAR-0347+2421	3 47 40.4	24 21 53	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3908	2	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
0345+015	3 48 2.3	1 39 18	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0345+015	3 48 2.3	1 39 18	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
PKS0347-241	3 49 15.4	-24 1 13	PC	IMAGE	ALL	F555W		1	260	3159	0		1
Q0347-383	3 49 43.7	-38 10 31	PC	IMAGE	ALL	F555W		1	260	3159	0		1
MARS-9	3 50 4.0	22 10 55	PC	IMAGE	P6	F230W		1	120	3103	0		1
MARS-8	3 50 7.9	22 11 1	PC	IMAGE	P6	F336W		1	0	3103	0		1
MARS-8	3 50 7.9	22 11 1	PC	IMAGE	P6	F889N		1	0	3103	0		1
MARS-8	3 50 7.9	22 11 1	PC	IMAGE	P6	F673N		1	0	3103	0		1
MARS-7	3 50 8.4	22 11 1	PC	IMAGE	P6	F502N		1	2	3103	0		1
MARS-7	3 50 8.4	22 11 1	PC	IMAGE	P6	F439W		1	0	3103	0		1
MARS-7	3 50 8.4	22 11 1	PC	IMAGE	P6	F588N		1	0	3103	0		1
BD+16D516	3 50 25.0	17 14 47	HRS	IMAGE	2.0	MIRROR-N2		1	102	2593	1		3
BD+16D516	3 50 25.0	17 14 47	HRS	ACCUM	2.0	G160M	1550	16	69	2593	1		1
BD+16D516	3 50 25.0	17 14 47	HRS	ACCUM	2.0	G160M	1640	16	69	2593	1		1
BD+16D516	3 50 25.0	17 14 47	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	2593	1	ACQ	3
BD+16D516	3 50 25.0	17 14 47	HRS	ACCUM	2.0	G160M	1400	16	69	2593	1		1
MARS-6	3 50 29.2	22 11 33	PC	IMAGE	P6	F230W		1	120	3103	0		1
MARS-5	3 50 29.6	22 11 34	PC	IMAGE	P6	F336W		1	0	3103	0		1
MARS-5	3 50 29.6	22 11 34	PC	IMAGE	P6	F889N		1	0	3103	0		1
MARS-5	3 50 29.6	22 11 34	PC	IMAGE	P6	F673N		1	0	3103	0		1
MARS-4	3 50 30.2	22 11 35	PC	IMAGE	P6	F502N		1	2	3103	0		1
MARS-4	3 50 30.2	22 11 35	PC	IMAGE	P6	F439W		1	0	3103	0		1
MARS-4	3 50 30.2	22 11 35	PC	IMAGE	P6	F588N		1	0	3103	0		1
MARS-3	3 50 51.3	22 12 7	PC	IMAGE	P6	F230W		1	120	3103	0		1
MARS-2	3 50 51.8	22 12 8	PC	IMAGE	P6	F336W		1	0	3103	0		1
MARS-2	3 50 51.8	22 12 8	PC	IMAGE	P6	F889N		1	0	3103	0		1
MARS-2	3 50 51.8	22 12 8	PC	IMAGE	P6	F673N		1	0	3103	0		1
MARS-1	3 50 52.3	22 12 8	PC	IMAGE	P6	F502N		1	2	3103	0		1
MARS-1	3 50 52.3	22 12 8	PC	IMAGE	P6	F439W		1	0	3103	0		1
MARS-1	3 50 52.3	22 12 8	PC	IMAGE	P6	F588N		1	0	3103	0		1
3C95	3 51 28.6	-14 29 9	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
3C95	3 51 28.6	-14 29 9	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
3C95	3 51 28.6	-14 29 9	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	3360	2424	1		1
3C95	3 51 28.6	-14 29 9	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	2424	1	ACQ	1
3C95	3 51 28.6	-14 29 9	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1080	2424	1		1
0351-3749	3 53 8.6	-37 40 54	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0351-378	3 53 8.7	-37 40 10	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0351-378	3 53 8.7	-37 40 10	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
0351-390	3 53 19.3	-38 55 11	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0351-390	3 53 19.3	-38 55 11	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
IK-TAU	3 53 28.6	11 24 20	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
IK-TAU	3 53 28.6	11 24 20	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
0351-10	3 53 46.9	-10 25 20	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0351-10	3 53 46.9	-10 25 20	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
UM684	3 54 5.6	-27 24 20	PC	IMAGE	ALL	F555W		1	260	3159	0		1
Q0353-383	3 54 49.8	-38 9 55	PC	IMAGE	ALL	F555W		1	260	3159	0		1
TEX0351+187	3 54 50.1	18 54 34	PC	IMAGE	ALL	F555W		1	240	4027	1		1
ESO-0354-4230	3 55 45.0	-42 21 56	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PKS0355-483	3 57 21.9	-48 12 15	PC	IMAGE	ALL	F555W		1	260	3159	0		1
UM685	4 2 39.9	-26 58 29	PC	IMAGE	ALL	F555W		1	240	4027	1		1
0401-350	4 3 10.5	-34 56 57	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0401-350	4 3 10.5	-34 56 57	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
ESO-0401-4332	4 3 33.2	-43 24 9	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PKS0402-362	4 3 53.7	-36 5 3	PC	IMAGE	ALL	F555W		1	260	3159	0		1
ESO-0402-4329	4 3 54.3	-43 20 57	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
0401-17	4 3 56.6	-17 3 24	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0401-17	4 3 56.6	-17 3 24	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
ESO-0402-5414	4 4 2.3	-54 6 3	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PKS0403-13	4 5 34.0	-13 8 14	FOS/RD	ACCUM	4.3	G190H	1900	1	1410	2578	1		1
PKS0403-13	4 5 34.0	-13 8 14	FOS/RD	ACCUM	4.3	G270H	2700	1	756	2578	1		1
PKS0403-13	4 5 34.0	-13 8 14	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
PKS0403-13	4 5 34.0	-13 8 14	FOS/RD	ACCUM	4.3	G400H	4000	1	533	2578	1		1
HD25825	4 6 16.0	15 41 53	FOS/BL	ACQ/PEAK	1.0	G270H		1	1	2485	1	ACQ	1
HD25825	4 6 16.0	15 41 53	FOS/BL	ACQ/PEAK	4.3	G270H		1	1	2485	1	ACQ	1
HD25825	4 6 16.0	15 41 53	FOS/BL	ACCUM	4.3	G270H	2700	1	50	2485	1		1
HD25825	4 6 16.0	15 41 53	FOS/BL	ACCUM	4.3	G130H	1300	1	1650	2485	1		1
HD25825	4 6 16.0	15 41 53	FOS/BL	ACCUM	4.3	G190H	1900	1	930	2485	1		1
POINT0405-123INCA221-27	4 7 28.3	-12 0 43	S/C	POINTING	V1			1	1	2565	2	CON	1
POINT0405-123INCA221-27	4 7 28.3	-12 0 43	S/C	POINTING	V1			1	1	4148	3	CON	1
POINT0405-123INCA221-28	4 7 28.3	-12 0 43	S/C	POINTING	V1			1	1	2565	2	CON	1
POINT0405-123INCA221-28	4 7 28.3	-12 0 43	S/C	POINTING	V1			1	1	4148	3	CON	1
MARS-F1	4 7 29.3	23 17 44	PC	IMAGE	P6	F336W		1	0	3107	0		1
MARS-F1	4 7 29.3	23 17 44	PC	IMAGE	P6	F413M		1	1	3107	0		1
MARS-F1	4 7 29.3	23 17 44	PC	IMAGE	P6	F673N		1	0	3107	0		1
MARS-F2	4 7 29.9	23 17 46	PC	IMAGE	P6	F230W		1	120	3107	0		1
MARS-FOS2	4 7 34.7	23 17 57	FOS/RD	RAPID	0.25-PAIR	G270H	2800	1	799	3107	0		1
0405-123INCA221-27	4 7 48.4	-12 11 37	FGS	POS	3	PUPIL		1	51	2565	2	CON	3
0405-123INCA221-27	4 7 48.4	-12 11 37	FGS	POS	3	PUPIL		1	51	4148	3	CON	3
0405-123INCA221-28	4 7 48.4	-12 11 37	FGS	POS	3	PUPIL		1	51	2565	2	CON	3
0405-123INCA221-28	4 7 48.4	-12 11 37	FGS	POS	3	PUPIL		1	51	4148	3	CON	3
0405-123	4 7 48.4	-12 11 36	FOS/BL	ACCUM	4.3	G130H	1300	1	1900	3837	2	CON	1
0405-123	4 7 48.4	-12 11 36	FOS/BL	ACCUM	4.3	G130H	1300	1	1300	3837	2	CON	2
0405-123	4 7 48.4	-12 11 36	FOS/BL	ACCUM	4.3	G130H	1300	1	2300	3837	2	CON	9
0405-123	4 7 48.4	-12 11 36	FOS/BL	ACQ/BINA	4.3	MIRROR		1	3	3837	2	ACQ CON	2
INCA221-27	4 7 53.1	-12 9 37	FGS	POS	3	PUPIL		1	51	2565	2	CON	2
INCA221-27	4 7 53.1	-12 9 37	FGS	POS	3	PUPIL		1	51	4148	3	CON	2
INCA221-28	4 7 53.1	-12 9 37	FGS	POS	3	PUPIL		1	51	2565	2	CON	2
INCA221-28	4 7 53.1	-12 9 37	FGS	POS	3	PUPIL		1	51	4148	3	CON	2
VW-HYI	4 9 11.3	-71 17 42	HRS	ACCUM	2.0	G160M	1386	2	4680	3836	2		1
VW-HYI	4 9 11.3	-71 17 42	FOS/BL	ACCUM	1.0	G130H	1375	1	720	3836	2		2
VW-HYI	4 9 11.3	-71 17 42	FOS/BL	ACQ/BINA	4.3	MIRROR	1375	1	25	3836	2	ACQ	2
VB13	4 10 42.4	18 25 24	HRS	ACCUM	0.25	G270M	2498	1	2300	2634	1		1
VB13	4 10 42.4	18 25 24	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	46	2634	1	ACQ	1
VB14	4 11 20.2	5 31 23	HRS	ACCUM	0.25	G270M	2498	1	1080	2634	1		1
VB14	4 11 20.2	5 31 23	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	18	2634	1	ACQ	1
HD26462	4 11 20.3	5 31 23	HRS	ACCUM	0.25	G270M	2498	1	1200	3614	2		1
ESO-0410-3300	4 12 3.8	-32 52 33	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-0411-5751	4 12 43.0	-57 44 16	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
3C109	4 13 40.3	11 12 15	FOC/96	IMAGE	512X1024	F320W POL0		1	606	3790	2		1
3C109	4 13 40.3	11 12 15	FOC/96	IMAGE	512X1024	F320W POL60		1	606	3790	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
3C109	4 13 40.3	11 12 15	FOC/96	IMAGE	512X1024	F320W POL120		1	606	3790	2		1
CWTAU	4 14 17.0	28 10 59	PC	IMAGE	ALL	F631N		1	180	2265	1		2
CWTAU	4 14 17.0	28 10 59	PC	IMAGE	ALL	F631N		1	180	4163	1		2
HD26767	4 14 27.1	12 26 7	FOS/BL	ACQ/PEAK	1.0	G270H		1	1	2485	1	ACQ	1
HD26767	4 14 27.1	12 26 7	FOS/BL	ACQ/PEAK	4.3	G270H		1	1	2485	1	ACQ	1
HD26767	4 14 27.1	12 26 7	FOS/BL	ACCUM	4.3	G270H	2700	1	50	2485	1		1
HD26767	4 14 27.1	12 26 7	FOS/BL	ACCUM	4.3	G130H	1300	1	1650	2485	1		1
HD26767	4 14 27.1	12 26 7	FOS/BL	ACCUM	4.3	G190H	1900	1	930	2485	1		1
0411+054	4 14 37.8	5 34 42	PC	IMAGE	ALL	F702W		1	500	2350	1		1
0411+054	4 14 37.8	5 34 42	PC	IMAGE	ALL	F702W		1	1000	2350	1		1
ESO-0415-5554	4 16 10.6	-55 46 48	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
3C110	4 17 16.7	-5 53 46	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
3C110	4 17 16.7	-5 53 46	FOS/RD	ACQ/BINA	4.3	MIRROR		1	9	4125	3	ACQ CON	1
3C110	4 17 16.7	-5 53 46	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
3C110	4 17 16.7	-5 53 46	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2280	4125	3	CON	1
3C110	4 17 16.7	-5 53 46	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	7481	4125	3	CON	1
BP-TAU	4 19 15.9	29 6 27	HRS	ACCUM	2.0	G270M	2800	2	300	3845	2		1
BP-TAU	4 19 15.9	29 6 27	HRS	ACCUM	2.0	G160M	1550	5	300	3845	2		1
BP-TAU	4 19 15.9	29 6 27	HRS	ACCUM	2.0	G160M	1400	6	300	3845	2		1
ESO-0419-2157	4 21 13.6	-21 50 44	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q0420-388	4 22 14.8	-38 44 53	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0420+003	4 22 41.8	0 30 20	PC	IMAGE	ALL	F555W		1	240	4027	1		1
HD27697	4 22 56.1	17 32 33	HRS	ACCUM	0.25	G270M	2498	5	2000	3614	2		1
PKS0420-01	4 23 15.8	-1 20 34	FOS/BL	ACQ/BINA	4.3	MIRROR		1	42	2424	1	ACQ	1
PKS0420-01	4 23 15.8	-1 20 34	FOS/BL	RAPID	1.0	G160L	1837	1	1463	2424	1		1
HD27835	4 24 12.7	16 22 44	FOS/BL	ACQ/PEAK	1.0	G270H		1	1	2485	1	ACQ	1
HD27835	4 24 12.7	16 22 44	FOS/BL	ACQ/PEAK	4.3	G270H		1	1	2485	1	ACQ	1
HD27835	4 24 12.7	16 22 44	FOS/BL	ACCUM	4.3	G270H	2700	1	50	2485	1		1
HD27835	4 24 12.7	16 22 44	FOS/BL	ACCUM	4.3	G130H	1300	1	1650	2485	1		1
HD27835	4 24 12.7	16 22 44	FOS/BL	ACCUM	4.3	G190H	1900	1	930	2485	1		1
BD+16D601	4 26 40.1	16 44 49	FOS/RD	RAPID	1.0	PRISM	5400	1	30	3744	2		1
BD+16D601-OFFSET	4 26 40.8	16 44 14	FOS/RD	ACQ/BINA	4.3	MIRROR		1	25	3744	2	ACQ	1
DF-TAU	4 27 2.8	25 42 23	FGS	TRANS	3	PUPIL		1	600	4150	3	CON	2
DF-TAU	4 27 2.8	25 42 23	FGS	TRANS	3	PUPIL		1	883	3842	2		2
DF-TAU	4 27 2.8	25 42 23	HRS	ACCUM	2.0	G270M	2800	2	300	3845	2		1
DF-TAU	4 27 2.8	25 42 23	HRS	ACCUM	2.0	G160M	1400	4	300	3845	2		1
DF-TAU	4 27 2.8	25 42 23	HRS	ACCUM	2.0	G160M	1550	4	300	3845	2		1
DF-TAU	4 27 2.8	25 42 23	HRS	ACCUM	2.0	G160M	1345	5	300	3845	2		1
DFTAU	4 27 2.8	25 42 23	PC	IMAGE	ALL	F875M		1	8	2265	1		32
DFTAU	4 27 2.8	25 42 23	PC	IMAGE	ALL	F875M		1	8	4163	1		16
DFTAU	4 27 2.8	25 42 23	PC	IMAGE	ALL	F631N		1	160	2265	1		2
HD28305	4 28 37.0	19 10 49	HRS	ACCUM	0.25	G270M	2498	5	1866	3614	2		1
HD28344	4 28 48.2	17 17 8	FOS/BL	ACQ/PEAK	1.0	G270H		1	1	2485	1	ACQ	1
HD28344	4 28 48.2	17 17 8	FOS/BL	ACQ/PEAK	4.3	G270H		1	1	2485	1	ACQ	1
HD28344	4 28 48.2	17 17 8	FOS/BL	ACCUM	4.3	G270H	2700	1	50	2485	1		1
HD28344	4 28 48.2	17 17 8	FOS/BL	ACCUM	4.3	G130H	1300	1	1650	2485	1		1
HD28344	4 28 48.2	17 17 8	FOS/BL	ACCUM	4.3	G190H	1900	1	930	2485	1		1
DI-TAU	4 29 42.5	26 32 50	FGS	TRANS	3	PUPIL		1	600	4150	3	CON	2
DI-TAU	4 29 42.5	26 32 50	FGS	TRANS	3	PUPIL		1	883	3842	2		2
NGC1569	4 30 48.5	64 50 55	PC	IMAGE	P5	F336W		1	10000	2389	1		1
NGC1569	4 30 48.5	64 50 55	PC	IMAGE	P5	F555W		1	700	2389	1		1
NGC1569	4 30 48.5	64 50 55	PC	IMAGE	P5	F336W		1	2500	2389	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC1569	4 30 48.5	64 50 55	PC	IMAGE	P5	F555W		1	2800	2389	1		1
NGC1569	4 30 48.5	64 50 55	PC	IMAGE	P5	F785LP		1	1000	2389	1		1
NGC1569	4 30 48.5	64 50 55	PC	IMAGE	P5	F785LP		1	4000	2389	1		1
BD+23D702-CALIB	4 31 13.1	23 20 20	PC	IMAGE	ALL	F875M		1	0	2265	1	CAL	64
BD+23D702-CALIB	4 31 13.1	23 20 20	PC	IMAGE	ALL	F631N		1	2	2265	1	CAL	24
BD+23D702-CALIB	4 31 13.1	23 20 48	PC	IMAGE	ALL	F875M		1	0	4163	1	CAL	48
BD+23D702-CALIB	4 31 13.1	23 20 48	PC	IMAGE	ALL	F631N		1	2	4163	1	CAL	8
ESO-0430-5442	4 31 39.4	-54 36 6	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
INCA221-8	4 32 4.7	5 24 36	FGS	POS	3	F5ND		1	51	2565	2	CON	2
INCA221-8	4 32 4.7	5 24 36	FGS	POS	3	F5ND		1	51	4148	3	CON	2
POINT0430+052INCA221-8	4 32 28.7	5 12 59	S/C	POINTING	V1			1	1	2565	2	CON	1
POINT0430+052INCA221-8	4 32 28.7	5 12 59	S/C	POINTING	V1			1	1	4148	3	CON	1
UGC3060	4 32 48.9	71 52 59	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
IRAS04296+3429	4 32 56.6	34 36 11	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
IRAS04296+3429	4 32 56.6	34 36 11	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
0430+052INCA221-29	4 33 10.9	5 21 17	FGS	POS	3	PUPIL		1	51	2565	2	CON	3
0430+052INCA221-29	4 33 10.9	5 21 17	FGS	POS	3	PUPIL		1	51	4148	3	CON	3
0430+052INCA221-8	4 33 10.9	5 21 17	FGS	POS	3	PUPIL		1	51	2565	2	CON	3
0430+052INCA221-8	4 33 10.9	5 21 17	FGS	POS	3	PUPIL		1	51	4148	3	CON	3
3C120	4 33 11.2	5 21 15	FGS	TRANS	3	F550W		1	1414	2443	1	CON SEL	1
3C120	4 33 11.2	5 21 15	FGS	TRANS	3	F583W		1	1414	2443	1	CON SEL	1
3C120	4 33 11.2	5 21 15	FGS	TRANS	3	PUPIL		1	1414	2443	1	CON SEL	1
POINT0430+052INCA221-29	4 33 19.3	5 33 5	S/C	POINTING	V1			1	1	2565	2	CON	1
POINT0430+052INCA221-29	4 33 19.3	5 33 5	S/C	POINTING	V1			1	1	4148	3	CON	1
INCA221-29	4 33 50.5	5 23 10	FGS	POS	3	F5ND		1	51	2565	2	CON	2
INCA221-29	4 33 50.5	5 23 10	FGS	POS	3	F5ND		1	51	4148	3	CON	2
NGC1614	4 34 0.1	-8 34 45	FOS/BL	ACCUM	1.0	G130H		1	18600	4122	2	CON	1
NGC1614	4 34 0.1	-8 34 45	FOS/BL	ACCUM	1.0	G190H		1	6200	4122	2	CON	1
NGC1614	4 34 0.1	-8 34 45	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	1	4122	2	ACQ CON	1
NGC1614	4 34 0.1	-8 34 45	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	1	4122	2	ACQ CON	1
NGC1614	4 34 0.1	-8 34 45	FOC/48	IMAGE	512X512	F130LP F140W		1	1000	3810	2		1
HD28992	4 34 35.2	15 30 18	FOS/BL	ACQ/PEAK	1.0	G270H		1	1	2485	1	ACQ	1
HD28992	4 34 35.2	15 30 18	FOS/BL	ACQ/PEAK	4.3	G270H		1	1	2485	1	ACQ	1
HD28992	4 34 35.2	15 30 18	FOS/BL	ACCUM	4.3	G270H	2700	1	50	2485	1		1
HD28992	4 34 35.2	15 30 18	FOS/BL	ACCUM	4.3	G130H	1300	1	1650	2485	1		1
HD28992	4 34 35.2	15 30 18	FOS/BL	ACCUM	4.3	G190H	1900	1	930	2485	1		1
FF-TAU	4 35 20.9	22 54 25	FGS	TRANS	3	PUPIL		1	600	4150	3	CON	2
FF-TAU	4 35 20.9	22 54 25	FGS	TRANS	3	PUPIL		1	883	3842	2		2
HQ-TAU	4 35 47.3	22 50 22	FGS	TRANS	3	PUPIL		1	600	4150	3	CON	2
HQ-TAU	4 35 47.3	22 50 22	FGS	TRANS	3	PUPIL		1	883	3842	2		2
MARK618	4 36 22.1	-10 22 35	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
HV-TAU	4 38 35.3	26 10 39	FGS	POS	3	PUPIL		1	51	3842	2		2
HV-TAU	4 38 35.3	26 10 39	FGS	TRANS	3	PUPIL		1	600	4150	3	CON	2
HV-TAU	4 38 35.3	26 10 39	FGS	TRANS	3	PUPIL		1	883	3842	2		2
HV-TAU-C	4 38 35.4	26 10 41*	FGS	TRANS	3	PUPIL		1	600	4150	3	CON	2
HV-TAU-C	4 38 47.6	26 10 43	FGS	POS	3	PUPIL		1	51	3842	2		2
GN-TAU	4 39 20.9	25 45 3	FGS	TRANS	3	PUPIL		1	600	4150	3	CON	2
GN-TAU	4 39 20.9	25 45 3	FGS	TRANS	3	PUPIL		1	883	3842	2		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PKS0438-43	4 40 17.1	-43 33 8	PC	IMAGE	ALL	F555W		1	260	3159	0		1
1E0438-166	4 40 26.5	-16 32 35	PC	IMAGE	ALL	F555W		1	260	3159	0		1
LMC-SMP2	4 40 56.7	-67 48 3	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	16	3441	2	ACQ	1
LMC-SMP2	4 40 56.7	-67 48 3	FOS/BL	ACCUM	1.0	G190H	1900	1	800	3441	2		1
LMC-SMP2	4 40 56.7	-67 48 3	FOS/BL	ACCUM	1.0	G130H	1300	1	1600	3441	2		1
LMC-SMP2	4 40 56.7	-67 48 3	FOS/BL	ACCUM	1.0	G270H	2700	1	350	3441	2		1
LMC-SMP2-PCPOS	4 40 56.7	-67 48 3	PC	IMAGE	P8	F502N		3	1500	2266	1		1
PKS0439-433	4 41 17.3	-43 13 44	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
PKS0439-433	4 41 17.3	-43 13 44	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
PKS0439-433	4 41 17.3	-43 13 44	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	7380	4125	3	CON	1
PKS0439-433	4 41 17.3	-43 13 44	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2508	4125	3	CON	1
PKS0439-433	4 41 17.3	-43 13 44	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	4125	3	ACQ CON	1
PK166-06D1	4 42 53.4	36 6 53	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK166-06D1	4 42 53.4	36 6 53	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
ESO-0444-5920	4 45 43.3	-59 14 49	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
DRTAU	4 47 6.2	16 58 43	PC	IMAGE	ALL	F875M		1	10	2265	1		32
DRTAU	4 47 6.2	16 58 43	PC	IMAGE	ALL	F875M		1	10	4163	1		32
DRTAU	4 47 6.2	16 58 43	PC	IMAGE	ALL	F631N		1	120	2265	1		2
DR-TAU	4 47 6.2	16 58 43	HRS	ACCUM	2.0	G270M	2800	1	300	3845	2		1
DR-TAU	4 47 6.2	16 58 43	HRS	ACCUM	2.0	G160M	1650	4	300	3845	2		1
DR-TAU	4 47 6.2	16 58 43	HRS	ACCUM	2.0	G160M	1400	6	300	3845	2		1
DR-TAU	4 47 6.2	16 58 43	HRS	ACCUM	2.0	G160M	1550	6	300	3845	2		1
DR-TAU	4 47 6.2	16 58 43	HRS	ACCUM	2.0	G160M	1345	5	300	3845	2		1
HD283868	4 47 6.7	26 10 46	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD283868	4 47 6.7	26 10 46	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
NGC1667	4 48 37.1	-6 19 12	PC	IMAGE	PC6	F785LP		1	120	4093	2		1
Q0447-395	4 49 8.7	-39 29 2	PC	IMAGE	ALL	F555W		1	260	3159	0		1
PKS0448-392	4 49 42.3	-39 11 9	PC	IMAGE	ALL	F555W		1	260	3159	0		1
MRK1087	4 49 44.4	3 20 3	FOC/48	IMAGE	512X512	F130LP F140W		1	1000	3810	2		1
LMC-SMP8	4 50 13.1	-69 34 1	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	7	3441	2	ACQ	1
LMC-SMP8	4 50 13.1	-69 34 1	FOS/BL	ACCUM	1.0	G130H	1300	1	700	3441	2		1
LMC-SMP8	4 50 13.1	-69 34 1	FOS/BL	ACCUM	1.0	G270H	2700	1	200	3441	2		1
LMC-SMP8	4 50 13.1	-69 34 1	FOS/BL	ACCUM	1.0	G190H	1900	1	350	3441	2		1
LMC-SMP8-PCPOS	4 50 13.1	-69 34 1	PC	IMAGE	P8	F502N		1	1100	2266	1		1
IR0450-2958	4 52 30.0	-29 53 35	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	3791	2	ACQ	1
IR0450-2958	4 52 30.0	-29 53 35	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	1	3791	2	ACQ	1
IR0450-2958	4 52 30.0	-29 53 35	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3791	2	ACQ	1
IR0450-2958	4 52 30.0	-29 53 35	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	13500	3791	2		1
IR0450-2958	4 52 30.0	-29 53 35	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1200	3791	2		1
IR0450-2958	4 52 30.0	-29 53 35	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	3299	3791	2		1
ESO-0450-2519	4 52 53.0	-25 14 48	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q0451-418	4 53 13.7	-41 47 26	PC	IMAGE	ALL	F555W		1	260	3159	0		1
PKS0451-28	4 53 14.7	-28 7 38	PC	IMAGE	ALL	F555W		1	260	3159	0		1
HD30614	4 54 2.9	66 20 35	HRS	ACCUM	0.25	G160M	1312	2	900	3746	2		1
NGC1705	4 54 13.5	-53 21 41	PC	IMAGE	P5	F555W		1	100	2389	1		1
NGC1705	4 54 13.5	-53 21 41	PC	IMAGE	P5	F555W		1	400	2389	1		1
NGC1705	4 54 13.5	-53 21 41	PC	IMAGE	P5	F785LP		1	600	2389	1		1
NGC1705	4 54 13.5	-53 21 41	PC	IMAGE	P5	F785LP		1	150	2389	1		1
NGC1705	4 54 14.1	-53 21 22	FOS/BL	ACCUM	1.0	G130H		1	1200	3591	2	CON	1
NGC1705	4 54 14.1	-53 21 22	FOS/BL	ACCUM	1.0	G190H		1	560	3591	2	CON	1
NGC1705	4 54 14.1	-53 21 22	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	0	3591	2	ACQ CON	1
NGC1705	4 54 14.1	-53 21 22	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	0	3591	2	ACQ CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC1705	4 54 14.1	-53 21 22	FOC/48	IMAGE	512X512	F130LP F140W		1	150	3591	2	ACQ	1
Q0453-423	4 55 23.0	-42 16 17	PC	IMAGE	ALL	F555W		1	260	3159	0		1
NGC1700	4 56 56.2	-4 51 57	PC	IMAGE	PC6	F555W		1	80	3912	2		1
NGC1700	4 56 56.2	-4 51 57	PC	IMAGE	PC6	F555W		2	350	3912	2		1
-66D40	4 57 41.1	-66 32 43	FOS/BL	ACCUM	0.25X2.0	G130H		1	8772	3605	2		1
-66D40	4 57 41.1	-66 32 43	FOS/BL	ACCUM	0.25X2.0	G190H		1	2048	3605	2		1
-66D40	4 57 41.1	-66 32 43	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3605	2	ACQ	1
-66D40	4 57 41.1	-66 32 43	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3605	2	ACQ	1
0456-395	4 58 20.9	-39 25 26	PC	IMAGE	ALL	F555W		1	240	4027	1		1
ESO-0457-2606	4 59 57.9	-26 1 26	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
TX-CAM	5 0 53.8	56 11 18	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
TX-CAM	5 0 53.8	56 11 18	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
SK-65D21	5 1 22.3	-65 41 48	FOS/BL	ACCUM	0.25X2.0	G190H		1	1527	4110	1		1
SK-65D21	5 1 22.3	-65 41 48	FOS/BL	ACCUM	0.25X2.0	G130H		1	2832	4110	1		1
SK-65D21	5 1 22.3	-65 41 48	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	4110	1	ACQ	1
SK-65D21	5 1 22.3	-65 41 48	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	4110	1	ACQ	1
NGC1741	5 1 38.0	-4 15 27	FOC/48	IMAGE	512X512	F130LP F140W		1	1000	3810	2		1
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	0.25	G160M	1540	1	544	3626	2		2
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	2.0	ECH-B18	3075	1	653	3626	2		2
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	2.0	ECH-B33	1705	1	653	3626	2		2
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	0.25	G160M	1190	1	544	3626	2		2
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	0.25	G160M	1263	1	544	3626	2		4
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	0.25	G160M	1573	1	544	3626	2		2
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	0.25	G160M	1643	1	653	3626	2		2
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	2.0	ECH-B19	3048	1	544	3626	2		2
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	2.0	ECH-B32	1786	1	544	3626	2		1
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	2.0	ECH-B26	2150	1	435	3626	2		2
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	2.0	ECH-B18	3130	2	244	3626	2		2
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	2.0	ECH-B18	3075	1	652	3626	2		2
HD32068	5 2 28.7	41 4 33	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	163	3626	2	ACQ	3
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	2.0	ECH-B19	3004	1	435	3626	2		2
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	2.0	ECH-B33	1704	1	761	3626	2		2
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	2.0	ECH-B22	2611	1	544	3626	2		2
HD32068	5 2 28.7	41 4 33	HRS	ACCUM	2.0	ECH-B24	2335	1	218	3626	2		4
NOVA-LMC-1991	5 3 45.0	-70 18 14	HRS	ACCUM	2.0	G160M	1240	1	6000	3412	1		1
NOVA-LMC-1991	5 3 45.0	-70 18 14	HRS	ACCUM	2.0	G160M	1640	1	6000	3412	1		1
NOVA-LMC-1991	5 3 45.0	-70 18 14	HRS	ACCUM	2.0	G160M	1750	1	6000	3412	1		1
NOVA-LMC-1991	5 3 45.0	-70 18 14	HRS	ACCUM	2.0	G200M	1900	1	6000	3412	1		1
LMC-SMP20	5 4 40.5	-69 21 41	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	22	3441	2	ACQ	1
LMC-SMP20	5 4 40.5	-69 21 41	FOS/BL	ACCUM	1.0	G270H	2700	1	500	3441	2		1
LMC-SMP20	5 4 40.5	-69 21 41	FOS/BL	ACCUM	1.0	G130H	1300	1	2200	3441	2		1
LMC-SMP20	5 4 40.5	-69 21 41	FOS/BL	ACCUM	1.0	G190H	1900	1	1100	3441	2		1
LMC-SMP20-PCPOS	5 4 40.5	-69 21 41	PC	IMAGE	P8	F502N		1	3000	2266	1		1
ESO-0503-3802	5 5 14.1	-37 58 37	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
SK-70D69	5 5 18.8	-70 25 50	FOS/BL	ACCUM	0.25X2.0	G130H		1	9230	2233	1		1
SK-70D69	5 5 18.8	-70 25 50	FOS/BL	ACCUM	0.25X2.0	G190H		1	4166	2233	1		1
SK-70D69	5 5 18.8	-70 25 50	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	2233	1	ACQ	1
SK-70D69	5 5 18.8	-70 25 50	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	2233	1	ACQ	1
SK-68D41	5 5 27.2	-68 10 3	FOS/BL	ACQ/PEAK	0.5	G400H		1	0	4110	1	ACQ	1
SK-68D41	5 5 27.2	-68 10 3	FOS/BL	ACQ/PEAK	1.0	G400H		1	0	4110	1	ACQ	1
SK-68D41	5 5 27.2	-68 10 3	FOS/BL	ACCUM	0.25X2.0	G130H		1	3503	4110	1		1
SK-68D41	5 5 27.2	-68 10 3	FOS/BL	ACQ/PEAK	0.25X2.0	G400H		1	0	4110	1	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
SK-68D41	5 5 27.2	-68 10 3	FOS/BL	ACQ/PEAK	4.3	G400H		1	0	4110	1	ACQ	1
SK-68D41	5 5 27.2	-68 10 3	FOS/BL	ACCUM	0.25X2.0	G190H		1	1662	4110	1		1
G191-B2B	5 5 30.6	52 49 54	HRS	ACCUM	2.0	MIRROR-A2		1	4	2536	1		1
G191-B2B	5 5 30.6	52 49 54	HRS	ACCUM	2.0	ECH-B	2798	2	1500	2536	1		1
G191-B2B	5 5 30.6	52 49 54	HRS	ACCUM	0.25	G160M	1409	2	1250	2536	1		1
G191-B2B	5 5 30.6	52 49 54	HRS	ACCUM	0.25	G160M	1247	2	1500	2536	1		1
G191-B2B	5 5 30.6	52 49 54	HRS	ACCUM	0.25	G160M	1318	2	1500	2536	1		1
G191-B2B	5 5 30.6	52 49 54	HRS	ACCUM	0.25	G160M	1203	10	1200	2536	1		1
G191-B2B	5 5 30.6	52 49 54	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	5	2536	1	ACQ	1
G191-B2B	5 5 30.6	52 49 54	HRS	ACCUM	2.0	ECH-B	2345	2	1250	2536	1		1
PKS0504+03	5 7 36.5	3 7 52	PC	IMAGE	ALL	F555W		1	240	4027	1		1
RW-AUR	5 7 49.5	30 24 5	HRS	ACCUM	2.0	G270M	2800	1	300	3845	2		1
RW-AUR	5 7 49.5	30 24 5	HRS	ACCUM	2.0	G160M	1400	3	300	3845	2		1
RW-AUR	5 7 49.5	30 24 5	HRS	ACCUM	2.0	G160M	1550	3	300	3845	2		1
LMC-N103B	5 8 59.1	-68 43 34	FOS/RD	ACQ/PEAK	4.3	MIRROR		1	10	2290	1	ACQ	1
LMC-N103B	5 8 59.1	-68 43 34	FOS/BL	ACCUM	1.0	G130H	1300	2	1700	2290	1		1
LMC-N103B	5 8 59.1	-68 43 34	FOS/RD	ACCUM	1.0	G190H	1900	2	1200	2290	1		1
LMC-N103B	5 8 59.1	-68 43 34	FOS/RD	ACCUM	1.0	PRISM	5007	2	1200	2290	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1230	1	70	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1390	1	80	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1550	1	60	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1406	1	80	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1194	1	80	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1203	1	80	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1213	1	80	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1239	1	70	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1248	1	70	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1256	1	80	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1264	.1	80	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1398	1	80	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1539	1	60	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACCUM	0.25	G160M	1561	1	60	2403	1		1
HD33328	5 9 8.9	-8 45 15	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	2403	1	ACQ	2
MRK1094	5 10 48.1	-2 40 54	FOC/48	IMAGE	512X512	F130LP F140W		1	1000	3810	2		1
LMC-SMP35	5 10 50.0	-65 29 32	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	6	3441	2	ACQ	1
LMC-SMP35	5 10 50.0	-65 29 32	FOS/BL	ACCUM	1.0	G130H	1300	1	600	3441	2		1
LMC-SMP35	5 10 50.0	-65 29 32	FOS/BL	ACCUM	1.0	G190H	1900	1	300	3441	2		1
LMC-SMP35	5 10 50.0	-65 29 32	FOS/BL	ACCUM	1.0	G270H	2700	1	140	3441	2		1
LMC-SMP35-PCPOS	5 10 50.0	-65 29 32	PC	IMAGE	P8	F502N		1	600	2266	1		1
LMC-SMP40	5 12 15.8	-66 22 57	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	22	3441	2	ACQ	1
LMC-SMP40	5 12 15.8	-66 22 57	FOS/BL	ACCUM	1.0	G270H	2700	1	500	3441	2		1
LMC-SMP40	5 12 15.8	-66 22 57	FOS/BL	ACCUM	1.0	G130H	1300	1	2200	3441	2		1
LMC-SMP40	5 12 15.8	-66 22 57	FOS/BL	ACCUM	1.0	G190H	1900	1	1100	3441	2		1
LMC-SMP40-PCPOS	5 12 15.8	-66 22 57	PC	IMAGE	P8	F502N		1	1800	2266	1		1
UGC3271	5 16 11.9	-0 8 59	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
ESO-0514-3709	5 16 38.8	-37 6 10	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
VIIZW031	5 16 46.6	79 40 12	FOC/48	IMAGE	512X512	F140W		1	2400	3913	2		2
VIIZW031	5 16 46.6	79 40 12	FOC/48	IMAGE	512X512	F220W		1	1200	3913	2		2
PICTORA	5 19 49.8	-45 46 45	PC	IMAGE	P6	F547M		1	800	2456	1		4
PICTORA	5 19 49.8	-45 46 45	PC	IMAGE	P6	F517N		1	1200	2456	1		4
PKS0518-45	5 19 49.8	-45 46 45	PC	IMAGE	PC6	F648M		1	4000	3667	2		1
PKS0518-45	5 19 49.8	-45 46 45	PC	IMAGE	PC6	F718M		1	2000	3667	2		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PKS0518-45	5 19 49.8	-45 46 45	PC	IMAGE	PC6	F648M		1	3800	3667	2		1
LMC-N122	5 19 54.7	-69 31 5	HRS	ACCUM	2.0	ECH-B	1910	4	2940	3608	2		1
LMC-SMP47	5 19 54.7	-69 31 5	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	7	3441	2	ACQ	1
LMC-SMP47	5 19 54.7	-69 31 5	FOS/BL	ACCUM	1.0	G190H	1900	1	500	3441	2		1
LMC-SMP47	5 19 54.7	-69 31 5	FOS/BL	ACCUM	1.0	G270H	2700	1	300	3441	2		1
LMC-SMP47	5 19 54.7	-69 31 5	FOS/BL	ACCUM	1.0	G130H	1300	1	1200	3441	2		1
LMC-SMP47-PCPOS	5 19 54.7	-69 31 5	PC	IMAGE	P8	F502N		1	400	2266	1		1
LMC26	5 20 0.8	-69 26 0	FOC/96	IMAGE	512X1024	F501N		1	900	3671	2		1
LMC26-KNOT	5 20 0.8	-69 25 59*	FOS/BL	ACCUM	4.3	G130H		1	1800	3671	2		1
LMC26-KNOT	5 20 0.8	-69 25 59*	FOS/BL	ACCUM	4.3	G190H		1	1800	3671	2		1
IRAS05189-2524	5 21 1.1	-25 21 45	FOC/96	IMAGE	512X512	F430W		1	600	3906	2		1
IRAS05189-2524	5 21 1.1	-25 21 45	FOC/96	IMAGE	512X512	F480LP		1	600	3906	2		1
POINTNEWEGOD-54NEWHI P-54	5 22 17.5	-36 37 36	S/C	POINTING	V1			1	1	3918	2	CON	1
POINTNEWEGOD-54NEWHI P-54	5 22 17.5	-36 37 36	S/C	POINTING	V1			1	1	4143	3	CON	1
POINTNEWEGOD-53NEWHI P-53	5 22 23.8	-36 17 53	S/C	POINTING	V1			1	1	3918	2	CON	1
POINTNEWEGOD-53NEWHI P-53	5 22 23.8	-36 17 53	S/C	POINTING	V1			1	1	4143	3	CON	1
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	G160M	1175	1	959	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	IMAGE	2.0	MIRROR-A2		1	96	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	IMAGE	2.0	MIRROR-A2		1	96	3993	1		2
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	G160M	1398	1	371	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	G160M	1608	1	526	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	WSCAN	0.25	ECH-B	1858	1	665	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	WSCAN	0.25	ECH-B	1744	1	596	3993	1		1
HD035149	5 22 49.9	3 32 40	HRS	WSCAN	0.25	ECH-B	1807	1	403	3993	1		1
HD035149	5 22 49.9	3 32 40	HRS	WSCAN	0.25	ECH-B	1827	1	473	3993	1		1
HD035149	5 22 49.9	3 32 40	HRS	WSCAN	0.25	ECH-B	2059	1	333	3993	1		1
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	G160M	1290	1	216	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	G160M	1554	1	565	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	G160M	1663	1	518	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	ECH-B	2325	1	128	3993	1		2
HD035149	5 22 49.9	3 32 40	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2251	1	ACQ	1
HD035149	5 22 49.9	3 32 40	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	3993	1	ACQ	2
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	ECH-B	2324	1	128	3993	1		3
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	ECH-B	2326	1	128	3993	1		2
HD035149	5 22 49.9	3 32 40	HRS	WSCAN	0.25	ECH-B	2519	1	270	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	G160M	1249	1	286	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	G160M	1345	1	255	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	WSCAN	0.25	ECH-B	2484	1	247	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	G160M	1133	1	1184	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	WSCAN	0.25	ECH-B	2799	1	170	2251	1		1
HD035149	5 22 49.9	3 32 40	HRS	WSCAN	0.25	ECH-B	2026	1	333	3993	1		1
HD035149	5 22 49.9	3 32 40	HRS	WSCAN	0.25	ECH-B	2371	1	210	3993	1		1
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	ECH-B	2324	1	128	3993	1		1
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	ECH-B	2325	1	128	3993	1		2
HD035149	5 22 49.9	3 32 40	HRS	ACCUM	0.25	ECH-B	2326	1	128	3993	1		2
HD035149	5 22 49.9	3 32 40	HRS	WSCAN	0.25	ECH-B	2249	1	147	2251	1		1
HD35149	5 22 50.0	3 32 40	HRS	ACCUM	0.25	G160M	1240	1	240	2584	1		1
HD35149	5 22 50.0	3 32 40	HRS	ACCUM	0.25	G160M	1335	1	200	2584	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD35149	5 22 50.0	3 32 40	HRS	ACCUM	0.25	G160M	1402	1	200	2584	1		1
HD35149	5 22 50.0	3 32 40	HRS	ACCUM	0.25	G160M	1206	1	900	2584	1		1
HD35149	5 22 50.0	3 32 40	HRS	ACCUM	0.25	G160M	1226	1	900	2584	1		1
HD35149	5 22 50.0	3 32 40	HRS	ACCUM	0.25	G160M	1549	1	200	2584	1		1
HD35149	5 22 50.0	3 32 40	HRS	ACCUM	0.25	G160M	1259	1	240	2584	1		1
HD35149	5 22 50.0	3 32 40	HRS	ACCUM	0.25	G160M	1387	1	240	2584	1		1
HD35149	5 22 50.0	3 32 40	HRS	ACCUM	0.25	G160M	1858	1	140	2584	1		1
HD35149	5 22 50.0	3 32 40	HRS	IMAGE	2.0	MIRROR-A2		1	96	2584	1		1
HD35149	5 22 50.0	3 32 40	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	2584	1	ACQ	1
NEWEGOD-53NEWHIP-53	5 22 57.9	-36 27 30	FGS	POS	3	PUPIL		1	51	3918	2	CON	3
NEWEGOD-53NEWHIP-53	5 22 57.9	-36 27 30	FGS	POS	3	PUPIL		1	51	4143	3	CON	3
NEWEGOD-54NEWHIP-54	5 22 57.9	-36 27 30	FGS	POS	3	PUPIL		1	51	3918	2	CON	3
NEWEGOD-54NEWHIP-54	5 22 57.9	-36 27 30	FGS	POS	3	PUPIL		1	51	4143	3	CON	3
PKS0521-365	5 22 57.9	-36 27 31	PC	IMAGE	ALL	F555W		1	200	2350	1		1
PKS0521-365	5 22 57.9	-36 27 31	PC	IMAGE	ALL	F555W		1	140	2350	1		1
BE261	5 22 59.9	-68 1 46	FOS/BL	ACCUM	0.25X2.0	G130H		1	8730	3605	2		1
BE261	5 22 59.9	-68 1 46	FOS/BL	ACCUM	0.25X2.0	G190H		1	1564	3605	2		1
BE261	5 22 59.9	-68 1 46	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3605	2	ACQ	1
BE261	5 22 59.9	-68 1 46	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3605	2	ACQ	1
NEWHIP-53	5 23 15.5	-36 22 19	FGS	POS	3	PUPIL		1	51	3918	2	CON	2
NEWHIP-53	5 23 15.5	-36 22 19	FGS	POS	3	PUPIL		1	51	4143	3	CON	2
NEWHIP-54	5 23 21.0	-36 40 16	FGS	POS	3	PUPIL		1	51	3918	2	CON	2
NEWHIP-54	5 23 21.0	-36 40 16	FGS	POS	3	PUPIL		1	51	4143	3	CON	2
IC418	5 27 28.2	-12 41 50	HRS	ACCUM	0.25	G160M	1510	1	600	3880	2		1
IC418	5 27 28.2	-12 41 50	HRS	ACCUM	0.25	G160M	1274	1	600	3880	2		1
IC418	5 27 28.2	-12 41 50	HRS	ACCUM	0.25	G160M	1304	1	600	3880	2		1
IC418	5 27 28.2	-12 41 50	HRS	ACCUM	0.25	G160M	1346	1	600	3880	2		1
IC418	5 27 28.2	-12 41 50	HRS	ACCUM	0.25	G160M	1224	1	1200	3880	2		1
IC418	5 27 28.2	-12 41 50	HRS	ACCUM	0.25	G160M	1656	1	960	3880	2		1
IC418	5 27 28.2	-12 41 50	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	5	3880	2		1
IC418	5 27 28.2	-12 41 50	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	20	3880	2		1
PK215-24D1	5 27 28.3	-12 41 48	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK215-24D1	5 27 28.3	-12 41 48	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
SK-66D100	5 27 45.5	-66 55 15	FOS/BL	ACCUM	0.25X2.0	G190H		1	2501	2233	1		1
SK-66D100	5 27 45.5	-66 55 15	FOS/BL	ACCUM	0.25X2.0	G130H		1	5273	2233	1		1
SK-66D100	5 27 45.5	-66 55 15	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	2233	1	ACQ	1
SK-66D100	5 27 45.5	-66 55 15	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	2233	1	ACQ	1
BE294	5 27 53.0	-68 59 9	WFC	IMAGE	WFALL	F555W		3	10	3605	2	ACQ	1
BE294	5 27 53.0	-68 59 9	FOS/BL	ACCUM	0.25X2.0	G190H		1	563	3605	2		1
BE294	5 27 53.0	-68 59 9	FOS/BL	ACCUM	0.25X2.0	G130H		1	2202	3605	2		1
BE294	5 27 53.0	-68 59 9	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3605	2	ACQ	1
BE294	5 27 53.0	-68 59 9	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3605	2	ACQ	1
G97-42-CALIB	5 28 0.5	9 38 39	PC	IMAGE	ALL	F875M		1	5	2265	1	CAL	32
G97-42-CALIB	5 28 0.5	9 38 39	PC	IMAGE	ALL	F875M		1	5	4163	1	CAL	16
G97-42-CALIB	5 28 0.5	9 38 39	PC	IMAGE	ALL	F631N		1	160	2265	1	CAL	4
MARS-MA1	5 28 58.1	25 16 37	PC	IMAGE	P6	F413M		1	1	3107	0		1
MARS-MA1	5 28 58.1	25 16 37	PC	IMAGE	P6	F673N		1	0	3107	0		1
PKS0528-250	5 30 8.0	-25 3 30	PC	IMAGE	ALL	F555W		1	260	3159	0		1
LMC-SMP72-PCPOS	5 30 46.0	-70 50 17	PC	IMAGE	P8	F502N		1	4000	2266	1		1
BE335	5 31 25.6	-69 5 38	FOS/BL	ACCUM	0.25X2.0	G190H		1	484	3605	2		1
BE335	5 31 25.6	-69 5 38	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3605	2	ACQ	1
BE335	5 31 25.6	-69 5 38	FOS/BL	ACCUM	0.25X2.0	G130H		1	1816	3605	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
BE335	5 31 25.6	-69 5 38	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3605	2	ACQ	1
SK-67D166	5 31 44.3	-67 38 1	FOS/BL	ACQ/PEAK	0.5	G400H		1	0	4110	1	ACQ	1
SK-67D166	5 31 44.3	-67 38 1	FOS/BL	ACQ/PEAK	1.0	G400H		1	0	4110	1	ACQ	1
SK-67D166	5 31 44.3	-67 38 1	FOS/BL	ACQ/PEAK	4.3	G400H		1	0	4110	1	ACQ	1
SK-67D166	5 31 44.3	-67 38 1	FOS/BL	ACCUM	0.25X2.0	G130H		1	1972	4110	1		1
SK-67D166	5 31 44.3	-67 38 1	FOS/BL	ACQ/PEAK	0.25X2.0	G400H		1	0	4110	1	ACQ	1
SK-67D166	5 31 44.3	-67 38 1	FOS/BL	ACCUM	0.25X2.0	G190H		1	744	4110	1		1
SK-67D167	5 31 52.0	-67 39 41	FOS/BL	ACCUM	0.25X2.0	G130H		1	2731	4110	1		1
SK-67D167	5 31 52.0	-67 39 41	FOS/BL	ACCUM	0.25X2.0	G190H		1	1205	4110	1		1
SK-67D167	5 31 52.0	-67 39 41	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	4110	1	ACQ	1
SK-67D167	5 31 52.0	-67 39 41	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	4110	1	ACQ	1
ESO-0531-2158	5 33 21.6	-21 56 48	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
LMC-SMP76	5 33 56.4	-67 53 10	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	7	3441	2	ACQ	1
LMC-SMP76	5 33 56.4	-67 53 10	FOS/BL	ACCUM	1.0	G130H	1300	1	500	3441	2		1
LMC-SMP76	5 33 56.4	-67 53 10	FOS/BL	ACCUM	1.0	G190H	1900	1	250	3441	2		1
LMC-SMP76	5 33 56.4	-67 53 10	FOS/BL	ACCUM	1.0	G270H	2700	1	120	3441	2		1
LMC-SMP76-PCPOS	5 33 56.4	-67 53 10	PC	IMAGE	P8	F502N		1	800	2266	1		1
PSR0531+21-SBACKGROUND	5 34 31.9	22 0 50*	HSP/POL	SINGLE	POL0	F277M		1	900	3557	2		1
PSR0531+21-SBACKGROUND	5 34 31.9	22 0 50*	HSP/POL	SINGLE	POL45	F277M		1	900	3557	2		1
PSR0531+21-SBACKGROUND	5 34 31.9	22 0 50*	HSP/POL	SINGLE	POL90	F277M		1	900	3557	2		1
PSR0531+21-SBACKGROUND	5 34 31.9	22 0 50*	HSP/POL	SINGLE	POL135	F277M		1	900	3557	2		1
PSR0531+21	5 34 31.9	22 0 52	HSP/POL	SINGLE	POL0	F277M		1	900	3557	2		12
PSR0531+21	5 34 31.9	22 0 52	HSP/POL	SINGLE	POL45	F277M		1	900	3557	2		12
PSR0531+21	5 34 31.9	22 0 52	HSP/POL	SINGLE	POL90	F277M		1	900	3557	2		12
PSR0531+21	5 34 31.9	22 0 52	HSP/POL	SINGLE	POL135	F277M		1	900	3557	2		12
PSR0531+21-NBACKGROUND	5 34 31.9	22 0 54*	HSP/POL	SINGLE	POL0	F277M		1	900	3557	2		3
PSR0531+21-NBACKGROUND	5 34 31.9	22 0 54*	HSP/POL	SINGLE	POL45	F277M		1	900	3557	2		3
PSR0531+21-NBACKGROUND	5 34 31.9	22 0 54*	HSP/POL	SINGLE	POL90	F277M		1	900	3557	2		3
PSR0531+21-NBACKGROUND	5 34 31.9	22 0 54*	HSP/POL	SINGLE	POL135	F277M		1	900	3557	2		3
LMC-SN1987A-OFFSET	5 34 53.8	-69 14 3	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	2563	1	ACQ	7
LMC-SN1987A-OFFSET	5 34 53.8	-69 14 3	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	2563	1	ACQ	3
LMC-SN1987A-OFFSET	5 34 53.8	-60 14 3	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	3853	2	ACQ	2
LMC-SN1987A-OFFSET	5 34 53.8	-60 14 3	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	3853	2	ACQ	2
TRAPEZIUM-053512-052336	5 35 12.2	-5 23 36	PC	IMAGE	ALL	F547M		1	60	2595	1		1
TRAPEZIUM-053512-052336	5 35 12.2	-5 23 36	PC	IMAGE	ALL	F547M		1	800	2595	1		1
TRAPEZIUM-053512-052336	5 35 12.2	-5 23 36	PC	IMAGE	ALL	F875M		1	500	2595	1		1
TRAPEZIUM-053512-052336	5 35 12.2	-5 23 36	PC	IMAGE	ALL	F875M		1	25	2595	1		1
SK-67D211	5 35 13.9	-67 33 27	FOS/BL	ACQ/PEAK	0.5	G400H		1	0	4110	1	ACQ	1
SK-67D211	5 35 13.9	-67 33 27	FOS/BL	ACQ/PEAK	1.0	G400H		1	0	4110	1	ACQ	1
SK-67D211	5 35 13.9	-67 33 27	FOS/BL	ACCUM	0.25X2.0	G190H		1	801	4110	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
SK-67D211	5 35 13.9	-67 33 27	FOS/BL	ACCUM	0.25X2.0	G130H		1	1881	4110	1		1
SK-67D211	5 35 13.9	-67 33 27	FOS/BL	ACQ/PEAK	0.25X2.0	G400H		1	0	4110	1	ACQ	1
SK-67D211	5 35 13.9	-67 33 27	FOS/BL	ACQ/PEAK	4.3	G400H		1	0	4110	1	ACQ	1
TRAPEZIUM-053514-052 230	5 35 14.4	-5 22 31	PC	IMAGE	ALL	F547M		1	60	2595	1		1
TRAPEZIUM-053514-052 230	5 35 14.4	-5 22 31	PC	IMAGE	ALL	F547M		1	800	2595	1		1
TRAPEZIUM-053514-052 230	5 35 14.4	-5 22 31	PC	IMAGE	ALL	F875M		1	500	2595	1		1
TRAPEZIUM-053514-052 230	5 35 14.4	-5 22 31	PC	IMAGE	ALL	F875M		1	25	2595	1		1
TRAPEZIUM-053514-052 126	5 35 14.4	-5 21 27	PC	IMAGE	ALL	F547M		1	60	2595	1		1
TRAPEZIUM-053514-052 126	5 35 14.4	-5 21 27	PC	IMAGE	ALL	F547M		1	800	2595	1		1
TRAPEZIUM-053514-052 126	5 35 14.4	-5 21 27	PC	IMAGE	ALL	F875M		1	500	2595	1		1
TRAPEZIUM-053514-052 126	5 35 14.4	-5 21 27	PC	IMAGE	ALL	F875M		1	25	2595	1		1
TRAPEZIUM-053514-052 021	5 35 14.4	-5 20 22	PC	IMAGE	ALL	F547M		1	60	2595	1		1
TRAPEZIUM-053514-052 021	5 35 14.4	-5 20 22	PC	IMAGE	ALL	F547M		1	800	2595	1		1
TRAPEZIUM-053514-052 021	5 35 14.4	-5 20 22	PC	IMAGE	ALL	F875M		1	500	2595	1		1
TRAPEZIUM-053514-052 021	5 35 14.4	-5 20 22	PC	IMAGE	ALL	F875M		1	25	2595	1		1
TRAPEZIUM-053516-052 322	5 35 16.5	-5 23 23	PC	IMAGE	ALL	F547M		1	1	2595	1		1
TRAPEZIUM-053517-052 414	5 35 17.4	-5 24 15	PC	IMAGE	ALL	F547M		1	60	2595	1		1
TRAPEZIUM-053517-052 414	5 35 17.4	-5 24 15	PC	IMAGE	ALL	F547M		1	800	2595	1		1
TRAPEZIUM-053517-052 414	5 35 17.4	-5 24 15	PC	IMAGE	ALL	F875M		1	500	2595	1		1
TRAPEZIUM-053517-052 414	5 35 17.4	-5 24 15	PC	IMAGE	ALL	F875M		1	25	2595	1		1
TRAPEZIUM-053518-052 511	5 35 17.8	-5 25 12	PC	IMAGE	ALL	F547M		1	60	2595	1		1
TRAPEZIUM-053518-052 511	5 35 17.8	-5 25 12	PC	IMAGE	ALL	F547M		1	800	2595	1		1
TRAPEZIUM-053518-052 511	5 35 17.8	-5 25 12	PC	IMAGE	ALL	F875M		1	500	2595	1		1
TRAPEZIUM-053518-052 511	5 35 17.8	-5 25 12	PC	IMAGE	ALL	F875M		1	25	2595	1		1
TRAPEZIUM-053518-052 125	5 35 18.1	-5 21 26	PC	IMAGE	ALL	F547M		1	60	2595	1		1
TRAPEZIUM-053518-052 125	5 35 18.1	-5 21 26	PC	IMAGE	ALL	F547M		1	800	2595	1		1
TRAPEZIUM-053518-052 125	5 35 18.1	-5 21 26	PC	IMAGE	ALL	F875M		1	500	2595	1		1
TRAPEZIUM-053518-052 125	5 35 18.1	-5 21 26	PC	IMAGE	ALL	F413M		1	150	2595	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
TRAPEZIUM-053518-052 125	5 35 18.1	-5 21 26	PC	IMAGE	ALL	F413M		1	1450	2595	1		1
TRAPEZIUM-053518-052 125	5 35 18.1	-5 21 26	PC	IMAGE	ALL	F875M		1	25	2595	1		1
TRAPEZIUM-053519-052 229	5 35 18.8	-5 22 30	PC	IMAGE	ALL	F547M		1	60	2595	1		1
TRAPEZIUM-053519-052 229	5 35 18.8	-5 22 30	PC	IMAGE	ALL	F547M		1	800	2595	1		1
TRAPEZIUM-053519-052 229	5 35 18.8	-5 22 30	PC	IMAGE	ALL	F875M		1	500	2595	1		1
TRAPEZIUM-053519-052 229	5 35 18.8	-5 22 30	PC	IMAGE	ALL	F875M		1	25	2595	1		1
TRAPEZIUM-053520-052 338	5 35 20.5	-5 23 38	PC	IMAGE	ALL	F547M		1	60	2595	1		1
TRAPEZIUM-053520-052 338	5 35 20.5	-5 23 38	PC	IMAGE	ALL	F547M		1	800	2595	1		1
TRAPEZIUM-053520-052 338	5 35 20.5	-5 23 38	PC	IMAGE	ALL	F875M		1	500	2595	1		1
TRAPEZIUM-053520-052 338	5 35 20.5	-5 23 38	PC	IMAGE	ALL	F875M		1	25	2595	1		1
TRAPEZIUM-053523-052 231	5 35 23.2	-5 22 32	PC	IMAGE	ALL	F547M		1	60	2595	1		1
TRAPEZIUM-053523-052 231	5 35 23.2	-5 22 32	PC	IMAGE	ALL	F547M		1	800	2595	1		1
TRAPEZIUM-053523-052 231	5 35 23.2	-5 22 32	PC	IMAGE	ALL	F875M		1	500	2595	1		1
TRAPEZIUM-053523-052 231	5 35 23.2	-5 22 32	PC	IMAGE	ALL	F875M		1	25	2595	1		1
TRAPEZIUM-053524-052 128	5 35 23.8	-5 21 28	PC	IMAGE	ALL	F547M		1	60	2595	1		1
TRAPEZIUM-053524-052 128	5 35 23.8	-5 21 28	PC	IMAGE	ALL	F547M		1	800	2595	1		1
TRAPEZIUM-053524-052 128	5 35 23.8	-5 21 28	PC	IMAGE	ALL	F875M		1	500	2595	1		1
TRAPEZIUM-053524-052 128	5 35 23.8	-5 21 28	PC	IMAGE	ALL	F413M		1	150	2595	1		1
TRAPEZIUM-053524-052 128	5 35 23.8	-5 21 28	PC	IMAGE	ALL	F413M		1	1450	2595	1		1
TRAPEZIUM-053524-052 128	5 35 23.8	-5 21 28	PC	IMAGE	ALL	F875M		1	25	2595	1		1
LMC-SN1987A-STAR2	5 35 27.7	-69 16 9*	FOS/BL	ACCUM	1.0	G130H	1379	1	800	2563	1		1
LMC-SN1987A-STAR2	5 35 27.7	-69 16 9*	FOS/RD	ACCUM	1.0	G190H	1980	1	600	2563	1		1
LMC-SN1987A-STAR2	5 35 27.7	-69 16 9*	FOS/RD	ACCUM	1.0	G270H	2753	1	300	2563	1		1
LMC-SN1987A-STAR2	5 35 27.7	-69 16 9*	FOS/RD	ACCUM	1.0	G400H	4013	1	300	2563	1		1
LMC-SN1987A-STAR2	5 35 27.7	-69 16 9*	FOS/RD	ACCUM	1.0	G570H	5691	1	300	2563	1		1
LMC-SN1987A-STAR2	5 35 27.7	-69 16 9*	FOS/RD	ACCUM	1.0	G780H	7756	1	300	2563	1		1
LMC-SN1987A-FOS	5 35 28.0	-69 16 11*	FOS/BL	ACCUM	0.25X2.0	G130H	1379	1	3000	2563	1		3
LMC-SN1987A-FOS	5 35 28.0	-69 16 11*	FOS/RD	ACCUM	0.25X2.0	G190H	1980	1	3000	2563	1		3
LMC-SN1987A-FOS	5 35 28.0	-69 16 11*	FOS/RD	ACCUM	0.25X2.0	G270H	2753	1	3000	2563	1		3
LMC-SN1987A-FOS	5 35 28.0	-69 16 11*	FOS/RD	ACCUM	0.25X2.0	G400H	4013	1	1500	2563	1		3
LMC-SN1987A-FOS	5 35 28.0	-69 16 11*	FOS/RD	ACCUM	0.25X2.0	G570H	5691	1	1500	2563	1		3
LMC-SN1987A-FOS	5 35 28.0	-69 16 11*	FOS/RD	ACCUM	0.25X2.0	G780H	7756	1	1500	2563	1		3

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
LMC-SN1987A-FOS	5 35 28.0	-60 16 11*	FOS/BL	ACCUM	0.25X2.0	G130H	1379	1	3000	3853	2		2
LMC-SN1987A-FOS	5 35 28.0	-60 16 11*	FOS/RD	ACCUM	0.25X2.0	G400H	4013	1	2000	3853	2		2
LMC-SN1987A-FOS	5 35 28.0	-60 16 11*	FOS/RD	ACCUM	0.25X2.0	G570H	5691	1	2000	3853	2		2
LMC-SN1987A-FOS	5 35 28.0	-60 16 11*	FOS/RD	ACCUM	0.25X2.0	G780H	7756	1	2000	3853	2		2
LMC-SN1987A-FOS	5 35 28.0	-60 16 11*	FOS/RD	ACCUM	0.25X2.0	G190H	1980	1	3500	3853	2		2
LMC-SN1987A-FOS	5 35 28.0	-60 16 11*	FOS/RD	ACCUM	0.25X2.0	G270H	2753	1	3500	3853	2		2
LMC-SN1987A	5 35 28.0	-69 16 12	PC	IMAGE	ANY	F336W		1	300	2563	1		3
LMC-SN1987A	5 35 28.0	-69 16 12	PC	IMAGE	ANY	F439W		1	300	2563	1		3
LMC-SN1987A	5 35 28.0	-69 16 12	PC	IMAGE	ANY	F487N		1	600	2563	1		3
LMC-SN1987A	5 35 28.0	-69 16 12	PC	IMAGE	ANY	F502N		1	600	2563	1		3
LMC-SN1987A	5 35 28.0	-69 16 12	PC	IMAGE	ANY	F547M		1	600	2563	1		3
LMC-SN1987A	5 35 28.0	-69 16 12	PC	IMAGE	ANY	F658N		1	600	2563	1		3
LMC-SN1987A	5 35 28.0	-69 16 12	PC	IMAGE	ANY	F702W		1	200	2563	1		3
LMC-SN1987A	5 35 28.0	-69 16 12	PC	IMAGE	ANY	F814W		1	300	2563	1		3
LMC-SN1987A	5 35 28.0	-69 16 12	PC	IMAGE	ANY	F648M		1	360	2563	1		3
LMC-SN1987A	5 35 28.0	-69 16 12	FOC/96	IMAGE	512X512	F175W		1	2000	2563	1		2
LMC-SN1987A	5 35 28.0	-69 16 12	FOC/96	IMAGE	512X512	F275W		1	2000	2563	1		2
LMC-SN1987A	5 35 28.0	-69 16 12	FOC/96	IMAGE	512X512	F307M		1	2000	2563	1		2
LMC-SN1987A	5 35 28.0	-69 16 12	FOC/96	IMAGE	512X512	F346M		1	1000	2563	1		2
LMC-SN1987A	5 35 28.0	-69 16 12	FOC/96	IMAGE	512X512	F486N		1	2000	2563	1		2
LMC-SN1987A	5 35 28.0	-69 16 12	FOC/96	IMAGE	512X512	F501N		2	3000	3853	2		2
LMC-SN1987A	5 35 28.0	-69 16 12	FOC/96	IMAGE	512X512	F175W		1	2500	3853	2		2
LMC-SN1987A	5 35 28.0	-69 16 12	FOC/96	IMAGE	512X512	F275W		1	2500	3853	2		2
LMC-SN1987A	5 35 28.0	-69 16 12	FOC/96	IMAGE	512X512	F501N		2	2500	2563	1		2
LMC-SN1987A-STAR3	5 35 28.3	-69 16 11*	FOS/BL	ACCUM	1.0	G130H	1379	1	800	2563	1		1
LMC-SN1987A-STAR3	5 35 28.3	-69 16 11*	FOS/RD	ACCUM	1.0	G190H	1980	1	800	2563	1		1
LMC-SN1987A-STAR3	5 35 28.3	-69 16 11*	FOS/RD	ACCUM	1.0	G270H	2753	1	400	2563	1		1
LMC-SN1987A-STAR3	5 35 28.3	-69 16 11*	FOS/RD	ACCUM	1.0	G400H	4013	1	400	2563	1		1
LMC-SN1987A-STAR3	5 35 28.3	-69 16 11*	FOS/RD	ACCUM	1.0	G570H	5691	1	400	2563	1		1
LMC-SN1987A-STAR3	5 35 28.3	-69 16 11*	FOS/RD	ACCUM	1.0	G780H	7756	1	400	2563	1		1
LMC-N63A	5 35 42.6	-66 2 0	FOS/RD	ACCUM	1.0	G190H	1900	1	2000	2290	1		1
LMC-N63A	5 35 42.6	-66 2 0	FOS/BL	ACCUM	1.0	G130H	1300	2	1750	2290	1		1
LMC-N63A	5 35 42.6	-66 2 0	FOS/RD	ACCUM	1.0	PRISM	5007	1	2000	2290	1		1
BE381	5 35 54.5	-68 59 7	FOS/BL	ACCUM	0.25X2.0	G130H		1	11908	3605	2		1
BE381	5 35 54.5	-68 59 7	FOS/BL	ACCUM	0.25X2.0	G190H		1	2807	3605	2		1
BE381	5 35 54.5	-68 59 7	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3605	2	ACQ	1
BE381	5 35 54.5	-68 59 7	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3605	2	ACQ	1
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	G160M	1175	1	44	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	IMAGE	2.0	MIRROR-A2		1	96	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	G160M	1290	1	10	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	G160M	1398	1	17	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	G160M	1554	1	26	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	G160M	1608	1	24	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	WSCAN	0.25	ECH-B	1744	1	32	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	WSCAN	0.25	ECH-B	1827	1	32	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	WSCAN	0.25	ECH-B	1807	1	38	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	WSCAN	0.25	ECH-B	1858	1	30	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	ECH-B	2325	1	7	3472	2		2
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	G160M	1663	1	24	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	3472	2	ACQ	1
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	ECH-B	2324	1	7	3472	2		2
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	ECH-B	2326	1	7	3472	2		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD037128	5 36 12.8	-1 12 7	HRS	WSCAN	0.25	ECH-B	2059	1	16	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	WSCAN	0.25	ECH-B	2519	1	12	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	WSCAN	0.25	ECH-B	2371	1	9	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	G160M	1133	1	55	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	G160M	1249	1	13	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	G160M	1345	1	11	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	WSCAN	0.25	ECH-B	2484	1	11	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	WSCAN	0.25	ECH-B	2249	1	6	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	WSCAN	0.25	ECH-B	2799	1	7	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	WSCAN	0.25	ECH-B	2026	1	15	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	ECH-B	2324	1	7	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	ECH-B	2325	1	7	3472	2		1
HD037128	5 36 12.8	-1 12 7	HRS	ACCUM	0.25	ECH-B	2326	1	7	3472	2		1
HH2	5 36 25.6	-6 47 15	PC	IMAGE	P6	F656N		4	1200	2243	1		1
HH2	5 36 25.6	-6 47 15	PC	IMAGE	P6	F673N		4	1200	2243	1		1
HH2	5 36 25.6	-6 47 15	PC	IMAGE	P6	F502N		11	1900	2243	1		1
SK-66D172	5 37 5.6	-66 21 36	FOS/BL	ACCUM	0.25X2.0	G130H		1	5871	2233	1		1
SK-66D172	5 37 5.6	-66 21 36	FOS/BL	ACCUM	0.25X2.0	G190H		1	2777	2233	1		1
SK-66D172	5 37 5.6	-66 21 36	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	2233	1	ACQ	1
SK-66D172	5 37 5.6	-66 21 36	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	2233	1	ACQ	1
SK-68D137	5 38 24.8	-68 52 33	FOS/BL	ACCUM	0.25X2.0	G130H		1	5683	2233	1		1
SK-68D137	5 38 24.8	-68 52 33	FOS/BL	ACCUM	0.25X2.0	G190H		1	2422	2233	1		1
SK-68D137	5 38 24.8	-68 52 33	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	2233	1	ACQ	1
SK-68D137	5 38 24.8	-68 52 33	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	2233	1	ACQ	1
POINT0537-441INCA221 -35	5 38 28.5	-44 16 15	S/C	POINTING	V1			1	1	2565	2	CON	1
POINT0537-441INCA221 -35	5 38 28.5	-44 16 15	S/C	POINTING	V1			1	1	4148	3	CON	1
POINT0537-441INCA221 -36	5 38 28.5	-44 16 15	S/C	POINTING	V1			1	1	2565	2	CON	1
POINT0537-441INCA221 -36	5 38 28.5	-44 16 15	S/C	POINTING	V1			1	1	4148	3	CON	1
30DORI4	5 38 48.3	-69 5 14*	FOS/RD	ACCUM	1.0	G190H		1	3600	3840	2		1
0537-441INCA221-35	5 38 49.7	-44 5 9	FGS	POS	3	PUPIL		1	51	2565	2	CON	3
0537-441INCA221-35	5 38 49.7	-44 5 9	FGS	POS	3	PUPIL		1	51	4148	3	CON	3
0537-441INCA221-36	5 38 49.7	-44 5 9	FGS	POS	3	PUPIL		1	51	2565	2	CON	3
0537-441INCA221-36	5 38 49.7	-44 5 9	FGS	POS	3	PUPIL		1	51	4148	3	CON	3
30DORI4-OFFSET	5 38 50.5	-69 5 38	FOS/RD	ACQ/BINA	4.3	MIRROR		1	0	3840	2	ACQ	1
-69D249C	5 38 58.4	-69 29 21	WFC	IMAGE	WFALL	F555W		3	10	3605	2	ACQ	1
-69D249C	5 38 58.4	-69 29 21	FOS/BL	ACCUM	0.25X2.0	G190H		1	717	3605	2		1
-69D249C	5 38 58.4	-69 29 21	FOS/BL	ACCUM	0.25X2.0	G130H		1	2585	3605	2		1
-69D249C	5 38 58.4	-69 29 21	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3605	2	ACQ	1
-69D249C	5 38 58.4	-69 29 21	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3605	2	ACQ	1
INCA221-35	5 39 4.5	-44 6 38	FGS	POS	3	PUPIL		1	51	2565	2	CON	2
INCA221-35	5 39 4.5	-44 6 38	FGS	POS	3	PUPIL		1	51	4148	3	CON	2
INCA221-36	5 39 4.5	-44 6 38	FGS	POS	3	PUPIL		1	51	2565	2	CON	2
INCA221-36	5 39 4.5	-44 6 38	FGS	POS	3	PUPIL		1	51	4148	3	CON	2
HD38448	5 39 56.2	-69 24 24	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	5	3664	2	ACQ	1
HD38448	5 39 56.2	-69 24 24	HRS	ACCUM	0.25	G160M	1561	2	1968	3664	2		1
HD38448	5 39 56.2	-69 24 24	HRS	ACCUM	0.25	G160M	1249	4	1968	3664	2		1
LMC-SMP85	5 40 30.9	-66 17 38	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	7	3441	2	ACQ	1
LMC-SMP85	5 40 30.9	-66 17 38*	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	7	4040	1	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
LMC-SMP85	5 40 30.9	-66 17 38	FOS/BL	ACCUM	1.0	G130H	1300	1	500	3441	2		1
LMC-SMP85	5 40 30.9	-66 17 38*	FOS/BL	ACCUM	1.0	G130H	1300	1	600	2266	1		1
LMC-SMP85	5 40 30.9	-66 17 38*	FOS/BL	ACCUM	1.0	G130H	1300	1	600	4040	1		1
LMC-SMP85	5 40 30.9	-66 17 38	FOS/BL	ACCUM	1.0	G190H	1900	1	250	3441	2		1
LMC-SMP85	5 40 30.9	-66 17 38	FOS/BL	ACCUM	1.0	G270H	2700	1	120	3441	2		1
LMC-SMP85	5 40 30.9	-66 17 38*	FOS/RD	ACCUM	1.0	G190H	1900	1	180	2266	1		1
LMC-SMP85	5 40 30.9	-66 17 38*	FOS/BL	ACCUM	1.0	G190H	1900	1	270	4040	1		1
LMC-SMP85	5 40 30.9	-66 17 38*	FOS/BL	ACCUM	1.0	G270H	2700	1	180	4040	1		1
LMC-SMP85	5 40 30.9	-66 17 38*	FOS/RD	ACCUM	1.0	PRISM	5007	1	180	2266	1		1
LMC-SMP85	5 40 30.9	-66 17 38*	FOS/BL	ACCUM	1.0	PRISM	5007	1	270	4040	1		1
LMC-SMP85-PCPOS	5 40 30.9	-66 17 38	PC	IMAGE	P8	F502N		1	1200	2266	1	ACQ	1
LMC-SMP85-OFFSET	5 40 34.5	-66 17 23	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	2266	1	ACQ	1
LMC-SMP85-OFFSET	5 40 34.5	-66 17 23	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	4040	1	ACQ	1
LMC-SMP85-PCSTAR	5 40 34.5	-66 17 23	PC	IMAGE	P8	F502N		3	800	2266	1		1
HD37742	5 40 45.6	-1 56 33	HRS	ACCUM	0.25	G160M	1240	1	40	2584	1		1
HD37742	5 40 45.6	-1 56 33	HRS	ACCUM	0.25	G160M	1335	1	40	2584	1		1
HD37742	5 40 45.6	-1 56 33	HRS	ACCUM	0.25	G160M	1402	1	40	2584	1		1
HD37742	5 40 45.6	-1 56 33	HRS	ACCUM	0.25	G160M	1206	1	40	2584	1		1
HD37742	5 40 45.6	-1 56 33	HRS	ACCUM	0.25	G160M	1226	1	40	2584	1		1
HD37742	5 40 45.6	-1 56 33	HRS	ACCUM	0.25	G160M	1259	1	40	2584	1		1
HD37742	5 40 45.6	-1 56 33	HRS	ACCUM	0.25	G160M	1387	1	40	2584	1		1
HD37742	5 40 45.6	-1 56 33	HRS	ACCUM	0.25	G160M	1549	1	40	2584	1		1
HD37742	5 40 45.6	-1 56 33	HRS	ACCUM	0.25	G160M	1858	1	40	2584	1		1
HD37742	5 40 45.6	-1 56 33	HRS	ACQ/PEAK	2.0	MIRROR-A1		1	46	2584	1	ACQ	1
HD37742	5 40 45.6	-1 56 33	HRS	IMAGE	2.0	MIRROR-A1		1	96	2584	1		1
LMC-SMP87	5 41 8.1	-72 42 8	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	14	3441	2	ACQ	1
LMC-SMP87	5 41 8.1	-72 42 8	FOS/BL	ACCUM	1.0	G190H	1900	1	800	3441	2		1
LMC-SMP87	5 41 8.1	-72 42 8	FOS/BL	ACCUM	1.0	G270H	2700	1	400	3441	2		1
LMC-SMP87	5 41 8.1	-72 42 8	FOS/BL	ACCUM	1.0	G130H	1300	1	1800	3441	2		1
LMC-SMP87-PCPOS	5 41 8.1	-72 42 8	PC	IMAGE	P8	F502N		1	600	2266	1		1
HD269992	5 41 27.8	-69 48 4	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	5	3664	2	ACQ	1
HD269992	5 41 27.8	-69 48 4	HRS	ACCUM	0.25	G160M	1561	2	1968	3664	2		1
HD269992	5 41 27.8	-69 48 4	HRS	ACCUM	0.25	G160M	1249	3	1968	3664	2		1
SK-69276	5 41 33.9	-69 33 41	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	5	3664	2	ACQ	1
SK-69276	5 41 33.9	-69 33 41	HRS	ACCUM	0.25	G160M	1249	1	2256	3664	2		1
SK-69276	5 41 33.9	-69 33 41	HRS	ACCUM	0.25	G160M	1561	1	2256	3664	2		1
SK-70111	5 41 36.9	-70 0 52	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	5	3664	2	ACQ	1
SK-70111	5 41 36.9	-70 0 52	HRS	ACCUM	0.25	G160M	1249	2	1968	3664	2		1
SK-70111	5 41 36.9	-70 0 52	HRS	ACCUM	0.25	G160M	1561	2	1968	3664	2		1
SK-69290	5 42 55.5	-68 59 52	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	5	3664	2	ACQ	1
SK-69290	5 42 55.5	-68 59 52	HRS	ACCUM	0.25	G160M	1249	3	2256	3664	2		1
SK-69290	5 42 55.5	-68 59 52	HRS	ACCUM	0.25	G160M	1561	3	1737	3664	2		1
BE153	5 45 52.0	-67 14 26	FOS/BL	ACCUM	0.25X2.0	G130H		1	1440	3605	2		1
BE153	5 45 52.0	-67 14 26	FOS/BL	ACCUM	0.25X2.0	G190H		1	422	3605	2		1
BE153	5 45 52.0	-67 14 26	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3605	2	ACQ	1
BE153	5 45 52.0	-67 14 26	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3605	2	ACQ	1
OFFSET-CAL87	5 46 46.1	-71 8 54*	FOS/BL	ACQ/PEAK	0.5	MIRROR		1	100	3489	2	ACQ	1
OFFSET-CAL87	5 46 46.1	-71 8 54*	FOS/BL	ACCUM	1.0	G160L	1836	10	1680	3489	2		1
CAL87STAR	5 46 49.6	-71 10 17	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1000	3489	2	ACQ	1
PK184-02D1	5 46 51.9	24 22 4	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK184-02D1	5 46 51.9	24 22 4	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
ESO-0545-3416	5 47 1.8	-34 15 2	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G270M	3000	1	180	3482	2		2
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	G160M	1860	1	315	3482	2		12
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	G270M	2800	1	142	3482	2		8
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	G270M	2607	1	100	3482	2		8
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G160M	1860	1	404	3482	2		3
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G270M	3090	1	180	3482	2		2
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	ECH-B	2340	1	483	3482	2		2
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	ECH-B	2627	1	327	3482	2		2
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	ECH-B	2714	1	228	3482	2		2
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	ECH-B	2726	1	328	3482	2		2
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	ECH-B	2739	1	666	3482	2		2
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	ECH-B	2800	1	508	3482	2		2
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	ECH-B	2852	1	328	3482	2		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	G270M	2360	1	204	3482	2		8
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G160M	1660	1	1184	3482	2		4
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G160M	1660	2	1184	3482	2		2
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G200M	2025	1	342	3482	2		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	ECH-B	2613	1	1055	3482	2		2
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G160M	1553	1	1200	3482	2		4
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G160M	1713	1	1200	3482	2		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G160M	1713	1	1370	3482	2		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G160M	1812	1	636	3482	2		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G200M	2062	1	360	3482	2		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G270M	2360	1	683	3482	2		4
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G270M	2607	1	323	3482	2		4
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G270M	2735	1	138	3482	2		2
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G160M	1553	2	1200	3482	2		2
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	ECH-B	1854	1	572	3482	2		3
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	ECH-B	1862	1	473	3482	2		3
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	ECH-B	2378	1	926	3482	2		2
HD39060	5 47 17.0	-51 3 59	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	3482	2	ACQ	1
SK-70115	5 48 49.7	-70 3 57	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	5	3664	2	ACQ	1
SK-70115	5 48 49.7	-70 3 57	HRS	ACCUM	0.25	G160M	1249	1	2256	3664	2		1
SK-70115	5 48 49.7	-70 3 57	HRS	ACCUM	0.25	G160M	1561	1	1968	3664	2		1
NGC2110	5 52 11.4	-7 27 22	PC	IMAGE	PC6	F547M		1	900	3724	2		1
NGC2110	5 52 11.4	-7 27 22	PC	IMAGE	PC6	F718M		1	900	3724	2		1
NGC2110	5 52 11.4	-7 27 22	PC	IMAGE	PC6	F492M		1	1800	3724	2		1
NGC2110	5 52 11.4	-7 27 22	PC	IMAGE	PC6	F664N		1	1800	3724	2		1
UGC3374	5 54 53.6	46 26 22	PC	IMAGE	PC6	F492M		1	60	3724	2		1
UGC3374	5 54 53.6	46 26 22	PC	IMAGE	PC6	F492M		1	500	3724	2		1
UGC3374	5 54 53.6	46 26 22	PC	IMAGE	PC6	F547M		1	60	3724	2		1
UGC3374	5 54 53.6	46 26 22	PC	IMAGE	PC6	F547M		1	300	3724	2		1
UGC3374	5 54 53.6	46 26 22	PC	IMAGE	PC6	F664N		1	500	3724	2		1
UGC3374	5 54 53.6	46 26 22	PC	IMAGE	PC6	F718M		1	60	3724	2		1
UGC3374	5 54 53.6	46 26 22	PC	IMAGE	PC6	F718M		1	500	3724	2		1
UGC3374	5 54 53.6	46 26 22	PC	IMAGE	PC6	F664N		1	120	3724	2		1
IIZW40	5 55 42.6	3 23 31	FOC/48	IMAGE	512X512	F130LP F140W		1	1000	3810	2		1
POINTNEWEGOB-19NEWHI P-19	5 58 27.6	-50 29 24	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-19NEWHI P-19	5 58 27.6	-50 29 24	S/C	POINTING	V1			1	1	4145	3	CON	1
POINTNEWEGOB-20NEWHI P-20	5 58 30.9	-50 22 30	S/C	POINTING	V1			1	1	2861	2	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
POINTNEWEGOB-20NEWHIP-20	5 58 30.9	-50 22 30	S/C	POINTING	V1			1	1	4145	3	CON	1
NEWHIP-19	5 58 58.8	-50 40 38	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-19	5 58 58.8	-50 40 38	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
NEWHIP-20	5 59 38.4	-50 18 33	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-20	5 59 38.4	-50 18 33	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
NEWEGOB-19NEWHIP-19	5 59 47.4	-50 26 51	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-19NEWHIP-19	5 59 47.4	-50 26 51	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
NEWEGOB-20NEWHIP-20	5 59 47.4	-50 26 51	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-20NEWHIP-20	5 59 47.4	-50 26 51	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
HD41312	6 3 15.5	-26 17 4	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	46	2238	1	ACQ	1
HD41312	6 3 15.5	-26 17 4	HRS	ACCUM	2.0	ECH-B	2802	4	326	2238	1		1
HD41312	6 3 15.5	-26 17 4	HRS	ACCUM	2.0	G160M	1550	8	326	2238	1		1
HD41312	6 3 15.5	-26 17 4	HRS	ACCUM	0.25	G160M	1223	19	326	2238	1		1
HD41312	6 3 15.5	-26 17 4	HRS	ACCUM	2.0	G200M	1901	8	326	2238	1		1
AFGL865	6 3 60.0	7 26 18	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
AFGL865	6 3 60.0	7 26 18	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
LMC-SMP96-PCPOS	6 6 4.6	-71 4 20	PC	IMAGE	P8	F502N		1	1300	2266	1		1
LMC-SMP96	6 6 5.8	-71 4 16	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	22	3441	2	ACQ	1
LMC-SMP96	6 6 5.8	-71 4 16	FOS/BL	ACCUM	1.0	G270H	2700	1	500	3441	2		1
LMC-SMP96	6 6 5.8	-71 4 16	FOS/BL	ACCUM	1.0	G130H	1300	1	2200	3441	2		1
LMC-SMP96	6 6 5.8	-71 4 16	FOS/BL	ACCUM	1.0	G190H	1900	1	1100	3441	2		1
NGC2158K-CALIB	6 7 31.6	24 4 9	PC	IMAGE	P6	F502N		2	70	2243	1	CAL	1
NGC2158K-CALIB	6 7 31.6	24 4 9	PC	IMAGE	P6	F673N		2	60	2243	1	CAL	1
NGC2158K-CALIB	6 7 31.6	24 4 9	PC	IMAGE	P6	F656N		2	260	2243	1	CAL	1
NGC2176	6 7 46.3	-6 23 9	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
NGC2176	6 7 46.3	-6 23 9	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
ESO-0608-3405	6 10 9.9	-34 6 19	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1230	1	70	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1390	1	80	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1550	1	60	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1406	1	80	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1194	1	80	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1203	1	80	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1213	1	80	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1239	1	70	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1248	1	70	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1256	1	80	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1264	1	80	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1398	1	80	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1539	1	60	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACCUM	0.25	G160M	1561	1	60	2403	1		1
HD42933	6 10 18.0	-54 58 7	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	2403	1	ACQ	2
MRK3-OFFSET	6 15 32.7	71 3 31	FOS/BL	ACQ/BINA	4.3	MIRROR		1	2	3573	2	ACQ	1
MRK3	6 15 36.3	71 2 15*	FOS/BL	ACCUM	4.3	G270H		1	1200	3573	2		1
HD44179	6 19 58.1	-10 38 14	HRS	ACCUM	2.0	G200M	1930	5	600	3468	2		1
HD44179	6 19 58.1	-10 38 14	HRS	ACCUM	2.0	G160M	1600	10	600	3468	2		1
HD44179	6 19 58.1	-10 38 14	HRS	ACCUM	2.0	G160M	1655	10	600	3468	2		1
HD44179	6 19 58.1	-10 38 14	HRS	ACCUM	2.0	G160M	1714	10	600	3468	2		1
HD44179	6 19 58.1	-10 38 14	FOS/BL	ACCUM	1.0	G130H	1379	1	15000	3468	2		1
HD44179	6 19 58.1	-10 38 14	FOS/BL	ACCUM	1.0	G190H	1954	1	1440	3468	2		4
HD44179	6 19 58.1	-10 38 14	FOS/BL	ACCUM	1.0	G270H	2766	1	1440	3468	2		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD44179	6 19 58.1	-10 38 14	FOS/BL	ACQ/PEAK	1.0	G190H	1954	1	0	3468	2	ACQ	1
HD44179	6 19 58.1	-10 38 14	FOS/BL	ACQ/PEAK	1.0	G190H	1954	1	1	3468	2	ACQ	1
HD44179	6 19 58.1	-10 38 14	FOS/BL	ACQ/PEAK	4.3	G190H	1954	1	0	3468	2	ACQ	1
HD44179	6 19 58.3	-10 38 14	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD44179	6 19 58.3	-10 38 14	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
ESO-0618-2001	6 21 5.2	-20 2 52	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-0619-2712	6 21 39.8	-27 14 3	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	MIRROR-A2		1	0	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	G160M	1810	1	88	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	ECH-B	1810	1	445	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	ECH-B	2800	1	100	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	G160M	1409	1	57	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	G160M	1247	1	44	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	G160M	1318	1	33	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	G160M	1542	1	84	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	G160M	1608	1	84	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	G160M	1663	1	84	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	G160M	1203	6	94	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	G160M	1203	16	94	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	ECH-B	1859	1	587	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	ECH-B	2377	1	138	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	G160M	1859	1	106	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	ECH-B	2345	1	83	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	ECH-B	2581	1	98	2536	1		1
HD44743	6 22 41.9	-17 57 22	HRS	ACCUM	0.25	ECH-B	2854	1	165	2536	1		1
HD044743	6 22 42.0	-17 57 21	HRS	ACCUM	0.25	G160M	1175	1	52	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	IMAGE	2.0	MIRROR-A2		1	96	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	ACCUM	0.25	G160M	1290	1	11	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	ACCUM	0.25	G160M	1398	1	20	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	ACCUM	0.25	G160M	1554	1	30	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	ACCUM	0.25	G160M	1608	1	28	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	WSCAN	0.25	ECH-B	1744	1	32	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	WSCAN	0.25	ECH-B	1827	1	32	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	WSCAN	0.25	ECH-B	1807	1	38	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	WSCAN	0.25	ECH-B	1858	1	30	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	ACCUM	0.25	G160M	1663	1	28	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	3472	2	ACQ	1
HD044743	6 22 42.0	-17 57 21	HRS	ACCUM	0.25	ECH-B	2324	1	7	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	WSCAN	0.25	ECH-B	2059	1	16	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	WSCAN	0.25	ECH-B	2519	1	12	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	WSCAN	0.25	ECH-B	2371	1	9	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	ACCUM	0.25	G160M	1249	1	15	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	ACCUM	0.25	G160M	1345	1	13	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	WSCAN	0.25	ECH-B	2484	1	11	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	WSCAN	0.25	ECH-B	2249	1	6	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	WSCAN	0.25	ECH-B	2799	1	7	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	WSCAN	0.25	ECH-B	2026	1	15	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	ACCUM	0.25	ECH-B	2325	1	7	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	ACCUM	0.25	ECH-B	2326	1	7	3472	2		1
HD044743	6 22 42.0	-17 57 21	HRS	ACCUM	0.25	G160M	1133	1	64	3472	2		1
A0620-00	6 22 44.5	-0 20 45	FOS/BL	RAPID	1.0	G160L	1500	1	3720	2334	1		3
A0620-00	6 22 44.5	-0 20 45	FOS/BL	RAPID	1.0	PRISM	2600	1	300	2334	1		4

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
A0620-00	6 22 44.5	-0 20 45	FOS/BL	ACQ/BINA	4.3	MIRROR		1	396	2334	1	ACQ	1
HS0624+6907	6 30 2.5	69 5 4	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	3791	2	ACQ	1
HS0624+6907	6 30 2.5	69 5 4	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3791	2	ACQ	1
HS0624+6907	6 30 2.5	69 5 4	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	900	3791	2		1
HS0624+6907	6 30 2.5	69 5 4	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	1842	3791	2		1
PK211-03D1	6 35 44.7	-0 5 36	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK211-03D1	6 35 44.7	-0 5 36	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
PKS0637-75	6 35 46.7	-75 16 17	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
PKS0637-75	6 35 46.7	-75 16 17	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	3600	2424	1		1
PKS0637-75	6 35 46.7	-75 16 17	FOS/RD	ACQ/BINA	4.3	MIRROR		1	6	2424	1	ACQ	1
PKS0637-75	6 35 46.7	-75 16 17	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	780	2424	1		1
PKS0637-75	6 35 46.7	-75 16 17	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	2424	1	ACQ	1
0637-752	6 35 46.8	-75 16 17	HRS	ACCUM	2.0	G270M	2803	14	900	3755	2		1
HD47205	6 36 41.0	-19 15 22	HRS	ACCUM	0.25	G270M	2498	5	2000	3614	2		1
HD047839	6 40 58.7	9 53 45	HRS	IMAGE	2.0	MIRROR-A2		1	96	2251	1		2
HD047839	6 40 58.7	9 53 45	HRS	ACCUM	0.25	G160M	1608	1	265	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	WSCAN	0.25	ECH-B	1744	1	286	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	WSCAN	0.25	ECH-B	1807	1	343	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	WSCAN	0.25	ECH-B	1827	1	286	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	WSCAN	0.25	ECH-B	1858	1	273	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	WSCAN	0.25	ECH-B	2059	1	149	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	ACCUM	0.25	G160M	1175	1	483	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	ACCUM	0.25	G160M	1290	1	109	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	ACCUM	0.25	G160M	1398	1	187	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	ACCUM	0.25	G160M	1554	1	284	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	ACCUM	0.25	G160M	1663	1	261	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2251	1	ACQ	2
HD047839	6 40 58.7	9 53 45	HRS	ACCUM	0.25	ECH-B	2324	1	66	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	WSCAN	0.25	ECH-B	2519	1	111	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	ACCUM	0.25	G160M	1133	1	596	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	ACCUM	0.25	G160M	1249	1	144	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	WSCAN	0.25	ECH-B	2484	1	101	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	WSCAN	0.25	ECH-B	2371	1	79	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	ACCUM	0.25	ECH-B	2325	1	66	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	ACCUM	0.25	ECH-B	2326	1	66	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	ACCUM	0.25	G160M	1345	1	128	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	WSCAN	0.25	ECH-B	2026	1	139	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	WSCAN	0.25	ECH-B	2249	1	60	2251	1		1
HD047839	6 40 58.7	9 53 45	HRS	WSCAN	0.25	ECH-B	2799	1	69	2251	1		1
S40636+68	6 42 4.2	67 58 35	PC	IMAGE	ALL	F555W		1	240	4027	1		1
0642-506	6 43 27.1	-50 41 6	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0642-506	6 43 27.1	-50 41 6	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
PKS0642-349	6 44 25.2	-34 59 42	PC	IMAGE	ALL	F555W		1	240	4027	1		1
ESO-0642-2735	6 44 48.9	-27 38 18	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD48915	6 45 8.9	-16 42 58	HRS	WSCAN	0.25	G160M	1795	1	4180	3496	2		1
HD48915	6 45 8.9	-16 42 58	HRS	WSCAN	0.25	G200M	2140	1	342	3496	2		1
HD48915	6 45 8.9	-16 42 58	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	5	3496	2	ACQ	1
HD48915	6 45 8.9	-16 42 58	HRS	WSCAN	0.25	G160M	1391	1	2324	3496	2		1
HD48915	6 45 8.9	-16 42 58	HRS	WSCAN	0.25	G270M	2685	1	1925	3496	2		1
HD48915	6 45 8.9	-16 42 58	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	3496	2	ACQ	1
HD48915	6 45 9.1	-16 42 56	HRS	ACCUM	0.25	G160M	1204	2	897	2461	1		1
HD48915	6 45 9.1	-16 42 56	HRS	ACCUM	0.25	G160M	1614	6	108	2461	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD48915	6 45 9.1	-16 42 56	HRS	ACCUM	0.25	ECH-B	2799	8	108	2461	1		1
HD48915	6 45 9.1	-16 42 56	HRS	ACCUM	0.25	G160M	1663	9	108	2461	1		1
HD48915	6 45 9.1	-16 42 56	HRS	ACCUM	0.25	ECH-B	2854	10	108	2461	1		1
HD48915	6 45 9.1	-16 42 56	HRS	ACCUM	0.25	ECH-B	2345	8	108	2461	1		1
HD48915	6 45 9.1	-16 42 56	HRS	ACCUM	0.25	G160M	1318	8	108	2461	1		1
HD48915	6 45 9.1	-16 42 56	HRS	ACCUM	0.25	ECH-B	2596	9	108	2461	1		1
HD48915	6 45 9.1	-16 42 56	HRS	ACCUM	0.25	ECH-B	2596	12	108	2461	1		1
ESO-0643-1809	6 45 52.8	-18 12 36	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD49798	6 48 4.8	-44 18 59	HRS	ACCUM	0.25	G160M	1252	1	110	2348	1		1
HD49798	6 48 4.8	-44 18 59	HRS	ACCUM	0.25	G160M	1318	1	110	2348	1		1
HD49798	6 48 4.8	-44 18 59	HRS	ACCUM	0.25	G160M	1619	1	220	2348	1		1
HD49798	6 48 4.8	-44 18 59	HRS	ACCUM	0.25	G160M	1667	1	220	2348	1		1
HD49798	6 48 4.8	-44 18 59	HRS	ACCUM	0.25	G160M	1817	1	220	2348	1		1
HD49798	6 48 4.8	-44 18 59	HRS	ACCUM	0.25	G160M	1857	1	220	2348	1		1
HD49798	6 48 4.8	-44 18 59	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	2348	1	ACQ	1
4C41.17	6 50 52.4	41 30 31	WFC	IMAGE	ALL	F702W		6	2400	2438	1		1
4C41.17	6 50 52.4	41 30 31	WFC	IMAGE	ALL	F569W		7	2400	2438	1		1
HD50896	6 54 13.0	-23 55 42	HRS	ACCUM	2.0	G160M	1238	2	954	2492	1		1
HD50896	6 54 13.0	-23 55 42	HRS	ACCUM	2.0	G160M	1397	2	954	2492	1		1
HD50896	6 54 13.0	-23 55 42	HRS	ACCUM	2.0	G160M	1549	2	954	2492	1		1
HD50896	6 54 13.0	-23 55 42	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2492	1	ACQ	1
UGC3522	6 56 8.2	84 55 6	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD51585	6 58 30.4	16 19 26	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD51585	6 58 30.4	16 19 26	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	MIRROR-A2		1	0	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	G160M	1810	1	80	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	2.0	ECH-B	2345	2	24	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	ECH-B	1810	1	417	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	G160M	1203	16	100	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	G160M	1409	1	53	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	G160M	1247	1	42	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	G160M	1542	1	84	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	G160M	1608	1	76	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	G160M	1663	1	72	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	G160M	1859	1	88	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	ECH-B	1859	1	479	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	ECH-B	2377	1	116	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	2.0	ECH-B	2800	2	26	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	ECH-B	2800	2	75	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	2.0	ECH-B	2581	2	26	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	2.0	ECH-B	2854	2	43	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	ECH-B	2345	2	75	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	G160M	1318	1	30	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	ECH-B	2581	2	79	2536	1		1
HD52089	6 58 37.5	-28 58 20	HRS	ACCUM	0.25	ECH-B	2854	2	120	2536	1		1
NEWHIP-21	7 6 34.5	64 25 12	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-21	7 6 34.5	64 25 12	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
NEWEGOB-21NEWHIP-21	7 7 13.2	64 35 59	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-21NEWHIP-21	7 7 13.2	64 35 59	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
POINTNEWEGOB-21NEWHIP-21	7 8 31.0	64 27 55	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-21NEWHIP-21	7 8 31.0	64 27 55	S/C	POINTING	V1			1	1	4145	3	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PK215+03D1	7 9 22.6	-0 48 24	PC	IMAGE	PCALL-FIX	F487N		1	240	3603	2	CON	2
PK215+03D1	7 9 22.6	-0 48 24	PC	IMAGE	PCALL-FIX	F502N		1	240	3603	2	CON	2
UGC3697	7 11 20.3	71 50 8	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
3C175	7 13 2.4	11 46 15	FOS/RD	ACCUM	4.3	G400H	4000	1	486	2578	1		1
3C175	7 13 2.4	11 46 15	FOS/RD	ACCUM	4.3	G270H	2700	1	720	2578	1		1
3C175	7 13 2.4	11 46 15	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
3C175	7 13 2.4	11 46 15	FOS/RD	ACCUM	4.3	G190H	1900	1	1692	2578	1		1
HD56126	7 16 10.2	9 59 48	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD56126	7 16 10.2	9 59 48	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
HD057061	7 18 42.4	-24 57 15	HRS	IMAGE	2.0	MIRROR-A2		1	96	2251	1		2
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	G160M	1608	1	265	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	WSCAN	0.25	ECH-B	1807	1	382	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	WSCAN	0.25	ECH-B	1858	1	304	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	G160M	1175	1	483	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	ECH-B	2325	1	74	2251	1		2
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	G160M	1290	1	109	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	G160M	1398	1	187	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	G160M	1554	1	284	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	G160M	1663	1	261	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2251	1	ACQ	2
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	ECH-B	2324	1	74	2251	1		2
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	ECH-B	2326	1	74	2251	1		2
HD057061	7 18 42.4	-24 57 15	HRS	WSCAN	0.25	ECH-B	1744	1	318	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	WSCAN	0.25	ECH-B	1827	1	318	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	WSCAN	0.25	ECH-B	2059	1	166	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	WSCAN	0.25	ECH-B	2519	1	123	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	G160M	1133	1	596	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	G160M	1249	1	144	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	WSCAN	0.25	ECH-B	2371	1	88	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	ECH-B	2324	1	74	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	ECH-B	2325	1	74	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	ECH-B	2326	1	74	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	ACCUM	0.25	G160M	1345	1	128	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	WSCAN	0.25	ECH-B	2484	1	113	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	WSCAN	0.25	ECH-B	2026	1	155	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	WSCAN	0.25	ECH-B	2249	1	67	2251	1		1
HD057061	7 18 42.4	-24 57 15	HRS	WSCAN	0.25	ECH-B	2799	1	77	2251	1		1
INCA221-40	7 20 3.6	71 20 47	FGS	POS	3	PUPIL		1	51	2565	2	CON	2
INCA221-40	7 20 3.6	71 20 47	FGS	POS	3	PUPIL		1	51	4148	3	CON	2
POINT0716+714INCA221 -40	7 20 55.1	71 9 54	S/C	POINTING	V1			1	1	2565	2	CON	1
POINT0716+714INCA221 -40	7 20 55.1	71 9 54	S/C	POINTING	V1			1	1	4148	3	CON	1
INCA221-41	7 21 24.3	71 8 55	FGS	POS	3	PUPIL		1	51	2565	2	CON	2
INCA221-41	7 21 24.3	71 8 55	FGS	POS	3	PUPIL		1	51	4148	3	CON	2
0716+714INCA221-40	7 21 53.4	71 20 36	FGS	POS	3	PUPIL		1	51	2565	2	CON	3
0716+714INCA221-40	7 21 53.4	71 20 36	FGS	POS	3	PUPIL		1	51	4148	3	CON	3
0716+714INCA221-41	7 21 53.4	71 20 36	FGS	POS	3	PUPIL		1	51	2565	2	CON	3
0716+714INCA221-41	7 21 53.4	71 20 36	FGS	POS	3	PUPIL		1	51	4148	3	CON	3
POINT0716+714INCA221 -41	7 23 50.0	71 12 56	S/C	POINTING	V1			1	1	2565	2	CON	1
POINT0716+714INCA221 -41	7 23 50.0	71 12 56	S/C	POINTING	V1			1	1	4148	3	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC2363	7 28 42.0	69 11 26	WFC	IMAGE	WF2	F555W		1	15	3840	2	ACQ	1
NGC2363	7 28 42.0	69 11 26	WFC	IMAGE	WF2	F502N	5008	1	500	3840	2	ACQ	1
NGC2363	7 28 42.0	69 11 26	FOS/RD	ACCUM	1.0	G190H		1	3299	3840	2		1
NGC2363-OFFSET	7 28 42.0	69 11 56*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	44	3840	2	ACQ	1
MRK8	7 29 25.9	72 7 45	FOC/48	IMAGE	512X512	F130LP F140W		1	1000	3810	2		1
G107-70	7 30 47.5	48 10 35	FOS/RD	ACCUM	0.3	G400H		1	2220	3816	2		2
G107-70	7 30 47.5	48 10 35	FOS/RD	ACQ/BINA	0.3	MIRROR		1	9	3816	2	ACQ	2
G107-70	7 30 47.5	48 10 35	FOS/RD	ACQ/BINA	4.3	MIRROR		1	4	3816	2	ACQ	1
G107-70	7 30 47.5	48 10 36	WFC	IMAGE	ANY	F469N		1	10	2593	1		1
G107-70	7 30 47.5	48 10 36	WFC	IMAGE	ANY	F469N		1	30	2593	1		1
G107-70	7 30 47.5	48 10 36	WFC	IMAGE	ANY	F658N		1	10	2593	1		1
G107-70	7 30 47.5	48 10 36	WFC	IMAGE	ANY	F469N		1	1	2593	1		1
G107-70	7 30 47.5	48 10 36	WFC	IMAGE	ANY	F1083N		1	10	2593	1		1
G107-70	7 30 47.5	48 10 36	WFC	IMAGE	ANY	F1083N		1	30	2593	1		1
G107-70	7 30 47.5	48 10 36	WFC	IMAGE	ANY	F1083N		1	1	2593	1		1
MARK74	7 31 9.6	55 15 16	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
0731+65W1	7 36 21.3	65 13 12	PC	IMAGE	ALL	F555W		1	260	3159	0		1
ESO-0736-6925	7 36 23.9	-69 31 48	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-0735-4731	7 36 28.2	-47 38 14	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC2403-PAR1	7 36 50.0	65 36 16	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
NGC2403-PAR1	7 36 50.0	65 36 16	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1
NGC2403-PAR1	7 36 50.0	65 36 16	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
NGC2403-PAR2	7 36 50.0	65 36 16	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
NGC2403-PAR2	7 36 50.0	65 36 16	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1
NGC2403-PAR2	7 36 50.0	65 36 16	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
NGC2403-PAR3	7 36 50.0	65 36 16	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
NGC2403-PAR3	7 36 50.0	65 36 16	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1
NGC2403-PAR3	7 36 50.0	65 36 16	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
NGC2403-PAR4	7 36 50.0	65 36 16	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
NGC2403-PAR4	7 36 50.0	65 36 16	WFC	IMAGE	ALL	F656N		1	1700	2356	1	PAR	1
NGC2403-PAR4	7 36 50.0	65 36 16	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
UGC3918	7 36 51.5	65 36 7	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
MARK9	7 36 57.0	58 46 13	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
POINTNEWEGOA-3NEWHIP-3	7 37 23.6	17 48 0	S/C	POINTING	V1			1	1	2860	2	CON	1
POINTNEWEGOA-3NEWHIP-3	7 37 23.6	17 48 0	S/C	POINTING	V1			1	1	4146	3	CON	1
NEWEGOA-3NEWHIP-3	7 38 7.3	17 42 18	FGS	POS	3	PUPIL		1	51	2860	2	CON	3
NEWEGOA-3NEWHIP-3	7 38 7.3	17 42 18	FGS	POS	3	PUPIL		1	51	4146	3	CON	3
NEWHIP-3	7 38 12.0	17 50 28	FGS	POS	3	PUPIL		1	51	2860	2	CON	2
NEWHIP-3	7 38 12.0	17 50 28	FGS	POS	3	PUPIL		1	51	4146	3	CON	2
ALPHA-C-MI-B	7 39 18.5	5 13 38	WFC	IMAGE	W4	F8ND		1	0	2593	1	ACQ	1
ALPHA-C-MI-B	7 39 18.5	5 13 38	WFC	IMAGE	ALL-ND	F469N		1	1	2593	1		1
ALPHA-C-MI-B	7 39 18.5	5 13 38	WFC	IMAGE	ALL-ND	F469N		1	3	2593	1		1
ALPHA-C-MI-B	7 39 18.5	5 13 38	WFC	IMAGE	ALL-ND	F469N		1	0	2593	1		1
ALPHA-C-MI-B	7 39 18.5	5 13 38	WFC	IMAGE	ALL-ND	F631N		1	0	2593	1		1
ALPHA-C-MI-B	7 39 18.5	5 13 38	WFC	IMAGE	ALL-ND	F656N		1	0	2593	1		1
ALPHA-C-MI-B	7 39 18.5	5 13 38	WFC	IMAGE	ALL-ND	F673N		1	0	2593	1		1
ALPHA-C-MI-B	7 39 18.5	5 13 38	WFC	IMAGE	ALL-ND	F1083N		1	1	2593	1		1
ALPHA-C-MI-B	7 39 18.5	5 13 38	WFC	IMAGE	ALL-ND	F1083N		1	3	2593	1		1
ALPHA-C-MI-B	7 39 18.5	5 13 38	WFC	IMAGE	ALL-ND	F1083N		1	0	2593	1		1
MARS-M1	7 39 51.8	23 4 40	PC	IMAGE	P6	F413M		1	1	3107	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
MARS-M1	7 39 51.8	23 4 40	PC	IMAGE	P6	F673N		1	0	3107	0		1
L745-46A	7 40 20.2	-17 24 44	FOS/BL	ACCUM	1.0	G270H	2700	1	1200	2593	1		1
L745-46A	7 40 20.2	-17 24 44	FOS/BL	ACCUM	1.0	G160L	1836	1	4800	2593	1		1
L745-46A	7 40 20.2	-17 24 44	FOS/BL	ACQ/BINA	4.3	MIRROR		1	2	2593	1	ACQ	1
MARS-M2	7 40 38.5	23 2 41	PC	IMAGE	P6	F413M		1	1	3107	0		1
MARS-M2	7 40 38.5	23 2 41	PC	IMAGE	P6	F673N		1	0	3107	0		1
OI363	7 41 10.7	31 12 0	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
OI363	7 41 10.7	31 12 0	FOS/RD	ACQ/BINA	4.3	MIRROR		1	14	4125	3	ACQ CON	1
OI363	7 41 10.7	31 12 0	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2310	4125	3	CON	1
OI363	7 41 10.7	31 12 0	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6228	4125	3	CON	1
OI363	7 41 10.7	31 12 0	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	2	4125	3	ACQ CON	1
MARS-M3	7 41 29.0	23 0 31	PC	IMAGE	P6	F502N		1	2	3107	0		1
MARS-M3	7 41 29.0	23 0 31	PC	IMAGE	P6	F413M		1	1	3107	0		1
MARS-M3	7 41 29.0	23 0 31	PC	IMAGE	P6	F673N		1	0	3107	0		1
MARS-M4	7 41 29.0	23 0 31	PC	IMAGE	P6	F336W		1	0	3107	0		1
MARS-M4	7 41 29.0	23 0 31	PC	IMAGE	P6	F230W		1	120	3107	0		1
PK231+04D2	7 41 50.4	-14 44 2	PC	IMAGE	PCALL-FIX	F502N		1	240	3603	2	CON	2
PK231+04D2	7 41 50.4	-14 44 2	PC	IMAGE	PCALL-FIX	F656N		1	240	3603	2	CON	2
QX-PUP	7 42 16.8	-14 42 52	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
QX-PUP	7 42 16.8	-14 42 52	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
UGC3973	7 42 32.7	49 48 33	PC	IMAGE	PC6	F785LP		1	180	4093	2		1
MARK78	7 42 41.7	65 10 38	PC	IMAGE	P6	F588N	5880	2	900	2493	1		1
MARK78	7 42 41.7	65 10 38	PC	IMAGE	P6	F517N	5171	1	1800	2493	1		1
MARK78	7 42 41.7	65 10 38	PC	IMAGE	P6	F517N	5171	2	1800	2493	1		1
3C186	7 44 17.5	37 53 17	FOS/RD	ACCUM	4.3	G400H	4000	1	846	2578	1		1
3C186	7 44 17.5	37 53 17	FOS/RD	ACCUM	4.3	G270H	2700	1	1080	2578	1		1
3C186	7 44 17.5	37 53 17	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
HD62509	7 45 18.9	28 1 34	HRS	ACCUM	0.25	G270M	2498	1	2160	3614	2		1
B20742+31	7 45 41.7	31 42 56	FOS/BL	RAPID	1.0	G160L	1840	1	600	3791	2		1
B20742+31	7 45 41.7	31 42 56	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	3791	2	ACQ	1
B20742+31	7 45 41.7	31 42 56	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	4728	3791	2		1
B20742+31	7 45 41.7	31 42 56	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1686	3791	2		1
B20742+31	7 45 41.7	31 42 56	FOS/RD	ACQ/BINA	4.3	MIRROR		1	6	3791	2	ACQ	1
SAO14321	7 46 40.0	65 27 20	PC	IMAGE	P6	F588N	5880	1	0	2493	1		1
SAO14321	7 46 40.0	65 27 20	PC	IMAGE	P6	F517N	5171	1	0	2493	1		1
UGC4016	7 46 53.0	39 1 55	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PK232+05D1	7 48 3.6	-14 7 43	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK232+05D1	7 48 3.6	-14 7 43	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
ESO-0748-5420	7 49 17.4	-54 27 27	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
SBS0747+611	7 52 22.6	60 57 52	PC	IMAGE	ALL	F555W		1	260	3159	0		1
OI-287	7 52 37.1	25 42 39	FOS/RD	ACQ/BINA	4.3	MIRROR		1	20	2123	1	ACQ	1
OI-287	7 52 37.1	25 42 39	FOS/RD	ACCUM	4.3	G190H	1900	1	3700	2123	1		1
U-GEM	7 55 5.3	22 0 6	HRS	ACCUM	2.0	G160M	1386	2	2400	3836	2		1
U-GEM	7 55 5.3	22 0 6	FOS/BL	ACCUM	1.0	G130H	1375	2	180	3836	2		2
U-GEM	7 55 5.3	22 0 6	FOS/BL	ACQ/BINA	4.3	MIRROR	1375	1	25	3836	2	ACQ	2
UGC4079	7 55 6.4	55 42 15	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
MARK382	7 55 25.3	39 11 10	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
OI-287	7 55 37.1	25 42 39	FOS/RD	ACQ/BINA	4.3	MIRROR		1	60	4051	1	ACQ	1
OI-287	7 55 37.1	25 42 39	FOS/RD	ACCUM	4.3	G190H	1900	1	3650	4051	1		1
0751+5623	7 55 42.6	56 15 3	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0751+5623	7 55 42.6	56 15 3	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
PC0751+5623	7 55 42.6	56 15 9	PC	IMAGE	ALL	F702W		1	100	2350	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PC0751+5623	7 55 42.6	56 15 9	PC	IMAGE	ALL	F702W		1	350	2350	1		1
NEWHIP-22	7 57 51.8	39 21 31	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-22	7 57 51.8	39 21 31	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
NEWEGOB-22NEWHIP-22	7 57 59.9	39 20 27	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-22NEWHIP-22	7 57 59.9	39 20 27	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
NEWEGOB-23NEWHIP-23	7 57 59.9	39 20 27	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-23NEWHIP-23	7 57 59.9	39 20 27	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
ESO-0756-4942	7 58 14.8	-49 51 11	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
POINTNEWEGOB-22NEWHIP-22	7 58 35.2	39 30 14	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-22NEWHIP-22	7 58 35.2	39 30 14	S/C	POINTING	V1			1	1	4145	3	CON	1
NEWHIP-23	7 58 51.2	39 26 50	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-23	7 58 51.2	39 26 50	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
POINTNEWEGOB-23NEWHIP-23	7 59 0.9	39 15 50	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-23NEWHIP-23	7 59 0.9	39 15 50	S/C	POINTING	V1			1	1	4145	3	CON	1
TEX0759+341	8 2 46.2	33 59 20	PC	IMAGE	ALL	F555W		1	260	3159	0		1
MARK385	8 3 28.1	25 6 8	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
MARS-1	8 6 53.2	21 47 22	HRS	ACCUM	2.0	ECH-A	1215	1	1200	2393	1		1
MARS-2	8 7 3.0	21 46 51	HRS	ACCUM	2.0	ECH-A	1215	1	1200	2393	1		1
MARS-3	8 7 12.9	21 46 19	HRS	ACCUM	2.0	ECH-A	1215	1	1200	2393	1		1
MARS-4	8 7 22.8	21 45 48	HRS	ACCUM	2.0	ECH-A	1215	1	1200	2393	1		1
MARS-5	8 7 32.6	21 45 16	HRS	ACCUM	2.0	ECH-A	1215	1	1200	2393	1		1
UGC4229	8 7 41.0	39 0 14	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
MARS-6	8 7 42.5	21 44 45	HRS	ACCUM	2.0	ECH-A	1215	1	1200	2393	1		1
MARS-OFFSET	8 7 52.4	21 44 13	HRS	ACCUM	2.0	ECH-A	1215	1	1200	2393	1		1
OJ508	8 8 40.3	49 50 39	PC	IMAGE	ALL	F555W		1	240	4027	1		1
B20808+28	8 11 36.9	28 45 3	PC	IMAGE	ALL	F555W		1	260	3159	0		1
NGC2534U1	8 13 6.8	55 40 45	PC	IMAGE	ALL	F555W		1	240	4027	1		1
UGC4284	8 14 40.1	49 3 42	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
VV-PUP	8 15 6.7	-19 3 17	HSP/VIS	PRISM	1.0	F551W/F240W		1	1800	3607	2		2
B20812+33A	8 15 34.1	33 5 28	PC	IMAGE	ALL	F555W		1	260	3159	0		1
UGC4303	8 16 16.9	25 58 27	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
ESO-0815-2718	8 17 5.9	-27 27 18	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
B20820+29	8 23 41.2	29 28 28	PC	IMAGE	ALL	F555W		1	240	4027	1		1
0823+033	8 25 50.4	3 9 25	PC	IMAGE	P6	F785LP		7	900	3648	2		1
HD72089	8 29 7.0	-45 33 27	HRS	ACCUM	0.25	G160M	1252	1	1320	2348	1		1
HD72089	8 29 7.0	-45 33 27	HRS	ACCUM	0.25	G160M	1318	1	1320	2348	1		1
HD72089	8 29 7.0	-45 33 27	HRS	ACCUM	0.25	G160M	1619	1	1320	2348	1		1
HD72089	8 29 7.0	-45 33 27	HRS	ACCUM	0.25	G160M	1667	1	1320	2348	1		1
HD72089	8 29 7.0	-45 33 27	HRS	ACCUM	0.25	G160M	1817	1	1320	2348	1		1
HD72089	8 29 7.0	-45 33 27	HRS	ACCUM	0.25	G160M	1857	1	1320	2348	1		1
HD72089	8 29 7.0	-45 33 27	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	2348	1	ACQ	1
0823+033-CALIB	8 29 11.1	5 59 21	PC	IMAGE	P6	F785LP		1	0	3648	2		1
HD72127B	8 29 27.5	-44 43 26*	HRS	IMAGE	2.0	MIRROR-A2		1	18	2347	1		1
HD72127B	8 29 27.5	-44 43 26*	HRS	ACCUM	0.25	G160M	1290	2	340	2347	1		1
HD72127B	8 29 27.5	-44 43 26*	HRS	ACCUM	0.25	G160M	1248	4	300	2347	1		1
HD72127B	8 29 27.5	-44 43 26*	HRS	ACCUM	0.25	G160M	1486	2	240	2347	1		1
HD72127B	8 29 27.5	-44 43 26*	HRS	ACCUM	0.25	G160M	1547	4	310	2347	1		1
HD72127B	8 29 27.5	-44 43 26*	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	92	2347	1	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD072127	8 29 27.5	-44 43 30	HRS	IMAGE	2.0	MIRROR-A2		1	96	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	IMAGE	2.0	MIRROR-A2		1	96	3993	1		1
HD072127	8 29 27.5	-44 43 30	HRS	ACCUM	0.25	G160M	1398	1	437	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	ACCUM	0.25	G160M	1554	1	665	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	ACCUM	0.25	G160M	1608	1	620	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	ACCUM	0.25	ECH-B	2324	1	148	3993	1		1
HD072127	8 29 27.5	-44 43 30	HRS	WSCAN	0.25	ECH-B	1858	1	784	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	WSCAN	0.25	ECH-B	1744	1	688	3993	1		1
HD072127	8 29 27.5	-44 43 30	HRS	WSCAN	0.25	ECH-B	1807	1	465	3993	1		1
HD072127	8 29 27.5	-44 43 30	HRS	WSCAN	0.25	ECH-B	1827	1	546	3993	1		1
HD072127	8 29 27.5	-44 43 30	HRS	WSCAN	0.25	ECH-B	2059	1	384	3993	1		1
HD072127	8 29 27.5	-44 43 30	HRS	ACCUM	0.25	G160M	1175	1	1130	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	ACCUM	0.25	G160M	1290	1	255	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	ACCUM	0.25	G160M	1663	1	611	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2251	1	ACQ	1
HD072127	8 29 27.5	-44 43 30	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	3993	1	ACQ	1
HD072127	8 29 27.5	-44 43 30	HRS	WSCAN	0.25	ECH-B	2519	1	319	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	ACCUM	0.25	G160M	1345	1	300	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	ACCUM	0.25	ECH-B	2325	1	148	3993	1		1
HD072127	8 29 27.5	-44 43 30	HRS	ACCUM	0.25	ECH-B	2326	1	148	3993	1		1
HD072127	8 29 27.5	-44 43 30	HRS	WSCAN	0.25	ECH-B	2484	1	291	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	WSCAN	0.25	ECH-B	2371	1	243	3993	1		1
HD072127	8 29 27.5	-44 43 30	HRS	WSCAN	0.25	ECH-B	2799	1	200	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	WSCAN	0.25	ECH-B	2026	1	384	3993	1		1
HD072127	8 29 27.5	-44 43 30	HRS	ACCUM	0.25	G160M	1133	1	1395	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	ACCUM	0.25	G160M	1249	1	337	2251	1		1
HD072127	8 29 27.5	-44 43 30	HRS	WSCAN	0.25	ECH-B	2249	1	173	2251	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	IMAGE	2.0	MIRROR-A2		1	51	2347	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	ACCUM	0.25	G160M	1290	1	220	2347	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	ACCUM	0.25	ECH-B	2538	1	100	2360	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	ACCUM	0.25	G160M	1486	1	120	2347	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	ACCUM	0.25	G160M	1252	1	110	2348	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	ACCUM	0.25	G160M	1318	1	110	2348	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	ACCUM	0.25	G160M	1619	1	220	2348	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	ACCUM	0.25	G160M	1667	1	220	2348	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	ACCUM	0.25	G160M	1817	1	220	2348	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	ACCUM	0.25	G160M	1857	1	220	2348	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	ACCUM	0.25	G160M	1547	2	180	2347	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	ACCUM	0.25	G160M	1248	3	340	2347	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	92	2347	1	ACQ	1
HD72127A	8 29 27.6	-44 43 31	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	92	2360	1	ACQ	1
HD72127A	8 29 27.6	-44 43 31	HRS	ACCUM	0.25	G160M	1248	1	345	2360	1		1
HD72127A	8 29 27.6	-44 43 31	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	2348	1	ACQ	1
HD72350	8 30 39.3	-44 44 14	HRS	ACCUM	0.25	ECH-B	2538	4	250	2360	1		1
HD72350	8 30 39.3	-44 44 14	HRS	ACCUM	0.25	G160M	1248	8	288	2360	1		1
HD72350	8 30 39.3	-44 44 14	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	92	2360	1	ACQ	1
B20827+24	8 30 52.1	24 11 0	PC	IMAGE	ALL	F555W		1	260	3159	0		1
PK249+06D1	8 31 42.8	-27 45 32	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK249+06D1	8 31 42.8	-27 45 32	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
0828+493-CALIB	8 32 3.6	48 19 18	PC	IMAGE	P6	F785LP		1	0	3648	2		1
0828+493	8 32 23.2	49 13 21	PC	IMAGE	P6	F785LP		8	900	3648	2		1
HD72798	8 33 1.8	-45 45 11	HRS	ACCUM	0.25	ECH-B	2538	4	250	2360	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD72798	8 33 1.8	-45 45 11	HRS	ACCUM	0.25	G160M	1248	6	288	2360	1		1
HD72798	8 33 1.8	-45 45 11	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	92	2360	1	ACQ	1
0830+115	8 33 14.3	11 22 44	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0830+115	8 33 14.3	11 22 44	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
0830+115	8 33 14.3	11 23 36	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0830+1009	8 33 22.5	9 58 44	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0830+1009	8 33 22.5	9 58 44	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
ESO-0831-2248	8 33 22.5	-22 58 21	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
0831+1248	8 34 8.6	12 38 37	PC	IMAGE	ALL	F555W		1	260	3159	0		1
MC0831+101	8 34 40.6	9 57 54	PC	IMAGE	ALL	F555W		1	240	4027	1		1
MARK390	8 35 33.0	30 32 3	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
HE2-10	8 36 15.1	-26 24 32	FOC/48	IMAGE	512X512	F130LP F140W		1	1000	3810	2		1
55W037	8 37 52.7	44 50 26	WFC	IMAGE	WF4	F555W	5479	4	840	3545	2	PAR	1
55W037	8 37 52.7	44 50 26	FOS/BL	ACQ/BINA	4.3	MIRROR		1	900	3545	2	ACQ	1
55W037	8 37 52.7	44 50 26	WFC	IMAGE	WF4	F785LP	8958	4	840	3545	2	PAR	1
55W037	8 37 52.7	44 50 26	FOS/BL	ACCUM	4.3	G160L	1840	1	4428	3545	2		1
55W041	8 38 12.1	44 48 25	WFC	IMAGE	WF4	F555W	5479	4	840	3545	2	PAR	1
55W041	8 38 12.1	44 48 25	FOS/BL	ACQ/BINA	4.3	MIRROR		1	200	3545	2	ACQ	1
55W041	8 38 12.1	44 48 25	WFC	IMAGE	WF4	F785LP	8958	4	840	3545	2	PAR	1
55W041	8 38 12.1	44 48 25	FOS/BL	ACCUM	4.3	G130H	1380	1	3600	3545	2		1
UGC4509	8 38 24.0	25 45 15	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
4C19.31	8 39 6.9	19 21 48	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0836+1122	8 39 33.0	11 12 7	PC	IMAGE	ALL	F555W		1	240	4027	1		1
US1420	8 39 35.2	44 8 11	PC	IMAGE	ALL	F555W		1	240	4027	1		1
US1443	8 40 30.0	46 51 13	PC	IMAGE	ALL	F555W		1	260	3159	0		1
3C207	8 40 47.6	13 12 24	FOS/RD	ACCUM	4.3	G400H	4000	1	1230	2578	1		1
3C207	8 40 47.6	13 12 24	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
3C207	8 40 47.6	13 12 24	FOS/RD	ACCUM	4.3	G190H	1900	1	2514	2578	1		1
3C207	8 40 47.6	13 12 24	FOS/RD	ACCUM	4.3	G270H	2700	1	1488	2578	1		1
US1498	8 42 15.3	45 25 44	PC	IMAGE	ALL	F555W		1	240	4027	1		1
HD74455A	8 42 16.1	-48 5 57	HRS	ACCUM	2.0	G160M	1225	1	360	2344	1		1
HD74455A	8 42 16.1	-48 5 57	HRS	ACCUM	2.0	G160M	1227	1	360	2344	1		1
GAL-084327+444009	8 43 27.2	44 40 9	WFC	IMAGE	WFALL	F555W		1	1200	3797	2		2
GAL-084426+444949	8 44 26.4	44 49 49	WFC	IMAGE	WFALL	F555W		1	1600	3797	2		2
GAL-084519+444935	8 45 18.2	44 49 35	WFC	IMAGE	WFALL	F555W		1	1600	3797	2		2
55W149	8 45 27.1	44 55 26	FOS/BL	ACCUM	4.3	G160L	1840	1	3600	3545	2		1
55W149	8 45 27.1	44 55 26	FOS/BL	ACQ/BINA	4.3	MIRROR		1	450	3545	2	ACQ	1
55W150	8 45 29.4	44 50 38	WFC	IMAGE	WF1	F555W	5479	4	600	3545	2	PAR	1
55W150	8 45 29.4	44 50 38	WFC	IMAGE	WF1	F785LP	8958	4	600	3545	2	PAR	1
4C13.39	8 45 47.3	13 28 58	PC	IMAGE	ALL	F555W		1	260	3159	0		1
PK208+33D1-KNOT3	8 46 53.2	17 52 52*	FOS/BL	ACCUM	4.3	G130H		1	1800	3671	2		1
PK208+33D1-KNOT3	8 46 53.2	17 52 52*	FOS/BL	ACCUM	4.3	G190H		1	1800	3671	2		1
PK208+33D1-KNOT3	8 46 53.2	17 52 52*	HRS	ACCUM	2.0	G160M	1550	1	1200	3671	2		1
PK208+33D1-KNOT4	8 46 53.2	17 52 43*	FOS/BL	ACCUM	4.3	G130H		1	1800	3671	2		1
PK208+33D1-KNOT4	8 46 53.2	17 52 43*	FOS/BL	ACCUM	4.3	G190H		1	1800	3671	2		1
PK208+33D1-KNOT4	8 46 53.2	17 52 43*	FOS/BL	ACCUM	4.3	G270H		1	1800	3671	2		1
PK208+33D1	8 46 53.5	17 52 46	FOC/96	IMAGE	512X1024	F501N		1	900	3671	2		1
PK208+33D1	8 46 53.5	17 52 46	FOC/96	IMAGE	512X1024	F152M		1	1800	3671	2		1
PK208+33D1-OFFSET	8 46 53.5	17 52 46	FOS/BL	ACQ/BINA	4.3	MIRROR		1	2	3671	2	ACQ	1
TON951	8 47 42.5	34 45 4	FOS/BL	ACQ/BINA	4.3	MIRROR		1	3	2717	1	ACQ	1
TON951	8 47 42.5	34 45 4	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	3	2717	1	ACQ	1
TON951	8 47 42.5	34 45 4	FOS/BL	ACCUM	0.25X2.0	G130H	1379	1	2500	2717	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
TON951	8 47 42.5	34 45 4	FOS/BL	ACCUM	0.25X2.0	G270H	2769	1	1500	2717	1		1
NEWEGOB-24NEWHIP-24	8 47 42.5	34 45 5	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-24NEWHIP-24	8 47 42.5	34 45 5	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
NEWEGOB-25NEWHIP-25	8 47 42.5	34 45 5	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-25NEWHIP-25	8 47 42.5	34 45 5	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
NEWHIP-24	8 48 16.0	34 36 16	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-24	8 48 16.0	34 36 16	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
NEWHIP-25	8 48 16.4	34 35 57	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-25	8 48 16.4	34 35 57	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
NGC2636	8 48 24.7	73 40 15	PC	IMAGE	PC6	F555W		1	80	3912	2		1
NGC2636	8 48 24.7	73 40 15	PC	IMAGE	PC6	F555W		2	400	3912	2		1
POINTNEWEGOB-25NEWHIP-25	8 48 35.6	34 47 35	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-25NEWHIP-25	8 48 35.6	34 47 35	S/C	POINTING	V1			1	1	4145	3	CON	1
POINTNEWEGOB-24NEWHIP-24	8 48 37.0	34 47 35	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-24NEWHIP-24	8 48 37.0	34 47 35	S/C	POINTING	V1			1	1	4145	3	CON	1
MARK96	8 49 0.3	46 15 5	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
0846+1540	8 49 8.1	15 29 32	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0846+156	8 49 8.2	15 28 51	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0846+156	8 49 8.2	15 28 51	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
UGC4619	8 49 21.9	19 4 29	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
0846+51W1	8 49 58.1	51 8 29	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0847.6+156A	8 50 27.7	15 29 28	PC	IMAGE	ALL	F555W		1	260	3159	0		1
HD75821A	8 50 33.5	-46 31 45	HRS	IMAGE	2.0	MIRROR-A2		1	51	2347	1		1
HD75821A	8 50 33.5	-46 31 45	HRS	ACCUM	0.25	G160M	1547	2	200	2347	1		1
HD75821A	8 50 33.5	-46 31 45	HRS	ACCUM	0.25	G160M	1248	1	160	2347	1		1
HD75821A	8 50 33.5	-46 31 45	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	92	2347	1	ACQ	1
HD75821A	8 50 33.5	-46 31 45	HRS	ACCUM	2.0	G160M	1225	1	360	2344	1		1
HD75821A	8 50 33.5	-46 31 45	HRS	ACCUM	2.0	G160M	1227	1	360	2344	1		1
HD75821B	8 50 33.8	-46 31 45*	HRS	IMAGE	2.0	MIRROR-A2		1	51	2347	1		1
HD75821B	8 50 33.8	-46 31 45*	HRS	ACCUM	0.25	G160M	1248	4	250	2347	1		1
HD75821B	8 50 33.8	-46 31 45*	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	92	2347	1	ACQ	1
HD75821B	8 50 33.8	-46 31 45*	HRS	ACCUM	0.25	G160M	1547	2	379	2347	1		1
LB8755	8 50 51.8	15 22 15	PC	IMAGE	ALL	F555W		1	260	3159	0		1
UGC4638	8 51 38.2	-2 22 0	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
LB8775	8 51 41.8	16 12 22	PC	IMAGE	ALL	F555W		1	260	3159	0		1
UGC4641	8 52 41.7	33 25 15	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC2681	8 53 32.9	51 18 49	FOC/48	IMAGE	512X512	F275W		1	600	3728	2		1
NGC2681	8 53 32.9	51 18 49	FOC/48	IMAGE	512X512	F220W		1	1080	3728	2		1
NGC2681	8 53 32.9	51 18 49	FOC/48	IMAGE	512X512	F342W		1	420	3728	2		1
NGC2681	8 53 32.9	51 18 49	FOC/48	IMAGE	512X512	F130LP F150W		1	2430	3728	2		1
US1867	8 53 34.2	43 49 1	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
US1867	8 53 34.2	43 49 1	FOS/RD	ACQ/BINA	4.3	MIRROR		1	12	2424	1	ACQ	1
US1867	8 53 34.2	43 49 1	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
US1867	8 53 34.2	43 49 1	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5160	2424	1		1
US1867	8 53 34.2	43 49 1	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1764	2424	1		1
NEWHIP-4	8 53 55.4	19 58 2	FGS	POS	3	F5ND		1	51	2860	2	CON	2
NEWHIP-4	8 53 55.4	19 58 2	FGS	POS	3	F5ND		1	51	4146	3	CON	2
POINTNEWEGOA-4NEWHIP-4	8 54 46.1	19 53 27	S/C	POINTING	V1			1	1	2860	2	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
POINTNEWEGOA-4NEWHIP -4	8 54 46.1	19 53 27	S/C	POINTING	V1			1	1	4146	3	CON	1
NEWEGOA-4NEWHIP-4	8 54 48.8	20 6 30	FGS	POS	3	PUPIL		1	51	2860	2	CON	3
NEWEGOA-4NEWHIP-4	8 54 48.8	20 6 30	FGS	POS	3	PUPIL		1	51	4146	3	CON	3
OJ287	8 54 48.9	20 6 30	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	3791	2	ACQ	1
OJ287	8 54 48.9	20 6 30	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	16800	3791	2		1
OJ287	8 54 48.9	20 6 30	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	3480	3791	2		1
OJ287	8 54 48.9	20 6 30	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1320	3791	2		1
OJ287	8 54 48.9	20 6 30	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	1	3791	2	ACQ	1
OJ287	8 54 48.9	20 6 30	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3791	2	ACQ	1
LB8863	8 54 50.7	19 30 35	PC	IMAGE	ALL	F555W		1	260	3159	0		1
UGC4666	8 55 34.5	58 44 4	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC4637	8 55 38.4	78 13 24	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
LB8956	8 57 26.8	18 55 24	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0854+1632	8 57 47.2	16 21 0	PC	IMAGE	ALL	F555W		1	260	3159	0		1
MC0856+124	8 59 33.8	12 16 31	PC	IMAGE	ALL	F555W		1	240	4027	1		1
HD77581	9 2 6.9	-40 33 15	FOS/BL	RAPID	1.0	G130H	1400	1	4260	2572	1		1
HD77581	9 2 6.9	-40 33 15	FOS/BL	ACQ/PEAK	1.0	G130H	1400	1	0	2572	1	ACQ	2
PKS0859-14	9 2 16.8	-14 15 31	PC	IMAGE	ALL	F555W		1	260	3159	0		1
PKS0859-14	9 2 16.8	-14 15 31	FOS/RD	ACQ/BINA	4.3	MIRROR		1	17	3858	2	ACQ	1
PKS0859-14	9 2 16.8	-14 15 31	FOS/RD	ACCUM	4.3	G270H	2767	1	450	3858	2		1
UGC4749	9 4 33.7	51 36 51	PC	IMAGE	PC6	F785LP		1	180	4093	2		1
0903+1534	9 5 51.9	15 22 48	PC	IMAGE	ALL	F555W		1	260	3159	0		1
3C215	9 6 31.9	16 46 12	FOS/RD	ACCUM	4.3	G400H	4000	1	1134	2578	1		1
3C215	9 6 31.9	16 46 12	FOS/RD	ACCUM	4.3	G190H	1900	1	5490	2578	1		1
3C215	9 6 31.9	16 46 12	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
3C215	9 6 31.9	16 46 12	FOS/RD	ACCUM	4.3	G270H	2700	1	1446	2578	1		1
H0903+175	9 6 38.3	17 22 23	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0905+151	9 8 23.6	14 55 14	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0905+151	9 8 23.6	14 55 14	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
0906+0406	9 9 15.9	3 53 48	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0906+0406	9 9 15.9	3 53 48	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
3C216-0	9 9 33.5	42 53 47	FOS/RD	ACQ/BINA	4.3	MIRROR		1	67	3858	2	ACQ	1
3C216-0	9 9 33.5	42 53 47	FOS/RD	ACCUM	4.3	G190H	1954	1	3378	3858	2		1
3C216-0	9 9 33.5	42 53 47	FOS/RD	ACCUM	4.3	G270H	2767	1	1637	3858	2		1
B30907+381	9 10 54.1	37 59 14	PC	IMAGE	ALL	F555W		1	260	3159	0		1
UGC4829	9 11 39.7	46 38 23	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
UGC4821	9 11 40.4	60 1 58	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-0910-2358	9 12 19.3	-24 10 18	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD80007	9 13 12.1	-69 43 2	HRS	ACCUM	2.0	MIRROR-A2		1	0	2537	1		1
HD80007	9 13 12.1	-69 43 2	HRS	ACCUM	0.25	G160M	1663	1	388	2537	1		1
HD80007	9 13 12.1	-69 43 2	HRS	ACCUM	0.25	ECH-B	2854	1	1600	2537	1		1
HD80007	9 13 12.1	-69 43 2	HRS	ACCUM	0.25	G160M	1859	1	325	2537	1		1
HD80007	9 13 12.1	-69 43 2	HRS	ACCUM	0.25	ECH-B	1859	1	1468	2537	1		1
HD80007	9 13 12.1	-69 43 2	HRS	ACCUM	0.25	ECH-B	2345	1	261	2537	1		1
HD80007	9 13 12.1	-69 43 2	HRS	ACCUM	0.25	G160M	1542	1	759	2537	1		1
HD80007	9 13 12.1	-69 43 2	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2537	1	ACQ	1
HD80007	9 13 12.1	-69 43 2	HRS	ACCUM	0.25	ECH-B	2596	1	405	2537	1		1
PC0910+5625	9 14 37.9	56 13 22	PC	IMAGE	ALL	F702W		1	100	2350	1		1
PC0910+5625	9 14 37.9	56 13 22	PC	IMAGE	ALL	F702W		1	350	2350	1		1
NEWEGOB-26NEWHIP-26	9 16 9.4	-62 19 29	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-26NEWHIP-26	9 16 9.4	-62 19 29	FGS	POS	3	PUPIL		1	51	4145	3	CON	3

