PB86-143245

Solar-Geophysical Data Number 494, October 1985 Part 1 (Prompt Reports). Data for September 1985, August 1985 and Late Data

(U.S.) National Geophysical Data Center
Boulder, CO

Prepared for

National Aeronautics and Space Administration
Washington, DC

Oct 85

U.S. Department of Commerce
National Technical Information Service
NTIS

BIBLIOGRAPHIC INFORMATION

PB86-143245

Solar-Geophysical Data Number 494, October 1985. Part 1 (Prompt Reports). Data for September 1985, August 1985 and Late Data,

Oct 85

by H. E. Coffey.

PERFORMER: National Geophysical Data Center, Boulder, CO.
SGD-494-PT-1
Contract NASA-W-15519, Grant NSF-ATM83-18491

SPONSOR: National Aeronautics and Space Administration, Washington, DC.

See also PB86-143252, and PB86-125457. Sponsored by National Aeronautics and Space Administration, Washington, DC., and National Science Foundation, Washington, DC.

Contents: Detailed index for 1985; Data for September 1985 (IUWDS alert periods (advance and worldwide); Solar activity indices; Solar flares; Solar radio emission; Stanford mean solar magnetic field); (Solar active regions, Sudden ionospheric disturbances, Solar radio spectral observations, Cosmic ray measurements by neutron monitor, Geomagnetic indices, Radio propagation indices); (Solar radio emission August 1985, Inferred interplanetary magnetic field polarity, Geomagnetic indices, Preliminary solar proton event list, Calcium plage data).

KEYWORDS: *Solar activity.

Available from the National Technical Information Service, SPRINGFIELD, VA. 22161

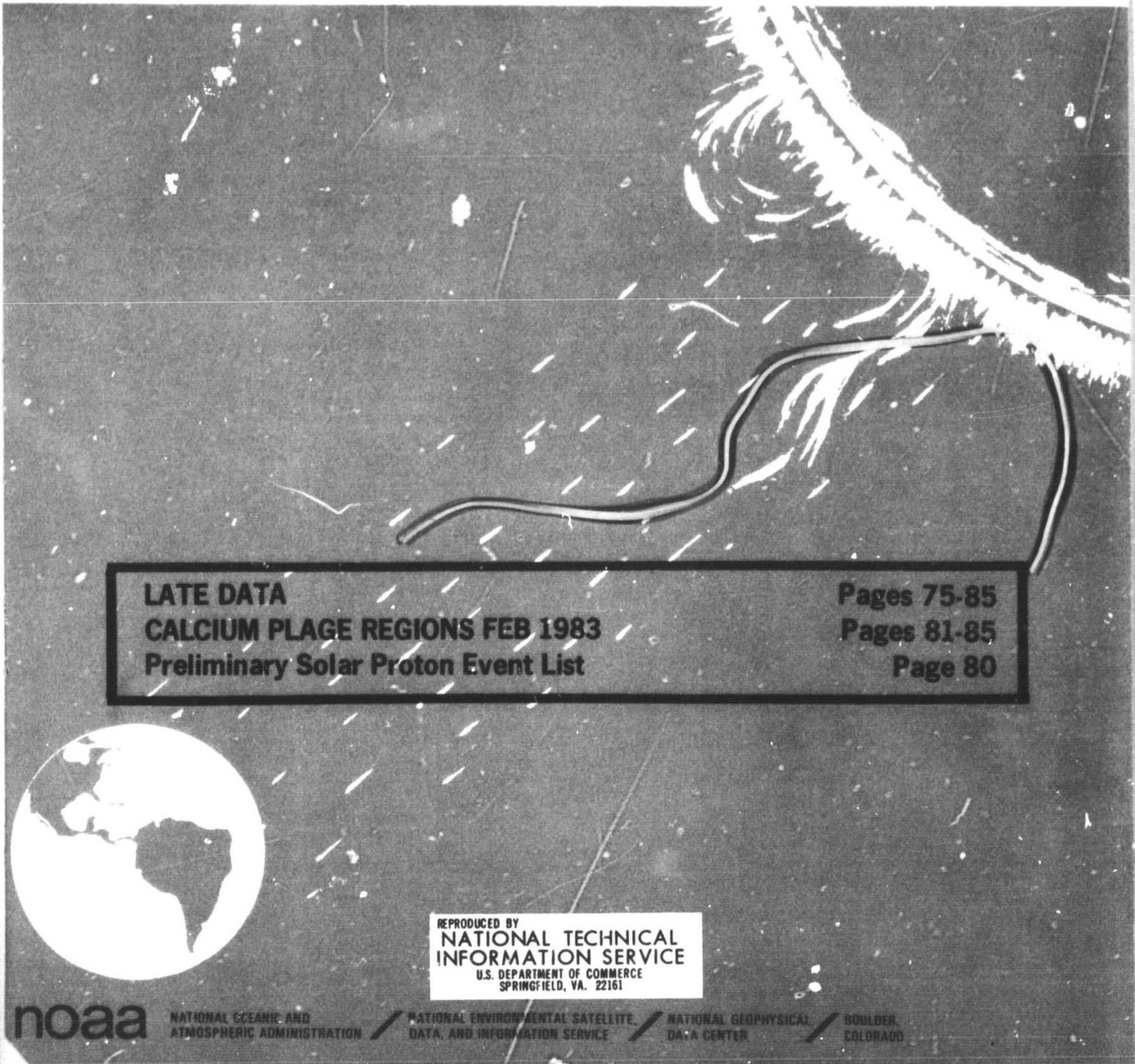
PRICE CODE: PC A05/MF A01

OCTOBER 1985 NUMBER 494 -- Part I

Solar-Geophysical Data prompt reports

Data for September 1985, August 1985, & Late Data

Explanation of Data Reports Issued as Number 489 (Supplement) May 1985



noaa NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION / NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE / NATIONAL GEOPHYSICAL DATA CENTER / BOULDER, COLORADO

U.S. DEPARTMENT OF COMMERCE
Malcolm Baldrige, Secretary

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
Anthony J. Calio, Acting Administrator

NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
William P. Bishop, Acting Assistant Administrator

Solar - Geophysical Data

Part I (Prompt Reports)

NO. 494 OCTOBER 1985

DATA FOR
SEPTEMBER 1985
AUGUST 1985

Michael A. Chinnery, Director
NATIONAL GEOPHYSICAL DATA CENTER
BOULDER, COLORADO

International Standard Serial Number: 0038-0911
Library of Congress Catalog Number: 79-640375 //r81

For sale through the National Geophysical Data Center, NOAA/NESDIS, E/GC2, 325 Broadway, Boulder, Colorado 80303. 1986 Subscription Price for the U.S.: $70.00 annually for both Part I (Prompt Reports) and Part II (Comprehensive Reports) or $35.00 annually for either part. Annual supplement containing explanation is included. Foreign subscriptions: For 1986 issues -- $106.00 for both parts or $53.00 for either part. We require prepayment for all orders. Please include with your request a check or money order payable in U.S. currency to the Department of Commerce, NOAA/NGDC. Any bank charges should be paid by the subscriber. Payment may be made through an American Express, Mastercard or VISA credit cards. Please include the correct name of credit card holder, card number and expiration date. Prices are subject to change. NGDC phone number: (303)497-6135 (FTS 320-6135).

For obtaining bulletins on a data exchange basis, send request to: World Data Center A for Solar-Terrestrial Physics, NOAA/NESDIS/NGDC, E/GC2, 325 Broadway, Boulder, Colorado 80303 U.S.A.

BACK ISSUES OF "SOLAR-GEOPHYSICAL DATA"

Reel#	Coverage	Medium	Reel#	Coverage	Medium	Reel#	Coverage	Medium
1	Jan 56 - Dec 56	Microfilm	9	Jan 64 - Dec 64	Microfilm	17	Jul 69 - Dec 69	Microfilm
2	Jan 57 - Dec 57	Microfilm	10	Jan 65 - Dec 65	Microfilm	18	Jan 70 - Jun 70	Microfilm
3	Jan 58 - Dec 58	Microfilm	11	Jan 66 - Sep 66	Microfilm	19	Jul 70 - Dec 70	Microfilm
4	Jan 59 - Dec 59	Microfilm	12	Oct 66 - Dec 66	Microfilm	20	Jan 71 - Jun 71	Microfilm
5	Jan 60 - Dec 60	Microfilm	13	Jan 67 - Dec 67	Microfilm	21	Jul 71 - Dec 71	Microfilm
6	Jan 61 - Dec 61	Microfilm	14	Jan 68 - Jun 68	Microfilm	22	Jan 72 - Jun 72	Microfilm
7	Jan 62 - Dec 62	Microfilm	15	Jul 68 - Dec 68	Microfilm	23	Jul 72 - Dec 72	Microfilm
8	Jan 63 - Dec 63	Microfilm	16	Jan 69 - Jun 69	Microfilm		1973 - 1984	Microfiche

Microfilm are available at $30.00 per reel; microfiche at $40.00 per year; $1,000.00 for above set. Back issues in booklet form are available, as long as the stocks exist, at $4.00 for either part plus a $3.00 handling charge per order. Any entire year of back issues in booklet form is available at the current annual subscription rate, as long as the stocks exist. Please add a ten dollar ($10.00) handling fee for non-U.S.A. orders. Prices are subject to change.

ISSN #0038-0911

1a

S O L A R - G E O P H Y S I C A L D A T A

NUMBER 494

(Issued in Two Parts)

Editor:
Helen E. Coffey, Physicist

Joe H. Allen, Chief
Solar-Terrestrial Physics Division

Staff:
John A. McKinnon, Physicist
Daniel C. Wilkinson, Physicist
Viola W. Miller, Physical Science Technician
Carol Weathers, Editorial Assistant
Charles T. Shanks, Draftsman

C O N T E N T S

PART I (PROMPT REPORTS)

PART II (COMPREHENSIVE REPORTS)

Published with partial support from NASA (W-15,519) and NSF (ATM-8318491).

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN "SOLAR-GEOPHYSICAL DATA"

CODE	KIND OF OBSERVATION	FEB 85	MAR	APR	MAY	JUN	JUL	AUG	SEP
A.	SOLAR AND INTERPLANETARY PHENOMENA								
A.1	Sunspot Drawings	488A 31	489A 30	490A 34	491A 28	492A 30	493A 24	494A 26	
A.2aa	Internat. Provisional Sunspot Numbers	487A 7	488A 7	489A 7	490A 7	491A 7	492A 9	493A 7	494A 7
A.2c	American Sunspot Numbers	487A 7	488A 7		490A 7	491A 7	492A 9	493A 7	494A 7
A.3a	Mt. Wilson Magnetograms	488A 31	489A 30	490A 34	491A 28	492A 30	493A 24	494A 26	
A.3b	Mt. Wilson Sunspot Magnetic Class	488A 59	489A 61	490A 64	491A 59	492A 60	493A 55	494A 57	
A.3c	Kitt Peak Magnetograms	488A 31	489A 30	490A 34	491A 28	492A 30	493A 24	494A 26	
A.3d	Mean Solar Magnetic Field (Stanford)	487A 24	488A 20	489A 23	490A 23	491A 20	492A 25	493A 19	494A 20
A.3e	Stanford Magnetograms	487A 31	489A 30	490A 34	491A 28	492A 30	493A 24	494A 26	
A.4	H-alpha Filtergrams	487A 31	489A 30	490A 34	491A 28	492A 30	493A 24	494A 26	
A.5	Calcium Plage Photographs/Drawings	Mar-Apr 84 in 491A 95; May 84 in 492A104; Jun-Jul 84 in 493A 77							
A.5a	Calcium Plage Regions	Dec 82 in 491A 86; Jan 83 in 492A 96; Feb 83 in 494A 81							
A.5b	Daily Calcium Plage Indices	Jun-Aug 83 in 485A113							
A.6	H-alpha Synoptic Charts	488A 27	489A 26	490A 26	491A 26	492A 28	493A 22	494A 24	
A.6b	Active Region Carte Synoptique (Paris)	492B 4	493B 4	494B 4					
A.6c	Stanford Solar Mag Field Synoptic Maps	488A 28	489A 27	490A 28	491A 25	492A 30	493A 23	494A 25	
A.6d	Kitt Peak Solar Mag Field Synoptic Maps	488A 29	489A 28	490A 30	491A 26				
A.6e	Mass Ejections from the Sun	492B 14	493B 17	494B 24					
A.6f	Active Prominences and Filaments	492A 15	493B 18	494B 25					
A.7g	Kitt Peak Helium Synoptic Maps	488A 30	489A 29	490A 32	491A 27				
A.7h	Coronal Line Emission (Sacramento Peak)	488A 31	489A 30	490A 34	491A 28	492A 30	493A 24	494A 26	
A.8aa	2800 MHz - Solar Flux (Ottawa)	487A 7	488A 7	489A 7	490A 7	491A 7	492A 9	493A 7	494A 7
A.8ac	2800 MHz - Adj. Solar Flux (Ottawa)	487A 7	488A 7	489A 7	490A 7	491A 7	492A 9	493A 7	494A 7
A.8g	Adjusted Daily Solar Fluxes (Sagamore)	487A 7	488A 7	489A 7	490A 7	491A 7	492A 9	493A 7	494A 7
A.10a	Interferometric Chart -169 MHz- Nancay	487A 14	488A 14	489A 16	490A 15	491A 14	492A 18	494A 76	494A 14
A.10c	East-West Scans - 21 cm - Fleurs	487A 17	488A 17	489A 19	490A 18	491A 17	492A 21	493A 16	494A 17
A.10d	East-West Scans - 43 cm - Fleurs	487A 18	488A 18	489A 20	490A 19	491A 18	492A 22	493A 17	494A 18
A.10e	East-West Scans - 10 cm - Ottawa	487A 16	488A 16	489A 18	490A 17	491A 16	492A 20	493A 15	494A 16
A.10f	East-West Scans - 3 cm - Toyokawa	487A 15	488A 15	489A 17	490A 16	491A 15	492A 19	493A 14	494A 15
A.11g	Solar X-ray GOES (graphs/event table)	492B 8	493B 6	494B 18					
A.12e	Solar Particles (IMP H & J)	Jan-Mar 83 in 478B 28; Apr-Dec 83 in 491B 80							
A.13d	Solar Wind from IP Scintillations								
A.13e	Solar Plasma (IMP H & J)	Jul 84-Mar 85 in 494B158							
A.13f	Solar Wind (Pioneer 12)	Aug 83-Jan 84 in 487A 82							
A.16a	SMM Solar Irradiance								
A.16b	NIMBUS Solar Irradiance	Nov 78-Mar 84 data in 485B 70							
A.17	Interplanetary Mag Field (Pioneer 12)								
A.17c	Inferred Interplanetary Magnetic Field	487A 21	488A 21	494A 77	494A 77	494A 77	494A 77		
B.	IONOSPHERIC RADIO PROPAGATION PHENOMENA								
B.52	Field Strength Graphs - North Atlantic	488A 76	489A 76	490A 82	491A 80	492A 80	493A 74	494A 72	
B.53	Quality Indices on Paths to Germany	488A 75	489A 78	490A 84	491A 82	492A 79	493A 76	494A 74	
C.	SOLAR FLARE-ASSOCIATED EVENTS								
C.1a	H-alpha Flares	487A 13	488A 12	489A 12	490A 12	491A 12	492A 14	493A 12	494A 12
C.1ba	H-alpha Flare Groups 1983	Aug-Sep 83 in 492B 17; Oct-Dec 83 in 493B 21; Jan-Jun 84 in 494B 27							
C.1d	Flare Patrol Observations	487A 14	488A 13	---	490A 14	491A 13	492A 17	493A 13	494A 13
C.1d	Flare Patrol Observations 1983	Aug-Sep 83 in 492B 17; Oct-Dec in 493B 21; Jan-Jun 84 in 494B 27							
C.1e	Flare Indices (by day)								
C.3	Radio Bursts Fixed Freq.	492B 6	493B 6	494B 6					
C.3	Radio Bursts Fixed Freq. Selected	487A 19	488A 18	489A 21	490A 20	491A 19	492A 23	493A 18	494A 19
C.4d	Radio Bursts Spectral (Culgoora)								
C.4e	Radio Bursts Spectral (Weissenau)	488A 63	489A 66	490A 69	491A 65	492A 67	493A 63	494A 62	
C.4f	Radio Bursts Spectral (Sagamore Hill)	488A 63	489A 66	490A 69	491A 65	492A 67	493A 63	494A 62	
C.4i	Radio Bursts Spectral (Bleien)	488A 63	489A 66	490A 69	491A 65	492A 67	493A 63	494A 62	
C.4k	Radio Bursts Spectral (Learmonth)	488A 63	489A 66	490A 69	491A 65	492A 67	493A 63	494A 62	
C.4l	Radio Bursts Spectral (Palehua)	488A 63	489A 66	490A 69	491A 65	492A 67	493A 63	494A 62	
C.6	Sudden Ionospheric Disturbances	488A 62	489A 65	490A 67	491A 64	492A 66	493A 63	494A 61	
D.	GEOMAGNETIC & MAGNETOSPHERIC PHENOMENA								
D.1a	Geomagnetic Indices	488A 69	489A 71	490A 76	491A 74	492A 73	493A 70	494A 68	
D.1ba	27-day Chart of Kp Indices	488A 71	489A 73	490A 78	491A 76	492A 75	493A 72	494A 70	
D.1c	27-day Chart of C_9								
D.1d	Principal Magnetic Storms	488A 74	489A 75	490A 80	491A 78	492A 77	493A 73	494A 71	
D.1f	Sudden Commencement/Solar Flare Effects	489A 80	490A 86	490A 81	491A 79	492A 78	494A 79		
D.1g	Equatorial Indices Dst	488A 73	489A 74	490A 79	491A 77	492A 76	494A 78		
F.	COSMIC RAYS								
F.1a	Cosmic Ray Neutron Counts (Deep River)	492A 86	492A 87	492A 88					
F.1b	Cosmic Ray Neutron Counts (Climax)	489A 82	490A 89	490A 75	491A 73	492A 69	493A 69	494A 67	
F.1e	Cosmic Ray Neutron Counts (Alert)	492A 86	492A 87	492A 88					
F.1h	Cosmic Ray Neutron Counts (Thule)	488A 65	491A 85	491A 86	491A 73	492A 69	493A 69	494A 67	
F.1i	Cosmic Ray Neutron Counts (Kiel)	488A 65	489A 67	490A 75	491A 73	492A 69	493A 69	494A 67	
F.1j	Cosmic Ray Neutron Counts (Tokyo)	488A 65	489A 67	490A 75	491A 73	492A 69	493A 69	494A 67	
F.1l	Cosmic Ray Neutron Counts (Huancayo)	490A 88	491A 85						
F.1m	Cosmic Ray Neutron Counts (Predigtstuhl)	488A 65	489A 67	490A 75	491A 73	492A 69	493A 69	494A 67	
H.	MISCELLANEOUS								
H.60	IUWDS Alert Periods	487A 4	488A 4	489A 4	490A 4	491A 4	492A 5	493A 4	494A 4

The entry "488A 31" under Feb 1985, for example, means that the sunspot drawings for Feb 1985 appear in SOLAR-GEOPHYSICAL DATA No. 488, Part I, and that they begin on page 31. "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

C O N T E N T S

Prompt Reports DATA FOR SEPTEMBER 1985 Number 494 Part I

ALERT PERIODS
INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

SUMMARY OF THE GEOALERT MESSAGES SEPTEMBER 1985

NO	DI	DO	WOLF	10CM	A	LOC	TOT	M	X	OUTSTANDING EVENTS	DA	LOC	DE	ALERTS
244	01	31	024	073	032	N07W27 N06W10	0 0	0 0	0 0	PRESTO MAGSTORM 31/03XX UT	01	N07W27 N06W10	Q Q	SOLQUIET MAGQUIET
245	02	01	000	072	007	SPOTNIL					02	SPOTNIL		SOLQUIET MAGQUIET
246	03	02	000	072	007	SPOTNIL					03	SPOTNIL		SOLQUIET MAGQUIET
247	04	03	000	072	006	SPOTNIL					04	SPOTNIL		SOLQUIET MAGQUIET
248	05	04	000	072	004	SPOTNIL					05	SPOTNIL		SOLQUIET MAGQUIET
249	06	05	000	071	004	SPOTNIL					06	SPOTNIL		SOLQUIET MAGQUIET
250	07	06	000	071	008	SPOTNIL					07	SPOTNIL		SOLQUIET MAGQUIET
251	08	07	000	070	010	SPOTNIL					08	SPOTNIL		SOLQUIET MAGALERT MINOR 08/10 RECURRENCE
252	09	08	000	069	012	SPOTNIL					09	SPOTNIL		SOLQUIET MAGALERT MINOR 09/10 RECURRENCE
253	10	09	000	070	013	SPOTNIL					10	SPOTNIL		SOLQUIET MAGNIL
254	11	10	000	069	013	SPOTNIL					11	SPOTNIL		SOLQUIET MAGQUIET
255	12	11	011	068	013	S19E03	0	0	0		12	S19E03	Q	SOLQUIET MAGQUIET
256	13	12	000	068	007	SPOTNIL					13	SPOTNIL		SOLQUIET MAGQUIET
257	14	13	014	070	010	S10E69	0	0	0		14	S10E69	Q	SOLQUIET MAGQUIET
258	15	14	013	070	023	S10E54	0	0	0	PRESTO MAGSTORM 14/0600 UT	15	S10E54	Q	SOLQUIET MAGQUIET
259	16	15	012	070	012	S10E41	0	0	0		16	S10E41	Q	SOLQUIET MAGQUIET
260	17	16	013	070	024	S10E27	0	0	0		17	S10E27	Q	SOLQUIET MAGQUIET
261	18	17	011	069	015	S11E10	0	0	0		18	S11E10	Q	SOLQUIET MAGQUIET
262	19	18	015	070	008	S10W04	3	0	0		19	S10W04	Q	SOLQUIET MAGQUIET
263	20	19	015	070	023	S11W17	1	0	0	PRESTO MAGSTORM 19/05XX UT	20	S11W17	Q	SOLQUIET MAGQUIET
264	21	20	013	069	025	S12W32	0	0	0		21	S12W32	Q	SOLQUIET MAGQUIET

ALERT PERIODS
INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

SUMMARY OF THE GEOALERT MESSAGES SEPTEMBER 1985

NO	DI	DO	WOLF	10CM	A	LOC	TOT	M	X	OUTSTANDING EVENTS	DA	LOC	DE	ALERTS
265	22	21	011	069	017	S11W46	0	0	0		22	S11W46	Q	SOLQUIET MAGQUIET
266	23	22	000	069	013	SPOTNIL					23	SPOTNIL		SOLQUIET MAGQUIET
267	24	23	000	069	011	SPOTNIL					24	SPOTNIL		SOLQUIET MAGQUIET
268	25	24	000	069	010	SPOTNIL					25	SPOTNIL		SOLQUIET MAGQUIET
269	26	25	000	068	015	SPOTNIL					26	SPOTNIL		SOLQUIET MAGQUIET
270	27	26	000	068	018	SPOTNIL					27	SPOTNIL		SOLQUIET MAGQUIET
271	28	27	000	067	017	SPOTNIL					28	SPOTNIL		SOLQUIET MAGQUIET
272	29	28	000	068	009	SPOTNIL					29	SPOTNIL		SOLQUIET MAGQUIET
273	30	29	013	068	008	S14E11	0	0	0		30	S14E11	Q	SOLQUIET MAGQUIET
274	01	30	012	068	007	S14W04	0	0	0		01	S14W04	Q	SOLQUIET MAGQUIET

NO=MESSAGES SERIAL NUMBER, DI=DATE OF ISSUE, DO=DATE OF OBSERVATION, WOLF=WOLF NUMBER, 10CM=10CM SOLAR FLUX, A=A INDEX, LOC=LOCATION LATITUDE AND LONGITUDE, TOT=TOTAL, M=NUMBER OF M FLARES, X=NUMBER OF X FLARES, DA=DATE OF FORECAST, DE=DESCRIPTION, Q=QUIET, E=ERUPTIVE, A=ACTIVE, P=PROTON.

PRESTO MESSAGES (THE RAPID REPORT OF MAJOR EVENTS)

SEPTEMBER 1985

PRESTO KAKIOKA 15/0030 UT MAGSTORM 14/0600 UT
PRESTO KAKIOKA 20/0055 UT MAGSTORM 19/05XX UT.

INTERNATIONAL (R_I) RELATIVE SUNSPOT NUMBERS

Day	1984 Final Oct	Nov	Dec	1985 Final Jan	Feb	Mar	Apr	May	Jun	1985 Prov Jul	Aug	Sep
01	7	16	19	0	18	13	25	19	10	21	35	7
02	8	14	22	0	22	13	21	15	0	27	25	0
03	11	11	19	0	25	9	23	14	11	30	27	0
04	11	14	19	0	22	0	17	18	26	32	27	0
05	0	12	16	0	20	0	23	16	35	38	20	0
06	0	0	21	0	16	0	19	14	37	43	14	0
07	0	11	18	0	7	0	11	32	38	71	12	0
08	12	13	23	11	16	14	5	44	42	67	12	0
09	14	13	21	14	24	15	9	56	42	85	17	0
10	17	21	15	0	19	13	0	49	58	82	12	0
11	22	27	28	0	13	16	0	49	66	61	12	7
12	16	21	29	13	10	18	0	33	54	45	12	0
13	10	16	28	16	11	14	0	32	45	25	0	9
14	9	15	28	26	13	10	10	32	36	9	0	9
15	14	13	26	25	11	0	0	32	37	8	0	9
16	19	11	30	26	10	11	0	31	27	9	0	9
17	24	11	24	29	12	20	0	38	23	11	12	8
18	25	14	12	26	10	35	10	41	18	11	11	10
19	25	13	11	27	19	27	9	40	10	11	11	10
20	17	27	11	55	27	19	11	37	9	11	10	9
21	19	36	14	59	27	9	17	36	9	10	9	8
22	12	36	12	50	25	15	31	34	9	10	0	7
23	11	41	11	39	16	22	28	32	12	18	0	0
24	9	47	16	33	11	36	30	25	13	12	0	0
25	10	59	21	20	11	30	37	19	12	10	0	0
26	10	44	20	9	11	33	37	13	10	13	8	0
27	8	39	14	8	10	27	31	12	8	12	8	0
28	0	39	16	0	9	36	27	12	8	36	10	0
29	8	30	15	9		25	26	10	9	51	0	7
30	11	20	10	0		29	26	8	11	46	6	7
31	14		10	17		23		8		40	9	
Mean	12	23	19	16	16	17	16	28	24	31	10	4

The yearly mean sunspot number equaled 45.9 in 1984.

DAILY SOLAR FLUX AT 2800 MHz (10.7 CM) ADJUSTED TO 1 AU

ALGONQUIN RADIO OBSERVATORY, OTTAWA

Day	Oct 84	Nov	Dec	Jan 85	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
01	72.0	69.5	77.0	68.4	72.2	69.3	72.2	80.6*	69.5	76.9	80.5	73.0
02	74.8	70.1	76.8	67.8	73.8	69.1	72.6	76.5	72.4	79.1*	80.4	72.8
03	75.2	72.0	77.9	67.7	73.6	69.0	72.5A	72.6	74.6	81.3	79.2	73.1
04	75.2	72.2	75.9	67.8	70.9	68.6	71.9	70.8	77.5	80.4	79.3	73.5
05	74.0	71.7	73.4	67.0	71.2	67.5	71.2	71.4	84.3	83.3	78.5	72.2
06	73.2	71.0	73.0	67.9	70.6	68.1	70.5	75.0	87.4	87.5	77.9	72.5
07	73.5	70.1	72.8	68.1	70.3	68.0	70.3	79.1	88.4	97.7	79.5	70.8
08	74.6	70.5	74.1	67.4	72.5	68.7	69.9	83.7	88.9	96.7*	78.5	70.3
09	73.5	72.7	74.5	68.1	73.2	68.7	69.4	89.6	89.8	100.9*	74.9	70.6
10	74.1	75.8	75.7	67.4	73.6	68.0	69.7	91.7	91.7	104.6*	72.8	70.3
11	74.3	73.1	78.9	67.7	73.2	69.6	69.0	89.9	91.2	97.3	68.4	69.2
12	73.9	72.8	77.8	68.4	72.3	69.3	69.6	92.1	89.8	92.9	69.7	68.5
13	74.7	71.6	76.2	72.6	70.8	69.5	69.9	91.9	89.2	85.5	68.9	70.7
14	73.2	72.0	75.8A	72.3	70.6	69.5	70.6	90.7*	85.3	76.4	69.3	70.4
15	76.4	72.9	74.9	72.4	70.2	69.6	70.0	92.0*	83.8	73.0	69.0	71.1
16	76.6	70.7	74.2	74.7	69.8	70.1	69.4	95.5	80.9	71.9	68.2	70.3
17	76.2	71.0	72.6	75.8	70.9	72.1	70.2	92.3	77.3	71.9	67.9	70.0
18	76.5	71.7	70.2	74.1	73.4*	74.6	71.7	92.7	73.8	71.8	68.6	70.4
19	74.2	72.3	71.0	75.4	76.1	74.2	71.7	89.6	72.2	71.7	69.1	70.7
20	73.5	74.8	69.9	81.7*	75.0	74.2	72.3	86.7	71.9	71.7	70.6	69.8
21	73.2	78.3	69.7	84.9*	74.2	76.1*	77.9	84.4*	71.5	71.2	70.4	69.6
22	74.5	78.2	70.7	85.3	73.3	75.9	89.8	82.7*	71.6	71.0	72.7	69.8
23	72.7	79.3	71.3	82.5	71.7	77.3	93.3*	80.0	71.8	71.1	72.9	69.2
24	70.8	81.1	71.8	78.2	70.5	79.6	89.0*	78.3	70.8	71.0	72.1	69.0
25	70.2	83.1	72.2	73.9	70.1	78.5	95.2	77.2	71.0	75.6	72.5	68.7
26	69.4	82.5	72.3	71.0	69.7	79.7†	88.3*	75.5	70.0	77.4	72.3	68.4
27	68.6	82.5*	72.0	69.5	68.9	77.4†	80.6	74.6	70.2	79.2	73.1	67.7
28	69.3	81.1	72.2	69.6	69.7	77.7†	78.1	73.7	71.0	81.2	73.1	67.8
29	68.2	77.1	72.1	69.7		76.7†	83.2	72.5	72.3	83.5	73.1	68.3
30	68.8	76.4	71.4	68.3		75.8†	80.8	71.4	74.8	83.8	73.9	68.3
31	69.8		70.0	69.9A		76.4†		69.6		82.4	74.1	
Mean	73.1	74.6	73.5	72.1	71.9	72.5	75.7	82.0	78.5	81.3	73.3	70.2

A = interpolated value; --- = no observation.
*Adjusted for burst in progress at time of measurement; †corrected for antenna drift.
The yearly mean 2800 MHz flux adjusted to 1 astronomical unit equaled 101.1 in 1984.

ERRATA: In SGD issues number 485-488, solar fluxes for 31st day of 1984 must be shifted right 1 column.

DAILY SOLAR INDICES

SEPTEMBER 1985

Day	Julian Day	Bartels Cycle Day	Sunspot Numbers Int	Amer	Obs Flux Ottawa (2800)	Solar Flux Adjusted to 1 Astronomical Unit: SGMR (15400)	SGMR (8800)	SGMR (4995)	Ottawa (2800)	SGMR (2695)	SGMR (1415)	SGMR (610)	SGMR (410)	SGMR (245)
01	244	10	7	0	71.7	552	289	---	73.0	70	59	51	22	11
02	245	11	0	0	71.5	528	273	106	72.8	69	60	52	23	10
03	246	12	0	0	71.9	542	276	107	73.1	69	58	52	22	12
04	247	13	0	0	72.3	530	263	80	73.5	92	58	53	22	11
05	248	14	0	1	71.1	540	279	104	72.2	67	59	49	21	11
06	249	15	0	0	71.4	512	275	106	72.5	70	59	54	22	13
07	250	16	0	0	69.8	---	---	---	70.8	--	--	--	--	--
08	251	17	0	0	69.3	535	263	104	70.3	68	57	48	21	11
09	252	18	0	0	69.6	511	276	105	70.6	69	56	49	20	11
10	253	19	0	0	69.3	516	278	105	70.3	68	57	48	21	11
11	254	20	7	0	68.3	552	277	104	69.2	66	55	50	20	8
12	255	21	0	0	67.6	544	278	101	68.5	66	55	49	20	12
13	256	22	9	11	69.8	546	277	104	70.7	66	56	48	20	6
14	257	23	9	10	69.5	553	279	103	70.4	67	54	47	19	9
15	258	24	9	11	70.3	543	277	103	71.1	69	55	46	20	10
16	259	25	9	11	69.5	539	282	103	70.3	68	54	49	20	10
17	260	26	8	10	69.3	546	273	103	70.0	65	54	45	19	9
18	261	27	10	14	69.8	542	275	104	70.4	66	58	49	19	11
19	262	1	10	13	70.1	538	267	102	70.7	66	56	47	21	10
20	263	2	9	10	69.2	534	261	102	69.8	66	56	48	20	10
21	264	3	8	11	69.0	541	267	101	69.6	65	55	47	19	26
22	265	4	7	0	69.3	540	281	102	69.8	66	54	52	21	11
23	266	5	0	0	68.7	---	---	---	69.2	--	--	--	--	--
24	267	6	0	0	68.6	---	---	---	69.0	--	--	--	--	--
25	268	7	0	0	68.4	546	265	99	68.7	67	56	46	21	9
26	269	8	0	0	68.1	538	273	102	68.4	67	55	53	22	36
27	270	9	0	0	67.4	---	---	---	67.7	--	--	--	--	--
28	271	10	0	0	67.5	---	---	---	67.8	--	--	--	--	--
29	272	11	7	1	68.1	---	---	---	68.3	--	--	--	--	--
30	273	12	7	0	68.1	552	273	128	68.3	65	54	48	18	9
Mean			4	3	69.5	538	274	103	70.2	68	56	49	20	12

*Adjusted for burst in progress at time of measurement.

The observed and the adjusted Ottawa fluxes tabulated above are the "Series C" daily values reported by the Algonquin Radio Observatory, Ottawa, Ontario, Canada. The letter "A" following an entry designates an interpolated flux. Numbers in parentheses in the column headings denote frequencies in MHz.

Equipment problems produced the gaps shown here in the Air Weather Service's Sagamore Hill (SGMR) observations.

The international and American sunspot numbers shown above are preliminary values.

OBSERVED AND PREDICTED SOLAR ACTIVITY INDICES

SEPTEMBER 1985

Date	RELATIVE SUNSPOT NUMBERS: International (Ri) Monthly Mean	International (Ri) Smoothed	American (Ra) Monthly Mean	American (Ra) Smoothed	Derived (Rs) Monthly Mean	Derived (Rs) Smoothed	2800 MHz RADIO FLUX Adjusted to 1 AU (Sa) Monthly Mean	2800 MHz RADIO FLUX Adjusted to 1 AU (Sa) Smoothed
Nov 81	137.5	139	138.8	142	157.6	151	203.3	197
Dec	150.1	138	145.0	140	155.5	149	201.4	195
Jan 82	111.1	137	110.4	139	124.2	148	173.4	195
Feb	163.6	133	161.0	134	163.6	144	208.9	191
Mar	153.8	129	155.5	130	163.0	139	206.3	186
Apr	122.0	124	121.9	124	113.9	134	162.9	182
May	82.2	120	82.6	120	97.7	129	147.9	177
Jun	110.4	117	113.5	118	129.6	127	177.4	175
Jul	106.1	115	113.3	117	116.0	125	164.8	174
Aug	107.6	109	110.5	111	123.9	120	172.1	168
Sep	118.8	101	117.8	103	118.5	112	167.1	161
Oct	94.7	96	90.1	97	111.8	106	160.9	155
Nov	98.1	95	93.2	95	114.8	103	163.7	153
Dec	127.0	95	145.0	95	146.7	101	193.2	151
Jan 83	84.3	93	82.8	93	86.7	98	137.7	148
Feb	51.0	90	53.4	90	67.2	94	119.6	145
Mar	66.5	86	60.5	85	64.7	90	117.3	141
Apr	80.7	82	74.5	81	67.5	85	119.9	136
May	99.2	77	97.7	77	86.1	80	137.1	131
Jun	91.1	70	93.1	69	92.4	72	143.0	124
Jul	82.2	66	82.2	63	77.4	66	129.1	118
Aug	71.8	66	69.2	63	75.7	66	127.5	118
Sep	50.3	68	47.4	66	57.0	67	110.2	119
Oct	55.8	68	52.3	66	58.6	67	111.7	120
Nov	33.3	59	30.2	65	35.6	67	90.4	120
Dec	33.4	64	32.3	62	35.7	65	90.5	118
Jan 84	57.0	60	54.4	58	59.4	61	112.4	115
Feb	85.4	56	81.5	54	86.2	58	137.2	101
Mar	83.5	53	83.0	51	68.5	55	120.8	108
Apr	69.7	50	66.5	48	78.1	52	129.7	105
May	76.4	48	72.1	45	79.6	49	131.1	103
Jun	46.1	46	45.2	44	49.8	48	103.5	102
Jul	37.4	44	36.2	42	37.6	39	92.2	99
Aug	25.5	40	24.5	38	30.7	41	85.8	95
Sep	15.7	34	13.6	32*	23.2	35	78.9	90
Oct	12.0	29	9.8	27*	16.9	31	73.1	86
Nov	22.8	25	19.4	23*	18.6	26	74.6	72
Dec	18.7	22	17.0	20*	17.4	23	73.5	79
Jan 85	16.5	20*	14.5	19*	15.9	21	72.1	77
Feb	15.9	20*	16.3	18*	15.7	20	71.9	76
Mar	17.2	18*	11.8*	16*	16.3	19	72.5	75
Apr	16.2	18(2)*	17.1*	15	19.8	18	75.7	--
May	27.5	17(3)*	24.0*	15	26.6	18	82.0	--
Jun	24.2	17(4)*	22.2*	14	22.8	17	78.5	--
Jul	30.8†	16(5)*	30.8*	14	25.8	17	81.3	--
Aug	10.4†	15(5)*	10.7*	13	17.2	16	73.3	--
Sep	3.9†	15(6)*	3.4*	12	13.8	15	70.2	--
Oct	----	13(7)*	----	11	----	14	----	--
Nov	----	12(8)*	----	10	----	13	----	--
Dec	----	11(8)*	----	9	----	12	----	--
Jan 86	----	11(9)*	----	9	----	12	----	--
Feb	----	11(9)*	----	9	----	11	----	--
Mar	----	10(10)*	----	8	----	11	----	--

*An asterisk marks either a value of the observed 12-month running mean or of a predicted 12-month average that is based in part on preliminary observations.

Underlined entries indicate predicted values and parentheses enclose the absolute value of the 90% confidence limits. The two columns headed "Derived" represent a sunspot number computed from a linear regression equation between the 2800 MHz solar flux (adjusted to 1 astronomical unit) and the Zurich sunspot number.

SMOOTHED OBSERVED AND PREDICTED SUNSPOT NUMBERS FOR CYCLE 21

SEPTEMBER 1985

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1976	15	13	12	13	13	12*	13	14	14	13	14	15
1977	17	18	20	22	24	26	29	33	39	46	52	57
1978	61	65	70	77	83	89	97	104	108	111	113	118
1979	124	131	137	141	147	153	155	155	156	158	162	165*
1980	164	163	161	159	156	155	153	150	150	150	148	143
1981	140	142	143	143	143	142	140	141	143	142	139	138
1982	137	133	129	124	120	117	115	109	101	96	95	95
1983	93	90	86	82	71	71	66	66	68	68	67	64
1984	60	56	53	50	48	47	44	40	34	29	25	22
1985	21	20	19	18 (2)	17 (3)	17 (4)	16 (5)	15 (5)	15 (6)	13 (7)	12 (8)	11 (8)
1986	11 (9)	11 (9)	10 (10)	10 (10)	9 (10)	8 (10)	8 (10)	7 (10)	7 (10)	7 (10)	8 (10)	8 (9)

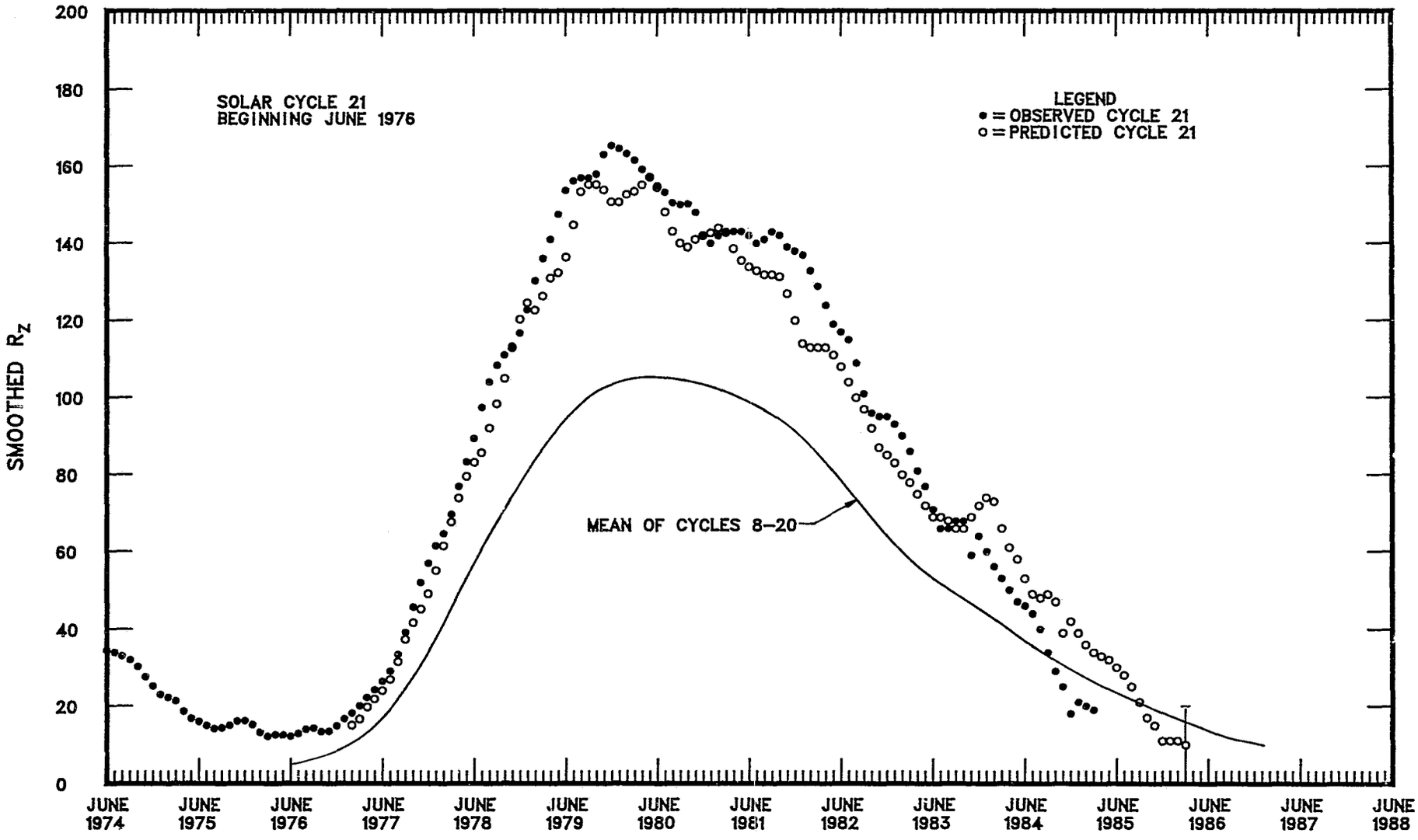
An asterisk marks the minimum and the maximum of Sunspot Cycle 21.

For the current solar cycle, this table gives observed smoothed sunspot numbers up to the one calculated from the most recently measured monthly mean. These smoothed observed values are based on final monthly mean Zurich numbers through 1980, on final international numbers through June 1985, and on provisional international numbers thereafter.

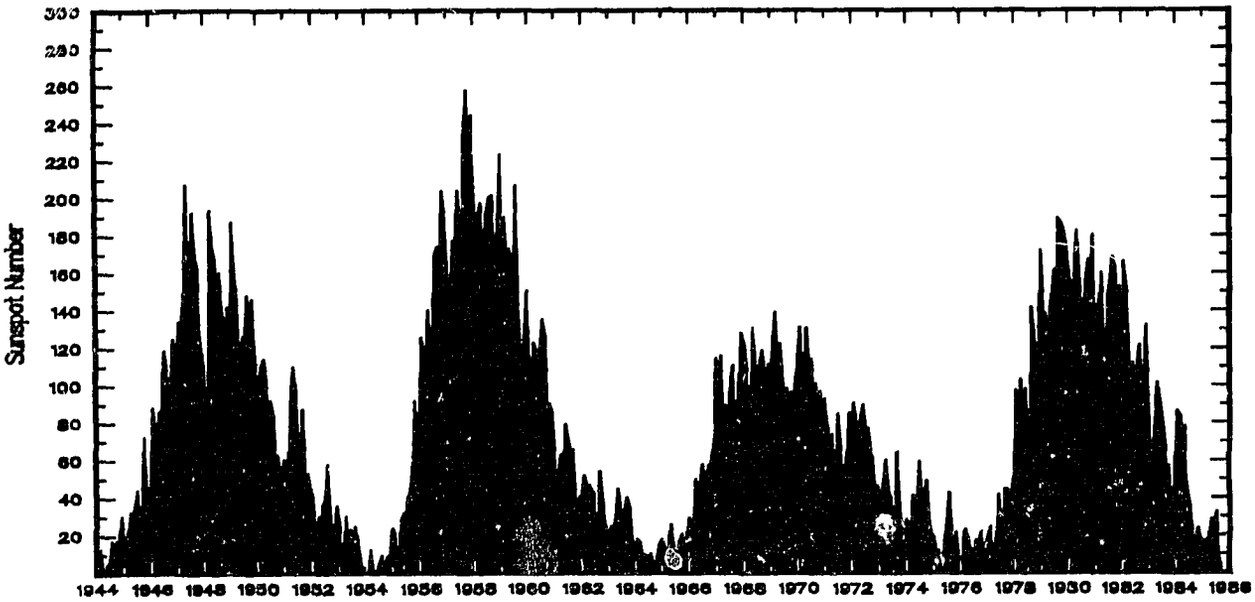
The entries with numbers in parentheses below them denote predictions by the McNish-Lincoln method. (See page 9 in the May 1985 edition of the "Solar-Geophysical Data" supplement.) Adding the number in parentheses to the predicted value generates the upper limit of the 90% confidence interval; subtracting the number in parentheses from the predicted value generates the lower limit. Consider, for example, the March 1986 prediction tabulated above. There exists a 90% chance that in March 1986 the actual smoothed sunspot number will fall somewhere between 0 and 20.

THE MCNISH-LINCOLN PREDICTION METHOD GENERATES USEFUL ESTIMATES OF SMOOTHED SUNSPOT NUMBERS FOR NO MORE THAN 12 MONTHS AHEAD. Beyond a year the predictions regress rapidly toward the mean of all 13 cycles of data used in the computation. Furthermore, the method is very sensitive to the date defined as the beginning of the current sunspot cycle, that is, to the date of the most recent sunspot minimum. In "Solar-Geophysical Data," issues 390-401, we based the current cycle predictions on March 1976 as the end of cycle 20 and the onset of the new cycle 21. Later studies, including one published by M. Waldmeier, showed that June 1976 was more appropriately the minimum epoch. We therefore generated this table using the June 1976 date.

OBSERVED AND ONE-YEAR-AHEAD PREDICTED SMOOTHED SUNSPOT NUMBERS



MONTHLY MEAN SUNSPOT NUMBERS
January 1944 - September 1985



MONTHLY MEAN SUNSPOT NUMBERS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1944	3.7	0.5	11.0	0.3	2.5	5.0	5.0	16.7	14.3	16.9	10.8	28.4
1945	18.5	12.7	21.5	32.0	30.6	36.2	42.6	25.9	34.9	68.8	46.0	27.4
1946	47.6	86.2	76.6	75.7	84.9	73.5	116.2	107.2	94.4	102.3	123.8	121.7
1947	115.7	133.4	129.8	149.8	201.3	163.9	157.9	188.8	169.4	163.6	128.0	116.5
1948	108.5	86.1	94.8	189.7	174.0	167.8	142.2	157.9	143.3	136.3	95.8	138.0
1949	119.1	182.3	157.5	147.0	106.2	121.7	125.8	123.8	145.3	131.6	143.5	117.6
1950	101.6	94.8	109.7	113.4	106.2	83.6	91.0	85.2	51.3	61.4	54.8	54.1
1951	59.9	59.9	55.9	92.9	108.5	100.6	61.5	61.0	83.1	51.6	52.4	45.8
1952	40.7	22.7	22.0	29.1	23.4	36.4	39.3	54.9	28.2	23.8	22.1	34.3
1953	26.5	3.9	10.0	27.8	12.5	21.8	8.6	23.5	19.3	8.2	1.6	2.5
1954	0.2	0.5	10.9	1.8	0.8	0.2	4.8	8.4	1.5	7.0	9.2	7.6
1955	23.1	20.8	4.9	11.3	28.9	31.7	26.7	40.7	42.7	58.5	89.2	76.9
1956	73.6	124.0	118.4	110.7	136.6	116.6	129.1	169.6	173.2	155.3	201.3	192.1
1957	165.0	130.2	157.4	175.2	164.6	200.7	187.2	158.0	235.8	253.8	210.9	239.4
1958	202.5	164.9	190.7	196.0	175.3	171.5	191.4	200.2	201.2	181.5	152.3	187.6
1959	217.4	143.1	185.7	163.3	172.0	168.7	149.6	199.6	145.2	111.4	124.0	125.0
1960	146.3	106.0	102.2	122.0	119.6	110.2	121.7	134.1	127.2	82.8	89.6	85.6
1961	57.9	46.1	53.0	61.4	51.0	77.4	70.2	55.8	63.6	37.7	32.6	39.9
1962	38.7	50.3	45.6	46.4	43.7	42.0	21.8	21.8	51.3	39.5	26.9	23.2
1963	19.8	24.4	17.1	29.3	43.0	35.9	19.6	33.2	38.8	35.3	23.4	14.9
1964	15.3	17.7	16.5	8.6	9.5	9.1	3.1	9.3	4.7	6.1	7.4	15.1
1965	17.5	14.2	11.7	6.8	24.1	15.9	11.9	8.9	16.8	20.1	15.8	17.0
1966	28.2	24.4	25.3	48.7	45.3	47.7	56.7	51.2	50.2	57.2	57.2	70.4
1967	110.9	93.6	111.8	69.5	86.5	67.3	91.5	107.2	76.8	88.2	94.3	126.4
1968	121.8	111.9	92.2	81.2	127.2	110.3	96.1	109.3	117.2	107.7	86.0	109.8
1969	104.4	120.5	135.8	106.8	120.0	106.0	96.8	98.0	91.3	95.7	93.5	97.9
1970	111.5	127.8	102.9	109.5	127.5	106.8	112.5	93.0	99.5	86.6	95.2	83.5
1971	91.3	79.0	60.7	71.8	57.5	49.8	81.0	61.4	50.2	51.7	63.2	82.2
1972	61.5	88.4	80.1	63.2	80.5	88.0	76.5	76.8	64.0	61.3	41.6	45.3
1973	43.4	42.9	46.0	57.7	42.4	39.5	23.1	25.6	59.3	30.7	23.9	23.3
1974	27.6	26.0	21.3	40.3	39.5	36.0	55.8	33.6	40.2	47.1	25.0	20.5
1975	18.9	11.5	11.5	5.1	9.0	11.4	28.2	39.7	13.9	9.1	19.4	7.8
1976	8.1	4.3	21.9	18.8	12.4	12.2	1.9	16.4	13.5	20.6	5.2	15.3
1977	16.4	23.1	8.7	12.9	18.6	38.5	21.4	30.1	44.0	43.8	29.1	43.2
1978	51.9	93.6	76.5	99.7	82.7	95.1	70.4	58.1	138.2	125.1	97.9	122.7
1979	166.6	137.5	138.0	101.5	134.4	149.5	159.4	142.2	188.4	186.2	183.3	176.3
1980	159.6	155.0	126.2	164.1	179.9	157.3	136.3	135.4	155.0	164.7	147.9	174.4
1981	114.0	141.3	135.5	156.4	127.5	90.9	143.8	158.7	167.3	162.4	137.5	150.1
1982	111.2	163.6	153.8	122.0	82.2	110.4	106.1	107.6	118.8	94.7	98.1	127.0
1983	84.3	51.0	66.5	80.7	99.2	91.1	82.2	71.8	50.3	55.8	33.3	33.4
1984	57.0	85.4	83.5	69.7	76.4	46.1	37.4	25.5	15.7	12.0	22.8	18.7
1985	16.5	15.9	17.2	16.2	27.5	24.2	30.8*	10.4*	3.9*			

*Provisional

H - ALPHA S O L A R F L A R E S

SEPTEMBER 1985

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10^{-6} Disk)	Area Measurement Corr (Sq Deg)	Remarks
RAMY	12	1118E		1129	S09	E90		09	19.2	11D	SF		3	C				
CATA	12	1125E	1125	1145D	S13	E90		09	19.3	20D	1F		2	P	1125	45		
GOES	12	1735	1738	1740						5		C 1.2						
CATA	13	0730E	0740	0745D	S11	E78		09	19.2	15D	1B		2	P	0740	56		T
LEAR	13	0735	0736	0745	S14	E81		09	19.4	10	SF	C 1.7	3	C		14		
LEAR	13	0833	0839	0844	S14	E78		09	19.2	11	SF		3	C		11		
ATHN	13	0835E	0840U	0844	S14	E78		09	19.2	9D	SF		3	V	0840	19	.6	
CATA	14	0920	0920	0925	S13	E65		09	19.3	5	SN		2	C	0920	56		T
PEKG	15	0729	0740	0745	S10	E54		09	19.4	16	1B			P	0740	189	3.9	D
ATHN	15	0733	0736U	0746	S10	E53		09	19.3	13	1B		2	V	0736	207	4.0	
LEAR	15	0733	0736	0757	S11	E53	4694	09	19.3	24	1B	C 4.3	3	C		209		FH
WEND	15	0735E		0802	S11	E53		09	19.3	.27D	1N	C 4.3		C	0735	240	4.2	
RAMY	15	1549	1550	1616	S09	E51	4694	09	19.5	27	SF		3	C		38		F
RAMY	18	1307	1307	1309	S10	E00	4694	09	18.5	2	SF		3	C		20		
RAMY	18	1319	1321	1330	S09	E00	4694	09	18.5	11	SF		3	C		25		
WEND	18	1557	1602	1612	S11	E01		09	18.7	15	SN			C	1602	50	.5	
RAMY	18	1601		1603D	S11	W00	4694	09	18.7	2D	SF		3	C				
HOLL	19	2139E	2141U	2152	S10	W16	4694	09	18.7	13D	SF		3	C		76		FH

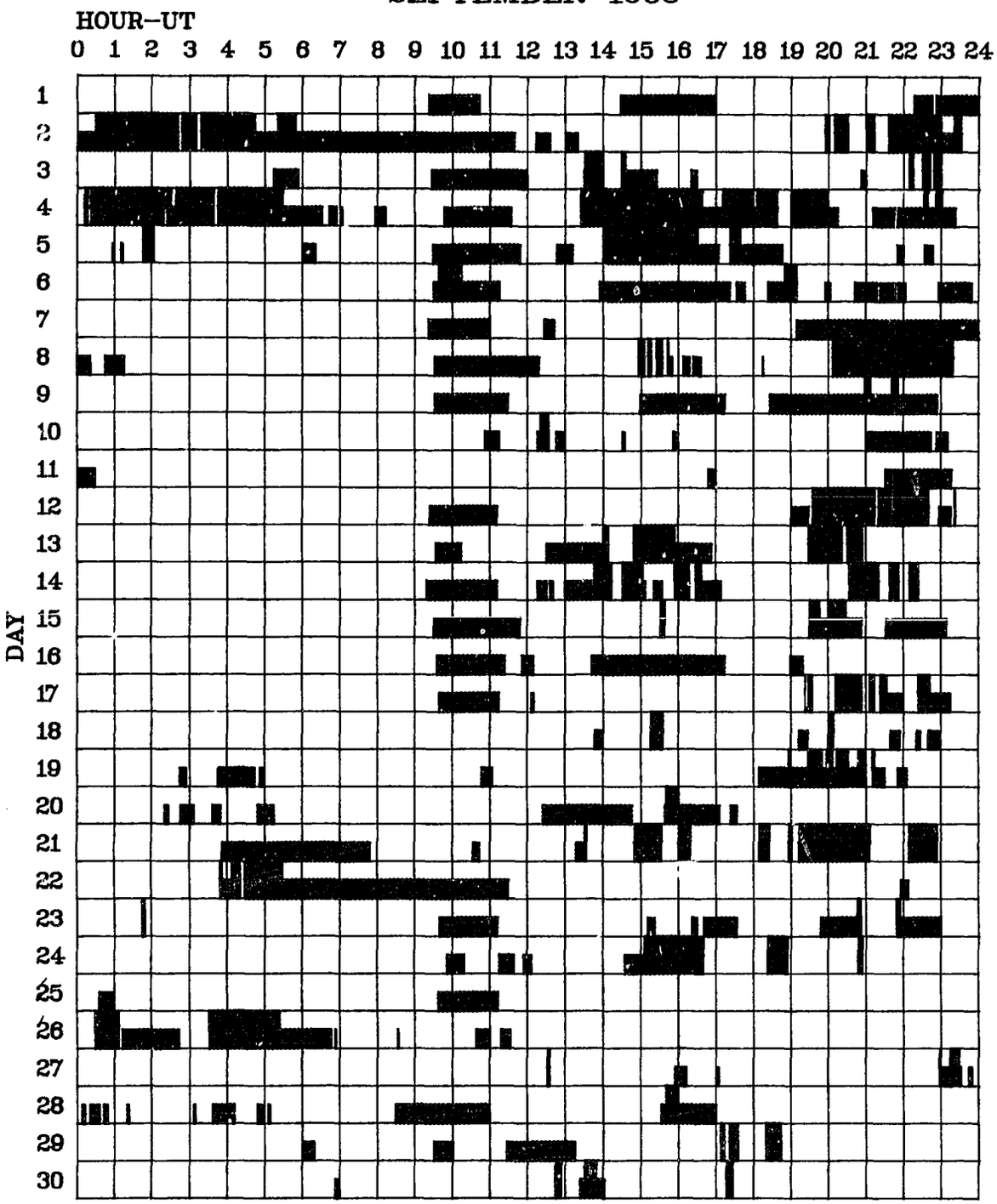
"Remarks":

A = Eruptive prominence whose base is less than 90° from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by high-speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the H and K lines of Ca II.
P = Flare shows helium D3 in emission.
Q = Flare shows Balmer continuum in emission.
R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
S = Brightness follows disappearance of filament in same position.
T = Region active all day.
U = Two bright branches, parallel or converging.
V = Occurrence of an explosive phase: important, expansion within roughly 1 minute that often includes a significant intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide H-alpha line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

SEPTEMBER 1985



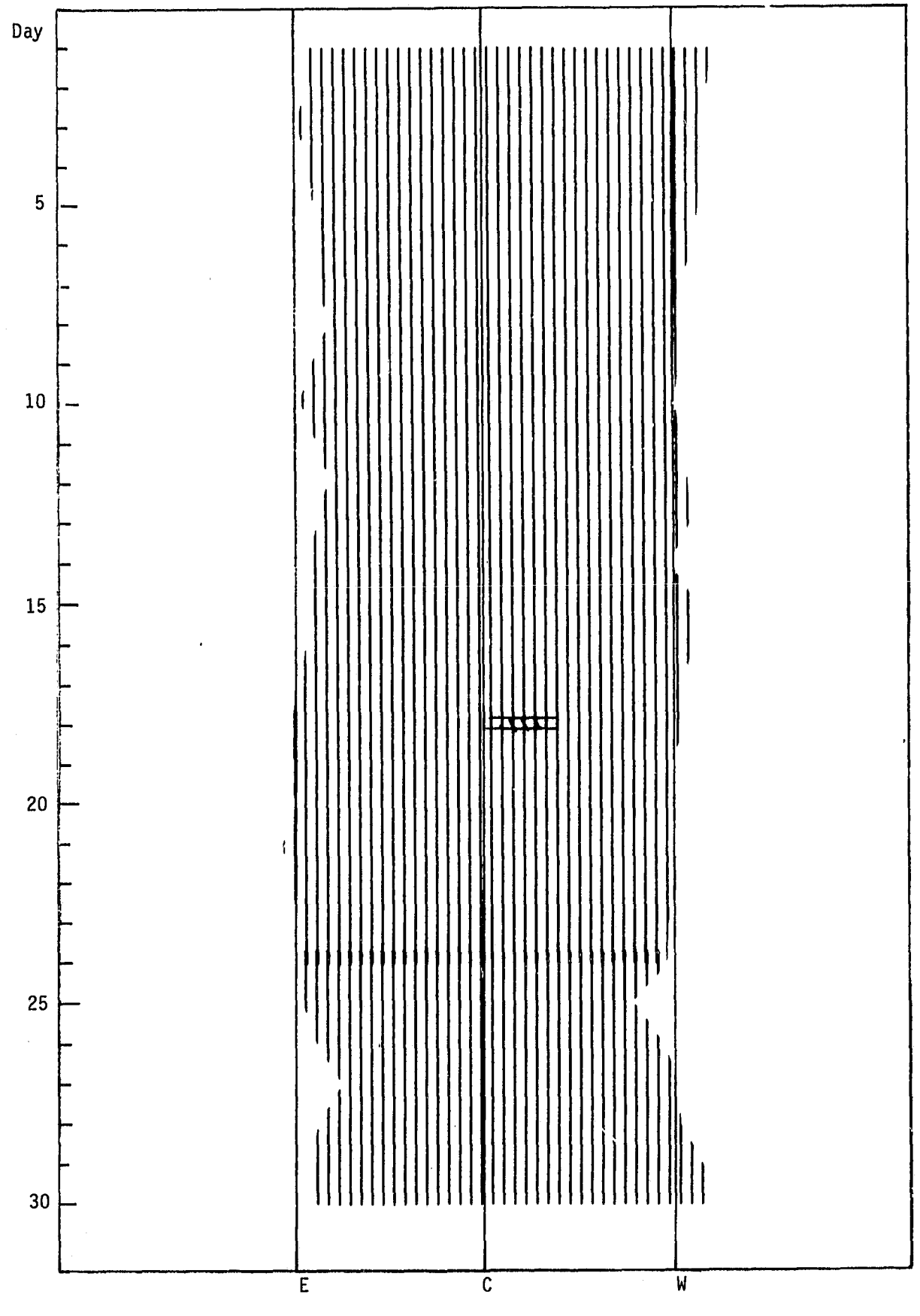
Times of no flare patrol, shown here as shaded areas, combine reports from the observatories listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind, that is, of neither visual nor cinematographic; portions of a panel with only the bottom half shaded mark times of strictly visual patrol.

Athens	Holloman	Learmonth	Palehua	Purple Mt.
Bucharest	Istanbul	Manila	Peking	Ramey
				Wendelstein

14
Sep 85

SOLAR INTERFEROMETRIC OBSERVATIONS

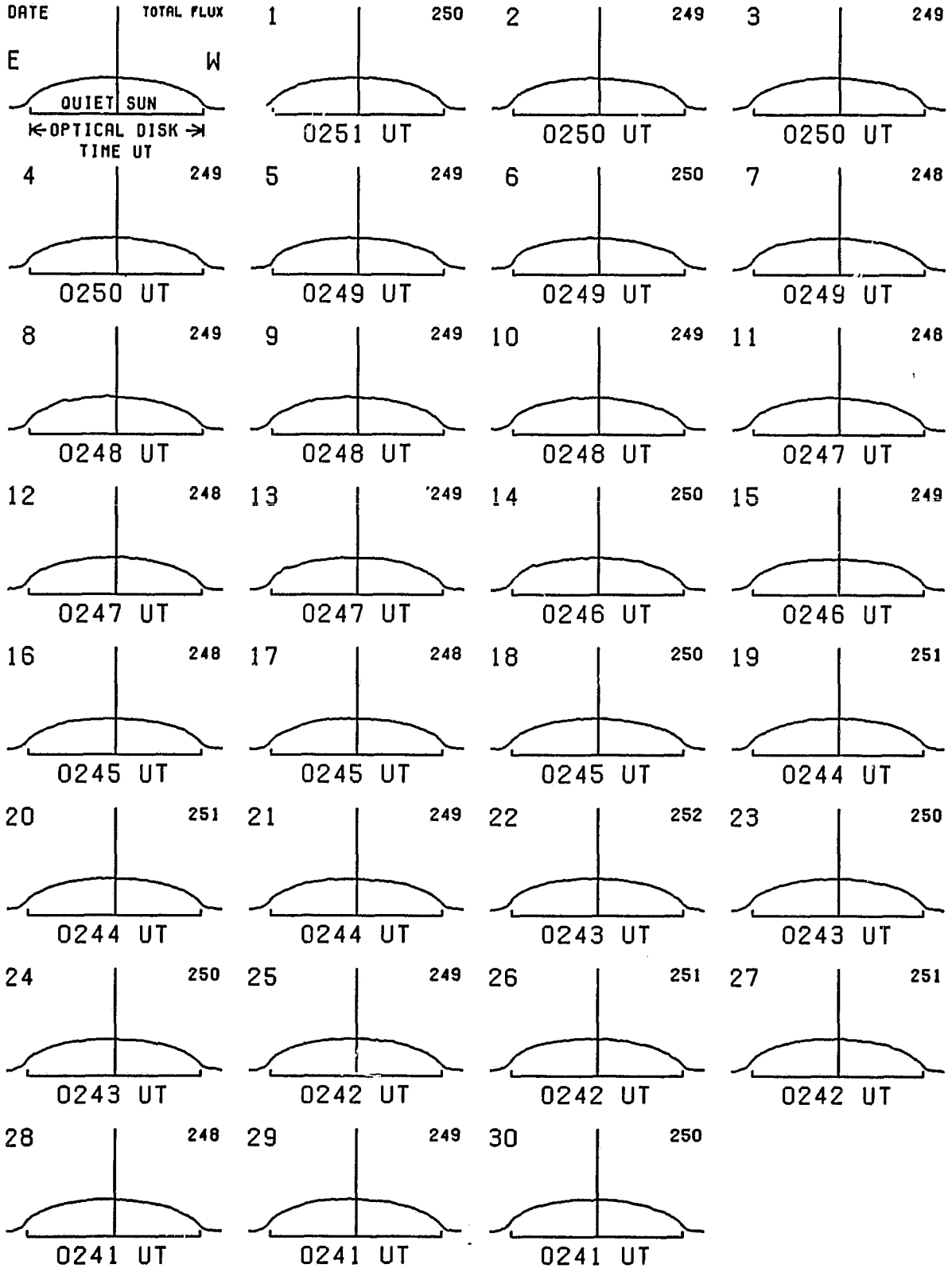
Nancay — SEPTEMBER 1985 — 169 MHz



EAST-WEST SOLAR SCANS
SEPTEMBER 1985

TOYOKAWA, JAPAN

3 CM
FAN BEAM WITH 1.1 MINUTES OF ARC



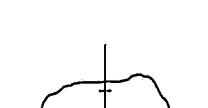
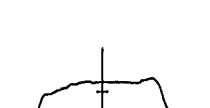
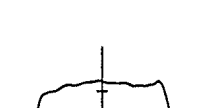
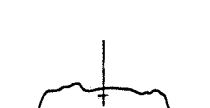
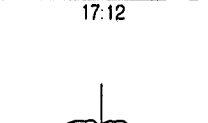
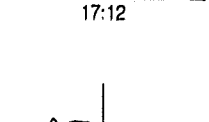
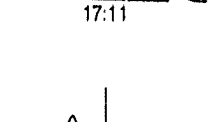
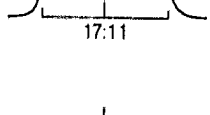
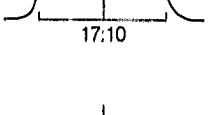
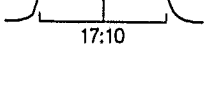
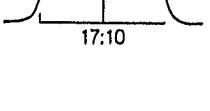
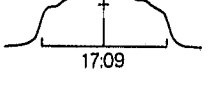
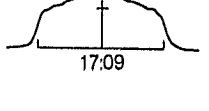
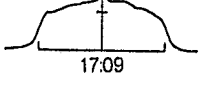
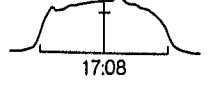
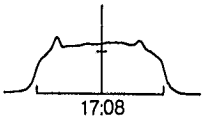
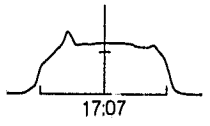
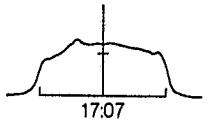
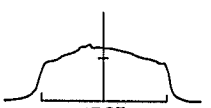
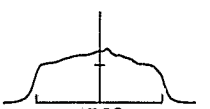
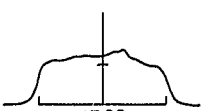
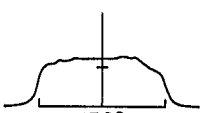
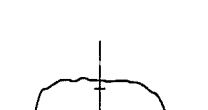
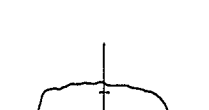
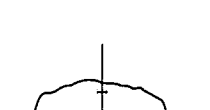
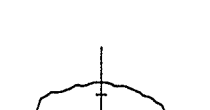
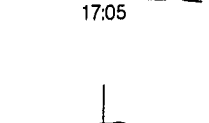
16
Sep 85

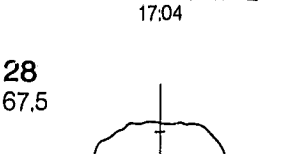
EAST-WEST SOLAR SCANS

SEPTEMBER 1985

ALGONQUIN RADIO OBSERVATORY
CANADA

10·7 cm
Fan Beam with 1·5 minutes of arc
E-W Resolution

01 71.7  17:12	02 71.5  17:12	03 71.9  17:11	04 72.3  17:11
05 71.1  17:11	06 71.4  17:10	07 69.8  17:10	08 69.3  17:10
09 69.6  17:09	10 69.3  17:09	11 68.3  17:09	12 67.6  17:08
13 69.8  17:08	14 69.5  17:08	15 70.3  17:07	16 69.5  17:07
17 69.3  17:07	18 69.8  17:06	19 70.1  17:06	20 69.2  17:06
21 69.0  17:05	22 69.3  17:05	23 68.7  17:05	24 68.6  17:04
25 68.4  17:04	26 68.1  17:03	27 67.4  17:03	28 67.5  17:03
29 68.1  17:02	30 68.1  17:02		

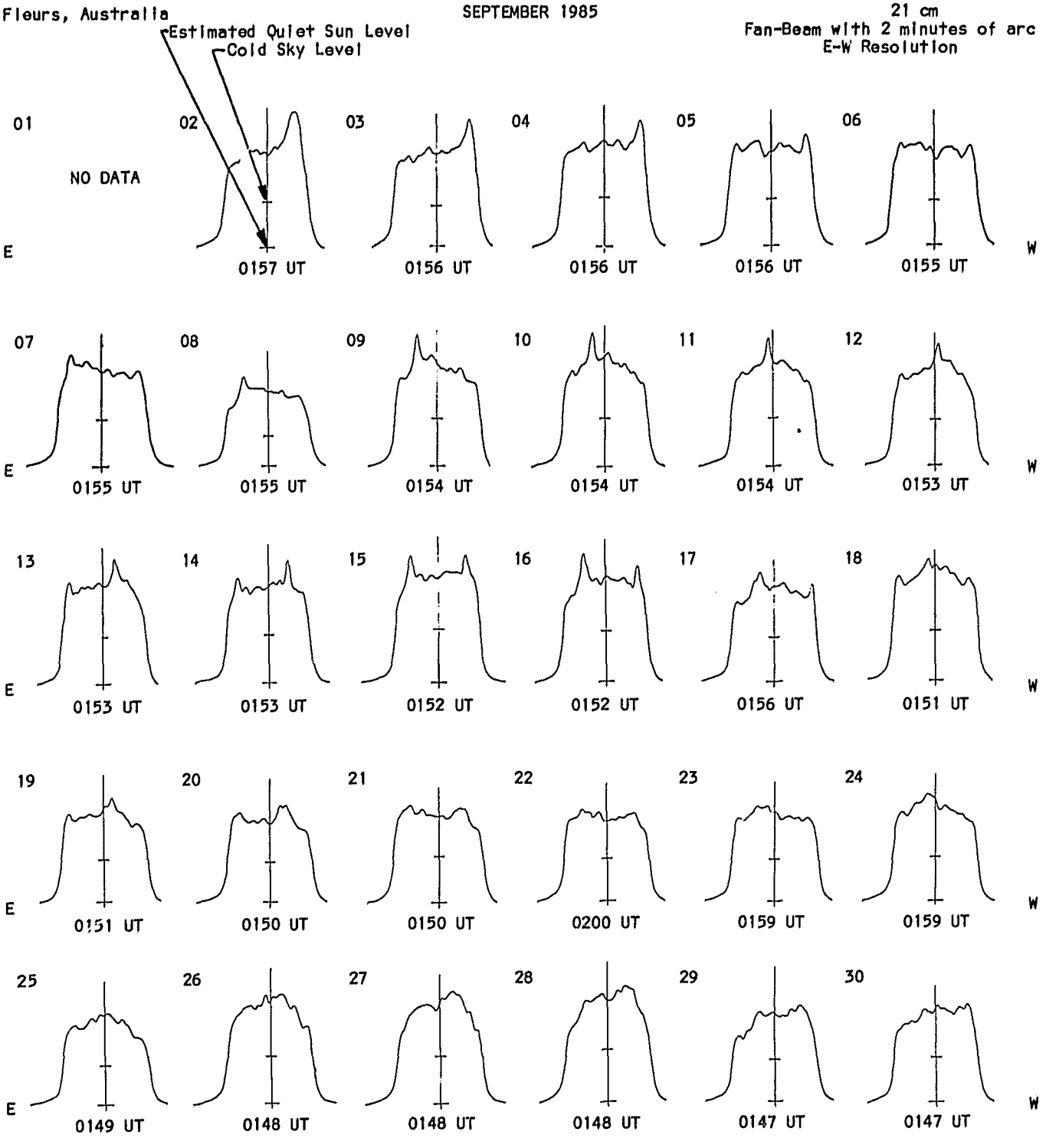


EAST-WEST SOLAR SCANS

Fleurs, Australia

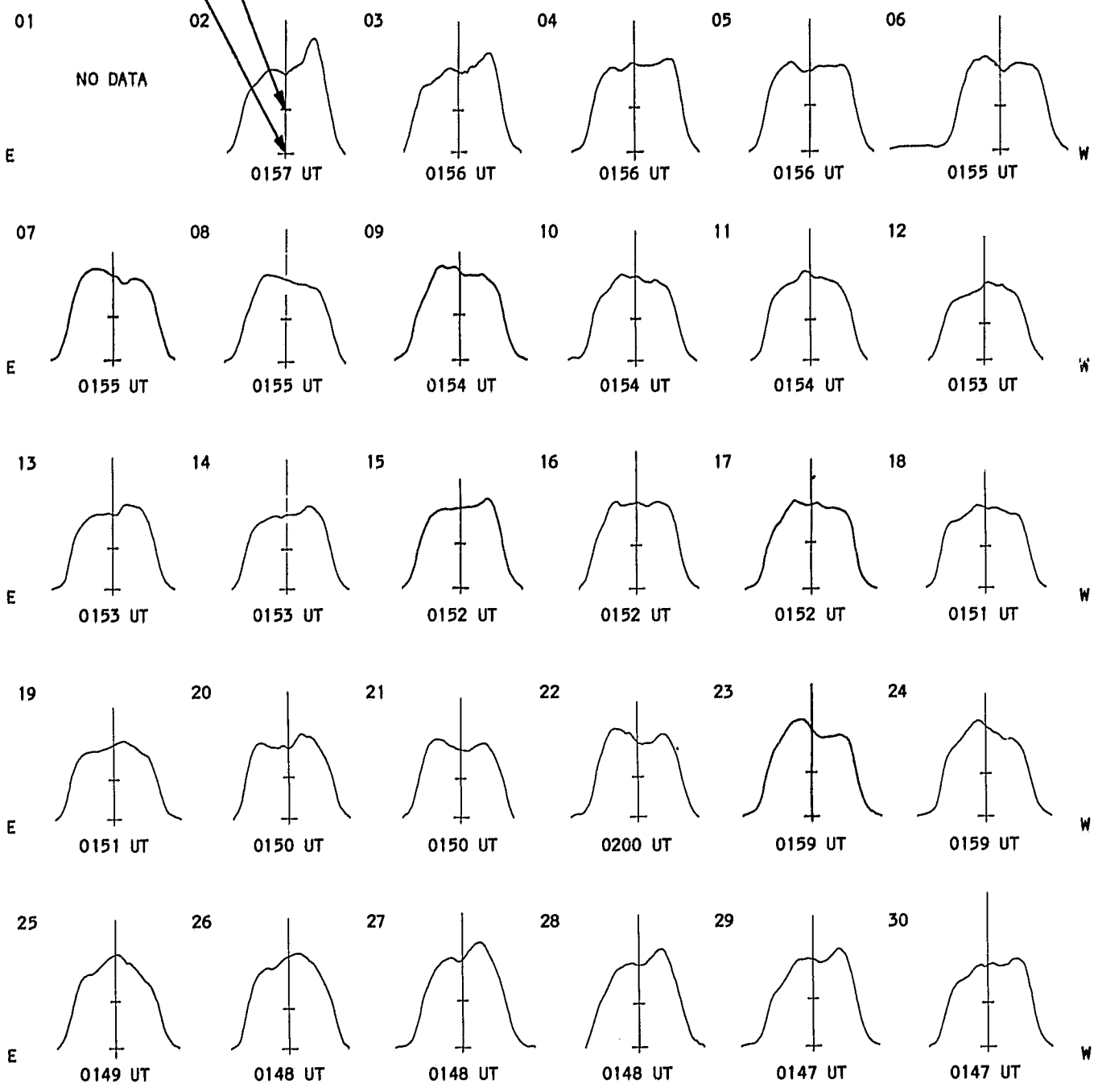
SEPTEMBER 1985

21 cm
Fan-Beam with 2 minutes of arc
E-W Resolution



EAST-WEST SOLAR SCANS

Fleurs, Australia — SEPTEMBER 1985 — 4.3 cm
Fan-Beam with 2 minutes of arc E-W Resolution



SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

SEPTEMBER 1985

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
15	610	LEAR	8 S	0733.5	0733.8	.8	18.0			QL=6 ST=2 TYP=3
	1415	LEAR	8 S	0734.1	0735.0	1.0	17.0			QL=6 ST=2 TYP=3
	2695	LEAR	8 S	0734.6	0734.8	.4	6.0			QL=6 ST=2 TYP=3
17	245	LEAR	44 NS	2234.0E	0210.6		36.0			QL=6 ST=1 TYP=1
19	245	LEAR	43 NS	2233.0	0840.8	689.0D	11.0			QL=6 ST=2 TYP=1
25	245	SGMR	47 GB	1544.8	1549.6	5.3	139.0			QL=1 ST=2 TYP=5

Reports are received routinely from the following observatories:

ATHN = Athens
BERN = Berne
BORD = Bordeaux
CRIM = Crimea
DWIN = Dwingeloo
GORK = Gorky
HIRA = Hiraiso
HUAN = Huancayo
IRKU = Irkutsk
IZMI = IZMIRAN
KISV = Kislovodsk
KRAK = Krakow
LEAR = Learmonth
MANI = Manila
NAGO = Nagoya
NOBE = Nobeyama
ONDR = Ondrejov
OTTA = Ottawa
PALE = Palehua
PEKG = Peking
PENT = Penticton
POTS = Potsdam
SAOP = Sao Paulo
SGMR = Sagamore Hill
TORN = Torun
TYKW = Toyokawa
TRST = Trieste
UPIC = Upice
VORO = Voroshilov

Explanation of Type Code:

1 Simple 1
2 Simple 1F
3 Simple 2
4 Simple 2F
5 Simple
6 Minor
7 Minor +
8 Spike
20 Simple 3
21 Simple 3A
22 Simple 3F
23 Simple 3AF
24 Rise
25 Rise A
26 Fall
27 Rise and Fall
28 Precursor
29 Post Burst Increase
30 Post Burst Increase A
31 Post Burst Decrease
33 Absorption
40 Fluctuation
41 Group of Bursts
42 Series of Bursts
43 Onset of Noise Storm
44 Noise Storm In Progress
45 Complex
46 Complex F
47 Great Burst
48 Major
49 Major +

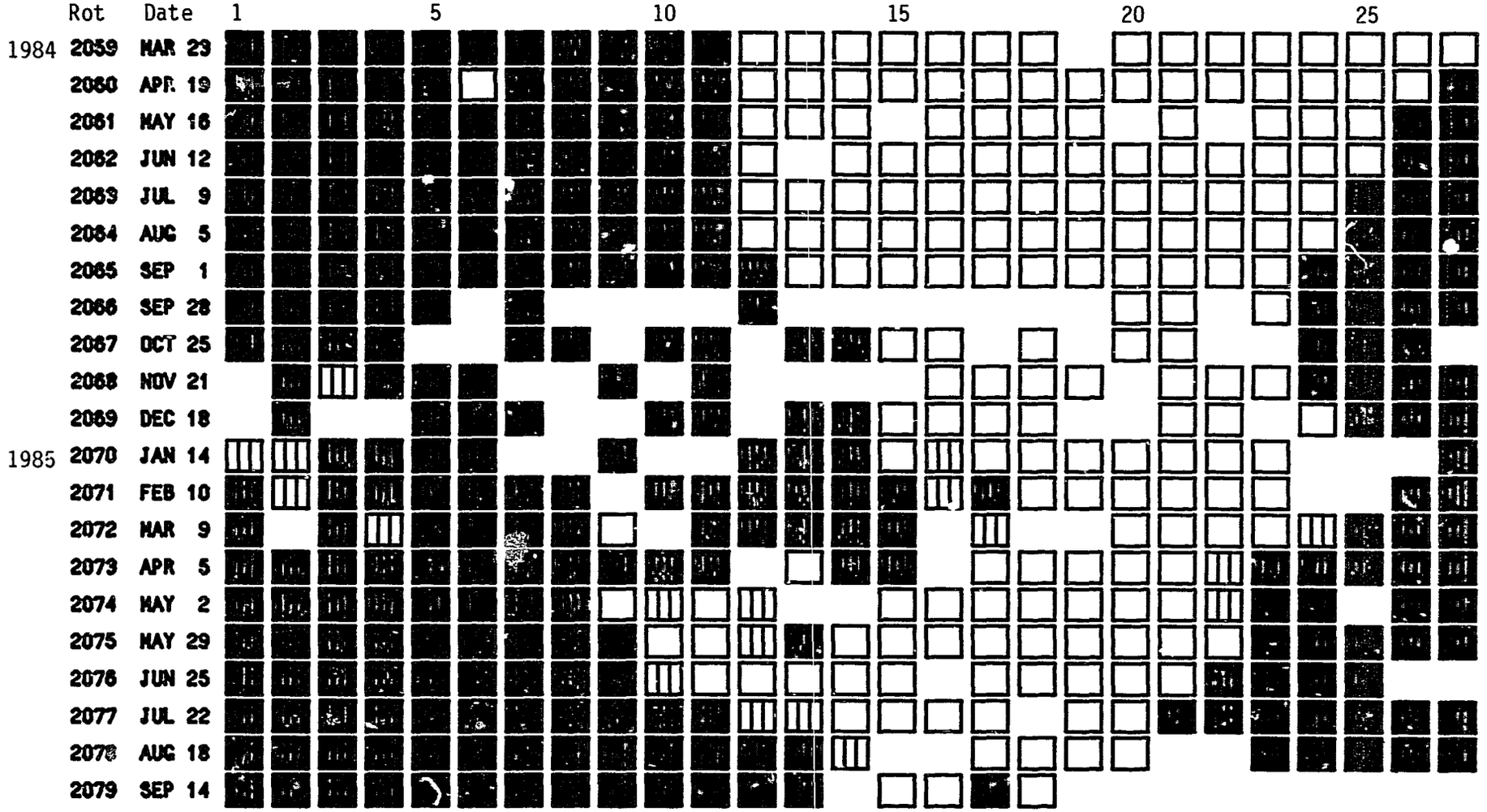
1A Simple 1A
3A Simple 2A
21A Simple 3A GRF
2A Simple 1AF
4A Simple 2AF
240 Rise only
240F Rise only F
24P Post Rise
24PF Post Rise F
16A Fall A
260 Fall Only
26F Fall F
27F Rise and Fall F
27AF Rise and Fall AF
31A Post Burst Decrease A
32A Absorption A
46F Complex F

STANFORD MEAN SOLAR MAGNETIC FIELD (MICROTESLA)

Day	Oct 84	Nov	Dec	Jan 85	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	-42	-13	-32	5	38	31	2	-5	-10	-16	-5	.
2	-63	.	.	14	35	27	-10	-8	-7	-14	1	.
3	.	-64	.	21	32	16	-14	-9	-11	-5	2	7
4	-76	-37	.	38	30	13	-13	-5	-12	2	8	3
5	.	.	.	.	15	.	-17	-5	-11	5	11	5
6	.	-22	15	.	.	.	-20	-5	-3	17	6	3
7	.	-4	28	37	.	-8	-7	-8	4	31	10	.
8	.	10	44	26	.	-17	-13	-8	6	24	.	.
9	-21	12	30	.	-4	-13	-6	-5	-1	22	8	-26
10	.	.	.	6	-5	.	-13	4	-4	.	8	-24
11	.	16	39	-10	-1	-4	-29	2	3	12	-9	-24
12	.	.	27	-8	-2	-1	-19	8	12	7	-16	-22
13	.	48	12	-10	-8	-3	-21	1	22	5	-24	-25
14	.	24	-10	-1	-9	-15	-13	.	21	8	-28	-24
15	.	.	-12	1	-23	-12	-12	.	19	6	-22	-21
16	.	.	-20	-7	-17	-6	.	11	17	-10	-23	-21
17	32	-4	-11	-3	-13	10	3	22	13	-27	-22	-25
18	36	-25	.	-25	.	.	-7	33	15	-27	-20	-29
19	.	-23	-8	-35	-12	-7	-10	48	7	-24	-20	-28
20	15	.	.	.	-17	-6	.	39	-10	.	-17	-22
21	-7	.	.	.	-15	-12	5	27	-21	.	-19	-21
22	-32	-6	-24	-30	-12	-12	6	25	-16	-19	-22	-23
23	-38	1	-35	.	-7	-5	18	0	-13	-19	-18	-16
24	-24	-15	-46	.	-6	.	23	-9	-13	-10	-22	-10
25	-14	-10	.	-9	2	1	18	-21	-16	-14	-28	-6
26	-18	-20	.	-12	-6	.	1	.	-12	-19	-25	-5
27	-15	.	-23	-2	13	.	-12	-18	-12	-27	-15	.
28	-32	.	-22	32	20	37	-27	-8	-9	-26	-9	11
29	.	-45	.	0		24	-32	-8	-13	-27	-4	12
30	.	.	-9	19		16	-47	-9	-9	-25	-2	-6
31	-71		-3	28		12		-5		-22	1	

Dot symbol indicates no data available for the day.

STANFORD MEAN SOLAR MAGNETIC FIELD



Mean Solar Magnetic Field Polarity: □ = field > 2 microT; ▥ = -2 microT ≤ field ≤ 2 microT

■ = field <-2 microT; No box = no data available

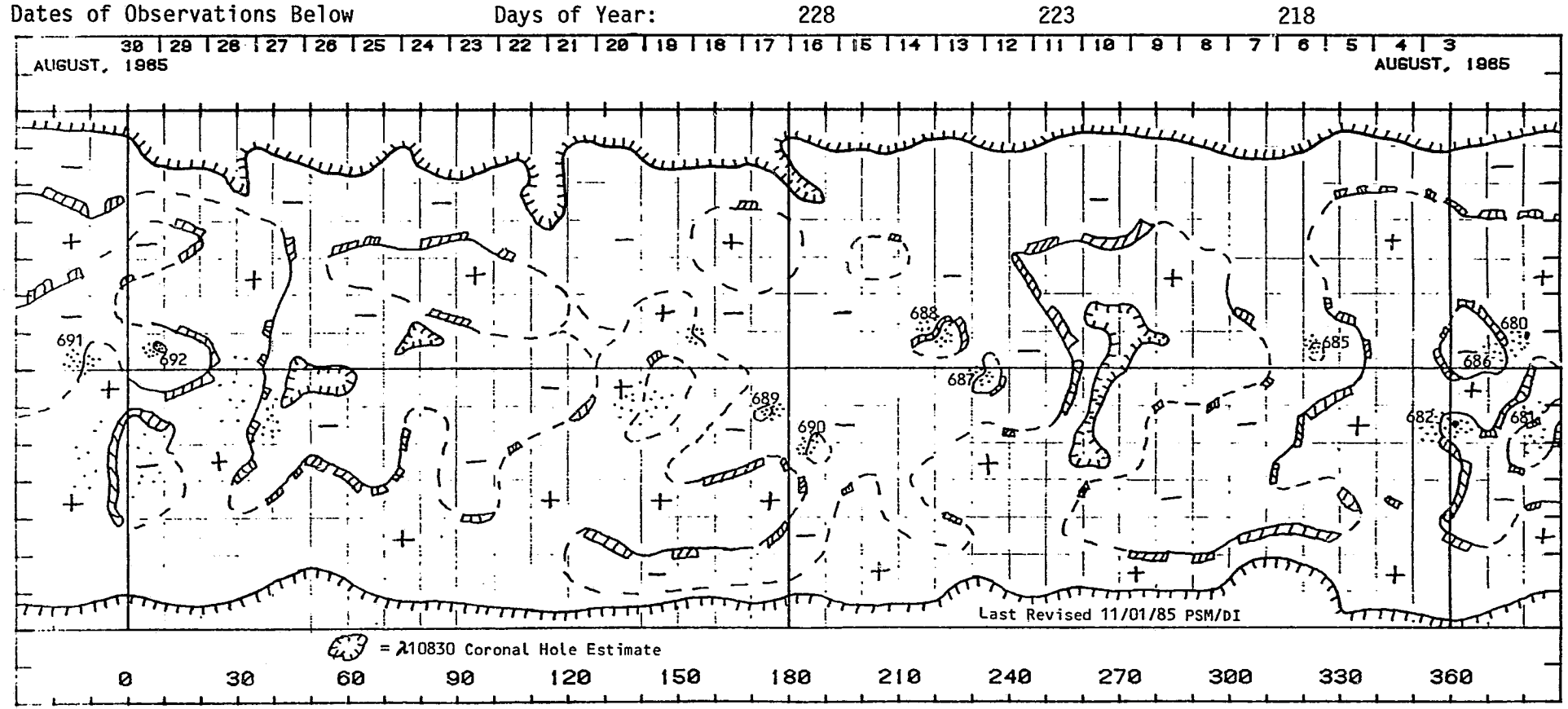
Observations are taken at 2000 UT. Rotation numbers given are the Bartels series, but the dates are not; these dates mark times of occurrence of phenomena on the Sun that affect the Earth during the given Bartels Rotation.

CONTENTS

Prompt Reports DATA FOR AUGUST 1985 Number 494 Part I

P R E L I M I N A R Y H - ALPHA S O L A R S Y N O P T I C C H A R T

CARRINGTON ROTATION NUMBER 1765
(August 3 to August 30, 1985)

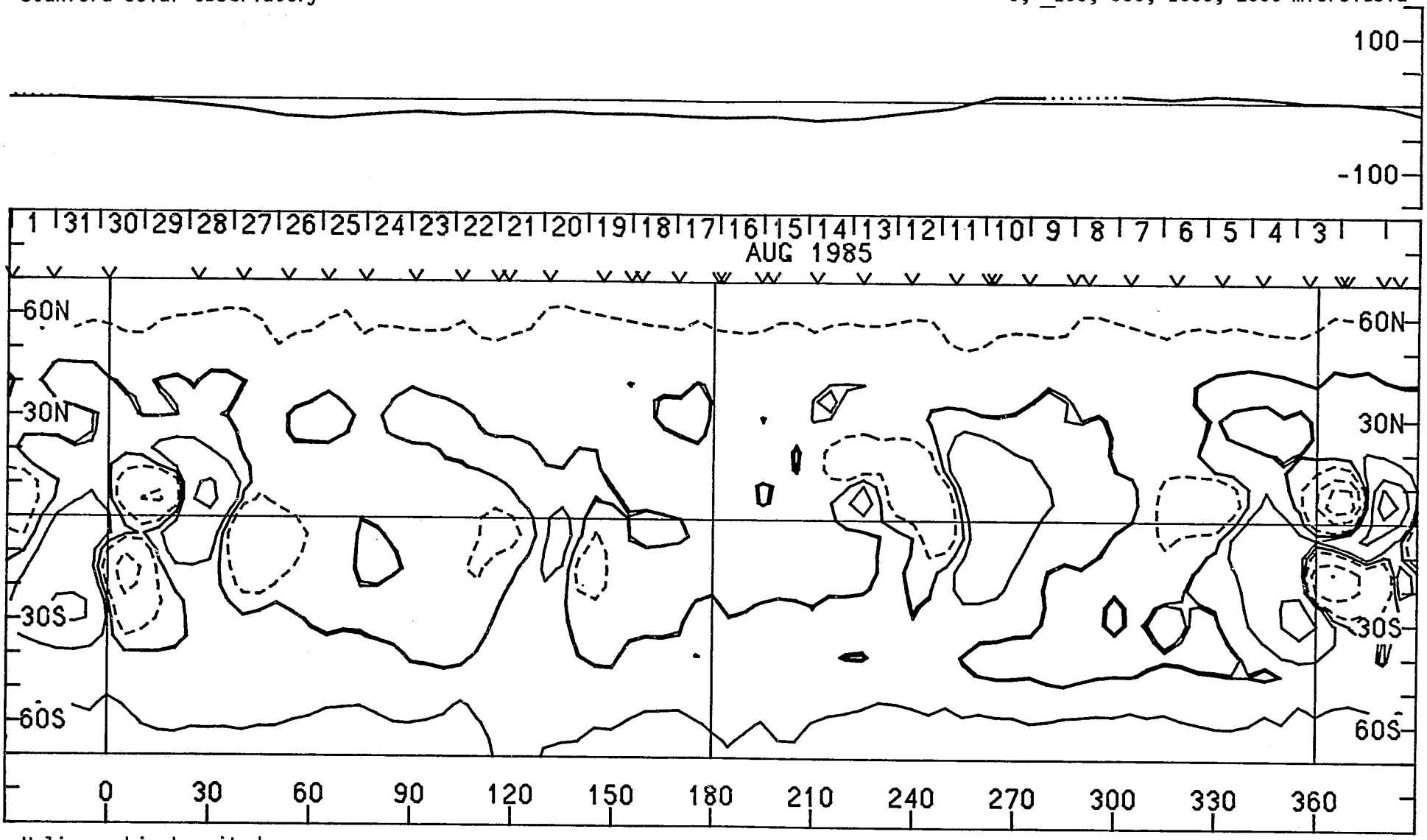


SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 1765
(August 3 to August 30, 1985)

Stanford Solar Observatory

0, ±100, 500, 1000, 2000 microTesla

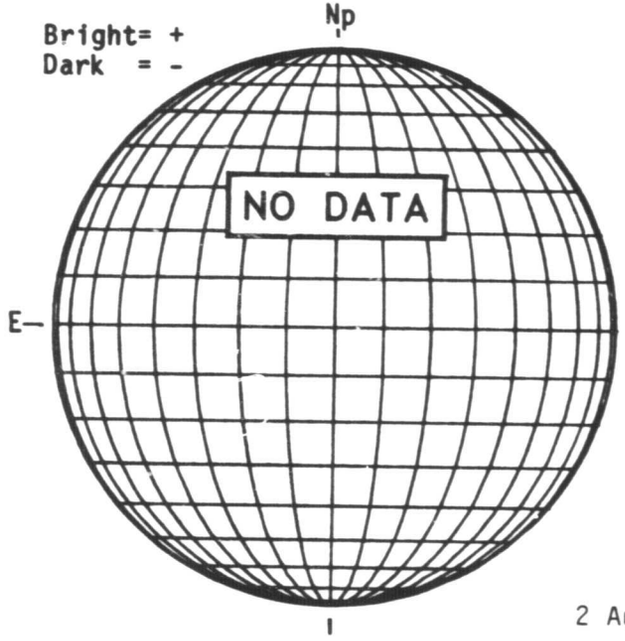


25 Aug 85

A U G U S T 01, 1 9 8 5 (P= 10.83, B_o = 5.69, L_o = 32.20)

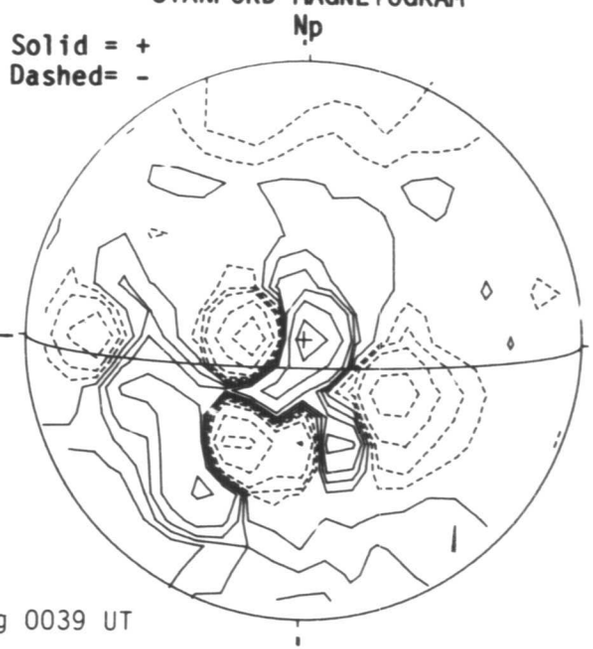
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

Solid = +
Dashed= -

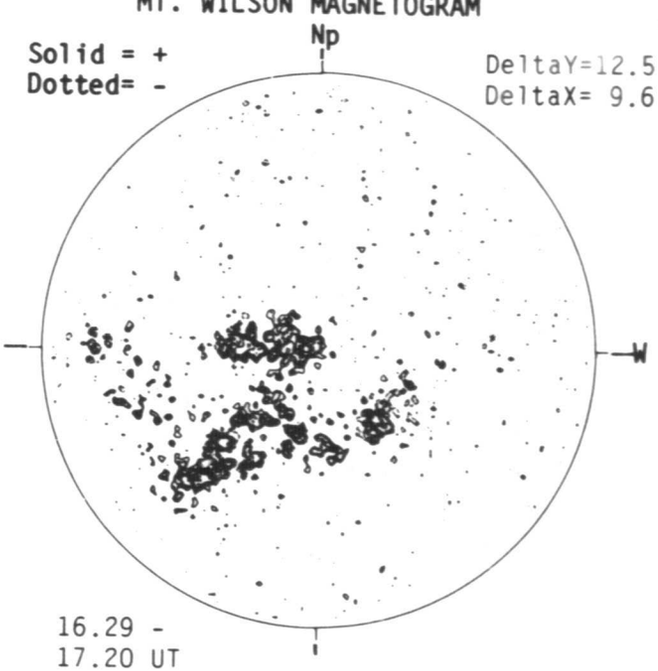


2 Aug 0039 UT

MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

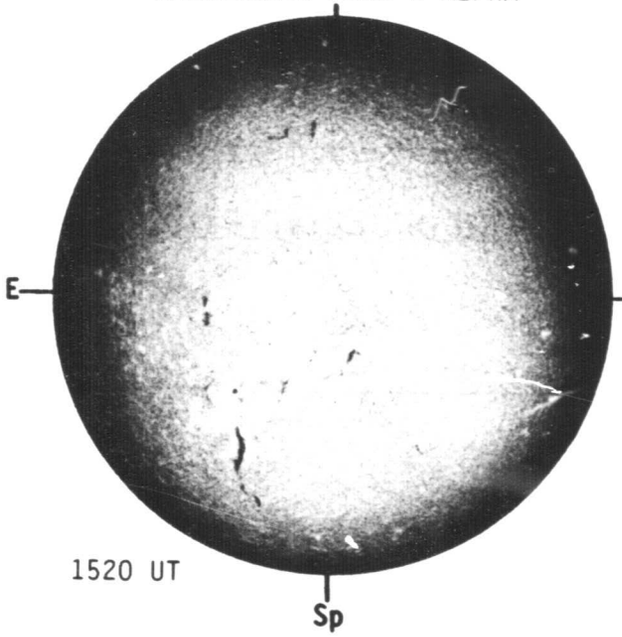
DeltaY=12.5
DeltaX= 9.6



16.29 -
17.20 UT

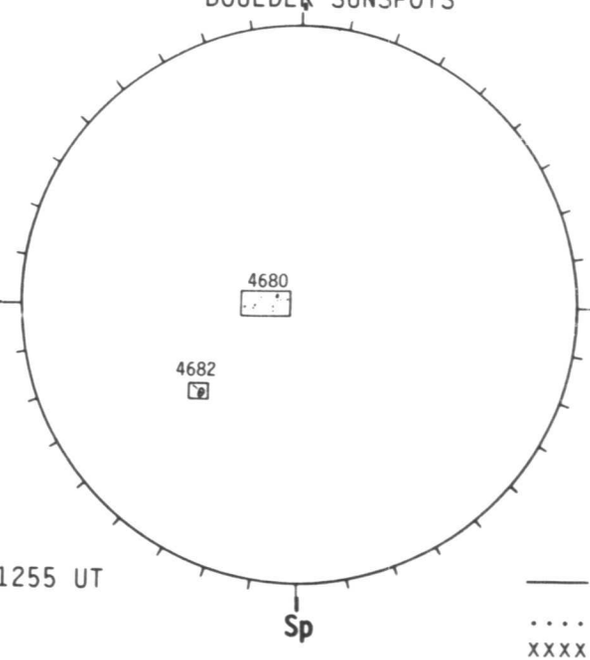
26 Aug 85

SACRAMENTO PEAK H-ALPHA



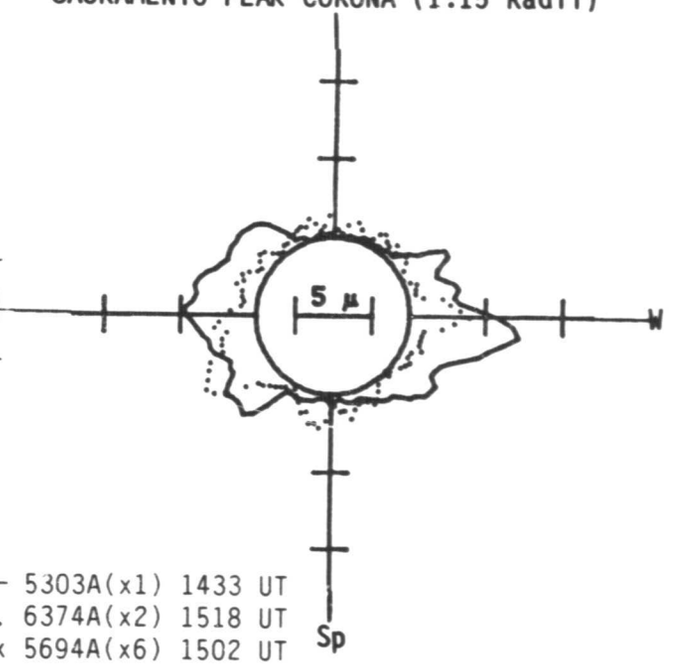
1520 UT

BOULDER SUNSPOTS



1255 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



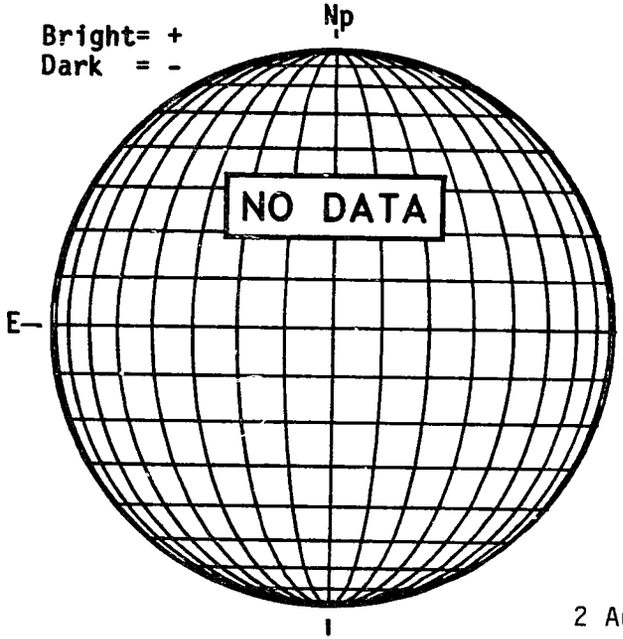
—— 5303A(x1) 1433 UT
.... 6374A(x2) 1518 UT
xxxx 5694A(x6) 1502 UT
NO 5694A ACTIVITY TODAY

A U G U S T 01, 1 9 8 5 (P= 10.83, B_0= 5.69, L_0= 32.20)

26 Aug 85

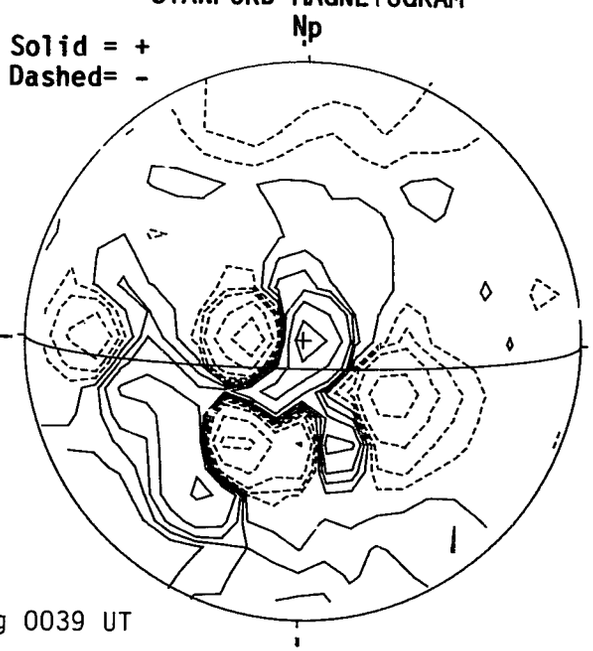
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

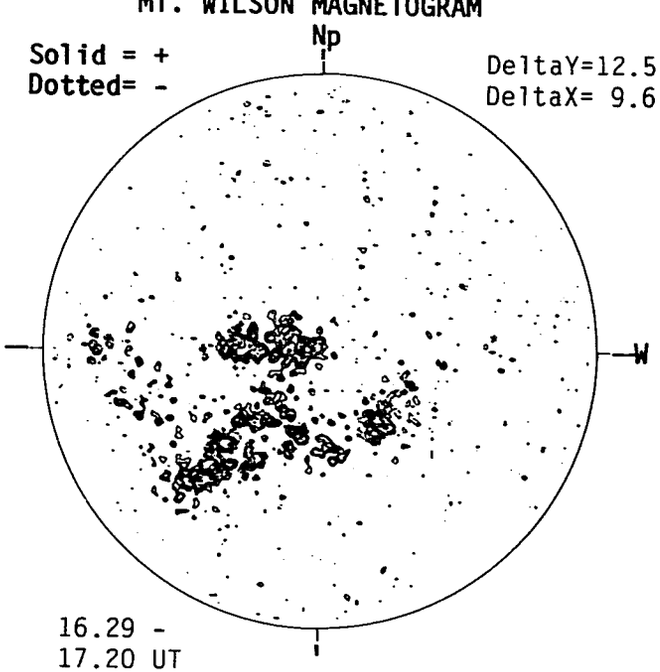
Solid = +
Dashed= -



MT. WILSON MAGNETOGRAM

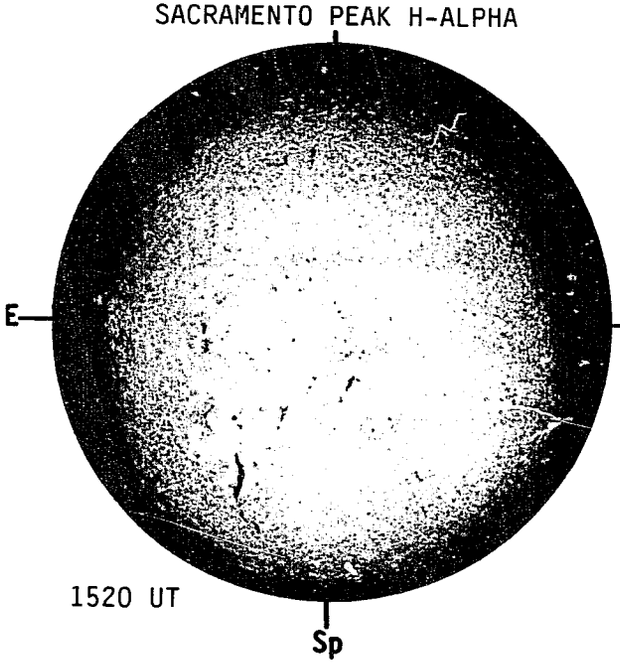
Solid = +
Dotted= -

DeltaY=12.5
DeltaX= 9.6



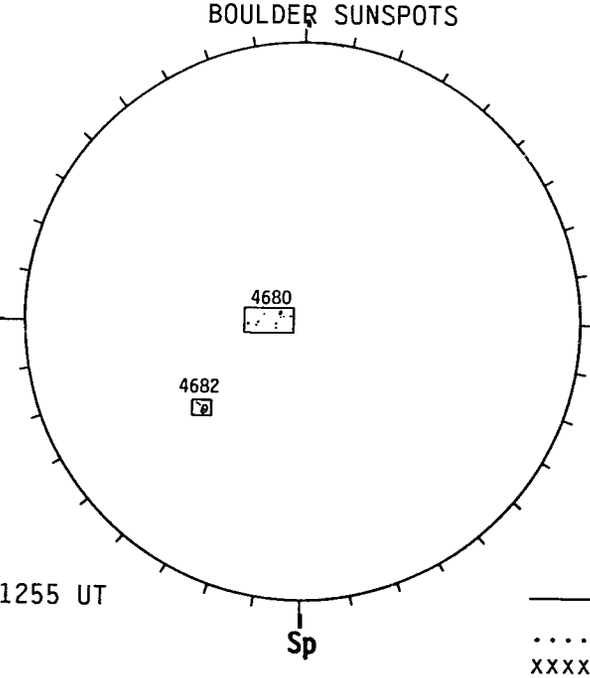
16.29 -
17.20 UT

SACRAMENTO PEAK H-ALPHA



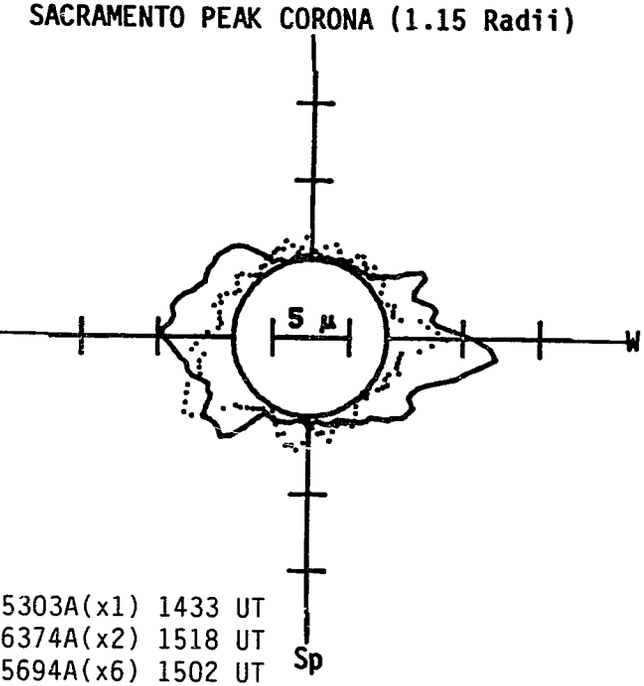
1520 UT

BOULDER SUNSPOTS



1255 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

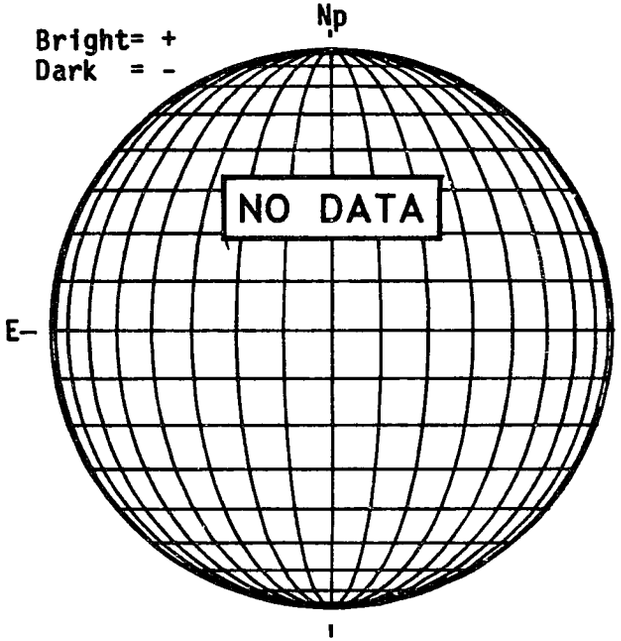


—— 5303A(x1) 1433 UT
.... 6374A(x2) 1518 UT
xxxx 5694A(x6) 1502 UT
NO 5694A ACTIVITY TODAY

AUGUST 02, 1985 (P= 11.23, B_0= 5.76, L_0= 18.97)

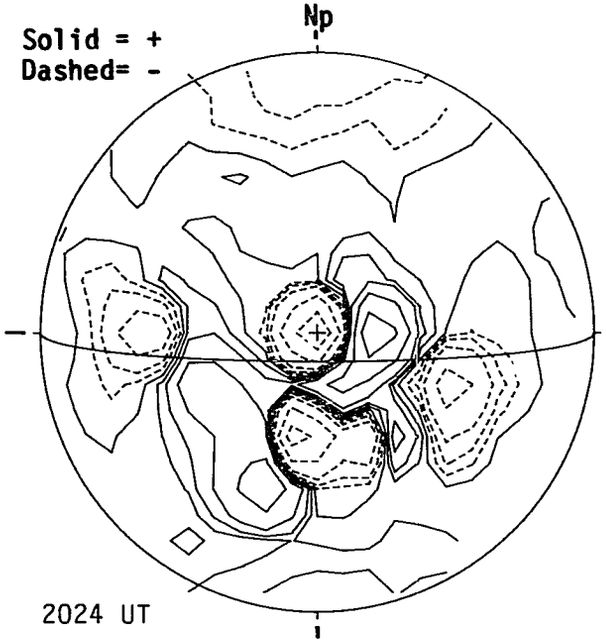
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

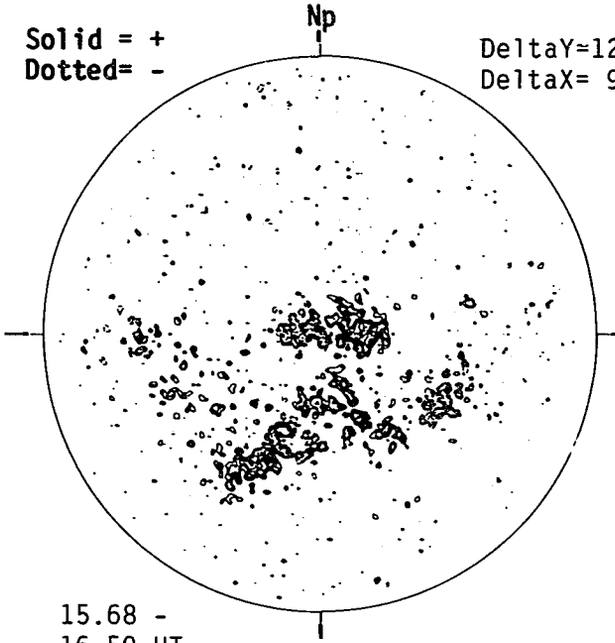
Solid = +
Dashed= -



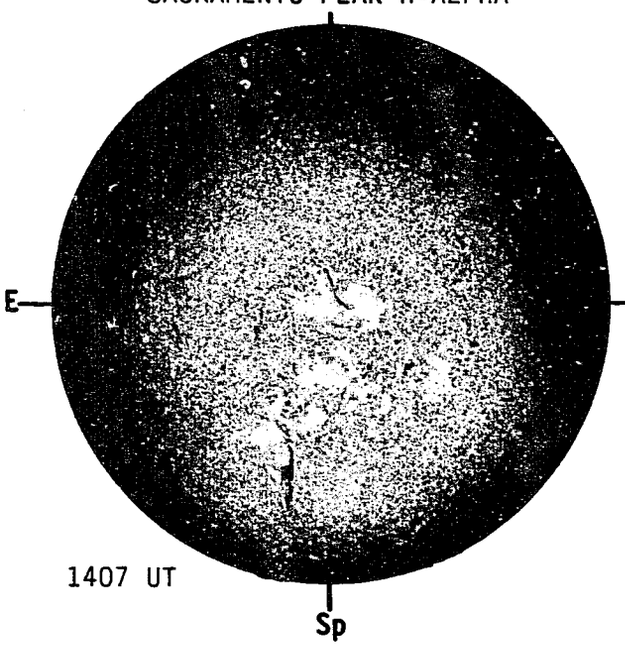
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