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
0913+0715	9 16 14.0	7 2 25	PC	IMAGE	ALL	F555W		1	260	3159	0		1
NEWHIP-26	9 16 56.2	-62 26 23	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-26	9 16 56.2	-62 26 23	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
POINTNEWEGOB-26NEWHIP-26	9 17 52.5	-62 16 3	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-26NEWHIP-26	9 17 52.5	-62 16 3	S/C	POINTING	V1			1	1	4145	3	CON	1
ESO-0915-2208	9 17 52.9	-22 21 16	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
MARK704	9 18 26.0	16 18 19	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
NGC2832	9 19 46.8	33 44 59	PC	IMAGE	PC6	F555W		2	700	3912	2		1
NGC2841UB3	9 19 57.7	51 6 10	FOS/RD	ACQ/BINA	4.3	MIRROR		1	9	2424	1	ACQ	1
NGC2841UB3	9 19 57.7	51 6 10	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
NGC2841UB3	9 19 57.7	51 6 10	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
NGC2841UB3	9 19 57.7	51 6 10	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	4200	2424	1		1
NGC2841UB3	9 19 57.7	51 6 10	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1401	2424	1		1
UGC4936	9 20 20.4	64 6 10	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PKS0919-260	9 21 29.3	-26 18 43	PC	IMAGE	ALL	F555W		1	240	4027	1		1
UGC4966	9 22 2.6	50 58 38	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC2841	9 22 2.7	50 58 35	PC	IMAGE	PC6	F555W		1	70	3912	2		1
NGC2841	9 22 2.7	50 58 35	PC	IMAGE	PC6	F555W		2	260	3912	2		1
SBS0920+580	9 23 32.6	57 46 1	PC	IMAGE	ALL	F555W		1	240	4027	1		1
WD0921+354	9 24 15.3	35 16 51	FOS/BL	ACQ/BINA	4.3	MIRROR		1	8	3447	2	ACQ	1
WD0921+354	9 24 15.3	35 16 51	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	8	3447	2	ACQ	1
WD0921+354	9 24 15.3	35 16 51	FOS/BL	ACCUM	0.25X2.0	G160L	1600	1	4326	3447	2		1
MARK110	9 25 12.9	52 17 11	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
B20923+39	9 27 3.0	39 2 21	FOS/RD	ACCUM	4.3	G400H	4000	1	1002	2578	1		1
B20923+39	9 27 3.0	39 2 21	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
B20923+39	9 27 3.0	39 2 21	FOS/RD	ACCUM	4.3	G190H	1900	1	2082	2578	1		1
B20923+39	9 27 3.0	39 2 21	FOS/RD	ACCUM	4.3	G270H	2700	1	1206	2578	1		1
UGC5079	9 32 10.1	21 30 2	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
0930+2858	9 33 37.3	28 44 40	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0930+2858	9 33 37.3	28 44 40	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
IZW18	9 34 2.0	55 14 27	HRS	ACCUM	2.0	G160M	1216	8	1170	2078	1		1
IZW18	9 34 2.0	55 14 27	HRS	ACCUM	2.0	G160M	1304	8	1320	2078	1		1
IZW18	9 34 2.1	55 14 27*	FOS/RD	ACCUM	1.0	G190H		1	3299	3840	2		1
IZW18	9 34 2.1	55 14 27	FOC/48	IMAGE	512X512	F130LP F140W		1	1500	3591	2		1
IZW18-OFFSET	9 34 6.3	55 14 38	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	3840	2	ACQ	1
US737	9 35 2.5	43 31 11	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
US737	9 35 2.5	43 31 11	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	4125	3	ACQ CON	1
US737	9 35 2.5	43 31 11	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
US737	9 35 2.5	43 31 11	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1866	4125	3	CON	1
US737	9 35 2.5	43 31 11	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6041	4125	3	CON	1
GB20932+367	9 35 31.9	36 33 15	PC	IMAGE	ALL	F555W		1	260	3159	0		1
Q0932+501	9 35 51.0	49 53 16	FOS/RD	ACQ/BINA	4.3	MIRROR		1	19	3660	2	ACQ	1
Q0932+501	9 35 51.0	49 53 16	FOS/RD	ACCUM	1.0	G270H	2753	1	3228	3660	2		1
Q0932+501	9 35 52.9	49 53 11	PC	IMAGE	ALL	F555W		1	260	3159	0		1
TB0933+733	9 37 51.0	73 2 6	PC	IMAGE	ALL	F555W		1	260	3159	0		1
IRAS09371+1212	9 39 53.6	11 58 54	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
IRAS09371+1212	9 39 53.6	11 58 54	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
0938+119	9 41 13.6	11 45 32	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
0938+119	9 41 13.6	11 45 32	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
3C225B	9 42 15.6	13 45 46	FOC/96	IMAGE	512X1024	F320W POL0		1	606	3790	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
3C225B	9 42 15.6	13 45 46	FOC/96	IMAGE	512X1024	F320W POL60		1	606	3790	2		1
3C225B	9 42 15.6	13 45 46	FOC/96	IMAGE	512X1024	F320W POL120		1	606	3790	2		1
UGC5189	9 42 53.1	9 29 35	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
GAL-CLUS-093942+4713 -FLD1	9 43 2.6	46 58 37	WFC	IMAGE	ALL	F702W		1	700	4014	1		1
GAL-CLUS-093942+4713 -FLD1	9 43 2.6	46 58 37	WFC	IMAGE	ALL	F702W		5	2200	4014	1		2
SBS0940+544-OFFSET	9 44 15.0	54 11 0	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3840	2	ACQ	1
SBS0940+544	9 44 17.2	54 11 23*	FOS/RD	ACCUM	1.0	G190H		1	5400	3840	2		1
B20941+26	9 44 42.2	25 54 43	PC	IMAGE	ALL	F555W		1	256	3159	0		1
ESO-0943-3057	9 45 38.6	-31 11 25	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
MC0945+114	9 47 45.8	11 13 54	PC	IMAGE	ALL	F555W		1	240	4027	1		1
0945-04	9 47 49.6	-4 25 15	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0945-04	9 47 49.6	-4 25 15	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
PK221+45D1	9 47 57.3	13 16 44	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK221+45D1	9 47 57.3	13 16 44	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PKS0945-321	9 48 9.4	-32 23 47	PC	IMAGE	ALL	F555W		1	240	4027	1		1
HD84916	9 48 21.6	-4 24 23	PC	IMAGE	P6	F555W		1	0	2600	1		2
HD84916	9 48 21.6	-4 24 23	PC	IMAGE	P6	F785LP		1	0	2600	1		2
US987	9 48 35.9	43 23 2	PC	IMAGE	ALL	F555W		1	260	3159	0		1
HD84937	9 48 56.0	13 44 40	HRS	ACCUM	2.0	ECH-B	3130	2	2160	2634	1		1
HD84937	9 48 56.0	13 44 40	HRS	ACCUM	0.25	G270M	2498	2	2000	2634	1		1
HD84937	9 48 56.0	13 44 40	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	9	2634	1	ACQ	1
HD84937	9 48 56.1	13 44 39	HRS	ACCUM	0.25	ECH-B	2496	87	336	3479	2	CON SEL	1
HD84937	9 48 56.1	13 44 39	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	5	3479	2	ACQ CON SEL	1
PG0946+301	9 49 41.1	29 55 19	PC	IMAGE	ALL	F555W		1	260	3159	0		1
MRK1236	9 49 54.1	0 36 58	FOC/48	IMAGE	512X512	F130LP F140W		1	1000	3810	2		1
0950+139	9 52 59.0	13 44 34	FOC/96	IMAGE	512X512	F486N		1	800	2570	1		1
0950+139	9 52 59.0	13 44 34	FOC/96	IMAGE	512X512	F501N		1	800	2570	1		1
EGB6	9 52 59.0	13 44 34	FOS/BL	ACCUM	1.0	G160L		1	1200	3816	2		1
EGB6	9 52 59.0	13 44 34	FOS/BL	ACCUM	1.0	G270H		1	1200	3816	2		1
EGB6	9 52 59.0	13 44 34	FOS/BL	ACQ/BINA	4.3	MIRROR		1	5	3816	2	ACQ	1
GSC4383-694	9 53 26.2	69 44 52	PC	IMAGE	P5	F555W		1	1	2389	1		1
0951-04	9 53 55.7	-5 4 19	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0951-04	9 53 55.7	-5 4 19	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
MARK127	9 54 21.9	51 14 36	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
NGC3049	9 54 49.7	9 16 19	FOS/BL	ACCUM	1.0	G130H		1	11200	4122	2	CON	1
NGC3049	9 54 49.7	9 16 19	FOS/BL	ACCUM	1.0	G190H		1	3900	4122	2	CON	1
NGC3049	9 54 49.7	9 16 19	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	1	4122	2	ACQ CON	1
NGC3049	9 54 49.7	9 16 19	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	1	4122	2	ACQ CON	1
NGC3049	9 54 49.7	9 16 19	FOC/48	IMAGE	512X512	F130LP F140W		1	650	3810	2		1
0952-01	9 55 0.1	-1 30 7	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0952-01	9 55 0.1	-1 30 7	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
NGC3031-FIELD	9 55 9.1	69 9 3	WFC	IMAGE	ALL	F555W		1	1800	2227	1		4
NGC3031-FIELD	9 55 9.1	69 9 3	WFC	IMAGE	ALL	F555W		1	1200	2227	1		8
NGC3031-FIELD	9 55 9.1	69 9 3	WFC	IMAGE	ALL	F555W		1	1200	2227	2		6
NGC3031-FIELD	9 55 9.1	69 9 3	WFC	IMAGE	ALL	F785LP		1	1800	2227	1		4
NGC3031-FIELD	9 55 9.1	69 9 3	WFC	IMAGE	ALL	F785LP		1	1800	2227	2		2
NGC3034	9 55 52.6	69 40 46	PC	IMAGE	P5	F336W		1	1000	2389	1		1
NGC3034	9 55 52.6	69 40 46	PC	IMAGE	P5	F336W		1	4000	2389	1		1
NGC3034	9 55 52.6	69 40 46	PC	IMAGE	P5	F555W		1	200	2389	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC3034	9 55 52.6	69 40 46	PC	IMAGE	P5	F555W		1	800	2389	1		1
NGC3034	9 55 52.6	69 40 46	PC	IMAGE	P5	F785LP		1	160	2389	1		1
NGC3034	9 55 52.6	69 40 46	PC	IMAGE	P5	F785LP		1	640	2389	1		1
UGC5322	9 55 52.8	69 40 53	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC3031-V30	9 56 8.7	69 7 4	WFC	IMAGE	ALL	F555W		1	1800	2227	1		4
NGC3031-V30	9 56 8.7	69 7 4	WFC	IMAGE	ALL	F555W		1	1200	2227	1		8
NGC3031-V30	9 56 8.7	69 7 4	WFC	IMAGE	ALL	F555W		1	1200	2227	2		6
NGC3031-V30	9 56 8.7	69 7 4	WFC	IMAGE	ALL	F785LP		1	1800	2227	1		4
NGC3031-V30	9 56 8.7	69 7 4	WFC	IMAGE	ALL	F785LP		1	1800	2227	2		2
0953+4749	9 56 25.2	47 34 44	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
0953+4749	9 56 25.2	47 34 44	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
NEWEGOB-27NEWHIP-27	9 56 52.5	41 15 40	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-27NEWHIP-27	9 56 52.5	41 15 40	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
NEWEGOB-28NEWHIP-28	9 56 52.5	41 15 40	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-28NEWHIP-28	9 56 52.5	41 15 40	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
SBS0953+549	9 57 14.7	54 40 18	PC	IMAGE	ALL	F555W		1	260	3159	0		1
NEWHIP-27	9 57 30.1	41 11 39	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-27	9 57 30.1	41 11 39	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
POINTNEWEGOB-27NEWHIP-27	9 57 40.4	41 23 34	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-27NEWHIP-27	9 57 40.4	41 23 34	S/C	POINTING	V1			1	1	4145	3	CON	1
NEWHIP-28	9 57 41.1	41 3 20	FGS	POS	3	F5ND		1	51	2861	2	CON	2
NEWHIP-28	9 57 41.1	41 3 20	FGS	POS	3	F5ND		1	51	4145	3	CON	2
POINTNEWEGOB-28NEWHIP-28	9 58 1.7	41 14 33	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-28NEWHIP-28	9 58 1.7	41 14 33	S/C	POINTING	V1			1	1	4145	3	CON	1
OK492	9 58 19.7	47 25 8	PC	IMAGE	ALL	F555W		1	260	3159	0		1
PC0955+4717	9 58 45.5	47 3 24	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0956+1217	9 58 52.2	12 2 45	PC	IMAGE	ALL	F555W		1	260	3159	0		1
MARK413	9 59 15.9	31 42 0	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
0957-055	9 59 33.6	-5 50 5	PC	IMAGE	ALL	F555W		1	240	4027	1		1
SBS0957+557	10 1 9.5	55 28 37	PC	IMAGE	ALL	F555W		1	260	3159	0		1
NGC3079-U2	10 1 9.8	55 28 32	FOS/RD	ACQ/BINA	4.3	MIRROR		1	27	3676	2	ACQ	1
NGC3079-U2	10 1 9.8	55 28 32	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	27	3676	2	ACQ	1
NGC3079-U2	10 1 9.8	55 28 32	FOS/RD	ACCUM	0.25X2.0	G270H	2759	1	3600	3676	2		1
MARK132	10 1 29.8	54 54 40	PC	IMAGE	ALL	F555W		1	260	3159	0		1
0959-075	10 1 47.8	-7 46 20	PC	IMAGE	ALL	F555W		1	240	4027	1		1
3C234	10 1 49.6	28 47 9	FOC/96	IMAGE	512X1024	F320W POL0		1	606	3790	2		1
3C234	10 1 49.6	28 47 9	FOC/96	IMAGE	512X1024	F320W POL60		1	606	3790	2		1
3C234	10 1 49.6	28 47 9	FOC/96	IMAGE	512X1024	F320W POL120		1	606	3790	2		1
UGC5387	10 1 58.4	55 40 51	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC3079-UB4	10 2 5.6	55 42 57	FOS/BL	ACQ/BINA	4.3	MIRROR		1	103	2644	1	ACQ	1
NGC3079-UB4	10 2 5.6	55 42 57	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	103	2644	1	ACQ	1
NGC3079-UB4	10 2 5.6	55 42 57	FOS/BL	ACCUM	0.25X2.0	G130H	1379	1	15500	2644	1		1
ESO-1000-2555	10 3 4.0	-26 9 22	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
0959+68W1	10 3 6.8	68 13 17	FOS/BL	RAPID	1.0	G160L	1840	1	600	3791	2		1
0959+68W1	10 3 6.8	68 13 17	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	3791	2	ACQ	1
0959+68W1	10 3 6.8	68 13 17	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	3791	2	ACQ	1
0959+68W1	10 3 6.8	68 13 17	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5862	3791	2		1
0959+68W1	10 3 6.8	68 13 17	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1782	3791	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
UGC5398	10 3 19.2	68 43 59	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
TON28	10 4 2.6	28 55 35	FOS/BL	ACQ/BINA	4.3	MIRROR		1	15	3418	1	ACQ	1
TON28	10 4 2.6	28 55 35	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
TON28	10 4 2.6	28 55 35	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2880	2424	1		1
TON28	10 4 2.6	28 55 35	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	19500	3418	1		1
TON28	10 4 2.6	28 55 35	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	2424	1	ACQ	1
TON28	10 4 2.6	28 55 35	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1080	2424	1		1
TON28	10 4 2.6	28 55 35	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	2	3418	1	ACQ	1
1002-249	10 4 46.6	-25 7 55	PC	IMAGE	ALL	F555W		1	240	4027	1		1
NGC3115	10 5 13.9	-7 43 11	PC	IMAGE	P6	F555W		1	30	2600	1		1
NGC3115	10 5 13.9	-7 43 11	PC	IMAGE	P6	F555W		2	120	2600	1		1
NGC3115	10 5 13.9	-7 43 11	PC	IMAGE	P6	F785LP		1	30	2600	1		1
NGC3115	10 5 13.9	-7 43 11	PC	IMAGE	P6	F785LP		2	120	2600	1		1
MARK135	10 6 4.3	53 42 53	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
1003-026	10 6 9.8	-2 51 45	PC	IMAGE	ALL	F555W		1	240	4027	1		1
1003-026	10 6 9.8	-2 51 38	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
1003-026	10 6 9.8	-2 51 38	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
OY-CAR	10 6 22.5	-70 14 5	FOS/BL	RAPID	1.0	G160L	1500	1	1440	2380	1		14
OY-CAR	10 6 22.5	-70 14 5	FOS/BL	RAPID	1.0	G160L	1500	1	2340	3820	1		14
OY-CAR	10 6 22.5	-70 14 5	FOS/BL	RAPID	1.0	G160L	1500	1	2340	4164	1		2
OY-CAR	10 6 22.5	-70 14 5	FOS/BL	ACQ/BINA	4.3	MIRROR		1	3	3820	1	ACQ	14
OY-CAR	10 6 22.5	-70 14 5	FOS/BL	ACQ/BINA	4.3	MIRROR		1	3	4164	1	ACQ	2
OY-CAR	10 6 22.5	-70 14 5	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	2380	1	ACQ	14
NGC3125	10 6 33.4	-29 56 10	FOS/BL	ACCUM	1.0	G130H		1	5400	4122	2	CON	2
NGC3125	10 6 33.4	-29 56 10	FOS/BL	ACCUM	1.0	G190H		1	1900	4122	2	CON	2
NGC3125	10 6 33.4	-29 56 10	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	1	4122	2	ACQ CON	2
NGC3125	10 6 33.4	-29 56 10	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	1	4122	2	ACQ CON	2
NGC3125	10 6 33.4	-29 56 10	FOC/48	IMAGE	512X512	F130LP F140W		1	500	3810	2		1
1004+130	10 7 26.1	12 48 56	HRS	ACCUM	2.0	G270M	2801	3	960	2553	1		1
1004+130	10 7 26.1	12 48 56	HRS	ACCUM	2.0	G160M	1550	13	914	2553	1		1
ESO-1006-2849	10 9 7.4	-29 3 47	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
4C41.21	10 10 27.5	41 32 39	FOS/BL	RAPID	1.0	G160L	1840	1	600	3791	2		1
4C41.21	10 10 27.5	41 32 39	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	3791	2	ACQ	1
4C41.21	10 10 27.5	41 32 39	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	3791	2	ACQ	1
4C41.21	10 10 27.5	41 32 39	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5700	3791	2		1
4C41.21	10 10 27.5	41 32 39	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1920	3791	2		1
1008-055	10 10 37.1	-5 50 9	PC	IMAGE	ALL	F555W		1	240	4027	1		1
PG1008+133	10 11 10.8	13 4 12	PC	IMAGE	ALL	F555W		1	260	3159	0		1
PKS1009-321	10 11 56.1	-32 23 36	PC	IMAGE	ALL	F555W		1	240	4027	1		1
E1006+817	10 12 41.0	81 30 34	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
E1006+817	10 12 41.0	81 30 34	FOS/RD	ACQ/BINA	4.3	MIRROR		1	9	4125	3	ACQ CON	1
E1006+817	10 12 41.0	81 30 34	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
E1006+817	10 12 41.0	81 30 34	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6960	4125	3	CON	1
E1006+817	10 12 41.0	81 30 34	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2340	4125	3	CON	1
H1011+091	10 13 41.8	8 51 26	PC	IMAGE	ALL	F555W		1	260	3159	0		1
ESO-1012-2837	10 14 42.2	-28 52 15	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1013+00	10 15 49.0	0 20 20	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
1013+00	10 15 49.0	0 20 20	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
RW-LMI	10 16 2.1	30 34 19	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
RW-LMI	10 16 2.1	30 34 19	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
IY-HYA	10 17 0.1	-14 39 30	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
IY-HYA	10 17 0.1	-14 39 30	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
MARK629	10 17 20.0	15 29 21	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
HD89353	10 18 7.7	-28 59 32	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD89353	10 18 7.7	-28 59 32	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
UGC5557	10 18 17.0	41 25 27	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
DM+20-2465	10 19 36.4	19 52 12	HRS	RAPID	2.0	G140L	1313	1	300	3240	0		24
DM+20-2465	10 19 36.4	19 52 12	HRS	RAPID	2.0	G140L	1533	1	300	3240	0		24
DM+20-2465	10 19 36.4	19 52 12	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	230	3240	0	ACQ	1
UGC5572	10 19 54.9	45 32 59	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q1017+280	10 19 54.9	27 45 55	PC	IMAGE	ALL	F555W		1	100	2350	1		1
Q1017+280	10 19 54.9	27 45 55	PC	IMAGE	ALL	F555W		1	350	2350	1		1
1017+1055	10 20 10.0	10 40 2	PC	IMAGE	ALL	F555W		1	260	3156	0		1
1017+1055	10 20 10.0	10 40 2	PC	IMAGE	ALL	F555W		1	240	4017	1		1
IRAS10197-5750	10 21 33.5	-58 5 51	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
IRAS10197-5750	10 21 33.5	-58 5 51	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
HD303822	10 23 19.6	-59 32 6	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
HD303822	10 23 19.6	-59 32 6	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
4C19.34	10 24 44.9	19 12 20	FOS/BL	ACQ/BINA	4.3	MIRROR		1	67	2424	1	ACQ	1
4C19.34	10 24 44.9	19 12 20	FOS/BL	RAPID	1.0	G160L	1837	1	1649	2424	1		1
UGC5637	10 25 5.5	17 9 41	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
MARK144	10 26 53.8	44 0 16	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
SAO099132	10 27 12.2	11 19 2	PC	IMAGE	P7	F718M	7120	1	0	2798	1		1
SAO099132	10 27 12.2	11 19 2	PC	IMAGE	P7	F368M	3577	1	7	2798	1		1
ABELL1020	10 27 49.6	10 26 31	PC	IMAGE	PC6	F555W		3	700	3912	2		1
ESO-1025-4339	10 27 51.6	-43 54 8	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
MRK33	10 32 31.8	54 24 1	FOS/BL	ACCUM	1.0	G190H		1	1000	4122	2	CON	1
MRK33	10 32 31.8	54 24 1	FOS/BL	ACCUM	1.0	G130H		1	2600	4122	2	CON	1
MRK33	10 32 31.8	54 24 1	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	1	4122	2	ACQ CON	1
MRK33	10 32 31.8	54 24 1	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	1	4122	2	ACQ CON	1
MRK33	10 32 31.8	54 24 1	FOC/48	IMAGE	512X512	F130LP F140W		1	400	3810	2		1
HD91316	10 32 48.6	9 18 24	HRS	ACCUM	0.25	G160M	1312	2	420	3746	2		1
HD091316	10 32 48.7	9 18 24	HRS	ACCUM	0.25	G160M	1175	1	558	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	ACCUM	0.25	G160M	1290	1	126	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	ACCUM	0.25	G160M	1398	1	216	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	ACCUM	0.25	G160M	1608	1	306	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	IMAGE	2.0	MIRROR-A2		1	96	2251	1		2
HD091316	10 32 48.7	9 18 24	HRS	ACCUM	0.25	G160M	1554	1	328	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	ACCUM	0.25	G160M	1663	1	301	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	ACCUM	0.25	ECH-B	2324	1	94	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	WSCAN	0.25	ECH-B	1744	1	405	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	WSCAN	0.25	ECH-B	1807	1	486	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	WSCAN	0.25	ECH-B	1827	1	405	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	WSCAN	0.25	ECH-B	1858	1	387	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	WSCAN	0.25	ECH-B	2059	1	211	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	WSCAN	0.25	ECH-B	2519	1	157	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2251	1	ACQ	2
HD091316	10 32 48.7	9 18 24	HRS	ACCUM	0.25	ECH-B	2325	1	94	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	ACCUM	0.25	ECH-B	2326	1	94	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	WSCAN	0.25	ECH-B	2484	1	144	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	ACCUM	0.25	G160M	1133	1	688	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	ACCUM	0.25	G160M	1249	1	166	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	ACCUM	0.25	G160M	1345	1	148	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	WSCAN	0.25	ECH-B	2026	1	198	2251	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD091316	10 32 48.7	9 18 24	HRS	WSCAN	0.25	ECH-B	2249	1	85	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	WSCAN	0.25	ECH-B	2799	1	99	2251	1		1
HD091316	10 32 48.7	9 18 24	HRS	WSCAN	0.25	ECH-B	2371	1	112	2251	1		1
RHO-LEO	10 32 48.7	9 18 24	WFC	IMAGE	W1	F284W	2866	1	0	3365	1		1
RHO-LEO	10 32 48.7	9 18 24	WFC	IMAGE	W1	F889N	8888	1	0	3365	1		1
ESO-1033-2429	10 35 23.3	-24 45 13	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1033-03	10 36 23.7	-3 43 21	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
1033-03	10 36 23.7	-3 43 21	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
1033+1342	10 36 26.9	13 26 52	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1033+1342	10 36 26.9	13 26 52	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
PG1034+001	10 37 3.9	-0 8 20	HRS	ACCUM	2.0	G160M	1550	1	300	2593	1		1
PG1034+001	10 37 3.9	-0 8 20	HRS	ACCUM	2.0	G160M	1640	1	300	2593	1		1
PG1034+001	10 37 3.9	-0 8 20	HRS	IMAGE	2.0	MIRROR-N2		1	102	2593	1		1
PG1034+001	10 37 3.9	-0 8 20	HRS	ACCUM	2.0	G160M	1203	1	300	2593	1		1
PG1034+001	10 37 3.9	-0 8 20	HRS	ACCUM	2.0	G160M	1239	1	600	2593	1		1
PG1034+001	10 37 3.9	-0 8 20	HRS	ACCUM	2.0	G160M	1387	1	300	2593	1		1
PG1034+001	10 37 3.9	-0 8 20	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	2593	1	ACQ	1
ESO-1034-2725	10 37 12.6	-27 41 1	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC3310	10 38 45.9	53 30 12	FOS/BL	ACCUM	1.0	G190H		1	800	3591	2	CON	1
NGC3310	10 38 45.9	53 30 12	FOS/BL	ACCUM	1.0	G130H		1	1700	3591	2	CON	1
NGC3310	10 38 45.9	53 30 12	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	0	3591	2	ACQ CON	1
NGC3310	10 38 45.9	53 30 12	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	0	3591	2	ACQ CON	1
NGC3310	10 38 45.9	53 30 12	FOC/48	IMAGE	512X512	F130LP F140W		1	200	3591	2	ACQ	1
UGC5789	10 39 9.4	41 41 14	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
TO10370-271	10 39 21.8	-27 19 16	PC	IMAGE	ALL	F555W		1	260	3156	0		1
ESO-1038-4818	10 40 18.0	-48 34 9	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
TO10382-272	10 40 32.2	-27 27 49	PC	IMAGE	ALL	F555W		1	260	3156	0		1
4C06.41	10 41 17.2	6 10 17	PC	IMAGE	ALL	F555W		1	260	3156	0		1
4C06.41	10 41 17.2	6 10 17	FOS/BL	ACQ/BINA	4.3	MIRROR		1	35	2424	1	ACQ	1
4C06.41	10 41 17.2	6 10 17	FOS/BL	RAPID	1.0	G160L	1837	1	1500	2424	1		1
1038+528	10 41 48.9	52 33 55	PC	IMAGE	ALL	F555W		1	240	4027	1		1
3C245.0	10 42 44.6	12 3 31	FOS/BL	RAPID	1.0	G160L	1837	1	1740	2424	1		1
3C245.0	10 42 44.6	12 3 31	FOS/BL	ACQ/BINA	4.3	MIRROR		1	56	2424	1	ACQ	1
SBS1039+582	10 42 55.7	57 55 50	PC	IMAGE	ALL	F555W		1	260	3156	0		1
UGC5840	10 43 31.1	24 55 20	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC5850	10 43 57.7	11 42 15	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD93308-NW	10 45 3.6	-59 41 4*	FOS/BL	ACCUM	0.3	G570H	4880	1	500	2338	1		1
HD93308-NW	10 45 3.6	-59 41 4*	FOS/BL	ACCUM	0.3	G130H	1410	1	2400	2338	1		1
HD93308-NW	10 45 3.6	-59 41 4*	FOS/BL	ACCUM	0.3	G270H	2765	1	500	2338	1		1
HD93308-NW	10 45 3.6	-59 41 4*	FOS/BL	ACCUM	0.3	G400H	4025	1	700	2338	1		1
HD93308-NW	10 45 3.6	-59 41 4*	FOS/BL	ACCUM	0.3	G190H	1945	1	1800	2338	1		1
HD93308-PKUP-OFFSET	10 45 3.6	-59 41 4	FOS/BL	ACCUM	0.5	G400H	4030	1	120	2338	1		1
HD93308-PKUP-OFFSET	10 45 3.6	-59 41 4	FOS/BL	ACCUM	0.5	G570H	4880	1	120	2338	1		1
HD93308-PKUP-OFFSET	10 45 3.6	-59 41 4	FOS/BL	ACCUM	0.5	G270H	2765	1	120	2338	1		1
HD93308-PKUP-OFFSET	10 45 3.6	-59 41 4	FOS/BL	ACQ/PEAK	0.3	G570H	4710	1	2	2338	1	ACQ	1
HD93308-PKUP-OFFSET	10 45 3.6	-59 41 4	FOS/BL	ACQ/PEAK	0.3	G570H	4710	1	6	2338	1	ACQ	1
HD93308-PKUP-OFFSET	10 45 3.6	-59 41 4	FOS/BL	ACQ/PEAK	0.5	G570H	4710	1	1	2338	1	ACQ	1
HD93308-PKUP-OFFSET	10 45 3.6	-59 41 4	FOS/BL	ACQ/PEAK	1.0	G570H	4710	1	0	2338	1	ACQ	1
HD93308-SE	10 45 3.6	-59 41 4*	FOS/BL	ACCUM	0.3	G570H	4880	1	500	2338	1		1
HD93308-SE	10 45 3.6	-59 41 4*	FOS/BL	ACCUM	0.3	G130H	1410	1	2400	2338	1		1
HD93308-SE	10 45 3.6	-59 41 4*	FOS/BL	ACCUM	0.3	G270H	2765	1	500	2338	1		1
HD93308-SE	10 45 3.6	-59 41 4*	FOS/BL	ACCUM	0.3	G400H	4025	1	700	2338	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD93308-SE	10 45 3.6	-59 41 4*	FOS/BL	ACCUM	0.3	G190H	1945	1	1800	2338	1		1
HD93308-NE	10 45 3.7	-59 41 4*	FOS/BL	ACCUM	0.3	G400H	4030	1	500	2338	1		1
HD93308-NE	10 45 3.7	-59 41 4*	FOS/BL	ACCUM	0.3	G570H	4880	1	500	2338	1		1
HD93308-NE	10 45 3.7	-59 41 4*	FOS/BL	ACCUM	0.3	G270H	2765	1	500	2338	1		1
1042+3158	10 45 23.4	31 42 13	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1042+3158	10 45 23.4	31 42 13	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
UGC5873	10 46 36.8	63 13 28	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC5882	10 46 45.6	11 49 18	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC3377	10 47 42.3	13 59 9	PC	IMAGE	P6	F555W		2	50	2600	1		1
NGC3377	10 47 42.3	13 59 9	PC	IMAGE	P6	F555W		1	12	2600	1		1
NGC3377	10 47 42.3	13 59 9	PC	IMAGE	P6	F555W		1	350	2600	1		1
NGC3377	10 47 42.3	13 59 9	PC	IMAGE	P6	F785LP		2	50	2600	1		1
NGC3377	10 47 42.3	13 59 9	PC	IMAGE	P6	F785LP		1	12	2600	1		1
NGC3393	10 48 23.6	-25 9 41	PC	IMAGE	ALL	F284W		1	600	2306	1	ACQ	1
NGC3393	10 48 23.6	-25 9 41	PC	IMAGE	ALL	F547M		1	300	2306	1	ACQ	1
NGC3393	10 48 23.6	-25 9 41	PC	IMAGE	ALL	F502N		1	160	2306	1	ACQ	1
NGC3393	10 48 23.6	-25 9 41	PC	IMAGE	ALL	F664N		1	120	2306	1	ACQ	1
NGC3393-NUC	10 48 23.6	-25 9 41	HRS	ACCUM	2.0	G160M	1231	4	1010	2306	1		1
NGC3393-NUC	10 48 23.6	-25 9 41	HRS	ACCUM	2.0	G160M	1231	4	1010	3982	1		1
NGC3393-NUC	10 48 23.6	-25 9 41	HRS	ACCUM	2.0	G160M	1568	10	1010	2306	1		1
NGC3393-NUC	10 48 23.6	-25 9 41	HRS	ACCUM	2.0	G160M	1568	10	1010	3982	1		1
NGC3393-NUC	10 48 23.6	-25 9 41	FOS/BL	ACQ/BINA	4.3	MIRROR		1	135	3982	1	ACQ	1
NGC3393-NUC	10 48 23.6	-25 9 41	FOS/RD	ACCUM	1.0	G570H	5691	1	600	2306	1		1
NGC3393-NUC	10 48 23.6	-25 9 41	FOS/RD	ACCUM	1.0	G570H	5691	1	600	3982	1		1
NGC3393-NUC	10 48 23.6	-25 9 41	FOS/BL	ACCUM	1.0	G130H	1379	1	16800	2306	1		1
NGC3393-NUC	10 48 23.6	-25 9 41	FOS/BL	ACCUM	1.0	G190H	1944	1	6650	2306	1		1
NGC3393-NUC	10 48 23.6	-25 9 41	FOS/RD	ACCUM	1.0	G270H	2753	1	3440	2306	1		1
NGC3393-NUC	10 48 23.6	-25 9 41	FOS/RD	ACCUM	1.0	G400H	4013	1	1400	2306	1		1
NGC3393-NUC	10 48 23.6	-25 9 41	FOS/BL	ACCUM	1.0	G130H	1379	1	16800	3982	1		1
NGC3393-NUC	10 48 23.6	-25 9 41	FOS/BL	ACCUM	1.0	G190H	1944	1	6650	3982	1		1
NGC3393-NUC	10 48 23.6	-25 9 41	FOS/RD	ACCUM	1.0	G270H	2753	1	3440	3982	1		1
NGC3393-NUC	10 48 23.6	-25 9 41	FOS/RD	ACCUM	1.0	G400H	4013	1	1400	3982	1		1
NGC3393-OFFSET	10 48 23.6	-25 9 41*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	30	2306	1	ACQ	1
NGC3393-OFFSET	10 48 23.6	-25 9 41*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	30	3982	1	ACQ	2
NGC3393-OFFSET	10 48 23.6	-25 9 41*	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	74	2306	1	ACQ	1
NGC3393-OFFSET	10 48 23.6	-25 9 41*	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	74	3982	1	ACQ	1
NGC3393-EARLY	10 48 27.1	-25 9 52	WFC	IMAGE	ALL	F547M		1	0	2306	1	ACQ	1
4C60.15	10 48 33.8	60 8 45	PC	IMAGE	ALL	F555W		1	260	3156	0		1
BD+38D2182	10 49 12.9	38 0 14	HRS	ACCUM	0.25	G160M	1550	4	1800	3706	2		1
BD+38D2182	10 49 12.9	38 0 14	HRS	ACCUM	0.25	G160M	1249	2	1440	3706	2		1
BD+38D2182	10 49 12.9	38 0 14	HRS	ACCUM	0.25	G160M	1403	3	1200	3706	2		1
MARK417	10 49 31.0	22 57 53	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
MARK154	10 50 47.2	50 10 9	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
PKS1049-09	10 51 29.9	-9 18 10	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
PKS1049-09	10 51 29.9	-9 18 10	FOS/RD	ACQ/BINA	4.3	MIRROR		1	9	4125	3	ACQ CON	1
PKS1049-09	10 51 29.9	-9 18 10	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
PKS1049-09	10 51 29.9	-9 18 10	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5424	4125	3	CON	1
PKS1049-09	10 51 29.9	-9 18 10	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2094	4125	3	CON	1
BD-20D3283	10 51 37.3	-21 15 1	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
BD-20D3283	10 51 37.3	-21 15 1	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PG1049-005	10 51 51.5	-0 51 18	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	2424	1	ACQ	1
PG1049-005	10 51 51.5	-0 51 18	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PG1049-005	10 51 51.5	-0 51 18	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1206	2424	1		1
PG1049-005	10 51 51.5	-0 51 18	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	3425	2424	1		1
UGC5986	10 52 31.1	36 37 9	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1050-00	10 53 20.4	-0 15 8	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1050-00	10 53 20.4	-0 15 8	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
HD946160-CALIB	10 55 25.3	-0 48 47	PC	IMAGE	PC6	F555W		4	0	3769	2		2
AG-CARINAE	10 56 11.5	-60 27 13	FOS/BL	ACCUM	0.5	G270H		1	800	3882	1		4
AG-CARINAE	10 56 11.5	-60 27 13	FOS/BL	ACQ/PEAK	0.3	G270H		1	0	3882	1	ACQ	1
AG-CARINAE	10 56 11.5	-60 27 13	FOS/BL	ACQ/PEAK	0.5	G270H		1	0	3882	1	ACQ	1
AG-CARINAE	10 56 11.5	-60 27 13	FOS/BL	ACQ/PEAK	1.0	G270H		1	0	3882	1	ACQ	1
AG-CARINAE	10 56 11.5	-60 27 13	FOS/BL	ACQ/PEAK	4.3	G270H		1	0	3882	1	ACQ	1
HD94910	10 56 11.5	-60 27 13	FOS/BL	ACCUM	1.0	G270H		1	800	3663	1		8
HD94910	10 56 11.5	-60 27 13	FOS/BL	ACQ/PEAK	0.3	G270H		1	0	3663	1	ACQ	2
HD94910	10 56 11.5	-60 27 13	FOS/BL	ACQ/PEAK	0.5	G270H		1	0	3663	1	ACQ	2
HD94910	10 56 11.5	-60 27 13	FOS/BL	ACQ/PEAK	1.0	G270H		1	0	3663	1	ACQ	2
HD94910	10 56 11.5	-60 27 13	FOS/BL	ACQ/PEAK	4.3	G270H		1	0	3663	1	ACQ	2
PKS1055+20	10 58 17.9	19 51 51	FOS/BL	ACQ/BINA	4.3	MIRROR		1	35	2424	1	ACQ	1
PKS1055+20	10 58 17.9	19 51 51	FOS/BL	RAPID	1.0	G160L	1837	1	1200	2424	1		1
SBS1055+584	10 59 2.1	58 8 49	PC	IMAGE	ALL	F555W		1	260	3156	0		1
UGC6079	11 0 23.9	28 58 30	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
INCA221-61	11 2 39.7	-32 44 18	FGS	POS	3	PUPIL		1	51	2565	2	CON	2
INCA221-61	11 2 39.7	-32 44 18	FGS	POS	3	PUPIL		1	51	4148	3	CON	2
POINT1101-325INCA221-61	11 2 41.6	-32 56 41	S/C	POINTING	V1			1	1	2565	2	CON	1
POINT1101-325INCA221-61	11 2 41.6	-32 56 41	S/C	POINTING	V1			1	1	4148	3	CON	1
ESO-1100-2249	11 3 24.0	-23 5 11	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q1101-264	11 3 25.3	-26 45 15	PC	IMAGE	ALL	F555W		1	100	2350	1		1
Q1101-264	11 3 25.3	-26 45 15	PC	IMAGE	ALL	F555W		1	350	2350	1		1
1101-325INCA221-61	11 3 31.2	-32 51 11	FGS	POS	3	PUPIL		1	51	2565	2	CON	3
1101-325INCA221-61	11 3 31.2	-32 51 11	FGS	POS	3	PUPIL		1	51	4148	3	CON	3
PKS1101-325	11 3 31.3	-32 51 16	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
PKS1101-325	11 3 31.3	-32 51 16	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	4125	3	ACQ CON	1
PKS1101-325	11 3 31.3	-32 51 16	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
PKS1101-325	11 3 31.3	-32 51 16	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6000	4125	3	CON	1
PKS1101-325	11 3 31.3	-32 51 16	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2400	4125	3	CON	1
NEWHIP-44	11 3 35.3	38 14 2	FGS	POS	3	PUPIL		1	51	2862	2	CON	2
NEWHIP-44	11 3 35.3	38 14 2	FGS	POS	3	PUPIL		1	51	4144	3	CON	2
MARK420	11 3 40.2	37 55 44	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
POINTNEWEGOC-44NEWHIP-44	11 3 48.3	38 2 10	S/C	POINTING	V1			1	1	2862	2	CON	1
POINTNEWEGOC-44NEWHIP-44	11 3 48.3	38 2 10	S/C	POINTING	V1			1	1	4144	3	CON	1
UGC6134	11 4 23.6	4 49 44	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NEWEGOC-44NEWHIP-44	11 4 27.3	38 12 31	FGS	POS	3	PUPIL		1	51	2862	2	CON	3
NEWEGOC-44NEWHIP-44	11 4 27.3	38 12 31	FGS	POS	3	PUPIL		1	51	4144	3	CON	3
NEWEGOC-45NEWHIP-45	11 4 27.3	38 12 31	FGS	POS	3	PUPIL		1	51	2862	2	CON	3
NEWEGOC-45NEWHIP-45	11 4 27.3	38 12 31	FGS	POS	3	PUPIL		1	51	4144	3	CON	3
NEWEGOC-46NEWHIP-46	11 4 27.3	38 12 31	FGS	POS	3	PUPIL		1	51	2862	2	CON	3
NEWEGOC-46NEWHIP-46	11 4 27.3	38 12 31	FGS	POS	3	PUPIL		1	51	4144	3	CON	3
NEWEGOC-47NEWHIP-47	11 4 27.3	38 12 31	FGS	POS	3	PUPIL		1	51	2862	2	CON	3
NEWEGOC-47NEWHIP-47	11 4 27.3	38 12 31	FGS	POS	3	PUPIL		1	51	4144	3	CON	3

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NEWEGOC-48NEWHIP-48	11 4 27.3	38 12 31	FGS	POS	3	PUPIL		1	51	2862	2	CON	3
NEWEGOC-48NEWHIP-48	11 4 27.3	38 12 31	FGS	POS	3	PUPIL		1	51	4144	3	CON	3
MARK421	11 4 27.4	38 12 31	HRS	ACCUM	2.0	G160M	1240	8	1920	3584	2		1
NEWHIP-45	11 4 31.3	38 14 29	FGS	POS	3	F5ND		1	51	2862	2	CON	2
NEWHIP-45	11 4 31.3	38 14 29	FGS	POS	3	F5ND		1	51	4144	3	CON	2
NEWHIP-48	11 4 43.9	38 14 48	FGS	POS	3	F5ND		1	51	2862	2	CON	2
NEWHIP-48	11 4 43.9	38 14 48	FGS	POS	3	F5ND		1	51	4144	3	CON	2
NEWHIP-46	11 4 57.3	38 24 38	FGS	POS	3	F5ND		1	51	2862	2	CON	2
NEWHIP-46	11 4 57.3	38 24 38	FGS	POS	3	F5ND		1	51	4144	3	CON	2
MRK36	11 4 58.5	29 8 19	FOS/BL	ACCUM	1.0	G130H		1	10600	4122	2	CON	1
MRK36	11 4 58.5	29 8 19	FOS/BL	ACCUM	1.0	G190H		1	3600	4122	2	CON	1
MRK36	11 4 58.5	29 8 19	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	1	4122	2	ACQ CON	1
MRK36	11 4 58.5	29 8 19	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	1	4122	2	ACQ CON	1
MRK36	11 4 58.5	29 8 19	FOC/48	IMAGE	512X512	F130LP F140W		1	600	3810	2		1
MARK162	11 5 8.2	44 44 50	PC	IMAGE	PC6	F785LP		1	230	4093	2		1
POINTNEWEGOC-45NEWHIP-45	11 5 9.5	38 5 9	S/C	POINTING	V1			1	1	2862	2	CON	1
POINTNEWEGOC-45NEWHIP-45	11 5 9.5	38 5 9	S/C	POINTING	V1			1	1	4144	3	CON	1
POINTNEWEGOC-48NEWHIP-48	11 5 12.0	38 4 36	S/C	POINTING	V1			1	1	2862	2	CON	1
POINTNEWEGOC-48NEWHIP-48	11 5 12.0	38 4 36	S/C	POINTING	V1			1	1	4144	3	CON	1
POINTNEWEGOC-47NEWHIP-47	11 5 16.8	38 5 8	S/C	POINTING	V1			1	1	2862	2	CON	1
POINTNEWEGOC-47NEWHIP-47	11 5 16.8	38 5 8	S/C	POINTING	V1			1	1	4144	3	CON	1
POINTNEWEGOC-46NEWHIP-46	11 5 26.2	38 14 43	S/C	POINTING	V1			1	1	2862	2	CON	1
POINTNEWEGOC-46NEWHIP-46	11 5 26.2	38 14 43	S/C	POINTING	V1			1	1	4144	3	CON	1
NEWHIP-47	11 5 32.2	38 16 33	FGS	POS	3	PUPIL		1	51	2862	2	CON	2
NEWHIP-47	11 5 32.2	38 16 33	FGS	POS	3	PUPIL		1	51	4144	3	CON	2
ST-LMI	11 5 39.7	25 6 29	HSP/VIS	PRISM	1.0	F551W/F240W		1	1800	3607	2		1
ST-LMI	11 5 39.8	25 6 29	FOS/BL	RAPID	1.0	G160L		1	1680	2686	1		1
ST-LMI	11 5 39.8	25 6 29	FOS/BL	RAPID	1.0	G160L		1	2100	2686	1		1
ST-LMI	11 5 39.8	25 6 29	FOS/BL	ACQ/BINA	4.3	MIRROR		1	60	2686	1	ACQ	1
UGC6150	11 5 49.3	-0 2 2	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD96675	11 5 58.1	-76 7 49	HRS	ACCUM	0.25	G160M	1265	4	1050	3759	2		1
HD96675	11 5 58.1	-76 7 49	HRS	ACCUM	0.25	G160M	1338	4	1050	3759	2		1
HD96675	11 5 58.1	-76 7 49	HRS	ACCUM	0.25	G160M	1462	8	1050	3759	2		1
PKS1103-006	11 6 31.7	-0 52 53	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	3858	2	ACQ	1
PKS1103-006	11 6 31.7	-0 52 53	FOS/RD	ACCUM	4.3	G190H	1954	1	498	3858	2		1
PKS1103-006	11 6 31.7	-0 52 53	FOS/RD	ACCUM	4.3	G270H	2767	1	240	3858	2		1
PKS1103-006	11 6 31.8	-0 52 53	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
PKS1103-006	11 6 31.8	-0 52 53	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	4125	3	ACQ CON	1
PKS1103-006	11 6 31.8	-0 52 53	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
PKS1103-006	11 6 31.8	-0 52 53	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6048	4125	3	CON	1
PKS1103-006	11 6 31.8	-0 52 53	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2424	4125	3	CON	1
MC1104+167	11 7 15.0	16 28 2	FOS/BL	RAPID	1.0	G160L	1840	1	600	3791	2		1
MC1104+167	11 7 15.0	16 28 2	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	4050	3791	2		1
MC1104+167	11 7 15.0	16 28 2	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1290	3791	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
MC1104+167	11 7 15.0	16 28 2	FOS/RD	ACQ/BINA	4.3	MIRROR		1	6	3791	2	ACQ	1
MC1104+167	11 7 15.0	16 28 2	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3791	2	ACQ	1
SAO62415	11 7 30.4	38 57 5	PC	IMAGE	P6	F555W		2	0	2432	1		1
SAO62415	11 7 30.4	38 57 5	PC	IMAGE	P6	F785LP		2	0	2432	1		1
UGC6225	11 11 30.9	55 40 29	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1110+01	11 12 46.3	0 49 59	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1110+01	11 12 46.3	0 49 59	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
ESO-1110-2629	11 13 17.0	-26 45 18	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD97603	11 14 6.5	20 31 25	HRS	ACCUM	2.0	G160M	1335	1	870	3737	2		1
3C254	11 14 38.7	40 37 20	FOS/RD	ACCUM	4.3	G400H	4000	1	1152	2578	1		1
3C254	11 14 38.7	40 37 20	FOS/RD	ACCUM	4.3	G190H	1900	1	2220	2578	1		1
3C254	11 14 38.7	40 37 20	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
3C254	11 14 38.7	40 37 20	FOS/RD	ACCUM	4.3	G270H	2700	1	1374	2578	1		1
NGC3603	11 15 7.2	-61 15 35	PC	IMAGE	ALL	F439W		1	1	2441	1		1
NGC3603	11 15 7.2	-61 15 35	PC	IMAGE	ALL	F439W		1	5	2441	1		1
NGC3603	11 15 7.2	-61 15 35	PC	IMAGE	ALL	F469N		1	100	2441	1		1
NGC3603	11 15 7.2	-61 15 35	PC	IMAGE	ALL	F469N		1	15	2441	1		1
NGC3599	11 15 26.9	18 6 37	PC	IMAGE	PC6	F555W		1	80	3912	2		1
NGC3599	11 15 26.9	18 6 37	PC	IMAGE	PC6	F555W		2	400	3912	2		1
NGC3605	11 16 46.6	18 1 0	PC	IMAGE	P6	F555W		2	500	2600	1		1
NGC3605	11 16 46.6	18 1 0	PC	IMAGE	P6	F555W		1	120	2600	1		1
NGC3608	11 16 58.9	18 8 56	PC	IMAGE	PC6	F555W		1	100	3912	2		1
NGC3608	11 16 58.9	18 8 56	PC	IMAGE	PC6	F555W		2	400	3912	2		1
DP-LEO	11 17 16.0	17 57 41	FOS/BL	RAPID	1.0	G160L		1	1800	2686	1		1
DP-LEO	11 17 16.0	17 57 41	FOS/BL	RAPID	1.0	G160L		1	1560	2686	1		1
DP-LEO	11 17 16.0	17 57 41	FOS/BL	RAPID	1.0	G160L		1	2280	2686	1		1
DP-LEO	11 17 16.0	17 57 41	FOS/BL	ACQ/BINA	4.3	MIRROR		1	180	2686	1	ACQ	1
ESO-1115-3232	11 18 16.1	-32 48 42	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC6315	11 18 17.1	53 45 0	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
NGC3610	11 18 25.2	58 47 10	FOS/BL	ACCUM	1.0	G130H		1	10800	3647	2		1
NGC3610	11 18 25.2	58 47 10	FOS/RD	ACCUM	1.0	G190H		1	5940	3647	2		1
NGC3610	11 18 25.2	58 47 10	FOS/RD	ACCUM	1.0	G270H		1	3600	3647	2		1
NGC3610	11 18 25.2	58 47 10	FOS/RD	ACQ/PEAK	1.0	MIRROR		1	30	3647	2	ACQ	1
UGC6328	11 18 55.9	13 5 38	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
SBS1116+603	11 19 14.3	60 4 57	PC	IMAGE	ALL	F555W		1	260	3156	0		1
HD98695	11 20 4.0	-71 59 40	FOS/BL	ACQ/PEAK	1.0	G570H		1	1	2245	1	ACQ	1
HD98695	11 20 4.0	-71 59 40	FOS/BL	ACQ/PEAK	4.3	G570H		1	0	2245	1	ACQ	1
HD98695	11 20 4.0	-71 59 40	FOS/BL	ACQ/PEAK	0.5	G570H		1	2	2245	1	ACQ	1
HD98695	11 20 4.0	-71 59 40	FOS/BL	ACCUM	1.0	G270H		1	844	2245	1		1
HD98695	11 20 4.0	-71 59 40	FOS/BL	ACCUM	4.3	G190H		1	1189	2245	1		1
HD98695	11 20 4.0	-71 59 40	FOS/BL	ACCUM	4.3	G130H	1454	1	2223	2245	1		1
1117-13	11 20 10.3	-13 46 26	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1117-13	11 20 10.3	-13 46 26	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
SBS1117+535	11 20 11.0	53 13 1	PC	IMAGE	ALL	F555W		1	260	3156	0		1
UGC6346	11 20 15.1	12 59 22	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
3C256	11 20 43.1	23 27 55	PC	IMAGE	P8	F336W		2	600	2698	1		1
3C256	11 20 43.1	23 27 55	PC	IMAGE	P8	F413M		2	600	2698	1		1
3C256	11 20 43.1	23 27 55	PC	IMAGE	P8	F413M		4	1800	2698	1		1
3C256	11 20 43.1	23 27 55	PC	IMAGE	P8	F336W		6	1800	2698	1		1
UGC6360	11 21 2.9	53 10 10	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC6385	11 22 18.0	59 4 28	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UM425	11 23 20.7	1 37 47	PC	IMAGE	ALL	F555W		1	240	4027	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
MARK168	11 25 46.5	47 0 3	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
UGC6439	11 26 8.3	43 35 9	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	FOS/BL	ACCUM	1.0	G190H		1	1200	3232	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	FOS/BL	ACCUM	1.0	G270H		1	1200	3232	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	FOS/BL	ACCUM	1.0	G400H		1	1200	3232	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	FOS/BL	ACCUM	1.0	G130H		1	2400	3381	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	FOS/BL	ACCUM	1.0	G190H		1	2400	3381	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	FOS/BL	ACCUM	1.0	G270H		1	2400	3381	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	FOS/BL	ACCUM	1.0	G400H		1	2400	3381	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	HRS	ACCUM	2.0	G140L	1310	1	1200	3232	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	HRS	ACCUM	2.0	G140L	1505	1	1200	3232	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	FOC/96	IMAGE	256X256	F152M		1	1800	3232	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	FOC/96	IMAGE	256X256	F253M		1	1800	3232	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	FOC/96	IMAGE	256X256	F346M		1	1800	3232	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	FOC/96	IMAGE	256X256	F501N		1	1800	3232	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	HRS	ACCUM	2.0	G160M	1537	1	5400	3232	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	HRS	ACCUM	2.0	G160M	1617	1	5400	3232	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	HRS	ACCUM	2.0	G270M	2802	1	2100	3232	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	HRS	ACCUM	2.0	G270M	2852	1	2100	3232	0		1
NOVA-MUS-1991	11 26 26.7	-68 40 33	FOS/BL	ACQ/BINA	4.3	MIRROR		1	5	3232	0	ACQ	1
NOVA-MUS-1991	11 26 26.7	-68 40 33	FOS/BL	ACQ/BINA	4.3	MIRROR		1	15	3381	0	ACQ	1
NOVA-MUS-1991	11 26 26.7	-68 40 33	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	18	3232	0	ACQ	1
MARK423	11 26 48.6	35 15 0	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
UGC6448	11 26 50.4	64 8 18	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
S41124+57	11 27 39.9	56 50 13	PC	IMAGE	ALL	F555W		1	240	4027	1		1
SBS1125+584	11 28 18.1	58 9 10	PC	IMAGE	ALL	F555W		1	240	4027	1		1
POINTNEWEGOD-55NEWHIP-55	11 28 27.7	-4 26 34	S/C	POINTING	V1			1	1	3918	2	CON	1
POINTNEWEGOD-55NEWHIP-55	11 28 27.7	-4 26 34	S/C	POINTING	V1			1	1	4143	3	CON	1
NGC3690	11 28 30.8	58 33 45	FOS/BL	ACCUM	1.0	G190H		1	4000	3591	2	CON	1
NGC3690	11 28 30.8	58 33 45	FOS/BL	ACCUM	1.0	G130H		1	8600	3591	2	CON	1
NGC3690	11 28 30.8	58 33 45	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	0	3591	2	ACQ CON	1
NGC3690	11 28 30.8	58 33 45	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	0	3591	2	ACQ CON	1
NGC3690	11 28 30.8	58 33 45	FOC/48	IMAGE	512X512	F130LP F140W		1	900	3591	2	ACQ	1
NGC3690	11 28 30.9	58 33 45	FOC/48	IMAGE	512X512	F220W		2	900	3792	2		1
IC694	11 28 33.5	58 33 45	FOC/48	IMAGE	512X512	F220W		2	900	3792	2		1
NEWHIP-55	11 29 14.5	-4 27 5	FGS	POS	3	F5ND		1	51	3918	2	CON	2
NEWHIP-55	11 29 14.5	-4 27 5	FGS	POS	3	F5ND		1	51	4143	3	CON	2
NEWEGOD-55NEWHIP-55	11 29 16.7	-4 24 9	FGS	POS	3	PUPIL		1	51	3918	2	CON	3
NEWEGOD-55NEWHIP-55	11 29 16.7	-4 24 9	FGS	POS	3	PUPIL		1	51	4143	3	CON	3
PKS-1127-14	11 30 7.0	-14 49 28	FOS/BL	ACQ/BINA	4.3	MIRROR		1	100	3483	2	ACQ	1
PKS1127-14	11 30 7.0	-14 49 28	PC	IMAGE	ALL	F555W		1	260	3156	0		1
PKS1127-14	11 30 7.0	-14 49 28	FOS/RD	ACQ/BINA	4.3	MIRROR		1	27	3858	2	ACQ	1
PKS1127-14	11 30 7.0	-14 49 28	FOS/RD	ACCUM	4.3	G270H	2767	1	533	3858	2		1
PKS-1127-14-GAL	11 30 7.6	-14 49 24*	FOS/BL	ACCUM	4.3	G190H	1900	1	10800	3483	2		1
SBS1128+574	11 30 49.4	57 9 10	PC	IMAGE	ALL	F555W		1	240	4027	1		1
ESO-1129-3001	11 31 31.8	-30 18 32	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC6516	11 31 53.6	28 21 30	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
MG1131+046	11 31 56.4	4 55 50	PC	IMAGE	ALL	F555W		1	600	2350	1		1
MG1131+046	11 31 56.4	4 55 50	PC	IMAGE	ALL	F555W		1	1300	2350	1		1
UGC6524	11 32 35.0	53 4 5	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD100340	11 32 49.9	5 16 36	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	138	2257	1	ACQ	1
HD100340	11 32 49.9	5 16 36	HRS	IMAGE	2.0	MIRROR-A2		1	774	2257	1		1
HD100340	11 32 49.9	5 16 36	HRS	ACCUM	0.25	G160M	1336	2	1094	2257	1		1
HD100340	11 32 49.9	5 16 36	HRS	ACCUM	0.25	G160M	1539	6	1324	2257	1		1
HD100340	11 32 49.9	5 16 36	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	138	2257	1	ACQ	1
HD100340	11 32 49.9	5 16 36	HRS	ACCUM	0.25	G270M	2600	1	1209	2257	1		1
HD100340	11 32 49.9	5 16 36	HRS	ACCUM	0.25	G160M	1250	3	1209	2257	1		1
HD100340	11 32 49.9	5 16 36	HRS	ACCUM	0.25	G160M	1200	4	1209	2257	1		1
HD100340	11 32 49.9	5 16 36	HRS	ACCUM	0.25	G160M	1860	4	1209	2257	1		1
HD100340	11 32 49.9	5 16 36	HRS	ACCUM	0.25	G160M	1306	2	979	2257	1		1
HD100340	11 32 49.9	5 16 36	HRS	ACCUM	0.25	G160M	1398	4	1497	2257	1		1
UGC6537	11 33 21.2	47 1 45	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1130+106Y	11 33 30.3	10 52 23	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
1130+106Y	11 33 30.3	10 52 23	FOS/RD	ACQ/BINA	4.3	MIRROR		1	12	2424	1	ACQ	1
1130+106Y	11 33 30.3	10 52 23	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
1130+106Y	11 33 30.3	10 52 23	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	4980	2424	1		1
1130+106Y	11 33 30.3	10 52 23	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1698	2424	1		1
ESO-1132-4506	11 35 8.3	-45 22 51	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
MG1136+1346	11 35 59.7	13 46 24	WFC	IMAGE	WF2	F555W		1	300	3654	2		1
MG1136+1346	11 35 59.7	13 46 24	WFC	IMAGE	WF2	F555W		1	8100	3654	2		1
MG1136+1346	11 35 59.7	13 46 24	WFC	IMAGE	WF2	F785LP		1	600	3654	2		1
MG1136+1346	11 35 59.7	13 46 24	WFC	IMAGE	WF2	F785LP		1	15400	3654	2		1
1133+1306	11 36 16.9	12 49 36	PC	IMAGE	ALL	F555W		1	260	3156	0		1
NGC3783	11 39 1.7	-37 44 20	HRS	IMAGE	2.0	MIRROR-N2		1	102	3463	2	ACQ	1
NGC3783	11 39 1.7	-37 44 20	HRS	ACCUM	2.0	G160M	1250	7	1152	3463	2		1
NGC3783	11 39 1.7	-37 44 20	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	40	3463	2	ACQ	1
PKS1136-13	11 39 10.7	-13 50 43	FOS/RD	ACQ/BINA	4.3	MIRROR		1	9	2424	1	ACQ	1
PKS1136-13	11 39 10.7	-13 50 43	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
PKS1136-13	11 39 10.7	-13 50 43	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PKS1136-13	11 39 10.7	-13 50 43	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	4212	2424	1		1
PKS1136-13	11 39 10.7	-13 50 43	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1410	2424	1		1
1136+122	11 39 19.2	11 57 23	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1136+122	11 39 19.2	11 57 23	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
1136+1214	11 39 19.2	11 58 7	PC	IMAGE	ALL	F555W		1	260	3156	0		1
1136+1214	11 39 19.2	11 58 7	PC	IMAGE	ALL	F555W		1	240	4017	1		1
3C263	11 39 57.1	65 47 49	FOS/RD	ACCUM	4.3	G400H	4000	1	204	2578	1		1
3C263	11 39 57.1	65 47 49	FOS/RD	ACCUM	4.3	G270H	2700	1	276	2578	1		1
3C263	11 39 57.1	65 47 49	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
3C263	11 39 57.1	65 47 49	FOS/RD	ACCUM	4.3	G190H	1900	1	533	2578	1		1
3C263.0	11 39 57.1	65 47 49	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
3C263.0	11 39 57.1	65 47 49	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	2424	1	ACQ	1
3C263.0	11 39 57.1	65 47 49	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
3C263.0	11 39 57.1	65 47 49	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2754	2424	1		1
3C263.0	11 39 57.1	65 47 49	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	792	2424	1		1
US2778	11 40 23.5	30 16 51	PC	IMAGE	ALL	F555W		1	260	3156	0		1
UGC6643	11 40 44.3	22 25 46	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD101584	11 40 58.9	-55 34 26	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD101584	11 40 58.9	-55 34 26	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
NGC3811	11 41 16.8	47 41 28	PC	IMAGE	PC6	F785LP		1	120	4093	2		1
SBS1138+584	11 41 21.7	58 9 51	PC	IMAGE	ALL	F555W		1	260	3156	0		1
US2813	11 42 9.8	28 22 57	PC	IMAGE	ALL	F555W		1	260	3156	0		1
US2828	11 42 26.3	28 17 8	PC	IMAGE	ALL	F555W		1	260	3156	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
US2828	11 42 26.3	28 17 8	PC	IMAGE	ALL	F555W		1	240	4017	1		1
MARK639	11 43 20.6	23 54 6	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
HD102065	11 43 37.8	-80 29 0	HRS	ACCUM	0.25	G160M	1265	3	702	3759	2		1
HD102065	11 43 37.8	-80 29 0	HRS	ACCUM	0.25	G160M	1338	3	702	3759	2		1
HD102065	11 43 37.8	-80 29 0	HRS	ACCUM	0.25	G160M	1462	4	1050	3759	2		1
1144-07	11 46 35.6	-7 40 5	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1144-07	11 46 35.6	-7 40 5	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
1146+111D	11 48 51.3	10 48 24	PC	IMAGE	ALL	F555W		1	260	3156	0		1
HD102647	11 49 3.5	14 34 19	HRS	ACCUM	2.0	MIRROR-A2		1	1	2537	1		1
HD102647	11 49 3.5	14 34 19	HRS	ACCUM	0.25	G160M	1663	1	1212	2537	1		1
HD102647	11 49 3.5	14 34 19	HRS	ACCUM	0.25	G160M	1542	6	1161	2537	1		1
HD102647	11 49 3.5	14 34 19	HRS	ACCUM	0.25	G160M	1859	1	540	2537	1		1
HD102647	11 49 3.5	14 34 19	HRS	ACCUM	0.25	ECH-B	2854	2	1100	2537	1		1
HD102647	11 49 3.5	14 34 19	HRS	ACCUM	0.25	ECH-B	1859	2	1215	2537	1		1
HD102647	11 49 3.5	14 34 19	HRS	ACCUM	0.25	ECH-B	2345	1	450	2537	1		1
HD102647	11 49 3.5	14 34 19	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2537	1	ACQ	1
HD102647	11 49 3.5	14 34 19	HRS	ACCUM	0.25	ECH-B	2596	1	649	2537	1		1
NGC3918	11 50 17.9	-57 10 57	HRS	ACCUM	2.0	ECH-B	1908	2	2220	3608	2		1
PK294+04D1	11 50 18.9	-57 10 51	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK294+04D1	11 50 18.9	-57 10 51	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PKS1148-00	11 50 43.8	-0 23 54	PC	IMAGE	ALL	F555W		1	260	3156	0		1
POX4	11 51 11.7	-20 35 58	FOS/BL	ACCUM	1.0	G130H		1	18600	4122	2	CON	1
POX4	11 51 11.7	-20 35 58	FOS/BL	ACCUM	1.0	G190H		1	6200	4122	2	CON	1
POX4	11 51 11.7	-20 35 58	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	1	4122	2	ACQ CON	1
POX4	11 51 11.7	-20 35 58	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	1	4122	2	ACQ CON	1
POX4	11 51 11.7	-20 35 58	FOC/48	IMAGE	512X512	F130LP F140W		1	1000	3810	2		1
B21148+38	11 51 29.3	38 25 53	PC	IMAGE	ALL	F555W		1	260	3156	0		1
POX5B	11 52 35.7	-17 57 4	PC	IMAGE	ALL	F555W		1	260	3156	0		1
UGC6870	11 53 48.9	52 19 35	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1151+0651	11 54 11.1	6 34 28	PC	IMAGE	ALL	F555W		1	240	4027	1		1
ESO-1153-1937	11 56 7.2	-19 53 49	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
POX30	11 57 31.7	-18 27 43	PC	IMAGE	ALL	F555W		1	260	3156	0		1
NGC3991	11 57 31.8	32 20 28	FOS/BL	ACCUM	1.0	G130H		1	3200	3591	2	CON	1
NGC3991	11 57 31.8	32 20 28	FOS/BL	ACCUM	1.0	G190H		1	1800	3591	2	CON	1
NGC3991	11 57 31.8	32 20 28	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	0	3591	2	ACQ CON	1
NGC3991	11 57 31.8	32 20 28	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	0	3591	2	ACQ CON	1
NGC3991	11 57 31.8	32 20 28	FOC/48	IMAGE	512X512	F130LP F140W		1	400	3591	2	ACQ	1
UGC6937	11 57 36.0	53 22 28	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC3998	11 57 56.1	55 27 13	FOC/96	IMAGE	512X512	F1ND F342W		1	240	2295	1		1
NGC3998	11 57 56.1	55 27 13	FOC/96	IMAGE	512X512	F175W		1	2039	2295	1		1
NGC3998	11 57 56.1	55 27 13	FOC/96	IMAGE	512X512	F1ND F2ND F480LP		1	460	2295	1		1
UGC6950	11 58 5.3	27 52 43	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
MARK434	11 59 28.6	34 53 36	PC	IMAGE	PC6	F785LP		1	260	4093	2		1
4C29.45	11 59 31.9	29 14 44	FOS/BL	RAPID	1.0	G160L	1840	1	600	3791	2		1
4C29.45	11 59 31.9	29 14 44	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	3791	2	ACQ	1
4C29.45	11 59 31.9	29 14 44	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3791	2	ACQ	1
4C29.45	11 59 31.9	29 14 44	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2520	3791	2		1
4C29.45	11 59 31.9	29 14 44	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1200	3791	2		1
PKS1157+014	11 59 44.8	1 12 6	PC	IMAGE	ALL	F555W		1	260	3156	0		1
PC1158+4635	12 0 36.9	46 18 47	PC	IMAGE	ALL	F702W		1	100	2350	1		1
PC1158+4635	12 0 36.9	46 18 47	PC	IMAGE	ALL	F702W		1	350	2350	1		1
POX42	12 0 44.9	-18 59 45	PC	IMAGE	ALL	F555W		1	260	3156	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
GW-VIR	12 1 46.0	-3 45 41	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	3	2741	1	ACQ	1
GW-VIR	12 1 46.0	-3 45 41	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	2741	1	ACQ	1
GW-VIR	12 1 46.0	-3 45 41	FOS/BL	ACCUM	0.25X2.0	G130H	1400	1	6179	2741	1		1
Q1159+123	12 1 47.9	12 6 30	PC	IMAGE	ALL	F555W		1	260	3156	0		1
1159+123	12 1 47.9	12 6 18	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1159+123	12 1 47.9	12 6 18	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
NGC4038/4039	12 1 53.9	-18 52 37	WFC	IMAGE	WF2-FIX	F336W		1	600	3784	2		1
NGC4038/4039	12 1 53.9	-18 52 37	WFC	IMAGE	WF2-FIX	F555W		1	30	3784	2		1
NGC4038/4039	12 1 53.9	-18 52 37	WFC	IMAGE	WF2-FIX	F555W		1	520	3784	2		1
NGC4038/4039	12 1 53.9	-18 52 37	WFC	IMAGE	WF2-FIX	F785LP		1	30	3784	2		1
NGC4038/4039	12 1 53.9	-18 52 37	WFC	IMAGE	WF2-FIX	F785LP		1	520	3784	2		1
NGC4051	12 3 9.7	44 31 52	WFC	IMAGE	ALL	F194W		1	300	2608	1	ACQ	1
NGC4051	12 3 9.7	44 31 52	HSP/UV2	PRISM	1.0	F262M/F145M		1	7500	2608	1		1
NGC4074	12 4 29.7	20 18 59	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
POX62	12 4 49.0	-21 5 19	PC	IMAGE	ALL	F555W		1	260	3156	0		1
1202-07	12 5 23.1	-7 42 32	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
1202-07	12 5 23.1	-7 42 32	FOC/96	IMAGE	512X1024	F190M	1975	1	550	4107	2		1
UGC7090	12 6 1.1	47 28 42	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
POX61	12 6 16.4	-16 20 3	PC	IMAGE	ALL	F555W		1	260	3156	0		1
SBS1204+597	12 7 2.4	59 28 53	PC	IMAGE	ALL	F555W		1	240	4027	1		1
1204+0935	12 7 22.8	9 18 34	PC	IMAGE	ALL	F555W		1	240	4027	1		1
UGC7118	12 8 5.9	65 10 29	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1205+0918	12 8 21.0	9 1 30	PC	IMAGE	ALL	F555W		1	240	4027	1		1
1206+1500	12 8 48.6	14 43 37	PC	IMAGE	ALL	F555W		1	240	4027	1		1
PG1206+459	12 8 58.0	45 40 36	PC	IMAGE	ALL	F555W		1	260	3156	0		1
PG1206+459	12 8 58.0	45 40 36	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
PG1206+459	12 8 58.0	45 40 36	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PG1206+459	12 8 58.0	45 40 36	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5100	2424	1		1
PG1206+459	12 8 58.0	45 40 36	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	2424	1	ACQ	1
PG1206+459	12 8 58.0	45 40 36	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1164	2424	1		1
1206+1727	12 9 1.0	17 11 7	PC	IMAGE	ALL	F555W		1	240	4027	1		1
MARK198	12 9 14.1	47 3 30	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
1206+1155	12 9 17.9	11 38 31	PC	IMAGE	ALL	F555W		1	260	3156	0		1
IRAS12071-0444	12 9 45.7	-5 1 13	FOC/96	IMAGE	512X512	F430W		1	1200	3906	2		1
IRAS12071-0444	12 9 45.7	-5 1 13	FOC/96	IMAGE	512X512	F480LP		1	1200	3906	2		1
UGC7151	12 9 58.6	46 27 26	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC7154	12 10 1.6	39 52 59	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC4147	12 10 6.2	18 32 30	PC	IMAGE	PCALL	F336W		1	300	3458	2		1
NGC4147	12 10 6.2	18 32 30	PC	IMAGE	PCALL	F336W		1	900	3458	2		1
NGC4147	12 10 6.2	18 32 30	PC	IMAGE	PCALL	F439W		1	100	3458	2		1
NGC4147	12 10 6.2	18 32 30	PC	IMAGE	PCALL	F439W		1	300	3458	2		1
NGC4147	12 10 6.2	18 32 30	PC	IMAGE	PCALL	F439W		1	400	3458	2		1
NGC4147	12 10 6.2	18 32 30	PC	IMAGE	PCALL	F336W		1	1200	3458	2		1
1E1207+3945	12 10 26.6	39 29 8	PC	IMAGE	ALL	F555W		1	200	2350	1		1
1E1207+3945	12 10 26.6	39 29 8	PC	IMAGE	ALL	F555W		1	400	2350	1		1
NGC4151-NUCLEUS	12 10 32.5	39 24 21	FOS/BL	ACCUM	1.0	G130H		3	360	2498	1		4
NGC4151-NUCLEUS	12 10 32.5	39 24 21	HRS	IMAGE	2.0	MIRROR-N2		1	97	2498	1		2
NGC4151-NUCLEUS	12 10 32.5	39 24 21	HRS	ACCUM	2.0	G160M	1520	4	960	2498	1		2
NGC4151-NUCLEUS	12 10 32.5	39 24 21	HRS	ACCUM	2.0	G160M	1600	4	960	2498	1		2
NGC4151-NUCLEUS	12 10 32.5	39 24 21	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	2498	1	ACQ	4
NGC4151-NUCLEUS	12 10 32.5	39 24 21	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	74	2498	1	ACQ	2
NGC4151	12 10 32.5	39 24 21	FGS	TRANS	3	F550W		1	1414	2443	1	CON SEL	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC4151	12 10 32.5	39 24 21	FGS	TRANS	3	F583W		1	1414	2443	1	CON SEL	1
NGC4151	12 10 32.5	39 24 21	FGS	TRANS	3	PUPIL		1	1414	2443	1	CON SEL	1
NGC4150	12 10 33.7	30 24 6	PC	IMAGE	PC6	F555W		1	80	3912	2		1
NGC4150	12 10 33.7	30 24 6	PC	IMAGE	PC6	F555W		2	400	3912	2		1
B21208+32A	12 10 37.6	31 57 6	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
B21208+32A	12 10 37.6	31 57 6	FOS/RD	ACQ/BINA	4.3	MIRROR		1	14	2424	1	ACQ	1
B21208+32A	12 10 37.6	31 57 6	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6045	2424	1		1
B21208+32A	12 10 37.6	31 57 6	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	2130	2424	1		1
B21208+32A	12 10 37.6	31 57 6	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	2	2424	1	ACQ	1
1208+1413	12 10 39.2	13 56 56	PC	IMAGE	ALL	F555W		1	240	4027	1		1
1208+101-C	12 10 56.9	9 54 27*	FOS/RD	RAPID	0.3	G650L		1	2280	3992	1		1
1208+101	12 10 57.0	9 54 27	PC	IMAGE	ALL	F439W		1	900	3981	1		2
1208+101	12 10 57.0	9 54 27	PC	IMAGE	ALL	F555W		1	600	3981	1		1
1208+101	12 10 57.0	9 54 27	PC	IMAGE	ALL	F702W		1	300	3981	1		2
1208+101	12 10 57.0	9 54 27	PC	IMAGE	ALL	F785LP		1	420	3981	1		2
1208+101-A	12 10 57.0	9 54 27	FOS/RD	RAPID	0.3	G650L		1	600	3992	1		1
1208+101-A	12 10 57.0	9 54 27	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	10	3992	1	ACQ	1
1208+101-A	12 10 57.0	9 54 27	FOS/RD	ACQ/BINA	4.3	MIRROR		1	88	3992	1	ACQ	1
1208+101-B	12 10 57.0	9 54 27*	FOS/RD	RAPID	0.3	G650L		1	2280	3992	1		1
1208+1011	12 10 57.0	9 54 27	PC	IMAGE	ALL	F555W		1	260	3156	0		1
UGC7183	12 11 5.0	50 29 8	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1208+1535	12 11 25.5	15 18 51	PC	IMAGE	ALL	F555W		1	240	4027	1		1
1209+0919	12 11 35.1	9 2 22	PC	IMAGE	ALL	F555W		1	240	4027	1		1
1209.1+10.7	12 11 40.6	10 30 2	PC	IMAGE	ALL	F555W		1	260	3156	0		1
1209.1+10.7	12 11 40.6	10 30 2	PC	IMAGE	ALL	F555W		1	240	4017	1		1
Q-1209+107	12 11 40.7	10 30 2	FOS/RD	ACQ/BINA	4.3	MIRROR		1	50	3483	2	ACQ	1
Q-1209+107-GAL	12 11 41.0	10 30 7*	FOS/RD	ACCUM	4.3	G190H	1900	1	10800	3483	2		1
NGC4168-PSF-PCPOS	12 12 17.2	13 12 18	PC	IMAGE	P6	F555W	5555	1	2520	2607	1		1
1209+154	12 12 32.1	15 7 26	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1209+154	12 12 32.1	15 7 26	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
1210+1731	12 13 3.0	17 14 23	PC	IMAGE	ALL	F555W		1	240	4027	1		1
1210+1507	12 13 8.0	14 51 7	PC	IMAGE	ALL	F555W		1	240	4027	1		1
IRAS12112+0305	12 13 46.0	2 48 40	FOC/48	IMAGE	512X512	F140W		1	2580	3913	2		2
IRAS12112+0305	12 13 46.0	2 48 40	FOC/48	IMAGE	512X512	F220W		1	1200	3913	2		2
UGC7231	12 13 48.2	14 54 1	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
B21211+33	12 14 4.1	33 9 46	PC	IMAGE	ALL	F555W		1	260	3156	0		1
UGC7241	12 14 9.5	54 31 35	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1211+143	12 14 17.7	14 3 12	HRS	ACCUM	2.0	G270M	2810	1	900	2553	1		1
1212+1551	12 14 52.6	15 34 56	PC	IMAGE	ALL	F555W		1	240	4027	1		1
1212+1045	12 15 1.6	10 28 38	PC	IMAGE	ALL	F555W		1	240	4027	1		1
1212+0854	12 15 8.0	8 38 17	PC	IMAGE	ALL	F555W		1	240	4027	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1230	1	30	2403	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1390	1	30	2403	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1550	1	30	2403	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1406	1	30	2403	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1194	1	30	2403	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1203	1	30	2403	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1213	1	30	2403	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1239	1	30	2403	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1248	1	30	2403	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1256	1	30	2403	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1264	1	30	2403	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1398	1	30	2403	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1539	1	30	2403	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACCUM	0.25	G160M	1561	1	30	2403	1		1
HD106490	12 15 8.8	-58 44 56	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	2403	1	ACQ	2
1213+0922	12 15 39.6	9 6 8	PC	IMAGE	ALL	F555W		1	260	3156	0		1
NGC4214	12 15 39.9	36 19 39	FOS/BL	ACCUM	1.0	G190H		1	800	4122	2	CON	1
NGC4214	12 15 39.9	36 19 39	FOS/BL	ACCUM	1.0	G130H		1	2100	4122	2	CON	1
NGC4214	12 15 39.9	36 19 39	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	1	4122	2	ACQ CON	1
NGC4214	12 15 39.9	36 19 39	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	1	4122	2	ACQ CON	1
NGC4214	12 15 39.9	36 19 39	FOC/48	IMAGE	512X512	F130LP F140W		1	300	3810	2		1
CASE1	12 15 44.2	52 31 2	FOS/BL	ACCUM	1.0	G270H		1	600	3816	2		1
CASE1	12 15 44.2	52 31 2	FOS/BL	ACCUM	1.0	G160L		1	1019	3816	2		1
CASE1	12 15 44.2	52 31 2	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3816	2	ACQ	1
UGC7284	12 15 54.2	13 8 59	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1213+1208	12 16 0.8	11 52 8	PC	IMAGE	ALL	F555W		1	240	4027	1		1
UGC7306	12 16 23.9	69 31 24	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
T1214-277-OFFSET	12 17 12.9	-28 2 34	FOS/RD	ACQ/BINA	4.3	MIRROR		1	18	3840	2	ACQ	1
NGC4239	12 17 15.0	16 31 53	PC	IMAGE	PC6	F555W		1	80	3912	2		1
NGC4239	12 17 15.0	16 31 53	PC	IMAGE	PC6	F555W		2	400	3912	2		1
T1214-277	12 17 17.1	-28 2 32*	FOS/RD	ACCUM	1.0	G190H		1	5400	3840	2		1
UGC7322	12 17 29.5	37 48 24	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
B21215+33	12 17 32.5	33 5 38	PC	IMAGE	ALL	F555W		1	260	3156	0		1
4C64.15	12 17 40.9	64 7 7	PC	IMAGE	ALL	F555W		1	240	4027	1		1
1215+1527	12 18 5.3	15 11 9	PC	IMAGE	ALL	F555W		1	240	4027	1		1
1215+1202	12 18 15.6	11 45 52	PC	IMAGE	ALL	F555W		1	240	4027	1		1
MC1215+113	12 18 26.1	11 5 5	FOS/BL	RAPID	1.0	G160L	1837	1	1890	2424	1		1
MC1215+113	12 18 26.1	11 5 5	FOS/BL	ACQ/BINA	4.3	MIRROR		1	39	2424	1	ACQ	1
MC1215+113	12 18 26.1	11 5 5	PC	IMAGE	ALL	F555W		1	260	3156	0		1
NGC4253	12 18 26.5	29 48 47	PC	IMAGE	PC6	F785LP		1	180	3698	2		1
PKS1216-010	12 18 35.0	-1 19 56	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	1	3791	2	ACQ	1
PKS1216-010	12 18 35.0	-1 19 56	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	3930	3791	2		1
PKS1216-010	12 18 35.0	-1 19 56	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1260	3791	2		1
PKS1216-010	12 18 35.0	-1 19 56	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	18102	3791	2		1
PKS1216-010	12 18 35.0	-1 19 56	FOS/RD	ACQ/BINA	4.3	MIRROR		1	6	3791	2	ACQ	1
PKS1216-010	12 18 35.0	-1 19 56	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3791	2	ACQ	1
1216+1754	12 18 46.7	17 38 17	PC	IMAGE	ALL	F555W		1	240	4027	1		1
NEWHIP-32	12 19 7.5	-2 2 25	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-32	12 19 7.5	-2 2 25	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
NEWEGOB-32NEWHIP-32	12 19 8.7	-1 49 29	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-32NEWHIP-32	12 19 8.7	-1 49 29	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
1216+1656	12 19 20.4	16 39 30	PC	IMAGE	ALL	F555W		1	240	4027	1		1
PG1216+069	12 19 20.9	6 38 38	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	2	3791	2	ACQ	1
PG1216+069	12 19 20.9	6 38 38	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	17802	3791	2		1
PG1216+069	12 19 20.9	6 38 38	FOS/BL	ACQ/BINA	4.3	MIRROR		1	14	3791	2	ACQ	1
NGC4261-PSF-PCPOS	12 19 23.2	5 49 30	PC	IMAGE	P6	F555W	5555	1	2520	2607	1	ACQ	1
NGC4261-WFPOS-CNTR	12 19 25.4	5 49 43	WFC	IMAGE	ALL	F555W	5555	1	5	2607	1	ACQ	1
NGC4261-WFPOS-CNTR	12 19 25.4	5 49 43	WFC	IMAGE	ALL	F555W	5555	1	300	2607	1	ACQ	1
1216+0947	12 19 26.8	9 31 3	PC	IMAGE	ALL	F555W		1	240	4027	1		1
NGC4261-NUCLEUS	12 19 27.6	5 49 55*	FOS/RD	ACCUM	0.5	PRISM	3500	1	1800	2607	1		1
NGC4261-NUCLEUS	12 19 27.6	5 49 55*	FOC/96	IMAGE	512X512	F220W		1	3299	2607	1		1
NGC4261-OFFSET	12 19 27.6	5 49 55	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	2607	1	ACQ	1
UGC7377	12 19 50.5	29 36 53	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
POINTNEWEGOB-32NEWHIP-32	12 19 51.1	-1 56 26	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-32NEWHIP-32	12 19 51.1	-1 56 26	S/C	POINTING	V1			1	1	4145	3	CON	1
CPD-53D5072	12 20 15.1	-53 55 31	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
CPD-53D5072	12 20 15.1	-53 55 31	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
1219+755	12 21 44.0	75 18 38	HRS	ACCUM	2.0	G270M	2806	3	960	2553	1		1
1219+755	12 21 44.0	75 18 38	HRS	ACCUM	2.0	G160M	1553	13	920	2553	1		1
UGC7420	12 21 58.3	4 28 23	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PSFSTAR2	12 23 5.1	12 41 6	PC	IMAGE	P6	F555W	5555	1	0	2607	1		3
MARK50	12 23 7.2	2 39 1	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
SBS1221+545	12 23 43.3	54 13 26	PC	IMAGE	ALL	F555W		1	260	3156	0		1
MC1221+114	12 24 19.1	11 7 21	PC	IMAGE	ALL	F555W		1	240	4027	1		1
NGC4365-PSF-PCPOS	12 24 28.5	7 19 3	PC	IMAGE	P6	F555W	5555	1	2520	2607	1	ACQ	1
NGC4365-WFPOS-CNTR	12 24 29.1	7 18 47	WFC	IMAGE	ALL	F555W	5555	1	5	2607	1	ACQ	1
NGC4365-WFPOS-CNTR	12 24 29.1	7 18 47	WFC	IMAGE	ALL	F555W	5555	1	300	2607	1	ACQ	1
NGC4365-NUCLEUS	12 24 29.7	7 18 51*	FOS/RD	ACCUM	0.5	PRISM	3500	1	1800	2607	1		1
NGC4365-NUCLEUS	12 24 29.7	7 18 51*	FOC/96	IMAGE	512X512	F220W		1	3299	2607	1		1
NGC4365-OFFSET	12 24 29.7	7 18 51	FOS/RD	ACQ/BINA	4.3	MIRROR		1	60	2607	1	ACQ	1
NGC4374-NUCLEUS	12 24 59.2	12 52 41*	FOS/RD	ACCUM	0.5	PRISM	3500	1	1800	2607	1		1
NGC4374-NUCLEUS	12 24 59.2	12 52 41*	FOC/96	IMAGE	512X512	F220W		1	3299	2607	1		1
NGC4374-OFFSET	12 24 59.2	12 52 41	FOS/RD	ACQ/BINA	4.3	MIRROR		1	20	2607	1	ACQ	1
BD+49D2137	12 25 0.4	49 8 30	HRS	ACCUM	0.25	G160M	1550	4	1200	3706	2		1
BD+49D2137	12 25 0.4	49 8 30	HRS	ACCUM	0.25	G160M	1403	3	1200	3706	2		1
BD+49D2137	12 25 0.4	49 8 30	HRS	ACCUM	0.25	G160M	1249	3	1200	3706	2		1
NGC4374-WFPOS-CNTR	12 25 1.5	12 52 55	WFC	IMAGE	ALL	F555W	5555	1	5	2607	1	ACQ	1
NGC4374-WFPOS-CNTR	12 25 1.5	12 52 55	WFC	IMAGE	ALL	F555W	5555	1	300	2607	1	ACQ	1
NGC4374-PSF-PCPOS	12 25 3.9	12 53 10	PC	IMAGE	P6	F555W	5555	1	2520	2607	1	ACQ	1
1222+1433	12 25 11.2	14 17 9	PC	IMAGE	ALL	F555W		1	240	4027	1		1
UGC7508	12 25 24.0	18 11 28	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC4382	12 25 24.6	18 11 27	FOC/48	IMAGE	512X512	F342W		1	240	2295	1		1
NGC4382	12 25 24.6	18 11 27	FOC/48	IMAGE	512X512	F430W		1	460	2295	1		1
NGC4382	12 25 24.6	18 11 27	FOC/48	IMAGE	512X512	F175W		1	2039	2295	1		1
PG1222+228	12 25 27.4	22 35 13	FOS/BL	ACCUM	4.3	G190H	1950	1	1440	2524	1		10
PG1222+228	12 25 27.4	22 35 13	FOS/BL	ACCUM	4.3	G270H	2765	1	1440	2524	1		9
PG1222+228	12 25 27.4	22 35 13	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	2524	1	ACQ	3
1222.9+1334	12 25 28.5	13 17 25	PC	IMAGE	ALL	F555W		1	240	4027	1		1
NGC4387	12 25 41.7	12 48 38	PC	IMAGE	P6	F555W		2	500	2600	1		1
NGC4387	12 25 41.7	12 48 38	PC	IMAGE	P6	F555W		1	120	2600	1		1
NGC4388	12 25 46.7	12 39 41*	FOS/BL	ACCUM	4.3	G270H		1	1200	3573	2		1
NGC4395	12 25 48.8	33 32 48	PC	IMAGE	PC6	F336W	3350	1	400	3507	2		1
NGC4395	12 25 48.8	33 32 48	PC	IMAGE	PC6	F547M	5470	1	120	3507	2		1
NGC4395	12 25 48.8	33 32 48	PC	IMAGE	PC6	F487N	4867	1	900	3507	2		1
NGC4395	12 25 48.8	33 32 48	PC	IMAGE	PC6	F502N	5016	1	300	3507	2		1
NGC4395	12 25 48.8	33 32 48	PC	IMAGE	PC6	F785LP	8960	1	60	3507	2		1
NGC4395	12 25 48.8	33 32 48	FOS/BL	ACCUM	4.3	G130H	1380	1	15600	3507	2		1
NGC4395	12 25 48.8	33 32 48	FOS/RD	ACCUM	4.3	G190H	1950	1	5820	3507	2		1
NGC4395	12 25 48.8	33 32 48	FOS/BL	ACQ/BINA	4.3	MIRROR		1	69	3507	2	ACQ	1
NGC4395	12 25 48.8	33 32 48	FOS/RD	ACQ/BINA	4.3	MIRROR		1	26	3507	2	ACQ	1
NGC4395	12 25 48.8	33 32 48	FOS/RD	ACCUM	4.3	G270H	2760	1	1932	3507	2		1
NGC4388-OFFSET	12 25 48.9	12 36 47	FOS/BL	ACQ/BINA	4.3	MIRROR		1	2	3573	2	ACQ	1
1223+1753	12 26 7.2	17 36 50	PC	IMAGE	ALL	F555W		1	240	4027	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC4406-PSF-PCPOS	12 26 11.5	12 56 43	PC	IMAGE	P6	F555W	5555	1	2520	2607	1		1
UGC7532	12 26 11.8	12 56 46	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1223+1723	12 26 30.0	17 6 43	PC	IMAGE	ALL	F555W		1	240	4027	1		1
HD108248	12 26 36.1	-63 5 56	HRS	ACCUM	0.25	G160M	1560	1	23	4149	4		1
HD108248	12 26 36.1	-63 5 56	HRS	ACCUM	0.25	G160M	1195	1	28	4149	4		1
HD108248	12 26 36.1	-63 5 56	HRS	ACCUM	0.25	G160M	1347	1	12	4149	4		1
HD108248	12 26 36.1	-63 5 56	HRS	ACCUM	0.25	G160M	1148	2	30	4149	4		1
HD108248	12 26 36.1	-63 5 56	HRS	WSCAN	0.25	ECH-B	2260	1	4	4149	4		1
HD108248	12 26 36.1	-63 5 56	HRS	ACCUM	0.25	G160M	1252	1	13	4149	4		1
HD108248	12 26 36.1	-63 5 56	HRS	ACCUM	0.25	G160M	1392	1	16	4149	4		1
HD108248	12 26 36.1	-63 5 56	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	4149	4	ACQ	1
HD108248	12 26 36.1	-63 5 56	HRS	ACCUM	0.25	G160M	1315	1	10	4149	4		1
HD108248	12 26 36.1	-63 5 56	HRS	WSCAN	0.25	ECH-B	2025	1	8	4149	4		1
HD108248	12 26 36.1	-63 5 56	HRS	WSCAN	0.25	ECH-B	2059	1	9	4149	4		1
HD108248	12 26 36.1	-63 5 56	HRS	WSCAN	0.25	ECH-B	1805	1	18	4149	4		1
HD108248	12 26 36.1	-63 5 56	HRS	WSCAN	0.25	ECH-B	1826	1	18	4149	4		1
HD108248	12 26 36.1	-63 5 56	HRS	WSCAN	0.25	ECH-B	2603	1	10	4149	4		1
HD108248	12 26 36.1	-63 5 56	HRS	WSCAN	0.25	ECH-B	2372	1	6	4149	4		1
UGC7572	12 27 20.3	64 48 5	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1224+1538	12 27 24.2	15 21 42	PC	IMAGE	ALL	F555W		1	240	4027	1		1
NGC4434	12 27 36.6	8 9 15	PC	IMAGE	P6	F555W		2	500	2600	1		1
NGC4434	12 27 36.6	8 9 15	PC	IMAGE	P6	F555W		1	120	2600	1		1
UGC7574	12 27 45.6	13 0 32	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC7593	12 28 14.4	44 27 12	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
1225+1512	12 28 22.2	14 55 54	PC	IMAGE	ALL	F555W		1	240	4027	1		1
NGC4458	12 28 57.6	13 14 31	PC	IMAGE	P6	F555W		2	100	2600	1		1
NGC4458	12 28 57.6	13 14 31	PC	IMAGE	P6	F555W		1	26	2600	1		1
1226+1115	12 28 58.1	10 58 55	PC	IMAGE	ALL	F555W		1	240	4027	1		1
3C273-JET	12 29 5.9	2 2 56	FOC/96	IMAGE	512X512	F430W POL0		1	8700	2451	1		1
3C273-JET	12 29 5.9	2 2 56	FOC/96	IMAGE	512X512	F430W POL60		1	8700	2451	1		1
3C273-JET	12 29 5.9	2 2 56	FOC/96	IMAGE	512X512	F430W POL120		1	8700	2451	1		1
1226+023INCA221-83	12 29 6.6	2 3 9	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
1226+023INCA221-83	12 29 6.6	2 3 9	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
3C273	12 29 6.7	2 3 8	FGS	TRANS	3	F550W		1	1414	2443	1	CON SEL	1
3C273	12 29 6.7	2 3 8	FGS	TRANS	3	F583W		1	1414	2443	1	CON SEL	1
3C273	12 29 6.7	2 3 8	FGS	TRANS	3	PUPIL		1	1414	2443	1	CON SEL	1
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	0.25	G160M	1247	1	1273	3477	2		16
NGC4464	12 29 21.3	8 9 22	PC	IMAGE	P6	F555W		1	80	2600	1		1
NGC4464	12 29 21.3	8 9 22	PC	IMAGE	P6	F555W		2	400	2600	1		1
INCA221-83	12 29 22.2	1 58 39	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-83	12 29 22.2	1 58 39	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
NGC4467	12 29 30.3	7 59 34	PC	IMAGE	P6	F555W		1	80	2600	1		1
NGC4467	12 29 30.3	7 59 34	PC	IMAGE	P6	F555W		2	400	2600	1		1
VCC1199	12 29 35.0	8 3 29	PC	IMAGE	P6	F555W		1	80	2600	1		1
VCC1199	12 29 35.0	8 3 29	PC	IMAGE	P6	F555W		2	400	2600	1		1
NGC4473-NUCLEUS	12 29 42.7	13 26 46*	FOS/RD	ACCUM	0.5	PRISM	3500	1	1800	2607	1		1
NGC4473-NUCLEUS	12 29 42.7	13 26 46*	FOC/96	IMAGE	512X512	F220W		1	3299	2607	1		1
NGC4473-OFFSET	12 29 42.7	13 26 46	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	2607	1	ACQ	1
UGC7629	12 29 46.7	8 0 3	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC4473-WFPOS-CNTR	12 29 47.2	13 26 34	WFC	IMAGE	ALL	F555W	5555	1	5	2607	1	ACQ	1
NGC4473-WFPOS-CNTR	12 29 47.2	13 26 34	WFC	IMAGE	ALL	F555W	5555	1	300	2607	1	ACQ	1
NGC4473-PSF-PCPOS	12 29 49.1	13 25 45	PC	IMAGE	P6	F555W	5555	1	2520	2607	1	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
POINT1226+023INCA221-83	12 29 51.8	2 8 27	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT1226+023INCA221-83	12 29 51.8	2 8 27	S/C	POINTING	V1			1	1	4147	3	CON	1
NGC4476-PSF-PCPOS	12 29 59.1	12 20 55	PC	IMAGE	P6	F555W	5555	1	2520	2607	1		1
NGC4478-PSF-PCPOS	12 30 17.4	12 19 43	PC	IMAGE	P6	F555W	5555	1	2520	2607	1		1
NGC4486B	12 30 32.0	12 29 25	PC	IMAGE	PC6	F555W		1	80	3912	2		1
NGC4486B	12 30 32.0	12 29 25	PC	IMAGE	PC6	F555W		2	400	3912	2		1
1228.0+07.8	12 30 34.2	7 33 5	PC	IMAGE	ALL	F555W		1	260	3156	0		1
1228.0+07.8	12 30 34.2	7 33 5	PC	IMAGE	ALL	F555W		1	240	4017	1		1
UGC7651	12 30 36.2	41 38 35	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC4486-JET	12 30 48.8	12 23 31	PC	IMAGE	PC6-FIX	F547M		1	800	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	PC	IMAGE	PC6-FIX	F547M POL0		1	900	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	PC	IMAGE	PC6-FIX	F547M POL60		1	900	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	PC	IMAGE	PC6-FIX	F547M POL120		1	900	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	FOC/96	IMAGE	512X1024	F320W		1	1500	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	FOC/96	IMAGE	512X1024	F2ND F320W		1	180	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	FOC/96	IMAGE	512X1024	F2ND F320W		1	1500	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	FOC/96	IMAGE	512X1024	F320W POL0		1	1500	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	FOC/96	IMAGE	512X1024	F320W POL60		1	1500	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	FOC/96	IMAGE	512X1024	F320W POL120		1	1500	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	FOC/96	IMAGE	512X1024	F1ND F320W POL0		1	300	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	FOC/96	IMAGE	512X1024	F1ND F320W POL0		1	1500	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	FOC/96	IMAGE	512X1024	F1ND F320W POL60		1	300	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	FOC/96	IMAGE	512X1024	F1ND F320W POL60		1	1500	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	FOC/96	IMAGE	512X1024	F1ND F320W POL120		1	300	3594	2		1
NGC4486-JET	12 30 48.8	12 23 31	FOC/96	IMAGE	512X1024	F1ND F320W POL120		1	1500	3594	2		1
M87	12 30 49.4	12 23 28	FGS	TRANS	3	F550W		1	1414	2443	1	CON SEL	1
M87	12 30 49.4	12 23 28	FGS	TRANS	3	F583W		1	1414	2443	1	CON SEL	1
M87	12 30 49.4	12 23 28	FGS	TRANS	3	PUPIL		1	1414	2443	1	CON SEL	1
1228+1808	12 30 57.0	17 51 40	PC	IMAGE	ALL	F555W		1	240	4027	1		1
1228.5+07.6	12 31 8.5	7 24 24	PC	IMAGE	ALL	F555W		1	260	3156	0		1
1228.5+07.6	12 31 8.5	7 24 24	PC	IMAGE	ALL	F555W		1	240	4017	1		1
1228+1216	12 31 16.4	12 0 24	PC	IMAGE	ALL	F555W		1	240	4028	1		1
1228.7+07.7	12 31 20.6	7 25 53	PC	IMAGE	ALL	F555W		1	260	3156	0		1
NGC4494	12 31 24.2	25 46 28	PC	IMAGE	PC6	F555W		1	500	3551	2		1
UGC7668	12 31 39.5	3 56 24	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1229+142	12 31 46.9	13 57 28	PC	IMAGE	ALL	F555W		1	240	4028	1		1
VCC1440	12 32 33.3	15 24 54	PC	IMAGE	P6	F555W		1	80	2600	1		1
VCC1440	12 32 33.3	15 24 54	PC	IMAGE	P6	F555W		2	400	2600	1		1
1230+1042	12 32 39.3	10 26 4	PC	IMAGE	ALL	F555W		1	240	4028	1		1
UGC7694	12 32 45.2	0 6 46	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1230+1318	12 32 54.5	13 2 8	PC	IMAGE	ALL	F555W		1	240	4028	1		1
IC3568	12 33 6.9	82 33 50	HRS	ACCUM	0.25	G160M	1304	2	1200	3880	2		1
IC3568	12 33 6.9	82 33 50	HRS	ACCUM	0.25	G160M	1346	2	1200	3880	2		1
IC3568	12 33 6.9	82 33 50	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	5	3880	2		1
IC3568	12 33 6.9	82 33 50	FOC/96	IMAGE	512X1024	F165W F8ND		1	600	3880	2	ACQ	1
IC3568	12 33 6.9	82 33 50	FOC/96	IMAGE	512X1024	F140M F6ND		1	240	3880	2	ACQ	1
IC3568	12 33 6.9	82 33 50	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	20	3880	2		1
1230+1627	12 33 10.4	16 10 53	PC	IMAGE	ALL	F555W		1	240	4028	1		1
1230+1052	12 33 17.8	10 35 38	PC	IMAGE	ALL	F555W		1	240	4028	1		1
Q1230+0947	12 33 25.8	9 31 23	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
Q1230+0947	12 33 25.8	9 31 23	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	4125	3	ACQ CON	1
Q1230+0947	12 33 25.8	9 31 23	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
Q1230+0947	12 33 25.8	9 31 23	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5796	4125	3	CON	1
Q1230+0947	12 33 25.8	9 31 23	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2076	4125	3	CON	1
UGC7718	12 34 3.0	7 41 57	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC7721	12 34 8.5	2 39 11	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
VCC1545	12 34 11.5	12 2 54	PC	IMAGE	P6	F555W		1	80	2600	1		1
VCC1545	12 34 11.5	12 2 54	PC	IMAGE	P6	F555W		2	400	2600	1		1
UGC7727	12 34 20.3	8 11 53	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC7732	12 34 27.0	2 11 17	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1232+0815	12 34 37.6	7 58 43	PC	IMAGE	ALL	F555W		1	240	4028	1		1
1232+1139	12 34 56.5	11 23 16	PC	IMAGE	ALL	F555W		1	240	4028	1		1
NGC4550-PSF-PCPOS	12 35 30.6	12 13 14	PC	IMAGE	P6	F555W	5555	1	2520	2607	1		1
1233+4752	12 35 31.1	47 35 30	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
1233+4752	12 35 31.1	47 35 30	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
VCC1627	12 35 37.3	12 22 55	PC	IMAGE	P6	F555W		1	80	2600	1		1
VCC1627	12 35 37.3	12 22 55	PC	IMAGE	P6	F555W		2	400	2600	1		1
NGC4551	12 35 37.9	12 15 50	PC	IMAGE	P6	F555W		2	500	2600	1		1
NGC4551	12 35 37.9	12 15 50	PC	IMAGE	P6	F555W		1	120	2600	1		1
NGC4552	12 35 39.9	12 33 22	FOC/48	IMAGE	512X512	F342W		1	600	3728	2		1
NGC4552	12 35 39.9	12 33 22	FOC/48	IMAGE	512X512	F220W		1	1380	3728	2		1
NGC4552	12 35 39.9	12 33 22	FOC/48	IMAGE	512X512	F275W		1	720	3728	2		1
NGC4552	12 35 39.9	12 33 22	FOC/48	IMAGE	512X512	F130LP F150W		1	2100	3728	2		1
UGC7766	12 35 57.8	27 57 36	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC7772	12 36 20.7	25 59 15	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC4564-PSF-PCPOS	12 36 27.0	11 26 21	PC	IMAGE	P6	F555W	5555	1	2520	2607	1		1
IC3582	12 36 30.4	26 12 0	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
UGC7786	12 36 50.0	13 9 45	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC4570-PSF-PCPOS	12 36 53.4	7 14 47	PC	IMAGE	P6	F555W	5555	1	2520	2607	1		1
NGC4589	12 37 25.0	74 11 31	PC	IMAGE	PC6	F555W		1	590	3551	2		1
1235+148	12 37 36.4	14 36 41	PC	IMAGE	ALL	F555W		1	240	4028	1		1
UGC7796	12 37 43.5	11 49 6	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1235+089	12 37 54.8	8 40 31	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1235+089	12 37 54.8	8 40 31	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
1235+0857	12 37 54.8	8 41 7	PC	IMAGE	ALL	F555W		1	240	4028	1		1
UGC7831	12 40 0.1	61 36 31	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1237+1325	12 40 13.2	13 9 27	PC	IMAGE	ALL	F555W		1	240	4028	1		1
1237+1212	12 40 21.0	11 55 39	PC	IMAGE	ALL	F555W		1	240	4028	1		1
PSFSTAR1	12 40 39.1	10 55 51	PC	IMAGE	P6	F555W	5555	1	0	2607	1		3
1338+416	12 41 0.7	41 23 14	FOS/BL	ACCUM	4.3	G190H	1900	1	1300	3837	2	CON	1
1338+416	12 41 0.7	41 23 14	FOS/BL	ACCUM	4.3	G190H	1900	1	2300	3837	2	CON	4
1338+416	12 41 0.7	41 23 14	FOS/RD	ACCUM	4.3	G190H	1900	1	1300	3837	2	CON	2
1338+416	12 41 0.7	41 23 14	FOS/RD	ACCUM	4.3	G190H	1900	1	2300	3837	2	CON	2
1338+416	12 41 0.7	41 23 14	FOS/BL	ACQ/BINA	4.3	MIRROR		1	16	3837	2	ACQ CON	1
1338+416	12 41 0.7	41 23 14	FOS/RD	ACQ/BINA	4.3	MIRROR		1	16	3837	2	ACQ CON	1
NGC4627	12 41 59.7	32 34 26	FOC/48	IMAGE	512X512	F342W		1	600	3728	2		1
NGC4627	12 41 59.7	32 34 26	FOC/48	IMAGE	512X512	F220W		1	1440	3728	2		1
NGC4627	12 41 59.7	32 34 26	FOC/48	IMAGE	512X512	F275W		1	720	3728	2		1
NGC4627	12 41 59.7	32 34 26	FOC/48	IMAGE	512X512	F130LP F150W		1	3600	3728	2		1
1239+1435	12 42 6.1	14 19 22	PC	IMAGE	ALL	F555W		1	240	4028	1		1
UGC7865	12 42 9.3	32 32 36	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC7878	12 42 49.7	2 41 18	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC4636	12 42 49.8	2 41 17	PC	IMAGE	PC6	F555W		2	700	3912	2		1
NGC4636	12 42 49.9	2 41 16	FOC/96	IMAGE	512X512	F342W		1	240	2295	1		1
NGC4636	12 42 49.9	2 41 16	FOC/96	IMAGE	512X512	F480LP		1	460	2295	1		1
NGC4636	12 42 49.9	2 41 16	FOC/96	IMAGE	512X512	F175W		1	2039	2295	1		1
1240+1516	12 42 53.3	14 59 52	PC	IMAGE	ALL	F555W		1	240	4028	1		1
1240+1504	12 43 13.0	14 48 12	PC	IMAGE	ALL	F555W		1	240	4028	1		1
UGC7898	12 43 39.8	11 33 11	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC7907	12 43 58.5	32 10 20	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PG1241+176	12 44 10.8	17 21 4	PC	IMAGE	ALL	F555W		1	260	3156	0		1
NGC4660-PSF-PCPOS	12 44 32.0	11 11 25	PC	IMAGE	P6	F555W	5555	1	2520	2607	1		1
NGC4670	12 45 17.3	27 7 36	FOS/BL	ACCUM	1.0	G130H		1	2500	3591	2	CON	1
NGC4670	12 45 17.3	27 7 36	FOS/BL	ACCUM	1.0	G190H		1	1200	3591	2	CON	1
NGC4670	12 45 17.3	27 7 36	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	0	3591	2	ACQ CON	1
NGC4670	12 45 17.3	27 7 36	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	0	3591	2	ACQ CON	1
NGC4670	12 45 17.3	27 7 36	FOC/48	IMAGE	512X512	F130LP F140W		1	300	3591	2	ACQ	1
1242+1737	12 45 26.8	17 20 53	PC	IMAGE	ALL	F555W		1	240	4028	1		1
UGC7938	12 46 11.4	30 43 23	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1244+1703	12 46 35.9	16 46 56	PC	IMAGE	ALL	F555W		1	240	4028	1		1
1244+1129	12 46 40.4	11 13 2	PC	IMAGE	ALL	F555W		1	240	4028	1		1
1244+1642	12 46 47.2	16 26 14	PC	IMAGE	ALL	F555W		1	240	4028	1		1
1244+0947	12 46 58.3	9 30 46	PC	IMAGE	ALL	F555W		1	240	4028	1		1
B21244+32B	12 47 20.8	32 9 1	FOS/BL	RAPID	1.0	G160L	1837	1	1500	2424	1		1
B21244+32B	12 47 20.8	32 9 1	FOS/BL	ACQ/BINA	4.3	MIRROR		1	56	2424	1	ACQ	1
1244.9+34.7	12 47 22.5	34 27 27	PC	IMAGE	ALL	F555W		1	260	3156	0		1
NGC4697	12 48 35.9	-5 47 57	PC	IMAGE	PC6	F555W		2	500	3912	2		1
NGC4697	12 48 35.9	-5 47 57	PC	IMAGE	PC6	F555W		1	140	3912	2		1
BSO1	12 48 51.9	37 30 28	PC	IMAGE	ALL	F555W		1	260	3156	0		1
PG1247+268	12 50 5.7	26 31 7	PC	IMAGE	ALL	F555W		1	260	3156	0		1
UGC7989	12 50 26.4	25 30 3	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PG1248+401	12 50 48.3	39 51 40	FOS/BL	RAPID	1.0	G160L	1840	1	750	4125	3	CON	1
PG1248+401	12 50 48.3	39 51 40	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	4125	3	ACQ CON	1
PG1248+401	12 50 48.3	39 51 40	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
PG1248+401	12 50 48.3	39 51 40	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6492	4125	3	CON	1
PG1248+401	12 50 48.3	39 51 40	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1836	4125	3	CON	1
PG1248+401	12 50 48.3	39 51 39	PC	IMAGE	ALL	F555W		1	260	3156	0		1
PG1248+401	12 50 48.3	39 51 39	PC	IMAGE	ALL	F555W		1	240	4017	1		1
UGC7996	12 50 53.0	41 7 13	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC4742	12 51 48.0	-10 27 18	PC	IMAGE	P6	F555W		1	70	2600	1		1
NGC4742	12 51 48.0	-10 27 18	PC	IMAGE	P6	F555W		2	260	2600	1		1
3C277-1	12 52 26.3	56 34 20	FOS/RD	ACCUM	4.3	G400H	4000	1	864	2578	1		1
3C277-1	12 52 26.3	56 34 20	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
3C277-1	12 52 26.3	56 34 20	FOS/RD	ACCUM	4.3	G270H	2700	1	1122	2578	1		1
3C277-1	12 52 26.3	56 34 20	FOS/RD	ACCUM	4.3	G190H	1900	1	1985	2578	1		1
UGC8016	12 52 55.9	11 13 50	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD112185	12 54 1.5	55 57 36	HRS	IMAGE	2.0	MIRROR-A2		1	96	2800	1		11
HD112185	12 54 1.5	55 57 36	HRS	ACCUM	0.25	ECH-B	3015	1	57	2800	1		11
HD112185	12 54 1.5	55 57 36	HRS	ACCUM	0.25	ECH-B	2061	1	57	2800	1		11
HD112185	12 54 1.5	55 57 36	HRS	ACCUM	0.25	ECH-B	2350	1	57	2800	1		11
HD112185	12 54 1.5	55 57 36	HRS	ACCUM	0.25	ECH-B	2965	1	57	2800	1		11
HD112185	12 54 1.5	55 57 36	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2800	1	ACQ	11
HD112185	12 54 1.5	55 57 36	HRS	ACCUM	0.25	ECH-B	3105	1	57	2800	1		11
HD112185	12 54 1.5	55 57 36	HRS	ACCUM	0.25	ECH-B	2340	1	57	2800	1		11

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD112185	12 54 1.5	55 57 36	HRS	ACCUM	0.25	ECH-B	2364	1	57	2800	1		11
HD112185	12 54 1.5	55 57 36	HRS	ACCUM	0.25	ECH-B	2959	1	57	2800	1		11
HD112185	12 54 1.5	55 57 36	HRS	ACCUM	0.25	ECH-B	2585	1	57	2800	1		11
HD112185	12 54 1.5	55 57 36	HRS	ACCUM	0.25	ECH-B	3121	1	57	2800	1		11
PKS1252+11	12 54 38.2	11 41 6	FOS/BL	RAPID	1.0	G160L	1837	1	900	2424	1		1
PKS1252+11	12 54 38.2	11 41 6	FOS/RD	ACQ/BINA	4.3	MIRROR		1	14	2424	1	ACQ	1
PKS1252+11	12 54 38.2	11 41 6	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	7710	2424	1		1
PKS1252+11	12 54 38.2	11 41 6	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	2055	2424	1		1
PKS1252+11	12 54 38.2	11 41 6	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	2	2424	1	ACQ	1
NEWHIP-56	12 55 37.0	57 6 24	FGS	POS	3	PUPIL		1	51	3918	2	CON	2
NEWHIP-56	12 55 37.0	57 6 24	FGS	POS	3	PUPIL		1	51	4143	3	CON	2
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1230	1	320	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1390	1	320	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1550	1	220	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1194	1	400	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1203	1	400	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1213	1	400	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1406	1	320	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1239	1	320	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1248	1	320	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1256	1	320	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1264	1	320	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1398	1	320	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1539	1	220	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACCUM	0.25	G160M	1561	1	220	2403	1		1
HD112244	12 55 56.9	-56 50 9	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	2403	1	ACQ	2
3C279	12 56 11.1	-5 47 22	FGS	TRANS	3	F550W		1	1414	2443	1	CON SEL	1
3C279	12 56 11.1	-5 47 22	FGS	TRANS	3	F583W		1	1414	2443	1	CON SEL	1
3C279	12 56 11.1	-5 47 22	FGS	TRANS	3	PUPIL		1	1414	2443	1	CON SEL	1
3C279	12 56 11.1	-5 47 22	FOS/RD	ACCUM	4.3	G400H	4000	1	918	2578	1		1
3C279	12 56 11.1	-5 47 22	FOS/RD	ACCUM	4.3	G190H	1900	1	2550	2578	1		1
3C279	12 56 11.1	-5 47 22	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
3C279	12 56 11.1	-5 47 22	FOS/RD	ACCUM	4.3	G270H	2700	1	1278	2578	1		1
UGC8058	12 56 14.0	56 52 24	PC	IMAGE	PC6	F785LP		1	180	3698	2		1
NEWEGOD-56NEWHIP-56	12 56 14.2	56 52 25	FGS	POS	3	PUPIL		1	51	3918	2	CON	3
NEWEGOD-56NEWHIP-56	12 56 14.2	56 52 25	FGS	POS	3	PUPIL		1	51	4143	3	CON	3
UGC8058	12 56 14.2	56 52 26	FOC/96	IMAGE	512X512	F2ND F480LP		1	600	3906	2		1
UGC8058	12 56 14.2	56 52 26	FOC/96	IMAGE	512X512	F1ND F2ND F430W		1	600	3906	2		1
NGC4826	12 56 43.7	21 41 0	PC	IMAGE	P6	F555W		1	70	2600	1		1
NGC4826	12 56 43.7	21 41 0	PC	IMAGE	P6	F555W		2	260	2600	1		1
UGC8062	12 56 43.8	21 41 0	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PG1254+047	12 56 59.9	4 27 34	FOS/BL	RAPID	1.0	G160L	1840	1	900	3791	2		1
PG1254+047	12 56 59.9	4 27 34	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	3791	2	ACQ	1
PG1254+047	12 56 59.9	4 27 34	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	3791	2	ACQ	1
PG1254+047	12 56 59.9	4 27 34	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	9660	3791	2		1
PG1254+047	12 56 59.9	4 27 34	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2100	3791	2		1
PG1254+047	12 56 59.9	4 27 34	PC	IMAGE	ALL	F555W		1	260	3156	0		1
POINTNEWEGOD-56NEWHIP-56	12 57 5.3	57 3 36	S/C	POINTING	V1			1	1	3918	2	CON	1
POINTNEWEGOD-56NEWHIP-56	12 57 5.3	57 3 36	S/C	POINTING	V1			1	1	4143	3	CON	1
HIIR-GR8	12 58 38.3	14 12 50	FOS/BL	ACCUM	4.3	G160L		1	2400	4206	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HIIR-GR8	12 58 38.3	14 12 50	FOS/BL	ACQ/BINA	4.3	MIRROR		1	300	4206	1	ACQ	1
HIIR-GR8	12 58 38.6	14 12 48	FOS/BL	ACCUM	4.3	G160L		1	2400	2416	1		1
HIIR-GR8	12 58 38.6	14 12 48	FOC/48	IMAGE	512X512	F150W		1	2400	2416	1		1
GR8	12 58 40.5	14 12 59	WFC	IMAGE	ALL	F336W		1	2400	2416	1		1
GR8	12 58 40.5	14 12 59	WFC	IMAGE	ALL	F502N		1	2400	2416	1		1
GR8	12 58 40.5	14 12 59	WFC	IMAGE	ALL	F656N		1	2400	2416	1	ACQ	1
GR8	12 58 40.5	14 12 59	WFC	IMAGE	ALL	F439W		2	1700	2416	1		1
GR8	12 58 40.5	14 12 59	WFC	IMAGE	ALL	F702W		2	1200	2416	1		1
GR8	12 58 40.5	14 12 59	WFC	IMAGE	ALL	F555W		2	1200	2416	1	ACQ	1
GR8	12 58 40.5	14 12 59	WFC	IMAGE	ALL	F785LP		1	2400	2416	1		1
GR8	12 58 40.5	14 12 59	FOC/48	IMAGE	512X512	F150W		1	2400	2416	1		1
PKS1256-17	12 58 56.1	-17 50 36	PC	IMAGE	ALL	F555W		1	260	3156	0		1
PKS1256-17	12 58 56.1	-17 50 36	PC	IMAGE	ALL	F555W		1	240	4017	1		1
NGC4861	12 59 0.4	34 50 43	FOS/BL	ACCUM	1.0	G190H		1	600	4122	2	CON	1
NGC4861	12 59 0.4	34 50 43	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	1	4122	2	ACQ CON	1
NGC4861	12 59 0.4	34 50 43	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	1	4122	2	ACQ CON	1
NGC4861	12 59 0.4	34 50 43	FOS/BL	ACCUM	1.0	G130H		1	1649	4122	2	CON	1
NGC4861	12 59 0.4	34 50 43	FOC/48	IMAGE	512X512	F130LP F140W		1	200	3810	2		1
UGC8102	12 59 27.2	14 10 16	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC4874	12 59 35.6	27 57 33	PC	IMAGE	PC6	F555W		2	1700	3912	2		1
B201	12 59 48.7	34 23 22	PC	IMAGE	ALL	F555W		1	260	3156	0		1
NGC4889	13 0 8.0	27 58 36	PC	IMAGE	PC6	F555W		2	1700	3912	2		1
W61972	13 0 48.1	28 23 21	PC	IMAGE	ALL	F555W		1	260	3156	0		1
US136	13 1 0.9	28 19 44	PC	IMAGE	ALL	F555W		1	240	4028	1		1
PG1259+593	13 1 12.9	59 2 7	FOS/BL	ACQ/BINA	4.3	MIRROR		1	14	3418	1	ACQ	1
PG1259+593	13 1 12.9	59 2 7	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2700	2424	1		1
PG1259+593	13 1 12.9	59 2 7	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	21600	3418	1		1
PG1259+593	13 1 12.9	59 2 7	FOS/RD	ACQ/BINA	4.3	MIRROR		1	6	2424	1	ACQ	1
PG1259+593	13 1 12.9	59 2 7	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	990	2424	1		1
PG1259+593	13 1 12.9	59 2 7	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	2424	1	ACQ	1
PG1259+593	13 1 12.9	59 2 7	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	2	3418	1	ACQ	1
BS06	13 1 52.6	34 11 2	PC	IMAGE	ALL	F555W		1	260	3156	0		1
ESO-1259-5003	13 2 21.4	-50 20 3	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q1300-243	13 3 18.6	-24 35 2	PC	IMAGE	ALL	F555W		1	260	3156	0		1
W33211	13 3 53.6	30 26 33	PC	IMAGE	ALL	F555W		1	260	3156	0		1
POINT1302-102INCA221-87	13 4 48.4	-10 28 45	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT1302-102INCA221-87	13 4 48.4	-10 28 45	S/C	POINTING	V1			1	1	4147	3	CON	1
POINT1302-102INCA221-88	13 4 53.9	-10 26 55	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT1302-102INCA221-88	13 4 53.9	-10 26 55	S/C	POINTING	V1			1	1	4147	3	CON	1
1302-14	13 5 25.2	-14 20 41	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
1302-14	13 5 25.2	-14 20 41	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
ESO-1302-4912	13 5 25.5	-49 28 14	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
INCA221-87	13 5 26.9	-10 19 30	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-87	13 5 26.9	-10 19 30	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
1302-102INCA221-87	13 5 32.9	-10 33 19	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
1302-102INCA221-87	13 5 32.9	-10 33 19	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
1302-102INCA221-88	13 5 32.9	-10 33 19	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
1302-102INCA221-88	13 5 32.9	-10 33 19	FGS	POS	3	PUPIL		1	51	4147	3	CON	3

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
1302-102INCA221-89	13 5 32.9	-10 33 19	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
1302-102INCA221-89	13 5 32.9	-10 33 19	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
PKS1302-102	13 5 33.0	-10 33 20	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	12000	3791	2		1
PKS1302-102	13 5 33.0	-10 33 20	FOS/BL	ACQ/BINA	4.3	MIRROR		1	8	3791	2	ACQ	1
PKS1302-102	13 5 33.0	-10 33 20	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	1	3791	2	ACQ	1
POINT1302-102INCA221-89	13 5 39.7	-10 22 41	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT1302-102INCA221-89	13 5 39.7	-10 22 41	S/C	POINTING	V1			1	1	4147	3	CON	1
INCA221-88	13 5 41.7	-10 30 7	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-88	13 5 41.7	-10 30 7	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
INCA221-89	13 5 41.7	-10 30 7	FGS	POS	3	PUPIL		1	51	2859	2	CON	4
INCA221-89	13 5 41.7	-10 30 7	FGS	POS	3	PUPIL		1	51	4147	3	CON	4
GP-COM	13 5 42.4	18 1 3	FOS/BL	ACQ/BINA	4.3	MIRROR		1	3	3824	2	ACQ	1
GP-COM	13 5 42.4	18 1 3	FOS/BL	RAPID	4.3	G130H	1380	1	22019	3824	2		1
IC4182-FIELD	13 5 46.9	37 37 44	WFC	IMAGE	ALL	F555W		1	3900	2547	1		2
IC4182-FIELD	13 5 46.9	37 37 44	WFC	IMAGE	ALL	F555W		1	4200	2547	1		19
IC4182-FIELD	13 5 46.9	37 37 44	WFC	IMAGE	ALL	F785LP		1	4200	2547	1		3
UGC8188	13 5 49.2	37 36 24	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
W22722	13 5 54.7	30 32 52	PC	IMAGE	ALL	F555W		1	260	3156	0		1
POINTINCA221-88INCA221-89	13 5 57.6	-10 19 25	S/C	POINTING	V1			1	1	2859	2	CON	1
POINTINCA221-88INCA221-89	13 5 57.6	-10 19 25	S/C	POINTING	V1			1	1	4147	3	CON	1
W21541	13 6 16.7	31 5 29	PC	IMAGE	ALL	F555W		1	260	3156	0		1
INCA221-88INCA221-89	13 6 29.2	-10 27 43	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
INCA221-88INCA221-89	13 6 29.2	-10 27 43	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
1304+295	13 7 2.9	29 18 42	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1304+295	13 7 2.9	29 18 42	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
POX123	13 7 10.4	-12 23 5	PC	IMAGE	ALL	F555W		1	260	3156	0		1
1305+296	13 8 12.1	29 25 13	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1305+296	13 8 12.1	29 25 13	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
ESO-1305-4914	13 8 37.4	-49 30 20	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
B2-1308+326	13 10 28.7	32 20 44	PC	IMAGE	ALL	F555W		1	200	2350	1		1
B2-1308+326	13 10 28.7	32 20 44	PC	IMAGE	ALL	F555W		1	140	2350	1		1
UGC8256	13 10 56.6	37 3 32	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q1309-056	13 11 36.5	-5 52 39	PC	IMAGE	ALL	F555W		1	260	3156	0		1
BSO8	13 11 37.0	33 46 48	PC	IMAGE	ALL	F555W		1	260	3156	0		1
BSO8	13 11 37.0	33 46 48	PC	IMAGE	ALL	F555W		1	240	4017	1		1
UGC8286	13 12 11.9	44 2 20	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
13H-DEEP-FIELD	13 12 16.1	42 44 39	FOC/48	IMAGE	512X1024	F220W		1	1773	2365	1		31
NGC5018	13 13 1.1	-19 31 6	FOC/48	IMAGE	512X512	F275W		1	900	3728	2		1
NGC5018	13 13 1.1	-19 31 6	FOC/48	IMAGE	512X512	F342W		1	600	3728	2		1
NGC5018	13 13 1.1	-19 31 6	FOC/48	IMAGE	512X512	F220W		1	1800	3728	2		1
NGC5018	13 13 1.1	-19 31 6	FOC/48	IMAGE	512X512	F130LP F150W		1	4560	3728	2		1
MARK246	13 13 15.8	56 5 52	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
UGC8307	13 13 27.5	36 35 40	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PKS1311-270	13 13 47.3	-27 16 49	PC	IMAGE	ALL	F555W		1	260	3156	0		1
UGC8327	13 15 15.7	44 24 27	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
UGC8334	13 15 49.2	42 1 49	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1313-1522	13 15 54.8	-15 38 33	PC	IMAGE	ALL	F555W		1	240	4028	1		1
SBS1315+605	13 17 15.5	60 15 33	PC	IMAGE	ALL	F555W		1	260	3156	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PC1315+4722	13 18 1.9	47 6 27	PC	IMAGE	ALL	F555W		1	260	3156	0		1
ESO-1316-2046	13 18 54.5	-21 2 22	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
TON153	13 19 56.3	27 28 8	PC	IMAGE	ALL	F555W		1	260	3156	0		1
TON153	13 19 56.3	27 28 8	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	2424	1	ACQ	1
TON153	13 19 56.3	27 28 8	FOS/BL	RAPID	1.0	G160L	1837	1	900	2424	1		1
TON153	13 19 56.3	27 28 8	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5049	2424	1		1
TON153	13 19 56.3	27 28 8	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1155	2424	1		1
TON153	13 19 56.3	27 28 8	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
ESO-1317-2133	13 20 16.7	-21 49 39	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1317-0507	13 20 30.0	-5 22 43	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1317-0507	13 20 30.0	-5 22 43	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
Q1318-113	13 21 9.3	-11 39 32	PC	IMAGE	ALL	F555W		1	260	3156	0		1
TON155	13 21 14.7	28 47 49	PC	IMAGE	ALL	F555W		1	260	3156	0		1
ESO-1319-2710	13 21 46.1	-27 25 47	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
MARK254	13 22 50.7	51 44 18	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
1320-106	13 22 58.1	-10 53 19	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
1320-106	13 22 58.1	-10 53 19	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
HD116658	13 25 11.6	-11 9 41	HRS	ACCUM	0.25	G160M	1290	1	3	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	ACCUM	0.25	G160M	1398	1	5	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	ACCUM	0.25	G160M	1554	1	8	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	ACCUM	0.25	G160M	1608	1	8	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	IMAGE	2.0	MIRROR-A2		1	96	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	WSCAN	0.25	ECH-B	2059	1	5	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	WSCAN	0.25	ECH-B	1807	1	12	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	WSCAN	0.25	ECH-B	1858	1	10	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	ACCUM	0.25	G160M	1175	1	14	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	ACCUM	0.25	G160M	1663	1	8	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	3472	2	ACQ	1
HD116658	13 25 11.6	-11 9 41	HRS	ACCUM	0.25	ECH-B	2324	1	2	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	WSCAN	0.25	ECH-B	1744	1	10	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	WSCAN	0.25	ECH-B	1827	1	10	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	WSCAN	0.25	ECH-B	2519	1	4	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	ACCUM	0.25	G160M	1345	1	3	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	WSCAN	0.25	ECH-B	2371	1	3	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	ACCUM	0.25	G160M	1133	1	18	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	ACCUM	0.25	ECH-B	2325	1	2	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	ACCUM	0.25	ECH-B	2326	1	2	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	ACCUM	0.25	G160M	1249	1	4	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	WSCAN	0.25	ECH-B	2484	1	3	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	WSCAN	0.25	ECH-B	2026	1	5	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	WSCAN	0.25	ECH-B	2249	1	2	3472	2		1
HD116658	13 25 11.6	-11 9 41	HRS	WSCAN	0.25	ECH-B	2799	1	2	3472	2		1
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1230	4	15	2403	1		1
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1390	4	15	2403	1		1
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1550	4	15	2403	1		1
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1406	4	15	2403	1		1
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1194	4	15	2403	1		1
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1203	4	15	2403	1		1
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1213	4	15	2403	1		1
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1239	4	15	2403	1		1
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1248	4	15	2403	1		1
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1256	4	15	2403	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1264	4	15	2403	1		1
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1398	4	15	2403	1		1
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1539	4	15	2403	1		1
HD116658	13 25 11.7	-11 9 41	HRS	ACCUM	0.25	G160M	1561	4	15	2403	1		1
ESO-1322-4245	13 25 27.9	-43 1 6	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
4C65.15	13 25 29.7	65 15 14	PC	IMAGE	ALL	F555W		1	240	4028	1		1
POX188	13 26 0.0	-10 57 5	PC	IMAGE	ALL	F555W		1	260	3156	0		1
NGC5139-NORTH2	13 26 48.0	-47 21 4	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC5139-NORTH2	13 26 48.0	-47 21 4	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
NGC5139-NORTH1	13 26 48.1	-47 26 4	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC5139-NORTH1	13 26 48.1	-47 26 4	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
NGC5139-CORE	13 26 48.1	-47 28 34	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC5139-CORE	13 26 48.1	-47 28 34	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
TOL35	13 27 6.7	-27 57 21	FOC/48	IMAGE	512X512	F130LP F140W		1	1000	3810	2		1
NGC5170-NW	13 29 48.4	-17 56 44	WFC	IMAGE	WFALL-FIX	F439W		1	3000	3532	2		1
NGC5170-NW	13 29 48.4	-17 56 44	WFC	IMAGE	WFALL-FIX	F785LP		1	600	3532	2		1
NGC5170-NW	13 29 48.4	-17 56 44	FOC/48	IMAGE	512X512	F430W		1	600	3532	2	PAR	1
NGC5170-NW	13 29 48.4	-17 56 44	FOC/48	IMAGE	512X512	F430W		1	3000	3532	2	PAR	1
ESO-1327-1742	13 29 48.8	-17 57 57	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC5170-NE	13 29 54.3	-17 57 44	WFC	IMAGE	WFALL-FIX	F439W		1	3000	3532	2		1
NGC5170-NE	13 29 54.3	-17 57 44	WFC	IMAGE	WFALL-FIX	F785LP		1	600	3532	2		1
NGC5170-NE	13 29 54.3	-17 57 44	FOC/48	IMAGE	512X512	F430W		1	600	3532	2	PAR	1
NGC5170-NE	13 29 54.3	-17 57 44	FOC/48	IMAGE	512X512	F430W		1	3000	3532	2	PAR	1
UGC8494	13 29 59.2	47 15 59	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1327+113	13 30 3.2	11 5 33	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1327+113	13 30 3.2	11 5 33	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
PKS1327-21	13 30 7.1	-21 42 2	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
PKS1327-21	13 30 7.1	-21 42 2	FOS/RD	ACQ/BINA	4.3	MIRROR		1	13	4125	3	ACQ CON	1
PKS1327-21	13 30 7.1	-21 42 2	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	7338	4125	3	CON	1
PKS1327-21	13 30 7.1	-21 42 2	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2976	4125	3	CON	1
PKS1327-21	13 30 7.1	-21 42 2	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
PKS1327-206	13 30 7.7	-20 56 16	PC	IMAGE	ALL	F555W		1	260	3156	0		1
PKS1327-311	13 30 19.0	-31 22 59	PC	IMAGE	ALL	F555W		1	240	4028	1		1
UGC8502	13 30 39.3	31 17 3	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
A1758-7	13 32 32.7	50 27 36	FOS/RD	ACCUM	4.3	G190H		1	7200	3448	2		1
A1758-7	13 32 32.7	50 27 36	FOS/RD	ACQ/BINA	4.3	MIRROR		1	300	3448	2	ACQ	1
A1758-11	13 32 38.3	50 34 29	FOS/RD	ACCUM	4.3	G190H		1	5070	3448	2		1
A1758-11	13 32 38.3	50 34 29	FOS/RD	ACQ/BINA	4.3	MIRROR		1	300	3448	2	ACQ	1
PG1333+176	13 36 2.0	17 25 13	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	2424	1	ACQ	1
PG1333+176	13 36 2.0	17 25 13	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
PG1333+176	13 36 2.0	17 25 13	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PG1333+176	13 36 2.0	17 25 13	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	3675	2424	1		1
PG1333+176	13 36 2.0	17 25 13	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1230	2424	1		1
IC4296	13 36 39.0	-33 57 56	FOC/96	IMAGE	512X512	F342W		1	240	2295	1		1
IC4296	13 36 39.0	-33 57 56	FOC/96	IMAGE	512X512	F480LP		1	460	2295	1		1
IC4296	13 36 39.0	-33 57 56	FOC/96	IMAGE	512X512	F175W		1	2039	2295	1		1
UXUMA	13 36 41.0	51 54 50	HRS	RAPID	2.0	G160M	1555	1	900	3578	2		1
UXUMA	13 36 41.0	51 54 50	HRS	RAPID	2.0	G160M	1555	1	3000	3578	2		1
UXUMA	13 36 41.0	51 54 50	HRS	RAPID	2.0	G160M	1538	1	900	3578	2		2
UXUMA	13 36 41.0	51 54 50	HRS	RAPID	2.0	G160M	1538	1	3000	3578	2		2
UXUMA	13 36 41.0	51 54 50	HRS	RAPID	2.0	G160M	1636	1	900	3578	2		1
UXUMA	13 36 41.0	51 54 50	HRS	RAPID	2.0	G160M	1636	1	3000	3578	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
1334-005	13 36 46.7	0 18 26	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1334-005	13 36 46.7	0 18 26	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
ESO-1334-2936	13 36 58.2	-29 52 2	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NEWHIP-57	13 36 59.1	24 36 48	FGS	POS	3	F5ND		1	51	3918	2	CON	2
NEWHIP-57	13 36 59.1	24 36 48	FGS	POS	3	F5ND		1	51	4143	3	CON	2
M83-PAR1	13 37 1.2	-29 51 51	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
M83-PAR1	13 37 1.2	-29 51 51	WFC	IMAGE	ALL	F658N		1	1700	2356	1	PAR	1
M83-PAR1	13 37 1.2	-29 51 51	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
M83-PAR2	13 37 1.2	-29 51 51	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
M83-PAR2	13 37 1.2	-29 51 51	WFC	IMAGE	ALL	F658N		1	1700	2356	1	PAR	1
M83-PAR2	13 37 1.2	-29 51 51	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
M83-PAR3	13 37 1.2	-29 51 51	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
M83-PAR3	13 37 1.2	-29 51 51	WFC	IMAGE	ALL	F658N		1	1700	2356	1	PAR	1
M83-PAR3	13 37 1.2	-29 51 51	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
M83-PAR4	13 37 1.2	-29 51 51	WFC	IMAGE	ALL	F547M		1	600	2356	1	PAR	1
M83-PAR4	13 37 1.2	-29 51 51	WFC	IMAGE	ALL	F658N		1	1700	2356	1	PAR	1
M83-PAR4	13 37 1.2	-29 51 51	WFC	IMAGE	ALL	F673N		1	1700	2356	1	PAR	1
NEWEGOD-57NEWHIP-57	13 37 18.7	24 23 3	FGS	POS	3	PUPIL		1	51	3918	2	CON	3
NEWEGOD-57NEWHIP-57	13 37 18.7	24 23 3	FGS	POS	3	PUPIL		1	51	4143	3	CON	3
UGC8616	13 37 32.1	8 53 7	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
POINTNEWEGOD-57NEWHIP-57	13 37 52.8	24 32 45	S/C	POINTING	V1			1	1	3918	2	CON	1
POINTNEWEGOD-57NEWHIP-57	13 37 52.8	24 32 45	S/C	POINTING	V1			1	1	4143	3	CON	1
ESO-1335-1737	13 38 2.6	-17 53 2	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC5256	13 38 17.5	48 16 35	PC	IMAGE	PC6	F785LP		1	180	3698	2		1
H1336+135	13 39 1.8	13 20 18	PC	IMAGE	ALL	F555W		1	260	3156	0		1
HD118716	13 39 53.4	-53 27 58	HRS	ACCUM	0.25	G160M	1560	1	116	4149	3		1
HD118716	13 39 53.4	-53 27 58	HRS	ACCUM	0.25	G160M	1195	1	143	4149	3		1
HD118716	13 39 53.4	-53 27 58	HRS	ACCUM	0.25	G160M	1252	1	67	4149	3		1
HD118716	13 39 53.4	-53 27 58	HRS	ACCUM	0.25	G160M	1347	1	64	4149	3		1
HD118716	13 39 53.4	-53 27 58	HRS	ACCUM	0.25	G160M	1392	1	82	4149	3		1
HD118716	13 39 53.4	-53 27 58	HRS	ACCUM	0.25	G160M	1148	2	154	4149	3		1
HD118716	13 39 53.4	-53 27 58	HRS	WSCAN	0.25	ECH-B	2260	1	22	4149	3		1
HD118716	13 39 53.4	-53 27 58	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	4149	3	ACQ	1
HD118716	13 39 53.4	-53 27 58	HRS	WSCAN	0.25	ECH-B	2025	1	40	4149	3		1
HD118716	13 39 53.4	-53 27 58	HRS	WSCAN	0.25	ECH-B	1805	1	93	4149	3		1
HD118716	13 39 53.4	-53 27 58	HRS	WSCAN	0.25	ECH-B	1826	1	93	4149	3		1
HD118716	13 39 53.4	-53 27 58	HRS	WSCAN	0.25	ECH-B	2059	1	45	4149	3		1
HD118716	13 39 53.4	-53 27 58	HRS	WSCAN	0.25	ECH-B	2372	1	33	4149	3		1
HD118716	13 39 53.4	-53 27 58	HRS	WSCAN	0.25	ECH-B	2603	1	52	4149	3		1
HD118716	13 39 53.4	-53 27 58	HRS	ACCUM	0.25	G160M	1315	1	53	4149	3		1
NGC5253	13 39 55.9	-31 38 30	FOS/BL	ACCUM	1.0	G130H		1	1600	3591	2	CON	1
NGC5253	13 39 55.9	-31 38 30	FOS/BL	ACCUM	1.0	G190H		1	750	3591	2	CON	1
NGC5253	13 39 55.9	-31 38 30	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	0	3591	2	ACQ CON	1
NGC5253	13 39 55.9	-31 38 30	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	0	3591	2	ACQ CON	1
NGC5253	13 39 55.9	-31 38 30	FOC/48	IMAGE	512X512	F130LP F140W		1	200	3591	2	ACQ	1
1337+1121	13 40 2.6	11 6 30	PC	IMAGE	ALL	F555W		1	260	3156	0		1
PG1338+416	13 41 0.8	41 23 14	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	2424	1	ACQ	1
PG1338+416	13 41 0.8	41 23 14	FOS/BL	RAPID	1.0	G160L	1837	1	900	2424	1		1
PG1338+416	13 41 0.8	41 23 14	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PG1338+416	13 41 0.8	41 23 14	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1200	2424	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
MARK268	13 41 11.2	30 22 41	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
3C288-1	13 42 13.2	60 21 43	FOS/RD	ACQ/BINA	4.3	MIRROR		1	59	3858	2	ACQ	1
3C288-1	13 42 13.2	60 21 43	FOS/RD	ACCUM	4.3	G270H	2767	1	1764	3858	2		1
1340+0959	13 42 29.5	9 44 46	PC	IMAGE	ALL	F555W		1	260	3156	0		1
1340+099	13 42 29.5	9 43 55	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1340+099	13 42 29.5	9 43 55	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
B21340+29	13 43 0.2	28 44 8	FOS/BL	ACQ/BINA	4.3	MIRROR		1	35	2424	1	ACQ	1
B21340+29	13 43 0.2	28 44 8	FOS/BL	RAPID	1.0	G160L	1837	1	1200	2424	1		1
1341+258	13 43 56.7	25 38 47	HRS	ACCUM	2.0	G160M	1579	12	900	2553	1		1
1341+258	13 43 56.7	25 38 47	HRS	ACCUM	2.0	G270M	2854	4	1080	2553	1		1
UGC8696	13 44 42.1	55 53 6	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
HD120086	13 47 19.2	-2 26 37	HRS	ACCUM	0.25	G160M	1252	1	330	2348	1		1
HD120086	13 47 19.2	-2 26 37	HRS	ACCUM	0.25	G160M	1318	1	330	2348	1		1
HD120086	13 47 19.2	-2 26 37	HRS	ACCUM	0.25	G160M	1619	1	660	2348	1		1
HD120086	13 47 19.2	-2 26 37	HRS	ACCUM	0.25	G160M	1667	1	660	2348	1		1
HD120086	13 47 19.2	-2 26 37	HRS	ACCUM	0.25	G160M	1817	1	660	2348	1		1
HD120086	13 47 19.2	-2 26 37	HRS	ACCUM	0.25	G160M	1857	1	660	2348	1		1
HD120086	13 47 19.2	-2 26 37	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	2348	1	ACQ	1
PKS1345+12	13 47 33.5	12 17 24	FOC/96	IMAGE	512X1024	F320W POL0		1	606	3790	2		1
PKS1345+12	13 47 33.5	12 17 24	FOC/96	IMAGE	512X1024	F320W POL60		1	606	3790	2		1
PKS1345+12	13 47 33.5	12 17 24	FOC/96	IMAGE	512X1024	F320W POL120		1	606	3790	2		1
MARK275	13 48 40.5	31 27 38	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
Q1346-036	13 48 44.0	-3 53 25	PC	IMAGE	ALL	F555W		1	260	3156	0		1
UGC8745	13 49 15.2	60 11 26	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC5322	13 49 15.4	60 11 25	PC	IMAGE	PC6	F555W		2	500	3912	2		1
NGC5322	13 49 15.4	60 11 25	PC	IMAGE	PC6	F555W		1	120	3912	2		1
1346+001	13 49 17.8	-0 7 52	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1346+001	13 49 17.8	-0 7 52	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
ESO-1346-3548	13 49 18.2	-36 3 40	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
4C53.28	13 49 34.7	53 41 17	FOS/BL	RAPID	1.0	G160L	1837	1	1734	2424	1		1
4C53.28	13 49 34.7	53 41 17	FOS/BL	ACQ/BINA	4.3	MIRROR		1	61	2424	1	ACQ	1
1347+1116	13 49 53.3	11 1 16	PC	IMAGE	ALL	F555W		1	260	3156	0		1
ESO-1348-3333	13 51 19.3	-33 48 28	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NEWEGOB-33NEWHIP-33	13 53 15.7	63 45 40	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-33NEWHIP-33	13 53 15.7	63 45 40	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
PG1351+64	13 53 15.9	63 45 46	FOS/BL	ACQ/BINA	4.3	MIRROR		1	7	2717	1	ACQ	1
PG1351+64	13 53 15.9	63 45 46	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	7	2717	1	ACQ	1
PG1351+64	13 53 15.9	63 45 46	FOS/BL	ACCUM	0.25X2.0	G190H	1954	1	3000	2717	1		1
PG1351+64	13 53 15.9	63 45 46	FOS/BL	ACCUM	0.25X2.0	G130H	1379	1	3200	2717	1		1
PG1351+64	13 53 15.9	63 45 46	FOS/BL	ACCUM	0.25X2.0	G270H	2769	1	1400	2717	1		1
B21351+31	13 54 5.4	31 39 2	PC	IMAGE	ALL	F555W		1	240	4028	1		1
NEWHIP-33	13 54 5.7	63 52 30	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-33	13 54 5.7	63 52 30	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
PG1352+011	13 54 58.7	0 52 10	PC	IMAGE	ALL	F555W		1	260	3156	0		1
PG1352+011	13 54 58.7	0 52 10	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	2424	1	ACQ	1
PG1352+011	13 54 58.7	0 52 10	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
PG1352+011	13 54 58.7	0 52 10	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PG1352+011	13 54 58.7	0 52 10	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6000	2424	1		1
PG1352+011	13 54 58.7	0 52 10	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1320	2424	1		1
POINTNEWEGOB-33NEWHIP-33	13 55 7.9	63 43 14	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-33NEWHIP-33	13 55 7.9	63 43 14	S/C	POINTING	V1			1	1	4145	3	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD121800	13 55 15.4	66 7 1	HRS	ACCUM	0.25	G160M	1550	1	272	3706	2		1
HD121800	13 55 15.4	66 7 1	HRS	ACCUM	0.25	G160M	1403	1	191	3706	2		1
HD121800	13 55 15.4	66 7 1	HRS	ACCUM	0.25	G160M	1249	1	136	3706	2		1
MRK463E-OFFSET	13 56 1.9	18 23 28	FOS/BL	ACQ/BINA	4.3	MIRROR		1	3	3573	2	ACQ	1
MRK463E	13 56 2.9	18 22 19	FOS/BL	ACCUM	4.3	G270H		1	1200	3573	2		1
UGC8853	13 56 12.0	5 0 53	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1407+599-CALIB	13 56 43.3	58 35 4	PC	IMAGE	P6	F785LP		1	1	3648	2		1
PKS1354+19	13 57 4.5	19 19 6	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	3858	2	ACQ	1
PKS1354+19	13 57 4.5	19 19 6	FOS/RD	ACCUM	4.3	G400H	4020	1	174	3858	2		1
PKS1354+19	13 57 4.5	19 19 6	FOS/RD	ACCUM	4.3	G190H	1954	1	492	3858	2		1
PKS1354+19	13 57 4.5	19 19 6	FOS/RD	ACCUM	4.3	G270H	2767	1	222	3858	2		1
PKS1354+19	13 57 4.5	19 19 7	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	2424	1	ACQ	1
PKS1354+19	13 57 4.5	19 19 7	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
PKS1354+19	13 57 4.5	19 19 7	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PKS1354+19	13 57 4.5	19 19 7	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	3960	2424	1		1
PKS1354+19	13 57 4.5	19 19 7	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1215	2424	1		1
MARK280	13 57 19.6	28 47 28	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
4C58.29	13 58 17.6	57 52 5	PC	IMAGE	ALL	F555W		1	260	3156	0		1
ABELL1831	13 59 15.1	27 58 33	PC	IMAGE	P6	F555W		2	700	2600	1		1
PG1358+04	14 0 32.0	4 4 58	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
PG1358+04	14 0 32.0	4 4 58	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	4125	3	ACQ CON	1
PG1358+04	14 0 32.0	4 4 58	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
PG1358+04	14 0 32.0	4 4 58	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5910	4125	3	CON	1
PG1358+04	14 0 32.0	4 4 58	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2118	4125	3	CON	1
1358+1134	14 0 39.0	11 20 22	PC	IMAGE	ALL	F555W		1	260	3156	0		1
TOL89	14 1 21.5	-33 3 46	FOS/BL	ACCUM	1.0	G130H		1	18600	4122	2	CON	1
TOL89	14 1 21.5	-33 3 46	FOS/BL	ACCUM	1.0	G190H		1	6200	4122	2	CON	1
TOL89	14 1 21.5	-33 3 46	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	1	4122	2	ACQ CON	1
TOL89	14 1 21.5	-33 3 46	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	1	4122	2	ACQ CON	1
TOL89	14 1 21.5	-33 3 46	FOC/48	IMAGE	512X512	F130LP F140W		1	1000	3810	2		1
1359-058	14 1 41.1	-6 8 23	PC	IMAGE	ALL	F555W		1	240	4028	1		1
NGC5457-FLD2	14 2 22.5	54 17 58	WFC	IMAGE	WFALL	F555W		1	3600	3905	3		12
NGC5457-FLD2	14 2 22.5	54 17 58	WFC	IMAGE	WFALL	F555W		1	3456	3905	2		1
NGC5457-FLD2	14 2 22.5	54 17 58	WFC	IMAGE	WFALL	F785LP		1	3600	3905	3		4
NGC5457-FLD2	14 2 22.5	54 17 58	FOC/48	IMAGE	512X1024	F150W		1	3600	3905	3	PAR	12
NGC5457-FLD2	14 2 22.5	54 17 58	FOC/48	IMAGE	512X1024	F430W		1	3600	3905	3	PAR	4
NGC5457-FLD2	14 2 22.5	54 17 58	FOC/48	IMAGE	512X1024	F150W		1	3456	3905	2	PAR	1
1400+1126	14 2 37.3	11 12 27	PC	IMAGE	ALL	F555W		1	260	3156	0		1
1400+114	14 2 37.3	11 11 36	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1400+114	14 2 37.3	11 11 36	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
NGC5457-SEARLE5-OFFSET	14 2 50.4	54 22 10	FOS/BL	ACQ/BINA	4.3	MIRROR		1	20	3813	2	ACQ	1
NGC5457-SEARLE5-OFFSET	14 2 50.4	54 22 10	FOS/RD	ACQ/BINA	4.3	MIRROR		1	2	3813	2	ACQ	1
NGC5457-SEARLE5	14 2 55.0	54 22 26*	FOS/RD	ACCUM	1.0	G400H	4000	1	500	3813	2		1
NGC5457-SEARLE5	14 2 55.0	54 22 26*	FOS/BL	ACCUM	1.0	G130H	1300	1	3000	3813	2		1
NGC5457-SEARLE5	14 2 55.0	54 22 26*	FOS/BL	ACCUM	1.0	G190H	1900	1	1000	3813	2		1
NGC5457-SEARLE5	14 2 55.0	54 22 26*	FOS/BL	ACCUM	1.0	G270H	2700	1	500	3813	2		1
NGC5457-SEARLE5	14 2 55.0	54 22 26*	FOS/RD	ACCUM	1.0	G570H	5700	1	2000	3813	2		1
NGC5457-SEARLE5	14 2 55.0	54 22 26*	FOS/RD	ACCUM	1.0	G780H	7800	1	6000	3813	2		1
NGC5455	14 3 1.2	54 14 27*	FOS/RD	ACCUM	1.0	G400H	4000	1	160	3813	2		1
NGC5455	14 3 1.2	54 14 27*	FOS/BL	ACCUM	1.0	G130H	1300	1	1000	3813	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC5455	14 3 1.2	54 14 27*	FOS/RD	ACCUM	1.0	G570H	5700	1	400	3813	2		1
NGC5455	14 3 1.2	54 14 27*	FOS/BL	ACCUM	1.0	G190H	1900	1	280	3813	2		1
NGC5455	14 3 1.2	54 14 27*	FOS/BL	ACCUM	1.0	G270H	2700	1	120	3813	2		1
NGC5455	14 3 1.2	54 14 27*	FOS/RD	ACCUM	1.0	G780H	7800	1	2500	3813	2		1
NGC5455-OFFSET	14 3 5.7	54 15 20	FOS/RD	ACQ/BINA	4.3	MIRROR		1	36	3813	2	ACQ	1
NGC5457-FLD1	14 3 23.9	54 21 36	WFC	IMAGE	WFALL	F555W		1	3600	3905	3		12
NGC5457-FLD1	14 3 23.9	54 21 36	WFC	IMAGE	WFALL	F555W		1	3456	3905	2		1
NGC5457-FLD1	14 3 23.9	54 21 36	WFC	IMAGE	WFALL	F785LP		1	3600	3905	3		4
NGC5457-FLD1	14 3 23.9	54 21 36	FOC/48	IMAGE	512X1024	F150W		1	3600	3905	3	PAR	12
NGC5457-FLD1	14 3 23.9	54 21 36	FOC/48	IMAGE	512X1024	F430W		1	3600	3905	3	PAR	4
NGC5457-FLD1	14 3 23.9	54 21 36	FOC/48	IMAGE	512X1024	F150W		1	3456	3905	2	PAR	1
1400+0935	14 3 26.5	9 20 44	PC	IMAGE	ALL	F555W		1	260	3156	0		1
1400+095	14 3 26.5	9 20 37	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
1400+095	14 3 26.5	9 20 37	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
NGC5461	14 3 41.3	54 19 4*	FOS/RD	ACCUM	1.0	G400H	4000	1	75	3813	2		1
NGC5461	14 3 41.3	54 19 4*	FOS/BL	ACCUM	1.0	G130H	1300	1	700	3813	2		1
NGC5461	14 3 41.3	54 19 4*	FOS/BL	ACCUM	1.0	G190H	1900	1	200	3813	2		1
NGC5461	14 3 41.3	54 19 4*	FOS/BL	ACCUM	1.0	G270H	2700	1	70	3813	2		1
NGC5461	14 3 41.3	54 19 4*	FOS/RD	ACCUM	1.0	G780H	7800	1	2000	3813	2		1
NGC5461	14 3 41.3	54 19 4*	FOS/RD	ACCUM	1.0	G570H	5700	1	185	3813	2		1
NGC5461-OFFSET	14 3 47.0	54 17 43	FOS/RD	ACQ/BINA	4.3	MIRROR		1	60	3813	2	ACQ	1
1E1401+0952	14 4 10.6	9 37 45	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
1E1401+0952	14 4 10.6	9 37 45	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	4125	3	ACQ CON	1
1E1401+0952	14 4 10.6	9 37 45	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
1E1401+0952	14 4 10.6	9 37 45	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6084	4125	3	CON	1
1E1401+0952	14 4 10.6	9 37 45	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2178	4125	3	CON	1
NGC5471-OFFSET	14 4 20.4	54 23 25	FOS/RD	ACQ/BINA	4.3	MIRROR		1	2	3813	2	ACQ	1
NGC5471	14 4 29.0	54 23 49*	FOS/RD	ACCUM	1.0	G400H	4000	1	60	3813	2		1
NGC5471	14 4 29.0	54 23 49*	FOS/BL	ACCUM	1.0	G270H	2700	1	80	3813	2		1
NGC5471	14 4 29.0	54 23 49*	FOS/RD	ACCUM	1.0	G570H	5700	1	300	3813	2		1
NGC5471	14 4 29.0	54 23 49*	FOS/BL	ACCUM	1.0	G130H	1300	1	450	3813	2		1
NGC5471	14 4 29.0	54 23 49*	FOS/BL	ACCUM	1.0	G190H	1900	1	150	3813	2		1
NGC5471	14 4 29.0	54 23 49*	FOS/RD	ACCUM	1.0	G780H	7800	1	1500	3813	2		1
PKS1402-012	14 4 45.8	-1 30 22	PC	IMAGE	ALL	F555W		1	260	3156	0		1
MARK667	14 4 52.7	21 38 1	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
PKS1402+044	14 5 1.1	4 15 36	PC	IMAGE	ALL	F555W		1	260	3156	0		1
UGC9013	14 5 1.3	53 39 44	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
POINT1404+286INCA221-92	14 6 11.3	28 19 38	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT1404+286INCA221-92	14 6 11.3	28 19 38	S/C	POINTING	V1			1	1	4147	3	CON	1
INCA221-92	14 6 40.3	28 29 3	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-92	14 6 40.3	28 29 3	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
1404+286INCA221-92	14 7 0.4	28 27 15	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
1404+286INCA221-92	14 7 0.4	28 27 15	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
1404+286INCA221-93	14 7 0.4	28 27 15	FGS	POS	3	PUPIL		1	51	4147	2	CON	3
1404+286INCA221-94	14 7 0.4	28 27 15	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
1404+286INCA221-94	14 7 0.4	28 27 15	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
POINT1404+286INCA221-93	14 7 45.4	28 20 8	S/C	POINTING	V1			1	1	4147	2	CON	1
POINT1404+286INCA221-94	14 7 45.4	28 20 8	S/C	POINTING	V1			1	1	2859	2	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
POINT1404+286INCA221 -94	14 7 45.4	28 20 8	S/C	POINTING	V1			1	1	4147	3	CON	1
INCA221-93	14 7 50.0	28 32 43	FGS	POS	3	F5ND		1	51	4147	2	CON	2
INCA221-94	14 7 50.0	28 32 43	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-94	14 7 50.0	28 32 43	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
1406+1221	14 8 38.9	12 7 10	PC	IMAGE	ALL	F555W		1	240	4028	1		1
1406+123	14 8 38.9	12 6 49	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1406+123	14 8 38.9	12 6 49	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
1407+599	14 9 23.5	59 39 41	PC	IMAGE	P6	F785LP		7	900	3648	2		1
PG1407+265	14 9 23.9	26 18 22	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	2424	1	ACQ	1
PG1407+265	14 9 23.9	26 18 22	FOS/BL	RAPID	1.0	G160L	1837	1	720	2424	1		1
PG1407+265	14 9 23.9	26 18 22	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	4500	2424	1		1
PG1407+265	14 9 23.9	26 18 22	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1200	2424	1		1
PG1407+265	14 9 23.9	26 18 22	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
ESO-1407-4305	14 10 25.0	-43 19 31	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PK315+09D1	14 11 52.2	-51 26 24	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK315+09D1	14 11 52.2	-51 26 24	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
1409+0930	14 12 17.3	9 16 25	PC	IMAGE	ALL	F555W		1	260	3156	0		1
ESO-1409-6506	14 13 9.5	-65 20 17	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1410+0936	14 13 21.0	9 22 5	PC	IMAGE	ALL	F555W		1	260	3156	0		1
UGC9102	14 13 38.9	7 39 35	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
GB21413+373	14 15 28.4	37 6 21	PC	IMAGE	ALL	F555W		1	260	3156	0		1
GB21413+373	14 15 28.4	37 6 21	PC	IMAGE	ALL	F555W		1	240	4017	1		1
Q1413+117-C	14 15 46.0	11 29 45*	FOS/RD	ACCUM	0.5	G570H		1	5174	2649	1		1
Q1413+117-C	14 15 46.0	11 29 45*	FOS/RD	ACQ/PEAK	0.5	MIRROR		1	23	2649	1	ACQ	1
Q1413+117	14 15 46.3	11 29 44	PC	IMAGE	P6	F555W		1	600	2649	1		1
Q1413+117	14 15 46.3	11 29 44	PC	IMAGE	P6	F555W		1	600	2649	1	ACQ	1
Q1413+117-D	14 15 46.3	11 29 45*	FOS/RD	ACCUM	0.5	G570H		1	5776	2649	1		1
Q1413+117-D	14 15 46.3	11 29 45*	FOS/RD	ACQ/PEAK	0.5	MIRROR		1	18	2649	1	ACQ	1
Q1413+117-A	14 15 46.3	11 29 44*	FOS/RD	ACCUM	0.5	G570H		1	3521	2649	1		1
Q1413+117-A	14 15 46.3	11 29 44*	FOS/RD	ACQ/PEAK	0.5	MIRROR		1	18	2649	1	ACQ	1
1413+117	14 15 46.3	11 29 44	PC	IMAGE	ALL	F555W		1	100	2350	1		1
1413+117	14 15 46.3	11 29 44	PC	IMAGE	ALL	F555W		1	900	2350	1		1
Q1413+117-B	14 15 46.4	11 29 44*	FOS/RD	ACCUM	0.5	G570H		1	4448	2649	1		1
Q1413+117-B	14 15 46.4	11 29 44*	FOS/RD	ACQ/PEAK	0.5	MIRROR		1	20	2649	1	ACQ	1
Q1413+117-OFFSET	14 15 47.7	11 29 52	FOS/RD	ACQ/BINA	4.3	MIRROR		1	22	2649	1	ACQ	1
PKS1413+135	14 15 58.8	13 20 24	PC	IMAGE	PCALL	F555W		1	1000	3657	2		2
PKS1413+135	14 15 58.8	13 20 24	PC	IMAGE	PCALL-FIX	F555W		1	900	3657	2		1
Q1414+0859	14 16 57.7	8 45 39	PC	IMAGE	ALL	F555W		1	260	3156	0		1
NGC5548	14 17 59.5	25 8 13	PC	IMAGE	PC6	F785LP		1	180	3698	2		1
NGC5548	14 17 59.6	25 8 12	FOS/BL	ACCUM	4.3	G130H		1	1750	3484	2		1
NGC5548	14 17 59.6	25 8 12	FOS/BL	ACCUM	4.3	G130H		1	1750	4054	2		39
NGC5548	14 17 59.6	25 8 12	FOS/BL	ACCUM	4.3	G190H		1	1295	3484	2		1
NGC5548	14 17 59.6	25 8 12	FOS/BL	ACCUM	4.3	G190H		1	1295	4054	2		39
NGC5548	14 17 59.6	25 8 12	FOS/BL	ACQ/BINA	4.3	MIRROR		1	15	3484	2	ACQ	1
NGC5548	14 17 59.6	25 8 12	FOS/BL	ACQ/BINA	4.3	MIRROR		1	15	4054	2	ACQ	39
MC1415+172	14 18 3.7	17 3 25	FOS/BL	RAPID	1.0	G160L	1837	1	1710	2424	1		1
MC1415+172	14 18 3.7	17 3 25	FOS/BL	ACQ/BINA	4.3	MIRROR		1	67	2424	1	ACQ	1
UGC9179	14 19 47.9	56 43 45	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UGC9175	14 20 19.9	3 56 1	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-1417-2900	14 20 34.1	-29 14 28	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-1418-4604	14 21 13.4	-46 17 59	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
1423+1007	14 26 11.1	9 54 9	PC	IMAGE	ALL	F555W		1	260	3156	0		1
NEWEGOB-34NEWHIP-34	14 27 0.5	23 48 0	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-34NEWHIP-34	14 27 0.5	23 48 0	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
POINTNEWEGOB-34NEWHIP-34	14 27 35.0	23 38 0	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-34NEWHIP-34	14 27 35.0	23 38 0	S/C	POINTING	V1			1	1	4145	3	CON	1
PKS1424-11	14 27 38.1	-12 3 50	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
PKS1424-11	14 27 38.1	-12 3 50	FOS/RD	ACQ/BINA	4.3	MIRROR		1	12	2424	1	ACQ	1
PKS1424-11	14 27 38.1	-12 3 50	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PKS1424-11	14 27 38.1	-12 3 50	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6975	2424	1		1
PKS1424-11	14 27 38.1	-12 3 50	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1995	2424	1		1
NEWHIP-34	14 27 45.4	23 50 26	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-34	14 27 45.4	23 50 26	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
1426-0131	14 29 3.0	-1 44 21	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1426-0131	14 29 3.0	-1 44 21	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
1429+1153	14 32 12.9	11 39 53	PC	IMAGE	ALL	F555W		1	260	3156	0		1
G166-37	14 34 51.2	25 10 3	FGS	POS	3	PUPIL		1	50	4064	1		30
G166-37	14 34 51.2	25 10 3	FGS	POS	3	PUPIL		1	50	3856	2		20
G166-37	14 34 51.2	25 10 3	FGS	TRANS	1	PUPIL		1	132	2428	1		1
NGC5683	14 34 52.4	48 39 43	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
INCA221-98	14 36 17.8	63 27 56	FGS	POS	3	F5ND		1	51	2859	2	CON	2
INCA221-98	14 36 17.8	63 27 56	FGS	POS	3	F5ND		1	51	4147	3	CON	2
UGC9412	14 36 22.1	58 47 39	PC	IMAGE	PC6	F785LP		1	180	3698	2		1
1435+638INCA221-98	14 36 45.7	63 36 38	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
1435+638INCA221-98	14 36 45.7	63 36 38	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
CPD-64D2939	14 37 9.9	-64 48 3	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
CPD-64D2939	14 37 9.9	-64 48 3	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
POINT1435+638INCA221-98	14 38 8.1	63 28 48	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT1435+638INCA221-98	14 38 8.1	63 28 48	S/C	POINTING	V1			1	1	4147	3	CON	1
HD128621	14 39 35.1	-60 50 16	HRS	ACCUM	2.0	ECH-B	3130	1	360	3614	2		1
HD128621	14 39 35.1	-60 50 16	HRS	ACCUM	0.25	G270M	2498	1	1440	3614	2		1
HD128621	14 39 35.1	-60 50 16	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	5	3614	2		1
HD128621	14 39 35.1	-60 50 16	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	3614	2		1
HD128620	14 39 36.6	-60 50 1	HRS	ACCUM	2.0	ECH-B	3130	1	120	3614	2		1
HD128620	14 39 36.6	-60 50 1	HRS	ACCUM	0.25	G270M	2498	1	300	3614	2		1
HD128620	14 39 36.6	-60 50 1	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	5	3614	2		1
HD128620	14 39 36.7	-60 50 2	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	46	2461	1	ACQ	1
HD128620	14 39 36.7	-60 50 2	HRS	ACCUM	0.25	ECH-B	2805	2	998	2461	1		1
HD128620	14 39 36.7	-60 50 2	HRS	ACCUM	0.25	ECH-B	2854	4	998	2461	1		1
HD128620	14 39 36.7	-60 50 2	HRS	ACCUM	0.25	ECH-B	2581	2	998	2461	1		1
HD128620	14 39 36.7	-60 50 2	HRS	ACCUM	0.25	ECH-B	2596	2	998	2461	1		1
MRK477	14 40 38.1	53 30 16*	FOS/BL	ACCUM	4.3	G270H		1	1200	3573	2		1
MARK477	14 40 38.1	53 30 15	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
MRK477-OFFSET	14 40 42.3	53 30 33	FOS/BL	ACQ/BINA	4.3	MIRROR		1	2	3573	2	ACQ	1
PKS1438-347	14 41 23.9	-34 56 46	PC	IMAGE	ALL	F555W		1	260	3156	0		1
NEWHIP-35	14 41 44.4	35 14 26	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-35	14 41 44.4	35 14 26	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
NEWEGOB-35NEWHIP-35	14 42 7.5	35 26 23	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-35NEWHIP-35	14 42 7.5	35 26 23	FGS	POS	3	PUPIL		1	51	4145	3	CON	3