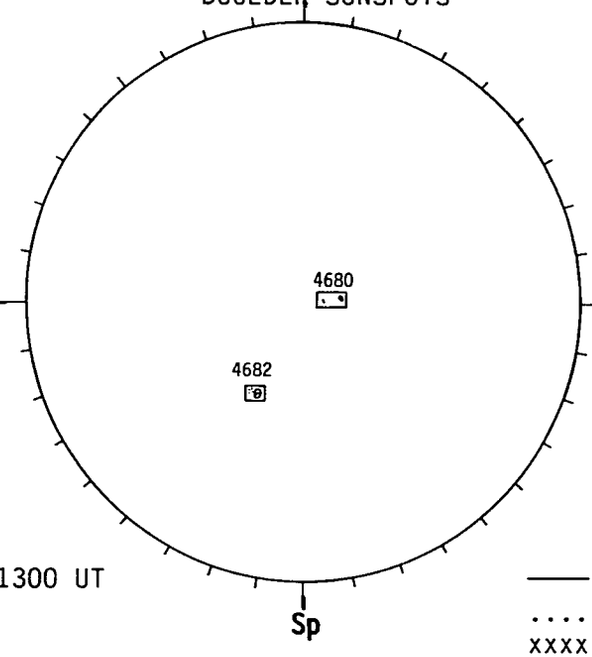
DeltaY=12.5
DeltaX= 9.6



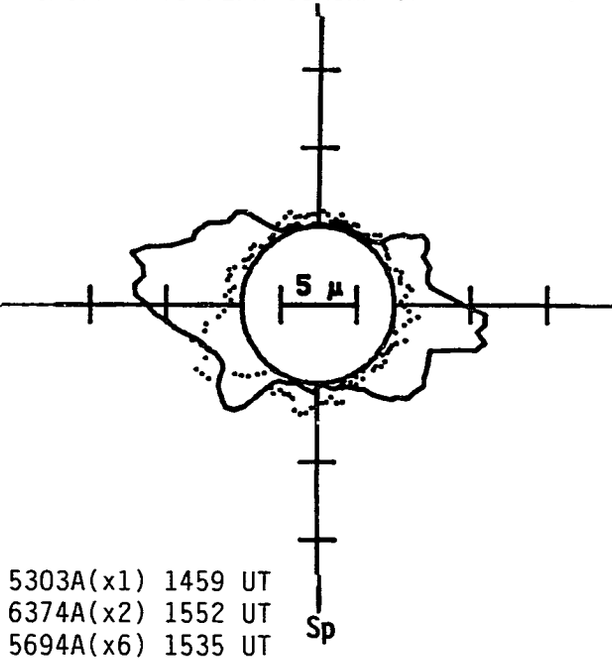
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



—— 5303A(x1) 1459 UT
.... 6374A(x2) 1552 UT
xxxx 5694A(x6) 1535 UT
NO 5694A ACTIVITY TODAY

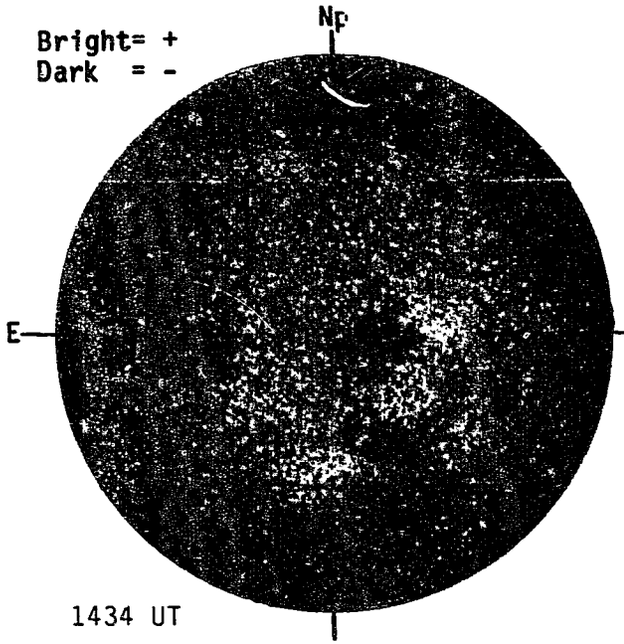
27 Aug 85

A U G U S T 03, 1 9 8 5 (P= 11.62, B_o= 5.83, L_o= 5.75)

28 Aug 85

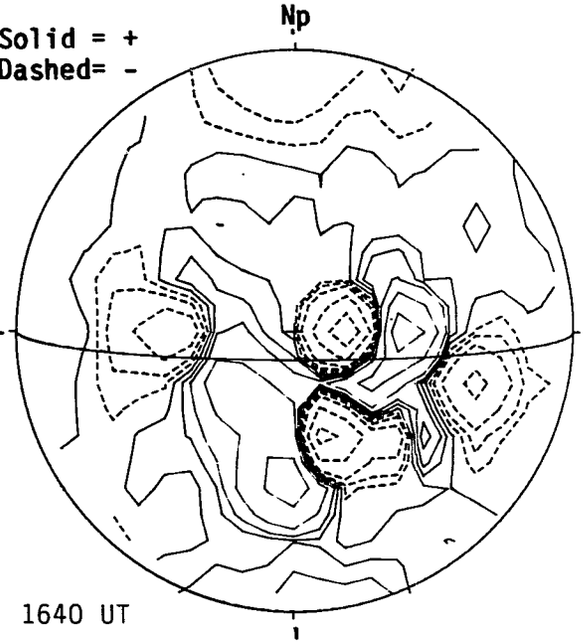
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

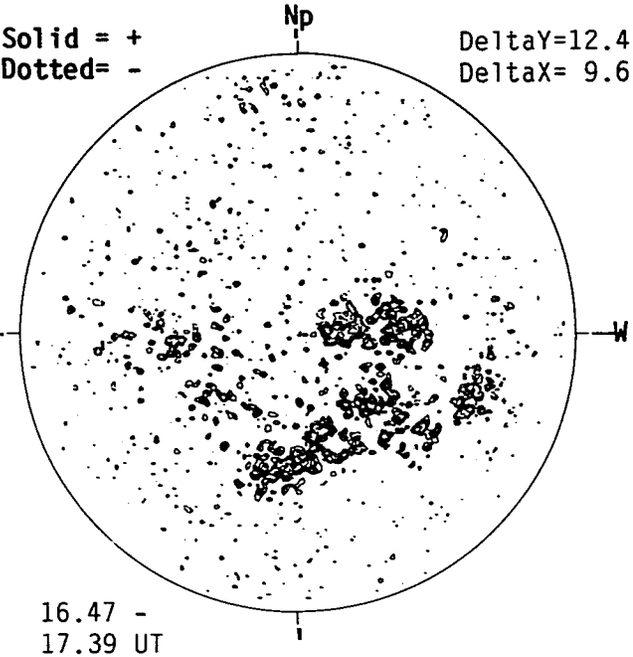
Solid = +
Dashed= -



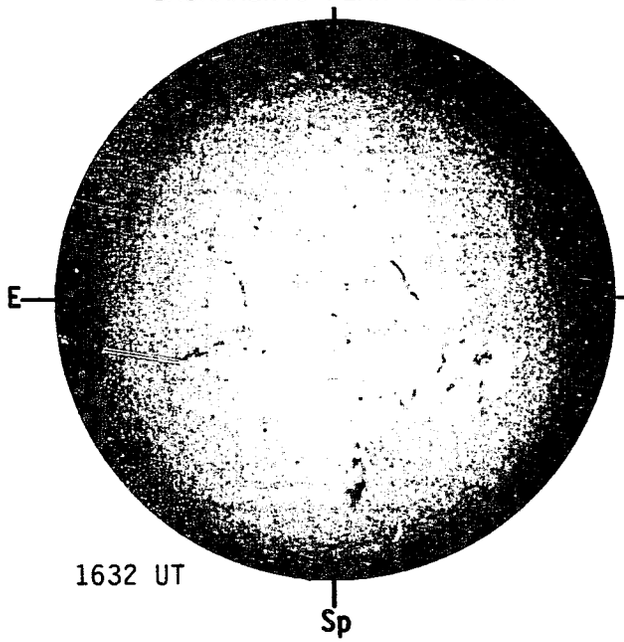
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

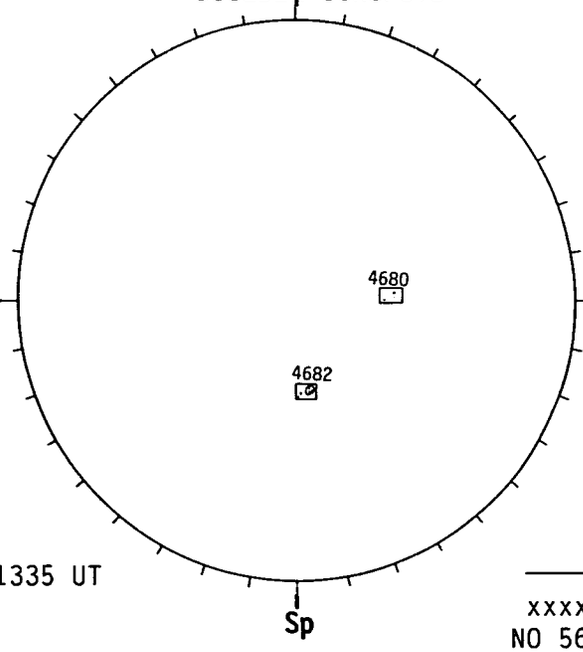
DeltaY=12.4
DeltaX= 9.6



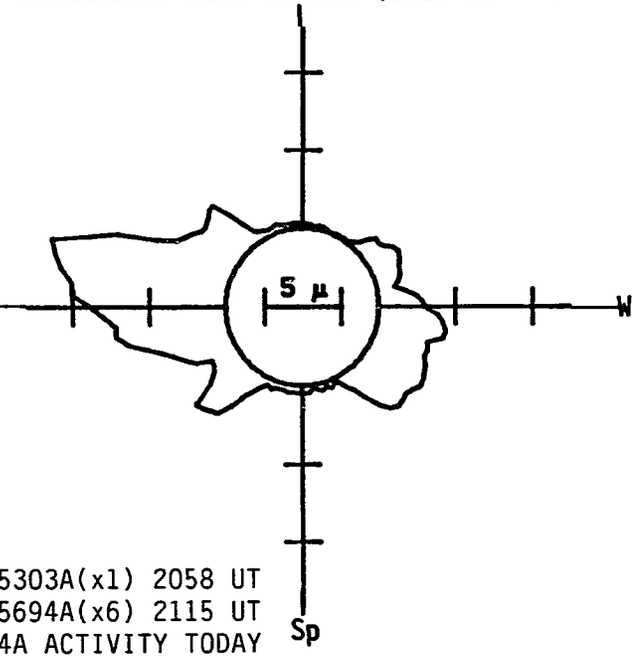
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

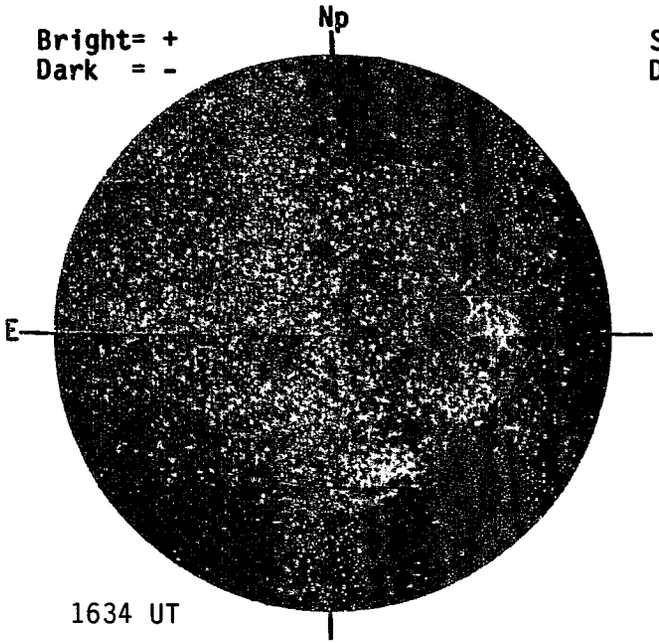


—— 5303A(x1) 2058 UT
xxxx 5694A(x6) 2115 UT
NO 5694A ACTIVITY TODAY

AUGUST 04, 1985 (P= 12.01, B_0= 5.90, L_0= 352.52)

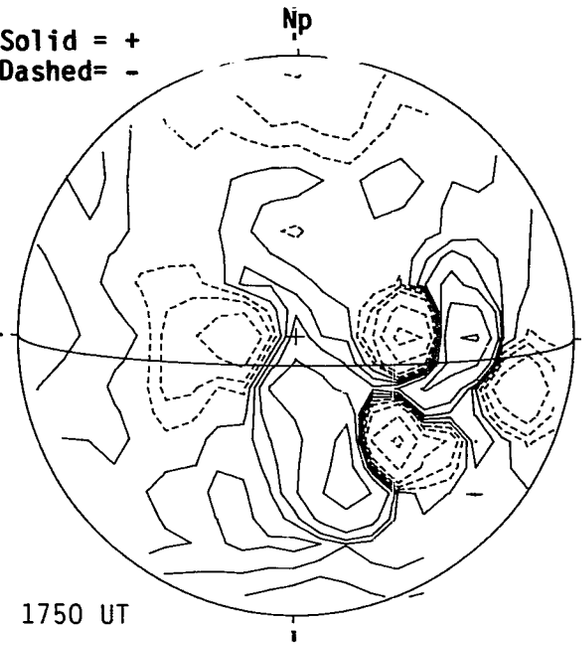
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

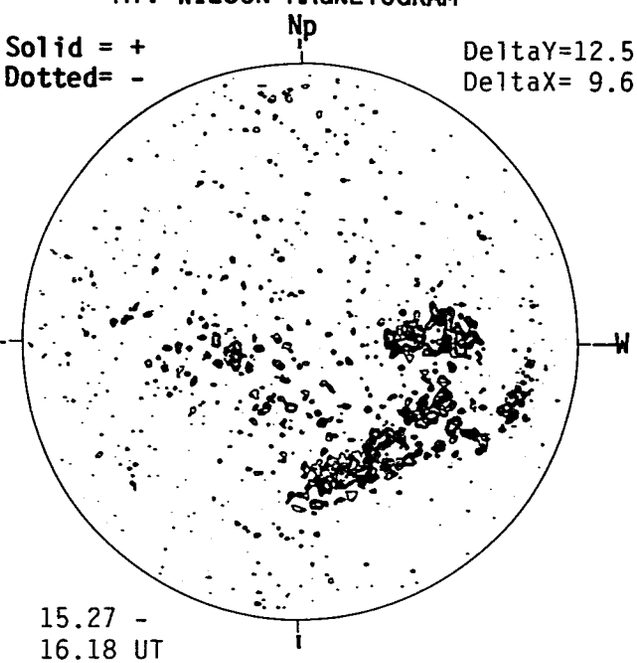
Solid = +
Dashed= -



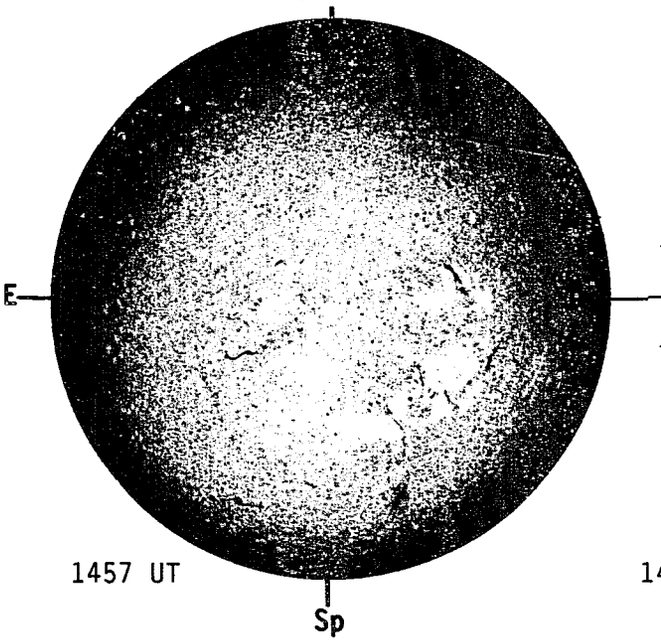
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

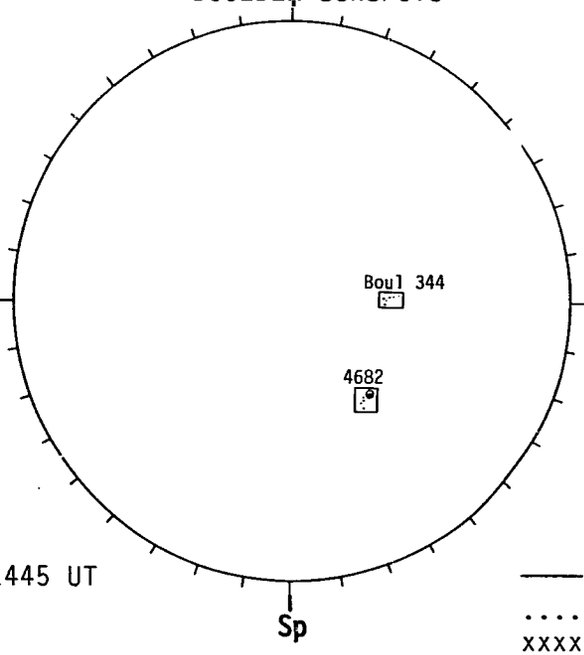
DeltaY=12.5
DeltaX= 9.6



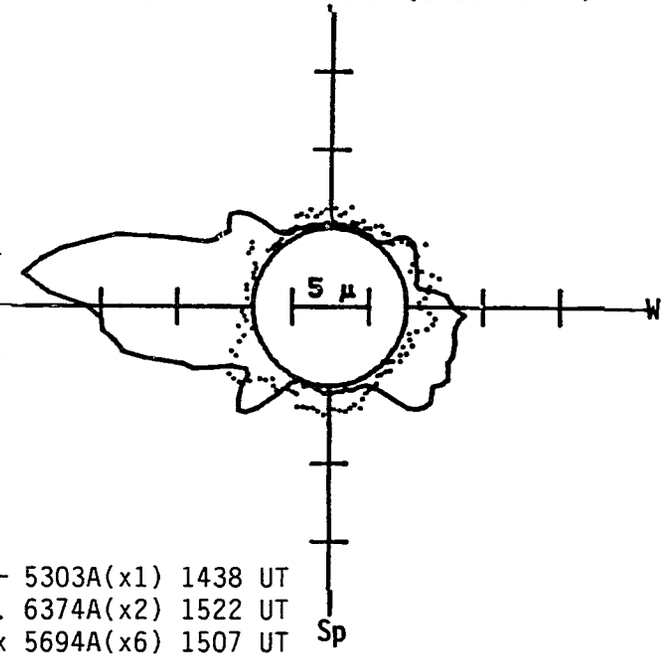
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



—— 5303A(x1) 1438 UT
.... 6374A(x2) 1522 UT
xxxx 5694A(x6) 1507 UT
NO 5694A ACTIVITY TODAY

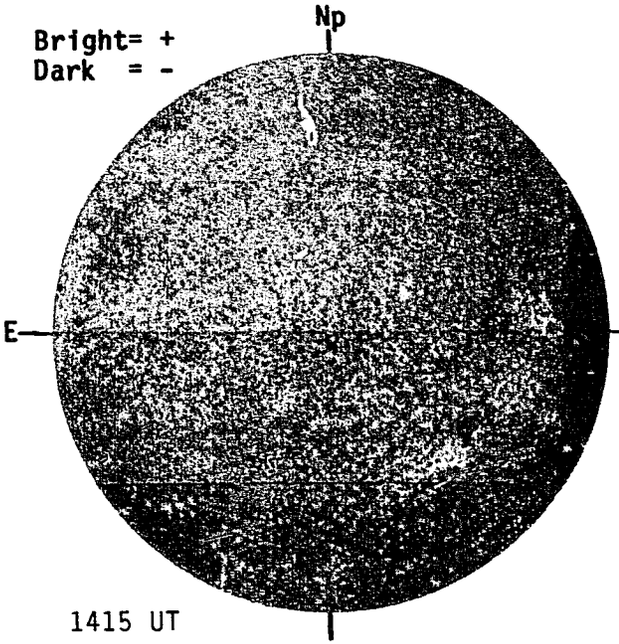
29 Aug 85

A U G U S T 05, 1 9 8 5 (P= 12.39, B_0= 5.96, L_0= 339.30)

Aug 85 30

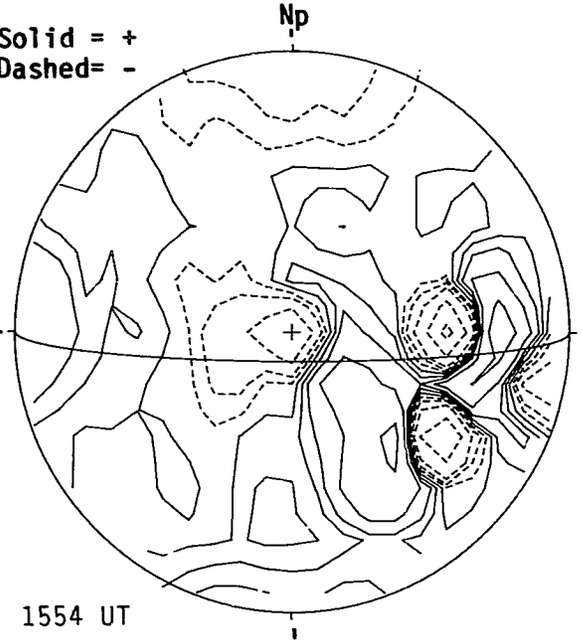
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

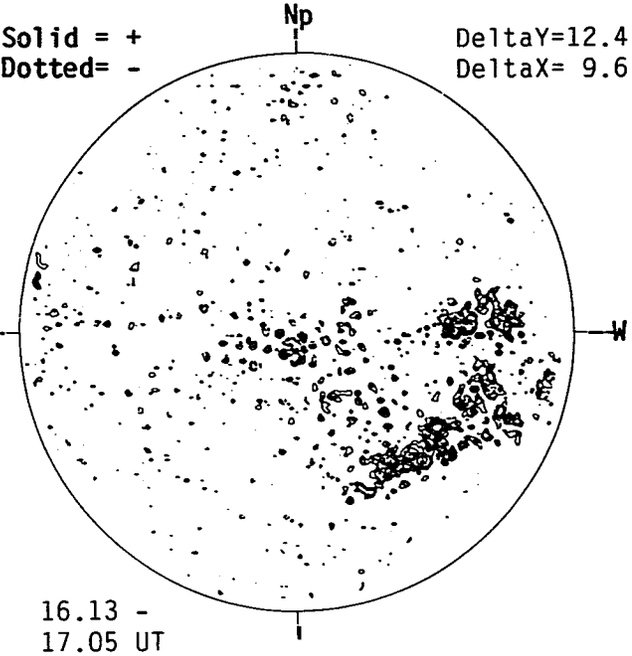
Solid = +
Dashed= -



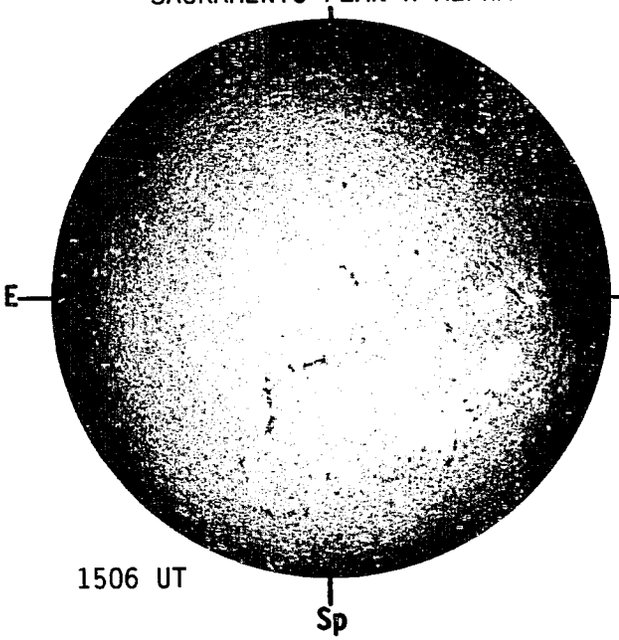
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

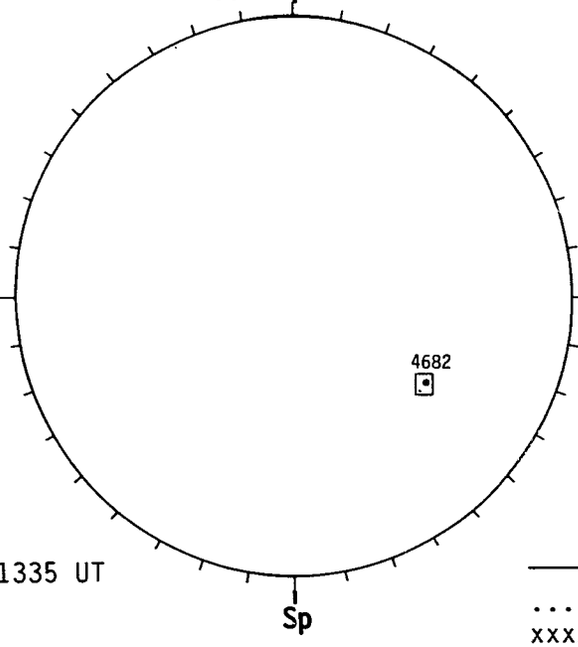
DeltaY=12.4
DeltaX= 9.6



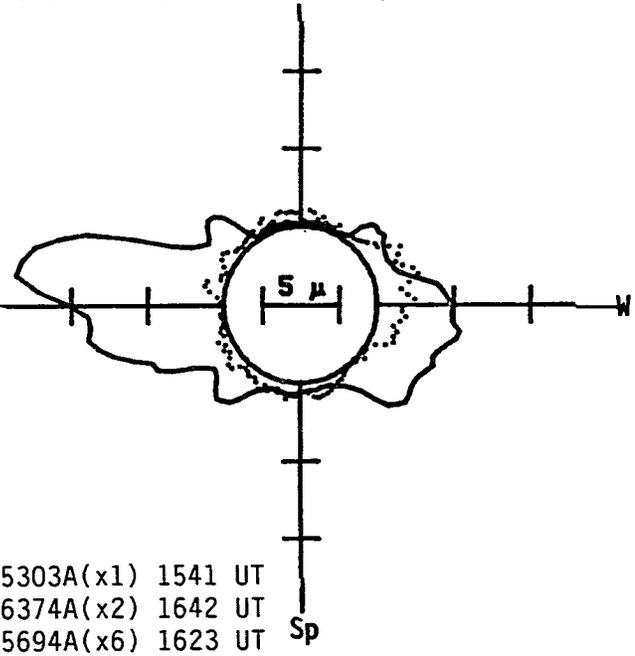
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

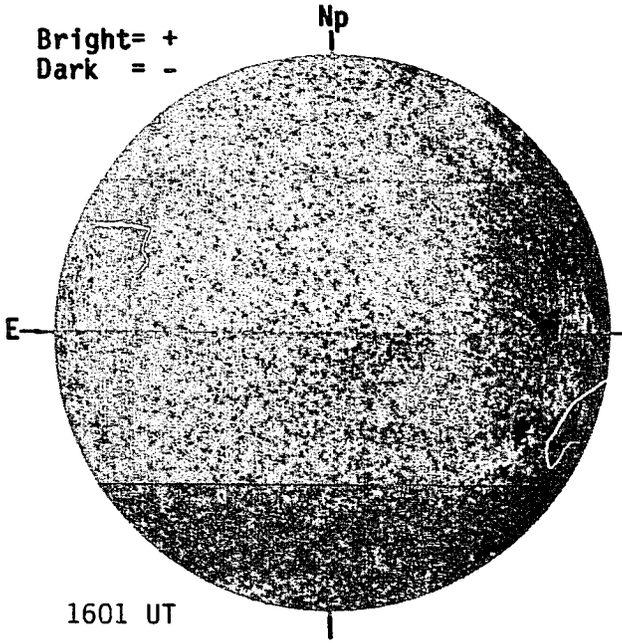


—— 5303A(x1) 1541 UT
.... 6374A(x2) 1642 UT
xxxx 5694A(x6) 1623 UT
NO 5694A ACTIVITY TODAY

AUGUST 06 1985 (P= 12.77, B_0= 6.03, L_0= 326.08)

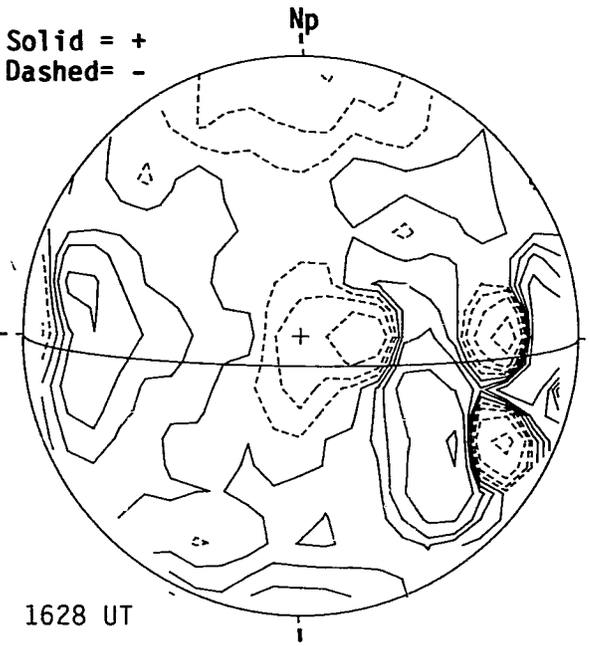
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

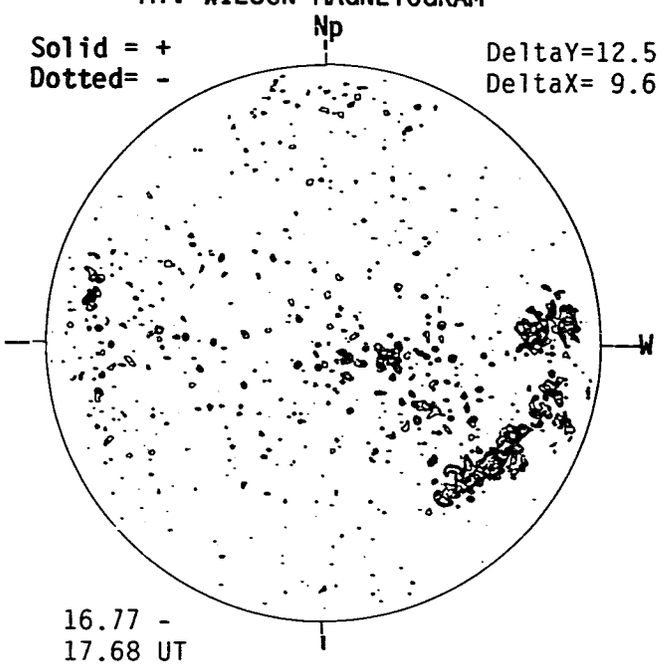
Solid = +
Dashed= -



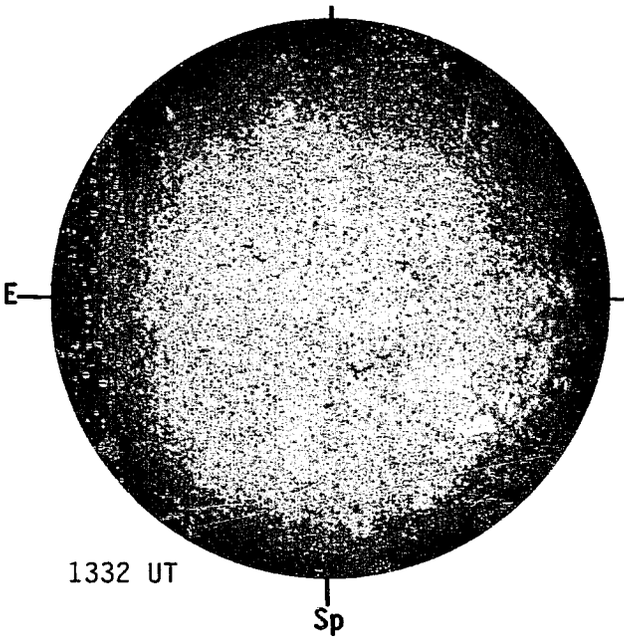
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

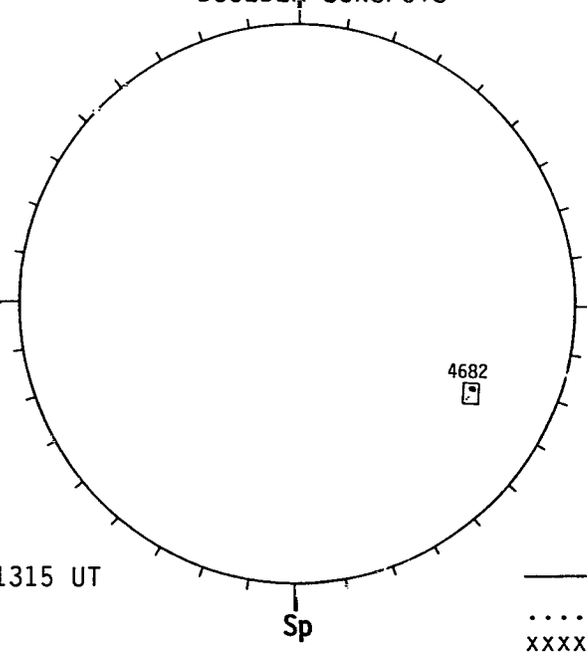
DeltaY=12.5
DeltaX= 9.6



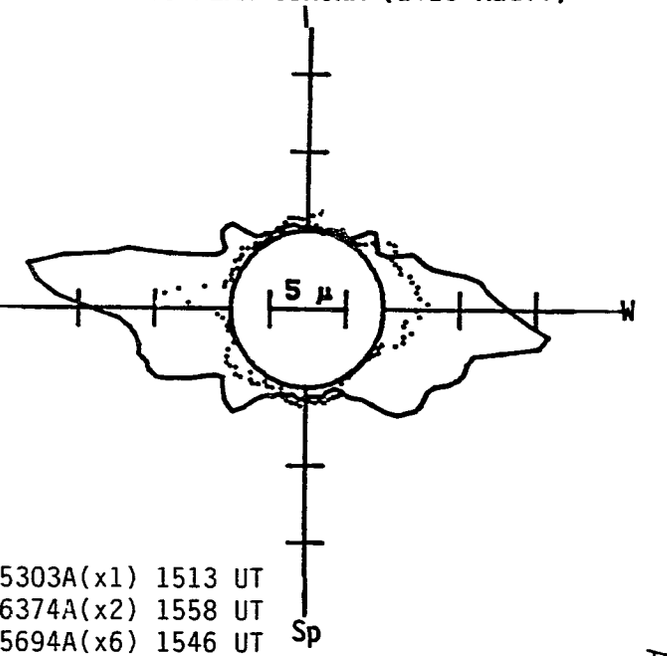
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



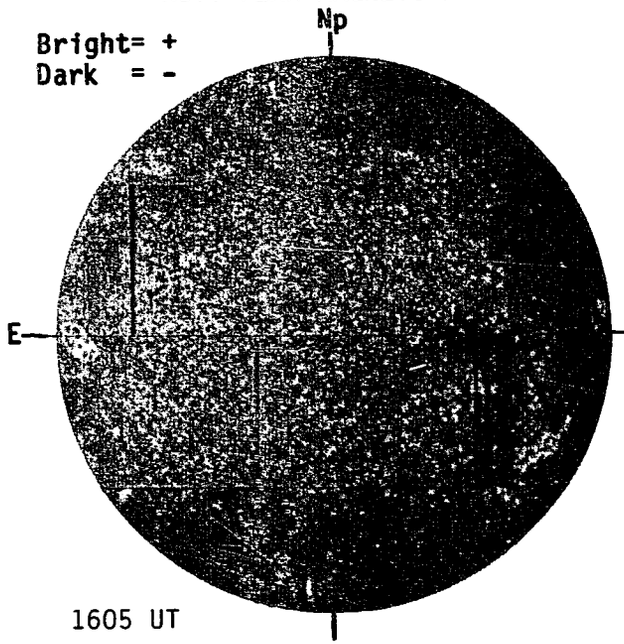
—— 5303A(x1) 1513 UT
.... 6374A(x2) 1558 UT
xxxx 5694A(x6) 1546 UT
NO 5694A ACTIVITY TODAY

31
Aug 85

A U G U S T 07, 1 9 8 5 (P= 13.15, B_0= 6.09, L_0= 312.85)

KITT PEAK MAGNETOGRAM

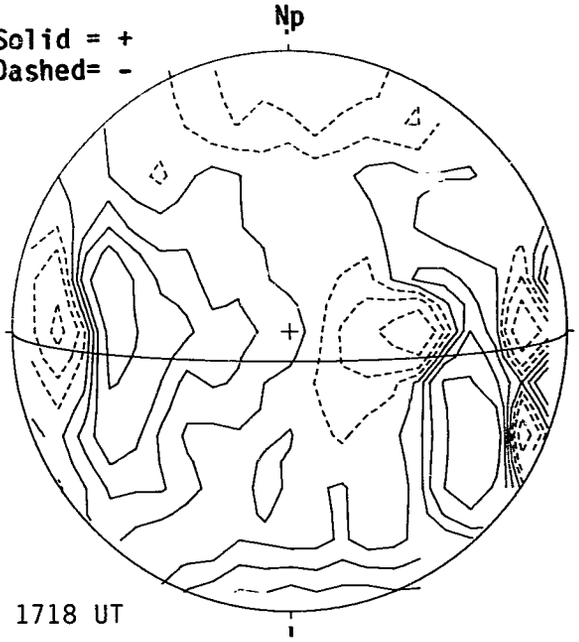
Bright= +
Dark = -



1605 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed= -

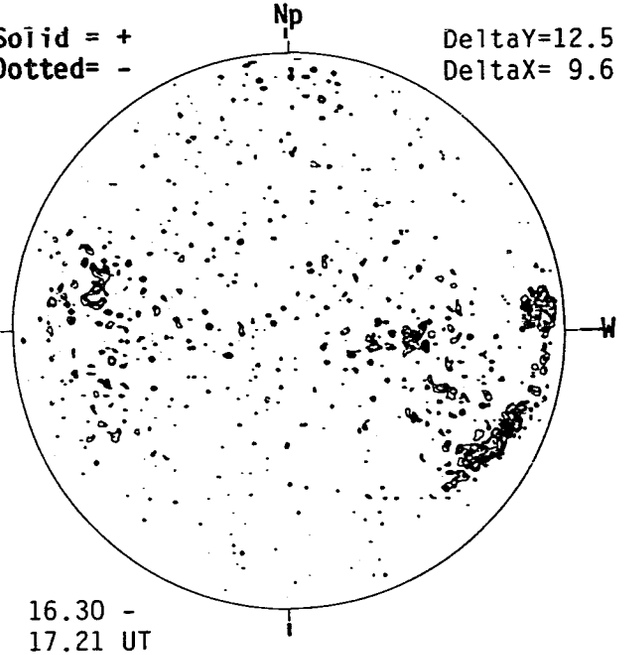


1718 UT

MT. WILSON MAGNETOGRAM

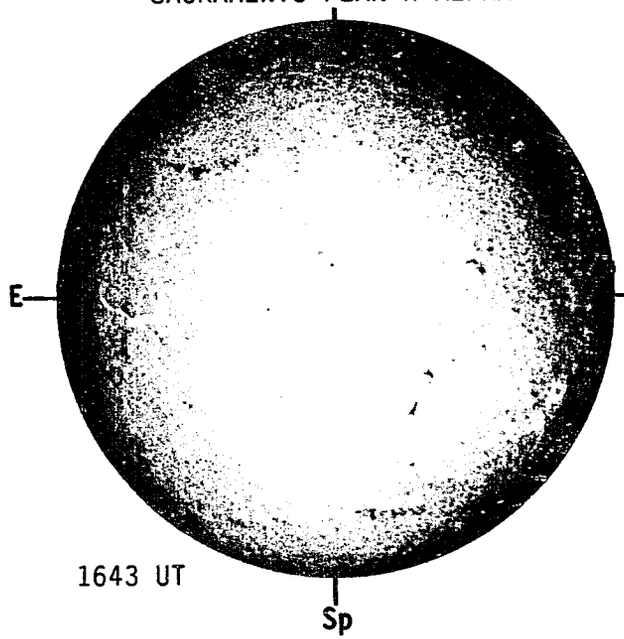
Solid = +
Dotted= -

DeltaY=12.5
DeltaX= 9.6



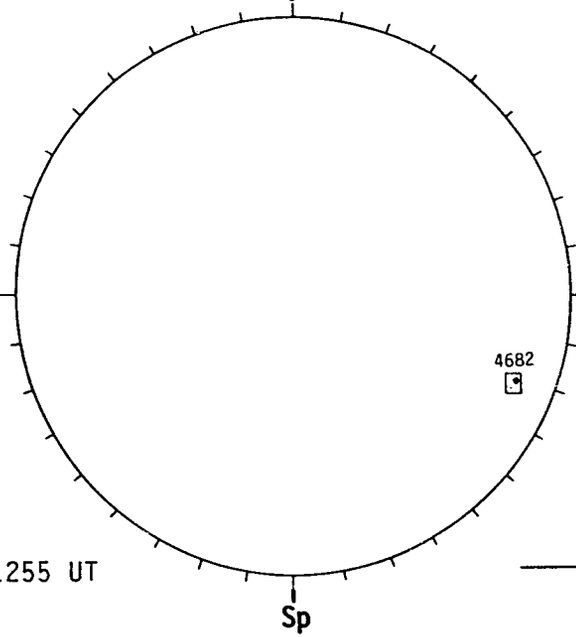
16.30 -
17.21 UT

SACRAMENTO PEAK H-ALPHA



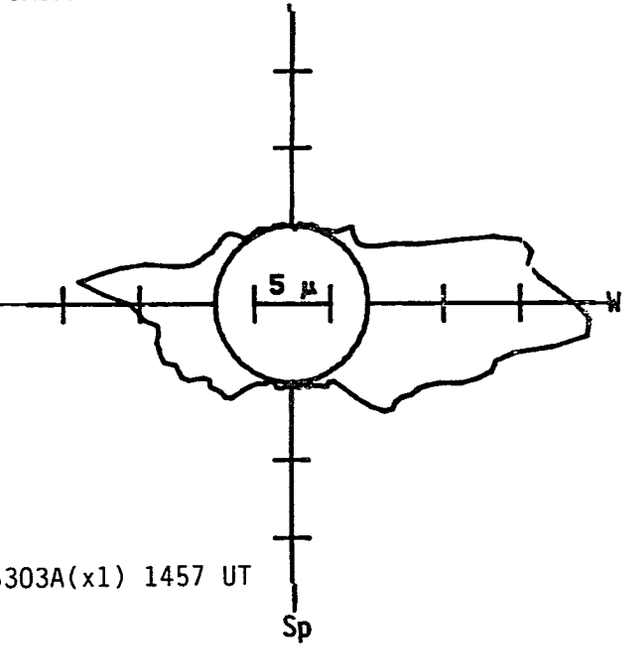
1643 UT

BOULDER SUNSPOTS



1255 UT

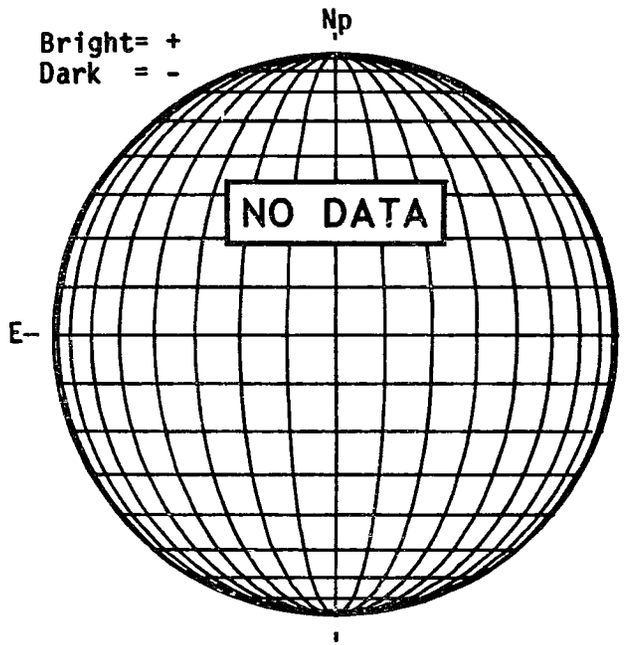
SACRAMENTO PEAK CORONA (1.15 Radii)



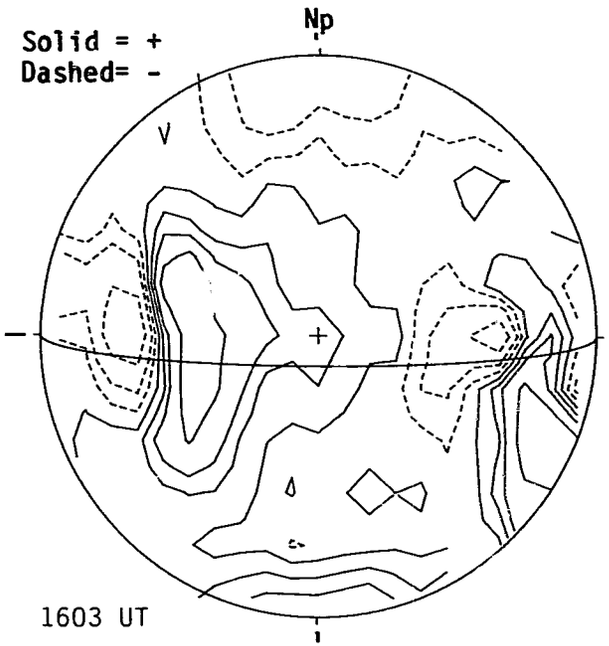
—— 5303A(x1) 1457 UT

A U G U S T 08, 1 9 8 5 (P= 13.52, B_0= 6.15, L_0= 299.63)

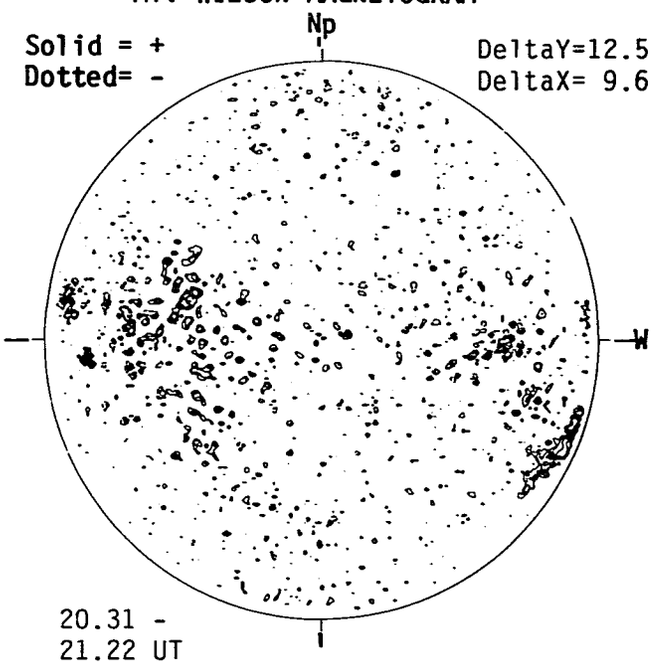
KITT PEAK MAGNETOGRAM



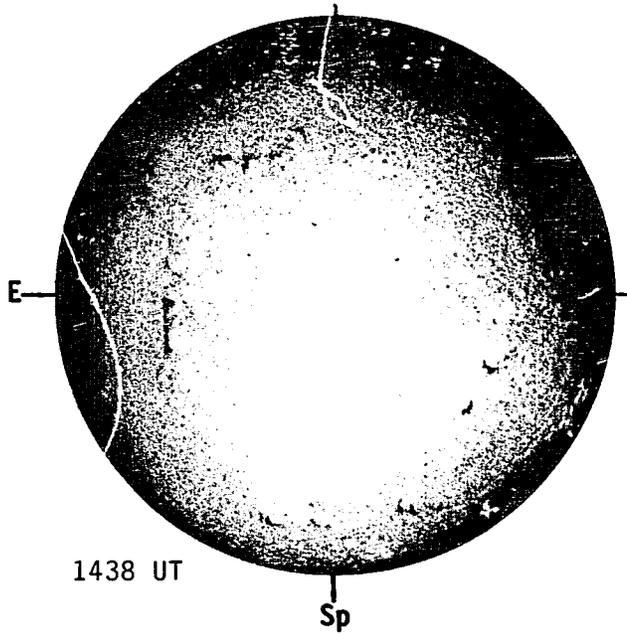
STANFORD MAGNETOGRAM



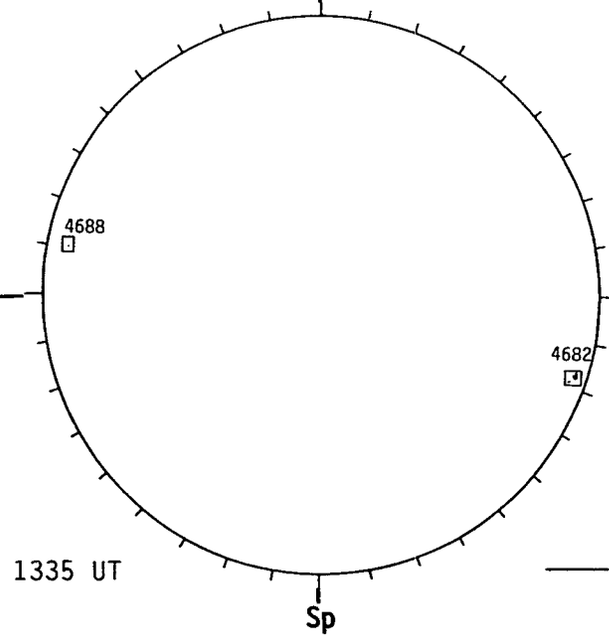
MT. WILSON MAGNETOGRAM



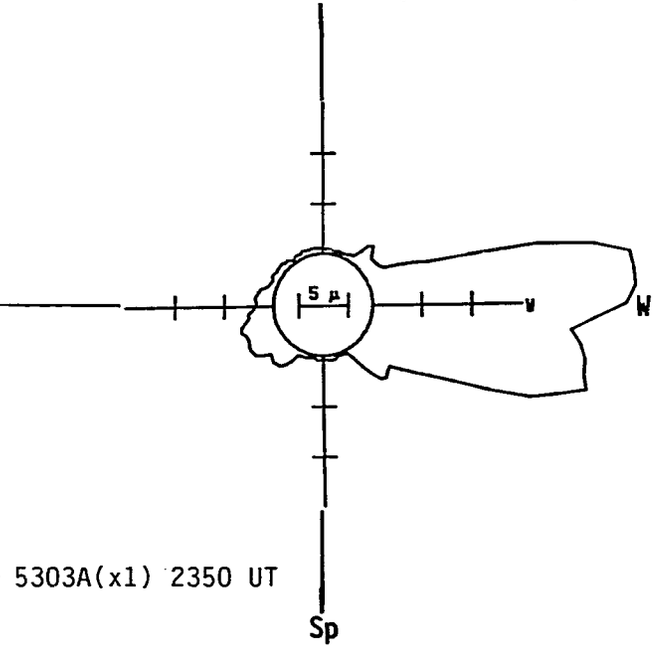
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



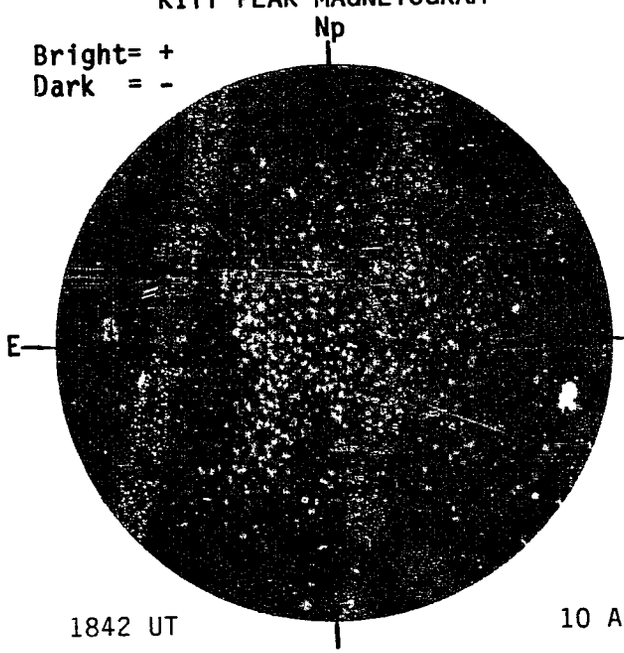
SACRAMENTO PEAK CORONA (1.15 Radii)



A U G U S T 09, 1 9 8 5 (P= 13.89, B_0= 6.21, L_0= 286.41)

KITT PEAK MAGNETOGRAM

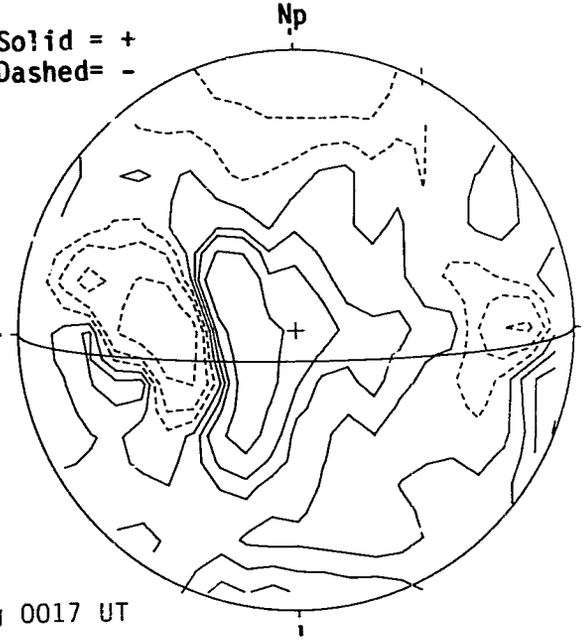
Bright= +
Dark = -



1842 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed= -

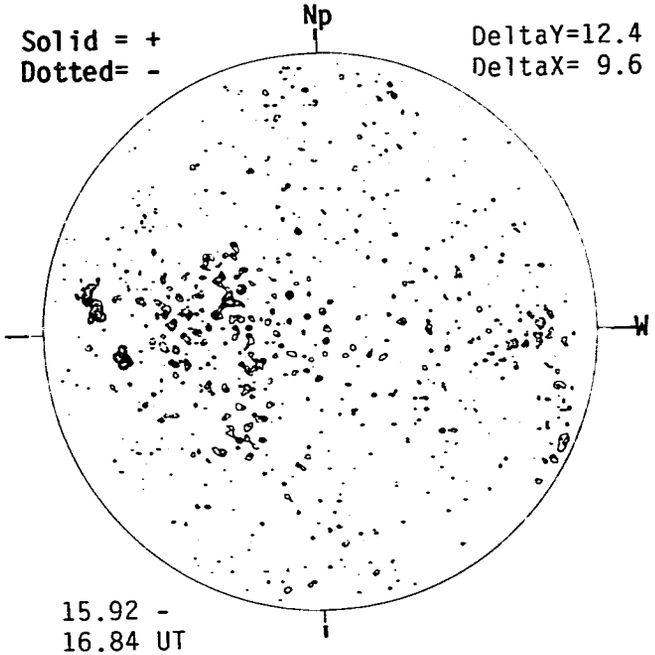


10 Aug 0017 UT

MT. WILSON MAGNETOGRAM

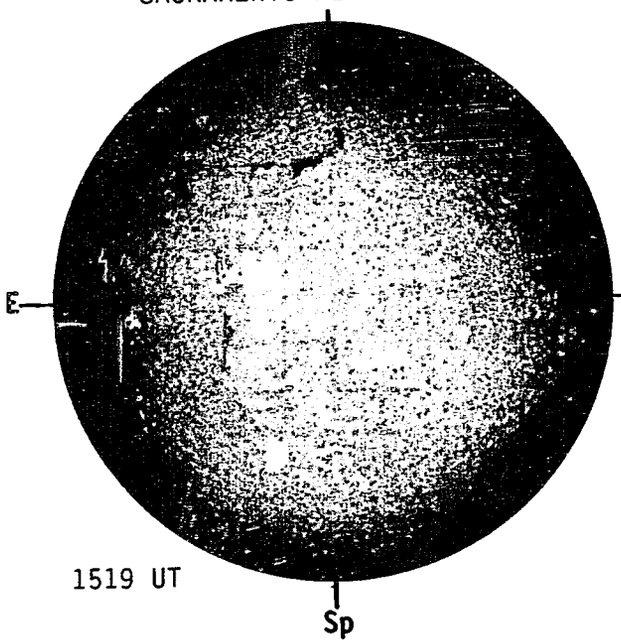
Solid = +
Dotted= -

DeltaY=12.4
DeltaX= 9.6



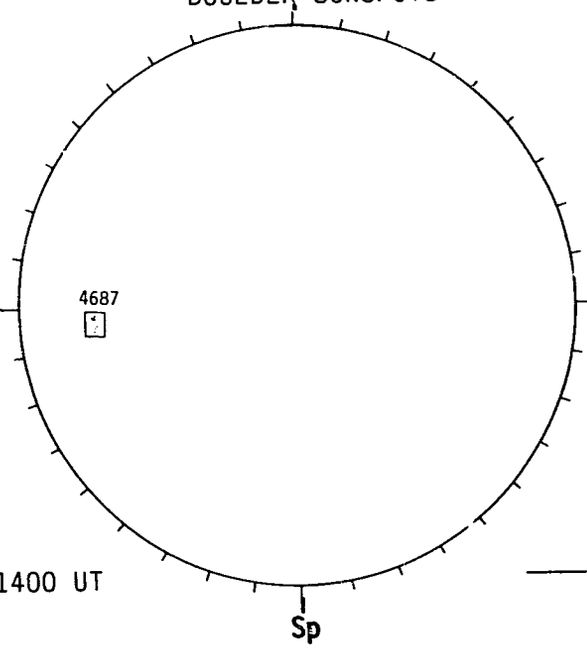
15.92 -
16.84 UT

SACRAMENTO PEAK H-ALPHA



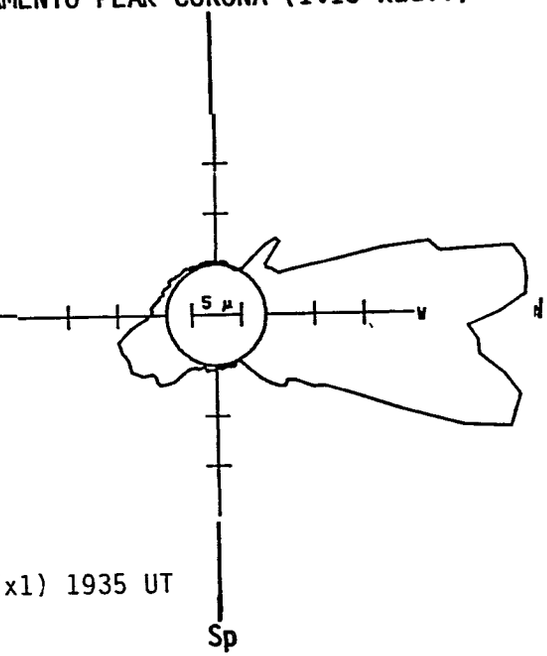
1519 UT

BOULDER SUNSPOTS



1400 UT

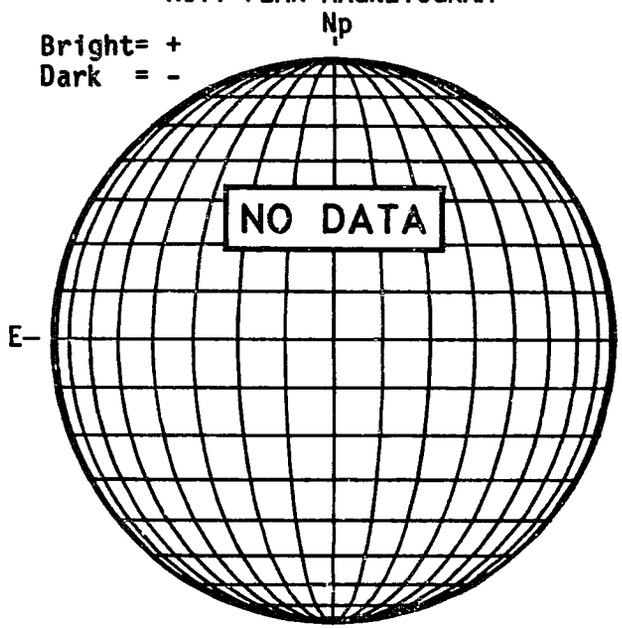
SACRAMENTO PEAK CORONA (1.15 Radii)