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC5728	14 42 23.9	-17 15 11	PC	IMAGE	PC6	F547M		1	600	3724	2		1
NGC5728	14 42 23.9	-17 15 11	PC	IMAGE	PC6	F718M		1	600	3724	2		1
NGC5728	14 42 23.9	-17 15 11	PC	IMAGE	PC6	F492M		1	1200	3724	2		1
NGC5728	14 42 23.9	-17 15 11	PC	IMAGE	PC6	F664N		1	1200	3724	2		1
POINTNEWEGOB-35NEWHIP-35	14 42 41.3	35 15 29	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-35NEWHIP-35	14 42 41.3	35 15 29	S/C	POINTING	V1			1	1	4145	3	CON	1
UGC9499	14 44 55.9	1 57 21	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
1442+101	14 45 16.6	9 58 36	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1442+101	14 45 16.6	9 58 36	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
PG1444+407	14 46 45.9	40 35 6	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
PG1444+407	14 46 45.9	40 35 6	FOS/BL	ACQ/BINA	4.3	MIRROR		1	13	4125	3	ACQ CON	1
PKS1448-232	14 51 2.5	-23 29 31	PC	IMAGE	ALL	F555W		1	260	3156	0		1
CPD-53D5736	14 52 28.8	-54 17 42	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
CPD-53D5736	14 52 28.8	-54 17 42	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
1451+1223	14 54 18.6	12 10 55	PC	IMAGE	ALL	F555W		1	260	3156	0		1
1455+1221	14 58 7.5	12 9 38	PC	IMAGE	ALL	F555W		1	260	3156	0		1
L151-81	14 58 12.0	-63 17 33	FOS/RD	ACCUM	0.3	G270H		1	2220	3816	2		1
L151-81	14 58 12.0	-63 17 33	FOS/RD	ACCUM	0.3	G400H		1	2220	3816	2		1
L151-81	14 58 12.0	-63 17 33	FOS/RD	ACCUM	0.5	G270H		1	1800	3816	2		1
L151-81	14 58 12.0	-63 17 33	FOS/RD	ACCUM	0.5	G400H		1	1800	3816	2		1
L151-81	14 58 12.0	-63 17 33	FOS/RD	ACQ/BINA	0.3	MIRROR		1	25	3816	2	ACQ	1
L151-81	14 58 12.0	-63 17 33	FOS/RD	ACQ/BINA	0.5	MIRROR		1	7	3816	2	ACQ	1
L151-81	14 58 12.0	-63 17 33	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	3816	2	ACQ	1
UGC9631	14 58 22.8	-1 5 26	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PK321+03D1	14 59 53.3	-54 18 3	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK321+03D1	14 59 53.3	-54 18 3	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
NGC5813	15 1 11.2	1 42 6	PC	IMAGE	PC6	F555W		2	500	3912	2		1
NGC5813	15 1 11.2	1 42 6	PC	IMAGE	PC6	F555W		1	120	3912	2		1
H1504+65	15 2 9.7	66 12 19	FOS/BL	ACQ/BINA	4.3	MIRROR		1	2	2593	1	ACQ	1
H1504+65	15 2 9.7	66 12 19	FOS/BL	ACCUM	1.0	G270H	2766	1	600	2593	1		1
H1504+65	15 2 9.7	66 12 19	FOS/BL	ACCUM	1.0	G160L	1836	1	4800	2593	1		1
1500+08	15 2 45.4	8 13 6	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
1500+08	15 2 45.4	8 13 6	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
STAR-1503-4159	15 2 53.2	-41 59 16	FOS/BL	ACCUM	1.0	G190H		1	11700	2434	1		2
STAR-1503-4159	15 2 53.2	-41 59 16	FOS/RD	ACCUM	1.0	G270H		1	9600	2434	1		1
STAR-1503-4159	15 2 53.2	-41 59 16	FOS/RD	ACQ/BINA	4.3	MIRROR		1	100	2434	1	ACQ	1
STAR-1503-4159	15 2 53.2	-41 59 16	FOS/BL	ACCUM	1.0	G130H		1	28079	3621	2		1
STAR-1503-4159	15 2 53.2	-41 59 16	FOS/BL	ACQ/BINA	4.3	MIRROR		1	110	2434	1	ACQ	2
STAR-1503-4159	15 2 53.2	-41 59 16	FOS/BL	ACQ/BINA	4.3	MIRROR		1	110	3621	2	ACQ	1
1500+0431	15 3 28.9	4 19 19	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1500+0431	15 3 28.9	4 19 19	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
MARK841	15 4 1.2	10 26 17	PC	IMAGE	PC6	F785LP		1	180	3698	2		1
NGC5845	15 6 0.8	1 38 1	PC	IMAGE	P6	F555W		1	60	2600	1		1
NGC5845	15 6 0.8	1 38 1	PC	IMAGE	P6	F555W		2	230	2600	1		1
NGC5846	15 6 29.2	1 36 20	FOC/48	IMAGE	512X512	F342W		1	240	2295	1		1
NGC5846	15 6 29.2	1 36 20	FOC/48	IMAGE	512X512	F430W		1	460	2295	1		1
NGC5846	15 6 29.2	1 36 20	FOC/48	IMAGE	512X512	F175W		1	2039	2295	1		1
UGC9723	15 6 29.4	55 45 49	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PKS1508-05	15 10 53.5	-5 43 7	PC	IMAGE	ALL	F555W		1	240	4028	1		1
MC1511+103	15 13 29.3	10 11 6	PC	IMAGE	ALL	F555W		1	240	4028	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
ESO-1510-4637	15 14 13.8	-46 48 14	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
B21512+37	15 14 43.1	36 50 50	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	2424	1	ACQ	1
B21512+37	15 14 43.1	36 50 50	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
B21512+37	15 14 43.1	36 50 50	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	4920	2424	1		1
B21512+37	15 14 43.1	36 50 50	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1560	2424	1		1
B2-1512+37-OFFSET	15 14 43.1	36 50 49	FOS/BL	ACQ/BINA	4.3	MIRROR		1	48	3538	2	ACQ	1
B2-1512+37-EMR1	15 14 43.5	36 50 51*	FOS/BL	IMAGE	4.3	G190H	1954	1	5550	3538	2		1
UGC9801	15 15 53.4	56 19 45	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ABELL2052	15 16 44.5	7 1 17	PC	IMAGE	P6	F555W		1	2000	2600	1		1
ABELL2052	15 16 44.5	7 1 17	PC	IMAGE	P6	F555W		1	1400	2600	1		1
POINT1514-241INCA221-104	15 16 53.8	-24 19 57	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT1514-241INCA221-104	15 16 53.8	-24 19 57	S/C	POINTING	V1			1	1	4147	3	CON	1
POINTNEWEGOC-50NEWHIP-50	15 16 59.6	-24 28 6	S/C	POINTING	V1			1	1	2862	2	CON	1
POINTNEWEGOC-50NEWHIP-50	15 16 59.6	-24 28 6	S/C	POINTING	V1			1	1	4144	3	CON	1
INCA221-104	15 17 35.0	-24 28 39	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-104	15 17 35.0	-24 28 39	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
PLUTO-REF-POSITION1	15 17 40.2	-2 34 54*	WFC	IMAGE	W1	F555W		1	8	2215	1		1
PLUTO-REF-POSITION2	15 17 40.5	-2 35 2*	WFC	IMAGE	W1	F555W		1	8	2215	1		1
PLUTO-REF-POSITION6	15 17 41.0	-2 35 47*	WFC	IMAGE	W1	F555W		1	8	2215	1		1
PLUTO-REF-POSITION5	15 17 41.0	-2 35 30*	WFC	IMAGE	W1	F555W		1	8	2215	1		1
PLUTO-REF-POSITION3	15 17 41.0	-2 35 24*	WFC	IMAGE	W1	F555W		1	8	2215	1		1
PLUTO-REF-POSITION4	15 17 41.1	-2 35 25*	WFC	IMAGE	W1	F555W		1	8	2215	1		1
PLUTO-REF-POSITION7	15 17 41.3	-2 35 52*	WFC	IMAGE	W1	F555W		1	8	2215	1		1
1514-241INCA221-104	15 17 41.7	-24 22 19	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
1514-241INCA221-104	15 17 41.7	-24 22 19	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
1514-241INCA221-105	15 17 41.7	-24 22 19	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
1514-241INCA221-105	15 17 41.7	-24 22 19	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
NEWEGOC-50NEWHIP-50	15 17 41.8	-24 22 18	FGS	POS	3	PUPIL		1	51	2862	2	CON	3
NEWEGOC-50NEWHIP-50	15 17 41.8	-24 22 18	FGS	POS	3	PUPIL		1	51	4144	3	CON	3
POINT1514-241INCA221-105	15 17 43.9	-24 9 25	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT1514-241INCA221-105	15 17 43.9	-24 9 25	S/C	POINTING	V1			1	1	4147	3	CON	1
FIELD-151744-023408-CALIB	15 17 44.3	-2 34 8	WFC	IMAGE	W1	F555W		1	360	2215	1	CAL	7
NEWHIP-50	15 17 45.1	-24 25 43	FGS	POS	3	PUPIL		1	51	2862	2	CON	8
NEWHIP-50	15 17 45.1	-24 25 43	FGS	POS	3	PUPIL		1	51	4144	3	CON	2
CIR-X1-OFFSET	15 18 4.0	56 48 19	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	6	3432	2	ACQ	4
CIR-X1-OFFSET	15 18 4.0	56 48 19	FOS/RD	ACQ/BINA	4.3	MIRROR		1	30	3432	2	ACQ	4
STAR-1520-5710-SPECTRUM	15 18 4.1	56 48 19*	FOS/RD	ACCUM	0.5	PRISM	4925	1	5160	3432	2		4
STAR-1520-5710	15 18 4.4	56 48 19	WFC	IMAGE	WFALL	F785LP		1	300	3432	2	ACQ	1
NGC5904-NORTH2	15 18 31.8	2 7 7	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC5904-NORTH2	15 18 31.8	2 7 7	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
NGC5904-NORTH1	15 18 31.8	2 6 7	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC5904-NORTH1	15 18 31.8	2 6 7	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
NGC5904-CORE	15 18 31.9	2 5 7	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC5904-CORE	15 18 31.9	2 5 7	PC	IMAGE	PCALL	F439W		3	250	3872	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
INCA221-105	15 18 36.0	-24 14 57	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-105	15 18 36.0	-24 14 57	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
IRAS15154-5258-OFFSET	15 19 7.1	-53 9 45	FOS/BL	ACQ/BINA	4.3	MIRROR		1	120	3671	2	ACQ	1
IRAS15154-5258-KNOT	15 19 7.4	-53 9 40*	FOS/BL	ACCUM	4.3	G160L		1	3299	3671	2		1
MC1517+176	15 20 15.3	17 25 53	PC	IMAGE	ALL	F555W		1	240	4028	1		1
NEWHIP-60	15 21 32.9	-6 49 36	FGS	POS	3	F5ND		1	51	3918	2	CON	2
NEWHIP-60	15 21 32.9	-6 49 36	FGS	POS	3	F5ND		1	51	4143	3	CON	2
POINTNEWEGOD-60NEWHIP-60	15 22 13.2	-6 56 47	S/C	POINTING	V1			1	1	3918	2	CON	1
POINTNEWEGOD-60NEWHIP-60	15 22 13.2	-6 56 47	S/C	POINTING	V1			1	1	4143	3	CON	1
SP43	15 22 19.7	41 11 56	PC	IMAGE	ALL	F555W		1	260	3156	0		1
SP43	15 22 19.8	41 11 21	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
SP43	15 22 19.8	41 11 21	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
NEWEGOD-60NEWHIP-60	15 22 27.2	-6 44 33	FGS	POS	3	PUPIL		1	51	3918	2	CON	3
NEWEGOD-60NEWHIP-60	15 22 27.2	-6 44 33	FGS	POS	3	PUPIL		1	51	4143	3	CON	3
NEWEGOD-61NEWHIP-61	15 22 27.2	-6 44 33	FGS	POS	3	PUPIL		1	51	3918	2	CON	3
NEWEGOD-61NEWHIP-61	15 22 27.2	-6 44 33	FGS	POS	3	PUPIL		1	51	4143	3	CON	3
IRAS15206+3342	15 22 38.0	33 31 36	FOC/96	IMAGE	512X512	F480LP		1	900	3906	2		1
IRAS15206+3342	15 22 38.0	33 31 36	FOC/96	IMAGE	512X512	F1ND F430W		1	1200	3906	2		1
POINTNEWEGOD-61NEWHIP-61	15 23 16.8	-6 49 30	S/C	POINTING	V1			1	1	3918	2	CON	1
POINTNEWEGOD-61NEWHIP-61	15 23 16.8	-6 49 30	S/C	POINTING	V1			1	1	4143	3	CON	1
NEWHIP-61	15 23 26.1	-6 36 37	FGS	POS	3	F5ND		1	51	3918	2	CON	2
NEWHIP-61	15 23 26.1	-6 36 37	FGS	POS	3	F5ND		1	51	4143	3	CON	2
PK322-00D1	15 23 42.3	-57 9 20	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK322-00D1	15 23 42.3	-57 9 20	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
PG1522+101	15 24 24.5	9 58 30	PC	IMAGE	ALL	F555W		1	260	3156	0		1
NGC5929	15 26 6.1	41 40 15	PC	IMAGE	PC6	F547M		1	900	3724	2		1
NGC5929	15 26 6.1	41 40 15	PC	IMAGE	PC6	F718M		1	900	3724	2		1
NGC5929	15 26 6.1	41 40 15	PC	IMAGE	PC6	F492M		1	1800	3724	2		1
NGC5929	15 26 6.1	41 40 15	PC	IMAGE	PC6	F664N		1	1800	3724	2		1
NGC5927	15 28 0.4	-50 40 22	FOC/48	IMAGE	512X512	F140W	1300	1	1200	3804	2		1
NGC5927	15 28 0.4	-50 40 22	FOC/48	IMAGE	512X512	F220W	2239	1	1200	3804	2		1
NGC5927	15 28 0.4	-50 40 22	FOC/48	IMAGE	512X512	F195W F342W	3377	1	500	3804	2		1
EX1526+285	15 28 40.7	28 25 29	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
EX1526+285	15 28 40.7	28 25 29	FOS/RD	ACQ/BINA	4.3	MIRROR		1	12	4125	3	ACQ CON	1
EX1526+285	15 28 40.7	28 25 29	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6036	4125	3	CON	1
EX1526+285	15 28 40.7	28 25 29	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2574	4125	3	CON	1
EX1526+285	15 28 40.7	28 25 29	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
MARK484	15 30 57.3	54 41 30	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
3C321	15 31 43.4	24 4 19	FOC/96	IMAGE	512X1024	F320W POL0		1	606	3790	2		1
3C321	15 31 43.4	24 4 19	FOC/96	IMAGE	512X1024	F320W POL60		1	606	3790	2		1
3C321	15 31 43.4	24 4 19	FOC/96	IMAGE	512X1024	F320W POL120		1	606	3790	2		1
MARK289	15 32 31.6	57 53 2	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
MARK290	15 35 52.4	57 54 9	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
NGC5982	15 38 39.7	59 21 21	PC	IMAGE	PC6	F555W		1	640	3551	2		1
PG1538+477	15 39 34.8	47 35 31	FOS/BL	RAPID	1.0	G160L	1840	1	600	3791	2		1
PG1538+477	15 39 34.8	47 35 31	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	3791	2	ACQ	1
PG1538+477	15 39 34.8	47 35 31	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	7800	3791	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PG1538+477	15 39 34.8	47 35 31	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	3791	2	ACQ	1
HD140283	15 43 3.1	-10 56 1	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	5	3479	2	ACQ	1
HD140283	15 43 3.1	-10 56 1	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	5	3479	2	ACQ CON SEL	1
HD140283	15 43 3.1	-10 56 1	HRS	ACCUM	0.25	ECH-B	2494	65	336	3479	2		1
HD140283	15 43 3.1	-10 56 1	HRS	ACCUM	0.25	ECH-B	2494	87	336	3479	2	CON SEL	1
1543+489	15 45 30.3	48 46 8	HRS	ACCUM	2.0	G270M	3009	25	870	3755	2		1
C1543+091-OFFSET	15 45 43.5	8 58 29	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	3840	2	ACQ	1
C1543+091	15 45 43.7	8 58 0*	FOS/RD	ACCUM	1.0	G190H		1	5400	3840	2		1
UGC10033	15 46 58.9	17 53 3	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
4U1543-47	15 47 8.4	-47 40 12	PC	IMAGE	P6	F336W		1	800	4165	2		1
4U1543-47	15 47 8.4	-47 40 12	PC	IMAGE	P6	F555W		1	10	4165	2		1
4U1543-47	15 47 8.4	-47 40 12	PC	IMAGE	P6	F555W		1	50	4165	2		1
4U1543-47	15 47 8.4	-47 40 12	PC	IMAGE	P6	F336W		1	160	4165	2		1
3C323-1	15 47 43.5	20 52 16	FOS/BL	ACCUM	4.3	G130H	1300	1	2310	2578	1		1
3C323-1	15 47 43.5	20 52 16	FOS/RD	ACCUM	4.3	G190H	1900	1	384	2578	1		1
3C323-1	15 47 43.5	20 52 16	FOS/RD	ACCUM	4.3	G270H	2700	1	225	2578	1		1
3C323-1	15 47 43.5	20 52 16	FOS/BL	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
3C323-1	15 47 43.5	20 52 16	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
3C323-1	15 47 43.5	20 52 16	FOS/RD	ACCUM	4.3	G400H	4000	1	155	2578	1		1
1548+4637	15 50 7.3	46 28 0	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1548+4637	15 50 7.3	46 28 0	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
PKS1548+056	15 50 35.3	5 27 11	PC	IMAGE	ALL	F555W		1	240	4028	1		1
MC1548+114	15 50 43.6	11 20 48	FOS/RD	ACCUM	4.3	G400H	4000	1	1290	2578	1		1
MC1548+114	15 50 43.6	11 20 48	FOS/RD	ACCUM	4.3	G190H	1900	1	4260	2578	1		1
MC1548+114	15 50 43.6	11 20 48	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
MC1548+114	15 50 43.6	11 20 48	FOS/RD	ACCUM	4.3	G270H	2700	1	1488	2578	1		1
HD141795	15 50 49.0	4 28 40	HRS	ACCUM	2.0	G160M	1335	1	762	3737	2		1
HD141637	15 50 58.7	-25 45 5	HRS	IMAGE	2.0	MIRROR-A2		1	96	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	IMAGE	2.0	MIRROR-A2		1	96	3993	1		2
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	G160M	1398	1	457	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	G160M	1554	1	696	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	G160M	1608	1	648	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	WSCAN	0.25	ECH-B	1807	1	496	3993	1		1
HD141637	15 50 58.7	-25 45 5	HRS	WSCAN	0.25	ECH-B	1827	1	583	3993	1		1
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	G160M	1175	1	1182	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	G160M	1290	1	267	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	G160M	1663	1	639	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	ECH-B	2325	1	158	3993	1		2
HD141637	15 50 58.7	-25 45 5	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2251	1	ACQ	1
HD141637	15 50 58.7	-25 45 5	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	3993	1	ACQ	2
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	ECH-B	2324	1	158	3993	1		3
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	ECH-B	2326	1	158	3993	1		2
HD141637	15 50 58.7	-25 45 5	HRS	WSCAN	0.25	ECH-B	1858	1	820	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	WSCAN	0.25	ECH-B	2519	1	333	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	WSCAN	0.25	ECH-B	1744	1	734	3993	1		1
HD141637	15 50 58.7	-25 45 5	HRS	WSCAN	0.25	ECH-B	2059	1	410	3993	1		1
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	G160M	1345	1	314	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	WSCAN	0.25	ECH-B	2484	1	305	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	G160M	1133	1	1459	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	G160M	1249	1	352	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	ECH-B	2324	1	158	3993	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	ECH-B	2325	1	158	3993	1		2
HD141637	15 50 58.7	-25 45 5	HRS	ACCUM	0.25	ECH-B	2326	1	158	3993	1		2
HD141637	15 50 58.7	-25 45 5	HRS	WSCAN	0.25	ECH-B	2249	1	181	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	WSCAN	0.25	ECH-B	2799	1	209	2251	1		1
HD141637	15 50 58.7	-25 45 5	HRS	WSCAN	0.25	ECH-B	2026	1	410	3993	1		1
HD141637	15 50 58.7	-25 45 5	HRS	WSCAN	0.25	ECH-B	2371	1	259	3993	1		1
1548+0917	15 51 3.4	9 8 50	PC	IMAGE	ALL	F555W		1	260	3156	0		1
PK330+04D1	15 51 16.3	-48 45 1	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK330+04D1	15 51 16.3	-48 45 1	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
UGC10075	15 51 25.3	62 18 34	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
MARK291	15 55 8.0	19 11 33	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
NEWEGOB-36NEWHIP-36	15 55 43.2	11 11 21	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-36NEWHIP-36	15 55 43.2	11 11 21	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
NEWHIP-36	15 55 57.0	10 59 14	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-36	15 55 57.0	10 59 14	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
PK320-09D1	15 56 1.4	-66 9 7	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK320-09D1	15 56 1.4	-66 9 7	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
3C326.1	15 56 10.1	20 4 21	PC	IMAGE	P8	F336W		2	600	2698	1		1
3C326.1	15 56 10.1	20 4 21	PC	IMAGE	P8	F413M		2	600	2698	1		1
3C326.1	15 56 10.1	20 4 21	PC	IMAGE	P8	F336W		1	1100	2698	1		1
3C326.1	15 56 10.1	20 4 21	PC	IMAGE	P8	F413M		6	1800	2698	1		1
3C326.1	15 56 10.1	20 4 21	PC	IMAGE	P8	F336W		9	1800	2698	1		1
POINTNEWEGOB-36NEWHI P-36	15 56 30.5	11 8 15	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-36NEWHI P-36	15 56 30.5	11 8 15	S/C	POINTING	V1			1	1	4145	3	CON	1
B21555+33	15 57 29.9	33 4 47	FOS/RD	ACQ/BINA	4.3	MIRROR		1	67	3858	2	ACQ	1
B21555+33	15 57 29.9	33 4 47	FOS/RD	ACCUM	4.3	G270H	2700	1	2027	3858	2		1
HD143018	15 58 51.1	-26 6 51	HRS	IMAGE	2.0	MIRROR-A2		1	96	2251	1		1
HD143018	15 58 51.1	-26 6 51	HRS	IMAGE	2.0	MIRROR-A2		1	96	3472	2		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	G160M	1554	1	70	2251	1		1
HD143018	15 58 51.1	-26 6 51	HRS	WSCAN	0.25	ECH-B	1807	1	103	3472	2		1
HD143018	15 58 51.1	-26 6 51	HRS	WSCAN	0.25	ECH-B	1858	1	82	3472	2		1
HD143018	15 58 51.1	-26 6 51	HRS	WSCAN	0.25	ECH-B	2059	1	45	3472	2		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	G160M	1175	1	119	2251	1		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	G160M	1290	1	59	2251	1		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	G160M	1398	1	59	2251	1		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	G160M	1663	1	64	2251	1		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	ECH-B	2325	1	20	3472	2		2
HD143018	15 58 51.1	-26 6 51	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2251	1	ACQ	1
HD143018	15 58 51.1	-26 6 51	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	3472	2	ACQ	1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	ECH-B	2324	1	20	3472	2		2
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	ECH-B	2326	1	20	3472	2		2
HD143018	15 58 51.1	-26 6 51	HRS	WSCAN	0.25	ECH-B	1744	1	86	3472	2		1
HD143018	15 58 51.1	-26 6 51	HRS	WSCAN	0.25	ECH-B	1827	1	86	3472	2		1
HD143018	15 58 51.1	-26 6 51	HRS	WSCAN	0.25	ECH-B	2519	1	33	3472	2		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	G160M	1133	1	146	2251	1		1
HD143018	15 58 51.1	-26 6 51	HRS	WSCAN	0.25	ECH-B	2371	1	24	3472	2		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	G160M	1249	1	59	2251	1		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	G160M	1345	1	59	2251	1		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	ECH-B	2324	1	20	3472	2		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	ECH-B	2325	1	20	3472	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	ECH-B	2326	1	20	3472	2		1
HD143018	15 58 51.1	-26 6 51	HRS	WSCAN	0.25	ECH-B	2484	1	30	3472	2		1
HD143018	15 58 51.1	-26 6 51	HRS	WSCAN	0.25	ECH-B	2026	1	42	3472	2		1
HD143018	15 58 51.1	-26 6 51	HRS	WSCAN	0.25	ECH-B	2249	1	18	3472	2		1
HD143018	15 58 51.1	-26 6 51	HRS	WSCAN	0.25	ECH-B	2799	1	21	3472	2		1
UGC10120	15 59 9.6	35 1 48	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
UGC10116	15 59 11.4	20 45 27	WFC	IMAGE	ALL	F439W		1	60	2067	1		2
UGC10116	15 59 11.4	20 45 27	WFC	IMAGE	ALL	F439W		1	900	2067	1		9
1557+0313	15 59 31.1	3 4 33	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
1557+0313	15 59 31.1	3 4 33	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
PKS1556-245	15 59 41.4	-24 42 39	PC	IMAGE	ALL	F555W		1	240	4028	1		1
PKS1559+173	16 1 20.3	17 14 16	PC	IMAGE	ALL	F555W		1	260	3156	0		1
G16-25	16 1 21.7	5 23 43	FGS	POS	3	PUPIL		1	50	4064	1		30
G16-25	16 1 21.7	5 23 43	FGS	POS	3	PUPIL		1	50	3856	2		20
G16-25	16 1 21.7	5 23 43	FGS	TRANS	3	PUPIL		1	15	4200	1		1
TEX1559+140	16 1 54.5	13 57 10	PC	IMAGE	ALL	F555W		1	250	3156	0		1
TEX1559+140	16 1 54.5	13 57 10	PC	IMAGE	ALL	F555W		1	240	4017	1		1
MARK695	16 2 51.0	15 57 40	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
1601+3754	16 3 8.1	37 45 48	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1601+3754	16 3 8.1	37 45 48	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
1601+182	16 3 18.8	18 9 5	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
1601+182	16 3 18.8	18 9 5	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
PKS1602-002	16 5 1.8	-0 20 37	PC	IMAGE	ALL	F555W		1	240	4028	1		1
NGC6052	16 5 12.9	20 32 31	PC	IMAGE	PC6	F785LP		1	180	3698	2		1
HD144585	16 7 3.4	-14 4 15	FOS/RD	ACCUM	0.5	G190H	2000	1	300	2569	1		2
HD144585	16 7 3.4	-14 4 15	FOS/RD	ACCUM	0.5	G190H	2000	1	33	2569	1		1
HD144585	16 7 3.4	-14 4 15	FOS/BL	ACCUM	0.5	G400H	4300	1	3	2569	1		2
HD144585	16 7 3.4	-14 4 15	FOS/BL	ACCUM	0.5	G270H	2700	1	12	2569	1		1
HD144585	16 7 3.4	-14 4 15	FOS/BL	ACCUM	0.5	G270H	2700	1	39	2569	1		2
HD144585	16 7 3.4	-14 4 15	FOS/BL	ACCUM	0.5	G400H	4300	1	18	2569	1		2
HD144585	16 7 3.4	-14 4 15	FOS/BL	ACQ/PEAK	0.3	G400H	4300	1	0	2569	1	ACQ	2
HD144585	16 7 3.4	-14 4 15	FOS/BL	ACQ/PEAK	0.5	G400H	4300	1	0	2569	1	ACQ	1
HD144585	16 7 3.4	-14 4 15	FOS/BL	ACQ/PEAK	1.0	G400H	4300	1	0	2569	1	ACQ	1
HD144585	16 7 3.4	-14 4 15	FOS/BL	ACQ/PEAK	4.3	G400H	4300	1	0	2569	1	ACQ	1
IC1198	16 8 36.4	12 19 51	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
DA406	16 13 41.1	34 12 48	FOS/RD	ACCUM	4.3	G400H	4000	1	690	2578	1		1
DA406	16 13 41.1	34 12 48	FOS/RD	ACCUM	4.3	G270H	2700	1	876	2578	1		1
DA406	16 13 41.1	34 12 48	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
PKS1614+051	16 16 37.7	4 59 35	PC	IMAGE	P6	F555W		1	300	2695	1		1
PKS1614+051	16 16 37.7	4 59 35	PC	IMAGE	P6	F555W		1	600	2695	1		1
PKS1614+051	16 16 37.7	4 59 35	PC	IMAGE	P6	F555W		2	1200	2695	1		1
PKS1614+051	16 16 37.7	4 59 35	PC	IMAGE	P6	F555W		6	1800	2695	1		1
PKS1614+051	16 16 37.7	4 59 35	PC	IMAGE	P6	F850LP		1	600	2695	1		1
PKS1614+051	16 16 37.7	4 59 35	PC	IMAGE	P6	F850LP		2	1200	2695	1		1
PKS1614+051	16 16 37.7	4 59 35	PC	IMAGE	P6	F850LP		4	1900	2695	1		1
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	PCALL	F336W		1	300	3458	2		1
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	PCALL	F336W		1	900	3458	2		1
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	PCALL	F439W		1	100	3458	2		1
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	PCALL	F439W		1	300	3458	2		1
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	PCALL	F439W		1	400	3458	2		1
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	PCALL	F336W		1	1200	3458	2		1
NGC6093-NORTH1	16 17 5.1	-22 58 21	PC	IMAGE	PCALL	F336W		3	600	3872	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC6093-NORTH1	16 17 5.1	-22 58 21	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
NGC6093-CORE	16 17 5.2	-22 59 21	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC6093-CORE	16 17 5.2	-22 59 21	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
PKS1615+029	16 17 49.9	2 46 43	PC	IMAGE	ALL	F555W		1	240	4028	1		1
3C334	16 20 21.8	17 36 24	FOS/RD	ACCUM	4.3	G190H	1900	1	648	2578	1		1
3C334	16 20 21.8	17 36 24	FOS/RD	ACCUM	4.3	G270H	2700	1	345	2578	1		1
3C334	16 20 21.8	17 36 24	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
3C334	16 20 21.8	17 36 24	FOS/RD	ACCUM	4.3	G400H	4000	1	251	2578	1		1
3C334.0	16 20 21.8	17 36 24	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
3C334.0	16 20 21.8	17 36 24	FOS/RD	ACQ/BINA	4.3	MIRROR		1	12	2424	1	ACQ	1
3C334.0	16 20 21.8	17 36 24	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
3C334.0	16 20 21.8	17 36 24	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5772	2424	1		1
3C334.0	16 20 21.8	17 36 24	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1938	2424	1		1
UGC10359	16 20 57.3	65 23 22	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
COD-38D10980	16 23 33.8	-39 13 48	HRS	IMAGE	2.0	MIRROR-N2		1	102	2593	1		1
COD-38D10980	16 23 33.8	-39 13 48	HRS	ACCUM	0.25	G160M	1190	3	300	2593	1		1
COD-38D10980	16 23 33.8	-39 13 48	HRS	ACCUM	2.0	G160M	1313	4	300	2593	1		1
COD-38D10980	16 23 33.8	-39 13 48	HRS	ACCUM	0.25	G160M	1252	6	300	2593	1		1
COD-38D10980	16 23 33.8	-39 13 48	HRS	ACCUM	0.25	G160M	1223	10	300	2593	1		1
COD-38D10980	16 23 33.8	-39 13 48	HRS	ACCUM	0.25	G160M	1283	3	240	2593	1		1
COD-38D10980	16 23 33.8	-39 13 48	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	2593	1	ACQ	1
MARK699	16 23 45.8	41 4 56	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
PKS1623+26	16 25 14.1	26 50 27	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
PKS1623+26	16 25 14.1	26 50 27	FOS/RD	ACCUM	4.3	G190H	1900	1	1326	2578	1		1
PKS1623+26	16 25 14.1	26 50 27	FOS/RD	ACCUM	4.3	G400H	4000	1	713	2578	1		1
PKS1623+26	16 25 14.1	26 50 27	FOS/RD	ACCUM	4.3	G270H	2700	1	821	2578	1		1
Q1623+268B	16 25 48.3	26 47 10	PC	IMAGE	ALL	F555W		1	100	2350	1		1
Q1623+268B	16 25 48.3	26 47 10	PC	IMAGE	ALL	F555W		1	350	2350	1		1
1624.0+26.9	16 26 6.1	26 50 34	PC	IMAGE	ALL	F555W		1	240	4028	1		1
NGC6166	16 28 38.4	39 33 3	PC	IMAGE	PC6	F555W		3	1700	3912	2		1
4C68.18	16 29 51.7	67 57 15	PC	IMAGE	ALL	F555W		1	240	4028	1		1
1630+377	16 32 1.1	37 37 49	FOS/RD	ACCUM	4.3	G190H	1900	1	1300	3837	2	CON	2
1630+377	16 32 1.1	37 37 49	FOS/RD	ACCUM	4.3	G270H	2700	1	1300	3837	2	CON	1
1630+377	16 32 1.1	37 37 49	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	3837	2	ACQ CON	2
1630+377	16 32 1.1	37 37 49	FOS/RD	ACCUM	4.3	G270H	2700	1	1025	3837	2	CON	1
HD148898	16 32 8.1	-21 27 59	HRS	ACCUM	2.0	G160M	1335	2	762	3737	2		1
1631+373	16 32 49.6	37 16 31	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1631+373	16 32 49.6	37 16 31	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
HD149038	16 34 4.8	-44 2 43	HRS	ACCUM	0.25	G160M	1312	3	798	3746	2		1
PG1634+706	16 34 28.9	70 31 33	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
PG1634+706	16 34 28.9	70 31 33	FOS/BL	ACQ/BINA	4.3	MIRROR		1	6	4125	3	ACQ CON	1
PG1634+706	16 34 29.1	70 31 33	PC	IMAGE	ALL	F555W		1	100	2350	1		1
PG1634+706	16 34 29.1	70 31 33	PC	IMAGE	ALL	F555W		1	350	2350	1		1
PG1634+706	16 34 29.1	70 31 33	FOS/BL	ACCUM	4.3	G190H	1950	4	1320	3732	2		1
PG1634+706	16 34 29.1	70 31 33	FOS/BL	ACCUM	4.3	G270H	2765	4	1320	3732	2		1
PG1634+706	16 34 29.1	70 31 33	FOS/BL	ACQ/BINA	4.3	MIRROR		1	6	3732	2	ACQ	1
MC1634+176	16 36 16.7	17 35 8	PC	IMAGE	ALL	F555W		1	260	3156	0		1
HD149757	16 37 9.4	-10 34 2	HRS	ACCUM	0.25	G160M	1312	1	420	3746	2		1
STAR-163802-763709	16 38 5.0	-76 36 56	FOC/48	IMAGE	512X1024	F220W		1	900	2378	1		4
STAR-163802-763709	16 38 5.0	-76 36 56	FOC/48	IMAGE	512X1024	F342W		1	900	2378	1		4
STAR-163802-763709	16 38 5.0	-76 36 56	FOC/48	IMAGE	512X1024	F430W		1	600	2378	1		1
STAR-163802-763709	16 38 5.0	-76 36 56	FOC/48	IMAGE	512X1024	F220W		1	900	2378	2	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
STAR-163802-763709	16 38 5.0	-76 36 56	FOC/48	IMAGE	512X1024	F342W		1	900	2378	2	CON	1
STAR-163802-763709	16 38 5.0	-76 36 56	FOC/48	IMAGE	512X1024	F220W		1	900	3984	2		2
STAR-163802-763709	16 38 5.0	-76 36 56	FOC/48	IMAGE	512X1024	F342W		1	900	3984	2		2
STAR-163802-763709	16 38 5.0	-76 36 56	FOC/48	IMAGE	512X1024	F430W		1	900	3984	2		2
STAR-163802-763709	16 38 5.0	-76 36 56	FOC/48	IMAGE	512X1024	F195W		1	660	2378	1		1
STAR-163802-763709	16 38 5.0	-76 36 56	FOC/48	IMAGE	512X1024	F195W		1	840	2378	1		1
STAR-163802-763709	16 38 5.0	-76 36 56	FOC/48	IMAGE	512X1024	F220W		1	2520	2378	2	CON	2
STAR-163802-763709	16 38 5.0	-76 36 56	FOC/48	IMAGE	512X1024	F342W		1	780	3984	2		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1230	1	500	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1390	1	500	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1550	1	325	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1406	1	500	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1194	1	600	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1203	1	600	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1213	1	600	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1239	1	500	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1248	1	500	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1256	1	500	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1264	1	500	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1398	1	500	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1539	1	325	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACCUM	0.25	G160M	1561	1	325	2403	1		1
HD150168	16 41 40.2	-49 39 4	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	2403	1	ACQ	2
1640+4628	16 42 4.9	46 22 23	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1640+4628	16 42 4.9	46 22 23	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
3C345	16 42 58.8	39 48 37	FGS	TRANS	3	F550W		1	1414	2443	1	CON SEL	1
3C345	16 42 58.8	39 48 37	FGS	TRANS	3	F583W		1	1414	2443	1	CON SEL	1
3C345	16 42 58.8	39 48 37	FGS	TRANS	3	PUPIL		1	1414	2443	1	CON SEL	1
3C345	16 42 58.8	39 48 37	FOS/RD	ACCUM	4.3	G400H	4000	1	189	2578	1		1
3C345	16 42 58.8	39 48 37	FOS/RD	ACCUM	4.3	G190H	1900	1	426	2578	1		1
3C345	16 42 58.8	39 48 37	FOS/RD	ACCUM	4.3	G270H	2700	1	225	2578	1		1
3C345	16 42 58.8	39 48 37	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
3C345.0	16 42 58.8	39 48 37	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
3C345.0	16 42 58.8	39 48 37	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5142	4125	3	CON	1
3C345.0	16 42 58.8	39 48 37	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1746	4125	3	CON	1
3C345.0	16 42 58.8	39 48 37	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	4125	3	ACQ CON	1
3C345.0	16 42 58.8	39 48 37	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
1643+465A	16 45 0.8	46 25 35	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
1643+465A	16 45 0.8	46 25 35	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
1643+465B	16 45 19.6	46 25 36	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
1643+465B	16 45 19.6	46 25 36	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
GD358	16 47 18.4	32 28 33	HSP/UV2	SINGLE	10.0	F140LP		1	1800	3798	2		1
GD358	16 47 18.5	32 28 33	HRS	ACCUM	2.0	G160M	1310	1	900	3816	2		1
GD358	16 47 18.5	32 28 33	HRS	ACCUM	2.0	G160M	1640	1	900	3816	2		1
GD358	16 47 18.5	32 28 33	HRS	IMAGE	2.0	MIRROR-N2		1	102	3816	2		1
GD358	16 47 18.5	32 28 33	HRS	ACCUM	2.0	G160M	1216	1	900	3816	2		1
GD358	16 47 18.5	32 28 33	HRS	ACCUM	2.0	G160M	1336	1	900	3816	2		1
GD358	16 47 18.5	32 28 33	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	3816	2	ACQ	1
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1230	1	320	2403	1		1
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1390	1	320	2403	1		1
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1550	1	220	2403	1		1
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1194	1	400	2403	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1203	1	400	2403	1		1
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1213	1	400	2403	1		1
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1406	1	320	2403	1		1
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1239	1	320	2403	1		1
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1248	1	320	2403	1		1
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1256	1	320	2403	1		1
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1264	1	320	2403	1		1
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1398	1	320	2403	1		1
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1539	1	220	2403	1		1
HD150898	16 47 19.4	-58 20 29	HRS	ACCUM	0.25	G160M	1561	1	220	2403	1		1
HD150898	16 47 19.4	-58 20 29	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	2403	1	ACQ	2
HD151890	16 51 52.3	-38 2 50	HRS	ACCUM	0.25	G160M	1560	1	260	4149	3		1
HD151890	16 51 52.3	-38 2 50	HRS	ACCUM	0.25	G160M	1347	1	144	4149	3		1
HD151890	16 51 52.3	-38 2 50	HRS	ACCUM	0.25	G160M	1392	1	183	4149	3		1
HD151890	16 51 52.3	-38 2 50	HRS	ACCUM	0.25	G160M	1148	2	344	4149	3		1
HD151890	16 51 52.3	-38 2 50	HRS	WSCAN	0.25	ECH-B	2260	1	50	4149	3		1
HD151890	16 51 52.3	-38 2 50	HRS	ACCUM	0.25	G160M	1195	1	321	4149	3		1
HD151890	16 51 52.3	-38 2 50	HRS	ACCUM	0.25	G160M	1252	1	150	4149	3		1
HD151890	16 51 52.3	-38 2 50	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	4149	3	ACQ	1
HD151890	16 51 52.3	-38 2 50	HRS	WSCAN	0.25	ECH-B	1805	1	208	4149	3		1
HD151890	16 51 52.3	-38 2 50	HRS	WSCAN	0.25	ECH-B	1826	1	208	4149	3		1
HD151890	16 51 52.3	-38 2 50	HRS	WSCAN	0.25	ECH-B	2059	1	100	4149	3		1
HD151890	16 51 52.3	-38 2 50	HRS	ACCUM	0.25	G160M	1315	1	119	4149	3		1
HD151890	16 51 52.3	-38 2 50	HRS	WSCAN	0.25	ECH-B	2025	1	90	4149	3		1
HD151890	16 51 52.3	-38 2 50	HRS	WSCAN	0.25	ECH-B	2372	1	73	4149	3		1
HD151890	16 51 52.3	-38 2 50	HRS	WSCAN	0.25	ECH-B	2603	1	117	4149	3		1
UGC10592	16 52 58.8	2 24 6	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NEWHIP-52	16 52 59.4	39 36 20	FGS	POS	3	PUPIL		1	51	2862	2	CON	2
NEWHIP-52	16 52 59.4	39 36 20	FGS	POS	3	PUPIL		1	51	4144	3	CON	2
NEWEGOC-52NEWHIP-52	16 53 52.2	39 45 37	FGS	POS	3	PUPIL		1	51	2862	2	CON	3
NEWEGOC-52NEWHIP-52	16 53 52.2	39 45 37	FGS	POS	3	PUPIL		1	51	4144	3	CON	3
MARK501	16 53 52.2	39 45 37	HRS	ACCUM	2.0	G160M	1240	16	1960	3584	2		1
POINTNEWEGOC-52NEWHI P-52	16 54 1.0	39 33 43	S/C	POINTING	V1			1	1	2862	2	CON	1
POINTNEWEGOC-52NEWHI P-52	16 54 1.0	39 33 43	S/C	POINTING	V1			1	1	4144	3	CON	1
1652+138	16 54 17.9	31 46 21	PC	IMAGE	ALL	F555W		1	500	2350	1		1
1652+138	16 54 17.9	31 46 21	PC	IMAGE	ALL	F555W		1	1000	2350	1		1
PKS1656+05	16 58 33.5	5 15 16	FOS/BL	ACQ/BINA	4.3	MIRROR		1	29	2424	1	ACQ	1
PKS1656+05	16 58 33.5	5 15 16	FOS/BL	RAPID	1.0	G160L	1837	1	1200	2424	1		1
ESO-1654-6008	16 59 2.8	-60 12 57	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
4C57.29	16 59 45.8	57 31 31	PC	IMAGE	ALL	F555W		1	240	4028	1		1
HS1700+6416	17 1 0.5	64 12 9	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	2288	1	ACQ	1
HS1700+6416	17 1 0.5	64 12 9	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	2288	1	ACQ	1
HS1700+6416	17 1 0.5	64 12 9	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2288	1	ACQ	1
HS1700+6416	17 1 0.5	64 12 9	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2288	1	ACQ	1
HS1700+6416	17 1 0.5	64 12 9	FOS/RD	ACCUM	0.25X2.0	G270H	2700	1	9000	2288	1		1
HS1700+6416	17 1 0.5	64 12 9	FOS/BL	ACCUM	0.25X2.0	G130H	1300	1	14039	2288	1		1
HS1700+6416	17 1 0.5	64 12 9	FOS/RD	ACCUM	0.25X2.0	G190H	1900	1	16119	2288	1		1
PG1700+518	17 1 24.9	51 49 20	FOS/RD	ACQ/BINA	4.3	MIRROR		1	3	3791	2	ACQ	1
PG1700+518	17 1 24.9	51 49 20	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3791	2	ACQ	1
PG1700+518	17 1 24.9	51 49 20	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	906	3791	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PG1700+518	17 1 24.9	51 49 20	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2135	3791	2		1
4C17.73	17 2 53.8	17 58 44	PC	IMAGE	ALL	F555W		1	240	4028	1		1
PK334-07D1	17 3 2.6	-53 55 46	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK334-07D1	17 3 2.6	-53 55 46	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
NGC6284	17 4 28.8	-24 45 53	PC	IMAGE	PCALL	F336W		1	300	3458	2		1
NGC6284	17 4 28.8	-24 45 53	PC	IMAGE	PCALL	F439W		1	100	3458	2		1
NGC6284	17 4 28.8	-24 45 53	PC	IMAGE	PCALL	F439W		1	300	3458	2		1
NGC6284	17 4 28.8	-24 45 53	PC	IMAGE	PCALL	F439W		1	400	3458	2		1
NGC6284	17 4 28.8	-24 45 53	PC	IMAGE	PCALL	F336W		2	900	3458	2		1
NGC6284	17 4 28.8	-24 45 53	PC	IMAGE	PCALL	F336W		1	1200	3458	2		1
PK350+04D1	17 4 36.2	-33 59 18	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK350+04D1	17 4 36.2	-33 59 18	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
3C351.0	17 4 41.3	60 44 30	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	2424	1	ACQ	1
3C351.0	17 4 41.3	60 44 30	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	3418	1	ACQ	1
3C351.0	17 4 41.3	60 44 30	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	18000	3418	1		1
3C351.0	17 4 41.3	60 44 30	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2124	2424	1		1
3C351.0	17 4 41.3	60 44 30	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	786	2424	1		1
3C351.0	17 4 41.3	60 44 30	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	2424	1	ACQ	1
3C351.0	17 4 41.3	60 44 30	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	1	3418	1	ACQ	1
PK010+18D2	17 5 38.0	-10 8 27	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK010+18D2	17 5 38.0	-10 8 27	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	2.0	G160M	1220	2	200	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	2.0	ECH-B	2360	15	150	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	2.0	ECH-B	2026	3	300	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	2.0	ECH-B	1806	4	300	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	2.0	ECH-B	2369	4	300	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	2.0	ECH-B	2582	7	300	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	2.0	ECH-B	2302	15	150	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	0.25	G160M	2026	3	300	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	0.25	G160M	1414	7	300	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	0.25	G160M	1335	9	300	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	0.25	G160M	1706	9	300	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	0.25	G160M	1161	12	250	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	0.25	G160M	1240	20	250	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	0.25	ECH-B	2366	27	237	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	0.25	G160M	1296	30	150	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	0.25	G160M	1262	33	150	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	0.25	ECH-B	2334	45	150	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	0.25	ECH-B	3078	45	150	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	0.25	ECH-B	2326	46	150	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACCUM	0.25	G160M	1364	67	109	2415	1		1
HD154368	17 6 28.4	-35 27 4	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	46	2415	1	ACQ	3
FIELD-170631+435540	17 6 31.0	43 55 40	FOC/48	IMAGE	512X1024	F220W		1	1660	3543	2		16
HE3-1336	17 7 12.3	-27 13 38	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HE3-1336	17 7 12.3	-27 13 38	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PKS1705+018	17 7 34.4	1 48 45	PC	IMAGE	ALL	F555W		1	240	4028	1		1
PK332-09D1	17 9 1.5	-56 54 51	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK332-09D1	17 9 1.5	-56 54 51	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
NGC6293-COMPARISON-FIELD	17 9 11.2	-26 34 11	PC	IMAGE	ALL	F555W		3	600	2419	1		1
NGC6293-COMPARISON-FIELD	17 9 11.2	-26 34 11	PC	IMAGE	ALL	F785LP		3	1900	2419	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC6293	17 10 10.7	-26 35 24	PC	IMAGE	ALL	F555W		2	600	2419	1		2
NGC6293	17 10 10.7	-26 35 24	PC	IMAGE	ALL	F785LP		2	1900	2419	1		2
HD326971	17 10 29.2	-41 54 12	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD326971	17 10 29.2	-41 54 12	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK349+01D1	17 13 44.3	-37 6 6	PC	IMAGE	PCALL-FIX	F502N		1	240	3603	2	CON	2
PK349+01D1	17 13 44.3	-37 6 6	PC	IMAGE	PCALL-FIX	F656N		1	240	3603	2	CON	2
HERC202	17 14 14.9	50 15 30	WFC	IMAGE	W1	F555W	5479	6	2400	2405	1		1
HERC202	17 14 14.9	50 15 30	WFC	IMAGE	W1	F785LP	8958	6	2400	2405	1		1
53W020	17 15 48.7	50 25 1	FOS/BL	ACQ/BINA	4.3	MIRROR		1	600	3545	2	ACQ	1
53W020	17 15 48.7	50 25 1	FOS/BL	ACCUM	4.3	G130H	1380	1	3600	3545	2		1
53W022	17 16 9.0	50 24 18	WFC	IMAGE	WF2	F555W	5479	4	600	3545	2	PAR	1
53W022	17 16 9.0	50 24 18	WFC	IMAGE	WF2	F785LP	8958	4	600	3545	2	PAR	1
CPD-59D6926	17 16 21.1	-59 29 23	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
CPD-59D6926	17 16 21.1	-59 29 23	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
53W034	17 16 54.5	50 0 34	FOC/48	IMAGE	512X1024	F430W	3920	2	1200	3545	2	PAR	1
53W034	17 16 54.5	50 0 34	FOC/48	IMAGE	512X1024	F275W	2759	4	1200	3545	2	PAR	1
53W036	17 16 56.6	50 29 3	WFC	IMAGE	WF1	F555W	5479	8	900	3545	2	PAR	1
53W036	17 16 56.6	50 29 3	WFC	IMAGE	WF1	F785LP	8958	4	900	3545	2	PAR	1
ESO-1712-6245	17 17 0.1	-62 49 10	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
53W039	17 17 1.9	50 25 30	FOS/RD	ACCUM	4.3	G190H	1950	1	9900	3545	2		1
53W039	17 17 1.9	50 25 30	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1200	3545	2	ACQ	1
53W044	17 17 36.9	50 3 5	WFC	IMAGE	W1	F555W	5479	4	1200	2405	1		1
53W044	17 17 36.9	50 3 5	WFC	IMAGE	W1	F785LP	8958	4	1200	2405	1		1
53W044	17 17 36.9	50 3 5	FOS/RD	ACCUM	4.3	G190H	1950	1	8100	3545	2		1
53W044	17 17 36.9	50 3 5	FOS/RD	ACQ/BINA	4.3	MIRROR		1	720	3545	2	ACQ	1
53W044	17 17 36.9	50 3 5	FOC/48	IMAGE	512X1024	F275W	2759	7	945	2405	1		1
53W045A	17 17 53.4	50 7 52	WFC	IMAGE	WF1	F555W	5479	6	900	3545	2	PAR	1
53W045A	17 17 53.4	50 7 52	WFC	IMAGE	WF1	F785LP	8958	6	900	3545	2	PAR	1
53W046	17 17 53.4	50 7 52	FOS/RD	ACQ/BINA	4.3	MIRROR		1	2000	3545	2	ACQ	1
53W046	17 17 53.4	50 7 52	FOS/RD	ACCUM	4.3	G190H	1950	1	12000	3545	2		1
53W046	17 17 53.4	50 7 52	WFC	IMAGE	W1	F555W	5479	4	2400	2405	1		1
53W046	17 17 53.4	50 7 52	WFC	IMAGE	W1	F785LP	8958	4	2400	2405	1		1
53W046	17 17 53.4	50 7 52	FOC/48	IMAGE	512X1024	F275W	2759	7	1200	2405	1		1
AFGL6815	17 18 20.1	-32 27 23	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
AFGL6815	17 18 20.1	-32 27 23	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
GAL-171908+494323	17 19 8.0	49 43 24	WFC	IMAGE	WFALL	F555W		1	1600	3797	2		2
PG1718+481	17 19 38.3	48 4 12	FOS/BL	RAPID	1.0	G160L	1840	1	600	3791	2		1
PG1718+481	17 19 38.3	48 4 12	FOS/RD	ACQ/BINA	4.3	MIRROR		1	2	3791	2	ACQ	1
PG1718+481	17 19 38.3	48 4 12	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	3791	2	ACQ	1
PG1718+481	17 19 38.3	48 4 12	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2717	3791	2		1
GAL-172116+500138	17 21 15.7	50 1 38	WFC	IMAGE	WFALL	F555W		1	1200	3797	2		2
HD156359	17 21 18.8	-62 55 4	HRS	IMAGE	2.0	MIRROR-A2		1	204	3463	2	ACQ	1
HD156359	17 21 18.8	-62 55 4	HRS	IMAGE	0.25	MIRROR-A2		1	204	3463	2	ACQ	1
HD156359	17 21 18.8	-62 55 4	HRS	ACCUM	0.25	G160M	1250	4	1152	3463	2		1
HD156359	17 21 18.8	-62 55 4	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	142	3463	2	ACQ	1
MARK506	17 22 39.9	30 52 53	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
B21722+33	17 24 14.4	33 3 2	PC	IMAGE	ALL	F555W		1	240	4028	1		1
NGC6352-COMPARISON-FIELD	17 24 26.2	-48 21 53	PC	IMAGE	ALL	F555W		3	300	2419	1		1
NGC6352-COMPARISON-FIELD	17 24 26.2	-48 21 53	PC	IMAGE	ALL	F785LP		3	1000	2419	1		1
PK357+03D1	17 24 34.3	-29 24 19	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PK357+03D1	17 24 34.3	-29 24 19	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
NGC6352	17 25 28.3	-48 25 38	PC	IMAGE	ALL	F555W		2	300	2419	1		2
NGC6352	17 25 28.3	-48 25 38	PC	IMAGE	ALL	F785LP		2	1000	2419	1		2
NGC6352	17 25 29.2	-48 25 22	FOC/48	IMAGE	512X512	F140W	1300	1	1200	3804	2		1
NGC6352	17 25 29.2	-48 25 22	FOC/48	IMAGE	512X512	F220W	2239	1	1200	3804	2		1
NGC6352	17 25 29.2	-48 25 22	FOC/48	IMAGE	512X512	F195W F342W	3377	1	500	3804	2		1
ESO-1724-6224	17 29 9.5	-62 26 45	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
4U1728-16	17 31 44.2	-16 57 41	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	2248	1	ACQ	1
4U1728-16	17 31 44.2	-16 57 41	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	2248	1	ACQ	1
4U1728-16	17 31 44.2	-16 57 41	FOS/BL	ACCUM	1.0	G130H	1379	1	5760	2248	1		1
4U1728-16	17 31 44.2	-16 57 41	FOS/RD	ACCUM	1.0	G270H	2755	1	749	2248	1		1
4U1728-16	17 31 44.2	-16 57 41	FOS/RD	ACCUM	1.0	G190H	1980	1	3456	2248	1		1
IRC+20326	17 31 55.1	17 45 20	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
IRC+20326	17 31 55.1	17 45 20	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
UGC10891	17 32 24.4	7 3 39	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PK357+01D1	17 32 47.0	-30 0 15	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK357+01D1	17 32 47.0	-30 0 15	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
PK3+05D1	17 34 26.8	-22 53 16	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK3+05D1	17 34 26.8	-22 53 16	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
OH35594-004	17 35 46.9	-32 23 50	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
OH35594-004	17 35 46.9	-32 23 50	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
NGC6388	17 36 17.0	-44 44 6	FOC/48	IMAGE	512X512	F140W	1300	1	1000	3804	2		1
NGC6388	17 36 17.0	-44 44 6	FOC/48	IMAGE	512X512	F220W	2239	1	1000	3804	2		1
NGC6388	17 36 17.0	-44 44 6	FOC/48	IMAGE	512X512	F195W F342W	3377	1	500	3804	2		1
4U1735-44	17 38 58.3	-44 27 2	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	2248	1	ACQ	1
4U1735-44	17 38 58.3	-44 27 2	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	2248	1	ACQ	1
4U1735-44	17 38 58.3	-44 27 2	FOS/BL	ACCUM	1.0	G130H	1379	1	4300	2248	1		1
4U1735-44	17 38 58.3	-44 27 2	FOS/RD	ACCUM	1.0	G270H	2755	1	1440	2248	1		1
4U1735-44	17 38 58.3	-44 27 2	FOS/RD	ACCUM	1.0	G190H	1980	1	8064	2248	1		1
NGC6397-POS2	17 40 41.5	-53 40 25	PC	IMAGE	PC6-FIX	F675W		2	10	3851	2		1
NGC6397-POS2	17 40 41.5	-53 40 25	PC	IMAGE	PC6-FIX	F675W		5	100	3851	2		1
NGC6397-POS2	17 40 41.5	-53 40 25	PC	IMAGE	PC6-FIX	F656N		6	1000	3851	2		1
NGC6397-POS3	17 40 41.7	-53 40 29	PC	IMAGE	PC6-FIX	F675W		1	10	3851	2		1
NGC6397-POS3	17 40 41.7	-53 40 29	PC	IMAGE	PC6-FIX	F675W		5	100	3851	2		1
NGC6397-POS3	17 40 41.7	-53 40 29	PC	IMAGE	PC6-FIX	F656N		6	1000	3851	2		1
NGC6397-POS1	17 40 41.7	-53 40 25	PC	IMAGE	PC6-FIX	F675W		2	10	3851	2		1
NGC6397-POS1	17 40 41.7	-53 40 25	PC	IMAGE	PC6-FIX	F675W		5	100	3851	2		1
NGC6397-POS1	17 40 41.7	-53 40 25	PC	IMAGE	PC6-FIX	F656N		6	1000	3851	2		1
HD161056	17 43 47.0	-7 4 46	FOS/BL	ACCUM	4.3	G270H		1	1011	2245	1		1
HD161056	17 43 47.0	-7 4 46	FOS/BL	ACQ/PEAK	1.0	G570H		1	1	2245	1	ACQ	2
HD161056	17 43 47.0	-7 4 46	FOS/BL	ACQ/PEAK	4.3	G570H		1	0	2245	1	ACQ	2
HD161056	17 43 47.0	-7 4 46	FOS/BL	ACCUM	4.3	G190H		3	1291	2245	1		1
HD161056	17 43 47.0	-7 4 46	FOS/BL	ACQ/PEAK	0.5	G570H		1	2	2245	1	ACQ	2
HD161056	17 43 47.0	-7 4 46	FOS/BL	ACCUM	4.3	G130H	1454	5	1495	2245	1		1
HD161796	17 44 55.5	50 2 40	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD161796	17 44 55.5	50 2 40	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
HE3-1475	17 45 14.2	-17 56 47	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
HE3-1475	17 45 14.2	-17 56 47	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
PK345-08D1	17 45 35.4	-46 5 25	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK345-08D1	17 45 35.4	-46 5 25	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
GALACTIC-CENTER	17 45 39.6	-29 0 34	PC	IMAGE	P6	F875M		1	1380	2459	1		1
GALACTIC-CENTER	17 45 39.6	-29 0 34	PC	IMAGE	P6	F1042M		1	1380	2459	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
GALACTIC-CENTER	17 45 39.6	-29 0 33	PC	IMAGE	P6	F785LP	8800	4	200	2534	1		1
GALACTIC-CENTER	17 45 39.6	-29 0 33	PC	IMAGE	P6	F1042M	****	16	230	2534	1		1
IRS16-POS1	17 45 40.1	-29 0 28	WFC	IMAGE	WF1	F1042M		8	700	3623	2		1
IRS16-POS2	17 45 40.4	-29 0 33*	WFC	IMAGE	WF1	F1042M		8	700	3623	2		1
PK358-00D2	17 45 57.7	-30 12 0	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK358-00D2	17 45 57.7	-30 12 0	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
1746+6226	17 46 40.1	62 25 1	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1746+6226	17 46 40.1	62 25 1	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
PK6+03D2	17 47 37.9	-22 6 19	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK6+03D2	17 47 37.9	-22 6 19	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
UGC11012	17 49 27.2	70 8 43	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PK353-04D1	17 49 48.2	-37 1 28	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK353-04D1	17 49 48.2	-37 1 28	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
NGC6441	17 50 12.8	-37 3 4	FOC/48	IMAGE	512X512	F140W	1300	1	1000	3804	2		1
NGC6441	17 50 12.8	-37 3 4	FOC/48	IMAGE	512X512	F220W	2239	1	1000	3804	2		1
NGC6441	17 50 12.8	-37 3 4	FOC/48	IMAGE	512X512	F195W F342W	3377	1	500	3804	2		1
MC31750+175	17 52 46.0	17 34 21	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
MC31750+175	17 52 46.0	17 34 21	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	4125	3	ACQ CON	1
MC31750+175	17 52 46.0	17 34 21	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	4560	4125	3	CON	1
MC31750+175	17 52 46.0	17 34 21	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1620	4125	3	CON	1
MC31750+175	17 52 46.0	17 34 21	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	4125	3	ACQ CON	1
1757+705	17 57 13.2	70 33 38	PC	IMAGE	P6	F785LP		6	900	3648	2		1
PKS1756+237	17 59 0.3	23 43 48	PC	IMAGE	ALL	F555W		1	240	4028	1		1
OH00589-039	18 0 30.3	-24 3 58	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
OH00589-039	18 0 30.3	-24 3 58	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
POINT1758-651INCA221 -116	18 1 27.4	-65 7 28	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT1758-651INCA221 -116	18 1 27.4	-65 7 28	S/C	POINTING	V1			1	1	4147	3	CON	1
POINT1758-651INCA221 -117	18 1 28.4	-65 6 16	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT1758-651INCA221 -117	18 1 28.4	-65 6 16	S/C	POINTING	V1			1	1	4147	3	CON	1
OH00610-063	18 1 51.9	-24 0 9	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
OH00610-063	18 1 51.9	-24 0 9	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
INCA221-116	18 2 0.9	-64 55 21	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-116	18 2 0.9	-64 55 21	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
1758-651INCA221-116	18 3 23.4	-65 7 37	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
1758-651INCA221-116	18 3 23.4	-65 7 37	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
1758-651INCA221-117	18 3 23.4	-65 7 37	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
1758-651INCA221-117	18 3 23.4	-65 7 37	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
1758-651INCA221-118	18 3 23.4	-65 7 37	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
1758-651INCA221-118	18 3 23.4	-65 7 37	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
INCA221-117	18 3 23.7	-65 5 40	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-117	18 3 23.7	-65 5 40	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
NGC6522-NORTH1	18 3 36.4	-30 0 51	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC6522-NORTH1	18 3 36.4	-30 0 51	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
NGC6522-CORE	18 3 36.4	-30 1 51	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC6522-CORE	18 3 36.4	-30 1 51	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
POINT1758-651INCA221 -118	18 4 18.0	-65 19 18	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT1758-651INCA221 -118	18 4 18.0	-65 19 18	S/C	POINTING	V1			1	1	4147	3	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
INCA221-118	18 5 36.9	-65 9 54	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-118	18 5 36.9	-65 9 54	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
POINTNEWEGOA-11NEWHIP-11	18 6 22.8	69 38 16	S/C	POINTING	V1			1	1	2860	2	CON	1
POINTNEWEGOA-11NEWHIP-11	18 6 22.8	69 38 16	S/C	POINTING	V1			1	1	4146	3	CON	1
1757+705-CALIB	18 6 35.2	71 30 2	PC	IMAGE	P6	F785LP		1	0	3648	2		1
HD165024	18 6 37.7	-50 5 30	HRS	ACCUM	0.25	G160M	1312	2	420	3746	2		1
NEWEGOA-11NEWHIP-11	18 6 50.5	69 49 30	FGS	POS	3	PUPIL		1	51	2860	2	CON	3
NEWEGOA-11NEWHIP-11	18 6 50.5	69 49 30	FGS	POS	3	PUPIL		1	51	4146	3	CON	3
NEWHIP-11	18 8 0.1	69 45 34	FGS	POS	3	PUPIL		1	51	2860	2	CON	2
NEWHIP-11	18 8 0.1	69 45 34	FGS	POS	3	PUPIL		1	51	4146	3	CON	2
NGC6541-CORE	18 8 1.7	-43 43 33	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC6541-CORE	18 8 1.7	-43 43 33	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
NGC6541	18 8 2.2	-43 42 19	PC	IMAGE	PCALL	F336W		1	300	3458	2		1
NGC6541	18 8 2.2	-43 42 19	PC	IMAGE	PCALL	F336W		1	900	3458	2		1
NGC6541	18 8 2.2	-43 42 19	PC	IMAGE	PCALL	F439W		1	100	3458	2		1
NGC6541	18 8 2.2	-43 42 19	PC	IMAGE	PCALL	F439W		1	300	3458	2		1
NGC6541	18 8 2.2	-43 42 19	PC	IMAGE	PCALL	F439W		1	400	3458	2		1
NGC6541	18 8 2.2	-43 42 19	PC	IMAGE	PCALL	F336W		1	1200	3458	2		1
HD165040	18 8 34.9	-63 40 6	HRS	ACCUM	2.0	G160M	1335	2	762	3737	2		1
IRAS18095+2704	18 11 30.7	27 5 16	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
IRAS18095+2704	18 11 30.7	27 5 16	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
OH01275+037	18 12 1.5	-17 42 35	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
OH01275+037	18 12 1.5	-17 42 35	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
OH01228+010	18 12 3.5	-18 14 25	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
OH01228+010	18 12 3.5	-18 14 25	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
PK001-06D2	18 16 12.3	-30 52 8	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK001-06D2	18 16 12.3	-30 52 8	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
AM-HER	18 16 13.3	49 52 4	HSP/VIS	PRISM	1.0	F551W/F240W		1	1642	3607	2		1
UGC11221	18 22 2.7	66 37 0	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-1815-7743	18 23 6.4	-77 43 17	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC6624	18 23 40.7	-30 21 39	FOC/48	IMAGE	512X512	F140W	1300	1	1200	3804	2		1
NGC6624	18 23 40.7	-30 21 39	FOC/48	IMAGE	512X512	F220W	2239	1	1200	3804	2		1
NGC6624	18 23 40.7	-30 21 39	FOC/48	IMAGE	512X512	F195W F342W	3377	1	500	3804	2		1
PK028+05D1	18 25 0.7	-1 30 50	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK028+05D1	18 25 0.7	-1 30 50	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
X1822-371	18 25 46.7	-37 6 20	FOS/BL	RAPID	4.3	G160L	1850	1	2340	3579	2		1
X1822-371	18 25 46.7	-37 6 20	FOS/BL	RAPID	4.3	G160L	1850	1	2400	3579	2		8
X1822-371	18 25 46.7	-37 6 20	FOS/BL	ACQ/BINA	4.3	MIRROR		1	5	3579	2	ACQ	1
4U1822-37	18 25 46.8	-37 6 20	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	2248	1	ACQ	1
4U1822-37	18 25 46.8	-37 6 20	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	2248	1	ACQ	1
4U1822-37	18 25 46.8	-37 6 20	FOS/RD	ACCUM	1.0	G190H	1980	1	980	2248	1		1
4U1822-37	18 25 46.8	-37 6 20	FOS/RD	ACCUM	1.0	G270H	2755	1	260	2248	1		1
4U1822-37	18 25 46.8	-37 6 20	FOS/BL	ACCUM	1.0	G130H	1379	1	1498	2248	1		1
PK043+11D1	18 27 48.3	14 29 7	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK043+11D1	18 27 48.3	14 29 7	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
UGC11269	18 30 39.9	67 59 14	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC6637	18 31 23.2	-32 20 53	FOC/48	IMAGE	512X512	F140W	1300	1	1000	3804	2		1
NGC6637	18 31 23.2	-32 20 53	FOC/48	IMAGE	512X512	F220W	2239	1	1000	3804	2		1
NGC6637	18 31 23.2	-32 20 53	FOC/48	IMAGE	512X512	F195W F342W	3377	1	500	3804	2		1
NGC6652	18 35 45.7	-32 59 25	PC	IMAGE	PCALL	F336W		1	300	3458	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC6652	18 35 45.7	-32 59 25	PC	IMAGE	PCALL	F336W		1	900	3458	2		1
NGC6652	18 35 45.7	-32 59 25	PC	IMAGE	PCALL	F439W		1	100	3458	2		1
NGC6652	18 35 45.7	-32 59 25	PC	IMAGE	PCALL	F439W		1	300	3458	2		1
NGC6652	18 35 45.7	-32 59 25	PC	IMAGE	PCALL	F439W		1	400	3458	2		1
NGC6652	18 35 45.7	-32 59 25	PC	IMAGE	PCALL	F336W		1	1200	3458	2		1
IRAS1833-2357-CENTRAL-STAR	18 36 22.8	-23 55 19	FOS/BL	ACCUM	4.3	G130H		1	2400	3671	2		1
IRAS1833-2357-CENTRAL-STAR	18 36 22.8	-23 55 19	FOS/BL	ACQ/BINA	4.3	MIRROR		1	3	3671	2	ACQ	1
IRAS1833-2357-KNOT	18 36 22.9	-23 55 19*	FOS/BL	ACCUM	1.0	G160L		1	1800	3671	2		1
HD172167	18 36 56.3	38 47 1	HRS	ACCUM	0.25	ECH-B	2345	4	144	2461	1		1
HD172167	18 36 56.3	38 47 1	HRS	ACCUM	0.25	ECH-B	2854	15	108	2461	1		1
HD172167	18 36 56.3	38 47 1	HRS	ACCUM	0.25	ECH-B	2596	3	288	2461	1		1
PKS1831-711	18 37 28.5	-71 8 44	PC	IMAGE	ALL	F555W		1	240	4028	1		1
V821-HER	18 41 53.9	17 40 33	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
V821-HER	18 41 53.9	17 40 33	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
OH02829-001	18 42 58.4	-4 8 4	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
OH02829-001	18 42 58.4	-4 8 4	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
NGC6681	18 43 12.6	-32 17 30	PC	IMAGE	PCALL	F336W		1	300	3458	2		1
NGC6681	18 43 12.6	-32 17 30	PC	IMAGE	PCALL	F439W		1	100	3458	2		1
NGC6681	18 43 12.6	-32 17 30	PC	IMAGE	PCALL	F439W		1	300	3458	2		1
NGC6681	18 43 12.6	-32 17 30	PC	IMAGE	PCALL	F439W		1	400	3458	2		1
NGC6681	18 43 12.6	-32 17 30	PC	IMAGE	PCALL	F336W		2	900	3458	2		1
NGC6681	18 43 12.6	-32 17 30	PC	IMAGE	PCALL	F336W		1	1200	3458	2		1
PK22-03D1	18 44 5.7	-11 6 48	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK22-03D1	18 44 5.7	-11 6 48	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
HD173667	18 45 39.7	20 32 47	HRS	ACCUM	0.25	G270M	2498	1	1200	3614	2		1
PK051+09D1	18 49 48.2	20 50 43	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK051+09D1	18 49 48.2	20 50 43	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
NGC6717	18 55 6.2	-22 42 2	PC	IMAGE	PCALL	F336W		1	300	3458	2		1
NGC6717	18 55 6.2	-22 42 2	PC	IMAGE	PCALL	F336W		1	900	3458	2		1
NGC6717	18 55 6.2	-22 42 2	PC	IMAGE	PCALL	F439W		1	100	3458	2		1
NGC6717	18 55 6.2	-22 42 2	PC	IMAGE	PCALL	F439W		1	300	3458	2		1
NGC6717	18 55 6.2	-22 42 2	PC	IMAGE	PCALL	F439W		1	400	3458	2		1
NGC6717	18 55 6.2	-22 42 2	PC	IMAGE	PCALL	F336W		1	1200	3458	2		1
PK032-02D1	18 58 26.0	-1 3 47	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK032-02D1	18 58 26.0	-1 3 47	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
3C395	19 2 56.0	31 59 42	FGS	TRANS	3	F550W		1	1414	2443	1	CON SEL	1
3C395	19 2 56.0	31 59 42	FGS	TRANS	3	F583W		1	1414	2443	1	CON SEL	1
3C395	19 2 56.0	31 59 42	FGS	TRANS	3	PUPIL		1	1414	2443	1	CON SEL	1
HD177752	19 6 3.4	-0 50 18	FOC/96	IMAGE	512X512	F175W PRISM2		1	1500	2680	1		2
HD177752	19 6 3.4	-0 50 18	FOC/96	IMAGE	512X1024	F175W PRISM2		1	300	2680	1	ACQ	2
HD177566	19 7 7.8	-41 43 15	HRS	ACCUM	0.25	G160M	1252	1	880	2348	1		1
HD177566	19 7 7.8	-41 43 15	HRS	ACCUM	0.25	G160M	1318	1	880	2348	1		1
HD177566	19 7 7.8	-41 43 15	HRS	ACCUM	0.25	G160M	1619	2	880	2348	1		1
HD177566	19 7 7.8	-41 43 15	HRS	ACCUM	0.25	G160M	1667	2	880	2348	1		1
HD177566	19 7 7.8	-41 43 15	HRS	ACCUM	0.25	G160M	1817	2	880	2348	1		1
HD177566	19 7 7.8	-41 43 15	HRS	ACCUM	0.25	G160M	1857	2	880	2348	1		1
HD177566	19 7 7.8	-41 43 15	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	2348	1	ACQ	1
NGC6764	19 8 16.5	50 55 57	FOS/BL	ACCUM	1.0	G130H		1	18600	4122	2	CON	1
NGC6764	19 8 16.5	50 55 57	FOS/BL	ACCUM	1.0	G190H		1	6200	4122	2	CON	1
NGC6764	19 8 16.5	50 55 57	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	1	4122	2	ACQ CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC6764	19 8 16.5	50 55 57	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	1	4122	2	ACQ CON	1
NGC6764	19 8 16.5	50 55 57	FOC/48	IMAGE	512X512	F130LP F140W		1	1000	3810	2		1
ESO-1905-6356	19 9 46.0	-63 51 26	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
A59	19 10 32.3	-59 57 6	HRS	IMAGE	2.0	MIRROR-N2		1	1792	2693	1		1
A59	19 10 32.3	-59 57 6	HRS	ACCUM	2.0	G270M	2798	16	900	2693	1		1
NGC6752	19 10 51.8	-59 58 55	PC	IMAGE	ALL	F675W		1	40	2555	1		1
NGC6752	19 10 51.8	-59 58 55	PC	IMAGE	ALL	F675W		1	1100	2555	1		1
NGC6752	19 10 51.8	-59 58 55	PC	IMAGE	ALL	F656N		3	2700	2555	1		1
NGC6752	19 10 51.8	-59 58 55	FOC/48	IMAGE	512X512	F220W		31	600	2472	1		1
NGC6752	19 10 51.8	-59 58 55	FOC/48	IMAGE	512X512	F342W		2	570	2472	1		1
NGC6752	19 10 51.8	-59 58 55	FOC/48	IMAGE	512X512	F430W		2	570	2472	1		1
A31	19 11 11.3	-59 59 54	HRS	IMAGE	2.0	MIRROR-N2		1	1792	2693	1		1
A31	19 11 11.3	-59 59 54	HRS	ACCUM	2.0	G270M	2798	15	900	2693	1		1
HD179821	19 13 58.6	0 7 32	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD179821	19 13 58.6	0 7 32	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
W-AQL	19 15 23.4	-7 2 50	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
W-AQL	19 15 23.4	-7 2 50	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
V605AQL-KNOT	19 18 20.5	1 46 59	FOC/96	IMAGE	512X512	F165W		1	800	2570	1		1
V605AQL-KNOT	19 18 20.5	1 46 59	FOC/96	IMAGE	512X512	F220W		1	800	2570	1		1
V605AQL-KNOT	19 18 20.5	1 46 59	FOC/96	IMAGE	512X512	F437M		1	800	2570	1		1
V605AQL-KNOT	19 18 20.5	1 46 59	FOC/96	IMAGE	512X512	F501N		1	800	2570	1		1
V605AQL-STAR	19 18 20.5	1 46 59	FOS/RD	ACQ/BINA	4.3	MIRROR		1	90	2570	1	ACQ	1
V605AQL-STAR	19 18 20.5	1 46 59	FOS/RD	ACCUM	0.5	PRISM	5400	1	2500	2570	1		1
V605AQL-STAR	19 18 20.5	1 46 59	FOS/BL	ACQ/BINA	4.3	MIRROR		1	120	2570	1	ACQ	1
V605AQL-STAR	19 18 20.5	1 46 59	FOS/BL	ACCUM	0.5	G160L	1675	1	2500	2570	1		1
V605AQL-STAR	19 18 20.5	1 46 59	FOS/RD	ACCUM	0.5	G650L	5625	1	2500	2570	1		1
PK037-06D1	19 22 56.7	1 30 52	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK037-06D1	19 22 56.7	1 30 52	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK045-02D1	19 24 22.4	9 53 56	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK045-02D1	19 24 22.4	9 53 56	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
V1302-AQL	19 26 48.1	11 21 17	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
V1302-AQL	19 26 48.1	11 21 17	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
4C73.18	19 27 48.5	73 58 1	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
4C73.18	19 27 48.5	73 58 1	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	4125	3	ACQ CON	1
TOL1924-416	19 27 58.2	-41 34 33	FOS/BL	ACCUM	1.0	G130H		1	4000	3591	2	CON	1
TOL1924-416	19 27 58.2	-41 34 33	FOS/BL	ACCUM	1.0	G190H		1	2300	3591	2	CON	1
TOL1924-416	19 27 58.2	-41 34 33	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	0	3591	2	ACQ CON	1
TOL1924-416	19 27 58.2	-41 34 33	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	0	3591	2	ACQ CON	1
TOL1924-416	19 27 58.2	-41 34 33	FOC/48	IMAGE	512X512	F130LP F140W		1	450	3591	2	ACQ	1
A3639-B	19 28 15.3	-50 53 1	FOS/RD	ACCUM	4.3	G190H		1	7200	3448	2		1
A3639-B	19 28 15.3	-50 53 1	FOS/RD	ACQ/BINA	4.3	MIRROR		1	720	3448	2	ACQ	1
SATURN1	19 28 18.5	-21 58 15	PC	IMAGE	P6	F439W		1	4	3090	1		4
SATURN1	19 28 18.5	-21 58 15	PC	IMAGE	P6	F889N		1	40	3090	1		4
SATURN2	19 28 19.7	-21 58 13	PC	IMAGE	P6	F439W		1	4	3090	1		4
SATURN2	19 28 19.7	-21 58 13	PC	IMAGE	P6	F889N		1	40	3090	1		4
A3639-D	19 28 25.1	-50 53 8	FOS/RD	ACCUM	4.3	G190H		1	5070	3448	2		1
A3639-D	19 28 25.1	-50 53 8	FOS/RD	ACQ/BINA	4.3	MIRROR		1	720	3448	2	ACQ	1
SATURN4	19 28 33.7	-21 57 47	PC	IMAGE	P6	F439W		1	4	3090	1		4
SATURN4	19 28 33.7	-21 57 47	PC	IMAGE	P6	F889N		1	40	3090	1		4
SATURN5	19 28 34.9	-21 57 45	PC	IMAGE	P6	F439W		1	4	3090	1		4
SATURN5	19 28 34.9	-21 57 45	PC	IMAGE	P6	F889N		1	40	3090	1		4
SATURN7	19 29 4.7	-21 56 48	PC	IMAGE	P6	F439W		1	4	3090	1		4

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
SATURN7	19 29 4.7	-21 56 48	PC	IMAGE	P6	F889N		1	40	3090	1		4
SATURN8	19 29 5.9	-21 56 46	PC	IMAGE	P6	F439W		1	4	3090	1		4
SATURN8	19 29 5.9	-21 56 46	PC	IMAGE	P6	F889N		1	40	3090	1		4
HD183344	19 29 21.4	-7 2 8	FOC/96	IMAGE	512X512	F175W PRISM2		1	2400	2680	1		2
HD183344	19 29 21.4	-7 2 8	FOC/96	IMAGE	512X1024	F175W PRISM2		1	300	2680	1	ACQ	2
HD183344	19 29 21.4	-7 2 8	FOC/96	IMAGE	512X1024	F175W PRISM2		1	120	2680	1	ACQ	2
M1-91	19 32 57.7	26 52 43	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
M1-91	19 32 57.7	26 52 43	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
PK064+05D1	19 34 45.2	30 30 59	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK064+05D1	19 34 45.2	30 30 59	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
BD+30D3639	19 34 45.3	30 30 59	HRS	ACCUM	0.25	G160M	1510	1	1800	3880	2		1
BD+30D3639	19 34 45.3	30 30 59	HRS	ACCUM	0.25	G160M	1463	1	1800	3880	2		1
BD+30D3639	19 34 45.3	30 30 59	HRS	ACCUM	0.25	G160M	1304	1	1800	3880	2		1
BD+30D3639	19 34 45.3	30 30 59	HRS	ACCUM	0.25	G160M	1346	1	1800	3880	2		1
BD+30D3639	19 34 45.3	30 30 59	HRS	ACCUM	0.25	G160M	1656	1	1800	3880	2		1
BD+30D3639	19 34 45.3	30 30 59	HRS	ACCUM	0.25	G160M	1274	2	1200	3880	2		1
BD+30D3639	19 34 45.3	30 30 59	HRS	ACCUM	0.25	G160M	1224	3	1200	3880	2		1
BD+30D3639	19 34 45.3	30 30 59	HRS	ACQ/PEAK	0.25	MIRROR-N2		1	5	3880	2		1
BD+30D3639	19 34 45.3	30 30 59	FOC/96	IMAGE	512X512	F152M F6ND		1	600	3880	2	ACQ	1
BD+30D3639	19 34 45.3	30 30 59	FOC/96	IMAGE	512X512	F195W F8ND		1	120	3880	2	ACQ	1
BD+30D3639	19 34 45.3	30 30 59	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	20	3880	2		1
M1-92	19 36 17.6	29 32 49	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
M1-92	19 36 17.6	29 32 49	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK060+01D1	19 38 8.6	25 15 43	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK060+01D1	19 38 8.6	25 15 43	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
PK056-00D1	19 39 35.9	20 19 5	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK056-00D1	19 39 35.9	20 19 5	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
1935-692	19 40 25.3	-69 7 6	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1935-692	19 40 25.3	-69 7 6	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
NGC6809-NORTH2	19 41 12.5	-59 51 0	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC6809-NORTH2	19 41 12.5	-59 51 0	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
NGC6809-NORTH1	19 41 12.8	-59 55 0	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC6809-NORTH1	19 41 12.8	-59 55 0	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
NGC6809-CORE	19 41 12.9	-59 57 0	PC	IMAGE	PCALL	F336W		3	600	3872	2		1
NGC6809-CORE	19 41 12.9	-59 57 0	PC	IMAGE	PCALL	F439W		3	250	3872	2		1
NGC6814	19 42 40.7	-10 19 26	WFC	IMAGE	ALL	F194W		1	300	2608	1	ACQ	1
NGC6814	19 42 40.7	-10 19 26	HSP/UV2	PRISM	1.0	F262M/F145M		1	7500	2608	1		1
1946+7658	19 44 55.2	77 5 27	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
1946+7658	19 44 55.2	77 5 27	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
HD187796	19 50 34.0	32 54 53	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD187796	19 50 34.0	32 54 53	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
HD187642	19 50 47.0	8 52 6	HRS	ACCUM	2.0	G160M	1335	1	435	3737	2		1
HD187642	19 50 47.0	8 52 6	HRS	ACCUM	0.25	ECH-B	2805	2	400	2461	1		1
HD187642	19 50 47.0	8 52 6	HRS	ACCUM	0.25	ECH-B	2854	3	504	2461	1		1
HD187642	19 50 47.0	8 52 6	HRS	ACCUM	0.25	ECH-B	2345	2	576	2461	1		1
HD187642	19 50 47.0	8 52 6	HRS	ACCUM	0.25	MIRROR-A2		1	14	2461	1		1
HD187642	19 50 47.0	8 52 6	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2461	1	ACQ	1
HD187642	19 50 47.0	8 52 6	HRS	ACCUM	0.25	ECH-B	2596	3	144	2461	1		1
HD187885	19 52 52.8	-17 1 50	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD187885	19 52 52.8	-17 1 50	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK68+01D2	19 59 18.2	31 54 37	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK68+01D2	19 59 18.2	31 54 37	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
CYGNUS-A-OFFSET	19 59 25.0	40 44 24	FOS/BL	ACQ/BINA	4.3	MIRROR		1	40	2177	1	ACQ	1
CYGNUS-A	19 59 28.3	40 44 2	WFC	IMAGE	ALL	F336W	3360	2	2600	2177	1	ACQ	1
CYGNUS-A-NUCLEUS	19 59 28.3	40 44 2	FOS/BL	ACCUM	4.3	G160L	1600	1	5716	2177	1		1
CYGNUS-A-NUCLEUS	19 59 28.3	40 44 2	FOS/RD	ACCUM	4.3	G270H	2700	1	5716	2177	1		1
3C405	19 59 28.4	40 44 1	FOC/96	IMAGE	512X1024	F320W POL0		1	606	3790	2		1
3C405	19 59 28.4	40 44 1	FOC/96	IMAGE	512X1024	F320W POL60		1	606	3790	2		1
3C405	19 59 28.4	40 44 1	FOC/96	IMAGE	512X1024	F320W POL120		1	606	3790	2		1
SOMESTAR-OFFSET	19 59 35.4	20 48 18	FOS/BL	ACQ/BINA	4.3	MIRROR		1	90	2237	1	ACQ	4
SOMESTAR-OFFSET	19 59 35.4	20 48 18	FOS/BL	ACQ/BINA	4.3	MIRROR		1	90	3969	1	ACQ	4
PSR1957+20	19 59 36.8	20 48 15	PC	IMAGE	P8	F675W		1	600	2237	1		2
PSR1957+20	19 59 36.8	20 48 15	PC	IMAGE	P8	F791W		1	1000	2237	1		3
PSR1957+20	19 59 36.8	20 48 15	PC	IMAGE	P8	F569W		1	600	2237	1	ACQ	1
PSR1957+20	19 59 36.8	20 48 15	PC	IMAGE	P8	F675W		1	600	3969	1		2
PSR1957+20	19 59 36.8	20 48 15	PC	IMAGE	P8	F791W		1	1000	3969	1		3
PSR1957+20	19 59 36.8	20 48 15	PC	IMAGE	P8	F569W		1	600	3969	1	ACQ	1
PSR1957+20	19 59 36.8	20 48 15	PC	IMAGE	P8	F791W		2	1000	2237	1		1
PSR1957+20	19 59 36.8	20 48 15	PC	IMAGE	P8	F791W		2	1000	3969	1		1
PSR1957+20-SPEC	19 59 36.8	20 48 15*	FOS/BL	ACCUM	0.25X2.0	G160L	1837	2	1320	2237	1		4
PSR1957+20-SPEC	19 59 36.8	20 48 15*	FOS/BL	ACCUM	0.25X2.0	G160L	1837	2	1320	3969	1		4
ESO-1957-4712	20 0 58.0	-47 4 19	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD189849	20 1 6.1	27 45 13	HRS	ACCUM	2.0	G160M	1335	2	870	3737	2		1
V1027-CYG	20 2 26.4	30 4 19	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
V1027-CYG	20 2 26.4	30 4 19	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
M3-60	20 4 22.4	33 38 59	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
M3-60	20 4 22.4	33 38 59	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
WZ-SGE	20 7 36.4	17 42 15	FOS/BL	ACCUM	1.0	G130H	1375	1	3000	3836	2		1
WZ-SGE	20 7 36.4	17 42 15	FOS/BL	ACQ/BINA	4.3	MIRROR	1375	1	25	3836	2	ACQ	1
POINT2005-489INCA221 -131	20 8 9.1	-48 54 4	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT2005-489INCA221 -131	20 8 9.1	-48 54 4	S/C	POINTING	V1			1	1	4147	3	CON	1
POINT2005-489INCA221 -132	20 8 17.9	-48 47 52	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT2005-489INCA221 -132	20 8 17.9	-48 47 52	S/C	POINTING	V1			1	1	4147	3	CON	1
INCA221-131	20 8 57.7	-49 4 43	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-131	20 8 57.7	-49 4 43	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
INCA221-132	20 9 7.1	-48 55 35	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-132	20 9 7.1	-48 55 35	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
2005-489INCA221-131	20 9 25.3	-48 49 54	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
2005-489INCA221-131	20 9 25.3	-48 49 54	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
2005-489INCA221-132	20 9 25.3	-48 49 54	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
2005-489INCA221-132	20 9 25.3	-48 49 54	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
PK074+02D1	20 10 52.5	37 24 42	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK074+02D1	20 10 52.5	37 24 42	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
PKS2008-159	20 11 15.7	-15 46 40	PC	IMAGE	ALL	F555W		1	240	4028	1		1
CD-41D13967	20 19 27.9	-41 31 30	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
CD-41D13967	20 19 27.9	-41 31 30	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
PK058-10D1	20 20 8.4	16 43 58	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK058-10D1	20 20 8.4	16 43 58	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PKS2021-330	20 24 35.6	-32 53 36	PC	IMAGE	ALL	F555W		1	260	3156	0		1
N-CYG-1992	20 30 31.6	52 37 53	HRS	ACCUM	2.0	G160M	1400	1	600	4053	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
N-CYG-1992	20 30 31.6	52 37 53	HRS	ACCUM	2.0	G160M	1490	1	600	4053	1		1
N-CYG-1992	20 30 31.6	52 37 53	HRS	ACCUM	2.0	G160M	1240	1	600	4053	1		1
N-CYG-1992	20 30 31.6	52 37 53	HRS	ACCUM	2.0	G160M	1550	1	600	4053	1		1
N-CYG-1992	20 30 31.6	52 37 53	HRS	ACCUM	2.0	G160M	1640	1	600	4053	1		1
N-CYG-1992	20 30 31.6	52 37 53	HRS	ACCUM	2.0	G200M	1900	1	600	4053	1		1
N-CYG-1992	20 30 31.6	52 37 53	HRS	ACCUM	2.0	G200M	2320	1	600	4053	1		1
N-CYG-1992	20 30 31.6	52 37 53	HRS	ACCUM	2.0	G270M	2800	1	540	4053	1		1
N-CYG-1992	20 30 31.6	52 37 53	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	138	4053	1		1
NOVA-CYGNI-1992	20 30 31.6	52 37 52	PC	IMAGE	PC6	F284W		1	2100	2797	1		1
UGC11597	20 34 52.5	60 9 13	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
2034-342	20 37 27.4	-34 5 30	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
2034-342	20 37 27.4	-34 5 30	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
AE-AQR	20 40 9.0	-0 52 15	FOS/BL	RAPID	4.3	G160L		1	18000	3600	2		1
AE-AQR	20 40 9.0	-0 52 15	FOS/BL	RAPID	4.3	PRISM		1	2220	3600	2		1
AE-AQR	20 40 9.0	-0 52 15	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3600	2	ACQ	1
BD+47D3167A	20 41 18.3	48 8 31	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
BD+47D3167A	20 41 18.3	48 8 31	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
2038-371	20 41 30.1	-37 0 16	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2038-371	20 41 30.1	-37 0 16	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
NEWHIP-37	20 43 16.3	-10 44 32	FGS	POS	3	F5ND		1	51	2861	2	CON	2
NEWHIP-37	20 43 16.3	-10 44 32	FGS	POS	3	F5ND		1	51	4145	3	CON	2
Q2040-374	20 43 19.6	-37 14 4	PC	IMAGE	ALL	F555W		1	260	3156	0		1
Q2040-400	20 43 27.6	-39 50 43	PC	IMAGE	ALL	F555W		1	260	3157	0		1
POINTNEWEGOB-37NEWHIP-37	20 43 41.6	-10 33 53	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-37NEWHIP-37	20 43 41.6	-10 33 53	S/C	POINTING	V1			1	1	4145	3	CON	1
MARK509	20 44 9.7	-10 43 25	PC	IMAGE	PC6	F785LP		1	120	3698	2		1
NEWEGOB-37NEWHIP-37	20 44 9.7	-10 43 23	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-37NEWHIP-37	20 44 9.7	-10 43 23	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
NEWEGOB-38NEWHIP-38	20 44 9.7	-10 43 23	FGS	POS	3	PUPIL		1	51	2861	2	CON	3
NEWEGOB-38NEWHIP-38	20 44 9.7	-10 43 23	FGS	POS	3	PUPIL		1	51	4145	3	CON	3
MARK509	20 44 9.8	-10 43 24	HRS	IMAGE	2.0	MIRROR-N2		1	102	3463	2	ACQ	1
MARK509	20 44 9.8	-10 43 24	HRS	ACCUM	2.0	G160M	1250	6	1152	3463	2		1
MARK509	20 44 9.8	-10 43 24	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	40	3463	2	ACQ	1
NEWHIP-38	20 44 37.0	-10 29 40	FGS	POS	3	PUPIL		1	51	2861	2	CON	2
NEWHIP-38	20 44 37.0	-10 29 40	FGS	POS	3	PUPIL		1	51	4145	3	CON	2
POINTNEWEGOB-38NEWHIP-38	20 45 1.3	-10 40 37	S/C	POINTING	V1			1	1	2861	2	CON	1
POINTNEWEGOB-38NEWHIP-38	20 45 1.3	-10 40 37	S/C	POINTING	V1			1	1	4145	3	CON	1
AU-MIC	20 45 9.4	-31 20 27	HRS	RAPID	2.0	G160M	1216	12	1800	2321	1		1
AU-MIC	20 45 9.4	-31 20 27	HRS	IMAGE	2.0	MIRROR-N2		1	96	2321	1		1
AU-MIC	20 45 9.4	-31 20 27	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	9	2321	1	ACQ	1
2043-347	20 46 43.5	-33 32 59	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2043-347	20 46 43.5	-33 32 59	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
2044-369	20 47 33.1	-36 44 56	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
2044-369	20 47 33.1	-36 44 56	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
EPSILON-AQR	20 48 55.0	-9 24 35	PC	IMAGE	P6	F284W	2866	1	0	2564	1		1
EPSILON-AQR	20 48 55.0	-9 24 35	PC	IMAGE	P6	F889N	8888	1	0	2564	1		1
2047+0123	20 50 23.2	1 34 15	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
2047+0123	20 50 23.2	1 34 15	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1

Target	RA (2000)	Dec (2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
2048+312	20 50 51.1	31 27 28	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2048+312	20 50 51.1	31 27 28	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
2049-353	20 52 49.4	-35 10 39	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2049-353	20 52 49.4	-35 10 39	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
2050-359	20 53 44.6	-35 46 36	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2050-359	20 53 44.6	-35 46 36	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
2054-355	20 57 57.9	-35 21 23	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2054-355	20 57 57.9	-35 21 23	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
POINTNEWEGOD-62NEWHIP-62	20 58 23.3	-52 11 3	S/C	POINTING	V1			1	1	3918	2	CON	1
POINTNEWEGOD-62NEWHIP-62	20 58 23.3	-52 11 3	S/C	POINTING	V1			1	1	4143	3	CON	1
ESO-2055-4928	20 58 32.0	-49 16 44	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q2055-440	20 59 0.6	-43 49 36	PC	IMAGE	ALL	F555W		1	260	3157	0		1
NEWEGOD-62NEWHIP-62	20 59 16.2	-52 0 10	FGS	POS	3	PUPIL		1	51	3918	2	CON	3
NEWEGOD-62NEWHIP-62	20 59 16.2	-52 0 10	FGS	POS	3	PUPIL		1	51	4143	3	CON	3
NEWHIP-62	20 59 40.2	-52 10 28	FGS	POS	3	PUPIL		1	51	3918	2	CON	2
NEWHIP-62	20 59 40.2	-52 10 28	FGS	POS	3	PUPIL		1	51	4143	3	CON	2
PK080-06D1	21 2 18.8	36 41 38	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK080-06D1	21 2 18.8	36 41 38	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK084-03D1	21 7 1.7	42 14 10	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
PK084-03D1	21 7 1.7	42 14 10	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
V1500-CYG	21 11 36.6	48 9 2	FOS/BL	ACQ/BINA	4.3	MIRROR		1	270	3527	2	ACQ	1
V1500-CYG	21 11 36.6	48 9 2	FOS/BL	ACCUM	1.0-PAIR	G160L	1837	20	630	3527	2		1
GD-394	21 12 44.0	50 6 18	HRS	IMAGE	2.0	MIRROR-N2		1	102	2593	1		1
GD-394	21 12 44.0	50 6 18	HRS	ACCUM	2.0	G160M	1307	2	270	2593	1		1
GD-394	21 12 44.0	50 6 18	HRS	ACCUM	2.0	G160M	1400	4	276	2593	1		1
GD-394	21 12 44.0	50 6 18	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	2593	1	ACQ	1
GD-394	21 12 44.0	50 6 18	HRS	ACCUM	2.0	G160M	1214	3	240	2593	1		1
PG2112+059	21 14 52.6	6 7 43	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
PG2112+059	21 14 52.6	6 7 43	FOS/BL	ACQ/BINA	4.3	MIRROR		1	14	4125	3	ACQ CON	1
HD202904	21 17 55.0	34 53 48	HRS	WSCAN	0.25	ECH-B	2260	1	139	4149	5		1
HD202904	21 17 55.0	34 53 48	HRS	ACCUM	0.25	G160M	1560	1	722	4149	5		1
HD202904	21 17 55.0	34 53 48	HRS	ACCUM	0.25	G160M	1195	1	889	4149	5		1
HD202904	21 17 55.0	34 53 48	HRS	ACCUM	0.25	G160M	1252	1	415	4149	5		1
HD202904	21 17 55.0	34 53 48	HRS	ACCUM	0.25	G160M	1347	1	399	4149	5		1
HD202904	21 17 55.0	34 53 48	HRS	ACCUM	0.25	G160M	1392	1	508	4149	5		1
HD202904	21 17 55.0	34 53 48	HRS	ACCUM	0.25	G160M	1148	2	954	4149	5		1
HD202904	21 17 55.0	34 53 48	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	4149	5	ACQ	1
HD202904	21 17 55.0	34 53 48	HRS	WSCAN	0.25	ECH-B	2059	1	279	4149	5		1
HD202904	21 17 55.0	34 53 48	HRS	WSCAN	0.25	ECH-B	2603	1	325	4149	5		1
HD202904	21 17 55.0	34 53 48	HRS	ACCUM	0.25	G160M	1315	1	331	4149	5		1
HD202904	21 17 55.0	34 53 48	HRS	WSCAN	0.25	ECH-B	2025	1	251	4149	5		1
HD202904	21 17 55.0	34 53 48	HRS	WSCAN	0.25	ECH-B	1805	1	576	4149	5		1
HD202904	21 17 55.0	34 53 48	HRS	WSCAN	0.25	ECH-B	1826	1	576	4149	5		1
HD202904	21 17 55.0	34 53 48	HRS	WSCAN	0.25	ECH-B	2372	1	204	4149	5		1
HD203280	21 18 34.8	62 35 8	HRS	ACCUM	2.0	G160M	1335	1	1197	3737	2		1
Q2116-358	21 19 27.5	-35 37 41	PC	IMAGE	ALL	F555W		1	260	3157	0		1
HA6	21 22 9.4	-42 50 49	PC	IMAGE	ALL	F555W		1	240	4028	1		1
3C432.0	21 22 46.4	17 4 38	PC	IMAGE	ALL	F555W		1	240	4028	1		1
PKS2121+053	21 23 44.5	5 35 22	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2123-408	21 26 18.5	-40 35 36	PC	IMAGE	ALL	F555W		1	240	4028	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
K648	21 27 34.4	11 57 14	HRS	ACCUM	2.0	G160M	1237	2	1800	3513	2		1
K648	21 27 34.4	11 57 14	HRS	ACCUM	2.0	G160M	1337	2	1722	3513	2		1
2125-1335	21 27 45.3	-13 22 11	PC	IMAGE	ALL	F555W		1	240	4028	1		1
PKS2126-15	21 29 12.1	-15 38 41	PC	IMAGE	ALL	F555W		1	260	3157	0		1
Q2127-158	21 29 49.4	-15 33 14	PC	IMAGE	ALL	F555W		1	100	2350	1		1
Q2127-158	21 29 49.4	-15 33 14	PC	IMAGE	ALL	F555W		1	350	2350	1		1
INCA221-138	21 31 35.0	-11 56 17	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-138	21 31 35.0	-11 56 17	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
2128-123INCA221-139	21 31 35.2	-12 7 4	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
2128-123INCA221-139	21 31 35.2	-12 7 4	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
2128-123INCA221-140	21 31 35.2	-12 7 4	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
2128-123INCA221-140	21 31 35.2	-12 7 4	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
2200+420INCA221-143	21 31 35.2	-12 7 4	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
2128-123INCA221-138	21 31 35.2	-12 7 4	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
2128-123INCA221-138	21 31 35.2	-12 7 4	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
PKS2128-12	21 31 35.3	-12 7 5	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
PKS2128-12	21 31 35.3	-12 7 5	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	4125	3	ACQ CON	1
PKS2128-12	21 31 35.3	-12 7 5	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
PKS2128-12	21 31 35.3	-12 7 5	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5772	4125	3	CON	1
PKS2128-12	21 31 35.3	-12 7 5	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2034	4125	3	CON	1
POINT2128-123INCA221-139	21 31 46.0	-11 56 8	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT2128-123INCA221-139	21 31 46.0	-11 56 8	S/C	POINTING	V1			1	1	4147	3	CON	1
PK095+00D1	21 31 50.2	52 33 54	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK095+00D1	21 31 50.2	52 33 54	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
POINT2128-123INCA221-138	21 32 14.0	-12 0 33	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT2128-123INCA221-138	21 32 14.0	-12 0 33	S/C	POINTING	V1			1	1	4147	3	CON	1
LDS749-B	21 32 16.1	0 15 14	FOS/BL	ACCUM	1.0	G130H	1380	1	1200	2593	1		1
LDS749-B	21 32 16.1	0 15 14	FOS/BL	ACCUM	1.0	G270H	2700	1	1200	2593	1		1
LDS749-B	21 32 16.1	0 15 14	FOS/BL	ACCUM	1.0	G190H	1944	1	1200	2593	1		1
LDS749-B	21 32 16.1	0 15 14	FOS/BL	ACQ/BINA	4.3	MIRROR		1	3	2593	1	ACQ	1
INCA221-139	21 32 18.6	-12 4 19	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-139	21 32 18.6	-12 4 19	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
POINT2128-123INCA221-140	21 32 20.4	-12 3 15	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT2128-123INCA221-140	21 32 20.4	-12 3 15	S/C	POINTING	V1			1	1	4147	3	CON	1
POINT2200+420INCA221-143	21 32 20.4	-12 3 15	S/C	POINTING	V1			1	1	2859	2	CON	1
INCA221-140	21 32 22.1	-12 16 3	FGS	POS	3	F5ND		1	51	2859	2	CON	2
INCA221-140	21 32 22.1	-12 16 3	FGS	POS	3	F5ND		1	51	4147	3	CON	2
INCA221-143	21 32 22.1	-12 16 3	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
HA5	21 34 17.9	-45 56 8	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2131-461	21 34 17.9	-45 55 38	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
2131-461	21 34 17.9	-45 55 38	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
HA2	21 34 44.0	-42 44 28	PC	IMAGE	ALL	F555W		1	260	3157	0		1
HA2	21 34 44.0	-42 44 28	PC	IMAGE	ALL	F555W		1	240	4017	1		1
PK81-14D1-KNOT	21 35 29.3	31 41 50*	FOS/BL	ACCUM	4.3	G130H		1	1800	3671	2		1
PK81-14D1-KNOT	21 35 29.3	31 41 50*	FOS/BL	ACCUM	4.3	G190H		1	1800	3671	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PK81-14D1-KNOT	21 35 29.3	31 41 50*	FOS/BL	ACCUM	4.3	G270H		1	1800	3671	2		1
PK81-14D1	21 35 29.4	31 41 46	FOC/96	IMAGE	512X1024	F501N		1	900	3671	2		1
PK81-14D1	21 35 29.4	31 41 46	FOC/96	IMAGE	512X1024	F152M		1	1800	3671	2		1
PK81-14D1-CENTRAL-STAR	21 35 29.4	31 41 46	HRS	ACCUM	0.25	G160M	1540	1	1800	3671	2		1
PK81-14D1-CENTRAL-STAR	21 35 29.4	31 41 46	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3671	2	ACQ	1
ESO-2133-5446	21 36 27.9	-54 33 17	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PKS2134+004	21 36 38.6	0 41 54	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PKS2136+141	21 39 1.3	14 23 36	PC	IMAGE	ALL	F555W		1	260	3157	0		1
NGC7099	21 40 22.0	-23 10 44	PC	IMAGE	PCALL	F336W		1	300	3458	2		1
NGC7099	21 40 22.0	-23 10 44	PC	IMAGE	PCALL	F439W		1	100	3458	2		1
NGC7099	21 40 22.0	-23 10 44	PC	IMAGE	PCALL	F439W		1	300	3458	2		1
NGC7099	21 40 22.0	-23 10 44	PC	IMAGE	PCALL	F439W		1	400	3458	2		1
NGC7099	21 40 22.0	-23 10 44	PC	IMAGE	PCALL	F336W		2	900	3458	2		1
NGC7099	21 40 22.0	-23 10 44	PC	IMAGE	PCALL	F336W		1	1200	3458	2		1
2138-4427	21 41 59.5	-44 13 18	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2138-4427	21 41 59.5	-44 13 18	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
2139-4434	21 42 25.9	-44 20 17	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2139-4434	21 42 25.9	-44 20 17	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
PKS2144-362	21 47 31.1	-36 1 52	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PKS2145+06	21 48 5.5	6 57 39	FOS/RD	ACQ/BINA	4.3	MIRROR		1	9	2424	1	ACQ	1
PKS2145+06	21 48 5.5	6 57 39	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PKS2145+06	21 48 5.5	6 57 39	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	3360	2424	1		1
PKS2145+06	21 48 5.5	6 57 39	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1019	2424	1		1
PKS2149-306	21 51 55.5	-30 27 54	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PKS2150+05	21 53 24.6	5 36 18	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2153-2094	21 55 53.6	-20 41 46	PC	IMAGE	ALL	F555W		1	240	4028	1		1
MARK516	21 56 22.3	7 22 0	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
PKS2153-204	21 56 33.8	-20 12 31	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2154-2004	21 57 5.9	-19 51 14	PC	IMAGE	ALL	F555W		1	240	4028	1		1
UGC11865	21 58 36.0	12 2 21	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
B22156+29	21 58 41.9	29 59 8	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2158-214U	22 0 55.1	-21 13 53	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2158-169	22 1 33.9	-16 42 59	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2158-169	22 1 33.9	-16 42 59	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
INCA221-143INCA221-172	22 2 5.8	42 22 47	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
INCA221-172	22 2 5.8	42 22 47	FGS	POS	3	PUPIL		1	51	4147	3	CON	7
INCA221-143	22 2 25.4	42 25 32	FGS	POS	3	PUPIL		1	51	4147	3	CON	4
INCA221-172	22 2 25.4	42 25 32	FGS	POS	3	PUPIL		1	51	2859	2	CON	4
ESO-2159-5132	22 2 41.9	-51 17 44	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
2200+420INCA221-143	22 2 43.2	42 16 40	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
2200+420INCA221-172	22 2 43.2	42 16 40	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
2200+420INCA221-172	22 2 43.2	42 16 40	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
POINT2200+420INCA221-172	22 3 7.1	42 27 16	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT2200+420INCA221-172	22 3 7.1	42 27 16	S/C	POINTING	V1			1	1	4147	3	CON	1
INCA221-173	22 3 9.3	31 51 56	FGS	POS	3	PUPIL		1	51	2859	2	CON	2
INCA221-173	22 3 9.3	31 51 56	FGS	POS	3	PUPIL		1	51	4147	3	CON	2
POINTINCA221-143INCA221-172	22 3 10.8	42 17 7	S/C	POINTING	V1			1	1	2859	2	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
POINTINCA221-143INCA 221-172	22 3 10.8	42 17 7	S/C	POINTING	V1			1	1	4147	3	CON	1
2201+315INCA221-173	22 3 14.9	31 45 38	FGS	POS	3	PUPIL		1	51	2859	2	CON	3
2201+315INCA221-173	22 3 14.9	31 45 38	FGS	POS	3	PUPIL		1	51	4147	3	CON	3
B22201+31A	22 3 15.0	31 45 38	FOS/RD	ACCUM	4.3	G400H	4000	1	132	2578	1		1
B22201+31A	22 3 15.0	31 45 38	FOS/BL	ACCUM	4.3	G130H	1300	1	2790	2578	1		1
B22201+31A	22 3 15.0	31 45 38	FOS/RD	ACCUM	4.3	G270H	2700	1	222	2578	1		1
B22201+31A	22 3 15.0	31 45 38	FOS/BL	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
B22201+31A	22 3 15.0	31 45 38	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
B22201+31A	22 3 15.0	31 45 38	FOS/BL	ACCUM	4.3	G190H	1900	1	1104	2578	1		1
POINT2200+420INCA221 -143	22 3 27.9	42 24 33	S/C	POINTING	V1			1	1	4147	3	CON	1
POINT2201+315INCA221 -173	22 4 7.2	31 49 56	S/C	POINTING	V1			1	1	2859	2	CON	1
POINT2201+315INCA221 -173	22 4 7.2	31 49 56	S/C	POINTING	V1			1	1	4147	3	CON	1
Q2203+29	22 6 2.7	29 30 2	PC	IMAGE	ALL	F702W		1	100	2350	1		1
Q2203+29	22 6 2.7	29 30 2	PC	IMAGE	ALL	F702W		1	350	2350	1		1
ESO-2204-3117	22 6 54.3	-31 3 2	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
2204-408	22 7 34.4	-40 36 19	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2204-408	22 7 34.4	-40 36 19	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
Q2204-408	22 7 34.4	-40 36 56	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PKS2204-573	22 7 54.0	-57 7 36	PC	IMAGE	ALL	F555W		1	260	3157	0		1
A1.1	22 8 36.8	-19 46 46	PC	IMAGE	ALL	F555W		1	240	4028	1		1
HD210330	22 10 48.6	-48 53 27	PC	IMAGE	PC6-FIX	F487N		1	240	3603	2	CON	2
HD210330	22 10 48.6	-48 53 27	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
2209-187U	22 12 10.4	-18 27 38	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PC2211+0119	22 14 27.8	1 34 57	PC	IMAGE	ALL	F555W		1	240	4028	1		1
2211-192U2	22 14 37.9	-19 0 57	PC	IMAGE	ALL	F555W		1	240	4028	1		1
PKS2212-299	22 15 16.0	-29 44 24	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2212-16	22 15 27.3	-16 11 33	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2212-16	22 15 27.3	-16 11 33	FOC/96	IMAGE	512X1024	F170M	1770	1	660	3801	2		1
NGC7244	22 16 26.8	16 28 17	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
22H-DEEP-FIELD	22 17 34.7	0 15 7	FOC/48	IMAGE	512X1024	F220W		1	1773	2365	1		31
PKS2215-508	22 18 19.1	-50 38 42	PC	IMAGE	ALL	F555W		1	240	4028	1		1
PKS2216-03	22 18 52.1	-3 35 37	FOS/RD	ACCUM	4.3	G400H	4000	1	294	2578	1		1
PKS2216-03	22 18 52.1	-3 35 37	FOS/RD	ACCUM	4.3	G190H	1900	1	666	2578	1		1
PKS2216-03	22 18 52.1	-3 35 37	FOS/RD	ACCUM	4.3	G270H	2700	1	486	2578	1		1
PKS2216-03	22 18 52.1	-3 35 37	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
NGC7252	22 20 44.8	-24 40 43	PC	IMAGE	PC6-FIX	F555W		1	1400	3784	2		1
NGC7252	22 20 44.8	-24 40 43	PC	IMAGE	PC6-FIX	F785LP		1	1400	3784	2		1
ESO-2217-4617	22 20 57.5	-46 2 5	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q2219-394	22 22 51.4	-39 13 33	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PKS2222+05	22 25 14.7	5 27 9	PC	IMAGE	ALL	F555W		1	240	4028	1		1
HD212571	22 25 16.6	1 22 41	HRS	IMAGE	2.0	MIRROR-A2		1	96	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	IMAGE	2.0	MIRROR-A2		1	96	3993	1		1
HD212571	22 25 16.6	1 22 41	HRS	ACCUM	0.25	G160M	1398	1	313	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	ACCUM	0.25	G160M	1608	1	444	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	WSCAN	0.25	ECH-B	1858	1	562	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	WSCAN	0.25	ECH-B	1807	1	341	3993	1		1
HD212571	22 25 16.6	1 22 41	HRS	WSCAN	0.25	ECH-B	1827	1	400	3993	1		1
HD212571	22 25 16.6	1 22 41	HRS	WSCAN	0.25	ECH-B	2059	1	282	3993	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD212571	22 25 16.6	1 22 41	HRS	ACCUM	0.25	G160M	1175	1	810	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	ACCUM	0.25	G160M	1290	1	183	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	ACCUM	0.25	G160M	1554	1	477	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	ACCUM	0.25	G160M	1663	1	438	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2251	1	ACQ	1
HD212571	22 25 16.6	1 22 41	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	3993	1	ACQ	1
HD212571	22 25 16.6	1 22 41	HRS	ACCUM	0.25	ECH-B	2324	1	108	3993	1		1
HD212571	22 25 16.6	1 22 41	HRS	WSCAN	0.25	ECH-B	2519	1	228	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	WSCAN	0.25	ECH-B	1744	1	504	3993	1		1
HD212571	22 25 16.6	1 22 41	HRS	ACCUM	0.25	G160M	1249	1	241	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	ACCUM	0.25	G160M	1345	1	215	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	ACCUM	0.25	G160M	1133	1	1000	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	WSCAN	0.25	ECH-B	2026	1	282	3993	1		1
HD212571	22 25 16.6	1 22 41	HRS	ACCUM	0.25	ECH-B	2325	1	108	3993	1		1
HD212571	22 25 16.6	1 22 41	HRS	ACCUM	0.25	ECH-B	2326	1	108	3993	1		1
HD212571	22 25 16.6	1 22 41	HRS	WSCAN	0.25	ECH-B	2484	1	209	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	WSCAN	0.25	ECH-B	2249	1	124	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	WSCAN	0.25	ECH-B	2799	1	143	2251	1		1
HD212571	22 25 16.6	1 22 41	HRS	WSCAN	0.25	ECH-B	2371	1	178	3993	1		1
PKS2223+21	22 25 38.1	21 18 6	PC	IMAGE	ALL	F555W		1	260	3157	0		1
Q2222-396	22 25 40.4	-39 24 37	PC	IMAGE	ALL	F555W		1	260	3157	0		1
3C446	22 25 47.3	-4 57 1	FOS/RD	ACCUM	4.3	G400H	4000	1	147	2578	1		1
3C446	22 25 47.3	-4 57 1	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
3C446	22 25 47.3	-4 57 1	FOS/RD	ACCUM	4.3	G270H	2700	1	1925	2578	1		1
1E2223-0517	22 26 15.8	-5 2 6	PC	IMAGE	ALL	F555W		1	200	2350	1		1
1E2223-0517	22 26 15.8	-5 2 6	PC	IMAGE	ALL	F555W		1	400	2350	1		1
2224-408	22 27 10.3	-40 36 52	PC	IMAGE	ALL	F555W		1	240	4028	1		1
2225-404	22 28 26.9	-40 9 59	PC	IMAGE	ALL	F555W		1	240	4028	1		1
PHL5200	22 28 30.4	-5 18 55	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2226+0216	22 28 38.1	2 31 22	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2226+0216	22 28 38.1	2 31 22	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
V354-LAC	22 29 10.2	54 51 4	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
V354-LAC	22 29 10.2	54 51 4	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
V3-2227-3928	22 30 32.9	-39 13 7	PC	IMAGE	ALL	F555W		1	260	3157	0		1
Q2228-399	22 31 35.3	-39 38 55	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PK100-08D1	22 31 41.9	47 48 15	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK100-08D1	22 31 41.9	47 48 15	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
UGC12066	22 31 50.9	19 41 34	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
CTA102	22 32 36.4	11 43 51	FOS/RD	ACCUM	4.3	G400H	4000	1	648	2578	1		1
CTA102	22 32 36.4	11 43 51	FOS/RD	ACCUM	4.3	G270H	2700	1	954	2578	1		1
CTA102	22 32 36.4	11 43 51	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
2231-0015	22 34 8.7	0 30 31	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2231-0015	22 34 8.7	0 30 31	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
ESO-2233-2618	22 35 46.2	-26 3 0	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
2233-377	22 36 34.6	-37 30 56	PC	IMAGE	ALL	F555W		1	240	4028	1		1
UGC12113	22 37 4.1	34 24 58	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC7332	22 37 24.6	23 47 54	PC	IMAGE	P6	F555W		1	35	2600	1		1
NGC7332	22 37 24.6	23 47 54	PC	IMAGE	P6	F555W		2	140	2600	1		1
2235-03	22 38 22.4	-2 45 53	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
2235-03	22 38 22.4	-2 45 53	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
UM656	22 38 57.6	-24 1 2	PC	IMAGE	ALL	F555W		1	260	3157	0		1
HD215318	22 39 24.4	81 23 1	FOC/96	IMAGE	512X512	F175W PRISM2		1	600	2680	1		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD215318	22 39 24.4	81 23 1	FOC/96	IMAGE	512X1024	F175W PRISM2		1	300	2680	1	ACQ	2
HD215318	22 39 24.4	81 23 1	FOC/96	IMAGE	512X1024	F175W PRISM2		1	120	2680	1	ACQ	2
2237-07	22 39 53.6	-5 52 20	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
2237-07	22 39 53.6	-5 52 20	FOC/96	IMAGE	512X1024	F190M	1975	1	550	4107	2		1
G2237+0305	22 40 30.3	3 21 31	FOC/96	IMAGE	512X512	F1ND F342W		1	900	2502	1		1
UM657	22 41 25.2	-17 14 25	PC	IMAGE	ALL	F555W		1	260	3157	0		1
Q2240-419	22 42 54.5	-41 41 45	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2240.9-3702	22 43 46.0	-36 47 5	PC	IMAGE	ALL	F555W		1	240	4028	1		1
G233-27	22 44 6.7	56 44 1	FGS	TRANS	3	PUPIL		1	132	2428	1		1
PKS2243-123	22 46 18.2	-12 6 51	FOS/BL	RAPID	1.0	G160L	1840	1	600	3791	2		1
PKS2243-123	22 46 18.2	-12 6 51	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	3791	2	ACQ	1
PKS2243-123	22 46 18.2	-12 6 51	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2310	3791	2		1
PKS2243-123	22 46 18.2	-12 6 51	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	7218	3791	2		1
PKS2243-123	22 46 18.2	-12 6 51	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	3791	2	ACQ	1
UM658	22 46 52.6	-22 3 9	PC	IMAGE	ALL	F555W		1	260	3157	0		1
CL2244-02-ARC	22 47 12.3	-2 5 39	WFC	IMAGE	W2	F555W		1	1200	2801	1		1
CL2244-02-ARC	22 47 12.3	-2 5 39	WFC	IMAGE	W2	F555W		3	2300	2801	1		1
ESO-2244-6519	22 47 22.0	-65 3 29	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q2246-389	22 49 47.1	-38 40 36	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2248-12	22 51 18.1	-12 27 4	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
2248-12	22 51 18.1	-12 27 4	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1
IRAS22491-1808	22 51 49.4	-17 52 24	FOC/48	IMAGE	512X512	F140W		1	2400	3913	2		2
IRAS22491-1808	22 51 49.4	-17 52 24	FOC/48	IMAGE	512X512	F220W		1	1200	3913	2		2
3C454.3	22 53 57.8	16 8 53	FGS	TRANS	3	F550W		1	1414	2443	1	CON SEL	1
3C454.3	22 53 57.8	16 8 53	FGS	TRANS	3	F583W		1	1414	2443	1	CON SEL	1
3C454.3	22 53 57.8	16 8 53	FGS	TRANS	3	PUPIL		1	1414	2443	1	CON SEL	1
3C454-3	22 53 57.8	16 8 53	FOS/RD	ACCUM	4.3	G400H	4000	1	648	2578	1		1
3C454-3	22 53 57.8	16 8 53	FOS/RD	ACCUM	4.3	G270H	2700	1	954	2578	1		1
3C454-3	22 53 57.8	16 8 53	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
3C454-3	22 53 57.8	16 8 53	FOS/RD	ACCUM	4.3	G190H	1900	1	503	2578	1		1
3C454.3	22 53 57.8	16 8 53	FOS/RD	ACQ/BINA	4.3	MIRROR		1	9	2424	1	ACQ	1
3C454.3	22 53 57.8	16 8 53	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
3C454.3	22 53 57.8	16 8 53	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
3C454.3	22 53 57.8	16 8 53	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5181	2424	1		1
3C454.3	22 53 57.8	16 8 53	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1404	2424	1		1
PKS2251+24	22 54 9.5	24 45 23	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PKS2251+11	22 54 10.4	11 36 39	FOS/BL	ACQ/BINA	4.3	MIRROR		1	14	3791	2	ACQ	1
PKS2251+11	22 54 10.4	11 36 39	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
PKS2251+11	22 54 10.4	11 36 39	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5973	2424	1		1
PKS2251+11	22 54 10.4	11 36 39	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	18720	3791	2		1
PKS2251+11	22 54 10.4	11 36 39	FOS/RD	ACQ/BINA	4.3	MIRROR		1	6	2424	1	ACQ	1
PKS2251+11	22 54 10.4	11 36 39	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1542	2424	1		1
PKS2251+11	22 54 10.4	11 36 39	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	2424	1	ACQ	1
PKS2251+11	22 54 10.4	11 36 39	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	2	3791	2	ACQ	1
PKS2251+11	22 54 10.4	11 36 39	FOS/RD	ACCUM	4.3	G400H	4000	1	141	2578	1		1
PKS2251+11	22 54 10.4	11 36 39	FOS/BL	ACCUM	4.3	G130H	1300	1	1980	2578	1		1
PKS2251+11	22 54 10.4	11 36 39	FOS/RD	ACCUM	4.3	G270H	2700	1	162	2578	1		1
PKS2251+11	22 54 10.4	11 36 39	FOS/BL	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
PKS2251+11	22 54 10.4	11 36 39	FOS/RD	ACQ/BINA	4.3	MIRROR		1	110	2578	1	ACQ	1
PKS2251+11	22 54 10.4	11 36 39	FOS/BL	ACCUM	4.3	G190H	1900	1	731	2578	1		1
ESO-2252-3955	22 54 59.4	-39 39 44	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
IC1459	22 57 10.5	-36 27 46	PC	IMAGE	PC6	F555W		1	500	3551	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
ESO-2254-4339	22 57 13.8	-43 23 42	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PKS2254+024	22 57 17.6	2 43 18	PC	IMAGE	ALL	F555W		1	260	3157	0		1
ESO-2254-4120	22 57 18.5	-41 4 14	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
HD216956	22 57 39.0	-29 37 20	HRS	ACCUM	0.25	G160M	1663	1	616	2537	1		1
HD216956	22 57 39.0	-29 37 20	HRS	ACCUM	2.0	MIRROR-A2		1	1	2537	1		1
HD216956	22 57 39.0	-29 37 20	HRS	ACCUM	0.25	G160M	1542	3	1214	2537	1		1
HD216956	22 57 39.0	-29 37 20	HRS	ACCUM	0.25	G160M	1859	1	276	2537	1		1
HD216956	22 57 39.0	-29 37 20	HRS	ACCUM	0.25	ECH-B	1859	1	1198	2537	1		1
HD216956	22 57 39.0	-29 37 20	HRS	ACCUM	0.25	ECH-B	2345	1	217	2537	1		1
HD216956	22 57 39.0	-29 37 20	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	2537	1	ACQ	1
HD216956	22 57 39.0	-29 37 20	HRS	ACCUM	0.25	ECH-B	2854	1	827	2537	1		1
HD216956	22 57 39.0	-29 37 20	HRS	ACCUM	0.25	ECH-B	2596	1	318	2537	1		1
MARK311	22 58 34.3	15 10 23	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
AC114	22 58 47.0	-34 48 14	WFC	IMAGE	ALL	F555W		1	1500	2269	1		1
AC114	22 58 47.0	-34 48 14	WFC	IMAGE	ALL	F555W		9	2300	2269	1		1
AC114	22 58 47.0	-34 48 14	WFC	IMAGE	ALL	F814W		9	2300	2269	1		1
MARK312	23 0 37.8	16 21 37	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
NGC7455	23 0 40.9	7 18 11	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
Q2258-391	23 1 30.8	-38 54 6	PC	IMAGE	ALL	F555W		1	260	3157	0		1
ESO-2259-3950	23 2 10.1	-39 34 11	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-2260-4106	23 2 46.5	-40 50 6	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC7469	23 3 15.8	8 52 27	PC	IMAGE	PC6	F785LP		1	180	3698	2		1
Q2300-352	23 3 18.0	-34 56 30	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2300-445	23 3 21.7	-44 10 28	PC	IMAGE	ALL	F555W		1	240	4028	1		1
PKS2300-68	23 3 43.5	-68 7 37	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
PKS2300-68	23 3 43.5	-68 7 37	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	2424	1	ACQ	1
PKS2300-68	23 3 43.5	-68 7 37	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PKS2300-68	23 3 43.5	-68 7 37	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5508	2424	1		1
PKS2300-68	23 3 43.5	-68 7 37	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1878	2424	1		1
2301-442	23 3 50.0	-43 55 39	PC	IMAGE	ALL	F555W		1	240	4028	1		1
MARK315	23 4 2.6	22 37 27	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
PG2302+029	23 4 44.9	3 11 46	FOS/BL	ACQ/BINA	4.3	MIRROR		1	18	3732	2	ACQ	1
PG2302+029	23 4 44.9	3 11 46	FOS/BL	ACCUM	4.3	G270H	2765	6	1320	3732	2		1
PG2302+029	23 4 45.0	3 11 46	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PG2302+029	23 4 45.0	3 11 46	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
PG2302+029	23 4 45.0	3 11 46	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1440	4125	3	CON	1
PG2302+029	23 4 45.0	3 11 46	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6072	4125	3	CON	1
PG2302+029	23 4 45.0	3 11 46	FOS/RD	ACQ/BINA	4.3	MIRROR		1	6	4125	3	ACQ CON	1
PG2302+029	23 4 45.0	3 11 46	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	0	4125	3	ACQ CON	1
Q2304-423	23 7 17.2	-42 3 19	PC	IMAGE	ALL	F555W		1	260	3157	0		1
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1230	5	500	2403	1		1
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1390	5	500	2403	1		1
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1550	3	525	2403	1		1
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1194	3	1000	2403	1		1
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1203	3	1000	2403	1		1
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1213	3	1000	2403	1		1
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1406	5	500	2403	1		1
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1239	5	500	2403	1		1
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1248	5	500	2403	1		1
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1256	5	500	2403	1		1
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1264	5	500	2403	1		1
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1398	5	500	2403	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1539	3	525	2403	1		1
HD218915	23 11 6.9	53 3 31	HRS	ACCUM	0.25	G160M	1561	3	525	2403	1		1
HD218915	23 11 6.9	53 3 31	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	2403	1	ACQ	2
4C09.72	23 11 17.7	10 8 15	FOS/BL	RAPID	1.0	G160L	1840	1	600	4125	3	CON	1
4C09.72	23 11 17.7	10 8 15	FOS/RD	ACQ/BINA	4.3	MIRROR		1	9	4125	3	ACQ CON	1
4C09.72	23 11 17.7	10 8 15	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	4125	3	ACQ CON	1
4C09.72	23 11 17.7	10 8 15	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5958	4125	3	CON	1
4C09.72	23 11 17.7	10 8 15	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2135	4125	3	CON	1
NGC7525	23 13 40.5	14 1 18	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
ESO-2312-4352	23 14 48.4	-43 36 0	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
NGC7552	23 16 10.9	-42 35 3	FOS/BL	ACCUM	1.0	G190H		1	4000	3591	2	CON	1
NGC7552	23 16 10.9	-42 35 3	FOS/BL	ACCUM	1.0	G130H		1	11300	3591	2	CON	1
NGC7552	23 16 10.9	-42 35 3	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	1	3591	2	ACQ CON	1
NGC7552	23 16 10.9	-42 35 3	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	1	3591	2	ACQ CON	1
NGC7552	23 16 10.9	-42 35 3	FOC/48	IMAGE	512X512	F130LP F140W		1	1000	3591	2	ACQ	1
NGC7603	23 18 56.9	0 14 33	PC	IMAGE	PC6	F785LP		1	230	3698	2		1
MARK322	23 20 3.2	26 12 57	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
NGC7626	23 20 42.5	8 13 2	PC	IMAGE	PC6	F555W		1	810	3551	2		1
PC2318+0119	23 21 14.7	1 35 54	PC	IMAGE	ALL	F555W		1	240	4028	1		1
2318+0119	23 21 14.8	1 35 27	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	3801	2	PAR	1
2318+0119	23 21 14.8	1 35 27	FOC/96	IMAGE	512X1024	F140W	1366	1	400	3801	2		1
UGC12554	23 22 6.7	40 50 43	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
IP-PEG	23 23 8.6	18 24 59	FOS/RD	RAPID	4.3	PRISM		1	2940	3683	2		1
IP-PEG	23 23 8.6	18 24 59	FOS/BL	RAPID	4.3	G160L	1500	1	2940	3683	2		6
IP-PEG	23 23 8.6	18 24 59	FOS/RD	ACQ/BINA	4.3	MIRROR		1	0	3683	2	ACQ	1
IP-PEG	23 23 8.6	18 24 59	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	3683	2	ACQ	6
CASSIOPEIA-A-NE	23 23 32.9	58 49 53	WFC	IMAGE	ALL	F547M	5462	2	500	2417	1		1
CASSIOPEIA-A-NE	23 23 32.9	58 49 53	WFC	IMAGE	ALL	F502N	5019	1	1900	2417	1		1
CASSIOPEIA-A-NE	23 23 32.9	58 49 53	WFC	IMAGE	ALL	F502N	5019	2	2100	2417	1		1
CASSIOPEIA-A-NE	23 23 32.9	58 49 53	WFC	IMAGE	ALL	F631N	6307	3	2100	2417	1		1
CASSIOPEIA-A-NE	23 23 32.9	58 49 53	WFC	IMAGE	ALL	F656N	6559	3	2100	2417	1		1
CASSIOPEIA-A-NE	23 23 32.9	58 49 53	WFC	IMAGE	ALL	F673N	6727	3	2100	2417	1		1
GD248-CALIB	23 26 6.7	16 0 21	FOC/96	IMAGE	512X512	F430W F4ND		1	600	2583	1	CAL	1
GD248-CALIB	23 26 6.7	16 0 21	FOC/96	IMAGE	512X512	F1ND F2ND F430W		1	1200	2583	1	CAL	1
PK111-02D1	23 26 14.7	58 10 54	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK111-02D1	23 26 14.7	58 10 54	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
NGC7674	23 27 57.0	8 46 45	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
G29-38	23 28 47.8	5 14 56	FOS/BL	ACCUM	1.0	G160L		1	2160	3816	2		1
G29-38	23 28 47.8	5 14 56	FOS/BL	ACCUM	1.0	G270H		1	1200	3816	2		1
G29-38	23 28 47.8	5 14 56	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	3816	2	ACQ	1
UM164	23 31 36.3	-1 48 6	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PKS2329-384	23 31 59.5	-38 11 48	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2329-376	23 32 8.1	-37 22 21	PC	IMAGE	ALL	F555W		1	240	4028	1		1
IRAS23304+6147	23 32 45.0	62 3 49	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
IRAS23304+6147	23 32 45.0	62 3 49	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
ESO-2331-3622	23 34 27.4	-36 6 5	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
LP-AND	23 34 27.4	43 33 5	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
LP-AND	23 34 27.4	43 33 5	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
PC2331+0216	23 34 31.9	2 33 22	PC	IMAGE	ALL	F702W		1	100	2350	1		1
PC2331+0216	23 34 31.9	2 33 22	PC	IMAGE	ALL	F702W		1	350	2350	1		1
2331+0216	23 34 31.9	2 32 36	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
2331+0216	23 34 31.9	2 32 36	FOC/96	IMAGE	512X1024	F170M	1770	1	660	4107	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
ESO-2333-3813	23 36 14.9	-37 56 21	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
ESO-2333-3903	23 36 27.2	-38 46 58	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
PKS2335-18	23 37 56.6	-17 52 22	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PKS2340-03	23 42 56.6	-3 22 26	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	2424	1	ACQ	1
PKS2340-03	23 42 56.6	-3 22 26	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1
PKS2340-03	23 42 56.6	-3 22 26	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PKS2340-03	23 42 56.6	-3 22 26	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	4608	2424	1		1
PKS2340-03	23 42 56.6	-3 22 26	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1206	2424	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	ACCUM	2.0	G160M	1550	1	100	2342	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	ACCUM	2.0	G270M	2800	1	100	2342	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	ACCUM	2.0	G160M	1550	1	100	4162	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	ACCUM	2.0	G270M	2800	1	100	4162	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	ACCUM	2.0	G200M	1760	1	630	2342	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	ACCUM	2.0	G200M	1760	1	630	4162	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	ACCUM	2.0	G200M	1895	1	100	2342	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	ACCUM	2.0	G200M	1895	1	100	4162	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	ACCUM	2.0	G270M	2543	1	440	2342	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	ACCUM	2.0	G270M	2629	1	220	2342	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	ACCUM	2.0	G270M	2543	1	440	4162	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	ACCUM	2.0	G270M	2629	1	220	4162	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	IMAGE	2.0	MIRROR-N2		1	774	2342	1		1
R-AQR-POS1	23 43 49.4	-15 17 4	HRS	IMAGE	2.0	MIRROR-N2		1	774	4162	1		1
R-AQR-POS2	23 43 49.7	-15 16 58*	HRS	ACCUM	2.0	G160M	1240	1	400	2342	1		1
R-AQR-POS2	23 43 49.7	-15 16 58*	HRS	ACCUM	2.0	G160M	1750	1	400	2342	1		1
R-AQR-POS2	23 43 49.7	-15 16 58*	HRS	ACCUM	2.0	G270M	2800	1	400	2342	1		1
R-AQR-POS2	23 43 49.7	-15 16 58*	HRS	ACCUM	2.0	G160M	1240	1	400	4162	1		1
R-AQR-POS2	23 43 49.7	-15 16 58*	HRS	ACCUM	2.0	G160M	1750	1	400	4162	1		1
R-AQR-POS2	23 43 49.7	-15 16 58*	HRS	ACCUM	2.0	G270M	2800	1	400	4162	1		1
R-AQR-POS2	23 43 49.7	-15 16 58*	HRS	ACCUM	2.0	G160M	1550	1	450	2342	1		1
R-AQR-POS2	23 43 49.7	-15 16 58*	HRS	ACCUM	2.0	G160M	1550	1	450	4162	1		1
R-AQR-POS2	23 43 49.7	-15 16 58*	HRS	ACCUM	2.0	G200M	1895	1	500	2342	1		1
R-AQR-POS2	23 43 49.7	-15 16 58*	HRS	ACCUM	2.0	G200M	1895	1	500	4162	1		1
G130-5	23 43 50.8	32 32 47	HSP/UV2	SINGLE	10.0	F140LP		1	1800	3798	2		1
UM660	23 44 19.6	-23 17 1	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2341-235	23 44 19.6	-23 16 21	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
2341-235	23 44 19.6	-23 16 21	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
UM175	23 44 23.3	1 20 4	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PKS2344+09	23 46 36.9	9 30 46	FOS/BL	RAPID	1.0	G160L	1840	1	600	3791	2		1
PKS2344+09	23 46 36.9	9 30 46	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	3791	2	ACQ	1
PKS2344+09	23 46 36.9	9 30 46	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	3791	2	ACQ	1
PKS2344+09	23 46 36.9	9 30 46	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5400	3791	2		1
PKS2344+09	23 46 36.9	9 30 46	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1746	3791	2		1
2344+0124	23 46 38.6	1 40 41	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
2344+0124	23 46 38.6	1 40 41	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
PKS2345+061	23 48 31.8	6 24 59	PC	IMAGE	ALL	F555W		1	260	3157	0		1
ESO-2348-4100	23 50 53.6	-40 43 48	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
UM184	23 50 57.8	-0 52 10	PC	IMAGE	ALL	F555W		1	260	3157	0		1
Q2348-4025	23 51 16.1	-40 8 36	PC	IMAGE	ALL	F555W		1	260	3157	0		1
4C28.58	23 51 59.1	29 10 29	WFC	IMAGE	ALL	F492M		5	2200	2438	1		1
4C28.58	23 51 59.1	29 10 29	WFC	IMAGE	ALL	F702W		5	2200	2438	1		1
PKS2351-154	23 54 30.2	-15 13 11	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PKS2352-34	23 55 25.6	-33 57 56	FOS/BL	RAPID	1.0	G160L	1837	1	600	2424	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PKS2352-34	23 55 25.6	-33 57 56	FOS/RD	ACQ/BINA	4.3	MIRROR		1	12	2424	1	ACQ	1
PKS2352-34	23 55 25.6	-33 57 56	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	1	2424	1	ACQ	1
PKS2352-34	23 55 25.6	-33 57 56	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	1722	2424	1		1
PKS2352-34	23 55 25.6	-33 57 56	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5459	2424	1		1
PKS2352-455	23 55 28.7	-45 13 25	PC	IMAGE	ALL	F555W		1	260	3157	0		1
PKS2353+154	23 55 53.6	15 41 26	PC	IMAGE	ALL	F555W		1	240	4028	1		1
MARK541	23 56 1.9	7 31 24	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
PK118+08D1	23 56 36.9	70 48 18	PC	IMAGE	PC6-FIX	F502N		1	240	3603	2	CON	2
PK118+08D1	23 56 36.9	70 48 18	PC	IMAGE	PC6-FIX	F656N		1	240	3603	2	CON	2
MARK542	23 56 59.6	-2 5 2	PC	IMAGE	PC6	F785LP		1	260	3698	2		1
Q2355-389	23 57 45.7	-38 41 30	PC	IMAGE	ALL	F555W		1	260	3157	0		1
2355-389	23 57 45.7	-38 41 18	WFC	IMAGE	WFALL-FIX	F555W	5479	1	100	4107	2	PAR	1
2355-389	23 57 45.7	-38 41 18	FOC/96	IMAGE	512X1024	F140W	1366	1	400	4107	2		1
ESO-2355-3252	23 57 49.1	-32 35 30	FOC/48	IMAGE	512X1024	F220W		1	600	3519	2		1
Q2357-348	23 59 40.1	-34 35 22	PC	IMAGE	ALL	F555W		1	260	3157	0		1

4.2 SOLAR SYSTEM OBSERVATIONS FOR GO PROGRAMS

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
111-ATE	(S)		FOS/RD	RAPID	1.0	PRISM	5400	1	240	3744	2		1
111-ATE	(S)		FOS/RD	ACQ/BINA	4.3	MIRROR		1	0	3744	2	ACQ	1
1144-ODA	(S)		FOS/RD	ACQ/BINA	4.3	MIRROR		1	13	3744	2	ACQ	1
1144-ODA	(S)		FOS/RD	RAPID	1.0	PRISM	5400	1	720	3744	2		1
1992AD	(S)		PC	IMAGE	P6	F555W		3	300	2432	1		1
1992AD	(S)		PC	IMAGE	P6	F785LP		3	400	2432	1		2
2060-CHIRON	(S)		PC	IMAGE	PC6	F555W		4	120	3769	2		2
2060-CHIRON	(S)		PC	IMAGE	PC6	F555W		6	120	3769	2		6
ARIEL-ACQ	(S)		HRS	ACQ/PEAK	2.0	MIRROR-N2		1	153	3616	2	ACQ	1
BL-JUPITER-48DEGN-CM-FOS	(S)		FOS/BL	ACCUM	1.0	G190H		1	1800	2560	1		1
BL-JUPITER-48DEGN-LIMB-FOS	(S)		FOS/BL	ACCUM	1.0	G190H		1	1800	2560	1		1
BL-JUPITER-6DEGN-CM-FOS	(S)		FOS/BL	ACCUM	1.0	G190H		1	1800	2560	1		1
BL-JUPITER-6DEGN-LIMB-FOS	(S)		FOS/BL	ACCUM	1.0	G190H		1	1800	2560	1		1
BL-JUPITER-HILAT-CM-FOS	(S)		FOS/BL	ACCUM	1.0	G190H		1	1800	2560	1		1
BL-JUPITER-HILAT-LIMB-FOS	(S)		FOS/BL	ACCUM	1.0	G190H		1	1800	2560	1		1
CHARON-NORTH	(S)		FOS/BL	ACCUM	0.5	G270H	2700	1	10440	2569	1		1
CHARON-SOUTH	(S)		FOS/BL	ACCUM	0.5	G270H	2700	1	10440	2569	1		1
COMET-FAYE-1984XI	(S)		PC	IMAGE	ALL	F517N		1	1700	2231	1		1
COMET-FAYE-1984XI	(S)		PC	IMAGE	ALL	F702W		1	26	2231	1		7
COMET-FAYE-1984XI	(S)		PC	IMAGE	ALL	F702W		2	260	2231	1		7
COMET-LEVY-1990C	(S)		S/C	POINTING	V1			1	120	3064	0		2
COMET-LEVY-1990C	(S)		WFC	IMAGE	ALL	F439W		1	2	3064	1		2
COMET-LEVY-1990C	(S)		WFC	IMAGE	ALL	F785LP		1	1	3064	1		2
COMET-LEVY-1990C	(S)		WFC	IMAGE	ALL	F785LP		1	2	3064	1		2
COMET-LEVY-1990C	(S)		WFC	IMAGE	ALL	F785LP		1	4	3064	1		2
COMET-SL-1991A1	(S)		WFC	IMAGE	W2	F785LP		1	20	2442	1		4
COMET-SL-1991A1	(S)		WFC	IMAGE	W2	F785LP		1	20	2483	1		8
COMET-SL-1991A1	(S)		WFC	IMAGE	W2	F785LP		1	0	2442	1		4
COMET-SL-1991A1	(S)		WFC	IMAGE	W2	F785LP		1	0	2483	1		8
COMET-SL-1991A1	(S)		HRS	ACCUM	2.0	G160M	1550	1	1200	2442	1		2
COMET-SL-1991A1	(S)		HRS	ACCUM	2.0	G160M	1475	1	1200	2442	1		2
COMET-SL-1991A1	(S)		HRS	ACCUM	2.0	G160M	1595	1	1200	2442	1		2
COMET-SL-1991A1	(S)		HRS	ACCUM	2.0	G270M	2905	1	1200	2442	1		2
COMET-SL-1991A1	(S)		HRS	ACCUM	2.0	G270M	2844	1	1200	2442	1		2
COMET-SL-1991A1	(S)		FOS/BL	ACCUM	4.3	G130H	1379	1	720	2483	1		1
COMET-SL-1991A1	(S)		FOS/BL	ACCUM	4.3	G130H	1379	1	960	2483	1		2
COMET-SL-1991A1	(S)		FOS/BL	ACCUM	4.3	G190H	1944	1	720	2483	1		1
COMET-SL-1991A1	(S)		FOS/BL	ACCUM	4.3	G190H	1944	1	960	2483	1		2
COMET-SL-1991A1	(S)		FOS/BL	ACCUM	4.3	G270H	2769	1	120	2483	1		2
COMET-SL-1991A1	(S)		FOS/BL	ACCUM	4.3	G270H	2769	1	960	2483	1		3
COMET-SL-1991A1	(S)		FOS/RD	ACCUM	4.3	G270H	2753	1	120	2483	1		2
COMET-SL-1991A1	(S)		FOS/RD	ACCUM	4.3	G400H	4013	1	720	2483	1		1
COMET-SL-1991A1	(S)		FOS/RD	ACCUM	4.3	G570H	5691	1	720	2483	1		1
COMET-SL-1991A1	(S)		HRS	ACCUM	2.0	G160M	1550	1	57	2442	1		2
COMET-SL-1991A1	(S)		HRS	ACCUM	2.0	G160M	1475	1	57	2442	1		3
COMET-SL-1991A1	(S)		HRS	ACCUM	2.0	G160M	1595	1	57	2442	1		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
COMET-SL-1991A1	(S)		HRS	ACCUM	2.0	G270M	2905	1	57	2442	1		2
COMET-SL-1991A1	(S)		HRS	ACCUM	2.0	G270M	2844	1	57	2442	1		2
COMET-SL-1991A1	(S)		FOS/BL	ACCUM	1.0-PAIR	G130H	1379	1	720	2483	1		1
COMET-SL-1991A1	(S)		FOS/BL	ACCUM	1.0-PAIR	G130H	1379	1	960	2483	1		1
COMET-SL-1991A1	(S)		FOS/BL	ACCUM	1.0-PAIR	G190H	1944	1	720	2483	1		1
COMET-SL-1991A1	(S)		FOS/BL	ACCUM	1.0-PAIR	G190H	1944	1	960	2483	1		1
COMET-SL-1991A1	(S)		FOS/BL	ACCUM	1.0-PAIR	G270H	2769	1	120	2483	1		2
COMET-SL-1991A1	(S)		FOS/BL	ACCUM	1.0-PAIR	G270H	2769	1	960	2483	1		2
COMET-SL-1991A1	(S)		FOS/RD	ACCUM	1.0-PAIR	G400H	4013	1	960	2483	1		1
COMET-SL-1991A1	(S)		FOS/RD	ACCUM	1.0-PAIR	G570H	5691	1	960	2483	1		1
COMET-SL-OFFSET	(S)		HRS	ACCUM	2.0	G160M	1475	1	1200	2442	1		1
DEIMOS-E	(S)		FOS/RD	ACQ/BINA	4.3	MIRROR		1	2	3744	2	ACQ	1
DEIMOS-E	(S)		FOS/RD	IMAGE	1.0	PRISM	5400	1	30	3744	2		1
DEIMOS-E	(S)		FOS/RD	RAPID	1.0	PRISM	5400	1	480	3744	2		1
DEIMOS-W	(S)		FOS/RD	ACQ/BINA	4.3	MIRROR		1	2	3744	2	ACQ	1
DEIMOS-W	(S)		FOS/RD	IMAGE	1.0	PRISM	5400	1	30	3744	2		1
DEIMOS-W	(S)		FOS/RD	RAPID	1.0	PRISM	5400	1	480	3744	2		1
HARTLEY-2	(S)		WFC	IMAGE	W2	F785LP		1	300	2481	1		7
HARTLEY-2	(S)		FOS/BL	ACCUM	4.3	G130H	1379	1	720	2481	1		2
HARTLEY-2	(S)		FOS/BL	ACCUM	4.3	G130H	1379	1	960	2481	1		3
HARTLEY-2	(S)		FOS/BL	ACCUM	4.3	G190H	1944	1	720	2481	1		2
HARTLEY-2	(S)		FOS/BL	ACCUM	4.3	G190H	1944	1	960	2481	1		3
HARTLEY-2	(S)		FOS/BL	ACCUM	4.3	G270H	2769	1	120	2481	1		4
HARTLEY-2	(S)		FOS/BL	ACCUM	4.3	G270H	2769	1	960	2481	1		5
HARTLEY-2	(S)		FOS/RD	ACCUM	4.3	G270H	2753	1	120	2481	1		2
HARTLEY-2	(S)		FOS/RD	ACCUM	4.3	G400H	4013	1	720	2481	1		1
HARTLEY-2	(S)		FOS/RD	ACCUM	4.3	G400H	4013	1	960	2481	1		1
HARTLEY-2	(S)		FOS/RD	ACCUM	4.3	G570H	5691	1	720	2481	1		1
HARTLEY-2	(S)		FOS/RD	ACCUM	4.3	G570H	5691	1	960	2481	1		1
IO	(S)		FOS/BL	RAPID	4.3	G270H		1	170	2602	1		1
IO	(S)		FOS/BL	RAPID	4.3	G270H		1	1590	2602	1		1
IO	(S)		PC	IMAGE	P7	F718M	7120	1	0	2798	1		6
IO	(S)		PC	IMAGE	P7	F368M	3577	3	7	2798	1		3
IO	(S)		FOS/BL	RAPID	4.3	G130H	1368	1	170	2602	1		1
IO	(S)		FOS/BL	RAPID	4.3	G130H	1368	1	1590	2602	1		1
IO-ACQ-FOS	(S)		FOS/BL	IMAGE	4.3	G190H		1	10	3862	2		1
IO-ACQ-FOS	(S)		FOS/BL	IMAGE	4.3	G270H		1	10	3862	2		1
IO-EGRESS	(S)		FOS/BL	IMAGE	4.3	G270H		1	4	3862	2		2
IO-EGRESS	(S)		FOS/BL	RAPID	4.3	G190H		1	1800	3862	2		1
IO-EGRESS	(S)		FOS/BL	RAPID	4.3	G270H		1	1800	3862	2		1
IO-INGRESS	(S)		HRS	RAPID	2.0	G200M	1910	1	1800	3862	2		1
IO-INGRESS	(S)		HRS	RAPID	2.0	G160M	1301	1	1800	3862	2		1
IO-TA	(S)		FOS/BL	IMAGE	4.3	G270H		1	4	2602	1		2
IO-TA	(S)		FOS/BL	IMAGE	4.3	G270H		1	300	2602	1		2
IO-TORUS-W	(S)		WFC	IMAGE	ANY	F673N	6731	1	360	2627	1		1
IO-TORUS-W	(S)		HRS	ACCUM	2.0	G270M	2469	2	1032	2627	1		1
IO-W	(S)		FOS/BL	IMAGE	4.3	G270H		1	4	2627	1		2
IO-W	(S)		FOS/BL	IMAGE	4.3	G270H		1	300	2627	1		2
IO-W	(S)		FOS/BL	ACCUM	4.3	G130H		1	1680	2627	1		1
IO-W	(S)		FOS/BL	ACCUM	4.3	G190H		1	1680	2627	1		1
IO-W	(S)		FOS/BL	RAPID	4.3	G130H		1	2100	2627	1		1
IO-W	(S)		FOS/BL	RAPID	4.3	G190H		1	2100	2627	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
IO-W	(S)		HRS	RAPID	2.0	G160M	1300	1	2100	2627	1		1
IO-W	(S)		HRS	RAPID	2.0	G200M	1817	1	2100	2627	1		1
IO-W	(S)		HRS	ACQ/PEAK	2.0	MIRROR-N2		1	23	2627	1	ACQ	1
IO-W	(S)		HRS	IMAGE	2.0	MIRROR-N2		1	96	2627	1		1
JUPITER	(S)		PC	IMAGE	ALL	F569W	5320	1	0	2625	1		1
JUPITER	(S)		WFC	IMAGE	W1	F336W	3371	1	3	3365	1		4
JUPITER	(S)		WFC	IMAGE	W1	F368M	3684	1	3	3365	1		3
JUPITER	(S)		WFC	IMAGE	W1	F284W	2866	1	23	3365	1		4
JUPITER	(S)		WFC	IMAGE	W1	F889N	8888	1	12	3365	1		6
JUPITER	(S)		HRS	ACCUM	2.0	G160M	1254	3	885	2625	1		1
JUPITER	(S)		HRS	ACCUM	2.0	G160M	1594	3	885	2625	1		1
JUPITER	(S)		WFC	IMAGE	W1	F413M	4098	1	0	3365	1		3
JUPITER	(S)		WFC	IMAGE	W1	F656N	6559	1	2	3365	1		6
JUPITER-CML	(S)		HRS	ACCUM	0.25	G160M	1223	3	700	3511	2		1
JUPITER-LIMB	(S)		HRS	ACCUM	0.25	G160M	1223	3	700	3511	2		1
JUPITER-MIDLATITUDE	(S)		HRS	ACCUM	0.25	G160M	1223	3	700	3511	2		1
JUPITER-NPR	(S)		FOC/96	IMAGE	512X512	F130M F140W		2	1080	4005	1		1
JUPITER-PC-CYC2	(S)		PC	IMAGE	ALL	F230W		1	40	3887	2		4
JUPITER-PC-CYC2	(S)		PC	IMAGE	ALL	F336W		1	5	3887	2		10
JUPITER-PC-CYC2	(S)		PC	IMAGE	ALL	F718M		1	0	3887	2		10
JUPITER-PC-CYC2	(S)		PC	IMAGE	ALL	F889N		1	30	3887	2		6
JUPITER-PC-CYC2	(S)		PC	IMAGE	ALL	F413M		1	1	3887	2		10
JUPITER-PC-CYC2	(S)		PC	IMAGE	ALL	F547M		1	0	3887	2		4
JUPITER-PC-CYC2	(S)		PC	IMAGE	ALL	F631N		1	4	3887	2		6
JUPITER-PC-CYCL1	(S)		PC	IMAGE	ALL	F230W		1	40	2560	1		6
JUPITER-PC-CYCL1	(S)		PC	IMAGE	ALL	F336W		1	5	2560	1		12
JUPITER-PC-CYCL1	(S)		PC	IMAGE	ALL	F718M		1	0	2560	1		12
JUPITER-PC-CYCL1	(S)		PC	IMAGE	ALL	F889N		1	30	2560	1		6
JUPITER-PC-CYCL1	(S)		PC	IMAGE	ALL	F413M		1	1	2560	1		12
JUPITER-PC-CYCL1	(S)		PC	IMAGE	ALL	F547M		1	0	2560	1		6
JUPITER-PC-CYCL1	(S)		PC	IMAGE	ALL	F631N		1	4	2560	1		6
JUPITER-SPR	(S)		FOC/96	IMAGE	512X512	F130M F140W		2	1080	4005	1		3
MARS-DUST-H1	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-DUST-H1	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
MARS-DUST-H2	(S)		PC	IMAGE	P6	F230W		1	150	3763	2		1
MARS-DUST-H2	(S)		PC	IMAGE	P6	F336W		1	1	3763	2		1
MARS-DUST-H2	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-DUST-H2	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
MARS-DUST-S1	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-DUST-S1	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
MARS-DUST-S2	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-DUST-S2	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
MARS-DUST-S3	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-DUST-S3	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
MARS-FOS-1	(S)		FOS/BL	RAPID	0.25-PAIR	G270H	2800	1	280	3763	2		2
MARS-FOS-3	(S)		FOS/BL	RAPID	0.25-PAIR	G270H	2800	1	480	3763	2		2
MARS-FOS-4	(S)		FOS/BL	RAPID	0.25-PAIR	G270H	2800	1	320	3763	2		2
MARS-OPP-A	(S)		PC	IMAGE	P6	F336W		1	3	3763	2		1
MARS-OPP-A	(S)		PC	IMAGE	P6	F502N		1	2	3763	2		1
MARS-OPP-A	(S)		PC	IMAGE	P6	F588N		1	0	3763	2		1
MARS-OPP-A	(S)		PC	IMAGE	P6	F889N		1	0	3763	2		1
MARS-OPP-A	(S)		PC	IMAGE	P6	F230W		1	150	3763	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
MARS-OPP-A	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-OPP-A	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
MARS-OPP-B	(S)		PC	IMAGE	P6	F336W		1	3	3763	2		1
MARS-OPP-B	(S)		PC	IMAGE	P6	F502N		1	2	3763	2		1
MARS-OPP-B	(S)		PC	IMAGE	P6	F588N		1	0	3763	2		1
MARS-OPP-B	(S)		PC	IMAGE	P6	F889N		1	0	3763	2		1
MARS-OPP-B	(S)		PC	IMAGE	P6	F1042M		1	0	3763	2		1
MARS-OPP-B	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-OPP-B	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
MARS-OPP-C	(S)		PC	IMAGE	P6	F336W		1	3	3763	2		1
MARS-OPP-C	(S)		PC	IMAGE	P6	F502N		1	2	3763	2		1
MARS-OPP-C	(S)		PC	IMAGE	P6	F588N		1	0	3763	2		1
MARS-OPP-C	(S)		PC	IMAGE	P6	F889N		1	0	3763	2		1
MARS-OPP-C	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-OPP-C	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
MARS-REP-1A	(S)		PC	IMAGE	P6	F336W		1	3	3763	2		1
MARS-REP-1A	(S)		PC	IMAGE	P6	F502N		1	2	3763	2		1
MARS-REP-1A	(S)		PC	IMAGE	P6	F588N		1	0	3763	2		1
MARS-REP-1A	(S)		PC	IMAGE	P6	F889N		1	0	3763	2		1
MARS-REP-1A	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-REP-1A	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
MARS-REP-1B	(S)		PC	IMAGE	P6	F336W		1	3	3763	2		1
MARS-REP-1B	(S)		PC	IMAGE	P6	F502N		1	2	3763	2		1
MARS-REP-1B	(S)		PC	IMAGE	P6	F588N		1	0	3763	2		1
MARS-REP-1B	(S)		PC	IMAGE	P6	F889N		1	0	3763	2		1
MARS-REP-1B	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-REP-1B	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
MARS-REP-3A	(S)		PC	IMAGE	P6	F336W		1	3	3763	2		1
MARS-REP-3A	(S)		PC	IMAGE	P6	F502N		1	2	3763	2		1
MARS-REP-3A	(S)		PC	IMAGE	P6	F230W		1	150	3763	2		1
MARS-REP-3A	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-REP-3A	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
MARS-REP-3B	(S)		PC	IMAGE	P6	F502N		1	2	3763	2		1
MARS-REP-3B	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-REP-3B	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
MARS-SUM-1A	(S)		PC	IMAGE	P6	F502N		1	2	3763	2		1
MARS-SUM-1A	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-SUM-1A	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
MARS-SUM-1B	(S)		PC	IMAGE	P6	F502N		1	2	3763	2		1
MARS-SUM-1B	(S)		PC	IMAGE	P6	F413M		1	1	3763	2		1
MARS-SUM-1B	(S)		PC	IMAGE	P6	F673N		1	0	3763	2		1
NEPTUNE	(S)		HRS	ACCUM	2.0	G160M	1594	5	1200	3616	2		1
NEPTUNE	(S)		HRS	ACCUM	2.0	G160M	1254	6	1140	3616	2		1
PHOBOS	(S)		FOS/RD	IMAGE	1.0	PRISM	5400	1	30	3744	2		1
PHOBOS	(S)		FOS/RD	RAPID	1.0	PRISM	5400	1	400	3744	2		1
PHOBOS	(S)		FOS/RD	ACQ/BINA	4.3	MIRROR		1	0	3744	2	ACQ	1
PL-CH-1	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-10	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-11	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-12	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-13	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-14	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PL-CH-15	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-16	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-17	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-18	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-19	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-19	(S)		PC	IMAGE	PC6-FIX	F439W		2	180	3848	2	CON SEL	2
PL-CH-2	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-20	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-21	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-22	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-23	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-24	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-3	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-3	(S)		PC	IMAGE	PC6-FIX	F439W		2	180	3848	2	CON SEL	2
PL-CH-4	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-5	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-6	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-7	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-8	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PL-CH-9	(S)		PC	IMAGE	PC6-FIX	F555W		2	30	3848	2	CON SEL	2
PLUTO-112	(S)		FOS/BL	ACCUM	0.5	G400H	4300	1	180	2569	1		1
PLUTO-112	(S)		FOS/RD	ACCUM	0.5	G190H	2000	1	1397	2569	1		1
PLUTO-112	(S)		FOS/BL	ACCUM	0.5	G270H	2700	1	1397	2569	1		1
PLUTO-157	(S)		FOS/BL	ACCUM	0.5	G400H	4300	1	180	2569	1		1
PLUTO-157	(S)		FOS/RD	ACCUM	0.5	G190H	2000	1	1397	2569	1		1
PLUTO-157	(S)		FOS/BL	ACCUM	0.5	G270H	2700	1	1397	2569	1		1
PLUTO-157-Q	(S)		FOS/BL	ACCUM	0.5	G400H	4300	1	180	2569	1		1
PLUTO-157-Q	(S)		FOS/RD	ACCUM	0.5	G190H	2000	1	1397	2569	1		1
PLUTO-157-Q	(S)		FOS/BL	ACCUM	0.5	G270H	2700	1	1397	2569	1		1
PLUTO-202	(S)		FOS/BL	ACCUM	0.5	G400H	4300	1	180	2569	1		1
PLUTO-202	(S)		FOS/RD	ACCUM	0.5	G190H	2000	1	1397	2569	1		1
PLUTO-202	(S)		FOS/BL	ACCUM	0.5	G270H	2700	1	1397	2569	1		1
PLUTO-247	(S)		FOS/BL	ACCUM	0.5	G400H	4300	1	180	2569	1		1
PLUTO-247	(S)		FOS/RD	ACCUM	0.5	G190H	2000	1	1397	2569	1		1
PLUTO-247	(S)		FOS/BL	ACCUM	0.5	G270H	2700	1	1397	2569	1		1
PLUTO-247-Q	(S)		FOS/BL	ACCUM	0.5	G400H	4300	1	180	2569	1		1
PLUTO-247-Q	(S)		FOS/RD	ACCUM	0.5	G190H	2000	1	1397	2569	1		1
PLUTO-247-Q	(S)		FOS/BL	ACCUM	0.5	G270H	2700	1	1397	2569	1		1
PLUTO-292	(S)		FOS/BL	ACCUM	0.5	G400H	4300	1	180	2569	1		1
PLUTO-292	(S)		FOS/RD	ACCUM	0.5	G190H	2000	1	1397	2569	1		1
PLUTO-292	(S)		FOS/BL	ACCUM	0.5	G270H	2700	1	1397	2569	1		1
PLUTO-337	(S)		FOS/BL	ACCUM	0.5	G400H	4300	1	180	2569	1		1
PLUTO-337	(S)		FOS/RD	ACCUM	0.5	G190H	2000	1	1397	2569	1		1
PLUTO-337	(S)		FOS/BL	ACCUM	0.5	G270H	2700	1	1397	2569	1		1
PLUTO-67	(S)		FOS/BL	ACCUM	0.5	G400H	4300	1	180	2569	1		1
PLUTO-67	(S)		FOS/RD	ACCUM	0.5	G190H	2000	1	1397	2569	1		1
PLUTO-67	(S)		FOS/BL	ACCUM	0.5	G270H	2700	1	1397	2569	1		1
PLUTO/BL	(S)		FOS/BL	ACCUM	1.0	G130H	1300	10	1440	3803	2		1
PLUTO/RD	(S)		FOS/RD	ACQ/BINA	4.3	MIRROR		1	3	3803	2	ACQ	1
PLUTO/RD	(S)		FOS/RD	IMAGE	0.3	MIRROR		1	5	3803	2	ACQ	1
PLUTO/RD	(S)		FOS/RD	ACCUM	1.0	G190H	1950	10	1431	3803	2		1
RD-JUP-12DEGS-CM-FOS -CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	780	3887	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
RD-JUP-25DEGS-CM-FOS -CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	780	3887	2		1
RD-JUP-33DEGS-CM-FOS -CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	780	3887	2		1
RD-JUP-48DEGN-CM-FOS -CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	780	3887	2		1
RD-JUP-48DEGS-CM-FOS -CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	780	3887	2		1
RD-JUP-65DEGN-CM-FOS -CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	780	3887	2		1
RD-JUP-65DEGS-CM-FOS -CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	780	3887	2		1
RD-JUP-6DEGN-CM-FOS-CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	780	3887	2		1
RD-JUP-6DEGS-CM-FOS-CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	780	3887	2		1
RD-JUP-EQU-CM-FOS-CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	780	3887	2		1
RD-JUPITER-15DEGN-CM -FOS	(S)		FOS/BL	ACCUM	1.0	G270H		1	60	2560	1		1
RD-JUPITER-15DEGN-CM -FOS	(S)		FOS/BL	ACCUM	1.0	G190H		1	1440	2560	1		1
RD-JUPITER-20DEGN-CM -FOS	(S)		FOS/BL	ACCUM	1.0	G270H		1	60	2560	1		1
RD-JUPITER-20DEGN-CM -FOS	(S)		FOS/BL	ACCUM	1.0	G190H		1	1440	2560	1		1
RD-JUPITER-25DEGN-CM -FOS	(S)		FOS/BL	ACCUM	1.0	G270H		1	60	2560	1		1
RD-JUPITER-25DEGN-CM -FOS	(S)		FOS/BL	ACCUM	1.0	G190H		1	1440	2560	1		1
RD-JUPITER-25DEGN-LIMB-FOS	(S)		FOS/RD	ACCUM	0.5	G190H		1	1440	2560	1		1
RD-JUPITER-25DEGN-LIMB-FOS	(S)		FOS/RD	ACCUM	0.5	G270H		1	120	2560	1		1
RD-JUPITER-48DEGN-CM -FOS	(S)		FOS/RD	ACCUM	0.5	G270H		1	120	2560	1		1
RD-JUPITER-48DEGN-LIMB-FOS	(S)		FOS/RD	ACCUM	0.5	G270H		1	120	2560	1		1
RD-JUPITER-48DEGN-LIMB-FOSB	(S)		FOS/RD	ACCUM	0.5	G270H		1	120	2560	1		1
RD-JUPITER-6DEGN-CM-FOS	(S)		FOS/RD	ACCUM	0.5	G270H		1	120	2560	1		1
RD-JUPITER-6DEGN-LIMB-FOS	(S)		FOS/RD	ACCUM	0.5	G270H		1	120	2560	1		1
RD-JUPITER-6DEGN-LIMB-FOSB	(S)		FOS/RD	ACCUM	0.5	G270H		1	120	2560	1		1
RD-JUPITER-HILAT-CM-FOS	(S)		FOS/RD	ACCUM	0.5	G270H		1	120	2560	1		1
RD-JUPITER-HILAT-LIMB-FOS	(S)		FOS/RD	ACCUM	0.5	G270H		1	120	2560	1		1
RD-JUPITER-HILAT-LIMB-FOSB	(S)		FOS/RD	ACCUM	0.5	G270H		1	120	2560	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
RD-JUPITER-PLUME-FOS	(S)		FOS/BL	ACCUM	1.0	G270H		1	60	2560	1		1
RD-JUPITER-PLUME-FOS	(S)		FOS/BL	ACCUM	1.0	G190H		1	1440	2560	1		1
RD-JUPITER-RED-SPOT-FOS	(S)		FOS/RD	ACCUM	0.5	G190H		1	1440	2560	1		1
RD-JUPITER-RED-SPOT-FOS	(S)		FOS/RD	ACCUM	0.5	G270H		1	120	2560	1		1
RD-JUPITER-SEB-FOS	(S)		FOS/RD	ACCUM	0.5	G190H		1	1440	2560	1		1
RD-JUPITER-SEB-FOS	(S)		FOS/RD	ACCUM	0.5	G270H		1	120	2560	1		1
RD-SAT-12DEGN-CM-FOS-CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	780	3887	2		1
RD-SAT-20DEGN-CM-FOS-CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	1800	3887	2		1
RD-SAT-40DEGN-CM-FOS-CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	1800	3887	2		1
RD-SAT-48DEGN-CM-FOS-CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	1800	3887	2		1
RD-SAT-4DEGN-CM-FOS-CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	780	3887	2		1
RD-SAT-4DEGS-CM-FOS-CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	780	3887	2		1
RD-SAT-60DEGN-CM-FOS-CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	1800	3887	2		1
RD-SAT-79DEGN-CM-FOS-CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	1800	3887	2		1
RD-SAT-90DEGN-CM-FOS-CYC2	(S)		FOS/RD	ACCUM	1.0	G190H		1	1800	3887	2		1
SATMAG-DUSK	(S)		FOS/RD	ACCUM	0.7X2.0-BAR	G270H	2753	11	1620	3644	2		1
SATURN	(S)		PC	IMAGE	P6	F284W	2866	1	400	2564	1		2
SATURN	(S)		PC	IMAGE	P6	F336W	3371	1	100	2564	1		2
SATURN	(S)		PC	IMAGE	P6	F368M	3684	1	50	2564	1		2
SATURN	(S)		PC	IMAGE	P6	F547M	5462	1	1	2564	1		1
SATURN	(S)		PC	IMAGE	P6	F656N	6559	1	40	2564	1		3
SATURN	(S)		PC	IMAGE	P6	F889N	8888	1	40	2564	1		3
SATURN	(S)		PC	IMAGE	PC5	F569W	5320	1	0	3618	2		1
SATURN	(S)		PC	IMAGE	P6	F413M	4098	1	12	2564	1		2
SATURN	(S)		HRS	ACCUM	0.25	G160M	1223	3	800	3511	2		1
SATURN	(S)		HRS	ACCUM	2.0	G160M	1254	3	1074	3618	2		1
SATURN	(S)		HRS	ACCUM	2.0	G160M	1594	3	1074	3618	2		1
SATURN-PC-CYC2	(S)		PC	IMAGE	P6	F336W		1	20	3887	2		2
SATURN-PC-CYC2	(S)		PC	IMAGE	P6	F439W		1	4	3887	2		2
SATURN-PC-CYC2	(S)		PC	IMAGE	P6	F547M		1	1	3887	2		2
SATURN-PC-CYC2	(S)		PC	IMAGE	P6	F718M		1	0	3887	2		2
SATURN-PC-CYC2	(S)		PC	IMAGE	P6	F889N		1	120	3887	2		2
SATURN-PC-CYC2	(S)		PC	IMAGE	P6	F1042M		1	13	3887	2		2
SATURN-PC-CYC2	(S)		PC	IMAGE	P6	F230W		1	155	3887	2		2
SCHAUMASSE	(S)		WFC	IMAGE	WF2	F785LP		1	300	3707	2		6
SCHAUMASSE	(S)		FOS/BL	ACCUM	4.3	G130H		1	720	3707	2		3
SCHAUMASSE	(S)		FOS/BL	ACCUM	4.3	G130H		1	960	3707	2		1
SCHAUMASSE	(S)		FOS/BL	ACCUM	4.3	G190H		1	720	3707	2		2
SCHAUMASSE	(S)		FOS/BL	ACCUM	4.3	G190H		1	960	3707	2		2
SCHAUMASSE	(S)		FOS/BL	ACCUM	4.3	G270H		1	120	3707	2		4
SCHAUMASSE	(S)		FOS/BL	ACCUM	4.3	G270H		1	960	3707	2		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
SCHAUMASSE	(S)		FOS/RD	ACCUM	4.3	G400H		1	960	3707	2		1
SCHAUMASSE	(S)		FOS/RD	ACCUM	4.3	G570H		1	960	3707	2		1
TITAN	(S)		PC	IMAGE	PC6-FIX	F439W		1	50	3899	2		1
TITAN	(S)		PC	IMAGE	PC6-FIX	F588N		1	80	3899	2		1
TITAN	(S)		PC	IMAGE	PC6-FIX	F673N		1	70	3899	2		1
TITAN	(S)		PC	IMAGE	PC6-FIX	F791W		1	5	3899	2		1
TITAN	(S)		PC	IMAGE	PC6-FIX	F889N		1	500	3899	2		1
TITAN	(S)		PC	IMAGE	PC6-FIX	F336W		1	230	3899	2		1
TITAN	(S)		PC	IMAGE	PC6-FIX	F547M		1	12	3899	2		1
TITAN	(S)		FOS/BL	ACCUM	4.3	G130H		1	9480	3617	2		1
TITAN	(S)		FOS/BL	ACCUM	4.3	G190H		1	4320	3617	2		1
TITAN	(S)		PC	IMAGE	PC6-FIX	F1042M		1	260	3899	2		1
TITAN-ACQ	(S)		FOS/BL	IMAGE	4.3	G270H		1	20	3617	2		1
TITAN-ACQ	(S)		FOS/BL	IMAGE	4.3	G270H		1	600	3617	2		1
TRITON	(S)		FOS/RD	ACCUM	4.3	G270H	2700	1	1560	2957	1		1
TRITON	(S)		FOS/RD	ACCUM	4.3	G190H	1980	1	3000	2957	1		1
TRITON	(S)		FOS/RD	ACQ/FIRM	4.3	MIRROR		1	4	2957	1	ACQ	1
TRITON-ACQ	(S)		HRS	ACQ/PEAK	2.0	MIRROR-N2		1	153	3616	2	ACQ	1
URANUS	(S)		HRS	ACCUM	2.0	G160M	1254	5	1260	3616	2		1
URANUS	(S)		HRS	ACCUM	2.0	G160M	1594	5	1080	3616	2		1
URANUS	(S)		HRS	ACCUM	0.25	G160M	1223	3	800	3511	2		1
URANUS-OFFSET	(S)		HRS	ACCUM	0.25	G160M	1223	3	800	3511	2		1

4.3 GENERIC TARGET OBSERVATIONS FOR GO PROGRAMS

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
COMET	(G)		FOS/BL	ACCUM	4.3	G130H		1	960	3582	2		6
COMET	(G)		WFC	IMAGE	WFALL-FIX	F785LP		1	5	3582	2		3
ISM	(G)		HRS	ACCUM	0.25	G160M	1223	3	600	2603	1		33
LMC-SMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1400	1	1200	3825	2		1
LMC-SMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1240	1	1200	3825	2		1
LMC-SMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1550	1	1200	3825	2		1
LMC-SMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1750	1	1200	3825	2		1
LMC-SMC-NOVA	(G)		HRS	ACCUM	2.0	G200M	2320	1	1200	3825	2		1
LMC-SMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1652	1	1200	3825	2		1
SMC-LMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1400	1	1500	3825	2		1
SMC-LMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1490	1	1500	3825	2		1
SMC-LMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1240	1	1500	3825	2		1
SMC-LMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1900	1	1500	3825	2		1
SMC-LMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1550	1	1500	3825	2		1
SMC-LMC-NOVA	(G)		HRS	ACCUM	2.0	G270M	2800	1	1500	3825	2		1
SMC-LMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1575	1	1500	3825	2		1
SMC-LMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1604	1	1500	3825	2		1
SMC-LMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1641	1	1500	3825	2		1
SMC-LMC-NOVA	(G)		HRS	ACCUM	2.0	G160M	1667	1	1500	3825	2		1
SN1992	(G)		FOS/RD	ACCUM	1.0	G160L	2076	1	2700	3853	2		1
SN1992	(G)		FOS/RD	ACCUM	1.0	G160L	2076	1	3600	3853	2		1
SN1992	(G)		FOS/RD	ACCUM	1.0	G270H	2769	1	2700	3853	2		1
SN1992	(G)		FOS/RD	ACCUM	1.0	G270H	2769	1	3600	3853	2		1
SN1992	(G)		FOS/RD	ACCUM	1.0	G400H	4040	1	1950	3853	2		1
SN1992	(G)		FOS/RD	ACCUM	1.0	G400H	4040	1	2600	3853	2		1
SN1992	(G)		FOS/RD	ACCUM	4.3	G160L	2076	1	1800	3853	2		1
SN1992	(G)		FOS/RD	ACCUM	4.3	G270H	2769	1	1800	3853	2		1
SN1992	(G)		FOS/RD	ACCUM	4.3	G400H	4040	1	1300	3853	2		1
SN1992-OFFSET	(G)		FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	3853	2	ACQ	1
SN1992-OFFSET	(G)		FOS/RD	ACQ/BINA	4.3	MIRROR		1	2	3853	2	ACQ	1
SN1992-OFFSET	(G)		FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	3853	2	ACQ	1
SUPERNOVA-1992X	(G)		HRS	ACCUM	2.0	ECH-B	2800	22	900	3525	2		1
SUPERNOVA-1992X	(G)		HRS	ACCUM	2.0	ECH-B	2850	22	900	3525	2		1

4.4 PARALLEL TARGET OBSERVATIONS FOR GO PROGRAMS

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
FIELD-NEAR-CAL87	(G)		WFC	IMAGE	ALL	F492M		1	700	3489	2	PAR	1
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	500	2684	1	PAR	10
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	6000	2684	1	PAR	5
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	6000	4018	1	PAR	40
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	6000	3917	2	PAR	80
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	1800	2684	1	PAR	10
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	3100	2684	1	PAR	5
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	8400	2684	1	PAR	5
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	1200	4018	1	PAR	20
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	8400	4018	1	PAR	20
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	10800	4018	1	PAR	10
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	1200	3917	2	PAR	40
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	8400	3917	2	PAR	40
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	10800	3917	2	PAR	20
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	1800	4105	1	PAR	70
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	2100	4105	1	PAR	70
HI-LAT	(G)		WFC	IMAGE	ALL	F555W		1	2400	4105	1	PAR	70
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	500	2684	1	PAR	10
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	1800	2684	1	PAR	10
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	3100	2684	1	PAR	5
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	7200	2684	1	PAR	10
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	2400	4018	1	PAR	10
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	4800	4018	1	PAR	20
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	7200	4018	1	PAR	40
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	9600	4018	1	PAR	10
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	12000	4018	1	PAR	10
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	2400	3917	2	PAR	20
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	4800	3917	2	PAR	40
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	7200	3917	2	PAR	80
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	9600	3917	2	PAR	20
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	12000	3917	2	PAR	20
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	1800	4105	1	PAR	70
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	2100	4105	1	PAR	70
HI-LAT	(G)		WFC	IMAGE	ALL	F785LP		1	2400	4105	1	PAR	70
HI-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	6000	4018	1	PAR	20
HI-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	6000	3917	2	PAR	40
HI-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	1500	2684	1	PAR	10
HI-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	1500	2684	1	PAR	20
HI-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	1200	4018	1	PAR	20
HI-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	3600	4018	1	PAR	10
HI-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	8400	4018	1	PAR	20
HI-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	10800	4018	1	PAR	20
HI-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	2400	4018	1	PAR	10
HI-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	4800	4018	1	PAR	30
HI-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	7200	4018	1	PAR	20
HI-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	9600	4018	1	PAR	20
HI-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	12000	4018	1	PAR	10
HI-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	1200	3917	2	PAR	40
HI-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	3600	3917	2	PAR	20
HI-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	8400	3917	2	PAR	40
HI-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	10800	3917	2	PAR	40
HI-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	2400	3917	2	PAR	20

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HI-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	4800	3917	2	PAR	60
HI-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	7200	3917	2	PAR	40
HI-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	9600	3917	2	PAR	40
HI-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	12000	3917	2	PAR	20
LMC-30DOR-C-POS1	(G)		WFC	IMAGE	WFALL	F648M		1	4	3589	2	PAR	3
LMC-30DOR-C-POS1	(G)		WFC	IMAGE	WFALL	F658N		1	950	3589	2	PAR	3
LMC-30DOR-C-POS2	(G)		WFC	IMAGE	WFALL	F502N		1	1000	3589	2	PAR	3
LMC-30DOR-C-POS2	(G)		WFC	IMAGE	WFALL	F547M		1	1	3589	2	PAR	3
LMC-30DOR-C-POS2	(G)		WFC	IMAGE	WFALL	F648M		1	4	3589	2	PAR	7
LMC-30DOR-C-POS2	(G)		WFC	IMAGE	WFALL	F658N		1	1000	3589	2	PAR	7
LMC-30DOR-C-POS3	(G)		WFC	IMAGE	WFALL	F502N		1	1000	3589	2	PAR	7
LMC-30DOR-C-POS3	(G)		WFC	IMAGE	WFALL	F547M		1	1	3589	2	PAR	7
LMC-30DOR-C-POS3	(G)		WFC	IMAGE	WFALL	F648M		1	4	3589	2	PAR	31
LMC-30DOR-C-POS3	(G)		WFC	IMAGE	WFALL	F658N		1	500	3589	2	PAR	31
LMC-30DOR-POS1	(G)		WFC	IMAGE	WFALL	F336W		1	2	3589	2	PAR	3
LMC-30DOR-POS1	(G)		WFC	IMAGE	WFALL	F375N		1	500	3589	2	PAR	3
LMC-30DOR-POS1	(G)		WFC	IMAGE	WFALL	F502N		1	500	3589	2	PAR	3
LMC-30DOR-POS1	(G)		WFC	IMAGE	WFALL	F547M		1	1	3589	2	PAR	3
LMC-30DOR-POS1	(G)		WFC	IMAGE	WFALL	F648M		1	1	3589	2	PAR	2
LMC-30DOR-POS1	(G)		WFC	IMAGE	WFALL	F658N		1	1000	3589	2	PAR	2
LMC-30DOR-POS2	(G)		WFC	IMAGE	WFALL	F502N		1	500	3589	2	PAR	3
LMC-30DOR-POS2	(G)		WFC	IMAGE	WFALL	F547M		1	1	3589	2	PAR	3
LMC-30DOR-POS2	(G)		WFC	IMAGE	WFALL	F648M		1	1	3589	2	PAR	2
LMC-30DOR-POS2	(G)		WFC	IMAGE	WFALL	F658N		1	1000	3589	2	PAR	2
LMC-30DOR-POS3	(G)		WFC	IMAGE	WFALL	F502N		1	500	3589	2	PAR	3
LMC-30DOR-POS3	(G)		WFC	IMAGE	WFALL	F547M		1	1	3589	2	PAR	3
LMC-30DOR-POS3	(G)		WFC	IMAGE	WFALL	F648M		1	1	3589	2	PAR	2
LMC-30DOR-POS3	(G)		WFC	IMAGE	WFALL	F658N		1	1000	3589	2	PAR	2
LMC-HII-REGION-1	(G)		WFC	IMAGE	WFALL	F648M		1	1	3589	2	PAR	14
LMC-HII-REGION-1	(G)		WFC	IMAGE	WFALL	F658N		1	1000	3589	2	PAR	14
LMC-N11	(G)		WFC	IMAGE	WFALL	F502N		1	1000	3589	2	PAR	5
LMC-N11	(G)		WFC	IMAGE	WFALL	F547M		1	2	3589	2	PAR	5
LMC-N11	(G)		WFC	IMAGE	WFALL	F648M		1	5	3589	2	PAR	5
LMC-N11	(G)		WFC	IMAGE	WFALL	F658N		1	1000	3589	2	PAR	5
LMC-N119	(G)		WFC	IMAGE	WFALL	F648M		1	10	3589	2	PAR	14
LMC-N119	(G)		WFC	IMAGE	WFALL	F658N		1	1000	3589	2	PAR	14
LMC-N158-POS1	(G)		WFC	IMAGE	WFALL	F648M		1	1	3589	2	PAR	6
LMC-N158-POS1	(G)		WFC	IMAGE	WFALL	F658N		1	500	3589	2	PAR	6
LMC-N158-POS2	(G)		WFC	IMAGE	WFALL	F502N		1	1000	3589	2	PAR	4
LMC-N158-POS2	(G)		WFC	IMAGE	WFALL	F547M		1	1	3589	2	PAR	4
LMC-N158-POS2	(G)		WFC	IMAGE	WFALL	F648M		1	2	3589	2	PAR	10
LMC-N158-POS2	(G)		WFC	IMAGE	WFALL	F658N		1	1000	3589	2	PAR	10
LMC-N44D	(G)		WFC	IMAGE	WFALL	F502N		1	500	3589	2	PAR	6
LMC-N44D	(G)		WFC	IMAGE	WFALL	F547M		1	1	3589	2	PAR	6
LMC-N44D	(G)		WFC	IMAGE	WFALL	F648M		1	1	3589	2	PAR	14
LMC-N44D	(G)		WFC	IMAGE	WFALL	F658N		1	500	3589	2	PAR	14
LMC-N49	(G)		WFC	IMAGE	WFALL	F648M		1	1	3589	2	PAR	20
LMC-N49	(G)		WFC	IMAGE	WFALL	F658N		1	500	3589	2	PAR	20
LO-LAT	(G)		PC	IMAGE	ALL	F555W		1	6000	4082	2	PAR	60
LO-LAT	(G)		PC	IMAGE	ALL	F284W		1	1200	4082	2	PAR	20
LO-LAT	(G)		PC	IMAGE	ALL	F284W		1	2400	4082	2	PAR	60
LO-LAT	(G)		PC	IMAGE	ALL	F284W		1	4800	4082	2	PAR	60

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
LO-LAT	(G)		PC	IMAGE	ALL	F284W		1	7200	4082	2	PAR	40
LO-LAT	(G)		PC	IMAGE	ALL	F555W		1	1200	4082	2	PAR	20
LO-LAT	(G)		PC	IMAGE	ALL	F555W		1	3600	4082	2	PAR	60
LO-LAT	(G)		PC	IMAGE	ALL	F555W		1	8400	4082	2	PAR	20
LO-LAT	(G)		PC	IMAGE	ALL	F785LP		1	2400	4082	2	PAR	60
LO-LAT	(G)		PC	IMAGE	ALL	F785LP		1	4800	4082	2	PAR	60
LO-LAT	(G)		PC	IMAGE	ALL	F785LP		1	7200	4082	2	PAR	60
LO-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	6000	4082	2	PAR	60
LO-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	1200	4082	2	PAR	40
LO-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	3600	4082	2	PAR	60
LO-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	8400	4082	2	PAR	20
LO-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	2400	4082	2	PAR	40
LO-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	4800	4082	2	PAR	60
LO-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	7200	4082	2	PAR	60
LO-LAT	(G)		FOC/48	IMAGE	512X512	F430W		1	2400	4082	2	PAR	80
LO-LAT	(G)		FOC/48	IMAGE	512X512	F430W		1	4800	4082	2	PAR	60
LO-LAT	(G)		FOC/48	IMAGE	512X512	F430W		1	7200	4082	2	PAR	40
LOW-LAT	(G)		PC	IMAGE	ALL	F555W		1	6000	4029	1	PAR	60
LOW-LAT	(G)		PC	IMAGE	ALL	F284W		1	1200	4029	1	PAR	20
LOW-LAT	(G)		PC	IMAGE	ALL	F284W		1	2400	4029	1	PAR	60
LOW-LAT	(G)		PC	IMAGE	ALL	F284W		1	4800	4029	1	PAR	60
LOW-LAT	(G)		PC	IMAGE	ALL	F284W		1	7200	4029	1	PAR	40
LOW-LAT	(G)		PC	IMAGE	ALL	F555W		1	1200	4029	1	PAR	20
LOW-LAT	(G)		PC	IMAGE	ALL	F555W		1	3600	4029	1	PAR	60
LOW-LAT	(G)		PC	IMAGE	ALL	F555W		1	8400	4029	1	PAR	20
LOW-LAT	(G)		PC	IMAGE	ALL	F555W		1	1800	4106	1	PAR	70
LOW-LAT	(G)		PC	IMAGE	ALL	F555W		1	2100	4106	1	PAR	70
LOW-LAT	(G)		PC	IMAGE	ALL	F555W		1	2400	4106	1	PAR	70
LOW-LAT	(G)		PC	IMAGE	ALL	F785LP		1	2400	4029	1	PAR	60
LOW-LAT	(G)		PC	IMAGE	ALL	F785LP		1	4800	4029	1	PAR	60
LOW-LAT	(G)		PC	IMAGE	ALL	F785LP		1	7200	4029	1	PAR	60
LOW-LAT	(G)		PC	IMAGE	ALL	F785LP		1	1800	4106	1	PAR	70
LOW-LAT	(G)		PC	IMAGE	ALL	F785LP		1	2100	4106	1	PAR	70
LOW-LAT	(G)		PC	IMAGE	ALL	F785LP		1	2400	4106	1	PAR	70
LOW-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	6000	4029	1	PAR	60
LOW-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	1200	4029	1	PAR	40
LOW-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	3600	4029	1	PAR	60
LOW-LAT	(G)		FOC/48	IMAGE	512X512	F150W		1	8400	4029	1	PAR	20
LOW-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	2400	4029	1	PAR	40
LOW-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	4800	4029	1	PAR	60
LOW-LAT	(G)		FOC/48	IMAGE	512X512	F275W		1	7200	4029	1	PAR	60
LOW-LAT	(G)		FOC/48	IMAGE	512X512	F430W		1	2400	4029	1	PAR	80
LOW-LAT	(G)		FOC/48	IMAGE	512X512	F430W		1	4800	4029	1	PAR	60
LOW-LAT	(G)		FOC/48	IMAGE	512X512	F430W		1	7200	4029	1	PAR	40

4.5 FIXED TARGET OBSERVATIONS FOR GTO PROGRAMS

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC4696	-	-	FOC/96	IMAGE	512X512	F120M		1	2400	1242	1		1
NGC4696	-	-	FOC/96	IMAGE	512X512	F140M		1	1800	1242	1		1
NGC4696	-	-	FOC/96	IMAGE	512X512	F320W		1	1200	1242	1		1
NGC4696	-	-	FOC/96	IMAGE	512X512	F372M		1	2400	1242	1		1
NGC4696	-	-	FOC/96	IMAGE	512X512	F430W		1	1200	1242	1		1
NGC4696	-	-	FOC/96	IMAGE	512X1024	F320W		1	900	1242	1		1
NGC4696	-	-	FOC/96	IMAGE	512X1024	F120M		1	2400	1242	1		1
NGC4696	-	-	FOC/96	IMAGE	512X1024	F372M		2	1200	1242	1		1
Q2359+068	0 1 40.5	7 9 55	FOS/BL	ACCUM	1.0	G160L	1837	1	1000	3967	9		1
Q2359+068	0 1 40.5	7 9 55	FOS/BL	ACQ/BINA	4.3	MIRROR		1	241	3967	9	ACQ	1
2359+068	0 1 40.6	7 9 55	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	3179	1		1
0002-422	0 4 48.3	-41 57 28	FOC/96	IMAGE	512X512	F2ND F430W		1	600	3177	1	CON SEL	1
MRK335	0 6 19.5	20 12 10	FOS/BL	ACCUM	1.0	G190H		1	600	3988	3		1
MRK335	0 6 19.5	20 12 10	FOS/BL	ACCUM	1.0	G130H		1	1800	3988	3		1
MRK335	0 6 19.5	20 12 10	FOS/BL	ACCUM	1.0	G270H		1	360	3988	3		1
MRK335	0 6 19.5	20 12 10	FOS/BL	ACQ/BINA	4.3	MIRROR		1	6	3988	3	ACQ	1
SA68.12760	0 16 30.0	15 58 30	FOC/48	IMAGE	512X1024	F130LP		1	7019	3685	2		1
SA68.8624	0 16 35.5	15 52 10	WFC	IMAGE	ALL	F785LP		1	7019	3685	2	PAR	1
S50014+81	0 17 8.5	81 35 9	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
S50014+81	0 17 8.5	81 35 9	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
S50014+81	0 17 8.5	81 35 9	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
S50014+81	0 17 8.5	81 35 9	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
S50014+81	0 17 8.6	81 35 9	FOS/BL	ACCUM	4.3	PRISM	3500	1	300	1027	0		1
S50014+81	0 17 8.6	81 35 9	FOS/BL	ACCUM	4.3	G160L	1650	1	600	1027	0		1
S50014+81	0 17 8.6	81 35 9	FOS/BL	ACCUM	4.3	G160L	1650	1	25	1027	0		2
S50014+81	0 17 8.6	81 35 9	FOS/BL	ACQ/BINA	4.3	MIRROR		1	67	1027	0	ACQ	1
SA68.13837	0 17 17.7	16 0 22	WFC	IMAGE	ALL	F785LP		1	7019	3685	2	PAR	1
SA68.17123	0 17 19.3	16 7 5	FOC/48	IMAGE	512X1024	F130LP		1	7019	3685	2		1
SA68.5658	0 17 21.3	15 47 17	WFC	IMAGE	ALL	F785LP		1	7019	3685	2	PAR	1
SA68.6024	0 17 48.7	15 47 42	FOC/48	IMAGE	512X1024	F130LP		1	7019	3685	2		1
SA68.2-T2-1-2	0 18 2.2	16 29 25	FOC/48	IMAGE	512X1024	F130LP		1	10500	3685	2		1
GRB-34B	0 18 12.4	44 1 21	WFC	IMAGE	WF-ND	F606W		1	60	3288	3		6
CL0016+16	0 18 33.6	16 26 16	WFC	IMAGE	ALL	F785LP		1	10500	3685	2	PAR	1
3C9	0 20 25.1	15 40 55	PC	IMAGE	ALL	F606W		1	1200	3263	9		1
GAL-CLUS-002013+0407 54	0 22 53.2	4 24 18	WFC	IMAGE	ALL	F622W		3	700	1115	4	CON	1
GAL-CLUS-002013+0407 54	0 22 53.2	4 24 18	WFC	IMAGE	ALL	F785LP		3	700	1115	4	CON	1
NGC104-OFFSET	0 24 4.5	-72 4 57	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	3198	1	ACQ CON SEL	2
NGC104-STAR	0 24 4.5	-72 4 57*	FOS/RD	ACCUM	0.5	G650L		1	7500	3198	1	CON SEL	1
NGC104-STAR	0 24 4.5	-72 4 57*	FOS/RD	ACCUM	0.5	PRISM		1	4500	3198	1	CON SEL	1
NGC104-R2	0 24 5.1	-72 9 53	PC	IMAGE	PCALL-FIX	F555W	5479	1	1000	2944	2		2
NGC104-R2	0 24 5.1	-72 9 53	PC	IMAGE	PCALL-FIX	F785LP	8958	1	1000	2944	2		1
NGC104-R1	0 24 5.2	-72 7 23	PC	IMAGE	PCALL-FIX	F555W	5479	1	1000	2944	2		2
NGC104-R1	0 24 5.2	-72 7 23	PC	IMAGE	PCALL-FIX	F785LP	8958	1	1000	2944	2		1
NGC104	0 24 5.2	-72 4 50	PC	IMAGE	P6	F555W		1	26	3111	0		1
NGC104	0 24 5.2	-72 4 50	PC	IMAGE	P6	F785LP		1	26	3111	0		1
NGC104	0 24 5.2	-72 4 50	PC	IMAGE	ALL	F555W	5479	1	26	2946	3		3
NGC104	0 24 5.2	-72 4 50	PC	IMAGE	ALL	F791W	8537	1	26	2946	3		2
NGC104	0 24 5.2	-72 4 50	PC	IMAGE	PCALL-FIX	F555W	5479	1	100	2944	2		2
NGC104	0 24 5.2	-72 4 50	PC	IMAGE	PCALL-FIX	F555W	5479	1	26	2944	2		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC104	0 24 5.2	-72 4 50	PC	IMAGE	PCALL-FIX	F785LP	8958	1	100	2944	2		2
NGC104	0 24 5.2	-72 4 50	PC	IMAGE	PCALL-FIX	F785LP	8958	1	26	2944	2		1
NGC104	0 24 5.2	-72 4 50	FOC/96	IMAGE	512X512	F430W		1	4068	3684	2		1
NGC104	0 24 5.2	-72 4 50	FOC/96	IMAGE	512X512	F480LP		1	4068	3684	2		1
NGC104	0 24 5.2	-72 4 50	FOC/96	IMAGE	512X512	F430W F4ND		1	4068	3684	2		1
NGC104	0 24 5.2	-72 4 50	FOC/96	IMAGE	512X512	F480LP F4ND		1	4068	3684	2		1
NGC104	0 24 5.2	-72 4 50	FOC/96	IMAGE	512X512	F1ND F2ND F430W		1	4068	3684	2		1
NGC104	0 24 5.2	-72 4 50	FOC/96	IMAGE	512X512	F1ND F2ND F480LP		1	4068	3684	2		1
NGC104-OUTER	0 24 5.2	-72 4 50	WFC	IMAGE	ALL	F555W		1	4068	3684	2	PAR	3
NGC104-OUTER	0 24 5.2	-72 4 50	WFC	IMAGE	ALL	F785LP		1	4068	3684	2	PAR	3
NGC104	0 24 11.0	-72 4 47	WFC	IMAGE	ALL	F439W	4385	1	1000	3198	1		1
NGC104	0 24 11.0	-72 4 47	WFC	IMAGE	ALL	F336W	3363	1	500	3198	1		1
NGC104	0 24 11.0	-72 4 47	WFC	IMAGE	ALL	F336W	3363	1	1000	3198	1		1
NGC104E1	0 25 29.7	-72 4 50*	PC	IMAGE	ALL	F555W	5479	1	100	2946	3		3
NGC104E1	0 25 29.7	-72 4 50*	PC	IMAGE	ALL	F555W	5479	1	1000	2946	3		3
NGC104E1	0 25 29.7	-72 4 50*	PC	IMAGE	ALL	F791W	8537	1	100	2946	3		2
NGC104E1	0 25 29.7	-72 4 50*	PC	IMAGE	ALL	F791W	8537	1	1000	2946	3		2
QSO0023+171B	0 25 36.9	17 28 5	FOC/96	IMAGE	512X512	F320W		1	1800	4034	3		1
GAL-CLUS-002400+165300	0 26 32.9	17 9 46	WFC	IMAGE	ALL	F555W		1	700	1115	3		1
GAL-CLUS-002400+165300	0 26 32.9	17 9 46	WFC	IMAGE	ALL	F702W		1	700	1115	3		1
GAL-CLUS-002400+165300	0 26 32.9	17 9 46	WFC	IMAGE	ALL	F555W		2	700	1115	3		1
GAL-CLUS-002400+165300	0 26 32.9	17 9 46	WFC	IMAGE	ALL	F702W		2	700	1115	3		1
GAL-CLUS-002400+165300-75-EAST	0 26 41.0	17 9 36	WFC	IMAGE	ALL	F555W		1	700	1115	4	CON	1
GAL-CLUS-002400+165300-75-EAST	0 26 41.0	17 9 36	WFC	IMAGE	ALL	F702W		1	700	1115	4	CON	1
NAB0024+22	0 27 15.4	22 41 59	FOS/RD	ACQ/BINA	4.3	MIRROR		1	14	4117	2	ACQ	1
NAB0024+22	0 27 15.4	22 41 59	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	4	4117	2	ACQ	1
NAB0024+22	0 27 15.4	22 41 59	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	8200	4117	2		1
NAB0024+22	0 27 15.4	22 41 59	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1880	4117	2		1
PG0026+12	0 29 13.7	13 16 4	FOS/RD	RAPID	1.0	G270H	2700	1	900	4079	2		1
PG0026+12	0 29 13.7	13 16 4	FOS/BL	RAPID	1.0	G130H	1300	1	12000	4079	2		1
PG0026+12	0 29 13.7	13 16 4	FOS/RD	RAPID	1.0	G190H	1900	1	1380	4079	2		1
PG0026+12	0 29 13.7	13 16 4	FOS/BL	ACQ/BINA	4.3	MIRROR		1	15	4079	2	ACQ	1
PG0026+129	0 29 13.8	13 16 5	WFC	IMAGE	WFALL	F725LP		1	5	3287	4	CON	1
PG0026+129	0 29 13.8	13 16 5	WFC	IMAGE	WFALL	F725LP		1	510	3287	4	CON	1
PG0026+129	0 29 13.8	13 16 5	WFC	IMAGE	WFALL	F725LP		1	212	3287	4	CON	1
NGC128-NUC	0 29 15.0	2 51 53	PC	IMAGE	P7	F555W		1	120	4167	4	CON	1
NGC128-NUC	0 29 15.0	2 51 53	PC	IMAGE	P7	F555W		1	1200	4167	4	CON	1
SMC-N2	0 32 38.8	-71 41 59	FOC/96	IMAGE	512X512	F486N		1	1000	1266	1		1
SMC-N2	0 32 38.8	-71 41 59	FOC/96	IMAGE	512X512	F501N		1	1000	1266	1		1
K1	0 32 46.5	39 34 37	WFC	IMAGE	WF1	F555W		1	2500	1117	3		1
K1	0 32 46.5	39 34 37	WFC	IMAGE	WF1	F785LP		1	2200	1117	3		1
NGC147	0 33 12.2	48 30 32	FOC/96	IMAGE	512X512	F430W		1	3600	3870	2		1
NGC147	0 33 12.2	48 30 32	FOC/96	IMAGE	512X512	F480LP		1	3600	3870	2		1
NGC147-OFF	0 33 12.3	48 30 32	WFC	IMAGE	ALL	F555W		1	3600	3870	2	PAR	1
NGC147-OFF	0 33 12.3	48 30 32	WFC	IMAGE	ALL	F785LP		1	3600	3870	2	PAR	1
SMC-N4	0 34 22.0	-73 13 22	FOC/96	IMAGE	512X512	F501N		1	1500	4075	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
M31-FIELD184B	0 37 24.9	39 56 41	WFC	IMAGE	WFALL	F336W		1	100	1120	3		1
M31-FIELD184B	0 37 24.9	39 56 41	WFC	IMAGE	WFALL	F555W		1	100	1120	3		1
M31-FIELD184B	0 37 24.9	39 56 41	WFC	IMAGE	WFALL	F336W		1	1800	1120	3		1
M31-FIELD184B	0 37 24.9	39 56 41	WFC	IMAGE	WFALL	F555W		1	2100	1120	3		1
M31-FIELD184B	0 37 24.9	39 56 41	WFC	IMAGE	WFALL	F785LP		1	100	1120	3		1
M31-FIELD184B	0 37 24.9	39 56 41	WFC	IMAGE	WFALL	F785LP		1	1800	1120	3		1
M31-FIELD184A	0 37 32.3	40 0 41	WFC	IMAGE	WFALL	F336W		1	100	1120	3		1
M31-FIELD184A	0 37 32.3	40 0 41	WFC	IMAGE	WFALL	F555W		1	100	1120	3		1
M31-FIELD184A	0 37 32.3	40 0 41	WFC	IMAGE	WFALL	F336W		1	1800	1120	3		1
M31-FIELD184A	0 37 32.3	40 0 41	WFC	IMAGE	WFALL	F555W		1	2100	1120	3		1
M31-FIELD184A	0 37 32.3	40 0 41	WFC	IMAGE	WFALL	F785LP		1	100	1120	3		1
M31-FIELD184A	0 37 32.3	40 0 41	WFC	IMAGE	WFALL	F785LP		1	1800	1120	3		1
5C03.44	0 37 36.7	39 38 11	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
5C03.44	0 37 36.7	39 38 11	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
PSF-NGC224	0 38 38.8	40 26 15	PC	IMAGE	P6	F555W		1	0	1118	0		1
PSF-NGC224	0 38 38.8	40 26 15	PC	IMAGE	P6	F785LP		1	0	1118	0		1
NGC185	0 38 58.0	48 20 18	FOC/96	IMAGE	512X512	F430W		1	3600	3870	2		1
NGC185	0 38 58.0	48 20 18	FOC/96	IMAGE	512X512	F480LP		1	3600	3870	2		1
NGC185-OFF	0 38 58.0	48 20 18	WFC	IMAGE	ALL	F555W		1	3600	3870	2	PAR	1
NGC185-OFF	0 38 58.0	48 20 18	WFC	IMAGE	ALL	F785LP		1	3600	3870	2	PAR	1
OB138/WR1	0 39 33.5	40 20 18	FOS/BL	ACQ/BINA	4.3	MIRROR		1	40	4188	3	ACQ	1
OB138/WR1	0 39 33.5	40 20 18	FOS/BL	ACCUM	1.0	G190H	1938	1	500	4188	3		1
OB138/WR1	0 39 33.5	40 20 18	FOS/BL	ACCUM	1.0	G270H	2766	1	200	4188	3		1
OB138/WR1	0 39 33.5	40 20 18	FOS/BL	ACCUM	1.0	G130H	1379	1	2500	4188	3		1
M31-FIELD138A	0 39 35.3	40 19 47	WFC	IMAGE	WFALL	F555W		1	1000	1120	4	CON	1
M31-FIELD138A	0 39 35.3	40 19 47	WFC	IMAGE	WFALL	F336W		1	2200	1120	4	CON	1
M31-FIELD138A	0 39 35.3	40 19 47	WFC	IMAGE	WFALL	F785LP		1	1000	1120	4	CON	1
M31-FIELD138B	0 39 43.4	40 16 23	WFC	IMAGE	WFALL	F555W		1	1000	1120	4	CON	1
M31-FIELD138B	0 39 43.4	40 16 23	WFC	IMAGE	WFALL	F336W		1	2200	1120	4	CON	1
M31-FIELD138B	0 39 43.4	40 16 23	WFC	IMAGE	WFALL	F785LP		1	1000	1120	4	CON	1
HVIII	0 39 54.7	41 47 42	WFC	IMAGE	WF1	F555W		1	2500	1117	3		1
HVIII	0 39 54.7	41 47 42	WFC	IMAGE	WF1	F785LP		1	2200	1117	3		1
HD3823	0 40 19.8	-59 27 39	HSP/UV1	SINGLE	1.0	F240W		1	3600	3007	0	CON SEL	1
HD3823	0 40 19.8	-59 27 39	HSP/UV1	SINGLE	1.0	F140LP		1	3600	3007	0	CON SEL	1
HD3823	0 40 19.8	-59 27 39	HSP/POL	SINGLE	POL0	F327M		1	3600	3007	0	CON SEL	1
NGC205-OFF	0 40 21.8	41 41 6	WFC	IMAGE	ALL	F555W		1	3600	3870	2	PAR	1
NGC205-OFF	0 40 21.8	41 41 6	WFC	IMAGE	ALL	F785LP		1	3600	3870	2	PAR	1
NGC205	0 40 22.0	41 41 7	PC	IMAGE	ALL	F336W		1	600	1041	0		1
NGC205	0 40 22.0	41 41 7	PC	IMAGE	ALL	F547M		1	400	1041	0		1
NGC205	0 40 22.0	41 41 7	PC	IMAGE	ALL	F664N		1	2000	1041	0		1
NGC205	0 40 22.1	41 41 7	FOC/96	IMAGE	512X512	F430W		1	3600	3870	2		1
NGC205	0 40 22.1	41 41 7	FOC/96	IMAGE	512X512	F480LP		1	3600	3870	2		1
M31-FIELD81A	0 40 26.5	40 32 26	WFC	IMAGE	WFALL	F555W		1	1000	1120	3		1
M31-FIELD81A	0 40 26.5	40 32 26	WFC	IMAGE	WFALL	F336W		1	2200	1120	3		1
M31-FIELD81A	0 40 26.5	40 32 26	WFC	IMAGE	WFALL	F785LP		1	1000	1120	3		1
K58	0 40 26.6	41 27 17	WFC	IMAGE	WF1	F555W		1	2500	1117	3		1
K58	0 40 26.6	41 27 17	WFC	IMAGE	WF1	F785LP		1	2200	1117	3		1
M31-FIELDN206	0 40 29.4	40 43 58	WFC	IMAGE	WFALL	F336W		1	1000	1120	3		1
M31-FIELDN206	0 40 29.4	40 43 58	WFC	IMAGE	WFALL	F555W		1	400	1120	3		1
M31-FIELDN206	0 40 29.4	40 43 58	WFC	IMAGE	WFALL	F785LP		1	400	1120	3		1
M31-FIELD81B	0 40 49.5	40 28 27	WFC	IMAGE	WFALL	F555W		1	1000	1120	3		1
M31-FIELD81B	0 40 49.5	40 28 27	WFC	IMAGE	WFALL	F336W		1	2200	1120	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
M31-FIELD81B	0 40 49.5	40 28 27	WFC	IMAGE	WFALL	F785LP		1	1000	1120	3		1
OB69/WR2	0 40 56.5	41 3 9	FOS/BL	ACQ/BINA	4.3	MIRROR		1	60	3954	2	ACQ	1
OB69/WR2	0 40 56.5	41 3 9	FOS/BL	ACCUM	1.0	G270H	2766	1	600	3954	2		1
OB69/WR2	0 40 56.5	41 3 9	FOS/BL	ACCUM	1.0	G130H	1379	1	5400	3954	2		1
OB69/WR2	0 40 56.5	41 3 9	FOS/BL	ACCUM	1.0	G190H	1938	1	1800	3954	2		1
NGC224-0038+4148	0 41 6.3	42 1 43	WFC	IMAGE	WF1	F555W		1	2500	1117	4	CON	1
NGC224-0038+4148	0 41 6.3	42 1 43	WFC	IMAGE	WF1	F785LP		1	2200	1117	4	CON	1
SMC-N5	0 41 22.0	-72 45 15	FOC/96	IMAGE	512X512	F486N		1	1000	1266	1		1
SMC-N5	0 41 22.0	-72 45 15	FOC/96	IMAGE	512X512	F501N		1	1000	1266	1		1
LHS1126	0 41 26.0	-22 21 3	FOS/BL	ACCUM	4.3	G190H	1950	1	3000	1050	0		1
LHS1126	0 41 26.0	-22 21 3	FOS/BL	ACQ/BINA	4.3	MIRROR		1	20	1050	0	ACQ	1
LHS1126	0 41 26.0	-22 21 3	FOS/BL	ACCUM	4.3	G400H	4040	1	300	1050	0		1
LHS1126	0 41 26.0	-22 21 3	FOS/BL	ACCUM	4.3	G270H	2769	1	1200	1050	0		1
G141	0 42 12.6	41 19 0	PC	IMAGE	ALL	F555W		1	1500	3870	2	PAR	1
G141	0 42 12.6	41 19 0	PC	IMAGE	ALL	F555W		1	3600	3870	2	PAR	1
G141	0 42 12.6	41 19 0	PC	IMAGE	ALL	F785LP		1	1140	1278	9	SEL PAR	1
G141	0 42 12.6	41 19 0	PC	IMAGE	ALL	F785LP		1	1500	3870	2	PAR	2
G141	0 42 12.6	41 19 0	PC	IMAGE	ALL	F785LP		1	3600	3870	2	PAR	1
G142	0 42 13.9	40 48 39	PC	IMAGE	ALL	F555W		1	3600	3219	9	PAR	1
G142	0 42 13.9	40 48 39	PC	IMAGE	ALL	F555W		1	1500	3870	2	PAR	1
G142	0 42 13.9	40 48 39	PC	IMAGE	ALL	F785LP		1	1140	1278	9	PAR	1
G142	0 42 13.9	40 48 39	PC	IMAGE	ALL	F785LP		1	3600	3219	9	PAR	1
G142	0 42 13.9	40 48 39	PC	IMAGE	ALL	F785LP		1	1500	3870	2	PAR	1
UM666	0 42 16.5	-2 54 22	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
UM666	0 42 16.5	-2 54 22	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
NGC224-OFF-3	0 42 34.6	41 13 48	FOC/96	IMAGE	512X512	F430W		1	3600	3870	2		1
NGC224-OFF-3	0 42 34.6	41 13 48	FOC/96	IMAGE	512X512	F480LP		1	3600	3870	2		1
NGC1068	0 42 40.3	-0 0 38	HRS	ACCUM	2.0	G140L	1313	1	1088	3024	0		1
NGC1068	0 42 40.3	-0 0 38	HRS	ACCUM	2.0	G140L	1643	3	1088	3024	0		1
NGC224-OFF-2	0 42 41.6	41 15 18	FOC/96	IMAGE	512X512	F480LP		1	1500	3870	2		1
UPGREN69	0 42 41.9	85 14 14	FGS	TRANS	3	F583W		1	300	3886	1		7
UPGREN69	0 42 41.9	85 14 14	FGS	TRANS	3	PUPIL		1	300	3886	1		7
NGC221	0 42 42.0	40 51 54	FOC/48	IMAGE	512X1024	F175W		1	5400	3105	0		1
NGC221	0 42 42.0	40 51 54	FOC/96	IMAGE	512X512	F480LP F4ND		1	1500	1277	0		1
NGC221	0 42 42.0	40 51 54	FOC/48	IMAGE	128X128-ASLIT	F430W		1	100	1278	9	ACQ	1
NGC221	0 42 42.0	40 51 54	FOC/48	SPEC	256X1024-SLIT	G450M	5175	1	3600	1278	9		1
NGC221-NUC	0 42 42.1	40 51 57	PC	IMAGE	P6	F555W		1	20	1118	0		1
NGC221-NUC	0 42 42.1	40 51 57	PC	IMAGE	P6	F555W		4	100	1118	0		1
NGC221-OFF-1	0 42 43.0	40 51 39	FOC/96	IMAGE	512X512	F480LP		1	1500	3870	2		1
VID998	0 42 43.3	85 14 14	HSP/UV1	SINGLE	1.0	F240W		1	970	3006	0		1
VID998	0 42 43.3	85 14 14	HSP/UV1	SINGLE	1.0	F140LP		1	970	3006	0		1
VID998	0 42 43.3	85 14 14	HSP/POL	SINGLE	POL0	F327M		1	970	3006	0		1
NGC224-OFF-1	0 42 43.6	41 15 51	FOC/96	IMAGE	512X512	F480LP		1	1500	3870	2		1
NGC224-NUC	0 42 44.2	41 16 9	PC	IMAGE	P6	F555W		1	100	1118	0		1
NGC224-NUC	0 42 44.2	41 16 9	PC	IMAGE	P6	F555W		4	300	1118	0		1
NGC224-NUC	0 42 44.2	41 16 9	PC	IMAGE	P6	F785LP		1	400	1118	0		2
NGC224-NUC	0 42 44.2	41 16 9	WFC	IMAGE	WFALL	F230W		1	1000	4167	3		2
NGC224-NUC	0 42 44.2	41 16 9	WFC	IMAGE	WFALL	F336W		1	1000	4167	3		2
NGC224-NUC	0 42 44.2	41 16 9	WFC	IMAGE	WFALL	F555W		1	500	4167	3		2
NGC221-OFF-2	0 42 44.3	40 51 2	FOC/96	IMAGE	512X512	F480LP		1	1500	3870	2		1
NGC224-SW4	0 42 44.5	41 16 8*	FOS/RD	ACCUM	0.5	G570H		1	900	4062	2		1
NGC224-SW3	0 42 44.5	41 16 8*	FOS/RD	ACCUM	0.3	G570H		1	1500	4062	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC224-NW3	0 42 44.5	41 16 9*	FOS/RD	ACCUM	0.3	G570H		1	1800	4062	2		1
NGC224-W2	0 42 44.5	41 16 8*	FOS/RD	ACCUM	0.3	G570H		1	1300	4062	2		1
NGC224-W1	0 42 44.5	41 16 8*	FOS/RD	ACCUM	0.3	G570H		1	1200	4062	2		1
NGC224-SW2	0 42 44.5	41 16 8*	FOS/RD	ACCUM	0.3	G570H		1	1300	4062	2		1
NGC224-NW2	0 42 44.5	41 16 9*	FOS/RD	ACCUM	0.3	G570H		1	1600	4062	2		1
NGC224-S2	0 42 44.5	41 16 8*	FOS/RD	ACCUM	0.3	G570H		1	1300	4062	2		1
NGC224-SW1	0 42 44.5	41 16 8*	FOS/RD	ACCUM	0.3	G570H		1	1200	4062	2		1
NGC224-NW1	0 42 44.5	41 16 9*	FOS/RD	ACCUM	0.3	G570H		1	1300	4062	2		1
NGC224	0 42 44.5	41 16 8	FOC/48	IMAGE	512X1024	F175W		1	5400	3105	0		1
NGC224	0 42 44.5	41 16 8	FOC/96	IMAGE	512X512	F480LP F4ND		1	1500	3870	2		1
NGC224	0 42 44.5	41 16 8	FOC/48	IMAGE	128X128-ASLIT	F430W		1	100	1278	9	ACQ SEL	1
NGC224	0 42 44.5	41 16 8	FOC/48	IMAGE	128X128-ASLIT	F430W		1	100	1278	9	ACQ CON SEL	1
NGC224	0 42 44.5	41 16 8	FOC/48	SPEC	256X1024-SLIT	G450M	5175	1	3600	1278	9	SEL	2
NGC224-S1	0 42 44.5	41 16 8*	FOS/RD	ACCUM	0.3	G570H		1	1200	4062	2		1
NGC224	0 42 44.5	41 16 8	PC	IMAGE	ALL	F336W		1	900	1041	0		1
NGC224	0 42 44.5	41 16 8	PC	IMAGE	ALL	F547M		1	600	1044	0		1
NGC224	0 42 44.5	41 16 8	PC	IMAGE	ALL	F375N		1	1800	1044	0		1
NGC224	0 42 44.5	41 16 8	PC	IMAGE	ALL	F658N		1	1800	1044	0		1
NGC224	0 42 44.5	41 16 8	PC	IMAGE	PCALL	F547M		1	600	3276	9		1
NGC224	0 42 44.5	41 16 8	PC	IMAGE	PCALL	F502N		1	1800	3276	9		1
NGC224	0 42 44.5	41 16 8	PC	IMAGE	PCALL	F656N		1	1800	3276	9		1
NGC224	0 42 44.5	41 16 8	FOS/RD	ACCUM	0.3	G570H		1	1200	4062	2		1
NGC224-N1	0 42 44.5	41 16 9*	FOS/RD	ACCUM	0.3	G570H		1	1200	4062	2		1
NGC224-SE1	0 42 44.5	41 16 8*	FOS/RD	ACCUM	0.3	G570H		1	1300	4062	2		1
NGC224-NE1	0 42 44.5	41 16 9*	FOS/RD	ACCUM	0.3	G570H		1	1200	4062	2		1
NGC224-NE1	0 42 44.5	41 16 9*	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	5	4062	2	ACQ	1
NGC224-NE1	0 42 44.5	41 16 9*	FOS/RD	ACQ/PEAK	0.5	MIRROR		1	2	4062	2	ACQ	1
NGC224-N2	0 42 44.5	41 16 9*	FOS/RD	ACCUM	0.3	G570H		1	1300	4062	2		1
NGC224-BULGE	0 42 44.5	41 16 9	PC	IMAGE	ALL	F555W		1	840	1278	9	SEL PAR	1
NGC224-BULGE	0 42 44.5	41 16 9	PC	IMAGE	ALL	F785LP		1	840	1278	9	SEL PAR	1
NGC224-SE2	0 42 44.6	41 16 8*	FOS/RD	ACCUM	0.3	G570H		1	1600	4062	2		1
NGC224-NE2	0 42 44.6	41 16 9*	FOS/RD	ACCUM	0.3	G570H		1	1300	4062	2		1
NGC224-E1	0 42 44.6	41 16 8*	FOS/RD	ACCUM	0.3	G570H		1	1200	4062	2		1
M31-BULGE	0 42 44.6	41 17 49	WFC	IMAGE	WFALL	F555W		1	1000	1120	3		1
M31-BULGE	0 42 44.6	41 17 49	WFC	IMAGE	WFALL	F336W		1	2200	1120	3		1
M31-BULGE	0 42 44.6	41 17 49	WFC	IMAGE	WFALL	F785LP		1	1000	1120	3		1
NGC224-E2	0 42 44.6	41 16 9*	FOS/RD	ACCUM	0.3	G570H		1	1300	4062	2		1
NGC224-SE3	0 42 44.6	41 16 8*	FOS/RD	ACCUM	0.3	G570H		1	1800	4062	2		1
NGC224-NE3	0 42 44.6	41 16 9*	FOS/RD	ACCUM	0.3	G570H		1	1500	4062	2		1
NGC224-NE4	0 42 44.6	41 16 9*	FOS/RD	ACCUM	0.5	G570H		1	900	4062	2		1
NGC224-OFFSET-STARS-FIELD	0 42 45.0	41 15 46*	WFC	IMAGE	ALL	F606W		1	30	1044	0		1
NGC221-OFF-3	0 42 45.6	40 50 4	FOC/96	IMAGE	512X512	F430W		1	3600	3219	9		1
NGC221-OFF-3	0 42 45.6	40 50 4	FOC/96	IMAGE	512X512	F480LP		1	3600	3219	9		1
NGC221-POS1	0 42 47.7	40 51 3	WFC	IMAGE	WFALL	F555W		1	1000	1114	3		1
NGC221-POS1	0 42 47.7	40 51 3	WFC	IMAGE	WFALL	F336W		1	2200	1114	3		1
NGC221-POS1	0 42 47.7	40 51 3	WFC	IMAGE	WFALL	F785LP		1	1000	1114	3		1
NGC224-OFFSET	0 42 48.9	41 15 12*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	15	4062	2	ACQ	1
NGC224-OFF-4	0 43 2.2	41 10 28	FOC/96	IMAGE	512X512	F430W		1	3600	3219	9		1
NGC224-OFF-4	0 43 2.2	41 10 28	FOC/96	IMAGE	512X512	F480LP		1	3600	3219	9		1
NGC221-POS2	0 43 4.4	40 54 40	WFC	IMAGE	WFALL	F555W		1	1000	1114	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC221-POS2	0 43 4.4	40 54 40	WFC	IMAGE	WFALL	F336W		1	2200	1114	3		1
NGC221-POS2	0 43 4.4	40 54 40	WFC	IMAGE	WFALL	F785LP		1	1000	1114	3		1
3C20W	0 43 7.0	52 3 40	PC	IMAGE	ALL	F606W		1	1200	3263	9		1
K219	0 43 17.8	39 49 11	WFC	IMAGE	WF1	F555W		1	2500	1117	3		1
K219	0 43 17.8	39 49 11	WFC	IMAGE	WF1	F785LP		1	2200	1117	3		1
G233	0 43 36.9	41 8 12	PC	IMAGE	ALL	F555W		1	3600	3219	9	PAR	1
G233	0 43 36.9	41 8 12	PC	IMAGE	ALL	F785LP		1	3600	3219	9	PAR	1
HD4174	0 44 37.2	40 40 46	HRS	ACCUM	0.25	G160M	1550	1	300	1198	1		1
HD4174	0 44 37.2	40 40 46	HRS	ACCUM	0.25	G160M	1400	3	300	1198	1		1
HD4174	0 44 37.2	40 40 46	HRS	ACCUM	0.25	G160M	1653	1	246	1198	1		1
HD4174	0 44 37.2	40 40 46	HRS	IMAGE	2.0	MIRROR-N2		1	96	1198	1		1
HD4174	0 44 37.2	40 40 46	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	9	1198	1	ACQ	1
OB66-C	0 45 15.3	41 37 47	FOS/BL	ACQ/BINA	4.3	MIRROR		1	40	4188	3	ACQ	1
OB66-C	0 45 15.3	41 37 47	FOS/BL	ACCUM	1.0	G160L	1836	1	2000	4188	3		1
OB48/527	0 45 17.6	41 39 22	FOS/BL	ACQ/BINA	4.3	MIRROR		1	60	1150	1	ACQ	1
OB48/527	0 45 17.6	41 39 22	FOS/BL	ACCUM	1.0	G130H	1379	1	3200	1150	1	UNP	1
OB48/527	0 45 17.6	41 39 22	FOS/BL	ACCUM	1.0	G190H	1938	1	1200	1150	1	UNP	1
OB48/527	0 45 17.6	41 39 22	FOS/BL	ACCUM	1.0	G270H	2766	1	350	1150	1	UNP	1
PSF-NGC221	0 46 11.8	40 25 32	PC	IMAGE	P6	F555W		1	0	1118	0		1
ARP230	0 46 24.1	-13 26 31	WFC	IMAGE	WF1	F555W		1	30	3292	3		1
ARP230	0 46 24.1	-13 26 31	WFC	IMAGE	WF1	F555W		1	400	3292	3		1
ARP230	0 46 24.1	-13 26 31	WFC	IMAGE	WF1	F555W		1	230	3292	3		1
ARP230	0 46 24.1	-13 26 31	WFC	IMAGE	WF1	F785LP		1	30	3292	3		1
ARP230	0 46 24.1	-13 26 31	WFC	IMAGE	WF1	F785LP		1	400	3292	3		1
ARP230	0 46 24.1	-13 26 31	WFC	IMAGE	WF1	F785LP		1	230	3292	3		1
NGC188/54	0 46 40.6	85 14 40	FOC/96	IMAGE	512X1024	F2ND F430W		1	900	3036	1	ACQ	1
NGC188/54	0 46 40.6	85 14 40	FOC/288	IMAGE	512X512	F2ND F430W		2	900	3036	1		1
NGC188/54	0 46 40.6	85 14 40	FOC/288	IMAGE	512X512	F1ND F342W		2	900	3059	1		1
NGC188/54	0 46 40.6	85 14 40	FOC/288	IMAGE	512X512	F2ND F430W		2	900	3059	1		1
NGC188/54	0 46 40.6	85 14 40	FOC/288	IMAGE	512X512	F275W F278M		2	900	3059	1		1
NGC188-4	0 46 51.0	85 15 33	WFC	IMAGE	ALL	F555W		2	24	1106	1		1
NGC188-4	0 46 51.0	85 15 33	WFC	IMAGE	ALL	F785LP		2	80	1106	1		1
NGC188-4	0 46 51.0	85 15 33	WFC	IMAGE	WFALL	F555W		1	24	3290	3		1
NGC188-4	0 46 51.0	85 15 33	WFC	IMAGE	WFALL	F785LP		1	80	3290	3		1
NGC188-B	0 46 51.0	85 15 40	WFC	IMAGE	WFALL	F555W		2	26	4085	2		1
NGC188-B	0 46 51.0	85 15 40	WFC	IMAGE	WFALL	F785LP		2	100	4085	2		1
NGC188-3	0 46 58.0	85 14 32	WFC	IMAGE	ALL	F555W		2	24	1106	1		1
NGC188-3	0 46 58.0	85 14 32	WFC	IMAGE	ALL	F785LP		2	80	1106	1		1
NGC188-3	0 46 58.0	85 14 32	WFC	IMAGE	WFALL	F555W		1	24	3290	3		1
NGC188-3	0 46 58.0	85 14 32	WFC	IMAGE	WFALL	F785LP		1	80	3290	3		1
SMC-N18	0 46 59.9	-72 49 15	FOC/96	IMAGE	512X512	F501N		1	1000	4075	2		1
NGC246	0 47 0.9	-11 52 37	WFC	IMAGE	WFALL	F469N		1	2100	3289	3		1
NGC246	0 47 0.9	-11 52 37	WFC	IMAGE	WFALL	F656N		1	2100	3289	3		1
NGC246	0 47 0.9	-11 52 37	WFC	IMAGE	WFALL	F658N		1	2100	3289	3		1
NGC188	0 47 20.0	85 15 10	PC	IMAGE	P5	F336W		1	40	3014	0		1
NGC188	0 47 20.0	85 15 10	PC	IMAGE	P5	F336W		1	400	3014	0		1
NGC188	0 47 20.0	85 15 10	PC	IMAGE	P6	F336W		1	40	3014	0		1
NGC188	0 47 20.0	85 15 10	PC	IMAGE	P6	F336W		1	400	3014	0		1
NGC188	0 47 20.0	85 15 10	WFC	IMAGE	ALL	F547M		1	10	3013	0		1
NGC188	0 47 20.0	85 15 10	WFC	IMAGE	ALL	F547M		1	40	3013	0		1
NGC188	0 47 20.0	85 15 10	WFC	IMAGE	ALL	F555W		1	3	3013	0		1
NGC188	0 47 20.0	85 15 10	WFC	IMAGE	ALL	F555W		1	12	3013	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC188	0 47 20.0	85 15 10	WFC	IMAGE	ALL	F785LP		1	3	3013	0		1
NGC188	0 47 20.0	85 15 10	WFC	IMAGE	ALL	F785LP		1	12	3013	0		1
NGC188-PSFS	0 47 20.0	85 15 10	WFC	IMAGE	ALL	F547M		1	300	1138	0		1
NGC188-PSFS	0 47 20.0	85 15 10	WFC	IMAGE	ALL	F675W		1	70	1138	0		1
NGC188	0 47 20.0	85 15 20	PC	IMAGE	ALL	F502N		1	500	3043	0		1
NGC188	0 47 20.0	85 15 20	PC	IMAGE	ALL	F547M		1	20	3043	0		1
NGC188	0 47 20.0	85 15 20	PC	IMAGE	ALL	F547M		1	80	3043	0		1
NGC188	0 47 20.0	85 15 20	PC	IMAGE	ALL	F555W		1	6	3043	0		1
NGC188	0 47 20.0	85 15 20	PC	IMAGE	ALL	F656N		1	800	3043	0		1
NGC188	0 47 20.0	85 15 20	PC	IMAGE	ALL	F502N		1	1600	3043	0		1
NGC188	0 47 20.0	85 15 20	PC	IMAGE	ALL	F555W		1	23	3043	0		1
NGC188	0 47 20.0	85 15 20	PC	IMAGE	ALL	F656N		1	1600	3043	0		1
NGC188	0 47 20.0	85 15 20	PC	IMAGE	ALL	F785LP		1	6	3043	0		1
NGC188	0 47 20.0	85 15 20	PC	IMAGE	ALL	F785LP		1	23	3043	0		1
NGC253-OFFSET-STARS-FIELD	0 47 29.7	-25 18 13*	WFC	IMAGE	ALL	F606W		1	30	3194	1		1
NGC188-1	0 47 32.0	85 14 58	WFC	IMAGE	ALL	F555W		2	24	1106	1		1
NGC188-1	0 47 32.0	85 14 58	WFC	IMAGE	ALL	F785LP		2	80	1106	1		1
NGC188-1	0 47 32.0	85 14 58	WFC	IMAGE	WFALL	F555W		1	24	3290	3		1
NGC188-1	0 47 32.0	85 14 58	WFC	IMAGE	WFALL	F785LP		1	80	3290	3		1
NGC253	0 47 33.2	-25 17 17	PC	IMAGE	ALL	F664N		2	900	3194	1		1
NGC253	0 47 33.2	-25 17 17	PC	IMAGE	ALL	F502N		1	1800	3194	1		1
NGC253	0 47 33.2	-25 17 17	PC	IMAGE	ALL	F547M		1	360	3194	1		1
NGC188-A	0 47 51.0	85 14 45	WFC	IMAGE	WFALL	F555W		2	26	4085	2		1
NGC188-A	0 47 51.0	85 14 45	WFC	IMAGE	WFALL	F785LP		2	100	4085	2		1
NGC188-2	0 47 51.0	85 15 43	WFC	IMAGE	ALL	F555W		2	24	1106	1		1
NGC188-2	0 47 51.0	85 15 43	WFC	IMAGE	ALL	F785LP		2	80	1106	1		1
NGC188-2	0 47 51.0	85 15 43	WFC	IMAGE	WFALL	F555W		1	24	3290	3		1
NGC188-2	0 47 51.0	85 15 43	WFC	IMAGE	WFALL	F785LP		1	80	3290	3		1
NGC188-C	0 47 51.0	85 15 55	WFC	IMAGE	WFALL	F555W		2	26	4085	2		1
NGC188-C	0 47 51.0	85 15 55	WFC	IMAGE	WFALL	F785LP		2	100	4085	2		1
K351	0 49 40.7	41 35 25	WFC	IMAGE	WF1	F555W		1	2500	1117	3		1
K351	0 49 40.7	41 35 25	WFC	IMAGE	WF1	F785LP		1	2200	1117	3		1
BPM16274	0 50 3.2	-52 8 17	FOC/96	IMAGE	512X512	F120M		1	300	3039	0		1
BPM16274	0 50 3.2	-52 8 17	FOC/96	IMAGE	512X512	F501N		2	900	3039	0		1
BPM16274	0 50 3.2	-52 8 17	FOC/96	IMAGE	512X512	F2ND F502M		2	900	3039	0		1
BPM16274	0 50 3.2	-52 8 17	FOC/96	IMAGE	512X512	F372M F4ND		1	300	3039	0		1
BPM16274	0 50 3.2	-52 8 17	FOC/96	IMAGE	512X512	F346M F4ND		2	900	3039	0		1
BPM16274	0 50 3.2	-52 8 17	FOC/96	IMAGE	512X512	F430W F4ND		2	900	3039	0		1
BPM16274	0 50 3.2	-52 8 17	FOC/96	IMAGE	512X512	F130M F2ND		2	900	3049	1		1
BPM16274	0 50 3.2	-52 8 17	FOC/96	IMAGE	512X512	F1ND F275W F4ND		2	900	3039	0		1
BPM16274	0 50 3.2	-52 8 17	FOC/96	IMAGE	512X512	F1ND F320W F4ND		2	900	3039	0		1
BPM16274	0 50 3.2	-52 8 17	FOC/96	IMAGE	512X512	F1ND F253M F2ND		2	900	3049	1		1
BPM16274	0 50 3.2	-52 8 17	FOC/96	IMAGE	512X512	F210M F220W F2ND		1	300	3039	0		1
BPM16274	0 50 3.2	-52 8 17	FOC/96	IMAGE	512X512	F275W F278M F2ND		1	300	3039	0		1
IZW1	0 53 34.9	12 41 36	PC	IMAGE	P6	F555W		3	100	1105	0		1
IZW1	0 53 34.9	12 41 36	PC	IMAGE	PC7	F555W		1	30	3292	4	CON	1
IZW1	0 53 34.9	12 41 36	PC	IMAGE	PC7	F555W		1	300	3292	4	CON	1
IZW1	0 53 34.9	12 41 36	WFC	IMAGE	W1	F555W		1	200	2882	0		2
IZW1	0 53 34.9	12 41 36	PC	IMAGE	P6	F785LP		2	180	1105	0		1
IZW1	0 53 34.9	12 41 36	PC	IMAGE	PC7	F555W		1	230	3292	4	CON	1
IZW1	0 53 34.9	12 41 36	WFC	IMAGE	W1	F785LP		1	200	2882	0		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
I-ZW1	0 53 34.9	12 41 36	FOS/BL	ACCUM	4.3	G190H	1950	1	1440	4057	2		4
I-ZW1	0 53 34.9	12 41 36	FOS/BL	ACCUM	4.3	G270H	2766	1	1440	4057	2		2
I-ZW1	0 53 34.9	12 41 36	FOS/BL	ACQ/BINA	4.3	MIRROR		1	3	4057	2	ACQ	1
B20051+29	0 53 44.3	29 25 7	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
B20051+29	0 53 44.3	29 25 7	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
NGC300	0 54 52.7	-37 41 9	FOC/96	IMAGE	512X512	F342W		1	300	3264	3		1
DHM0054-284	0 56 25.2	-28 8 32	WFC	IMAGE	ALL	F606W		3	1800	1045	9		1
DHM0054-284	0 56 25.2	-28 8 32	FOS/RD	ACQ/BINA	4.3	MIRROR		1	26	1045	9	ACQ CON SEL	6
DHM0054-284	0 56 25.2	-28 8 32	FOS/RD	ACQ/PEAK	2.0-BAR	MIRROR		1	26	1045	9	ACQ CON SEL	6
3C29	0 57 34.9	-1 23 27	FOS/RD	ACCUM	1.0	PRISM	5400	1	500	3272	9	CON	1
3C29	0 57 34.9	-1 23 27	FOC/96	IMAGE	512X512	F370LP	4040	1	300	1033	0		1
3C29	0 57 34.9	-1 23 27	FOC/96	IMAGE	512X512	F220W F231M	2260	1	900	1033	0		1
3C29-FIELD	0 57 34.9	-1 23 27	WFC	IMAGE	ALL	F439W	4353	1	15	3272	9	ACQ CON	1
3C29-OFFSET	0 57 34.9	-1 23 27*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3272	9	ACQ CON	1
0055-270	0 57 57.9	-26 43 14	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	1235	0		1
0055-2659	0 57 58.0	-26 43 14	FOS/BL	ACCUM	4.3	PRISM	3500	1	600	3199	1		1
0055-2659	0 57 58.0	-26 43 14	FOS/BL	ACCUM	4.3	G160L	1650	1	1200	3199	1		1
0055-2659	0 57 58.0	-26 43 14	FOS/BL	ACQ/BINA	4.3	MIRROR		1	250	3199	1	ACQ	1
SMC-N67	0 59 25.0	-71 27 50	FOC/96	IMAGE	512X512	F501N		1	2000	4075	2		1
0058+019	1 0 54.2	2 11 36	FOC/96	IMAGE	512X512	F2ND F430W		1	600	1236	0	CON SEL	1
0058+019	1 0 54.2	2 11 36	FOC/96	IMAGE	512X512	F2ND F430W		1	600	3177	1	CON SEL	1
Q0101-4216	1 3 4.4	-42 4 0	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
Q0101-4216	1 3 4.4	-42 4 0	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
0100+130	1 3 11.3	13 16 17	FOC/96	IMAGE	512X512	F2ND F430W		1	600	1236	0	SEL	1
0100+130	1 3 11.3	13 16 17	FOC/96	IMAGE	512X512	F2ND F430W		1	600	3177	1	CON SEL	1
NGC362	1 3 14.5	-70 50 53	PC	IMAGE	P6	F555W		1	100	3227	1		1
NGC362	1 3 14.5	-70 50 53	PC	IMAGE	P6	F785LP		1	100	3227	1		1
R31	1 3 25.2	-72 6 43	HRS	ACCUM	0.25	G160M	1545	1	420	1152	1		3
Q0101-304	1 3 55.2	-30 9 47	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
Q0102-4238	1 4 34.8	-42 22 7	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
Q0102-4238	1 4 34.8	-42 22 7	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
IC1613	1 5 11.2	2 7 42	WFC	IMAGE	WFALL	F336W		1	100	1120	4	CON	1
IC1613	1 5 11.2	2 7 42	WFC	IMAGE	WFALL	F555W		1	100	1120	4	CON	1
IC1613	1 5 11.2	2 7 42	WFC	IMAGE	WFALL	F336W		1	1800	1120	4	CON	1
IC1613	1 5 11.2	2 7 42	WFC	IMAGE	WFALL	F555W		1	2100	1120	4	CON	1
IC1613	1 5 11.2	2 7 42	WFC	IMAGE	WFALL	F785LP		1	100	1120	4	CON	1
IC1613	1 5 11.2	2 7 42	WFC	IMAGE	WFALL	F785LP		1	1800	1120	4	CON	1
NGC383	1 7 24.9	32 24 46	FOC/96	IMAGE	512X512	F342W		1	600	4205	3		1
NGC383	1 7 24.9	32 24 46	FOC/96	IMAGE	512X512	F502M		1	300	4205	3		1
NGC383	1 7 24.9	32 24 46	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC383	1 7 24.9	32 24 46	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
3C33S	1 8 50.4	13 18 29	PC	IMAGE	ALL	F606W		1	1800	1058	1		1
3C33S	1 8 50.4	13 18 29	FOC/96	IMAGE	512X512	F480LP		1	1800	3263	9		1
POINT0111+021INCA221-4	1 11 21.1	1 55 0	S/C	POINTING	V1			1	0	1532	9		2
L725-32	1 12 20.4	-17 1 6	WFC	IMAGE	WF-ND	F606W		1	30	3288	4	CON	7
0111+021INCA221-4	1 13 43.1	2 22 17	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
0111+021INCA221-4	1 13 43.2	2 22 17	FGS	POS	2	F583W		1	51	1532	9		6
POINT0111+021INCA221-4	1 14 3.3	2 10 15	S/C	POINTING	V1			1	1	4155	3	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
INCA221-4	1 14 40.2	2 17 59	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
INCA221-4	1 14 40.3	2 17 59	FGS	POS	2	F583W		1	51	1532	9		4
UM670	1 17 23.2	-8 41 9	FOS/BL	RAPID	4.3	PRISM	3500	1	600	3268	2		1
UM670	1 17 23.2	-8 41 9	FOS/BL	ACQ/BINA	4.3	MIRROR		1	60	3268	2	ACQ	1
UM670	1 17 23.2	-8 41 9	FOS/BL	RAPID	4.3	G160L	1650	1	1200	3268	2		1
0114-089	1 17 23.3	-8 41 32	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	1235	0		1
POINT-CP4.1	1 21 41.6	25 47 13	S/C	POINTING	V1			1	0	1014	3		1
POINT-CP4.2	1 21 41.6	25 46 7	S/C	POINTING	V1			1	0	1014	3	CON	1
Q0120+027	1 22 56.2	2 57 32	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
FAIRALL9	1 23 45.7	-58 48 22	FOS/BL	ACCUM	1.0	G190H		1	900	4045	1		1
FAIRALL9	1 23 45.7	-58 48 22	FOS/BL	ACCUM	1.0	G130H		1	2400	4045	1		1
FAIRALL9	1 23 45.7	-58 48 22	FOS/BL	ACCUM	1.0	G270H		1	360	4045	1		1
FAIRALL9	1 23 45.7	-58 48 22	HRS	ACCUM	2.0	G140L	1590	1	1500	1170	0		1
FAIRALL9	1 23 45.7	-58 48 22	HRS	ACCUM	2.0	G200M	1940	1	240	1170	0		1
FAIRALL9	1 23 45.7	-58 48 22	HRS	ACCUM	2.0	G140L	1315	1	1080	1170	0		1
FAIRALL9	1 23 45.7	-58 48 22	HRS	ACCUM	2.0	G270M	2945	1	180	1170	0		1
FAIRALL9	1 23 45.7	-58 48 22	HRS	ACCUM	2.0	G270M	2985	1	180	1170	0		1
FAIRALL9	1 23 45.7	-58 48 22	HRS	ACCUM	2.0	G270M	3025	1	240	1170	0		1
FAIRALL9	1 23 45.7	-58 48 22	HRS	ACCUM	2.0	G200M	1978	1	240	1170	0		1
FAIRALL9	1 23 45.7	-58 48 22	HRS	ACCUM	2.0	G200M	2014	1	240	1170	0		1
FAIRALL9	1 23 45.7	-58 48 22	HRS	ACCUM	2.0	G200M	2052	1	240	1170	0		1
FAIRALL9	1 23 45.7	-58 48 22	HRS	ACCUM	2.0	G270M	2909	1	180	1170	0		1
FAIRALL9	1 23 45.7	-58 48 22	HRS	ACCUM	2.0	G270M	2829	1	120	1170	0		1
FAIRALL9	1 23 45.7	-58 48 22	HRS	ACCUM	2.0	G270M	2869	1	120	1170	0		1
FAIRALL9	1 23 45.7	-58 48 22	FOS/BL	ACQ/BINA	4.3	MIRROR		1	2	4045	1	ACQ	1
FAIRALL9	1 23 45.7	-58 48 22	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	1170	0	ACQ	1
3C40-FIELD	1 25 57.7	-1 20 2	WFC	IMAGE	ALL	F439W	4353	1	15	3272	9	ACQ CON	1
3C40	1 25 59.7	-1 20 32	FOS/RD	ACCUM	1.0	PRISM	5400	1	500	3272	9	CON	1
3C40	1 25 59.7	-1 20 32	FOC/96	IMAGE	512X512	F370LP	4040	1	300	1033	0		1
3C40	1 25 59.7	-1 20 32	FOC/96	IMAGE	512X512	F220W F231M	2260	1	900	1033	0		1
3C40-OFFSET	1 25 59.7	-1 20 32*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3272	9	ACQ CON	1
4C25.05	1 26 42.6	25 59 6	PC	IMAGE	PC6	F517N		2	300	3287	4	CON	1
M33-NGC604	1 31 43.0	30 26 50	WFC	IMAGE	WFALL	F336W		1	1000	4088	2		1
M33-NGC604	1 31 43.0	30 26 50	WFC	IMAGE	WFALL	F555W		1	1000	4088	2		1
M33-NGC604	1 31 43.0	30 26 50	WFC	IMAGE	WFALL	F375N		2	2200	4088	2		1
M33-NGC604	1 31 43.0	30 26 50	WFC	IMAGE	WFALL	F487N		2	2200	4088	2		1
M33-NGC604	1 31 43.0	30 26 50	WFC	IMAGE	WFALL	F502N		2	2200	4088	2		1
M33-NGC604	1 31 43.0	30 26 50	WFC	IMAGE	WFALL	F547M		2	140	4088	2		1
M33-NGC604	1 31 43.0	30 26 50	WFC	IMAGE	WFALL	F656N		2	2200	4088	2		1
M33-NGC604	1 31 43.0	30 26 50	WFC	IMAGE	WFALL	F673N		2	2200	4088	2		1
M33-SNR2	1 33 1.1	30 39 10	WFC	IMAGE	ALL	F673N		1	1360	3205	1		1
0130-403	1 33 1.9	-40 6 28	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	1235	0		1
M33-FIELD137	1 33 16.1	30 53 16	WFC	IMAGE	WFALL	F336W		1	100	1120	3		1
M33-FIELD137	1 33 16.1	30 53 16	WFC	IMAGE	WFALL	F555W		1	100	1120	3		1
M33-FIELD137	1 33 16.1	30 53 16	WFC	IMAGE	WFALL	F336W		1	1800	1120	3		1
M33-FIELD137	1 33 16.1	30 53 16	WFC	IMAGE	WFALL	F555W		1	2100	1120	3		1
M33-FIELD137	1 33 16.1	30 53 16	WFC	IMAGE	WFALL	F785LP		1	100	1120	3		1
M33-FIELD137	1 33 16.1	30 53 16	WFC	IMAGE	WFALL	F785LP		1	1800	1120	3		1
M33/WR28	1 33 32.6	30 41 27	FOS/BL	ACQ/BINA	4.3	MIRROR		1	40	4188	3	ACQ	1
M33/WR28	1 33 32.6	30 41 27	FOS/BL	ACCUM	1.0	G160L	1836	1	1600	4188	3		1
M33-N595-STARA	1 33 33.8	30 35 30	HRS	ACCUM	2.0	G140L	1590	1	700	3930	4		1
M33-N595-STARA	1 33 33.8	30 35 30	HRS	ACCUM	2.0	G140L	1303	1	500	3930	4		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
M33-SNR8	1 33 35.1	30 36 30	WFC	IMAGE	ALL	F673N		1	1360	3205	1		1
M33-CENTRAL	1 33 50.0	30 35 0	WFC	IMAGE	WFALL	F555W		1	1000	4088	2		1
M33-CENTRAL	1 33 50.0	30 35 0	WFC	IMAGE	WFALL	F336W		1	1400	4088	2		1
M33-CENTRAL	1 33 50.0	30 35 0	WFC	IMAGE	WFALL	F375N		2	2200	4088	2		1
M33-CENTRAL	1 33 50.0	30 35 0	WFC	IMAGE	WFALL	F487N		2	2200	4088	2		1
M33-CENTRAL	1 33 50.0	30 35 0	WFC	IMAGE	WFALL	F502N		2	2200	4088	2		1
M33-CENTRAL	1 33 50.0	30 35 0	WFC	IMAGE	WFALL	F547M		2	140	4088	2		1
M33-CENTRAL	1 33 50.0	30 35 0	WFC	IMAGE	WFALL	F656N		2	2200	4088	2		1
M33-CENTRAL	1 33 50.0	30 35 0	WFC	IMAGE	WFALL	F673N		2	2200	4088	2		1
NGC598-NUC	1 33 50.9	30 39 36	PC	IMAGE	P6	F555W		1	100	3229	1		1
NGC598-NUC	1 33 50.9	30 39 36	PC	IMAGE	P6	F555W		2	500	3229	1		1
NGC598-NUC	1 33 50.9	30 39 36	PC	IMAGE	P6	F785LP		1	600	3229	1		2
NGC598-NUC	1 33 50.9	30 39 36	WFC	IMAGE	WFALL	F555W		1	100	4167	4	CON	1
NGC598-NUC	1 33 50.9	30 39 36	WFC	IMAGE	WFALL	F555W		1	700	4167	4	CON	1
NGC598-NUC	1 33 50.9	30 39 36	WFC	IMAGE	WFALL	F785LP		1	100	4167	4	CON	1
NGC598-NUC	1 33 50.9	30 39 36	WFC	IMAGE	WFALL	F785LP		1	700	4167	4	CON	1
NGC598	1 33 52.2	30 39 15	FOC/96	IMAGE	512X512	F342W		1	300	3264	3		1
POINT0134+329INCA221-9	1 33 54.4	32 51 52	S/C	POINTING	V1			1	0	1532	9		2
M33-N604-STARA	1 34 32.4	30 47 3	HRS	ACCUM	2.0	G140L	1590	1	700	3930	4		1
M33-N604-STARA	1 34 32.4	30 47 3	HRS	ACCUM	2.0	G140L	1303	1	500	3930	4		1
M33-DISK	1 34 32.7	30 47 3	WFC	IMAGE	WFALL	F336W		1	100	1120	3		1
M33-DISK	1 34 32.7	30 47 3	WFC	IMAGE	WFALL	F555W		1	100	1120	3		1
M33-DISK	1 34 32.7	30 47 3	WFC	IMAGE	WFALL	F336W		1	1800	1120	3		1
M33-DISK	1 34 32.7	30 47 3	WFC	IMAGE	WFALL	F555W		1	2100	1120	3		1
M33-DISK	1 34 32.7	30 47 3	WFC	IMAGE	WFALL	F785LP		1	100	1120	3		1
M33-DISK	1 34 32.7	30 47 3	WFC	IMAGE	WFALL	F785LP		1	1800	1120	3		1
M33-FIELDN604	1 34 33.1	30 47 0	WFC	IMAGE	WFALL	F336W		1	1000	1120	3		1
M33-FIELDN604	1 34 33.1	30 47 0	WFC	IMAGE	WFALL	F555W		1	400	1120	3		1
M33-FIELDN604	1 34 33.1	30 47 0	WFC	IMAGE	WFALL	F656N		1	2200	1120	3		1
M33-FIELDN604	1 34 33.1	30 47 0	WFC	IMAGE	WFALL	F785LP		1	400	1120	3		1
0132-198	1 34 39.2	-19 31 59	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	3179	1		1
PSF-NGC598	1 35 25.9	30 46 31	PC	IMAGE	P6	F555W		1	0	3229	1		1
PSF-NGC598	1 35 25.9	30 46 31	PC	IMAGE	P6	F785LP		1	0	3229	1		1
0134+329INCA221-9	1 37 41.2	33 9 35	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
3C48	1 37 41.3	33 9 35	PC	IMAGE	P6	F555W		2	40	3228	1		1
3C48	1 37 41.3	33 9 35	PC	IMAGE	P6	F785LP		1	80	3228	1		1
3C48	1 37 41.3	33 9 35	PC	IMAGE	P6	F785LP		2	500	3228	1		1
3C48	1 37 41.3	33 9 35	WFC	IMAGE	WFALL	F725LP		1	600	3287	3		1
3C48	1 37 41.3	33 9 35	WFC	IMAGE	WFALL	F725LP		1	250	3287	3		1
0134+329	1 37 41.3	33 9 35	PC	IMAGE	P8	F606W		1	30	1139	9		1
0134+329	1 37 41.3	33 9 35	PC	IMAGE	P8	F725LP		1	70	1139	9		1
0134+329INCA221-9	1 37 41.3	33 9 35	FGS	POS	2	F583W		1	51	1532	9	UNP	6
3C48	1 37 41.3	33 9 35	FOS/RD	ACCUM	0.25X2.0	G190H		1	4200	4126	3		1
3C48	1 37 41.3	33 9 35	FOS/RD	ACCUM	0.25X2.0	G270H		1	1800	4126	3		1
3C48	1 37 41.3	33 9 35	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	4126	3	ACQ	1
3C48	1 37 41.3	33 9 35	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	10	4126	3	ACQ	1
INCA221-9	1 37 41.4	33 1 49	FGS	POS	2	F583W		1	51	1532	9	UNP	4
INCA221-9	1 37 41.5	33 1 48	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
POINT0134+329INCA221-9	1 38 34.7	33 4 28	S/C	POINTING	V1			1	1	4155	3	CON	1
L726-8AB	1 38 48.7	-17 57 47	WFC	IMAGE	WF-ND	F606W		1	80	3288	4	CON	6