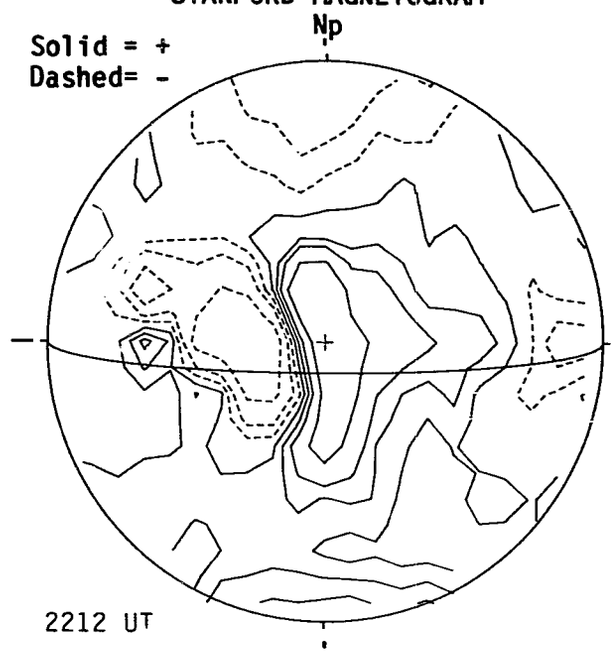
5303A(x1) 1935 UT

A U G U S T 10, 1 9 8 5 (P= 14.25, B_0= 6.27, L_0= 273.19)

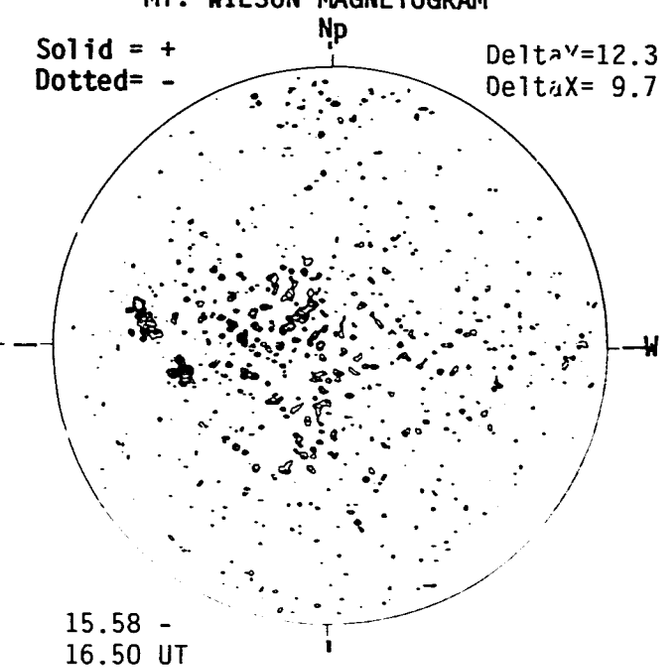
KITT PEAK MAGNETOGRAM



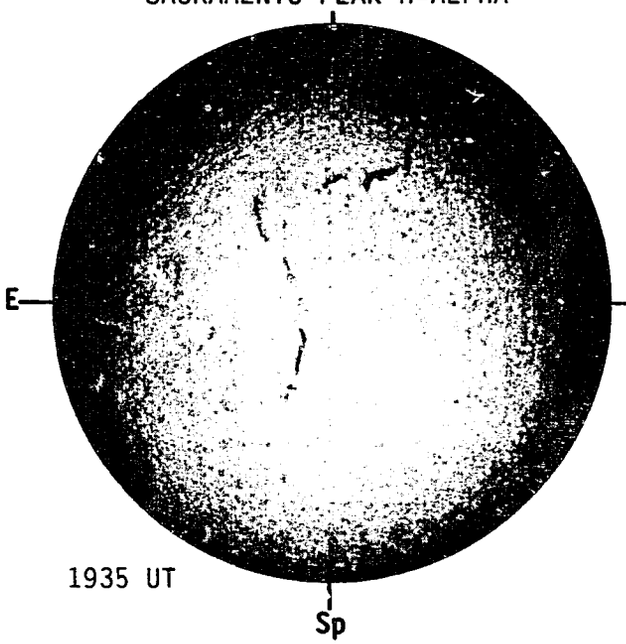
STANFORD MAGNETOGRAM



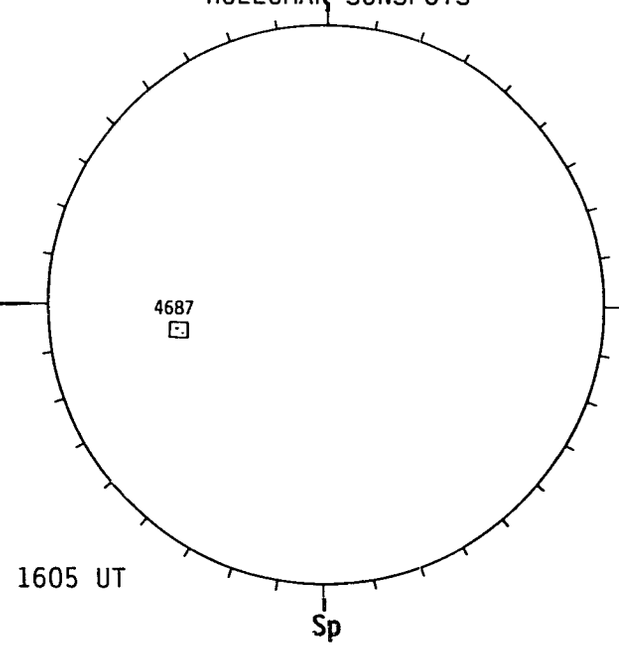
MT. WILSON MAGNETOGRAM



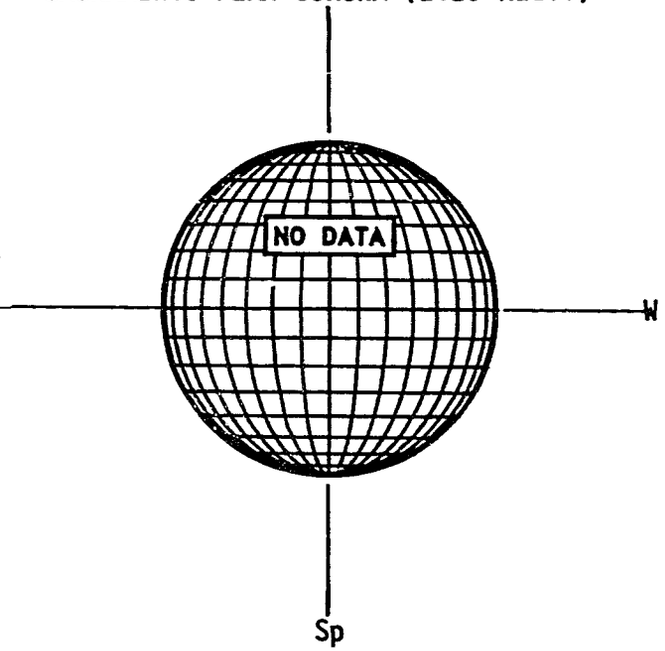
SACRAMENTO PEAK H-ALPHA



HOLLOMAN SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

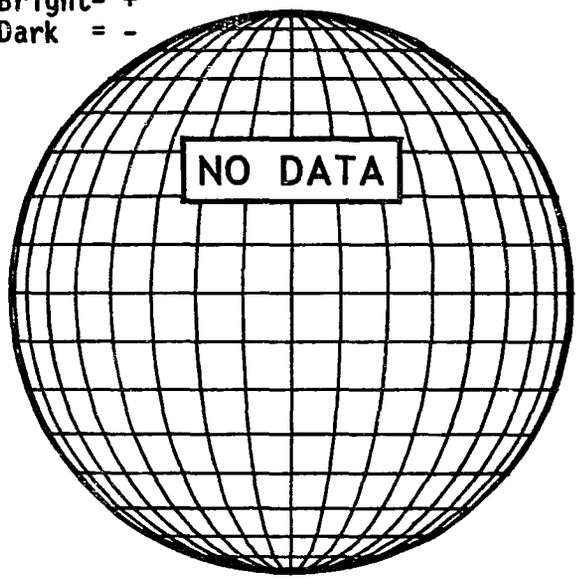


A U G U S T 11, 1 9 8 5 (P= 14.61, B_o= 6.33, L_o= 259.97)

KITT PEAK MAGNETOGRAM

Np

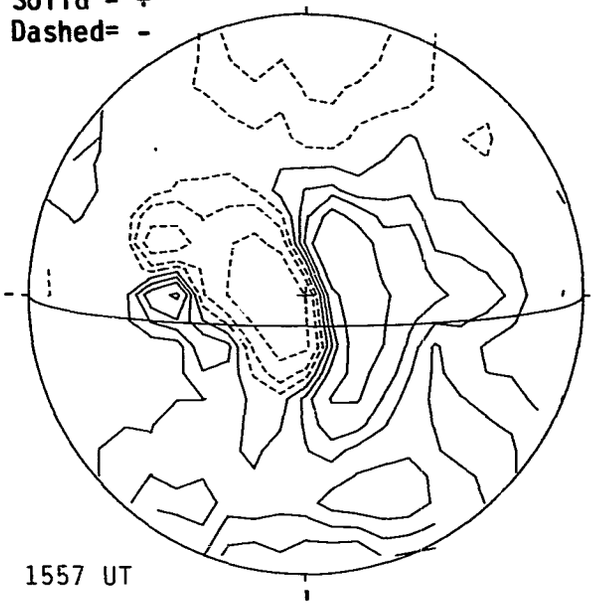
Bright= +
Dark = -



STANFORD MAGNETOGRAM

Np

Solid = +
Dashed= -



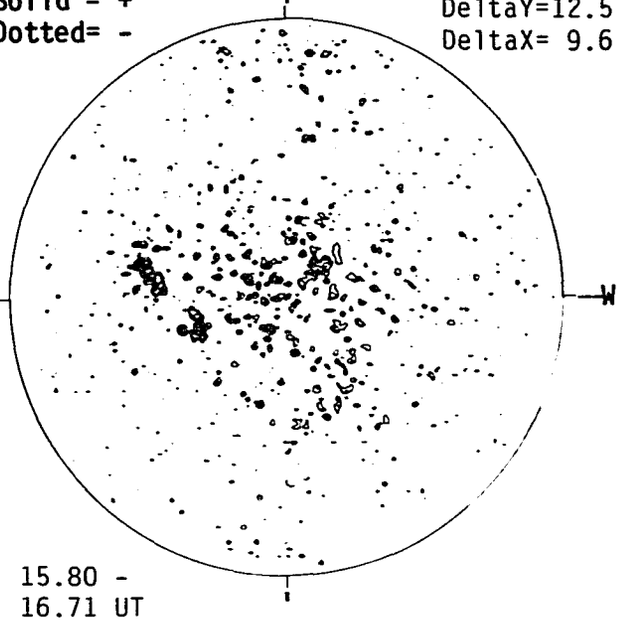
1557 UT

MT. WILSON MAGNETOGRAM

Np

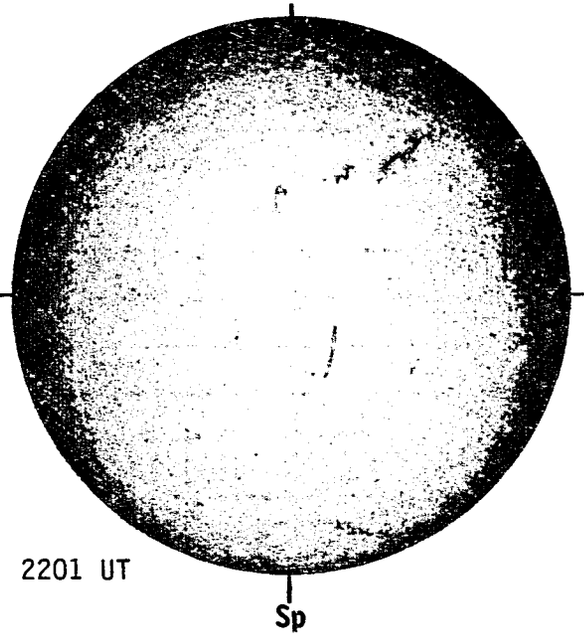
Solid = +
Dotted= -

DeltaY=12.5
DeltaX= 9.6



15.80 -
16.71 UT

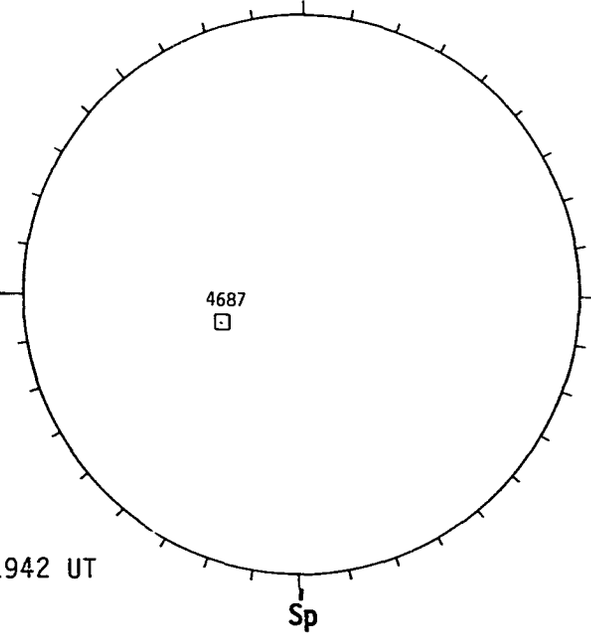
SACRAMENTO PEAK H-ALPHA



2201 UT

Sp

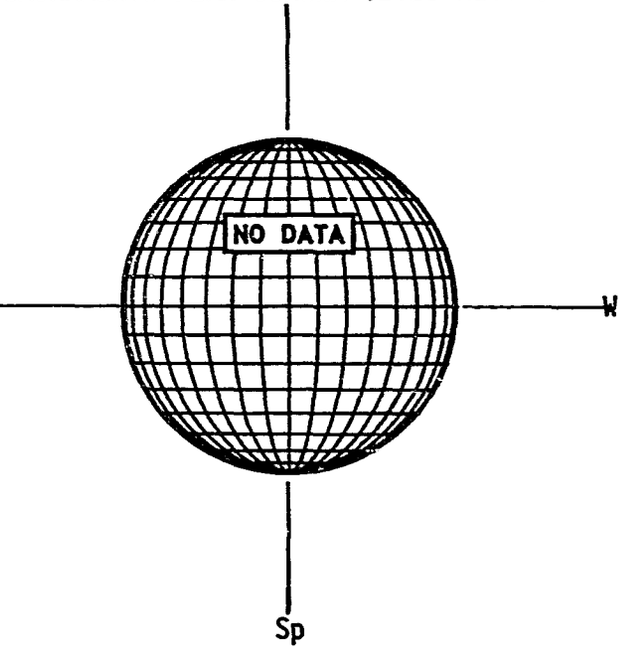
HOLLOMAN SUNSPOTS



1942 UT

Sp

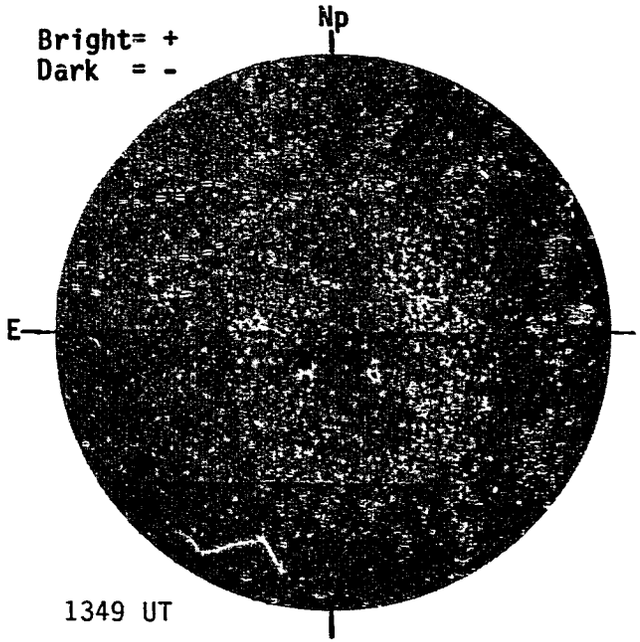
SACRAMENTO PEAK CORONA (1.15 Radii)



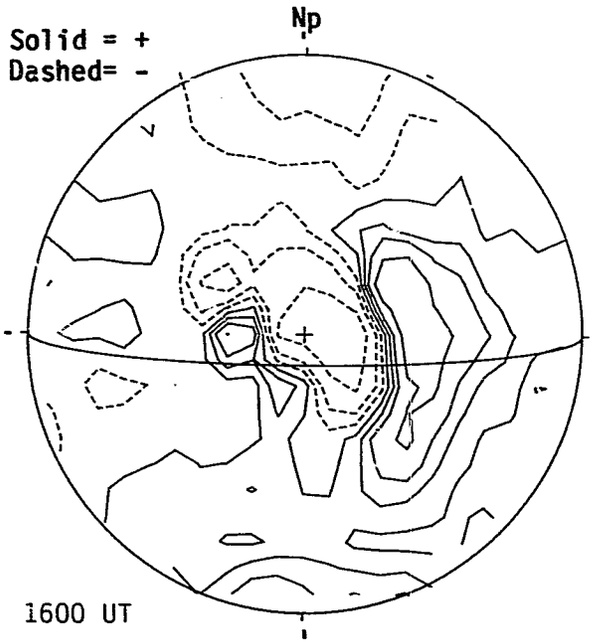
Sp

A U G U S T 12, 1 9 8 5 (P= 14.96, B_0= 6.38, L_0= 246.74)

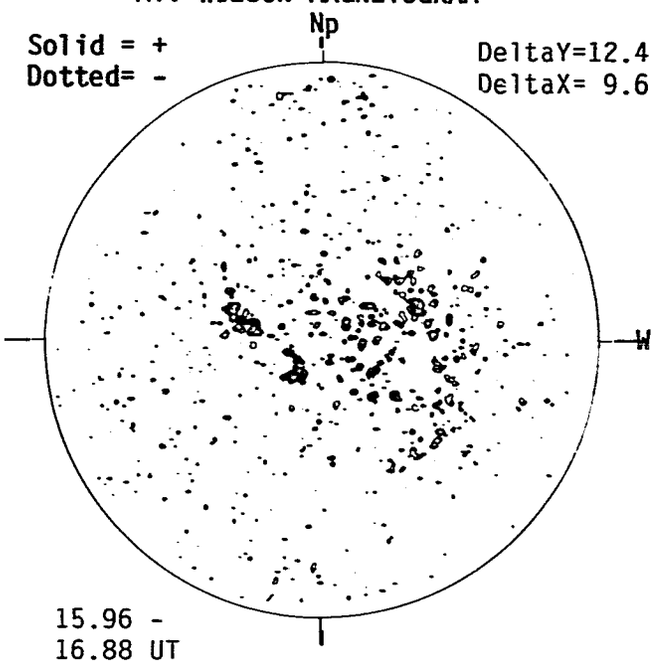
KITT PEAK MAGNETOGRAM



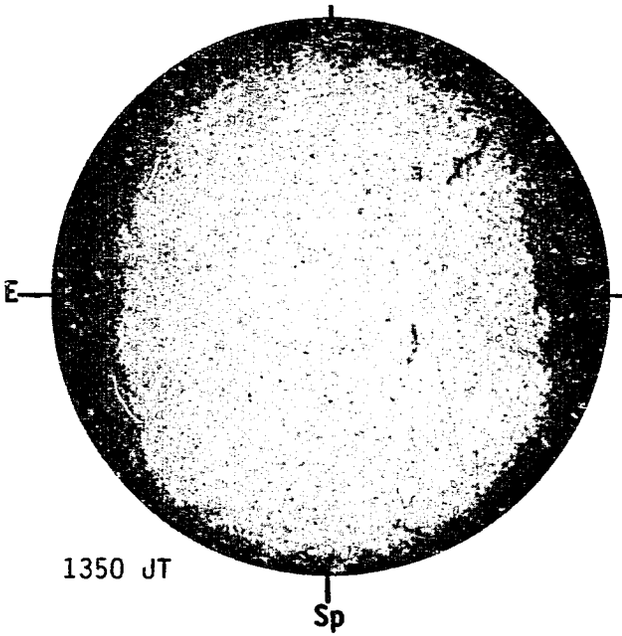
STANFORD MAGNETOGRAM



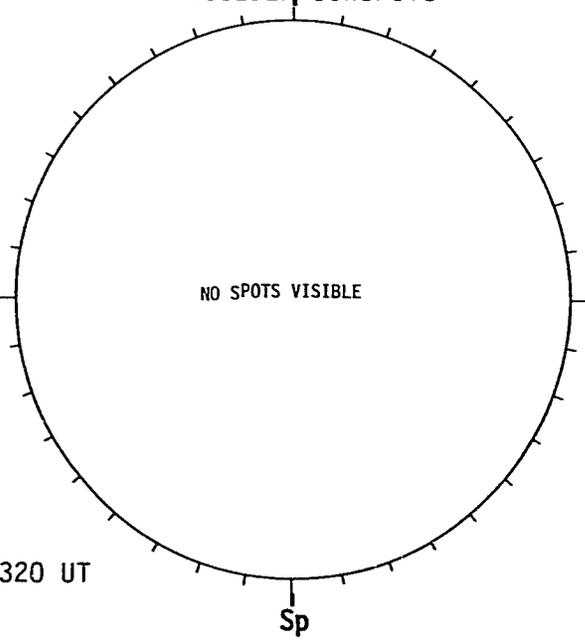
MT. WILSON MAGNETOGRAM



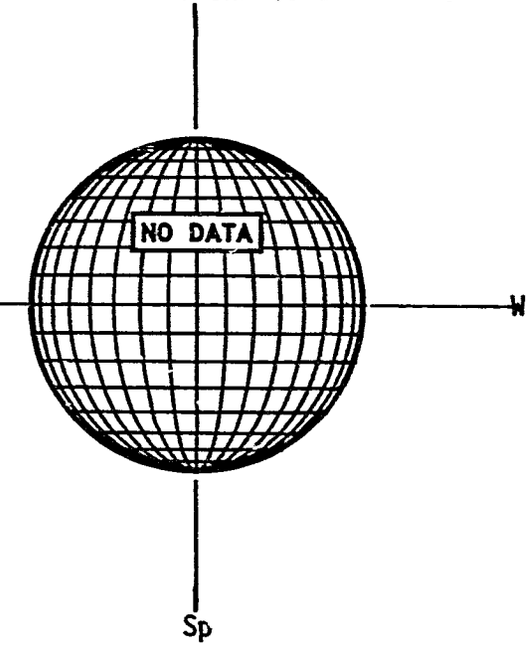
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



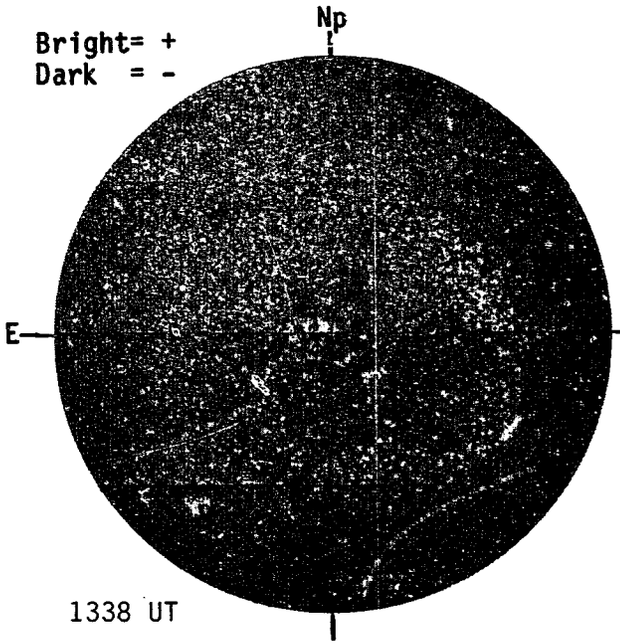
SACRAMENTO PEAK CORONA (1.15 Radii)



A U G U S T 13, 1 9 8 5 (P= 15.31, B_o= 6.44, L_o= 233.53)

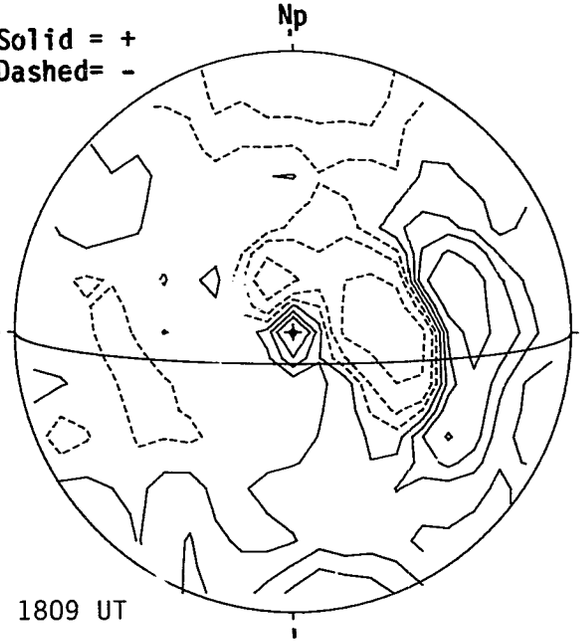
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

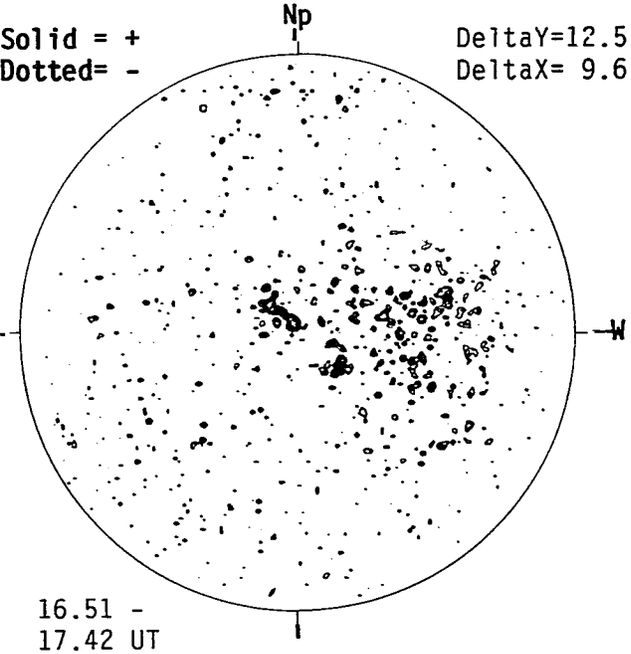
Solid = +
Dashed= -



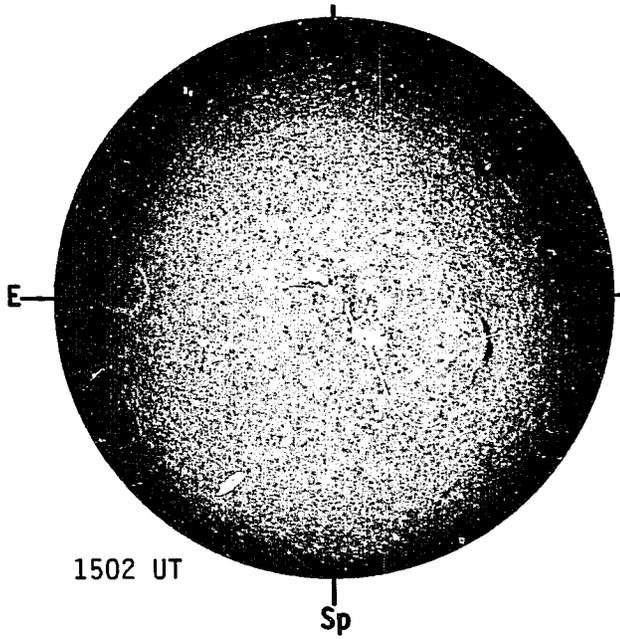
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

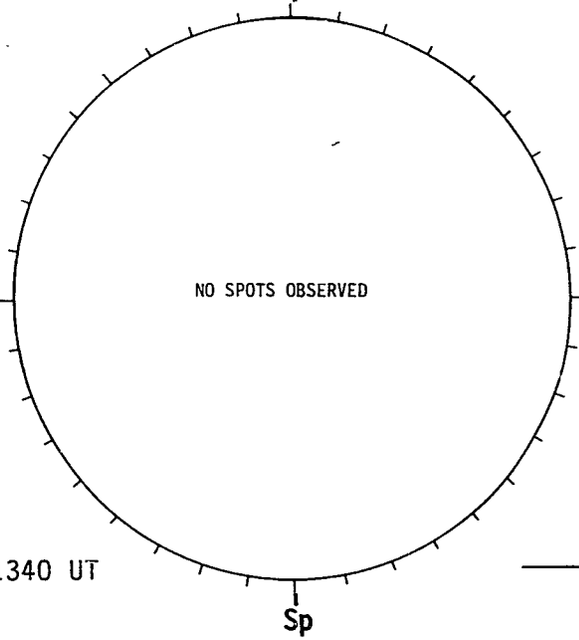
DeltaY=12.5
DeltaX= 9.6



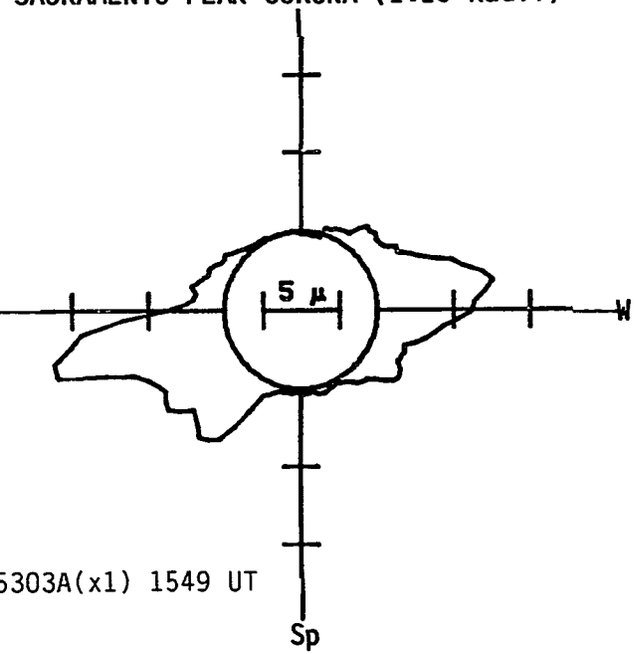
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS

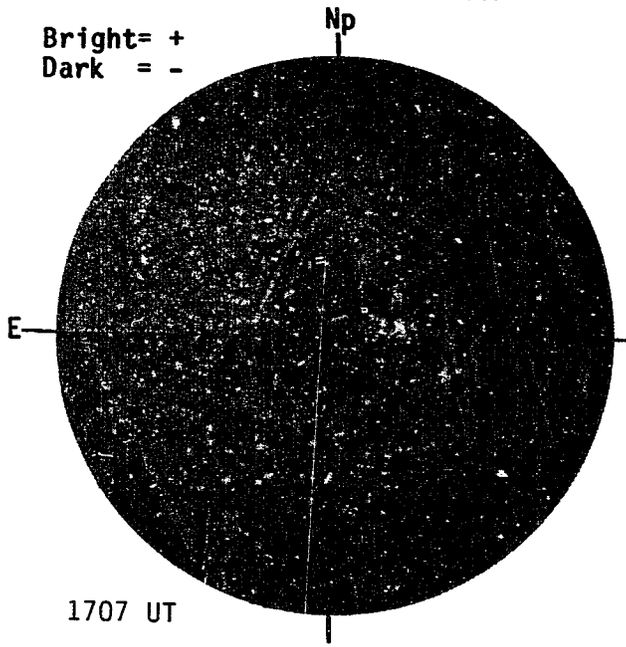


SACRAMENTO PEAK CORONA (1.15 Radii)

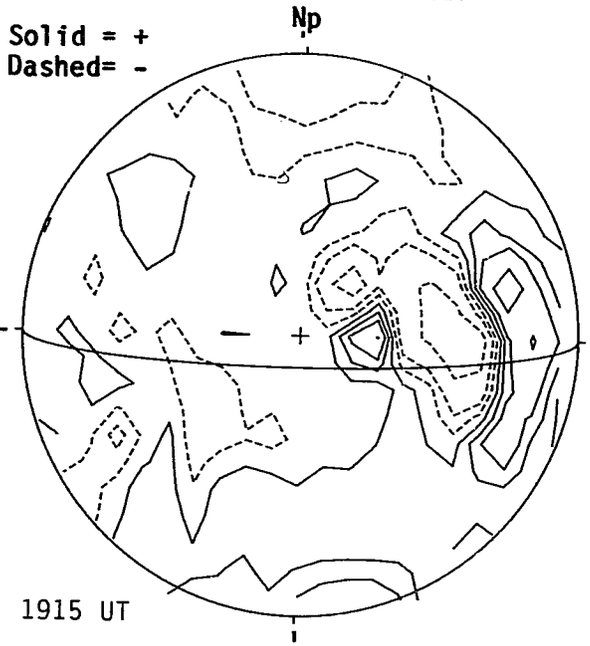


AUGUST 14, 1985 (P= 15.66, B_0= 6.49, L_0= 220.31)

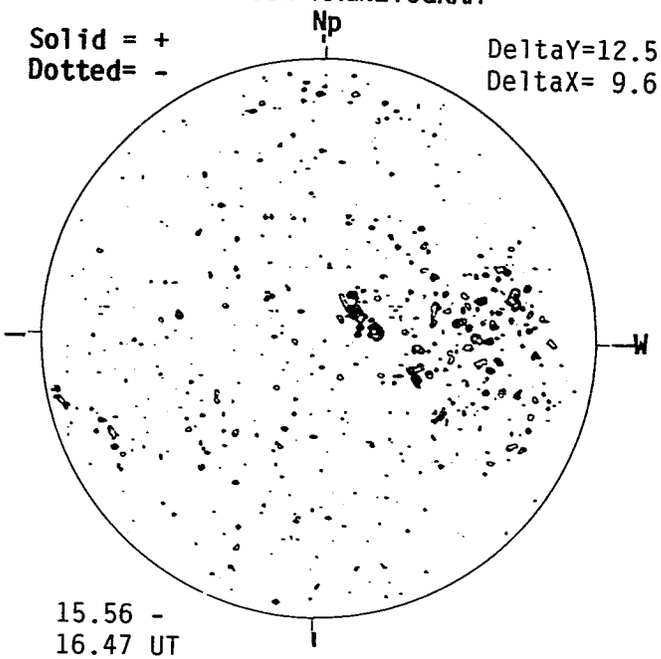
KITT PEAK MAGNETOGRAM



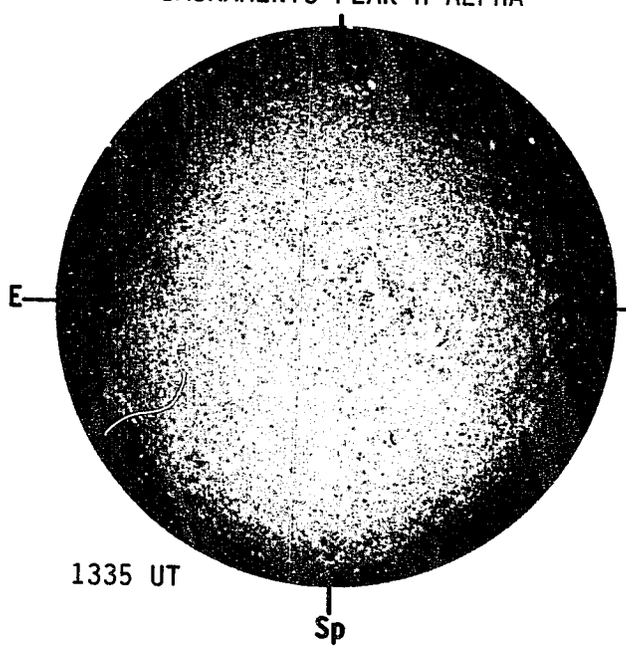
STANFORD MAGNETOGRAM



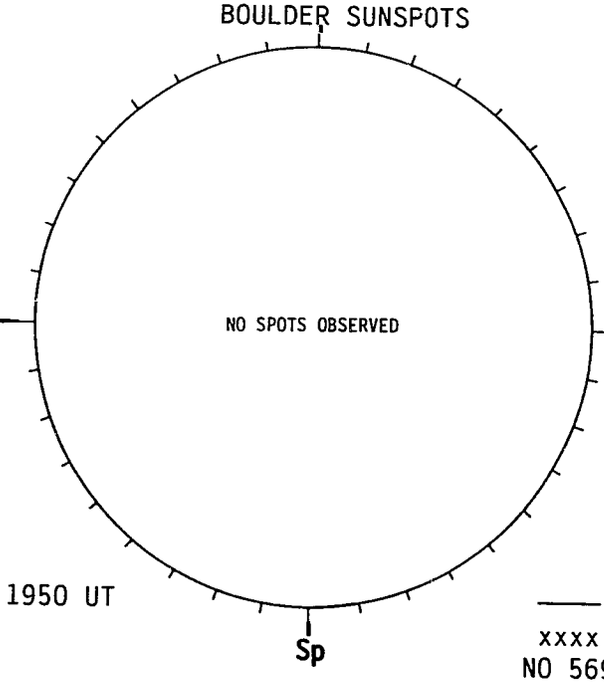
MT. WILSON MAGNETOGRAM



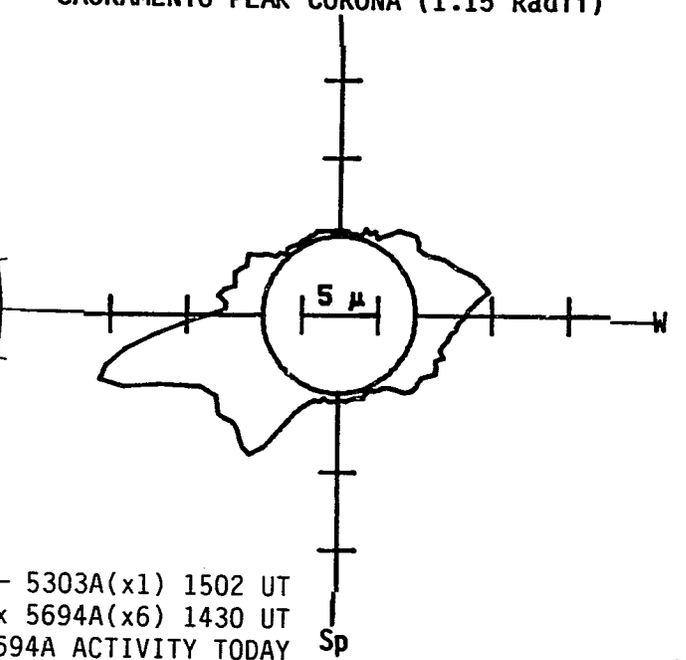
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



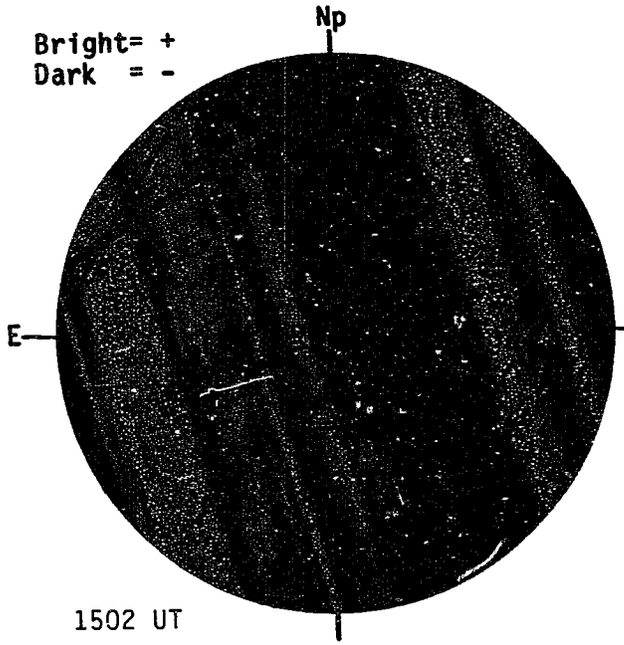
SACRAMENTO PEAK CORONA (1.15 Radii)



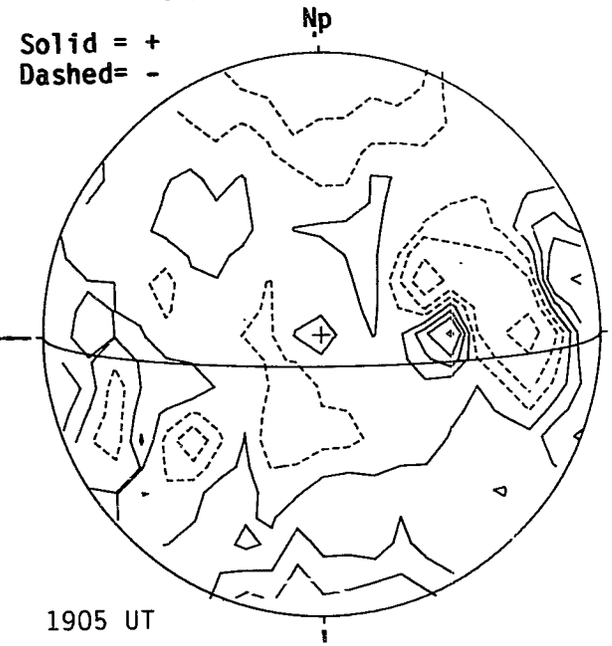
—— 5303A(x1) 1502 UT
xxxx 5694A(x6) 1430 UT
NO 5694A ACTIVITY TODAY

A U G U S T 15, 1 9 8 5 (P= 16.00, B_0= 6.54, L_0= 207.09)

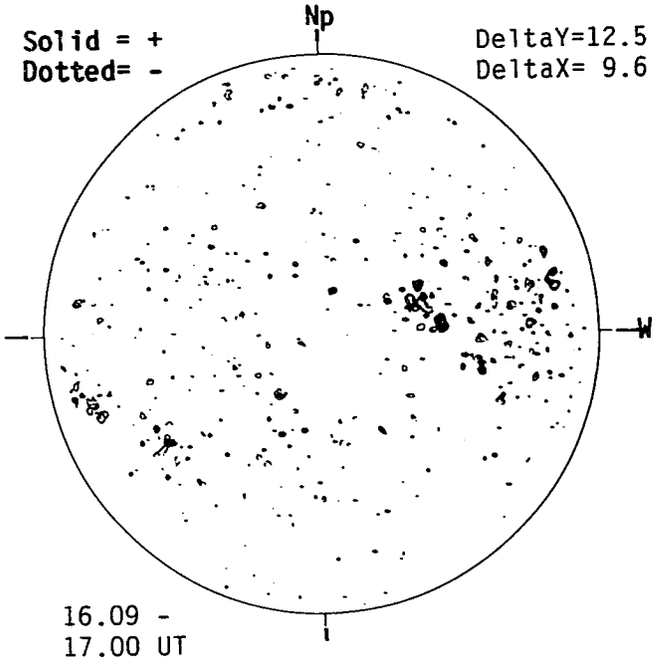
KITT PEAK MAGNETOGRAM



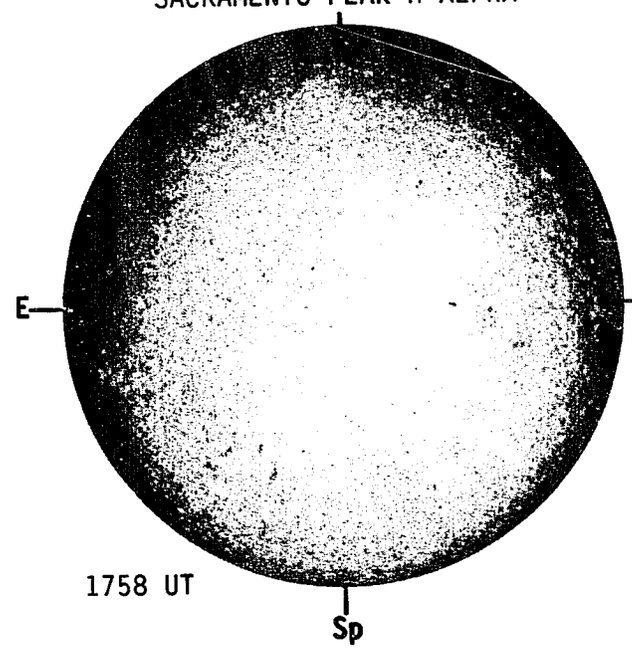
STANFORD MAGNETOGRAM



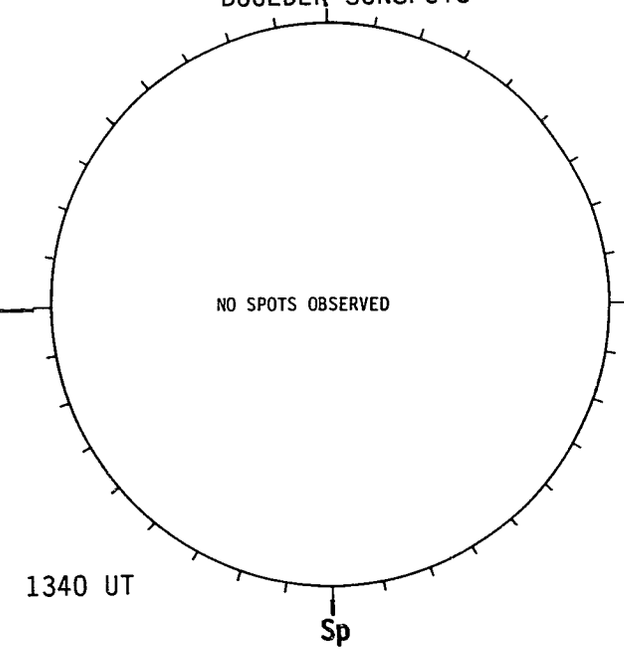
MT. WILSON MAGNETOGRAM



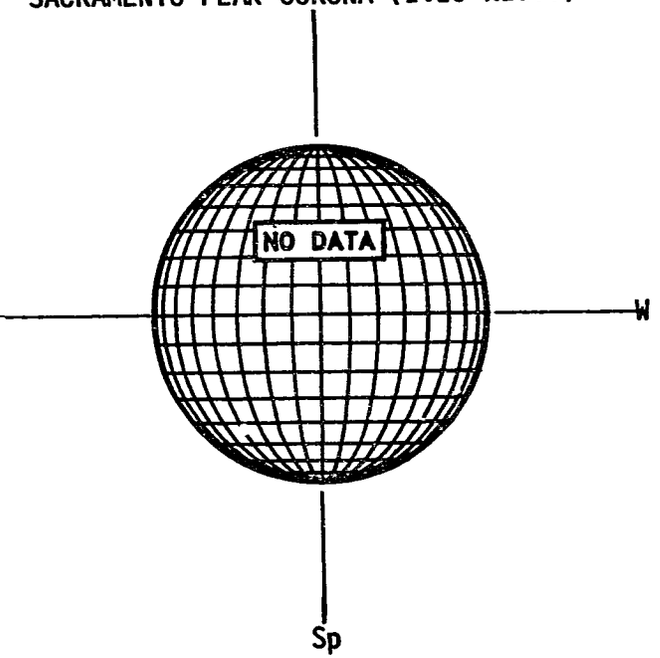
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



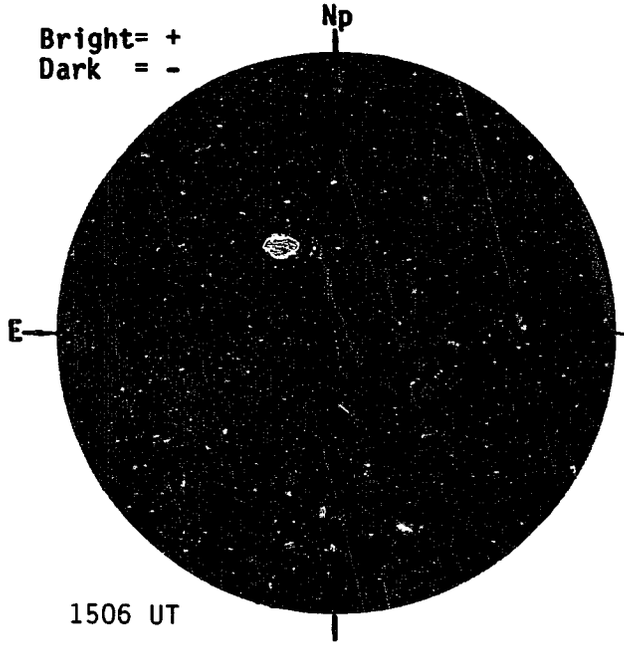
SACRAMENTO PEAK CORONA (1.15 Radii)



A U G U S T 16, 1 9 8 5 (P= 16.34, B_0= 6.58, L_0= 193.87)

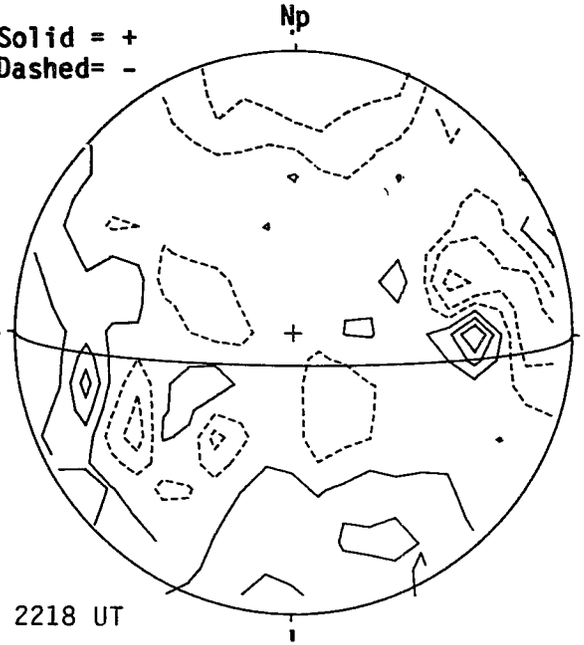
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

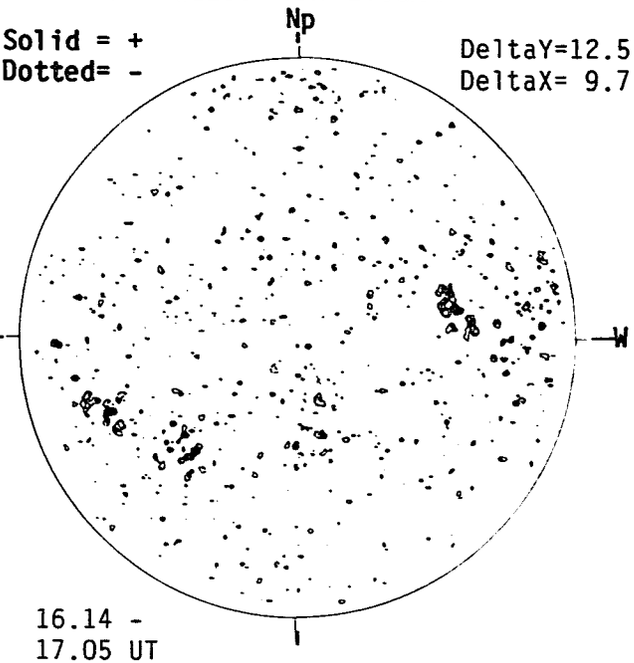
Solid = +
Dashed= -



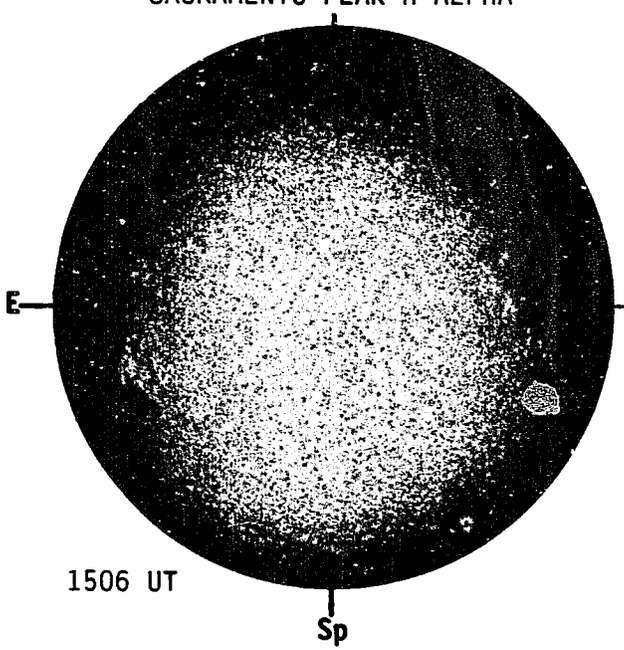
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

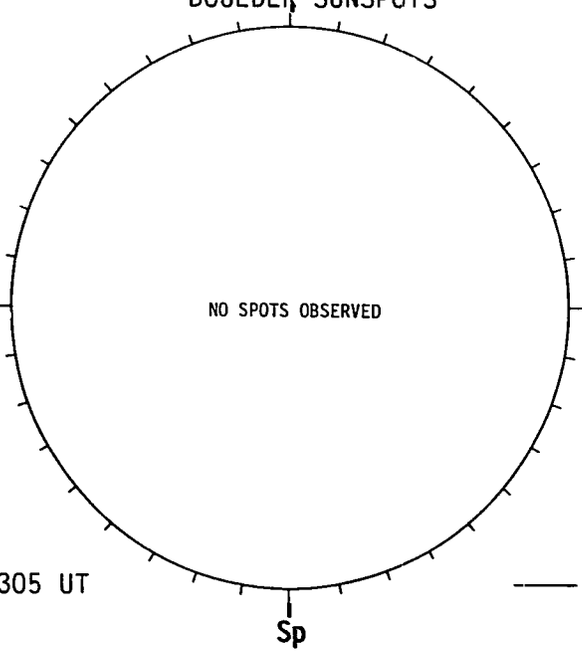
DeltaY=12.5
DeltaX= 9.7



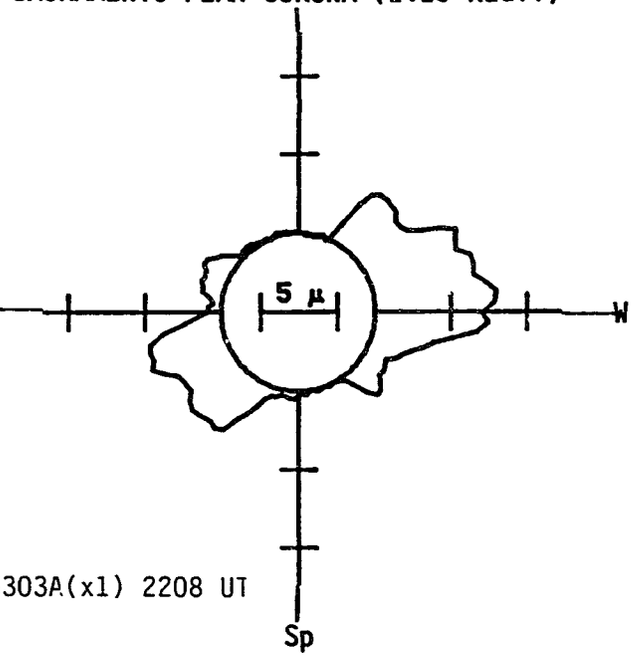
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

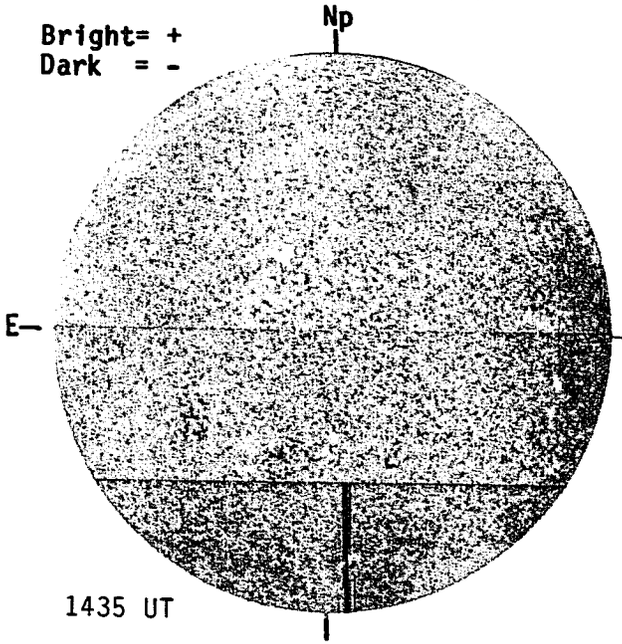


—— 5303A(x1) 2208 UT

A U G U S T 17, 1 9 8 5 (P= 16.67, B_0= 6.63, L_0= 180.65)

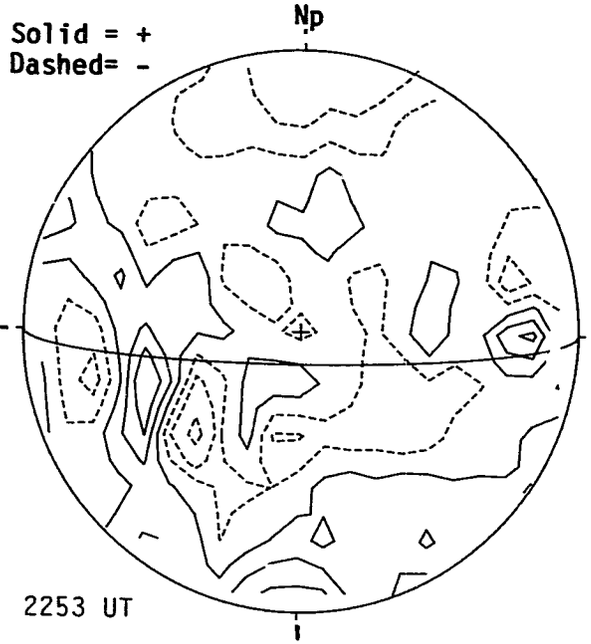
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

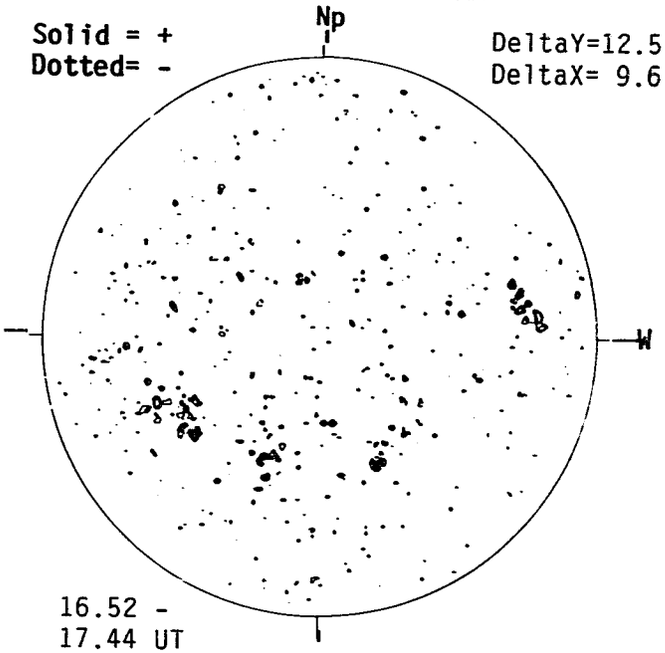
Solid = +
Dashed= -



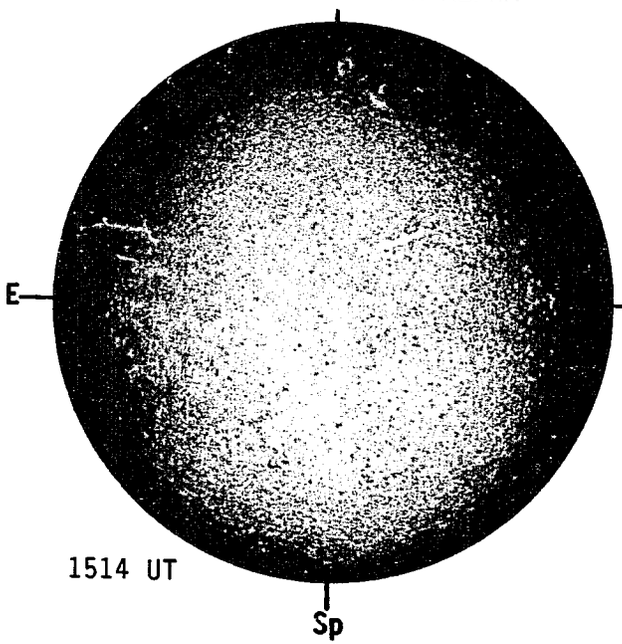
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

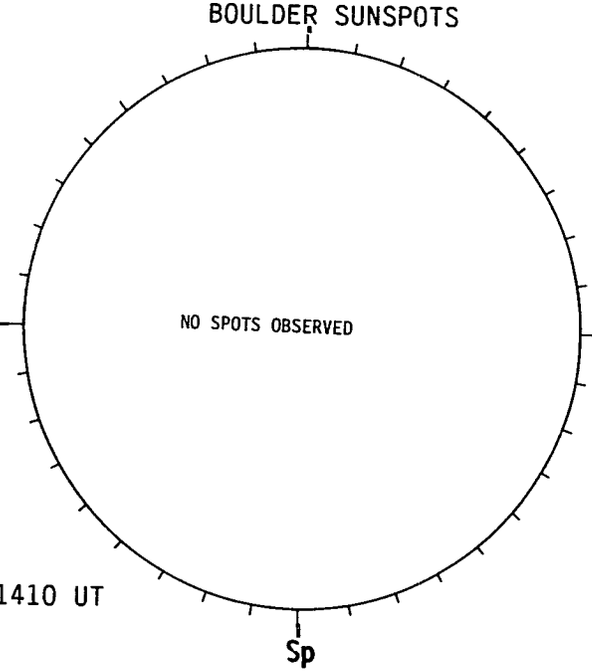
DeltaY=12.5
DeltaX= 9.6



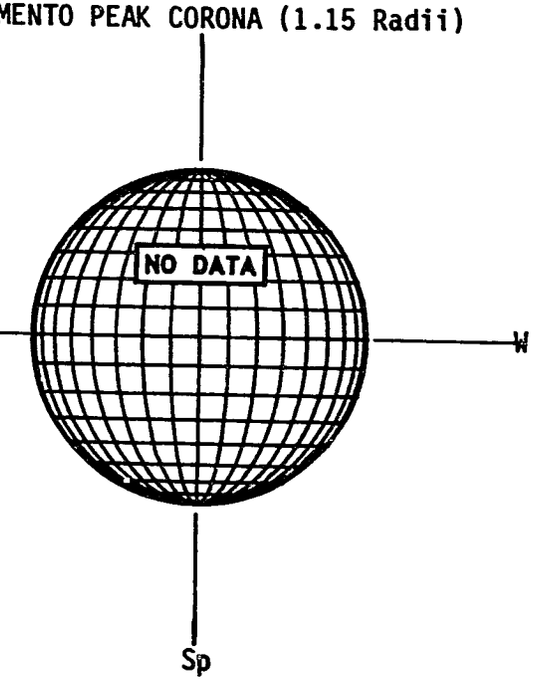
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



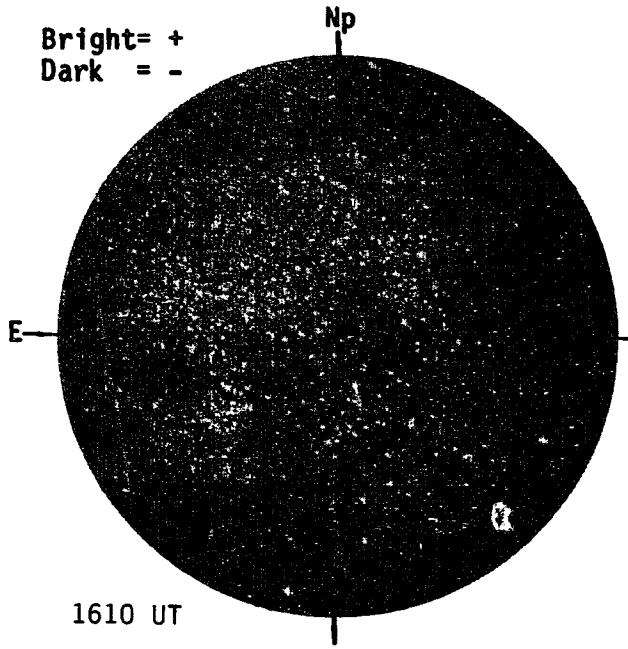
SACRAMENTO PEAK CORONA (1.15 Radii)



AUGUST 18, 1985 (P= 17.00, B_o= 6.67, L_o= 167.44)

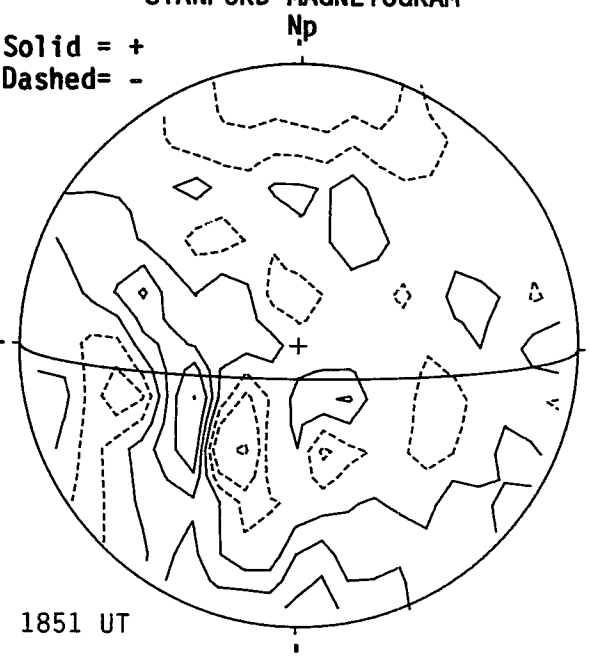
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

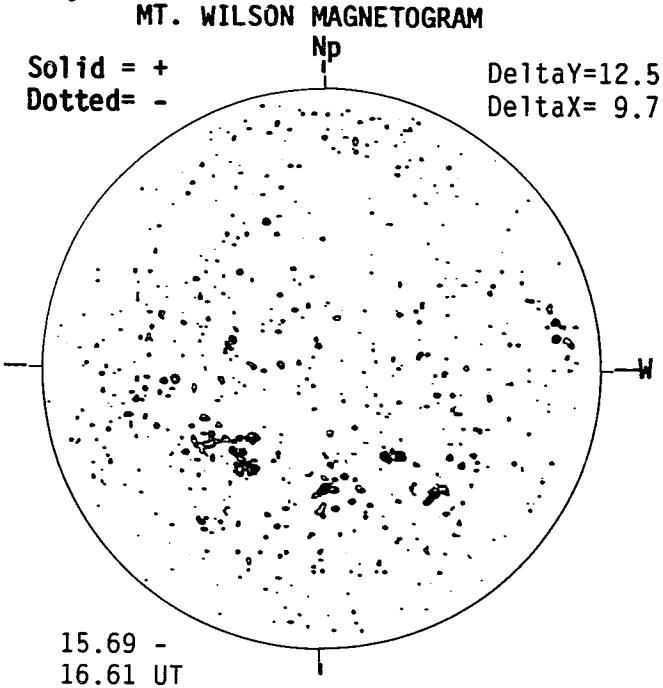
Solid = +
Dashed= -



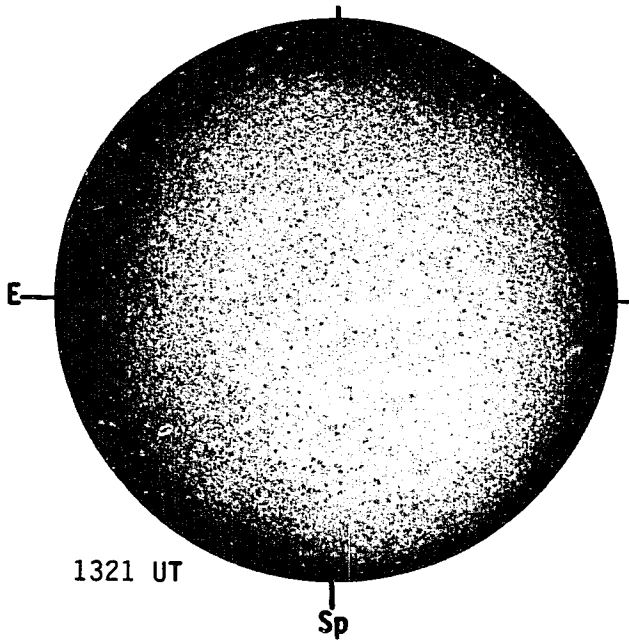
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

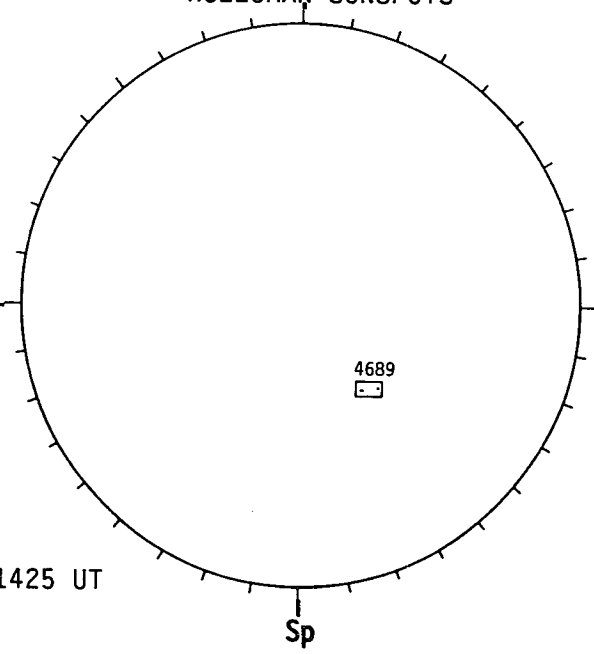
DeltaY=12.5
DeltaX= 9.7



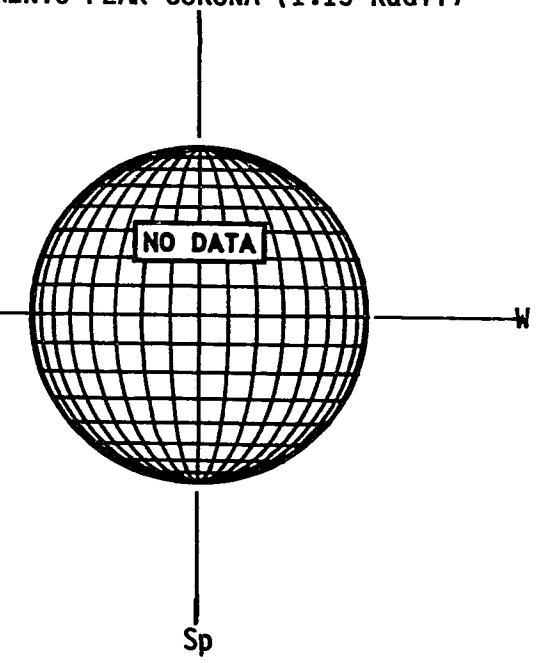
SACRAMENTO PEAK H-ALPHA



HOLLOMAN SUNSPOTS



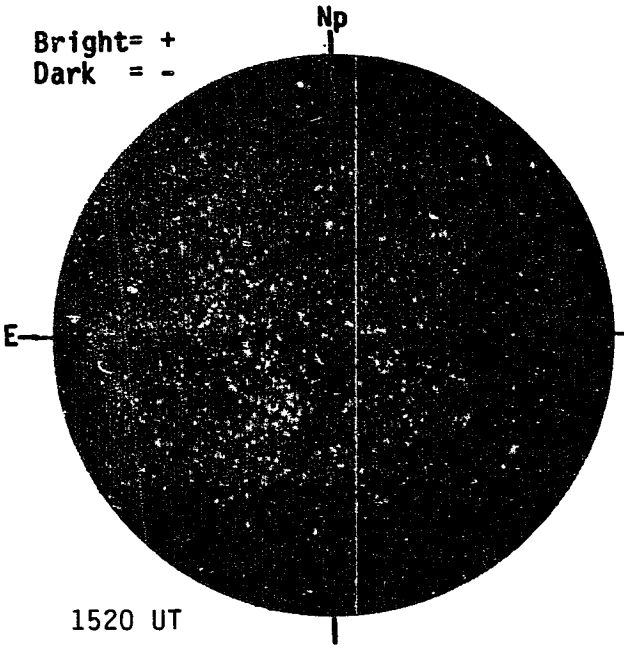
SACRAMENTO PEAK CORONA (1.15 Radii)



A U G U S T 19, 1 9 8 5 (P= 17.32, B_0= 6.72, L_0= 154.22)

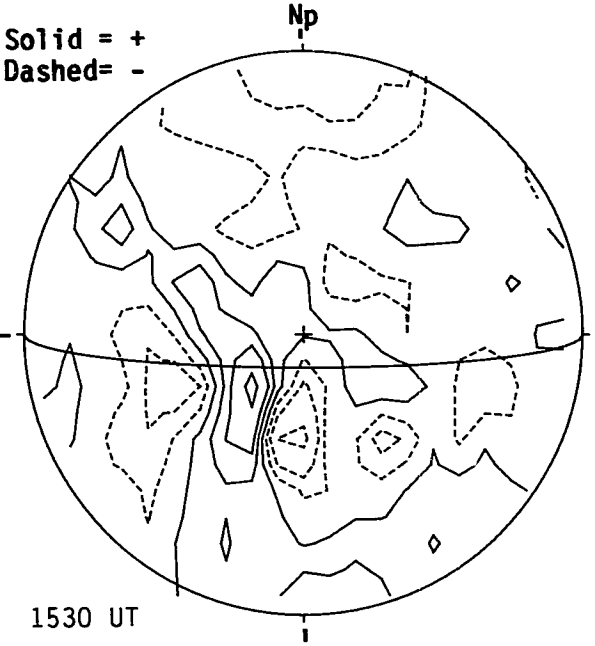
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

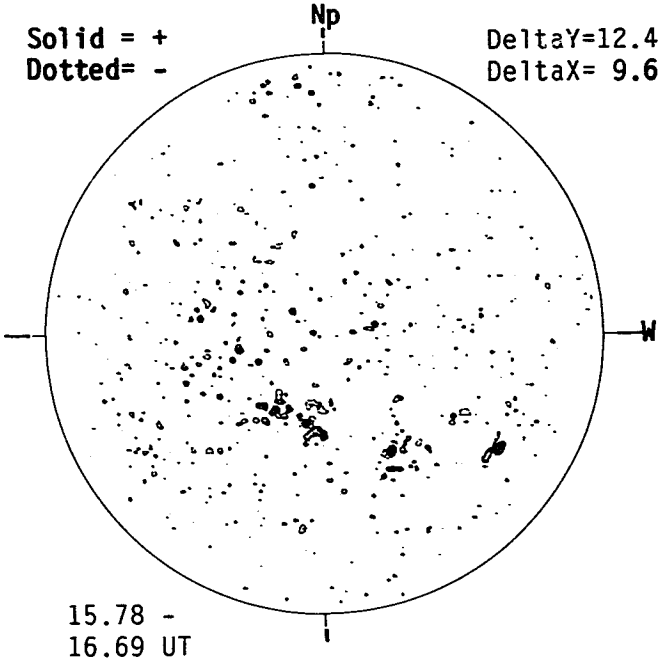
Solid = +
Dashed= -



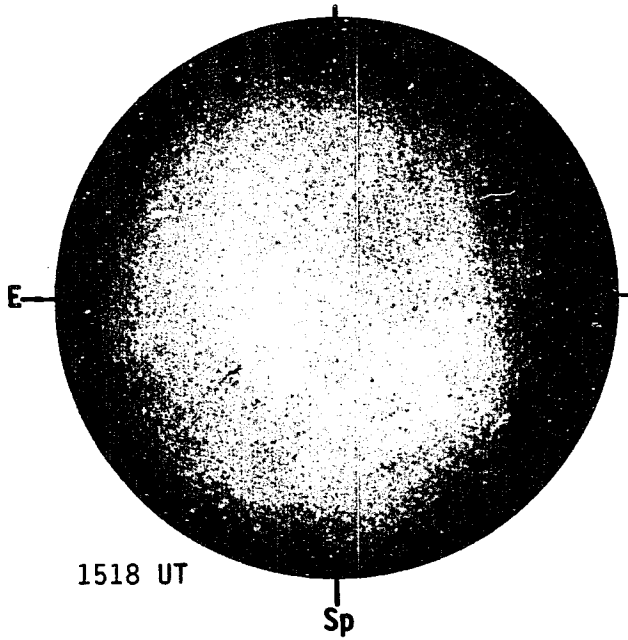
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

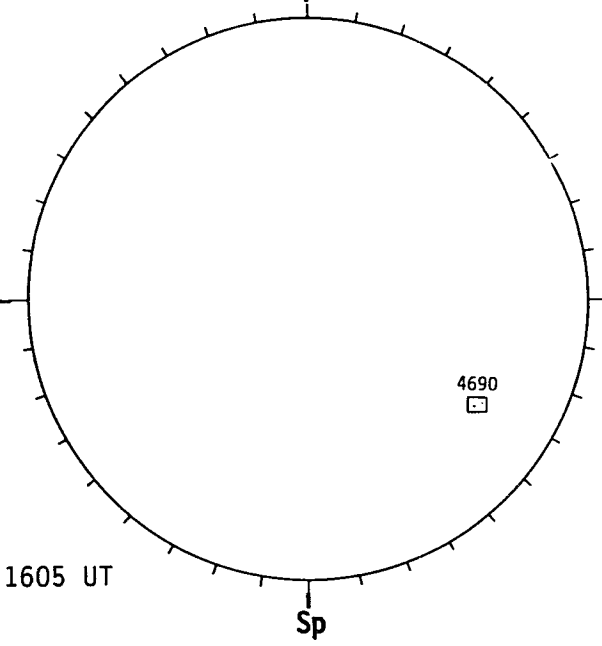
DeltaY=12.4
DeltaX= 9.6



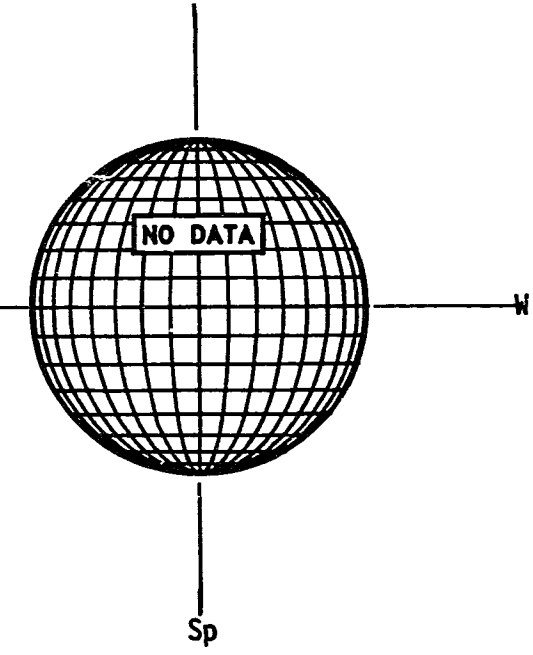
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

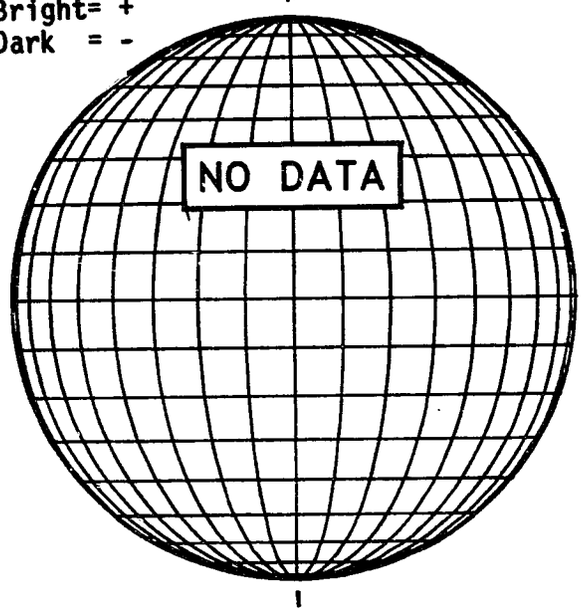


A U G U S T 20, 1 9 8 5 (P= 17.64, B_o= 6.76, L_o= 141.00)

KITT PEAK MAGNETOGRAM

Np

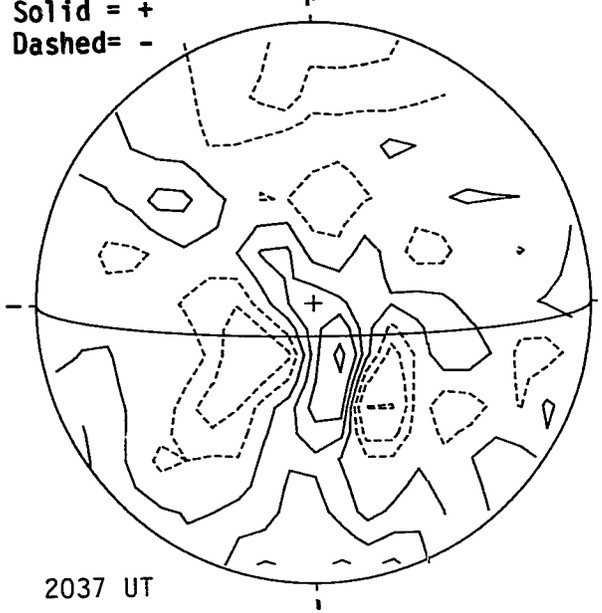
Bright= +
Dark = -



STANFORD MAGNETOGRAM

Np

Solid = +
Dashed= -



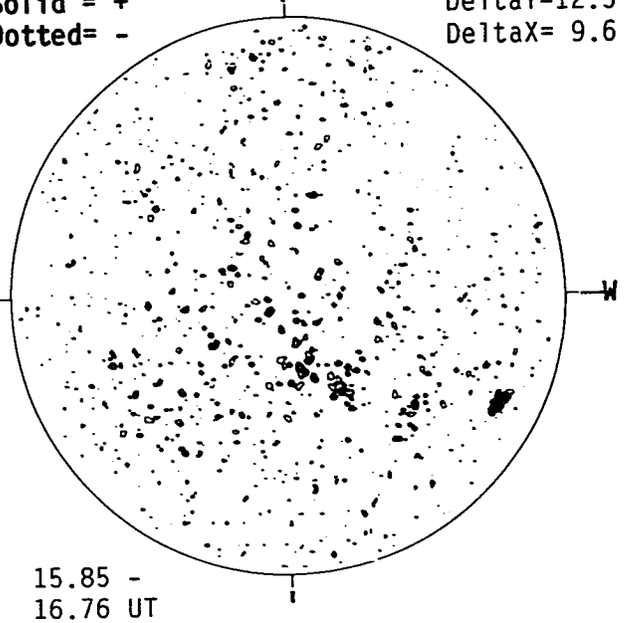
2037 UT

MT. WILSON MAGNETOGRAM

Np

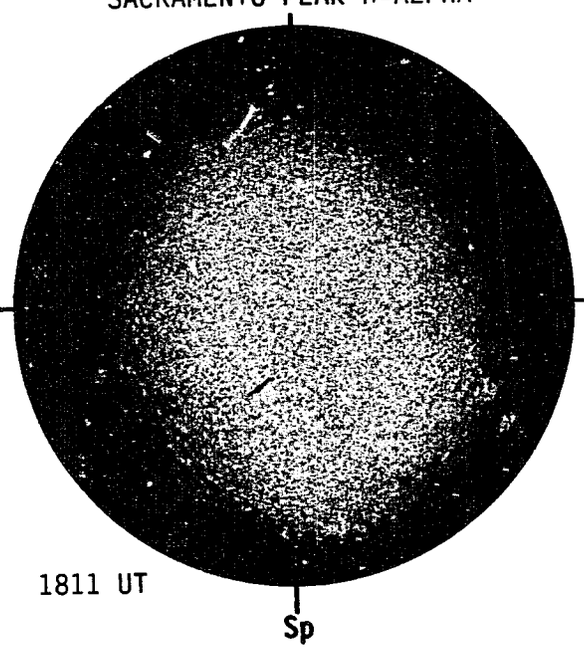
Solid = +
Dotted= -

DeltaY=12.5
DeltaX= 9.6



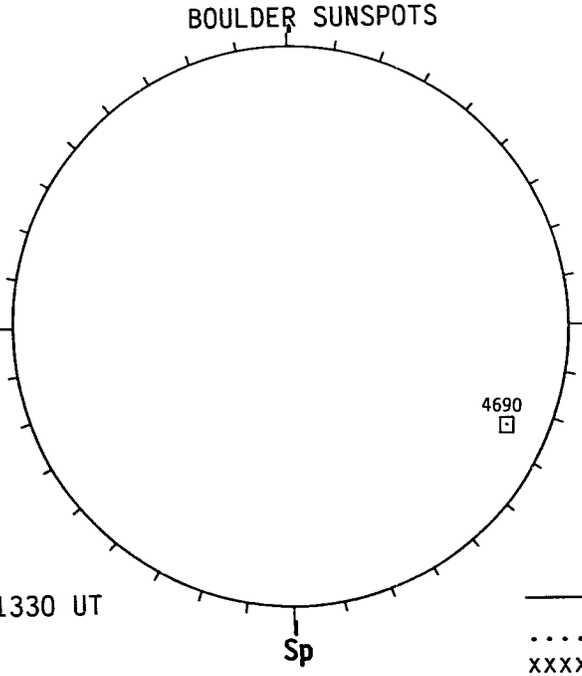
15.85 -
16.76 UT

SACRAMENTO PEAK H-ALPHA



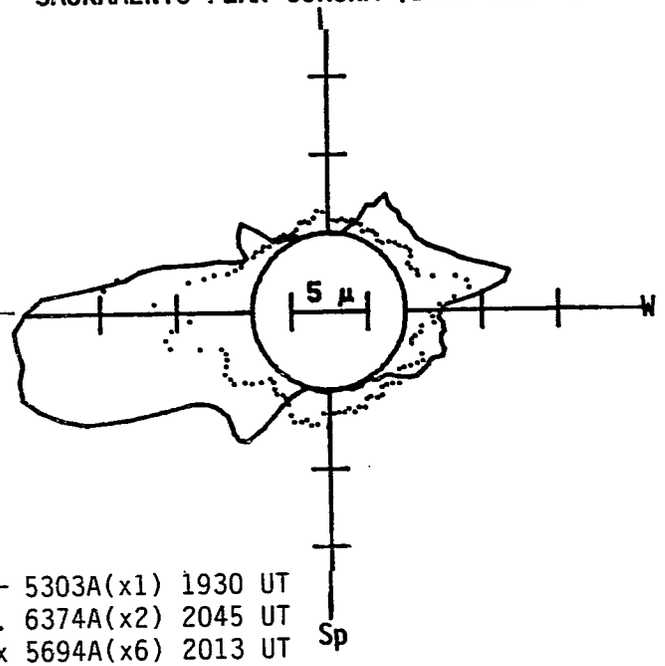
1811 UT

BOULDER SUNSPOTS



1330 UT

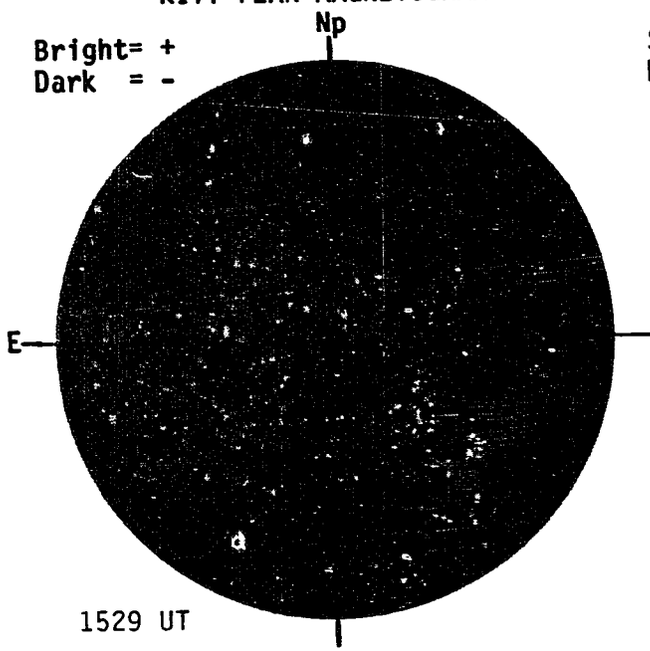
SACRAMENTO PEAK CORONA (1.15 Radii)



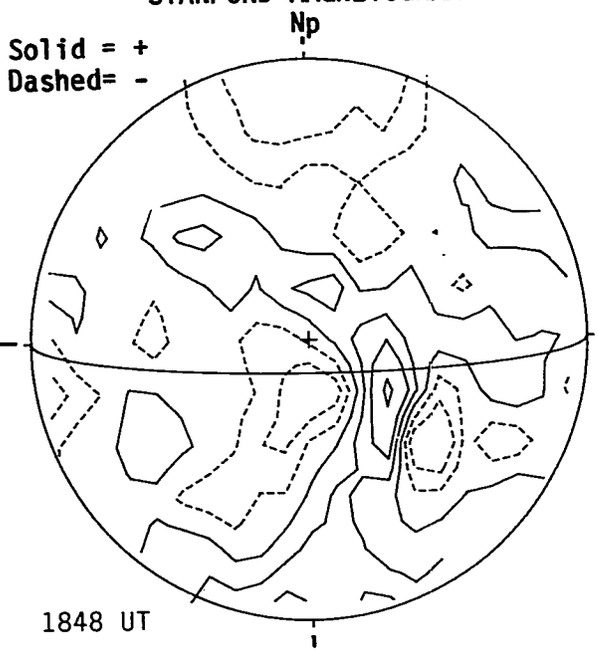
—— 5303A(x1) 1930 UT
.... 6374A(x2) 2045 UT
xxxx 5694A(x6) 2013 UT
NO 5694A ACTIVITY TODAY

A U G U S T 21, 1 9 8 5 (P= 17.95, B_0= 6.79, L_0= 127.79)

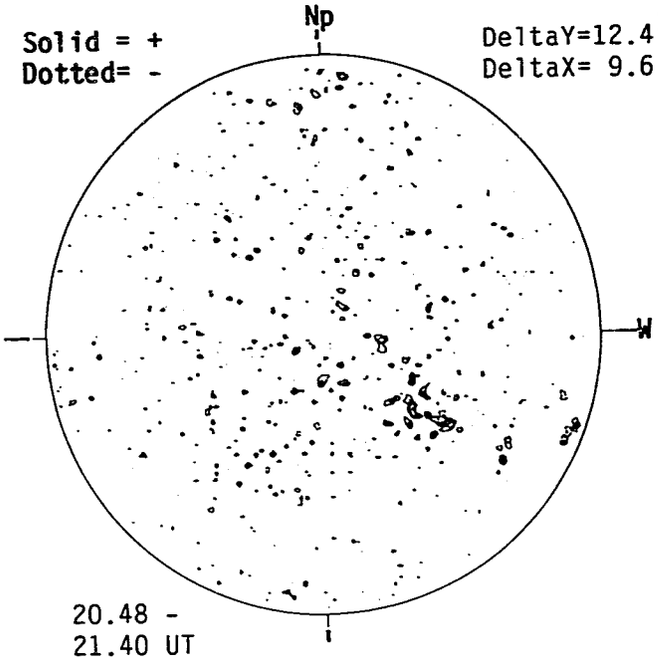
KITT PEAK MAGNETOGRAM



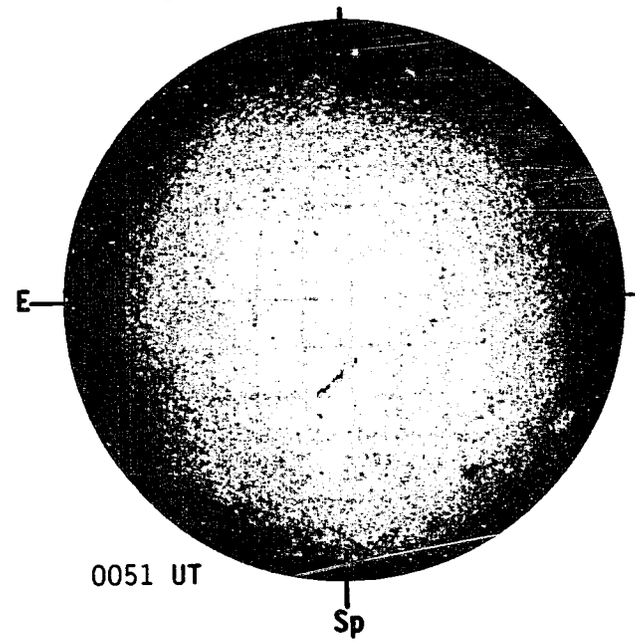
STANFORD MAGNETOGRAM



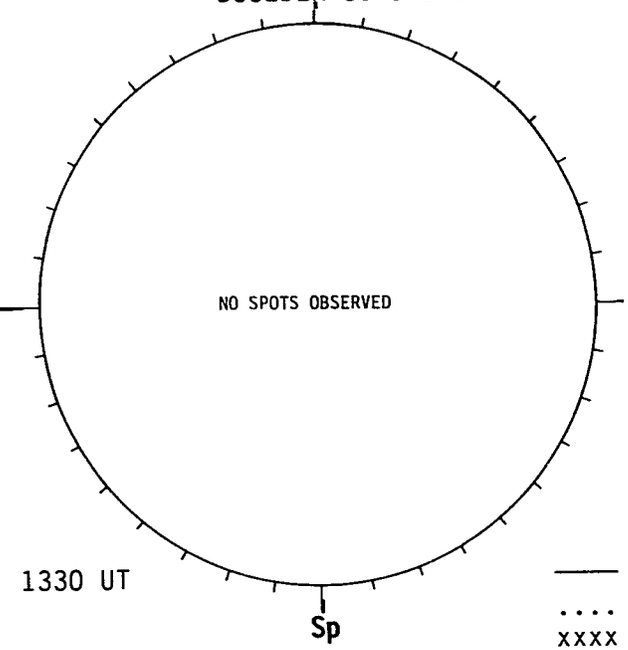
MT. WILSON MAGNETOGRAM



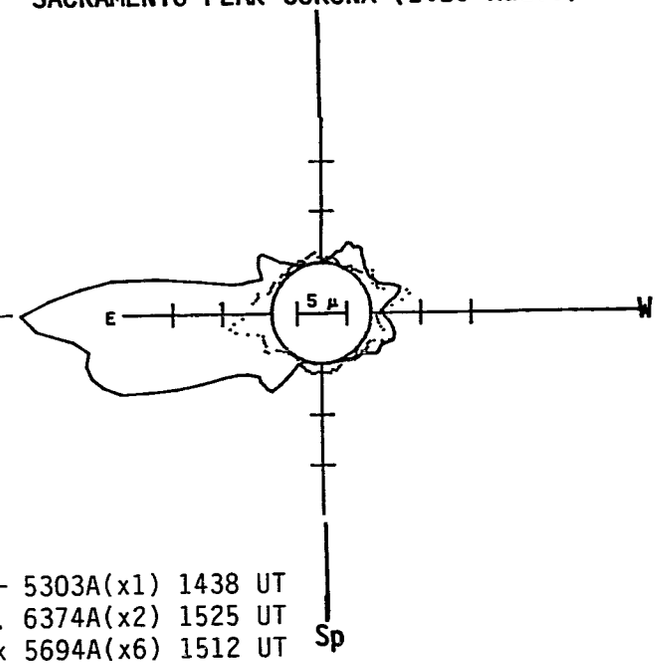
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

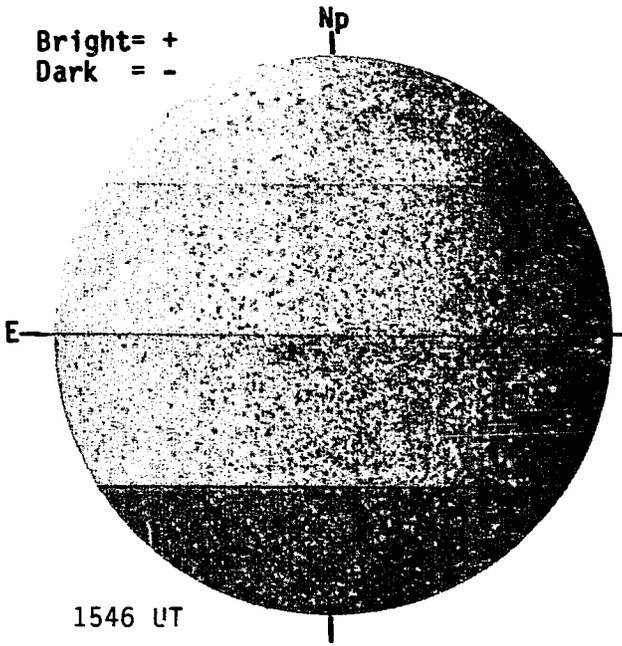


—— 5303A(x1) 1438 UT
.... 6374A(x2) 1525 UT
xxxx 5694A(x6) 1512 UT
NO 5694A ACTIVITY TODAY

A U G U S T 22, 1 9 8 5 (P= 18.26, B_0= 6.83, L_0= 114.57)

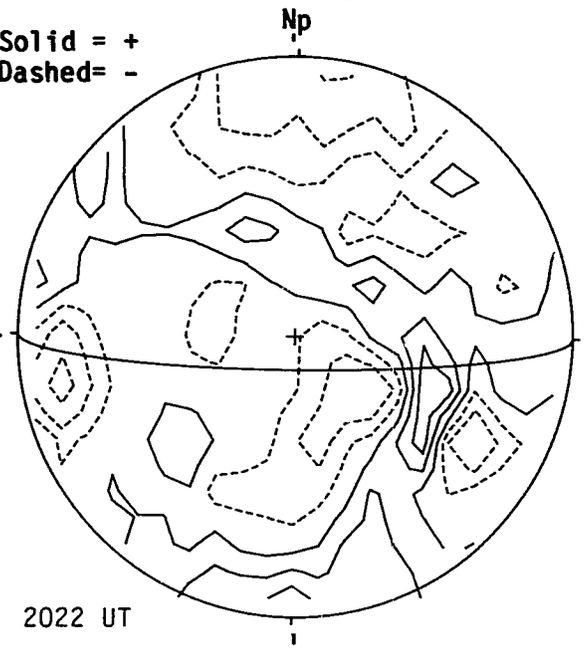
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

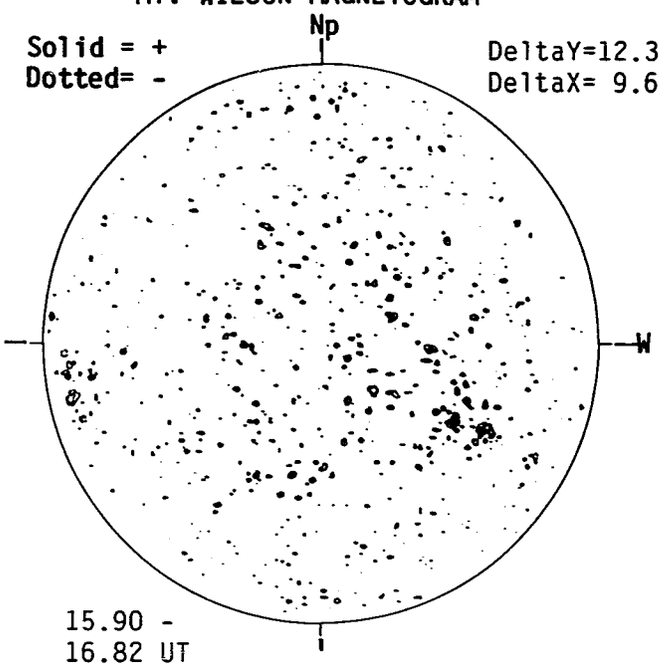
Solid = +
Dashed= -



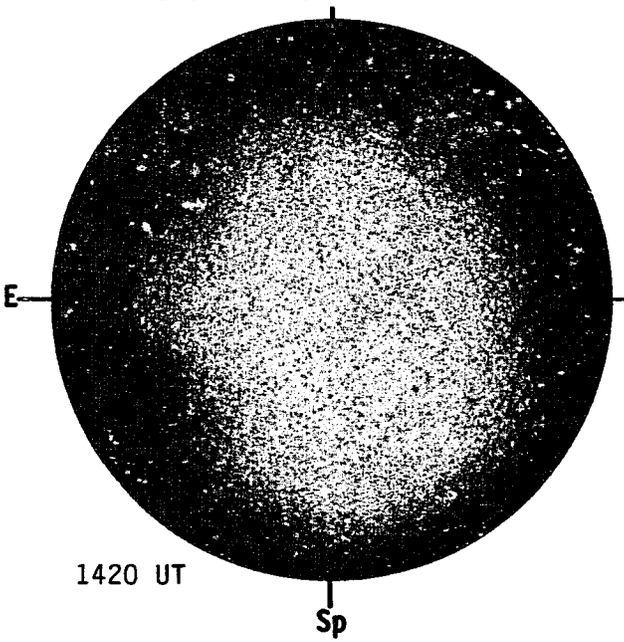
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

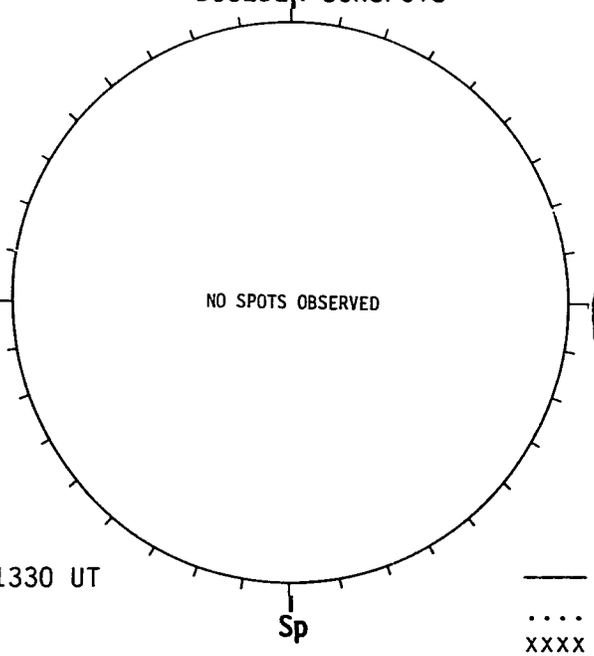
DeltaY=12.3
DeltaX= 9.6



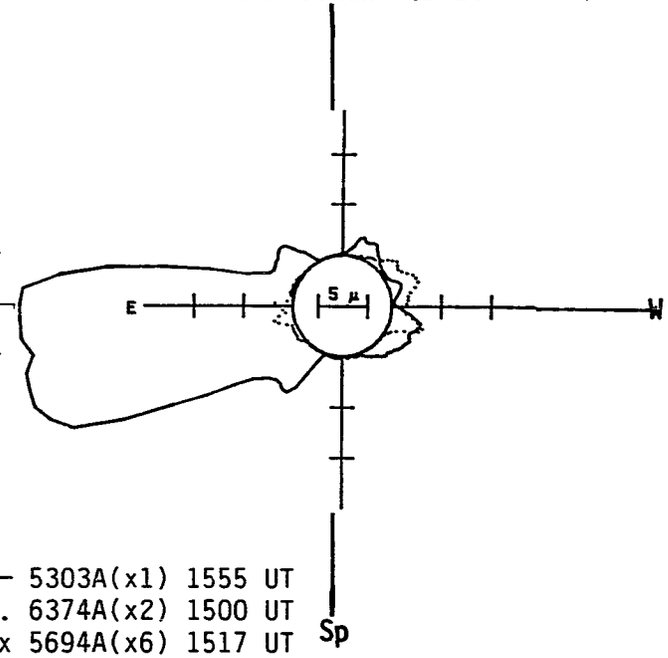
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



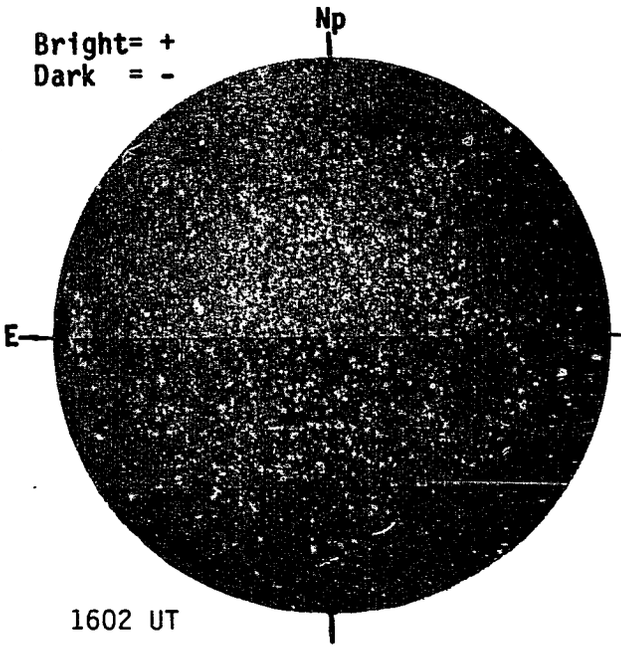
—— 5303A(x1) 1555 UT
.... 6374A(x2) 1500 UT
xxxx 5694A(x6) 1517 UT
NO 5694A ACTIVITY TODAY

47
Aug 85

A U G U S T 23, 1 9 8 5 (P= 18.56, B_o= 6.87, L_o= 101.36)

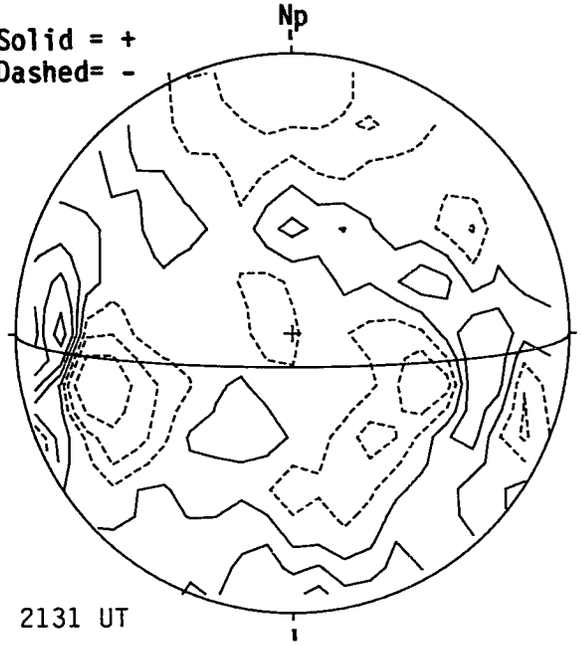
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

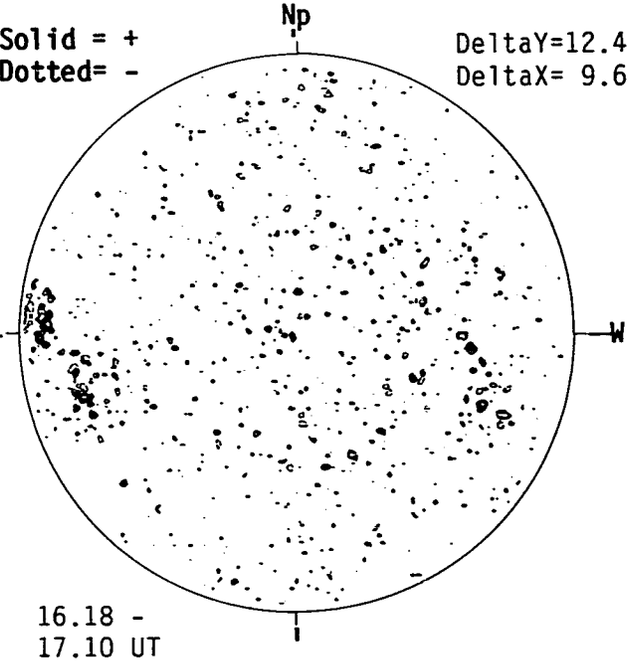
Solid = +
Dashed= -



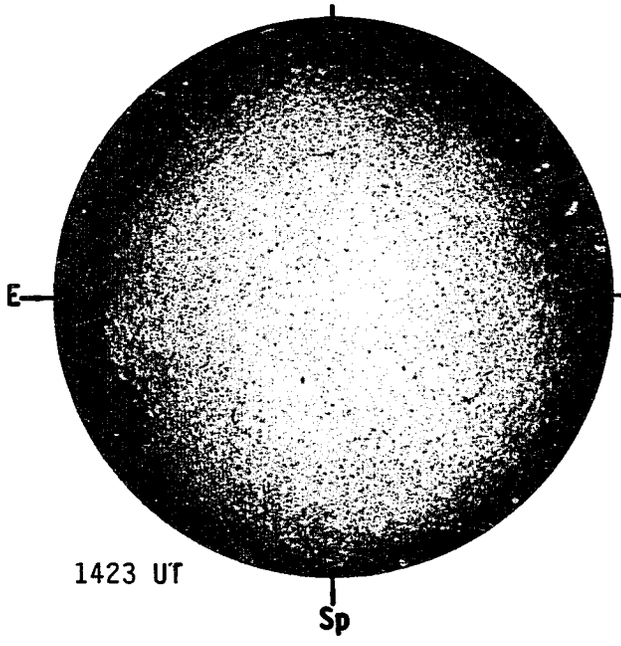
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

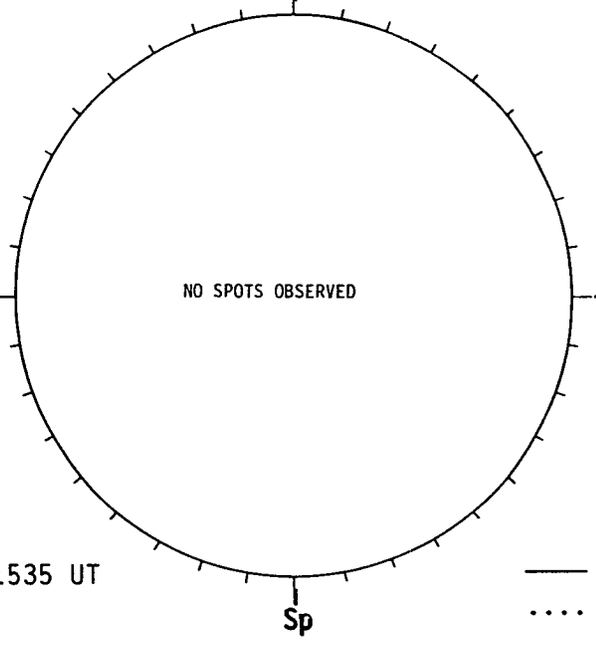
DeltaY=12.4
DeltaX= 9.6



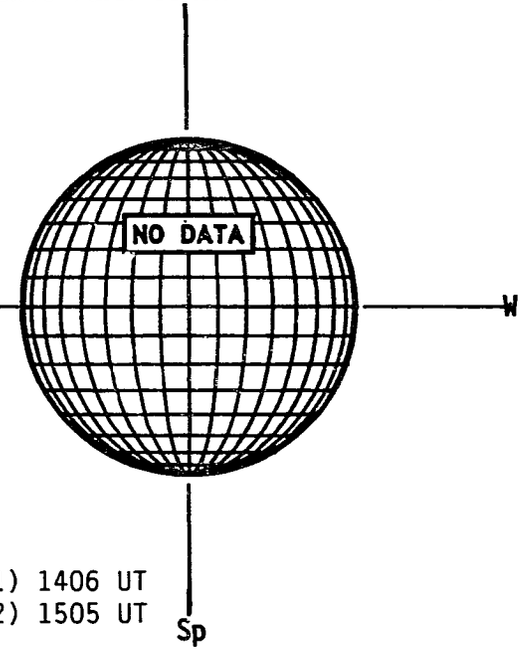
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



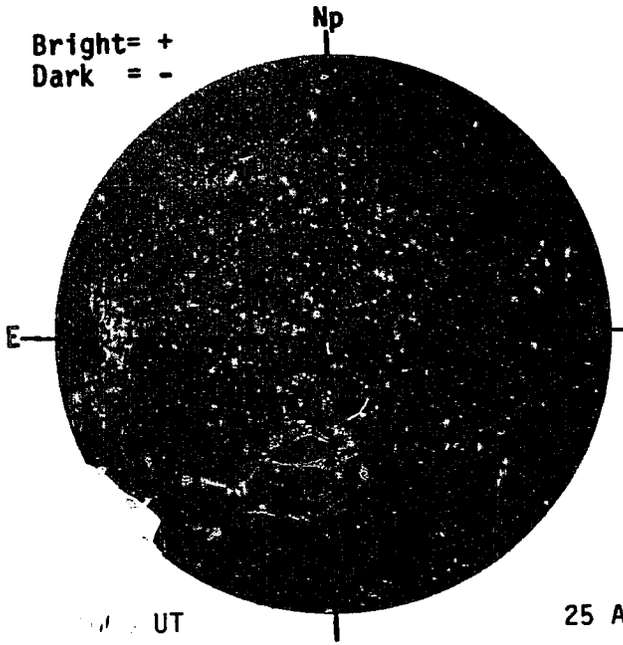
SACRAMENTO PEAK CORONA (1.15 Radii)



—— 5303A(x1) 1406 UT
.... 6374A(x2) 1505 UT

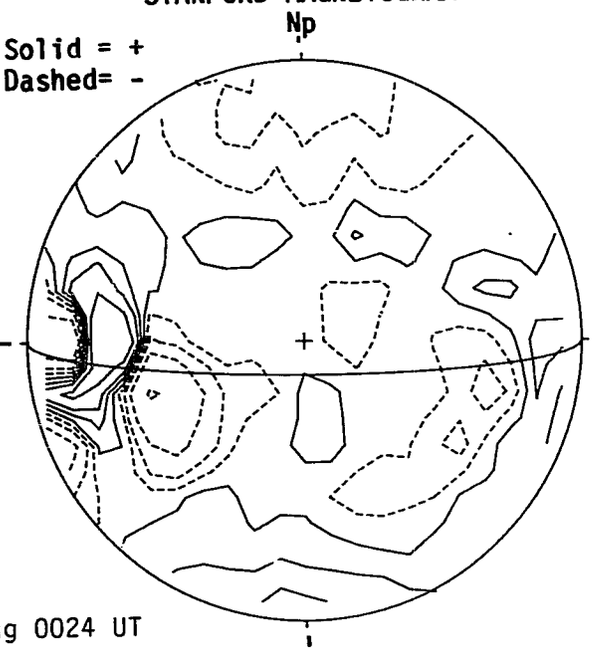
A U G U S T 24, 1 9 8 5 (P= 18.86, B_0= 6.90, L_0= 88.14)

KITT PEAK MAGNETOGRAM



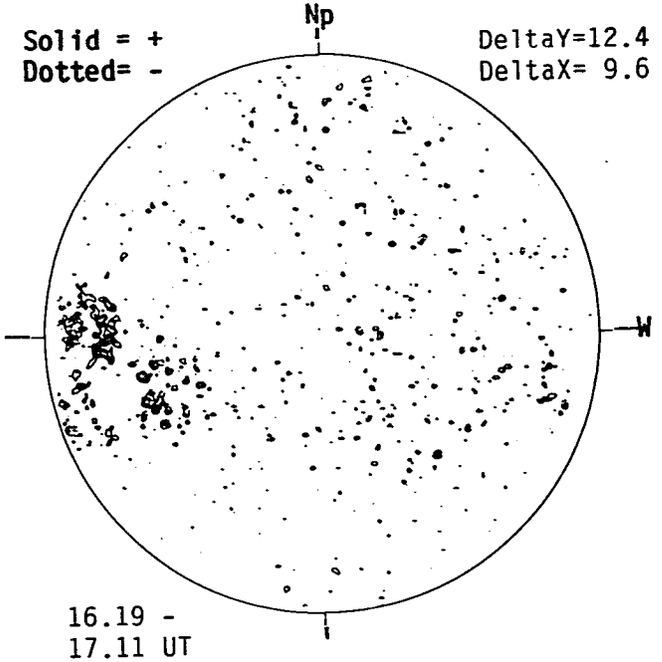
UT

STANFORD MAGNETOGRAM



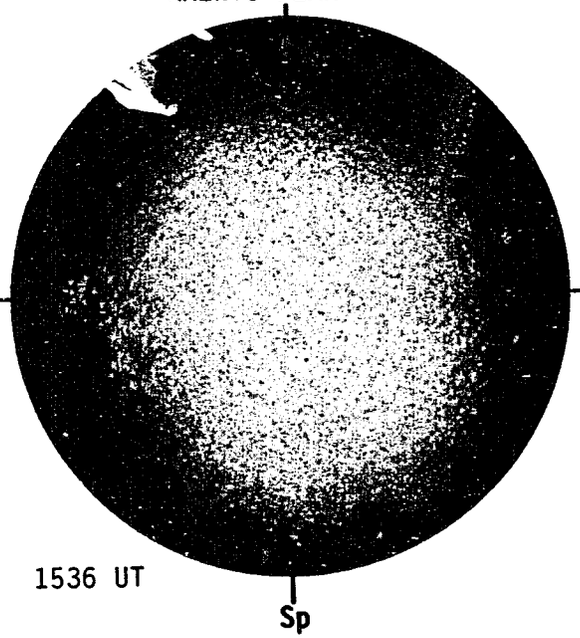
25 Aug 0024 UT

MT. WILSON MAGNETOGRAM



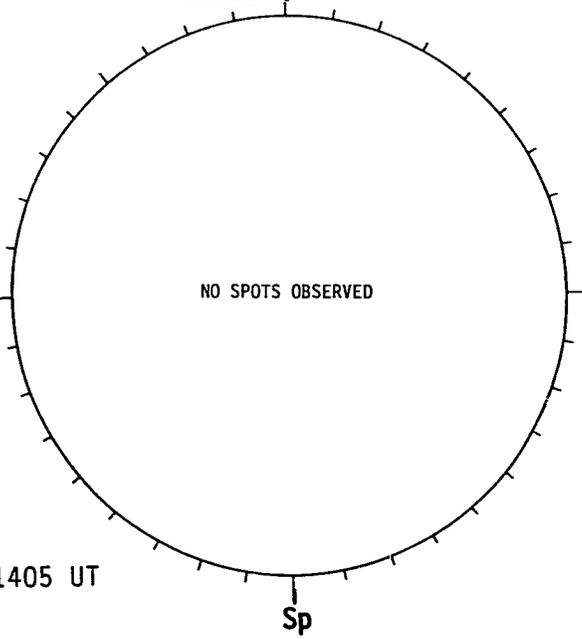
16.19 -
17.11 UT

AMENTO PEAK H-ALHPA



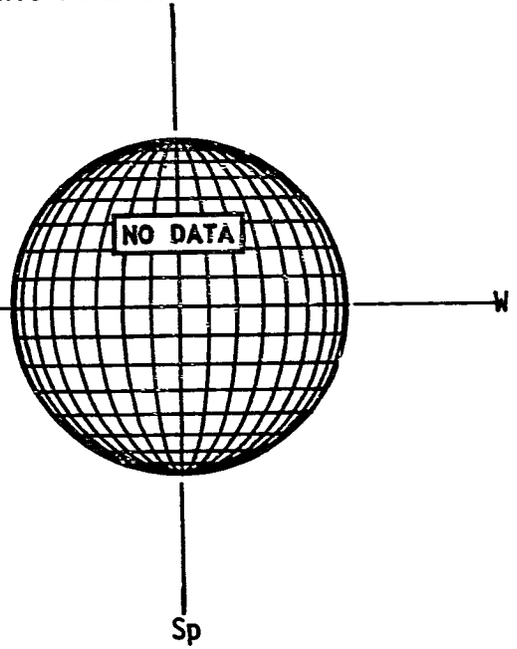
1536 UT

BOULDER SUNSPOTS



1405 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

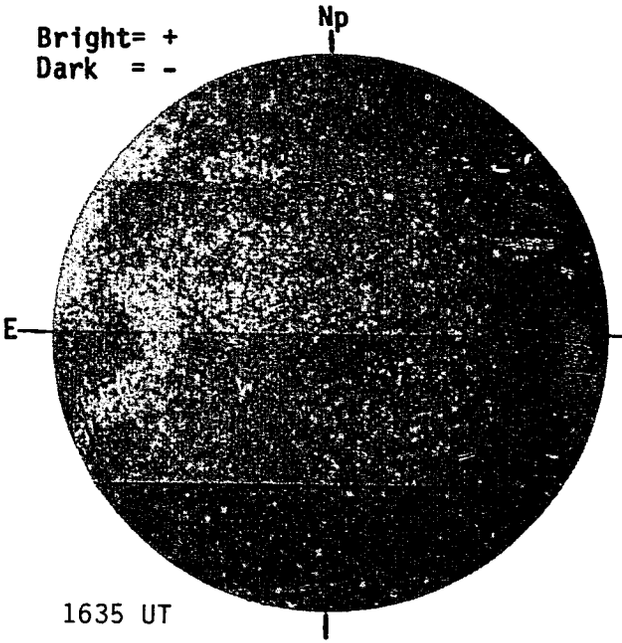


A U G U S T 25, 1 9 8 5 (P= 19.15, B_0= 6.93, L_0= 74.93)