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
GLIESE065	1 38 50.3	-17 57 29	FGS	POS	PRIME	F550W		1	52	2935	9	CON	29
GLIESE065	1 38 50.3	-17 57 29	FGS	TRANS	PRIME	F583W		1	100	2935	9	ACQ	1
L726-8-A	1 39 1.0	-17 57 0	PC	IMAGE	P6	F875M		1	50	1062	9		1
L726-8-A	1 39 1.0	-17 57 0	PC	IMAGE	P6	F622W		4	400	1062	9		1
L726-8-A	1 39 1.0	-17 57 0	PC	IMAGE	P6	F875M		4	400	1062	9		1
HD10700	1 44 4.0	-15 56 15	PC	IMAGE	P6	F622W		4	100	1062	9		3
HD10700	1 44 4.0	-15 56 15	PC	IMAGE	P6	F875M		4	400	1062	9		3
HD10700	1 44 4.0	-15 56 15	PC	IMAGE	P6	F122M F875M		1	0	1062	9		3
0143-015	1 45 51.2	-1 20 31	FOS/BL	ACCUM	4.3	PRISM	3500	1	600	1027	0		1
0143-015	1 45 51.2	-1 20 31	FOS/BL	ACCUM	4.3	G160L	1650	1	50	1027	0		2
0143-015	1 45 51.2	-1 20 31	FOS/BL	ACCUM	4.3	G160L	1650	1	1200	1027	0		1
0143-015	1 45 51.2	-1 20 31	FOS/BL	ACQ/BINA	4.3	MIRROR		1	130	1027	0	ACQ	1
0143-016	1 45 51.2	-1 20 31	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	1235	0		1
0143-010	1 46 19.9	-0 46 29	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	1235	0		1
TEX0145+386	1 48 24.4	38 54 5	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
TEX0145+386	1 48 24.4	38 54 5	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
PKS0146-500	1 48 52.7	-49 47 12	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
PKS0146-500	1 48 52.7	-49 47 12	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
UM675	1 52 27.3	-20 1 7	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
UM675	1 52 27.3	-20 1 7	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
UM675	1 52 27.3	-20 1 7	FOS/RD	ACCUM	1.0	G160L	1600	1	6000	3051	0		1
UM675	1 52 27.3	-20 1 7	FOS/RD	ACCUM	4.3	G160L	1600	1	100	3051	0		1
UM675	1 52 27.3	-20 1 7	FOS/RD	ACQ/BINA	4.3	MIRROR		1	30	3199	1	ACQ	1
UM675	1 52 27.3	-20 1 7	FOS/RD	ACCUM	4.3	G270H	2700	1	3200	3199	1		1
UM675	1 52 27.3	-20 1 7	FOS/RD	ACQ/BINA	4.3	MIRROR		1	22	3051	0	ACQ	1
POINT0150-334INCA221-12	1 52 27.4	-33 4 2	S/C	POINTING	V1			1	1	4155	3	CON	1
B20149+33	1 52 34.6	33 50 34	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
B20149+33	1 52 34.6	33 50 34	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
B20149+33	1 52 34.6	33 50 34	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
B20149+33	1 52 34.6	33 50 34	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
INCA221-12	1 52 43.1	-33 14 26	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
INCA221-14	1 53 3.2	-33 18 43	FGS	POS	2	F5ND		1	51	1532	9	UNP	4
0150-334INCA221-12	1 53 9.9	-33 10 26	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
0150-334INCA221-14	1 53 10.0	-33 10 26	FGS	POS	2	F550W		1	51	1532	9	UNP	2
0150-334INCA221-14	1 53 10.0	-33 10 26	FGS	POS	2	F583W		1	51	1532	9	UNP	4
0151+048	1 53 53.9	5 2 57	FOC/96	IMAGE	512X512	F1ND F430W		1	600	3177	1	CON SEL	1
POINT0150-334INCA221-14	1 53 55.0	-33 16 10	S/C	POINTING	V1			1	0	1532	9		2
0154-512U	1 56 34.7	-51 0 11	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
0154-512U	1 56 34.7	-51 0 11	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
0153+045	1 56 36.1	4 45 36	FOS/BL	ACCUM	4.3	PRISM	3500	1	600	3199	1		1
0153+045	1 56 36.1	4 45 36	FOS/BL	ACCUM	4.3	G160L	1650	1	1200	3199	1		1
0153+045	1 56 36.1	4 45 36	FOS/BL	ACQ/BINA	4.3	MIRROR		1	169	3199	1	ACQ	1
0153+744INCA221-15	1 57 34.9	74 42 43	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
S50153+74	1 57 35.1	74 42 42	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
S50153+74	1 57 35.1	74 42 42	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
INCA221-15	1 57 42.4	74 37 30	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
POINT0153+744INCA221-15	2 0 20.4	74 40 33	S/C	POINTING	V1			1	1	4155	3	CON	1
B20201+36B	2 4 55.6	36 49 18	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
B20201+36B	2 4 55.6	36 49 18	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NAB0205+02	2 7 49.8	2 42 55	FOS/RD	RAPID	1.0	G270H	2700	1	1230	4120	3		1
NAB0205+02	2 7 49.8	2 42 55	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	4120	3	ACQ	1
NAB0205+02	2 7 49.8	2 42 55	FOS/RD	RAPID	1.0	G190H	1900	1	3299	4120	3		1
0215+015	2 17 49.0	1 44 50	FOC/96	IMAGE	512X512	F1ND F430W		1	600	1236	0	SEL	1
0215+015	2 17 49.0	1 44 50	FOC/96	IMAGE	512X512	F1ND F430W		1	600	3177	1	CON SEL	1
3C66A	2 22 39.6	43 2 8	FOS/BL	ACCUM	0.25X2.0	G190H		1	1200	4061	2		1
3C66A	2 22 39.6	43 2 8	FOS/BL	ACCUM	0.25X2.0	G270H		1	720	4061	2		1
3C66A	2 22 39.6	43 2 8	FOS/BL	ACCUM	0.25X2.0	G130H		1	10725	4061	2		1
3C66A	2 22 39.6	43 2 8	FOS/BL	ACQ/BINA	4.3	MIRROR		1	18	4061	2	ACQ	1
3C66A	2 22 39.6	43 2 8	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	18	4061	2	ACQ	1
3C66B	2 23 11.5	42 59 31	PC	IMAGE	PC6	F555W POL0		1	900	3344	3		1
3C66B	2 23 11.5	42 59 31	PC	IMAGE	PC6	F555W POL60		1	900	3344	3		1
3C66B	2 23 11.5	42 59 31	PC	IMAGE	PC6	F555W POL120		1	900	3344	3		1
3C66B	2 23 11.5	42 59 31	FOC/96	IMAGE	512X512	F130M		1	2400	1228	0		1
3C66B	2 23 11.5	42 59 31	FOC/96	IMAGE	512X512	F220W		2	2400	1228	0		1
3C66B	2 23 11.5	42 59 33	FOC/96	IMAGE	512X512	F320W		1	3000	2994	0		1
3C66B	2 23 11.5	42 59 33	FOC/96	IMAGE	512X512	F430W		1	3000	2994	0		1
RWTRI	2 25 35.6	28 5 52	FGS	POS	2	F550W		1	52	2933	9		48
RWTRI	2 25 35.6	28 5 52	FGS	TRANS	ANY	F583W		1	100	2933	9		1
NGC925-OFF	2 27 4.0	33 35 49	WFC	IMAGE	ALL	F555W		1	1900	3010	0		1
NGC925	2 27 4.0	33 36 19	WFC	IMAGE	ALL	F555W		1	1900	3010	0		1
NGC936-NUC	2 27 37.5	-1 9 18	PC	IMAGE	PC6	F555W		1	500	4169	3		2
NGC936-NUC	2 27 37.5	-1 9 18	PC	IMAGE	PCALL	F785LP		1	11	4167	4	CON	1
NGC936-NUC	2 27 37.5	-1 9 18	PC	IMAGE	PCALL	F785LP		1	110	4167	4	CON	1
NGC936-NUC	2 27 37.5	-1 9 18	PC	IMAGE	PCALL	F555W		1	15	4167	4	CON	1
NGC936-NUC	2 27 37.5	-1 9 18	PC	IMAGE	PCALL	F555W		1	153	4167	4	CON	1
PKS0225-014	2 28 7.8	-1 15 41	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
PKS0225-014	2 28 7.8	-1 15 41	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
Q0226-104	2 28 39.1	-10 11 10	FOS/RD	ACCUM	1.0	G270H	2759	1	2000	1146	1		1
Q0226-104	2 28 39.1	-10 11 10	FOS/RD	ACCUM	1.0	G190H	1980	1	3000	3953	2		1
Q0226-104	2 28 39.1	-10 11 10	FOS/RD	ACQ/BINA	4.3	MIRROR		1	19	1146	1	ACQ	1
Q0226-104	2 28 39.1	-10 11 10	FOS/RD	ACQ/BINA	4.3	MIRROR		1	19	3953	2	ACQ	1
HD15570	2 32 49.4	61 22 43	HSP/UV2	SINGLE	1.0	F152M		1	1800	3926	1		2
HD15570	2 32 49.4	61 22 43	HSP/UV2	PRISM	1.0	F262M/F145M		1	1800	1095	1		2
FEIGE24	2 35 7.4	3 43 55	FGS	POS	2	F550W		1	52	2932	9		48
FEIGE24	2 35 7.4	3 43 55	FGS	TRANS	ANY	F583W		1	100	2932	9		1
HD16160	2 36 4.8	6 53 13	PC	IMAGE	P6	F622W		4	1000	1062	9		2
HD16160	2 36 4.8	6 53 13	PC	IMAGE	P6	F875M		4	1000	1062	9		2
HD16160	2 36 4.8	6 53 13	PC	IMAGE	P6	F122M F875M		1	5	1062	9		2
AO0235+164	2 38 38.9	16 37 0	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
AO0235+164	2 38 38.9	16 37 0	WFC	IMAGE	W1	F791W		1	600	1035	9		1
AO0235+164	2 38 38.9	16 37 0	WFC	IMAGE	W1	F492M		1	1200	1035	9		1
AO0235+164	2 38 38.9	16 37 0	WFC	IMAGE	W1	F128LP		1	600	1035	9		1
AO0235+164	2 38 38.9	16 37 0	FOS/RD	RAPID	1.0	G160L	1600	1	5000	1035	3		1
AO0235+164	2 38 38.9	16 37 0	FOS/RD	RAPID	1.0	G270H	2700	1	3000	1035	3		1
AO0235+164	2 38 38.9	16 37 0	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	1035	3	ACQ	1
AO0235+164BKG	2 38 39.9	16 37 0*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
INCA221-18	2 39 31.4	-23 5 45	FGS	POS	3	PUPIL		1	51	4155	3	CCN	2
INCA221-18	2 39 31.5	-23 5 45	FGS	POS	2	F583W		1	51	1532	9	UNP	4
POINT0237-233INCA221 -18	2 39 34.2	-23 17 0	S/C	POINTING	V1			1	1	4155	3	CON	1
POINT0237-233INCA221 -18	2 39 35.6	-23 18 37	S/C	POINTING	V1			1	0	1532	9		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
ABELL370-G047	2 39 51.0	-1 33 55	FOC/48	IMAGE	512X512	F220W		1	960	4072	2		1
ABELL370-G047	2 39 51.0	-1 33 55	FOC/48	IMAGE	512X512	F275W		1	960	4072	2		1
ABELL370-G047	2 39 51.0	-1 33 55	FOC/48	IMAGE	512X512	F342W		1	480	4072	2		1
ABELL370-G047	2 39 51.0	-1 33 55	FOC/48	IMAGE	512X512	F430W		1	480	4072	2		1
ABELL370-G020	2 39 51.3	-1 34 52	FOC/48	IMAGE	512X512	F220W		1	960	4072	2		1
ABELL370-G020	2 39 51.3	-1 34 52	FOC/48	IMAGE	512X512	F275W		1	960	4072	2		1
ABELL370-G020	2 39 51.3	-1 34 52	FOC/48	IMAGE	512X512	F342W		1	480	4072	2		1
ABELL370-G020	2 39 51.3	-1 34 52	FOC/48	IMAGE	512X512	F430W		1	480	4072	2		1
ABELL370-G042	2 39 52.5	-1 33 42	FOC/48	IMAGE	512X512	F220W		1	960	4072	2		1
ABELL370-G042	2 39 52.5	-1 33 42	FOC/48	IMAGE	512X512	F275W		1	960	4072	2		1
ABELL370-G042	2 39 52.5	-1 33 42	FOC/48	IMAGE	512X512	F342W		1	480	4072	2		1
ABELL370-G042	2 39 52.5	-1 33 42	FOC/48	IMAGE	512X512	F430W		1	480	4072	2		1
ABELL370-G001	2 39 52.7	-1 34 22	FOC/48	IMAGE	512X512	F220W		1	960	4072	2		1
ABELL370-G001	2 39 52.7	-1 34 22	FOC/48	IMAGE	512X512	F275W		1	960	4072	2		1
ABELL370-G001	2 39 52.7	-1 34 22	FOC/48	IMAGE	512X512	F342W		1	480	4072	2		1
ABELL370-G001	2 39 52.7	-1 34 22	FOC/48	IMAGE	512X512	F430W		1	480	4072	2		1
ABELL370-G102	2 39 53.1	-1 35 5	FOC/48	IMAGE	512X512	F220W		1	960	4072	2		1
ABELL370-G102	2 39 53.1	-1 35 5	FOC/48	IMAGE	512X512	F275W		1	960	4072	2		1
ABELL370-G102	2 39 53.1	-1 35 5	FOC/48	IMAGE	512X512	F342W		1	480	4072	2		1
ABELL370-G102	2 39 53.1	-1 35 5	FOC/48	IMAGE	512X512	F430W		1	480	4072	2		1
ABELL370-G094	2 39 54.2	-1 35 9	FOC/48	IMAGE	512X512	F220W		1	960	4142	3		1
ABELL370-G094	2 39 54.2	-1 35 9	FOC/48	IMAGE	512X512	F275W		1	960	4142	3		1
ABELL370-G094	2 39 54.2	-1 35 9	FOC/48	IMAGE	512X512	F342W		1	480	4142	3		1
ABELL370-G094	2 39 54.2	-1 35 9	FOC/48	IMAGE	512X512	F430W		1	480	4142	3		1
ABELL370-G027	2 39 54.6	-1 34 41	FOC/48	IMAGE	512X512	F220W		1	960	4142	3		1
ABELL370-G027	2 39 54.6	-1 34 41	FOC/48	IMAGE	512X512	F275W		1	960	4142	3		1
ABELL370-G027	2 39 54.6	-1 34 41	FOC/48	IMAGE	512X512	F342W		1	480	4142	3		1
ABELL370-G027	2 39 54.6	-1 34 41	FOC/48	IMAGE	512X512	F430W		1	480	4142	3		1
ABELL370-G032	2 39 54.6	-1 33 56	FOC/48	IMAGE	512X512	F220W		1	960	4072	2		1
ABELL370-G032	2 39 54.6	-1 33 56	FOC/48	IMAGE	512X512	F275W		1	960	4072	2		1
ABELL370-G032	2 39 54.6	-1 33 56	FOC/48	IMAGE	512X512	F342W		1	480	4072	2		1
ABELL370-G032	2 39 54.6	-1 33 56	FOC/48	IMAGE	512X512	F430W		1	480	4072	2		1
ABELL370-G081	2 39 56.2	-1 34 25	FOC/48	IMAGE	512X512	F220W		1	960	4072	2		1
ABELL370-G081	2 39 56.2	-1 34 25	FOC/48	IMAGE	512X512	F275W		1	960	4072	2		1
ABELL370-G081	2 39 56.2	-1 34 25	FOC/48	IMAGE	512X512	F342W		1	480	4072	2		1
ABELL370-G081	2 39 56.2	-1 34 25	FOC/48	IMAGE	512X512	F430W		1	480	4072	2		1
FORNAX-CLUSTER4	2 40 7.4	-34 32 15	WFC	IMAGE	WF2	F555W		1	200	1110	3		1
FORNAX-CLUSTER4	2 40 7.4	-34 32 15	WFC	IMAGE	WF2	F555W		1	2000	1110	3		1
FORNAX-CLUSTER4	2 40 7.4	-34 32 15	WFC	IMAGE	WF2	F785LP		1	200	1110	3		1
FORNAX-CLUSTER4	2 40 7.4	-34 32 15	WFC	IMAGE	WF2	F785LP		1	1600	1110	3		1
0237-233INCA221-18	2 40 8.0	-23 9 18	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
0237-233INCA221-18	2 40 8.1	-23 9 18	FGS	POS	2	F583W		1	51	1532	9	UNP	6
0237-233	2 40 8.2	-23 9 16	FOC/96	IMAGE	512X512	F1ND F2ND F430W		1	600	1236	0	SEL	1
0237-233	2 40 8.2	-23 9 16	FOC/96	IMAGE	512X512	F1ND F2ND F430W		1	600	3177	1	CON SEL	1
NGC1052-OFFSET-STARS -FIELD	2 41 2.4	-8 15 59*	WFC	IMAGE	ALL	F606W		1	30	1038	0		1
NGC1052	2 41 4.8	-8 15 21	PC	IMAGE	ALL	F664N		2	900	1038	0		1
NGC1052	2 41 4.8	-8 15 21	PC	IMAGE	ALL	F502N		1	1800	1038	0		1
NGC1052	2 41 4.8	-8 15 21	PC	IMAGE	ALL	F547M		1	360	1038	0		1
NGC1052-NUC	2 41 4.9	-8 15 21	PC	IMAGE	PC6	F555W		1	500	3639	2		2
NGC1052-NUC	2 41 4.9	-8 15 21	PC	IMAGE	PCALL	F702W		1	6	4167	3		1
NGC1052-NUC	2 41 4.9	-8 15 21	PC	IMAGE	PCALL	F702W		1	60	4167	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC1052-NUC	2 41 4.9	-8 15 21	PC	IMAGE	PCALL	F555W		1	266	4167	3		1
NGC1052-NUC	2 41 4.9	-8 15 21	PC	IMAGE	PCALL	F664N		1	120	4167	3		1
NGC1052-NUC	2 41 4.9	-8 15 21	PC	IMAGE	PCALL	F664N		1	1200	4167	3		1
NGC1052-NUC	2 41 4.9	-8 15 21	PC	IMAGE	PCALL	F785LP		1	19	4167	3		1
NGC1052-NUC	2 41 4.9	-8 15 21	PC	IMAGE	PCALL	F555W		1	26	4167	3		1
NGC1052-NUC	2 41 4.9	-8 15 21	PC	IMAGE	PCALL	F785LP		1	189	4167	3		1
NGC1052	2 41 5.0	-8 15 21	FOC/96	IMAGE	512X512	F501N	5010	1	1800	1227	0		1
NGC1052	2 41 5.0	-8 15 21	FOC/96	IMAGE	512X512	F550M	5470	1	1800	1227	0		1
HD17051	2 42 31.7	-50 48 12	HSP/UV1	SINGLE	1.0	F240W		1	3600	3007	0	CON SEL	1
HD17051	2 42 31.7	-50 48 12	HSP/UV1	SINGLE	1.0	F140LP		1	3600	3007	0	CON SEL	1
HD17051	2 42 31.7	-50 48 12	HSP/POL	SINGLE	POL0	F327M		1	3600	3007	0	CON SEL	1
NGC1068	2 42 40.7	-0 0 49	PC	IMAGE	PCALL	F502N		1	900	3274	9		1
NGC1068	2 42 40.7	-0 0 49	PC	IMAGE	PCALL	F664N		1	900	3274	9		1
NGC1068	2 42 40.7	-0 0 49	PC	IMAGE	PCALL	F547M		1	450	3274	9		1
NGC1068	2 42 40.7	-0 0 49	FOS/BL	ACCUM	0.3	G190H		1	1000	1036	0		1
NGC1068	2 42 40.7	-0 0 49	FOS/RD	ACCUM	0.3	G270H		1	700	1036	0		1
NGC1068	2 42 40.7	-0 0 49	FOS/RD	ACCUM	0.3	G400H		1	600	1036	0		1
NGC1068	2 42 40.7	-0 0 49	FOS/RD	ACCUM	0.3	G570H		1	600	1036	0		1
NGC1068	2 42 40.7	-0 0 49	FOS/BL	ACCUM	0.3	G130H		1	1500	1036	0		1
NGC1068	2 42 40.7	-0 0 49	FOS/BL	ACQ/PEAK	0.3	G270H	2620	1	10	1036	0	ACQ	1
NGC1068	2 42 40.7	-0 0 49	FOS/BL	ACQ/PEAK	0.5	G270H	2620	1	5	1036	0	ACQ	1
NGC1068	2 42 40.7	-0 0 49	FOS/BL	ACQ/PEAK	1.0	G270H	2620	1	2	1036	0	ACQ	1
NGC1068	2 42 40.7	-0 0 49	FOS/BL	ACQ/PEAK	4.3	G270H	2620	1	1	1036	0	ACQ	1
NGC1068	2 42 40.7	-0 0 49	FOS/RD	ACQ/PEAK	0.3	G270H	2620	1	10	1036	0	ACQ	1
NGC1068	2 42 40.7	-0 0 49	FOS/RD	ACQ/PEAK	0.5	G270H	2620	1	5	1036	0	ACQ	1
NGC1068	2 42 40.7	-0 0 49	FOS/RD	ACQ/PEAK	1.0	G270H	2620	1	2	1036	0	ACQ	1
NGC1068	2 42 40.7	-0 0 49	FOS/RD	ACQ/PEAK	4.3	G270H	2620	1	1	1036	0	ACQ	1
NGC1068	2 42 40.7	-0 0 49	FOS/BL	ACQ/PEAK	0.3	G270H	2620	1	10	3195	1	ACQ CON SEL	1
NGC1068	2 42 40.7	-0 0 49	FOS/BL	ACQ/PEAK	0.5	G270H	2620	1	5	3195	1	ACQ CON SEL	1
NGC1068	2 42 40.7	-0 0 49	FOS/BL	ACQ/PEAK	1.0	G270H	2620	1	2	3195	1	ACQ CON SEL	1
NGC1068	2 42 40.7	-0 0 49	FOS/BL	ACQ/PEAK	4.3	G270H	2620	1	1	3195	1	ACQ CON SEL	1
NGC1068	2 42 40.7	-0 0 49	FOS/RD	ACQ/PEAK	0.3	G270H	2620	1	10	3195	1	ACQ CON SEL	2
NGC1068	2 42 40.7	-0 0 49	FOS/RD	ACQ/PEAK	0.5	G270H	2620	1	5	3195	1	ACQ CON SEL	2
NGC1068	2 42 40.7	-0 0 49	FOS/RD	ACQ/PEAK	1.0	G270H	2620	1	2	3195	1	ACQ CON SEL	2
NGC1068	2 42 40.7	-0 0 49	FOS/RD	ACQ/PEAK	4.3	G270H	2620	1	1	3195	1	ACQ CON SEL	2
NGC1068-CLOUD3	2 42 40.7	-0 0 49*	FOS/BL	ACCUM	0.3	G190H		1	1000	3195	1	CON SEL	1
NGC1068-CLOUD3	2 42 40.7	-0 0 49*	FOS/RD	ACCUM	0.3	G270H		1	700	3195	1	CON SEL	1
NGC1068-CLOUD3	2 42 40.7	-0 0 49*	FOS/RD	ACCUM	0.3	G400H		1	600	3195	1	CON SEL	1
NGC1068-CLOUD3	2 42 40.7	-0 0 49*	FOS/RD	ACCUM	0.3	G570H		1	600	3195	1	CON SEL	1
NGC1068-CLOUD3	2 42 40.7	-0 0 49*	FOS/BL	ACCUM	0.3	G130H		1	1500	3195	1	CON SEL	1
NGC1068-CLOUD3	2 42 40.7	-0 0 49*	FOS/RD	ACCUM	0.3	G570H		1	1200	3195	1	CON SEL	1
NGC1068-CLOUD4	2 42 40.7	-0 0 49*	FOS/RD	ACCUM	0.3	G570H		1	1200	3195	1	CON SEL	1
NGC1068-CLOUD5	2 42 40.7	-0 0 49*	FOS/RD	ACCUM	0.3	G570H		1	1200	3195	1	CON SEL	1
NGC1068-CLOUD1	2 42 40.7	-0 0 48*	FOS/BL	ACCUM	0.3	G190H		1	1000	1036	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC1068-CLOUD1	2 42 40.7	-0 0 48*	FOS/RD	ACCUM	0.3	G270H		1	700	1036	0		1
NGC1068-CLOUD1	2 42 40.7	-0 0 48*	FOS/RD	ACCUM	0.3	G400H		1	600	1036	0		1
NGC1068-CLOUD1	2 42 40.7	-0 0 48*	FOS/RD	ACCUM	0.3	G570H		1	600	1036	0		1
NGC1068-CLOUD1	2 42 40.7	-0 0 48*	FOS/BL	ACCUM	0.3	G130H		1	1500	1036	0		1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/BL	ACCUM	0.3	G130H		1	600	3075	0		1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/BL	ACCUM	0.3	G190H		1	300	3075	0		1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/RD	ACCUM	0.3	G270H		1	300	3075	0		1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/RD	ACCUM	0.3	G400H		1	300	3075	0		1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/RD	ACCUM	0.3	G570H		1	300	3075	0		1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/BL	ACCUM	0.3	G190H		1	1000	3112	0		1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/BL	ACCUM	0.3	G270H		1	700	3112	0		1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/BL	ACCUM	0.3	G130H		1	1500	3112	0		1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	0	3075	0	ACQ	1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/RD	ACQ/PEAK	4.3	MIRROR		1	0	3075	0	ACQ	1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	3075	0	ACQ	1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/BL	ACQ/PEAK	0.3	G270H	2620	1	10	3112	0	ACQ	1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/BL	ACQ/PEAK	0.5	G270H	2620	1	5	3112	0	ACQ	1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/BL	ACQ/PEAK	1.0	G270H	2620	1	2	3112	0	ACQ	1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/BL	ACQ/PEAK	4.3	G270H	2620	1	1	3112	0	ACQ	1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/BL	ACQ/PEAK	0.3	PRISM	4425	1	1	3075	0	ACQ	1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/RD	ACQ/PEAK	0.3	PRISM	4425	1	0	3075	0	ACQ	1
NGC1068-NUC	2 42 40.7	-0 0 49*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	3075	0	ACQ	1
NGC1068	2 42 40.7	-0 0 48	FOC/96	IMAGE	512X512	F320W POL0		1	3600	3504	2		1
NGC1068	2 42 40.7	-0 0 48	FOC/96	IMAGE	512X512	F152M	1500	1	2400	1227	0		1
NGC1068	2 42 40.7	-0 0 48	FOC/96	IMAGE	512X512	F320W POL60		1	3600	3504	2		1
NGC1068	2 42 40.7	-0 0 48	FOC/96	IMAGE	512X512	F140M	5010	1	2000	1227	0		1
NGC1068	2 42 40.7	-0 0 48	FOC/96	IMAGE	512X512	F320W POL120		1	3600	3504	2		1
NGC1068	2 42 40.7	-0 0 48	FOC/96	IMAGE	512X512	F120M	1215	1	2400	1227	0		1
NGC1068	2 42 40.7	-0 0 48	FOC/96	IMAGE	512X512	F501N	5010	1	2400	1227	0		1
NGC1068	2 42 40.7	-0 0 48	FOC/96	IMAGE	512X512	F550M	5470	1	1500	1227	0		1
NGC1068	2 42 40.7	-0 0 48	FOC/96	IMAGE	512X512	F372M	3727	1	2400	1227	0		1
NGC1068-CLOUD2	2 42 40.7	-0 0 48*	FOS/BL	ACCUM	0.3	G190H		1	1000	1036	0		1
NGC1068-CLOUD2	2 42 40.7	-0 0 48*	FOS/RD	ACCUM	0.3	G270H		1	700	1036	0		1
NGC1068-CLOUD2	2 42 40.7	-0 0 48*	FOS/RD	ACCUM	0.3	G400H		1	600	1036	0		1
NGC1068-CLOUD2	2 42 40.7	-0 0 48*	FOS/RD	ACCUM	0.3	G570H		1	600	1036	0		1
NGC1068-CLOUD2	2 42 40.7	-0 0 48*	FOS/BL	ACCUM	0.3	G130H		1	1500	1036	0		1
NGC1068	2 42 40.7	-0 0 48	PC	IMAGE	ALL	F502N		1	900	3001	0	ACQ	1
NGC1068	2 42 40.7	-0 0 48	PC	IMAGE	ALL	F502N		1	900	3075	0	ACQ	1
NGC1068	2 42 40.7	-0 0 48	PC	IMAGE	ALL	F547M		1	180	3001	0	ACQ	1
NGC1068	2 42 40.7	-0 0 48	PC	IMAGE	ALL	F547M		1	180	3075	0	ACQ	1
NGC1068-NUC	2 42 40.7	-0 0 48*	FOS/BL	ACCUM	0.3	G130H		1	600	3001	0		1
NGC1068-NUC	2 42 40.7	-0 0 48*	FOS/BL	ACCUM	0.3	G190H		1	300	3001	0		1
NGC1068-NUC	2 42 40.7	-0 0 48*	FOS/RD	ACCUM	0.3	G270H		1	300	3001	0		1
NGC1068-NUC	2 42 40.7	-0 0 48*	FOS/RD	ACCUM	0.3	G400H		1	300	3001	0		1
NGC1068-NUC	2 42 40.7	-0 0 48*	FOS/RD	ACCUM	0.3	G570H		1	300	3001	0		1
NGC1068-NUC	2 42 40.7	-0 0 48*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	3001	0	ACQ	1
NGC1068-NUC	2 42 40.7	-0 0 48*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	3001	0	ACQ	1
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL0	F216M		1	180	3248	3		1
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL0	F237M		1	180	3248	3		1
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL0	F277M		1	180	3248	3		10
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL0	F327M		1	180	3248	3		1
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL45	F216M		1	180	3248	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL45	F237M		1	180	3248	3		1
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL45	F277M		1	180	3248	3		10
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL45	F327M		1	180	3248	3		1
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL90	F216M		1	180	3248	3		1
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL90	F237M		1	180	3248	3		1
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL90	F277M		1	180	3248	3		10
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL90	F327M		1	180	3248	3		1
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL135	F216M		1	180	3248	3		1
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL135	F237M		1	180	3248	3		1
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL135	F277M		1	180	3248	3		10
NGC1068	2 42 40.8	-0 0 48	HSP/POL	SINGLE	POL135	F327M		1	180	3248	3		1
NGC1068-NUC	2 42 40.8	-0 0 47	PC	IMAGE	P6	F439W		2	500	1118	0		1
NGC1068-NUC	2 42 40.8	-0 0 47	PC	IMAGE	P6	F664N		2	600	1118	0		1
NGC1068-NUC	2 42 40.8	-0 0 47	PC	IMAGE	P6	F555W POL0		2	400	1118	0		1
NGC1068-NUC	2 42 40.8	-0 0 47	PC	IMAGE	P6	F555W POL60		2	400	1118	0		1
NGC1068-NUC	2 42 40.8	-0 0 47	PC	IMAGE	P6	F555W POL120		2	400	1118	0		1
PSF-NGC1068	2 43 17.1	0 5 14	PC	IMAGE	P6	F439W		1	3	1118	0		1
PSF-NGC1068	2 43 17.1	0 5 14	PC	IMAGE	P6	F555W		1	0	1118	0		1
PSF-NGC1068	2 43 17.1	0 5 14	PC	IMAGE	P6	F664N		1	1	1118	0		1
0241+622INCA221-20	2 44 58.3	62 28 6	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
TAU1-ERI	2 45 4.9	-18 34 22	WFC	IMAGE	WFALL	F555W		1	40	3313	4	CON	2
TAU1-ERI	2 45 4.9	-18 34 22	WFC	IMAGE	WFALL	F555W		1	2000	3313	4	CON	2
INCA221-20	2 45 8.6	62 35 31	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
NGC1097	2 46 19.3	-30 16 33	FOC/96	IMAGE	512X512	F220W		1	1000	3344	3		1
NGC1097	2 46 19.3	-30 16 33	FOC/96	IMAGE	512X512	F501N		1	1000	3344	3		1
NGC1097	2 46 19.3	-30 16 33	FOC/96	IMAGE	512X512	F502M		1	1000	3344	3		1
NGC1097	2 46 19.3	-30 16 33	FOC/96	IMAGE	512X512	F550M		1	1000	3344	3		1
NGC1097-NUC	2 46 19.3	-30 16 33	PC	IMAGE	PC6	F555W		1	500	3639	2		2
NGC1097-NUC	2 46 19.3	-30 16 33	PC	IMAGE	PCALL	F555W		1	80	4167	4	CON	1
NGC1097-NUC	2 46 19.3	-30 16 33	PC	IMAGE	PCALL	F555W		1	800	4167	4	CON	1
NGC1097-NUC	2 46 19.3	-30 16 33	PC	IMAGE	PCALL	F785LP		1	70	4167	4	CON	1
NGC1097-NUC	2 46 19.3	-30 16 33	PC	IMAGE	PCALL	F785LP		1	700	4167	4	CON	1
POINT0241+622INCA221 -20	2 46 39.7	62 31 4	S/C	POINTING	V1			1	1	4155	3	CON	1
Q0249-184	2 51 48.0	-18 14 29	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
3C75-FIELD	2 57 41.6	6 1 29	WFC	IMAGE	ALL	F439W	4353	1	15	3272	9	ACQ CON	1
3C75	2 57 41.6	6 1 37	FOS/RD	ACCUM	1.0	PRISM	5400	1	500	3272	9	CON	1
3C75	2 57 41.6	6 1 37	FOC/96	IMAGE	512X512	F370LP	4040	1	300	1033	0		1
3C75	2 57 41.6	6 1 37	FOC/96	IMAGE	512X512	F220W F231M	2260	1	900	1033	0		1
3C75-OFFSET	2 57 41.6	6 1 37*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3272	9	ACQ CON	1
FEIGE29	2 57 50.1	-2 0 1	HRS	IMAGE	2.0	MIRROR-A2		1	484	1064	3	ACQ	1
FEIGE29	2 57 50.1	-2 0 1	HRS	ACCUM	0.25	G160M	1305	1	1200	1064	3		1
FEIGE29	2 57 50.1	-2 0 1	HRS	ACCUM	0.25	G160M	1362	1	1200	1064	3		1
FEIGE29	2 57 50.1	-2 0 1	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	46	1064	3	ACQ	1
POINT-CP7.1	3 0 43.5	1 51 13	S/C	POINTING	V1			1	0	1014	3		1
POINT-CP7.2	3 1 34.3	2 3 49	S/C	POINTING	V1			1	0	1014	3	CON	1
Q0301-006	3 3 41.0	-0 23 22	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
Q0302-003	3 4 49.8	-0 8 14	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
1E0302-223	3 4 49.8	-22 11 52	FOS/RD	ACQ/PEAK	4.3	MIRROR		1	22	4120	3	ACQ	1
1E0302-223	3 4 49.8	-22 11 52	FOS/RD	ACCUM	0.5	G270H	2700	1	6000	3054	0		1
1E0302-223	3 4 49.8	-22 11 52	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3054	0	ACQ	1
1E0302-223	3 4 49.8	-22 11 52	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	4120	3	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
1E0302-223	3 4 49.8	-22 11 52	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	3700	4120	3		1
3C78	3 8 26.3	4 6 38	FOS/RD	ACCUM	1.0	PRISM	5400	1	500	3272	9	CON	1
3C78	3 8 26.3	4 6 38	FOC/96	IMAGE	512X512	F370LP	4040	1	300	1033	0		1
3C78	3 8 26.3	4 6 38	FOC/96	IMAGE	512X512	F220W F231M	2260	1	900	1033	0		1
3C78-OFFSET	3 8 26.3	4 6 38*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3272	9	ACQ CON	1
3C78	3 8 26.3	4 6 40	FOC/96	IMAGE	512X512	F220W		1	900	3344	3		1
3C78	3 8 26.3	4 6 40	FOC/96	IMAGE	512X512	F430W		1	900	3344	3		1
3C78	3 8 26.3	4 6 40	FOC/96	IMAGE	512X512	F372M		1	1800	3344	3		1
3C78	3 8 26.3	4 6 40	FOC/96	IMAGE	512X512	F501N		1	1800	3344	3		1
3C78-FIELD	3 8 29.3	4 6 58	WFC	IMAGE	ALL	F439W	4353	1	15	3272	9	ACQ CON	1
POINT0312-770INCA221-22	3 9 40.6	-76 59 54	S/C	POINTING	V1			1	1	4155	3	CON	1
3C79	3 10 0.5	17 6 0	WFC	IMAGE	WFALL	F555W		1	140	3287	4	CON	1
3C79	3 10 0.5	17 6 0	WFC	IMAGE	WFALL	F725LP		1	200	3287	4	CON	1
3C79	3 10 0.5	17 6 0	WFC	IMAGE	WFALL	F725LP		1	480	3287	4	CON	1
0308-193	3 10 28.5	-19 9 27	FOS/BL	RAPID	4.3	PRISM	3500	1	600	4121	3		1
0308-193	3 10 28.5	-19 9 27	FOS/BL	ACQ/BINA	4.3	MIRROR		1	60	4121	3	ACQ	1
0308-193	3 10 28.5	-19 9 27	FOS/BL	RAPID	4.3	G160L	1650	1	1200	4121	3		1
0308+1902	3 11 42.6	19 13 40	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
0308+1902	3 11 42.6	19 13 40	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
0312-770INCA221-22	3 11 55.1	-76 51 52	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
0312-770INCA221-22	3 11 55.1	-76 51 52	FGS	POS	2	F583W		1	51	1532	9	UNP	6
INCA221-22	3 13 3.9	-77 1 44	FGS	POS	2	F583W		1	51	1532	9	UNP	4
INCA221-22	3 13 4.3	-77 1 44	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
EF-ERI	3 14 13.0	-22 35 41	FOS/BL	ACCUM	4.3	G130H		1	1440	4136	3		8
EF-ERI	3 14 13.0	-22 35 41	FOS/BL	ACQ/BINA	4.3	MIRROR		1	7	4136	3	ACQ	1
EF-ERI	3 14 13.1	-22 35 41	HRS	ACCUM	2.0	G140L	1520	8	300	1155	3		1
POINT0312-770INCA221-22	3 15 26.8	-76 52 17	S/C	POINTING	V1			1	0	1532	9		2
HD20135	3 16 1.9	48 1 41	HRS	ACCUM	2.0	G140L	1430	4	375	1210	0		1
PSF-NGC1275	3 16 49.2	42 29 46	PC	IMAGE	P6	F555W		1	0	1105	0		1
PSF-NGC1275	3 16 49.2	42 29 46	PC	IMAGE	P6	F702W		1	0	1105	0		1
SAO38695	3 16 49.2	42 29 48	PC	IMAGE	PC6	F336W		1	20	4086	2		1
SAO38695	3 16 49.2	42 29 48	PC	IMAGE	PC6	F336W		1	60	4086	2		1
SAO38695	3 16 49.2	42 29 48	PC	IMAGE	PC6	F555W		1	0	4086	2		1
SAO38695	3 16 49.2	42 29 48	PC	IMAGE	PC6	F702W		1	0	4086	2		1
SAO38695	3 16 49.2	42 29 48	PC	IMAGE	PC6	F336W		1	35	4086	2		1
SAO38695	3 16 49.2	42 29 48	PC	IMAGE	PC6	F547M		1	1	4086	2		1
SAO38695	3 16 49.2	42 29 48	PC	IMAGE	PC6	F702W		1	0	4086	2		1
SAO38695	3 16 49.2	42 29 48	PC	IMAGE	PC6	F547M		1	0	4086	2		1
SAO38695	3 16 49.2	42 29 48	PC	IMAGE	PC6	F555W		1	0	4086	2		1
3C83.1	3 18 15.8	41 51 28	FOS/RD	ACCUM	1.0	PRISM	5400	1	500	3272	9	CON	1
3C83.1	3 18 15.8	41 51 28	FOC/96	IMAGE	512X512	F370LP	4040	1	300	1033	0		1
3C83.1	3 18 15.8	41 51 28	FOC/96	IMAGE	512X512	F220W F231M	2260	1	900	1033	0		1
3C83.1-FIELD	3 18 15.8	41 51 28	WFC	IMAGE	ALL	F439W	4353	1	15	3272	9	ACQ CON	1
3C83.1-OFFSET	3 18 15.8	41 51 28*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3272	9	ACQ CON	1
POINT0316+413INCA221-23	3 18 36.9	41 28 5	S/C	POINTING	V1			1	0	1532	9		2
INCA221-23	3 19 10.1	41 16 17	FGS	POS	2	F550W		1	51	1532	9		5
NGC1275	3 19 48.1	41 30 38	PC	IMAGE	PC6	F547M		3	2000	4086	2		1
NGC1275	3 19 48.1	41 30 38	PC	IMAGE	PC6	F555W		3	100	4086	2		1
NGC1275	3 19 48.1	41 30 38	PC	IMAGE	PC6	F555W		3	2000	4086	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC1275	3 19 48.1	41 30 38	PC	IMAGE	PC6	F702W		3	100	4086	2		1
NGC1275	3 19 48.1	41 30 38	PC	IMAGE	PC6	F702W		3	2000	4086	2		1
NGC1275	3 19 48.1	41 30 38	PC	IMAGE	PC6	F336W		4	2000	4086	2		1
NGC1275	3 19 48.1	41 30 39	PC	IMAGE	P6	F555W		1	700	1105	0		2
NGC1275	3 19 48.1	41 30 39	PC	IMAGE	P6	F664N		1	1900	1105	0		1
NGC1275	3 19 48.1	41 30 39	PC	IMAGE	P6	F673N		1	1900	1105	0		1
NGC1275	3 19 48.1	41 30 39	PC	IMAGE	P6	F702W		1	1400	1105	0		1
NGC1275	3 19 48.1	41 30 39	WFC	IMAGE	WF1	F555W		1	30	3292	3		1
NGC1275	3 19 48.1	41 30 39	WFC	IMAGE	WF1	F555W		1	400	3292	3		1
NGC1275	3 19 48.1	41 30 39	WFC	IMAGE	WF1	F555W		1	700	3292	3		1
NGC1275	3 19 48.1	41 30 39	WFC	IMAGE	WF1	F664N		1	30	3292	3		1
NGC1275	3 19 48.1	41 30 39	WFC	IMAGE	WF1	F664N		1	300	3292	3		1
NGC1275	3 19 48.1	41 30 39	WFC	IMAGE	WF1	F664N		1	700	3292	3		1
NGC1275	3 19 48.1	41 30 39	WFC	IMAGE	WF1	F555W		1	230	3292	3		1
NGC1275	3 19 48.1	41 30 39	WFC	IMAGE	WF1	F664N		1	230	3292	3		1
NGC1275	3 19 48.1	41 30 39	WFC	IMAGE	WF1	F785LP		1	30	3292	3		1
NGC1275	3 19 48.1	41 30 39	WFC	IMAGE	WF1	F785LP		1	400	3292	3		1
NGC1275	3 19 48.1	41 30 39	WFC	IMAGE	WF1	F785LP		1	700	3292	3		1
NGC1275	3 19 48.1	41 30 39	WFC	IMAGE	WF1	F785LP		1	230	3292	3		1
NGC1275	3 19 48.2	41 30 42	FOC/96	IMAGE	512X512	F152M	1500	1	2000	1227	0		1
NGC1275	3 19 48.2	41 30 42	FOC/96	IMAGE	512X512	F140M	1400	1	1200	1227	0		1
NGC1275	3 19 48.2	41 30 42	FOC/96	IMAGE	512X512	F190M	5010	1	1200	1227	0		1
NGC1275	3 19 48.2	41 30 42	FOC/96	IMAGE	512X512	F231M	5010	1	1200	1227	0		1
NGC1275	3 19 48.2	41 30 42	FOC/96	IMAGE	512X512	F501N	5010	1	1200	1227	0		1
NGC1275	3 19 48.2	41 30 42	FOC/96	IMAGE	512X512	F550M	5470	1	1200	1227	0		1
NGC1275	3 19 48.2	41 30 42	FOC/96	IMAGE	512X512	F130M	1216	1	1200	1227	0		1
NGC1275	3 19 48.2	41 30 42	FOC/96	IMAGE	512X512	F372M	3727	1	1200	1227	0		1
NGC1275	3 19 48.2	41 30 42	FOC/96	IMAGE	512X512	F502M	5007	1	1200	1227	0		1
NGC1275	3 19 48.2	41 30 42	HSP/POL	SINGLE	POL0	F216M		1	360	3248	2		2
NGC1275	3 19 48.2	41 30 42	HSP/POL	SINGLE	POL0	F277M		1	360	3248	2		1
NGC1275	3 19 48.2	41 30 42	HSP/POL	SINGLE	POL45	F216M		1	360	3248	2		2
NGC1275	3 19 48.2	41 30 42	HSP/POL	SINGLE	POL45	F277M		1	360	3248	2		1
NGC1275	3 19 48.2	41 30 42	HSP/POL	SINGLE	POL90	F216M		1	360	3248	2		2
NGC1275	3 19 48.2	41 30 42	HSP/POL	SINGLE	POL90	F277M		1	360	3248	2		1
NGC1275	3 19 48.2	41 30 42	HSP/POL	SINGLE	POL135	F216M		1	360	3248	2		2
NGC1275	3 19 48.2	41 30 42	HSP/POL	SINGLE	POL135	F277M		1	360	3248	2		1
NGC1275	3 19 48.2	41 30 41	FOC/96	IMAGE	512X512	F372M	3700	1	2000	3180	1		1
NGC1275	3 19 48.2	41 30 41	FOC/96	IMAGE	512X512	F130M	1270	1	2400	3180	1		1
NGC1275	3 19 48.2	41 30 41	FOC/96	IMAGE	512X512	F170M	1760	1	2400	3180	1		1
NGC1275	3 19 48.2	41 30 41	FOC/96	IMAGE	512X512	F190M	1975	1	2000	3180	1		1
0316+413	3 19 48.2	41 30 42	PC	IMAGE	P8	F606W		1	0	1139	9		1
0316+413	3 19 48.2	41 30 42	PC	IMAGE	P8	F725LP		1	0	1139	9		1
0316+413INCA221-23	3 19 48.2	41 30 42	FGS	POS	2	F550W		1	51	1532	9		6
0318-196	3 20 21.1	-19 26 32	FOS/RD	ACCUM	0.25X2.0	G190H		1	8400	4126	3		1
0318-196	3 20 21.1	-19 26 32	FOS/RD	ACCUM	0.25X2.0	G270H		1	2400	4126	3		1
0318-196	3 20 21.1	-19 26 32	FOS/RD	ACQ/BINA	4.3	MIRROR		1	33	4126	3	ACQ	1
0318-196	3 20 21.1	-19 26 32	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	33	4126	3	ACQ	1
NGC1316A	3 22 40.9	-37 12 12	FOC/96	IMAGE	512X512	F120M		1	2400	2956	1		1
NGC1316A	3 22 40.9	-37 12 12	FOC/96	IMAGE	512X512	F342W		1	1200	2956	1		1
NGC1316A	3 22 40.9	-37 12 12	FOC/96	IMAGE	512X512	F372M		1	2400	2956	1		1
NGC1316-NUC	3 22 41.7	-37 12 30	PC	IMAGE	P6	F555W		1	50	1118	0		1
NGC1316-NUC	3 22 41.7	-37 12 30	PC	IMAGE	P6	F555W		2	260	1118	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC1316-NUC	3 22 41.7	-37 12 30	PC	IMAGE	P6	F785LP		1	260	1118	0		2
NGC1316	3 22 41.7	-37 12 29	FOC/96	IMAGE	512X512	F120M		1	2400	2956	1		1
NGC1316	3 22 41.7	-37 12 29	FOC/96	IMAGE	512X512	F130M		1	1800	2956	1		1
NGC1316	3 22 41.7	-37 12 29	FOC/96	IMAGE	512X512	F220W		1	1200	2956	1		1
NGC1316	3 22 41.7	-37 12 29	FOC/96	IMAGE	512X512	F342W		1	1200	2956	1		1
NGC1316	3 22 41.7	-37 12 29	FOC/96	IMAGE	512X512	F372M		1	2400	2956	1		1
PSF-NGC1316	3 24 2.0	-37 17 0	PC	IMAGE	P6	F555W		1	0	1118	0		1
PSF-NGC1316	3 24 2.0	-37 17 0	PC	IMAGE	P6	F785LP		1	0	1118	0		1
H0323+022	3 26 13.9	2 25 15	HSP/UV2	SINGLE	1.0	F140LP		1	2100	3248	2		1
H0323+022	3 26 13.9	2 25 15	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		27
H0323+022	3 26 13.9	2 25 15	HSP/POL	STAR-SKY	POL0	F277M		1	396	3248	2		27
H0323+022	3 26 13.9	2 25 15	HSP/POL	STAR-SKY	POL45	F277M		1	396	3248	2		27
H0323+022	3 26 13.9	2 25 15	HSP/POL	STAR-SKY	POL90	F277M		1	396	3248	2		27
H0323+022	3 26 13.9	2 25 15	HSP/POL	STAR-SKY	POL135	F277M		1	396	3248	2		27
H0323+022	3 26 13.9	2 25 15	FOS/BL	ACCUM	4.3	G190H	1950	1	1440	4201	3		4
H0323+022	3 26 13.9	2 25 15	FOS/BL	ACQ/BINA	4.3	MIRROR		1	66	4201	3	ACQ	1
H0323+022	3 26 13.9	2 25 15	FOS/RD	ACQ/BINA	4.3	MIRROR		1	25	4201	9	ACQ	1
H0323+022	3 26 13.9	2 25 15	FOS/BL	ACCUM	4.3	G270H	2766	1	1440	4201	3		2
H0323+022	3 26 13.9	2 25 15	FOS/RD	ACQ/PEAK	0.7X2.0-BAR	MIRROR		1	1	4201	9	ACQ	1
H0323+022	3 26 13.9	2 25 15	FOS/RD	ACCUM	0.7X2.0-BAR	G650L	6242	1	1500	4201	9		1
H0323+022BKG	3 26 13.9	2 25 30*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		27
0324-408	3 26 17.4	-40 36 50	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	1235	0		1
GL490	3 27 38.5	58 46 58	PC	IMAGE	PCALL	F702W		1	80	3284	3		1
GL490	3 27 38.5	58 46 58	PC	IMAGE	PCALL	F702W		2	400	3284	3		1
GL490	3 27 38.5	58 46 58	PC	IMAGE	PCALL	F606W		1	180	3284	3		1
GL490	3 27 38.5	58 46 58	PC	IMAGE	PCALL	F850LP		1	23	3284	3		1
GL490	3 27 38.5	58 46 58	PC	IMAGE	PCALL	F850LP		4	140	3284	3		1
HH7-11IR	3 29 5.6	31 15 47	WFC	IMAGE	WFALL	F656N		2	1000	3284	3		1
HH7-11IR	3 29 5.6	31 15 47	WFC	IMAGE	WFALL	F673N		2	1000	3284	3		1
DW0326+27	3 29 57.7	27 56 16	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
DW0326+27	3 29 57.7	27 56 16	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
HD21996	3 32 4.8	-21 14 51	HRS	ACCUM	0.25	G160M	1305	1	900	1064	3		1
HD21996	3 32 4.8	-21 14 51	HRS	ACCUM	0.25	G160M	1362	1	900	1064	3		1
HD21996	3 32 4.8	-21 14 51	HRS	IMAGE	2.0	MIRROR-A2		1	290	1064	3	ACQ	1
HD21996	3 32 4.8	-21 14 51	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	27	1064	3	ACQ	1
HD22049	3 32 52.5	-9 27 29	HRS	ACCUM	2.0	G160M	1640	2	300	4183	4		1
HD22049	3 32 52.5	-9 27 29	HRS	ACCUM	2.0	G160M	1550	4	327	4183	4		1
HD22049	3 32 52.5	-9 27 29	HRS	ACCUM	2.0	G200M	1900	6	327	4183	4		1
HD22049	3 32 52.5	-9 27 29	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	4183	4	ACQ	1
HD22049	3 32 55.7	-9 27 30	PC	IMAGE	P6	F622W		4	100	1062	9		3
HD22049	3 32 55.7	-9 27 30	PC	IMAGE	P6	F875M		4	400	1062	9		3
HD22049	3 32 55.7	-9 27 30	PC	IMAGE	P6	F122M F875M		1	0	1062	9		3
NGC1360	3 33 13.7	-25 51 34	WFC	IMAGE	WFALL	F469N		1	2100	3289	3		1
NGC1360	3 33 13.7	-25 51 34	WFC	IMAGE	WFALL	F656N		1	2100	3289	3		1
NGC1360	3 33 13.7	-25 51 34	WFC	IMAGE	WFALL	F658N		1	2100	3289	3		1
PAL1	3 33 23.0	79 34 50	PC	IMAGE	ALL	F555W	5479	1	1000	2946	3		3
PAL1	3 33 23.0	79 34 50	PC	IMAGE	ALL	F791W	8537	1	1000	2946	3		2
NGC1365-SW	3 33 36.2	-36 8 28	FOC/96	IMAGE	512X512	F437M		1	6000	4071	2		1
NGC1365-SW	3 33 36.2	-36 8 28	FOC/96	IMAGE	512X512	F501N		1	13800	4071	2		1
Q0334-205	3 36 26.9	-20 19 39	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
NGC1399	3 36 27.6	-35 27 5	FOC/96	IMAGE	512X512	F342W		1	600	4205	3		1
NGC1399	3 36 27.6	-35 27 5	FOC/96	IMAGE	512X512	F502M		1	300	4205	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC1399	3 36 27.6	-35 27 5	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC1399	3 36 27.6	-35 27 5	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
HD22468	3 36 47.3	0 35 16	HRS	ACCUM	2.0	G200M	1900	2	245	4182	3		1
HD22468	3 36 47.3	0 35 16	HRS	ACCUM	2.0	G160M	1402	4	300	4182	3		1
HD22468	3 36 47.3	0 35 16	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	162	4181	3	ACQ	1
HD22468	3 36 47.3	0 35 16	HRS	ACCUM	0.25	ECH-B20	2800	1	1305	4181	3		1
HD22468	3 36 47.3	0 35 16	HRS	ACCUM	0.25	ECH-B22	2600	1	979	4181	3		1
HD22468	3 36 47.3	0 35 16	HRS	ACCUM	0.25	ECH-B20	2800	1	1414	4182	3		1
HD22468	3 36 47.3	0 35 16	HRS	ACCUM	0.25	ECH-B22	2600	1	979	4182	3		1
HD22468	3 36 47.3	0 35 16	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	163	4182	3	ACQ	1
HD22468	3 36 47.3	0 35 16	HRS	ACCUM	0.25	G160M	1223	4	979	4181	3		1
HD22468	3 36 47.3	0 35 16	HRS	ACCUM	0.25	G160M	1223	4	979	4182	3		1
HD22468	3 36 47.4	0 35 16	HRS	RAPID	2.0	G160M	1360	1	1580	1159	3		8
HD22468	3 36 47.4	0 35 16	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	9	1159	3	ACQ	1
HD23180	3 44 19.1	32 17 18	HRS	ACCUM	2.0	G160M	1411	2	222	1200	1		1
HD23180	3 44 19.1	32 17 18	HRS	ACCUM	2.0	ECH-B22	2574	1	327	1200	1		1
HD23180	3 44 19.1	32 17 18	HRS	ACCUM	2.0	ECH-B22	2573	1	327	1200	1		1
HD23180	3 44 19.1	32 17 18	HRS	ACCUM	2.0	ECH-B25	2254	1	653	1200	1		1
HD23180	3 44 19.1	32 17 18	HRS	ACCUM	2.0	ECH-B25	2253	1	653	1200	1		1
HD23180	3 44 19.1	32 17 18	HRS	ACCUM	2.0	ECH-B25	2255	1	653	1200	1		1
HD23180	3 44 19.1	32 17 18	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	1200	1	ACQ	1
HD23180	3 44 19.1	32 17 18	HRS	ACCUM	2.0	G160M	1403	2	222	1200	1		1
HD23180	3 44 19.1	32 17 18	HRS	ACCUM	2.0	G160M	1419	2	222	1200	1		1
HD23180	3 44 19.1	32 17 18	HRS	ACCUM	2.0	ECH-B22	2573	1	327	1200	1		1
HD23180	3 44 19.1	32 17 18	HRS	ACCUM	2.0	ECH-B25	2254	1	653	1200	1		1
HD23180	3 44 19.1	32 17 18	HRS	ACCUM	2.0	ECH-B25	2253	1	653	1200	1		1
HD23246	3 44 25.7	24 23 42	HRS	ACCUM	2.0	G140L	1430	2	225	1210	0		1
HZ627	3 45 24.1	24 53 10	HRS	ACCUM	2.0	G140L	1430	3	450	1210	0		1
NAB0348+06	3 51 16.6	6 19 15	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
NAB0348+06	3 51 16.6	6 19 15	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
PKS0349-27	3 51 35.9	-27 44 35	FOC/96	IMAGE	512X512	F320W		1	600	3181	1		1
PKS0349-27	3 51 35.9	-27 44 35	FOC/96	IMAGE	512X512	F130M		1	1800	3181	1		1
PKS0349-27	3 51 35.9	-27 44 35	FOC/96	IMAGE	512X512	F152M		1	1800	3181	1		1
PKS0349-27	3 51 35.9	-27 44 35	FOC/96	IMAGE	512X512	F170M		1	1800	3181	1		1
PKS0349-27	3 51 35.9	-27 44 35	FOC/96	IMAGE	512X512	F410M		1	1800	3181	1		1
HD24398	3 54 7.9	31 53 1	HRS	ACCUM	0.25	G160M	1335	1	1152	3990	3		1
HD24398	3 54 7.9	31 53 1	HRS	ACCUM	0.25	G160M	1477	1	1152	3990	3		2
HD24398	3 54 7.9	31 53 1	HRS	ACCUM	0.25	G160M	1349	1	1152	3990	3		3
HD24398	3 54 7.9	31 53 1	HRS	ACCUM	0.25	ECH-B24	2325	1	1152	3990	3		3
HD24398	3 54 7.9	31 53 1	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	3990	3	ACQ	1
PKS0355-483	3 57 21.9	-48 12 15	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
PKS0355-483	3 57 21.9	-48 12 15	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
HD24760	3 57 51.2	40 0 37	HRS	ACCUM	0.25	G160M	1350	1	259	3990	3		1
HD24760	3 57 51.2	40 0 37	HRS	ACCUM	0.25	G160M	1335	1	172	3990	3		1
HD24760	3 57 51.2	40 0 37	HRS	ACCUM	0.25	G160M	1476	1	172	3990	3		3
HD24760	3 57 51.2	40 0 37	HRS	ACCUM	0.25	G160M	1477	1	172	3990	3		1
HD24760	3 57 51.2	40 0 37	HRS	ACCUM	0.25	G160M	1309	1	172	3990	3		1
HD24760	3 57 51.2	40 0 37	HRS	ACCUM	0.25	G160M	1349	1	259	3990	3		1
HD24760	3 57 51.2	40 0 37	HRS	ACCUM	0.25	G160M	1348	1	259	3990	3		3
HD24760	3 57 51.2	40 0 37	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	3990	3	ACQ	1
HD24760	3 57 51.2	40 0 37	HRS	ACCUM	0.25	ECH-B24	2324	1	172	3990	3		1
HD24760	3 57 51.2	40 0 37	HRS	ACCUM	0.25	ECH-B24	2323	1	172	3990	3		3

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD24760	3 57 51.2	40 0 37	HRS	ACCUM	0.25	G160M	1476	1	172	3990	3		1
HD24760	3 57 51.2	40 0 37	HRS	ACCUM	0.25	G160M	1477	1	172	3990	3		1
HD24760	3 57 51.2	40 0 37	HRS	ACCUM	0.25	G160M	1349	1	259	3990	3		2
HD24760	3 57 51.2	40 0 37	HRS	ACCUM	0.25	ECH-B24	2324	1	172	3990	3		2
3C98	3 58 54.5	10 26 3	FOC/96	IMAGE	512X512	F220W		1	900	3344	3		1
3C98	3 58 54.5	10 26 3	FOC/96	IMAGE	512X512	F430W		1	900	3344	3		1
3C98	3 58 54.5	10 26 3	FOC/96	IMAGE	512X512	F372M		1	1800	3344	3		1
3C98	3 58 54.5	10 26 3	FOC/96	IMAGE	512X512	F501N		1	1800	3344	3		1
HD24912	3 58 57.8	35 47 28	HRS	RAPID	0.25	G160M	1392	1	1800	1211	2		6
HD24912	3 58 57.8	35 47 28	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	1211	2	ACQ	2
XI-PER	3 58 57.9	35 47 27	HRS	IMAGE	2.0	MIRROR-A1		1	242	3127	0		2
XI-PER	3 58 57.9	35 47 27	HRS	IMAGE	0.25	MIRROR-A1		1	242	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A41	1370	1	288	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A45	1240	1	288	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A41	1370	1	288	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B20	2800	1	288	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACQ/PEAK	2.0	MIRROR-A1		1	46	3127	0	ACQ	1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	2.0	ECH-A43	1302	1	288	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	2.0	ECH-B27	2063	1	288	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	2.0	ECH-B28	2026	1	288	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	2.0	ECH-B31	1808	1	288	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	IMAGE	2.0	MIRROR-A2		1	96	3127	0		2
XI-PER	3 58 57.9	35 47 27	HRS	IMAGE	2.0	MIRROR-N1		1	96	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A42	1335	1	288	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A36	1549	1	288	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A37	1532	1	288	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A43	1302	1	288	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A44	1281	1	288	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B24	2382	1	288	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A36	1549	1	288	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A43	1302	1	288	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A44	1281	1	288	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A45	1238	1	288	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A45	1252	1	288	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B27	2063	1	288	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B28	2026	1	288	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B31	1808	1	288	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B24	2324	4	288	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	IMAGE	0.25	MIRROR-A2		1	96	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B24	2313	1	230	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B22	2602	1	230	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B24	2312	1	230	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	2.0	ECH-B25	2260	1	172	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B25	2260	1	172	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B24	2370	1	172	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	3127	0	ACQ	1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	2.0	ECH-B25	2249	1	172	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACQ/PEAK	0.25	MIRROR-A1		1	9	3021	0	ACQ	1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A40	1393	1	403	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A41	1357	1	345	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A42	1344	1	345	3021	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B24	2324	1	172	3021	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A38	1477	1	403	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A39	1447	1	403	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A40	1402	1	403	3127	0		2
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A40	1393	1	403	3127	0		2
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A41	1357	1	345	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A42	1344	1	345	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A47	1191	1	691	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B30	1862	1	172	3127	0		1
XI-PER	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-A44	1288	3	403	3021	0		1
HD24912	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B	2312	1	360	1066	1		2
HD24912	3 58 57.9	35 47 27	HRS	ACCUM	0.25	ECH-B	2313	1	360	1066	1		1
HD24912	3 58 57.9	35 47 27	HRS	IMAGE	2.0	MIRROR-A2		1	96	1066	1		1
HD24912	3 58 57.9	35 47 27	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	1066	1	ACQ	1
PKS0405-12	4 7 48.4	-12 11 36	FOS/BL	ACQ/BINA	4.3	MIRROR		1	7	1025	0	ACQ	1
PKS0405-12	4 7 48.4	-12 11 36	FOS/RD	ACQ/BINA	4.3	MIRROR		1	3	1025	0	ACQ	1
PKS0405-12	4 7 48.4	-12 11 36	FOS/BL	ACCUM	0.25X2.0	G130H	1379	1	7000	1025	0		1
PKS0405-12	4 7 48.4	-12 11 36	FOS/BL	ACCUM	0.25X2.0	G190H	1944	1	3600	1025	0		1
PKS0405-12	4 7 48.4	-12 11 36	FOS/RD	RAPID	0.25X2.0	G270H	2762	1	2400	1025	0		1
PKS0405-12	4 7 48.4	-12 11 36	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	4	1025	0	ACQ	1
PKS0405-12	4 7 48.4	-12 11 36	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	2	1025	0	ACQ	1
0405-123INCA221-27	4 7 48.4	-12 11 37	FGS	POS	2	F550W		1	51	1532	9	UNP	9
INCA221-27	4 7 53.0	-12 9 38	FGS	POS	2	F550W		1	51	1532	9	UNP	6
POINT0405-123INCA221 -27	4 8 18.4	-12 20 47	S/C	POINTING	V1			1	0	1532	9		3
VA6	4 9 53.3	13 29 24	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA6	4 9 53.3	13 29 24	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
SAO131003	4 10 44.5	-4 52 28	FGS	TRANS	3	PUPIL		1	500	3061	1		2
VA43	4 12 7.5	17 37 34	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA43	4 12 7.5	17 37 34	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA52	4 13 9.4	14 44 30	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA52	4 13 9.4	14 44 30	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
CW-TAU	4 14 17.0	28 10 59	PC	IMAGE	PC-ND	F606W		1	160	3285	4	CON	1
CW-TAU	4 14 17.0	28 10 59	PC	IMAGE	PC-ND	F702W		1	140	3285	4	CON	2
CW-TAU	4 14 17.0	28 10 59	PC	IMAGE	PC-ND	F850LP		1	100	3285	4	CON	1
CW-TAU	4 14 17.0	28 10 59	PC	IMAGE	PCALL	F850LP		1	0	3285	4	ACQ CON	1
H101	4 14 25.5	14 38 0	FGS	TRANS	3	F5ND		1	200	3004	0		1
H105	4 14 27.2	12 26 7	FGS	TRANS	3	F5ND		1	200	3004	0		1
VA68	4 14 51.8	13 3 18	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA68	4 14 51.8	13 3 18	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
H115	4 15 10.2	14 23 55	FGS	TRANS	3	F583W		1	200	3004	0		1
VA72	4 15 10.2	14 23 56	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA72	4 15 10.2	14 23 56	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
PKS0414-06	4 17 16.7	-5 53 46	FOS/RD	RAPID	1.0	G270H	2700	1	1000	3269	2		1
PKS0414-06	4 17 16.7	-5 53 46	FOS/RD	RAPID	1.0	G190H	1900	1	2140	3269	2		1
PKS0414-06	4 17 16.7	-5 53 46	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	3269	2	ACQ	1
VA119	4 17 54.8	16 32 41	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA119	4 17 54.8	16 32 41	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
3C111	4 18 21.3	38 1 35	FOC/96	IMAGE	512X512	F220W		1	900	3344	3		1
3C111	4 18 21.3	38 1 35	FOC/96	IMAGE	512X512	F430W		1	900	3344	3		1
3C111	4 18 21.3	38 1 35	FOC/96	IMAGE	512X512	F372M		1	1800	3344	3		1
3C111	4 18 21.3	38 1 35	FOC/96	IMAGE	512X512	F501N		1	1800	3344	3		1
VA135	4 18 21.8	17 25 19	FGS	TRANS	ANY	F583W		1	800	1004	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
VA135	4 18 21.8	17 25 19	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA146	4 18 47.0	13 21 59	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA146	4 18 47.0	13 21 59	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
H198	4 19 7.8	17 31 30	FGS	TRANS	3	F583W		1	200	3004	0		1
VA162	4 19 20.1	14 19 0	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA162	4 19 20.1	14 19 0	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
HD27295	4 19 26.1	21 8 31	HRS	ACCUM	0.25	ECH-B	2066	1	990	4194	4		1
HD27295	4 19 26.1	21 8 31	HRS	ACCUM	0.25	ECH-B	2542	1	555	4194	4		1
HD27295	4 19 26.1	21 8 31	HRS	ACCUM	0.25	ECH-B	1942	2	663	4194	4		1
HD27295	4 19 26.1	21 8 31	HRS	ACCUM	0.25	ECH-B	1849	4	990	4194	4		1
HD27295	4 19 26.1	21 8 31	HRS	ACCUM	0.25	ECH-B	2029	1	1207	4194	4		1
HD27295	4 19 26.1	21 8 31	HRS	ACCUM	0.25	ECH-B	1741	8	1207	4194	4		1
PSF-TAU	4 19 47.5	15 37 39	PC	IMAGE	P6	F656N		2	0	3188	1		1
NGC1566	4 20 0.4	-54 56 18	FOC/96	IMAGE	512X512	F220W		1	1000	3344	3		1
NGC1566	4 20 0.4	-54 56 18	FOC/96	IMAGE	512X512	F501N		1	1000	3344	3		1
NGC1566	4 20 0.4	-54 56 18	FOC/96	IMAGE	512X512	F502M		1	1000	3344	3		1
NGC1566	4 20 0.4	-54 56 18	FOC/96	IMAGE	512X512	F550M		1	1000	3344	3		1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/BL	ACCUM	0.3	G130H		1	6000	3136	1		1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/BL	ACCUM	0.3	G190H		1	4000	3136	1		1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/RD	ACCUM	0.3	G270H		1	2000	3136	1		1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/RD	ACCUM	0.3	G400H		1	2000	3136	1		1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/RD	ACCUM	0.3	G570H		1	2000	3136	1		1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/BL	ACQ/PEAK	0.3	MIRROR		1	8	3136	1	ACQ	1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/BL	ACQ/PEAK	0.5	MIRROR		1	4	3136	1	ACQ	1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/BL	ACQ/PEAK	1.0	MIRROR		1	2	3136	1	ACQ	1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	1	3136	1	ACQ	1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	8	3136	1	ACQ	1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/RD	ACQ/PEAK	0.5	MIRROR		1	4	3136	1	ACQ	1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/RD	ACQ/PEAK	1.0	MIRROR		1	2	3136	1	ACQ	1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/RD	ACQ/PEAK	4.3	MIRROR		1	1	3136	1	ACQ	1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/BL	ACQ/BINA	4.3	MIRROR		1	10	3136	1	ACQ	1
NGC1566-NUC	4 20 0.6	-54 56 14	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	3136	1	ACQ	1
NGC1566	4 20 0.7	-54 56 17	PC	IMAGE	ALL	F502N		1	900	3050	0	ACQ	1
NGC1566	4 20 0.7	-54 56 17	PC	IMAGE	ALL	F194W		1	1800	3050	0	ACQ	1
NGC1566	4 20 0.7	-54 56 17	PC	IMAGE	ALL	F547M		1	180	3050	0	ACQ	1
NGC1566-NUC	4 20 0.7	-54 56 17*	FOS/BL	ACCUM	0.3	G130H		1	3000	3050	0		1
NGC1566-NUC	4 20 0.7	-54 56 17*	FOS/RD	ACCUM	0.3	G270H		1	600	3050	0		1
NGC1566-NUC	4 20 0.7	-54 56 17*	FOS/RD	ACCUM	0.3	G400H		1	300	3050	0		1
NGC1566-NUC	4 20 0.7	-54 56 17*	FOS/RD	ACCUM	0.3	G570H		1	300	3050	0		1
NGC1566-NUC	4 20 0.7	-54 56 17*	FOS/BL	ACCUM	0.3	G190H		1	1500	3050	0		1
NGC1566-NUC	4 20 0.7	-54 56 17*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	3050	0	ACQ	1
NGC1566-NUC	4 20 0.7	-54 56 17*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	3050	0	ACQ	1
VA191	4 20 19.8	17 30 58	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA191	4 20 19.8	17 30 58	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
H230	4 20 52.7	13 51 52	FGS	TRANS	3	F583W		1	200	3004	0		1
H246	4 21 34.7	14 24 36	FGS	TRANS	3	F5ND		1	200	3004	0		1
HD27561	4 21 34.8	14 24 36	HRS	ACCUM	2.0	G140L	1430	1	180	1210	0		1
PSF-TAU	4 21 42.7	19 28 6	PC	IMAGE	P6	F673N		1	5	1121	0		1
PSF-TAU	4 21 42.7	19 28 6	PC	IMAGE	P6	F656N		1	23	1121	0		1
PSF-TAU	4 21 42.7	19 28 6	PC	IMAGE	P6	F702W		1	0	1121	0		1
RY-TAURI	4 21 57.4	28 26 36	HRS	ACCUM	2.0	G160M	1400	4	272	3949	3		1
RY-TAURI	4 21 57.4	28 26 36	HRS	ACCUM	2.0	G160M	1550	5	272	3949	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
RY-TAURI	4 21 57.4	28 26 36	HRS	ACCUM	2.0	G160M	1640	5	272	3949	3		1
RY-TAURI	4 21 57.4	28 26 36	HRS	ACCUM	2.0	G200M	1900	5	299	3949	3		1
RY-TAURI	4 21 57.4	28 26 36	HRS	ACCUM	2.0	G270M	2800	1	244	3949	3		1
T-TAU	4 21 59.4	19 32 7	PC	IMAGE	P6	F702W		1	3	1121	0		1
T-TAU	4 21 59.4	19 32 7	PC	IMAGE	P6	F656N		2	600	1121	0		1
T-TAU	4 21 59.4	19 32 7	PC	IMAGE	P6	F673N		2	600	1121	0		1
T-TAU	4 21 59.4	19 32 7	PC	IMAGE	PC5	F656N		1	300	3285	3		1
T-TAU	4 21 59.4	19 32 7	PC	IMAGE	PC5	F850LP		1	3	3285	3		1
T-TAU	4 21 59.4	19 32 7	PC	IMAGE	PC-ND	F673N		1	300	3285	3		1
T-TAU	4 21 59.4	19 32 7	PC	IMAGE	PC-ND	F702W		1	50	3285	3		2
T-TAU	4 21 59.4	19 32 7	PC	IMAGE	PCALL	F702W		1	1	3285	3	ACQ	1
H290	4 23 25.2	15 45 48	FGS	TRANS	3	F583W		1	200	3004	0		1
H292	4 23 32.2	14 40 15	FGS	TRANS	3	F583W		1	200	3004	0		1
VA282	4 23 42.8	15 52 52	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA282	4 23 42.8	15 52 52	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA294	4 23 54.3	14 3 8	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA294	4 23 54.3	14 3 8	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA292	4 23 55.5	16 21 15	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA292	4 23 55.5	16 21 15	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA297	4 23 59.0	16 43 18	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA297	4 23 59.0	16 43 18	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
PKS0421+019	4 24 8.6	2 4 25	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
PKS0421+019	4 24 8.6	2 4 25	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
H307	4 24 12.7	16 22 45	FGS	TRANS	3	F5ND		1	200	3004	0		1
H312	4 24 16.7	18 0 12	FGS	TRANS	3	F583W		1	200	3004	0		1
VA310	4 24 17.0	18 0 11	FGS	POS	2	F550W		1	53	1009	3	CON	42
VA310	4 24 17.0	18 0 11	FGS	TRANS	ANY	F583W		1	800	1009	3		1
VA310	4 24 17.0	18 0 11	WFC	IMAGE	ALL	F725LP		1	600	1009	3	CON PAR	17
PCEN310	4 24 18.4	17 57 52	FGS	POS	2	F550W		0	53	1009	3	CON	21
H316	4 24 22.2	17 4 45	FGS	TRANS	3	F5ND		1	200	3004	0		1
PKS0422+004	4 24 46.8	0 36 7	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
PKS0422+004BKG	4 24 46.8	0 36 22*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
VA334	4 24 47.9	15 52 31	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA334	4 24 47.9	15 52 31	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA351	4 25 13.4	17 16 8	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA351	4 25 13.4	17 16 8	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA354	4 25 25.3	17 54 58	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA354	4 25 25.3	17 54 58	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA366	4 25 49.2	15 31 16	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA366	4 25 49.2	15 31 16	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA376	4 25 53.9	11 55 54	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA376	4 25 53.9	11 55 54	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
PCEN383	4 26 3.8	15 4 34	FGS	POS	2	F550W		0	53	1009	3	CON	21
VA383	4 26 4.8	15 2 28	FGS	POS	2	F550W		1	53	1009	3	CON	42
VA383	4 26 4.8	15 2 28	FGS	TRANS	ANY	F583W		1	800	1009	3		1
VA383	4 26 4.8	15 2 28	WFC	IMAGE	ALL	F725LP		1	600	1009	3	CON PAR	17
H379	4 26 5.8	15 31 28	FGS	TRANS	3	F5ND		1	200	3004	0		1
HD28052	4 26 20.8	15 37 7	HRS	ACCUM	2.0	G140L	1550	1	225	1210	0		1
HD28052	4 26 20.8	15 37 7	HRS	ACCUM	2.0	G140L	1300	2	225	1210	0		1
HYADES388	4 26 40.0	16 44 49	FGS	TRANS	3	F5ND		1	200	3004	0		1
VA404	4 26 42.7	12 41 12	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA404	4 26 42.7	12 41 12	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
VA407	4 26 54.2	13 8 19	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA407	4 26 54.2	13 8 19	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
DG-TAU	4 27 4.7	26 6 17	PC	IMAGE	P6	F631N		1	800	1121	0		1
DG-TAU	4 27 4.7	26 6 17	PC	IMAGE	P6	F656N		1	800	1121	0		1
DG-TAU	4 27 4.7	26 6 17	PC	IMAGE	P6	F702W		1	10	1121	0		1
DG-TAU	4 27 4.7	26 6 17	PC	IMAGE	PC-ND	F702W		1	70	3285	3		2
DG-TAU	4 27 4.7	26 6 17	PC	IMAGE	PCALL	F631N		1	300	3285	3		1
DG-TAU	4 27 4.7	26 6 17	PC	IMAGE	PCALL	F656N		1	300	3285	3		1
DG-TAU	4 27 4.7	26 6 17	PC	IMAGE	PCALL	F702W		1	4	3285	3	ACQ	1
DG-TAU	4 27 4.7	26 6 17	PC	IMAGE	PC-ND	F850LP		1	100	3285	3		1
0424-131	4 27 7.3	-13 2 54	FOC/96	IMAGE	512X512	F2ND F430W		1	600	1236	0	SEL	1
0424-131	4 27 7.3	-13 2 54	FOC/96	IMAGE	512X512	F2ND F430W		1	600	3177	1	CON SEL	1
VA420	4 27 16.5	17 14 32	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA420	4 27 16.5	17 14 32	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA444	4 27 32.3	15 21 56	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA444	4 27 32.3	15 21 56	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
H417	4 27 46.9	14 25 4	FGS	TRANS	3	F583W		1	200	3004	0		1
PCEN472	4 28 3.6	13 52 58	FGS	POS	2	F550W		0	53	1394	3	CON	21
H420	4 28 4.4	13 52 4	FGS	TRANS	3	F583W		1	200	3004	0		1
VA472	4 28 4.5	13 52 3	FGS	POS	2	F550W		1	53	1394	3	CON	42
VA472	4 28 4.5	13 52 3	FGS	TRANS	ANY	F583W		1	800	1394	3		1
VA472	4 28 4.5	13 52 3	WFC	IMAGE	ALL	F725LP		1	600	1394	3	CON PAR	17
H429	4 28 23.4	14 44 28	FGS	TRANS	3	F5ND		1	200	3004	0		1
HD28307	4 28 34.5	15 57 44	HRS	ACCUM	2.0	G160M	1550	3	300	4184	4		1
HD28307	4 28 34.5	15 57 44	HRS	ACCUM	2.0	G270M	2340	3	272	4184	4		1
HD28307	4 28 34.5	15 57 44	HRS	ACCUM	2.0	G160M	1402	3	300	4184	4		1
HD28307	4 28 34.5	15 57 44	HRS	ACCUM	2.0	G160M	1304	4	300	4184	4		1
HD28307	4 28 34.5	15 57 44	HRS	ACCUM	2.0	G200M	1900	2	244	4184	4		1
HD28307	4 28 34.5	15 57 44	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	4184	4	ACQ	1
HD28305	4 28 37.0	19 10 49	HRS	ACCUM	2.0	G270M	2340	2	300	4184	4		1
HD28305	4 28 37.0	19 10 49	HRS	ACCUM	2.0	G200M	1900	2	244	4184	4		1
HD28305	4 28 37.0	19 10 49	HRS	ACCUM	2.0	G160M	1304	2	244	4184	4		1
HD28305	4 28 37.0	19 10 49	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	4184	4	ACQ	1
VA490	4 28 39.3	16 58 11	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA490	4 28 39.3	16 58 11	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA500	4 28 50.7	16 17 21	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA500	4 28 50.7	16 17 21	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA502	4 28 52.3	15 58 54	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA502	4 28 52.3	15 58 54	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA529	4 29 12.2	15 16 26	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA529	4 29 12.2	15 16 26	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA537	4 29 16.2	12 21 38	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA537	4 29 16.2	12 21 38	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
PCEN548	4 29 28.8	16 13 45	FGS	POS	2	F550W		0	53	1394	3	CON	21
H472	4 29 30.9	16 14 42	FGS	TRANS	3	F583W		1	200	3004	0		1
VA548	4 29 31.0	16 14 41	FGS	POS	2	F550W		1	53	1394	3	CON	42
VA548	4 29 31.0	16 14 41	FGS	TRANS	ANY	F583W		1	800	1394	3		1
VA548	4 29 31.0	16 14 41	WFC	IMAGE	ALL	F725LP		1	600	1394	3	CON PAR	17
VA559	4 29 55.6	16 54 51	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA559	4 29 55.6	16 54 51	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
H478	4 29 57.6	16 40 23	FGS	TRANS	3	F583W		1	200	3004	0		1
LK-HA-101	4 30 14.5	35 16 25	PC	IMAGE	PCALL	F656N		2	300	3285	4	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
LK-HA-101	4 30 14.5	35 16 25	PC	IMAGE	PC-ND	F702W		1	350	3285	4	CON	1
LK-HA-101	4 30 14.5	35 16 25	PC	IMAGE	PC-ND	F702W		1	360	3285	4	CON	1
LK-HA-101	4 30 14.5	35 16 25	PC	IMAGE	PC-ND	F850LP		1	160	3285	4	CON	1
LK-HA-101	4 30 14.5	35 16 25	PC	IMAGE	PCALL	F702W		1	1	3285	4	ACQ CON	1
H491	4 30 34.8	15 44 3	FGS	TRANS	3	F583W		1	200	3004	0		1
VA607	4 30 57.2	12 18 14	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA607	4 30 57.2	12 18 14	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA610	4 31 10.9	16 23 45	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA610	4 31 10.9	16 23 45	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA622	4 31 29.2	17 43 6	FGS	POS	2	F550W		1	53	1394	3	CON	44
VA622	4 31 29.2	17 43 6	FGS	TRANS	ANY	F583W		1	800	1394	3		1
VA622	4 31 29.2	17 43 6	WFC	IMAGE	ALL	F725LP		1	600	1394	3	CON PAR	17
H507	4 31 29.4	13 54 13	FGS	TRANS	3	F5ND		1	200	3004	0		1
PCEN622	4 31 31.3	17 43 14	FGS	POS	2	F550W		0	53	1394	3	CON	22
L1551	4 31 34.1	18 8 8	WFC	IMAGE	ALL	F675W		1	60	1138	0		1
L1551	4 31 34.1	18 8 8	PC	IMAGE	PCALL	F656N		2	800	3284	4	CON	1
L1551	4 31 34.1	18 8 8	PC	IMAGE	PCALL	F673N		2	800	3284	4	CON	1
L1551	4 31 34.1	18 8 8	PC	IMAGE	PCALL	F702W		2	500	3284	4	CON	1
L1551	4 31 34.1	18 8 8	WFC	IMAGE	ALL	F656N		1	1800	1138	0		1
L1551	4 31 34.1	18 8 8	WFC	IMAGE	ALL	F673N		1	1800	1138	0		1
L1551	4 31 34.1	18 8 8	WFC	IMAGE	ALL	F785LP		1	1200	1138	0		1
VA627	4 31 36.5	17 42 33	FGS	POS	2	F550W		1	53	1394	3	CON	44
VA627	4 31 36.5	17 42 33	FGS	TRANS	ANY	F583W		1	800	1394	3		1
HL-TAU	4 31 38.4	18 13 59	PC	IMAGE	PC-ND	F702W		1	260	3285	3		2
HL-TAU	4 31 38.4	18 13 59	PC	IMAGE	PC-ND	F850LP		1	350	3285	3		1
XZ-HL-TAU	4 31 39.2	18 13 58	PC	IMAGE	P6	F702W		1	80	3188	1		1
XZ-HL-TAU	4 31 39.2	18 13 58	PC	IMAGE	P6	F631N		2	1800	3188	1		1
XZ-HL-TAU	4 31 39.2	18 13 58	PC	IMAGE	P6	F656N		2	1800	3188	1		1
XZ-HL-TAU	4 31 39.2	18 13 58	PC	IMAGE	P6	F673N		2	1800	3188	1		1
XZ-HL-TAU	4 31 39.2	18 13 58	PC	IMAGE	PCALL	F673N		1	300	3285	4	CON	1
XZ-HL-TAU	4 31 39.2	18 13 58	PC	IMAGE	PCALL	F702W		1	30	3285	4	ACQ CON	1
XZ-HL-TAU	4 31 39.2	18 13 58	PC	IMAGE	PCALL	F631N		2	300	3285	4	CON	1
XZ-HL-TAU	4 31 39.2	18 13 58	PC	IMAGE	PCALL	F656N		2	300	3285	4	CON	2
NGC1600-NUC	4 31 40.0	-5 5 12	PC	IMAGE	PC6	F555W		2	1000	3639	2		1
NGC1600-NUC	4 31 40.0	-5 5 12	PC	IMAGE	PCALL	F785LP		1	1000	4167	3		2
VA637	4 31 43.6	15 2 29	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA637	4 31 43.6	15 2 29	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA645	4 31 52.7	15 29 59	FGS	POS	2	F550W		1	53	1394	3	CON	42
VA645	4 31 52.7	15 29 59	FGS	TRANS	ANY	F583W		1	800	1394	3		1
VA645	4 31 52.7	15 29 59	WFC	IMAGE	ALL	F725LP		1	600	1394	3	CON PAR	17
VA646	4 31 54.8	15 34 12	FGS	POS	2	F550W		1	53	1394	3	CON	42
VA646	4 31 54.8	15 34 12	FGS	TRANS	ANY	F583W		1	800	1394	3		1
PCEN645	4 31 57.3	15 29 42	FGS	POS	2	F550W		0	53	1394	3	CON	21
VA673	4 32 23.6	17 45 2	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA673	4 32 23.6	17 45 2	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA677	4 32 25.5	13 6 48	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA677	4 32 25.5	13 6 48	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
INCA221-29-AST1	4 32 39.8	5 13 4	FGS	POS	2	F550W		1	2	1139	9	CON PAR	2
INCA221-29-AST1	4 32 39.8	5 13 4	FGS	POS	2	F550W		1	8	1139	9	CON PAR	2
L1551-PSF	4 32 40.3	17 51 42	WFC	IMAGE	ALL	F785LP		1	0	1138	0		1
H554	4 32 59.5	15 49 9	FGS	TRANS	3	F583W		1	200	3004	0		1
INCA221-29-AST2	4 33 10.4	5 15 49	FGS	POS	2	F550W		1	0	1139	9	CON PAR	2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
0430+052INCA221-29	4 33 11.0	5 21 17	FGS	POS	2	F550W		1	51	1532	9		6
0430+052INCA221-29	4 33 11.0	5 21 17	PC	IMAGE	P8	F606W		1	2	1139	9		2
0430+052INCA221-29	4 33 11.0	5 21 17	PC	IMAGE	P8	F606W		1	2	1139	9	CON	2
0430+052INCA221-29	4 33 11.0	5 21 17	PC	IMAGE	P8	F725LP		1	2	1139	9		2
0430+052INCA221-29	4 33 11.0	5 21 17	PC	IMAGE	P8	F725LP		1	8	1139	9	CON	2
3C120	4 33 11.1	5 21 15	PC	IMAGE	P6	F517N		2	500	3228	1		1
3C120	4 33 11.1	5 21 15	PC	IMAGE	P6	F555W		2	10	3228	1		1
3C120	4 33 11.1	5 21 15	PC	IMAGE	P6	F675W		2	14	3228	1		1
3C120	4 33 11.1	5 21 15	PC	IMAGE	P6	F785LP		2	20	3228	1		1
3C120	4 33 11.1	5 21 15	PC	IMAGE	PC6	F785LP		2	300	3287	3		1
3C120	4 33 11.1	5 21 15	FOC/96	IMAGE	512X512	F130M	1270	1	2400	1227	0		1
3C120	4 33 11.1	5 21 15	FOC/96	IMAGE	512X512	F165W	1640	1	2400	1227	0		1
3C120	4 33 11.1	5 21 15	FOC/96	IMAGE	512X512	F320W	3200	1	2400	1227	0		1
3C120	4 33 11.1	5 21 15	FOC/96	IMAGE	512X512	F372M	3727	1	2400	1227	0		1
VA709	4 33 27.0	13 2 44	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA709	4 33 27.0	13 2 44	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
A496	4 33 37.8	-13 15 42	FOC/96	IMAGE	512X512	F220W		2	1200	3487	2		1
A496	4 33 37.8	-13 15 42	FOC/96	IMAGE	512X512	F320W		2	1200	3487	2		1
A496	4 33 37.8	-13 15 42	FOC/96	IMAGE	512X512	F372M		2	1200	3487	2		1
A496	4 33 37.8	-13 15 42	FOC/96	IMAGE	512X512	F430W		2	1200	3487	2		1
POINT0430+052INCA221-29	4 33 41.0	5 10 30	S/C	POINTING	V1			1	0	1532	9		2
VA722	4 33 44.9	12 42 42	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA722	4 33 44.9	12 42 42	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
INCA221-29	4 33 50.4	5 23 4	PC	IMAGE	P8	F658N		1	0	1139	9	CON	2
INCA221-29	4 33 50.4	5 23 4	FGS	POS	2	F5ND		1	51	1532	9		4
H578	4 33 58.5	15 9 49	FGS	TRANS	3	F583W		1	200	3004	0		1
VA747	4 34 32.1	15 49 40	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA747	4 34 32.1	15 49 40	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
VA764	4 35 30.6	14 12 44	FGS	TRANS	ANY	F583W		1	800	1004	3		1
VA764	4 35 30.6	14 12 44	FGS	TRANS	PRIME	F550W		1	800	1004	3	CON	4
HD29139	4 35 55.2	16 30 33	HRS	ACCUM	2.0	G270M	2345	1	300	3023	0		1
HD29139	4 35 55.2	16 30 33	HRS	ACCUM	0.25	G270M	2345	4	300	3023	0		1
HD29139	4 35 55.2	16 30 33	HRS	ACCUM	2.0	ECH-B24	2327	3	300	3023	0		1
HD29139	4 35 55.2	16 30 33	HRS	ACCUM	0.25	ECH-B24	2327	1	300	3023	0		1
HD29139	4 35 55.2	16 30 33	HRS	ACCUM	0.25	ECH-B24	2327	11	300	3023	0		1
HD29139	4 35 55.2	16 30 33	HRS	ACCUM	0.25	ECH-B20	2799	2	220	3023	0		1
HD29139	4 35 55.2	16 30 33	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	9	3023	0	ACQ	1
3C123	4 37 4.2	29 40 21	PC	IMAGE	ALL	F606W		1	1200	3263	9		1
Q0451-418	4 53 13.7	-41 47 26	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
Q0451-418	4 53 13.7	-41 47 26	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
0453-423	4 55 23.0	-42 16 17	FOC/96	IMAGE	512X512	F1ND F430W		1	600	3177	1	CON SEL	1
PKS0454-22	4 56 8.9	-21 59 9	WFC	IMAGE	ANY	F128LP		1	1200	4120	9		1
PKS0454-22	4 56 8.9	-21 59 9	FOS/RD	ACCUM	4.3	PRISM	3500	1	50	1026	0		1
PKS0454-22	4 56 8.9	-21 59 9	FOS/BL	ACCUM	4.3	G130H	1300	1	50	1026	0		1
PKS0454-22	4 56 8.9	-21 59 9	FOS/RD	ACCUM	1.0	G270H	2700	1	2000	1026	0		1
PKS0454-22	4 56 8.9	-21 59 9	FOS/RD	ACCUM	4.3	G190H	1900	1	50	1026	0		1
PKS0454-22	4 56 8.9	-21 59 9	FOS/RD	ACCUM	4.3	G270H	2700	1	50	1026	0		1
PKS0454-22	4 56 8.9	-21 59 9	FOS/RD	ACCUM	1.0	G190H	1900	1	5900	1026	0		1
PKS0454-22	4 56 8.9	-21 59 9	FOS/BL	ACCUM	1.0	G130H	1300	1	6499	1026	0		1
PKS0454-22	4 56 8.9	-21 59 9	FOS/BL	ACQ/BINA	4.3	MIRROR		1	19	1026	0	ACQ	1
PKS0454-22	4 56 8.9	-21 59 9	FOS/RD	ACQ/BINA	4.3	MIRROR		1	9	1026	0	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PKS0454+039	4 56 47.2	4 0 53	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
PKS0454+039	4 56 47.2	4 0 53	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
IC391	4 57 22.0	78 11 23	WFC	IMAGE	WF1	F230W		1	30	3292	4	CON	1
IC391	4 57 22.0	78 11 23	WFC	IMAGE	WF1	F230W		1	300	3292	4	CON	1
IC391	4 57 22.0	78 11 23	WFC	IMAGE	WF1	F555W		1	30	3292	4	CON	1
IC391	4 57 22.0	78 11 23	WFC	IMAGE	WF1	F555W		1	400	3292	4	CON	1
IC391	4 57 22.0	78 11 23	WFC	IMAGE	WF1	F702W		1	30	3292	4	CON	1
IC391	4 57 22.0	78 11 23	WFC	IMAGE	WF1	F702W		1	400	3292	4	CON	1
IC391	4 57 22.0	78 11 23	WFC	IMAGE	WF1	F230W		1	230	3292	4	CON	1
IC391	4 57 22.0	78 11 23	WFC	IMAGE	WF1	F555W		1	230	3292	4	CON	1
IC391	4 57 22.0	78 11 23	WFC	IMAGE	WF1	F702W		1	230	3292	4	CON	1
IC391	4 57 22.0	78 11 23	WFC	IMAGE	WF1	F785LP		1	30	3292	4	CON	1
IC391	4 57 22.0	78 11 23	WFC	IMAGE	WF1	F785LP		1	400	3292	4	CON	1
IC391	4 57 22.0	78 11 23	WFC	IMAGE	WF1	F785LP		1	230	3292	4	CON	1
0457+024	4 59 52.1	2 29 32	FOC/96	IMAGE	512X512	F430W		1	600	3177	1	CON SEL	1
INCA221-31	5 0 43.3	84 34 30	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
HD31964	5 1 58.1	43 49 24	FOS/BL	ACCUM	4.3	G130H	1379	2	5400	1068	2		1
HD31964	5 1 58.1	43 49 24	FOS/BL	ACQ/PEAK	1.0	G130H	1379	1	4	1068	2	ACQ	1
HD31964	5 1 58.1	43 49 24	FOS/BL	ACQ/PEAK	4.3	G130H	1379	1	4	1068	2	ACQ	1
3C133	5 2 58.5	25 16 25	FOC/96	IMAGE	512X512	F220W		1	900	3344	3		1
3C133	5 2 58.5	25 16 25	FOC/96	IMAGE	512X512	F430W		1	900	3344	3		1
3C133	5 2 58.5	25 16 25	FOC/96	IMAGE	512X512	F372M		1	1800	3344	3		1
3C133	5 2 58.5	25 16 25	FOC/96	IMAGE	512X512	F501N		1	1800	3344	3		1
NGC1818-BKGRD	5 4 11.8	-66 36 40	WFC	IMAGE	WF1	F555W		1	20	1113	4	CON	1
NGC1818-BKGRD	5 4 11.8	-66 36 40	WFC	IMAGE	WF1	F555W		1	200	1113	4	CON	1
NGC1818-BKGRD	5 4 11.8	-66 36 40	WFC	IMAGE	WF1	F555W		1	700	1113	4	CON	2
NGC1818-BKGRD	5 4 11.8	-66 36 40	WFC	IMAGE	WF1	F785LP		1	20	1113	4	CON	1
NGC1818-BKGRD	5 4 11.8	-66 36 40	WFC	IMAGE	WF1	F785LP		1	200	1113	4	CON	1
NGC1818	5 4 13.0	-66 26 10	WFC	IMAGE	WF1	F336W		1	30	1113	3		1
NGC1818	5 4 13.0	-66 26 10	WFC	IMAGE	WF1	F336W		1	400	1113	3		1
NGC1818	5 4 13.0	-66 26 10	WFC	IMAGE	WF1	F555W		1	3	1113	3		1
NGC1818	5 4 13.0	-66 26 10	WFC	IMAGE	WF1	F555W		1	50	1113	3		1
NGC1818	5 4 13.0	-66 26 10	WFC	IMAGE	WF1	F555W		1	300	1113	3		1
NGC1818	5 4 13.0	-66 26 10	WFC	IMAGE	WF1	F785LP		1	3	1113	3		1
NGC1818	5 4 13.0	-66 26 10	WFC	IMAGE	WF1	F785LP		1	50	1113	3		1
NGC1818	5 4 13.0	-66 26 10	WFC	IMAGE	WF1	F785LP		1	300	1113	3		1
LMC-N97	5 4 52.0	-68 39 10	FOC/96	IMAGE	512X512	F501N		1	2000	4075	2		1
LMC-N24	5 6 9.6	-67 45 28	FOC/96	IMAGE	512X512	F501N		1	1000	4075	2		1
POINT0454+844INCA221-31	5 6 18.6	84 43 44	S/C	POINTING	V1			1	1	4155	3	CON	1
PKS0506-61	5 6 44.1	-61 9 40	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
PKS0506-61	5 6 44.1	-61 9 40	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
PKS0506-61	5 6 44.1	-61 9 40	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
PKS0506-61	5 6 44.1	-61 9 40	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
LMC-WS9	5 8 2.2	-68 40 30	PC	IMAGE	ALL	F502N		1	300	1046	0		1
LMC-WS9	5 8 2.2	-68 40 30	PC	IMAGE	ALL	F664N		1	300	1046	0		1
LMC-WS9	5 8 2.2	-68 40 30	FOS/BL	ACCUM	1.0	G130H		1	1590	4129	3		1
LMC-WS9	5 8 2.2	-68 40 30	FOS/BL	ACCUM	1.0	G190H		1	795	4129	3		1
LMC-WS9-OFFSET	5 8 2.2	-68 40 30*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	58	4129	3	ACQ	1
0454+844INCA221-31	5 8 42.6	84 32 4	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
NGC1850-OFF	5 8 44.7	-68 46 12	WFC	IMAGE	ALL	F555W		1	10	3008	0		1
NGC1850-OFF	5 8 44.7	-68 46 12	WFC	IMAGE	ALL	F555W		1	100	3008	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC1850-OFF	5 8 44.7	-68 46 12	WFC	IMAGE	ALL	F555W		1	2200	3008	0		1
NGC1850-OFF	5 8 44.7	-68 46 12	WFC	IMAGE	ALL	F785LP		1	10	3008	0		1
NGC1850-OFF	5 8 44.7	-68 46 12	WFC	IMAGE	ALL	F785LP		1	100	3008	0		1
NGC1850-OFF	5 8 44.7	-68 46 12	WFC	IMAGE	ALL	F785LP		1	2200	3008	0		1
NGC1850	5 8 44.8	-68 45 42	PC	IMAGE	ALL	F555W		1	25	3060	0		2
NGC1850	5 8 44.8	-68 45 42	PC	IMAGE	ALL	F555W		1	250	3060	0		2
NGC1850	5 8 44.8	-68 45 42	WFC	IMAGE	ALL	F555W		1	10	3008	0		1
NGC1850	5 8 44.8	-68 45 42	WFC	IMAGE	ALL	F555W		1	100	3008	0		1
NGC1850	5 8 44.8	-68 45 42	WFC	IMAGE	ALL	F555W		1	2200	3008	0		1
NGC1850	5 8 44.8	-68 45 42	WFC	IMAGE	ALL	F785LP		1	10	3008	0		1
NGC1850	5 8 44.8	-68 45 42	WFC	IMAGE	ALL	F785LP		1	100	3008	0		1
NGC1850	5 8 44.8	-68 45 42	WFC	IMAGE	ALL	F785LP		1	2200	3008	0		1
LMC-N192	5 9 37.6	-70 49 13	FOC/96	IMAGE	512X512	F501N		1	1000	4075	2		1
NGC1866-BKGRD	5 13 36.9	-65 39 52	WFC	IMAGE	WF1	F555W		1	20	1113	4	CON	1
NGC1866-BKGRD	5 13 36.9	-65 39 52	WFC	IMAGE	WF1	F555W		1	200	1113	4	CON	1
NGC1866-BKGRD	5 13 36.9	-65 39 52	WFC	IMAGE	WF1	F555W		1	700	1113	4	CON	2
NGC1866-BKGRD	5 13 36.9	-65 39 52	WFC	IMAGE	WF1	F785LP		1	20	1113	4	CON	1
NGC1866-BKGRD	5 13 36.9	-65 39 52	WFC	IMAGE	WF1	F785LP		1	200	1113	4	CON	1
NGC1866	5 13 38.3	-65 27 52	WFC	IMAGE	WF1	F336W		1	30	1113	3		1
NGC1866	5 13 38.3	-65 27 52	WFC	IMAGE	WF1	F336W		1	400	1113	3		1
NGC1866	5 13 38.3	-65 27 52	WFC	IMAGE	WF1	F555W		1	3	1113	3		1
NGC1866	5 13 38.3	-65 27 52	WFC	IMAGE	WF1	F555W		1	50	1113	3		1
NGC1866	5 13 38.3	-65 27 52	WFC	IMAGE	WF1	F555W		1	300	1113	3		1
NGC1866	5 13 38.3	-65 27 52	WFC	IMAGE	WF1	F785LP		1	3	1113	3		1
NGC1866	5 13 38.3	-65 27 52	WFC	IMAGE	WF1	F785LP		1	50	1113	3		1
NGC1866	5 13 38.3	-65 27 52	WFC	IMAGE	WF1	F785LP		1	300	1113	3		1
NGC1851	5 14 6.3	-40 2 50	PC	IMAGE	ALL	F555W	5479	1	26	2946	3		3
NGC1851	5 14 6.3	-40 2 50	PC	IMAGE	ALL	F791W	8537	1	26	2946	3		2
NGC1851	5 14 6.6	-40 2 37	PC	IMAGE	P8	F439W	4385	1	2000	3282	2		1
NGC1851	5 14 6.6	-40 2 37	PC	IMAGE	P8	F336W	3363	1	2000	3282	2		2
NGC1851	5 14 6.7	-40 2 48	PC	IMAGE	ALL	F547M		1	100	1052	0		1
NGC1851	5 14 6.7	-40 2 48	PC	IMAGE	ALL	F230W		1	250	1052	0		1
NGC1851	5 14 6.7	-40 2 48	PC	IMAGE	ALL	F336W		1	130	1052	0		1
NGC1851-OFFSET	5 14 6.7	-40 2 48*	FOS/BL	ACQ/PEAK	0.5	MIRROR		1	4	4127	3	ACQ CON SEL	1
NGC1851-OFFSET	5 14 6.7	-40 2 48*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	58	4127	3	ACQ CON SEL	1
NGC1851-STAR	5 14 6.7	-40 2 48*	FOS/BL	ACCUM	0.5	G160L		1	6499	4127	3	CON SEL	1
NGC1851	5 14 6.9	-40 2 42	PC	IMAGE	P6	F555W		1	160	1019	0		1
NGC1851	5 14 6.9	-40 2 42	PC	IMAGE	P6	F785LP		1	160	1019	0		1
AKN120	5 16 11.4	-0 8 59	FOC/96	IMAGE	512X512	F152M	1500	1	2000	1227	0		1
AKN120	5 16 11.4	-0 8 59	FOC/96	IMAGE	512X512	F130M	1270	1	2000	3180	1		1
AKN120	5 16 11.4	-0 8 59	FOC/96	IMAGE	512X512	F170M	1760	1	2000	3180	1		1
AKN120	5 16 11.4	-0 8 59	FOC/96	IMAGE	512X512	F190M	1975	1	2000	3180	1		1
AKN120	5 16 11.4	-0 8 59	FOC/96	IMAGE	512X512	F501N	5010	1	1200	1227	0		1
AKN120	5 16 11.4	-0 8 59	FOC/96	IMAGE	512X512	F550M	5470	1	1200	1227	0		1
AKN120	5 16 11.5	-0 8 59	FOS/BL	ACCUM	1.0	G190H		1	600	3988	3		1
AKN120	5 16 11.5	-0 8 59	FOS/BL	ACCUM	1.0	G130H		1	1800	3988	3		1
AKN120	5 16 11.5	-0 8 59	FOS/BL	ACCUM	1.0	G270H		1	360	3988	3		1
AKN120	5 16 11.5	-0 8 59	FOS/BL	ACQ/BINA	4.3	MIRROR		1	6	3988	3	ACQ	1
PKS0514-16	5 16 15.9	-16 3 8	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
PKS0514-16	5 16 15.9	-16 3 8	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD34029	5 16 41.2	45 59 53	HRS	ACCUM	2.0	G200M	1750	1	30	1175	0		1
HD34029	5 16 41.2	45 59 53	HRS	ACCUM	2.0	G140M	1300	1	120	1175	0		1
HD34029	5 16 41.2	45 59 53	HRS	ACCUM	2.0	G160M	1550	1	180	1175	0		1
HD34029	5 16 41.2	45 59 53	HRS	ACCUM	2.0	G200M	1900	1	280	1175	0		1
HD34029	5 16 41.2	45 59 53	HRS	ACCUM	2.0	G140L	1304	1	30	1175	0		1
HD34029	5 16 41.2	45 59 53	HRS	ACCUM	2.0	G140L	1574	1	30	1175	0		1
HD34029	5 16 41.2	45 59 53	HRS	ACCUM	2.0	G160M	1654	1	120	1175	0		1
HD34029	5 16 41.2	45 59 53	HRS	IMAGE	2.0	MIRROR-A2		1	96	1175	0		2
HD34029	5 16 41.2	45 59 53	HRS	ACCUM	2.0	G160M	1402	1	379	1175	0		1
HD34029	5 16 41.2	45 59 53	HRS	ACCUM	0.25	ECH-B20	2800	1	707	1175	0		1
HD34029	5 16 41.2	45 59 53	HRS	ACCUM	0.25	ECH-B22	2600	1	707	1175	0		1
HD34029	5 16 41.2	45 59 53	HRS	ACCUM	0.25	ECH-B20	2800	1	707	3943	2		1
HD34029	5 16 41.2	45 59 53	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	1175	0	ACQ	2
HD34029	5 16 41.2	45 59 53	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	163	3943	2	ACQ	1
HD34029	5 16 41.2	45 59 53	HRS	ACCUM	0.25	ECH-A46	1213	4	979	1175	0		1
HD34029	5 16 41.2	45 59 53	HRS	ACCUM	0.25	G160M	1223	2	979	3943	2		1
PICTORA	5 19 26.3	-45 45 54	PC	IMAGE	ALL	F606W POL0		1	480	3263	9		1
PICTORA	5 19 26.3	-45 45 54	PC	IMAGE	ALL	F606W POL60		1	480	3263	9		1
PICTORA	5 19 26.3	-45 45 54	PC	IMAGE	ALL	F606W POL120		1	480	3263	9		1
PICTORA	5 19 26.3	-45 45 54	FOC/96	IMAGE	512X512	F430W POL0		1	480	3263	9		1
PICTORA	5 19 26.3	-45 45 54	FOC/96	IMAGE	512X512	F430W POL60		1	480	3263	9		1
PICTORA	5 19 26.3	-45 45 54	FOC/96	IMAGE	512X512	F430W POL120		1	480	3263	9		1
0519-69.0	5 19 33.8	-69 2 10	WFC	IMAGE	ALL	F547M		1	800	4108	2		1
0519-69.0	5 19 33.8	-69 2 10	WFC	IMAGE	ALL	F656N		2	1900	4108	2		1
0519-69.0P1	5 19 33.8	-69 2 10	FOS/BL	ACCUM	1.0-PAIR	G130H		1	8000	4141	3		1
0519-69.0P1	5 19 33.8	-69 2 10	FOS/BL	ACCUM	1.0-PAIR	G190H		1	4000	4141	3		1
0519-69.0P1	5 19 33.8	-69 2 10	FOS/RD	ACCUM	1.0-PAIR	G270H		1	2400	4141	3		1
0519-69.0P1	5 19 33.8	-69 2 10	FOS/RD	ACCUM	1.0-PAIR	G400H		1	2400	4141	3		1
0519-69.0P1	5 19 33.8	-69 2 10	FOS/RD	ACCUM	1.0-PAIR	G570H		1	2400	4141	3		1
STAR2-OFFSET	5 19 33.8	-69 2 10	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	4141	3	ACQ	1
STAR2-OFFSET	5 19 33.8	-69 2 10	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	4141	3	ACQ	1
PKS0521-36	5 22 57.9	-36 27 32	FOC/96	IMAGE	512X512	F320W		1	3000	2993	0		1
PKS0521-36	5 22 57.9	-36 27 32	FOC/96	IMAGE	512X512	F430W		1	3000	2993	0		1
LMC-N201	5 24 55.1	-71 32 56	FOC/96	IMAGE	512X512	F486N		1	1000	1266	1		1
LMC-N201	5 24 55.1	-71 32 56	FOC/96	IMAGE	512X512	F501N		1	1000	1266	1		1
LMC-N49	5 26 1.0	-66 4 39	WFC	IMAGE	ALL	F336W		1	1200	4037	3		1
LMC-N49	5 26 1.0	-66 4 39	WFC	IMAGE	ALL	F702W		1	1200	4037	3		1
N49	5 26 1.6	-66 5 4	WFC	IMAGE	ALL	F517N		1	1000	1048	0		1
N49	5 26 1.6	-66 5 4	WFC	IMAGE	ALL	F656N		1	1500	1048	0		1
STAR1-OFFSET	5 26 11.1	-66 6 4	FOS/BL	ACQ/BINA	4.3	MIRROR		1	112	4108	2	ACQ	1
STAR1-OFFSET	5 26 11.1	-66 6 4	FOS/RD	ACQ/BINA	4.3	MIRROR		1	27	4108	2	ACQ	1
N49-P1	5 26 17.0	-66 5 7*	FOS/RD	ACCUM	1.0-PAIR	G270H		1	1000	4108	2		1
N49-P1	5 26 17.0	-66 5 7*	FOS/RD	ACCUM	1.0-PAIR	G400H		1	1000	4108	2		1
N49-P1	5 26 17.0	-66 5 7*	FOS/RD	ACCUM	1.0-PAIR	G570H		1	1000	4108	2		1
N49-P1	5 26 17.0	-66 5 7*	FOS/BL	ACCUM	1.0-PAIR	G130H		1	5500	4108	2		1
N49-P1	5 26 17.0	-66 5 7*	FOS/BL	ACCUM	1.0-PAIR	G190H		1	2750	4108	2		1
LMC-N52	5 28 42.9	-67 33 47	FOC/96	IMAGE	512X512	F501N		1	1000	4075	2		1
HD36705	5 28 44.7	-65 26 55	HRS	ACCUM	2.0	ECH-B	2798	1	272	3948	9		20
HD36705	5 28 44.7	-65 26 55	HRS	ACCUM	2.0	G160M	1400	4	326	3948	9		7
HD36705	5 28 44.7	-65 26 55	HRS	ACCUM	2.0	G160M	1240	4	326	3948	9		2
HD36705	5 28 44.7	-65 26 55	HRS	ACCUM	2.0	G160M	1550	4	326	3948	9		6
HD36705	5 28 44.7	-65 26 55	HRS	ACCUM	2.0	G200M	1900	4	326	3948	9		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD36705	5 28 44.7	-65 26 55	HRS	ACCUM	2.0	G160M	1335	4	326	3948	9		2
HD36705	5 28 44.7	-65 26 55	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	163	3948	9	ACQ	7
NGC1978	5 28 45.7	-66 14 7	WFC	IMAGE	WF1	F555W		1	20	1113	3		1
NGC1978	5 28 45.7	-66 14 7	WFC	IMAGE	WF1	F555W		1	200	1113	3		1
NGC1978	5 28 45.7	-66 14 7	WFC	IMAGE	WF1	F555W		1	700	1113	3		2
NGC1978	5 28 45.7	-66 14 7	WFC	IMAGE	WF1	F785LP		1	20	1113	3		1
NGC1978	5 28 45.7	-66 14 7	WFC	IMAGE	WF1	F785LP		1	200	1113	3		1
TV-COL	5 29 25.0	-32 49 4	FGS	POS	2	F550W		1	52	2934	9		48
TV-COL	5 29 25.0	-32 49 4	FGS	TRANS	ANY	F583W		1	100	2934	9		1
LMC-BAR-60MIN-SE	5 30 22.7	-70 0 56	WFC	IMAGE	WF1	F555W		1	20	1113	4	CON	1
LMC-BAR-60MIN-SE	5 30 22.7	-70 0 56	WFC	IMAGE	WF1	F555W		1	200	1113	4	CON	1
LMC-BAR-60MIN-SE	5 30 22.7	-70 0 56	WFC	IMAGE	WF1	F555W		1	700	1113	4	CON	2
LMC-BAR-60MIN-SE	5 30 22.7	-70 0 56	WFC	IMAGE	WF1	F785LP		1	20	1113	4	CON	1
LMC-BAR-60MIN-SE	5 30 22.7	-70 0 56	WFC	IMAGE	WF1	F785LP		1	200	1113	4	CON	1
NGC1978-BKGRD	5 30 34.5	-66 13 15*	WFC	IMAGE	WF1	F555W		1	20	1113	4	CON	1
NGC1978-BKGRD	5 30 34.5	-66 13 15*	WFC	IMAGE	WF1	F555W		1	200	1113	4	CON	1
NGC1978-BKGRD	5 30 34.5	-66 13 15*	WFC	IMAGE	WF1	F555W		1	700	1113	4	CON	2
NGC1978-BKGRD	5 30 34.5	-66 13 15*	WFC	IMAGE	WF1	F785LP		1	20	1113	4	CON	1
NGC1978-BKGRD	5 30 34.5	-66 13 15*	WFC	IMAGE	WF1	F785LP		1	200	1113	4	CON	1
HD36486	5 32 0.4	-0 17 57	HRS	ACCUM	0.25	G160M	1560	1	104	3444	2		1
HD36486	5 32 0.4	-0 17 57	HRS	ACCUM	0.25	G160M	1195	1	129	3444	2		1
HD36486	5 32 0.4	-0 17 57	HRS	ACCUM	0.25	G160M	1148	2	138	3444	2		1
HD36486	5 32 0.4	-0 17 57	HRS	WSCAN	0.25	ECH-B	2260	1	20	3444	2		1
HD36486	5 32 0.4	-0 17 57	HRS	ACCUM	0.25	G160M	1252	1	60	3444	2		1
HD36486	5 32 0.4	-0 17 57	HRS	ACCUM	0.25	G160M	1347	1	58	3444	2		1
HD36486	5 32 0.4	-0 17 57	HRS	ACCUM	0.25	G160M	1392	1	73	3444	2		1
HD36486	5 32 0.4	-0 17 57	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	3444	2	ACQ	1
HD36486	5 32 0.4	-0 17 57	HRS	WSCAN	0.25	ECH-B	2025	1	36	3444	2		1
HD36486	5 32 0.4	-0 17 57	HRS	WSCAN	0.25	ECH-B	2059	1	40	3444	2		1
HD36486	5 32 0.4	-0 17 57	HRS	WSCAN	0.25	ECH-B	2372	1	29	3444	2		1
HD36486	5 32 0.4	-0 17 57	HRS	WSCAN	0.25	ECH-B	2603	1	47	3444	2		1
HD36486	5 32 0.4	-0 17 57	HRS	ACCUM	0.25	G160M	1315	1	48	3444	2		1
HD36486	5 32 0.4	-0 17 57	HRS	WSCAN	0.25	ECH-B	1805	1	83	3444	2		1
HD36486	5 32 0.4	-0 17 57	HRS	WSCAN	0.25	ECH-B	1826	1	83	3444	2		1
LMC-WS33	5 34 21.2	-68 58 25	PC	IMAGE	ALL	F502N		1	300	1046	0		1
LMC-WS33	5 34 21.2	-68 58 25	PC	IMAGE	ALL	F664N		1	300	1046	0		1
LMC-WS33	5 34 21.2	-68 58 25	FOS/BL	ACCUM	1.0	G130H		1	1590	4129	3		1
LMC-WS33	5 34 21.2	-68 58 25	FOS/BL	ACCUM	1.0	G190H		1	795	4129	3		1
LMC-WS33-OFFSET	5 34 21.2	-68 58 25*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	58	4129	3	ACQ	1
CRAB-FILAMENT	5 34 30.1	22 0 30	FOC/96	IMAGE	512X512	F342W		1	1500	2896	0		1
CRAB-FILAMENT	5 34 30.1	22 0 30	FOC/96	IMAGE	512X512	F501N		2	1500	2896	0		1
PSR0531+21	5 34 31.9	22 0 52	HSP/UV2	SINGLE	1.0	F160LP		1	1680	1101	0		1
NGC1952	5 34 31.9	22 0 52	PC	IMAGE	ALL	F547M		1	900	1138	0		2
NGC1952	5 34 31.9	22 0 52	PC	IMAGE	PC6	F547M		1	1200	3284	4	CON	1
NGC1952	5 34 31.9	22 0 52	PC	IMAGE	PC6	F648M		1	1200	3284	4	CON	1
NGC1952	5 34 31.9	22 0 52	PC	IMAGE	PCALL	F336W		1	60	3284	3		1
NGC1952	5 34 31.9	22 0 52	PC	IMAGE	PCALL	F336W		1	400	3284	3		1
NGC1952	5 34 31.9	22 0 52	PC	IMAGE	PCALL	F336W		1	2000	3284	3		1
NGC1952	5 34 31.9	22 0 52	PC	IMAGE	PCALL	F648M		1	2000	3284	3		1
NGC1952	5 34 31.9	22 0 52	PC	IMAGE	PCALL	F547M		1	1200	3284	4	CON	1
NGC1952	5 34 31.9	22 0 52	PC	IMAGE	PCALL	F785LP		1	60	3284	3		1
NGC1952	5 34 31.9	22 0 52	PC	IMAGE	PCALL	F785LP		1	400	3284	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC1952	5 34 31.9	22 0 52	PC	IMAGE	PCALL	F785LP		1	2000	3284	3		1
CRAB-PULSAR	5 34 32.0	22 0 52	FOS/BL	ACCUM	4.3	PRISM		1	1300	4133	3		1
CRAB-PULSAR	5 34 32.0	22 0 52	FOS/BL	ACCUM	4.3	G130H		1	2700	4133	3	CON SEL	1
CRAB-PULSAR	5 34 32.0	22 0 52	FOS/BL	ACCUM	4.3	G190H		1	2700	4133	3	CON SEL	1
CRAB-PULSAR	5 34 32.0	22 0 52	FOS/BL	ACCUM	4.3	G270H		1	2700	4133	3	CON SEL	1
CRAB-PULSAR	5 34 32.0	22 0 52	FOS/BL	ACCUM	4.3	PRISM		1	2700	4133	3	CON SEL	1
CRAB-PULSAR	5 34 32.0	22 0 52	FOS/BL	ACQ/BINA	4.3	MIRROR		1	18	4133	3	ACQ	1
CRAB-PULSAR	5 34 32.0	22 0 52	FOS/BL	ACQ/BINA	4.3	MIRROR		1	18	4133	3	ACQ CON SEL	4
SAO249318	5 34 43.9	-69 28 19	WFC	IMAGE	WF2	F673N		1	5	4087	2		1
SAO249318	5 34 43.9	-69 28 19	WFC	IMAGE	WF2	F656N		1	23	4087	2		1
SAO249318	5 34 43.9	-69 28 19	WFC	IMAGE	WF2	F702W		1	0	4087	2		1
CRAB-PSF	5 34 56.1	22 34 8	PC	IMAGE	ALL	F547M		1	0	1138	0		1
NGC1976-3	5 35 8.0	-5 24 56	WFC	IMAGE	ALL	F631N		1	900	1075	9		1
NGC1976-3	5 35 8.0	-5 24 56	WFC	IMAGE	ALL	F502N		1	480	1075	9		1
NGC1976-3	5 35 8.0	-5 24 56	WFC	IMAGE	ALL	F656N		1	360	1075	9		1
NGC1976-4	5 35 8.1	-5 22 44	WFC	IMAGE	ALL	F631N		1	900	1075	9		1
NGC1976-4	5 35 8.1	-5 22 44	WFC	IMAGE	ALL	F502N		1	480	1075	9		1
NGC1976-4	5 35 8.1	-5 22 44	WFC	IMAGE	ALL	F656N		1	360	1075	9		1
HD36861	5 35 8.3	9 56 4	HRS	ACCUM	0.25	G160M	1335	1	1152	3990	3		1
HD36861	5 35 8.3	9 56 4	HRS	ACCUM	0.25	G160M	1477	1	1152	3990	3		2
HD36861	5 35 8.3	9 56 4	HRS	ACCUM	0.25	G160M	1349	1	1152	3990	3		3
HD36861	5 35 8.3	9 56 4	HRS	ACCUM	0.25	ECH-B24	2325	1	1152	3990	3		3
HD36861	5 35 8.3	9 56 4	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	3990	3	ACQ	1
M42HH	5 35 11.5	-5 21 35	WFC	IMAGE	WFALL	F702W		1	100	3285	4	CON	1
M42HH	5 35 11.5	-5 21 35	WFC	IMAGE	WFALL	F702W		1	100	3285	4	ACQ CON	1
M42HH	5 35 11.5	-5 21 35	WFC	IMAGE	WFALL	F673N		2	400	3285	4	CON	2
NGC1976-2	5 35 16.8	-5 24 57	WFC	IMAGE	ALL	F631N		1	900	1075	9		1
NGC1976-2	5 35 16.8	-5 24 57	WFC	IMAGE	ALL	F502N		1	480	1075	9		1
NGC1976-2	5 35 16.8	-5 24 57	WFC	IMAGE	ALL	F656N		1	360	1075	9		1
NGC1976-5	5 35 16.9	-5 22 45	WFC	IMAGE	ALL	F631N		1	900	1075	9		1
NGC1976-5	5 35 16.9	-5 22 45	WFC	IMAGE	ALL	F502N		1	480	1075	9		1
NGC1976-5	5 35 16.9	-5 22 45	WFC	IMAGE	ALL	F656N		1	360	1075	9		1
NGC1976-1	5 35 25.6	-5 24 57	WFC	IMAGE	ALL	F631N		1	900	1075	9		1
NGC1976-1	5 35 25.6	-5 24 57	WFC	IMAGE	ALL	F502N		1	480	1075	9		1
NGC1976-1	5 35 25.6	-5 24 57	WFC	IMAGE	ALL	F656N		1	360	1075	9		1
NGC1976-6	5 35 25.7	-5 22 45	WFC	IMAGE	ALL	F502N		1	960	1075	9		1
NGC1976-6	5 35 25.7	-5 22 45	WFC	IMAGE	ALL	F631N		1	1500	1075	9		1
NGC1976-6	5 35 25.7	-5 22 45	WFC	IMAGE	ALL	F656N		1	720	1075	9		1
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1335	1	115	1168	2		1
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1474	1	115	1168	2		1
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1475	1	115	1168	2		1
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1476	1	115	1168	2		1
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1354	1	230	1168	2		3
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1353	1	230	1168	2		1
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	ECH-B24	2324	1	57	1168	2		1
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	ECH-B24	2323	1	57	1168	2		3
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1506	1	172	1168	2		1
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1507	1	172	1168	2		1
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1508	1	172	1168	2		1
HD37043	5 35 25.9	-5 54 36	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	1168	2	ACQ	1
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1474	1	115	1168	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1475	1	115	1168	2		2
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1353	1	230	1168	2		2
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	ECH-B24	2324	1	57	1168	2		2
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1506	1	172	1168	2		1
HD37043	5 35 25.9	-5 54 36	HRS	ACCUM	0.25	G160M	1507	1	172	1168	2		2
SN1987A	5 35 28.0	-69 16 11	PC	IMAGE	PCALL	F555W		1	5	3285	3		1
SN1987A	5 35 28.0	-69 16 11	PC	IMAGE	PCALL	F555W		1	50	3285	3		3
SN1987A	5 35 28.0	-69 16 11	PC	IMAGE	PCALL	F555W		1	200	3285	3		3
SN1987A	5 35 28.0	-69 16 11	PC	IMAGE	PCALL	F656N		1	300	3285	3		1
SN1987A	5 35 28.0	-69 16 11	PC	IMAGE	PCALL	F702W		1	5	3285	3		1
SN1987A	5 35 28.0	-69 16 11	PC	IMAGE	PCALL	F702W		1	50	3285	3		3
SN1987A	5 35 28.0	-69 16 11	PC	IMAGE	PCALL	F702W		1	200	3285	3		3
SN1987A	5 35 28.0	-69 16 11	PC	IMAGE	PCALL	F336W		1	5	3285	3	ACQ	1
SN1987A	5 35 28.0	-69 16 11	PC	IMAGE	PCALL	F336W		1	50	3285	3	ACQ	1
SN1987A	5 35 28.0	-69 16 11	PC	IMAGE	PCALL	F336W		1	200	3285	3	ACQ	1
SN1987A	5 35 28.0	-69 16 11	PC	IMAGE	PCALL	F656N		2	300	3285	3		2
SN1987A	5 35 28.0	-69 16 11	PC	IMAGE	PCALL	F850LP		1	50	3285	3		3
SN1987A	5 35 28.0	-69 16 11	PC	IMAGE	PCALL	F850LP		1	200	3285	3		3
SN1987A	5 35 28.0	-69 16 12*	HSP/POL	SINGLE	6.0	F160LP		1	2400	1098	0		1
SN1987A	5 35 28.0	-69 16 12*	HSP/POL	SINGLE	6.0	F160LP		1	2400	1098	1		2
SN1987A	5 35 28.0	-69 16 12*	HSP/POL	SINGLE	6.0	F160LP		1	2400	1098	2		1
SN1987A	5 35 28.0	-69 16 12*	HSP/POL	SINGLE	6.0	F160LP		1	2400	4083	2		2
SN1987A	5 35 28.0	-69 16 12*	HSP/POL	SINGLE	6.0	F160LP		1	2400	4202	3		2
SN1987A	5 35 28.0	-69 16 11	FOC/96	IMAGE	512X512	F275W		2	1200	1259	0		1
SN1987A	5 35 28.0	-69 16 11	FOC/96	IMAGE	512X512	F486N		2	1200	1259	0	UNP	1
SN1987A	5 35 28.0	-69 16 11	FOC/96	IMAGE	512X512	F501N		2	1200	1259	0	UNP	1
SN1987A	5 35 28.3	-69 16 13	FOC/96	IMAGE	512X512	F175W		1	2000	2999	0		1
SN1987A	5 35 28.3	-69 16 13	FOC/96	IMAGE	512X512	F275W		1	1000	2999	0		1
SN1987A	5 35 28.3	-69 16 13	FOC/96	IMAGE	512X512	F346M		1	1000	2999	0		1
SN1987A	5 35 28.3	-69 16 13	FOC/96	IMAGE	512X512	F501N		1	2000	2999	0		1
HH34	5 35 29.9	-6 27 1	PC	IMAGE	PCALL	F702W		1	200	3285	3		2
HH34	5 35 29.9	-6 27 1	PC	IMAGE	PCALL	F656N		2	300	3285	3		2
HH34	5 35 29.9	-6 27 1	PC	IMAGE	PCALL	F673N		2	300	3285	3		2
HH34	5 35 29.9	-6 27 1	PC	IMAGE	PCALL	F702W		1	120	3285	3	ACQ	1
HH34	5 35 29.9	-6 27 1	PC	IMAGE	PCALL	F850LP		2	600	3285	3		1
A0538-66	5 35 40.5	-66 51 53	HSP/POL	SINGLE	POL0	F277M		1	450	4036	3		12
A0538-66	5 35 40.5	-66 51 53	HSP/POL	SINGLE	POL45	F277M		1	450	4036	3		12
A0538-66	5 35 40.5	-66 51 53	HSP/POL	SINGLE	POL90	F277M		1	450	4036	3		12
A0538-66	5 35 40.5	-66 51 53	HSP/POL	SINGLE	POL135	F277M		1	450	4036	3		12
HH1	5 36 20.5	-6 45 11	FOC/96	IMAGE	512X512	F372M		2	1000	1263	1		1
HH1	5 36 20.5	-6 45 11	FOC/96	IMAGE	512X512	F486N		2	1000	1263	1		1
HH1	5 36 20.5	-6 45 11	FOC/96	IMAGE	512X512	F501N		2	1000	1263	1		1
HH1	5 36 20.5	-6 45 11	FOC/96	IMAGE	512X512	F190M		2	1200	2897	0		1
LMC-N66	5 36 20.8	-67 18 8	FOC/96	IMAGE	512X512	F486N		1	1000	1266	1		1
LMC-N66	5 36 20.8	-67 18 8	FOC/96	IMAGE	512X512	F501N		1	1000	1266	1		1
LMC-WS35	5 36 20.9	-67 18 8	PC	IMAGE	ALL	F502N		1	300	1046	0		1
LMC-WS35	5 36 20.9	-67 18 8	PC	IMAGE	ALL	F664N		1	300	1046	0		1
LMC-WS35	5 36 20.9	-67 18 8	FOS/BL	ACCUM	1.0	G130H		1	1590	4129	3		1
LMC-WS35	5 36 20.9	-67 18 8	FOS/BL	ACCUM	1.0	G190H		1	795	4129	3		1
LMC-WS35-OFFSET	5 36 20.9	-67 18 8*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	58	4129	3	ACQ	1
HH1-2CTR	5 36 21.0	-6 45 25	PC	IMAGE	PCALL	F702W		1	400	3285	3		2
HH1-2CTR	5 36 21.0	-6 45 25	PC	IMAGE	PCALL	F656N		2	600	3285	3		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HH1-2CTR	5 36 21.0	-6 45 25	PC	IMAGE	PCALL	F673N		2	700	3285	3		2
HH1-2CTR	5 36 21.0	-6 45 25	PC	IMAGE	PCALL	F850LP		1	400	3285	3		1
CS-STAR	5 36 23.3	-6 46 7	WFC	IMAGE	ALL	F702W		1	400	1121	0		1
CS-STAR	5 36 23.3	-6 46 7	WFC	IMAGE	ALL	F673N		1	600	3285	4	CON	1
CS-STAR	5 36 23.3	-6 46 7	WFC	IMAGE	ALL	F656N		1	1200	1121	0		1
CS-STAR	5 36 23.3	-6 46 7	WFC	IMAGE	ALL	F673N		1	1200	1121	0		1
CS-STAR	5 36 23.3	-6 46 7	WFC	IMAGE	WFALL	F656N		1	600	3285	4	CON	1
CS-STAR	5 36 23.3	-6 46 7	WFC	IMAGE	WFALL	F673N		1	600	3285	4	CON	1
CS-STAR	5 36 23.3	-6 46 7	WFC	IMAGE	WFALL	F702W		1	200	3285	4	CON	2
CS-STAR	5 36 23.3	-6 46 7	WFC	IMAGE	WFALL	F702W		1	200	3285	4	ACQ CON	1
CS-STAR	5 36 23.3	-6 46 7	WFC	IMAGE	WFALL	F850LP		1	200	3285	4	CON	1
HH2	5 36 25.5	-6 47 12	FOC/96	IMAGE	512X1024	F372M		1	1500	1263	1		1
HH2	5 36 25.5	-6 47 12	FOC/96	IMAGE	512X1024	F486N		1	1500	1263	1		1
HH2	5 36 25.5	-6 47 12	FOC/96	IMAGE	512X1024	F501N		1	1500	1263	1		1
INCA221-35	5 38 12.8	-44 5 26	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
INCA221-35	5 38 13.0	-44 5 25	FGS	POS	2	F583W		1	51	1532	9		6
HD38268	5 38 22.6	-69 4 13	FOC/96	IMAGE	512X1024	F120M		1	2700	3058	1		1
HD38268	5 38 22.6	-69 4 13	FOC/96	IMAGE	512X512	F130M F4ND		1	2700	3058	1		1
HD38268	5 38 22.6	-69 4 13	FOC/96	IMAGE	512X512	F253M F6ND		1	2700	3058	1		1
POINT0537-441INCA221 -36	5 38 25.7	-44 16 35	S/C	POINTING	V1			1	1	4155	3	CON	1
POINT0537-441INCA221 -35	5 38 25.7	-44 16 40	S/C	POINTING	V1			1	1	4155	3	CON	1
POINT0537-441INCA221 -35	5 38 39.8	-44 16 59	S/C	POINTING	V1			1	0	1532	9		3
MK42	5 38 42.1	-69 5 55	PC	IMAGE	ALL	F284W		1	40	3030	0		4
MK42	5 38 42.1	-69 5 55	PC	IMAGE	ALL	F284W		1	100	3030	0		1
MK42	5 38 42.1	-69 5 55	PC	IMAGE	ALL	F368M		1	40	3030	0		2
MK42	5 38 42.1	-69 5 55	PC	IMAGE	ALL	F368M		1	100	3030	0		1
MK42	5 38 42.1	-69 5 55	HRS	ACCUM	2.0	G140L	1300	1	435	3030	0		1
MK42	5 38 42.1	-69 5 55	HRS	ACCUM	0.25	G140L	1300	1	1740	3030	0		1
MK42	5 38 42.1	-69 5 55	HRS	ACCUM	2.0	G140L	1612	1	1740	3030	0		1
MK42	5 38 42.1	-69 5 55	HRS	ACCUM	0.25	G140L	1612	4	1740	3030	0		1
30DOR-STARS	5 38 42.1	-69 5 42*	PC	IMAGE	ALL	F284W		5	450	1215	0	UNP	1
HD38268	5 38 42.3	-69 6 3	FOC/96	IMAGE	512X512	F130M		2	1200	4073	2		1
HD38268	5 38 42.3	-69 6 3	FOC/96	IMAGE	512X512	F1ND F346M F4ND		2	1200	4073	2		1
HD38268	5 38 42.5	-69 6 3	FOC/288	IMAGE	512X512	F170M		1	900	1255	0		1
HD38268	5 38 42.5	-69 6 3	FOC/288	IMAGE	512X512	F210M		1	900	1255	0		1
HD38268	5 38 42.5	-69 6 3	FOC/96	IMAGE	512X512	F346M F8ND		1	600	2998	0		1
HD38268	5 38 42.5	-69 6 3	FOC/96	IMAGE	512X512	F410M F8ND		1	600	2998	0		1
HD38268	5 38 42.5	-69 6 3	FOC/96	IMAGE	512X512	F470M F8ND		1	600	2998	0		1
HD38268	5 38 42.5	-69 6 3	FOC/288	IMAGE	512X512	F2ND F550M		1	300	1255	0		1
HD38268	5 38 42.5	-69 6 3	FOC/288	IMAGE	512X512	F253M F2ND		1	600	1255	0		1
HD38268	5 38 42.5	-69 6 3	FOC/288	IMAGE	512X512	F253M F4ND		1	900	2998	0		1
HD38268	5 38 42.5	-69 6 3	FOC/96	IMAGE	512X512	F1ND F550M F6ND		1	600	2998	0		1
30DOR-STARS	5 38 42.5	-69 6 3	PC	IMAGE	P6	F439W		1	30	3987	1		1
30DOR-STARS	5 38 42.5	-69 6 3	PC	IMAGE	P6	F439W		5	180	3987	1		1
R136A	5 38 42.5	-69 6 3	HRS	IMAGE	2.0	MIRROR-N2		1	242	3210	2		1
R136A	5 38 42.5	-69 6 3	HRS	ACCUM	2.0	G160M	1250	3	1280	3210	2		1
R136A	5 38 42.5	-69 6 3	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	102	3210	2		1
R136A	5 38 42.5	-69 6 3	HRS	IMAGE	2.0	MIRROR-N2		1	96	3210	2		2
R136A1	5 38 42.5	-69 6 3	HRS	IMAGE	2.0	MIRROR-N1		1	484	1188	0		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
R136A1	5 38 42.5	-69 6 3	HRS	ACCUM	2.0	G140L	1450	1	600	1188	0		1
R136A1	5 38 42.5	-69 6 3	HRS	ACCUM	2.0	G140L	1200	2	600	1188	0		1
R136A1	5 38 42.5	-69 6 3	HRS	ACCUM	2.0	G140L	1700	2	480	1188	0		1
R136A1	5 38 42.5	-69 6 3	HRS	IMAGE	2.0	MIRROR-N2		1	96	1188	0		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F336W		3	600	4168	3		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F439W		3	80	4168	3		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F469N		3	2000	4168	3		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F555W		3	40	4168	3		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F702W		3	80	4168	3		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F439W		4	20	4168	3		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F469N		4	400	4168	3		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F555W		4	10	4168	3		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F702W		4	20	4168	3		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F555W		6	80	4168	3		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F336W		4	140	4168	3		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F336W		4	1200	4168	3		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F439W		6	160	4168	3		1
R136	5 38 43.4	-69 6 5	PC	IMAGE	PC6	F702W		6	160	4168	3		1
R136-LMC	5 38 43.4	-69 6 5	PC	IMAGE	P6	F336W		1	80	1121	0		1
R136-LMC	5 38 43.4	-69 6 5	PC	IMAGE	P6	F469N		1	140	1121	0		1
R136-LMC	5 38 43.4	-69 6 5	PC	IMAGE	P6	F555W		1	16	1121	0		1
R136-LMC	5 38 43.4	-69 6 5	PC	IMAGE	P6	F702W		1	26	1121	0		1
R136-LMC	5 38 43.4	-69 6 5	PC	IMAGE	PC8	F336W		1	0	3285	4	CON	1
R136-LMC	5 38 43.4	-69 6 5	PC	IMAGE	PC8	F469N		1	40	3285	4	CON	1
R136-LMC	5 38 43.4	-69 6 5	PC	IMAGE	PC8	F555W		1	1	3285	4	CON	1
R136-LMC	5 38 43.4	-69 6 5	PC	IMAGE	PC8	F656N		1	70	3285	4	CON	1
R136-LMC	5 38 43.4	-69 6 5	PC	IMAGE	PC8	F555W		1	10	3285	4	ACQ CON	1
R136-LMC	5 38 43.4	-69 6 5	PC	IMAGE	ALL	F368M		5	300	2886	1		1
R136-LMC	5 38 43.4	-69 6 5	PC	IMAGE	ALL	F547M		5	100	2886	1		1
R136-LMC	5 38 43.4	-69 6 5	PC	IMAGE	PC8	F850LP		1	3	3285	4	CON	1
R136-LMC	5 38 43.4	-69 6 5	PC	IMAGE	PC8	F702W		1	2	3285	4	CON	2
30DOR	5 38 43.5	-69 5 5	WFC	IMAGE	WFALL	F656N		1	1800	4087	2		1
30DOR	5 38 43.5	-69 5 5	WFC	IMAGE	WFALL	F702W		1	26	4087	2		1
30DOR	5 38 43.5	-69 5 5	WFC	IMAGE	WFALL	F673N		2	3600	4087	2		1
0537-441INCA221-35	5 38 49.7	-44 5 9	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
0537-441INCA221-36	5 38 49.7	-44 5 9	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
0537-441INCA221-35	5 38 49.8	-44 5 9	FGS	POS	2	F583W		1	51	1532	9		9
PKS0537-441	5 38 49.8	-44 5 4	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
PKS0537-441BKG	5 38 49.8	-44 4 49*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
A0535+26	5 38 54.6	26 18 57	HSP/UV1	PRISM	1.0	F248M/F135W		1	3000	1091	3		1
LMCX-3	5 38 56.4	-64 5 1	HSP/POL	STAR-SKY	POL0	F277M		1	330	4036	3		14
LMCX-3	5 38 56.4	-64 5 1	HSP/POL	STAR-SKY	POL0	F277M		1	495	4036	3		2
LMCX-3	5 38 56.4	-64 5 1	HSP/POL	STAR-SKY	POL45	F277M		1	330	4036	3		14
LMCX-3	5 38 56.4	-64 5 1	HSP/POL	STAR-SKY	POL45	F277M		1	495	4036	3		2
LMCX-3	5 38 56.4	-64 5 1	HSP/POL	STAR-SKY	POL90	F277M		1	330	4036	3		14
LMCX-3	5 38 56.4	-64 5 1	HSP/POL	STAR-SKY	POL90	F277M		1	495	4036	3		2
LMCX-3	5 38 56.4	-64 5 1	HSP/POL	STAR-SKY	POL135	F277M		1	330	4036	3		14
LMCX-3	5 38 56.4	-64 5 1	HSP/POL	STAR-SKY	POL135	F277M		1	495	4036	3		2
LMC-X-3	5 38 56.6	-64 5 4	FOS/BL	ACQ/BINA	4.3	MIRROR		1	60	1151	1	ACQ	2
LMC-X-3	5 38 56.6	-64 5 4	FOS/BL	ACCUM	1.0	G130H	1379	1	1800	1151	1		2
LMC-X-3	5 38 56.6	-64 5 4	FOS/BL	ACCUM	1.0	G190H	1938	1	420	1151	1		2
INCA221-36	5 39 4.2	-44 6 37	FGS	POS	3	PUPIL		1	51	4155	3	CON	2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
LMC-PULSAR	5 40 11.0	-69 19 57	WFC	IMAGE	ALL	F555W		2	600	3253	3	ACQ	1
LMC-PULSAR	5 40 11.0	-69 19 57	HSP/UV1	SINGLE	1.0	F135W		1	3600	3253	3		4
LMC-PULSAR	5 40 11.0	-69 19 57	HSP/VIS	SINGLE	1.0	F551W		1	3600	3253	3		1
0540-69.3	5 40 11.1	-69 19 58	WFC	IMAGE	ALL	F547M		1	800	4108	2		1
0540-69.3	5 40 11.1	-69 19 58	WFC	IMAGE	ALL	F502N		2	1900	4108	2		1
0540-69.3P1	5 40 11.1	-69 19 58	FOS/BL	ACCUM	1.0-PAIR	G130H		1	8000	4141	3		1
0540-69.3P1	5 40 11.1	-69 19 58	FOS/BL	ACCUM	1.0-PAIR	G190H		1	4000	4141	3		1
0540-69.3P1	5 40 11.1	-69 19 58	FOS/RD	ACCUM	1.0-PAIR	G270H		1	2400	4141	3		1
0540-69.3P1	5 40 11.1	-69 19 58	FOS/RD	ACCUM	1.0-PAIR	G400H		1	2400	4141	3		1
0540-69.3P1	5 40 11.1	-69 19 58	FOS/RD	ACCUM	1.0-PAIR	G570H		1	2400	4141	3		1
STAR3-OFFSET	5 40 11.1	-69 19 58	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	4141	3	ACQ	1
STAR3-OFFSET	5 40 11.1	-69 19 58	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	4141	3	ACQ	1
R50CTR	5 40 29.3	-7 28 12	WFC	IMAGE	WFALL	F702W		1	100	3285	4	ACQ CON	1
R50CTR	5 40 29.3	-7 28 12	WFC	IMAGE	WFALL	F702W		2	400	3285	4	CON	2
CAL87	5 46 3.1	-71 8 15	FOS/BL	ACQ/BINA	4.3	MIRROR		1	100	1151	1	ACQ	3
CAL87	5 46 3.1	-71 8 15	FOS/BL	ACCUM	1.0	G160L	1836	1	600	1151	1		3
BETA-PIC	5 47 12.6	-51 3 59	WFC	IMAGE	W2	F555W		1	10	1122	1		1
BETA-PIC	5 47 12.6	-51 3 59	WFC	IMAGE	W4	F555W		1	10	1122	1		1
BETA-PIC	5 47 12.6	-51 3 59	WFC	IMAGE	W2	F555W		1	1200	1122	1		1
BETA-PIC	5 47 12.6	-51 3 59	WFC	IMAGE	W2	F889N		1	0	1122	1		1
BETA-PIC	5 47 12.6	-51 3 59	WFC	IMAGE	W4	F555W		1	1200	1122	1		1
BETA-PIC	5 47 12.6	-51 3 59	WFC	IMAGE	W4	F889N		1	0	1122	1		1
B-PIC	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	ECH-B21	2740	1	544	3031	0		1
B-PIC	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	ECH-B21	2740	4	544	3031	0		2
B-PIC	5 47 17.0	-51 3 59	HRS	IMAGE	2.0	MIRROR-A2		1	52	3031	0		1
B-PIC	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	ECH-B22	2603	2	544	3031	0		2
B-PIC	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G270M	2750	1	108	3031	0		2
B-PIC	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G270M	2603	1	217	3031	0		2
B-PIC	5 47 17.0	-51 3 59	HRS	ACCUM	2.0	ECH-B22	2603	1	326	3031	0		1
B-PIC	5 47 17.0	-51 3 59	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	9	3031	0	ACQ	1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	ECH-B21	2740	2	544	1171	1		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	ECH-B22	2603	1	544	1171	1		1
HD39060	5 47 17.0	-51 3 59	HRS	IMAGE	0.25	MIRROR-A2		1	774	1171	1	ACQ	1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G200M	1860	1	380	1171	1		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G270M	2070	1	326	1171	1		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G270M	2350	1	326	1171	1		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G270M	2750	1	108	1171	1		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G270M	2984	1	108	1171	1		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	G270M	2603	1	108	1171	1		1
HD39060	5 47 17.0	-51 3 59	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	1171	1	ACQ	1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	ECH-B23	2483	1	217	1171	1		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	ECH-B20	2799	2	326	1171	1		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	ECH-B28	2027	2	217	1171	1		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	ECH-B25	2263	1	217	1171	1		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	ECH-B18	3083	4	353	1171	1		1
HD39060	5 47 17.0	-51 3 59	HRS	ACCUM	0.25	ECH-B20	2854	1	163	1171	1		1
HD39060	5 47 17.1	-51 3 59	FOS/RD	ACCUM	0.3	PRISM	5000	1	40	1287	2		1
HD39060	5 47 17.1	-51 3 59	FOC/288	OCC	512X1024-F0.4	F480LP		1	300	1287	2		1
HD39060	5 47 17.1	-51 3 59	FOC/288	OCC	512X512-F0.4	F2ND F480LP		1	1200	1287	2		1
HD39060	5 47 17.1	-51 3 59	FOC/288	OCC	512X512-F0.4	F220W	2200	1	2000	1287	2		1
HD39060	5 47 17.1	-51 3 59	FOC/288	OCC	512X1024-F0.4	F2ND F480LP		1	1200	1287	2		1
HD39060-OFF1	5 47 17.1	-51 3 59*	FOS/RD	ACCUM	0.3	PRISM	5000	1	600	1287	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD39060-OFF2	5 47 17.1	-51 3 59*	FOS/RD	ACCUM	0.3	PRISM	5000	1	600	1287	2		1
HD39060-OFF3	5 47 17.1	-51 3 59*	FOS/RD	ACCUM	0.3	PRISM	5000	1	600	1287	2		1
HD39060-OFF4	5 47 17.1	-51 3 59*	FOS/RD	ACCUM	0.3	PRISM	5000	1	600	1287	2		1
HD39060-OFF5	5 47 17.1	-51 3 59*	FOS/RD	ACCUM	0.3	PRISM	5000	1	600	1287	2		1
HD39060-OFF6	5 47 17.1	-51 3 59*	FOS/RD	ACCUM	0.3	PRISM	5000	1	600	1287	2		1
NGC2121-BKGRD	5 47 21.3	-71 33 23*	WFC	IMAGE	WF1	F555W		1	20	1113	4	CON	1
NGC2121-BKGRD	5 47 21.3	-71 33 23*	WFC	IMAGE	WF1	F555W		1	200	1113	4	CON	1
NGC2121-BKGRD	5 47 21.3	-71 33 23*	WFC	IMAGE	WF1	F555W		1	700	1113	4	CON	2
NGC2121-BKGRD	5 47 21.3	-71 33 23*	WFC	IMAGE	WF1	F785LP		1	20	1113	4	CON	1
NGC2121-BKGRD	5 47 21.3	-71 33 23*	WFC	IMAGE	WF1	F785LP		1	200	1113	4	CON	1
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	G160M	1335	1	115	1168	2		1
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	G160M	1474	1	115	1168	2		1
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	G160M	1475	1	115	1168	2		1
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	G160M	1476	1	115	1168	2		1
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	G160M	1354	1	230	1168	2		1
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	ECH-B24	2324	1	57	1168	2		1
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	ECH-B24	2323	1	57	1168	2		3
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	G160M	1506	1	172	1168	2		1
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	G160M	1507	1	172	1168	2		1
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	G160M	1508	1	172	1168	2		1
HD38771	5 47 45.3	-9 40 11	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	1168	2	ACQ	1
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	G160M	1474	1	115	1168	2		1
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	G160M	1475	1	115	1168	2		2
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	G160M	1353	1	230	1168	2		1
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	ECH-B24	2324	1	57	1168	2		2
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	G160M	1506	1	172	1168	2		1
HD38771	5 47 45.3	-9 40 11	HRS	ACCUM	0.25	G160M	1507	1	172	1168	2		2
NGC2121	5 48 10.9	-71 28 51	WFC	IMAGE	WF1	F555W		1	20	1113	3		1
NGC2121	5 48 10.9	-71 28 51	WFC	IMAGE	WF1	F555W		1	200	1113	3		1
NGC2121	5 48 10.9	-71 28 51	WFC	IMAGE	WF1	F555W		1	700	1113	3		2
NGC2121	5 48 10.9	-71 28 51	WFC	IMAGE	WF1	F785LP		1	20	1113	3		1
NGC2121	5 48 10.9	-71 28 51	WFC	IMAGE	WF1	F785LP		1	200	1113	3		1
GAMMA-PIC	5 49 49.6	-56 9 59	WFC	IMAGE	W2	F555W		1	10	1122	1		1
GAMMA-PIC	5 49 49.6	-56 9 59	WFC	IMAGE	W4	F555W		1	10	1122	1		1
GAMMA-PIC	5 49 49.6	-56 9 59	WFC	IMAGE	W2	F555W		1	1200	1122	1		1
GAMMA-PIC	5 49 49.6	-56 9 59	WFC	IMAGE	W2	F889N		1	0	1122	1		1
GAMMA-PIC	5 49 49.6	-56 9 59	WFC	IMAGE	W4	F555W		1	1200	1122	1		1
GAMMA-PIC	5 49 49.6	-56 9 59	WFC	IMAGE	W4	F889N		1	0	1122	1		1
PKS0548-322BKG	5 50 41.1	-32 16 1*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
PKS0548-322	5 50 41.9	-32 16 11	HSP/POL	SINGLE	POL0	F277M		1	900	3248	3		1
PKS0548-322	5 50 41.9	-32 16 11	HSP/POL	SINGLE	POL45	F277M		1	900	3248	3		1
PKS0548-322	5 50 41.9	-32 16 11	HSP/POL	SINGLE	POL90	F277M		1	900	3248	3		1
PKS0548-322	5 50 41.9	-32 16 11	HSP/POL	SINGLE	POL135	F277M		1	900	3248	3		1
PKS0548-322	5 50 41.9	-32 16 11	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
Q0551-366	5 52 46.2	-36 37 29	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
Q0551-366	5 52 46.2	-36 37 29	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
Q0551-366	5 52 46.2	-36 37 29	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
Q0551-366	5 52 46.2	-36 37 29	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
LP658-2	5 55 9.5	-4 10 7	FOS/BL	ACCUM	4.3	G190H	1950	1	4500	1050	0		1
LP658-2	5 55 9.5	-4 10 7	FOS/BL	ACQ/BINA	4.3	MIRROR		1	22	1050	0	ACQ	1
LP658-2	5 55 9.5	-4 10 7	FOS/BL	ACCUM	4.3	G400H	4040	1	300	1050	0		1
LP658-2	5 55 9.5	-4 10 7	FOS/BL	ACCUM	4.3	G270H	2769	1	1200	1050	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD39801	5 55 10.3	7 24 25	HRS	IMAGE	0.25	MIRROR-A2		1	80	1195	0		1
HD39801	5 55 10.3	7 24 25	HRS	ACCUM	2.0	G140L	1550	3	354	1195	0		1
HD39801	5 55 10.3	7 24 25	HRS	ACCUM	2.0	G140L	1800	3	354	1195	0		1
HD39801	5 55 10.3	7 24 25	HRS	ACCUM	0.25	G160M	1300	36	300	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	ACCUM	2.0	G160M	1655	4	354	1195	0		1
HD39801	5 55 10.3	7 24 25	HRS	ACCUM	2.0	G160M	1655	4	354	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	WSCAN	0.25	G270M	2420	2	1200	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	ACCUM	2.0	G200M	1994	1	276	1195	0		1
HD39801	5 55 10.3	7 24 25	HRS	ACCUM	2.0	G140L	1314	3	354	1195	0		1
HD39801	5 55 10.3	7 24 25	HRS	WSCAN	0.25	G270M	2970	2	1062	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	WSCAN	0.25	G270M	2068	2	1200	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	WSCAN	0.25	G270M	2244	2	1200	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	IMAGE	2.0	MIRROR-N2		1	96	1195	0		1
HD39801	5 55 10.3	7 24 25	HRS	IMAGE	2.0	MIRROR-A2		1	96	1199	1		2
HD39801	5 55 10.3	7 24 25	HRS	WSCAN	0.25	G270M	2574	2	1062	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	WSCAN	0.25	G270M	2706	2	1062	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	WSCAN	0.25	G270M	2838	2	1062	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	WSCAN	0.25	G270M	3102	2	1062	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	WSCAN	0.25	G270M	3234	2	1062	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	ACCUM	0.25	ECH-B20	2799	1	656	1195	0		1
HD39801	5 55 10.3	7 24 25	HRS	ACCUM	0.25	ECH-B24	2327	3	1200	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	ACCUM	0.25	ECH-B20	2799	1	1308	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	ACCUM	0.25	ECH-B22	2596	3	1092	1199	1		1
HD39801	5 55 10.3	7 24 25	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	1195	0	ACQ	2
HD39801	5 55 10.3	7 24 25	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	1199	1	ACQ	2
INCA221-37-AST1	6 8 23.8	-15 35 57	FGS	POS	2	F550W		1	60	1013	9	CON PAR	2
INCA221-37-AST1	6 8 23.8	-15 35 57	FGS	POS	2	F550W		1	120	1013	9	CON PAR	2
INCA221-37-AST2	6 9 0.2	-15 37 39	FGS	POS	2	F550W		1	2	1013	9	CON PAR	2
INCA221-37	6 9 7.2	-15 42 6	PC	IMAGE	P8	F658N		1	2	1013	9	CON	2
INCA221-37	6 9 7.2	-15 42 7	FGS	POS	3	F5ND		1	51	4155	3	CON	2
POINT0607-157INCA221 -38	6 9 27.1	-15 54 4	S/C	POINTING	V1			1	1	4155	3	CON	1
POINT0607-157INCA221 -37	6 9 27.9	-15 53 28	S/C	POINTING	V1			1	1	4155	3	CON	1
0607-157INCA221-38	6 9 40.8	-15 42 40	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
0607-157INCA221-37	6 9 40.8	-15 42 40	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
0607-157INCA221-37	6 9 40.9	-15 42 40	PC	IMAGE	P8	F606W		1	60	1013	9	CON	2
0607-157INCA221-37	6 9 40.9	-15 42 40	PC	IMAGE	P8	F725LP		1	120	1013	9	CON	2
HD43834	6 10 13.0	-74 45 0	HSP/UV1	SINGLE	1.0	F240W		1	3600	3007	0	CON SEL	1
HD43834	6 10 13.0	-74 45 0	HSP/UV1	SINGLE	1.0	F140LP		1	3600	3007	0	CON SEL	1
HD43834	6 10 13.0	-74 45 0	HSP/POL	SINGLE	POL0	F327M		1	3600	3007	0	CON SEL	1
INCA221-38	6 10 13.4	-15 53 33	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
LMC-LM1-61	6 10 25.7	-67 56 20	FOC/96	IMAGE	512X512	F501N		1	2000	4075	2		1
HODGE11	6 14 23.1	-69 50 48	WFC	IMAGE	WF1	F555W		1	20	1113	3		1
HODGE11	6 14 23.1	-69 50 48	WFC	IMAGE	WF1	F555W		1	200	1113	3		1
HODGE11	6 14 23.1	-69 50 48	WFC	IMAGE	WF1	F555W		1	700	1113	3		2
HODGE11	6 14 23.1	-69 50 48	WFC	IMAGE	WF1	F785LP		1	20	1113	3		1
HODGE11	6 14 23.1	-69 50 48	WFC	IMAGE	WF1	F785LP		1	200	1113	3		1
HODGE11-BKGRD	6 14 43.7	-70 1 39*	WFC	IMAGE	WF1	F555W		1	20	1113	4	CON	1
HODGE11-BKGRD	6 14 43.7	-70 1 39*	WFC	IMAGE	WF1	F555W		1	200	1113	4	CON	1
HODGE11-BKGRD	6 14 43.7	-70 1 39*	WFC	IMAGE	WF1	F555W		1	700	1113	4	CON	2
HODGE11-BKGRD	6 14 43.7	-70 1 39*	WFC	IMAGE	WF1	F785LP		1	20	1113	4	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HODGE11-BKGRD	6 14 43.7	-70 1 39*	WFC	IMAGE	WF1	F785LP		1	200	1113	4	CON	1
MKN3	6 15 36.2	71 2 15	FOC/96	IMAGE	512X512	F372M		1	2700	3504	2		1
MKN3	6 15 36.2	71 2 15	FOC/96	IMAGE	512X512	F437M		1	2300	3504	2		1
MKN3	6 15 36.2	71 2 15	FOC/96	IMAGE	512X512	F501N		1	1200	3504	2		1
MKN3	6 15 36.2	71 2 15	FOC/96	IMAGE	512X512	F502M		1	1200	3504	2		1
MRK3	6 15 36.3	71 2 15	PC	IMAGE	ALL	F664N		2	900	1036	0		1
MRK3	6 15 36.3	71 2 15	PC	IMAGE	ALL	F502N		1	1800	1036	0		1
MRK3	6 15 36.3	71 2 15	PC	IMAGE	ALL	F547M		1	360	1036	0		1
IC2165	6 21 42.8	-12 58 44	WFC	IMAGE	WFALL	F284W		1	200	3283	3		1
IC2165	6 21 42.8	-12 58 44	WFC	IMAGE	WFALL	F439W		1	60	3283	3		1
IC2165	6 21 42.8	-12 58 44	WFC	IMAGE	WFALL	F622W		1	30	3283	3		1
IC2165	6 21 42.8	-12 58 44	WFC	IMAGE	WFALL	F157W		1	360	3283	3		1
IC2165	6 21 42.8	-12 58 44	WFC	IMAGE	WFALL	F336W		1	180	3283	3		1
IC2165	6 21 42.8	-12 58 44	WFC	IMAGE	WFALL	F517N		1	180	3283	3		1
A0620-00	6 22 44.5	-0 20 45	HSP/UV2	SINGLE	10.0	F140LP		3	1200	3255	2		3
NGC2257-BKGRD	6 29 1.0	-64 11 46*	WFC	IMAGE	WF1	F555W		1	20	1113	4	CON	1
NGC2257-BKGRD	6 29 1.0	-64 11 46*	WFC	IMAGE	WF1	F555W		1	200	1113	4	CON	1
NGC2257-BKGRD	6 29 1.0	-64 11 46*	WFC	IMAGE	WF1	F555W		1	700	1113	4	CON	2
NGC2257-BKGRD	6 29 1.0	-64 11 46*	WFC	IMAGE	WF1	F785LP		1	20	1113	4	CON	1
NGC2257-BKGRD	6 29 1.0	-64 11 46*	WFC	IMAGE	WF1	F785LP		1	200	1113	4	CON	1
HS0624+6907	6 30 2.7	69 5 4	FOS/BL	ACQ/BINA	4.3	MIRROR		1	3	4112	2	ACQ	1
HS0624+6907	6 30 2.7	69 5 4	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	3	4112	2	ACQ	1
HS0624+6907	6 30 2.7	69 5 4	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	9000	4112	2		1
NGC2257	6 30 11.6	-64 19 39	WFC	IMAGE	WF1	F555W		1	20	1113	4	CON	1
NGC2257	6 30 11.6	-64 19 39	WFC	IMAGE	WF1	F555W		1	200	1113	4	CON	1
NGC2257	6 30 11.6	-64 19 39	WFC	IMAGE	WF1	F555W		1	700	1113	4	CON	2
NGC2257	6 30 11.6	-64 19 39	WFC	IMAGE	WF1	F785LP		1	20	1113	4	CON	1
NGC2257	6 30 11.6	-64 19 39	WFC	IMAGE	WF1	F785LP		1	200	1113	4	CON	1
NGC2237	6 31 40.7	5 11 46	PC	IMAGE	ALL	F656N		1	1800	1072	9		1
INCA221-39	6 34 50.4	-75 13 10	FGS	POS	2	F583W		1	51	1532	9	UNP	4
INCA221-39	6 34 50.6	-75 13 8	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
0637-752INCA221-39	6 35 46.5	-75 16 17	FGS	POS	2	F583W		1	51	1532	9	UNP	6
0637-752INCA221-39	6 35 46.5	-75 16 17	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
POINT0637-752INCA221-39	6 36 23.7	-75 3 55	S/C	POINTING	V1			1	1	4155	3	CON	1
POINT0637-752INCA221-39	6 37 16.8	-75 5 54	S/C	POINTING	V1			1	0	1532	9		2
R-MON	6 39 9.8	8 44 9	PC	IMAGE	PC-ND	F702W		1	60	3285	4	CON	3
R-MON	6 39 9.8	8 44 9	PC	IMAGE	PCALL	F702W		1	0	3285	4	ACQ CON	1
R-MON	6 39 9.8	8 44 9	PC	IMAGE	PCALL	F606W POL0		1	50	3285	4	CON	1
R-MON	6 39 9.8	8 44 9	PC	IMAGE	PCALL	F606W POL60		1	50	3285	4	CON	1
R-MON	6 39 9.8	8 44 9	PC	IMAGE	PCALL	F606W POL120		1	50	3285	4	CON	1
CARINA-064024-5055	6 41 48.5	-50 58 18	WFC	IMAGE	WFALL	F555W		1	200	1110	3		1
CARINA-064024-5055	6 41 48.5	-50 58 18	WFC	IMAGE	WFALL	F555W		1	2000	1110	3		1
CARINA-064024-5055	6 41 48.5	-50 58 18	WFC	IMAGE	WFALL	F785LP		1	200	1110	3		1
CARINA-064024-5055	6 41 48.5	-50 58 18	WFC	IMAGE	WFALL	F785LP		1	1600	1110	3		1
Q0636+680	6 42 4.2	67 58 35	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
Q0642-506	6 43 27.0	-50 41 12	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
V3-0642-5038	6 43 27.0	-50 41 12	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
V3-0642-5038	6 43 27.0	-50 41 12	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
HD48329	6 43 55.9	25 7 52	HRS	ACCUM	2.0	G270M	2340	1	136	1177	2		1
HD48329	6 43 55.9	25 7 52	HRS	ACCUM	2.0	G200M	1900	2	381	1177	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD48329	6 43 55.9	25 7 52	HRS	ACCUM	2.0	G160M	1304	1	81	1177	2		1
HD48329	6 43 55.9	25 7 52	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	163	1177	2	ACQ	1
HD48915A	6 45 8.8	-16 42 59	PC	IMAGE	P6	F502N		4	80	1062	9		3
HD48915A	6 45 8.8	-16 42 59	PC	IMAGE	P6	F631N		4	140	1062	9		3
HD48915A	6 45 8.8	-16 42 59	PC	IMAGE	P6	F889N		4	140	1062	9		3
HD48915A	6 45 8.8	-16 42 59	PC	IMAGE	P6	F122M F889N		1	0	1062	9		3
SIRIUS-A	6 45 10.8	-16 41 58	PC	IMAGE	P8	F157W F8ND		1	0	3042	1	ACQ	1
SIRIUS-A	6 45 10.8	-16 41 58	PC	IMAGE	ALL-ND	F157W		1	1	3042	1		1
SIRIUS-A	6 45 10.8	-16 41 58	PC	IMAGE	ALL-ND	F157W		1	3	3042	1		1
SIRIUS-A	6 45 10.8	-16 41 58	PC	IMAGE	ALL-ND	F157W		1	0	3042	1		1
0642+449	6 46 32.0	44 51 18	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	1235	0		1
0642+449	6 46 32.1	44 51 16	FOC/96	IMAGE	512X512	F430W		1	600	1236	0	SEL	1
0642+449	6 46 32.1	44 51 16	FOC/96	IMAGE	512X512	F430W		1	600	3177	1	CON SEL	1
3C171	6 55 14.7	54 8 58	FOC/96	IMAGE	512X512	F220W		1	900	3344	3		1
3C171	6 55 14.7	54 8 58	FOC/96	IMAGE	512X512	F430W		1	900	3344	3		1
3C171	6 55 14.7	54 8 58	FOC/96	IMAGE	512X512	F372M		1	1800	3344	3		1
3C171	6 55 14.7	54 8 58	FOC/96	IMAGE	512X512	F501N		1	1800	3344	3		1
HD55575	7 15 49.9	47 14 33	HSP/UV1	SINGLE	1.0	F240W		1	3600	3007	0	CON SEL	1
HD55575	7 15 49.9	47 14 33	HSP/UV1	SINGLE	1.0	F140LP		1	3600	3007	0	CON SEL	1
HD55575	7 15 49.9	47 14 33	HSP/POL	SINGLE	POL0	F327M		1	3600	3007	0	CON SEL	1
NGC2392	7 29 10.5	20 54 43	FGS	POS	2	F550W		1	52	2929	9		48
NGC2392	7 29 10.5	20 54 43	FGS	TRANS	ANY	F583W		1	100	2929	9		1
3A0729+103	7 31 29.0	9 56 22	HSP/UV1	PRISM	1.0	F248M/F135W		1	13680	3257	3		1
NGC2403	7 36 48.4	64 35 59	FOC/96	IMAGE	512X512	F342W		1	300	3264	3		1
PKS0735+178	7 38 7.4	17 42 21	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
PKS0735+178	7 38 7.4	17 42 19	WFC	IMAGE	ANY	F725LP		1	1200	4177	9		1
PKS0735+178	7 38 7.4	17 42 19	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	4177	9	ACQ	1
PKS0735+178	7 38 7.4	17 42 19	HRS	ACCUM	2.0	G140L	1431	1	3340	4177	9		1
PKS0735+178	7 38 7.4	17 42 19	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	26	4177	9	ACQ	1
PKS0735+178	7 38 7.4	17 42 19	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	5	4177	9	ACQ	1
PKS0735+178	7 38 7.4	17 42 19	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2420	4177	9		1
PKS0735+178BKG	7 38 8.5	17 42 32*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
POINT0736+017INCA221-42	7 38 30.8	1 34 48	S/C	POINTING	V1			1	0	1532	9		2
POINT0736+017INCA221-42	7 38 32.3	1 34 34	S/C	POINTING	V1			1	1	4155	3	CON	1
INCA221-42	7 38 43.4	1 46 44	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
INCA221-42	7 38 43.7	1 46 43	FGS	POS	2	F583W		1	51	1532	9		4
HD61421	7 39 15.7	5 12 39	HRS	ACCUM	2.0	G160M	1640	2	300	3964	2		1
HD61421	7 39 15.7	5 12 39	HRS	ACCUM	2.0	G200M	1900	1	136	3964	2		1
HD61421	7 39 15.7	5 12 39	HRS	ACCUM	2.0	G160M	1550	2	191	3964	2		1
HD61421	7 39 15.7	5 12 39	HRS	ACCUM	2.0	G160M	1402	2	218	3964	2		1
HD61421	7 39 15.7	5 12 39	HRS	ACCUM	0.25	ECH-B20	2800	1	652	3964	2		1
HD61421	7 39 15.7	5 12 39	HRS	ACCUM	0.25	ECH-B22	2600	1	652	3964	2		1
HD61421	7 39 15.7	5 12 39	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	163	3964	2	ACQ	1
HD61421	7 39 15.7	5 12 39	HRS	ACCUM	0.25	G160M	1223	3	1088	3964	2		1
0736+017INCA221-42	7 39 18.0	1 37 4	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
HD61421A	7 39 18.0	5 13 29	PC	IMAGE	P6	F502N		4	400	1062	9		3
HD61421A	7 39 18.0	5 13 29	PC	IMAGE	P6	F631N		4	600	1062	9		3
HD61421A	7 39 18.0	5 13 29	PC	IMAGE	P6	F889N		4	500	1062	9		3
HD61421A	7 39 18.0	5 13 29	PC	IMAGE	P6	F122M F889N		1	0	1062	9		3
0736+017INCA221-42	7 39 18.1	1 37 4	FGS	POS	2	F583W		1	51	1532	9		6

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
LFT-544	7 40 20.8	-17 24 0	WFC	IMAGE	WF2-FIX	F606W		1	25	3288	3		6
NGC2440-OFF	7 41 52.2	-18 12 32	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	4100	2	ACQ	1
NGC2440	7 41 54.4	-18 12 34	WFC	IMAGE	ALL	F336W		1	100	1108	0		1
NGC2440	7 41 54.4	-18 12 34	WFC	IMAGE	ALL	F194W		2	300	1108	0		1
NGC2440	7 41 54.4	-18 12 34	WFC	IMAGE	ALL	F439W		2	60	1108	0		1
NGC2440	7 41 54.4	-18 12 34	WFC	IMAGE	ALL	F622W		2	30	1108	0		1
NGC2440	7 41 54.4	-18 12 34	WFC	IMAGE	ALL	F284W		1	180	1108	0		1
NGC2440	7 41 54.4	-18 12 34	WFC	IMAGE	ALL	F517N		2	180	1108	0		1
NGC2440-STAR	7 41 55.3	-18 12 31	PC	IMAGE	P6	F469N		1	300	1212	0		1
NGC2440-STAR	7 41 55.3	-18 12 31	PC	IMAGE	P6	F487N		1	300	1212	0		1
NGC2440-STAR	7 41 55.3	-18 12 31	PC	IMAGE	P6	F517N		1	1200	1212	0		1
NGC2440-STAR	7 41 55.3	-18 12 31	FOS/BL	ACCUM	1.0-PAIR-B	G130H	1379	1	3600	4100	2		1
NGC2440-STAR	7 41 55.3	-18 12 31	FOS/BL	ACCUM	1.0-PAIR-B	G400H	4040	1	3600	4100	2		1
NGC2440	7 41 55.4	-18 12 33	FOC/96	IMAGE	512X512	F130M		1	480	3336	3		1
NGC2440	7 41 55.4	-18 12 33	FOC/96	IMAGE	512X512	F210M		1	480	3336	3		1
NGC2440	7 41 55.4	-18 12 33	FOC/96	IMAGE	512X512	F278M		1	480	3336	3		1
MKN79	7 42 32.8	49 48 35	FOC/96	IMAGE	512X512	F220W		1	1000	3344	3		1
MKN79	7 42 32.8	49 48 35	FOC/96	IMAGE	512X512	F502M		1	1000	3344	3		1
MKN79	7 42 32.8	49 48 35	FOC/96	IMAGE	512X512	F550M		1	1000	3344	3		1
HD62542	7 42 37.1	-42 13 46	HRS	ACCUM	0.25	G160M	1234	33	348	3957	2		1
HD62542	7 42 37.1	-42 13 46	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	20	3957	2	ACQ	1
HD62542	7 42 37.1	-42 13 46	HRS	ACCUM	0.25	G160M	2586	10	348	3957	2		1
HD62542	7 42 37.1	-42 13 46	HRS	ACCUM	0.25	G160M	1400	20	348	3957	2		1
HD62542	7 42 37.1	-42 13 46	HRS	ACCUM	0.25	G160M	1284	20	348	3957	2		1
MKN78	7 42 41.8	65 10 35	FOC/96	IMAGE	512X512	F502M	4950	1	2000	3180	1		1
MKN78	7 42 41.8	65 10 35	FOC/96	IMAGE	512X512	F130M	1270	1	2400	3180	1		1
MKN78	7 42 41.8	65 10 35	FOC/96	IMAGE	512X512	F550M	5470	1	1800	3180	1		1
PKS0743-67	7 43 31.7	-67 26 25	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
PKS0743-67	7 43 31.7	-67 26 25	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
PKS0743-67	7 43 31.7	-67 26 25	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
PKS0743-67	7 43 31.7	-67 26 25	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
0743-673INCA221-43	7 43 32.3	-67 26 23	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
PSF-NGC2440	7 43 45.4	-17 56 46	WFC	IMAGE	ALL	F194W		1	40	1108	0		1
PSF-NGC2440	7 43 45.4	-17 56 46	WFC	IMAGE	ALL	F336W		1	0	1108	0		1
PSF-NGC2440	7 43 45.4	-17 56 46	WFC	IMAGE	ALL	F439W		1	0	1108	0		1
PSF-NGC2440	7 43 45.4	-17 56 46	WFC	IMAGE	ALL	F517N		1	0	1108	0		1
PSF-NGC2440	7 43 45.4	-17 56 46	WFC	IMAGE	ALL	F622W		1	0	1108	0		1
PSF-NGC2440	7 43 45.4	-17 56 46	WFC	IMAGE	ALL	F284W		1	2	1108	0		1
POINT0743-673INCA221-43	7 44 43.8	-67 16 22	S/C	POINTING	V1			1	1	4155	3	CON	1
HD62509	7 45 23.4	28 1 32	HRS	ACCUM	2.0	G160M	1640	2	1200	1177	2		1
HD62509	7 45 23.4	28 1 32	HRS	ACCUM	2.0	G200M	1900	2	272	1177	2		1
HD62509	7 45 23.4	28 1 32	HRS	ACCUM	2.0	G160M	1550	1	1308	1177	2		1
HD62509	7 45 23.4	28 1 32	HRS	ACCUM	2.0	G160M	1304	1	272	1177	2		1
HD62509	7 45 23.4	28 1 32	HRS	ACCUM	2.0	G270M	2340	1	81	1177	2		1
HD62509	7 45 23.4	28 1 32	HRS	ACCUM	2.0	G160M	1402	1	870	1177	2		1
HD62509	7 45 23.4	28 1 32	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	163	1177	2	ACQ	1
INCA221-43	7 46 3.2	-67 25 58	FGS	POS	3	F5ND		1	51	4155	3	CON	2
PKS0745-191	7 47 31.3	-19 17 40	FOC/96	IMAGE	512X512	F320W		2	1200	3487	2		1
PKS0745-191	7 47 31.3	-19 17 40	FOC/96	IMAGE	512X512	F372M		2	1500	3487	2		1
PKS0745-191	7 47 31.3	-19 17 40	FOC/96	IMAGE	512X512	F430W		2	1200	3487	2		1
B20749+37	7 52 28.7	37 50 52	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
B20749+37	7 52 28.7	37 50 52	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
BPM4729	7 53 4.7	-67 47 31	FOS/BL	ACCUM	4.3	G190H	1950	1	1500	1050	0		1
BPM4729	7 53 4.7	-67 47 31	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	1050	0	ACQ	1
BPM4729	7 53 4.7	-67 47 31	FOS/BL	ACCUM	4.3	G400H	4040	1	300	1050	0		1
BPM4729	7 53 4.7	-67 47 31	FOS/BL	ACCUM	4.3	G270H	2769	1	1200	1050	0		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	G160M	1200	1	288	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	G160M	1370	1	288	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	G160M	1530	1	288	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	G160M	1345	1	230	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	G160M	1476	1	288	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	G160M	1608	1	288	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	5	3933	9	ACQ	1
HD64760	7 53 18.2	-48 6 11	HRS	IMAGE	2.0	MIRROR-A2		1	96	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	G160M	1302	1	230	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B20	2852	1	288	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B30	1854	1	288	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B30	1862	1	288	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B31	1806	1	288	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B31	1827	1	288	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	G160M	1400	1	403	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	G160M	1170	1	518	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	G160M	1665	1	345	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	G160M	1247	1	403	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	G160M	1557	1	403	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B24	2370	1	172	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B25	2260	1	172	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	3933	9	ACQ	1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B28	2025	1	172	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B20	2799	1	172	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B22	2576	1	172	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B22	2589	1	172	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B22	2602	1	172	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B24	2343	1	172	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B24	2382	1	172	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B25	2249	1	172	3933	9		1
HD64760	7 53 18.2	-48 6 11	HRS	ACCUM	0.25	ECH-B27	2062	1	172	3933	9		1
OI+090.4	7 57 6.7	9 56 34	HSP/UV2	SINGLE	1.0	F140LP		1	120	3248	2		10
OI+090.4	7 57 6.7	9 56 34	HSP/POL	SINGLE	POL0	F277M		1	180	3248	2		20
OI+090.4	7 57 6.7	9 56 34	HSP/POL	SINGLE	POL45	F277M		1	180	3248	2		20
OI+090.4	7 57 6.7	9 56 34	HSP/POL	SINGLE	POL90	F277M		1	180	3248	2		20
OI+090.4	7 57 6.7	9 56 34	HSP/POL	SINGLE	POL135	F277M		1	180	3248	2		20
OI090.4	7 57 6.7	9 56 35	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	4201	9	ACQ	1
OI090.4	7 57 6.7	9 56 35	FOS/BL	ACCUM	4.3	G190H	1950	1	1440	3270	2		2
OI090.4	7 57 6.7	9 56 35	FOS/BL	ACQ/BINA	4.3	MIRROR		1	12	3270	2	ACQ	1
OI090.4	7 57 6.7	9 56 35	FOS/BL	ACCUM	4.3	G270H	2766	1	1440	3270	2		1
OI090.4	7 57 6.7	9 56 35	FOS/RD	ACQ/PEAK	0.7X2.0-BAR	MIRROR		1	1	4201	9	ACQ	1
OI090.4	7 57 6.7	9 56 35	FOS/RD	ACCUM	0.7X2.0-BAR	G650L	6242	1	1500	4201	9		1
Z-CHA	8 7 28.2	-76 32 1	HSP/UV1	SINGLE	1.0	F135W		1	2700	1092	1		42
0805+046	8 7 57.5	4 32 35	FOC/96	IMAGE	512X512	F1ND F430W		1	600	1236	0	SEL	1
0805+046	8 7 57.5	4 32 35	FOC/96	IMAGE	512X512	F1ND F430W		1	600	3177	1	CON SEL	1
HD68273	8 9 32.0	-47 20 12	HRS	WSCAN	0.25	ECH-A	1530	1	192	1071	0		1
HD68273	8 9 32.0	-47 20 12	HRS	WSCAN	0.25	ECH-B	2370	1	48	1071	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD68273	8 9 32.0	-47 20 12	HRS	WSCAN	0.25	ECH-A	1240	1	105	1071	0		1
HD68273	8 9 32.0	-47 20 12	HRS	WSCAN	0.25	ECH-A	1303	1	76	1071	0		1
HD68273	8 9 32.0	-47 20 12	HRS	WSCAN	0.25	ECH-A	1334	1	105	1071	0		1
HD68273	8 9 32.0	-47 20 12	HRS	WSCAN	0.25	ECH-A	1356	1	182	1071	0		1
HD68273	8 9 32.0	-47 20 12	HRS	WSCAN	0.25	ECH-A	1252	1	86	1071	0		1
HD68273	8 9 32.0	-47 20 12	HRS	ACQ/PEAK	2.0	MIRROR-A1		1	9	1071	0	ACQ	1
HD68273	8 9 32.0	-47 20 12	HRS	WSCAN	0.25	ECH-A	1392	1	211	1071	0		1
HD68273	8 9 32.0	-47 20 12	HRS	WSCAN	0.25	ECH-A	1191	1	57	1071	0		1
HD68273	8 9 32.0	-47 20 12	HRS	WSCAN	0.25	ECH-B	2602	1	76	1071	0		1
HD68273	8 9 32.0	-47 20 12	HRS	WSCAN	0.25	ECH-A	1547	1	220	1071	0		1
HD68273	8 9 32.0	-47 20 12	HRS	WSCAN	0.25	ECH-B	1805	1	86	1071	0		1
BD+75D325	8 10 49.3	74 57 58	HRS	ACCUM	0.25	G160M	1360	2	300	4046	1		1
BD+75D325	8 10 49.3	74 57 58	HRS	ACCUM	0.25	G160M	1330	2	270	4046	1		1
BD+75D325	8 10 49.3	74 57 58	HRS	ACCUM	0.25	G160M	1420	3	240	4046	1		1
BD+75D325	8 10 49.3	74 57 58	HRS	ACCUM	0.25	G160M	1450	3	240	4046	1		1
BD+75D325	8 10 49.3	74 57 58	HRS	ACCUM	0.25	G160M	1390	3	220	4046	1		1
BD+75D325	8 10 49.3	74 57 58	HRS	ACCUM	0.25	G160M	1550	3	240	4046	1		1
BD+75D325	8 10 49.3	74 57 58	HRS	ACCUM	0.25	G160M	1265	2	270	4046	1		1
BD+75D325	8 10 49.3	74 57 58	HRS	ACCUM	0.25	G160M	1295	2	270	4046	1		1
BD+75D325	8 10 49.3	74 57 58	HRS	ACCUM	0.25	G160M	1234	2	270	4046	1		1
BD+75D325	8 10 49.3	74 57 58	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	4046	1	ACQ	1
BD+75D325	8 10 49.3	74 57 57	PC	IMAGE	P6	F889N		1	50	3186	1	CON	1
BD+75D325	8 10 49.3	74 57 57	PC	IMAGE	PC6	F336W		2	4	4084	2		1
3C196	8 13 36.0	48 13 3	PC	IMAGE	ALL	F606W		1	1200	3263	9		1
3C196	8 13 36.1	48 13 2	WFC	IMAGE	ANY	F725LP		1	1200	4176	9		1
3C196	8 13 36.1	48 13 2	FOS/RD	ACQ/BINA	4.3	MIRROR		1	22	1193	1	ACQ	1
3C196	8 13 36.1	48 13 2	FOS/RD	ACQ/BINA	4.3	MIRROR		1	52	3939	2	ACQ	1
3C196	8 13 36.1	48 13 2	FOS/RD	RAPID	1.0	G160L	1600	1	9161	3939	2		1
3C196	8 13 36.1	48 13 2	FOS/RD	ACCUM	4.3	G160L	2036	1	1200	1193	1		1
AI-VEL	8 14 5.2	-44 34 30	HSP/VIS	PRISM	1.0	F551W/F240W		1	10800	1103	2		1
RX-PUP	8 14 12.3	-41 42 29	FOC/96	IMAGE	512X512	F190M		1	600	3747	2		1
RX-PUP	8 14 12.3	-41 42 29	FOC/96	IMAGE	512X512	F253M		1	600	3747	2		1
RX-PUP	8 14 12.3	-41 42 29	FOC/96	IMAGE	512X512	F278M		1	600	3747	2		1
0812+020	8 15 22.9	1 54 59	FOC/96	IMAGE	512X512	F2ND F430W		1	600	3177	1	CON SEL	1
0812+020	8 15 23.0	1 55 9	FOC/96	IMAGE	512X512	F480LP		1	1740	3263	9		1
POINT0818-128INCA221-44	8 20 19.3	-12 52 14	S/C	POINTING	V1			1	1	4155	3	CON	1
OJ-131BKG	8 20 56.7	-12 59 9*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
0818-128INCA221-44	8 20 57.4	-12 58 59	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
OJ-131	8 20 57.4	-12 58 59	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
INCA221-44	8 21 9.2	-12 51 46	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
PKS0819-032	8 21 40.0	-3 23 13	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
PKS0819-032	8 21 40.0	-3 23 13	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
0822+27W1	8 25 47.4	27 4 21	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
0822+27W1	8 25 47.4	27 4 21	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
JUPITER-9	8 26 1.4	20 1 39	PC	IMAGE	ALL	F439W		1	0	1126	0		1
JUPITER-9	8 26 1.4	20 1 39	PC	IMAGE	ALL	F718M		1	0	1126	0		1
JUPITER-9	8 26 1.4	20 1 39	PC	IMAGE	ALL	F889N		1	10	1126	0		1
JUPITER-9	8 26 1.4	20 1 39	PC	IMAGE	ALL	F336W		1	16	1126	0		1
JUPITER-9	8 26 1.4	20 1 39	PC	IMAGE	ALL	F547M		1	0	1126	0		1
JUPITER-8	8 26 2.9	20 1 34	PC	IMAGE	ALL	F439W		1	0	1126	0		1
JUPITER-8	8 26 2.9	20 1 34	PC	IMAGE	ALL	F718M		1	0	1126	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
JUPITER-8	8 26 2.9	20 1 34	PC	IMAGE	ALL	F889N		1	10	1126	0		1
JUPITER-8	8 26 2.9	20 1 34	PC	IMAGE	ALL	F336W		1	16	1126	0		1
JUPITER-8	8 26 2.9	20 1 34	PC	IMAGE	ALL	F547M		1	0	1126	0		1
JUPITER-7	8 26 4.4	20 1 29	PC	IMAGE	ALL	F439W		1	0	1126	0		1
JUPITER-7	8 26 4.4	20 1 29	PC	IMAGE	ALL	F718M		1	0	1126	0		1
JUPITER-7	8 26 4.4	20 1 29	PC	IMAGE	ALL	F889N		1	10	1126	0		1
JUPITER-7	8 26 4.4	20 1 29	PC	IMAGE	ALL	F336W		1	16	1126	0		1
JUPITER-7	8 26 4.4	20 1 29	PC	IMAGE	ALL	F547M		1	0	1126	0		1
JUPITER-6	8 26 19.4	20 0 39	PC	IMAGE	ALL	F439W		1	0	1126	0		1
JUPITER-6	8 26 19.4	20 0 39	PC	IMAGE	ALL	F718M		1	0	1126	0		1
JUPITER-6	8 26 19.4	20 0 39	PC	IMAGE	ALL	F889N		1	10	1126	0		1
JUPITER-6	8 26 19.4	20 0 39	PC	IMAGE	ALL	F336W		1	16	1126	0		1
JUPITER-6	8 26 19.4	20 0 39	PC	IMAGE	ALL	F547M		1	0	1126	0		1
JUPITER-5	8 26 20.2	20 0 36	PC	IMAGE	ALL	F439W		1	0	1126	0		1
JUPITER-5	8 26 20.2	20 0 36	PC	IMAGE	ALL	F718M		1	0	1126	0		1
JUPITER-5	8 26 20.2	20 0 36	PC	IMAGE	ALL	F889N		1	10	1126	0		1
JUPITER-5	8 26 20.2	20 0 36	PC	IMAGE	ALL	F336W		1	16	1126	0		1
JUPITER-5	8 26 20.2	20 0 36	PC	IMAGE	ALL	F547M		1	0	1126	0		1
JUPITER-4	8 26 21.0	20 0 33	PC	IMAGE	ALL	F439W		1	0	1126	0		1
JUPITER-4	8 26 21.0	20 0 33	PC	IMAGE	ALL	F718M		1	0	1126	0		1
JUPITER-4	8 26 21.0	20 0 33	PC	IMAGE	ALL	F889N		1	10	1126	0		1
JUPITER-4	8 26 21.0	20 0 33	PC	IMAGE	ALL	F336W		1	16	1126	0		1
JUPITER-4	8 26 21.0	20 0 33	PC	IMAGE	ALL	F547M		1	0	1126	0		1
JUPITER-3	8 26 21.9	20 0 30	PC	IMAGE	ALL	F439W		1	0	1126	0		1
JUPITER-3	8 26 21.9	20 0 30	PC	IMAGE	ALL	F718M		1	0	1126	0		1
JUPITER-3	8 26 21.9	20 0 30	PC	IMAGE	ALL	F889N		1	10	1126	0		1
JUPITER-3	8 26 21.9	20 0 30	PC	IMAGE	ALL	F336W		1	16	1126	0		1
JUPITER-3	8 26 21.9	20 0 30	PC	IMAGE	ALL	F547M		1	0	1126	0		1
JUPITER-2	8 26 22.7	20 0 27	PC	IMAGE	ALL	F439W		1	0	1126	0		1
JUPITER-2	8 26 22.7	20 0 27	PC	IMAGE	ALL	F718M		1	0	1126	0		1
JUPITER-2	8 26 22.7	20 0 27	PC	IMAGE	ALL	F889N		1	10	1126	0		1
JUPITER-2	8 26 22.7	20 0 27	PC	IMAGE	ALL	F336W		1	16	1126	0		1
JUPITER-2	8 26 22.7	20 0 27	PC	IMAGE	ALL	F547M		1	0	1126	0		1
JUPITER-1	8 26 23.6	20 0 24	PC	IMAGE	ALL	F439W		1	0	1126	0		1
JUPITER-1	8 26 23.6	20 0 24	PC	IMAGE	ALL	F718M		1	0	1126	0		1
JUPITER-1	8 26 23.6	20 0 24	PC	IMAGE	ALL	F889N		1	10	1126	0		1
JUPITER-1	8 26 23.6	20 0 24	PC	IMAGE	ALL	F336W		1	16	1126	0		1
JUPITER-1	8 26 23.6	20 0 24	PC	IMAGE	ALL	F547M		1	0	1126	0		1
0824+110	8 27 6.5	10 52 24	FOC/96	IMAGE	512X512	F1ND F430W		1	600	3177	1	CON SEL	1
POINT0826-373INCA221 -45	8 27 17.4	-37 38 50	S/C	POINTING	V1			1	0	1532	9		2
POINT0826-373INCA221 -45	8 27 18.8	-37 38 59	S/C	POINTING	V1			1	1	4155	3	CON	1
POINT0826-373INCA221 -46	8 27 51.8	-37 19 24	S/C	POINTING	V1			1	1	4155	3	CON	1
0826-373INCA221-45	8 28 4.8	-37 31 6	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
0826-373INCA221-46	8 28 4.8	-37 31 6	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
0826-373INCA221-45	8 28 4.8	-37 31 6	FGS	POS	2	F583W		1	51	1532	9	UNP	6
INCA221-45	8 28 12.2	-37 43 47	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
INCA221-45	8 28 12.3	-37 43 49	FGS	POS	2	F583W		1	51	1532	9	UNP	4
IO-8	8 28 27.1	19 53 16	FOC/96	IMAGE	512X512	F120M		1	900	1269	0		1
IO-7	8 28 27.5	19 53 15	FOC/96	IMAGE	512X512	F120M		1	900	1269	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
INCA221-46	8 28 52.1	-37 21 17	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
IO-6	8 28 54.9	19 51 39	FOC/96	IMAGE	512X512	F140W		1	900	1269	0		1
IO-5	8 28 57.1	19 51 31	FOC/96	IMAGE	512X512	F175W		1	900	1269	0		1
IO-4	8 28 58.8	19 51 25	FOC/96	IMAGE	512X512	F210M F220W		1	900	1269	0		1
IO-3	8 28 60.0	19 51 21	FOC/96	IMAGE	512X512	F275W F278M F4ND		1	900	1269	0		1
IO-2	8 29 0.7	19 51 19	FOC/96	IMAGE	512X512	F275W F278M F2ND		1	900	1269	0		1
IO-1	8 29 0.9	19 51 19	FOC/96	IMAGE	512X512	F275W F278M		1	900	1269	0		1
PSR0833-45	8 35 20.7	-45 10 36	WFC	IMAGE	ALL	F555W		2	600	3253	3	ACQ	1
PSR0833-45	8 35 20.7	-45 10 36	HSP/UV1	SINGLE	1.0	F135W		1	3600	3253	3		4
PSR0833-45	8 35 20.7	-45 10 36	HSP/VIS	SINGLE	1.0	F551W		1	3600	3253	3		1
BD+67D552	8 36 30.7	67 17 40	FGS	TRANS	ANY	F583W		1	1000	1003	3		3
BD+67D552	8 36 30.7	67 17 40	FGS	TRANS	ANY	F583W		1	1000	1003	4		1
INCA221-49	8 38 1.0	70 49 36	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
3C205	8 39 6.5	57 54 17	PC	IMAGE	ALL	F606W		1	1200	3263	9		1
HD72905	8 39 11.9	65 1 11	HSP/UV1	SINGLE	1.0	F240W		1	3600	3007	0	CON SEL	1
HD72905	8 39 11.9	65 1 11	HSP/UV1	SINGLE	1.0	F140LP		1	3600	3007	0	CON SEL	1
HD72905	8 39 11.9	65 1 11	HSP/POL	SINGLE	POL0	F327M		1	3600	3007	0	CON SEL	1
POINT0836+710INCA221-49	8 39 42.5	70 38 46	S/C	POINTING	V1			1	1	4155	3	CON	1
3C206	8 39 50.6	-12 14 34	WFC	IMAGE	WFALL	F725LP		1	12	3287	4	CON	1
3C206	8 39 50.6	-12 14 34	WFC	IMAGE	WFALL	F725LP		1	510	3287	4	CON	1
3C206	8 39 50.6	-12 14 34	WFC	IMAGE	WFALL	F725LP		1	212	3287	4	CON	1
0836+710INCA221-49	8 41 23.7	70 49 24	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
S50836+71	8 41 24.3	70 53 42	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
S50836+71	8 41 24.3	70 53 42	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
JUPITER-1	8 44 30.5	18 51 20	PC	IMAGE	ALL	F336W		1	5	3237	0		1
JUPITER-1	8 44 30.5	18 51 20	PC	IMAGE	ALL	F439W		1	0	3237	0		1
JUPITER-1	8 44 30.5	18 51 20	PC	IMAGE	ALL	F718M		1	0	3237	0		1
JUPITER-1	8 44 30.5	18 51 20	PC	IMAGE	ALL	F889N		1	30	3237	0		1
JUPITER-1	8 44 30.5	18 51 20	PC	IMAGE	ALL	F547M		1	0	3237	0		1
JUPITER-2	8 44 32.9	18 51 10	PC	IMAGE	ALL	F336W		1	5	3237	0		1
JUPITER-2	8 44 32.9	18 51 10	PC	IMAGE	ALL	F439W		1	0	3237	0		1
JUPITER-2	8 44 32.9	18 51 10	PC	IMAGE	ALL	F718M		1	0	3237	0		1
JUPITER-2	8 44 32.9	18 51 10	PC	IMAGE	ALL	F889N		1	30	3237	0		1
JUPITER-2	8 44 32.9	18 51 10	PC	IMAGE	ALL	F547M		1	0	3237	0		1
JUPITER-3	8 44 35.4	18 51 1	PC	IMAGE	ALL	F336W		1	5	3237	0		1
JUPITER-3	8 44 35.4	18 51 1	PC	IMAGE	ALL	F439W		1	0	3237	0		1
JUPITER-3	8 44 35.4	18 51 1	PC	IMAGE	ALL	F718M		1	0	3237	0		1
JUPITER-3	8 44 35.4	18 51 1	PC	IMAGE	ALL	F889N		1	30	3237	0		1
JUPITER-3	8 44 35.4	18 51 1	PC	IMAGE	ALL	F547M		1	0	3237	0		1
JUPITER-4	8 44 37.9	18 50 51	PC	IMAGE	ALL	F336W		1	5	3237	0		1
JUPITER-4	8 44 37.9	18 50 51	PC	IMAGE	ALL	F439W		1	0	3237	0		1
JUPITER-4	8 44 37.9	18 50 51	PC	IMAGE	ALL	F718M		1	0	3237	0		1
JUPITER-4	8 44 37.9	18 50 51	PC	IMAGE	ALL	F889N		1	30	3237	0		1
JUPITER-4	8 44 37.9	18 50 51	PC	IMAGE	ALL	F547M		1	0	3237	0		1
JUPITER-5	8 44 40.4	18 50 41	PC	IMAGE	ALL	F336W		1	5	3237	0		1
JUPITER-5	8 44 40.4	18 50 41	PC	IMAGE	ALL	F439W		1	0	3237	0		1
JUPITER-5	8 44 40.4	18 50 41	PC	IMAGE	ALL	F718M		1	0	3237	0		1
JUPITER-5	8 44 40.4	18 50 41	PC	IMAGE	ALL	F889N		1	30	3237	0		1
JUPITER-5	8 44 40.4	18 50 41	PC	IMAGE	ALL	F547M		1	0	3237	0		1
JUPITER-6	8 44 42.8	18 50 32	PC	IMAGE	ALL	F336W		1	5	3237	0		1
JUPITER-6	8 44 42.8	18 50 32	PC	IMAGE	ALL	F439W		1	0	3237	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
JUPITER-6	8 44 42.8	18 50 32	PC	IMAGE	ALL	F718M		1	0	3237	0		1
JUPITER-6	8 44 42.8	18 50 32	PC	IMAGE	ALL	F889N		1	30	3237	0		1
JUPITER-6	8 44 42.8	18 50 32	PC	IMAGE	ALL	F547M		1	0	3237	0		1
LYNX2-11378	8 45 18.2	44 49 35	FOC/48	IMAGE	512X512	F305LP		1	1800	3121	0		1
KRON-LYNX2IRK	8 45 23.8	44 50 7	WFC	IMAGE	W1	F555W		1	1800	3121	0		1
JUPITER-7	8 45 27.8	18 47 36	PC	IMAGE	ALL	F336W		1	5	3237	0		1
JUPITER-7	8 45 27.8	18 47 36	PC	IMAGE	ALL	F439W		1	0	3237	0		1
JUPITER-7	8 45 27.8	18 47 36	PC	IMAGE	ALL	F718M		1	0	3237	0		1
JUPITER-7	8 45 27.8	18 47 36	PC	IMAGE	ALL	F889N		1	30	3237	0		1
JUPITER-7	8 45 27.8	18 47 36	PC	IMAGE	ALL	F547M		1	0	3237	0		1
JUPITER-8	8 45 32.9	18 47 16	PC	IMAGE	ALL	F336W		1	5	3237	0		1
JUPITER-8	8 45 32.9	18 47 16	PC	IMAGE	ALL	F439W		1	0	3237	0		1
JUPITER-8	8 45 32.9	18 47 16	PC	IMAGE	ALL	F718M		1	0	3237	0		1
JUPITER-8	8 45 32.9	18 47 16	PC	IMAGE	ALL	F889N		1	30	3237	0		1
JUPITER-8	8 45 32.9	18 47 16	PC	IMAGE	ALL	F547M		1	0	3237	0		1
JUPITER-9	8 45 37.9	18 46 56	PC	IMAGE	ALL	F336W		1	5	3237	0		1
JUPITER-9	8 45 37.9	18 46 56	PC	IMAGE	ALL	F439W		1	0	3237	0		1
JUPITER-9	8 45 37.9	18 46 56	PC	IMAGE	ALL	F718M		1	0	3237	0		1
JUPITER-9	8 45 37.9	18 46 56	PC	IMAGE	ALL	F889N		1	30	3237	0		1
JUPITER-9	8 45 37.9	18 46 56	PC	IMAGE	ALL	F547M		1	0	3237	0		1
0843+136	8 45 47.3	13 28 59	FOC/96	IMAGE	512X512	F1ND F430W		1	600	1236	0	CON SEL	1
0843+136	8 45 47.3	13 28 59	FOC/96	IMAGE	512X512	F1ND F430W		1	600	3177	1	CON SEL	1
F193	8 51 35.8	11 53 35	FOS/RD	ACCUM	0.3	G570H		1	120	1040	9	CAL	1
F193	8 51 35.8	11 53 35	FOS/RD	ACCUM	0.3	G570H		1	120	4062	2	CAL	1
F193	8 51 35.8	11 53 35	FOS/RD	ACCUM	0.5	G570H		1	120	4062	2	CAL	1
F193	8 51 35.8	11 53 35	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	0	1040	9	ACQ	1
F193	8 51 35.8	11 53 35	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	0	4062	2	ACQ	1
F193	8 51 35.8	11 53 35	FOS/RD	ACQ/BINA	4.3	MIRROR		1	0	1040	9	ACQ	1
F193	8 51 35.8	11 53 35	FOS/RD	ACQ/BINA	4.3	MIRROR		1	0	4062	2	ACQ	1
NGC2681-NUC	8 53 32.9	51 18 50	PC	IMAGE	PC6	F555W		1	500	4169	3		2
NGC2681-NUC	8 53 32.9	51 18 50	PC	IMAGE	PCALL	F555W		1	23	4167	3		1
NGC2681-NUC	8 53 32.9	51 18 50	PC	IMAGE	PCALL	F555W		1	230	4167	3		1
NGC2681-NUC	8 53 32.9	51 18 50	PC	IMAGE	PCALL	F785LP		1	20	4167	3		1
NGC2681-NUC	8 53 32.9	51 18 50	PC	IMAGE	PCALL	F785LP		1	200	4167	3		1
NGC2681	8 53 33.0	51 18 54	FOC/96	IMAGE	512X512	F342W		1	300	3264	3		1
INCA221-50	8 54 0.6	20 13 49	FGS	POS	2	F5ND		1	51	1532	9		4
INCA221-50	8 54 0.6	20 13 50	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
POINT-CP13.2	8 54 5.3	-6 44 27	S/C	POINTING	V1			1	0	1014	3	CON	1
POINT0851+202INCA221-50	8 54 47.1	20 18 17	S/C	POINTING	V1			1	0	1532	9		2
POINT0851+202INCA221-50	8 54 48.6	20 18 36	S/C	POINTING	V1			1	1	4155	3	CON	1
0851+202INCA221-50	8 54 48.8	20 6 32	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
0851+202INCA221-50	8 54 48.9	20 6 32	FGS	POS	2	F550W		1	51	1532	9		6
OJ287	8 54 48.9	20 6 30	FOS/BL	ACCUM	4.3	G190H	1950	1	1440	3201	1		2
OJ287	8 54 48.9	20 6 30	FOS/BL	ACQ/BINA	4.3	MIRROR		1	8	3201	1	ACQ	1
OJ287	8 54 48.9	20 6 30	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	4201	9	ACQ	1
OJ287	8 54 48.9	20 6 30	FOS/BL	ACCUM	1.0	G130H	1379	1	1500	3201	1		1
OJ287	8 54 48.9	20 6 30	FOS/BL	ACCUM	4.3	G130H	1444	1	1440	3201	1		2
OJ287	8 54 48.9	20 6 30	FOS/BL	ACCUM	4.3	G270H	2766	1	1440	3201	1		1
OJ287	8 54 48.9	20 6 30	FOS/RD	ACQ/PEAK	0.7X2.0-BAR	MIRROR		1	1	4201	9	ACQ	1
OJ287	8 54 48.9	20 6 30	FOS/RD	ACCUM	0.7X2.0-BAR	G650L	6242	1	1500	4201	9		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
OJ+287	8 54 48.9	20 6 31	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
OJ+287BKG	8 54 49.9	20 6 31*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
POINT-CP13.1	8 55 40.4	-6 44 40	S/C	POINTING	V1			1	0	1014	3		1
4U0900-40	9 2 6.8	-40 33 18	HSP/UV1	PRISM	1.0	F248M/F135W		1	3000	1091	3		1
HD77581	9 2 6.8	-40 33 18	HSP/UV1	SINGLE	1.0	F220W		1	20	3234	3		1
HD77581	9 2 6.8	-40 33 18	HSP/UV2	SINGLE	1.0	F145M		1	20	3234	3		1
HD77581	9 2 6.8	-40 33 18	HSP/UV2	SINGLE	1.0	F184W		1	20	3234	3		1
HD77581	9 2 6.8	-40 33 18	HSP/UV2	SINGLE	1.0	F248M		1	20	3234	3		10
HD77581	9 2 6.8	-40 33 18	HSP/UV2	SINGLE	1.0	F284M		1	20	3234	3		1
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL0	F216M		1	45	3234	3		1
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL0	F237M		1	45	3234	3		2
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL0	F277M		1	45	3234	3		20
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL0	F327M		1	45	3234	3		20
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL45	F216M		1	45	3234	3		1
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL45	F237M		1	45	3234	3		2
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL45	F277M		1	45	3234	3		20
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL45	F327M		1	45	3234	3		20
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL90	F216M		1	45	3234	3		1
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL90	F237M		1	45	3234	3		2
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL90	F277M		1	45	3234	3		20
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL90	F327M		1	45	3234	3		20
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL135	F216M		1	45	3234	3		1
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL135	F237M		1	45	3234	3		2
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL135	F277M		1	45	3234	3		20
HD77581	9 2 6.8	-40 33 18	HSP/POL	SINGLE	POL135	F327M		1	45	3234	3		20
HD78316	9 7 44.8	10 40 4	HRS	IMAGE	2.0	MIRROR-A2		1	97	3207	1		1
HD78316	9 7 44.8	10 40 4	HRS	ACCUM	0.25	ECH-B	2540	1	1217	3207	1		1
HD78316	9 7 44.8	10 40 4	HRS	ACCUM	0.25	ECH-B	1849	3	1000	3207	1		1
HD78316	9 7 44.8	10 40 4	HRS	ACCUM	0.25	ECH-B	2354	2	673	3207	1		1
HD78316	9 7 44.8	10 40 4	HRS	ACCUM	0.25	ECH-B	1942	3	891	3207	1		1
HD78316	9 7 44.8	10 40 4	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	3207	1	ACQ	1
HD78316	9 7 44.8	10 40 4	HRS	ACCUM	0.25	ECH-B	1741	5	1108	3207	1		1
ETA-CAR-PSF-2	9 13 12.1	-69 43 2	PC	IMAGE	P6	F658N		1	0	1138	0		1
ETA-CAR-PSF-2	9 13 12.1	-69 43 2	PC	IMAGE	P6	F658N		1	8	1138	0		1
INCA221-53	9 15 33.1	29 47 33	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
0912+297INCA221-53	9 15 52.3	29 33 24	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
NGC2815-NUC	9 16 19.6	-23 38 0	PC	IMAGE	PCALL	F785LP		1	11	4167	4	CON	1
NGC2815-NUC	9 16 19.6	-23 38 0	PC	IMAGE	PCALL	F785LP		1	110	4167	4	CON	1
NGC2815-NUC	9 16 19.6	-23 38 0	PC	IMAGE	PCALL	F555W		1	15	4167	4	CON	1
NGC2815-NUC	9 16 19.6	-23 38 0	PC	IMAGE	PCALL	F555W		1	153	4167	4	CON	1
POINT0912+297INCA221-53	9 16 30.5	29 43 15	S/C	POINTING	V1			1	1	4155	3	CON	1
HYDRA-A	9 18 5.7	-12 5 44	FOC/96	IMAGE	512X512	F220W		2	1200	3487	2		1
HYDRA-A	9 18 5.7	-12 5 44	FOC/96	IMAGE	512X512	F320W		2	1200	3487	2		1
HYDRA-A	9 18 5.7	-12 5 44	FOC/96	IMAGE	512X512	F372M		2	1200	3487	2		1
HYDRA-A	9 18 5.7	-12 5 44	FOC/96	IMAGE	512X512	F430W		2	1200	3487	2		1
MKN704	9 18 26.3	16 18 18	FOC/96	IMAGE	512X512	F220W		1	1000	3344	3		1
MKN704	9 18 26.3	16 18 18	FOC/96	IMAGE	512X512	F502M		1	1000	3344	3		1
MKN704	9 18 26.3	16 18 18	FOC/96	IMAGE	512X512	F550M		1	1000	3344	3		1
NGC2841	9 22 1.7	50 58 31	FOC/96	IMAGE	512X512	F342W		1	300	3264	3		1
G117-B15A	9 24 15.3	35 16 51	HSP/UV2	SINGLE	1.0	F184W		1	10800	1093	2		1
G117-B15A	9 24 15.3	35 16 51	HSP/UV2	SINGLE	1.0	F284M		1	10800	1093	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
POINT-CP1.2	9 31 16.7	-7 10 49	S/C	POINTING	V1			1	0	1014	3	CON	1
NGC2903-170S-131W	9 32 0.3	21 27 13*	WFC	IMAGE	WFALL	F336W		1	700	1119	3		1
NGC2903-170S-131W	9 32 0.3	21 27 13*	WFC	IMAGE	WFALL	F555W		1	700	1119	3		12
NGC2903-170S-131W	9 32 0.3	21 27 13*	WFC	IMAGE	WFALL	F785LP		1	700	1119	3		4
POINT-CP1.1	9 32 28.5	-7 26 37	S/C	POINTING	V1			1	0	1014	3		1
GAL-CLUS-093942+471306-FLD2	9 42 37.6	46 58 16*	WFC	IMAGE	ALL	F555W		1	700	1115	4	CON	1
GAL-CLUS-093942+471306-FLD2	9 42 37.6	46 58 16*	WFC	IMAGE	ALL	F702W		1	700	1115	4	CON	1
GAL-CLUS-093942+471306-FLD3	9 42 51.0	47 0 50*	WFC	IMAGE	ALL	F555W		1	700	1115	4	CON	1
GAL-CLUS-093942+471306-FLD3	9 42 51.0	47 0 50*	WFC	IMAGE	ALL	F702W		1	700	1115	4	CON	1
GAL-CLUS-093942+471306-FLD1	9 42 56.6	46 58 50	WFC	IMAGE	ALL	F555W		1	700	1115	4	CON	1
GAL-CLUS-093942+471306-FLD1	9 42 56.6	46 58 50	WFC	IMAGE	ALL	F702W		1	700	1115	4	CON	1
NGC2992	9 45 42.3	-14 19 40	FOC/96	IMAGE	512X512	F437M		1	900	3504	2		1
NGC2992	9 45 42.3	-14 19 40	FOC/96	IMAGE	512X512	F372M		1	2700	3504	2		1
NGC2992	9 45 42.3	-14 19 40	FOC/96	IMAGE	512X512	F501N		1	2700	3504	2		1
NGC2992	9 45 42.3	-14 19 40	FOC/96	IMAGE	512X512	F502M		1	1200	3504	2		1
HD84737	9 48 34.2	46 1 20	HSP/UV1	SINGLE	1.0	F240W		1	3600	3007	0	CON SEL	1
HD84737	9 48 34.2	46 1 20	HSP/UV1	SINGLE	1.0	F140LP		1	3600	3007	0	CON SEL	1
HD84737	9 48 34.2	46 1 20	HSP/POL	SINGLE	POL0	F327M		1	3600	3007	0	CON SEL	1
PG0946+301	9 49 41.1	29 55 19	FOS/BL	ACCUM	4.3	G160L	1600	1	100	3200	1		1
PG0946+301	9 49 41.1	29 55 19	FOS/RD	ACCUM	4.3	G270H	2700	1	100	3200	1		1
PG0946+301	9 49 41.1	29 55 19	FOS/BL	RAPID	1.0	G160L	1600	1	2000	3200	1		1
PG0946+301	9 49 41.1	29 55 19	FOS/RD	RAPID	1.0	G190H	1900	1	5000	3200	1		1
PG0946+301	9 49 41.1	29 55 19	FOS/RD	RAPID	1.0	G270H	2700	1	3000	3200	1		1
PG0946+301	9 49 41.1	29 55 19	FOS/RD	ACQ/BINA	4.3	MIRROR		1	9	3200	1	ACQ	1
POINT-CP12.2	9 50 27.8	12 58 11	S/C	POINTING	V1			1	0	1014	3	CON	1
POINT-CP12.1	9 51 34.3	12 40 11	S/C	POINTING	V1			1	0	1014	3		1
GAL-CLUS-094949+440848	9 52 56.0	43 55 8	WFC	IMAGE	ALL	F555W		1	700	1115	3		1
GAL-CLUS-094949+440848	9 52 56.0	43 55 8	WFC	IMAGE	ALL	F702W		1	700	1115	3		1
GAL-CLUS-094949+440848	9 52 56.0	43 55 8	WFC	IMAGE	ALL	F555W		2	700	1115	3		1
GAL-CLUS-094949+440848	9 52 56.0	43 55 8	WFC	IMAGE	ALL	F702W		2	700	1115	3		1
0952+179	9 54 56.9	17 43 32	FOC/96	IMAGE	512X512	F2ND F430W		1	600	1236	0	SEL	1
0952+179	9 54 56.9	17 43 32	FOC/96	IMAGE	512X512	F2ND F430W		1	600	3177	1	CON SEL	1
NGC3031-OFFSET-STARS-FIELD	9 55 32.7	69 4 1*	WFC	IMAGE	ALL	F606W		1	30	1038	0		1
M81	9 55 33.1	69 3 56	FOC/96	IMAGE	512X512	F486N		1	2400	1055	0		1
M81	9 55 33.1	69 3 56	FOC/96	IMAGE	512X512	F550M		1	1200	1055	0		1
M81	9 55 33.1	69 3 56	FOC/48	SPEC	256X1024-SLIT	F430W		1	1800	3261	9		1
M81	9 55 33.1	69 3 56	FOC/48	SPEC	256X1024-SLIT	F430W		1	5400	3261	9	CON	1
NGC3031	9 55 33.1	69 3 56	PC	IMAGE	ALL	F664N		2	900	1038	0		1
NGC3031	9 55 33.1	69 3 56	PC	IMAGE	ALL	F502N		1	1800	1038	0		1
NGC3031	9 55 33.1	69 3 56	PC	IMAGE	ALL	F547M		1	360	1038	0		1
NGC3031	9 55 33.1	69 3 56	FOS/BL	ACCUM	0.3	G190H		1	1000	3194	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC3031	9 55 33.1	69 3 56	FOS/RD	ACCUM	0.3	G270H		1	700	3194	1		1
NGC3031	9 55 33.1	69 3 56	FOS/RD	ACCUM	0.3	G400H		1	600	3194	1		1
NGC3031	9 55 33.1	69 3 56	FOS/RD	ACCUM	0.3	G570H		1	700	3194	1		1
NGC3031	9 55 33.1	69 3 56	FOS/BL	ACCUM	0.3	G130H		1	1500	3194	1		1
NGC3031-OFFSET-STAR	9 55 33.1	69 3 56*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	5	3194	1	ACQ	1
NGC3031-OFFSET-STAR	9 55 33.1	69 3 56*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	3194	1	ACQ	1
NGC3031-NUC	9 55 33.2	69 3 55	PC	IMAGE	P6	F555W		1	50	1118	0		1
NGC3031-NUC	9 55 33.2	69 3 55	PC	IMAGE	P6	F555W		2	160	1118	0		1
NGC3031-NUC	9 55 33.2	69 3 55	PC	IMAGE	P6	F785LP		1	200	1118	0		2
M81-BULGE	9 55 46.1	69 4 43	WFC	IMAGE	WFALL	F336W		1	100	1120	3		1
M81-BULGE	9 55 46.1	69 4 43	WFC	IMAGE	WFALL	F555W		1	100	1120	3		1
M81-BULGE	9 55 46.1	69 4 43	WFC	IMAGE	WFALL	F336W		1	1800	1120	3		1
M81-BULGE	9 55 46.1	69 4 43	WFC	IMAGE	WFALL	F555W		1	2100	1120	3		1
M81-BULGE	9 55 46.1	69 4 43	WFC	IMAGE	WFALL	F785LP		1	100	1120	3		1
M81-BULGE	9 55 46.1	69 4 43	WFC	IMAGE	WFALL	F785LP		1	1800	1120	3		1
NGC3034	9 55 54.8	69 40 53	WFC	IMAGE	WF1	F555W		1	30	3292	4	CON	1
NGC3034	9 55 54.8	69 40 53	WFC	IMAGE	WF1	F555W		1	400	3292	4	CON	1
NGC3034	9 55 54.8	69 40 53	WFC	IMAGE	WF1	F555W		1	230	3292	4	CON	1
NGC3034	9 55 54.8	69 40 53	WFC	IMAGE	WF1	F785LP		1	30	3292	4	CON	1
NGC3034	9 55 54.8	69 40 53	WFC	IMAGE	WF1	F785LP		1	400	3292	4	CON	1
NGC3034	9 55 54.8	69 40 53	WFC	IMAGE	WF1	F785LP		1	230	3292	4	CON	1
PG0953+414	9 56 52.4	41 15 23	FOS/BL	ACQ/BINA	4.3	MIRROR		1	7	3220	1	ACQ	1
PG0953+414	9 56 52.4	41 15 23	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	3	3220	1	ACQ	1
PG0953+414	9 56 52.4	41 15 23	FOS/BL	ACCUM	0.25X2.0	G130H	1379	1	8000	3220	1		1
PSF-NGC3031	9 57 0.5	68 54 6	PC	IMAGE	P6	F555W		1	0	1118	0		1
PSF-NGC3031	9 57 0.5	68 54 6	PC	IMAGE	P6	F785LP		1	0	1118	0		1
0955+326	9 58 20.9	32 24 2	FOC/96	IMAGE	512X512	F430W F4ND		1	600	1236	0	SEL	1
0955+326	9 58 20.9	32 24 2	FOC/96	IMAGE	512X512	F430W F4ND		1	600	3177	1	CON SEL	1
0955+326INCA221-56	9 58 20.9	32 24 2	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
0955+326INCA221-57	9 58 20.9	32 24 2	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
3C232	9 58 20.9	32 24 2	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
3C232BKG	9 58 20.9	32 24 17*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
3C232	9 58 21.0	32 24 2	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	3566	2	ACQ	1
3C232	9 58 21.0	32 24 2	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	2	3566	2	ACQ	1
3C232	9 58 21.0	32 24 2	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	4400	3566	2		1
3C232	9 58 21.0	32 24 2	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1800	3566	2		1
PC0955+4717	9 58 45.5	47 3 24	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
PC0955+4717	9 58 45.5	47 3 24	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
INCA221-56	9 58 45.6	32 35 8	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
Q0956+123	9 58 52.2	12 2 45	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
POINT0955+326INCA221-57	9 58 59.3	32 14 50	S/C	POINTING	V1			1	1	4155	3	CON	1
INCA221-57	9 59 10.9	32 26 20	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
POINT0955+326INCA221-56	9 59 18.3	32 24 38	S/C	POINTING	V1			1	1	4155	3	CON	1
QSO0957+561BKG	10 1 19.2	55 53 55*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3250	3		1
QSO0957+561BKG	10 1 19.2	55 53 55*	HSP/UV2	STAR-SKY	1.0-A	F284M		1	120	3250	3		1
QSO0957+561BKG	10 1 19.2	55 53 55*	HSP/UV2	STAR-SKY	1.0-B	F248M		1	120	3250	3		1
Q0957+561	10 1 20.7	55 53 50	PC	IMAGE	PC6	F555W		1	500	3799	2		1
Q0957+561	10 1 20.7	55 53 50	PC	IMAGE	PC6	F555W		2	2200	3799	2		1
Q0957+561	10 1 20.7	55 53 50	PC	IMAGE	PC6	F785LP		4	2200	3799	2		1
Q0957+561	10 1 20.8	55 53 53	FOC/96	IMAGE	512X512	F342W		1	1800	3226	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
QSO0957+561A	10 1 20.8	55 53 55	HSP/POL	STAR-SKY	POL0	F277M		1	800	3250	3		1
QSO0957+561A	10 1 20.8	55 53 55	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3250	3		1
QSO0957+561A	10 1 20.8	55 53 55	HSP/POL	STAR-SKY	POL45	F277M		1	800	3250	3		1
QSO0957+561A	10 1 20.8	55 53 55	HSP/POL	STAR-SKY	POL90	F277M		1	800	3250	3		1
QSO0957+561A	10 1 20.8	55 53 55	HSP/UV2	STAR-SKY	1.0-A	F284M		1	120	3250	3		1
QSO0957+561A	10 1 20.8	55 53 55	HSP/UV2	STAR-SKY	1.0-B	F248M		1	120	3250	3		1
QSO0957+561A	10 1 20.8	55 53 55	HSP/POL	STAR-SKY	POL135	F277M		1	800	3250	3		1
Q0957+561	10 1 20.8	55 53 53	PC	IMAGE	P6	F555W		2	160	1116	0		1
Q0957+561	10 1 20.8	55 53 53	PC	IMAGE	PC6	F555W		2	300	3287	3		1
Q0957+561	10 1 20.8	55 53 53	PC	IMAGE	P6	F785LP		2	350	1116	0		1
Q0957+561	10 1 20.8	55 53 53	PC	IMAGE	PC6	F785LP		2	300	3287	3		1
0957+561A	10 1 20.9	55 53 54	FOS/RD	RAPID	4.3	G160L	1650	1	500	4080	2		1
0957+561A	10 1 20.9	55 53 54	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	4080	2	ACQ	1
0957+561A	10 1 20.9	55 53 54	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	5	4080	2	ACQ	1
0957+561A	10 1 20.9	55 53 54	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	13128	4080	2		1
QSO0957+561B	10 1 20.9	55 53 49*	HSP/POL	STAR-SKY	POL0	F277M		1	800	3250	3		1
QSO0957+561B	10 1 20.9	55 53 49*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3250	3		1
QSO0957+561B	10 1 20.9	55 53 49*	HSP/POL	STAR-SKY	POL45	F277M		1	800	3250	3		1
QSO0957+561B	10 1 20.9	55 53 49*	HSP/POL	STAR-SKY	POL90	F277M		1	800	3250	3		1
QSO0957+561B	10 1 20.9	55 53 49*	HSP/UV2	STAR-SKY	1.0-A	F284M		1	120	3250	3		1
QSO0957+561B	10 1 20.9	55 53 49*	HSP/UV2	STAR-SKY	1.0-B	F248M		1	120	3250	3		1
QSO0957+561B	10 1 20.9	55 53 49*	HSP/POL	STAR-SKY	POL135	F277M		1	800	3250	3		1
0957+561B	10 1 21.0	55 53 48	FOS/RD	RAPID	4.3	G160L	1650	1	500	4080	2		1
0957+561B	10 1 21.0	55 53 48	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	4080	2	ACQ	1
0957+561B	10 1 21.0	55 53 48	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	5	4080	2	ACQ	1
0957+561B	10 1 21.0	55 53 48	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	13128	4080	2		1
NGC3079-OFFSET-STARS -FIELD	10 1 54.4	55 41 8*	WFC	IMAGE	ALL	F606W		1	30	1038	0		1
NGC3079	10 1 57.8	55 40 48	PC	IMAGE	ALL	F664N		2	900	1038	0		1
NGC3079	10 1 57.8	55 40 48	PC	IMAGE	ALL	F502N		1	1800	1038	0		1
NGC3079	10 1 57.8	55 40 48	PC	IMAGE	ALL	F547M		1	360	1038	0		1
NGC3115	10 5 14.2	-7 43 5	FOC/48	IMAGE	512X512	F342W		1	1400	3335	3		1
NGC3115	10 5 14.2	-7 43 5	FOC/48	IMAGE	512X512	F175W		1	5200	4070	2		1
3C236	10 6 1.7	34 54 11	FOC/96	IMAGE	512X512	F220W		1	900	3344	3		1
3C236	10 6 1.7	34 54 11	FOC/96	IMAGE	512X512	F430W		1	900	3344	3		1
3C236	10 6 1.7	34 54 11	FOC/96	IMAGE	512X512	F372M		1	1800	3344	3		1
3C236	10 6 1.7	34 54 11	FOC/96	IMAGE	512X512	F501N		1	1800	3344	3		1
CSO38	10 11 55.6	29 41 41	FOS/RD	ACQ/PEAK	4.3	MIRROR		1	1	3066	0	ACQ	1
CSO38	10 11 55.6	29 41 41	FOS/RD	ACCUM	4.3	G160L	1600	1	100	3066	0		1
CSO38	10 11 55.6	29 41 41	FOS/RD	ACCUM	1.0	G160L	1600	1	5900	3066	0		1
CSO38	10 11 55.6	29 41 41	FOS/RD	ACQ/BINA	4.3	MIRROR		1	22	3066	0	ACQ	1
CSO251	10 13 3.2	35 51 23	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	0	3065	0	ACQ	1
CSO251	10 13 3.2	35 51 23	FOS/BL	ACCUM	4.3	G130H	1300	1	100	3065	0		1
CSO251	10 13 3.2	35 51 23	FOS/BL	ACCUM	1.0	G130H	1300	1	6900	3065	0		1
CSO251	10 13 3.2	35 51 23	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	3065	0	ACQ	1
1011+250	10 13 53.4	24 49 17	FOC/96	IMAGE	512X512	F430W F4ND		1	600	1236	0	SEL	1
1011+250	10 13 53.4	24 49 17	FOC/96	IMAGE	512X512	F430W F4ND		1	600	3177	1	CON SEL	1
1017+1055	10 20 10.0	10 40 2	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
1017+1055	10 20 10.0	10 40 2	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
Q1017+109	10 20 10.0	10 40 2	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
INCA221-58	10 22 18.5	-10 32 10	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
1020-103INCA221-58	10 22 32.6	-10 37 42	FGS	POS	3	PUPIL		1	51	4155	3	CON	3

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
POINT1020-103INCA221-58	10 23 5.5	-10 28 58	S/C	POINTING	V1			1	1	4155	3	CON	1
NGC3227	10 23 30.6	19 51 54	PC	IMAGE	ALL	F664N		2	900	3195	1		1
NGC3227	10 23 30.6	19 51 54	PC	IMAGE	ALL	F502N		1	1800	3195	1		1
NGC3227	10 23 30.6	19 51 54	PC	IMAGE	ALL	F547M		1	360	3195	1		1
NGC3227-OFFSET-STARS-FIELD	10 23 33.4	19 51 3*	WFC	IMAGE	ALL	F606W		1	30	3195	1		1
PKS1021-00	10 24 29.5	-0 52 56	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
PKS1021-00	10 24 29.5	-0 52 56	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
HD90839	10 30 37.5	55 58 50	PC	IMAGE	P6	F622W		4	1000	1062	9		2
HD90839	10 30 37.5	55 58 50	PC	IMAGE	P6	F875M		4	1000	1062	9		2
HD90839	10 30 37.5	55 58 50	PC	IMAGE	P6	F122M F875M		1	2	1062	9		2
3C244.1	10 33 31.4	56 15 3	FOC/96	IMAGE	512X512	F480LP		1	1740	3263	9		1
Q1033+137	10 36 26.9	13 26 51	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
NGC3311-NUC	10 36 42.9	-27 31 43	PC	IMAGE	PC6	F555W		1	1800	3286	2		1
NGC3311-NUC	10 36 42.9	-27 31 43	PC	IMAGE	PC6	F555W		1	1200	3286	2		1
INCA221-59	10 40 12.8	6 12 12	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
POINT1038+064INCA221-59	10 40 48.0	6 21 23	S/C	POINTING	V1			1	1	4155	3	CON	1
INCA221-60	10 41 1.2	6 6 23	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
1038+064INCA221-59	10 41 17.0	6 10 16	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
1038+064INCA221-60	10 41 17.0	6 10 16	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
4C06.41	10 41 17.2	6 10 17	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
4C06.41	10 41 17.2	6 10 17	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
1038+064	10 41 17.2	6 10 17	FOC/96	IMAGE	512X512	F2ND F430W		1	600	1236	0	SEL	1
1038+064	10 41 17.2	6 10 17	FOC/96	IMAGE	512X512	F2ND F430W		1	600	3177	1	CON SEL	1
POINT1038+064INCA221-60	10 41 37.9	5 58 20	S/C	POINTING	V1			1	1	4155	3	CON	1
3C245	10 42 44.6	12 3 32	FOS/RD	ACCUM	0.25X2.0	G190H		1	8000	4126	9		1
3C245	10 42 44.6	12 3 32	FOS/RD	ACCUM	0.25X2.0	G270H		1	1400	4126	9		1
3C245	10 42 44.6	12 3 32	FOS/RD	ACQ/BINA	4.3	MIRROR		1	27	4126	9	ACQ	1
3C245	10 42 44.6	12 3 32	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	27	4126	9	ACQ	1
S51039+81	10 44 23.0	80 54 39	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
S51039+81	10 44 23.0	80 54 39	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
S51039+81	10 44 23.0	80 54 39	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
S51039+81	10 44 23.0	80 54 39	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
HD93250	10 44 45.2	-59 33 55	HSP/UV2	SINGLE	1.0	F152M		1	1800	3926	1		2
HD93250	10 44 45.2	-59 33 55	HSP/UV2	PRISM	1.0	F262M/F145M		1	1800	1095	1		2
HD93250	10 44 45.2	-59 33 54	HRS	WSCAN	2.0	G160M	1520	1	1536	4104	2		1
HD93250	10 44 45.2	-59 33 54	HRS	WSCAN	2.0	G160M	1424	1	1536	4104	2		1
HD93250	10 44 45.2	-59 33 54	HRS	WSCAN	2.0	G160M	1232	1	1536	4104	2		1
HD93250	10 44 45.2	-59 33 54	HRS	WSCAN	2.0	G160M	1328	1	1536	4104	2		1
HD93250	10 44 45.2	-59 33 54	HRS	WSCAN	2.0	G160M	1616	1	1536	4104	2		1
HD93250	10 44 45.2	-59 33 54	HRS	WSCAN	2.0	G160M	1712	1	1536	4104	2		1
HD93250	10 44 45.2	-59 33 54	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	203	4104	2	ACQ	1
W-CONDENSATION	10 45 2.3	-59 40 50	HRS	ACCUM	2.0	G140L	1300	1	1200	1186	2		1
W-CONDENSATION	10 45 2.3	-59 40 50	HRS	ACCUM	2.0	G140L	1550	1	1200	1186	2		1
W-CONDENSATION	10 45 2.3	-59 40 50	HRS	ACCUM	2.0	G140L	1800	1	1800	1186	2		1
HOMUN-KNOT	10 45 2.3	-59 41 6	HRS	IMAGE	2.0	MIRROR-N2		1	282	4179	3		1
HOMUN-KNOT	10 45 2.3	-59 41 6	HRS	ACCUM	2.0	G270M	2800	3	1280	4179	3		1
HOMUN-KNOT	10 45 2.3	-59 41 6	FOS/RD	ACCUM	0.5	G270H	2800	1	300	4179	3		1
HOMUN-KNOT	10 45 2.3	-59 41 6	FOS/RD	ACCUM	0.5	G400H	3950	1	300	4179	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HOMUN-KNOT	10 45 2.3	-59 41 6	FOS/RD	ACCUM	0.5	G570H	5600	1	300	4179	3		1
HOMUN-KNOT	10 45 2.3	-59 41 6	FOS/RD	ACCUM	0.5	G780H	7050	1	300	4179	3		1
HOMUN-KNOT	10 45 2.3	-59 41 6	FOS/BL	ACCUM	0.5	G190H	1950	2	300	4179	3		1
HOMUN-KNOT	10 45 2.3	-59 41 6	FOS/BL	ACCUM	0.5	G130H	1400	4	300	4179	3		1
S-COND	10 45 2.3	-59 41 6	HRS	IMAGE	2.0	MIRROR-N2		1	484	3945	2		1
S-COND	10 45 2.3	-59 41 6	HRS	ACCUM	2.0	G270M	2800	3	1280	3945	2		1
S-COND	10 45 2.3	-59 41 6	FOS/RD	ACCUM	0.5	G270H	2800	1	300	4179	3		1
S-COND	10 45 2.3	-59 41 6	FOS/RD	ACCUM	0.5	G400H	3950	1	300	4179	3		1
S-COND	10 45 2.3	-59 41 6	FOS/RD	ACCUM	0.5	G570H	5600	1	300	4179	3		1
S-COND	10 45 2.3	-59 41 6	FOS/RD	ACCUM	0.5	G780H	7050	1	300	4179	3		1
S-COND	10 45 2.3	-59 41 6	FOS/BL	ACCUM	0.5	G190H	1950	2	300	4179	3		1
S-COND	10 45 2.3	-59 41 6	FOS/BL	ACCUM	0.5	G130H	1400	4	300	4179	3		1
S-CONDENSATION	10 45 2.4	-59 41 8	HRS	ACCUM	2.0	G140L	1300	1	1200	1186	1		1
S-CONDENSATION	10 45 2.4	-59 41 8	HRS	ACCUM	2.0	G140L	1550	1	1200	1186	1		1
S-CONDENSATION	10 45 2.4	-59 41 8	HRS	ACCUM	2.0	G140L	1800	1	1800	1186	1		1
ETA-CAR	10 45 3.6	-59 41 4	WFC	IMAGE	W2	F502N		1	20	4173	3		1
ETA-CAR	10 45 3.6	-59 41 4	WFC	IMAGE	W2	F502N		1	200	4173	3		1
ETA-CAR	10 45 3.6	-59 41 4	WFC	IMAGE	W2	F502N		1	2000	4173	3		1
ETA-CAR	10 45 3.6	-59 41 4	WFC	IMAGE	W2	F658N		1	20	4173	3		1
ETA-CAR	10 45 3.6	-59 41 4	WFC	IMAGE	W2	F658N		1	200	4173	3		1
ETA-CAR	10 45 3.6	-59 41 4	WFC	IMAGE	W2	F658N		1	2000	4173	3		1
ETA-CAR	10 45 3.6	-59 41 4	WFC	IMAGE	W2	F673N		1	20	4173	3		1
ETA-CAR	10 45 3.6	-59 41 4	WFC	IMAGE	W2	F673N		1	200	4173	3		1
ETA-CAR	10 45 3.6	-59 41 4	WFC	IMAGE	W2	F673N		1	2000	4173	3		1
ETA-CAR	10 45 3.6	-59 41 4	WFC	IMAGE	W2	F547M		2	14	4173	3		1
ETA-CAR	10 45 3.6	-59 41 4	WFC	IMAGE	W2	F547M		2	140	4173	3		1
ETA-CAR	10 45 3.6	-59 41 4	PC	IMAGE	ALL	F664N		2	60	4178	3		1
ETA-CAR	10 45 3.6	-59 41 4	PC	IMAGE	ALL	F664N		2	60	4179	4		1
ETA-CAR	10 45 3.6	-59 41 4	PC	IMAGE	ALL	F658N		5	300	4178	3		1
ETA-CAR	10 45 3.6	-59 41 4	PC	IMAGE	ALL	F658N		5	300	4179	4		1
ETA-CAR	10 45 3.6	-59 41 4	PC	IMAGE	PCALL	F336W		1	8	3209	2		1
ETA-CAR	10 45 3.6	-59 41 4	PC	IMAGE	PCALL	F336W		1	40	3209	2		3
ETA-CAR	10 45 3.6	-59 41 4	PC	IMAGE	PCALL	F631N		1	8	3209	2		1
ETA-CAR	10 45 3.6	-59 41 4	PC	IMAGE	PCALL	F631N		1	40	3209	2		3
ETA-CARINAE	10 45 3.6	-59 41 4	PC	IMAGE	P6	F336W		1	2	1186	0	ACQ	1
ETA-CARINAE	10 45 3.6	-59 41 4	PC	IMAGE	P6	F336W		1	30	1186	0	ACQ	1
ETA-CARINAE	10 45 3.6	-59 41 4	PC	IMAGE	P6	F658N		1	100	1186	0	ACQ	1
ETA-CARINAE	10 45 3.6	-59 41 4	PC	IMAGE	P6	F675W		1	4	1186	0	ACQ	1
ETA-CARINAE	10 45 3.6	-59 41 4	PC	IMAGE	P6	F675W		1	100	1186	0	ACQ	1
ETA-CARINAE	10 45 3.6	-59 41 4	PC	IMAGE	P6	F336W		1	2	1186	3		1
ETA-CARINAE	10 45 3.6	-59 41 4	PC	IMAGE	P6	F336W		1	30	1186	3		1
ETA-CARINAE	10 45 3.6	-59 41 4	PC	IMAGE	P6	F658N		1	100	1186	3		1
ETA-CARINAE	10 45 3.6	-59 41 4	PC	IMAGE	P6	F675W		1	4	1186	3		1
ETA-CARINAE	10 45 3.6	-59 41 4	PC	IMAGE	P6	F675W		1	100	1186	3		1
ETA-CARINAE	10 45 3.6	-59 41 4	WFC	IMAGE	ALL-ND	F658N		1	10	1186	0	UNP	1
ETA-CARINAE	10 45 3.6	-59 41 4	WFC	IMAGE	ALL-ND	F675W		1	3	1186	0	ACQ UNP	1
ETACAR-OFFSET	10 45 3.6	-59 41 4	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	51	3945	2		1
ETACAR-OFFSET	10 45 3.6	-59 41 4	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	51	4179	3		1
ETACAR-OFFSET	10 45 3.6	-59 41 4	HRS	IMAGE	2.0	MIRROR-N2		1	96	3945	2		2
ETACAR-OFFSET	10 45 3.6	-59 41 4	HRS	IMAGE	2.0	MIRROR-N2		1	96	4179	3		2
ETACAR-OFFSET	10 45 3.6	-59 41 4	FOS/BL	ACQ/PEAK	0.5	G570H	4710	1	1	4179	3		1
ETACAR-OFFSET	10 45 3.6	-59 41 4	FOS/BL	ACQ/PEAK	1.0	G570H	4710	1	0	4179	3	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	P6	F336W		1	2	1138	0		1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	P6	F658N		1	2	1138	0		1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	P6	F658N		1	40	1138	0		1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	P6	F658N		1	800	1138	0		1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	P6	F850LP		1	0	1138	0		1
ETA-CAR	10 45 3.7	-59 41 4	WFC	IMAGE	ALL	F492M		1	40	2887	0		1
ETA-CAR	10 45 3.7	-59 41 4	WFC	IMAGE	ALL	F658N		1	20	2887	0		2
ETA-CAR	10 45 3.7	-59 41 4	WFC	IMAGE	ALL	F658N		1	80	2887	0		2
ETA-CAR	10 45 3.7	-59 41 4	WFC	IMAGE	ALL	F658N		1	400	2887	0		2
ETA-CAR	10 45 3.7	-59 41 4	WFC	IMAGE	ALL	F492M		2	10	2887	0		1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	PCALL	F658N		1	1	3284	3		1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	PCALL	F336W		1	1	3284	4	CON	1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	PCALL	F336W		1	10	3284	4	CON	1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	PCALL	F336W		1	100	3284	4	CON	1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	PCALL	F658N		1	1	3284	4	CON	1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	PCALL	F658N		1	10	3284	4	CON	1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	PCALL	F658N		1	100	3284	4	CON	1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	PCALL	F850LP		1	0	3284	4	CON	1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	PCALL	F850LP		1	2	3284	4	CON	1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	PCALL	F850LP		1	20	3284	4	CON	1
ETA-CAR	10 45 3.7	-59 41 4	WFC	IMAGE	ALL	F785LP		1	0	2887	0		1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	PCALL	F658N POL0		1	10	3284	3		1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	PCALL	F658N POL60		1	10	3284	3		1
ETA-CAR	10 45 3.7	-59 41 4	PC	IMAGE	PCALL	F658N POL120		1	10	3284	3		1
HD93308	10 45 3.7	-59 41 4	FOC/96	IMAGE	512X512	F550M F6ND		2	1200	4073	2		1
HD93308	10 45 3.7	-59 41 4	FOC/96	IMAGE	512X1024	F4ND F550M		1	1200	4073	2		1
HD93308	10 45 3.7	-59 41 4	FOC/96	IMAGE	512X512	F1ND F550M F8ND		1	1200	3305	1		1
HD93308	10 45 3.7	-59 41 4	FOC/96	IMAGE	512X512	F175W F190M F4ND		2	1200	3305	1		1
HD93308	10 45 3.7	-59 41 4	FOC/96	IMAGE	512X1024	F1ND F4ND F550M		2	1200	4073	2		1
HD93308	10 45 3.7	-59 41 4	FOC/96	IMAGE	512X512	F1ND F307M F342W F 8ND		2	1200	3305	1		1
PSF-STAR	10 45 8.3	-59 40 50	PC	IMAGE	PCALL	F336W		1	60	3209	2		3
PSF-STAR	10 45 8.3	-59 40 50	PC	IMAGE	PCALL	F631N		1	30	3209	2		1
PSF-STAR	10 45 8.3	-59 40 50	PC	IMAGE	PCALL	F336W		1	15	3209	2		1
PSF-STAR	10 45 8.3	-59 40 50	PC	IMAGE	PCALL	F631N		1	120	3209	2		3
1042+178	10 45 14.3	17 35 48	PC	IMAGE	PC6	F555W		1	2000	4172	3		1
1042+178	10 45 14.3	17 35 48	PC	IMAGE	PC6	F785LP		2	2000	4172	3		1
ETA-CAR-PSF-1	10 47 12.8	-60 5 50	PC	IMAGE	P6	F336W		1	0	1138	0		1
ETA-CAR-PSF-1	10 47 12.8	-60 5 50	PC	IMAGE	P6	F658N		1	30	1138	0		1
ETA-CAR-PSF-1	10 47 12.8	-60 5 50	PC	IMAGE	P6	F850LP		1	1	1138	0		1
NGC3379-POS2	10 47 29.9	12 34 58*	WFC	IMAGE	WFALL	F555W		1	2200	1114	3		1
NGC3379-POS2	10 47 29.9	12 34 58*	WFC	IMAGE	WFALL	F785LP		1	2500	1114	3		1
NGC3379-POS1	10 47 40.7	12 34 57*	WFC	IMAGE	WFALL	F555W		1	2200	1114	3		1
NGC3379-POS1	10 47 40.7	12 34 57*	WFC	IMAGE	WFALL	F785LP		1	2500	1114	3		1
NGC3377-POS1	10 47 41.7	14 1 4*	WFC	IMAGE	WFALL	F555W		1	2200	1114	3		1
NGC3377-POS1	10 47 41.7	14 1 4*	WFC	IMAGE	WFALL	F785LP		1	2500	1114	3		1
NGC3379-NUC	10 47 49.6	12 34 53	PC	IMAGE	P6	F555W		1	100	3229	1		1
NGC3379-NUC	10 47 49.6	12 34 53	PC	IMAGE	P6	F555W		2	500	3229	1		1
NGC3379	10 47 49.6	12 34 52	FOC/96	IMAGE	512X512	F342W		1	600	4205	3		1
NGC3379	10 47 49.6	12 34 52	FOC/96	IMAGE	512X512	F502M		1	300	4205	3		1
NGC3379	10 47 49.6	12 34 52	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC3379	10 47 49.6	12 34 52	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC3384-NUC	10 48 17.1	12 37 50	PC	IMAGE	P6	F555W		2	100	1118	0		1
HD93521	10 48 23.5	37 34 13	HRS	WSCAN	0.25	ECH-A	1240	1	528	1071	0		1
HD93521	10 48 23.5	37 34 13	HRS	WSCAN	0.25	ECH-A	1252	1	432	1071	0		1
HD93521	10 48 23.5	37 34 13	HRS	WSCAN	0.25	ECH-A	1530	1	960	1071	0		1
HD93521	10 48 23.5	37 34 13	HRS	WSCAN	0.25	ECH-B	2370	1	240	1071	0		1
HD93521	10 48 23.5	37 34 13	HRS	WSCAN	0.25	ECH-A	1303	1	384	1071	0		1
HD93521	10 48 23.5	37 34 13	HRS	WSCAN	0.25	ECH-A	1334	1	528	1071	0		1
HD93521	10 48 23.5	37 34 13	HRS	WSCAN	0.25	ECH-A	1356	1	912	1071	0		1
HD93521	10 48 23.5	37 34 13	HRS	WSCAN	0.25	ECH-A	1392	1	1056	1071	0		1
HD93521	10 48 23.5	37 34 13	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	1071	0	ACQ	1
HD93521	10 48 23.5	37 34 13	HRS	WSCAN	0.25	ECH-A	1191	1	288	1071	0		1
HD93521	10 48 23.5	37 34 13	HRS	WSCAN	0.25	ECH-B	1805	1	432	1071	0		1
HD93521	10 48 23.5	37 34 13	HRS	WSCAN	0.25	ECH-B	2602	1	384	1071	0		1
HD93521	10 48 23.5	37 34 13	HRS	WSCAN	0.25	ECH-A	1547	1	1104	1071	0		1
PSF-NGC3384	10 50 9.0	12 48 35	PC	IMAGE	P6	F555W		1	0	1118	0		1
PSF-NGC3379	10 50 9.1	12 48 35	PC	IMAGE	P6	F555W		1	0	3229	1		1
AGK+08D1425	10 51 54.9	8 26 6	FOS/RD	ACQ/PEAK	0.5	G650L		1	0	1080	2	ACQ	1
AGK+08D1425	10 51 54.9	8 26 6	FOS/RD	ACQ/PEAK	1.0	G650L		1	0	1080	2	ACQ	1
AGK+08D1425	10 51 54.9	8 26 6	FOS/RD	ACQ/PEAK	4.3	G650L		1	0	1080	2	ACQ	1
AGK+08D1425	10 51 54.9	8 26 6	FOS/RD	RAPID	1.0	G650L	6232	1	2280	1080	2		1
AGK+08D1425	10 51 54.9	8 26 6	FOS/RD	RAPID	1.0	G650L	6232	1	2039	1080	2		1
G146-72	10 55 6.1	47 14 41	FGS	TRANS	ANY	F583W		1	2000	1003	3		2
POINT-CP11.2	10 56 23.9	-4 29 52	S/C	POINTING	V1			1	0	1014	3	CON	1
POINT-CP11.1	10 56 26.3	-4 28 40	S/C	POINTING	V1			1	0	1014	3		1
WOLF359	10 56 29.0	7 0 55	PC	IMAGE	P6	F875M		1	50	1062	9		1
WOLF359	10 56 29.0	7 0 55	PC	IMAGE	P6	F622W		4	1000	1062	9		1
WOLF359	10 56 29.0	7 0 55	PC	IMAGE	P6	F875M		4	1000	1062	9		1
GLIESE406	10 56 40.3	7 2 41	FGS	POS	PRIME	F550W		1	52	2936	9	CON	29
GLIESE406	10 56 40.3	7 2 41	FGS	TRANS	PRIME	F583W		1	100	2936	9	ACQ	1
3C247	10 58 58.6	43 1 25	FOC/96	IMAGE	512X512	F480LP		1	1740	3263	9		1
ARP148	11 3 53.5	40 51 1	WFC	IMAGE	WF1	F555W		1	30	3292	4	CON	1
ARP148	11 3 53.5	40 51 1	WFC	IMAGE	WF1	F555W		1	400	3292	4	CON	1
ARP148	11 3 53.5	40 51 1	WFC	IMAGE	WF1	F702W		1	30	3292	4	CON	1
ARP148	11 3 53.5	40 51 1	WFC	IMAGE	WF1	F702W		1	400	3292	4	CON	1
ARP148	11 3 53.5	40 51 1	WFC	IMAGE	WF1	F555W		1	230	3292	4	CON	1
ARP148	11 3 53.5	40 51 1	WFC	IMAGE	WF1	F702W		1	230	3292	4	CON	1
ARP148	11 3 53.5	40 51 1	WFC	IMAGE	WF1	F785LP		1	30	3292	4	CON	1
ARP148	11 3 53.5	40 51 1	WFC	IMAGE	WF1	F785LP		1	400	3292	4	CON	1
ARP148	11 3 53.5	40 51 1	WFC	IMAGE	WF1	F785LP		1	230	3292	4	CON	1
3C249.1BKG	11 4 13.8	76 58 43*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
3C249.1	11 4 13.8	76 58 58	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
MKN421	11 4 27.3	38 12 32	FOC/96	IMAGE	512X512	F370LP	4040	1	300	1033	0		1
MKN421	11 4 27.3	38 12 32	FOC/96	IMAGE	512X512	F220W F231M	2260	1	900	1033	0		1
MRK421	11 4 27.3	38 12 32	FOS/BL	ACCUM	4.3	G190H	1950	1	1440	4057	2		2
MRK421	11 4 27.3	38 12 32	FOS/BL	ACQ/BINA	4.3	MIRROR		1	2	4057	2	ACQ	1
MRK421	11 4 27.3	38 12 32	FOS/BL	ACCUM	4.3	G270H	2766	1	1440	4057	2		1
MKN421	11 4 27.3	38 12 32	HSP/UV2	SINGLE	1.0	F140LP		1	120	3248	2		27
MKN421	11 4 27.3	38 12 32	HSP/POL	SINGLE	POL0	F216M		1	360	3248	2		2
MKN421	11 4 27.3	38 12 32	HSP/POL	SINGLE	POL0	F277M		1	180	3248	2		26
MKN421	11 4 27.3	38 12 32	HSP/POL	SINGLE	POL0	F277M		1	360	3248	2		1
MKN421	11 4 27.3	38 12 32	HSP/POL	SINGLE	POL45	F216M		1	360	3248	2		2
MKN421	11 4 27.3	38 12 32	HSP/POL	SINGLE	POL45	F277M		1	180	3248	2		26

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
MKN421	11 4 27.3	38 12 32	HSP/POL	SINGLE	POL45	F277M		1	360	3248	2		1
MKN421	11 4 27.3	38 12 32	HSP/POL	SINGLE	POL90	F216M		1	360	3248	2		2
MKN421	11 4 27.3	38 12 32	HSP/POL	SINGLE	POL90	F277M		1	180	3248	2		26
MKN421	11 4 27.3	38 12 32	HSP/POL	SINGLE	POL90	F277M		1	360	3248	2		1
MKN421	11 4 27.3	38 12 32	HSP/POL	SINGLE	POL135	F216M		1	360	3248	2		2
MKN421	11 4 27.3	38 12 32	HSP/POL	SINGLE	POL135	F277M		1	180	3248	2		26
MKN421	11 4 27.3	38 12 32	HSP/POL	SINGLE	POL135	F277M		1	360	3248	2		1
PKS1103-006	11 6 31.7	-0 52 53	FOS/BL	ACCUM	0.25X2.0	G190H		1	1800	1043	2		1
PKS1103-006	11 6 31.7	-0 52 53	FOS/BL	ACCUM	0.25X2.0	G270H		1	720	1043	2		1
PKS1103-006	11 6 31.7	-0 52 53	FOS/BL	ACCUM	0.25X2.0	G130H		1	13775	1043	2		1
PKS1103-006	11 6 31.7	-0 52 53	FOS/BL	ACQ/BINA	4.3	MIRROR		1	29	1043	2	ACQ	1
PKS1103-006	11 6 31.7	-0 52 53	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	29	1043	2	ACQ	1
NGC3516	11 6 47.5	72 34 7	HRS	ACCUM	2.0	G160M	1546	2	1196	3936	2		1
NGC3516	11 6 47.5	72 34 7	HRS	ACCUM	2.0	G160M	1546	2	1196	4187	3		1
NGC3516	11 6 47.5	72 34 7	HRS	ACCUM	2.0	G160M	1546	2	1305	3936	2		3
NGC3516	11 6 47.5	72 34 7	HRS	ACCUM	2.0	G160M	1546	2	1305	4187	3		3
NGC3516	11 6 47.5	72 34 7	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	163	3936	2		1
NGC3516	11 6 47.5	72 34 7	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	163	4187	3		1
NGC3516	11 6 47.5	72 34 7	HRS	ACCUM	2.0	G160M	1579	2	1196	3936	2		1
NGC3516	11 6 47.5	72 34 7	HRS	ACCUM	2.0	G160M	1579	2	1196	4187	3		1
NGC3516	11 6 47.5	72 34 7	HRS	ACCUM	2.0	G160M	1579	2	1305	3936	2		3
NGC3516	11 6 47.5	72 34 7	HRS	ACCUM	2.0	G160M	1579	2	1305	4187	3		3
3C249.1	11 7 54.2	76 42 43	HSP/UV2	IMAGE	10.0	F140LP		1	841	1099	2	ACQ CON	1
3C249.1	11 7 54.2	76 42 43	HSP/UV2	SINGLE	10.0	F140LP		1	16200	1099	2	CON	1
PSF-R136/3603	11 8 51.9	-60 45 34	PC	IMAGE	P6	F336W		1	0	1121	0		1
PSF-R136/3603	11 8 51.9	-60 45 34	PC	IMAGE	P6	F469N		1	8	1121	0		1
PSF-R136/3603	11 8 51.9	-60 45 34	PC	IMAGE	P6	F702W		1	0	1121	0		1
PSF-R136/3603	11 8 51.9	-60 45 34	PC	IMAGE	P6	F555W		1	0	1121	0		1
NGC3557	11 9 57.4	-42 26 17	FOC/96	IMAGE	512X512	F342W	3400	1	600	4205	3		1
NGC3557	11 9 57.4	-42 26 17	FOC/96	IMAGE	512X512	F502M	5200	1	300	4205	3		1
3C252	11 11 34.7	35 40 40	PC	IMAGE	ALL	F606W		1	1200	3263	9		1
PK148+57D1	11 14 47.9	55 1 5	WFC	IMAGE	ALL	F122M		1	2400	1074	9		1
PK148+57D1	11 14 47.9	55 1 5	WFC	IMAGE	ALL	F284W		1	2400	1074	9		1
NGC3603	11 15 5.3	-61 15 43	PC	IMAGE	P6	F336W		1	60	1121	0		1
NGC3603	11 15 5.3	-61 15 43	PC	IMAGE	P6	F702W		1	20	1121	0		1
NGC3603	11 15 5.3	-61 15 43	PC	IMAGE	P6	F469N		1	120	1121	0		1
NGC3603	11 15 5.3	-61 15 43	PC	IMAGE	P6	F555W		1	14	1121	0		1
NGC3603	11 15 5.3	-61 15 43	WFC	IMAGE	WF4	F336W		1	0	3285	4	CON	1
NGC3603	11 15 5.3	-61 15 43	WFC	IMAGE	WF4	F555W		1	0	3285	4	CON	1
NGC3603	11 15 5.3	-61 15 43	WFC	IMAGE	WF4	F555W		1	0	3285	4	ACQ CON	1
NGC3603	11 15 5.3	-61 15 43	WFC	IMAGE	WF4	F850LP		1	2	3285	4	CON	1
NGC3603	11 15 5.3	-61 15 43	WFC	IMAGE	WFALL	F469N		1	8	3285	4	CON	1
NGC3603	11 15 5.3	-61 15 43	WFC	IMAGE	WFALL	F502N		1	100	3285	4	CON	1
NGC3603	11 15 5.3	-61 15 43	WFC	IMAGE	WFALL	F656N		1	30	3285	4	CON	1
NGC3603	11 15 5.3	-61 15 43	WFC	IMAGE	WFALL	F658N		1	300	3285	4	CON	1
NGC3603	11 15 5.3	-61 15 43	WFC	IMAGE	WF4	F702W		1	1	3285	4	CON	2
HD97950AB	11 15 7.4	-61 15 38	FOC/96	IMAGE	512X512	F130M		2	1200	4073	2		1
HD97950AB	11 15 7.4	-61 15 38	FOC/96	IMAGE	512X512	F4ND F550M		2	1200	4073	2		1
INCA221-64	11 16 58.8	-46 31 54	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
POINT1116-462INCA221-65	11 17 11.7	-46 32 26	S/C	POINTING	V1			1	1	4155	3	CON	1
INCA221-65	11 17 28.1	-46 44 13	FGS	POS	3	PUPIL		1	51	4155	3	CON	2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
POINT1116-462INCA221-64	11 17 33.2	-46 43 35	S/C	POINTING	V1			1	1	4155	3	CON	1
PG1115+080	11 18 16.9	7 45 59	FOS/RD	ACQ/BINA	4.3	MIRROR		1	10	4078	2	ACQ	1
PG1115+080	11 18 16.9	7 45 59	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	10	4078	2	ACQ	1
PG1115+080	11 18 16.9	7 45 59	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	4500	4078	2		1
PG1115+080A	11 18 16.9	7 45 59	FOS/RD	RAPID	0.3	G400H	4000	1	2400	4128	9		1
PG1115+080A	11 18 16.9	7 45 59	FOS/RD	RAPID	0.3	G270H	2700	1	5050	4128	9		1
PG1115+080A	11 18 16.9	7 45 59	FOS/RD	RAPID	0.3	G190H	1900	1	5074	4128	9		1
PG1115+080A-OFFSET	11 18 16.9	7 45 59	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	4128	9	ACQ	2
PG1115+080D	11 18 16.9	7 45 59*	FOS/RD	RAPID	0.3	G400H	4000	1	3100	4128	9		1
PG1115+080D	11 18 16.9	7 45 59*	FOS/RD	RAPID	0.3	G270H	2700	1	6820	4128	9		1
PG1115+080D	11 18 16.9	7 45 59*	FOS/RD	RAPID	0.3	G190H	1900	1	7336	4128	9		1
PG1115+08	11 18 17.0	7 46 0	FOC/96	IMAGE	512X512	F342W		1	3600	1059	0		1
PG1115+080	11 18 17.0	7 46 0	PC	IMAGE	P6	F555W		1	60	1116	0		1
PG1115+080	11 18 17.0	7 46 0	PC	IMAGE	P6	F785LP		2	400	1116	0		1
PG1115+080	11 18 17.0	7 46 0	PC	IMAGE	PC6	F555W		1	400	3799	2		1
PG1115+080	11 18 17.0	7 46 0	PC	IMAGE	PC6	F555W		2	2000	3799	2		1
PG1115+080	11 18 17.0	7 46 0	PC	IMAGE	P6	F785LP		1	120	1116	0		1
PG1115+080	11 18 17.0	7 46 0	PC	IMAGE	PC6	F785LP		3	2000	3799	2		1
PG1115+080	11 18 17.0	7 46 0	PC	IMAGE	PC6	F785LP		1	1200	3799	2		1
PG1115+080	11 18 17.0	7 46 0	WFC	IMAGE	WFALL	F785LP		1	600	3287	3		1
PG1115+080	11 18 17.0	7 46 0	WFC	IMAGE	WFALL	F785LP		1	250	3287	3		1
PG1115+080	11 18 17.0	7 46 0	FOS/BL	ACCUM	0.25X2.0	G130H		1	23400	1144	2		1
PG1115+080	11 18 17.0	7 46 0	FOS/BL	ACCUM	0.25X2.0	G130H		1	21600	4190	3	CON	1
PG1115+080	11 18 17.0	7 46 0	FOS/BL	ACQ/BINA	4.3	MIRROR		1	60	4190	3	ACQ CON	1
PG1115+080	11 18 17.0	7 46 0	FOS/BL	ACQ/BINA	4.3	MIRROR		1	17	1144	2	ACQ	1
PG1115+080	11 18 17.0	7 46 0	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	60	1144	2	ACQ	1
PG1115+080	11 18 17.0	7 46 0	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	60	4190	3	ACQ CON	1
1116-462INCA221-64	11 18 26.8	-46 34 16	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
1116-462INCA221-65	11 18 26.8	-46 34 16	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
PG1115+407	11 18 30.6	40 25 50	WFC	IMAGE	WFALL	F725LP		1	14	3287	4	CON	1
PG1115+407	11 18 30.6	40 25 50	WFC	IMAGE	WFALL	F725LP		1	510	3287	4	CON	1
PG1115+407	11 18 30.6	40 25 50	WFC	IMAGE	WFALL	F725LP		1	212	3287	4	CON	1
PG1116+215	11 19 8.7	21 19 18	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	4115	2	ACQ	1
PG1116+215	11 19 8.7	21 19 18	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	3	4115	2	ACQ	1
PG1116+215	11 19 8.7	21 19 18	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	2	4115	2	ACQ	1
PG1116+215	11 19 8.7	21 19 18	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2000	4115	2		1
PG1116+215	11 19 8.7	21 19 18	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	800	4115	2		1
PG1116+215	11 19 8.7	21 19 18	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	9200	4115	2		1
3C256	11 20 43.1	23 27 55	PC	IMAGE	P6	F785LP		2	900	3228	1		1
3C256	11 20 43.1	23 27 55	WFC	IMAGE	WFALL	F725LP		1	600	3287	3		1
3C256	11 20 43.1	23 27 55	WFC	IMAGE	WFALL	F725LP		1	250	3287	3		1
A1118-61	11 20 57.2	-61 54 58	HSP/UV1	PRISM	1.0	F248M/F135W		1	3000	1091	3		1
1120+019	11 23 20.7	1 37 48	PC	IMAGE	PC6	F555W		1	400	4172	3		1
1120+019	11 23 20.7	1 37 48	PC	IMAGE	PC6	F555W		1	2000	4172	3		1
1120+019	11 23 20.7	1 37 48	PC	IMAGE	PC6	F785LP		1	1000	4172	3		1
1120+019	11 23 20.7	1 37 48	PC	IMAGE	PC6	F785LP		1	2000	4172	3		1
UGC6456	11 28 0.3	78 59 36	WFC	IMAGE	WF1	F555W		1	30	3292	4	CON	1
UGC6456	11 28 0.3	78 59 36	WFC	IMAGE	WF1	F555W		1	400	3292	4	CON	1
UGC6456	11 28 0.3	78 59 36	WFC	IMAGE	WF1	F555W		1	230	3292	4	CON	1
UGC6456	11 28 0.3	78 59 36	WFC	IMAGE	WF1	F785LP		1	30	3292	4	CON	1
UGC6456	11 28 0.3	78 59 36	WFC	IMAGE	WF1	F785LP		1	400	3292	4	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
UGC6456	11 28 0.3	78 59 36	WFC	IMAGE	WF1	F785LP		1	230	3292	4	CON	1
INCA221-66	11 29 12.2	-14 47 48	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
POINT1127-145INCA221 -66	11 29 44.3	-14 38 15	S/C	POINTING	V1			1	1	4155	3	CON	1
POINT1127-145INCA221 -67	11 29 44.4	-14 38 28	S/C	POINTING	V1			1	1	4155	3	CON	1
1127-145INCA221-66	11 30 7.0	-14 49 27	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
1127-145INCA221-67	11 30 7.0	-14 49 27	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
INCA221-67	11 30 33.4	-14 41 21	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
NGC3783	11 39 1.7	-37 44 18	HRS	ACCUM	2.0	G160M	1546	2	1088	1160	1		1
NGC3783	11 39 1.7	-37 44 18	HRS	ACCUM	2.0	G160M	1579	2	1088	1160	1		1
NGC3783	11 39 1.7	-37 44 18	HRS	ACCUM	2.0	G160M	1546	2	1196	3936	2		2
NGC3783	11 39 1.7	-37 44 18	HRS	ACCUM	2.0	G160M	1579	2	1196	3936	2		2
NGC3783	11 39 1.7	-37 44 18	HRS	ACCUM	2.0	G160M	1546	2	1196	4187	3		2
NGC3783	11 39 1.7	-37 44 18	HRS	ACCUM	2.0	G160M	1579	2	1196	4187	3		2
NGC3783	11 39 1.7	-37 44 18	HRS	ACCUM	2.0	G160M	1546	2	979	1160	1		1
NGC3783	11 39 1.7	-37 44 18	HRS	ACCUM	2.0	G160M	1579	2	979	1160	1		1
NGC3783	11 39 1.7	-37 44 18	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	163	1160	1		1
NGC3783	11 39 1.7	-37 44 18	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	163	3936	2		1
NGC3783	11 39 1.7	-37 44 18	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	163	4187	3		1
NGC3783	11 39 1.8	-37 44 19	PC	IMAGE	ALL	F664N		2	900	1036	0		1
NGC3783	11 39 1.8	-37 44 19	PC	IMAGE	ALL	F502N		1	1800	1036	0		1
NGC3783	11 39 1.8	-37 44 19	PC	IMAGE	ALL	F547M		1	360	1036	0		1
3C264	11 45 5.0	19 36 23	FOS/RD	ACCUM	1.0	PRISM	5400	1	500	3272	9	CON	1
3C264	11 45 5.0	19 36 23	FOC/96	IMAGE	512X512	F370LP	4040	1	300	1033	0		1
3C264	11 45 5.0	19 36 23	FOC/96	IMAGE	512X512	F220W F231M	2260	1	900	1033	0		1
3C264-OFFSET	11 45 5.0	19 36 23*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3272	9	ACQ CON	1
3C264-FIELD	11 45 5.0	19 36 43	WFC	IMAGE	ALL	F439W	4353	1	15	3272	9	CON	1
NGC3862	11 45 5.0	19 36 22	FOC/96	IMAGE	512X512	F502M		1	600	1057	0		1
NGC3862	11 45 5.0	19 36 22	FOC/96	IMAGE	512X512	F342W		1	1200	1057	0		1
NGC3862	11 45 5.0	19 36 22	FOC/96	IMAGE	512X512	F220W		1	1800	3265	2		1
3C265	11 45 28.6	31 33 48	FOC/96	IMAGE	512X512	F480LP		1	1740	3263	9		1
L145-141	11 45 43.0	-64 50 24	PC	IMAGE	P6	F875M		1	50	1062	9		2
L145-141	11 45 43.0	-64 50 24	PC	IMAGE	P6	F850LP		4	1000	1062	9		2
POINT1144-379INCA221 -68	11 46 18.6	-38 20 33	S/C	POINTING	V1			1	0	1532	9		2
INCA221-68	11 46 35.4	-38 8 59	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
INCA221-68	11 46 35.5	-38 8 59	FGS	POS	2	F583W		1	102	1532	9	UNP	4
1144-379INCA221-68	11 47 1.4	-38 12 11	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
1144-379INCA221-69	11 47 1.4	-38 12 11	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
1144-379INCA221-68	11 47 1.4	-38 12 11	FGS	POS	2	F583W		1	102	1532	9	UNP	6
POINT1144-379INCA221 -68	11 47 13.5	-38 0 11	S/C	POINTING	V1			1	1	4155	3	CON	1
1E1145.1-6141	11 47 28.5	-61 57 13	HSP/UV1	PRISM	1.0	F248M/F135W		1	3000	1091	3		1
ROSS128	11 47 45.0	0 48 19	PC	IMAGE	P6	F875M		1	40	1062	9		1
ROSS128	11 47 45.0	0 48 19	PC	IMAGE	P6	F622W		4	400	1062	9		1
ROSS128	11 47 45.0	0 48 19	PC	IMAGE	P6	F875M		4	400	1062	9		1
INCA221-69	11 47 48.6	-38 7 11	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
POINT1144-379INCA221 -69	11 47 50.4	-38 19 9	S/C	POINTING	V1			1	1	4155	3	CON	1
4U1145-619	11 48 0.1	-62 12 24	HSP/UV1	PRISM	1.0	F248M/F135W		1	3000	1091	3		1
PKS1148-00	11 50 43.8	-0 23 54	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PKS1148-00	11 50 43.8	-0 23 54	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
B21148+38	11 51 29.3	38 25 53	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
B21148+38	11 51 29.3	38 25 53	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
INCA221-72	11 52 54.1	49 23 46	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
1150+497INCA221-72	11 53 24.4	49 31 8	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
1150+497INCA221-73	11 53 24.4	49 31 8	FGS	POS	3	PUPIL		1	51	4155	3	CON	3
1150+497	11 53 24.4	49 31 9	PC	IMAGE	P8	F606W		1	26	1139	9		1
1150+497	11 53 24.4	49 31 9	PC	IMAGE	P8	F725LP		1	50	1139	9		1
LB2136	11 53 24.5	49 31 9	PC	IMAGE	PC6	F375N		2	300	3287	4	CON	1
INCA221-73	11 53 37.3	49 36 5	FGS	POS	3	PUPIL		1	51	4155	3	CON	2
POINT1150+497INCA221 -72	11 54 7.9	49 19 55	S/C	POINTING	V1			1	1	4155	3	CON	1
POINT1150+497INCA221 -73	11 54 32.7	49 28 48	S/C	POINTING	V1			1	1	4155	3	CON	1
NGC3998-NUC	11 57 56.2	55 27 13	PC	IMAGE	PCALL	F702W		1	6	4167	4	CON	1
NGC3998-NUC	11 57 56.2	55 27 13	PC	IMAGE	PCALL	F702W		1	60	4167	4	CON	1
NGC3998-NUC	11 57 56.2	55 27 13	PC	IMAGE	PCALL	F555W		1	378	4167	4	CON	1
NGC3998-NUC	11 57 56.2	55 27 13	PC	IMAGE	PCALL	F664N		1	120	4167	4	CON	1
NGC3998-NUC	11 57 56.2	55 27 13	PC	IMAGE	PCALL	F664N		1	1200	4167	4	CON	1
NGC3998-NUC	11 57 56.2	55 27 13	PC	IMAGE	PCALL	F785LP		1	27	4167	4	CON	1
NGC3998-NUC	11 57 56.2	55 27 13	PC	IMAGE	PCALL	F555W		1	37	4167	4	CON	1
NGC3998-NUC	11 57 56.2	55 27 13	PC	IMAGE	PCALL	F785LP		1	269	4167	4	CON	1
NGC4051	12 3 9.6	44 31 53	PC	IMAGE	ALL	F664N		2	900	1036	0		1
NGC4051	12 3 9.6	44 31 53	PC	IMAGE	ALL	F502N		1	1800	1036	0		1
NGC4051	12 3 9.6	44 31 53	PC	IMAGE	ALL	F547M		1	360	1036	0		1
NGC4051-OFFSET-STARS -FIELD	12 3 10.7	44 31 53*	WFC	IMAGE	ALL	F606W		1	30	1036	0		1
PG1202+281	12 4 42.2	27 54 12	FOC/96	IMAGE	512X512	PRISM1	3575	1	1200	3130	0		1
PG1202+281	12 4 42.2	27 54 12	FOS/RD	ACQ/BINA	4.3	MIRROR		1	8	4115	2	ACQ	1
PG1202+281	12 4 42.2	27 54 12	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	2	4115	2	ACQ	1
PG1202+281	12 4 42.2	27 54 12	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	3600	4115	2		1
PG1202+281	12 4 42.2	27 54 12	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1400	4115	2		1
PKS1203+011	12 5 48.5	0 53 44	WFC	IMAGE	WFALL	F725LP		1	80	3287	4	CON	1
PKS1203+011	12 5 48.5	0 53 44	WFC	IMAGE	WFALL	F725LP		1	200	3287	4	CON	1
PKS1203+011	12 5 48.5	0 53 44	WFC	IMAGE	WFALL	F725LP		1	480	3287	4	CON	1
FEIGE56	12 6 39.4	11 40 18	HRS	IMAGE	2.0	MIRROR-A2		1	484	1064	3	ACQ	1
FEIGE56	12 6 39.4	11 40 18	HRS	ACCUM	0.25	G160M	1305	1	1800	1064	3		1
FEIGE56	12 6 39.4	11 40 18	HRS	ACCUM	0.25	G160M	1362	1	1800	1064	3		1
FEIGE56	12 6 39.4	11 40 18	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	46	1064	3	ACQ	1
POINT1206-399INCA221 -77	12 8 33.8	-40 11 57	S/C	POINTING	V1			1	1	4154	3	CON	1
INCA221-77	12 8 48.5	-40 23 8	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
Q1206+119	12 9 17.9	11 38 31	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
1206-399INCA221-77	12 9 35.3	-40 16 12	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
1206-399INCA221-78	12 9 35.3	-40 16 12	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
INCA221-78	12 9 58.8	-40 17 41	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
POINT1206-399INCA221 -78	12 10 4.0	-40 5 53	S/C	POINTING	V1			1	1	4154	3	CON	1
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL0	F216M		1	180	3248	2		1
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL0	F237M		1	180	3248	2		1
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL0	F277M		1	180	3248	2		10
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL0	F327M		1	180	3248	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL45	F216M		1	180	3248	2		1
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL45	F237M		1	180	3248	2		1
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL45	F277M		1	180	3248	2		10
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL45	F327M		1	180	3248	2		1
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL90	F216M		1	180	3248	2		1
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL90	F237M		1	180	3248	2		1
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL90	F277M		1	180	3248	2		10
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL90	F327M		1	180	3248	2		1
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL135	F216M		1	180	3248	2		1
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL135	F237M		1	180	3248	2		1
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL135	F277M		1	180	3248	2		10
NGC4151	12 10 31.9	39 24 21	HSP/POL	SINGLE	POL135	F327M		1	180	3248	2		1
NGC4151	12 10 32.5	39 24 21	PC	IMAGE	ALL	F664N		1	400	1036	0		1
NGC4151	12 10 32.5	39 24 21	PC	IMAGE	ALL	F502N		1	1800	1036	0		1
NGC4151	12 10 32.5	39 24 21	PC	IMAGE	ALL	F547M		1	360	1036	0		1
NGC4151	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F502N		1	10	3274	9		1
NGC4151	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F502N		1	900	3274	9		1
NGC4151	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F547M		1	10	3274	9		1
NGC4151	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F547M		1	300	3274	9		1
NGC4151	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F664N		1	10	3274	9		1
NGC4151	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F664N		1	900	3274	9		1
NGC4151	12 10 32.5	39 24 21	FOS/BL	ACCUM	0.3	G190H		1	1000	3195	1	CON SEL	2
NGC4151	12 10 32.5	39 24 21	FOS/RD	ACCUM	0.3	G270H		1	700	3195	1	CON SEL	2
NGC4151	12 10 32.5	39 24 21	FOS/RD	ACCUM	0.3	G400H		1	600	3195	1	CON SEL	2
NGC4151	12 10 32.5	39 24 21	FOS/RD	ACCUM	0.3	G570H		1	600	3195	1	CON SEL	2
NGC4151	12 10 32.5	39 24 21	FOS/BL	ACCUM	0.3	G130H		1	1500	3195	1	CON SEL	2
NGC4151	12 10 32.5	39 24 21	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	3195	1	ACQ CON SEL	1
NGC4151	12 10 32.5	39 24 21	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	3195	1	ACQ CON SEL	1
NGC4151-CLOUD1	12 10 32.5	39 24 21*	FOS/BL	ACCUM	0.3	G190H		1	1000	3195	1	CON SEL	2
NGC4151-CLOUD1	12 10 32.5	39 24 21*	FOS/RD	ACCUM	0.3	G270H		1	700	3195	1	CON SEL	2
NGC4151-CLOUD1	12 10 32.5	39 24 21*	FOS/RD	ACCUM	0.3	G400H		1	600	3195	1	CON SEL	2
NGC4151-CLOUD1	12 10 32.5	39 24 21*	FOS/RD	ACCUM	0.3	G570H		1	600	3195	1	CON SEL	2
NGC4151-CLOUD1	12 10 32.5	39 24 21*	FOS/BL	ACCUM	0.3	G130H		1	1500	3195	1	CON SEL	2
NGC4151-CLOUD2	12 10 32.5	39 24 21*	FOS/BL	ACCUM	0.3	G190H		1	1000	3195	1	CON SEL	2
NGC4151-CLOUD2	12 10 32.5	39 24 21*	FOS/RD	ACCUM	0.3	G270H		1	700	3195	1	CON SEL	2
NGC4151-CLOUD2	12 10 32.5	39 24 21*	FOS/RD	ACCUM	0.3	G400H		1	600	3195	1	CON SEL	2
NGC4151-CLOUD2	12 10 32.5	39 24 21*	FOS/RD	ACCUM	0.3	G570H		1	600	3195	1	CON SEL	2
NGC4151-CLOUD2	12 10 32.5	39 24 21*	FOS/BL	ACCUM	0.3	G130H		1	1500	3195	1	CON SEL	2
NGC4151-OFFSET-STAR	12 10 32.5	39 24 21*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	3195	1	ACQ CON SEL	1
NGC4151-OFFSET-STAR	12 10 32.5	39 24 21*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	3195	1	ACQ CON SEL	1
NGC4151-NUC	12 10 32.5	39 24 21	PC	IMAGE	PC6	F555W		1	500	3639	2		2
NGC4151-NUC	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F547M		1	3	4167	3		1
NGC4151-NUC	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F547M		1	30	4167	3		1
NGC4151-NUC	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F547M		1	300	4167	3		1
NGC4151-NUC	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F664N		1	2	4167	3		1
NGC4151-NUC	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F664N		1	20	4167	3		1
NGC4151-NUC	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F664N		1	200	4167	3		1
NGC4151-NUC	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F702W		1	0	4167	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC4151-NUC	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F702W		1	2	4167	3		1
NGC4151-NUC	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F702W		1	20	4167	3		1
NGC4151-NUC	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F875M		1	1	4167	3		1
NGC4151-NUC	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F875M		1	15	4167	3		1
NGC4151-NUC	12 10 32.5	39 24 21	PC	IMAGE	PCALL	F875M		1	150	4167	3		1
NGC4151	12 10 32.6	39 24 21	HRS	ACCUM	2.0	G270M	2796	1	2000	1141	1		1
NGC4151	12 10 32.6	39 24 21	HRS	ACCUM	2.0	G270M	2796	1	2000	1141	1	CON	1
NGC4151	12 10 32.6	39 24 21	HRS	ACCUM	2.0	G270M	2796	1	2000	3952	2		1
NGC4151	12 10 32.6	39 24 21	FOS/BL	RAPID	0.25X2.0	G130H		1	2000	1141	1		1
NGC4151	12 10 32.6	39 24 21	FOS/BL	RAPID	0.25X2.0	G130H		1	2000	1141	1	CON	1
NGC4151	12 10 32.6	39 24 21	FOS/BL	RAPID	0.25X2.0	G130H		1	2000	3952	2		1
NGC4151	12 10 32.6	39 24 21	HRS	ACCUM	2.0	G160M	1548	1	1500	1141	1		6
NGC4151	12 10 32.6	39 24 21	HRS	ACCUM	2.0	G160M	1548	1	1500	1141	1	CON	6
NGC4151	12 10 32.6	39 24 21	HRS	ACCUM	2.0	G160M	1548	1	1500	3952	2		6
NGC4151	12 10 32.6	39 24 21	FOS/BL	ACQ/BINA	4.3	MIRROR		1	4	1141	1	ACQ	1
NGC4151	12 10 32.6	39 24 21	FOS/BL	ACQ/BINA	4.3	MIRROR		1	4	1141	1	ACQ CON	1
NGC4151	12 10 32.6	39 24 21	FOS/BL	ACQ/BINA	4.3	MIRROR		1	4	3952	2	ACQ	1
NGC4151	12 10 32.6	39 24 21	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	4	1141	1	ACQ	1
NGC4151	12 10 32.6	39 24 21	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	4	1141	1	ACQ CON	1
NGC4151	12 10 32.6	39 24 21	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	4	3952	2	ACQ	1
NGC4151	12 10 32.6	39 24 21	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	1141	1	ACQ	1
NGC4151	12 10 32.6	39 24 21	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	1141	1	ACQ CON	1
NGC4151	12 10 32.6	39 24 21	FOC/96	IMAGE	512X512	F152M	1500	1	2000	1227	0		1
NGC4151	12 10 32.6	39 24 21	FOC/96	IMAGE	512X512	F120M	1215	1	2400	1227	0		1
NGC4151	12 10 32.6	39 24 21	FOC/96	IMAGE	512X512	F501N	5010	1	1200	1227	0		2
NGC4151	12 10 32.6	39 24 21	FOC/96	IMAGE	512X512	F550M	5470	1	1200	1227	0		1
NGC4151-OFFSET-STARS -FIELD	12 10 34.2	39 24 59*	WFC	IMAGE	ALL	F606W		1	30	1036	0		1
1208+107	12 10 37.7	31 57 5	FOC/96	IMAGE	512X512	F430W F4ND		1	600	1236	0	SEL	1
1208+107	12 10 37.7	31 57 5	FOC/96	IMAGE	512X512	F430W F4ND		1	600	3177	1	CON SEL	1
Q1209+154	12 12 31.9	15 7 25	FOS/BL	ACCUM	1.0	G160L	1837	1	1000	3967	9		1
Q1209+154	12 12 31.9	15 7 25	FOS/BL	ACQ/BINA	4.3	MIRROR		1	152	3967	9	ACQ	1
Q1209+154	12 12 32.0	15 7 26	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
1211+334INCA221-80	12 14 3.8	33 9 38	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
B21211+33	12 14 4.1	33 9 46	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
B21211+33	12 14 4.1	33 9 46	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
PG1211+143	12 14 17.7	14 3 12	FOS/RD	ACCUM	4.3	PRISM	3500	1	50	1026	0		1
PG1211+143	12 14 17.7	14 3 12	FOS/BL	ACCUM	1.0	G130H	1300	1	4000	1026	0		1
PG1211+143	12 14 17.7	14 3 12	FOS/BL	ACCUM	4.3	G130H	1300	1	50	1026	0		1
PG1211+143	12 14 17.7	14 3 12	FOS/RD	ACCUM	4.3	G190H	1900	1	50	1026	0		1
PG1211+143	12 14 17.7	14 3 12	FOS/RD	ACCUM	4.3	G270H	2700	1	50	1026	0		1
PG1211+143	12 14 17.7	14 3 12	FOS/BL	ACQ/BINA	4.3	MIRROR		1	5	1026	0	ACQ	1
PG1211+143	12 14 17.7	14 3 12	FOS/RD	ACCUM	1.0	G190H	1900	1	1340	1026	0		1
PG1211+143	12 14 17.7	14 3 12	FOS/RD	ACCUM	1.0	G270H	2700	1	350	1026	0		1
PG1211+143	12 14 17.7	14 3 12	FOS/RD	ACQ/BINA	4.3	MIRROR		1	2	1026	0	ACQ	1
POINT1211+334INCA221 -80	12 14 53.9	33 3 1	S/C	POINTING	V1			1	1	4154	3	CON	1
INCA221-80	12 14 58.9	33 15 22	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
ON+325BKG	12 17 52.3	30 7 16*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
ON+325	12 17 52.3	30 7 1	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
NGC4258-OFFSET-STARS -FIELD	12 18 53.7	47 18 14*	WFC	IMAGE	ALL	F606W		1	30	1038	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC4258	12 18 57.6	47 18 14	PC	IMAGE	ALL	F664N		2	900	1038	0		1
NGC4258	12 18 57.6	47 18 14	PC	IMAGE	ALL	F502N		1	1800	1038	0		1
NGC4258	12 18 57.6	47 18 14	PC	IMAGE	ALL	F547M		1	360	1038	0		1
NGC4258	12 18 58.1	47 18 16	FOC/96	IMAGE	512X512	F342W		1	300	3264	3		1
PG1216+069	12 19 20.3	6 38 40	WFC	IMAGE	WFALL	F725LP		1	10	3287	3		1
PG1216+069	12 19 20.3	6 38 40	WFC	IMAGE	WFALL	F725LP		1	510	3287	3		1
PG1216+069	12 19 20.3	6 38 40	WFC	IMAGE	WFALL	F725LP		1	212	3287	3		1
PG1216+069	12 19 20.9	6 38 39	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	3	4112	2	ACQ	1
PG1216+069	12 19 20.9	6 38 39	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	4000	4112	2		1
PG1216+069	12 19 20.9	6 38 39	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1400	4112	2		1
PG1216+069	12 19 20.9	6 38 39	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	4112	2	ACQ	1
3C270	12 19 23.2	5 49 29	FOS/RD	ACCUM	1.0	PRISM	5400	1	500	3272	9	CON	1
3C270	12 19 23.2	5 49 29	FOC/96	IMAGE	512X512	F370LP	4040	1	300	1033	0		1
3C270	12 19 23.2	5 49 29	FOC/96	IMAGE	512X512	F220W F231M	2260	1	900	1033	0		1
3C270-OFFSET	12 19 23.2	5 49 29*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3272	9	ACQ CON	1
3C270	12 19 23.2	5 49 30	FOC/96	IMAGE	512X512	F220W		1	900	3344	3		1
3C270	12 19 23.2	5 49 30	FOC/96	IMAGE	512X512	F430W		1	900	3344	3		1
3C270	12 19 23.2	5 49 30	FOC/96	IMAGE	512X512	F372M		1	1800	3344	3		1
3C270	12 19 23.2	5 49 30	FOC/96	IMAGE	512X512	F501N		1	1800	3344	3		1
3C270-FIELD	12 19 24.2	5 49 54	WFC	IMAGE	ALL	F439W	4353	1	15	3272	9	ACQ CON	1
NGC4274-NUC	12 19 50.6	29 36 52	PC	IMAGE	PC6	F555W		1	500	4169	3		2
NGC4274-NUC	12 19 50.6	29 36 52	PC	IMAGE	PCALL	F785LP		1	11	4167	4	CON	1
NGC4274-NUC	12 19 50.6	29 36 52	PC	IMAGE	PCALL	F785LP		1	110	4167	4	CON	1
NGC4274-NUC	12 19 50.6	29 36 52	PC	IMAGE	PCALL	F555W		1	15	4167	4	CON	1
NGC4274-NUC	12 19 50.6	29 36 52	PC	IMAGE	PCALL	F555W		1	153	4167	4	CON	1
PSF-NGC4278	12 19 58.2	30 29 11	PC	IMAGE	P6	F555W		1	0	3229	1		1
PSF-NGC4278	12 19 58.2	30 29 11	PC	IMAGE	P6	F664N		1	1	3229	1		1
NGC4278-NUC	12 20 6.9	29 16 51	PC	IMAGE	P6	F555W		1	100	3229	1		1
NGC4278-NUC	12 20 6.9	29 16 51	PC	IMAGE	P6	F555W		2	500	3229	1		1
NGC4278-NUC	12 20 6.9	29 16 51	PC	IMAGE	P6	F664N		1	120	3229	1		1
NGC4278-NUC	12 20 6.9	29 16 51	PC	IMAGE	P6	F664N		1	1200	3229	1		1
NGC4278	12 20 6.9	29 16 50	FOC/96	IMAGE	512X512	F275W		1	2280	4071	2		1
NGC4278	12 20 6.9	29 16 50	FOC/96	IMAGE	512X512	F372M		1	2280	4071	2		1
NGC4278	12 20 6.9	29 16 50	FOC/96	IMAGE	512X512	F501N		1	2280	4071	2		1
NGC4278	12 20 6.9	29 16 50	FOC/96	IMAGE	512X512	F550M		1	2280	4071	2		1
NGC4283-NUC	12 20 20.7	29 18 36	PC	IMAGE	PCALL	F555W		1	14	4167	3		1
NGC4283-NUC	12 20 20.7	29 18 36	PC	IMAGE	PCALL	F555W		1	140	4167	3		1
NGC4283-NUC	12 20 20.7	29 18 36	PC	IMAGE	PCALL	F785LP		1	10	4167	3		1
NGC4283-NUC	12 20 20.7	29 18 36	PC	IMAGE	PCALL	F785LP		1	100	4167	3		1
1219+285INCA221-82	12 21 31.6	28 13 58	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
ON+231BKG	12 21 31.7	28 14 10*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
ON+231	12 21 31.7	28 13 58	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
MKN205BKG	12 21 41.5	75 18 47*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
MKN205	12 21 44.1	75 18 36	HSP/UV2	IMAGE	10.0	F140LP		1	841	1099	2	ACQ CON	1
MKN205	12 21 44.1	75 18 36	HSP/UV2	SINGLE	10.0	F140LP		1	16200	1099	2	CON	1
MARK205	12 21 44.1	75 18 38	FOS/RD	ACQ/BINA	4.3	MIRROR		1	4	1022	0	ACQ	1
MARK205	12 21 44.1	75 18 38	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	4	1022	0	ACQ	1
MARK205	12 21 44.1	75 18 38	FOS/RD	RAPID	0.25X2.0	G190H	1945	1	1800	1022	0		1
MARK205	12 21 44.1	75 18 38	FOS/RD	RAPID	0.25X2.0	G190H	1945	1	2200	1022	0		1
MARK205	12 21 44.1	75 18 38	FOS/RD	RAPID	0.25X2.0	G270H	2762	1	1600	1022	0		1
MKN205	12 21 44.1	75 18 37	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
INCA221-82	12 21 52.2	28 8 59	FGS	POS	3	PUPIL		1	51	4154	3	CON	2