50 Aug 85

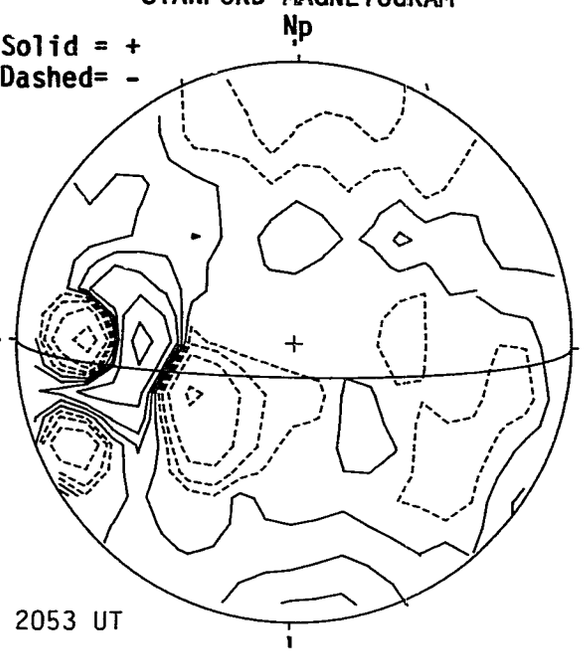
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

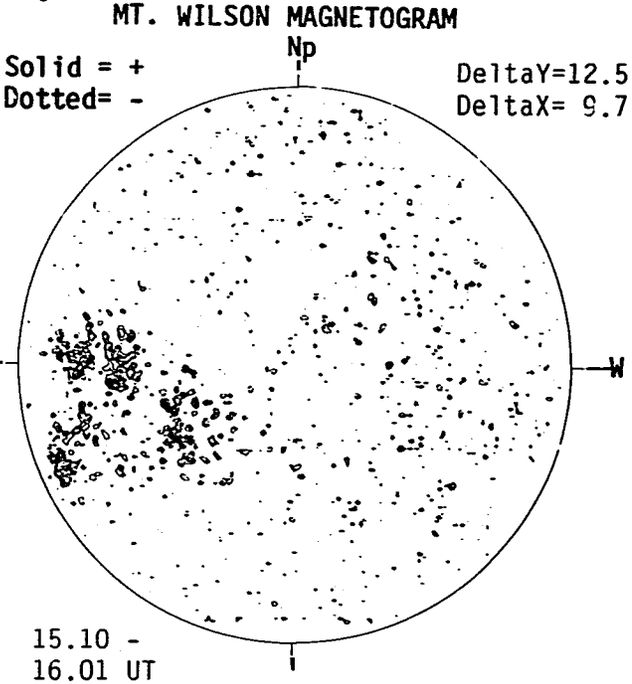
Solid = +
Dashed= -



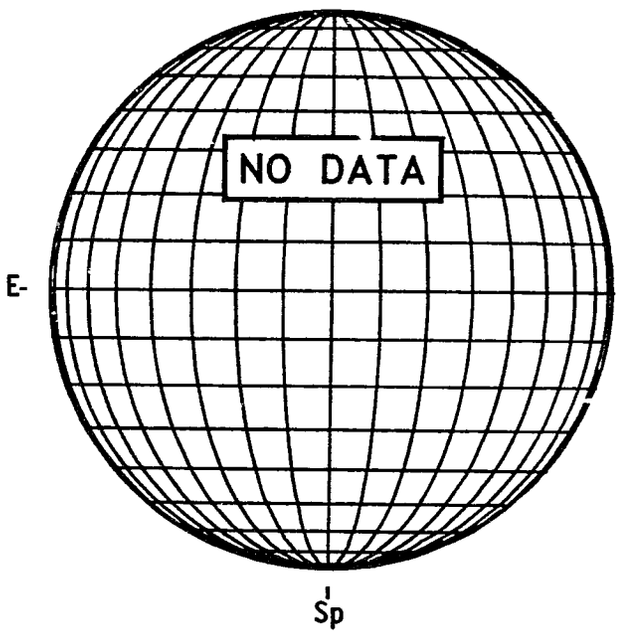
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

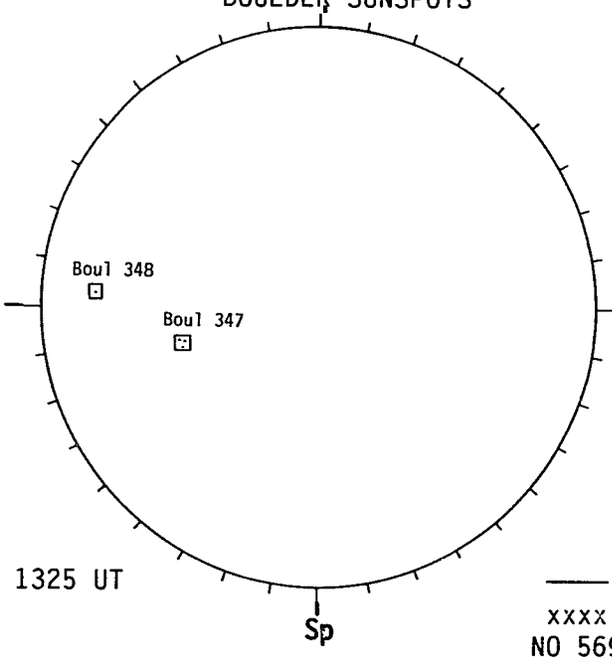
DeltaY=12.5
DeltaX= 9.7



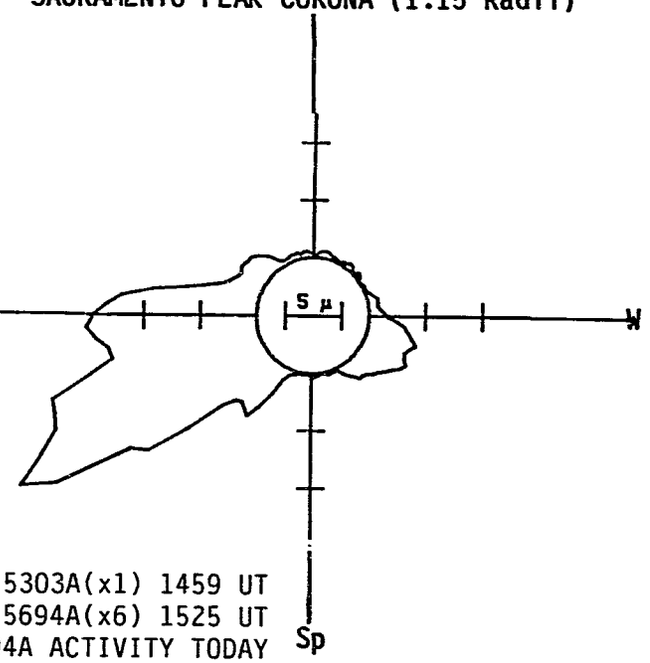
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



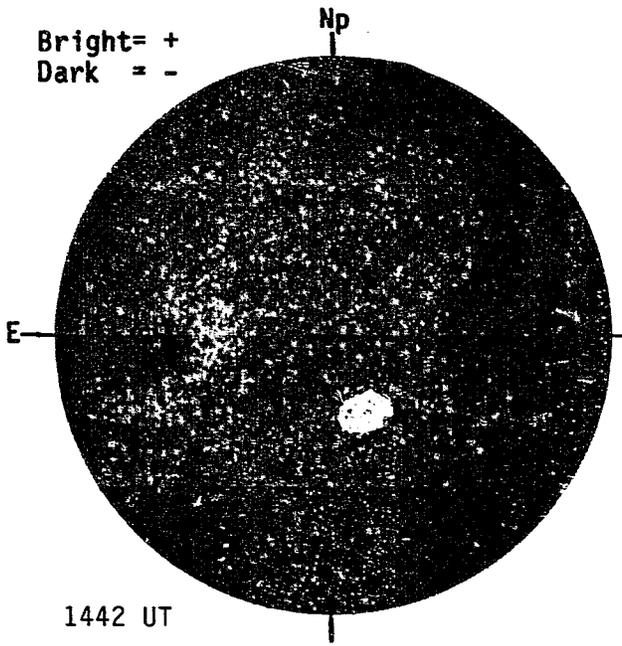
SACRAMENTO PEAK CORONA (1.15 Radii)



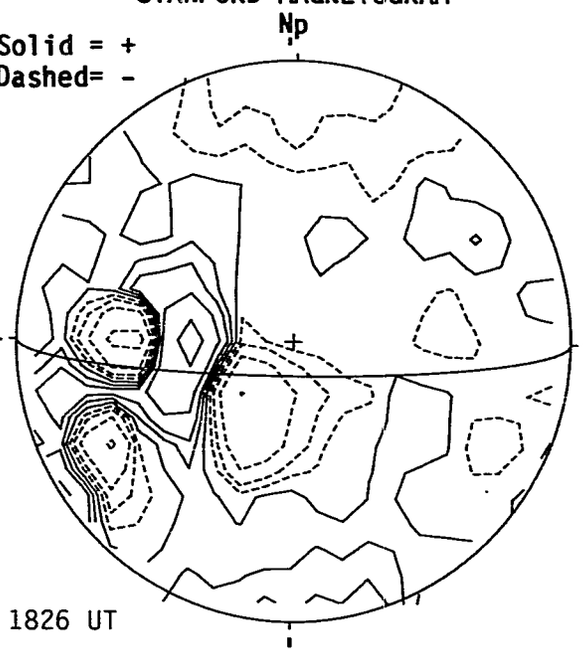
—— 5303A(x1) 1459 UT
xxxx 5694A(x6) 1525 UT
NO 5694A ACTIVITY TODAY

A U G U S T 26, 1 9 8 5 (P= 19.44, B_0= 6.96, L_0= 61.72)

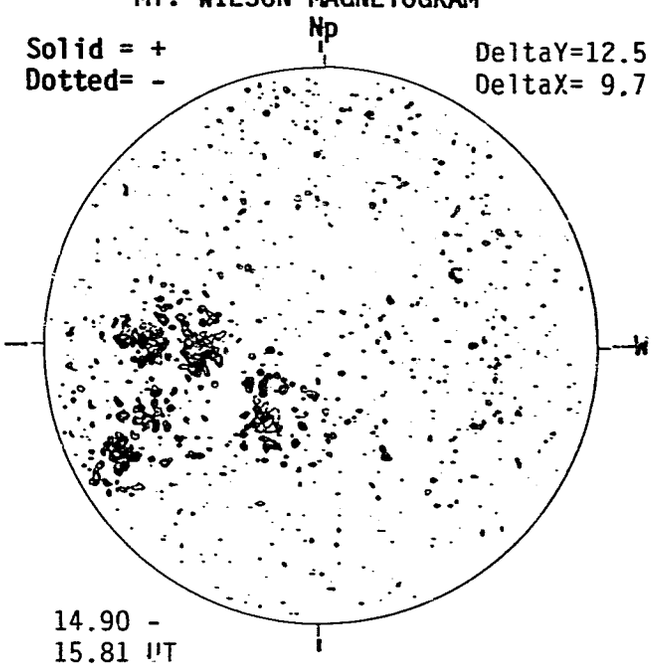
KITT PEAK MAGNETOGRAM



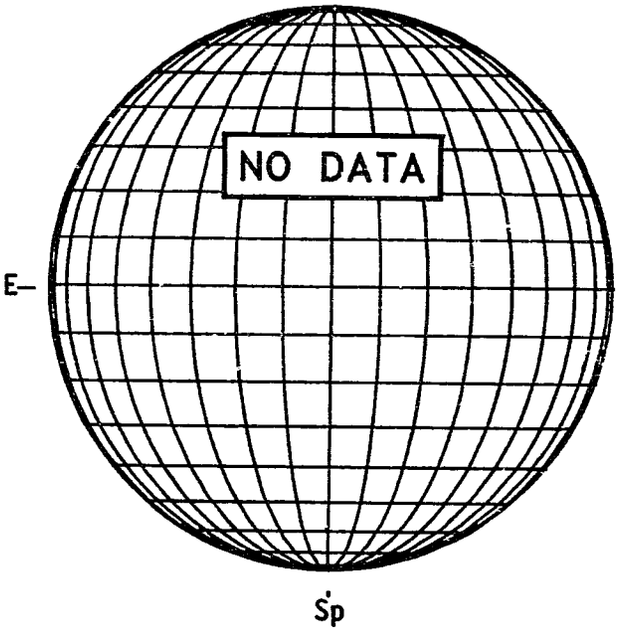
STANFORD MAGNETOGRAM



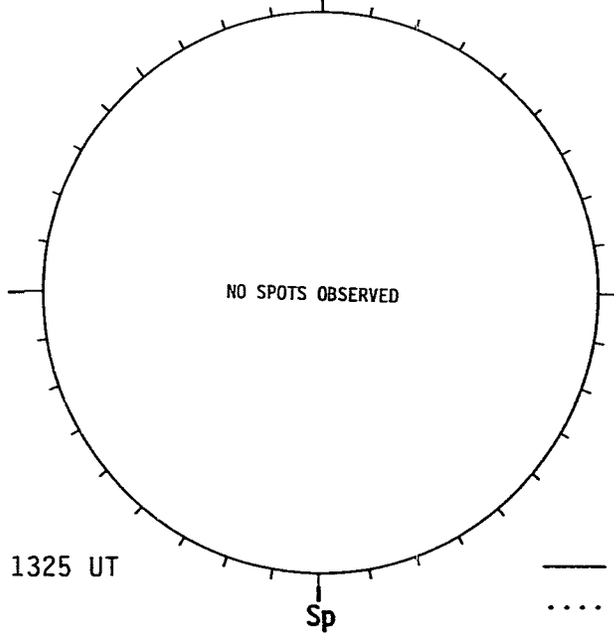
MT. WILSON MAGNETOGRAM



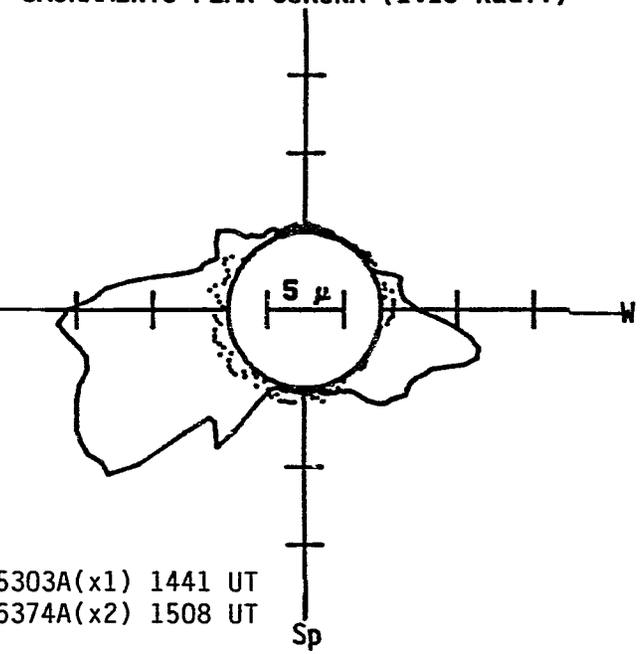
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

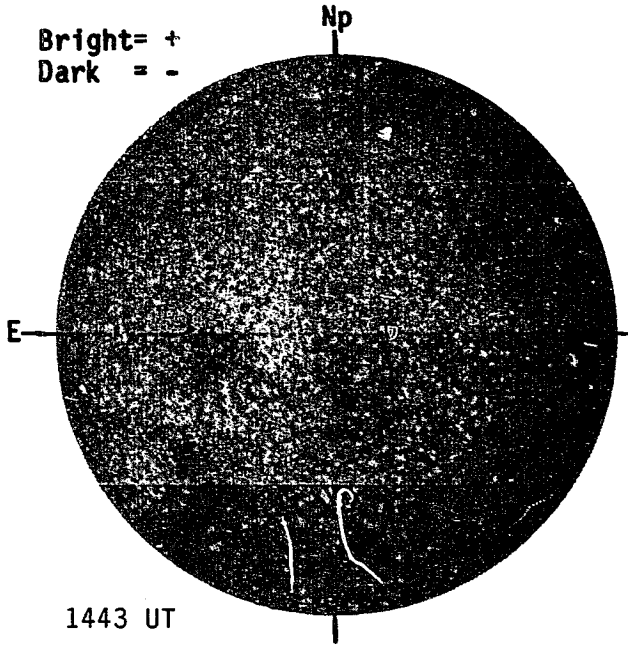


A U G U S T 27, 1 9 8 5 (P= 19.72, B_o= 6.98, L_o= 48.50)

52
Aug 85

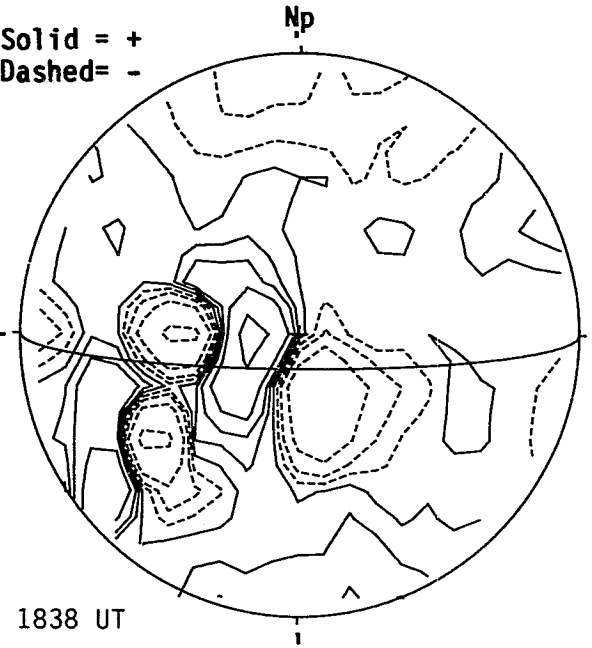
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

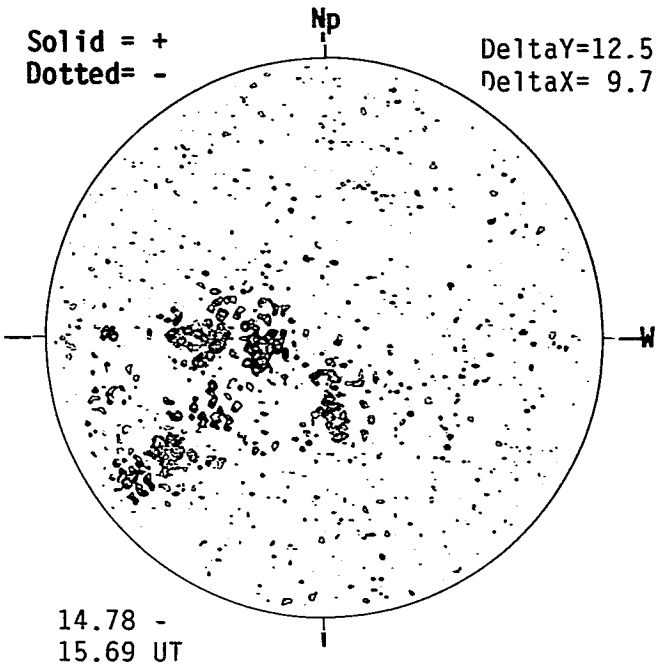
Solid = +
Dashed= -



MT. WILSON MAGNETOGRAM

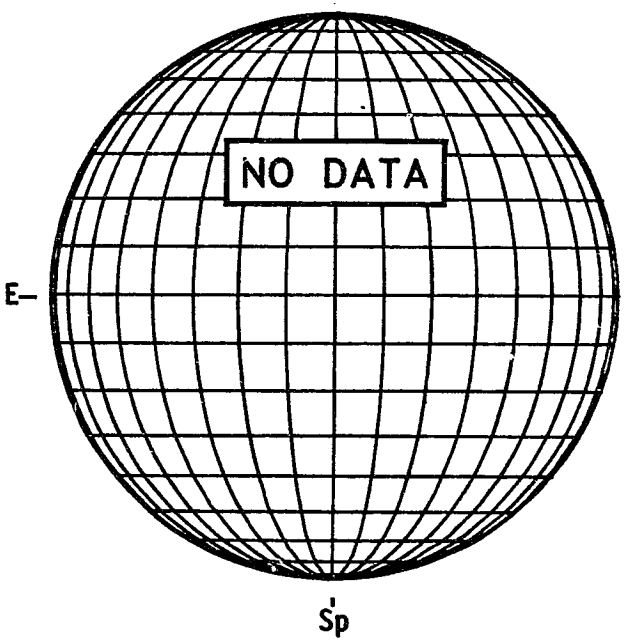
Solid = +
Dotted= -

DeltaY=12.5
DeltaX= 9.7

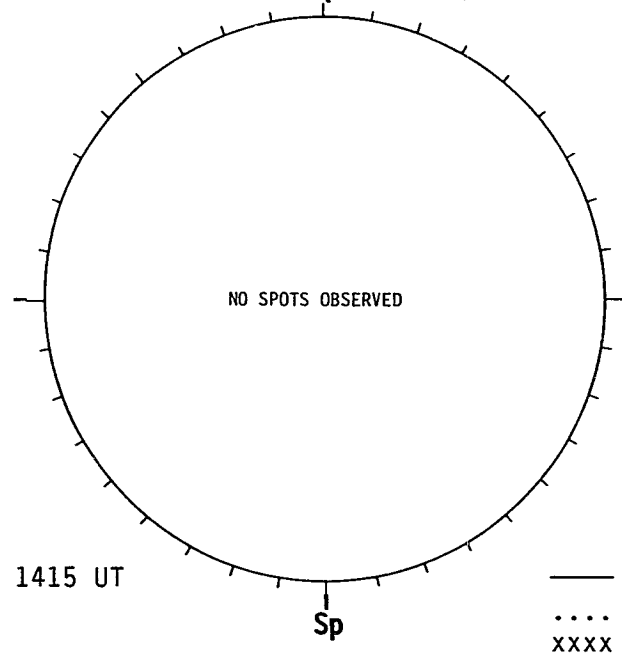


14.78 -
15.69 UT

SACRAMENTO PEAK H-ALPHA

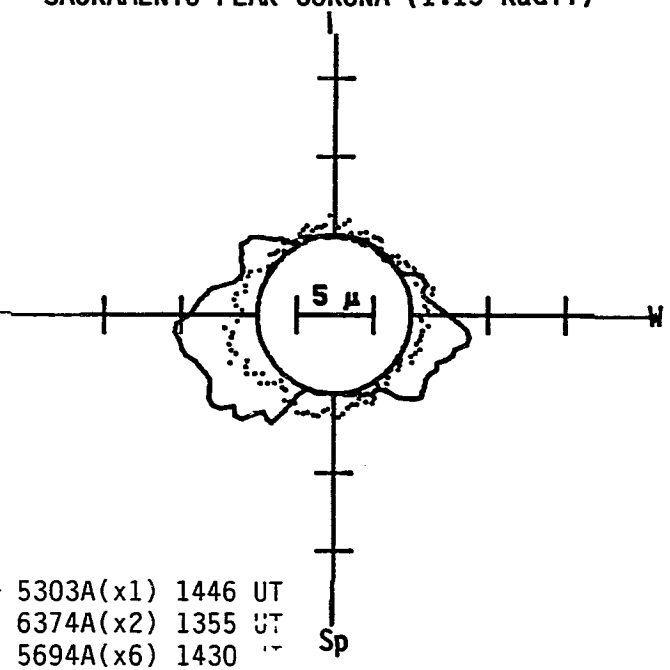


BOULDER SUNSPOTS



1415 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

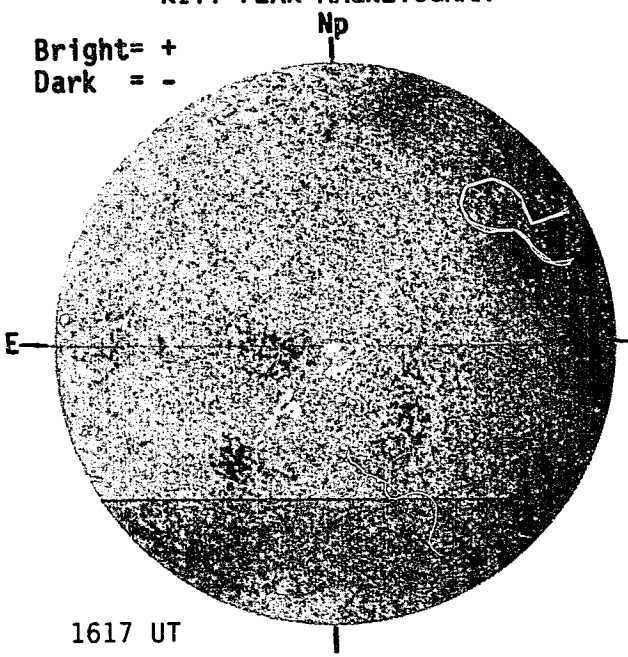


—— 5303A(x1) 1446 UT
.... 6374A(x2) 1355 UT
xxxx 5694A(x6) 1430 UT
NO 5694A ACTIVITY TOD

A U G U S T 28, 1 9 8 5 (P= 20.00, B_o= 7.01, L_o= 35.29)

KITT PEAK MAGNETOGRAM

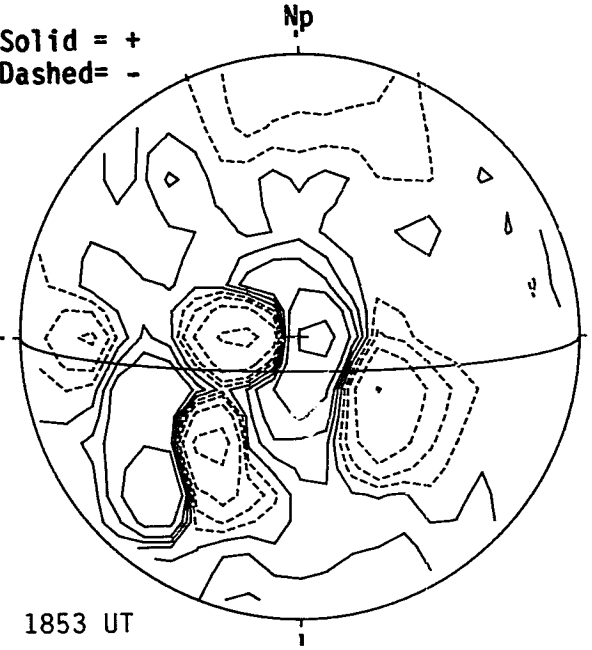
Bright= +
Dark = -



1617 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed= -

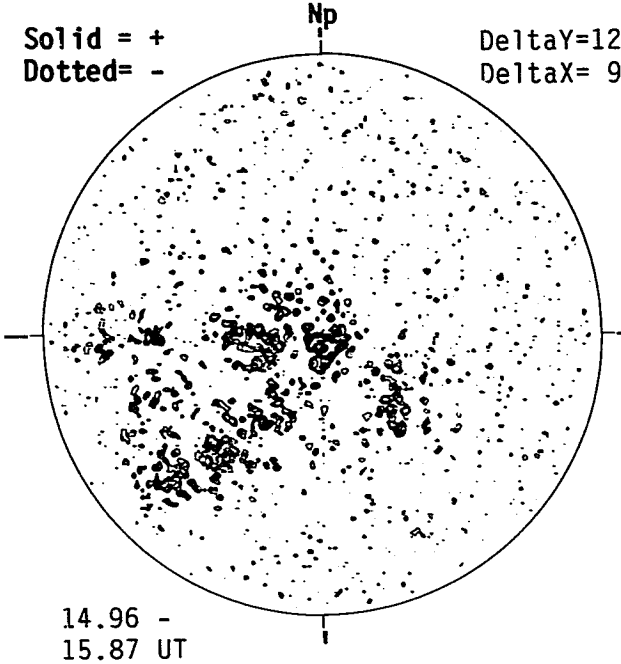


1853 UT

MT. WILSON MAGNETOGRAM

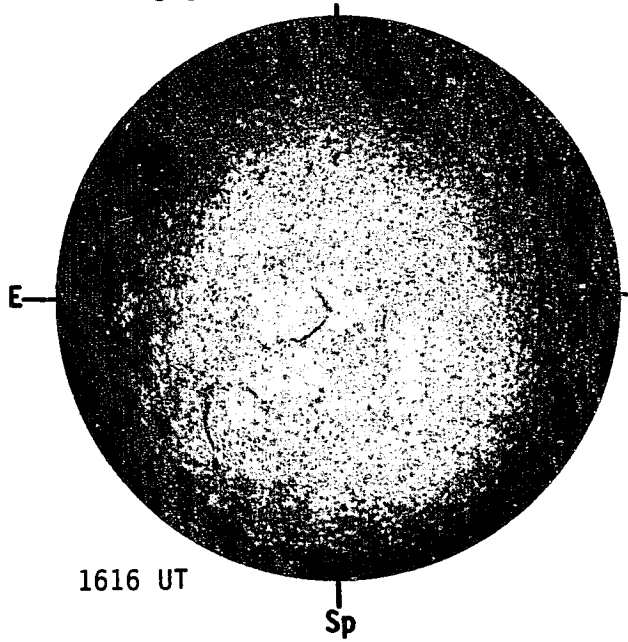
Solid = +
Dotted= -

DeltaY=12.5
DeltaX= 9.7



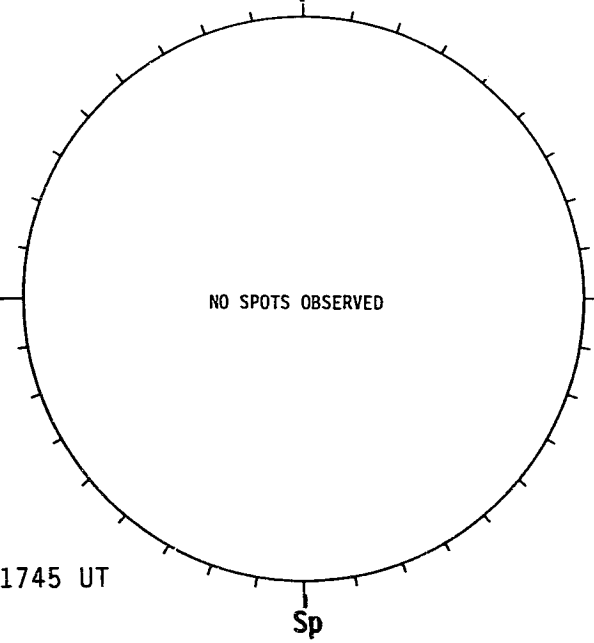
14.96 -
15.87 UT

SACRAMENTO PEAK H-ALPHA



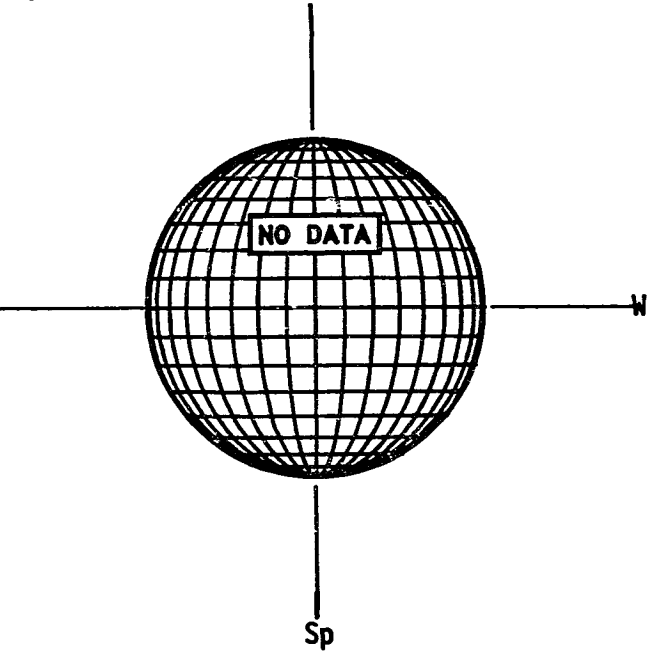
1616 UT

HOLLOMAN SUNSPOTS



1745 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

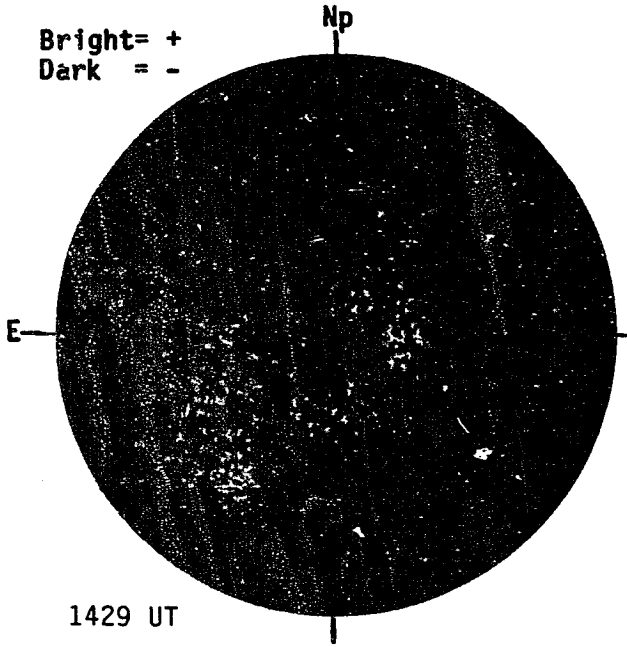


A U G U S T 29, 1 9 8 5 (P= 20.27, B_0= 7.03, L_0= 22.08)

54
Aug 85

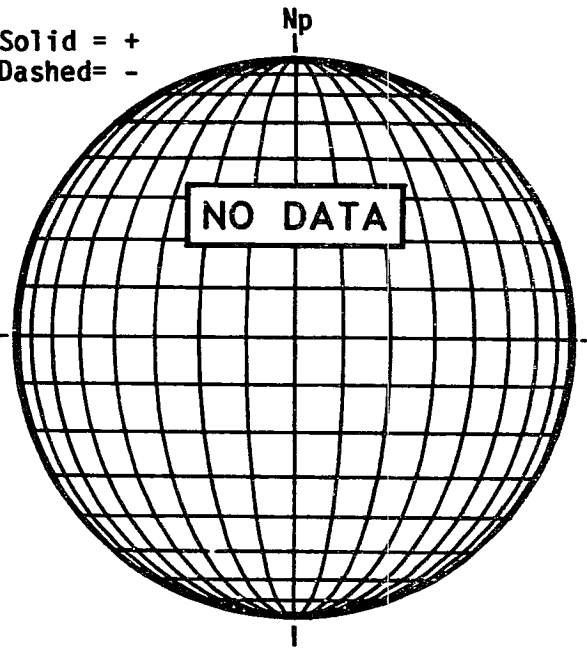
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

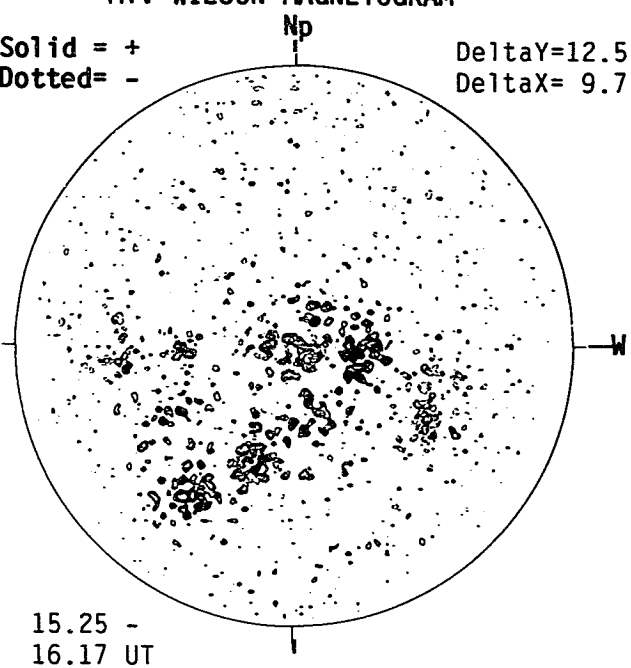
Solid = +
Dashed= -



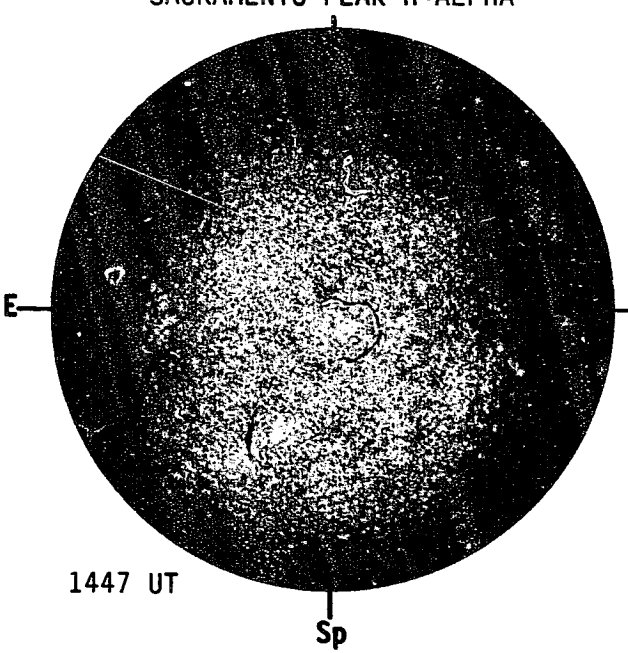
MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

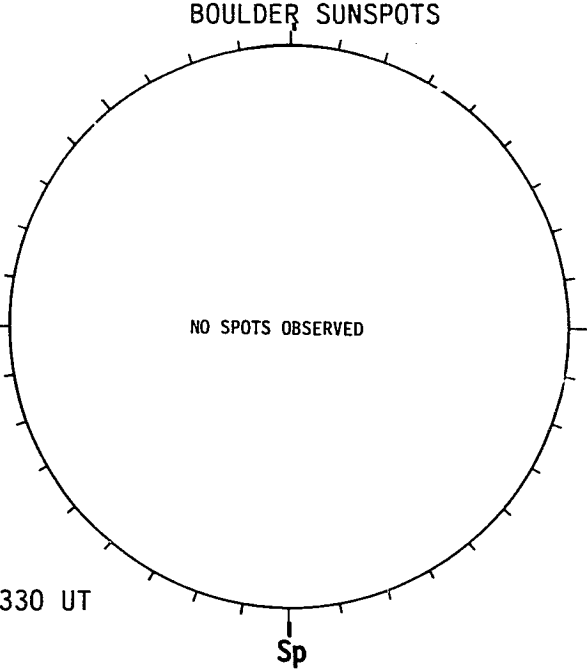
DeltaY=12.5
DeltaX= 9.7



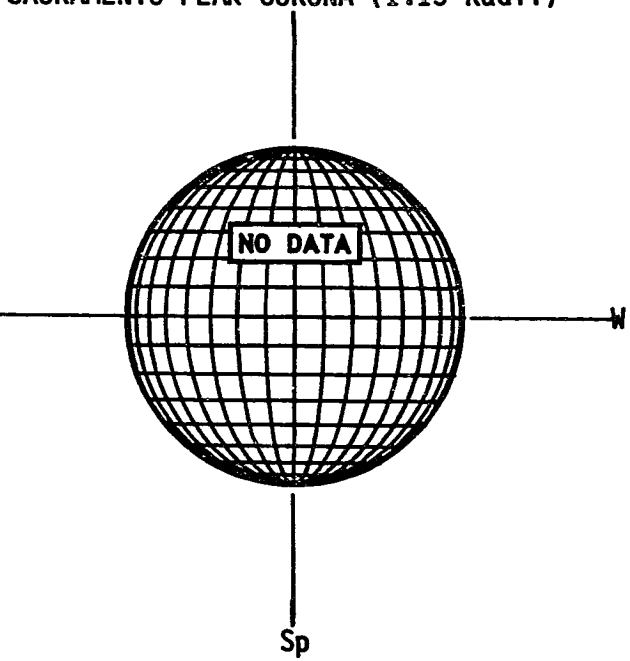
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS

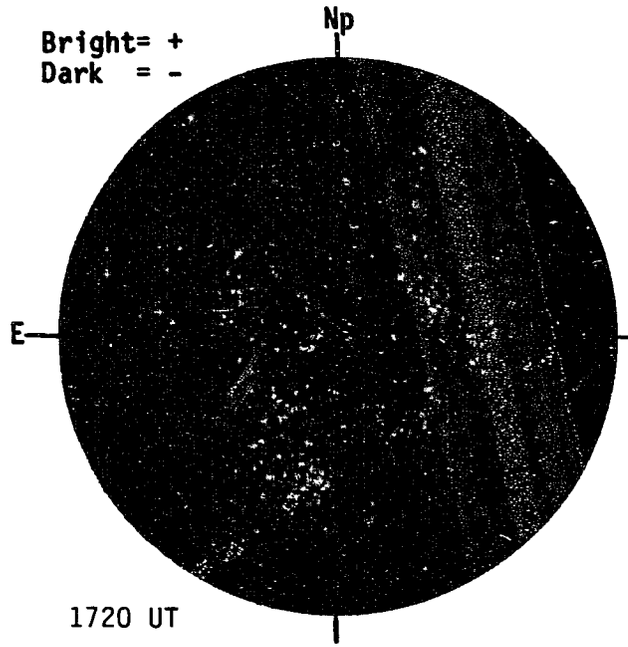


SACRAMENTO PEAK CORONA (1.15 Radii)

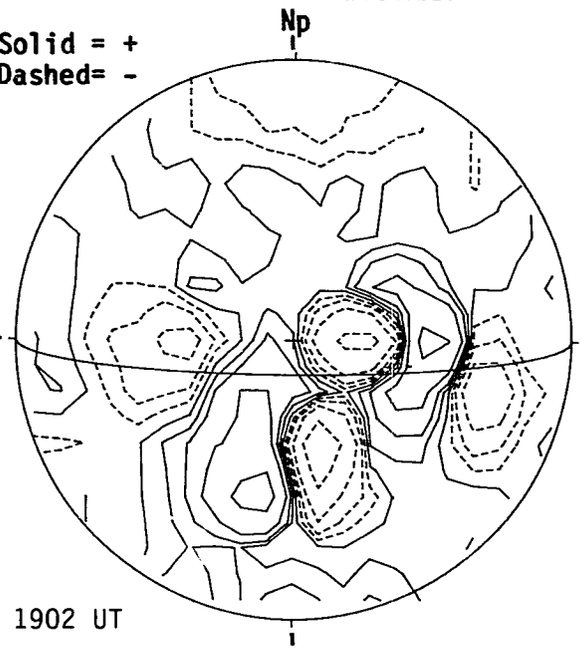


A U G U S T 30, 1 9 8 5 (P= 20.53, B_0= 7.05, L_0= 8.87)

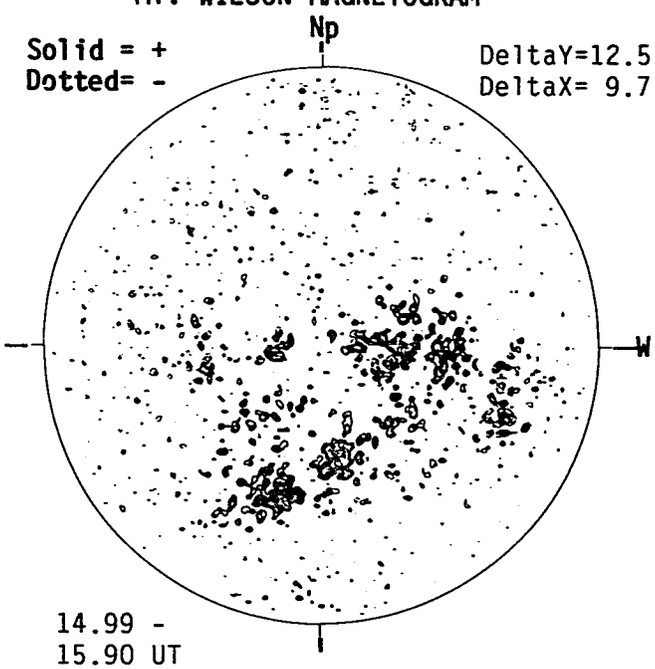
KITT PEAK MAGNETOGRAM



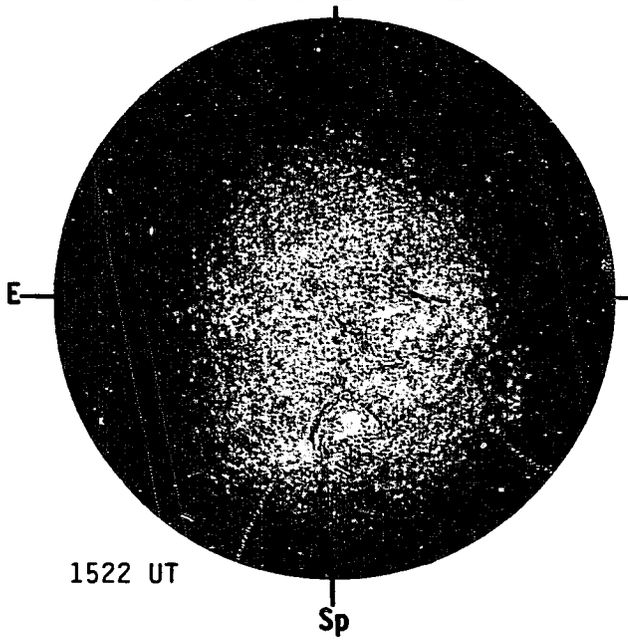
STANFORD MAGNETOGRAM



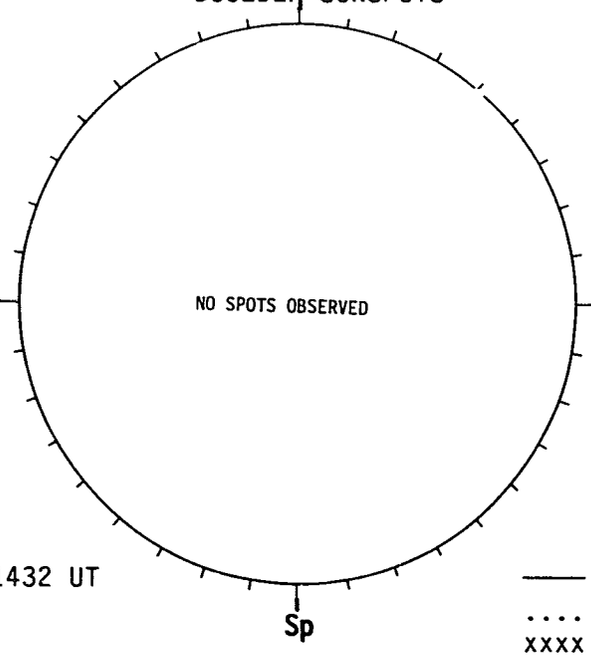
MT. WILSON MAGNETOGRAM



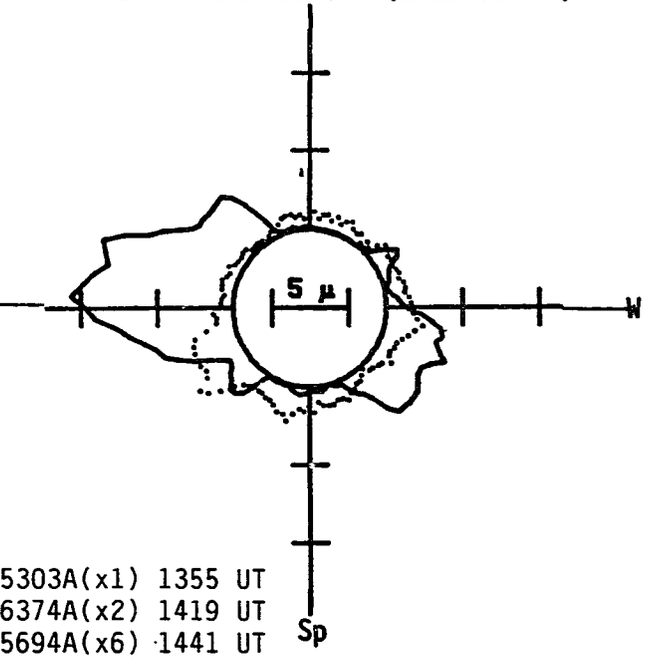
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

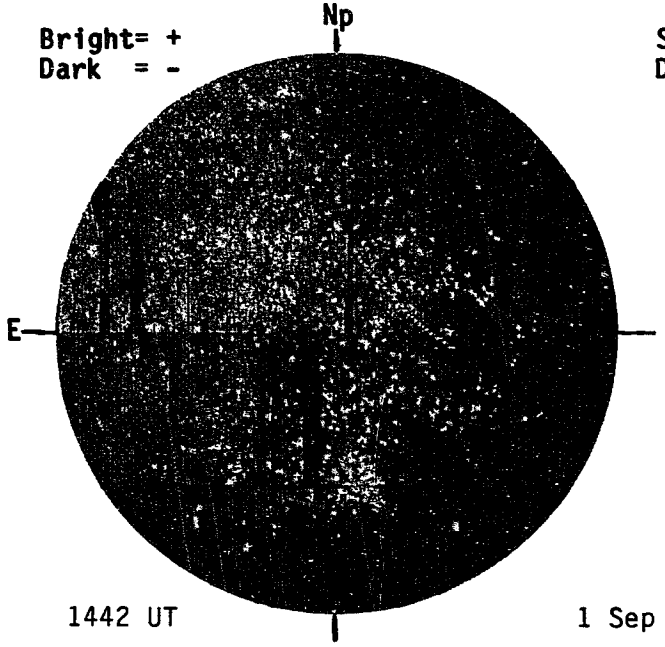


—— 5303A(x1) 1355 UT
.... 6374A(x2) 1419 UT
xxxx 5694A(x6) 1441 UT
NO 5694A ACTIVITY TODAY

A U G U S T 31, 1 9 8 5 (P= 20.79, B_0= 7.07, L_0= 355.66)

KITT PEAK MAGNETOGRAM

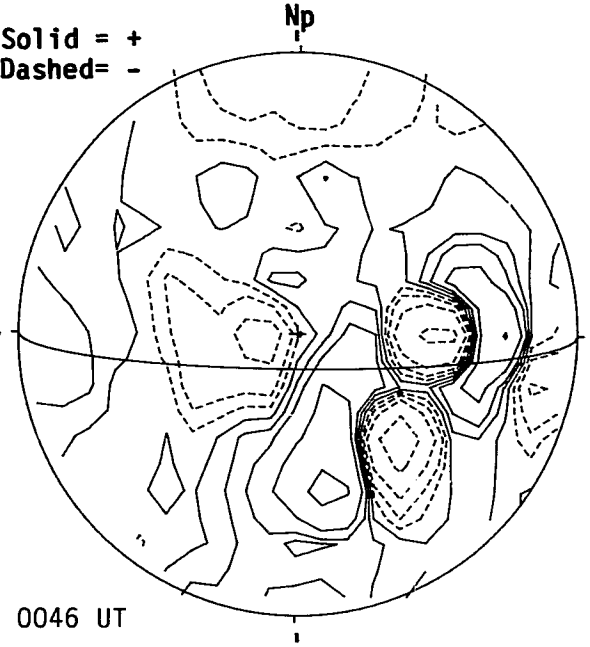
Bright= +
Dark = -



1442 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed= -

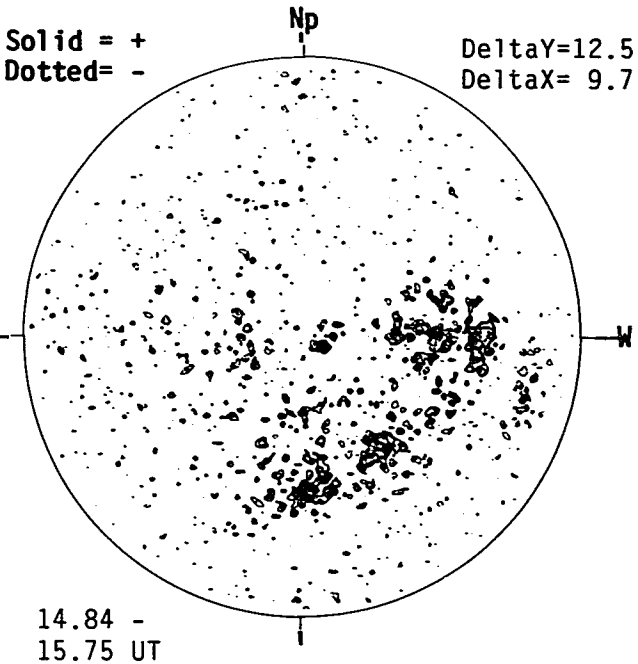


1 Sep 0046 UT

MT. WILSON MAGNETOGRAM

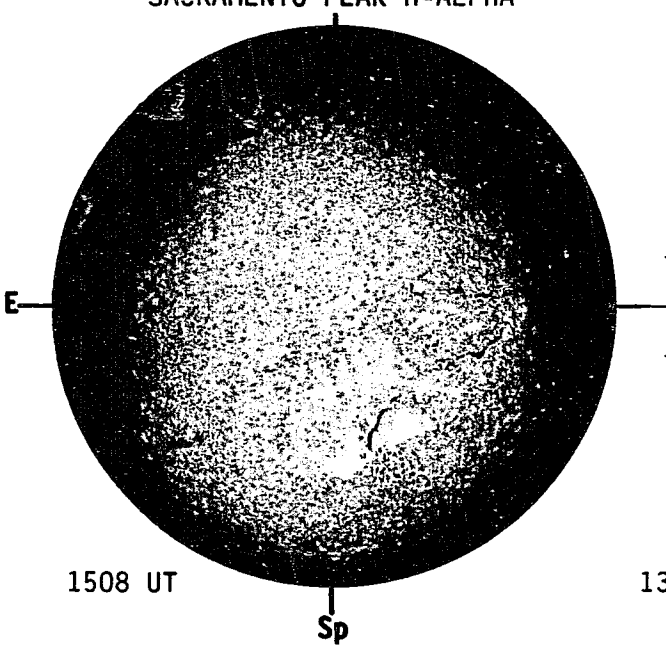
Solid = +
Dotted= -

DeltaY=12.5
DeltaX= 9.7



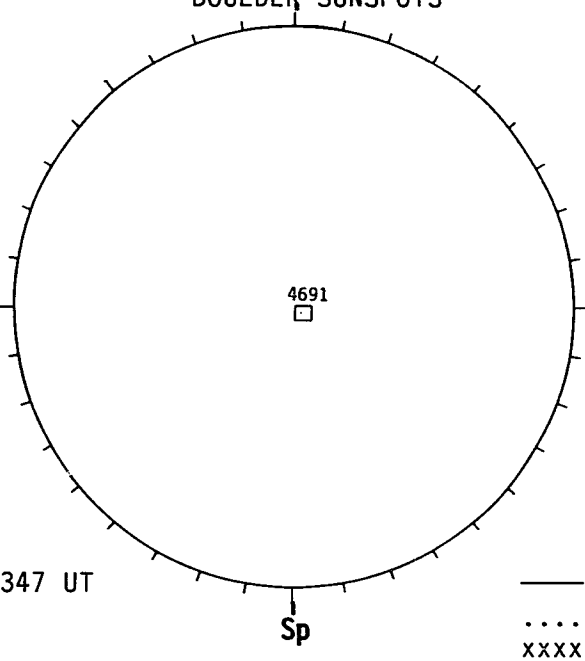
14.84 -
15.75 UT

SACRAMENTO PEAK H-ALPHA



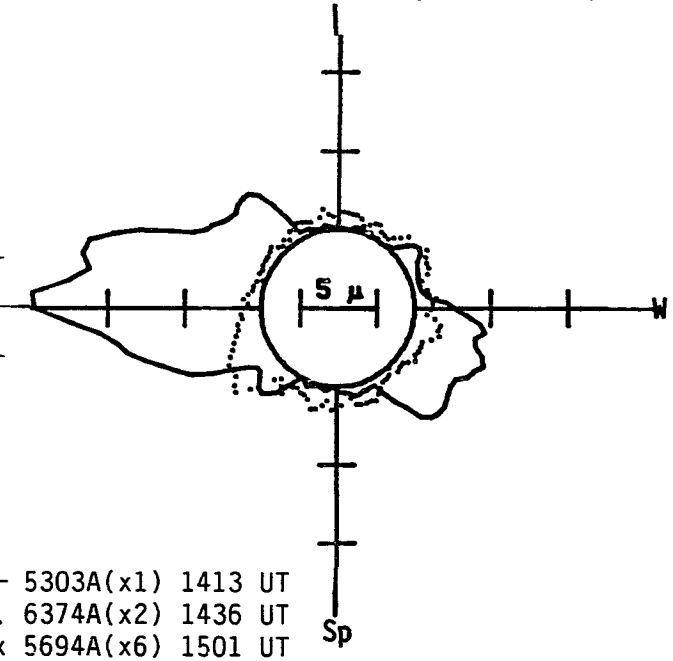
1508 UT

BOULDER SUNSPOTS



1347 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



—— 5303A(x1) 1413 UT
.... 6374A(x2) 1436 UT
xxxx 5694A(x6) 1501 UT
NO 5694A ACTIVITY TODAY