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Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
POINT1219+285INCA221 -82	12 22 19.8	28 18 58	S/C	POINTING	V1			1	1	4154	3	CON	1
NGC4314	12 22 32.0	29 53 46	PC	IMAGE	ALL	F555W	5416	1	400	3293	9		1
NGC4314	12 22 32.0	29 53 46	WFC	IMAGE	ALL	F336W	3360	2	2800	3293	9		1
NGC4314	12 22 32.0	29 53 46	PC	IMAGE	ALL	F664N	6637	1	1200	3293	9		1
NGC4314	12 22 32.0	29 53 46	PC	IMAGE	ALL	F785LP	8922	1	400	3293	9		1
NGC4314	12 22 32.0	29 53 46	PC	IMAGE	ALL	F785LP	8922	2	200	1012	0		1
NGC4314	12 22 32.0	29 53 46	WFC	IMAGE	ALL	F439W	4352	2	1000	3293	9		1
NGC4314	12 22 32.0	29 53 46	WFC	IMAGE	ALL	F555W	5416	2	600	3293	9		1
NGC4314	12 22 32.0	29 53 46	WFC	IMAGE	ALL	F785LP	8922	2	600	3293	9		1
NGC4321-135N-84E	12 23 1.0	15 51 38*	WFC	IMAGE	WFALL	F336W		1	700	1119	4	CON	1
NGC4321-135N-84E	12 23 1.0	15 51 38*	WFC	IMAGE	WFALL	F555W		1	700	1119	4	CON	12
NGC4321-135N-84E	12 23 1.0	15 51 38*	WFC	IMAGE	WFALL	F785LP		1	700	1119	4	CON	6
NGC4321-DW5	12 23 21.3	15 52 5	FOC/48	IMAGE	512X512	F175W		1	4500	4070	2		1
3C272.1-FIELD	12 25 1.3	12 53 13	WFC	IMAGE	ALL	F439W	4353	1	15	3272	9	ACQ CON	1
NGC4374	12 25 3.6	12 53 13	FOC/96	IMAGE	512X512	F342W		1	600	4205	3		1
NGC4374	12 25 3.6	12 53 13	FOC/96	IMAGE	512X512	F502M		1	300	4205	3		1
NGC4374	12 25 3.6	12 53 13	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC4374	12 25 3.6	12 53 13	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
3C272.1	12 25 3.8	12 53 13	FOS/RD	ACCUM	1.0	PRISM	5400	1	500	3272	9	CON	1
3C272.1	12 25 3.8	12 53 13	FOC/96	IMAGE	512X512	F370LP	4040	1	300	1033	0		1
3C272.1	12 25 3.8	12 53 13	FOC/96	IMAGE	512X512	F220W F231M	2260	1	900	1033	0		1
3C272.1-OFFSET	12 25 3.8	12 53 13*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3272	9	ACQ CON	1
1222+228	12 25 27.4	22 35 14	FOC/96	IMAGE	512X512	F430W F4ND		1	600	1236	0	SEL	1
1222+228	12 25 27.4	22 35 14	FOC/96	IMAGE	512X512	F430W F4ND		1	600	3177	1	CON SEL	1
NGC4406	12 26 11.7	12 56 45	FOC/96	IMAGE	512X512	F342W		1	1200	1057	0		1
NGC4406	12 26 11.7	12 56 45	FOC/96	IMAGE	512X512	F1ND F502M		1	600	1057	0		1
NGC4406	12 26 11.7	12 56 45	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	7200	4205	9	CON	1
NGC4406	12 26 11.7	12 56 45	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
IZW36	12 26 16.0	48 29 38	FOC/96	IMAGE	512X512	F342W		2	500	1246	1		1
IZW36	12 26 16.0	48 29 38	FOC/96	IMAGE	512X512	F430W		2	1000	1246	1		1
IZW36	12 26 16.0	48 29 38	FOC/96	IMAGE	512X512	F175W		2	1600	1246	1		1
IZW36	12 26 16.0	48 29 38	FOC/96	IMAGE	512X512	F480LP		1	2500	1246	1		1
STAR4-OFFSET	12 28 10.3	44 6 21	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3296	2	ACQ	1
NGC4449-SNR	12 28 10.9	44 6 48	WFC	IMAGE	ALL	F517N		1	1000	1048	0	UNP	1
NGC4449-SNR	12 28 10.9	44 6 48	WFC	IMAGE	ALL	F502N		1	1600	1048	0	UNP	1
NGC4449-SNRP1	12 28 10.9	44 6 48*	FOS/BL	ACCUM	1.0	G130H		1	5000	3296	2		1
NGC4449-SNRP1	12 28 10.9	44 6 48*	FOS/BL	ACCUM	1.0	G190H		1	2500	3296	2		1
NGC4449-SNRP1	12 28 10.9	44 6 48*	FOS/RD	ACCUM	1.0	G270H		1	1250	3296	2		1
NGC4449-SNRP1	12 28 10.9	44 6 48*	FOS/RD	ACCUM	1.0	G400H		1	1250	3296	2		1
NGC4449-SNRP1	12 28 10.9	44 6 48*	FOS/RD	ACCUM	1.0	G570H		1	1250	3296	2		1
NGC4449-SNRP1	12 28 10.9	44 6 48*	FOS/BL	ACQ/PEAK	1.0	G570H	5000	1	1	3296	2	ACQ	1
NGC4449-SNRP1	12 28 10.9	44 6 48*	FOS/RD	ACQ/PEAK	1.0	G570H	5000	1	1	3296	2	ACQ	1
PSF-NGC4486	12 28 16.8	12 20 41	PC	IMAGE	P6	F336W		1	20	1105	0		1
PSF-NGC4486	12 28 16.8	12 20 41	PC	IMAGE	P6	F675W		1	0	1105	0		1
PSF-NGC4486	12 28 16.8	12 20 41	PC	IMAGE	P6	F555W		1	0	1105	0		1
PSF-NGC4486	12 28 16.8	12 20 41	PC	IMAGE	P6	F785LP		2	0	3242	0		1
PSF-NGC4486	12 28 16.8	12 20 41	PC	IMAGE	P6	F785LP		1	0	1105	0		1
PSF-NGC4486	12 28 16.8	12 20 41	PC	IMAGE	P6	F785LP		1	1	3242	0		1
1225+317	12 28 24.9	31 28 37	FOC/96	IMAGE	512X512	F1ND F2ND F430W		1	600	3177	1	CON SEL	1
B21225+317	12 28 24.9	31 28 37	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	1028	3	ACQ	1
B21225+317	12 28 24.9	31 28 37	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	11	1028	3	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
B21225+317	12 28 24.9	31 28 37	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	3000	1028	3		1
1226+105	12 28 36.9	10 18 43	FOC/96	IMAGE	512X512	F1ND F430W		1	600	3177	1	CON SEL	1
3C273-OFFSET	12 29 6.4	2 3 4	PC	IMAGE	P6	F555W		1	40	1116	0		1
3C273-OFFSET	12 29 6.4	2 3 4	PC	IMAGE	P6	F785LP		1	5	1116	0		1
3C273-OFFSET	12 29 6.4	2 3 4	PC	IMAGE	P6	F785LP		1	70	1116	0		1
3C273-OFFSET	12 29 6.4	2 3 4	PC	IMAGE	P6	F785LP		2	300	1116	0		1
3C273-OFFSET	12 29 6.4	2 3 4	PC	IMAGE	P6	F555W		1	2	1116	0		1
3C273	12 29 6.7	2 3 8	WFC	IMAGE	WFALL	F675W		2	300	3287	3		1
1226+023	12 29 6.7	2 3 9	PC	IMAGE	P8	F606W		1	0	1139	9		1
1226+023	12 29 6.7	2 3 9	PC	IMAGE	P8	F658N		1	40	1139	9		1
1226+023	12 29 6.7	2 3 9	PC	IMAGE	P8	F725LP		1	1	1139	9	ACQ	1
1226+023	12 29 6.7	2 3 9	PC	IMAGE	ALL-ND	F606W		1	400	1139	9		1
1226+023	12 29 6.7	2 3 9	PC	IMAGE	ALL-ND	F725LP		1	100	1139	9		1
PG1226+023	12 29 6.7	2 3 8	FOS/BL	ACQ/PEAK	4.3	MIRROR		1	0	3088	0	ACQ	1
PG1226+023	12 29 6.7	2 3 8	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	0	3088	0	ACQ	1
PG1226+023	12 29 6.7	2 3 8	FOS/RD	ACQ/PEAK	4.3	MIRROR		1	0	3088	0	ACQ	1
PG1226+023	12 29 6.7	2 3 8	FOS/BL	ACQ/PEAK	0.3	MIRROR		1	1	3088	0	ACQ	1
PG1226+023	12 29 6.7	2 3 8	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3088	0	ACQ	1
PG1226+023	12 29 6.7	2 3 8	FOS/RD	ACQ/BINA	4.3	MIRROR		1	0	3088	0	ACQ	1
PG1226+023	12 29 6.7	2 3 8	FOS/BL	ACCUM	1.0	G130H	1379	1	1000	3088	0		1
PG1226+023	12 29 6.7	2 3 8	FOS/BL	ACCUM	4.3	G130H	1379	1	500	3088	0		1
PG1226+023	12 29 6.7	2 3 8	FOS/RD	RAPID	1.0	G190H	1980	1	1000	3088	0		1
PG1226+023	12 29 6.7	2 3 8	FOS/RD	RAPID	1.0	G270H	2753	1	1000	3088	0		1
PG1226+023	12 29 6.7	2 3 8	FOS/BL	ACQ/PEAK	0.25X2.0	G130H		1	10	3088	0	ACQ	1
PG1226+023	12 29 6.7	2 3 8	FOS/RD	ACQ/PEAK	0.25X2.0	G270H		1	1	3088	0	ACQ	1
PG1226+023	12 29 6.7	2 3 8	FOS/BL	ACCUM	0.3	G130H	1379	1	1300	3088	0		2
PG1226+023	12 29 6.7	2 3 8	FOS/BL	ACCUM	0.5	G130H	1379	1	1500	3088	0		1
PG1226+023	12 29 6.7	2 3 8	FOS/RD	RAPID	0.3	G190H	1980	1	1300	3088	0		2
PG1226+023	12 29 6.7	2 3 8	FOS/RD	RAPID	0.3	G270H	2753	1	1300	3088	0		2
PG1226+023	12 29 6.7	2 3 8	FOS/RD	RAPID	4.3	G190H	1980	1	520	3088	0		1
PG1226+023	12 29 6.7	2 3 8	FOS/RD	RAPID	4.3	G270H	2753	1	520	3088	0		1
PG1226+023	12 29 6.7	2 3 8	FOS/BL	ACCUM	0.25X2.0	G130H	1379	1	2000	3088	0		1
PG1226+023	12 29 6.7	2 3 8	FOS/RD	RAPID	0.25X2.0	G190H	1980	1	2000	3088	0		1
PG1226+023	12 29 6.7	2 3 8	FOS/RD	RAPID	0.25X2.0	G270H	2753	1	2000	3088	0		1
PG1226+023	12 29 6.7	2 3 8	FOS/RD	RAPID	0.5	G190H	1980	1	1519	3088	0		1
PG1226+023	12 29 6.7	2 3 8	FOS/RD	RAPID	0.5	G270H	2753	1	1519	3088	0		1
3C273	12 29 6.7	2 3 8	FOS/BL	ACCUM	4.3	G190H	1950	1	1440	1029	0		2
3C273	12 29 6.7	2 3 8	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	1029	0	ACQ	1
3C273	12 29 6.7	2 3 8	FOS/BL	ACCUM	4.3	G130H	1444	1	1440	1029	0		2
3C273	12 29 6.7	2 3 8	FOS/BL	ACCUM	4.3	G270H	2766	1	1440	1029	0		1
3C273	12 29 6.7	2 3 8	FOC/96	IMAGE	512X512	F140M	1390	1	2000	1227	0		1
3C273	12 29 6.7	2 3 8	FOC/96	IMAGE	512X512	F170M	1760	1	2400	1227	0		1
3C273	12 29 6.7	2 3 8	FOC/96	IMAGE	512X512	F210M	2140	1	1500	1227	0		1
3C273	12 29 6.7	2 3 8	FOC/288	IMAGE	512X512	F210M	2140	1	1000	1227	0		1
3C273	12 29 6.7	2 3 8	FOC/96	IMAGE	512X512	F210M F4ND	2140	1	500	1227	0		1
3C273	12 29 6.7	2 3 8	FOC/288	IMAGE	512X512	F210M F2ND	2140	1	1000	1227	0		1
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G160M	1540	1	1500	1140	0		1
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G270M	2700	1	1080	1140	1		1
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G160M	1315	1	1980	1140	0		1
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G160M	1375	1	1080	1140	1		4
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G160M	1253	1	3000	1140	0		1
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G160M	1408	1	1980	1140	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G160M	1284	1	1980	1140	0		1
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G160M	1346	1	1980	1140	0		1
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G160M	1377	1	1980	1140	0		1
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G160M	1233	1	1196	3951	2		3
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G160M	1183	1	1196	4199	3		3
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G270M	2800	1	1019	1140	0		1
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G270M	2595	1	1019	1140	0		1
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G140L	1322	1	1019	1140	0		1
3C273.0	12 29 6.8	2 3 8	HRS	ACCUM	2.0	G200M	1794	1	1019	1140	0		1
3C273.0	12 29 6.8	2 3 8	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	1140	0	ACQ	1
NGC4472	12 29 46.5	7 59 58	FOC/96	IMAGE	512X512	F502M		1	600	4138	2		1
NGC4472	12 29 46.5	7 59 58	FOC/96	IMAGE	512X512	F342W		1	1200	4138	2		1
NGC4472-NUC	12 29 46.7	8 0 2	PC	IMAGE	P6	F555W		2	800	3229	1		1
NGC4472-NUC	12 29 46.7	8 0 2	PC	IMAGE	P6	F555W		1	160	3229	1		1
NGC4472-SW2	12 29 46.8	8 0 2*	FOS/RD	ACCUM	0.5	G570H		1	759	4130	3		1
NGC4472-SW1	12 29 46.8	8 0 2*	FOS/RD	ACCUM	0.3	G570H		1	2330	4130	3		1
NGC4472-NW2	12 29 46.8	8 0 2*	FOS/RD	ACCUM	0.5	G570H		1	759	4130	3		1
NGC4472-NW1	12 29 46.8	8 0 2*	FOS/RD	ACCUM	0.3	G570H		1	2330	4130	3		1
NGC4472	12 29 46.8	8 0 2	FOS/RD	ACCUM	0.3	G570H		1	6000	4130	3		1
NGC4472	12 29 46.8	8 0 2	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	5	4130	3	ACQ	1
NGC4472	12 29 46.8	8 0 2	FOS/RD	ACQ/PEAK	0.5	MIRROR		1	2	4130	3	ACQ	1
NGC4472-OFFSET	12 29 46.8	8 0 2*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	15	4130	3	ACQ	1
NGC4472-SE1	12 29 46.8	8 0 2*	FOS/RD	ACCUM	0.3	G570H		1	2330	4130	3		1
NGC4472-SE2	12 29 46.8	8 0 2*	FOS/RD	ACCUM	0.5	G570H		1	759	4130	3		1
NGC4472-NE1	12 29 46.8	8 0 2*	FOS/RD	ACCUM	0.3	G570H		1	2330	4130	3		1
NGC4472-NE2	12 29 46.8	8 0 2*	FOS/RD	ACCUM	0.5	G570H		1	759	4130	3		1
NGC4476	12 29 59.0	12 20 56	WFC	IMAGE	WF1	F555W		1	30	3292	4	CON	1
NGC4476	12 29 59.0	12 20 56	WFC	IMAGE	WF1	F555W		1	400	3292	4	CON	1
NGC4476	12 29 59.0	12 20 56	WFC	IMAGE	WF1	F702W		1	30	3292	4	CON	1
NGC4476	12 29 59.0	12 20 56	WFC	IMAGE	WF1	F702W		1	400	3292	4	CON	1
NGC4476	12 29 59.0	12 20 56	WFC	IMAGE	WF1	F555W		1	230	3292	4	CON	1
NGC4476	12 29 59.0	12 20 56	WFC	IMAGE	WF1	F702W		1	230	3292	4	CON	1
NGC4476	12 29 59.0	12 20 56	WFC	IMAGE	WF1	F785LP		1	30	3292	4	CON	1
NGC4476	12 29 59.0	12 20 56	WFC	IMAGE	WF1	F785LP		1	400	3292	4	CON	1
NGC4476	12 29 59.0	12 20 56	WFC	IMAGE	WF1	F785LP		1	230	3292	4	CON	1
PSF-NGC4472	12 30 39.3	7 7 17	PC	IMAGE	P6	F555W		1	0	3229	1		1
M87-OFFSET-STARS-FIELD	12 30 48.4	12 22 38*	WFC	IMAGE	ALL	F606W		1	30	1034	0		1
M87A	12 30 48.6	12 23 33	FOC/96	IMAGE	512X512	F140W		1	2400	1228	0		1
M87A	12 30 48.6	12 23 33	FOC/96	IMAGE	512X512	F220W		1	2400	1228	0		1
NGC4486	12 30 48.6	12 23 34	PC	IMAGE	P6	F336W		1	2200	1105	0		1
NGC4486	12 30 48.6	12 23 34	PC	IMAGE	P6	F675W		2	230	1105	0		1
NGC4486	12 30 48.6	12 23 34	PC	IMAGE	P6	F555W		4	140	1105	0		1
NGC4486	12 30 48.6	12 23 34	PC	IMAGE	P6	F785LP		2	350	1105	0		1
M87-JET-KNOT-A	12 30 48.6	12 23 32*	FOS/BL	ACCUM	1.0	G130H		1	4800	3273	2		1
M87-JET-KNOT-A	12 30 48.6	12 23 32*	FOS/BL	ACCUM	1.0	G190H		1	4800	3273	2		1
M87-JET-KNOT-A	12 30 48.6	12 23 32*	FOS/RD	ACCUM	1.0	G270H		1	2400	3273	2		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F194W		1	600	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F230W		1	100	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F230W		1	600	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F284W		1	600	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F336W		1	100	3292	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F336W		1	600	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F439W		1	30	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F439W		1	400	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F555W		1	300	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F555W		1	15	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F785LP		1	30	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F785LP		1	800	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PCALL	F675W		1	20	3292	4	CON	1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PCALL	F675W		1	200	3292	4	CON	1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PCALL	F850LP		1	300	3292	4	CON	1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F606W POL0		1	60	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F606W POL0		1	600	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PCALL	F850LP		1	120	3292	4	CON	1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F606W POL60		1	60	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F606W POL60		1	600	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F606W POL120		1	60	3292	3		1
NGC4486	12 30 49.0	12 23 30	PC	IMAGE	PC7	F606W POL120		1	600	3292	3		1
NGC4486-POS6	12 30 49.4	12 23 28*	FOS/RD	ACCUM	0.3	G570H		1	4360	1040	9		1
NGC4486-POS2	12 30 49.4	12 23 28*	FOS/RD	ACCUM	0.3	G570H		1	3375	1040	9		1
NGC4486-POS5	12 30 49.4	12 23 28*	FOS/RD	ACCUM	0.3	G570H		1	4360	1040	9		1
M87-CLOUD-A	12 30 49.4	12 23 28*	FOS/BL	ACCUM	0.3	G130H		1	3100	3273	2		1
M87-CLOUD-A	12 30 49.4	12 23 28*	FOS/BL	ACCUM	0.3	G190H		1	1800	3273	2		1
M87-CLOUD-A	12 30 49.4	12 23 28*	FOS/RD	ACCUM	0.3	G270H		1	1400	3273	2		1
M87-CLOUD-A	12 30 49.4	12 23 28*	FOS/RD	ACCUM	0.3	G400H		1	1400	3273	2		1
M87-CLOUD-A	12 30 49.4	12 23 28*	FOS/RD	ACCUM	0.3	G570H		1	1400	3273	2		1
NGC4486-POS1	12 30 49.4	12 23 28*	FOS/RD	ACCUM	0.3	G570H		1	3375	1040	9		1
M87	12 30 49.4	12 23 28	PC	IMAGE	ALL	F336W		1	300	1034	0		1
M87	12 30 49.4	12 23 28	PC	IMAGE	ALL	F547M		1	600	1034	0		1
M87	12 30 49.4	12 23 28	PC	IMAGE	ALL	F675W		1	400	1034	0		1
M87	12 30 49.4	12 23 28	PC	IMAGE	ALL	F664N		2	1000	1034	0		1
M87	12 30 49.4	12 23 28	PC	IMAGE	ALL	F375N		1	1500	1034	0		1
M87	12 30 49.4	12 23 28	PC	IMAGE	PCALL	F547M		1	600	4131	9		1
M87	12 30 49.4	12 23 28	PC	IMAGE	PCALL	F664N		1	2000	4131	9		1
M87	12 30 49.4	12 23 28	FOS/BL	ACCUM	0.3	G130H		1	3100	3273	2		1
M87	12 30 49.4	12 23 28	FOS/BL	ACCUM	0.3	G190H		1	1200	3273	2		1
M87	12 30 49.4	12 23 28	FOS/RD	ACCUM	0.3	G270H		1	1200	3273	2		1
M87	12 30 49.4	12 23 28	FOS/RD	ACCUM	0.3	G400H		1	1200	3273	2		1
M87	12 30 49.4	12 23 28	FOS/RD	ACCUM	0.3	G570H		1	1200	3273	2		1
M87	12 30 49.4	12 23 28	FOS/BL	ACQ/PEAK	0.3	MIRROR		1	7	3273	2	ACQ	1
M87	12 30 49.4	12 23 28	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	2	3273	2	ACQ	1
M87	12 30 49.4	12 23 28	FOS/BL	ACQ/BINA	4.3	MIRROR		1	42	3273	2	ACQ	1
M87	12 30 49.4	12 23 28	FOS/RD	ACQ/BINA	4.3	MIRROR		1	18	3273	2	ACQ	1
NGC4486	12 30 49.4	12 23 28	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	2	1040	9	ACQ	1
NGC4486	12 30 49.4	12 23 28	FOS/RD	ACQ/BINA	4.3	MIRROR		1	18	1040	9	ACQ	1
M87N	12 30 49.4	12 23 28	FOC/96	IMAGE	512X512	F220W		1	2400	1228	0		1
M87N	12 30 49.4	12 23 28	FOC/96	IMAGE	512X512	F140W		2	2400	1228	0		1
M87N	12 30 49.4	12 23 28	FOC/96	IMAGE	512X512	F501N		2	2400	1228	0		1
M87N	12 30 49.4	12 23 28	FOC/96	IMAGE	512X512	F120M	2720	1	2400	1228	0		1
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL0	F216M		1	180	3248	2		1
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL0	F237M		1	180	3248	2		1
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL0	F277M		1	180	3248	2		10
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL0	F327M		1	180	3248	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL45	F216M		1	180	3248	2		1
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL45	F237M		1	180	3248	2		1
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL45	F277M		1	180	3248	2		10
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL45	F327M		1	180	3248	2		1
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL90	F216M		1	180	3248	2		1
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL90	F237M		1	180	3248	2		1
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL90	F277M		1	180	3248	2		10
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL90	F327M		1	180	3248	2		1
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL135	F216M		1	180	3248	2		1
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL135	F237M		1	180	3248	2		1
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL135	F277M		1	180	3248	2		10
M87-NUC	12 30 49.4	12 23 28	HSP/POL	SINGLE	POL135	F327M		1	180	3248	2		1
NGC4486	12 30 49.4	12 23 28	PC	IMAGE	P6	F785LP		1	700	3242	0		2
NGC4486-POS3	12 30 49.4	12 23 28*	FOS/RD	ACCUM	0.3	G570H		1	3375	1040	9		1
NGC4486-POS7	12 30 49.4	12 23 27*	FOS/RD	ACCUM	0.3	G570H		1	4360	1040	9		1
NGC4486-POS4	12 30 49.4	12 23 28*	FOS/RD	ACCUM	0.3	G570H		1	3375	1040	9		1
NGC4486-POS8	12 30 49.4	12 23 28*	FOS/RD	ACCUM	0.3	G570H		1	4360	1040	9		1
NGC4486	12 30 49.4	12 23 28	FOC/48	SPEC	256X1024-SLIT	G450M		1	9000	3504	2		1
NGC4486	12 30 49.4	12 23 28	FOC/48	SPEC	256X1024-SLIT	G450M		1	120	3504	2	ACQ	1
HD108903	12 31 9.9	-57 6 48	HRS	ACCUM	2.0	G160M	1655	4	354	3212	1		1
HD108903	12 31 9.9	-57 6 48	HRS	ACCUM	2.0	G270M	2003	2	300	3212	1		1
HD108903	12 31 9.9	-57 6 48	HRS	ACCUM	0.25	G270M	2345	3	300	3212	1		1
HD108903	12 31 9.9	-57 6 48	HRS	ACCUM	2.0	G200M	1994	1	276	3212	1		1
HD108903	12 31 9.9	-57 6 48	HRS	WSCAN	2.0	G270M	2121	2	1200	3212	1		1
HD108903	12 31 9.9	-57 6 48	HRS	ACCUM	0.25	G270M	2499	2	300	3212	1		1
HD108903	12 31 9.9	-57 6 48	HRS	ACCUM	0.25	G270M	2609	2	246	3212	1		1
HD108903	12 31 9.9	-57 6 48	HRS	ACCUM	0.25	G270M	2753	2	138	3212	1		1
HD108903	12 31 9.9	-57 6 48	HRS	ACCUM	0.25	G270M	2803	2	138	3212	1		1
HD108903	12 31 9.9	-57 6 48	HRS	IMAGE	2.0	MIRROR-A2		1	193	3212	1		1
HD108903	12 31 9.9	-57 6 48	HRS	ACCUM	0.25	ECH-B22	2596	6	300	3212	1		1
HD108903	12 31 9.9	-57 6 48	HRS	ACCUM	0.25	ECH-B20	2799	2	192	3212	1		1
HD108903	12 31 9.9	-57 6 48	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	3212	1	ACQ	2
HD109011	12 31 18.9	55 7 8	HRS	ACCUM	2.0	G140L	1430	2	225	1210	0		1
1228.7+07.7	12 31 20.6	7 25 53	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
1228.7+07.7	12 31 20.6	7 25 53	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
PKS1229-021	12 32 0.0	-2 24 5	WFC	IMAGE	ANY	F725LP		1	1200	4176	9		1
PKS1229-021	12 32 0.0	-2 24 5	FOS/BL	RAPID	1.0	G160L	1600	1	4320	3939	2		1
PKS1229-021	12 32 0.0	-2 24 5	FOS/RD	ACQ/BINA	4.3	MIRROR		1	22	1193	1	ACQ	1
PKS1229-021	12 32 0.0	-2 24 5	FOS/BL	ACQ/BINA	4.3	MIRROR		1	37	3939	2	ACQ	1
PKS1229-021	12 32 0.0	-2 24 5	FOS/RD	ACCUM	4.3	G160L	2036	1	1000	1193	1		1
1229-012	12 32 0.0	-2 24 6	FOC/96	IMAGE	512X512	F2ND F430W		1	600	3177	1	CON SEL	1
1229+204	12 32 3.6	20 9 30	WFC	IMAGE	ALL	F555W		1	600	4186	4		1
1229+204	12 32 3.6	20 9 30	WFC	IMAGE	ALL	F702W		1	600	4186	4		1
SAO138840	12 33 2.9	-2 17 26	FOS/RD	RAPID	1.0	G650L		1	1800	1082	2		1
SAO138840	12 33 2.9	-2 17 26	FOS/RD	ACQ/BINA	4.3	MIRROR		1	300	1082	2	ACQ	1
NGC4535-180N	12 34 20.3	8 14 53*	WFC	IMAGE	WFALL	F336W		1	700	1119	3		1
NGC4535-180N	12 34 20.3	8 14 53*	WFC	IMAGE	WFALL	F555W		1	700	1119	3		12
NGC4535-180N	12 34 20.3	8 14 53*	WFC	IMAGE	WFALL	F785LP		1	700	1119	3		6
NGC4507	12 35 36.7	-39 54 34	FOC/96	IMAGE	512X512	F220W		1	1000	3344	3		1
NGC4507	12 35 36.7	-39 54 34	FOC/96	IMAGE	512X512	F502M		1	1000	3344	3		1
NGC4507	12 35 36.7	-39 54 34	FOC/96	IMAGE	512X512	F550M		1	1000	3344	3		1
NGC4552-NUC	12 35 39.8	12 33 23	PC	IMAGE	PC6	F555W		1	100	3286	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC4552-NUC	12 35 39.8	12 33 23	PC	IMAGE	PC6	F555W		2	500	3286	2		1
NGC4552-POS1	12 35 39.9	12 35 30*	WFC	IMAGE	WFALL	F555W		1	2200	1114	3		1
NGC4552-POS1	12 35 39.9	12 35 30*	WFC	IMAGE	WFALL	F785LP		1	2500	1114	3		1
NGC4552	12 35 39.9	12 33 25	FOC/96	IMAGE	512X512	F502M		1	900	3225	1		1
NGC4552	12 35 39.9	12 33 25	FOC/96	IMAGE	512X512	F342W		1	1200	3225	1		1
NGC4552	12 35 39.9	12 33 25	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC4552	12 35 39.9	12 33 25	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
NGC4559-215N-171W	12 35 44.4	28 1 27*	WFC	IMAGE	WFALL	F336W		1	700	1119	4	CON	1
NGC4559-215N-171W	12 35 44.4	28 1 27*	WFC	IMAGE	WFALL	F555W		1	700	1119	4	CON	12
NGC4559-215N-171W	12 35 44.4	28 1 27*	WFC	IMAGE	WFALL	F785LP		1	700	1119	4	CON	4
NGC4565-BULGE	12 36 20.6	25 59 12	WFC	IMAGE	WFALL	F555W		1	180	4167	3		1
NGC4565-BULGE	12 36 20.6	25 59 12	WFC	IMAGE	WFALL	F555W		1	1800	4167	3		1
NGC4565-BULGE	12 36 20.6	25 59 12	WFC	IMAGE	WFALL	F785LP		1	120	4167	3		1
NGC4565-BULGE	12 36 20.6	25 59 12	WFC	IMAGE	WFALL	F785LP		1	1200	4167	3		1
NGC4590	12 39 28.0	-26 44 35	PC	IMAGE	P6	F555W		1	100	3227	1		1
NGC4590	12 39 28.0	-26 44 35	PC	IMAGE	P6	F785LP		1	100	3227	1		1
NGC4594	12 39 59.0	-11 37 28	FOC/96	IMAGE	512X512	F342W		1	1800	1056	0		1
NGC4594-NUC	12 39 59.4	-11 37 23	PC	IMAGE	P6	F555W		1	500	1118	0		2
PSF-NGC4621	12 40 39.2	10 55 52	PC	IMAGE	P6	F555W		1	0	3229	1		1
NGC4621-NUC	12 42 2.4	11 38 48	PC	IMAGE	P6	F555W		1	60	3229	1		1
NGC4621-NUC	12 42 2.4	11 38 48	PC	IMAGE	P6	F555W		2	300	3229	1		1
NGC4621	12 42 2.5	11 38 49	FOC/96	IMAGE	512X512	F502M		1	900	3225	1		1
NGC4621	12 42 2.5	11 38 49	FOC/96	IMAGE	512X512	F342W		1	1200	3225	1		1
NGC4621	12 42 2.5	11 38 49	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC4621	12 42 2.5	11 38 49	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
PSF-NGC4594	12 42 11.4	-11 11 3	PC	IMAGE	P6	F555W		1	0	1118	0		1
PSF-NGC4649	12 43 8.0	12 44 35	PC	IMAGE	P6	F555W		1	0	3229	1		1
NGC4649	12 43 39.6	11 33 10	FOC/96	IMAGE	512X512	F502M		1	900	3881	2		1
NGC4649	12 43 39.6	11 33 10	FOC/96	IMAGE	512X512	F342W		1	1200	3881	2		1
NGC4649-NUC	12 43 40.1	11 33 8	PC	IMAGE	P6	F555W		2	800	3229	1		1
NGC4649-NUC	12 43 40.1	11 33 8	PC	IMAGE	P6	F555W		1	160	3229	1		1
NGC4649	12 43 40.2	11 32 58	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC4649	12 43 40.2	11 32 58	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
NGC4649-POS1	12 43 54.9	11 33 3*	WFC	IMAGE	WFALL	F555W		1	2200	1114	3		1
NGC4649-POS1	12 43 54.9	11 33 3*	WFC	IMAGE	WFALL	F785LP		1	2500	1114	3		1
NGC4649-POS2	12 44 5.7	11 33 4*	WFC	IMAGE	WFALL	F555W		1	2200	1114	3		1
NGC4649-POS2	12 44 5.7	11 33 4*	WFC	IMAGE	WFALL	F785LP		1	2500	1114	3		1
PG1241+176	12 44 10.8	17 21 4	FOS/RD	ACQ/BINA	4.3	MIRROR		1	4	4112	2	ACQ	1
PG1241+176	12 44 10.8	17 21 4	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	4	4112	2	ACQ	1
PG1241+176	12 44 10.8	17 21 4	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2600	4112	2		1
NGC4697	12 48 35.6	-5 48 10	FOC/96	IMAGE	512X512	F502M		1	900	3225	1		1
NGC4697	12 48 35.6	-5 48 10	FOC/96	IMAGE	512X512	F342W		1	1200	3225	1		1
NGC4697	12 48 35.6	-5 48 10	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC4697	12 48 35.6	-5 48 10	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
1246-057	12 49 13.8	-5 59 19	FOS/BL	RAPID	4.3	PRISM	3500	1	500	4081	2		1
1246-057	12 49 13.8	-5 59 19	FOS/BL	RAPID	1.0	G160L	1600	1	2000	1028	3	CON	1
1246-057	12 49 13.8	-5 59 19	FOS/RD	RAPID	1.0	G190H	1900	1	4000	1028	3	CON	1
1246-057	12 49 13.8	-5 59 19	FOS/RD	RAPID	1.0	G270H	2700	1	3000	1028	3	CON	1
1246-057	12 49 13.8	-5 59 19	FOS/BL	RAPID	4.3	G160L	1650	1	950	4081	2		1
1246-057	12 49 13.8	-5 59 19	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	1028	3	ACQ CON	1
1246-057	12 49 13.8	-5 59 19	FOS/BL	ACQ/BINA	4.3	MIRROR		1	61	4081	2	ACQ	1
1246-057	12 49 14.0	-5 59 19	FOC/96	IMAGE	512X512	F1ND F430W		1	600	3177	1	CON SEL	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PG1247+267	12 50 5.7	26 31 8	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	1028	3	ACQ	1
PG1247+267	12 50 5.7	26 31 8	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	7	1028	3	ACQ	1
PG1247+267	12 50 5.7	26 31 8	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	4500	1028	3		1
NGC4736-NUC	12 50 53.2	41 7 13	PC	IMAGE	PC6	F555W		1	500	4169	3		2
NGC4736-NUC	12 50 53.2	41 7 13	PC	IMAGE	PCALL	F785LP		1	11	4167	3		1
NGC4736-NUC	12 50 53.2	41 7 13	PC	IMAGE	PCALL	F785LP		1	110	4167	3		1
NGC4736-NUC	12 50 53.2	41 7 13	PC	IMAGE	PCALL	F555W		1	15	4167	3		1
NGC4736-NUC	12 50 53.2	41 7 13	PC	IMAGE	PCALL	F555W		1	153	4167	3		1
NGC4736	12 50 53.4	41 7 10	FOC/96	IMAGE	512X512	F342W		1	300	3264	3		1
NGC4753	12 52 21.9	-1 11 59	WFC	IMAGE	WF1	F555W		1	30	3292	4	CON	1
NGC4753	12 52 21.9	-1 11 59	WFC	IMAGE	WF1	F555W		1	400	3292	4	CON	1
NGC4753	12 52 21.9	-1 11 59	WFC	IMAGE	WF1	F555W		1	230	3292	4	CON	1
3C277.3	12 54 12.1	27 37 31	FOC/96	IMAGE	512X512	F320W		2	900	3504	2		1
3C277.3	12 54 12.1	27 37 31	FOC/96	IMAGE	512X512	F410M		2	900	3504	2		1
3C277.3	12 54 12.1	27 37 31	FOC/96	IMAGE	512X512	F550M		2	900	3504	2		1
3C278	12 54 37.3	-12 33 22	FOC/96	IMAGE	512X512	F220W		1	900	3344	3		1
3C278	12 54 37.3	-12 33 22	FOC/96	IMAGE	512X512	F430W		1	900	3344	3		1
3C278	12 54 37.3	-12 33 22	FOC/96	IMAGE	512X512	F372M		1	1800	3344	3		1
3C278	12 54 37.3	-12 33 22	FOC/96	IMAGE	512X512	F501N		1	1800	3344	3		1
3C279BKG	12 56 11.1	-5 47 6*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
3C279	12 56 11.1	-5 47 21	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
3C279	12 56 11.1	-5 47 21	HSP/POL	STAR-SKY	POL0	F277M		1	990	3248	2		2
3C279	12 56 11.1	-5 47 21	HSP/POL	STAR-SKY	POL45	F277M		1	990	3248	2		2
3C279	12 56 11.1	-5 47 21	HSP/POL	STAR-SKY	POL90	F277M		1	990	3248	2		2
3C279	12 56 11.1	-5 47 21	HSP/POL	STAR-SKY	POL135	F277M		1	990	3248	2		2
MRK231	12 56 14.4	56 52 25	FOS/BL	ACCUM	4.3	G190H	1950	1	1440	3270	2		4
MRK231	12 56 14.4	56 52 25	FOS/BL	ACQ/BINA	4.3	MIRROR		1	11	3270	2	ACQ	1
MRK231	12 56 14.4	56 52 25	FOS/BL	ACCUM	4.3	G270H	2766	1	1440	3270	2		2
NGC4826	12 56 43.5	21 40 59	WFC	IMAGE	WF1	F555W		1	30	3292	4	CON	1
NGC4826	12 56 43.5	21 40 59	WFC	IMAGE	WF1	F555W		1	400	3292	4	CON	1
NGC4826	12 56 43.5	21 40 59	WFC	IMAGE	WF1	F702W		1	30	3292	4	CON	1
NGC4826	12 56 43.5	21 40 59	WFC	IMAGE	WF1	F702W		1	400	3292	4	CON	1
NGC4826	12 56 43.5	21 40 59	WFC	IMAGE	WF1	F555W		1	230	3292	4	CON	1
NGC4826	12 56 43.5	21 40 59	WFC	IMAGE	WF1	F702W		1	230	3292	4	CON	1
NGC4826	12 56 43.5	21 40 59	WFC	IMAGE	WF1	F785LP		1	30	3292	4	CON	1
NGC4826	12 56 43.5	21 40 59	WFC	IMAGE	WF1	F785LP		1	400	3292	4	CON	1
NGC4826	12 56 43.5	21 40 59	WFC	IMAGE	WF1	F785LP		1	230	3292	4	CON	1
1256+357	12 58 29.8	35 28 43	FOC/96	IMAGE	512X512	F1ND F430W		1	600	3177	1	CON SEL	1
NGC4874	12 59 35.6	27 57 38	PC	IMAGE	ALL	F702W		1	300	4186	4		1
NGC4881-POS1	12 59 57.6	28 15 37*	WFC	IMAGE	WFALL	F555W		1	2200	1114	3		1
NGC4881-POS1	12 59 57.6	28 15 37*	WFC	IMAGE	WFALL	F785LP		1	2500	1114	3		1
W61972	13 0 48.1	28 23 21	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
W61972	13 0 48.1	28 23 21	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
IC4051-POS1	13 0 58.0	28 0 28*	WFC	IMAGE	WFALL	F555W		1	2200	1114	4	CON	1
IC4051-POS1	13 0 58.0	28 0 28*	WFC	IMAGE	WFALL	F785LP		1	2500	1114	4	CON	1
GX304-1	13 1 17.2	-61 36 6	HSP/UV1	PRISM	1.0	F248M/F135W		1	3000	1091	3		1
B234	13 3 3.3	35 51 28	PC	IMAGE	P6	F555W		2	180	3228	1		1
B234	13 3 3.3	35 51 28	PC	IMAGE	P6	F785LP		2	360	3228	1		1
B234	13 3 3.3	35 51 28	WFC	IMAGE	WFALL	F725LP		1	600	3287	3		1
B234	13 3 3.3	35 51 28	WFC	IMAGE	WFALL	F725LP		1	250	3287	3		1
NGC4936	13 4 16.3	-30 31 2	FOC/96	IMAGE	512X512	F342W		1	600	4205	3		1
NGC4936	13 4 16.3	-30 31 2	FOC/96	IMAGE	512X512	F502M		1	300	4205	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC4936	13 4 16.3	-30 31 2	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC4936	13 4 16.3	-30 31 2	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
1302-102	13 5 33.0	-10 33 20	WFC	IMAGE	ALL	F555W		1	900	3931	2		1
1302-102	13 5 33.0	-10 33 20	WFC	IMAGE	ALL	F702W		1	900	3931	2		1
PG1302-102	13 5 33.0	-10 33 20	FOS/RD	ACQ/BINA	4.3	MIRROR		1	6	1018	2	ACQ	1
PG1302-102	13 5 33.0	-10 33 20	FOS/RD	ACQ/BINA	4.3	MIRROR		1	4	3222	2	ACQ	1
PG1302-102	13 5 33.0	-10 33 20	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	2	1018	2	ACQ	1
PG1302-102	13 5 33.0	-10 33 20	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	2	3222	2	ACQ	1
PG1302-102	13 5 33.0	-10 33 20	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1000	1018	2		1
PG1302-102	13 5 33.0	-10 33 20	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1000	3222	2		1
PG1302-102	13 5 33.0	-10 33 20	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2600	1018	2		1
PG1302-102	13 5 33.0	-10 33 20	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2600	3222	2		1
BS08	13 11 37.0	33 46 48	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
BS08	13 11 37.0	33 46 48	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
NGC5033-220S-49E	13 13 32.1	36 31 58*	WFC	IMAGE	WFALL	F336W		1	700	1119	3		1
NGC5033-220S-49E	13 13 32.1	36 31 58*	WFC	IMAGE	WFALL	F555W		1	700	1119	3		12
NGC5033-220S-49E	13 13 32.1	36 31 58*	WFC	IMAGE	WFALL	F785LP		1	700	1119	3		4
1311-270	13 13 47.4	-27 16 49	FOC/96	IMAGE	512X512	F1ND F430W		1	600	3177	1	CON SEL	1
NGC5044	13 15 26.1	-16 23 55	FOC/96	IMAGE	512X512	F342W		1	600	4205	3		1
NGC5044	13 15 26.1	-16 23 55	FOC/96	IMAGE	512X512	F502M		1	300	4205	3		1
NGC5044	13 15 26.1	-16 23 55	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC5044	13 15 26.1	-16 23 55	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
POINT-CP8.2	13 16 33.0	-3 54 0	S/C	POINTING	V1			1	0	1014	3	CON	1
POINT-CP8.1	13 16 34.3	-3 53 42	S/C	POINTING	V1			1	0	1014	3		1
GAL-CLUS-131642+313218	13 19 16.0	31 17 18	WFC	IMAGE	ALL	F725LP		10	700	1115	4	CON	1
NGC5077	13 19 31.5	-12 39 52	FOC/96	IMAGE	512X512	F342W		1	600	4205	3		1
NGC5077	13 19 31.5	-12 39 52	FOC/96	IMAGE	512X512	F502M		1	300	4205	3		1
NGC5077	13 19 31.5	-12 39 52	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC5077	13 19 31.5	-12 39 52	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
TON155	13 21 14.7	28 47 49	FOS/BL	ACQ/BINA	4.3	MIRROR		1	64	1144	2	ACQ	1
TON155	13 21 14.7	28 47 49	FOS/BL	ACQ/BINA	4.3	MIRROR		1	64	4191	3	ACQ CON	1
TON155	13 21 14.7	28 47 49	FOS/BL	ACCUM	1.0	G160L	1837	1	1000	1144	2		1
TON155	13 21 14.7	28 47 49	FOS/BL	ACCUM	1.0	G130H	1379	1	15300	4191	3	CON	1
TON156	13 21 15.9	28 47 19	FOS/BL	ACQ/BINA	4.3	MIRROR		1	36	4191	3	ACQ CON	1
TON156	13 21 15.9	28 47 19	FOS/BL	ACCUM	1.0	G130H	1379	1	9468	4191	3	CON	1
3C285	13 21 17.9	42 35 15	FOC/96	IMAGE	512X512	F342W		1	1800	4071	2		1
3C285	13 21 17.9	42 35 15	FOC/96	IMAGE	512X512	F502M		1	1800	4071	2		1
3C285	13 21 17.9	42 35 15	FOC/96	IMAGE	512X512	F480LP		1	1740	3263	9		1
NGC5102-NUC	13 21 57.2	-36 37 51	PC	IMAGE	P6	F555W		1	80	3229	1		1
NGC5102-NUC	13 21 57.2	-36 37 51	PC	IMAGE	P6	F555W		2	400	3229	1		1
NGC5102-NUC	13 21 57.2	-36 37 51	PC	IMAGE	P6	F785LP		1	80	3229	1		1
NGC5102-NUC	13 21 57.2	-36 37 51	PC	IMAGE	P6	F785LP		2	400	3229	1		1
NGC5102	13 21 57.5	-36 37 49	FOC/48	IMAGE	512X512	F220W		1	2280	3335	3		1
NGC5102	13 21 57.5	-36 37 49	FOC/48	IMAGE	512X512	F175W		1	5200	4070	2		1
NGC5102	13 21 57.5	-36 37 49	FOC/48	IMAGE	512X512	F342W		1	3200	4070	2		1
NGC5102	13 21 57.5	-36 37 49	FOC/96	IMAGE	512X512	F2ND F342W		1	1800	4070	2		1
PSF-NGC5102	13 22 14.1	-35 41 51	PC	IMAGE	P6	F555W		1	0	3229	1		1
PSF-NGC5102	13 22 14.1	-35 41 51	PC	IMAGE	P6	F785LP		1	0	3229	1		1
GAL-CLUS-132229+311436	13 24 48.6	30 59 2	WFC	IMAGE	ALL	F622W		3	700	1115	4	CON	1
GAL-CLUS-132229+311436	13 24 48.6	30 59 2	WFC	IMAGE	ALL	F785LP		3	700	1115	4	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
GAL-CLUS-132227+302718	13 24 48.8	30 11 48	WFC	IMAGE	ALL	F622W		5	700	1115	3		1
GAL-CLUS-132227+302718	13 24 48.8	30 11 48	WFC	IMAGE	ALL	F785LP		5	700	1115	3		1
HD116842	13 25 13.5	54 59 17	HRS	ACCUM	2.0	G140L	1550	1	105	1210	0		1
HD116842	13 25 13.5	54 59 17	HRS	ACCUM	2.0	G140L	1300	2	225	1210	0		1
NGC5128	13 25 27.6	-43 0 48	WFC	IMAGE	WF1	F555W		1	100	3292	3		1
NGC5128	13 25 27.6	-43 0 48	WFC	IMAGE	WF1	F555W		1	600	3292	3		1
NGC5128	13 25 27.6	-43 0 48	WFC	IMAGE	WF1	F785LP		1	100	3292	3		1
NGC5128	13 25 27.6	-43 0 48	WFC	IMAGE	WF1	F785LP		1	600	3292	3		1
NGC5128	13 25 28.9	-43 0 58	PC	IMAGE	PCALL-FIX	F555W		1	900	3344	3		1
NGC5128	13 25 28.9	-43 0 58	PC	IMAGE	PCALL-FIX	F785LP		1	900	3344	3		1
CEN-A-2	13 25 36.7	-42 56 12	FOC/48	IMAGE	512X512	F342W		1	1200	3344	3		1
NGC5139	13 25 37.0	-47 35 38	PC	IMAGE	P8	F606W		1	6	1013	9		4
NGC5139	13 25 37.0	-47 35 38	PC	IMAGE	P8	F658N		1	600	1013	9		2
NGC5139	13 26 45.9	-47 28 37	PC	IMAGE	P6	F555W		1	42	3111	0		1
NGC5139	13 26 45.9	-47 28 37	PC	IMAGE	P6	F785LP		1	42	3111	0		1
NGC5139	13 26 45.9	-47 28 37	FOC/96	IMAGE	512X512	F430W		1	3600	3325	2		2
NGC5139	13 26 45.9	-47 28 37	FOC/96	IMAGE	512X512	F480LP		1	3600	3325	2		2
NGC5139	13 26 45.9	-47 28 37	FOC/96	IMAGE	512X1024	F430W		1	3600	1279	0		1
NGC5139	13 26 45.9	-47 28 37	FOC/96	IMAGE	512X1024	F480LP		1	3600	1279	0		1
NGC5139-OUTER	13 26 45.9	-47 28 37	WFC	IMAGE	ALL	F555W		1	3600	3325	2	PAR	2
NGC5139-OUTER	13 26 45.9	-47 28 37	WFC	IMAGE	ALL	F785LP		1	3600	3325	2	PAR	2
NGC5139	13 29 16.1	-47 22 28	PC	IMAGE	P8	F439W	4385	1	2000	4056	2		1
NGC5139	13 29 16.1	-47 22 28	PC	IMAGE	P8	F336W	3363	1	2000	4056	2		2
NGC5139-OFFSET	13 29 16.1	-47 22 28	FOS/RD	ACQ/BINA	4.3	MIRROR		1	2	4135	3	ACQ CON SEL	2
NGC5139-STAR	13 29 16.1	-47 22 28*	FOS/RD	ACCUM	0.5	PRISM		1	5000	4135	3	CON SEL	1
NGC5139-STAR	13 29 16.1	-47 22 28*	FOS/RD	ACCUM	0.5	G650L		1	7500	4135	3	CON SEL	1
NGC5194-OFFSET-STARS-FIELD	13 29 49.4	47 11 16*	WFC	IMAGE	ALL	F606W		1	30	3194	1		1
NGC5194-WFC-OFFSET	13 29 50.4	47 11 7	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	3275	2	ACQ	1
NGC5194-NUC	13 29 52.5	47 11 47	PC	IMAGE	PC6	F555W		1	100	3639	2		1
NGC5194-NUC	13 29 52.5	47 11 47	PC	IMAGE	PC6	F555W		1	500	3639	2		2
NGC5194-NUC	13 29 52.5	47 11 47	PC	IMAGE	PCALL	F555W		1	7	4167	3		1
NGC5194-NUC	13 29 52.5	47 11 47	PC	IMAGE	PCALL	F555W		1	70	4167	3		1
NGC5194-NUC	13 29 52.5	47 11 47	PC	IMAGE	PCALL	F555W		1	700	4167	3		1
NGC5194-NUC	13 29 52.5	47 11 47	PC	IMAGE	PCALL	F785LP		1	7	4167	3		1
NGC5194-NUC	13 29 52.5	47 11 47	PC	IMAGE	PCALL	F785LP		1	70	4167	3		1
NGC5194-NUC	13 29 52.5	47 11 47	PC	IMAGE	PCALL	F785LP		1	700	4167	3		1
NGC5194	13 29 52.7	47 11 43	FOC/96	IMAGE	512X512	F275W		1	2280	4071	2		1
NGC5194	13 29 52.7	47 11 43	FOC/96	IMAGE	512X512	F372M		1	2280	4071	2		1
NGC5194	13 29 52.7	47 11 43	FOC/96	IMAGE	512X512	F410M		1	2280	4071	2		1
NGC5194	13 29 52.7	47 11 43	PC	IMAGE	ALL	F664N		2	900	3194	1		1
NGC5194	13 29 52.7	47 11 43	PC	IMAGE	ALL	F502N		1	1800	3194	1		1
NGC5194	13 29 52.7	47 11 43	PC	IMAGE	ALL	F547M		1	360	3194	1		1
NGC5194-CLOUD1	13 29 57.1	47 12 4*	FOS/BL	ACCUM	0.3	G130H		1	4050	3275	2		1
NGC5194-CLOUD1	13 29 57.1	47 12 4*	FOS/BL	ACCUM	0.3	G190H		1	2350	3275	2		1
NGC5194-CLOUD1	13 29 57.1	47 12 4*	FOS/RD	ACCUM	0.3	G400H		1	1355	3275	2		1
NGC5194-CLOUD1	13 29 57.1	47 12 4*	FOS/RD	ACCUM	0.3	G570H		1	1355	3275	2		1
NGC5194-CLOUD1	13 29 57.1	47 12 4*	FOS/RD	ACCUM	0.3	G270H		1	1649	3275	2		1
NGC5194-CLOUD2	13 29 57.1	47 12 4*	FOS/BL	ACCUM	0.3	G130H		1	4050	3275	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC5194-CLOUD2	13 29 57.1	47 12 4*	FOS/BL	ACCUM	0.3	G190H		1	2350	3275	2		1
NGC5194-CLOUD2	13 29 57.1	47 12 4*	FOS/RD	ACCUM	0.3	G400H		1	1355	3275	2		1
NGC5194-CLOUD2	13 29 57.1	47 12 4*	FOS/RD	ACCUM	0.3	G570H		1	1355	3275	2		1
NGC5194-CLOUD2	13 29 57.1	47 12 4*	FOS/RD	ACCUM	0.3	G270H		1	1649	3275	2		1
NGC5195-NUC	13 29 59.6	47 15 58	PC	IMAGE	PCALL	F555W		1	14	4167	4	CON	1
NGC5195-NUC	13 29 59.6	47 15 58	PC	IMAGE	PCALL	F555W		1	140	4167	4	CON	1
NGC5195-NUC	13 29 59.6	47 15 58	PC	IMAGE	PCALL	F785LP		1	14	4167	4	CON	1
NGC5195-NUC	13 29 59.6	47 15 58	PC	IMAGE	PCALL	F785LP		1	140	4167	4	CON	1
NGC5194-PC-OFFSET	13 29 59.8	47 12 7*	FOS/BL	ACQ/PEAK	0.3	MIRROR		1	140	3275	2	ACQ	1
NGC5194-PC-OFFSET	13 29 59.8	47 12 7*	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	21	3275	2	ACQ	1
NGC5194-PC-OFFSET	13 29 59.8	47 12 7*	FOS/RD	ACQ/PEAK	0.5	MIRROR		1	10	3275	2	ACQ	1
HD116852	13 30 23.6	-78 51 20	HRS	IMAGE	2.0	MIRROR-A2		1	153	4094	2		1
HD116852	13 30 23.6	-78 51 20	HRS	IMAGE	2.0	MIRROR-A2		1	153	3960	2		1
HD116852	13 30 23.6	-78 51 20	HRS	IMAGE	0.25	MIRROR-A2		1	204	4094	2	ACQ	1
HD116852	13 30 23.6	-78 51 20	HRS	IMAGE	0.25	MIRROR-A2		1	204	3960	2	ACQ	1
HD116852	13 30 23.6	-78 51 20	HRS	ACCUM	0.25	G270M	2600	1	576	4094	2		1
HD116852	13 30 23.6	-78 51 20	HRS	ACCUM	0.25	G160M	1250	1	1324	3960	2		1
HD116852	13 30 23.6	-78 51 20	HRS	ACCUM	0.25	G160M	1860	2	921	3960	2		1
HD116852	13 30 23.6	-78 51 20	HRS	ACCUM	0.25	G160M	1388	2	1440	3960	2		1
HD116852	13 30 23.6	-78 51 20	HRS	ACCUM	0.25	ECH-B25	2260	1	1843	4094	2		1
HD116852	13 30 23.6	-78 51 20	HRS	ACCUM	0.25	G200M	2045	1	1557	4094	2		1
HD116852	13 30 23.6	-78 51 20	HRS	ACCUM	0.25	G160M	1318	1	979	3960	2		1
HD116852	13 30 23.6	-78 51 20	HRS	ACCUM	0.25	G160M	1539	3	1209	3960	2		1
HD116852	13 30 23.6	-78 51 20	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	163	4094	2	ACQ	1
HD116852	13 30 23.6	-78 51 20	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	163	3960	2	ACQ	1
HD116852	13 30 23.6	-78 51 20	HRS	ACCUM	0.25	ECH-B22	2603	1	1209	4094	2		1
INCA221-90	13 30 53.9	30 32 31	PC	IMAGE	P8	F658N		1	2	1139	9	CON	2
3C286	13 31 8.3	30 30 33	PC	IMAGE	ALL	F850LP		1	1200	4120	9		1
3C286	13 31 8.3	30 30 33	FOS/RD	ACQ/BINA	4.3	MIRROR		1	22	1193	1	ACQ	1
3C286	13 31 8.3	30 30 33	FOS/RD	ACCUM	4.3	G160L	2036	1	900	1193	1		1
1328+307INCA221-90	13 31 8.3	30 30 33	PC	IMAGE	P8	F606W		1	30	1139	9		2
1328+307INCA221-90	13 31 8.3	30 30 33	PC	IMAGE	P8	F606W		1	30	1139	9	CON	2
1328+307INCA221-90	13 31 8.3	30 30 33	PC	IMAGE	P8	F725LP		1	30	1139	9		2
1328+307INCA221-90	13 31 8.3	30 30 33	PC	IMAGE	P8	F725LP		1	60	1139	9	CON	2
3C286	13 31 8.3	30 30 32	PC	IMAGE	PC6	F517N		2	300	3287	4	CON	1
3C286	13 31 8.3	30 30 32	WFC	IMAGE	WFALL	F725LP		1	600	3287	4	CON	1
3C286	13 31 8.3	30 30 32	WFC	IMAGE	WFALL	F725LP		1	250	3287	4	CON	1
INCA221-90-AST2	13 31 49.2	30 29 16	FGS	POS	2	F550W		1	2	1139	9	CON PAR	2
INCA221-90-AST1	13 32 8.6	30 30 2	FGS	POS	2	F550W		1	30	1139	9	CON PAR	2
INCA221-90-AST1	13 32 8.6	30 30 2	FGS	POS	2	F550W		1	60	1139	9	CON PAR	2
1331+170	13 33 35.9	16 49 4	FOC/96	IMAGE	512X512	F1ND F2ND F430W		1	600	3177	1	CON SEL	1
MC1331+170	13 33 35.9	16 49 4	PC	IMAGE	PC6	F375N		2	300	3287	3		1
1334-005	13 36 47.2	-0 48 58	FOS/BL	RAPID	4.3	PRISM	3500	1	600	3268	2		1
1334-005	13 36 47.2	-0 48 58	FOS/BL	ACQ/BINA	4.3	MIRROR		1	60	3268	2	ACQ	1
1334-005	13 36 47.2	-0 48 58	FOS/BL	RAPID	4.3	G160L	1650	1	1200	3268	2		1
SN1983N	13 36 51.3	-29 54 3	FOC/96	IMAGE	512X512	F346M		1	1800	3231	1		2
SN1983N	13 36 51.3	-29 54 3	FOC/96	IMAGE	512X512	F470M		1	1800	3231	1		2
NGC5236	13 36 59.2	-29 52 4	FOC/96	IMAGE	512X512	F342W		1	300	3264	3		1
NGC5236-NUC	13 37 0.3	-29 52 4	PC	IMAGE	PC6	F336W		1	1200	1213	1		1
NGC5236-NUC	13 37 0.3	-29 52 4	PC	IMAGE	PC6	F555W		1	1200	1213	1		1
NGC5236-NUC	13 37 0.3	-29 52 4	PC	IMAGE	PC6	F658N		1	1200	1213	1		1
NGC5236-NUC	13 37 0.3	-29 52 4	PC	IMAGE	PC6	F785LP		1	1200	1213	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC5236	13 37 0.8	-29 51 58	PC	IMAGE	ALL	F336W		1	600	1041	0		1
NGC5236	13 37 0.8	-29 51 58	PC	IMAGE	ALL	F547M		1	400	1041	0		1
NGC5236	13 37 0.8	-29 51 58	PC	IMAGE	ALL	F664N		1	2000	1041	0		1
NGC5236-A2	13 39 48.4	-30 7 4*	FOS/BL	ACCUM	1.0	G130H	1379	1	1800	4103	2		1
NGC5236-A1	13 39 48.4	-30 7 4*	FOS/BL	ACCUM	1.0	G130H	1379	1	3600	4103	2		1
NGC5236-A1	13 39 48.4	-30 7 4*	FOS/BL	ACCUM	1.0	G190H	1954	1	1800	4103	2		1
NGC5236-A1	13 39 48.4	-30 7 4*	FOS/BL	ACCUM	1.0	G270H	2769	1	1800	4103	2		1
NGC5236-A1	13 39 48.4	-30 7 4*	FOS/BL	ACCUM	1.0	G400H	4040	1	1800	4103	2		1
NGC5236-OFF	13 39 48.8	-30 7 5*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	4103	2	ACQ	1
M3-300-NORTH	13 42 11.1	28 27 32*	WFC	IMAGE	WFALL	F555W		1	100	1112	4	CON	1
M3-300-NORTH	13 42 11.1	28 27 32*	WFC	IMAGE	WFALL	F555W		1	300	1112	4	CON	1
M3-300-NORTH	13 42 11.1	28 27 32*	WFC	IMAGE	WFALL	F555W		1	1600	1112	4	CON	1
M3-300-NORTH	13 42 11.1	28 27 32*	WFC	IMAGE	WFALL	F785LP		1	100	1112	4	CON	1
M3-300-NORTH	13 42 11.1	28 27 32*	WFC	IMAGE	WFALL	F785LP		1	300	1112	4	CON	1
M3-300-NORTH	13 42 11.1	28 27 32*	WFC	IMAGE	WFALL	F785LP		1	1600	1112	4	CON	1
M3-105-NORTH	13 42 11.2	28 24 17*	WFC	IMAGE	WFALL	F555W		1	100	1112	4	CON	1
M3-105-NORTH	13 42 11.2	28 24 17*	WFC	IMAGE	WFALL	F555W		1	600	1112	4	CON	1
M3-105-NORTH	13 42 11.2	28 24 17*	WFC	IMAGE	WFALL	F555W		2	600	1112	4	CON	1
M3-105-NORTH	13 42 11.2	28 24 17*	WFC	IMAGE	WFALL	F785LP		1	400	1112	4	CON	1
M3-105-NORTH	13 42 11.2	28 24 17*	WFC	IMAGE	WFALL	F785LP		4	400	1112	4	CON	1
M3	13 42 11.2	28 22 32	PC	IMAGE	PC6	F336W		1	20	1112	4	CON	1
M3	13 42 11.2	28 22 32	PC	IMAGE	PC6	F336W		1	100	1112	4	CON	1
M3	13 42 11.2	28 22 32	PC	IMAGE	PC6	F336W		1	800	1112	4	CON	1
NGC5272-M3	13 42 11.2	28 22 32	PC	IMAGE	PC6	F336W		1	800	4084	2		1
NGC5272-M3	13 42 11.2	28 22 32	PC	IMAGE	PC6	F336W		1	2000	4084	2		1
NGC5272-M3	13 42 11.2	28 22 32	PC	IMAGE	PC6	F336W		3	2000	4084	2		1
NGC5272-OFF	13 42 11.2	28 22 22	PC	IMAGE	PC6	F336W		1	800	4084	2		1
NGC5272-OFF	13 42 11.2	28 22 22	PC	IMAGE	PC6	F336W		3	2000	4084	2		1
NGC5272	13 42 11.2	28 22 32	PC	IMAGE	P6	F555W		1	100	3565	2		1
NGC5272	13 42 11.2	28 22 32	PC	IMAGE	P6	F785LP		1	100	3565	2		1
4C58.27	13 47 41.0	58 12 42	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
4C58.27	13 47 41.0	58 12 42	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
4C58.27	13 47 41.0	58 12 42	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
4C58.27	13 47 41.0	58 12 42	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
A1795	13 48 52.4	26 35 35	FOC/96	IMAGE	512X512	F220W		2	1200	3487	2		1
A1795	13 48 52.4	26 35 35	FOC/96	IMAGE	512X512	F320W		2	1200	3487	2		1
A1795	13 48 52.4	26 35 35	FOC/96	IMAGE	512X512	F372M		2	1200	3487	2		1
A1795	13 48 52.4	26 35 35	FOC/96	IMAGE	512X512	F430W		2	1200	3487	2		1
IC4329A	13 49 19.3	-30 18 36	HSP/UV2	SINGLE	1.0	F140LP		1	120	3248	3		10
IC4329A	13 49 19.3	-30 18 36	HSP/POL	SINGLE	POL0	F216M		1	540	3248	3		1
IC4329A	13 49 19.3	-30 18 36	HSP/POL	SINGLE	POL0	F277M		1	360	3248	3		1
IC4329A	13 49 19.3	-30 18 36	HSP/POL	SINGLE	POL45	F216M		1	540	3248	3		1
IC4329A	13 49 19.3	-30 18 36	HSP/POL	SINGLE	POL45	F277M		1	360	3248	3		1
IC4329A	13 49 19.3	-30 18 36	HSP/POL	SINGLE	POL90	F216M		1	540	3248	3		1
IC4329A	13 49 19.3	-30 18 36	HSP/POL	SINGLE	POL90	F277M		1	360	3248	3		1
IC4329A	13 49 19.3	-30 18 36	HSP/POL	SINGLE	POL135	F216M		1	540	3248	3		1
IC4329A	13 49 19.3	-30 18 36	HSP/POL	SINGLE	POL135	F277M		1	360	3248	3		1
HD120787	13 49 45.0	61 29 26	HSP/UV1	SINGLE	1.0	F240W		1	3600	3007	0	CON SEL	1
HD120787	13 49 45.0	61 29 26	HSP/UV1	SINGLE	1.0	F140LP		1	3600	3007	0	CON SEL	1
HD120787	13 49 45.0	61 29 26	HSP/POL	SINGLE	POL0	F327M		1	3600	3007	0	CON SEL	1
1E1352+1820	13 54 34.8	18 6 16	WFC	IMAGE	WFALL	F725LP		1	10	3287	4	CON	1
1E1352+1820	13 54 34.8	18 6 16	WFC	IMAGE	WFALL	F725LP		1	510	3287	4	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
1E1352+1820	13 54 34.8	18 6 16	WFC	IMAGE	WFALL	F725LP		1	212	3287	4	CON	1
MRK463	13 56 2.9	18 22 19	PC	IMAGE	ALL	F517N		1	1000	1036	0		1
MRK463	13 56 2.9	18 22 19	PC	IMAGE	ALL	F547M		1	400	1036	0		1
MRK463-OFFSET	13 56 4.8	18 23 21*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	52	3274	3	ACQ	1
MRK463-OFFSET-STARS-FIELD	13 56 8.3	18 21 47	WFC	IMAGE	WF2-FIX	F547M		1	3	3274	3	ACQ	1
MRK463-OFFSET-STARS-FIELD	13 56 8.3	18 21 47	WFC	IMAGE	WF2-FIX	F547M		1	120	3274	3	ACQ	1
MRK463-NUC2	13 56 9.2	18 22 18	FOS/BL	ACQ/PEAK	0.3	MIRROR		1	25	3274	3	ACQ	1
MRK463-NUC2	13 56 9.2	18 22 18	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	8	3274	3	ACQ	1
MRK463-POS1	13 56 9.5	18 22 17*	FOS/BL	ACCUM	0.3	G190H		1	2000	3274	3		1
MRK463-POS1	13 56 9.5	18 22 17*	FOS/RD	ACCUM	0.3	G270H		1	2000	3274	3		1
MRK463-POS1	13 56 9.5	18 22 17*	FOS/RD	ACCUM	0.3	G400H		1	1000	3274	3		1
MRK463-POS1	13 56 9.5	18 22 17*	FOS/RD	ACCUM	0.3	G570H		1	1000	3274	3		1
MRK463-POS1	13 56 9.5	18 22 17*	FOS/BL	ACCUM	0.3	G130H		1	2400	3274	3		1
MRK463-POS2	13 56 9.5	18 22 18*	FOS/BL	ACCUM	0.3	G130H		1	300	3274	3		1
MRK463-POS2	13 56 9.5	18 22 18*	FOS/BL	ACCUM	0.3	G190H		1	240	3274	3		1
MRK463-POS2	13 56 9.5	18 22 18*	FOS/RD	ACCUM	0.3	G270H		1	120	3274	3		1
MRK463-POS2	13 56 9.5	18 22 18*	FOS/RD	ACCUM	0.3	G400H		1	120	3274	3		1
MRK463-POS2	13 56 9.5	18 22 18*	FOS/RD	ACCUM	0.3	G570H		1	120	3274	3		1
MRK463	13 56 9.5	18 22 18*	FOS/BL	ACCUM	0.3	G190H		1	1000	3274	3		1
MRK463	13 56 9.5	18 22 18*	FOS/RD	ACCUM	0.3	G270H		1	1000	3274	3		1
MRK463	13 56 9.5	18 22 18*	FOS/RD	ACCUM	0.3	G400H		1	300	3274	3		1
MRK463	13 56 9.5	18 22 18*	FOS/RD	ACCUM	0.3	G570H		1	300	3274	3		1
MRK463	13 56 9.5	18 22 18*	FOS/BL	ACCUM	0.3	G130H		1	1500	3274	3		1
1354+195	13 57 4.5	19 19 7	FOC/96	IMAGE	512X512	F1ND F2ND F430W		1	600	3177	1	CON SEL	1
4C58.29	13 58 17.6	57 52 5	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
4C58.29	13 58 17.6	57 52 5	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
Q1358+391	14 0 13.8	38 54 18	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
NGC5457-NUC	14 3 12.7	54 20 58	PC	IMAGE	PC6	F555W		1	100	3639	2		1
NGC5457-NUC	14 3 12.7	54 20 58	PC	IMAGE	PC6	F555W		1	500	3639	2		2
NGC5457-NUC	14 3 12.7	54 20 58	PC	IMAGE	PCALL	F555W		1	20	4167	3		1
NGC5457-NUC	14 3 12.7	54 20 58	PC	IMAGE	PCALL	F555W		1	200	4167	3		1
NGC5457-NUC	14 3 12.7	54 20 58	PC	IMAGE	PCALL	F785LP		1	16	4167	3		1
NGC5457-NUC	14 3 12.7	54 20 58	PC	IMAGE	PCALL	F785LP		1	160	4167	3		1
NGC5457	14 3 13.2	54 21 14	FOC/96	IMAGE	512X512	F342W		1	300	3264	3		1
NGC5457-4	14 3 42.1	54 19 5	WFC	IMAGE	ALL	F284W		1	300	1073	9		1
NGC5457-4	14 3 42.1	54 19 5	WFC	IMAGE	ALL	F656N		1	600	1073	9		1
NGC5457-4	14 3 42.1	54 19 5	WFC	IMAGE	ALL	F375N		1	1500	1073	9		1
NGC5457-4	14 3 42.1	54 19 5	WFC	IMAGE	ALL	F487N		1	480	1073	9		1
NGC5457-4	14 3 42.1	54 19 5	WFC	IMAGE	ALL	F487N		1	2400	1073	9		1
NGC5457-4	14 3 42.1	54 19 5	WFC	IMAGE	ALL	F502N		1	780	1073	9		1
NGC5457-4	14 3 42.1	54 19 5	WFC	IMAGE	ALL	F547M		1	480	1073	9		1
NGC5457-1	14 4 29.2	54 23 49	WFC	IMAGE	ALL	F284W		1	300	1073	9		1
NGC5457-1	14 4 29.2	54 23 49	WFC	IMAGE	ALL	F487N		1	300	1073	9		1
NGC5457-1	14 4 29.2	54 23 49	WFC	IMAGE	ALL	F547M		1	300	1073	9		1
NGC5457-1	14 4 29.2	54 23 49	WFC	IMAGE	ALL	F656N		1	300	1073	9		1
NGC5457-1	14 4 29.2	54 23 49	WFC	IMAGE	ALL	F375N		1	1800	1073	9		1
NGC5457-1	14 4 29.2	54 23 49	WFC	IMAGE	ALL	F487N		1	2100	1073	9		1
NGC5457-1	14 4 29.2	54 23 49	WFC	IMAGE	ALL	F502N		1	720	1073	9		1
1E1402.3+0416BKG	14 4 51.0	4 2 14*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		27
1E1402.3+0416	14 4 51.0	4 2 2	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		9

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
1E1402.3+0416	14 4 51.0	4 2 2	HSP/POL	STAR-SKY	POL0	F277M		1	990	3248	2		2
1E1402.3+0416	14 4 51.0	4 2 2	HSP/POL	STAR-SKY	POL45	F277M		1	990	3248	2		2
1E1402.3+0416	14 4 51.0	4 2 2	HSP/POL	STAR-SKY	POL90	F277M		1	990	3248	2		2
1E1402.3+0416	14 4 51.0	4 2 2	HSP/POL	STAR-SKY	POL135	F277M		1	990	3248	2		2
1402+045	14 5 1.2	4 15 34	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	3179	1		1
INCA221-92	14 6 40.7	28 29 4	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
NGC5481	14 6 41.5	50 43 34	FOC/96	IMAGE	512X512	F502M		1	300	4205	3		1
NGC5481	14 6 41.5	50 43 34	FOC/96	IMAGE	512X512	F342W	3400	1	600	4205	3		1
1404+286INCA221-92	14 7 0.4	28 27 15	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
1404+286INCA221-94	14 7 0.4	28 27 15	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
POINT1404+286INCA221-92	14 7 7.9	28 38 44	S/C	POINTING	V1			1	1	4154	3	CON	1
POINT1404+286INCA221-94	14 7 49.5	28 20 55	S/C	POINTING	V1			1	1	4154	3	CON	1
INCA221-94	14 7 49.5	28 32 43	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
Q1408+5642	14 9 54.2	56 28 29	FOS/RD	ACCUM	1.0	G270H	2753	1	2000	4189	3		1
Q1408+5642	14 9 54.2	56 28 29	FOS/RD	ACQ/BINA	4.3	MIRROR		1	19	4189	3	ACQ	1
GAL-CLUS-3C295	14 11 20.5	52 12 8	WFC	IMAGE	ALL	F555W		3	700	1115	3		1
GAL-CLUS-3C295	14 11 20.5	52 12 8	WFC	IMAGE	ALL	F702W		3	700	1115	3		1
3C295	14 11 20.6	52 12 10	PC	IMAGE	ALL	F606W		1	1200	3263	9		1
EIN1	14 12 20.8	-12 1 25	FGS	POS	3	PUPIL		1	52	1010	4		20
EIN1	14 12 20.8	-12 1 25	FGS	TRANS	3	PUPIL		1	200	1010	4		1
NGC5506	14 13 14.7	-3 12 22	FOC/96	IMAGE	512X512	F220W		1	1000	3344	3		1
NGC5506	14 13 14.7	-3 12 22	FOC/96	IMAGE	512X512	F502M		1	1000	3344	3		1
NGC5506	14 13 14.7	-3 12 22	FOC/96	IMAGE	512X512	F550M		1	1000	3344	3		1
PG1411+442	14 13 48.3	44 0 13	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	4118	2	ACQ	1
PG1411+442	14 13 48.3	44 0 13	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	3	4118	2	ACQ	1
PG1411+442	14 13 48.3	44 0 13	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	2	4118	2	ACQ	1
PG1411+442	14 13 48.3	44 0 13	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	2000	4118	2		1
PG1411+442	14 13 48.3	44 0 13	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	800	4118	2		1
PG1411+442	14 13 48.3	44 0 13	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	8200	4118	2		1
1413+117	14 15 46.2	11 29 44	PC	IMAGE	PC6	F785LP		3	2000	4172	3		1
3C296-FIELD	14 16 51.9	10 48 7	WFC	IMAGE	ALL	F439W	4353	1	15	3272	9	ACQ CON	1
3C296	14 16 52.9	10 48 27	FOS/RD	ACCUM	1.0	PRISM	5400	1	500	3272	9	CON	1
3C296	14 16 52.9	10 48 27	FOC/96	IMAGE	512X512	F370LP	4040	1	300	1033	0		1
3C296	14 16 52.9	10 48 27	FOC/96	IMAGE	512X512	F220W F231M	2260	1	900	1033	0		1
3C296-OFFSET	14 16 52.9	10 48 27*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3272	9	ACQ CON	1
PG1415+451	14 17 0.9	44 56 6	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	3566	2	ACQ	1
PG1415+451	14 17 0.9	44 56 6	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	7	3566	2	ACQ	1
PG1415+451	14 17 0.9	44 56 6	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1600	3566	2		1
NGC5548	14 17 59.6	25 8 12	FOS/BL	ACCUM	1.0	G190H		1	1200	4045	1		1
NGC5548	14 17 59.6	25 8 12	FOS/BL	ACCUM	1.0	G270H		1	480	4045	1		1
NGC5548	14 17 59.6	25 8 12	HRS	ACCUM	2.0	G140L	1590	1	1380	3206	1		1
NGC5548	14 17 59.6	25 8 12	HRS	ACCUM	2.0	G200M	1885	1	240	3206	1		1
NGC5548	14 17 59.6	25 8 12	HRS	ACCUM	2.0	G270M	2905	1	180	3206	1		1
NGC5548	14 17 59.6	25 8 12	HRS	ACCUM	2.0	G270M	2945	1	180	3206	1		1
NGC5548	14 17 59.6	25 8 12	HRS	ACCUM	2.0	G270M	2865	1	120	3206	1		1
NGC5548	14 17 59.6	25 8 12	HRS	ACCUM	2.0	G200M	1923	1	240	3206	1		1
NGC5548	14 17 59.6	25 8 12	HRS	ACCUM	2.0	G200M	1959	1	240	3206	1		1
NGC5548	14 17 59.6	25 8 12	HRS	ACCUM	2.0	G200M	1997	1	240	3206	1		1
NGC5548	14 17 59.6	25 8 12	HRS	ACCUM	2.0	G270M	2749	1	120	3206	1		1
NGC5548	14 17 59.6	25 8 12	HRS	ACCUM	2.0	G270M	2789	1	120	3206	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC5548	14 17 59.6	25 8 12	HRS	ACCUM	2.0	G270M	2829	1	120	3206	1		1
NGC5548	14 17 59.6	25 8 12	FOS/BL	ACQ/BINA	4.3	MIRROR		1	6	4045	1	ACQ	1
NGC5548	14 17 59.6	25 8 12	FOS/BL	ACCUM	1.0	G130H		1	3299	4045	1		1
NGC5548	14 17 59.6	25 8 12	HRS	ACCUM	2.0	G140L	1315	1	1019	3206	1		1
NGC5548	14 17 59.6	25 8 12	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	3206	1	ACQ	1
NGC5548	14 17 59.6	25 8 12	FOC/96	IMAGE	512X512	F152M	1500	1	1500	3180	1		1
NGC5548	14 17 59.6	25 8 12	FOC/96	IMAGE	512X512	F130M	1270	1	1500	3180	1		1
NGC5548	14 17 59.6	25 8 12	FOC/96	IMAGE	512X512	F170M	1760	1	1500	3180	1		1
NGC5548	14 17 59.6	25 8 12	FOC/96	IMAGE	512X512	F502M	4950	1	1500	3180	1		1
NGC5548	14 17 59.6	25 8 12	FOC/96	IMAGE	512X512	F550M	5470	1	1500	3180	1		1
DEEP-SURVEY-FIELD-2	14 18 0.1	52 27 6	WFC	IMAGE	WFALL	F606W		11	800	1111	3		1
DEEP-SURVEY-FIELD-2	14 18 0.1	52 27 6	WFC	IMAGE	WFALL	F725LP		11	800	1111	3		1
DEEP-SURVEY-FIELD-2	14 18 0.1	52 27 6	FOC/48	IMAGE	512X1024	F275W		11	700	1111	3	PAR	1
DEEP-SURVEY-FIELD-2	14 18 0.1	52 27 6	FOC/48	IMAGE	512X1024	F430W		11	700	1111	3	PAR	1
1416+067INCA221-96	14 19 8.1	6 28 35	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
INCA221-96	14 19 29.4	6 22 44	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
POINT1416+067INCA221-96	14 19 43.6	6 35 6	S/C	POINTING	V1			1	1	4154	3	CON	1
1418+546INCA221-97	14 19 46.5	54 23 14	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
INCA221-97	14 20 18.2	54 30 23	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
POINT1418+546INCA221-97	14 21 13.0	54 21 13	S/C	POINTING	V1			1	1	4154	3	CON	1
B21425+267	14 27 35.7	26 32 14	WFC	IMAGE	WFALL	F725LP		1	10	3287	3		1
B21425+267	14 27 35.7	26 32 14	WFC	IMAGE	WFALL	F725LP		1	510	3287	3		1
B21425+267	14 27 35.7	26 32 14	WFC	IMAGE	WFALL	F725LP		1	212	3287	3		1
PROXIMA-CEN	14 29 43.0	-62 40 47	PC	IMAGE	P6	F875M		1	40	1062	9		1
PROXIMA-CEN	14 29 43.0	-62 40 47	PC	IMAGE	P6	F622W		4	1000	1062	9		1
PROXIMA-CEN	14 29 43.0	-62 40 47	PC	IMAGE	P6	F875M		4	1000	1062	9		1
PROXIMA-CENTAURI	14 29 43.0	-62 40 46	FGS	POS	3	PUPIL		1	52	2939	1		32
PROXIMA-CENTAURI	14 29 43.0	-62 40 46	FGS	POS	3	PUPIL		1	52	2939	2		18
PROXIMA-CENTAURI	14 29 43.0	-62 40 46	FGS	POS	3	F583W		1	52	4031	1		32
PROXIMA-CENTAURI	14 29 43.0	-62 40 46	FGS	POS	3	F583W		1	52	4031	2		18
GLIESE551	14 29 51.6	-62 40 59	FGS	POS	PRIME	F550W		1	52	2937	9		29
GLIESE551	14 29 51.6	-62 40 59	FGS	TRANS	PRIME	F583W		1	100	2937	9	ACQ	1
S4-1435+63	14 36 45.8	63 36 38	FOS/RD	ACQ/BINA	4.3	MIRROR		1	4	3221	1	ACQ	1
S4-1435+63	14 36 45.8	63 36 38	FOS/RD	RAPID	0.25X2.0	G270H	2762	1	3600	3221	1		1
S4-1435+63	14 36 45.8	63 36 38	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR	2762	1	2	3221	1	ACQ	1
HD128621	14 39 35.2	-60 50 16	PC	IMAGE	P6	F889N		4	700	1062	9		3
HD128621	14 39 35.2	-60 50 16	PC	IMAGE	P6	F502N		4	1200	1062	9		3
HD128621	14 39 35.2	-60 50 16	PC	IMAGE	P6	F631N		4	1200	1062	9		3
HD128621	14 39 35.2	-60 50 16	PC	IMAGE	P6	F122M F889N		1	1	1062	9		3
HD128620	14 39 36.7	-60 50 0	PC	IMAGE	P6	F502N		4	300	1062	9		3
HD128620	14 39 36.7	-60 50 0	PC	IMAGE	P6	F631N		4	400	1062	9		3
HD128620	14 39 36.7	-60 50 0	PC	IMAGE	P6	F889N		4	230	1062	9		3
HD128620	14 39 36.7	-60 50 0	PC	IMAGE	P6	F122M F889N		1	0	1062	9		3
HD128621	14 39 37.6	-60 50 17	HRS	ACCUM	0.25	ECH-B20	2800	1	1088	3943	2		1
HD128621	14 39 37.6	-60 50 17	HRS	ACCUM	0.25	ECH-B22	2600	1	979	3943	2		1
HD128621	14 39 37.6	-60 50 17	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	163	3943	2	ACQ	1
HD128621	14 39 37.6	-60 50 17	HRS	ACCUM	0.25	G160M	1223	3	1196	3943	2		1
HD128620	14 39 39.1	-60 50 1	HRS	ACCUM	0.25	ECH-B20	2800	1	761	3943	2		1
HD128620	14 39 39.1	-60 50 1	HRS	ACCUM	0.25	ECH-B22	2600	1	652	3943	2		1
HD128620	14 39 39.1	-60 50 1	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	163	3943	2	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD128620	14 39 39.1	-60 50 1	HRS	ACCUM	0.25	G160M	1223	3	1196	3943	2		1
MRK477	14 40 38.1	53 30 16	PC	IMAGE	ALL	F517N		1	1000	1036	0		1
MRK477	14 40 38.1	53 30 16	PC	IMAGE	ALL	F547M		1	400	1036	0		1
PKS1438-347	14 41 23.9	-34 56 46	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
PKS1438-347	14 41 23.9	-34 56 46	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
NGC5728	14 42 23.9	-17 15 13	FOC/96	IMAGE	512X512	F220W		1	1000	3344	3		1
NGC5728	14 42 23.9	-17 15 13	FOC/96	IMAGE	512X512	F502M		1	1000	3344	3		1
NGC5728	14 42 23.9	-17 15 13	FOC/96	IMAGE	512X512	F550M		1	1000	3344	3		1
3C303	14 43 0.6	52 1 37	FOC/96	IMAGE	512X512	F480LP		1	1740	3263	9		1
3C303-FIELD	14 43 1.7	52 1 37	WFC	IMAGE	ALL	F336W		1	2400	1039	9		1
3C303	14 43 1.9	52 1 39	WFC	IMAGE	WFALL	F725LP		1	50	3287	3		1
3C303	14 43 1.9	52 1 39	WFC	IMAGE	WFALL	F725LP		1	510	3287	3		1
3C303	14 43 1.9	52 1 39	WFC	IMAGE	WFALL	F725LP		1	212	3287	3		1
1442+102	14 45 16.5	9 58 36	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	1235	0		1
1442+101	14 45 16.5	9 58 36	FOS/BL	ACCUM	4.3	PRISM	3500	1	600	1027	0		1
1442+101	14 45 16.5	9 58 36	FOS/BL	ACCUM	4.3	G160L	1650	1	50	1027	0		2
1442+101	14 45 16.5	9 58 36	FOS/BL	ACCUM	4.3	G160L	1650	1	1200	1027	0		1
1442+101	14 45 16.5	9 58 36	FOS/BL	ACQ/BINA	4.3	MIRROR		1	244	1027	0	ACQ	1
1442+101	14 45 16.5	9 58 36	FOC/96	IMAGE	512X512	F1ND F430W		1	600	3177	1	CON SEL	1
1442+101	14 45 16.5	9 58 37	WFC	IMAGE	ALL	F606W		3	1800	1045	9		1
1442+101	14 45 16.5	9 58 37	FOS/RD	ACQ/BINA	4.3	MIRROR		1	26	1045	9	ACQ CON SEL	6
1442+101	14 45 16.5	9 58 37	FOS/RD	ACQ/PEAK	2.0-BAR	MIRROR		1	26	1045	9	ACQ CON SEL	6
PG1444+407	14 46 45.9	40 35 7	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	3566	2	ACQ	1
PG1444+407	14 46 45.9	40 35 7	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	7	3566	2	ACQ	1
PG1444+407	14 46 45.9	40 35 7	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	3600	3566	2		1
PG1444+407	14 46 45.9	40 35 7	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1400	3566	2		1
3C305	14 49 21.6	63 16 14	FOC/96	IMAGE	512X512	F320W		2	900	3504	2		1
3C305	14 49 21.6	63 16 14	FOC/96	IMAGE	512X512	F372M		2	900	3504	2		1
3C305	14 49 21.6	63 16 14	FOC/96	IMAGE	512X512	F502M		2	900	3504	2		1
PKS1448-232	14 51 2.5	-23 29 31	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
PKS1448-232	14 51 2.5	-23 29 31	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
POINT1451-375INCA221 -101	14 53 28.8	-37 44 16	S/C	POINTING	V1			1	1	4154	3	CON	1
INCA221-101	14 54 16.8	-37 37 23	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
Q1451+124	14 54 18.5	12 10 54	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	4069	2		1
1451-375INCA221-101	14 54 27.3	-37 47 33	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
1451-375INCA221-102	14 54 27.3	-37 47 33	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
INCA221-102	14 54 42.3	-37 56 16	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
POINT1451-375INCA221 -102	14 55 26.1	-37 47 44	S/C	POINTING	V1			1	1	4154	3	CON	1
NGC5813	15 1 11.2	1 42 8	FOC/96	IMAGE	512X512	F342W		1	600	4205	3		1
NGC5813	15 1 11.2	1 42 8	FOC/96	IMAGE	512X512	F502M		1	300	4205	3		1
NGC5813	15 1 11.2	1 42 8	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC5813	15 1 11.2	1 42 8	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
NGC5813-NUC	15 1 11.2	1 42 7	PC	IMAGE	PCALL	F785LP		1	57	4167	4	CON	1
NGC5813-NUC	15 1 11.2	1 42 7	PC	IMAGE	PCALL	F785LP		1	570	4167	4	CON	1
NGC5813-NUC	15 1 11.2	1 42 7	PC	IMAGE	PCALL	F555W		1	79	4167	4	CON	1
NGC5813-NUC	15 1 11.2	1 42 7	PC	IMAGE	PCALL	F555W		1	797	4167	4	CON	1
URSA-MINOR-150812+67 2300	15 8 32.5	67 12 22	WFC	IMAGE	WFALL	F555W		1	200	1110	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
URSA-MINOR-150812+67 2300	15 8 32.5	67 12 22	WFC	IMAGE	WFALL	F555W		1	2000	1110	3		1
URSA-MINOR-150812+67 2300	15 8 32.5	67 12 22	WFC	IMAGE	WFALL	F785LP		1	200	1110	3		1
URSA-MINOR-150812+67 2300	15 8 32.5	67 12 22	WFC	IMAGE	WFALL	F785LP		1	1600	1110	3		1
PLUTO2	15 10 56.8	-2 10 32	FOC/96	IMAGE	256X256	F2ND F430W		1	900	3059	1		1
PLUTO3	15 10 57.1	-2 10 35	FOC/96	IMAGE	256X256	F2ND F342W		1	900	3059	1		1
PLUTO4	15 10 57.2	-2 10 36	FOC/96	IMAGE	512X512	F275W F278M		1	900	3059	1		1
PLUTO5	15 10 57.5	-2 10 38	FOC/96	IMAGE	512X512	F120M		1	900	3059	1		1
PLUTO6	15 10 57.6	-2 10 39	FOC/96	IMAGE	256X256	F2ND F430W		1	900	3059	1		1
PLUTO7	15 10 57.9	-2 10 42	FOC/96	IMAGE	256X256	F2ND F342W		1	900	3059	1		1
PLUTO8	15 10 58.0	-2 10 43	FOC/96	IMAGE	512X512	F275W F278M		1	900	3059	1		1
PLUTO9	15 10 58.3	-2 10 45	FOC/96	IMAGE	512X512	F120M		1	900	3059	1		1
PLUTO12	15 11 2.7	-2 11 24	FOC/288	IMAGE	512X512	F2ND F430W		1	900	3059	1		1
PLUTO13	15 11 2.8	-2 11 25	FOC/288	IMAGE	512X512	F1ND F342W		1	900	3059	1		1
PLUTO14	15 11 3.1	-2 11 28	FOC/288	IMAGE	512X512	F275W F278M		1	900	3059	1		1
PLUTO15	15 11 3.2	-2 11 29	FOC/288	IMAGE	512X512	F275W F278M		1	900	3059	1		1
PLUTO16	15 11 3.5	-2 11 31	FOC/288	IMAGE	512X512	F2ND F430W		1	900	3059	1		1
PLUTO17	15 11 3.6	-2 11 32	FOC/288	IMAGE	512X512	F1ND F342W		1	900	3059	1		1
3C317	15 16 44.6	7 1 17	FOC/96	IMAGE	512X512	F220W		1	1000	3344	3		1
3C317	15 16 44.6	7 1 17	FOC/96	IMAGE	512X512	F502M		1	1000	3344	3		1
3C317	15 16 44.6	7 1 17	FOC/96	IMAGE	512X512	F550M		1	1000	3344	3		1
3C317	15 16 44.6	7 1 18	FOS/RD	ACCUM	1.0	PRISM	5400	1	500	3272	9	CON	1
3C317	15 16 44.6	7 1 18	FOC/96	IMAGE	512X512	F370LP	4040	1	300	1033	0		1
3C317	15 16 44.6	7 1 18	FOC/96	IMAGE	512X512	F220W F231M	2260	1	900	1033	0		1
3C317-FIELD	15 16 44.6	7 1 18	WFC	IMAGE	ALL	F439W	4353	1	15	3272	9	ACQ CON	1
3C317-OFFSET	15 16 44.6	7 1 18*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3272	9	ACQ CON	1
AP-LIBBKG	15 17 40.7	-24 22 19*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
AP-LIB	15 17 41.8	-24 22 19	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
AP-LIB	15 17 41.8	-24 22 20	PC	IMAGE	P6	F555W		1	14	1116	0		1
AP-LIB	15 17 41.8	-24 22 20	PC	IMAGE	P6	F785LP		1	30	1116	0		1
AP-LIB	15 17 41.8	-24 22 20	PC	IMAGE	P6	F785LP		2	500	1116	0		1
AP-LIB	15 17 41.8	-24 22 20	WFC	IMAGE	WFALL	F725LP		1	600	3287	4	CON	1
AP-LIB	15 17 41.8	-24 22 20	WFC	IMAGE	WFALL	F725LP		1	250	3287	4	CON	1
APLIB	15 17 41.8	-24 22 20	FOC/96	IMAGE	512X512	F275W	2740	1	900	3000	0		1
APLIB	15 17 41.8	-24 22 20	FOC/96	IMAGE	512X512	F430W	3960	1	600	3000	0		1
APLIB	15 17 41.8	-24 22 20	FOC/96	IMAGE	512X512	F2ND F430W	3960	1	600	3000	0		1
NGC5904	15 18 33.8	2 4 58	PC	IMAGE	P6	F555W		1	70	3227	1		1
NGC5904	15 18 33.8	2 4 58	PC	IMAGE	P6	F785LP		1	70	3227	1		1
NGC5920	15 21 52.0	7 42 31	FOC/96	IMAGE	512X512	F220W		2	1200	3487	2		1
NGC5920	15 21 52.0	7 42 31	FOC/96	IMAGE	512X512	F320W		2	1200	3487	2		1
NGC5920	15 21 52.0	7 42 31	FOC/96	IMAGE	512X512	F372M		2	1200	3487	2		1
NGC5920	15 21 52.0	7 42 31	FOC/96	IMAGE	512X512	F430W		2	1200	3487	2		1
HD136352	15 21 56.2	-48 18 49	HSP/UV1	SINGLE	1.0	F240W		1	3600	3007	0	CON SEL	1
HD136352	15 21 56.2	-48 18 49	HSP/UV1	SINGLE	1.0	F140LP		1	3600	3007	0	CON SEL	1
HD136352	15 21 56.2	-48 18 49	HSP/POL	SINGLE	POL0	F327M		1	3600	3007	0	CON SEL	1
ME2-1	15 22 18.2	-23 37 40	WFC	IMAGE	WFALL	F336W		1	200	3283	3		1
ME2-1	15 22 18.2	-23 37 40	WFC	IMAGE	WFALL	F439W		1	100	3283	3		1
ME2-1	15 22 18.2	-23 37 40	WFC	IMAGE	WFALL	F622W		1	60	3283	3		1
ME2-1	15 22 18.2	-23 37 40	WFC	IMAGE	WFALL	F157W		1	420	3283	3		1
ME2-1	15 22 18.2	-23 37 40	WFC	IMAGE	WFALL	F284W		1	240	3283	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
SP43	15 22 19.7	41 11 56	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
SP43	15 22 19.7	41 11 56	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
3C319	15 24 5.0	54 28 6	FOC/96	IMAGE	512X512	F480LP		1	1740	3263	9		1
PG1522+101	15 24 24.5	9 58 29	FOS/BL	ACCUM	4.3	G160L	1600	1	100	3200	1		1
PG1522+101	15 24 24.5	9 58 29	FOS/RD	ACCUM	4.3	G270H	2700	1	100	3200	1		1
PG1522+101	15 24 24.5	9 58 29	FOS/BL	RAPID	1.0	G160L	1600	1	6000	3200	1		1
PG1522+101	15 24 24.5	9 58 29	FOS/RD	RAPID	1.0	G190H	1900	1	10000	3200	1		1
PG1522+101	15 24 24.5	9 58 29	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	3200	1	ACQ	1
PG1522+101	15 24 24.5	9 58 29	FOS/RD	RAPID	1.0	G270H	2700	1	2779	3200	1		1
PG1522+101	15 24 24.5	9 58 30	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
PG1522+101	15 24 24.5	9 58 30	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
1525+227	15 27 57.7	22 33 4	WFC	IMAGE	WFALL	F725LP		1	30	3287	4	CON	1
1525+227	15 27 57.7	22 33 4	WFC	IMAGE	WFALL	F725LP		1	510	3287	4	CON	1
1525+227	15 27 57.7	22 33 4	WFC	IMAGE	WFALL	F725LP		1	212	3287	4	CON	1
P18	15 28 34.2	-4 3 18	HSP/PMT/V IS	SPLIT	1.0	F750W/F320N		1	1800	4015	2		1
PSF-IC4553/4	15 31 32.7	22 31 48	PC	IMAGE	P6	F555W		1	0	1105	0		1
PSF-IC4553/4	15 31 32.7	22 31 48	PC	IMAGE	P6	F702W		1	0	1105	0		1
PSF-IC4553/4	15 31 32.7	22 31 48	PC	IMAGE	P6	F785LP		1	0	1105	0		1
P17	15 31 43.2	-3 21 48	HSP/PMT/V IS	SPLIT	1.0	F750W/F320N		1	1200	1086	1		1
ARP220	15 34 57.3	23 30 12	FOC/96	IMAGE	512X512	F120M		1	2400	1244	1		1
ARP220	15 34 57.3	23 30 12	FOC/96	IMAGE	512X512	F165W		1	1200	1244	1		1
ARP220	15 34 57.3	23 30 12	FOC/96	IMAGE	512X512	F372M		1	2400	1244	1		1
ARP220	15 34 57.3	23 30 12	FOC/96	IMAGE	512X512	F430W		1	1200	1244	1		1
IC4553/4	15 34 57.6	23 30 14	PC	IMAGE	P6	F555W		2	400	1105	0		1
IC4553/4	15 34 57.6	23 30 14	PC	IMAGE	P6	F702W		3	260	1105	0		1
IC4553/4	15 34 57.6	23 30 14	PC	IMAGE	P6	F785LP		1	300	1105	0		1
IC4553/4	15 34 57.6	23 30 14	PC	IMAGE	P6	F785LP		2	300	1105	0		1
IC4553/4	15 34 57.6	23 30 14	WFC	IMAGE	WF1	F555W		1	30	3292	4	CON	1
IC4553/4	15 34 57.6	23 30 14	WFC	IMAGE	WF1	F555W		1	400	3292	4	CON	1
IC4553/4	15 34 57.6	23 30 14	WFC	IMAGE	WF1	F702W		1	30	3292	4	CON	1
IC4553/4	15 34 57.6	23 30 14	WFC	IMAGE	WF1	F702W		1	400	3292	4	CON	1
IC4553/4	15 34 57.6	23 30 14	WFC	IMAGE	WF1	F555W		1	230	3292	4	CON	1
IC4553/4	15 34 57.6	23 30 14	WFC	IMAGE	WF1	F702W		1	230	3292	4	CON	1
IC4553/4	15 34 57.6	23 30 14	WFC	IMAGE	WF1	F785LP		1	30	3292	4	CON	1
IC4553/4	15 34 57.6	23 30 14	WFC	IMAGE	WF1	F785LP		1	400	3292	4	CON	1
IC4553/4	15 34 57.6	23 30 14	WFC	IMAGE	WF1	F785LP		1	230	3292	4	CON	1
ARP220	15 35 0.3	23 30 12	FOC/96	IMAGE	512X512	F342W		2	1500	2895	0		1
ARP220	15 35 0.3	23 30 12	FOC/96	IMAGE	512X512	F430W		2	1500	2895	0		1
PSF-IZW121	15 36 23.7	54 57 21	PC	IMAGE	P6	F555W		1	0	3185	1		1
PSF-IZW121	15 36 23.7	54 57 21	PC	IMAGE	P6	F785LP		1	0	3185	1		1
MRK486	15 36 38.4	54 33 33	FOS/RD	ACQ/BINA	4.3	MIRROR		1	3	4201	9	ACQ	1
MRK486	15 36 38.4	54 33 33	FOS/BL	ACCUM	4.3	G190H	1950	1	1440	4201	3		2
MRK486	15 36 38.4	54 33 33	FOS/BL	ACCUM	4.3	G270H	2766	1	1440	4201	3		1
MRK486	15 36 38.4	54 33 33	FOS/RD	ACQ/PEAK	0.7X2.0-BAR	MIRROR		1	1	4201	9	ACQ	1
MRK486	15 36 38.4	54 33 33	FOS/BL	ACQ/BINA	4.3	MIRROR		1	6	4201	3	ACQ	1
MRK486	15 36 38.4	54 33 33	FOS/RD	ACCUM	0.7X2.0-BAR	G650L	6242	1	1500	4201	9		1
IZW121	15 36 38.4	54 33 32	PC	IMAGE	P6	F555W		3	100	3185	1		1
IZW121	15 36 38.4	54 33 32	PC	IMAGE	PC7	F555W		1	100	3292	4	CON	1
IZW121	15 36 38.4	54 33 32	PC	IMAGE	PC7	F555W		1	400	3292	4	CON	1
IZW121	15 36 38.4	54 33 32	PC	IMAGE	P6	F785LP		2	180	3185	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
P19	15 39 29.3	-5 16 32	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	75	3319	2	CON	2
P19	15 39 29.3	-5 16 32	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	86	3319	2	CON	2
P19	15 39 29.3	-5 16 32	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	225	3319	2	CON	1
P19	15 39 29.3	-5 16 32	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	256	3319	2	CON	1
P19	15 39 29.3	-5 16 32	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1200	3319	2	CON	1
PG1538+477	15 39 34.8	47 35 31	FOS/RD	ACQ/BINA	4.3	MIRROR		1	12	4118	2	ACQ	1
PG1538+477	15 39 34.8	47 35 31	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	8	4118	2	ACQ	1
PG1538+477	15 39 34.8	47 35 31	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2000	4118	2		1
4U1538-52	15 42 23.3	-52 23 10	HSP/UV1	PRISM	1.0	F248M/F135W		1	3000	1091	3		1
P19.04	15 46 0.4	-5 8 19	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1800	4015	2		1
3CR323.1	15 47 43.5	20 52 17	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
3C323.1BKG	15 47 43.5	20 52 2*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
1546+027INCA221-106	15 49 29.5	2 37 2	PC	IMAGE	P8	F606W		1	50	1013	9	CON	2
1546+027INCA221-106	15 49 29.5	2 37 2	PC	IMAGE	P8	F725LP		1	100	1013	9	CON	2
INCA221-106-AST1	15 49 42.7	2 24 57	FGS	POS	2	F550W		1	50	1013	9	CON PAR	2
INCA221-106-AST1	15 49 42.7	2 24 57	FGS	POS	2	F550W		1	100	1013	9	CON PAR	2
INCA221-106	15 49 51.6	2 30 3	PC	IMAGE	P8	F658N		1	1	1013	9	CON	2
INCA221-106-AST2	15 50 7.7	2 19 43	FGS	POS	2	F550W		1	1	1013	9	CON PAR	2
MC1548+114A	15 50 43.6	11 20 48	WFC	IMAGE	WF2	F785LP		2	764	4079	2		1
1548+114	15 50 43.7	11 20 48	FOC/96	IMAGE	512X512	F2ND F430W		1	600	3177	1	CON SEL	1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	2.0	G160M	1942	1	330	3022	0		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	2.0	G160M	1942	1	330	3125	0		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2415	1	554	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-A	1335	2	772	1183	4		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2354	1	876	1182	0		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2536	1	876	1182	0		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	G160M	1942	1	990	3022	0		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	G160M	1942	1	990	3125	0		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2442	1	554	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2066	1	990	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2144	1	772	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2154	1	663	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2269	1	554	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2278	1	772	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2331	1	663	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2609	1	772	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-A	1403	2	772	1183	4		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-A	1437	2	772	1183	4		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-A	1304	2	990	1183	4		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-A	1360	2	772	1183	4		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-A	1377	2	772	1183	4		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-A	1539	2	772	1183	4		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	1849	3	876	1182	0		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-A	1649	3	990	1183	4		1
HD141556	15 50 57.5	-33 37 38	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	164	3961	2	ACQ	1
HD141556	15 50 57.5	-33 37 38	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	40	3961	2	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	2.0	ECH-B29	1942	1	880	3125	0		1
HD141556	15 50 57.5	-33 37 38	HRS	IMAGE	2.0	MIRROR-A2		1	96	3125	0		2
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2018	1	1098	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2029	1	1098	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2207	1	1098	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	1942	2	1096	1182	0		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B29	1942	2	1640	3022	0		1
HD141556	15 50 57.5	-33 37 38	HRS	IMAGE	0.25	MIRROR-A2		1	96	3125	0		2
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B29	1942	3	1092	3125	0		1
HD141556	15 50 57.5	-33 37 38	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	1182	0	ACQ	1
HD141556	15 50 57.5	-33 37 38	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	3125	0	ACQ	1
HD141556	15 50 57.5	-33 37 38	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	73	1182	0	ACQ	1
HD141556	15 50 57.5	-33 37 38	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	9	3022	0	ACQ	1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2382	1	990	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-A	1252	2	990	1183	4		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	2003	1	1098	3961	2		1
HD141556	15 50 57.5	-33 37 38	HRS	ACCUM	0.25	ECH-B	1741	4	1312	1182	0		1
RU-LUPI	15 56 42.3	-37 49 16	HRS	ACCUM	2.0	G160M	1400	3	272	1209	2		1
RU-LUPI	15 56 42.3	-37 49 16	HRS	ACCUM	2.0	G160M	1550	5	272	1209	2		1
RU-LUPI	15 56 42.3	-37 49 16	HRS	ACCUM	2.0	G160M	1640	5	272	1209	2		1
RU-LUPI	15 56 42.3	-37 49 16	HRS	ACCUM	2.0	G200M	1900	5	299	1209	2		1
RU-LUPI	15 56 42.3	-37 49 16	HRS	ACCUM	2.0	G270M	2325	2	272	1209	2		1
RU-LUPI	15 56 42.3	-37 49 16	HRS	ACCUM	2.0	G270M	2800	1	244	1209	2		1
DEEP-SURVEY-FIELD-1	15 58 37.8	42 3 9	WFC	IMAGE	WFALL	F606W		11	800	1111	3		1
DEEP-SURVEY-FIELD-1	15 58 37.8	42 3 9	WFC	IMAGE	WFALL	F725LP		11	800	1111	3		1
DEEP-SURVEY-FIELD-1	15 58 37.8	42 3 9	FOC/48	IMAGE	512X1024	F275W		1	700	1111	3	PAR	1
DEEP-SURVEY-FIELD-1	15 58 37.8	42 3 9	FOC/48	IMAGE	512X1024	F430W		1	700	1111	3	PAR	1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	ECH-B	2312	1	180	1066	1		2
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	ECH-B	2313	1	180	1066	1		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	G160M	1329	1	180	1066	1		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	G160M	1331	1	180	1066	1		1
HD143018	15 58 51.1	-26 6 51	HRS	ACCUM	0.25	G160M	1333	1	180	1066	1		1
HD143018	15 58 51.1	-26 6 51	HRS	IMAGE	2.0	MIRROR-A2		1	96	1066	1		1
HD143018	15 58 51.1	-26 6 51	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	1066	1	ACQ	1
HD143118	16 0 7.4	-38 23 47	HRS	WSCAN	0.25	ECH-B	2260	1	72	3266	4		1
HD143118	16 0 7.4	-38 23 47	HRS	ACCUM	0.25	G160M	1560	1	375	3266	4		1
HD143118	16 0 7.4	-38 23 47	HRS	ACCUM	0.25	G160M	1195	1	462	3266	4		1
HD143118	16 0 7.4	-38 23 47	HRS	ACCUM	0.25	G160M	1252	1	215	3266	4		1
HD143118	16 0 7.4	-38 23 47	HRS	ACCUM	0.25	G160M	1347	1	207	3266	4		1
HD143118	16 0 7.4	-38 23 47	HRS	ACCUM	0.25	G160M	1392	1	264	3266	4		1
HD143118	16 0 7.4	-38 23 47	HRS	ACCUM	0.25	G160M	1148	2	495	3266	4		1
HD143118	16 0 7.4	-38 23 47	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	3266	4	ACQ	1
HD143118	16 0 7.4	-38 23 47	HRS	WSCAN	0.25	ECH-B	2025	1	130	3266	4		1
HD143118	16 0 7.4	-38 23 47	HRS	WSCAN	0.25	ECH-B	2059	1	144	3266	4		1
HD143118	16 0 7.4	-38 23 47	HRS	ACCUM	0.25	G160M	1315	1	172	3266	4		1
HD143118	16 0 7.4	-38 23 47	HRS	WSCAN	0.25	ECH-B	1805	1	299	3266	4		1
HD143118	16 0 7.4	-38 23 47	HRS	WSCAN	0.25	ECH-B	1826	1	299	3266	4		1
HD143118	16 0 7.4	-38 23 47	HRS	WSCAN	0.25	ECH-B	2372	1	106	3266	4		1
HD143118	16 0 7.4	-38 23 47	HRS	WSCAN	0.25	ECH-B	2603	1	169	3266	4		1
TEX1559+140	16 1 54.5	13 57 10	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
TEX1559+140	16 1 54.5	13 57 10	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
POINT-CP3.2	16 3 35.8	-47 41 36	S/C	POINTING	V1			1	0	1014	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
POINT-CP3.1	16 3 37.5	-47 41 23	S/C	POINTING	V1			1	0	1014	3		1
GAL-CLUS-160244+431254	16 4 23.1	43 4 47	WFC	IMAGE	ALL	F702W		8	700	1115	3		1
GAL-CLUS-160244+431254	16 4 23.1	43 4 47	WFC	IMAGE	ALL	F850LP		8	700	1115	3		1
HD144217	16 5 26.1	-19 48 19	HRS	IMAGE	0.25	MIRROR-A2		1	51	1162	1		2
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	G160M	1160	1	633	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	G160M	1235	1	633	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	IMAGE	2.0	MIRROR-A2		1	96	1162	1		2
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	ECH-B24	2370	1	230	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	ECH-B28	2025	1	115	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	ECH-B25	2249	1	57	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	ECH-B20	2852	1	115	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	ECH-B22	2603	1	115	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	ECH-B24	2324	1	921	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	ECH-B26	2138	1	115	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	ECH-B27	2062	1	115	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	ECH-B31	1806	1	115	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	ECH-B33	1706	1	633	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	G160M	1420	1	172	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	G160M	1200	1	172	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	G160M	1610	1	172	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	1162	1	ACQ	2
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	ECH-B32	1745	1	172	1162	1		1
HD144217	16 5 26.1	-19 48 19	HRS	ACCUM	0.25	ECH-B30	1862	1	172	1162	1		1
HD144217A	16 5 26.2	-19 48 19	HRS	ACCUM	0.25	ECH-B	2312	1	180	1066	1		2
HD144217A	16 5 26.2	-19 48 19	HRS	ACCUM	0.25	ECH-B	2313	1	180	1066	1		1
HD144217A	16 5 26.2	-19 48 19	HRS	IMAGE	2.0	MIRROR-A2		1	96	1066	1		1
HD144217A	16 5 26.2	-19 48 19	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	1066	1	ACQ	1
HD144470	16 6 48.4	-20 40 9	HRS	ACCUM	0.25	ECH-B	2312	1	600	1066	1		2
HD144470	16 6 48.4	-20 40 9	HRS	ACCUM	0.25	ECH-B	2313	1	600	1066	1		1
HD144470	16 6 48.4	-20 40 9	HRS	IMAGE	2.0	MIRROR-A2		1	96	1066	1		1
HD144470	16 6 48.4	-20 40 9	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	1066	1	ACQ	1
TH28	16 8 29.7	-39 3 11	WFC	IMAGE	WF1	F656N		1	300	3285	4	CON	2
TH28	16 8 29.7	-39 3 11	WFC	IMAGE	WF1	F702W		1	100	3285	4	CON	2
TH28	16 8 29.7	-39 3 11	PC	IMAGE	PC-ND	F702W		1	600	3285	4	CON	1
TH28	16 8 29.7	-39 3 11	PC	IMAGE	PCALL	F702W		1	40	3285	4	ACQ CON	1
Q1607+183	16 10 5.2	18 11 46	FOS/BL	ACCUM	1.0	G160L	1837	1	1000	3967	9		1
Q1607+183	16 10 5.2	18 11 46	FOS/BL	ACQ/BINA	4.3	MIRROR		1	183	3967	9	ACQ	1
TON256	16 14 13.2	26 4 16	WFC	IMAGE	WFALL	F725LP		1	8	3287	3		1
TON256	16 14 13.2	26 4 16	WFC	IMAGE	WFALL	F725LP		1	510	3287	3		1
TON256	16 14 13.2	26 4 16	WFC	IMAGE	WFALL	F725LP		1	212	3287	3		1
TON256	16 14 13.3	26 4 16	FOC/96	IMAGE	512X512	F502M		1	1800	2908	0		1
TON256	16 14 13.3	26 4 16	FOC/96	IMAGE	512X512	F550M		1	1800	2908	0		1
1613.7+1715	16 15 56.9	17 7 52	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
1613.7+1715	16 15 56.9	17 7 52	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	P6	F555W		1	200	3565	2		1
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	P6	F785LP		1	200	3565	2		1
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	ALL	F336W		1	4000	4063	2		1
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	ALL	F547M		1	200	4063	2		1
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	ALL	F547M		1	1000	4063	2		1
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	P8	F439W	4385	1	500	4132	9		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	P8	F284W	2841	1	1000	4132	9		1
NGC6093	16 17 2.5	-22 58 30	PC	IMAGE	P8	F336W	3363	1	1000	4132	9		1
NGC6093-OFFSET	16 17 2.5	-22 58 30*	FOS/BL	ACQ/PEAK	0.5	MIRROR		1	4	4127	3	ACQ CON SEL	1
NGC6093-OFFSET	16 17 2.5	-22 58 30*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	58	4127	3	ACQ CON SEL	1
NGC6093-STAR	16 17 2.5	-22 58 30*	FOS/BL	ACCUM	0.5	G160L		1	6499	4127	3	CON SEL	1
NGC6093-NOVA	16 17 5.2	-22 59 21*	FOS/RD	ACCUM	0.3	G650L		1	4000	4132	9	CON SEL	1
NGC6093-NOVA	16 17 5.2	-22 59 21*	FOS/RD	ACCUM	0.3	PRISM		1	1300	4132	9	CON SEL	1
NGC6093-OFFSET	16 17 5.2	-22 59 21	FOS/RD	ACQ/BINA	4.3	MIRROR		1	2	4132	9	ACQ CON SEL	2
SCO-X-1	16 19 54.6	-15 38 23	HRS	ACCUM	2.0	G160M	1400	4	332	1174	3		3
SCO-X-1	16 19 54.6	-15 38 23	HRS	ACCUM	2.0	G160M	1550	4	332	1174	3		1
SCO-X-1	16 19 54.6	-15 38 23	HRS	ACCUM	2.0	G160M	1240	5	332	1174	3		1
SCO-X-1	16 19 54.6	-15 38 23	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	9	1174	3	ACQ	1
SCOX-1	16 19 55.2	-15 38 24	FOC/96	IMAGE	512X512	F486N		1	1200	3182	1		1
SCOX-1	16 19 55.2	-15 38 24	FOC/96	IMAGE	512X512	F501N		1	1200	3182	1		1
SCOX-1	16 19 55.2	-15 38 24	FOC/96	IMAGE	512X512	F190M		1	1200	3295	3		1
SCOX-1	16 19 55.2	-15 38 24	FOC/96	IMAGE	512X512	F253M		1	1200	3295	3		1
SCOX-1	16 19 55.2	-15 38 24	FOC/96	IMAGE	512X512	F278M		1	1200	3295	3		1
3CR334	16 20 21.9	17 36 24	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
3C334BKG	16 20 23.0	17 36 24*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
HD147165	16 21 11.4	-25 35 33	HRS	ACCUM	0.25	G160M	1560	1	535	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	ACCUM	0.25	G160M	1148	1	1416	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	ACCUM	0.25	G160M	1252	1	308	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	ACCUM	0.25	G160M	1392	1	377	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	WSCAN	0.25	ECH-B	2260	1	103	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	ACCUM	0.25	G160M	1195	1	660	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	ACCUM	0.25	G160M	1347	1	296	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	3215	1	ACQ	2
HD147165	16 21 11.4	-25 35 33	HRS	WSCAN	0.25	ECH-B	2025	1	186	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	WSCAN	0.25	ECH-B	2059	1	207	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	WSCAN	0.25	ECH-B	2323	1	469	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	WSCAN	0.25	ECH-B	2372	1	151	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	ACCUM	0.25	G160M	1315	1	246	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	WSCAN	0.25	ECH-B	1805	1	427	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	WSCAN	0.25	ECH-B	1826	1	427	3215	1		1
HD147165	16 21 11.4	-25 35 33	HRS	WSCAN	0.25	ECH-B	2603	1	241	3215	1		1
B31621+392	16 23 7.7	39 9 33	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
B31621+392	16 23 7.7	39 9 33	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
NGC6121	16 23 35.4	-26 31 32	PC	IMAGE	P6	F555W		1	26	3111	0		1
NGC6121	16 23 35.4	-26 31 32	PC	IMAGE	P6	F785LP		1	26	3111	0		1
AC+48D1595-89	16 24 7.6	48 21 11	FGS	TRANS	ANY	F583W		1	1000	1003	3		3
AC+48D1595-89	16 24 7.6	48 21 11	FGS	TRANS	ANY	F583W		1	1000	1003	4		1
GL623	16 24 7.9	48 21 11	FOC/96	IMAGE	512X512	F486N		6	600	1274	0		1
DARK-PMT	16 27 11.0	-24 19 14	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	300	1081	0		1
1628.5+3808	16 30 13.6	37 58 21	FOS/BL	ACQ/BINA	4.3	MIRROR		1	84	1144	2	ACQ	1
1628.5+3808	16 30 13.6	37 58 21	FOS/BL	ACQ/BINA	4.3	MIRROR		1	84	4191	3	ACQ CON	1
1628.5+3808	16 30 13.6	37 58 21	FOS/BL	ACCUM	1.0	G160L	1837	1	1000	1144	2		1
1628.5+3808	16 30 13.6	37 58 21	FOS/BL	ACCUM	1.0	G130H	1379	1	12240	4191	3	CON	1
1628.6+3806	16 30 20.8	37 56 56	FOS/BL	ACCUM	1.0	G160L	1837	1	1000	1144	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
1628.6+3806	16 30 20.8	37 56 56	FOS/BL	ACCUM	1.0	G130H	1379	1	12240	4191	3	CON	1
1628.6+3806	16 30 20.8	37 56 56	FOS/BL	ACQ/BINA	4.3	MIRROR		1	70	1144	2	ACQ	1
1628.6+3806	16 30 20.8	37 56 56	FOS/BL	ACQ/BINA	4.3	MIRROR		1	70	4191	3	ACQ CON	1
PG1630+377	16 32 1.2	37 37 49	HRS	ACCUM	2.0	G140L	1317	1	300	4177	9		1
PG1630+377	16 32 1.2	37 37 49	HRS	ACCUM	2.0	G140L	1317	2	300	4177	9		1
PG1630+377	16 32 1.2	37 37 49	HRS	ACCUM	2.0	G140L	1317	6	300	4177	9		1
PG1630+377	16 32 1.2	37 37 49	HRS	ACCUM	2.0	G140L	1317	12	300	4177	9		1
PG1630+377	16 32 1.2	37 37 49	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	4180	3	ACQ	1
PG1630+377	16 32 1.2	37 37 49	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	26	4177	9	ACQ	1
PG1630+377	16 32 1.2	37 37 49	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	7	4180	3	ACQ	1
PG1630+377	16 32 1.2	37 37 49	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	2960	4180	3		1
PG1630+377	16 32 1.2	37 37 49	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	6899	4180	3		1
NGC6251	16 32 31.9	82 32 16	WFC	IMAGE	WF1	F555W		1	30	3292	4	CON	1
NGC6251	16 32 31.9	82 32 16	WFC	IMAGE	WF1	F555W		1	400	3292	4	CON	1
NGC6251	16 32 31.9	82 32 16	WFC	IMAGE	WF1	F555W		1	230	3292	4	CON	1
NGC6171	16 32 31.9	-13 3 13	PC	IMAGE	P6	F555W		1	300	3565	2		1
NGC6171	16 32 31.9	-13 3 13	PC	IMAGE	P6	F785LP		1	300	3565	2		1
NGC6251	16 32 32.7	82 32 16	FOC/96	IMAGE	512X512	F502M		1	600	1057	0		1
NGC6251	16 32 32.7	82 32 16	FOC/96	IMAGE	512X512	F342W		1	1200	1057	0		1
NGC6251	16 32 32.7	82 32 16	FOC/96	IMAGE	512X512	F342W		1	2250	3881	2		1
NGC6251	16 32 32.7	82 32 16	FOC/96	IMAGE	512X512	F410M	3389	1	1680	3881	2		1
NGC6251	16 32 32.7	82 32 16	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	7200	4205	9	CON	1
NGC6251	16 32 32.7	82 32 16	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
NGC6164	16 33 59.5	-48 9 6	WFC	IMAGE	ALL	F656N		1	1600	3190	1		1
PG1634+706	16 34 29.1	70 31 33	FOS/RD	ACQ/BINA	4.3	MIRROR		1	4	3221	1	ACQ	1
PG1634+706	16 34 29.1	70 31 33	FOS/RD	RAPID	0.25X2.0	G270H	2762	1	3200	3221	1		1
PG1634+706	16 34 29.1	70 31 33	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR	2762	1	2	3221	1	ACQ	1
HD149881	16 36 58.2	14 28 30	HRS	ACCUM	0.25	G160M	1560	1	1029	4159	3		1
HD149881	16 36 58.2	14 28 30	HRS	ACCUM	0.25	G160M	1195	1	1268	4159	3		1
HD149881	16 36 58.2	14 28 30	HRS	ACCUM	0.25	G160M	1252	1	592	4159	3		1
HD149881	16 36 58.2	14 28 30	HRS	ACCUM	0.25	G160M	1347	1	570	4159	3		1
HD149881	16 36 58.2	14 28 30	HRS	ACCUM	0.25	G160M	1392	1	724	4159	3		1
HD149881	16 36 58.2	14 28 30	HRS	ACCUM	0.25	G160M	1148	2	1361	4159	3		1
HD149881	16 36 58.2	14 28 30	HRS	WSCAN	0.25	ECH-B	2260	1	198	4159	3		1
HD149881	16 36 58.2	14 28 30	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	4159	3	ACQ	1
HD149881	16 36 58.2	14 28 30	HRS	WSCAN	0.25	ECH-B	2025	1	358	4159	3		1
HD149881	16 36 58.2	14 28 30	HRS	WSCAN	0.25	ECH-B	1805	1	822	4159	3		1
HD149881	16 36 58.2	14 28 30	HRS	WSCAN	0.25	ECH-B	1826	1	822	4159	3		1
HD149881	16 36 58.2	14 28 30	HRS	WSCAN	0.25	ECH-B	2059	1	397	4159	3		1
HD149881	16 36 58.2	14 28 30	HRS	WSCAN	0.25	ECH-B	2603	1	464	4159	3		1
HD149881	16 36 58.2	14 28 30	HRS	ACCUM	0.25	G160M	1315	1	472	4159	3		1
HD149881	16 36 58.2	14 28 30	HRS	WSCAN	0.25	ECH-B	2372	1	291	4159	3		1
KP1635+267B	16 37 1.5	26 36 9*	HSP/POL	STAR-SKY	POL0	F277M		1	1000	4034	3		4
KP1635+267B	16 37 1.5	26 36 9*	HSP/POL	STAR-SKY	POL45	F277M		1	1000	4034	3		4
KP1635+267B	16 37 1.5	26 36 9*	HSP/POL	STAR-SKY	POL90	F277M		1	1000	4034	3		4
KP1635+267B	16 37 1.5	26 36 9*	HSP/POL	STAR-SKY	POL135	F277M		1	1000	4034	3		4
KP1635+267A	16 37 1.5	26 36 5	HSP/POL	STAR-SKY	POL0	F277M		1	1000	4034	3		4
KP1635+267A	16 37 1.5	26 36 5	HSP/POL	STAR-SKY	POL45	F277M		1	1000	4034	3		4
KP1635+267A	16 37 1.5	26 36 5	HSP/POL	STAR-SKY	POL90	F277M		1	1000	4034	3		4
KP1635+267A	16 37 1.5	26 36 5	HSP/POL	STAR-SKY	POL135	F277M		1	1000	4034	3		4
1634.9+267	16 37 1.6	26 36 9	PC	IMAGE	P6	F555W		2	900	1116	0		1
1634.9+267	16 37 1.6	26 36 9	PC	IMAGE	P6	F785LP		2	900	1116	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
1634.9+267	16 37 1.6	26 36 9	WFC	IMAGE	WFALL	F725LP		1	400	3287	3		1
1634.9+267	16 37 1.6	26 36 9	WFC	IMAGE	WFALL	F725LP		1	600	3287	3		1
HD149757	16 37 9.5	-10 34 2	HRS	IMAGE	2.0	MIRROR-A2		1	96	1065	1		1
HD149757	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1355	1	326	1065	1		1
HD149757	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1273	1	326	1065	1		1
HD149757	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1275	1	326	1065	1		1
HD149757	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1357	1	326	1065	1		1
HD149757	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1464	3	435	1065	1		1
HD149757	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1461	3	435	1065	1		1
HD149757	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1466	3	435	1065	1		1
HD149757	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1471	3	435	1065	1		1
HD149757	16 37 9.5	-10 34 2	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	1065	1	ACQ	1
HD149757	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1271	1	326	1065	1		1
HD149757	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1353	1	326	1065	1		1
HD149757	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1462	3	435	1065	1		1
HD149757	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1463	3	435	1065	1		1
ZETA-OPH	16 37 9.5	-10 34 2	HRS	IMAGE	0.25	MIRROR-A2		1	51	1189	2		1
ZETA-OPH	16 37 9.5	-10 34 2	HRS	IMAGE	2.0	MIRROR-A2		1	96	1189	2		1
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	25	1189	2	CON	1
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1410	1	27	1189	2		2
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1410	1	435	1189	2		1
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1240	1	27	1189	2		2
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1290	1	27	1189	2		2
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1290	1	435	1189	2		1
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1310	1	27	1189	2		2
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1310	1	435	1189	2		1
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1240	2	435	1189	2		1
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1273	1	27	1189	2		2
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	G160M	1273	1	435	1189	2		1
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	1189	2		1
ZETA-OPH	16 37 9.5	-10 34 2	HRS	OSCAN	0.25	ECH-B	2695	1	163	1189	2		1
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	ECH-B22	2573	1	27	1189	2		2
ZETA-OPH	16 37 9.5	-10 34 2	HRS	ACCUM	0.25	ECH-B22	2573	2	435	1189	2		1
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	ECH-B	2312	1	240	1066	1		2
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	ECH-B	2313	1	240	1066	1		1
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	G160M	1329	1	240	1066	1		1
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	G160M	1331	1	240	1066	1		1
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	G160M	1333	1	240	1066	1		1
HD149757	16 37 9.6	-10 34 1	HRS	IMAGE	2.0	MIRROR-A2		1	96	1066	1		1
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	ECH-A	1419	1	1088	3005	0		2
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	ECH-A	1476	1	1088	3005	0		1
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	ECH-A	1477	1	1088	3005	0		1
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	ECH-A	1283	1	1088	3005	0		2
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	2.0	ECH-A	1419	1	761	3005	0		3
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	2.0	ECH-A	1283	1	435	3005	0		3
HD149757	16 37 9.6	-10 34 1	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	1066	1	ACQ	1
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	ECH-A	1418	1	1088	3005	0		1
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	ECH-A	1476	1	1088	3005	0		1
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	ECH-A	1284	1	1088	3005	0		1
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	2.0	ECH-A	1476	1	435	3005	0		3
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	ECH-B	2325	1	217	3005	0		2
HD149757	16 37 9.6	-10 34 1	HRS	ACCUM	0.25	ECH-B	2326	1	217	3005	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
INCA221-110-AST2	16 39 6.5	39 41 52	FGS	POS	2	F550W		1	12	1139	2	CON PAR	3
INCA221-110-AST1	16 39 27.2	39 43 47	FGS	POS	2	F550W		1	80	1139	2	CON PAR	3
INCA221-110-AST1	16 39 27.2	39 43 47	FGS	POS	2	F550W		1	200	1139	2	CON PAR	3
INCA221-110	16 40 3.9	39 45 33	PC	IMAGE	P8	F658N		1	12	1139	2	CON	3
1638+398INCA221-110	16 40 29.8	39 46 46	PC	IMAGE	P8	F606W		1	80	1139	2	CON	3
1638+398INCA221-110	16 40 29.8	39 46 46	PC	IMAGE	P8	F606W		1	80	1139	9		2
1638+398INCA221-110	16 40 29.8	39 46 46	PC	IMAGE	P8	F606W		1	80	1139	9	CON	1
1638+398INCA221-110	16 40 29.8	39 46 46	PC	IMAGE	P8	F725LP		1	200	1139	2	CON	3
1638+398INCA221-110	16 40 29.8	39 46 46	PC	IMAGE	P8	F725LP		1	80	1139	9		2
NGC6205	16 41 40.6	36 27 32	PC	IMAGE	ALL	F547M		1	100	1052	0		1
NGC6205	16 41 40.6	36 27 32	PC	IMAGE	ALL	F230W		1	250	1052	0		1
NGC6205	16 41 40.6	36 27 32	PC	IMAGE	ALL	F336W		1	130	1052	0		1
M13-123-NORTH	16 41 41.4	36 29 40*	WFC	IMAGE	WFALL	F555W		1	100	1112	3		1
M13-123-NORTH	16 41 41.4	36 29 40*	WFC	IMAGE	WFALL	F555W		1	600	1112	3		1
M13-123-NORTH	16 41 41.4	36 29 40*	WFC	IMAGE	WFALL	F555W		2	600	1112	3		1
M13-123-NORTH	16 41 41.4	36 29 40*	WFC	IMAGE	WFALL	F785LP		1	400	1112	3		1
M13-123-NORTH	16 41 41.4	36 29 40*	WFC	IMAGE	WFALL	F785LP		4	400	1112	3		1
NGC6205	16 41 41.5	36 27 37	PC	IMAGE	P6	F555W		1	56	3111	0		1
NGC6205	16 41 41.5	36 27 37	PC	IMAGE	P6	F785LP		1	56	3111	0		1
M13-400-SOUTH	16 41 41.7	36 20 57*	WFC	IMAGE	WFALL	F555W		1	100	1112	3		1
M13-400-SOUTH	16 41 41.7	36 20 57*	WFC	IMAGE	WFALL	F555W		1	300	1112	3		1
M13-400-SOUTH	16 41 41.7	36 20 57*	WFC	IMAGE	WFALL	F555W		1	1600	1112	3		1
M13-400-SOUTH	16 41 41.7	36 20 57*	WFC	IMAGE	WFALL	F785LP		1	100	1112	3		1
M13-400-SOUTH	16 41 41.7	36 20 57*	WFC	IMAGE	WFALL	F785LP		1	300	1112	3		1
M13-400-SOUTH	16 41 41.7	36 20 57*	WFC	IMAGE	WFALL	F785LP		1	1600	1112	3		1
INCA221-167-AST1	16 42 51.5	39 37 41	FGS	POS	2	F550W		1	8	1139	9	CON PAR	2
INCA221-167-AST1	16 42 51.5	39 37 41	FGS	POS	2	F550W		1	26	1139	9	CON PAR	2
1641+399INCA221-167	16 42 58.7	39 48 37	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
3C345BKG	16 42 58.8	39 48 52*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
3C345	16 42 58.8	39 48 37	PC	IMAGE	P6	F555W		2	40	3228	1		1
3C345	16 42 58.8	39 48 37	PC	IMAGE	P6	F785LP		1	80	3228	1		1
3C345	16 42 58.8	39 48 37	PC	IMAGE	P6	F785LP		2	500	3228	1		1
3C345	16 42 58.8	39 48 37	WFC	IMAGE	WFALL	F725LP		1	600	3287	3		1
3C345	16 42 58.8	39 48 37	WFC	IMAGE	WFALL	F725LP		1	250	3287	3		1
3C345	16 42 58.8	39 48 37	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
3C345	16 42 58.8	39 48 37	HSP/POL	STAR-SKY	POL0	F216M		1	594	3248	2		2
3C345	16 42 58.8	39 48 37	HSP/POL	STAR-SKY	POL0	F277M		1	792	3248	2		1
3C345	16 42 58.8	39 48 37	HSP/POL	STAR-SKY	POL45	F216M		1	594	3248	2		2
3C345	16 42 58.8	39 48 37	HSP/POL	STAR-SKY	POL45	F277M		1	792	3248	2		1
3C345	16 42 58.8	39 48 37	HSP/POL	STAR-SKY	POL90	F216M		1	594	3248	2		2
3C345	16 42 58.8	39 48 37	HSP/POL	STAR-SKY	POL90	F277M		1	792	3248	2		1
3C345	16 42 58.8	39 48 37	HSP/POL	STAR-SKY	POL135	F216M		1	594	3248	2		2
3C345	16 42 58.8	39 48 37	HSP/POL	STAR-SKY	POL135	F277M		1	792	3248	2		1
1641+399INCA221-167	16 42 58.8	39 48 37	PC	IMAGE	P8	F606W		1	8	1139	9		2
1641+399INCA221-167	16 42 58.8	39 48 37	PC	IMAGE	P8	F606W		1	8	1139	9	CON	2
1641+399INCA221-167	16 42 58.8	39 48 37	PC	IMAGE	P8	F725LP		1	8	1139	9		2
1641+399INCA221-167	16 42 58.8	39 48 37	PC	IMAGE	P8	F725LP		1	26	1139	9	CON	2
INCA221-167-AST2	16 43 0.5	39 45 28	FGS	POS	2	F550W		1	4	1139	9	CON PAR	2
INCA221-167	16 43 38.1	39 55 5	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
INCA221-167	16 43 38.3	39 55 5	PC	IMAGE	P8	F658N		1	4	1139	9	CON	2
POINT1641+399INCA221 -167	16 44 1.7	39 43 52	S/C	POINTING	V1			1	1	4154	3	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC6218	16 47 14.5	-1 56 52	PC	IMAGE	P6	F555W		1	80	3227	1		1
NGC6218	16 47 14.5	-1 56 52	PC	IMAGE	P6	F785LP		1	80	3227	1		1
HD150798	16 48 39.9	-69 1 40	HRS	ACCUM	2.0	G200M	1900	2	1200	1179	2		1
HD150798	16 48 39.9	-69 1 40	HRS	ACCUM	2.0	G160M	1554	3	1200	1179	2		1
HD150798	16 48 39.9	-69 1 40	HRS	ACCUM	2.0	ECH-B20	2799	2	218	1179	2		1
HD150798	16 48 39.9	-69 1 40	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	163	1179	2	ACQ	1
HERCULES-A	16 51 8.2	4 59 33	FOC/96	IMAGE	512X512	F220W		1	900	3344	3		1
HERCULES-A	16 51 8.2	4 59 33	FOC/96	IMAGE	512X512	F430W		1	900	3344	3		1
HERCULES-A	16 51 8.2	4 59 33	FOC/96	IMAGE	512X512	F372M		1	1800	3344	3		1
HERCULES-A	16 51 8.2	4 59 33	FOC/96	IMAGE	512X512	F501N		1	1800	3344	3		1
HD151804	16 51 33.6	-41 13 50	HRS	WSCAN	0.25	G160M	1480	1	448	4104	2		1
HD151804	16 51 33.6	-41 13 50	HRS	WSCAN	0.25	G160M	1284	1	448	4104	2		1
HD151804	16 51 33.6	-41 13 50	HRS	WSCAN	0.25	G160M	1676	1	448	4104	2		1
HD151804	16 51 33.6	-41 13 50	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	4104	2	ACQ	1
NGC6240	16 52 58.9	2 24 1	FOC/96	IMAGE	512X512	F372M	3700	4	900	1231	1		1
NGC6240	16 52 58.9	2 24 1	FOC/96	IMAGE	512X512	F437M	4290	6	600	4074	2		1
NGC6240	16 52 58.9	2 24 1	FOC/96	IMAGE	512X512	F502M	4950	6	600	4074	2		1
MRK501	16 53 52.2	39 45 37	FOS/BL	ACCUM	4.3	G190H	1950	1	1440	4057	2		2
MRK501	16 53 52.2	39 45 37	FOS/BL	ACQ/BINA	4.3	MIRROR		1	5	4057	2	ACQ	1
MRK501	16 53 52.2	39 45 37	FOS/BL	ACCUM	4.3	G270H	2766	1	1440	4057	2		1
MKN501	16 53 52.3	39 45 37	HSP/UV2	SINGLE	1.0	F140LP		1	120	3248	2		10
MKN501	16 53 52.3	39 45 37	HSP/POL	SINGLE	POL0	F216M		1	360	3248	2		2
MKN501	16 53 52.3	39 45 37	HSP/POL	SINGLE	POL0	F277M		1	180	3248	2		9
MKN501	16 53 52.3	39 45 37	HSP/POL	SINGLE	POL0	F277M		1	360	3248	2		1
MKN501	16 53 52.3	39 45 37	HSP/POL	SINGLE	POL45	F216M		1	360	3248	2		2
MKN501	16 53 52.3	39 45 37	HSP/POL	SINGLE	POL45	F277M		1	180	3248	2		9
MKN501	16 53 52.3	39 45 37	HSP/POL	SINGLE	POL45	F277M		1	360	3248	2		1
MKN501	16 53 52.3	39 45 37	HSP/POL	SINGLE	POL90	F216M		1	360	3248	2		2
MKN501	16 53 52.3	39 45 37	HSP/POL	SINGLE	POL90	F277M		1	180	3248	2		9
MKN501	16 53 52.3	39 45 37	HSP/POL	SINGLE	POL90	F277M		1	360	3248	2		1
MKN501	16 53 52.3	39 45 37	HSP/POL	SINGLE	POL135	F216M		1	360	3248	2		2
MKN501	16 53 52.3	39 45 37	HSP/POL	SINGLE	POL135	F277M		1	180	3248	2		9
MKN501	16 53 52.3	39 45 37	HSP/POL	SINGLE	POL135	F277M		1	360	3248	2		1
HD152236	16 53 59.7	-42 21 43	HSP/UV2	SINGLE	1.0	F152M		1	1800	3926	1		2
HD152236	16 53 59.7	-42 21 43	HSP/UV2	PRISM	1.0	F262M/F145M		1	1800	1095	1		2
VB8	16 55 31.0	-8 19 44	WFC	IMAGE	WF2-FIX	F606W		1	10	3288	3		6
VYS782-C	16 55 35.5	-8 23 39	FOC/96	IMAGE	512X512	F480LP		5	600	1274	0		1
NGC6254	16 57 9.0	-4 5 57	PC	IMAGE	P6	F555W		1	70	3565	2		1
NGC6254	16 57 9.0	-4 5 57	PC	IMAGE	P6	F785LP		1	70	3565	2		1
INCA221-111	16 57 31.7	5 16 28	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
HZ-HER	16 57 49.8	35 20 33	FOS/BL	ACCUM	4.3	G130H		1	1600	3202	1		2
HZ-HER	16 57 49.8	35 20 33	FOS/BL	ACCUM	4.3	G190H		1	1350	3202	1		1
HZ-HER	16 57 49.8	35 20 33	FOS/BL	ACCUM	4.3	G270H		1	1350	3202	1		2
HZ-HER	16 57 49.8	35 20 33	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	3202	1	ACQ	5
HZ-HER	16 57 49.8	35 20 33	FOS/BL	PERIOD	4.3	G160L	1830	1	2534	3202	1		3
POINT1656+053INCA221 -111	16 57 59.3	5 5 44	S/C	POINTING	V1			1	1	4154	3	CON	1
1656+053INCA221-111	16 58 33.4	5 15 16	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
1656+053INCA221-113	16 58 33.4	5 15 16	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
INCA221-113	16 58 39.0	5 3 1	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
POINT1656+053INCA221 -113	16 59 16.4	5 10 36	S/C	POINTING	V1			1	1	4154	3	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PG1700+518	17 1 24.9	51 49 20	FOC/96	IMAGE	512X512	F152M		1	1080	1145	5		1
PG1700+518	17 1 24.9	51 49 20	FOC/96	IMAGE	512X512	F231M		1	420	1145	5		1
PG1700+518	17 1 24.9	51 49 20	FOS/BL	ACQ/BINA	4.3	MIRROR		1	9	3222	2	ACQ	1
PG1700+518	17 1 24.9	51 49 20	FOS/BL	ACQ/BINA	4.3	MIRROR		1	16	1018	2	ACQ	1
PG1700+518	17 1 24.9	51 49 20	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	3	1018	2	ACQ	1
PG1700+518	17 1 24.9	51 49 20	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR		1	3	3222	2	ACQ	1
PG1700+518	17 1 24.9	51 49 20	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	15800	1018	2		1
PG1700+518	17 1 24.9	51 49 20	FOS/BL	RAPID	0.25X2.0	G130H	1300	1	15800	3222	2		1
GX339-4	17 2 49.4	-48 47 22	HSP/UV2	SINGLE	10.0	F140LP		3	1200	3255	2		3
HD153919	17 3 56.6	-37 50 38	HSP/UV1	SINGLE	1.0	F220W		1	20	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/UV2	SINGLE	1.0	F145M		1	20	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/UV2	SINGLE	1.0	F184W		1	20	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/UV2	SINGLE	1.0	F248M		1	20	1097	2		10
HD153919	17 3 56.6	-37 50 38	HSP/UV2	SINGLE	1.0	F284M		1	20	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL0	F216M		1	30	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL0	F237M		1	30	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL0	F277M		1	30	1097	2		10
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL0	F327M		1	30	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL45	F216M		1	30	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL45	F237M		1	30	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL45	F277M		1	30	1097	2		10
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL45	F327M		1	30	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL90	F216M		1	30	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL90	F237M		1	30	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL90	F277M		1	30	1097	2		10
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL90	F327M		1	30	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL135	F216M		1	30	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL135	F237M		1	30	1097	2		1
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL135	F277M		1	30	1097	2		10
HD153919	17 3 56.6	-37 50 38	HSP/POL	SINGLE	POL135	F327M		1	30	1097	2		1
1E1704+710	17 4 26.0	70 57 35	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
1E1704+710	17 4 26.0	70 57 35	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
V2051-OPH	17 8 19.1	-25 48 29	HSP/UV1	SINGLE	1.0	F145M		1	7200	3238	3		2
IE1711+712	17 11 9.0	71 12 30	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
IE1711+712	17 11 9.0	71 12 30	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
IE1711+712	17 11 9.0	71 12 30	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
IE1711+712	17 11 9.0	71 12 30	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
M92	17 17 7.3	43 8 11	PC	IMAGE	PC6	F336W		1	20	1112	3		1
M92	17 17 7.3	43 8 11	PC	IMAGE	PC6	F336W		1	100	1112	3		1
M92	17 17 7.3	43 8 11	PC	IMAGE	PC6	F336W		1	800	1112	3		1
NGC6341-M92	17 17 7.3	43 8 11	PC	IMAGE	PC6	F336W		1	800	4171	3		1
NGC6341-M92	17 17 7.3	43 8 11	PC	IMAGE	PC6	F336W		3	2200	4171	3		1
NGC6341-OFF	17 17 7.3	43 8 1	PC	IMAGE	PC6	F336W		1	800	4171	3		1
NGC6341-OFF	17 17 7.3	43 8 1	PC	IMAGE	PC6	F336W		3	2200	4171	3		1
NGC6341	17 17 7.3	43 8 12	PC	IMAGE	P6	F555W		1	56	3111	0		1
NGC6341	17 17 7.3	43 8 12	PC	IMAGE	P6	F785LP		1	56	3111	0		1
PG1718+481	17 19 38.1	48 4 12	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
PG1718+481	17 19 38.1	48 4 12	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
PG1718+481	17 19 38.3	48 4 12	FOS/RD	ACQ/BINA	4.3	MIRROR		1	4	4112	2	ACQ	1
PG1718+481	17 19 38.3	48 4 12	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	2	4112	2	ACQ	1
PG1718+481	17 19 38.3	48 4 12	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1200	4112	2		1
POINT-CP6.1	17 20 2.6	-33 39 36	S/C	POINTING	V1			1	0	1014	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
POINT-CP6.2	17 20 10.4	-33 35 55	S/C	POINTING	V1			1	0	1014	3	CON	1
DRACO-171922+5757	17 20 10.6	57 54 41	WFC	IMAGE	WFALL	F555W		1	200	1110	4	CON	1
DRACO-171922+5757	17 20 10.6	57 54 41	WFC	IMAGE	WFALL	F555W		1	2000	1110	4	CON	1
DRACO-171922+5757	17 20 10.6	57 54 41	WFC	IMAGE	WFALL	F785LP		1	200	1110	4	CON	1
DRACO-171922+5757	17 20 10.6	57 54 41	WFC	IMAGE	WFALL	F785LP		1	1600	1110	4	CON	1
INCA221-114	17 27 11.1	50 17 0	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
POINT1727+502INCA221 -114	17 28 9.7	50 26 9	S/C	POINTING	V1			1	1	4154	3	CON	1
1727+502INCA221-114	17 28 18.5	50 13 10	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
1727+502INCA221-115	17 28 18.5	50 13 10	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
INCA221-115	17 28 29.8	50 9 51	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
POINT1727+502INCA221 -115	17 29 28.4	50 16 38	S/C	POINTING	V1			1	1	4154	3	CON	1
HD159181	17 30 25.9	52 18 5	HRS	ACCUM	2.0	G160M	1550	3	300	1176	1		1
HD159181	17 30 25.9	52 18 5	HRS	ACCUM	2.0	G200M	1900	4	300	1176	1		1
HD159181	17 30 25.9	52 18 5	HRS	ACCUM	2.0	G160M	1400	6	300	1176	1		1
HD159181	17 30 25.9	52 18 5	HRS	ACCUM	2.0	ECH-B	2800	2	28	1176	1		1
HD159181	17 30 25.9	52 18 5	HRS	IMAGE	2.0	MIRROR-A2		1	96	1176	1		1
HD159181	17 30 25.9	52 18 5	HRS	ACCUM	2.0	G160M	1300	2	163	1176	1		1
HD159181	17 30 25.9	52 18 5	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	73	1176	1	ACQ	1
NGC6362	17 31 54.8	-67 2 52	PC	IMAGE	P6	F555W		1	100	3227	1		1
NGC6362	17 31 54.8	-67 2 52	PC	IMAGE	P6	F785LP		1	100	3227	1		1
GX-1+4	17 32 2.1	-24 44 44	HSP/UV1	PRISM	1.0	F248M/F135W		1	3000	1091	3		1
BD+68D946	17 36 27.4	68 20 22	FGS	TRANS	ANY	F583W		1	1000	1003	3		2
BD+68D946	17 36 27.5	68 20 22	FOC/96	IMAGE	512X512	F486N		6	600	3176	1		1
NGC6402	17 37 37.9	-3 14 38	PC	IMAGE	ALL	F656N	6559	1	2500	3002	0	ACQ	1
NGC6402	17 37 37.9	-3 14 38	FOC/96	IMAGE	512X512	F430W	3920	1	2500	3002	0	ACQ	1
NGC6402	17 37 37.9	-3 14 38	FOC/96	IMAGE	512X512	F342W	3377	1	2500	3002	0	ACQ	1
NGC6402-NOVA	17 37 37.9	-3 14 38*	FOS/RD	ACCUM	0.5	PRISM		1	2500	3002	0		1
NGC6402-OFFSET	17 37 37.9	-3 14 38	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	3002	0	ACQ	1
NGC6402-NOVA	17 37 38.2	-3 14 41*	FOS/RD	ACCUM	0.5	PRISM		1	4500	3094	0		1
NGC6402-B	17 37 38.4	-3 14 37	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	10	3094	0	ACQ	1
NGC6402-B	17 37 38.4	-3 14 37	FOS/RD	ACQ/PEAK	0.3	MIRROR		1	20	3094	0	ACQ	1
HD160578	17 42 29.3	-39 1 47	HRS	ACCUM	0.25	G160M	1560	1	139	3266	5		1
HD160578	17 42 29.3	-39 1 47	HRS	ACCUM	0.25	G160M	1195	1	172	3266	5		1
HD160578	17 42 29.3	-39 1 47	HRS	ACCUM	0.25	G160M	1252	1	80	3266	5		1
HD160578	17 42 29.3	-39 1 47	HRS	ACCUM	0.25	G160M	1347	1	77	3266	5		1
HD160578	17 42 29.3	-39 1 47	HRS	ACCUM	0.25	G160M	1392	1	98	3266	5		1
HD160578	17 42 29.3	-39 1 47	HRS	ACCUM	0.25	G160M	1148	2	184	3266	5		1
HD160578	17 42 29.3	-39 1 47	HRS	WSCAN	0.25	ECH-B	2260	1	27	3266	5		1
HD160578	17 42 29.3	-39 1 47	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	3266	5	ACQ	1
HD160578	17 42 29.3	-39 1 47	HRS	ACCUM	0.25	G160M	1315	1	64	3266	5		1
HD160578	17 42 29.3	-39 1 47	HRS	WSCAN	0.25	ECH-B	2025	1	48	3266	5		1
HD160578	17 42 29.3	-39 1 47	HRS	WSCAN	0.25	ECH-B	2059	1	54	3266	5		1
HD160578	17 42 29.3	-39 1 47	HRS	WSCAN	0.25	ECH-B	2372	1	39	3266	5		1
HD160578	17 42 29.3	-39 1 47	HRS	WSCAN	0.25	ECH-B	2603	1	63	3266	5		1
HD160578	17 42 29.3	-39 1 47	HRS	WSCAN	0.25	ECH-B	1805	1	111	3266	5		1
HD160578	17 42 29.3	-39 1 47	HRS	WSCAN	0.25	ECH-B	1826	1	111	3266	5		1
GAMMA-OPH	17 47 53.6	2 42 31	WFC	IMAGE	WFALL	F555W		1	20	3313	4	CON	2
GAMMA-OPH	17 47 53.6	2 42 31	WFC	IMAGE	WFALL	F555W		1	1000	3313	4	CON	2
1749+701INCA221-169	17 48 32.8	70 5 50	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
NGC6445	17 49 15.2	-20 0 34	FOC/96	IMAGE	512X512	F130M		1	480	3336	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC6445	17 49 15.2	-20 0 34	FOC/96	IMAGE	512X512	F210M		1	480	3336	3		1
NGC6445	17 49 15.2	-20 0 34	FOC/96	IMAGE	512X512	F278M		1	480	3336	3		1
POINT1749+701INCA221 -169	17 50 8.1	69 56 33	S/C	POINTING	V1			1	1	4154	3	CON	1
INCA221-169	17 50 11.8	70 8 33	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
BD+4D3561	17 57 48.3	4 41 34	PC	IMAGE	P6	F875M		1	40	1062	9		2
BD+4D3561	17 57 48.3	4 41 34	PC	IMAGE	P6	F622W		4	1000	1062	9		2
BD+4D3561	17 57 48.3	4 41 34	PC	IMAGE	P6	F875M		4	1000	1062	9		2
BARNARDS-STAR	17 57 48.5	4 41 36	FGS	POS	PRIME	F550W		1	52	2941	9		34
BARNARDS-STAR	17 57 48.5	4 41 36	FGS	POS	PRIME	F550W		1	52	2942	9		16
GLIESE699	17 57 49.2	4 40 5	FGS	POS	PRIME	F550W		1	52	2938	9	CON	17
GLIESE699	17 57 49.2	4 40 5	FGS	TRANS	PRIME	F583W		1	100	2938	9	ACQ	1
BARNARDS-STAR	17 57 51.4	4 33 3	WFC	IMAGE	WF-ND	F606W		1	17	3288	3		6
POINT1758-651INCA221 -116	18 1 18.8	-65 7 49	S/C	POINTING	V1			1	1	4154	3	CON	1
INCA221-116	18 2 0.7	-64 55 20	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
FIELD180310-295143	18 3 10.0	-29 51 43	WFC	IMAGE	ALL	F555W		1	2000	1106	1		1
FIELD180310-295143	18 3 10.0	-29 51 43	WFC	IMAGE	ALL	F555W		1	1600	1106	1		1
FIELD180310-295143	18 3 10.0	-29 51 43	WFC	IMAGE	ALL	F785LP		1	2000	1106	1		2
FIELD180310-295143	18 3 10.0	-29 51 43	WFC	IMAGE	WFALL	F555W		2	200	4085	2		1
FIELD180310-295143	18 3 10.0	-29 51 43	WFC	IMAGE	WFALL	F555W		4	2000	4085	2		1
FIELD180310-295143	18 3 10.0	-29 51 43	WFC	IMAGE	WFALL	F785LP		2	200	4085	2		1
FIELD180310-295143	18 3 10.0	-29 51 43	WFC	IMAGE	WFALL	F785LP		4	2000	4085	2		1
BAADES-WINDOW-FIELD	18 3 13.3	-29 56 44	FOC/96	IMAGE	512X512	F342W		1	1800	1281	1		1
BAADES-WINDOW-FIELD	18 3 13.3	-29 56 44	FOC/96	IMAGE	512X512	F430W		1	1800	1281	1		1
BAADES-WINDOW-FIELD	18 3 13.3	-29 56 44	FOC/96	IMAGE	512X512	F480LP		1	1800	1281	1		1
1758-651INCA221-116	18 3 23.4	-65 7 37	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
NGC6522	18 3 34.1	-30 2 2	PC	IMAGE	ALL	F555W		1	1800	1281	1	PAR	1
NGC6522	18 3 34.1	-30 2 2	PC	IMAGE	ALL	F785LP		1	1800	1281	1	PAR	2
HD164794	18 3 52.4	-24 21 38	HSP/UV2	SINGLE	1.0	F152M		1	1800	3926	1		2
HD164794	18 3 52.4	-24 21 38	HSP/UV2	PRISM	1.0	F262M/F145M		1	1800	1095	1		2
NGC6537	18 5 13.3	-19 50 14	FOC/96	IMAGE	512X512	F130M		1	480	3336	3		1
NGC6537	18 5 13.3	-19 50 14	FOC/96	IMAGE	512X512	F210M		1	480	3336	3		1
NGC6537	18 5 13.3	-19 50 14	FOC/96	IMAGE	512X512	F278M		1	480	3336	3		1
3CR371	18 6 50.7	69 49 28	HSP/UV2	IMAGE	10.0	F140LP		1	841	1099	2	ACQ CON	1
3CR371	18 6 50.7	69 49 28	HSP/UV2	SINGLE	10.0	F140LP		1	16200	1099	2	CON	1
3CR371	18 6 51.1	69 49 34	HSP/POL	SINGLE	POL0	F277M		1	180	3248	2		20
3CR371	18 6 51.1	69 49 34	HSP/POL	SINGLE	POL45	F277M		1	180	3248	2		20
3CR371	18 6 51.1	69 49 34	HSP/POL	SINGLE	POL90	F277M		1	180	3248	2		20
3CR371	18 6 51.1	69 49 34	HSP/POL	SINGLE	POL135	F277M		1	180	3248	2		20
DQ-HER-A	18 7 29.7	45 51 39*	FOS/BL	ACCUM	4.3	G160L	1837	1	2400	1067	3		1
DQ-HER	18 7 30.2	45 51 31	HSP/UV1	PRISM	1.0	F248M/F135W		1	16920	1090	2		1
DQ-HER	18 7 30.3	45 51 31	WFC	IMAGE	ALL	F606W		2	1500	1067	3	ACQ	1
DQ-HER	18 7 30.3	45 51 31	FOS/BL	ACQ/BINA	4.3	MIRROR		1	5	1067	3	ACQ	1
DQ-HER	18 7 30.3	45 51 32	FOS/BL	ACCUM	1.0	G130H		1	2100	4058	2		2
DQ-HER	18 7 30.3	45 51 32	FOS/BL	ACCUM	1.0	G190H		1	1600	4058	2		1
DQ-HER	18 7 30.3	45 51 32	FOS/BL	ACCUM	1.0	G270H		1	1400	4058	2		2
DQ-HER	18 7 30.3	45 51 32	FOS/BL	ACQ/BINA	4.3	MIRROR		1	0	4058	2	ACQ	4
DQ-HER	18 7 30.3	45 51 32	FOS/BL	PERIOD	1.0	G160L	1830	1	3979	4058	2		2
DQ-HER-B	18 7 30.9	45 51 36*	FOS/BL	ACCUM	4.3	G160L	1837	1	2400	1067	3		1
W-SER	18 9 50.7	-15 33 0	HRS	ACCUM	0.25	G160M	1400	4	540	1190	1		2
W-SER	18 9 50.7	-15 33 0	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	1190	1	ACQ	2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD165499	18 10 26.6	-62 0 19	HSP/UV1	SINGLE	1.0	F240W		1	3600	3007	0	CON SEL	1
HD165499	18 10 26.6	-62 0 19	HSP/UV1	SINGLE	1.0	F140LP		1	3600	3007	0	CON SEL	1
HD165499	18 10 26.6	-62 0 19	HSP/POL	SINGLE	POL0	F327M		1	3600	3007	0	CON SEL	1
AM-HER	18 16 13.3	49 52 4	FOS/BL	ACCUM	4.3	G130H		1	1328	1051	0		1
AM-HER	18 16 13.3	49 52 4	FOS/BL	ACCUM	4.3	G130H		1	1424	1051	0		5
AM-HER	18 16 13.3	49 52 4	FOS/BL	ACCUM	4.3	G190H		1	1328	1051	0		2
AM-HER	18 16 13.3	49 52 4	FOS/BL	ACCUM	4.3	G190H		1	1424	1051	0		2
AM-HER	18 16 13.3	49 52 4	FOS/BL	ACQ/PEAK	0.3	G570H		1	5	1051	0	ACQ	2
AM-HER	18 16 13.3	49 52 4	FOS/BL	ACQ/PEAK	1.0	G570H		1	5	1051	0	ACQ	2
AM-HER	18 16 13.3	49 52 4	FOS/BL	ACQ/PEAK	4.3	G570H		1	5	1051	0	ACQ	2
FIELD181834-325058	18 18 34.0	-32 50 58	WFC	IMAGE	WFALL	F336W		1	100	3290	3		1
FIELD181834-325058	18 18 34.0	-32 50 58	WFC	IMAGE	WFALL	F555W		1	100	3290	3		1
FIELD181834-325058	18 18 34.0	-32 50 58	WFC	IMAGE	WFALL	F555W		1	1800	3290	3		2
FIELD181834-325058	18 18 34.0	-32 50 58	WFC	IMAGE	WFALL	F785LP		1	100	3290	3		1
FIELD181834-325058	18 18 34.0	-32 50 58	WFC	IMAGE	WFALL	F785LP		1	1800	3290	3		1
NGC6611B	18 18 38.6	-13 52 51	PC	IMAGE	ALL	F656N		1	1800	1072	9		1
HD167756	18 18 40.1	-42 17 18	HRS	IMAGE	0.25	MIRROR-A2		1	129	1165	0	ACQ	1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	ECH-B	2370	1	288	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	G140M	1400	1	230	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	G140M	1300	1	115	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	G140M	1240	2	230	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	G140M	1175	1	288	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	G140M	1200	1	345	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	G140M	1350	1	172	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	G140M	1540	1	403	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	ECH-B	2025	1	403	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	ECH-B	2062	1	403	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	ECH-B	1806	2	345	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	ECH-A	1333	3	345	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	ECH-A	1241	4	345	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	ECH-A	1392	5	403	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	ECH-A	1549	6	345	1165	0		1
HD167756	18 18 40.1	-42 17 18	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	18	1165	0	ACQ	1
HD167756	18 18 40.1	-42 17 18	HRS	ACCUM	0.25	ECH-A	1301	2	403	1165	0		1
NGC6611A	18 18 44.5	-13 47 17	PC	IMAGE	ALL	F656N		1	1800	1072	9		1
M16	18 18 50.0	-13 15 40	WFC	IMAGE	WFALL	F658N		2	2000	4170	3		1
M16	18 18 50.0	-13 15 40	WFC	IMAGE	WFALL	F673N		2	2000	4170	3		1
M16	18 18 50.0	-13 15 40	WFC	IMAGE	WFALL	F502N		2	2200	4170	3		1
M16	18 18 50.0	-13 15 40	WFC	IMAGE	WFALL	F547M		2	140	4170	3		1
M16	18 18 50.0	-13 15 40	WFC	IMAGE	WFALL	F656N		2	2200	4170	3		1
NGC6611C	18 18 51.7	-13 53 10	PC	IMAGE	ALL	F656N		1	1800	1072	9		1
NGC6611D	18 18 56.1	-13 57 23	PC	IMAGE	ALL	F656N		1	1800	1072	9		1
E1821+643	18 21 57.1	64 20 37	HRS	IMAGE	2.0	MIRROR-N2		1	307	4094	2		1
E1821+643	18 21 57.1	64 20 37	HRS	ACCUM	2.0	G270M	2800	3	1152	4094	2		1
E1821+643	18 21 57.1	64 20 37	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	204	4094	2	ACQ	1
E1821+643	18 21 57.1	64 20 37	HRS	ACCUM	2.0	G160M	1250	6	1209	4094	2		1
E1821+643	18 21 57.2	64 20 36	FOS/BL	ACQ/BINA	4.3	MIRROR		1	3	3221	1	ACQ	1
E1821+643	18 21 57.2	64 20 36	FOS/BL	ACCUM	0.25X2.0	G130H	1379	1	5000	3221	1		1
E1821+643	18 21 57.2	64 20 36	FOS/RD	ACQ/BINA	4.3	MIRROR		1	2	1025	0	ACQ	1
E1821+643	18 21 57.2	64 20 36	FOS/RD	RAPID	0.25X2.0	G190H	1945	1	1720	1025	0		1
E1821+643	18 21 57.2	64 20 36	FOS/RD	RAPID	0.25X2.0	G270H	2762	1	2400	1025	0		1
E1821+643	18 21 57.2	64 20 36	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	2	1025	0	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
E1821+643	18 21 57.2	64 20 36	FOS/BL	ACQ/PEAK	0.25X2.0	MIRROR	1379	1	2	3221	1	ACQ	1
SAO103656	18 22 54.8	14 58 12	FGS	TRANS	3	PUPIL		1	500	3061	1		2
SAO103656	18 22 54.8	14 58 12	FGS	TRANS	3	F583W		1	300	3886	1		7
SAO103656	18 22 54.8	14 58 12	FGS	TRANS	3	PUPIL		1	300	3886	1		7
NGC6624	18 23 40.6	-30 21 41	PC	IMAGE	P8	F439W	4385	1	500	4132	9		1
NGC6624	18 23 40.6	-30 21 41	PC	IMAGE	P8	F284W	2841	1	1000	4132	9		1
NGC6624	18 23 40.6	-30 21 41	PC	IMAGE	P8	F336W	3363	1	1000	4132	9		1
NGC6624	18 23 40.7	-30 21 39	FOC/96	IMAGE	512X512	F430W		1	1800	3218	1		2
NGC6624	18 23 40.7	-30 21 39	FOC/96	IMAGE	512X512	F480LP		1	1800	3218	1		2
NGC6624	18 23 40.7	-30 21 39	FOC/96	IMAGE	512X1024	F140W		1	1800	3218	1		2
NGC6624	18 23 40.7	-30 21 39	FOC/96	IMAGE	512X512	F2ND F430W		1	1800	3218	1		2
NGC6624	18 23 40.7	-30 21 39	FOC/96	IMAGE	512X512	F2ND F480LP		1	1800	3218	1		2
NGC6624	18 23 40.7	-30 21 39	FOC/96	IMAGE	512X512	F1ND F2ND F430W		1	1800	3218	1		2
NGC6624	18 23 40.7	-30 21 39	FOC/96	IMAGE	512X512	F1ND F2ND F480LP		1	1800	3218	1		2
NGC6624-OUTER	18 23 40.7	-30 21 39	WFC	IMAGE	ALL	F555W		1	1800	3218	1	PAR	6
NGC6624-OUTER	18 23 40.7	-30 21 39	WFC	IMAGE	ALL	F785LP		1	1800	3218	1	PAR	8
INCA221-122-AST2	18 31 33.3	28 15 43	FGS	POS	2	F550W		1	150	1475	9	CON PAR	2
INCA221-122	18 31 55.9	28 25 25	PC	IMAGE	P8	F658N		1	150	1475	9	CON	2
INCA221-122-AST1	18 32 34.0	28 23 33	FGS	POS	2	F550W		1	150	1475	9	CON PAR	4
1830+285INCA221-122	18 32 50.2	28 33 35	PC	IMAGE	P8	F606W		1	130	1475	9	CON	2
1830+285INCA221-122	18 32 50.2	28 33 35	PC	IMAGE	P8	F725LP		1	300	1475	9	CON	2
PKS1830-211	18 33 39.9	-21 3 40	PC	IMAGE	PC6	F785LP		4	2000	4172	3		1
3C382	18 35 3.4	32 41 48	FOC/96	IMAGE	512X512	F220W		1	900	3344	3		1
3C382	18 35 3.4	32 41 48	FOC/96	IMAGE	512X512	F430W		1	900	3344	3		1
3C382	18 35 3.4	32 41 48	FOC/96	IMAGE	512X512	F372M		1	1800	3344	3		1
3C382	18 35 3.4	32 41 48	FOC/96	IMAGE	512X512	F501N		1	1800	3344	3		1
NGC6656-R2	18 36 24.0	-23 44 28	PC	IMAGE	PCALL-FIX	F555W	5479	1	1000	2944	2		2
NGC6656-R2	18 36 24.0	-23 44 28	PC	IMAGE	PCALL-FIX	F785LP	8958	1	1000	2944	2		1
NGC6656-R1	18 36 24.1	-23 49 28	PC	IMAGE	PCALL-FIX	F555W	5479	1	1000	2944	2		2
NGC6656-R1	18 36 24.1	-23 49 28	PC	IMAGE	PCALL-FIX	F785LP	8958	1	1000	2944	2		1
NGC6656	18 36 24.2	-23 54 12	PC	IMAGE	ALL	F555W	5479	1	26	2947	2		3
NGC6656	18 36 24.2	-23 54 12	PC	IMAGE	ALL	F791W	8537	1	26	2947	2		2
NGC6656	18 36 24.2	-23 54 12	PC	IMAGE	PCALL-FIX	F555W	5479	1	100	2944	2		2
NGC6656	18 36 24.2	-23 54 12	PC	IMAGE	PCALL-FIX	F555W	5479	1	26	2944	2		2
NGC6656	18 36 24.2	-23 54 12	PC	IMAGE	PCALL-FIX	F785LP	8958	1	100	2944	2		2
NGC6656	18 36 24.2	-23 54 12	PC	IMAGE	PCALL-FIX	F785LP	8958	1	26	2944	2		1
ALPHA-LYRAE	18 36 55.5	38 46 47	WFC	IMAGE	WFALL	F555W		1	0	3313	4	CON	2
ALPHA-LYRAE	18 36 55.5	38 46 47	WFC	IMAGE	WFALL	F555W		1	25	3313	4	CON	2
3C390.3	18 42 9.5	79 46 16	FOC/96	IMAGE	512X512	F152M	1500	1	2000	3180	1		1
3C390.3	18 42 9.5	79 46 16	FOC/96	IMAGE	512X512	F130M	1270	1	2400	3180	1		1
3C390.3	18 42 9.5	79 46 16	FOC/96	IMAGE	512X512	F210M	2160	1	2200	3180	1		1
3C390.3	18 42 9.5	79 46 16	FOC/96	IMAGE	512X512	F502M	4950	1	2200	3180	1		1
3C390.3	18 42 9.5	79 46 16	FOC/96	IMAGE	512X512	F190M	1975	1	2200	3180	1		1
3C390.3	18 42 9.5	79 46 16	FOC/96	IMAGE	512X512	F550M	5470	1	2200	3180	1		1
NGC6681	18 43 12.7	-32 17 31	PC	IMAGE	ALL	F336W		1	4000	4063	2		1
NGC6681	18 43 12.7	-32 17 31	PC	IMAGE	ALL	F547M		1	200	4063	2		1
NGC6681-OFFSET	18 43 12.7	-32 17 31*	FOS/BL	ACQ/PEAK	0.5	MIRROR		1	4	4127	3	ACQ CON SEL	1
NGC6681-OFFSET	18 43 12.7	-32 17 31*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	58	4127	3	ACQ CON SEL	1
NGC6681-STAR	18 43 12.7	-32 17 31*	FOS/BL	ACCUM	0.5	G160L		1	6499	4127	3	CON SEL	1
NGC6703	18 48 2.5	45 34 46	FOC/96	IMAGE	512X512	F342W	3400	1	600	4205	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC6703	18 48 2.5	45 34 46	FOC/96	IMAGE	512X512	F502M	5300	1	300	4205	3		1
ROSS-154	18 49 47.6	-23 50 0	PC	IMAGE	PC-ND	F606W		1	30	3288	3		6
ROSS154	18 49 50.0	-23 50 9	PC	IMAGE	P6	F875M		1	40	1062	9		1
ROSS154	18 49 50.0	-23 50 9	PC	IMAGE	P6	F622W		4	400	1062	9		1
ROSS154	18 49 50.0	-23 50 9	PC	IMAGE	P6	F875M		4	400	1062	9		1
NGC6712	18 53 5.0	-8 42 20	PC	IMAGE	P8	F439W	4385	1	2000	1053	0		1
NGC6712	18 53 5.0	-8 42 20	PC	IMAGE	P8	F336W	3363	1	2000	1053	0		1
NGC6712	18 53 5.0	-8 42 20	PC	IMAGE	P8	F336W	3363	1	1700	1053	0		1
NGC6712-OFFSET	18 53 5.0	-8 42 20	FOS/RD	ACQ/BINA	4.3	MIRROR		1	1	1053	0	ACQ CON SEL	2
NGC6712-STAR	18 53 5.0	-8 42 20*	FOS/RD	ACCUM	0.5	G650L		1	4500	1053	0	CON SEL	1
NGC6712-STAR	18 53 5.0	-8 42 20*	FOS/RD	ACCUM	0.5	PRISM		1	4500	1053	0	CON SEL	1
4C56.28	18 58 26.9	56 45 57	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
4C56.28	18 58 26.9	56 45 57	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
GRW+70-8247	19 0 10.1	70 39 52	FOS/BL	ACCUM	4.3	G190H	1900	1	1200	1049	1		1
GRW+70-8247	19 0 10.1	70 39 52	FOS/BL	ACQ/BINA	4.3	MIRROR		1	2	1049	1	ACQ	1
GRW+70-8247	19 0 10.1	70 39 52	FOS/BL	ACCUM	4.3	G270H	2766	1	300	1049	1		1
GRW+70-8247	19 0 10.1	70 39 52	FOS/BL	ACCUM	4.3	G130H	1379	8	1440	1049	1		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F230W		1	30	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F230W		1	300	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F230W		1	700	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F555W		1	30	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F555W		1	400	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F555W		1	700	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F702W		1	30	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F702W		1	400	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F702W		1	700	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F230W		1	230	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F555W		1	230	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F702W		1	230	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F785LP		1	30	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F785LP		1	400	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F785LP		1	700	3292	3		1
NGC6745	19 1 41.1	40 44 57	WFC	IMAGE	WF1	F785LP		1	230	3292	3		1
NGC6741	19 2 37.0	-0 26 58	FOC/96	IMAGE	512X512	F130M		1	480	3336	3		1
NGC6741	19 2 37.0	-0 26 58	FOC/96	IMAGE	512X512	F210M		1	480	3336	3		1
NGC6741	19 2 37.0	-0 26 58	FOC/96	IMAGE	512X512	F278M		1	480	3336	3		1
4U1907+09	19 9 37.8	9 49 48	HSP/POL	STAR-SKY	POL0	F277M		1	330	4036	3		14
4U1907+09	19 9 37.8	9 49 48	HSP/POL	STAR-SKY	POL0	F277M		1	495	4036	3		2
4U1907+09	19 9 37.8	9 49 48	HSP/POL	STAR-SKY	POL45	F277M		1	330	4036	3		14
4U1907+09	19 9 37.8	9 49 48	HSP/POL	STAR-SKY	POL45	F277M		1	495	4036	3		2
4U1907+09	19 9 37.8	9 49 48	HSP/POL	STAR-SKY	POL90	F277M		1	330	4036	3		14
4U1907+09	19 9 37.8	9 49 48	HSP/POL	STAR-SKY	POL90	F277M		1	495	4036	3		2
4U1907+09	19 9 37.8	9 49 48	HSP/POL	STAR-SKY	POL135	F277M		1	330	4036	3		14
4U1907+09	19 9 37.8	9 49 48	HSP/POL	STAR-SKY	POL135	F277M		1	495	4036	3		2
U102	19 10 6.2	-22 53 51	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	3000	1083	2		1
TR32	19 10 26.2	-21 44 11	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1800	4015	2		1
NGC6752-300-PA330	19 10 31.5	-59 54 36*	WFC	IMAGE	WFALL	F555W		1	100	1112	3		1
NGC6752-300-PA330	19 10 31.5	-59 54 36*	WFC	IMAGE	WFALL	F555W		1	300	1112	3		1
NGC6752-300-PA330	19 10 31.5	-59 54 36*	WFC	IMAGE	WFALL	F555W		1	1600	1112	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC6752-300-PA330	19 10 31.5	-59 54 36*	WFC	IMAGE	WFALL	F785LP		1	100	1112	3		1
NGC6752-300-PA330	19 10 31.5	-59 54 36*	WFC	IMAGE	WFALL	F785LP		1	300	1112	3		1
NGC6752-300-PA330	19 10 31.5	-59 54 36*	WFC	IMAGE	WFALL	F785LP		1	1600	1112	3		1
NGC6752-105-NORTH	19 10 51.6	-59 57 9*	WFC	IMAGE	WFALL	F555W		1	100	1112	3		1
NGC6752-105-NORTH	19 10 51.6	-59 57 9*	WFC	IMAGE	WFALL	F555W		1	600	1112	3		1
NGC6752-105-NORTH	19 10 51.6	-59 57 9*	WFC	IMAGE	WFALL	F555W		2	600	1112	3		1
NGC6752-105-NORTH	19 10 51.6	-59 57 9*	WFC	IMAGE	WFALL	F785LP		1	400	1112	3		1
NGC6752-105-NORTH	19 10 51.6	-59 57 9*	WFC	IMAGE	WFALL	F785LP		4	400	1112	3		1
NGC6752-OFF	19 10 51.8	-59 58 44	PC	IMAGE	PC6	F336W		1	800	4084	2		1
NGC6752-OFF	19 10 51.8	-59 58 44	PC	IMAGE	PC6	F336W		3	2000	4084	2		1
NGC6752	19 10 51.8	-59 58 54	PC	IMAGE	PC6	F336W		1	20	1112	4	CON	1
NGC6752	19 10 51.8	-59 58 54	PC	IMAGE	PC6	F336W		1	100	1112	4	CON	1
NGC6752	19 10 51.8	-59 58 54	PC	IMAGE	PC6	F336W		1	800	1112	4	CON	1
NGC6752	19 10 51.8	-59 58 54	PC	IMAGE	PC6	F336W		1	800	4084	2		1
NGC6752	19 10 51.8	-59 58 54	PC	IMAGE	PC6	F336W		1	2000	4084	2		1
NGC6752	19 10 51.8	-59 58 54	PC	IMAGE	PC6	F336W		3	2000	4084	2		1
NGC6752	19 10 51.8	-59 58 55	PC	IMAGE	P6	F555W		1	21	3111	0		1
NGC6752	19 10 51.8	-59 58 55	PC	IMAGE	P6	F785LP		1	21	3111	0		1
NGC6752	19 10 51.8	-59 58 55	PC	IMAGE	ALL	F555W	5479	1	100	2945	3		5
NGC6752	19 10 51.8	-59 58 55	PC	IMAGE	ALL	F791W	8537	1	100	2945	3		5
NGC6752	19 10 51.8	-59 58 55	PC	IMAGE	ALL	F555W	5479	1	100	2946	3		5
NGC6752	19 10 51.8	-59 58 55	PC	IMAGE	ALL	F791W	8537	1	100	2946	3		5
NGC6752	19 10 51.8	-59 58 55	PC	IMAGE	ALL	F555W	5479	1	100	2947	2		5
NGC6752	19 10 51.8	-59 58 55	PC	IMAGE	ALL	F791W	8537	1	100	2947	2		5
NGC6752	19 10 51.8	-59 58 55	PC	IMAGE	ALL	F555W	5479	1	26	2945	3		3
NGC6752	19 10 51.8	-59 58 55	PC	IMAGE	ALL	F791W	8537	1	26	2945	3		2
NGC6752	19 10 51.8	-59 58 55	FOC/96	IMAGE	512X512	F430W		1	4068	3684	2		1
NGC6752	19 10 51.8	-59 58 55	FOC/48	IMAGE	512X1024	F175W		1	3600	3684	2		1
NGC6752	19 10 51.8	-59 58 55	FOC/96	IMAGE	512X512	F480LP		1	4068	3684	2		1
NGC6752	19 10 51.8	-59 58 55	FOC/96	IMAGE	512X512	F1ND F430W		1	4068	3684	2		1
NGC6752	19 10 51.8	-59 58 55	FOC/96	IMAGE	512X512	F2ND F430W		1	4068	3684	2		1
NGC6752	19 10 51.8	-59 58 55	FOC/96	IMAGE	512X512	F1ND F480LP		1	4068	3684	2		1
NGC6752	19 10 51.8	-59 58 55	FOC/96	IMAGE	512X512	F2ND F480LP		1	4068	3684	2		1
NGC6752-OUTER	19 10 51.8	-59 58 55	WFC	IMAGE	ALL	F555W		1	4068	3684	2	PAR	3
NGC6752-OUTER	19 10 51.8	-59 58 55	WFC	IMAGE	ALL	F785LP		1	3600	3684	2	PAR	1
NGC6752-OUTER	19 10 51.8	-59 58 55	WFC	IMAGE	ALL	F785LP		1	4068	3684	2	PAR	3
NGC6752	19 10 52.5	-59 59 4	PC	IMAGE	PCALL-FIX	F555W	5479	1	100	2943	1		2
NGC6752	19 10 52.5	-59 59 4	PC	IMAGE	PCALL-FIX	F555W	5479	1	26	2943	1		2
NGC6752	19 10 52.5	-59 59 4	PC	IMAGE	PCALL-FIX	F785LP	8958	1	100	2943	1		2
NGC6752	19 10 52.5	-59 59 4	PC	IMAGE	PCALL-FIX	F785LP	8958	1	26	2943	1		1
NGC6752-R2	19 10 57.8	-59 53 11	PC	IMAGE	PCALL-FIX	F555W	5479	1	1000	2943	1		2
NGC6752-R2	19 10 57.8	-59 53 11	PC	IMAGE	PCALL-FIX	F785LP	8958	1	1000	2943	1		1
NGC6752-R1	19 11 5.4	-59 56 27	PC	IMAGE	PCALL-FIX	F555W	5479	1	1000	2943	1		2
NGC6752-R1	19 11 5.4	-59 56 27	PC	IMAGE	PCALL-FIX	F785LP	8958	1	1000	2943	1		1
TR30	19 11 18.0	-21 41 39	HSP/PMT/V IS	SPLIT	1.0	F750W/F320N		1	1800	4015	2		1
MI-67	19 11 31.0	16 51 38	FOC/48	IMAGE	512X512	F195W		2	720	1265	1		1
MI-67	19 11 31.0	16 51 38	FOC/48	IMAGE	512X512	F275W		2	720	1265	1		1
NGC6752E1	19 11 31.7	-59 58 52*	PC	IMAGE	ALL	F555W	5479	1	1000	2945	3		3
NGC6752E1	19 11 31.7	-59 58 52*	PC	IMAGE	ALL	F791W	8537	1	1000	2945	3		2
NGC6752E1	19 11 31.7	-59 58 52*	PC	IMAGE	ALL	F555W	5479	1	1000	2947	2		3
NGC6752E1	19 11 31.7	-59 58 52*	PC	IMAGE	ALL	F791W	8537	1	1000	2947	2		2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
SS433	19 11 49.5	4 58 58	HSP/UV2	SINGLE	1.0	F140LP		1	600	4037	3		7
SS433	19 11 49.5	4 58 58	HSP/UV2	SINGLE	1.0	F160LP		1	600	4037	3		7
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL0	F216M		1	900	4037	3		1
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL0	F237M		1	900	4037	3		1
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL0	F277M		1	720	4037	3		11
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL0	F327M		1	540	4037	3		1
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL45	F216M		1	900	4037	3		1
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL45	F237M		1	900	4037	3		1
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL90	F216M		1	900	4037	3		1
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL90	F237M		1	900	4037	3		1
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL45	F277M		1	720	4037	3		11
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL45	F327M		1	540	4037	3		1
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL90	F277M		1	720	4037	3		11
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL90	F327M		1	540	4037	3		1
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL135	F216M		1	900	4037	3		1
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL135	F237M		1	900	4037	3		1
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL135	F277M		1	720	4037	3		11
SS433	19 11 49.5	4 58 58	HSP/POL	SINGLE	POL135	F327M		1	540	4037	3		1
SS433	19 11 49.6	4 58 58	PC	IMAGE	PCALL	F648M		1	200	3284	3		1
SS433	19 11 49.6	4 58 58	PC	IMAGE	PCALL	F648M		1	1000	3284	3		1
SS433	19 11 49.6	4 58 57	FOC/96	IMAGE	512X512	F502M	4950	1	600	1261	0		4
SS433	19 11 49.6	4 58 57	FOC/96	IMAGE	512X512	F502M	4950	1	900	1261	0		2
SS433	19 11 49.6	4 58 57	FOC/96	IMAGE	512X512	PRISM1	4950	1	1000	1261	0		2
SS433	19 11 49.6	4 58 57	FOC/96	IMAGE	512X512	PRISM2	4950	1	1000	1261	0		2
SS433	19 11 49.6	4 58 57	FOC/288	IMAGE	512X512	F502M	4950	1	600	3183	1		4
SS433	19 11 49.6	4 58 57	FOC/288	IMAGE	512X512	PRISM1	4950	1	1000	3183	1		2
SS433	19 11 49.6	4 58 57	FOC/288	IMAGE	512X512	PRISM2	4950	1	1000	3183	1		2
V1343-AQL	19 11 49.6	4 58 58	FOC/288	OCC	512X512-F0.4	CLEAR		1	1050	3280	9		1
W1062	19 12 14.3	2 53 14	FGS	TRANS	ANY	F583W		1	2000	1003	3		2
N63	19 13 20.0	-21 40 37	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	3000	4198	2		1
VB10	19 14 30.8	5 4 5	PC	IMAGE	PC6-FIX	F606W		1	40	3288	3		6
TR24	19 14 49.0	-21 34 13	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1800	4015	2		1
POINT1912-550INCA221-123	19 15 18.3	-54 49 17	S/C	POINTING	V1			1	1	4154	3	CON	1
POINT1912-550INCA221-124	19 15 19.9	-54 52 42	S/C	POINTING	V1			1	1	4154	3	CON	1
PSR1913+16	19 15 28.0	16 6 27	PC	IMAGE	ALL	F606W	6751	1	1800	1061	0		1
PSR1913+16	19 15 28.0	16 6 27	PC	IMAGE	PC6	F702W	6898	2	2100	3877	2		1
PSR1913+16	19 15 28.0	16 6 27	PC	IMAGE	PC6-FIX	F702W	6898	1	2100	3877	2		1
N61	19 15 58.1	-21 32 13	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	3000	4076	2		1
INCA221-123	19 16 21.2	-54 40 41	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
INCA221-124	19 16 29.3	-54 58 58	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
1912-550INCA221-123	19 16 39.1	-54 54 48	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
1912-550INCA221-124	19 16 39.1	-54 54 48	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
GL752B-OFFSET	19 16 55.6	5 10 8	HRS	ACCUM	2.0	G140L	1574	2	300	1180	4		1
GL752B-OFFSET	19 16 55.6	5 10 8	HRS	ACCUM	2.0	G140L	1304	2	327	1180	4		1
GL752B-OFFSET	19 16 55.6	5 10 8	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	1180	4	ACQ	1
GL752B	19 16 58.6	5 8 56*	HRS	ACCUM	2.0	G140L	1427	13	272	1180	4		1
VYS65-B	19 16 58.6	5 8 56	FOC/96	IMAGE	512X512	F480LP		5	600	1274	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
TR18	19 17 13.5	-21 30 1	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1800	4015	2		1
AS353A	19 20 30.9	11 1 55	PC	IMAGE	PCALL	F656N		1	300	3285	4	CON	1
AS353A	19 20 30.9	11 1 55	PC	IMAGE	PCALL	F702W		1	0	3285	4	ACQ CON	1
AS353A	19 20 30.9	11 1 55	PC	IMAGE	PC-ND	F702W		1	120	3285	4	CON	2
INCA221-126-AST1	19 24 10.9	-29 7 28	FGS	POS	2	F550W		1	0	1475	9	CON PAR	2
INCA221-126-AST1	19 24 10.9	-29 7 28	FGS	POS	2	F550W		1	16	1475	9	CON PAR	2
POINT1921-293INCA221-126	19 24 17.0	-29 23 43	S/C	POINTING	V1			1	1	4154	3	CON	1
POINT1921-293INCA221-127	19 24 17.9	-29 5 35	S/C	POINTING	V1			1	1	4154	3	CON	1
INCA221-126-AST2	19 24 31.4	-29 8 1	FGS	POS	2	F550W		1	0	1475	9	CON PAR	2
CH-CYG	19 24 33.1	50 14 29	FOC/96	IMAGE	512X512	F190M		1	1200	3295	3		1
CH-CYG	19 24 33.1	50 14 29	FOC/96	IMAGE	512X512	F253M		1	1200	3295	3		1
CH-CYG	19 24 33.1	50 14 29	FOC/96	IMAGE	512X512	F278M		1	1200	3295	3		1
CH-CYG	19 24 33.1	50 14 29	FOC/96	IMAGE	512X512	F1ND F486N		1	600	1253	0		1
CH-CYG	19 24 33.1	50 14 29	FOC/96	IMAGE	512X512	F2ND F501N		1	600	1253	0		1
CH-CYG	19 24 33.1	50 14 29	FOC/96	IMAGE	512X512	F4ND F501N		1	600	1253	0		1
CH-CYG	19 24 33.1	50 14 29	FOC/96	IMAGE	512X512	F501N F6ND		1	600	1253	0		1
N66	19 24 44.2	-21 19 16	WFC	IMAGE	ALL	F569W		1	0	3354	2	ACQ CON SEL	2
N66	19 24 44.2	-21 19 16	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1500	3354	2	CON SEL	2
1921-293INCA221-126	19 24 51.0	-29 14 31	FGS	POS	3	PUPIL		1	51	4154	3	CON	4
1921-293INCA221-127	19 24 51.0	-29 14 31	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
1921-293INCA221-126	19 24 51.1	-29 14 31	PC	IMAGE	P8	F606W		1	80	1475	9	CON UNP	2
1921-293INCA221-126	19 24 51.1	-29 14 31	PC	IMAGE	P8	F725LP		1	150	1475	9	CON	2
POINT1928+738INCA221-129	19 25 0.7	74 1 45	S/C	POINTING	V1			1	1	4154	3	CON	1
INCA221-126	19 25 4.0	-29 18 30	FGS	POS	3	F5ND		1	51	4154	3	CON	2
INCA221-126	19 25 4.1	-29 18 30	PC	IMAGE	P8	F658N		1	1	1475	9	CON	2
INCA221-127	19 25 11.5	-29 7 25	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
U115	19 25 29.6	-22 28 26	WFC	IMAGE	ALL	F569W		1	0	3354	2	ACQ CON SEL	2
U115	19 25 29.6	-22 28 26	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1500	3354	2	CON SEL	2
INCA221-128	19 26 40.7	74 5 50	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
INCA221-129	19 26 58.7	73 53 44	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
1928+738INCA221-128	19 27 48.3	73 58 1	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
1928+738INCA221-129	19 27 48.3	73 58 1	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
4C73.18	19 27 48.5	73 58 2	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	3	4112	2	ACQ	1
4C73.18	19 27 48.5	73 58 2	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	4400	4112	2		1
4C73.18	19 27 48.5	73 58 2	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1640	4112	2		1
4C73.18	19 27 48.5	73 58 2	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	4112	2	ACQ	1
POINT1928+738INCA221-128	19 29 28.2	74 8 8	S/C	POINTING	V1			1	1	4154	3	CON	1
TR46	19 30 55.1	-21 6 24	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1800	4015	2		1
NGC6809	19 39 59.4	-30 57 44	PC	IMAGE	P6	F555W		1	35	3111	0		1
NGC6809	19 39 59.4	-30 57 44	PC	IMAGE	P6	F785LP		1	35	3111	0		1
U131	19 40 34.5	-21 56 19	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	63	3373	3	CON	2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
U131	19 40 34.5	-21 56 19	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	187	3373	3	CON	1
U131	19 40 34.5	-21 56 19	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	154	3373	3	CON	2
U131	19 40 34.5	-21 56 19	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	462	3373	3	CON	1
U131	19 40 34.5	-21 56 19	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	4740	3373	3	CON	1
3C402	19 41 42.1	50 37 56	FOS/RD	ACCUM	1.0	PRISM	5400	1	500	3272	9	CON	1
3C402	19 41 42.1	50 37 56	FOC/96	IMAGE	512X512	F370LP	4040	1	300	1033	0		1
3C402	19 41 42.1	50 37 56	FOC/96	IMAGE	512X512	F220W F231M	2260	1	900	1033	0		1
3C402-FIELD	19 41 42.1	50 37 56	WFC	IMAGE	ALL	F439W	4353	1	15	3272	9	ACQ CON	1
3C402-OFFSET	19 41 42.1	50 37 56*	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3272	9	ACQ CON	1
HM-SGE	19 41 57.1	16 44 40	FOC/96	IMAGE	512X512	F486N		1	600	3182	1		1
HM-SGE	19 41 57.1	16 44 40	FOC/96	IMAGE	512X512	F501N		1	600	3182	1		1
HM-SGE	19 41 57.1	16 44 40	FOC/96	IMAGE	512X512	F190M		1	600	3747	2		1
HM-SGE	19 41 57.1	16 44 40	FOC/96	IMAGE	512X512	F253M		1	600	3747	2		1
HM-SGE	19 41 57.1	16 44 40	FOC/96	IMAGE	512X512	F278M		1	600	3747	2		1
NGC6814-OFFSET-STARS-FIELD	19 42 39.9	-10 19 1*	WFC	IMAGE	ALL	F606W		1	30	3195	1		1
NGC6814	19 42 40.6	-10 19 25	PC	IMAGE	ALL	F664N		2	900	3195	1		1
NGC6814	19 42 40.6	-10 19 25	PC	IMAGE	ALL	F502N		1	1800	3195	1		1
NGC6814	19 42 40.6	-10 19 25	PC	IMAGE	ALL	F547M		1	360	3195	1		1
HS1946+7658	19 44 55.1	77 5 52	FOS/BL	RAPID	4.3	PRISM	3500	1	600	4121	3		1
HS1946+7658	19 44 55.1	77 5 52	FOS/BL	ACQ/BINA	4.3	MIRROR		1	60	4121	3	ACQ	1
HS1946+7658	19 44 55.1	77 5 52	FOS/BL	RAPID	4.3	G160L	1650	1	1200	4121	3		1
NGC6822-1	19 45 5.2	-14 43 18	WFC	IMAGE	ALL	F284W		1	300	1073	9		1
NGC6822-1	19 45 5.2	-14 43 18	WFC	IMAGE	ALL	F375N		1	900	1073	9		1
NGC6822-1	19 45 5.2	-14 43 18	WFC	IMAGE	ALL	F656N		1	300	1073	9		1
NGC6822-1	19 45 5.2	-14 43 18	WFC	IMAGE	ALL	F487N		1	240	1073	9		1
NGC6822-1	19 45 5.2	-14 43 18	WFC	IMAGE	ALL	F487N		1	1200	1073	9		1
NGC6822-1	19 45 5.2	-14 43 18	WFC	IMAGE	ALL	F502N		1	420	1073	9		1
NGC6822-1	19 45 5.2	-14 43 18	WFC	IMAGE	ALL	F547M		1	240	1073	9		1
CI-CYG	19 50 11.9	35 41 3	HRS	ACCUM	0.25	G160M	1550	2	354	3934	2		1
CI-CYG	19 50 11.9	35 41 3	HRS	ACCUM	0.25	MIRROR-N2	1400	6	300	3934	2		1
CI-CYG	19 50 11.9	35 41 3	HRS	ACCUM	0.25	G270M	2790	3	272	3934	2		1
CI-CYG	19 50 11.9	35 41 3	HRS	ACCUM	0.25	G160M	1653	3	272	3934	2		1
CI-CYG	19 50 11.9	35 41 3	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	20	3934	2	ACQ	1
U122	19 50 26.8	-21 29 55	WFC	IMAGE	ALL	F569W		1	0	3354	3	ACQ CON SEL	2
U122	19 50 26.8	-21 29 55	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1500	3354	3	CON SEL	2
HD187642	19 50 46.8	8 52 6	PC	IMAGE	P6	F502N		4	600	1062	9		4
HD187642	19 50 46.8	8 52 6	PC	IMAGE	P6	F631N		4	900	1062	9		3
HD187642	19 50 46.8	8 52 6	PC	IMAGE	P6	F889N		4	900	1062	9		3
HD187642	19 50 46.8	8 52 6	PC	IMAGE	P6	F122M F889N		1	1	1062	9		3
HD187642	19 50 46.9	8 52 6	HRS	ACCUM	2.0	G160M	1550	2	299	3950	2		1
HD187642	19 50 46.9	8 52 6	HRS	ACCUM	2.0	G160M	1333	2	299	3950	2		1
G208-44-5	19 53 54.0	44 24 55	PC	IMAGE	P6	F875M		1	50	1062	9		1
G208-44-5	19 53 54.0	44 24 55	PC	IMAGE	P6	F622W		4	400	1062	9		1
G208-44-5	19 53 54.0	44 24 55	PC	IMAGE	P6	F875M		4	400	1062	9		1
V1016CYG	19 57 5.0	39 49 36	FOC/96	IMAGE	512X512	F190M		1	600	3747	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
V1016CYG	19 57 5.0	39 49 36	FOC/96	IMAGE	512X512	F253M		1	600	3747	2		1
V1016CYG	19 57 5.0	39 49 36	FOC/96	IMAGE	512X512	F278M		1	600	3747	2		1
HDE226868	19 58 21.5	35 12 5	HSP/UV1	SINGLE	1.0	F220W		1	20	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/UV2	SINGLE	1.0	F145M		1	20	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/UV2	SINGLE	1.0	F184W		1	20	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/UV2	SINGLE	1.0	F248M		1	20	1097	2		6
HDE226868	19 58 21.5	35 12 5	HSP/UV2	SINGLE	1.0	F284M		1	20	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL0	F216M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL0	F237M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL0	F277M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL0	F277M		1	225	1097	2		5
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL0	F327M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL45	F216M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL45	F237M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL45	F277M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL45	F277M		1	225	1097	2		5
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL45	F327M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL90	F216M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL90	F237M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL90	F277M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL90	F277M		1	225	1097	2		5
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL90	F327M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL135	F216M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL135	F237M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL135	F277M		1	180	1097	2		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL135	F277M		1	225	1097	2		5
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL135	F327M		1	180	1097	2		1
CYG-XR-1	19 58 21.5	35 12 5	HSP/UV2	SINGLE	1.0	F140LP		3	1200	1094	1		3
HDE226868	19 58 21.5	35 12 5	HSP/UV1	SINGLE	1.0	F220W		1	20	2952	3		1
HDE226868	19 58 21.5	35 12 5	HSP/UV2	SINGLE	1.0	F145M		1	20	2952	3		1
HDE226868	19 58 21.5	35 12 5	HSP/UV2	SINGLE	1.0	F184W		1	20	2952	3		1
HDE226868	19 58 21.5	35 12 5	HSP/UV2	SINGLE	1.0	F248M		1	20	2952	3		6
HDE226868	19 58 21.5	35 12 5	HSP/UV2	SINGLE	1.0	F284M		1	20	2952	3		1
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL0	F216M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL0	F237M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL0	F277M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL0	F277M		1	225	2952	3		5
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL0	F327M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL45	F216M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL45	F237M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL45	F277M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL45	F277M		1	225	2952	3		5
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL45	F327M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL90	F216M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL90	F237M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL90	F277M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL90	F277M		1	225	2952	3		5
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL90	F327M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL135	F216M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL135	F237M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL135	F277M		1	180	2952	3		2
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL135	F277M		1	225	2952	3		5

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HDE226868	19 58 21.5	35 12 5	HSP/POL	SINGLE	POL135	F327M		1	180	2952	3		2
CYGNUS-A	19 59 28.4	40 44 1	PC	IMAGE	PC6	F785LP		1	900	3344	3		1
CYGNUS-A	19 59 28.4	40 44 1	FOC/96	IMAGE	512X512	F130M		1	2400	2956	1		1
CYGNUS-A	19 59 28.4	40 44 1	FOC/96	IMAGE	512X512	F152M		1	1800	2956	1		1
CYGNUS-A	19 59 28.4	40 44 1	FOC/96	IMAGE	512X512	F170M		1	1800	2956	1		1
CYGNUS-A	19 59 28.4	40 44 1	FOC/96	IMAGE	512X512	F220W		1	1200	2956	1		1
CYGNUS-A	19 59 28.4	40 44 1	FOC/96	IMAGE	512X512	F342W		1	1200	2956	1		1
CYGNUS-A	19 59 28.4	40 44 1	FOC/96	IMAGE	512X512	F372M		1	2400	2956	1		1
3C405	19 59 28.4	40 44 1	WFC	IMAGE	WF1	F555W		1	30	3292	3		1
3C405	19 59 28.4	40 44 1	WFC	IMAGE	WF1	F555W		1	400	3292	3		1
3C405	19 59 28.4	40 44 1	WFC	IMAGE	WF1	F555W		1	700	3292	3		1
3C405	19 59 28.4	40 44 1	WFC	IMAGE	WF1	F675W		1	30	3292	3		1
3C405	19 59 28.4	40 44 1	WFC	IMAGE	WF1	F675W		1	400	3292	3		1
3C405	19 59 28.4	40 44 1	WFC	IMAGE	WF1	F675W		1	700	3292	3		1
3C405	19 59 28.4	40 44 1	WFC	IMAGE	WF1	F555W		1	230	3292	3		1
3C405	19 59 28.4	40 44 1	WFC	IMAGE	WF1	F675W		1	230	3292	3		1
3C405	19 59 28.4	40 44 1	WFC	IMAGE	WF1	F785LP		1	30	3292	3		1
3C405	19 59 28.4	40 44 1	WFC	IMAGE	WF1	F785LP		1	400	3292	3		1
3C405	19 59 28.4	40 44 1	WFC	IMAGE	WF1	F785LP		1	700	3292	3		1
3C405	19 59 28.4	40 44 1	WFC	IMAGE	WF1	F785LP		1	230	3292	3		1
NGC6853	19 59 32.5	22 43 11	WFC	IMAGE	ALL	F469N		1	1800	1107	0		1
NGC6853	19 59 32.5	22 43 11	WFC	IMAGE	ALL	F656N		1	1800	1107	0		1
NGC6853	19 59 32.5	22 43 11	WFC	IMAGE	ALL	F658N		1	1800	1107	0		1
NGC6853	19 59 32.5	22 43 11	WFC	IMAGE	WFALL	F656N		1	2100	3289	4	CON	1
3C405	19 59 32.9	40 43 40	PC	IMAGE	ALL	F606W		1	1200	3263	9		1
NGC6853	19 59 41.6	22 43 22	FGS	POS	2	F550W		1	52	2930	9		48
NGC6853	19 59 41.6	22 43 22	FGS	TRANS	ANY	F583W		1	100	2930	9		1
INCA221-130	20 2 30.8	77 54 22	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
PKS2000-330	20 3 24.3	-32 51 44	WFC	IMAGE	ALL	F606W		3	1800	1045	9		1
PKS2000-330	20 3 24.3	-32 51 44	FOS/RD	ACQ/BINA	4.3	MIRROR		1	26	1045	9	ACQ CON SEL	6
PKS2000-330	20 3 24.3	-32 51 44	FOS/RD	ACQ/PEAK	2.0-BAR	MIRROR		1	26	1045	9	ACQ CON SEL	6
RR-TEL	20 4 18.5	-55 43 34	FOC/96	IMAGE	512X512	F190M		1	600	3747	2		1
RR-TEL	20 4 18.5	-55 43 34	FOC/96	IMAGE	512X512	F253M		1	600	3747	2		1
RR-TEL	20 4 18.5	-55 43 34	FOC/96	IMAGE	512X512	F278M		1	600	3747	2		1
POINT2007+776INCA221 -130	20 5 4.2	78 3 32	S/C	POINTING	V1			1	1	4154	3	CON	1
2007+776INCA221-130	20 5 31.0	77 52 43	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
2007+776INCA221-134	20 5 31.0	77 52 43	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
INCA221-134	20 7 58.3	77 49 29	FGS	POS	3	F5ND		1	51	4154	3	CON	2
POINT2007+776INCA221 -134	20 8 9.4	78 1 32	S/C	POINTING	V1			1	1	4154	3	CON	1
GSC6323-01396	20 10 30.4	-20 36 48	HSP/PMT/V IS	SPLIT	1.0	F750W/F320N		1	1080	1081	0		1
GSC6323-01396	20 10 30.4	-20 36 48	HSP/PMT/V IS	SPLIT	1.0	F750W/F320N		1	1320	1081	0		1
GSC6323-01396	20 10 30.4	-20 36 48	HSP/PMT/V IS	SPLIT	1.0	F750W/F320N		1	1680	1081	0		1
GSC6323-01396	20 10 30.4	-20 36 48	HSP/PMT/V IS	SPLIT	1.0	F750W/F320N		1	2340	1081	0		1
GSC6323-01396	20 10 30.4	-20 36 48	HSP/PMT/V IS	SPLIT	1.0	F750W/F320N		1	2400	1081	0		7

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
GSC6323-01396	20 10 30.4	-20 36 48	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1019	1081	0		1
GSC6323-01396	20 10 30.4	-20 36 48	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	2039	1081	0		1
NGC6888	20 12 31.0	38 27 14	WFC	IMAGE	WFALL	F502N		2	2100	3642	2		1
NGC6888	20 12 31.0	38 27 14	WFC	IMAGE	WFALL	F656N		2	2100	3642	2		1
NGC6888	20 12 31.0	38 27 14	WFC	IMAGE	WFALL	F658N		2	2100	3642	2		1
NGC6888	20 12 31.0	38 27 14	WFC	IMAGE	WFALL	F673N		2	2100	3642	2		1
HD192281	20 12 33.1	40 16 6	HSP/UV2	SINGLE	1.0	F152M		1	1800	3926	1		2
HD192281	20 12 33.1	40 16 6	HSP/UV2	PRISM	1.0	F262M/F145M		1	1800	1095	1		2
NGC6886	20 12 43.0	19 58 37	FOC/96	IMAGE	512X512	F130M		1	480	3336	3		1
NGC6886	20 12 43.0	19 58 37	FOC/96	IMAGE	512X512	F210M		1	480	3336	3		1
NGC6886	20 12 43.0	19 58 37	FOC/96	IMAGE	512X512	F278M		1	480	3336	3		1
POINT-CP9.2	20 14 7.4	-30 6 34	S/C	POINTING	V1			1	0	1014	3	CON	1
POINT-CP9.1	20 15 53.7	-30 4 46	S/C	POINTING	V1			1	0	1014	3		1
HD193664	20 17 27.2	66 50 59	HSP/UV1	SINGLE	1.0	F240W		1	3600	3007	0	CON SEL	1
HD193664	20 17 27.2	66 50 59	HSP/UV1	SINGLE	1.0	F140LP		1	3600	3007	0	CON SEL	1
HD193664	20 17 27.2	66 50 59	HSP/POL	SINGLE	POL0	F327M		1	3600	3007	0	CON SEL	1
HD193237	20 17 47.1	38 1 59	HSP/UV2	SINGLE	1.0	F152M		1	1800	1095	1		4
HD193237	20 17 47.1	38 1 59	HSP/UV2	SINGLE	1.0	F152M		1	1800	3926	1		4
POINT-CP10.2	20 18 2.6	-28 42 40	S/C	POINTING	V1			1	0	1014	3	CON	1
MG2016+112	20 19 18.1	11 27 13	PC	IMAGE	PC6	F555W		6	2000	3799	2		1
MG2016+112	20 19 18.2	11 27 15	PC	IMAGE	P6	F555W		2	900	1116	0		1
MG2016+112	20 19 18.2	11 27 15	PC	IMAGE	P6	F785LP		2	900	1116	0		1
POINT-CP10.1	20 19 45.6	-28 36 8	S/C	POINTING	V1			1	0	1014	3		1
V-SGE	20 20 14.7	21 6 9	HRS	ACCUM	2.0	G270M	2800	1	72	4185	3		1
V-SGE	20 20 14.7	21 6 9	HRS	ACCUM	2.0	G160M	1240	2	260	4185	3		1
V-SGE	20 20 14.7	21 6 9	HRS	ACCUM	2.0	G160M	1550	2	332	4185	3		2
V-SGE	20 20 14.7	21 6 9	HRS	ACCUM	2.0	G160M	1640	2	304	4185	3		1
V-SGE	20 20 14.7	21 6 9	HRS	ACCUM	2.0	G160M	1400	3	260	4185	3		1
V-SGE	20 20 14.7	21 6 9	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	1	4185	3	ACQ	2
V404CYG	20 24 3.8	33 52 3	HSP/UV2	SINGLE	10.0	F140LP		3	1200	3255	2		3
S106/IRS3	20 27 26.8	37 22 50	PC	IMAGE	PCALL	F656N		2	700	3284	3		1
S106/IRS3	20 27 26.8	37 22 50	PC	IMAGE	PCALL	F702W		4	120	3284	3		1
S106/IRS3	20 27 26.8	37 22 50	PC	IMAGE	PCALL	F850LP		2	100	3284	3		1
SATURN-C	20 36 30.1	-18 59 28	PC	IMAGE	P6	F336W		1	100	3239	0		1
SATURN-C	20 36 30.1	-18 59 28	PC	IMAGE	P6	F439W		1	4	3239	0		1
SATURN-C	20 36 30.1	-18 59 28	PC	IMAGE	P6	F547M		1	1	3239	0		1
SATURN-C	20 36 30.1	-18 59 28	PC	IMAGE	P6	F889N		1	100	3239	0		1
SATURN-C	20 36 30.1	-18 59 28	PC	IMAGE	P6	F588N		1	16	3239	0		1
SATURN-C	20 36 30.1	-18 59 28	PC	IMAGE	P6	F718M		1	1	3239	0		1
SATURN-B	20 36 30.1	-18 59 28	PC	IMAGE	P6	F336W		1	100	3239	0		1
SATURN-B	20 36 30.1	-18 59 28	PC	IMAGE	P6	F439W		1	4	3239	0		1
SATURN-B	20 36 30.1	-18 59 28	PC	IMAGE	P6	F547M		1	1	3239	0		1
SATURN-B	20 36 30.1	-18 59 28	PC	IMAGE	P6	F889N		1	100	3239	0		1
SATURN-B	20 36 30.1	-18 59 28	PC	IMAGE	P6	F588N		1	16	3239	0		1
SATURN-B	20 36 30.1	-18 59 28	PC	IMAGE	P6	F718M		1	1	3239	0		1
SATURN-A	20 36 31.1	-18 59 23	PC	IMAGE	P6	F336W		1	100	3239	0		1
SATURN-A	20 36 31.1	-18 59 23	PC	IMAGE	P6	F439W		1	4	3239	0		1
SATURN-A	20 36 31.1	-18 59 23	PC	IMAGE	P6	F547M		1	1	3239	0		1
SATURN-A	20 36 31.1	-18 59 23	PC	IMAGE	P6	F889N		1	100	3239	0		1
SATURN-A	20 36 31.1	-18 59 23	PC	IMAGE	P6	F588N		1	16	3239	0		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
SATURN-A	20 36 31.1	-18 59 23	PC	IMAGE	P6	F718M		1	1	3239	0		1
HR-DEL	20 42 20.4	19 9 39	FOC/96	IMAGE	512X512	F486N		1	600	3182	1		1
HR-DEL	20 42 20.4	19 9 39	FOC/96	IMAGE	512X512	F501N		1	1200	3182	1		1
Q2040-374	20 43 19.6	-37 14 4	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
Q2040-374	20 43 19.6	-37 14 4	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
MRK509	20 44 9.8	-10 43 25	FOS/BL	ACCUM	1.0	G270H		1	600	4045	1		1
MRK509	20 44 9.8	-10 43 25	FOS/BL	ACCUM	1.0	G130H		1	4200	4045	1		1
MRK509	20 44 9.8	-10 43 25	FOS/BL	ACCUM	1.0	G190H		1	1620	4045	1		1
MRK509	20 44 9.8	-10 43 25	HRS	ACCUM	2.0	G200M	1920	1	300	3206	1		1
MRK509	20 44 9.8	-10 43 25	HRS	ACCUM	2.0	G140L	1590	1	1560	3206	1		1
MRK509	20 44 9.8	-10 43 25	HRS	ACCUM	2.0	G140L	1315	1	1200	3206	1		1
MRK509	20 44 9.8	-10 43 25	HRS	ACCUM	2.0	G200M	1958	1	300	3206	1		1
MRK509	20 44 9.8	-10 43 25	HRS	ACCUM	2.0	G200M	1994	1	300	3206	1		1
MRK509	20 44 9.8	-10 43 25	HRS	ACCUM	2.0	G200M	2032	1	300	3206	1		1
MRK509	20 44 9.8	-10 43 25	HRS	ACCUM	2.0	G270M	2918	1	180	3206	1		1
MRK509	20 44 9.8	-10 43 25	HRS	ACCUM	2.0	G270M	2958	1	180	3206	1		1
MRK509	20 44 9.8	-10 43 25	HRS	ACCUM	2.0	G270M	2998	1	180	3206	1		1
MRK509	20 44 9.8	-10 43 25	HRS	ACCUM	2.0	G270M	2802	1	120	3206	1		1
MRK509	20 44 9.8	-10 43 25	HRS	ACCUM	2.0	G270M	2842	1	120	3206	1		1
MRK509	20 44 9.8	-10 43 25	HRS	ACCUM	2.0	G270M	2882	1	120	3206	1		1
MRK509	20 44 9.8	-10 43 25	FOS/BL	ACQ/BINA	4.3	MIRROR		1	2	4045	1	ACQ	1
MRK509	20 44 9.8	-10 43 25	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	3206	1	ACQ	1
AU-MIC	20 45 9.4	-31 20 27	HRS	RAPID	2.0	G160M	1360	1	1800	1158	1		7
AU-MIC	20 45 9.4	-31 20 27	HRS	IMAGE	2.0	MIRROR-N2		1	96	1158	1		1
AU-MIC	20 45 9.4	-31 20 27	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	9	1158	1	ACQ	1
AU-MIC	20 45 9.5	-31 20 27	HRS	ACCUM	2.0	ECH-B	2800	6	164	1176	1		1
AU-MIC	20 45 9.5	-31 20 27	HRS	ACCUM	2.0	G160M	1550	17	164	1176	1		1
AU-MIC	20 45 9.5	-31 20 27	HRS	ACCUM	2.0	G160M	1400	22	164	1176	1		1
AU-MIC	20 45 9.5	-31 20 27	HRS	IMAGE	2.0	MIRROR-N2		1	96	1176	1		1
AU-MIC	20 45 9.5	-31 20 27	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	1176	1	ACQ	1
NGC6995-W	20 45 35.8	31 6 43	WFC	IMAGE	WFALL	F502N		2	2100	3642	2		1
NGC6995-W	20 45 35.8	31 6 43	WFC	IMAGE	WFALL	F656N		2	2100	3642	2		1
NGC6995-W	20 45 35.8	31 6 43	WFC	IMAGE	WFALL	F673N		2	2100	3642	2		1
IC5063	20 52 2.1	-57 3 54	FOC/96	IMAGE	512X512	F220W		1	900	3344	3		1
IC5063	20 52 2.1	-57 3 54	FOC/96	IMAGE	512X512	F430W		1	900	3344	3		1
IC5063	20 52 2.1	-57 3 54	FOC/96	IMAGE	512X512	F372M		1	1800	3344	3		1
IC5063	20 52 2.1	-57 3 54	FOC/96	IMAGE	512X512	F501N		1	1800	3344	3		1
NGC6995-SE	20 56 27.9	30 25 43	WFC	IMAGE	WFALL	F502N		2	2100	4173	3		1
NGC6995-SE	20 56 27.9	30 25 43	WFC	IMAGE	WFALL	F656N		2	2100	4173	3		1
NGC6995-SE	20 56 27.9	30 25 43	WFC	IMAGE	WFALL	F673N		2	2100	4173	3		1
NGC6995	20 56 54.9	31 7 37	WFC	IMAGE	ALL	F547M		1	300	1138	0		1
NGC6995	20 56 54.9	31 7 37	WFC	IMAGE	ALL	F675W		1	200	1138	0		1
NGC6995	20 56 54.9	31 7 37	WFC	IMAGE	ALL	F502N		2	1900	1138	0		1
NGC6995	20 56 54.9	31 7 37	WFC	IMAGE	ALL	F656N		2	1900	1138	0		1
NGC6995	20 56 54.9	31 7 37	WFC	IMAGE	ALL	F673N		2	1900	1138	0		1
NGC6995	20 56 54.9	31 7 37	WFC	IMAGE	WFALL	F569W		1	300	3284	4	CON	1
NGC6995	20 56 54.9	31 7 37	WFC	IMAGE	WFALL	F375N		1	2300	3284	4	CON	1
NGC6995	20 56 54.9	31 7 37	WFC	IMAGE	WFALL	F502N		1	2300	3284	4	CON	1
NGC6995	20 56 54.9	31 7 37	WFC	IMAGE	WFALL	F631N		1	2300	3284	4	CON	1
NGC6995	20 56 54.9	31 7 37	WFC	IMAGE	WFALL	F656N		1	2300	3284	4	CON	1
NGC6995-XA	20 57 19.7	31 2 37	WFC	IMAGE	WFALL	F502N		2	2200	3642	2		1
NGC6995-XA	20 57 19.7	31 2 37	WFC	IMAGE	WFALL	F656N		2	2200	3642	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC6995-XA	20 57 19.7	31 2 37	WFC	IMAGE	WFALL	F673N		2	2200	3642	2		1
GSC6349-01493	20 58 46.9	-18 11 32	HSP/PMT/V IS	SPLIT	1.0	F750W/F320N		1	1800	4193	2		2
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	ALL	F336W		1	80	1108	0		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	ALL	F439W		1	60	1108	0		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	ALL	F284W		1	150	1108	0		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	ALL	F656N		1	1900	1108	0		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	WFALL	F622W		1	30	3283	3		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	WFALL	F469N		2	100	3642	2		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	WFALL	F502N		2	8	3642	2		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	WFALL	F502N		2	100	3642	2		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	WFALL	F656N		2	10	3642	2		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	WFALL	F656N		2	100	3642	2		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	WFALL	F658N		2	70	3642	2		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	WFALL	F157W		1	180	3283	3		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	WFALL	F656N		1	2100	3289	4	CON	1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	WFALL	F469N		2	1600	3642	2		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	WFALL	F502N		2	1600	3642	2		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	WFALL	F656N		2	1600	3642	2		1
NGC7027	21 7 0.2	42 14 18	WFC	IMAGE	WFALL	F658N		2	1600	3642	2		1
NGC7027	21 7 1.7	42 14 9	FOC/96	IMAGE	256X256	F130M		1	480	1254	1		1
NGC7027	21 7 1.7	42 14 9	FOC/96	IMAGE	256X256	F210M		1	480	1254	1		1
NGC7027	21 7 1.7	42 14 9	FOC/96	IMAGE	256X256	F278M		1	480	1254	1		1
NGC7027-STAR	21 7 1.8	42 14 10*	FOS/BL	ACCUM	1.0-PAIR-B	G400H	4040	1	3600	3946	2		1
NGC7027-OFFSET	21 7 2.7	42 14 10	FOS/RD	ACQ/BINA	4.3	MIRROR		1	11	3946	2	ACQ	1
PG2112+059	21 14 52.6	6 7 43	FOS/RD	ACQ/PEAK	0.25X2.0	MIRROR		1	2	4112	2	ACQ	1
PG2112+059	21 14 52.6	6 7 43	FOS/RD	RAPID	0.25X2.0	G190H	1900	1	5000	4112	2		1
PG2112+059	21 14 52.6	6 7 43	FOS/RD	RAPID	0.25X2.0	G270H	2700	1	1800	4112	2		1
PG2112+059	21 14 52.6	6 7 43	FOS/RD	ACQ/BINA	4.3	MIRROR		1	5	4112	2	ACQ	1
NGC7049	21 18 59.6	-48 34 39	FOC/96	IMAGE	512X512	F342W		1	600	4205	3		1
NGC7049	21 18 59.6	-48 34 39	FOC/96	IMAGE	512X512	F502M		1	300	4205	3		1
NGC7049	21 18 59.6	-48 34 39	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC7049	21 18 59.6	-48 34 39	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
GSC6347-01433	21 19 5.5	-16 39 49	HSP/PMT/V IS	SPLIT	1.0	F750W/F320N		1	7620	3375	2		1
2118+132	21 20 42.4	13 27 25	PC	IMAGE	PC6	F555W		2	2000	4172	3		1
2126-159	21 29 12.1	-15 38 41	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	1235	0		1
PKS2126-15	21 29 12.1	-15 38 41	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
PKS2126-15	21 29 12.1	-15 38 41	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
NGC7078	21 29 58.1	12 10 3	PC	IMAGE	PCALL	F439W	4385	1	600	4134	3	ACQ	1
NGC7078-OFFSET	21 29 58.1	12 10 3	FOS/RD	ACQ/BINA	4.3	MIRROR		1	6	4134	3	ACQ	1
NGC7078-STAR	21 29 58.1	12 10 3*	FOS/BL	ACCUM	0.5	G160L		1	2500	4134	3		1
NGC7078-STAR	21 29 58.1	12 10 3*	FOS/RD	ACCUM	0.5	G650L		1	2500	4134	3		1
M15	21 29 58.3	12 10 1	PC	IMAGE	P5	F336W		1	20	3011	0		1
M15	21 29 58.3	12 10 1	PC	IMAGE	P5	F336W		1	100	3011	0		1
M15	21 29 58.3	12 10 1	PC	IMAGE	P5	F336W		1	800	3011	0		1
M15	21 29 58.3	12 10 1	PC	IMAGE	P6	F336W		1	20	3011	0		1
M15	21 29 58.3	12 10 1	PC	IMAGE	P6	F336W		1	100	3011	0		1
M15	21 29 58.3	12 10 1	PC	IMAGE	P6	F336W		1	800	3011	0		1
M15	21 29 58.3	12 10 1	PC	IMAGE	PC6	F336W		1	20	1112	3		1
M15	21 29 58.3	12 10 1	PC	IMAGE	PC6	F336W		1	100	1112	3		1
M15	21 29 58.3	12 10 1	PC	IMAGE	PC6	F336W		1	800	1112	3		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC7078-M15	21 29 58.3	12 10 1	PC	IMAGE	PC6	F336W		1	800	4171	3		1
NGC7078-M15	21 29 58.3	12 10 1	PC	IMAGE	PC6	F336W		1	2200	4171	3		1
NGC7078-M15	21 29 58.3	12 10 1	PC	IMAGE	PC6	F336W		3	2200	4171	3		1
M15-OFF	21 29 58.3	12 9 51	PC	IMAGE	P5	F336W		1	20	3011	0		1
M15-OFF	21 29 58.3	12 9 51	PC	IMAGE	P5	F336W		1	100	3011	0		1
M15-OFF	21 29 58.3	12 9 51	PC	IMAGE	P5	F336W		1	800	3011	0		1
M15-OFF	21 29 58.3	12 9 51	PC	IMAGE	P6	F336W		1	20	3011	0		1
M15-OFF	21 29 58.3	12 9 51	PC	IMAGE	P6	F336W		1	100	3011	0		1
M15-OFF	21 29 58.3	12 9 51	PC	IMAGE	P6	F336W		1	800	3011	0		1
NGC7078-OFF	21 29 58.3	12 9 51	PC	IMAGE	PC6	F336W		1	800	4171	3		1
NGC7078-OFF	21 29 58.3	12 9 51	PC	IMAGE	PC6	F336W		3	2200	4171	3		1
NGC7078	21 29 58.4	12 10 0	PC	IMAGE	P6	F555W		1	70	3040	1		1
NGC7078	21 29 58.4	12 10 0	PC	IMAGE	P6	F555W		1	300	3040	1		1
NGC7078	21 29 58.4	12 10 0	PC	IMAGE	P6	F555W		1	160	1019	0		1
NGC7078	21 29 58.4	12 10 0	PC	IMAGE	P6	F785LP		1	160	1019	0		1
NGC7078	21 29 58.4	12 10 0	PC	IMAGE	P6	F785LP		1	180	3040	1		1
NGC7078	21 29 58.4	12 10 0	PC	IMAGE	ALL	F555W	5479	1	26	2945	3		3
NGC7078	21 29 58.4	12 10 0	PC	IMAGE	ALL	F791W	8537	1	26	2945	3		2
NGC7078	21 29 58.4	12 10 0	PC	IMAGE	ALL	F555W	5479	1	26	2947	2		3
NGC7078	21 29 58.4	12 10 0	PC	IMAGE	ALL	F791W	8537	1	26	2947	2		2
NGC7078	21 29 58.4	12 10 1	FOC/96	IMAGE	512X512	F342W		1	1500	3217	3		1
NGC7078	21 29 58.4	12 10 1	FOC/96	IMAGE	512X512	F342W		1	1500	3084	0		1
NGC7078	21 29 58.4	12 10 1	FOC/96	IMAGE	512X512	F2ND F342W		1	600	3217	3		1
NGC7078	21 29 58.4	12 10 1	FOC/96	IMAGE	512X512	F2ND F342W		1	300	3084	0		1
K648	21 29 59.4	12 10 26	PC	IMAGE	ALL	F502N		1	300	1046	0		1
K648	21 29 59.4	12 10 26	PC	IMAGE	ALL	F664N		1	300	1046	0		1
K648	21 29 59.4	12 10 26	FOS/BL	ACCUM	1.0	G130H		1	650	3196	1		1
K648	21 29 59.4	12 10 26	FOS/BL	ACCUM	1.0	G190H		1	650	3196	1		1
K648	21 29 59.4	12 10 26	FOS/BL	ACCUM	1.0	G270H		1	650	3196	1		1
K648-OFFSET-STAR	21 29 59.4	12 10 26*	FOS/BL	ACQ/BINA	4.3	MIRROR		1	2	3196	1	ACQ	1
W922	21 31 18.5	-9 47 27	FGS	TRANS	ANY	F583W		1	1000	1003	3		2
2128-123INCA221-139	21 31 35.2	-12 7 4	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
2128-123	21 31 35.3	-12 7 5	FOC/96	IMAGE	512X512	F430W F4ND		1	600	3177	1	CON SEL	1
POINT2128-123INCA221 -139	21 32 12.4	-12 15 54	S/C	POINTING	V1			1	1	4154	3	CON	1
INCA221-139	21 32 18.4	-12 4 18	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
QSO2130+099-OFFSET	21 32 27.3	10 8 15*	FOS/BL	ACCUM	1.0	G130H	1379	1	3600	1194	3		1
II-ZW136	21 32 27.8	10 8 19	WFC	IMAGE	WFALL	F725LP		1	4	3287	4	CON	1
II-ZW136	21 32 27.8	10 8 19	WFC	IMAGE	WFALL	F725LP		1	510	3287	4	CON	1
II-ZW136	21 32 27.8	10 8 19	WFC	IMAGE	WFALL	F725LP		1	212	3287	4	CON	1
QSO2130+099-NUCLEUS	21 32 27.9	10 8 20	PC	IMAGE	PC6	F547M		1	1200	1194	3	ACQ	1
QSO2130+099-NUCLEUS	21 32 27.9	10 8 20	PC	IMAGE	PC6	F547M		1	1200	1194	9	ACQ	1
QSO2130+099-NUCLEUS	21 32 27.9	10 8 20	HRS	IMAGE	2.0	MIRROR-N2		1	192	1194	9		1
QSO2130+099-NUCLEUS	21 32 27.9	10 8 20	HRS	IMAGE	2.0	MIRROR-N2		2	256	1194	9		1
QSO2130+099-NUCLEUS	21 32 27.9	10 8 20	FOS/BL	ACQ/BINA	4.3	MIRROR		1	10	1194	3	ACQ	1
QSO2130+099-NUCLEUS	21 32 27.9	10 8 20	FOS/BL	ACCUM	1.0	G130H	1379	1	3600	1194	3		1
NGC7089	21 33 29.3	-0 49 23	PC	IMAGE	P6	F555W		1	160	3565	2		1
NGC7089	21 33 29.3	-0 49 23	PC	IMAGE	P6	F785LP		1	160	3565	2		1
INCA221-171	21 35 56.2	0 40 38	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
POINT2134+004INCA221 -171	21 36 15.2	0 51 49	S/C	POINTING	V1			1	1	4154	3	CON	1
2134+004INCA221-171	21 36 38.6	0 41 54	FGS	POS	3	PUPIL		1	51	4154	3	CON	3

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
PKS2134+004	21 36 38.6	0 41 54	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
PKS2134+004	21 36 38.6	0 41 54	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
PKS2135-147	21 37 45.2	-14 32 55	WFC	IMAGE	WFALL	F725LP		1	10	3287	3		1
PKS2135-147	21 37 45.2	-14 32 55	WFC	IMAGE	WFALL	F725LP		1	510	3287	3		1
PKS2135-147	21 37 45.2	-14 32 55	WFC	IMAGE	WFALL	F725LP		1	212	3287	3		1
PKS2135-147	21 37 45.2	-14 32 56	FOS/BL	RAPID	1.0	G130H	1300	1	5100	1191	2		1
PKS2135-147	21 37 45.2	-14 32 56	FOS/RD	RAPID	1.0	G190H	1900	1	2300	1191	2		1
PKS2135-147	21 37 45.2	-14 32 56	FOS/BL	ACQ/BINA	4.3	MIRROR		1	16	1191	2	ACQ	1
Q2135-147	21 37 45.2	-14 32 56	FOC/96	IMAGE	512X512	PRISM1	3575	1	1200	3056	0		1
NGC7099	21 40 22.0	-23 10 45	PC	IMAGE	P6	F555W		1	70	3227	1		1
NGC7099	21 40 22.0	-23 10 45	PC	IMAGE	P6	F785LP		1	70	3227	1		1
NGC7099	21 40 22.0	-23 10 45	PC	IMAGE	ALL	F555W	5479	1	26	2945	3		3
NGC7099	21 40 22.0	-23 10 45	PC	IMAGE	ALL	F791W	8537	1	26	2945	3		2
NGC7099	21 40 22.0	-23 10 45	PC	IMAGE	ALL	F555W	5479	1	26	2947	2		3
NGC7099	21 40 22.0	-23 10 45	PC	IMAGE	ALL	F791W	8537	1	26	2947	2		2
NGC7099	21 40 22.1	-23 10 45	FOC/96	IMAGE	512X512	F342W		1	1500	1280	0		1
NGC7099	21 40 22.1	-23 10 45	FOC/96	IMAGE	512X512	F2ND F342W		1	300	1280	0		1
OX169	21 43 35.6	17 43 49	FOS/BL	ACCUM	4.3	G130H	1300	1	100	1192	0		1
OX169	21 43 35.6	17 43 49	FOS/RD	ACCUM	4.3	G190H	1900	1	100	1192	0		1
OX169	21 43 35.6	17 43 49	FOS/BL	ACQ/BINA	4.3	MIRROR		1	20	1192	0	ACQ	1
OX169	21 43 35.6	17 43 49	FOS/BL	RAPID	1.0	G130H	1300	1	4600	1192	0		1
OX169	21 43 35.6	17 43 49	FOS/RD	RAPID	1.0	G190H	1900	1	1130	1192	0		1
OX169	21 43 35.6	17 43 49	FOS/RD	RAPID	1.0	G270H	2700	1	1180	1192	0		1
2141+175	21 43 35.6	17 43 49	WFC	IMAGE	ALL	F555W		1	600	4186	4		1
2141+175	21 43 35.6	17 43 49	WFC	IMAGE	ALL	F702W		1	600	4186	4		1
GSC5800-00460	21 47 2.9	-14 58 58	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	146	3373	2	CON	2
GSC5800-00460	21 47 2.9	-14 58 58	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	212	3373	2	CON	2
GSC5800-00460	21 47 2.9	-14 58 58	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	439	3373	2	CON	1
GSC5800-00460	21 47 2.9	-14 58 58	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	636	3373	2	CON	1
GSC5800-00460	21 47 2.9	-14 58 58	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	16020	3373	2	CON	1
2140-758	21 47 12.6	-75 36 11	FOC/96	IMAGE	512X512	F2ND F430W		1	600	3177	1	CON SEL	1
AG-PEG	21 51 2.0	12 37 31	FOC/96	IMAGE	512X512	F190M		1	600	3747	2		1
AG-PEG	21 51 2.0	12 37 31	FOC/96	IMAGE	512X512	F253M		1	600	3747	2		1
AG-PEG	21 51 2.0	12 37 31	FOC/96	IMAGE	512X512	F278M		1	600	3747	2		1
BD+28D4211	21 51 11.1	28 51 52	PC	IMAGE	P6	F889N		1	120	3186	1	CON	1
BD+28D4211	21 51 11.1	28 51 52	PC	IMAGE	PC6	F336W		2	10	4171	3		1
PKS2150+05	21 53 24.6	5 36 18	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
PKS2150+05	21 53 24.6	5 36 18	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
GSC5808-00850	21 57 27.9	-14 5 20	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	153	3371	2	CON	2
GSC5808-00850	21 57 27.9	-14 5 20	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	347	3371	2	CON	2
GSC5808-00850	21 57 27.9	-14 5 20	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	458	3371	2	CON	1
GSC5808-00850	21 57 27.9	-14 5 20	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	7980	3371	2	CON	1
GSC5808-00850	21 57 27.9	-14 5 20	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1039	3371	2	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
GAL-CLUS-215519+0334 12	21 57 56.0	3 47 54	WFC	IMAGE	ALL	F622W		3	700	1115	4	CON	1
GAL-CLUS-215519+0334 12	21 57 56.0	3 47 54	WFC	IMAGE	ALL	F785LP		3	700	1115	4	CON	1
B22156+29	21 58 41.9	29 59 8	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
B22156+29	21 58 41.9	29 59 8	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
PKS2155-304BKG	21 58 50.4	-30 13 32*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
PKS2155-304	21 58 51.6	-30 13 32	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	3		10
PKS2155-304	21 58 51.6	-30 13 32	HSP/POL	STAR-SKY	POL0	F277M		1	990	3248	3		2
PKS2155-304	21 58 51.6	-30 13 32	HSP/POL	STAR-SKY	POL45	F277M		1	990	3248	3		2
PKS2155-304	21 58 51.6	-30 13 32	HSP/POL	STAR-SKY	POL90	F277M		1	990	3248	3		2
PKS2155-304	21 58 51.6	-30 13 32	HSP/POL	STAR-SKY	POL135	F277M		1	990	3248	3		2
PKS2155-304	21 58 52.0	-30 13 32	FOS/BL	ACCUM	4.3	G190H	1950	1	1440	1029	0		2
PKS2155-304	21 58 52.0	-30 13 32	FOS/BL	ACQ/BINA	4.3	MIRROR		1	2	1029	0	ACQ	1
PKS2155-304	21 58 52.0	-30 13 32	FOS/BL	ACCUM	1.0	G130H	1379	1	1500	1029	0		1
PKS2155-304	21 58 52.0	-30 13 32	FOS/BL	ACCUM	4.3	G130H	1444	1	1440	1029	0		2
PKS2155-304	21 58 52.0	-30 13 32	FOS/BL	ACCUM	4.3	G270H	2766	1	1440	1029	0		1
PKS2155-304	21 58 52.0	-30 13 32	FOS/RD	ACQ/PEAK	0.7X2.0-BAR	MIRROR		1	1	4201	9	ACQ	1
PKS2155-304	21 58 52.0	-30 13 32	FOS/RD	ACQ/BINA	4.3	MIRROR		1	0	4201	9	ACQ	1
PKS2155-304	21 58 52.0	-30 13 32	FOS/RD	ACCUM	0.7X2.0-BAR	G650L	6242	1	1500	4201	9		1
PKS2155-304	21 58 52.0	-30 13 32	HRS	ACCUM	2.0	G160M	1240	6	288	3965	2		1
PKS2155-304	21 58 52.0	-30 13 32	HRS	ACCUM	2.0	G140L	1315	14	300	1172	0		1
PKS2155-304	21 58 52.0	-30 13 32	HRS	ACCUM	2.0	G140L	1585	14	300	1172	0		1
PKS2155-304	21 58 52.0	-30 13 32	HRS	ACCUM	2.0	G160M	1240	3	590	3965	2		2
PKS2155-304	21 58 52.0	-30 13 32	HRS	ACCUM	2.0	ECH-B22	2600	7	288	3965	2		1
PKS2155-304	21 58 52.0	-30 13 32	HRS	ACCUM	2.0	ECH-B22	2600	3	590	3965	2		2
PKS2155-304	21 58 52.0	-30 13 32	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	73	1172	0	ACQ	1
PKS2155-304	21 58 52.0	-30 13 32	HRS	ACQ/PEAK	2.0	MIRROR-N2		1	81	3965	2	ACQ	1
PKS2158-380	22 1 17.0	-37 46 23	FOC/96	IMAGE	512X512	F130M		1	2400	2956	1		1
PKS2158-380	22 1 17.0	-37 46 23	FOC/96	IMAGE	512X512	F140M		1	1800	2956	1		1
PKS2158-380	22 1 17.0	-37 46 23	FOC/96	IMAGE	512X512	F152M		1	1800	2956	1		1
PKS2158-380	22 1 17.0	-37 46 23	FOC/96	IMAGE	512X512	F220W		1	1200	2956	1		1
PKS2158-380	22 1 17.0	-37 46 23	FOC/96	IMAGE	512X512	F342W		1	1200	2956	1		1
PKS2158-380	22 1 17.0	-37 46 23	FOC/96	IMAGE	512X512	F372M		1	2400	2956	1		1
INCA221-172	22 2 5.7	42 22 46	PC	IMAGE	P8	F658N		1	0	1139	9	CON	2
INCA221-143	22 2 25.5	42 25 29	PC	IMAGE	P8	F658N		1	1	1139	9	CON	2
BL-LAC	22 2 43.3	42 16 40	FOS/BL	ACCUM	4.3	G190H	1950	1	1440	4057	2		2
BL-LAC	22 2 43.3	42 16 40	FOS/BL	ACQ/BINA	4.3	MIRROR		1	16	4057	2	ACQ	1
BL-LAC	22 2 43.3	42 16 40	FOS/BL	ACCUM	4.3	G270H	2766	1	1440	4057	2		1
2200+420INCA221-143	22 2 43.3	42 16 40	PC	IMAGE	P8	F606W		1	2	1139	9		2
2200+420INCA221-143	22 2 43.3	42 16 40	PC	IMAGE	P8	F606W		1	2	1139	9	CON	2
2200+420INCA221-143	22 2 43.3	42 16 40	PC	IMAGE	P8	F725LP		1	2	1139	9		2
2200+420INCA221-143	22 2 43.3	42 16 40	PC	IMAGE	P8	F725LP		1	5	1139	9	CON	2
2200+420INCA221-172	22 2 43.3	42 16 40	PC	IMAGE	P8	F606W		1	2	1139	9		2
2200+420INCA221-172	22 2 43.3	42 16 40	PC	IMAGE	P8	F606W		1	2	1139	9	CON	2
2200+420INCA221-172	22 2 43.3	42 16 40	PC	IMAGE	P8	F725LP		1	2	1139	9		2
2200+420INCA221-172	22 2 43.3	42 16 40	PC	IMAGE	P8	F725LP		1	0	1139	9	CON	2
BL-LAC	22 2 43.3	42 16 40	WFC	IMAGE	WFALL	F725LP		1	600	3287	3		1
BL-LAC	22 2 43.3	42 16 40	WFC	IMAGE	WFALL	F725LP		1	250	3287	3		1
BL-LAC	22 2 43.3	42 16 40	HSP/UV2	SINGLE	1.0	F140LP		1	120	3248	2		10
BL-LAC	22 2 43.3	42 16 40	HSP/POL	SINGLE	POL0	F277M		1	360	3248	2		10
BL-LAC	22 2 43.3	42 16 40	HSP/POL	SINGLE	POL45	F277M		1	360	3248	2		10

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
BL-LAC	22 2 43.3	42 16 40	HSP/POL	SINGLE	POL90	F277M		1	360	3248	2		10
BL-LAC	22 2 43.3	42 16 40	HSP/POL	SINGLE	POL135	F277M		1	360	3248	2		10
INCA221-143-AST2	22 2 54.0	42 13 19	FGS	POS	2	F550W		1	1	1139	9	CON PAR	2
INCA221-172-AST2	22 2 54.0	42 13 19	FGS	POS	2	F550W		1	0	1139	9	CON PAR	2
INCA221-143-AST1	22 3 5.5	42 6 2	FGS	POS	2	F550W		1	2	1139	9	CON PAR	2
INCA221-143-AST1	22 3 5.5	42 6 2	FGS	POS	2	F550W		1	5	1139	9	CON PAR	2
INCA221-172-AST1	22 3 5.5	42 6 2	FGS	POS	2	F550W		1	0	1139	9	CON PAR	2
INCA221-172-AST1	22 3 5.5	42 6 2	FGS	POS	2	F550W		1	2	1139	9	CON PAR	2
INCA221-173	22 3 9.3	31 51 57	PC	IMAGE	P8	F658N		1	2	1139	9	CON	2
B22201+315	22 3 14.9	31 45 38	WFC	IMAGE	WFALL	F725LP		1	600	3287	3		1
B22201+315	22 3 14.9	31 45 38	WFC	IMAGE	WFALL	F725LP		1	250	3287	3		1
2201+315	22 3 15.0	31 45 38	PC	IMAGE	P8	F606W		1	5	1139	9		1
2201+315	22 3 15.0	31 45 38	PC	IMAGE	P8	F725LP		1	14	1139	9		1
2201+315INCA221-173	22 3 15.0	31 45 38	PC	IMAGE	P8	F606W		1	5	1139	9		2
2201+315INCA221-173	22 3 15.0	31 45 38	PC	IMAGE	P8	F606W		1	5	1139	9	CON	2
2201+315INCA221-173	22 3 15.0	31 45 38	PC	IMAGE	P8	F725LP		1	5	1139	9		2
2201+315INCA221-173	22 3 15.0	31 45 38	PC	IMAGE	P8	F725LP		1	14	1139	9	CON	2
INCA221-173-AST1	22 3 32.6	31 41 52	FGS	POS	2	F550W		1	5	1139	9	CON PAR	2
INCA221-173-AST1	22 3 32.6	31 41 52	FGS	POS	2	F550W		1	14	1139	9	CON PAR	2
INCA221-173-AST2	22 3 48.0	31 34 45	FGS	POS	2	F550W		1	2	1139	9	CON PAR	2
GSC5808-00138	22 6 26.9	-12 55 49	WFC	IMAGE	ALL	F569W		1	0	3354	2	ACQ CON SEL	2
GSC5808-00138	22 6 26.9	-12 55 49	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1500	3354	2	CON SEL	2
GSC5808-00138	22 6 26.9	-12 55 49	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	6000	1082	2		1
Q2204-408	22 7 34.1	-40 36 54	FOS/BL	ACQ/BINA	4.3	MIRROR		1	73	3967	9	ACQ	1
Q2204-408	22 7 34.1	-40 36 54	FOS/BL	ACCUM	1.0	G160L	1837	1	1000	3967	9		1
Q2204-409	22 7 34.4	-40 36 55	FOC/96	IMAGE	512X512	PRISM1	3575	3	900	3057	0		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	G160M	1553	1	288	3941	2		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	ECH-B31	1810	1	220	3941	2		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	ECH-A42	1332	1	882	1201	0		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	ECH-B28	2027	1	220	3941	2		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	ECH-A36	1547	1	882	1201	0		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	ECH-A37	1529	1	882	1201	0		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	ECH-A45	1240	1	882	1201	0		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	ECH-A45	1250	1	220	1201	0		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	G160M	1193	1	460	3941	2		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	G160M	1295	1	230	3941	2		1
HD209952	22 8 13.8	-46 57 40	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	78	1201	0	ACQ	1
HD209952	22 8 13.8	-46 57 40	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	3941	2	ACQ	1
HD209952	22 8 13.8	-46 57 40	HRS	ACQ/PEAK	0.25	MIRROR-A2		1	78	1201	0	ACQ	1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	ECH-B20	2799	1	108	3941	2		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	G160M	1249	1	288	3941	2		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	ECH-A34	1654	1	882	1201	0		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	ECH-A43	1303	1	220	1201	0		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	ECH-B20	2854	1	220	3941	2		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	ECH-B24	2370	1	220	3941	2		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	G140M	1198	1	1157	1201	0		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	G160M	1328	1	230	3941	2		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	G160M	1659	1	230	3941	2		1
HD209952	22 8 13.8	-46 57 40	HRS	ACCUM	0.25	ECH-B22	2596	1	217	3941	2		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HD210334	22 8 40.9	45 44 33	HRS	ACCUM	2.0	G270M	2800	2	54	1208	1		8
HD210334	22 8 40.9	45 44 33	HRS	ACCUM	2.0	G160M	1550	5	190	1208	1		8
HD210839	22 11 30.6	59 24 51	HRS	ACCUM	0.25	G160M	1377	5	326	4092	2		7
HD210839	22 11 30.6	59 24 51	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	4092	2	ACQ	1
PKS2223+21	22 25 38.1	21 18 6	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
PKS2223+21	22 25 38.1	21 18 6	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
3C446	22 25 47.3	-4 57 1	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
3C446	22 25 47.3	-4 57 1	HSP/POL	STAR-SKY	POL0	F277M		1	990	3248	2		2
3C446	22 25 47.3	-4 57 1	HSP/POL	STAR-SKY	POL45	F277M		1	990	3248	2		2
3C446	22 25 47.3	-4 57 1	HSP/POL	STAR-SKY	POL90	F277M		1	990	3248	2		2
3C446	22 25 47.3	-4 57 1	HSP/POL	STAR-SKY	POL135	F277M		1	990	3248	2		2
3C446BKG	22 25 47.3	-4 57 16*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
2223-052	22 25 47.4	-4 57 2	FOC/96	IMAGE	512X512	F2ND F430W		1	600	3177	1	CON SEL	1
KRUGER-60B	22 28 5.2	57 42 9	WFC	IMAGE	WF-ND	F606W		1	30	3288	3		6
NGC7293	22 29 36.1	-20 47 11	WFC	IMAGE	WFALL	F469N		1	2100	3289	3		1
NGC7293	22 29 36.1	-20 47 11	WFC	IMAGE	WFALL	F656N		1	2100	3289	3		2
NGC7293	22 29 36.1	-20 47 11	WFC	IMAGE	WFALL	F658N		1	2100	3289	3		1
PK36-57D1	22 29 38.7	-20 47 42	WFC	IMAGE	ALL	F122M		1	2400	1074	9		1
PK36-57D1	22 29 38.7	-20 47 42	WFC	IMAGE	ALL	F284W		1	2400	1074	9		1
NGC7293	22 29 38.8	-20 50 12	FGS	POS	2	F550W		1	52	2931	9		48
NGC7293	22 29 38.8	-20 50 12	FGS	TRANS	ANY	F583W		1	100	2931	9		1
3C449	22 31 20.6	39 21 30	FOC/96	IMAGE	512X512	F120M		1	2400	2956	1		1
3C449	22 31 20.6	39 21 30	FOC/96	IMAGE	512X512	F140M		1	1800	2956	1		1
3C449	22 31 20.6	39 21 30	FOC/96	IMAGE	512X512	F342W		1	1200	2956	1		1
3C449	22 31 20.6	39 21 30	FOC/96	IMAGE	512X512	F372M		1	2400	2956	1		1
PHL346	22 37 35.9	-18 40 24	HRS	ACCUM	0.25	G160M	1305	1	2400	1064	3		1
PHL346	22 37 35.9	-18 40 24	HRS	ACCUM	0.25	G160M	1362	1	2400	1064	3		1
PHL346	22 37 35.9	-18 40 24	HRS	IMAGE	2.0	MIRROR-A2		1	580	1064	3	ACQ	1
PHL346	22 37 35.9	-18 40 24	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	55	1064	3	ACQ	1
HD214680	22 39 15.6	39 3 1	HRS	WSCAN	0.25	G160M	1480	1	1792	3947	2		1
HD214680	22 39 15.6	39 3 1	HRS	WSCAN	0.25	G160M	1284	1	1792	3947	2		1
HD214680	22 39 15.6	39 3 1	HRS	WSCAN	0.25	G160M	1676	1	1792	3947	2		1
HD214680	22 39 15.6	39 3 1	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	3947	2	ACQ	1
2237+0305	22 40 29.8	3 21 29	PC	IMAGE	P6	F555W		1	50	1116	0		1
2237+0305	22 40 29.8	3 21 29	PC	IMAGE	P6	F785LP		1	100	1116	0		1
2237+0305	22 40 29.8	3 21 29	PC	IMAGE	P6	F785LP		2	400	1116	0		1
2237+0305	22 40 29.8	3 21 29	PC	IMAGE	PC6	F555W		1	800	3799	2		1
2237+0305	22 40 29.8	3 21 29	PC	IMAGE	PC6	F555W		2	300	3287	3		1
2237+0305	22 40 29.8	3 21 29	PC	IMAGE	PC6	F555W		1	2200	3799	2		1
2237+0305	22 40 29.8	3 21 29	PC	IMAGE	PC6	F785LP		2	300	3287	3		1
2237+0305	22 40 29.8	3 21 29	PC	IMAGE	PC6	F785LP		4	1600	3799	2		1
G2237+0305	22 40 29.8	3 21 29	FOC/96	IMAGE	512X512	F342W		1	3600	1059	0		1
G2237+0305	22 40 29.8	3 21 29	FOC/96	IMAGE	512X512	F502M		1	1500	2996	0		1
G2237+0305	22 40 29.8	3 21 29	FOC/96	IMAGE	512X512	F342W		1	3600	3087	0		1
G2237+0305	22 40 29.8	3 21 29	FOC/96	IMAGE	512X1024	F342W		1	600	3087	0	ACQ	1
2237+0305	22 40 30.3	3 21 31	WFC	IMAGE	W1	F702W		1	30	3068	0		1
2237+0305	22 40 30.3	3 21 31	WFC	IMAGE	W1	F702W		1	300	3068	0		1
2237+0305	22 40 30.3	3 21 31	WFC	IMAGE	W1	F336W		1	150	3068	0		1
2237+0305	22 40 30.3	3 21 31	WFC	IMAGE	W1	F336W		1	750	3068	0		1
2237+0305	22 40 30.3	3 21 31	WFC	IMAGE	W1	F702W		1	2100	3068	0		1
GSC5815-01190	22 41 0.9	-10 28 18	WFC	IMAGE	ALL	F569W		1	0	3354	3	ACQ CON SEL	2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
GSC5815-01190	22 41 0.9	-10 28 18	HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1500	3354	3	CON SEL	2
Q2240-419	22 42 54.5	-41 41 45	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
Q2240-419	22 42 54.5	-41 41 45	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
BD+43D4305	22 46 52.1	44 20 12	FOC/96	IMAGE	512X512	F486N		6	600	3176	1		1
HD215733	22 47 2.6	17 14 0	HRS	ACCUM	0.25	G160M	1195	1	1561	3444	2		1
HD215733	22 47 2.6	17 14 0	HRS	ACCUM	0.25	G160M	1560	1	1267	3444	2		1
HD215733	22 47 2.6	17 14 0	HRS	ACCUM	0.25	G160M	1252	1	728	3444	2		1
HD215733	22 47 2.6	17 14 0	HRS	ACCUM	0.25	G160M	1347	1	701	3444	2		1
HD215733	22 47 2.6	17 14 0	HRS	ACCUM	0.25	G160M	1392	1	892	3444	2		1
HD215733	22 47 2.6	17 14 0	HRS	ACCUM	0.25	G160M	1148	2	1675	3444	2		1
HD215733	22 47 2.6	17 14 0	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	3444	2	ACQ	1
HD215733	22 47 2.6	17 14 0	HRS	WSCAN	0.25	ECH-B	2260	1	244	3444	2		1
HD215733	22 47 2.6	17 14 0	HRS	ACCUM	0.25	G160M	1315	1	582	3444	2		1
HD215733	22 47 2.6	17 14 0	HRS	WSCAN	0.25	ECH-B	2025	1	440	3444	2		1
HD215733	22 47 2.6	17 14 0	HRS	WSCAN	0.25	ECH-B	1805	1	1011	3444	2		1
HD215733	22 47 2.6	17 14 0	HRS	WSCAN	0.25	ECH-B	1826	1	1011	3444	2		1
HD215733	22 47 2.6	17 14 0	HRS	WSCAN	0.25	ECH-B	2059	1	489	3444	2		1
HD215733	22 47 2.6	17 14 0	HRS	WSCAN	0.25	ECH-B	2372	1	359	3444	2		1
HD215733	22 47 2.6	17 14 0	HRS	WSCAN	0.25	ECH-B	2603	1	571	3444	2		1
HD216435	22 53 36.7	-48 35 50	HSP/UV1	SINGLE	1.0	F240W		1	3600	3007	0	CON SEL	1
HD216435	22 53 36.7	-48 35 50	HSP/UV1	SINGLE	1.0	F140LP		1	3600	3007	0	CON SEL	1
HD216435	22 53 36.7	-48 35 50	HSP/POL	SINGLE	POL0	F327M		1	3600	3007	0	CON SEL	1
INCA221-153	22 53 48.3	16 14 12	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
3C454.3BKG	22 53 56.7	16 8 54*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
2251+158INCA221-153	22 53 57.7	16 8 54	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
2251+158INCA221-154	22 53 57.7	16 8 54	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
3CR454.3	22 53 57.7	16 8 54	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	3248	2		10
MR2251-178W	22 54 5.8	-17 34 57*	FOC/48	SPEC	256X1024-SLIT	GRAT-PRISM		1	2000	1225	1		1
MR2251-178	22 54 5.8	-17 34 55	FOC/96	IMAGE	512X512	F130M		1	2400	1233	0		1
MR2251-178	22 54 5.8	-17 34 55	FOC/96	IMAGE	512X512	F190M		1	2400	1233	0		1
MR2251-178	22 54 5.8	-17 34 55	FOC/96	IMAGE	512X512	F502M		1	2400	1233	0		1
MR2251-178	22 54 5.8	-17 34 55	FOC/96	IMAGE	512X512	F550M		1	2400	1233	0		1
MR2251-178	22 54 5.9	-17 34 55	WFC	IMAGE	WFALL	F725LP		1	510	3287	3		1
MR2251-178	22 54 5.9	-17 34 55	WFC	IMAGE	WFALL	F725LP		1	212	3287	3		1
MR2251-178	22 54 5.9	-17 34 55	WFC	IMAGE	WFALL	F725LP		1	2	3287	3		1
MR2251-178	22 54 5.9	-17 34 57	FOC/48	SPEC	256X1024-SLIT	GRAT-PRISM		1	2000	1225	1		1
MR2251-178	22 54 5.9	-17 34 57	FOC/48	SPEC	256X1024-SLIT	G450M	4450	1	2000	1225	1		1
PKS2251+24	22 54 9.5	24 45 23	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
PKS2251+24	22 54 9.5	24 45 23	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
INCA221-154	22 54 23.5	15 59 51	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
POINT2251+158INCA221-153	22 54 35.2	16 16 42	S/C	POINTING	V1			1	1	4154	3	CON	1
POINT2251+158INCA221-154	22 54 48.1	16 10 0	S/C	POINTING	V1			1	1	4154	3	CON	1
AO-PSC	22 55 18.0	-3 10 40	HSP/UV1	PRISM	1.0	F248M/F135W		1	12959	3257	3		1
INCA221-155	22 56 18.2	7 44 18	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
POINT2254+074INCA221-155	22 56 50.5	7 54 10	S/C	POINTING	V1			1	1	4154	3	CON	1
IC1459	22 57 10.6	-36 27 48	FOC/96	IMAGE	512X512	F342W		1	900	3265	2		1
IC1459	22 57 10.6	-36 27 48	FOC/96	IMAGE	512X512	F502M		1	1200	3265	2		1
IC1459	22 57 10.6	-36 27 48	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	7200	4205	9	CON	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
IC1459	22 57 10.6	-36 27 48	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
INCA221-157	22 57 16.3	7 36 48	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
2254+074INCA221-155	22 57 17.2	7 43 13	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
2254+074INCA221-157	22 57 17.2	7 43 13	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
PKS2254+024	22 57 17.6	2 43 18	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
PKS2254+024	22 57 17.6	2 43 18	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1
ALPHA-PSA	22 57 37.8	-29 37 12	WFC	IMAGE	WFALL	F555W		1	70	3313	4	CON	2
ALPHA-PSA	22 57 37.8	-29 37 12	WFC	IMAGE	WFALL	F555W		1	1	3313	4	CON	2
INCA221-158	22 57 42.6	-27 57 58	FGS	POS	3	F5ND		1	51	4154	3	CON	2
POINT2255-282INCA221-158	22 57 47.8	-28 10 17	S/C	POINTING	V1			1	1	4154	3	CON	1
POINT2254+074INCA221-157	22 58 3.1	7 39 57	S/C	POINTING	V1			1	1	4154	3	CON	1
2255-282INCA221-158	22 58 5.9	-27 58 21	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
NGC7457	23 1 0.0	30 8 42	PC	IMAGE	P5	F555W		1	40	3009	0		2
NGC7457	23 1 0.0	30 8 42	PC	IMAGE	P5	F555W		1	400	3009	0		2
NGC7457	23 1 0.0	30 8 42	PC	IMAGE	P5	F785LP		1	40	3009	0		2
NGC7457	23 1 0.0	30 8 42	PC	IMAGE	P5	F785LP		1	400	3009	0		2
POINT2300-683INCA221-159	23 2 3.7	-68 15 29	S/C	POINTING	V1			1	1	4154	3	CON	1
POINT2300-683INCA221-175	23 2 20.9	-68 18 22	S/C	POINTING	V1			1	1	4154	3	CON	1
NGC7469	23 3 15.6	8 52 26	FOC/96	IMAGE	512X512	F220W		1	1000	3344	3		1
NGC7469	23 3 15.6	8 52 26	FOC/96	IMAGE	512X512	F502M		1	1000	3344	3		1
NGC7469	23 3 15.6	8 52 26	FOC/96	IMAGE	512X512	F550M		1	1000	3344	3		1
NGC7469	23 3 15.6	8 52 26	FOS/RD	RAPID	4.3	G270H	2700	1	800	3211	1		1
NGC7469	23 3 15.6	8 52 26	FOS/BL	RAPID	4.3	G130H	1300	1	2800	3211	1		1
NGC7469	23 3 15.6	8 52 26	FOS/BL	RAPID	4.3	G190H	1900	1	1400	3211	1		1
NGC7469	23 3 15.6	8 52 26	FOS/BL	ACQ/BINA	4.3	MIRROR		1	1	3211	1	ACQ	1
MKN1126	23 3 15.6	8 52 25	FOC/96	IMAGE	512X512	F220W		1	1000	3344	3		1
MKN1126	23 3 15.6	8 52 25	FOC/96	IMAGE	512X512	F502M		1	1000	3344	3		1
MKN1126	23 3 15.6	8 52 25	FOC/96	IMAGE	512X512	F550M		1	1000	3344	3		1
NGC7469	23 3 15.6	8 52 25	FOC/96	IMAGE	512X512	F152M	1500	1	2000	3180	1		1
NGC7469	23 3 15.6	8 52 25	FOC/96	IMAGE	512X512	F130M	1270	1	2000	3180	1		1
NGC7469	23 3 15.6	8 52 25	FOC/96	IMAGE	512X512	F170M	1760	1	2000	3180	1		1
2300-683INCA221-159	23 3 44.1	-68 7 37	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
2300-683INCA221-160	23 3 44.1	-68 7 37	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
2300-683INCA221-175	23 3 44.1	-68 7 37	FGS	POS	3	PUPIL		1	51	4154	3	CON	3
INCA221-159	23 4 4.1	-68 20 51	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
INCA221-175	23 4 37.2	-68 22 45	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
PG2302+029	23 4 45.0	3 11 46	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	4120	3	ACQ	1
PG2302+029	23 4 45.0	3 11 46	FOS/RD	RAPID	1.0	G270H	2700	1	3299	4120	3		1
INCA221-160	23 4 46.9	-67 54 14	FGS	POS	3	PUPIL		1	51	4154	3	CON	2
POINT2300-683INCA221-160	23 6 6.1	-68 5 13	S/C	POINTING	V1			1	1	4154	3	CON	1
Q2304-423	23 7 17.2	-42 3 19	PC	IMAGE	P7	F555W		1	240	3092	0	CON	1
Q2304-423	23 7 17.2	-42 3 19	PC	IMAGE	P7	F785LP		1	240	3092	0	CON	1
2305+187	23 7 45.7	19 1 15	WFC	IMAGE	ALL	F656N		1	1200	1157	1		1
2305+187	23 7 45.7	19 1 15	WFC	IMAGE	ALL	F702W		1	240	1157	1		1
PG2308+098	23 11 17.8	10 8 16	FOS/RD	RAPID	1.0	G190H	1900	1	3960	4079	2		1
PG2308+098	23 11 17.8	10 8 16	FOS/RD	RAPID	1.0	G270H	2700	1	1050	4079	2		1
PG2308+098	23 11 17.8	10 8 16	FOS/RD	ACQ/BINA	4.3	MIRROR		1	7	4079	2	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC7507	23 12 8.8	-28 32 50	FOC/96	IMAGE	512X512	F342W		1	600	4205	3		1
NGC7507	23 12 8.8	-28 32 50	FOC/96	IMAGE	512X512	F502M		1	300	4205	3		1
NGC7507	23 12 8.8	-28 32 50	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC7507	23 12 8.8	-28 32 50	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
NGC7538	23 13 45.4	61 28 11	WFC	IMAGE	WFALL	F702W		2	300	3284	3		1
NGC7538	23 13 45.4	61 28 11	WFC	IMAGE	WFALL	F850LP		2	200	3284	3		1
NGC7538	23 13 45.4	61 28 11	WFC	IMAGE	WFALL	F850LP		2	1000	3284	3		1
HD219188	23 14 0.6	4 59 50	HRS	ACCUM	0.25	G160M	1195	1	1598	4159	4		1
HD219188	23 14 0.6	4 59 50	HRS	ACCUM	0.25	G160M	1392	1	913	4159	4		1
HD219188	23 14 0.6	4 59 50	HRS	ACCUM	0.25	G160M	1148	2	1715	4159	4		1
HD219188	23 14 0.6	4 59 50	HRS	WSCAN	0.25	ECH-B	2260	1	258	4159	4		1
HD219188	23 14 0.6	4 59 50	HRS	ACCUM	0.25	G160M	1560	1	1297	4159	4		1
HD219188	23 14 0.6	4 59 50	HRS	ACCUM	0.25	G160M	1252	1	746	4159	4		1
HD219188	23 14 0.6	4 59 50	HRS	ACCUM	0.25	G160M	1347	1	718	4159	4		1
HD219188	23 14 0.6	4 59 50	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	20	4159	4	ACQ	1
HD219188	23 14 0.6	4 59 50	HRS	WSCAN	0.25	ECH-B	2025	1	465	4159	4		1
HD219188	23 14 0.6	4 59 50	HRS	WSCAN	0.25	ECH-B	1805	1	1069	4159	4		1
HD219188	23 14 0.6	4 59 50	HRS	WSCAN	0.25	ECH-B	1826	1	1069	4159	4		1
HD219188	23 14 0.6	4 59 50	HRS	WSCAN	0.25	ECH-B	2059	1	517	4159	4		1
HD219188	23 14 0.6	4 59 50	HRS	WSCAN	0.25	ECH-B	2372	1	379	4159	4		1
HD219188	23 14 0.6	4 59 50	HRS	WSCAN	0.25	ECH-B	2603	1	603	4159	4		1
HD219188	23 14 0.6	4 59 50	HRS	ACCUM	0.25	G160M	1315	1	595	4159	4		1
NGC7582	23 18 23.2	-42 22 14	FOC/96	IMAGE	512X512	F220W		1	1000	3344	3		1
NGC7582	23 18 23.2	-42 22 14	FOC/96	IMAGE	512X512	F501N		1	1000	3344	3		1
NGC7582	23 18 23.2	-42 22 14	FOC/96	IMAGE	512X512	F502M		1	1000	3344	3		1
NGC7582	23 18 23.2	-42 22 14	FOC/96	IMAGE	512X512	F550M		1	1000	3344	3		1
NGC7635	23 20 47.0	61 12 30	WFC	IMAGE	WFALL	F502N		1	200	4088	2		1
NGC7635	23 20 47.0	61 12 30	WFC	IMAGE	WFALL	F656N		1	200	4088	2		1
NGC7635	23 20 47.0	61 12 30	WFC	IMAGE	WFALL	F502N		2	2200	4088	2		1
NGC7635	23 20 47.0	61 12 30	WFC	IMAGE	WFALL	F547M		2	140	4088	2		1
NGC7635	23 20 47.0	61 12 30	WFC	IMAGE	WFALL	F656N		2	2200	4088	2		1
NGC7635	23 20 47.0	61 12 30	WFC	IMAGE	WFALL	F658N		2	2200	4088	2		1
NGC7635	23 20 47.0	61 12 30	WFC	IMAGE	WFALL	F673N		2	2200	4088	2		1
POINT-CP2.2	23 24 27.5	28 20 59	S/C	POINTING	V1			1	0	1014	3	CON	1
POINT-CP2.1	23 25 59.0	28 32 29	S/C	POINTING	V1			1	0	1014	3		1
HD220787	23 26 45.4	-10 51 56	HRS	ACCUM	0.25	G160M	1305	1	600	1064	3		1
HD220787	23 26 45.4	-10 51 56	HRS	ACCUM	0.25	G160M	1362	1	600	1064	3		1
HD220787	23 26 45.4	-10 51 56	HRS	IMAGE	2.0	MIRROR-A2		1	96	1064	3	ACQ	1
HD220787	23 26 45.4	-10 51 56	HRS	ACQ/PEAK	2.0	MIRROR-A2		1	9	1064	3	ACQ	1
HD221420	23 33 19.3	-77 23 8	HSP/UV1	SINGLE	1.0	F240W		1	3600	3007	0	CON SEL	1
HD221420	23 33 19.3	-77 23 8	HSP/UV1	SINGLE	1.0	F140LP		1	3600	3007	0	CON SEL	1
HD221420	23 33 19.3	-77 23 8	HSP/POL	SINGLE	POL0	F327M		1	3600	3007	0	CON SEL	1
NGC7714-POS1	23 36 14.1	2 9 18*	FOS/RD	ACCUM	0.5	G160L		1	3600	3276	9		1
NGC7714-POS1	23 36 14.1	2 9 18*	FOS/RD	ACCUM	0.5	G570H		1	1800	3276	9		1
NGC7714	23 36 14.1	2 9 18	PC	IMAGE	ALL	F336W		1	600	1041	0		1
NGC7714	23 36 14.1	2 9 18	PC	IMAGE	ALL	F547M		1	400	1041	0		1
NGC7714	23 36 14.1	2 9 18	PC	IMAGE	ALL	F664N		1	2000	1041	0		1
NGC7714	23 36 14.1	2 9 18	FOS/RD	ACCUM	0.5	G570H		1	900	3276	9		1
NGC7714	23 36 14.1	2 9 18	FOS/BL	ACCUM	0.5	G160L		1	3600	3276	9		1
NGC7714	23 36 14.1	2 9 18	FOS/RD	ACQ/PEAK	0.5	MIRROR		1	1	3276	9	ACQ	1
NGC7714	23 36 14.1	2 9 18	FOS/RD	ACQ/PEAK	4.3	MIRROR		1	0	3276	9	ACQ	1
NGC7714	23 36 14.1	2 9 18	FOS/BL	ACQ/PEAK	0.5	MIRROR		1	4	3276	9	ACQ	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
NGC7714	23 36 14.1	2 9 18	FOS/RD	ACQ/PEAK	1.0	MIRROR		1	0	3276	9	ACQ	1
3C465E	23 38 29.4	27 1 55	FOC/96	IMAGE	512X512	F220W		1	900	3344	3		1
3C465E	23 38 29.4	27 1 55	FOC/96	IMAGE	512X512	F430W		1	900	3344	3		1
3C465E	23 38 29.4	27 1 55	FOC/96	IMAGE	512X512	F372M		1	1800	3344	3		1
3C465E	23 38 29.4	27 1 55	FOC/96	IMAGE	512X512	F501N		1	1800	3344	3		1
NGC7720	23 38 29.4	27 1 55	FOC/96	IMAGE	512X512	F502M		1	600	3263	9		1
NGC7720	23 38 29.4	27 1 55	FOC/96	IMAGE	512X512	F320W		1	1200	3263	9		1
NGC7720	23 38 29.4	27 1 55	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC7720	23 38 29.4	27 1 55	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
ROSS248	23 41 55.0	44 10 39	FOC/96	IMAGE	512X512	F486N		6	600	3176	1		1
ROSS248	23 41 55.0	44 10 30	PC	IMAGE	P6	F875M		1	50	1062	9		1
ROSS248	23 41 55.0	44 10 30	PC	IMAGE	P6	F622W		4	400	1062	9		1
ROSS248	23 41 55.0	44 10 30	PC	IMAGE	P6	F875M		4	400	1062	9		1
ROSS-248	23 41 55.2	44 11 50	WFC	IMAGE	WF-ND	F606W		1	60	3288	3		6
R-AQR	23 43 49.4	-15 17 4	FOC/96	IMAGE	512X1024	F120M		1	900	2995	0		1
R-AQR	23 43 49.4	-15 17 4	FOC/96	IMAGE	512X1024	F372M		1	900	2995	0		1
R-AQR	23 43 49.4	-15 17 4	FOC/96	IMAGE	512X1024	F501N		1	600	2995	0		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F190M		1	600	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F253M		1	600	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F372M		1	600	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F486N		1	600	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F501N		1	600	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F190M		1	1200	3295	3		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F253M		1	1200	3295	3		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F190M		1	1200	3747	2		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F253M		1	1200	3747	2		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F278M		1	1200	3747	2		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F2ND F372M		1	600	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F2ND F501N		1	600	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F4ND F550M		1	300	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F501N POL0		1	600	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F501N POL60		1	600	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F140W PRISM1		1	600	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F175W PRISM1		1	600	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F275W PRISM2		1	600	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F501N POL120		1	600	3182	1		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F140W PRISM1		1	1200	3747	2		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F175W PRISM1		1	1200	3747	2		1
CENTER-R-AQR	23 43 49.5	-15 17 2*	FOC/96	IMAGE	512X512	F275W PRISM2		1	1200	3747	2		1
NGC7742	23 44 15.7	10 46 1	WFC	IMAGE	WF1	F555W		1	30	3292	4	CON	1
NGC7742	23 44 15.7	10 46 1	WFC	IMAGE	WF1	F555W		1	400	3292	4	CON	1
NGC7742	23 44 15.7	10 46 1	WFC	IMAGE	WF1	F702W		1	30	3292	4	CON	1
NGC7742	23 44 15.7	10 46 1	WFC	IMAGE	WF1	F702W		1	400	3292	4	CON	1
NGC7742	23 44 15.7	10 46 1	WFC	IMAGE	WF1	F555W		1	230	3292	4	CON	1
NGC7742	23 44 15.7	10 46 1	WFC	IMAGE	WF1	F702W		1	230	3292	4	CON	1
NGC7742	23 44 15.7	10 46 1	WFC	IMAGE	WF1	F785LP		1	30	3292	4	CON	1
NGC7742	23 44 15.7	10 46 1	WFC	IMAGE	WF1	F785LP		1	400	3292	4	CON	1
NGC7742	23 44 15.7	10 46 1	WFC	IMAGE	WF1	F785LP		1	230	3292	4	CON	1
SX-PHE	23 46 32.7	-41 34 47	HSP/VIS	PRISM	1.0	F551W/F240W		1	7200	1103	2		1
QSO2345+007B	23 48 19.2	0 57 17*	HSP/POL	STAR-SKY	POL0	F277M		1	1000	4034	3		4
QSO2345+007B	23 48 19.2	0 57 17*	HSP/POL	STAR-SKY	POL45	F277M		1	1000	4034	3		4
QSO2345+007B	23 48 19.2	0 57 17*	HSP/POL	STAR-SKY	POL90	F277M		1	1000	4034	3		4

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
QSO2345+007B	23 48 19.2	0 57 17*	HSP/POL	STAR-SKY	POL135	F277M		1	1000	4034	3		4
QSO2345+007B	23 48 19.2	0 57 17*	HSP/POL	STAR-SKY	POL0	F277M		1	1000	1096	3		1
QSO2345+007B	23 48 19.2	0 57 17*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	1096	3		1
QSO2345+007B	23 48 19.2	0 57 17*	HSP/POL	STAR-SKY	POL45	F277M		1	1000	1096	3		1
QSO2345+007B	23 48 19.2	0 57 17*	HSP/POL	STAR-SKY	POL90	F277M		1	1000	1096	3		1
QSO2345+007B	23 48 19.2	0 57 17*	HSP/UV2	STAR-SKY	1.0-A	F284M		1	120	1096	3		1
QSO2345+007B	23 48 19.2	0 57 17*	HSP/UV2	STAR-SKY	1.0-B	F248M		1	120	1096	3		1
QSO2345+007B	23 48 19.2	0 57 17*	HSP/POL	STAR-SKY	POL135	F277M		1	1000	1096	3		1
2345+007	23 48 19.4	0 57 18	PC	IMAGE	P6	F555W		2	900	1116	0		1
2345+007	23 48 19.4	0 57 18	PC	IMAGE	P6	F785LP		2	900	1116	0		1
2345+007	23 48 19.4	0 57 18	WFC	IMAGE	WFALL	F725LP		1	400	3287	3		1
2345+007	23 48 19.4	0 57 18	WFC	IMAGE	WFALL	F725LP		1	600	3287	3		1
QSO2345+007A	23 48 19.6	0 57 21	HSP/POL	STAR-SKY	POL0	F277M		1	1000	4034	3		4
QSO2345+007A	23 48 19.6	0 57 21	HSP/POL	STAR-SKY	POL45	F277M		1	1000	4034	3		4
QSO2345+007A	23 48 19.6	0 57 21	HSP/POL	STAR-SKY	POL90	F277M		1	1000	4034	3		4
QSO2345+007A	23 48 19.6	0 57 21	HSP/POL	STAR-SKY	POL135	F277M		1	1000	4034	3		4
Q2345+07	23 48 19.6	0 57 21	FOC/96	IMAGE	512X512	F342W		1	1800	3226	1		1
QSO2345+007A	23 48 19.6	0 57 21	HSP/POL	STAR-SKY	POL0	F277M		1	1000	1096	3		1
QSO2345+007A	23 48 19.6	0 57 21	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	1096	3		1
QSO2345+007A	23 48 19.6	0 57 21	HSP/POL	STAR-SKY	POL45	F277M		1	1000	1096	3		1
QSO2345+007A	23 48 19.6	0 57 21	HSP/POL	STAR-SKY	POL90	F277M		1	1000	1096	3		1
QSO2345+007A	23 48 19.6	0 57 21	HSP/UV2	STAR-SKY	1.0-A	F284M		1	120	1096	3		1
QSO2345+007A	23 48 19.6	0 57 21	HSP/UV2	STAR-SKY	1.0-B	F248M		1	120	1096	3		1
QSO2345+007A	23 48 19.6	0 57 21	HSP/POL	STAR-SKY	POL135	F277M		1	1000	1096	3		1
QSO2345+007BKG	23 48 19.6	0 57 16*	HSP/UV2	SINGLE	1.0-C	F140LP		1	120	1096	3		1
QSO2345+007BKG	23 48 19.6	0 57 16*	HSP/UV2	STAR-SKY	1.0-A	F284M		1	120	1096	3		1
QSO2345+007BKG	23 48 19.6	0 57 16*	HSP/UV2	STAR-SKY	1.0-B	F248M		1	120	1096	3		1
NGC7768	23 50 58.4	27 8 50	FOC/96	IMAGE	512X512	F342W		1	600	4205	3		1
NGC7768	23 50 58.4	27 8 50	FOC/96	IMAGE	512X512	F502M		1	300	4205	3		1
NGC7768	23 50 58.4	27 8 50	FOC/48	SPEC	256X1024-SLIT	G450M	4500	1	12000	4205	9	CON	1
NGC7768	23 50 58.4	27 8 50	FOC/48	IMAGE	128X128-ASLIT	F430W	3920	1	100	4205	9	CON	1
NGC7768-NUC	23 50 58.4	27 8 50	PC	IMAGE	PC6	F555W		1	1800	3286	2		1
NGC7768-NUC	23 50 58.4	27 8 50	PC	IMAGE	PC6	F555W		1	1200	3286	2		1
2351-154	23 54 30.1	-15 13 12	FOC/96	IMAGE	512X512	F2ND F430W		1	600	1236	0	SEL	1
2351-154	23 54 30.1	-15 13 12	FOC/96	IMAGE	512X512	F2ND F430W		1	600	3177	1	CON SEL	1
PKS2351-154	23 54 30.2	-15 13 11	PC	IMAGE	ALL	F555W		1	120	3034	0	CON	1
PKS2351-154	23 54 30.2	-15 13 11	PC	IMAGE	ALL	F785LP		1	120	3034	0	CON	1

4.6 SOLAR SYSTEM TARGET OBSERVATIONS FOR GTO PROGRAMS

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
00138-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	467	1082	2		2
00138-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	2333	1082	2		1
01433-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	613	3375	2		3
01493-A-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	200	4193	2		4
01493-A-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	600	4193	2		2
01493-B-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	200	4193	2		4
01493-B-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	600	4193	2		2
1-CERES	(S)		PC	IMAGE	PC-ND	F555W		1	4	1125	3		5
12-VICTORIA	(S)		PC	IMAGE	PC-ND	F555W		1	40	1125	3		4
18-MELPOMENE	(S)		PC	IMAGE	PC-ND	F555W		1	10	1125	3		4
2-PALLAS	(S)		PC	IMAGE	PC-ND	F555W		1	4	1125	4	CON	4
216-KLEOPATRA	(S)		PC	IMAGE	PC-ND	F555W		1	50	1125	3		4
29-AMPHITRITE	(S)		PC	IMAGE	PC-ND	F555W		1	30	1125	4	CON	4
4-VESTA	(S)		PC	IMAGE	PC-ND	F555W		1	4	1125	4	CON	4
532-HERCULINA	(S)		PC	IMAGE	PC-ND	F555W		1	20	1125	3		4
6-HEBE	(S)		PC	IMAGE	PC-ND	F555W		1	4	1125	3		4
AGK+08D1425-BACKGROUND	(S)		FOS/RD	RAPID	1.0	G650L	6232	1	780	1080	2		1
AGK-BKG2	(S)		FOS/RD	RAPID	1.0	G650L	6232	1	780	1080	2		2
CERES	(S)		FOC/96	IMAGE	256X256	F342W F6ND		1	600	1268	1		2
CERES	(S)		FOC/96	IMAGE	256X256	F1ND F342W F4ND		1	600	1268	1		1
CERES	(S)		FOC/96	IMAGE	256X256	F1ND F342W F6ND		1	600	1268	1		1
GANYMEDE-CALIB	(S)		HRS	IMAGE	2.0	MIRROR-N2		1	51	1285	0		1
GANYMEDE-CALIB	(S)		HRS	ACCUM	2.0	G200M	2116	4	900	1285	0		1
IO	(S)		PC	IMAGE	PC6	F284W		1	60	1128	4	CON	7
IO	(S)		HRS	IMAGE	2.0	MIRROR-N2		1	97	1204	3		1
IO	(S)		HRS	ACCUM	2.0	G160M	1216	1	2220	4174	3		1
IO	(S)		HRS	ACQ/PEAK	2.0	MIRROR-N2		1	74	1204	3	ACQ	1
IO	(S)		HRS	ACCUM	2.0	G160M	1216	1	6599	1204	3		1
IO-EAST	(S)		HRS	IMAGE	2.0	MIRROR-N2		1	256	1285	0		1
IO-EAST	(S)		HRS	ACCUM	2.0	G200M	2116	4	900	1285	0		1
IO-IN	(S)		HRS	IMAGE	2.0	MIRROR-N2		1	97	1206	2		1
IO-IN	(S)		HRS	ACCUM	2.0	G160M	1479	1	1440	3935	2	CON	1
IO-IN	(S)		HRS	ACCUM	2.0	G200M	1817	1	1440	3935	2	CON	1
IO-IN	(S)		HRS	WSCAN	2.0	G160M	1328	1	2880	1206	2		1
IO-IN	(S)		HRS	ACQ/PEAK	2.0	MIRROR-N2		1	163	1206	2	ACQ	1
IO-OUT	(S)		HRS	IMAGE	2.0	MIRROR-N2		1	97	3935	2	CON	1
IO-OUT	(S)		HRS	ACCUM	2.0	G160M	1479	1	1440	1206	2		1
IO-OUT	(S)		HRS	ACCUM	2.0	G200M	1817	1	1440	1206	2		1
IO-OUT	(S)		HRS	WSCAN	2.0	G160M	1328	1	2880	1206	2		1
IO-OUT	(S)		HRS	ACQ/PEAK	2.0	MIRROR-N2		1	163	3935	2	ACQ CON	1
IO-WEST	(S)		HRS	IMAGE	2.0	MIRROR-N2		1	97	3214	1		1
IO-WEST	(S)		HRS	ACCUM	2.0	G200M	2116	1	4260	3214	1		1
IO-WEST	(S)		HRS	ACCUM	2.0	G200M	2116	1	1367	3214	1		1
IO-WEST	(S)		HRS	ACQ/PEAK	2.0	MIRROR-N2		1	74	3214	1	ACQ	1

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JUPITER	(S)		PC	IMAGE	ALL	F194W		1	200	3994	1		1
JUPITER	(S)		PC	IMAGE	ALL	F230W		1	200	3994	1		1
JUPITER	(S)		PC	IMAGE	ALL	F547M		1	0	3994	1		1
JUPITER-1	(S)		WFC	IMAGE	W2	F336W		1	15	1288	1		1
JUPITER-1	(S)		HRS	ACCUM	2.0	G200M	1590	1	1512	1288	1		1
JUPITER-1	(S)		HRS	ACCUM	2.0	G200M	1660	1	1512	1288	1		1
JUPITER-1	(S)		HRS	ACCUM	2.0	G200M	1730	1	1512	1288	1		1
JUPITER-1	(S)		HRS	ACCUM	2.0	G200M	1765	1	960	1288	1		1
JUPITER-1	(S)		HRS	ACCUM	2.0	G200M	1625	1	1512	1288	1		1
JUPITER-1	(S)		HRS	ACCUM	2.0	G200M	1695	1	1512	1288	1		1
JUPITER-1	(S)		FOS/BL	ACCUM	1.0	G190H	1900	1	1380	1288	1		1
JUPITER-1	(S)		FOS/BL	ACCUM	1.0	G270H	2766	1	120	1288	1		1
JUPITER-1	(S)		FOS/BL	ACCUM	0.25X2.0	G190H	1900	1	480	1288	1		1
JUPITER-1	(S)		FOS/BL	ACCUM	0.25X2.0	G270H	2766	1	240	1288	1		1
JUPITER-2	(S)		FOS/BL	ACCUM	1.0	G190H	1900	1	480	1288	1		1
JUPITER-ACQ1	(S)		PC	IMAGE	ALL	F439W		1	4	4203	2		1
JUPITER-ACQ2	(S)		PC	IMAGE	ALL	F569W		1	1	4203	2		1
JUPITER-AURORAN1	(S)		FOC/96	IMAGE	512X1024	F120M PRISM1		1	900	3997	1		6
JUPITER-AURORAN1	(S)		FOC/96	IMAGE	512X1024	F140W PRISM1		1	900	3997	1		3
JUPITER-AURORAN1	(S)		FOC/96	IMAGE	512X1024	F165W PRISM1		1	900	3997	1		3
JUPITER-CENTER	(S)		HRS	ACCUM	2.0	G200M	1817	1	600	1206	2	CAL	1
JUPITER-CENTER	(S)		HRS	ACCUM	2.0	G200M	2116	2	900	3214	1		1
JUPITER-CENTER	(S)		HRS	ACCUM	2.0	G160M	1208	1	1800	4175	3		1
JUPITER-GRS1	(S)		HRS	ACCUM	2.0	G200M	1940	1	240	4203	2		1
JUPITER-GRS1	(S)		HRS	ACCUM	2.0	G200M	1800	1	420	4203	2		1
JUPITER-GRS1	(S)		HRS	ACCUM	2.0	G200M	1870	1	240	4203	2		1
JUPITER-GRS1	(S)		HRS	ACCUM	2.0	G200M	2010	1	186	4203	2		1
JUPITER-GRS1	(S)		HRS	ACCUM	2.0	G200M	2080	1	102	4203	2		1
JUPITER-GRS1	(S)		HRS	ACCUM	2.0	G200M	1905	1	240	4203	2		1
JUPITER-GRS1	(S)		HRS	ACCUM	2.0	G200M	1975	1	210	4203	2		1
JUPITER-GRS1	(S)		HRS	ACCUM	2.0	G200M	1835	1	360	4203	2		1
JUPITER-GRS1	(S)		HRS	ACCUM	2.0	G200M	2045	1	168	4203	2		1
JUPITER-GRS2	(S)		HRS	ACCUM	2.0	G200M	1940	1	240	4203	2		1
JUPITER-GRS2	(S)		HRS	ACCUM	2.0	G200M	2010	1	186	4203	2		1
JUPITER-GRS2	(S)		HRS	ACCUM	2.0	G200M	2080	1	102	4203	2		1
JUPITER-GRS2	(S)		HRS	ACCUM	2.0	G200M	1975	1	210	4203	2		1
JUPITER-GRS2	(S)		HRS	ACCUM	2.0	G200M	2045	1	168	4203	2		1
JUPITER-GRS3	(S)		HRS	ACCUM	2.0	G200M	1940	1	240	4203	2		1
JUPITER-GRS3	(S)		HRS	ACCUM	2.0	G200M	1800	1	420	4203	2		1
JUPITER-GRS3	(S)		HRS	ACCUM	2.0	G200M	1870	1	240	4203	2		1
JUPITER-GRS3	(S)		HRS	ACCUM	2.0	G200M	2010	1	186	4203	2		1
JUPITER-GRS3	(S)		HRS	ACCUM	2.0	G200M	2080	1	102	4203	2		1
JUPITER-GRS3	(S)		HRS	ACCUM	2.0	G200M	1905	1	240	4203	2		1
JUPITER-GRS3	(S)		HRS	ACCUM	2.0	G200M	1975	1	210	4203	2		1
JUPITER-GRS3	(S)		HRS	ACCUM	2.0	G200M	1835	1	360	4203	2		1
JUPITER-GRS3	(S)		HRS	ACCUM	2.0	G200M	2045	1	168	4203	2		1
JUPITER-HOT-AURORA	(S)		HRS	ACCUM	2.0	G160M	1208	1	1800	4175	3		1
JUPITER-HOT-AURORA	(S)		HRS	ACCUM	0.25	G160M	1208	1	10800	4175	3		1
JUPITER-NORTH	(S)		FOC/96	IMAGE	512X1024	F120M F140W		2	990	3997	1		4
JUPITER-NORTHPOLE	(S)		FOC/96	IMAGE	512X1024	F170M F175W		1	300	4113	2		7
JUPITER-NORTHPOLE	(S)		FOC/96	IMAGE	512X1024	F140W F152M		1	420	1286	1		1
JUPITER-NORTHPOLE	(S)		FOC/96	IMAGE	512X1024	F140W F152M		1	960	1286	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
JUPITER-NORTHPOLE	(S)		FOC/96	IMAGE	512X1024	F170M F175W		1	240	1286	1		1
JUPITER-NORTHPOLE	(S)		FOC/96	IMAGE	512X1024	F140W F152M		2	660	4113	2		7
JUPITER-NORTHPOLE	(S)		FOC/96	IMAGE	512X1024	F140W F152M		3	540	1286	1		1
JUPITER-NP180	(S)		HRS	ACCUM	2.0	G200M	1940	1	240	4203	2		1
JUPITER-NP180	(S)		HRS	ACCUM	2.0	G200M	1800	1	420	4203	2		1
JUPITER-NP180	(S)		HRS	ACCUM	2.0	G200M	1870	1	240	4203	2		1
JUPITER-NP180	(S)		HRS	ACCUM	2.0	G200M	2010	1	186	4203	2		1
JUPITER-NP180	(S)		HRS	ACCUM	2.0	G200M	2080	1	102	4203	2		1
JUPITER-NP180	(S)		HRS	ACCUM	2.0	G200M	1905	1	240	4203	2		1
JUPITER-NP180	(S)		HRS	ACCUM	2.0	G200M	1975	1	210	4203	2		1
JUPITER-NP180	(S)		HRS	ACCUM	2.0	G200M	1835	1	360	4203	2		1
JUPITER-NP180	(S)		HRS	ACCUM	2.0	G200M	2045	1	168	4203	2		1
JUPITER-NPR	(S)		HRS	WSCAN	2.0	G160M	1270	2	1050	4001	1		1
JUPITER-NPR	(S)		HRS	WSCAN	2.0	G160M	1590	2	1050	4001	1		1
JUPITER-QUIET	(S)		HRS	WSCAN	2.0	G160M	1270	2	1050	4001	1		1
JUPITER-QUIET	(S)		HRS	WSCAN	2.0	G160M	1590	2	1050	4001	1		1
JUPITER-RING	(S)		PC	IMAGE	PC6	F889N		1	60	1127	3		4
JUPITER-SOUTHPOLE	(S)		FOC/96	IMAGE	512X1024	F170M F175W		1	300	4113	2		1
JUPITER-SOUTHPOLE	(S)		FOC/96	IMAGE	512X1024	F140W F152M		2	660	4113	2		1
MERCURY	(S)		PC	IMAGE	PC6	F889N		1	0	1123	4	CON	1
MERCURY	(S)		PC	IMAGE	PC6	F336W		1	1	1123	4	CON	1
MERCURY	(S)		PC	IMAGE	PC6	F517N		1	0	1123	4	CON	1
MERCURY	(S)		PC	IMAGE	PC6	F1042M		1	0	1123	4	CON	1
MP1108	(S)		FGS	POS	2	F583W		1	300	1014	3		2
MP1276	(S)		FGS	POS	2	F583W		1	300	1014	3	CON	4
MP1310	(S)		FGS	POS	2	F583W		1	300	1014	3		2
MP1320	(S)		FGS	POS	2	F583W		1	300	1014	3	CON	2
MP1626	(S)		FGS	POS	2	F583W		1	300	1014	3		2
MP1626	(S)		FGS	POS	2	F583W		1	300	1014	3	CON	4
MP2000	(S)		FGS	POS	2	F583W		1	300	1014	3		6
MP2000	(S)		FGS	POS	2	F583W		1	300	1014	3	CON	4
MP391	(S)		FGS	POS	2	F583W		1	300	1014	3		2
MP391	(S)		FGS	POS	2	F583W		1	300	1014	3	CON	2
MP434	(S)		FGS	POS	2	F583W		1	300	1014	3		2
MP619	(S)		FGS	POS	2	F583W		1	300	1014	3		4
MP619	(S)		FGS	POS	2	F583W		1	300	1014	3	CON	2
MP652	(S)		FGS	POS	2	F583W		1	300	1014	3		4
MP692	(S)		FGS	POS	2	F583W		1	300	1014	3		2
MP965	(S)		FGS	POS	2	F583W		1	300	1014	3	CON	4
N61-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	91	4076	2		6
N63-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	107	4198	2		6
NEPTUNE	(S)		PC	IMAGE	P6	F569W		1	2	1134	0		13
NEPTUNE	(S)		PC	IMAGE	P6	F675W		1	2	1134	0		8
NEPTUNE	(S)		PC	IMAGE	P6	F889N		4	30	3186	1		3
NEPTUNE	(S)		PC	IMAGE	P6	F439W		1	12	1134	0		8
NEPTUNE	(S)		PC	IMAGE	P6	F889N		2	120	1134	0		8
NEPTUNE	(S)		WFC	IMAGE	WF1	F889N		1	300	3291	3		1
NEPTUNE	(S)		WFC	IMAGE	WF1	F194W		1	2400	3291	3		1
NEPTUNE	(S)		WFC	IMAGE	WF1	F230W		1	1800	3291	3		1
NEPTUNE	(S)		WFC	IMAGE	WF1	F284W		1	180	3291	3		1

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NEPTUNE	(S)		WFC	IMAGE	WFALL	F606W		1	2	1135	4	CON	6
NEPTUNE	(S)		WFC	IMAGE	WFALL	F606W		1	260	1135	4	CON	6
NEPTUNE	(S)		FOS/BL	ACCUM	0.3	G190H	1900	1	3600	1290	1		1
NEPTUNE	(S)		FOS/BL	ACCUM	0.3	G270H	2700	1	1200	1290	1		1
NEPTUNE	(S)		FOS/BL	ACCUM	1.0	G190H	1900	1	14400	1290	1		1
NEPTUNE	(S)		FOS/BL	ACCUM	1.0	G270H	2700	1	1200	1290	1		1
OBERON	(S)		FOS/BL	ACQ/FIRM	4.3	MIRROR		1	19	1290	1	ACQ SEL	1
P18A-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1000	4015	2		1
P18A-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	333	4015	2		2
P18B-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	333	4015	2		3
P19.04-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	267	4015	2		6
PLUTO+CHARON	(S)		FOC/96	IMAGE	512X512	F120M		3	900	3036	1		1
PLUTO+CHARON	(S)		FOC/96	IMAGE	256X256	F2ND F342W		2	900	3036	1		1
PLUTO+CHARON	(S)		FOC/96	IMAGE	256X256	F2ND F430W		2	900	3036	1		1
PLUTO+CHARON	(S)		FOC/96	IMAGE	512X512	F275W F278M		2	900	3036	1		1
PLUTO+CHARON	(S)		FOC/96	IMAGE	512X1024	F430W F4ND		1	900	3036	1	ACQ	1
PLUTO+CHARON	(S)		FOC/288	IMAGE	512X512	F2ND F430W		2	900	3036	1		1
PLUTO-AND-CHARON	(S)		PC	IMAGE	ALL	F555W		1	10	1136	3		2
PLUTO-AND-CHARON	(S)		PC	IMAGE	ALL	F555W		1	200	1136	3		2
PLUTO-AND-CHARON	(S)		PC	IMAGE	PC6	F555W		1	10	1136	3		2
PLUTO-AND-CHARON	(S)		PC	IMAGE	PC6	F555W		1	200	1136	3		6
PLUTO-AND-CHARON	(S)		PC	IMAGE	PC6	F569W		1	10	1136	3		4
PLUTO-AND-CHARON	(S)		PC	IMAGE	PC6	F336W		1	350	1136	3		4
PLUTO-AND-CHARON	(S)		PC	IMAGE	PC6	F785LP		1	10	1136	3		4
PLUTO-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	400	1086	1		2
PLUTO-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1200	1086	1		1
S-CLOUD-OUT	(S)		HRS	ACCUM	2.0	G200M	1817	1	1440	3935	2	CON	1
SAO138840-BACKGROUND	(S)		FOS/RD	RAPID	1.0	G650L		1	540	1082	2		2
SAO138840-BACKGROUND	(S)		FOS/RD	RAPID	1.0	G650L		1	1620	1082	2		1
SATURN	(S)		PC	IMAGE	P6	F336W		1	75	4204	2		1
SATURN	(S)		PC	IMAGE	ALL	F889N		1	50	1130	3		2
SATURN	(S)		WFC	IMAGE	W1	F439W		1	0	2890	0		1
SATURN	(S)		WFC	IMAGE	W1	F547M		1	0	2890	0		1
SATURN	(S)		WFC	IMAGE	W1	F718M		1	0	2890	0		1
SATURN	(S)		PC	IMAGE	PCALL	F336W		1	50	1129	4	CON	14
SATURN	(S)		PC	IMAGE	PCALL	F439W		1	2	1129	4	CON	14
SATURN	(S)		PC	IMAGE	PCALL	F718M		1	1	1129	4	CON	14
SATURN	(S)		PC	IMAGE	PCALL	F889N		1	14	1129	4	CON	14
SATURN	(S)		WFC	IMAGE	WFALL	F606W		1	1	1131	4	CON	6
SATURN	(S)		WFC	IMAGE	WFALL	F606W		1	20	1131	4	CON	6
SATURN-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	174	1081	0		4
SATURN-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	868	1081	0		2
SATURN-EQ1	(S)		HRS	ACCUM	2.0	G200M	1940	1	480	4204	2		1
SATURN-EQ1	(S)		HRS	ACCUM	2.0	G200M	1730	1	1920	4204	2		1

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SATURN-EQ1	(S)		HRS	ACCUM	2.0	G200M	1800	1	840	4204	2		1
SATURN-EQ1	(S)		HRS	ACCUM	2.0	G200M	1870	1	480	4204	2		1
SATURN-EQ1	(S)		HRS	ACCUM	2.0	G200M	1905	1	480	4204	2		1
SATURN-EQ1	(S)		HRS	ACCUM	2.0	G200M	1975	1	420	4204	2		1
SATURN-EQ1	(S)		HRS	ACCUM	2.0	G200M	1765	1	960	4204	2		1
SATURN-EQ1	(S)		HRS	ACCUM	2.0	G200M	1835	1	720	4204	2		1
SATURN-EQ1	(S)		FOS/BL	ACCUM	1.0	G190H	1900	1	960	4204	2		1
SATURN-EQ1	(S)		FOS/BL	ACCUM	1.0	G270H	2766	1	480	4204	2		1
SATURN-EQ2	(S)		HRS	ACCUM	2.0	G200M	1940	1	480	4204	2		1
SATURN-EQ2	(S)		HRS	ACCUM	2.0	G200M	1905	1	480	4204	2		1
SATURN-EQ2	(S)		HRS	ACCUM	2.0	G200M	1975	1	420	4204	2		1
SATURN-EQ2	(S)		FOS/BL	ACCUM	1.0	G190H	1900	1	960	4204	2		1
SATURN-EQ2	(S)		FOS/BL	ACCUM	1.0	G270H	2766	1	480	4204	2		1
SATURN-NPOLE	(S)		HRS	ACCUM	2.0	G200M	1940	1	480	4204	2		1
SATURN-NPOLE	(S)		HRS	ACCUM	2.0	G200M	1730	1	1920	4204	2		1
SATURN-NPOLE	(S)		HRS	ACCUM	2.0	G200M	1800	1	840	4204	2		1
SATURN-NPOLE	(S)		HRS	ACCUM	2.0	G200M	1870	1	480	4204	2		1
SATURN-NPOLE	(S)		HRS	ACCUM	2.0	G200M	1905	1	480	4204	2		1
SATURN-NPOLE	(S)		HRS	ACCUM	2.0	G200M	1975	1	420	4204	2		1
SATURN-NPOLE	(S)		HRS	ACCUM	2.0	G200M	1765	1	960	4204	2		1
SATURN-NPOLE	(S)		HRS	ACCUM	2.0	G200M	1835	1	720	4204	2		1
SATURN-NPOLE	(S)		FOS/BL	ACCUM	1.0	G190H	1900	1	960	4204	2		1
SATURN-NPOLE	(S)		FOS/BL	ACCUM	1.0	G270H	2766	1	480	4204	2		1
SATURN-NUV	(S)		FOC/96	IMAGE	512X1024	F210M F220W		2	900	3178	1		1
SATURNB-RING	(S)		PC	IMAGE	PC6	F336W		1	20	1130	3		4
SATURNB-RING	(S)		PC	IMAGE	PC6	F439W		1	2	1130	3		4
SATURNB-RING	(S)		PC	IMAGE	PC6	F569W		1	0	1130	3		4
SATURNB-RING	(S)		PC	IMAGE	PC6	F791W		1	0	1130	3		4
STAR-IMAGE-NEPTUNE	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	60	3354	2	CON SEL	2
STAR-IMAGE-NEPTUNE	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1500	3354	2	CON SEL	1
STAR-IMAGE-SATURN	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	60	3354	2	CON SEL	2
STAR-IMAGE-SATURN	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	60	3354	3	CON SEL	2
STAR-IMAGE-SATURN	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1500	3354	2	CON SEL	1
STAR-IMAGE-SATURN	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1500	3354	3	CON SEL	1
STAR-IMAGE-URANUS	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	60	3354	2	CON SEL	2
STAR-IMAGE-URANUS	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	60	3354	3	CON SEL	2
STAR-IMAGE-URANUS	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1500	3354	2	CON SEL	1
STAR-IMAGE-URANUS	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	1500	3354	3	CON SEL	1
TITAN	(S)		PC	IMAGE	ALL	F439W		1	2	2891	0		1
TITAN	(S)		PC	IMAGE	ALL	F547M		1	1	2891	0		1
TITAN	(S)		PC	IMAGE	ALL	F889N		1	14	2891	0		1
TITAN	(S)		FOS/BL	ACCUM	1.0	G190H	1900	1	1512	1289	1		1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
TITAN	(S)		FOS/BL	ACQ/FIRM	4.3	MIRROR		1	0	4204	2	ACQ	1
TITAN	(S)		FOS/BL	ACCUM	1.0	G270H	2769	1	1512	1289	1		1
TITAN	(S)		FOC/96	IMAGE	512X512	F220W F231M		1	1512	1289	1		1
TITAN	(S)		FOS/BL	ACQ/FIRM	1.0	MIRROR	2769	1	0	1289	1	ACQ	1
TITANIA	(S)		FOS/BL	ACQ/FIRM	4.3	MIRROR		1	16	1290	1	ACQ SEL	1
TR18A-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	333	4015	2		3
TR18B-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	333	4015	2		3
TR24A-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	333	4015	2		3
TR24B-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	333	4015	2		3
TR30-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	267	4015	2		6
TR32-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	267	4015	2		6
TR46-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	267	4015	2		6
TRITON	(S)		FOS/BL	ACQ/FIRM	4.3	MIRROR		1	11	1290	1	ACQ	1
U102-BACKGROUND	(S)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	135	1083	2		6
URANUS	(S)		PC	IMAGE	PC6	F889N		3	60	1132	3		1
URANUS	(S)		WFC	IMAGE	WF1	F230W		1	900	1132	3		2
URANUS	(S)		WFC	IMAGE	WF1	F284W		1	60	1132	3		2
URANUS	(S)		WFC	IMAGE	WF1	F889N		1	300	1132	3		2
URANUS	(S)		WFC	IMAGE	WF1	F194W		1	1800	1132	3		2
URANUS	(S)		WFC	IMAGE	WFALL	F606W		1	2	1133	3		6
URANUS	(S)		WFC	IMAGE	WFALL	F606W		1	120	1133	3		6
URANUS	(S)		PC	IMAGE	P6	F439W	4353	1	20	1202	4	ACQ	1
URANUS	(S)		HRS	ACCUM	2.0	G160M	1216	1	3000	1202	4	CON	1
URANUS	(S)		HRS	ACCUM	2.0	G160M	1608	1	3060	1202	4		1
URANUS	(S)		FOS/BL	ACCUM	0.3	G270H	2700	1	300	1290	1	SEL	2
URANUS	(S)		FOS/BL	ACCUM	1.0	G270H	2700	1	300	1290	1	SEL	2
URANUS	(S)		FOS/BL	ACCUM	0.3	G190H	1900	1	1800	1290	1	SEL	2
URANUS	(S)		FOS/BL	ACCUM	1.0	G190H	1900	1	3600	1290	1	SEL	2
URANUS	(S)		FOC/96	IMAGE	512X512	F210M F220W		2	900	3178	1		1
URANUS	(S)		FOC/96	IMAGE	512X512	F120M PRISM1		2	900	3178	1		1
URANUS	(S)		FOC/96	IMAGE	512X512	F140W PRISM1		2	900	3178	1		1
URANUS	(S)		FOC/96	IMAGE	512X512	F165W PRISM1		2	900	3178	1		1
VENUS	(S)		PC	IMAGE	PC7	F194W		1	60	1124	3		1
VENUS	(S)		PC	IMAGE	PC7	F230W		1	40	1124	3		1
VENUS	(S)		PC	IMAGE	PC7	F284W		1	4	1124	3		1
VENUS	(S)		PC	IMAGE	PC7	F336W		1	0	1124	3		1
VENUS	(S)		PC	IMAGE	PC7	F368M		1	0	1124	3		1

4.7 GENERIC TARGET OBSERVATIONS FOR GTO PROGRAMS

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
COMET	(G)		FOS/BL	ACCUM	4.3	G130H		1	960	1184	2		2
COMET	(G)		FOS/BL	ACCUM	4.3	G190H		1	960	1184	2		1
COMET	(G)		FOS/BL	ACCUM	4.3	G270H		1	960	1184	2		1
COMET	(G)		HRS	ACCUM	2.0	G270M	2820	1	300	1184	2		1
COMET	(G)		HRS	ACCUM	2.0	G270M	2890	1	600	1184	2		1
COMET	(G)		HRS	ACCUM	2.0	G200M	2190	2	600	1184	2		1
COMET	(G)		WFC	IMAGE	WFALL-FIX	F785LP		1	5	1184	2		8
COMET	(G)		HRS	ACCUM	2.0	ECH-B	3085	1	600	1184	2		1
COMET	(G)		HRS	ACCUM	2.0	G270M	3085	1	300	1184	2		1
COMET	(G)		HRS	ACCUM	2.0	G200M	1817	1	600	1184	2		1
COMET	(G)		HRS	ACCUM	2.0	G270M	2436	1	300	1184	2		1
COMET	(G)		HRS	ACCUM	2.0	G270M	2321	1	600	1184	2		1
COMET	(G)		HRS	ACCUM	2.0	G270M	2576	1	300	1184	2		1
COMET	(G)		HRS	ACCUM	2.0	G270M	3142	1	300	1184	2		1
COMET	(G)		HRS	ACCUM	2.0	G160M	1216	2	300	1184	2		1
COMET	(G)		HRS	ACCUM	2.0	G160M	1561	2	600	1184	2		1
COMET	(G)		HRS	ACCUM	2.0	ECH-B	3079	3	600	1184	2		7
COMET	(G)		HRS	ACCUM	2.0	G270M	2663	2	450	1184	2		1
COMET-X	(G)		PC	IMAGE	ALL	F439W		1	10	1137	2		2
COMET-X	(G)		PC	IMAGE	ALL	F439W		1	100	1137	2		1
COMET-X	(G)		PC	IMAGE	ALL	F517N		1	10	1137	2		2
COMET-X	(G)		PC	IMAGE	ALL	F517N		1	100	1137	2		1
COMET-X	(G)		PC	IMAGE	ALL	F555W		1	1	1137	2		2
COMET-X	(G)		PC	IMAGE	ALL	F555W		1	10	1137	2		1
COMET-X	(G)		PC	IMAGE	ALL	F702W		1	1	1137	2		2
COMET-X	(G)		PC	IMAGE	ALL	F702W		1	10	1137	2		1
DARK-EARTH	(G)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	300	3354	2	CON SEL CAL	6
DARK-EARTH	(G)		HSP/PMT/VIS	SPLIT	1.0	F750W/F320N		1	300	3354	3	CON SEL CAL	4
FUZZY-1	(G)		FOS/RD	ACCUM	1.0	G650L		1	8300	1045	9	CON SEL	6
FUZZY-1	(G)		FOS/RD	ACCUM	1.0	PRISM		1	8300	1045	9	CON SEL	3
FUZZY-1	(G)		FOS/RD	ACCUM	2.0-BAR	G650L		1	8300	1045	9	CON SEL	3
FUZZY-1	(G)		FOS/RD	ACCUM	2.0-BAR	PRISM		1	8300	1045	9	CON SEL	3
FUZZY-2	(G)		FOS/RD	ACCUM	1.0	G650L		1	8300	1045	9	CON SEL	3
FUZZY-2	(G)		FOS/RD	ACCUM	1.0	PRISM		1	8300	1045	9	CON SEL	3
FUZZY-2	(G)		FOS/RD	ACCUM	2.0-BAR	G650L		1	8300	1045	9	CON SEL	3
FUZZY-2	(G)		FOS/RD	ACCUM	2.0-BAR	PRISM		1	8300	1045	9	CON SEL	3
FUZZY-3	(G)		FOS/RD	ACCUM	1.0	G650L		1	8300	1045	9	CON SEL	3
FUZZY-3	(G)		FOS/RD	ACCUM	1.0	PRISM		1	8300	1045	9	CON SEL	3
FUZZY-3	(G)		FOS/RD	ACCUM	2.0-BAR	G650L		1	8300	1045	9	CON SEL	3
FUZZY-3	(G)		FOS/RD	ACCUM	2.0-BAR	PRISM		1	8300	1045	9	CON SEL	3
QSO-A	(G)		HRS	ACCUM	2.0	G140L	1358	1	1088	3967	9	CON	12

4.8 PARALLEL TARGET OBSERVATIONS FOR GTO PROGRAMS

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
ASTLO100	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO100	-	-	WFC	IMAGE	ALL	F555W		1	1200	1305	9	PAR	1
ASTLO100	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1305	9	PAR	1
ASTLO102	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO104	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO104	-	-	WFC	IMAGE	ALL	F555W		1	1200	1305	9	PAR	1
ASTLO104	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1305	9	PAR	1
ASTLO106	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO108	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO108	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTLO108	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO110	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO110	-	-	WFC	IMAGE	ALL	F555W		1	1200	1305	9	PAR	1
ASTLO110	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1305	9	PAR	1
ASTLO112	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO112	-	-	WFC	IMAGE	ALL	F555W		1	1200	1305	9	PAR	1
ASTLO112	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1305	9	PAR	1
ASTLO114	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO114	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO114	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO116	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO118	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	2
ASTLO118	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTLO118	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO120	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO122	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO122	-	-	WFC	IMAGE	ALL	F555W		1	1200	1305	9	PAR	1
ASTLO122	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1305	9	PAR	1
ASTLO124	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO126	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO126	-	-	WFC	IMAGE	ALL	F555W		1	1200	1305	9	PAR	1
ASTLO126	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1305	9	PAR	1
ASTLO128	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO130	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO130	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO130	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO132	-	-	WFC	IMAGE	ALL	F656N		1	2600	1305	9	PAR	1
ASTLO134	-	-	WFC	IMAGE	ALL	F656N		1	2600	1305	9	PAR	1
ASTLO136	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	2
ASTLO136	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTLO136	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO138	-	-	WFC	IMAGE	ALL	F656N		1	2600	1305	9	PAR	1
ASTLO140	-	-	WFC	IMAGE	ALL	F656N		1	2600	1305	9	PAR	1
ASTLO142	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO144	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO146	-	-	WFC	IMAGE	ALL	F656N		1	2600	1305	9	PAR	1
ASTLO148	-	-	WFC	IMAGE	ALL	F656N		1	2600	1305	9	PAR	1
ASTLO150	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO152	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO152	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTLO152	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO154	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
ASTLO154	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTLO154	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO156	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	2
ASTLO156	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTLO156	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO158	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	2
ASTLO158	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTLO158	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO160	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO160	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTLO160	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO162	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO164	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO166	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO168	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO170	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO172	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO174	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO176	-	-	WFC	IMAGE	ALL	G800L		1	2600	1305	9	PAR	1
ASTLO178	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO178	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO178	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO180	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO180	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO180	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO182	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO182	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO182	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO184	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO184	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO184	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO186	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO186	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO186	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO188	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO188	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO188	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO190	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO190	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO190	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO192	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO192	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO192	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO194	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO194	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO194	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO196	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO196	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO196	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTLO198	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTLO198	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTLO198	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
ASTL0200	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTL0200	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0200	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0202	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTL0202	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0202	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0204	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTL0204	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0204	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0206	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTL0206	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0206	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0208	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTL0208	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0208	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0210	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTL0210	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0210	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0212	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTL0212	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0212	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0214	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTL0214	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0214	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0216	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTL0216	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0216	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0218	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTL0218	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0218	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0220	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTL0220	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0220	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0222	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTL0222	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0222	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0224	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	2
ASTL0224	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTL0224	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	2
ASTL0226	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	2
ASTL0226	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTL0226	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	2
ASTL0228	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	2
ASTL0228	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTL0228	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	2
ASTL0230	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	2
ASTL0230	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTL0230	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	2
ASTL0232	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	2
ASTL0232	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTL0232	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	2
ASTL0234	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	2

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
ASTL0234	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTL0234	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	2
ASTL0236	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	2
ASTL0236	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTL0236	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	2
ASTL0238	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0238	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTL0238	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0240	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0240	-	-	WFC	IMAGE	ALL	F336W		2	2600	1305	9	PAR	1
ASTL0240	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
ASTL0252	-	-	WFC	IMAGE	ALL	F336W		1	2600	1305	9	PAR	1
ASTL0252	-	-	WFC	IMAGE	ALL	F555W		1	2600	1305	9	PAR	1
ASTL0252	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1305	9	PAR	1
FIELD	(G)		S/C	DATA	NONE			1	612	1013	9	PAR	2
GEOCORONA	(S)		FOS/BL	ACCUM	1.0	G130H	1300	1	2220	4174	3	CAL PAR	1
GEOCORONA	(S)		FOS/BL	ACCUM	1.0	G130H	1350	1	1800	4175	3	CAL PAR	1
GEOCORONA	(S)		FOS/BL	ACCUM	1.0	G130H	1350	1	10800	4175	3	CAL PAR	1
GEOCORONA	(S)		FOS/BL	ACCUM	1.0	G130H	1300	1	6599	1204	3	CAL PAR	1
GEOCORONA-1	(G)		HRS	ACCUM	2.0	G160M		1	1800	1203	3	PAR	1
GEOCORONA-1	(G)		HRS	ACCUM	0.25	G160M		1	10800	1203	3	PAR	1
GEOCORONA-5	(S)		FOS/BL	ACCUM	1.0	G130H	1350	1	3900	1202	4	CON CAL PAR	1
GEOCORONA-6	(G)		HRS	ACCUM	2.0	G160M	1216	1	1800	1202	4	CAL PAR	1
HRSL0100	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0100	-	-	WFC	IMAGE	ALL	F664N		1	2600	1306		PAR	1
HRSL0100	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSL0100	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSL0102	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0102	-	-	WFC	IMAGE	ALL	F664N		1	2600	1306		PAR	1
HRSL0102	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSL0102	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSL0104	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0104	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0106	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0106	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0108	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0108	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0110	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0110	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0112	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0112	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0114	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0114	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0114	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0116	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0116	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0118	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0118	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0120	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0120	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0122	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HRSLO122	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSLO122	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSLO124	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSLO124	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSLO124	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSLO126	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSLO126	-	-	WFC	IMAGE	ALL	G800L		1	2600	1306		PAR	1
HRSLO126	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSLO126	-	-	WFC	IMAGE	ALL	F664N		2	2600	1306		PAR	1
HRSLO126	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSLO128	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSLO128	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSLO128	-	-	WFC	IMAGE	ALL	F664N		2	2600	1306		PAR	1
HRSLO128	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSLO130	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO130	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO132	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO132	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO134	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSLO134	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSLO134	-	-	WFC	IMAGE	ALL	F664N		2	2600	1306		PAR	1
HRSLO134	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSLO136	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO136	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO138	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO138	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO140	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO140	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO142	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO142	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO144	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO144	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO146	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO146	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO148	-	-	WFC	IMAGE	ALL	F664N		1	2600	1306		PAR	1
HRSLO150	-	-	WFC	IMAGE	ALL	F664N		1	2600	1306		PAR	1
HRSLO150	-	-	WFC	IMAGE	ALL	G800L		1	2600	1306		PAR	1
HRSLO150	-	-	WFC	IMAGE	ALL	F547M		2	2600	1306		PAR	1
HRSLO152	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO152	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO154	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO154	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO156	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO156	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO158	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO158	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO160	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO160	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO162	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO162	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO164	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO164	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HRSLO166	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO166	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO168	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO168	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO170	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO170	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO172	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO172	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO174	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSLO174	-	-	WFC	IMAGE	ALL	F664N		1	2600	1306		PAR	1
HRSLO174	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSLO174	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSLO176	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSLO176	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO176	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO178	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSLO178	-	-	WFC	IMAGE	ALL	F664N		1	2600	1306		PAR	1
HRSLO178	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSLO178	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSLO180	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSLO180	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO180	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO182	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSLO182	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO182	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO184	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO184	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO186	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSLO186	-	-	WFC	IMAGE	ALL	F664N		1	2600	1306		PAR	1
HRSLO186	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSLO186	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSLO188	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSLO188	-	-	WFC	IMAGE	ALL	F664N		1	2600	1306		PAR	1
HRSLO188	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSLO188	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSLO190	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO190	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO192	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSLO192	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO192	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO194	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSLO194	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO194	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO196	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSLO196	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO196	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO198	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO198	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO200	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO200	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSLO202	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSLO202	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HRSL0204	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0204	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0204	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSL0206	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0206	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0206	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0208	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0208	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0208	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0210	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0210	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0210	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSL0212	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0212	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0212	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0214	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0214	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0214	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0216	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0216	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0216	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0218	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0218	-	-	WFC	IMAGE	ALL	G800L		1	2600	1306		PAR	1
HRSL0218	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSL0218	-	-	WFC	IMAGE	ALL	F664N		2	2600	1306		PAR	1
HRSL0218	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSL0220	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0220	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSL0220	-	-	WFC	IMAGE	ALL	F664N		2	2600	1306		PAR	1
HRSL0220	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSL0222	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0222	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0222	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0224	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0224	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0226	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0226	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0228	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0228	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0230	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0230	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0232	-	-	WFC	IMAGE	ALL	F555W		1	2000	1306		PAR	1
HRSL0234	-	-	WFC	IMAGE	ALL	F785LP		1	2000	1306		PAR	1
HRSL0236	-	-	WFC	IMAGE	ALL	F555W		1	2000	1306		PAR	1
HRSL0238	-	-	WFC	IMAGE	ALL	F785LP		1	2000	1306		PAR	1
HRSL0240	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0242	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0242	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0244	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0244	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0246	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0246	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HRSL0248	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0248	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0252	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0252	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0254	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0254	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSL0254	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSL0256	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0256	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0256	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0258	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0258	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0260	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0260	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0260	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSL0262	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0262	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0262	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0264	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0264	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0266	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0266	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSL0266	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSL0268	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0268	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0268	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0270	-	-	WFC	IMAGE	ALL	F547M		1	2600	1306		PAR	1
HRSL0270	-	-	WFC	IMAGE	ALL	F664N		1	2600	1306		PAR	1
HRSL0272	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0272	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0272	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0274	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0274	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0276	-	-	WFC	IMAGE	ALL	F547M		1	2600	1306		PAR	1
HRSL0276	-	-	WFC	IMAGE	ALL	F664N		1	2600	1306		PAR	1
HRSL0278	-	-	WFC	IMAGE	ALL	F547M		1	2600	1306		PAR	1
HRSL0278	-	-	WFC	IMAGE	ALL	F664N		1	2600	1306		PAR	1
HRSL0280	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0280	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0280	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0282	-	-	WFC	IMAGE	ALL	F547M		1	2600	1306		PAR	1
HRSL0282	-	-	WFC	IMAGE	ALL	F664N		1	2600	1306		PAR	1
HRSL0284	-	-	WFC	IMAGE	ALL	F547M		1	2600	1306		PAR	1
HRSL0284	-	-	WFC	IMAGE	ALL	F664N		1	2600	1306		PAR	1
HRSL0286	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0286	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0288	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0288	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0290	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0290	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0292	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0292	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HRSL0294	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0294	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0296	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0296	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0298	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0298	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0300	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0300	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0302	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0302	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0304	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0304	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0306	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0306	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0306	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSL0308	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0308	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0310	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0310	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0312	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0312	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0314	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0314	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0316	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0316	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0318	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0318	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0320	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0320	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0320	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0322	-	-	WFC	IMAGE	ALL	F336W		1	2600	1306		PAR	1
HRSL0322	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0322	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0324	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0324	-	-	WFC	IMAGE	ALL	G800L		1	2600	1306		PAR	1
HRSL0324	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSL0324	-	-	WFC	IMAGE	ALL	F664N		2	2600	1306		PAR	1
HRSL0324	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSL0326	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0326	-	-	WFC	IMAGE	ALL	G800L		1	2600	1306		PAR	1
HRSL0326	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSL0326	-	-	WFC	IMAGE	ALL	F664N		2	2600	1306		PAR	1
HRSL0326	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSL0328	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0328	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1
HRSL0328	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
HRSL0330	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0330	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0332	-	-	WFC	IMAGE	ALL	F555W		1	1200	1306		PAR	1
HRSL0332	-	-	WFC	IMAGE	ALL	F785LP		1	1200	1306		PAR	1
HRSL0334	-	-	WFC	IMAGE	ALL	F555W		1	2600	1306		PAR	1
HRSL0334	-	-	WFC	IMAGE	ALL	F336W		2	2600	1306		PAR	1

Target	RA(2000)	Dec(2000)	Inst. Config.	Operating Mode	Aperture	Spectral Element	Central Wave.	No. Exp.	Exp. Time	ID	Cy.	Spec. Req.	Total Lines
HRSLO334	-	-	WFC	IMAGE	ALL	F785LP		1	2600	1306		PAR	1
V1343-AQL-JET	(G)		WFC	IMAGE	ALL	F656N	6559	1	1050	3280	9	PAR	1