SUNSPOT GROUPS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

AUGUST 1985

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
4681	24257	MWIL	07	27	1415	S10	E70	08	1.9	4	(AP)					
4681		LEAR	07	28	0033	S11	E66	08	2.0		A	HXX	10	1		2
4681		ATHN	07	28	0645	S13	E61	08	1.9		A	AXX	10	1		3
4681		RAMY	07	28	1350	S10	E57	08	1.9		A	HSX		1	1	3
4681		BOUL	07	28	1415	S10	E54	08	1.7		A	AXX	90	1	1	2
4681	24257	MWIL	07	28	1500	S11	E57	08	1.9	4	(AP)					
4681		HOLL	07	28	1728	S10	E56	08	1.9		A	HSX		1	1	4
4681		PALE	07	28	1900	S10	E56	08	2.0		A	AXX	10	1		3
4681		LEAR	07	29	0025	S11	E52	08	1.9		A	AXX	10	1	1	2
4681		MANI	07	29	0157	S11	E51	08	1.9			AXX	10	1	1	2
4681		RAMY	07	29	1250	S11	E45	08	1.9		A	AXX	20	1	1	3
4681	24257	MWIL	07	29	1600	S11	E44	08	2.0	4	(AP)					
4681		PALE	07	29	1825	S11	E42	08	1.9		A	AXX	10	1		3
4681		LEAR	07	30	0013	S11	E38	08	1.9		A	AXX		1	1	2
4681		MANI	07	30	0128	S11	E37	08	1.8			AXX	10	1	1	2
4681		RAMY	08	01	1233	S13	E05	08	1.9		A	AXX		1		4
4681		RAMY	08	03	1340	S12	W21	08	2.0		A	AXX		1		3
4680	24256	MWIL	07	26	1445	N07	E86	08	2.1	2	AP					
4680		HOLL	07	26	1926	N07	E83	08	2.0		A	HAX	70	2	2	2
4680		PALE	07	26	1942	N06	E87	08	2.3		A	HKX	150	2	3	2
4680		LEAR	07	27	0037	N06	E79	08	1.9		B	CSO	20	3	4	3
4680		ATHN	07	27	0745	N06	E77	08	2.1		A	AXO	20	3	1	3
4680		RAMY	07	27	1327	N05	E72	08	1.9		B	DAO	20	3	3	4
4680	24256	MWIL	07	27	1415	N06	E73	08	2.1	5	(AP)					
4680		LEAR	07	28	0033	N06	E74	08	2.6		B	FSO	30	3	14	2
4680		ATHN	07	28	0645	N06	E69	08	2.4			CAO	60	4	17	3
4680		RAMY	07	28	1350	N07	E65	08	2.4		B	EAO	50	4	14	3
4680		BOUL	07	28	1415	N07	E62	08	2.2		B	CAO	140	3	14	2
4680	24256	MWIL	07	28	1500	N06	E60	08	2.1	4	(B)					
4680		HOLL	07	28	1728	N06	E62	08	2.4		B	ESO	80	7	14	4
4680		PALE	07	28	1900	N07	E62	08	2.4		B	EAO	100	4	14	3
4680		LEAR	07	29	0025	N07	E58	08	2.4		B	EAO	80	4	15	2
4680		MANI	07	29	0157	N07	E58	08	2.4			EAO	130	3	12	2
4680		ATHN	07	29	0530	N06	E53	08	2.2			EAO	120	4	14	1
4680		RAMY	07	29	1250	N07	E52	08	2.4		B	EAO	130	5	15	3
4680	24256	MWIL	07	29	1600	N06	E47	08	2.2	4	(BP)					
4680		PALE	07	29	1825	N06	E47	08	2.3		B	DAO	120	5	13	3
4680		LEAR	07	30	0013	N07	E45	08	2.4		B	FSO	70	11	17	2
4680		MANI	07	30	0128	N07	E44	08	2.4			FAO	110	13	16	2
4680		ATHN	07	30	0730	N06	E39	08	2.2			ESO	100	5	13	1
4680		RAMY	07	30	1217	N06	E37	08	2.3		BG	FAO	140	17	17	2
4680		BOUL	07	30	1300	N07	E37	08	2.3		B	FAI	70	9	16	2
4680	24256	MWIL	07	30	1500	N06	E34	08	2.2	5	(BG)					
4680		HOLL	07	30	1803	N07	E35	08	2.4		BG	FSO	80	15	16	3
4680		PALE	07	31	0050	N07	E27	08	2.1		B	DAO	110	12	10	3
4680		ATHN	07	31	0610	N07	E29	08	2.4			FSI	80	13	16	3
4680		LEAR	07	31	0750	N07	E23	08	2.0			DAO	80	24	10	1
4680		BOUL	07	31	1300	N07	E21	08	2.1		B	DSI	40	8	7	1
4680	24256	MWIL	07	31	1500	N06	E20	08	2.1	5	(BG)					
4680		HOLL	07	31	1707	N07	E21	08	2.3		B	FSO	40	8	16	3
4680		MANI	07	31	2330	N07	E17	08	2.3			DRO	70	9	9	2
4680		LEAR	08	01	0017	N06	E17	08	2.3		B	FSO	110	20	17	4
4680		ATHN	08	01	0600	N05	E14	08	2.3			ESI	70	12	12	3
4680		RAMY	08	01	1233	N07	E07	08	2.0		BG	CAO	70	14	9	4
4680	24256	MWIL	08	01	1445	N06	E04	08	1.9	5	(BG)					
4680		HOLL	08	01	1620	N06	E05	08	2.1		B	CSO	60	12	9	3
4680		LEAR	08	02	0055	N06	W01	08	2.0		B	CRO	30	11	9	3
4680		ATHN	08	02	0930	N06	W06	08	1.9			CSO	40	2	3	1
4680		RAMY	08	02	1258	N06	W10	08	1.8		B	CAO	20	2	1	3
4680		BOUL	08	02	1300	N07	W06	08	2.1		B	CAO	10	3	4	3
4680	24256	MWIL	08	02	1500	N06	W04	08	2.3	4	(B)					
4680		HOLL	08	02	1600	N07	W08	08	2.1		B	CRO	40	7	6	3
4680		PALE	08	02	1916	N07	W12	08	1.9		B	CRO	20	6	6	3
4680		LEAR	08	03	0035	N06	W15	08	1.9		B	CRO	10	3	3	3
4680		ATHN	08	03	0615	N08	W19	08	1.8			CRO	30	4	2	2
4680		RAMY	08	03	1340	N06	W23	08	1.8		B	CRO	30	5	3	3
4680	24256	MWIL	08	03	1515	N06	W24	08	1.8	3	(AP)					
4680		HOLL	08	03	1533	N06	W24	08	1.9		B	BXO	10	4	3	3
4680		PALE	08	03	2020	N07	W26	08	1.9		B	BXO	10	5	3	3
4680		LEAR	08	04	0128	N06	W30	08	1.8		B	BXO	10	3	3	2

SUNSPOT GROUPS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

AUGUST 1985

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time Mo	Day	(UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
4680		MANI	08	04	0216	N06	W31	08	1.8			BXO	10	3	3	2
4680		ATHN	08	04	0730	N06	W30	08	2.1		B	BXO	10	2	3	3
4680		RAMY	08	04	1410	N05	W35	08	2.0		B	BXO	10	4	4	4
4680	24256	MWIL	08	04	1430	N06	W31	08	2.3	3	(B)					
4680		HOLL	08	04	1510	N06	W37	08	1.9		B	BXO	10	3	3	3
4680		PALE	08	04	1735	N07	W38	08	1.9		B	BXO	30	3	3	3
4680		ATHN	08	05	0715	N07	W43	08	2.1		B	BXO	10	2	2	2
4680		HOLL	08	05	1441	N06	W50	08	1.9		A	AXX		1	1	3
4680		RAMY	08	05	1452	N06	W49	08	2.0		A	AXX	10	2	1	3
4680	24256	MWIL	08	05	1500	N06	W42	08	2.5	4	(BP)					
4680		PALE	08	05	1815	N05	W46	08	2.3		B	BXO	10	5	16	2
4680		LEAR	08	06	0120	N06	W57	08	1.8		B	BXO	10	2	.4	3
4680		RAMY	08	07	1330	N02	W67	08	2.6		B	BXO	10	2	2	4
4680		HOLL	08	07	1430	N03	W69	08	2.4		B	BXO		3	3	3
4680	24256	MWIL	08	07	1515	N03	W69	08	2.5	3	(AP)					
4680A		PALE	07	31	0050	N07	E38	08	2.9		B	BXO	30	5	2	3
4680A		LEAR	07	31	0750	N08	E33	08	2.8			BXO	20	4	3	1
4680A		ATHN	08	04	0730	N05	W16	08	3.1		A	AXX	10	1		3
4680A		RAMY	08	04	1410	N06	W22	08	2.9		B	BXO	10	4	4	4
4680A		BOUL	08	04	1445	N06	W22	08	3.0		B	BXO	10	4	4	2
4680A		HOLL	08	04	1510	N07	W23	08	2.9		B	BXO	10	4	4	3
4682		ATHN	07	28	0645	S16	E78	08	3.2			BXO	50	5	3	3
4682		RAMY	07	28	1350	S14	E76	08	3.3		A	HKX	140	3	3	3
4682		BOUL	07	28	1415	S12	E69	08	2.8		A	HAX	20	2	2	2
4682	24260	MWIL	07	28	1500	S14	E76	08	3.4	5	(AP)					
4682		HOLL	07	28	1728	S14	E74	08	3.3		A	HKX	130	3	3	4
4682		PALE	07	28	1900	S13	E74	08	3.4		A	HKX	120	3	3	3
4682		LEAR	07	29	0025	S14	E69	08	3.2		A	HKX	60	1	3	2
4682		MANI	07	29	0157	S16	E67	08	3.2			HSX	90	2	2	2
4682		ATHN	07	29	0530	S15	E67	08	3.3			CAO	30	4	4	1
4682		RAMY	07	29	1250	S14	E64	08	3.4		B	CKO	140	4	5	3
4682	24260	MWIL	07	29	1600	S14	E61	08	3.3	4	(AP)					
4682		PALE	07	29	1825	S15	E61	08	3.4		B	CAO	150	3	2	3
4682		LEAR	07	30	0013	S13	E57	08	3.3		A	HHX	70	3	3	2
4682		MANI	07	30	0128	S13	E56	08	3.3			HHX	90	3	3	2
4682		ATHN	07	30	0730	S15	E51	08	3.2			HKX	120	1	3	1
4682		RAMY	07	30	1217	S13	E48	08	3.1		A	HKX	150	3	3	2
4682		BOUL	07	30	1300	S12	E48	08	3.2		A	HAX	150	2	2	2
4682	24260	MWIL	07	30	1500	S14	E48	08	3.3	5	(AP)					
4682		HOLL	07	30	1803	S13	E47	08	3.3		A	HAX	150	1	2	3
4682		PALE	07	31	0050	S14	E43	08	3.3		B	CKO	150	4	4	3
4682		ATHN	07	31	0610	S14	E37	08	3.1			HKX	160	2	3	3
4682		LEAR	07	31	0750	S14	E38	08	3.2			HKX	120	7	3	1
4682		BOUL	07	31	1300	S12	E36	08	3.3		B	CSI	130	2	2	1
4682	24260	MWIL	07	31	1500	S14	E35	08	3.3	5	(AP)					
4682		HOLL	07	31	1707	S13	E34	08	3.3		B	CAO	110	5	5	3
4682		MANI	07	31	2330	S13	E30	08	3.2			CHO	60	4	3	2
4682		LEAR	08	01	0017	S14	E28	08	3.1		B	CSO	110	7	3	4
4682		ATHN	08	01	0600	S15	E24	08	3.1			HAX	60	3	2	3
4682		RAMY	08	01	1233	S15	E23	08	3.3		B	CAO	150	7	3	4
4682	24260	MWIL	08	01	1445	S14	E22	08	3.3	5	(AP)					
4682		HOLL	08	01	1620	S15	E22	08	3.3		B	CHO	80	5	3	3
4682		LEAR	08	02	0055	S14	E16	08	3.2		B	CAO	70	7	3	3
4682		ATHN	08	02	0930	S15	E11	08	3.2			HAX	80	1	2	1
4682		RAMY	08	02	1258	S15	E10	08	3.3		B	CAO	130	5	4	3
4682		BOUL	08	02	1300	S12	E11	08	3.4		B	CSI	110	5	4	3
4682	24260	MWIL	08	02	1500	S14	E08	08	3.2	5	(AP)					
4682		HOLL	08	02	1600	S14	E07	08	3.2		B	CHO	100	4	3	3
4682		PALE	08	02	1916	S14	E06	08	3.3		B	CHO	90	4	4	3
4682		LEAR	08	03	0035	S14	E03	08	3.3		B	CAO	70	5	3	3
4682		ATHN	08	03	0615	S12	W02	08	3.1			CSO	80	4	2	2
4682		RAMY	08	03	1340	S15	E04	08	3.9		B	CAO	110	6	5	3
4682	24260	MWIL	08	03	1515	S15	W05	08	3.3	5	(AP)					
4682		HOLL	08	03	1533	S14	W05	08	3.3		B	CSO	110	6	4	3
4682		PALE	08	03	2020	S15	W06	08	3.4		B	CSO	70	6	4	3
4682		LEAR	08	04	0128	S15	W11	08	3.2		B	CSO	60	4	3	2
4682		MANI	08	04	0216	S14	W11	08	3.3			CSO	70	4	3	2
4682		ATHN	08	04	0730	S15	W12	08	3.4		B	DAO	80	4	3	3
4682		RAMY	08	04	1410	S15	W16	08	3.4		B	CAO	110	9	3	4

SUNSPOT GROUPS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

AUGUST 1985

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time Mo Day (UT)	Lat CMD	CMP Mo Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
4682	24260	MWIL	08 04 1430	S15 W17	08 3.3	5	(AP)					
4682		BOUL	08 04 1445	S13 W15	08 3.5		B	CSO	90	7	3	2
4682		HOLL	08 04 1510	S16 W17	08 3.3		B	CSO	70	7	3	3
4682		PALE	08 04 1735	S14 W19	08 3.3		B	CAO	110	5	3	3
4682		ATHN	08 05 0715	S15 W25	08 3.4		B	CSO	70	3	3	2
4682		BOUL	08 05 1335	S13 W28	08 3.5		B	CSO	60	2	2	1
4682		HOLL	08 05 1441	S15 W31	08 3.3		B	CSO	60	4	3	3
4682		RAMY	08 05 1452	S15 W31	08 3.3		B	CAO	90	3	2	3
4682	24260	MWIL	08 05 1500	S15 W32	08 3.2	5	(AP)					
4682		PALE	08 05 1815	S16 W33	08 3.3		B	CSO	70	5	4	2
4682		LEAR	08 06 0120	S15 W36	08 3.3		B	CSO	60	5	4	3
4682		ATHN	08 06 0630	S15 W39	08 3.3			CSO	60	2	2	2
4682		RAMY	08 06 1236	S15 W43	08 3.3		B	CSO	90	6	4	4
4682		BOUL	08 06 1315	S13 W39	08 3.6		B	CSO	30	3	3	1
4682		HOLL	08 06 1430	S14 W44	08 3.3		B	CSO	80	5	5	3
4682	24260	MWIL	08 06 1500	S15 W45	08 3.2	5	(BF)					
4682		PALE	08 06 1955	S16 W48	08 3.2		B	CSO	60	5	3	3
4682		MANI	08 06 2315	S16 W50	08 3.2			CSO	50	4	3	2
4682		LEAR	08 07 0317	S15 W51	08 3.3		B	CSO	40	3	2	3
4682		BOUL	08 07 1255	S14 W54	08 3.5		B	CSO	50	2	2	2
4682		RAMY	08 07 1330	S15 W58	08 3.2		B	CAO	40	6	4	4
4682		HOLL	08 07 1430	S15 W58	08 3.2		B	CSO	30	5	3	3
4682	24260	MWIL	08 07 1515	S15 W57	08 3.3	5	(BF)					
4682		PALE	08 07 2021	S14 W63	08 3.1		B	CAO	50	3	3	2
4682		MANI	08 08 0137	S15 W65	08 3.1			CSO	50	2	3	3
4682		LEAR	08 08 0221	S15 W66	08 3.1		B	CSO	30	3	4	4
4682		ATHN	08 08 0505	S15 W65	08 3.3			CSO	50	2	2	2
4682		BOUL	08 08 1335	S15 W69	08 3.3		B	CSO	50	2	2	3
4682		RAMY	08 08 1420	S15 W70	08 3.3		B	CAO	30	3	3	4
4682		HOLL	08 08 1433	S15 W71	08 3.2		B	CSO	50	2	3	3
4682	24260	MWIL	08 08 1445	S15 W71	08 3.2	4	(AP)					
4682		PALE	08 08 2115	S14 W75	08 3.2		A	HAX	40	1	2	2
4682		LEAR	08 09 0031	S15 W78	08 3.1		A	HSX	10	1		3
4682		ATHN	08 09 0715	S15 W79	08 3.3			AXX	50	1	1	3
4682A	24261	MWIL	07 31 1500	S19 E37	08 3.4	3	(AF)					
4682B		LEAR	08 06 0120	N04 E04	08 6.4		B	BXO	10	2	3	3
4682B		ATHN	08 06 0630	N03 W01	08 6.2			BXO	10	2	1	2
4682B		RAMY	08 06 1236	N03 W03	08 6.3		A	AXX		1		4
4682B	24262	MWIL	08 06 1500	N03 W04	08 6.3	3	(AF)					
4687		LEAR	08 08 0221	S03 E66	08 13.0		A	AXX	10	1	1	4
4687		RAMY	08 08 1420	S00 E61	08 13.2		B	BXO	10	2	1	4
4687		HOLL	08 08 1433	S01 E61	08 13.2		A	AXX		1	1	3
4687	24263	MWIL	08 08 1445	S02 E60	08 13.1	4	(AP)					
4687		PALE	08 08 2115	S02 E58	08 13.2		B	BXO	30	3	3	2
4687		LEAR	08 09 0031	S03 E55	08 13.1		B	BXO	10	4		3
4687		ATHN	08 09 0715	S02 E49	08 13.0		B	BXO	30	4	2	3
4687		BOUL	08 09 1400	N02 E48	08 13.2		B	CSO	30	6	2	2
4687		HOLL	08 09 1437	N00 E47	08 13.1		B	CRO	30	6	3	3
4687		RAMY	08 09 1440	S01 E47	08 13.1		B	DAO	40	6	4	3
4687	24263	MWIL	08 09 1500	S01 E47	08 13.1	4	(B)					
4687		PALE	08 09 1920	S02 E44	08 13.1		B	BXO	30	5	4	3
4687		LEAR	08 10 0016	S01 E41	08 13.1		B	CSO	20	5	2	2
4687		ATHN	08 10 0535	S01 E35	08 12.8			CSO	20	5	2	3
4687		RAMY	08 10 1322	S01 E33	08 13.0		B	CAO	20	3	3	4
4687	24263	MWIL	08 10 1445	S01 E32	08 13.0	5	(B)					
4687		HOLL	08 10 1605	N00 E32	08 13.1		B	CRO	20	2	3	3
4687		PALE	08 10 1915	S00 E31	08 13.1		A	AXX	10	1	1	3
4687		LEAR	08 11 0038	S06 E25	08 12.9		B	HSX	10	1	1	3
4687		ATHN	08 11 0745	S01 E24	08 13.1			AXX	20	1	1	1
4687		RAMY	08 11 1228	S00 E20	08 13.0		A	AXX	10	2	1	3
4687	24263	MWIL	08 11 1500	S00 E18	08 13.0	4	(AP)					
4687		HOLL	08 11 1942	N00 E17	08 13.1		A	AXX	10	1	1	2
4688		MANI	08 08 0137	N09 E77	08 13.8			AXX	20	1	1	3
4688		LEAR	08 08 0221	N09 E77	08 13.9		A	AXX	10	1	1	4
4688		BOUL	08 08 1335	N12 E68	08 13.7		A	AXX		1	1	3
4688		RAMY	08 08 1420	N11 E72	08 14.0		B	BXO	10	2	4	4
4688		HOLL	08 08 1433	N12 E70	08 13.9		A	AXX		1	1	3

SUNSPOT GROUPS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

AUGUST 1985

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time Mo Day (UT)	Lat CMD	CMP Mo Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
4688	24264	MWIL	08 08 1445	N11 E69	08 13.8	3	(AP)					
4688		PALE	08 08 2115	N11 E69	08 14.1		A	AXX	10	1		2
4688	24264	MWIL	08 09 1500	N11 E58	08 14.0	1	AP					
4688		RAMY	08 11 1228	N09 E29	08 13.7		A	AXX		1		3
4690		PALE	08 17 1830	S20 W15	08 16.6		A	AXX		1		3
4690	24267	MWIL	08 19 1445	S18 W40	08 16.6	3	(B)					
4690		BOUL	08 19 1605	S17 W39	08 16.7		B	BXO		2	3	3
4690		HOLL	08 19 1739	S18 W42	08 16.5		B	BXO	20	3	3	3
4690		LEAR	08 19 2328	S20 W44	08 16.6		B	BXO	20	2	5	2
4690		LEAR	08 20 0038	S18 W45	08 16.6		B	BXO	40	4	5	3
4690		ATHN	08 20 0530	S17 W47	08 16.7		B	BXO	40	3	5	3
4690		RAMY	08 20 1255	S17 W54	08 16.4		B	CAO	10	3	5	3
4690		BOUL	08 20 1330	S17 W53	08 16.5		A	AXX	10	1	1	2
4690	24267	MWIL	08 20 1500	S18 W54	08 16.5	3	(B)					
4690		PALE	08 20 2120	S18 W61	08 16.2		A	AXX		1		2
4690		HOLL	08 20 2130	S16 W59	08 16.4		A	AXX	10	2	1	2
4690	24267	MWIL	08 21 1530	S18 W68	08 16.5	2	(B)					
4689		PALE	08 17 1830	S11 W03	08 17.5		B	BXO	10	2	3	3
4689		HOLL	08 17 1856	S11 W04	08 17.5		B	BXO	10	2	3	3
4689		LEAR	08 18 0402	S11 W09	08 17.5		B	DSO	10	2	3	2
4689		ATHN	08 18 0520	S11 W11	08 17.4			BXO	10	?	3	3
4689		RAMY	08 18 1328	S12 W15	08 17.4		B	BXO	10	3	4	2
4689		HOLL	08 18 1425	S11 W15	08 17.5		B	BXO	10	3	4	3
4689	24266	MWIL	08 18 1500	S11 W15	08 17.5	3	(B)					
4689		PALE	08 18 1725	S11 W16	08 17.5		A	AXX		1		4
4689A	24265	MWIL	08 16 1500	N02 E57	08 20.9	3	(AP)					
4689B		LEAR	08 26 0252	S08 W31	08 23.8		B	BXO	10	2	2	3
4689C		BOUL	08 25 1325	S01 E29	08 27.7		B	BXO	10	3	2	2
4692		BOUL	08 25 1325	N08 E58	08 29.9		A	AXX		1	1	2
4692		RAMY	08 30 1611	N08 W09	08 30.0		A	AXX		1		4
4692		PALE	08 30 1830	N06 W09	08 30.1		A	AXX	10	1	1	3
4692		LEAR	08 31 0020	N07 W12	08 30.1		B	BXO	20	2	8	2
4692		ATHN	08 31 0700	N06 W17	08 30.0		A	AXX	10	1		2
4692		HOLL	08 31 1345	N07 W23	08 29.9		A	AXX		1		3
4691		LEAR	08 27 0204	N04 E56	08 31.3		A	AXX	10	1	1	2
4691		HOLL	08 27 1606	N05 E52	08 31.6		A	AXX	10	1		4
4691		RAMY	08 27 1704	06 E51	08 31.5		A	AXX	10	1		2
4691		PALE	08 27 1933	N06 E49	08 31.5		A	AXX	10	1		2
4691		LEAR	08 28 0056	N04 E45	08 31.4		A	AXX		1	1	3
4691		RAMY	08 29 1225	N06 E24	08 31.3		A	AXX		1		3
4691		HOLL	08 31 1345	N05 W04	08 31.3		B	BXO	10	3	3	3
4691		BOUL	08 31 1347	N07 W02	08 31.4		B	BXO	20	2	2	3
4691		RAMY	08 31 1417	N05 W05	08 31.2		B	BXO	10	5	3	3
4691		PALE	08 31 1725	N05 W06	08 31.3		B	BXO	10	3	3	3
4691		MANI	08 31 2245	N05 W10	08 31.2			AXX		1	1	3
4691		LEAR	09 01 0026	N05 W11	08 31.2		A	HXX		1	1	3

SUDDEN IONOSPHERIC DISTURBANCES

August 1985

Day	Start (UT)	Max (UT)	End (UT)	Imp	Wide-spread Index	Number of Station Reports by Type SWF	SEA	SPA	LF-SPA	SES	Known Flare	X-ray Class	NOAA/SESC Region
07	1507	1523	1540	1-	1		1				1453 UT		4682
08	0744	0751	0842	1+	5	2	2	1	2	3	0744 UT	C5.4	4682
09	0222	0228	0244	1-	1				1		No Flare		
15	1331	1336	1350	1-	1		1				No Flare		
26	2114	2115	2120	1	1	1					No Flare		
28	1402	1411	1439	1-	1		1				No Flare		

* No flare patrol

SIDs by NOAA/SESC REGION

August 1985

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Region Number 4682							1	1																							
X-Ray								1																							
No Flare									1						1												1		1		
No Flare Patrol																															
No Data																															
Event Totals							1	1	1						1												1		1		

OBSERVATORIES REPORTING FOR AUG 1985*

Ayrshire, Scotland (AY)	SES	Latrobe, Pennsylvania, USA (A19)	SES
Darmstadt, GFR (DA)	SWF	Lintong, China (LT)	SPA
Durban, South Africa (A58)	SES	Louisville, Kentucky, USA (A26)	SES
Edenvale, South Africa (A52)	SES	Maui, Hawaii, USA (MI)	SWF
Farsta, Sweden (FA)	SES	Panska Ves, Czechoslovakia (PU)	SEA, SWF, SES
Hiraiso, Japan (HI)	SWF	Paterson, New Jersey, USA (A46)	SES
Houston, Texas, USA (A50)	SES	St. Cloud, Minnesota, USA (SC)	SES
Huancayo, Peru (HU)	SWF	Tavares, Florida, USA (A49)	SES
Inubo, Japan (IN)	SPA	Tucson, Arizona, USA (A09)	SES
Juliusruh, GDR (JU)	SWF	Upice, Czechoslovakia (UI)	SEA
Kuhlungsborn, GDR (KU)	SPA, SEA	Valley Cottage, New York, USA (A01)	SES
Lake Hiawatha, New Jersey, USA (A32)	SES		

*Observations are not necessarily continuous for each reporting station.

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

AUGUST 1985

Day	Observation Start (UT)	Observation End (UT)	Sta	Decimetric Band Start (UT)	Decimetric Band End (UT)	Decimetric Band Int (1-3)	Metric Band Start (UT)	Metric Band End (UT)	Metric Band Int (1-3)	Dekametric Band Start (UT)	Dekametric Band End (UT)	Dekametric Band Int (1-3)	Spectral Type
01	0442	0823	WEIS										
	0450	1110	BLEN										
	0945	1830	WEIS										
02	0545	1831	WEIS										
	1031	1805	BLEN										
03	0442	1831	WEIS										
	0450	1805	BLEN										
			PALE				2157.6	2158.3	2				V
04	0443	1513	WEIS										
	0450	1805	BLEN										
05	0444	1827	WEIS										
	0450	1805	BLEN										
06	0445	1110	WEIS										
	0455	1805	BLEN										
	1119	1826	WEIS										
07			LEAR				0309.1	0309.8	1				III
	0448	1753	WEIS				1449.0	1449.5	1				IIIG
	0455	1627	BLEN	1449.4	1449.6	2	1449.4	1449.6	2				IIIGG,RS
			BLEN				1545.2	1547.0	3				IIIGG
			WEIS				1545.3	1545.6	2				IIIG
			PALE				1822.6	1823.1	1				V
			SGMR				1822.6	1823.1	1				V
08	0447	1821	WEIS				0745.4	0745.7	2				IIIG
			LEAR				0745.6	0752.0	2				III
09			LEAR				0406.6	0407.0	1				III
	0451	1112	WEIS										
			LEAR				0635.3	0636.1	1				III
	1133	1800	BLEN										
	1134	1821	WEIS										
10	0450	1745	WEIS										
	0500	1800	BLEN										
11	0451	1818	WEIS										
	0500	1800	BLEN										
12	0453	1135	WEIS										
	0500	1800	BLEN										
	1158	1817	WEIS										
13	0455	1815	WEIS										
	0500	1800	BLEN										
14	0454	1813	WEIS										
	0510	1750	BLEN										
15	0458	1812	WEIS										
	0510	0738	BLEN										
	0948	1750	BLEN										
16	0458	1517	WEIS										
	0510	1750	BLEN										
	1627	1809	WEIS										
			PALE				2009.3	2009.8	2				V
			PALE				2123.1	2125.1	2				V
17			PALE				0036.5	0037.1	1				V
	0501	1808	WEIS										
	0510	1750	BLEN										
18	0500	1807	WEIS										
	0515	1745	BLEN										
19	0503	1240	WEIS										

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

AUGUST 1985

Day	Observation Start (UT)	Observation End (UT)	Sta	Decimetric Band Start (UT)	Decimetric Band End (UT)	Decimetric Band Int (1-3)	Metric Band Start (UT)	Metric Band End (UT)	Metric Band Int (1-3)	Dekametric Band Start (UT)	Dekametric Band End (UT)	Dekametric Band Int (1-3)	Spectral Type
19	0515	1745	BLEN										
	1624	1805	WEIS										
			SGMR				1800.6	1810.3	1				G
20	0515	1745	BLEN										
21	1254	1801	WEIS										
	1415	1740	BLEN										
			PALE				2037.3	2038.8	2				V
22	0505	1422	WEIS										
	0520	1740	BLEN										
			SGMR				1409.8	1415.3	1				V
	1445	1759	WEIS										
23	0508	1758	WEIS										
	0520	1740	BLEN										
24	0508	0708	WEIS										
	0520	1740	BLEN										
	0713	1755	WEIS										
25	0510	1754	WEIS										
	0525	1735	BLEN										
26	0510	1752	WEIS										
	0525	1735	BLEN										
27	0512	1750	WEIS										
	0525	1053	BLEN										
28	0513	1233	WEIS										
	1009	1730	BLEN										
	1239	1748	WEIS										
29	0516	1746	WEIS										
	0530	1350	BLEN										
30	0515	0723	WEIS										
	0759	1748	WEIS										
			SGMR				2200.3	2201.1	1				V
			SGMR				2223.3	2224.1	1				V
31	0518	1534	WEIS										
	1558	1743	WEIS										

The symbols used under the column heading SPECTRAL TYPE have the following definitions:

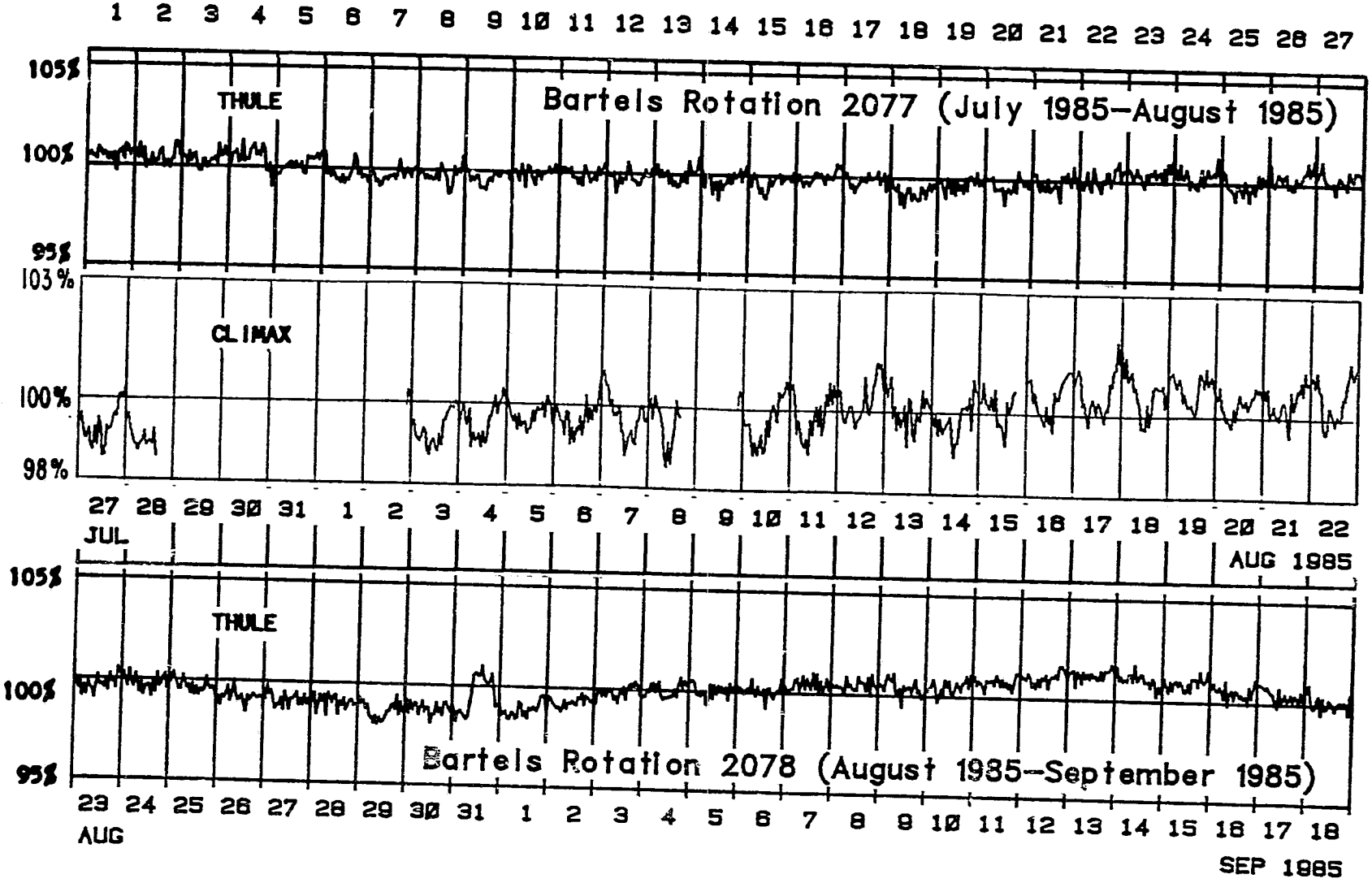
B = Single burst
G = Small group (< 10) of bursts
GG = Large group (> 10) of burst
C = Underlying continuum (particularly with Type I)
S = Storm in the sense of intermittent but apparently connected activity
N = Intermittent activity in this period
U = U-shaped burst of Type III

RS = Reverse slope burst
DP = Drifting pairs
DC = Drifting Chains
H = Herringbone
W = Weak
P = Pulsations
CONT = Continuum
UNCLF = Unclassified activity
DCIM = Fast drift

Stations Reporting:

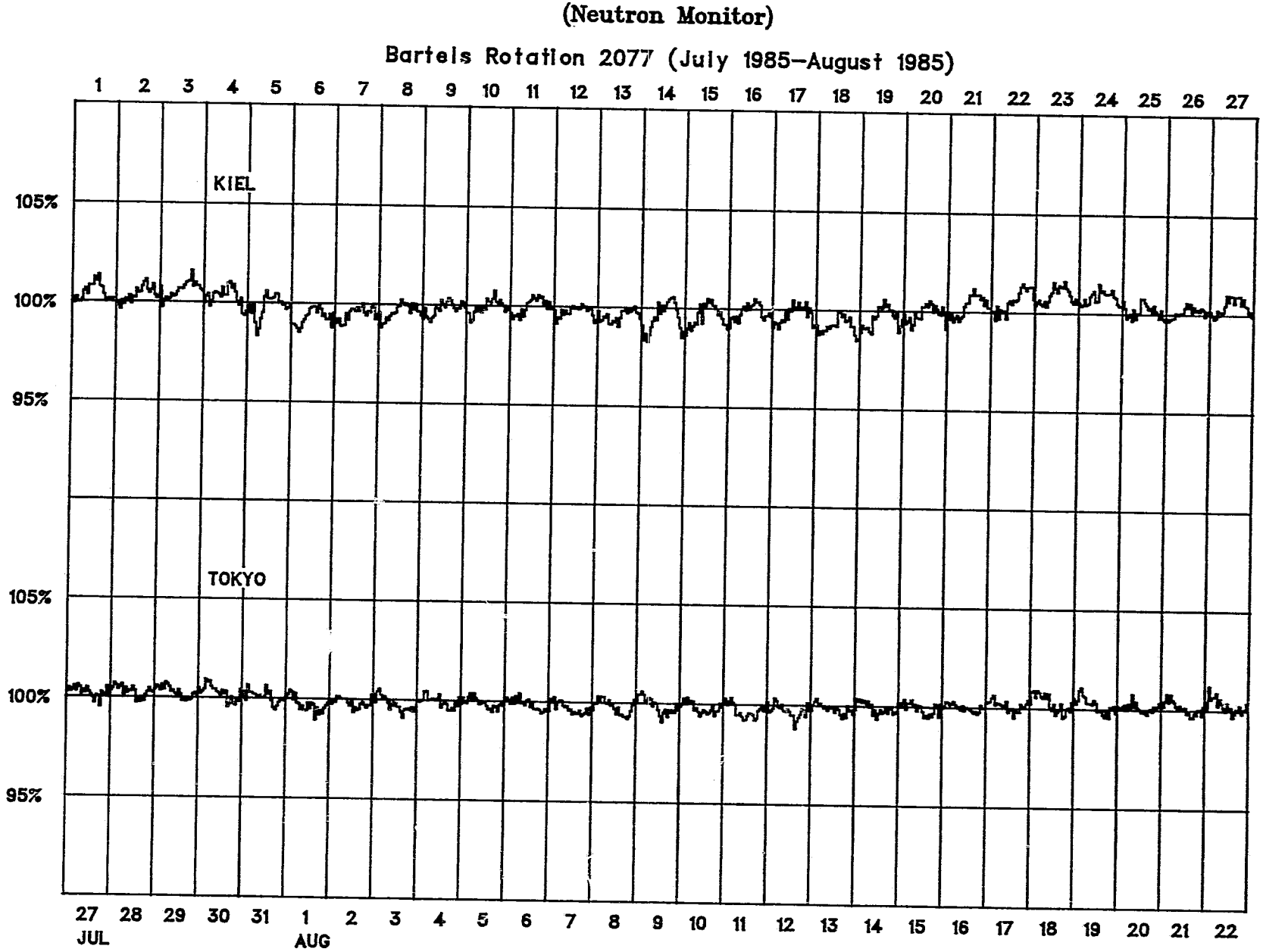
BLEN = Bleien LEAR = Learmonth PALE = Palehua SGMR = Sagamore Hill WEIS = Weisseneau

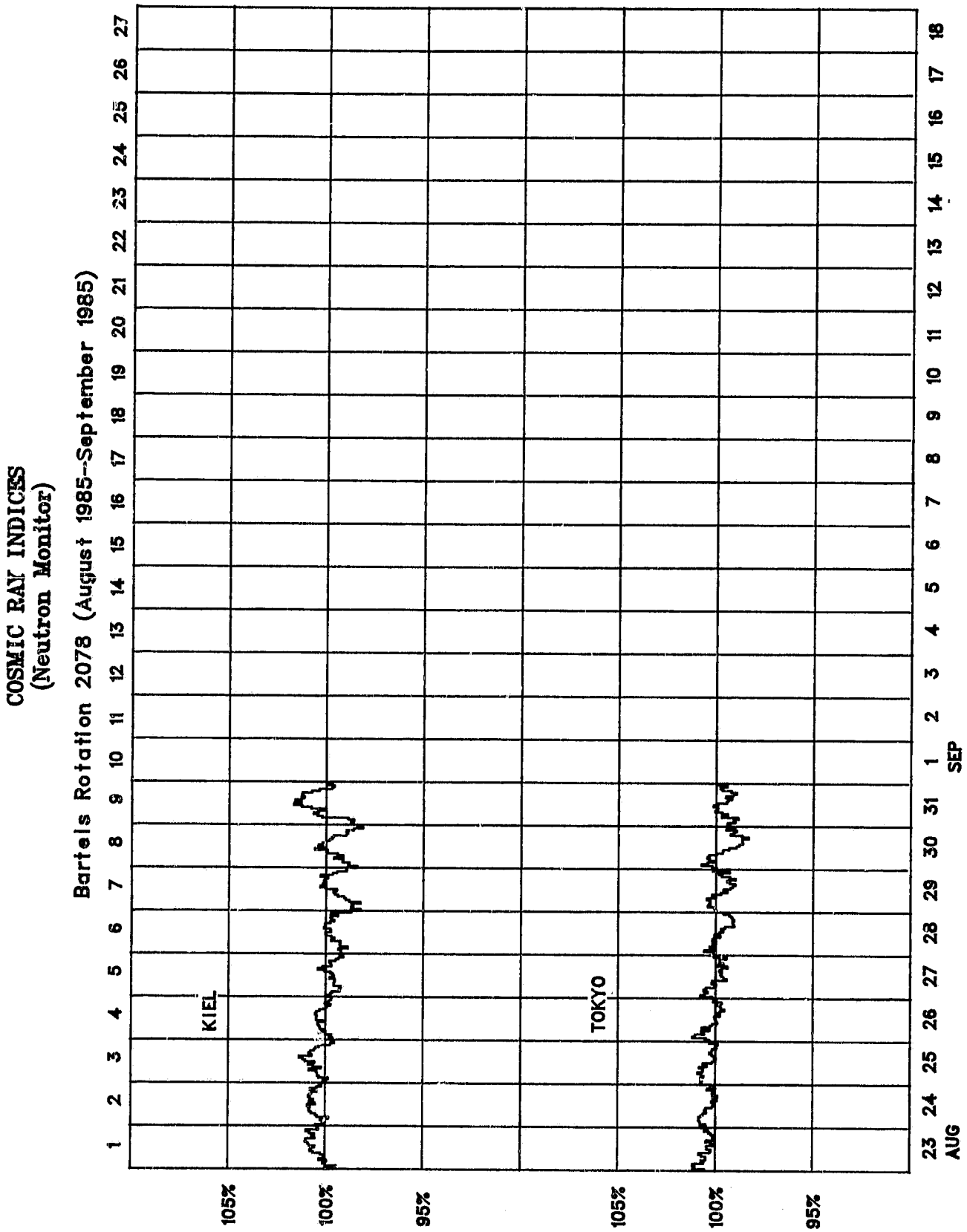
COSMIC RAY INDICES
(Neutron Monitor)



COSMIC RAY INDICES
(Neutron Monitor)

Bartels Rotation 2077 (July 1985–August 1985)




COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2078 (August 1985--September 1985)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
KIEL
TOKYO
105%
100%
95%
105%
100%
95%
23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
AUG
SEP

COSMIC RAY INDICES
(Neutron Monitor)

August 1985

Day	THULE Average (cts/h)/100	ALERT Average (cts/h)/100	DEEP RIVER Average (cts/h)/300	KIEL Average (cts/h)/100	CLIMAX Average (cts/h)/100	PRFDIGTSTUHL Average (cts/h)/100	TOKYO Average (cts/h)/256	HUANCAYO Average (cts/h)/100
1	4390			6094.9	---	1212	3612.3	
2	4387			6106.6	4027.7(6)	1212	3616.4	
3	4390			6115.9	3996.8	1209	3615.2	
4	4385			6126.9	4006.1	1208	3620.6	
5	4398			6133.8	4012.0	1209	3619.0	
6	4398			6137.8	4010.0	1209	3618.5	
7	4393			6122.5	4013.4	1211	3612.0	
8	4399			6112.2	4006.0(34)	1208	3615.2	
9	4390			6108.4	4033.7(6)	1210	3619.1	
10	4385			6115.0	4011.3	1213	3616.5	
11	4400			6128.7	4017.7	1214	3612.5	
12	4394			6123.0	4033.6	1220	3613.3	
13	4371			6089.9	4025.8	1215	3617.7	
14	4390			6116.3	4017.1	1201	3620.1	
15	4389			6131.4	4031.1	1201	3621.1	
16	4396			6156.8	4041.0	1205	3623.5	
17	4407			6174.6	4044.3	1225	3628.1	
18	4418			6193.3	4045.6	1221	3633.8	
19	4414			6188.6	4051.1	1222	3631.4	
20	4395			6148.2	4036.3	1219	3627.4	
21	4414			6145.9	4039.8	1221	3628.3	
22	4414			6165.5	4044.2	1215	3633.5	
23	4417			6167.9	4047.8	1217	3638.5	
24	4421			6173.7	4048.4	1203	3634.6	
25	4415			6168.0	4049.3	1221	3635.5	
26	4394			6147.1	4023.6	1222	3627.0	
27	4390			6116.9	4016.2	1217	3619.6	
28	4387			6113.1	4011.2	1218	3612.1	
29	4369			6101.3	4015.9	1218	3612.5	
30	4378			6100.1	4020.3	1217	3602.3	
31	4409			6160.2	4002.7(34)	1225	3603.2	
Mean	4397			6134.9	4026.0	1214	3620.7	

For less than 24-hour coverage, parentheses enclose the number of hours for which data are available.
For Climax and Huancayo, parentheses enclose the number of section hours whenever the sum of both sections falls below 40 hours.

GEOMAGNETIC ACTIVITY INDICES

August 1985

Day		Kp Three-Hourly Indices 1	2	3	4	5	6	7	8	Sum	Ap	Cp	Km Three-Hourly Indices 1	2	3	4	5	6	7	8	aa Provisional Am	N	S	M	
1		4	3	2+	3-	4+	3+	2+	3+	25+	18	1.0	4-	3	2+	2	3+	3-	2	3	27	40	18	25	34	
2		2+	3	3-	2	1+	3	3	3-	20	11	0.6	2+	3	3-	2	1+	3	3-	3-	22	23	17	19	21	
3	Q7	2+	2-	1-	1+	1	2	2+	2	13+	6	0.3	3-	2	1	2-	1-	2-	3-	2+	14	18	9	11	16	
4	Q8	2	2+	2	1+	2	1	2-	2-	14	6	0.3	2	3-	3	1+	2-	1	1+	1+	14	15	9	13	11	CC
5	Q2	1-	1	1	1-	1	1	1	1	7+	4	0.1	1+	1+	1	1-	1+	1	1	1-	7	11	4	7	8	CC
6	Q1	1	0+	1-	0+	0+	1-	2-	1-	6-	3	0.1	1	1-	1-	0	0+	0+	2	1-	5	7	4	3	8	CC
7	Q3	1+	0+	1-	0+	0+	0+	1	2+	7-	4	0.1	2	0+	1	0+	0+	0	0+	2-	6	12	2	5	9	CC
8	Q6	2+	2-	1	1	1+	1	2-	2+	12+	6	0.3	2-	2+	1	1	1+	1-	1	2	10	15	7	11	11	CC
9	Q4	2	1-	0+	0+	0+	1-	3-	2+	9+	5	0.2	2	1	0	0+	0+	1-	2-	2	7	12	4	6	10	CC
10	Q10A	2-	2+	3	2+	1+	1+	1+	1+	15-	7	0.4	2-	2+	3	2+	1+	2-	2-	1+	15	15	12	18	9	KK
11	Q5K	3+	2-	0+	1+	1	0	0+	0+	8+	5	0.2	3+	2-	0+	1+	1	0'	0+	0+	9	12	6	15	4	KK
12	D5	1-	0+	1	2	2+	3+	6+	6	22	27	1.2	0+	0+	1-	2	3-	3	5	5+	34	47	22	6	62	
13	D1	6-	6	5	5-	3+	3	4+	4+	36+	41	1.5	5	5+	5-	5-	3	2+	4	4-	64	68	48	79	38	
14		3	3	4-	2+	2+	2-	2-	2+	20	11	0.7	3	3-	3+	3	2+	2-	2-	2-	22	18	19	25	12	
15		3-	3	3+	3-	2+	2-	3-	2+	21-	12	0.7	2+	3	4-	3-	3-	2-	2+	2	23	24	23	30	18	
16		2+	2	2-	2+	3-	2-	3-	3-	18	9	0.5	3-	2	2-	2	3-	2	3-	3-	19	24	14	12	27	
17		1-	3+	3	2+	2	2+	1+	2+	17+	9	0.5	1	3	3	3-	3-	3-	1+	2+	19	21	16	16	21	
18		1+	2+	2	2+	2+	3-	3-	4+	20	12	0.7	2-	3	2+	3-	2+	3-	3-	4	26	32	16	14	35	
19		3	4+	2+	1-	1+	1	2+	3	18	12	0.7	3	4-	2+	1	1+	1	2	3-	20	26	11	22	16	
20		3	3+	3-	1	3-	3-	2	3-	20	12	0.7	3	3+	3	1+	3-	2+	2	3-	23	27	17	22	23	
21		3	3-	3-	2+	1	2-	2-	3	18	10	0.6	3	3-	3-	2+	1+	2	1+	3	19	19	17	22	15	
22	D3	4-	3	5-	5	3-	4	5-	3+	31	28	1.2	3	3-	5-	4+	3-	4-	4+	3	46	59	44	60	44	
23		4+	4-	2	4-	3-	2+	3	3+	25	17	0.9	4	4-	2-	4-	3-	2-	3	3+	32	33	24	33	25	
24	Q9A	3+	2+	2-	1+	1+	1	1	1+	13+	7	0.4	3	2+	2	1+	2-	1-	1+	2-	14	17	7	13	11	C
25		2+	4	5	3	3-	3-	2-	3-	24	18	1.0	2+	3+	4+	3	3-	2+	2-	2+	27	29	24	34	20	
26		4-	3+	2	1+	2+	2+	3+	4	22+	14	0.8	4-	3+	2+	2-	2-	2	3-	4-	26	30	18	22	27	
27		4	3	2+	4	2+	3	2+	2	23	15	0.8	4-	3	3-	4-	2	3	2	2-	26	25	26	32	20	
28		2+	2	2	3	2	4-	4-	3+	22	13	0.8	2+	2-	2+	3-	2	3+	3+	3+	25	25	17	16	27	
29	D4*	3+	3+	3+	3-	4-	3	4	2+	26-	17	0.9	3+	4-	3+	3	3+	3	4-	2+	34	34	31	27	39	
30		3+	3+	1-	1-	1-	3-	3+	2+	17	10	0.6	3	3-	1-	0+	1-	2+	3	2	16	22	12	16	18	
31	D2	4-	4	5	5	4+	5-	4-	3+	34-	32	1.3	4-	4-	5-	5-	4-	5-	3	3+	54	48	50	53	46	
Mean											13	0.65									22.7	26.1	17.8	22.0	

Day	Kn Three-Hourly Indices 1	2	3	4	5	6	7	8	An	Ks Three-Hourly Indices 1	2	3	4	5	6	7	8	As	S_a	Prov R_I	R_a	R_s	IMF	
1	4-	3	3-	2+	4-	3	2+	3	31	4	3	2-	2-	3-	3-	2-	3-	24	80.5	35	32	25	T	-
2	2+	3	3-	2+	2-	3	3-	3	24	3-	3	3-	2	1-	3-	3-	3-	20	80.4	25	27	25	AT	-
3	2+	2	1	2	1+	2	2+	2+	15	3	2	1-	1+	0	1+	3-	2+	13	79.2	27	23	24	T	-
4	2-	2+	3-	1+	2	1+	2	2	15	2+	3	3	2-	1+	0+	1-	1-	14	79.3	27	21	24	T	-
5	1+	1+	1+	1+	2-	1+	1+	1+	9	1	1	1-	0	1	0+	0+	0+	4	78.5	20	14	23	T	-
6	1+	1-	1	0+	0	1	2	1	7	1-	0+	0+	0	0+	0	2	0+	4	77.9	14	13	22	T	-
7	2-	1	1	1-	1-	0+	1-	2	7	2	0	1-	0	0	0	0	1+	4	79.5	12	14	24	T	-
8	2	2+	1	1	2-	1+	2-	2	12	2-	2+	1+	1	1+	0	0+	2-	9	78.5	12	19	23	AT	-
9	1+	1-	0	1-	0+	1+	2+	2+	9	2+	1	0	0+	0	0	1+	1+	6	74.9	17	13	19	T	-
10	2-	2+	3	2+	2-	2	1+	2-	17	1+	2+	3	2+	1	1	2-	1-	13	72.8	12	10	17	A	-
11	3	2-	1-	1+	1+	0	1-	1-	9	3+	1+	0+	1	1-	0	0	0	8	68.4	12	9	12	A	-
12	1	0+	1	2+	3	3	5+	5	37	0	0+	0+	1+	2	3-	4	6-	30	69.7	12	8	13	A	-
13	5	6-	5-	5-	3	3-	4	4-	68	5	5-	5-	4+	3	2	4+	4-	60	68.9	0	0	12	TA	-
14	3	3	3+	3+	2+	2	2	2+	26	3-	3-	3+	3	2	2-	1+	1	19	69.3	0	0	13	A	-
15	3-	3	3+	3	3-	2-	3-	2+	24	2+	3	4-	3-	3-	1+	2	2	22	69.0	0	0	13	A	-
16	2+	2-	2-	3-	3-	2	3	3-	20	3-	2+	2-	1+	2+	2	3-	3-	18	68.2	0	0	12	A	-
17	1-	3	3+	3-	3-	3	2	2	22	1	3-	3-	2+	2+	2+	1-	2+	17	67.9	12	0	11	A	-
18	3-	3-	3-	3-	3	3	3-	4	28	0+	3	2	3-	2-	2+	2+	4+	23	68.6	11	10	12	T	-
19	3	4	3-	1+	2-	1+	3-	3+	24	3-	4-	2	1-	1+	0+	1+	2+	16	69.1	11	10	13	T	-
20	3	3+	3	1+	3-	3-	2+	3-	23	3+	3+	3	1	2+	2	2-	3-	23	70.6	10	14	14	T	-
21	3-	3-	3-	3-	1+	2	1+	3-	19	3	3-	3-	2	1+	2-	1	3	19	70.4	9	8	14	T	-
22	3	2+	4+	4+	3-	4-	4	3	42	3	3-	5	5-	3-	4-	5-	3	49	72.7	0	0	17	T	-
23	4	4-	2	4-	3-	2+	3	4-	35	4	4-	2-	4-	2+	1	3-	3+	30	72.9	0	2	17	TA	-
24	3	2+	2+	2	2-	1+	2-	2-	16	3	2+	2-	1-	1+	0+	1-	2-	12	72.1	0	13	16	T	-
25	2+	4-	5-	3-	3-	2+	2-	2+	29	3-	3	4	3	3-	2	1+	2	24	72.5	0	11	16	T	-
26	3	4-	2+	2-	2+	2+	3+	4-	27	4	3	3-	2-	1	1+	2+	4-	25	72.3	8	8	16	T	-
27	3+	3-	3-	4-	2+	3-	2	2-	25	4-	3	3-	3+	2	3	2+	1+	27	73.1	8	8	17	T	-
28	2+	2	3-	3	2+	3+	4-	3	27	2+	2-	2	3-	2	3+	3	3+	23	73.1	10	10	17	T	-
29	3	4-	3+	3	3+	3+	4-	2	34	4-	3+	3+	3-	4-	3-	4-	2+	34	73.1	0	16	17	T	-
30	3	3-	1-	1	1	3-	3	2	18	3	3	1-	0	0	2-	3-	2	15	73.9	8	8	18	T	-
31	3+	4	4+	4+	4-	5-	3	3	51	4+	3	5-	5	4	4+	3-	3+	56	74.1	9	11	18	T	-
Mean									24.2									21.3	73.3	10.4	10.7	17.2		

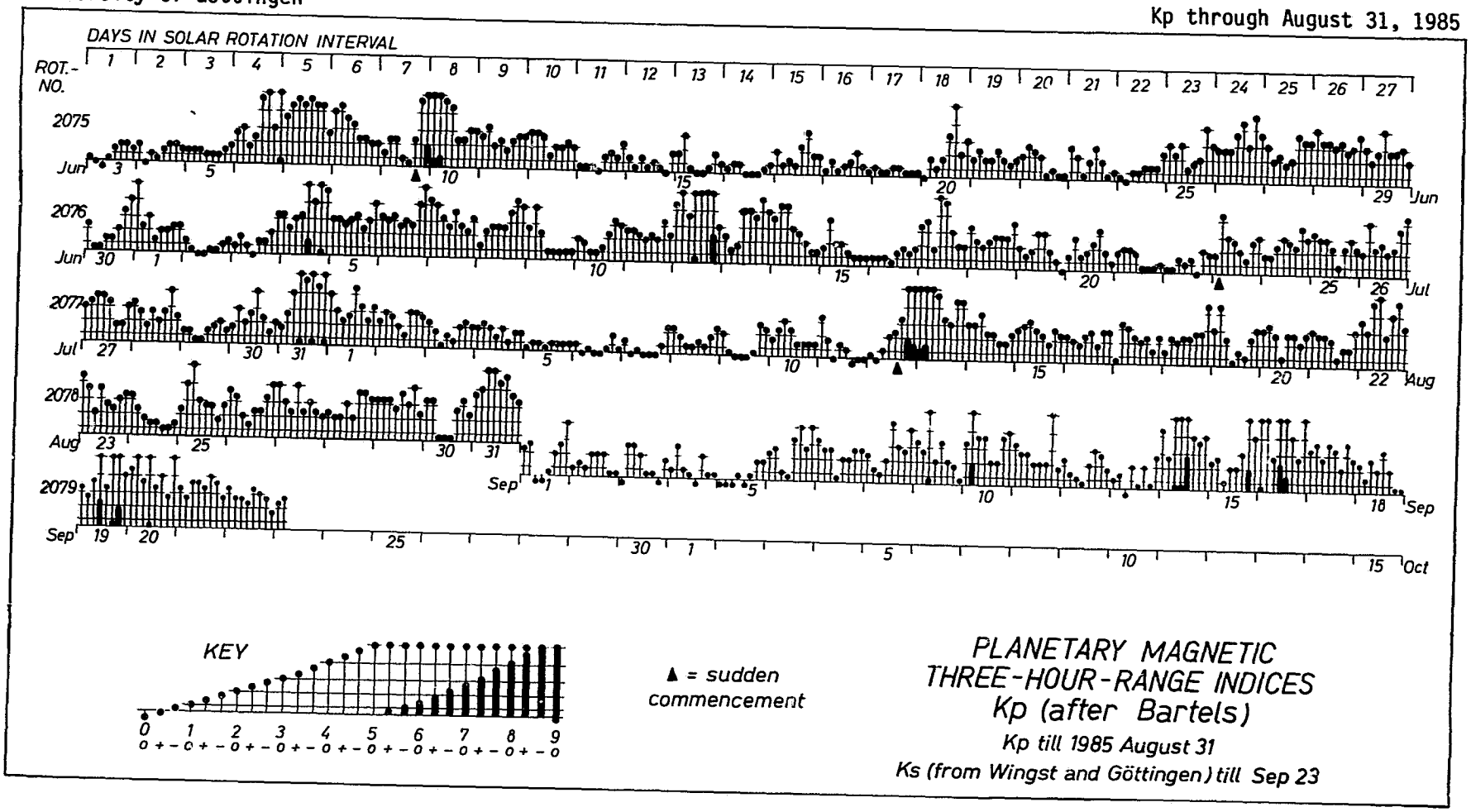
DAILY AVERAGE INDICES Ap

DAY	1984 SEP	OCT	NOV	DEC	1985 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
1	11	7	27	15	33	15	16	23	10	18	14	18
2	12	10	12	27	17	11	22	16	38	6	3	11
3	12	20	18	22	13	8	14	20	6	4	6	6
4	59	6	18	28	7	3	10	17	10	5	33	6
5	63	7	13	20	6	21	42	7	7	5	16	4
6	12	21	14	22	5	46	24	5	10	25	21	3
7	6	43	20	18	5	20	22	7	8	30	19	4
8	11	24	20	8	19	24	27	15	8	16	16	6
9	12	20	12	6	46	19	4	38	8	22	8	5
10	25	29	18	9	29	24	10	11	4	30	8	7
11	17	28	20	19	20	13	6	11	5	11	10	5
12	13	32	8	17	19	11	7	5	12	10	48	27
13	11	17	10	27	14	11	4	6	11	4	20	41
14	14	15	14	8	9	16	7	10	8	4	16	11
15	10	14	52	24	9	9	14	4	15	5	7	12
16	8	19	112	33	8	7	11	8	11	3	5	9
17	6	3	35	28	9	12	8	5	8	7	20	9
18	3	43	22	15	6	4	11	4	9	4	13	12
19	36	75	21	8	7	7	9	21	9	3	8	12
20	21	63	20	6	6	10	5	53	5	13	8	12
21	10	47	22	13	12	8	5	103	8	7	5	10
22	22	46	14	9	11	7	4	11	5	6	4	28
23	112	27	10	16	36	7	5	12	4	7	13	17
24	52	39	10	4	7	18	6	17	5	5	12	7
25	43	22	10	5	9	12	5	21	8	12	12	18
26	42	14	8	26	6	5	8	30	9	21	16	14
27	25	8	7	17	11	19	10	33	5	13	15	15
28	16	8	6	31	58	60	14	61	5	18	13	13
29	12	7	13	26	24		6	17	4	13	5	17
30	11	7	36	21	17		7	42	3	10	11	10
31		6		24	15		10		7		36	32
MEAN	24	23	21	18	16	15	11	21	9	11	14	13

PLANETARY 3-HOUR-RANGE INDICES (Kp) BY 27-DAY SOLAR ROTATION INTERVAL

University of Gottingen

Kp through August 31, 1985



PRINCIPAL MAGNETIC STORMS

AUGUST 1985

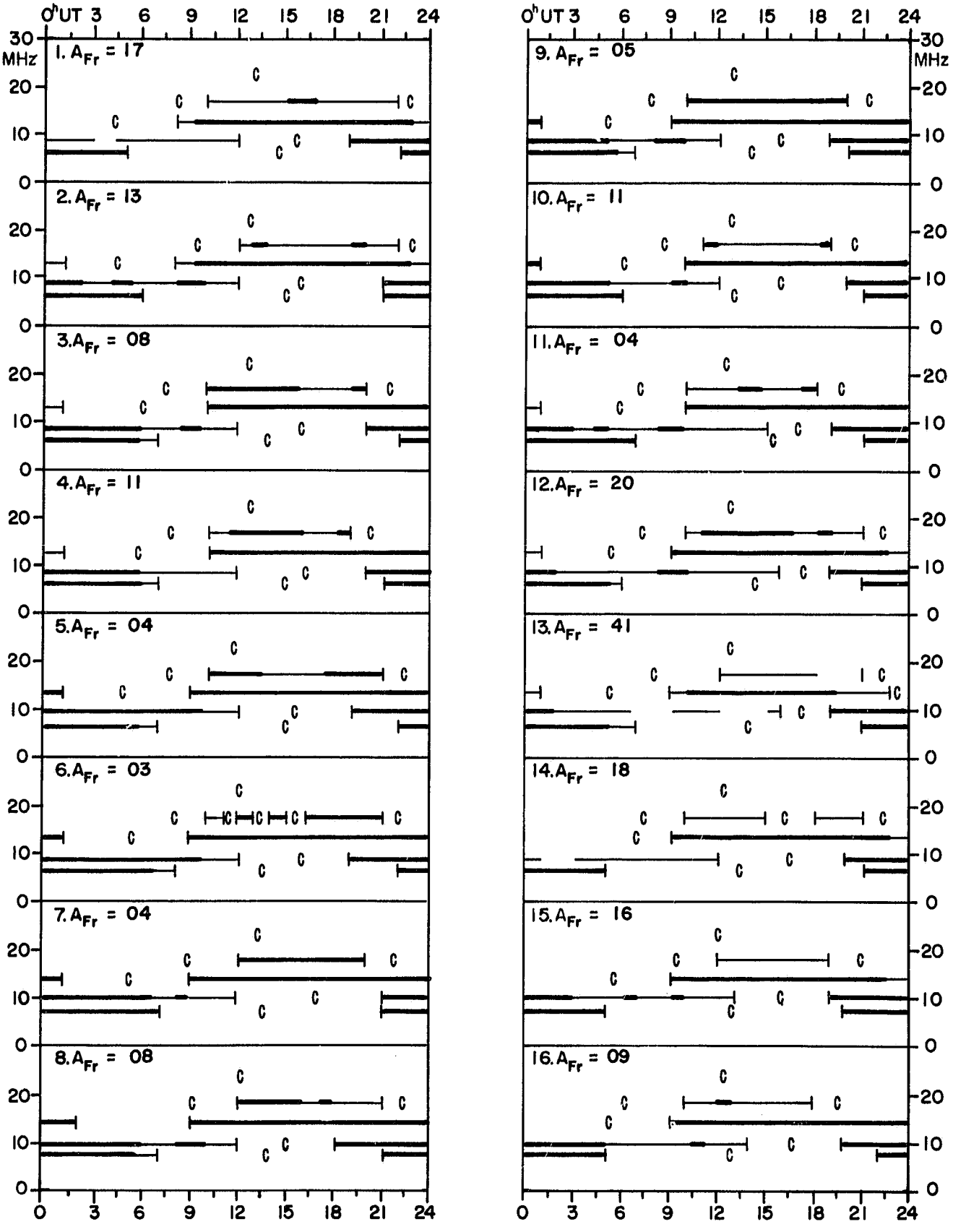
Sta	Geomag Lat	Commencement Day	Time (UT)	Type	SC Amplitudes D (Min)	H (Gamma)	Z (Gamma)	Maximum 3-Hour K Index Day(3-Hour Periods)	K	Ranges D (Min)	H (Gamma)	Z (Gamma)	End Day	Hour (UT)
COL	64.6N	12	0937	SC*	20	112	18	13(3,4)	7	179	1820	1030	14	18
SIT	60.0N	12	0941	SC	- 1	13	0	13(2)	7	--	880	670	14	10
WIT	54.2N	12	1451	SC	- 2	30	0	12(7)	6	29	182	86	13	23
FRD	49.6N	12	1451	SC	..	5	- 1	12(7) 13(1,2)	6	27	164	92	15	--
BJI	28.5N	12	1451	SC	1	30	3	12(7)	6	11	128	29	13	16
HON	21.1N	12	1451	SC	..	16	5	12(7) 13(2,3,4)	5	8	159	27	13	16
JAI	17.3N	12	1450	SC	- 0.2	20	- 2		-	6	107	34	13	23
SHL	14.7N	12	1450	SC	- 0.1	19	3		-	5	106	26	13	23
UJJ	13.5N	12	1450	SC	- 0.1	23	- 4		-	4	102	34	13	23
ABG	09.5N	12	1450	SC	- 0.4	19	- 3	12(7)	6	5	101	41	13	23
HYB	07.6N	12	1451	SC	0	21	- 1	12(7)	6	4	108	29	13	23
GUA	04.0N	12	1251	..	..	..	..	12(8)	5	--	100	20	13	15
ANN	01.5N	12	1450	..	- 0.7	24	12		-	4	115	62	13	23
TRD	01.1S	12	1450	SC	- 0.3	18	23		-	3	151	89	13	23
HER	33.7S	12	14--	..	..	..	..	12(7,8)	6	18	101	111	13	23
CNB	43.9S	12	11--	..	..	..	..	13(2,3)	5	15	135	34	13	15
COL	64.6N	21	22--	..	..	..	..	22(4,6) 23(4)	6	140	1080	520	24	07
HYB	07.6N	21	2200	..	..	..	..	22(3,4)	5	6	72	22	23	13
HER	33.7S	21	22--	..	..	..	..	22(7)	5	19	66	68	23	05
JAI	17.3N	22	0500	..	..	..	..		-	5	69	24	23	02
SHL	14.7N	22	0500	..	..	..	..		-	6	71	19	23	02
UJJ	13.5N	22	0500	..	..	..	..		-	5	67	24	23	02
ABG	09.5N	22	0500	..	..	..	..	22(3,4,7)	5	4	64	29	23	02
ANN	01.5N	22	0500	..	..	..	..		-	4	140	45	23	02
TRD	01.1S	22	0500	..	..	..	..		-	3	104	86	23	02
CNB	43.9S	22	08--	..	..	..	..	22(3,4)	5	15	108	32	23	15
HYB	07.6N	25	0200	..	..	..	..	25 (2,3) 27(6)	4	5	87	23	27	19
GUA	04.0N	25	0407	..	..	..	..	25(3)	5	--	110	10	25	17
COL	64.6N	28	08--	..	..	..	..	29(5)	6	65	830	490	30	06
JAI	17.3N	30	1700	..	..	..	..		-	6	115	36	31	23
SHL	14.7N	30	1700	..	..	..	..		-	6	125	26	31	23
JJJ	13.5N	30	1700	..	..	..	..		-	5	123	37	31	23
ABG	09.5N	30	1700	..	..	..	..	31(3,4,5)	5	5	124	53	31	23
HYB	07.6N	30	1400	..	..	..	..	31(4)	5	5	147	30	31	23
ANN	01.5N	30	1700	..	..	..	..		-	6	201	65	31	23
TRD	01.1S	30	1700	..	..	..	..		-	5	220	77	31	23
GNA	43.3S	30	17--	..	..	..	..	31(6)	5	16	140	100	01	00
CNB	43.9S	30	17--	..	..	..	..	31(3,4)	5	14	131	53	31	21
COL	64.6N	31	05--	..	..	..	..	31(4)	7	231	1580	800	01	01
SIT	60.0N	31	06--	..	..	..	..	31(3)	7	--	--	--	31	20
FRD	49.6N	31	----	..	..	..	..	31(2,3,4)	5	20	109	51	01	--
BJI	28.5N	31	03--	..	..	..	..	31(3)	5	7	142	26	31	19
GUA	04.0N	31	03--	..	..	..	..	31(3)	5	--	160	10	31	20

Stations Reporting:

ABG = ALIBAG
ANN = ANNAMALAINAGAR
BJI = BEIJING
CNB = CANBERRA
COL = COLLEGE
FRD = FREDERICKSBURG
GNA = GNANGARA
GUA = GUAM
HER = HERMANUS
HON = HONOLULU
HYB = HYDERABAD
JAI = JAIPUR
SHL = SHILLONG
SIT = SITKA
TRD = TRIVANDRUM
UJJ = UJJAIN
WIT = WITTEVEEN

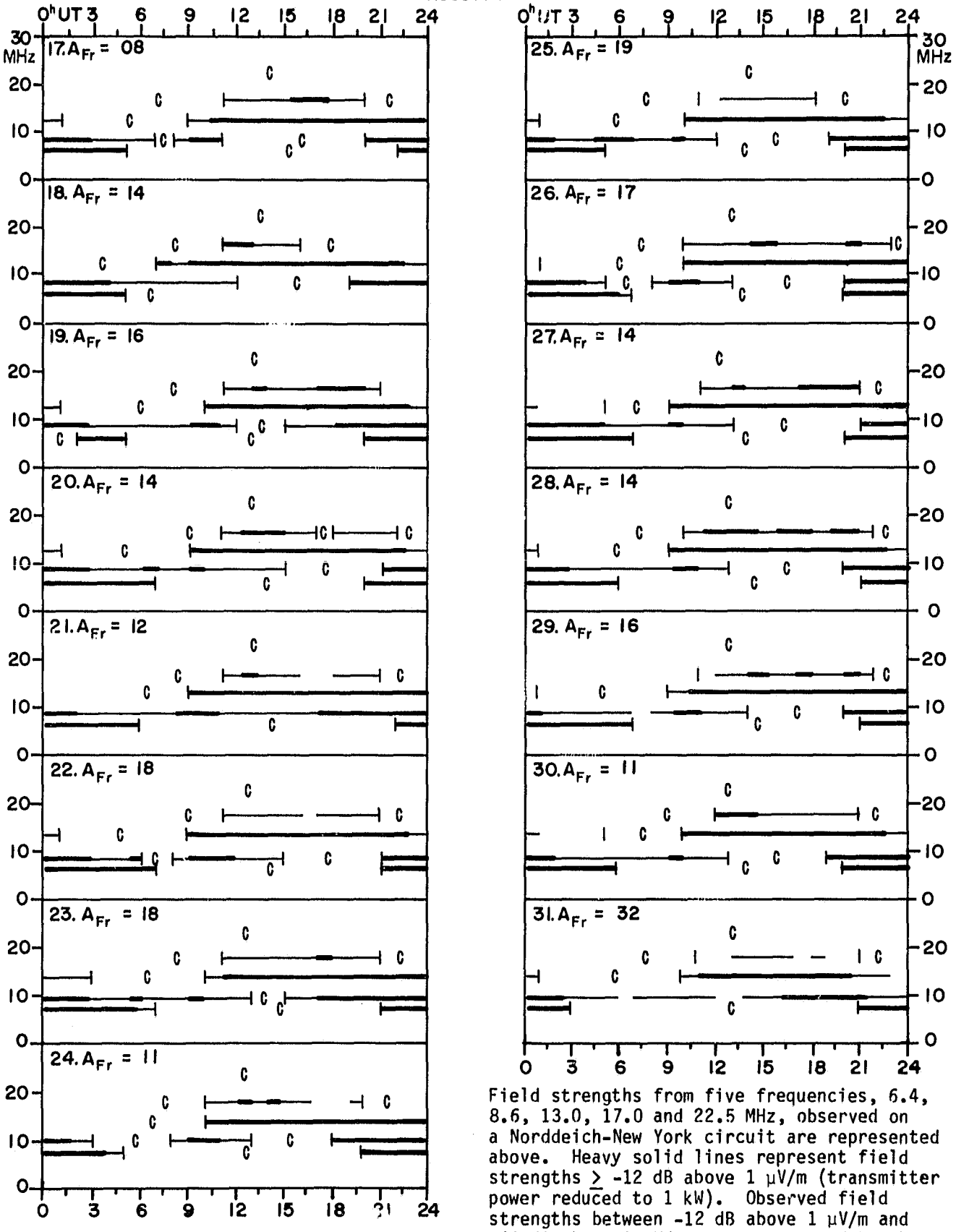
TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

AUGUST 1985



TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

AUGUST 1985



Field strengths from five frequencies, 6.4, 8.6, 13.0, 17.0 and 22.5 MHz, observed on a Norddeich-New York circuit are represented above. Heavy solid lines represent field strengths $\geq$ -12 dB above 1 μV/m (transmitter power reduced to 1 kW). Observed field strengths between -12 dB above 1 μV/m and -40 dB above 1 μV/m are represented by the fine line.

RADIO PROPAGATION QUALITY INDICES

AUGUST 1985

Day	Bracknell	Teheran	New York	Tokyo	Johannesburg	Canberra
1	4.0	5.8	4.5	4.2	6.0	5.5
2	3.0	5.2	5.4	5.6	3.2	4.9
3	6.0	6.3	5.8	6.9	7.1	4.9
4	6.7	5.3	6.4	6.7	6.2	5.2
5	8.9	6.9	7.1	7.7	7.5	5.6
6	9.7	6.0	8.0	8.2	6.1	6.2
7	8.1	6.4	8.0	8.5	6.9	6.7
8	5.3	6.6	7.2	7.8	6.4	7.1
9	6.2	7.0	6.9	7.7	5.7	7.1
10	5.9	8.0	5.4	6.9	6.3	7.0
11	2.5	8.5	6.0	7.1	5.5	8.0
12	3.5	7.7	5.7	6.4	5.9	7.6
13	2.5	6.3	2.1	4.0	6.1	6.1
14	6.2	8.0	4.7	5.4	4.9	5.3
15	2.8	7.2	7.1	4.6	5.8	6.0
16	2.9	7.3	6.0	4.0	6.2	5.3
17	7.3	7.0	5.4	3.7	5.7	5.4
18	8.3	6.1	5.7	4.9	7.4	6.3
19	4.8	5.6	6.3	5.6	4.0	5.5
20	2.8	6.3	5.4	4.6	5.4	4.8
21	5.4	5.8	6.3	2.9	6.2	4.5
22	2.4	5.1	6.0	4.0	5.4	4.6
23	7.0	5.3	3.9	4.0	6.6	5.0
24	2.4	5.5	5.3	5.3	6.6	5.6
25	2.9	5.2	5.8	5.0	8.0	5.4
26	3.0	6.6	5.9	6.0	6.3	5.0
27	5.1	5.1	7.5	4.7	5.9	6.1
28	4.1	6.7	5.5	6.0	5.7	5.1
29	4.4	5.5	4.8	6.0	8.7	5.4
30	5.4	5.8	6.1	6.9	6.5	5.0
31	2.8	6.3	2.0	4.5	7.9	4.9
Mean	4.9	6.3	5.7	5.7	6.2	5.7

CALCULATION OF QUALITY INDICES (Q)

From all 24 hourly field strength values and from all frequencies of the same circuit a median field strength value is calculated (FD). This daily value is compared with the average value (FA) of the preceeding 27 days (1 sun rotation).

$$Q = 6.0 + 20 \log(FD/FA)/3.0$$

The quality indices vary from 0.0 to 9.9 where 6.0 is normal. Conditions are "normal" (index = 6.0), if they correspond to the average of the preceeding 27 days.

SCALE FOR QUALITY INDICES

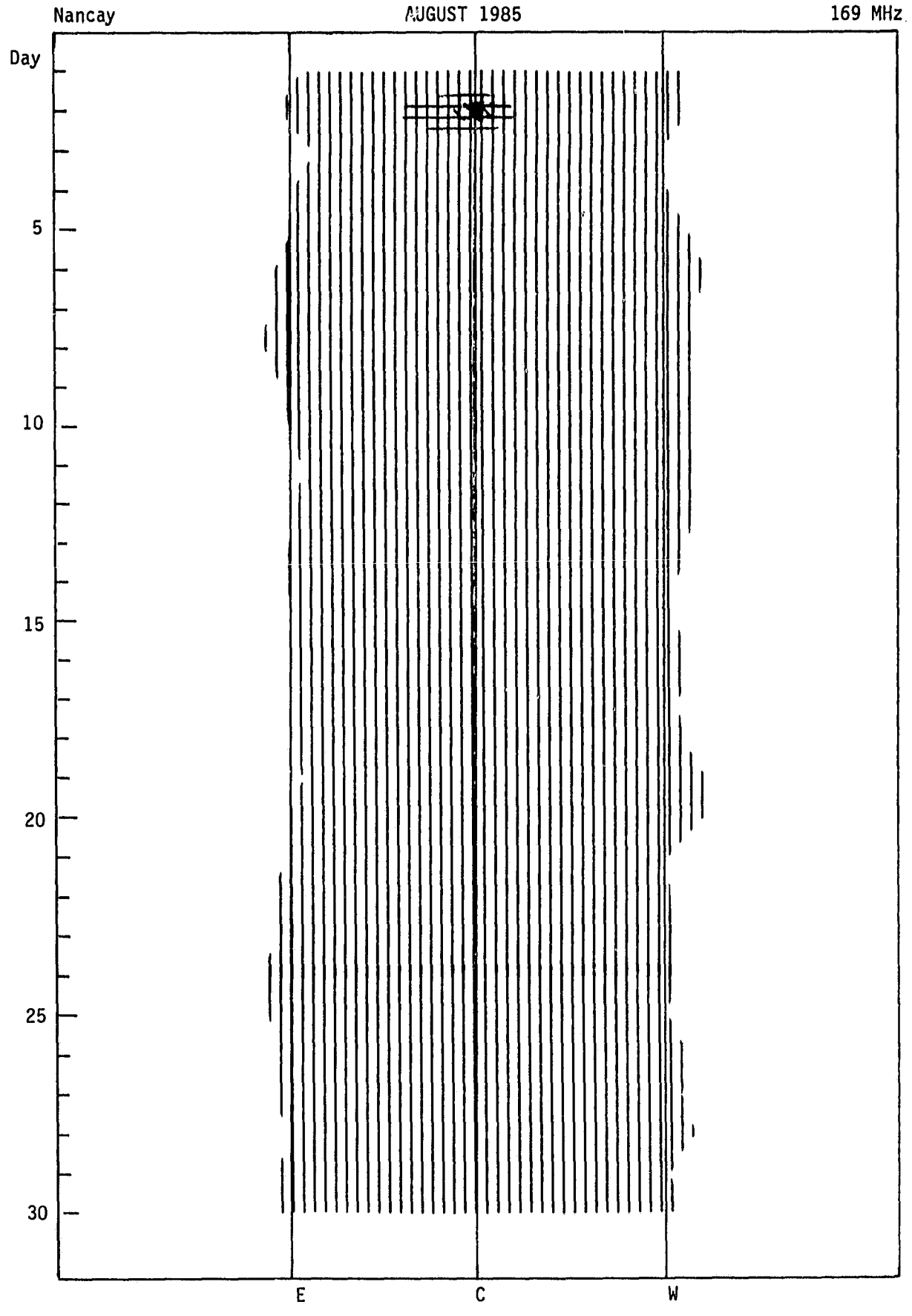
0.0 - 1.0 = very poor
1.1 - 3.0 = poor
3.1 - 5.0 = fair
5.1 - 7.0 - normal
7.1 - 9.0 = good
9.1 - 9.9 = very good

CONTENTS

Prompt Reports LATE DATA Number 494 Part I

76
Late
Aug 85

SOLAR INTERFEROMETRIC OBSERVATIONS



VOSTOK INFERRED INTERPLANETARY MAGNETIC FIELD
PRELIMINARY DATA

November 1984 - October 1985

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	A	T	T	A	A	A	AT	T	T	T	TA	TA
2	T	T	T	A	A	A	A	T	T	AT	T	T
3	T	AT	T	A	AT	A	AT	A	A	T	T	A
4	AT	T	T	T	A	A	TA	A	T	T	T	A
5	AT	T	T	AT	A	A	TA	A	T	T	T	A
6	T	A	T	A	A	A	TA	T	T	T	A	A
7	T	T	T	A	A	A	T	TA	TA	T	A	A
8	T	AT	T	AT	AT	A	T	T	T	AT	AT	A
9	T	T	AT	A	T	T	A	TA	T	T	A	T
10	T	A	AT	T	T	T	T	T	TA	A	A	AT
11	T	A	A	AT	T	A	A	TA	A	A	AT	AT
12	T	A	AT	A	T	AT	T	T	AT	A	AT	T
13	T	AT	T	T	T	AT	T	TA	A	TA	A	T
14	T	A	A	A	T	T	T	AT	A	A	A	T
15	A	A	A	T	A	A	T	T	A	A	T	AT
16	A	A	A	T	T	A	T	A	A	A	TA	AT
17	A	AT	T	T	T	A	T	A	A	A	T	T
18	T	T	T	A	A	A	TA	A	A	T	T	T
19	A	A	T	-	T	T	T	A	A	T	A	T
20	T	T	A	T	TA	T	A	A	A	T	A	T
21	A	AT	T	AT	T	T	A	A	A	T	T	T
22	A	T	A	T	T	T	A	AT	TA	T	T	T
23	T	AT	T	T	T	A	A	AT	T	TA	TA	T
24	T	T	T	T	T	AT	A	A	T	T	T	T
25	T	T	T	-	T	A	A	T	T	T	AT	T
26	T	T	T	-	T	A	A	T	TA	T	AT	T
27	AT	-	-	-	T	TA	A	T	T	T	T	T
28	-	-	-	-	A	TA	A	T	T	T	T	-
29	-	-	-		-	AT	A	T	T	T	T	-
30	-	-	-		-	A	A	T	T	T	T	-
31		-	-		-		T		T	T		-

NASA/GODDARD SPACE FLIGHT CENTER

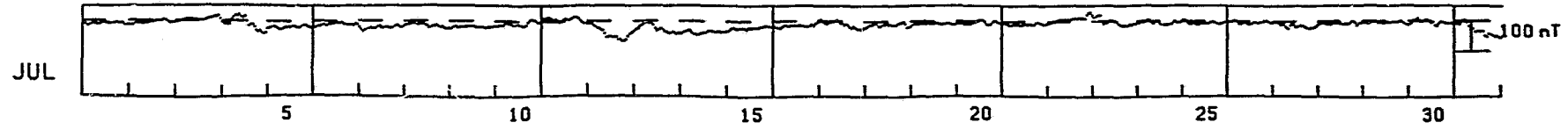
78
Late
Jul 85

HOURLY EQUATORIAL DST VALUES(PROVISIONAL)

JULY 1985

UNIT=NT

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	U.T. 24
1	-11	-10	-17	-13	-10	-9	-10	-13	-11	-7	-5	-6	-8	-10	-10	-9	-7	-6	-10	-7	-9	-16	-15	-13
2	-15	-14	-10	-7	-7	-8	-9	-8	-7	-6	-3	-3	-2	-1	0	-1	0	3	0	-5	-8	-8	-6	-4
3	-2	-1	1	1	4	6	5	5	3	2	2	0	1	0	3	6	8	10	12	16	15	18	7	-4
4	-10	-10	-11	-9	6	13	19	15	22	13	9	16	-1	-14	-9	-9	-18	-28	-33	-30	-37	-40	-36	-23
5	-20	-19	-16	-18	-21	-26	-27	-24	-22	-19	-17	-19	-16	-16	-19	-22	-20	-15	-13	-12	-17	-20	-21	-22
6	-21	-18	-16	-15	-12	-11	-14	-10	-10	-8	-7	-4	-8	-7	-5	-11	-12	-13	-12	-12	-15	-9	-12	-20
7	-27	-34	-29	-31	-25	-22	-24	-25	-23	-18	-17	-24	-24	-20	-21	-24	-24	-21	-17	-14	-18	-20	-19	-14
8	-12	-10	-9	-7	-6	-8	-12	-10	-8	-8	-13	-16	-21	-19	-16	-16	-13	-16	-20	-17	-22	-25	-23	-24
9	-23	-18	-16	-21	-19	-19	-18	-17	-17	-16	-15	-17	-18	-18	-18	-19	-18	-19	-21	-18	-19	-18	-15	-14
10	-16	-14	-13	-13	-7	-6	-9	-10	-12	-13	-11	-10	-13	-15	-14	-12	-2	5	7	3	2	-5	-3	7
11	9	10	12	13	10	4	7	2	-3	-1	6	8	7	5	8	12	14	14	10	1	-5	-8	-8	-8
12	-6	-8	-13	-18	-22	-24	-28	-31	-42	-52	-50	-49	-52	-51	-51	-61	-60	-65	-66	-61	-50	-43	-38	-32
13	-26	-23	-16	-12	-8	-4	-6	-6	-7	-13	-24	-32	-27	-24	-27	-34	-36	-41	-40	-36	-38	-43	-41	-41
14	-41	-34	-33	-30	-30	-38	-43	-44	-46	-43	-38	-37	-36	-31	-30	-31	-32	-34	-32	-31	-34	-33	-33	-31
15	-30	-24	-20	-23	-26	-23	-22	-21	-22	-27	-22	-22	-22	-22	-22	-21	-19	-18	-17	-15	-17	-18	-20	-20
16	-19	-19	-21	-20	-15	-12	-14	-15	-14	-13	-13	-14	-14	-13	-14	-16	-17	-18	-16	-12	-14	-7	-4	3
17	6	-1	-7	-8	-3	-1	-1	0	3	3	-7	-5	-13	-10	-12	-19	-20	-15	-20	-24	-25	-26	-22	-20
18	-17	-12	-11	-9	-4	-8	-16	-16	-11	-11	-8	-11	-8	-12	-12	-13	-8	-6	-5	-1	-10	-20	-19	-15
19	-11	-8	-11	-10	-8	-8	-11	-7	-6	-6	-8	-8	-6	-7	-9	-11	-10	-8	-6	-7	-10	-12	-11	-8
20	-7	-6	-8	-9	-10	-11	-11	-6	-4	-2	1	3	5	2	-2	-11	-12	-10	-4	1	0	-5	-7	-4
21	-5	-6	-9	-13	-12	-9	-10	-8	-11	-13	-10	-7	-10	-10	-10	-11	-9	-5	-3	-3	-7	-9	-8	-6
22	-4	-2	1	1	4	6	7	6	4	7	6	6	8	9	11	11	13	10	9	8	21	28	28	19
23	13	15	20	19	0	-10	-5	-4	1	3	-1	1	-2	-10	-14	-15	-14	-15	-16	-11	-14	-10	-9	-6
24	-7	-4	-3	-2	2	5	-2	-6	-7	0	1	-7	-12	-12	-12	-13	-9	-9	-5	1	-5	-5	-3	1
25	5	1	-7	-10	-10	-4	-9	-11	-11	-6	-7	-7	-8	-7	-3	-2	-2	-7	-9	-10	-8	-6	-2	-2
26	-1	-1	0	2	0	-8	-9	-6	-3	-6	-11	-9	-7	-4	-4	-6	-5	-3	-1	4	3	0	-5	-2
27	-1	-2	-4	-11	-9	-8	-17	-22	-12	-10	-8	-17	-17	-14	-12	-13	-16	-19	-22	-20	-20	-18	-14	-9
28	-7	-5	-5	-5	-9	-10	-9	-6	-4	-7	-7	-7	-8	-9	-7	-9	-7	-1	0	-6	-14	-7	-6	-5
29	-5	-6	-8	-4	-2	-3	-4	-6	-5	-5	-7	-6	-4	-6	-5	-3	-3	-5	-2	0	-3	-8	-12	-13
30	-10	-6	2	5	9	2	-2	0	3	3	0	-6	-4	-14	-17	-10	-4	-5	-7	-8	-10	-10	-6	-1
31	-4	-10	-11	-3	3	4	-6	-16	-27	-24	-34	-33	-33	-34	-34	-49	-52	-40	-44	-47	-51	-49	-53	-56



MAGNETIC STORM SUDDEN COMMENCEMENTS AND SOLAR FLARE EFFECTS
(PRELIMINARY REPORT ON RAPID MAGNETIC VARIATIONS)

JULY 1985

Storm Sudden Commencements (ssc)			Solar Flare Effects (sfe)		
Day	Time	Quality: Station Group*	Day	Begin-End	Station(s)
04	0401	A: COI QUE; C: WIT NGK EBR LNP CZT KGL	none		
22	1948	A: QUE; B: MPO; C: CLF GCK SPT LNP			

Reporting Observatories:

SOD DOB NUR WNG WIT NGK HAD BDV CLF GCK MMB EBR COI SPT
FRD KAK HTY KNY QUE LNP LUA MPO GNA CAO AMS CZT KGL

*Three-letter codes identify each observatory.

NOAA SPACE ENVIRONMENT SERVICES CENTER
SOLAR PROTON EVENTS AFFECTING THE EARTH ENVIRONMENT
****Preliminary Listing****

1976 - JULY 1985

PARTICLE EVENT								ASSOCIATED FLARE AND ACTIVE REGION					
Start				Maximum		Satellite	Riometer		Max	Importance		Disk	NOAA/USAF
Yr	Mo	Day	Time	Day	Time	Proton Flux*	Absorption	Day	Time	X-Ray	Opt	Location	Region
76	04	30	2120	01	1700	12	0.0 dB	30	2114	X 2	2B	S09 W47	0700
77	09	19	1430	19	2130	200	4.5	19	1054	X 2	3B	N08 W58	0889
77	11	22	1400	22	1800	160	0.7	22	1006	X 1	2N	N24 W38	0939
78	02	13	0930	14	1000	850	6.3	13	0255	M 7	SB	N22 W13	1001
78	04	11	1530	11	1630	0	3.2	11	1353	X 2	2B	N19 W54	1057
78	04	29	0445	30	2000	1000	9.8	28	1306	X 5	4B	N22 E41	1092
78	05	07	0420	07	0420	100	0.0	07	0330	X 2	2B	N22 W64	1095
78	06	02	0730	02	0935	19	1.8	31	1009	M 5	2B	N23 W50	1129
78	06	24	0900	25	0230	25	1.2	22	1709	M 2	3B	N19 E18	1164
78	07	13	0300	13	1000	20	0.0	--	----	---	--	--- ---	----
78	09	10	1035	24	0400	2200	9.6	23	0941	X 1	3B	N35 W50	1294
78	11	10	2130	10	2140	38	0.0	10	0042	M 1	2N	N17 E02	1385
79	02	17	2020	17	2205	31	0.0	16	0200	X 2	2B	N15 E48	1574
79	04	03	1600	03	2310	45	2.6	--	----	---	--	--- ---	----
79	06	06	1850	07	0005	950	5.9	04	0409	X 1	2B	N20 E34	1781
79	07	07	0015	07	1010	50	0.0	--	----	---	--	--- ---	----
79	08	19	0850	20	0830	450	4.4	18	1343	X 1	--	S08 E90	----
79	08	19	0850	20	1700	410	0.0	18	1343	X 1	--	S08 E90	----
79	08	19	0850	21	0740	500	0.0	18	1343	X 1	--	S08 E90	----
79	09	15	1500	16	1200	60	0.0	14	0802	X 2	--	N10 E90	1994
79	11	16	0430	16	1300	75	3.0	15	1639	M 1	SB	N34 W25	2110
80	02	06	1340	06	1850	12	1.0	--	----	---	--	--- ---	----
80	07	17	2300	18	1930	100	2.0	17	0603	M 3	1B	S12 E06	2562
81	03	30	0900	30	2115	30	0.0	30	0049	M 3	2N	N13 W74	2993
81	04	10	1745	11	0000	50	1.8	10	1655	X 2	3B	N09 W40	3025
81	04	24	1515	24	2330	160	2.3	24	1400	X 5	2B	N18 W50	3049
81	05	09	1200	10	2130	150	0.0	08	2252	M 7	2B	N09 E37	3099
81	05	15	0300	16	1950	130	3.7	13	0425	X 1	3B	N11 E58	3106
81	07	20	1430	20	1825	100	2.5	20	1329	M 5	1B	S26 W75	3204
81	07	25	0600	25	1320	18	0.0	--	----	---	--	--- ---	----
81	08	10	0115	10	0435	57	0.0	07	1916	M 4	2B	S10 E24	3275
81	10	08	1235	11	0600	83	1.7	07	2308	X 3	1B	S19 E88	3390
81	10	12	1235	13	2247	2000	6.3	12	0636	X 3	3B	S16 E20	3390
81	12	10	0545	11	0900	65	0.0	09	1854	M 5	3B	N12 W16	3496
82	01	31	0055	31	1630	830	2.2	30	2358	X 1	3B	S13 E19	3576
82	06	06	0245	06	0245	10	0.0	06	1637	X12	3B	S11 E26	3763
82	06	09	0040	09	0510	30	0.0	06	1637	X12	3B	S11 E26	3763
82	07	11	0700	13	1615	2900	12.5	09	0742	X 9	3B	N17 E73	3804
82	07	22	2030	23	0220	240	3.0	22	1734	M 4	SF	N29 W86	3804
82	09	05	2205	06	0100	66	1.0	05	0845	M 4	3N	N11 E30	3886
82	11	22	1940	22	2140	40	0.0	22	1828	. 7	1N	N11 W43	3994
82	11	26	0605	26	1500	25	3.0	11	0253	X 4	2B	S11 W87	3994
82	12	08	0010	08	1000	1000	0.0	12	2354	X 2	SB	S14 W81	4007
82	12	17	1845	18	0945	130	3.7	15	0202	X12	2B	S10 E24	4026
82	12	19	1920	20	0515	85	3.0	19	1624	M 9	2B	N10 W75	4022
82	12	27	0600	27	1345	190	4.6	25	0752	X 2	1B	S14 E31	4033
83	02	03	1200	04	1620	340	3.9	02	0619	X 4	3B	S19 W08	4077
83	06	15	0435	15	1800	18	0.0	12	----	---	--	S09 W90	4201
84	02	16	0915	16	1005	660	0.8	16	----	---	--	S12 W95	4408
84	02	19	1310	21	1415	55	0.5	19	2301	X 2	2B	N16 E82	4421
84	03	13	1440	13	1450	10	0.0	Minor Geomagnetic Activity					
84	03	14	0405	14	0505	100	0.0	14	0334	M 2	2B	S12 W42	4433
84	04	25	1330	26	1420	2500	17.0	24	0005	X13	3B	S12 E43	4474
84	05	24	1045	24	1140	31	0.0	24	1503	M 6	2B	S09 E24	4492
84	05	31	1315	31	1415	15	0.0	31	1142	M 1	--	S09 W90	4492
85	01	22	0415	31	0550	14	0.0	21	2350	X 4	2B	S08 W38	4617
85	04	25	1430	26	0600	160	1.1	24	0935	X 1	3B	N06 E27	4647
85	07	09	0235	09	0325	140	0.0	09	0204	M 2	1B	S16 W36	4671

*Particle flux (particles/cm2-s-ster) measured at >10 MeV at GOES geosynchronous satellite.

CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

FEBRUARY 1983

Calcium Plage Region	Sta	Observation Time Mo	Day	(UT)	Lat CMD	CMP Mo	Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF Sunspot Groups #1	#2	#3
18752	BIGB	01	28	1715	S15 E58	02	2.1	3.0	2000	4075		
18752	BIGB	01	29	1920	S15 E44	02	2.1	3.5	1900	4075		
18752	BIGB	01	31	2054	S13 E13	02	1.8	3.5	0734	4075		
18752	BIGB	02	01	2028	S13 E01	02	1.9	3.5	0705	4075		
18752	BIGB	02	04	1818	S14 W34	02	2.2	3.0	0717	4075		
18753	BIGB	01	29	1920	S10 E54	02	2.9	3.0	0900	4077		
18753	BIGB	01	31	2054	S10 E23	02	2.6	3.5	0851	4077		
18753	BIGB	02	01	2028	S18 E11	02	2.7	3.5	0938	4077		
18753	BIGB	02	04	1818	S17 W25	02	2.9	3.5	1255	4077		
18753	BIGB	02	08	2007	S16 W73	02	3.3	3.0	1108	4077		
18753	BIGB	02	09	1910	S18 W86	02	3.2	2.5	0700	4077		
18754	BIGB	01	28	1715	S14 E75	02	3.4	2.0	1000	4077A		
18754	BIGB	01	29	1920	S15 E62	02	3.5	2.5	1800	4077A		
18754	BIGB	01	31	2054	S14 E31	02	3.2	2.5	0835	4077A		
18754	BIGB	02	01	2028	S13 E19	02	3.3	2.0	0770	4077A		
18754	BIGB	02	04	1818	S13 W17	02	3.5	2.0	0961	4077A		
18754	BIGB	02	08	2007	S13 W68	02	3.7	1.0	0863	4077A		
18754	BIGB	02	09	1910	S14 W80	02	3.7	1.0	0900	4077A		
18755	BIGB	01	31	2054	N20 E55	02	5.1	2.0	0434	4080		
18755	BIGB	02	01	2028	N20 E40	02	4.9	1.0	0426	4080		
18755	BIGB	02	04	1818	N20 E02	02	4.9	1.0	0195	4080		
18757	BIGB	01	31	2054	S13 E70	02	6.1	2.0	2204	4082		
18757	BIGB	02	01	2028	S14 E55	02	6.0	2.0	1197	4082		
18757	BIGB	02	04	1818	S06 E11	02	5.6	2.0	0407	4082		
18757	BIGB	02	08	2007	S09 W42	02	5.7	2.0	0600	4082		
18757	BIGB	02	09	1910	S09 W58	02	5.4	2.0	0550	4082		
18757	BIGB	02	10	1917	S07 W73	02	5.3	2.0	0600	4082		
18757	BIGB	02	11	1923	S16 W85	02	5.4	1.0	0300	4082		
18759	BIGB	02	04	1818	S16 E16	02	6.0	2.0	1907	4079		
18759	BIGB	02	08	2007	S18 W32	02	6.4	3.5	2151	4079		
18759	BIGB	02	09	1910	S13 W41	02	6.7	3.5	2600	4079		
18759	BIGB	02	10	1917	S14 W53	02	6.8	3.5	2200	4079		
18759	BIGB	02	11	1923	S19 W70	02	6.5	2.5	2371	4079		
18759	BIGB	02	12	1915	S14 W80	02	6.7	2.5	1400	4079		
18756	BIGB	01	31	2054	N17 E73	02	6.4	2.0	1786			
18756	BIGB	02	01	2028	N16 E57	02	6.2	2.0	1820			
18756	BIGB	02	04	1818	N18 E23	02	6.5	2.0	1613			
18756	BIGB	02	08	2007	N17 W30	02	6.5	2.0	1434			
18756	BIGB	02	09	1910	N19 W44	02	6.4	2.0	1500			
18756	BIGB	02	10	1917	N19 W59	02	6.3	2.0	1600			
18756	BIGB	02	11	1923	N17 W71	02	6.4	1.5	0551			
18758	BIGB	02	01	2028	S13 E69	02	7.0	1.5	1263	4084		
18758	BIGB	02	04	1818	S11 E32	02	7.2	3.5	0961	4084		
18758	BIGB	02	08	2007	S14 W25	02	6.9	2.0	0635	4084		
18758	BIGB	02	09	1910	S20 W50	02	6.0	3.0	0600	4084		
18758	BIGB	02	10	1917	S20 W60	02	6.2	3.0	0600	4084		
18758	BIGB	02	11	1923	S15 W67	02	6.7	2.5	0734	4084		
18758	BIGB	02	12	1915	S22 W85	02	6.3	2.0	0400	4084		
18761	BIGB	02	08	2007	S08 W19	02	7.4	2.0	0521	4081		
18761	BIGB	02	09	1910	S07 W35	02	7.2	2.5	0650	4081		
18761	BIGB	02	10	1917	S08 W48	02	7.2	2.0	0700	4081		
18761	BIGB	02	11	1923	S08 W52	02	7.9	2.0	0835	4081		
18761	BIGB	02	12	1915	S08 W70	02	7.5	2.0	0700	4081		
18761	BIGB	02	13	1822	S08 W85	02	7.4	2.0	0400	4081		
18760	BIGB	02	04	1818	N10 E53	02	8.7	2.0	0554	4081C		
18760	BIGB	02	08	2007	N10 W00	02	8.8	1.5	0488	4081C		
18760	BIGB	02	09	1910	N12 W13	02	8.8	1.5	0500	4081C		
18760	BIGB	02	10	1917	N12 W26	02	8.8	1.0	0500	4081C		
18760	BIGB	02	11	1923	N11 W37	02	9.0	1.5	0267	4081C		
18760	BIGB	02	12	1915	N12 W55	02	8.6	1.5	0450	4081C		
18760	BIGB	02	13	1822	N12 W70	02	8.5	1.5	0400	4081C		
18769	BIGB	02	15	1945	N15 W42	02	12.6	1.5	0049	4089		

CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

FEBRUARY 1983

Calcium Plage Region	Sta	Observation Time Mo	Day	(UT)	Lat CMD	CMP Mo	Day	Intensity	Corrected Area (10-6 Heml)	NOAA/USAF Sunspot Groups #1	#2	#3
18769	BIGB	02	16	1936	N15 W54	02	12.7	2.0	0099	4089		
18762	BIGB	02	08	2007	S17 E64	02	13.7	1.0	0200	4083		
18762	BIGB	02	09	1910	S16 E50	02	13.6	1.5	0425	4083		
18762	BIGB	02	10	1917	S17 E39	02	13.8	1.5	0450	4083		
18762	BIGB	02	11	1923	S15 E21	02	13.4	1.0	0116	4083		
18762	BIGB	02	12	1915	S15 E12	02	13.7	1.0	0225	4083		
18762	BIGB	02	13	1822	S16 W00	02	13.8	1.0	0100	4083		
18762	BIGB	02	14	1855	S13 W12	02	13.9	1.0	0083	4083		
18762	BIGB	02	15	1945	S13 W25	02	13.9	1.0	0099	4083		
18763	BIGB	02	09	1910	N08 E55	02	13.9	1.5	0450			
18763	BIGB	02	10	1917	N10 E42	02	13.9	1.5	0500			
18763	BIGB	02	11	1923	N08 E28	02	13.9	1.5	0216			
18763	BIGB	02	12	1915	N10 E17	02	14.1	1.0	0400			
18763	BIGB	02	13	1822	N10 E03	02	14.0	1.0	0400			
18763	BIGB	02	14	1855	N09 W10	02	14.0	1.5	0315			
18763	BIGB	02	15	1945	N09 W24	02	14.0	1.5	0282			
18763	BIGB	02	16	1936	N10 W31	02	14.5	1.5	0199			
18763	BIGB	02	17	1943	N10 W47	02	14.3	1.0	0290			
18763	BIGB	02	18	1748	N10 W55	02	14.6	1.0	0313			
18763	BIGB	02	19	1700	N13 W70	02	14.4	1.0	0138			
18764	BIGB	02	09	1910	N02 E66	02	14.7	3.0	0675	4086		
18764	BIGB	02	10	1917	N02 E56	02	15.0	3.0	0650	4086		
18764	BIGB	02	11	1923	N00 E43	02	15.0	2.5	0317	4086		
18764	BIGB	02	12	1915	N02 E31	02	15.1	2.0	0600	4086		
18764	BIGB	02	13	1822	N02 E18	02	15.1	2.0	0700	4086		
18764	BIGB	02	14	1855	N00 E02	02	14.9	2.5	0431	4086		
18764	BIGB	02	15	1945	N00 W11	02	15.0	2.5	0415	4086		
18764	BIGB	02	16	1936	N01 W21	02	15.2	2.5	0498	4086		
18764	BIGB	02	17	1943	N02 W35	02	15.2	2.5	0718	4086		
18764	BIGB	02	18	1748	N01 W47	02	15.2	2.0	0693	4086		
18764	BIGB	02	19	1700	N02 W60	02	15.2	2.0	0553	4086		
18764	BIGB	02	20	2100	N02 W77	02	15.1	1.0	0600	4086		
18765	BIGB	02	09	1910	S13 E74	02	15.4	2.5	2000	4086A		
18765	BIGB	02	10	1917	S13 E65	02	15.7	3.0	2000	4086A		
18765	BIGB	02	11	1923	S14 E52	02	15.7	3.0	1503	4086A		
18765	BIGB	02	12	1915	S14 E40	02	15.8	3.0	1850	4086A		
18765	BIGB	02	13	1822	S14 E25	02	15.6	2.5	1900	4086A		
18765	BIGB	02	14	1855	S14 E13	02	15.8	2.5	1394	4086A		
18765	BIGB	02	15	1945	S14 W00	02	15.8	2.5	1361	4086A		
18765	BIGB	02	16	1936	S14 W12	02	15.9	2.5	1211	4086A		
18765	BIGB	02	17	1943	S15 W25	02	15.9	2.5	1350	4086A		
18765	BIGB	02	18	1748	S14 W35	02	16.1	2.5	1254	4086A		
18765	BIGB	02	19	1700	S14 W50	02	15.9	2.5	1003	4086A		
18765	BIGB	02	20	2100	S15 W64	02	16.0	2.0	1000	4086A		
18765	BIGB	02	22	1948	S17 W87	02	16.2	1.0	0300	4086A		
18766	BIGB	02	09	1910	N14 E70	02	15.1	1.0	0900			
18766	BIGB	02	10	1917	N17 E64	02	15.7	1.0	1000			
18766	BIGB	02	11	1923	N12 E50	02	15.6	2.0	1300			
18766	BIGB	02	12	1915	N14 E38	02	15.7	2.5	1600			
18766	BIGB	02	13	1822	N15 E27	02	15.8	2.5	1700			
18766	BIGB	02	14	1855	N12 E09	02	15.5	2.5	0996			
18766	BIGB	02	15	1945	N13 E04	02	16.1	2.0	0962			
18766	BIGB	02	16	1936	N14 W11	02	16.0	2.5	0896			
18766	BIGB	02	17	1943	N14 W24	02	16.0	2.0	1094			
18766	BIGB	02	18	1748	N15 W32	02	16.3	2.0	0973			
18766	BIGB	02	19	1700	N18 W44	02	16.3	2.0	0900			
18766	BIGB	02	20	2100	N15 W60	02	16.3	1.5	0900			
18766	BIGB	02	22	1948	N16 W74	02	17.2	1.0	0250			
18774	BIGB	02	19	1700	S15 W28	02	17.6	2.0	0173			
18774	BIGB	02	20	2100	S16 W43	02	17.6	2.0	0150			
18774	BIGB	02	21	1814	S16 W54	02	17.7	2.0	0082			
18774	BIGB	02	22	1948	S16 W68	02	17.7	1.5	0033			
18767	BIGB	02	12	1915	S18 E80	02	18.9	1.0	0750			
18767	BIGB	02	13	1822	S19 E70	02	19.1	3.0	1300			

CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

FEBRUARY 1983

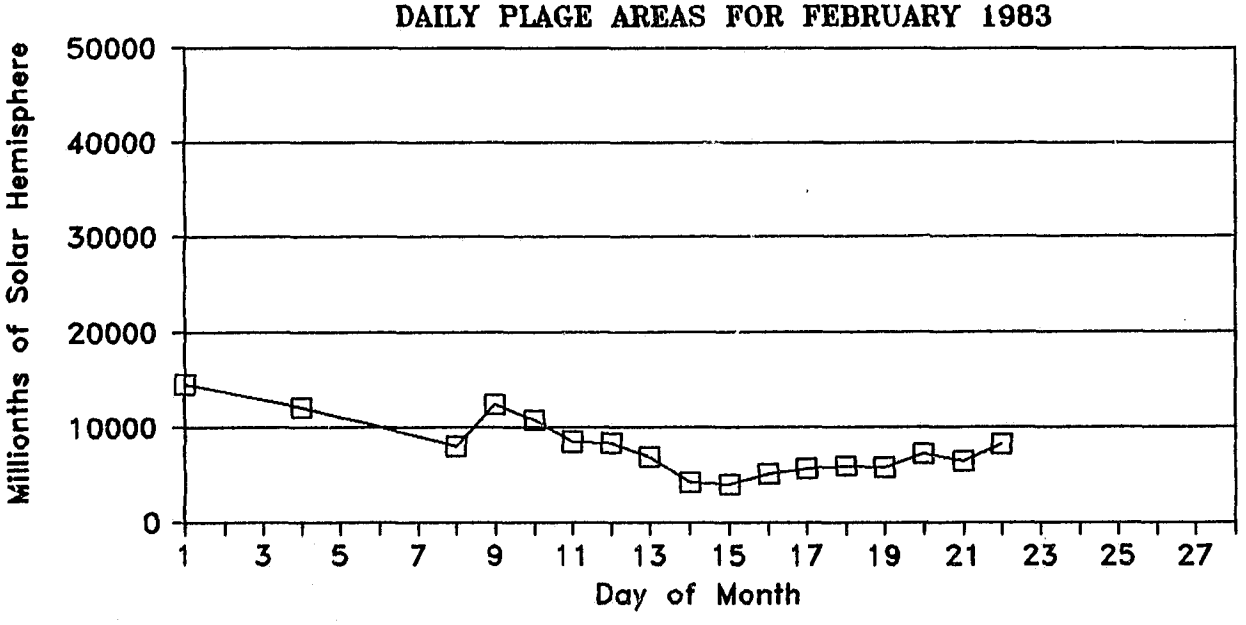
Calcium Plage Region	Sta	Observation Time Mo Day (UT)	Lat CMD	CMP Mo Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF Sunspot Groups #1	#2	#3
18767	BIGB	02 14 1855	S20 E57	02 19.1	2.5	0780			
18767	BIGB	02 15 1945	S20 E45	02 19.3	2.0	0614			
18767	BIGB	02 16 1936	S18 E32	02 19.2	1.5	0880			
18767	BIGB	02 17 1943	S19 E20	02 19.3	1.5	0786			
18767	BIGB	02 18 1748	S18 E09	02 19.4	2.0	0860			
18767	BIGB	02 19 1700	S19 W03	02 19.5	2.5	1000			
18767	BIGB	02 20 2100	S16 W25	02 19.0	2.0	1100			
18767	BIGB	02 21 1814	S19 W27	02 19.7	2.0	0957			
18767	BIGB	02 22 1948	S18 W40	02 19.8	2.0	0680			
18768	BIGB	02 14 1855	S19 E65	02 19.7	2.0	0199	4090		
18768	BIGB	02 15 1945	S19 E53	02 19.9	2.5	0215	4090		
18768	BIGB	02 16 1936	S18 E40	02 19.9	1.5	0265	4090		
18768	BIGB	02 17 1943	S18 E28	02 19.9	2.5	0290	4090		
18768	BIGB	02 18 1748	S17 E16	02 19.9	2.5	0313	4090		
18768	BIGB	02 19 1700	S17 E04	02 20.0	2.5	0259	4090		
18768	BIGB	02 20 2100	S16 W10	02 20.1	2.5	0350	4090		
18768	BIGB	02 21 1814	S17 W20	02 20.2	2.5	0396	4090		
18768	BIGB	02 22 1948	S18 W33	02 20.3	2.5	0282	4090		
18771	BIGB	02 16 1936	S10 E58	02 21.2	2.5	0182			
18771	BIGB	02 17 1943	S11 E47	02 21.3	1.0	0171			
18771	BIGB	02 18 1748	S10 E35	02 21.4	1.5	0165			
18771	BIGB	02 19 1700	S11 E25	02 21.6	1.5	0086			
18771	BIGB	02 20 2100	S11 E10	02 21.6	2.0	0150			
18771	BIGB	02 21 1814	S11 W00	02 21.7	1.5	0115			
18771	BIGB	02 22 1948	S10 W15	02 21.7	2.0	0315			
18770	BIGB	02 17 1943	N20 E56	02 22.1	1.0	0102			
18770	BIGB	02 18 1748	N20 E41	02 21.9	1.0	0115			
18776	BIGB	02 20 2100	S05 E23	02 22.6	2.0	0075			
18772	BIGB	02 16 1936	S12 E71	02 22.2	2.5	0946	4091		
18772	BIGB	02 17 1943	S15 E64	02 22.7	1.5	0786	4091		
18772	BIGB	02 18 1748	S14 E52	02 22.7	2.0	0792	4091		
18772	BIGB	02 19 1700	S14 E42	02 22.9	2.0	0553	4091		
18772	BIGB	02 20 2100	S14 E26	02 22.8	2.0	0560	4091		
18772	BIGB	02 21 1814	S13 E15	02 22.9	2.5	0643	4091		
18772	BIGB	02 22 1948	S14 E01	02 22.9	2.5	0581	4091		
18777	BIGB	02 20 2100	S11 E35	02 23.5	2.0	0120	4095		
18777	BIGB	02 21 1814	S11 E21	02 23.3	2.0	0231	4095		
18777	BIGB	02 22 1948	S10 E08	02 23.4	2.0	0116	4095		
18773	BIGB	02 17 1943	S12 E76	02 23.5	1.0	0085	4100	4092	
18773	BIGB	02 18 1748	S12 E69	02 23.9	2.0	0478	4100	4092	
18773	BIGB	02 19 1700	S10 E59	02 24.1	2.0	0553	4100	4092	
18773	BIGB	02 20 2100	S09 E45	02 24.2	2.5	0550	4100	4092	
18773	BIGB	02 21 1814	S10 E31	02 24.1	2.0	0692	4100	4092	
18773	BIGB	02 22 1948	S10 E17	02 24.1	2.5	0531	4100	4092	
18775	BIGB	02 19 1700	N04 E61	02 24.3	1.5	0605			
18775	BIGB	02 20 2100	N06 E50	02 24.6	2.0	0750			
18775	BIGB	02 21 1814	N04 E34	02 24.3	2.0	0544			
18775	BIGB	02 22 1948	N04 E19	02 24.2	2.0	0514			
18779	BIGB	02 20 2100	N14 E69	02 26.1	3.0	0450	4094		
18779	BIGB	02 22 1948	N12 E39	02 25.8	2.5	0348	4094		
18780	BIGB	02 20 2100	N07 E80	02 26.9	1.0	0300			
18780	BIGB	02 21 1814	N05 E61	02 26.3	2.0	0526			
18780	BIGB	02 22 1948	N04 E45	02 26.2	2.0	0315			
18778	BIGB	02 20 2100	N17 E70	02 26.2	1.5	0150	4101		
18778	BIGB	02 21 1814	N16 E63	02 26.5	2.5	0495	4101		
18778	BIGB	02 22 1948	N16 E49	02 26.5	2.5	0531	4101		
18781	BIGB	02 21 1814	S20 E72	02 27.3	1.5	1500	4101A		
18781	BIGB	02 22 1948	S20 E60	02 27.4	2.5	1411	4101A		

84
Late
Feb 83

DAILY PLAGE SUMMARIES

FEBRUARY 1983

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths	Largest Plage of Solar	Total Area Hemisphere)	Smallest Intensity	Largest Intensity
01	BIGB	25.9	11	426	3050	14563	1.0	3.5
02	No Observations This Day							
03	No Observations This Day							
04	BIGB	23.6	11	195	2689	12122	1.0	3.5
05	No Observations This Day							
06	No Observations This Day							
07	No Observations This Day							
08	BIGB	13.2	9	200	2151	8000	1.0	3.5
09	BIGB	15.4	13	425	2600	12450	1.0	3.5
10	BIGB	13.1	11	450	2200	10800	1.0	3.5
11	BIGB	9.1	11	116	2371	8510	1.0	3.0
12	BIGB	10.1	10	225	1850	8375	1.0	3.0
13	BIGB	11.0	8	100	1900	6900	1.0	3.0
14	BIGB	8.4	7	83	1394	4198	1.0	2.5
15	BIGB	7.8	8	49	1361	3997	1.0	2.5
16	BIGB	8.8	9	99	1211	5176	1.5	2.5
17	BIGB	8.8	10	85	1350	5672	1.0	2.5
18	BIGB	9.0	10	115	1254	5956	1.0	2.5
19	BIGB	8.4	11	86	1003	5823	1.0	2.5
20	BIGB	8.5	15	75	1100	7205	1.0	3.0
21	BIGB	8.6	12	82	1500	6412	1.5	2.5
22	BIGB	10.0	15	33	1992	8199	1.0	3.0
23	No Observations This Day							
24	No Observations This Day							
25	No Observations This Day							
26	No Observations This Day							
27	No Observations This Day							
28	No Observations This Day							



BIG BEAR SOLAR OBSERVATORY
ACTIVE REGION SUMMARY

FEBRUARY 1983

REGION	IDENTIFICATION	AGE	FIRST SEEN	DURATION
18751	18713	2	821225	>11 days
752	New	1	830126	>12
753	New (vic. of 18714)	1	830129	11
754	18718	4	830128	13
755	New	1	830131	>05
757	18727	3	830131	>12
759	New	1	830204	>09
756	18724	3	830131	12
758	New (vic. of 18728)	1	830201	12
761	New	1	830208	>06
760	New	1	830204	>10
769	New	1	830215	02
762	18734	2	830208	08
763	18736	2	830209	11
764	18737	3	830209	>11
765	18739	3	830209	13
766	18738	3	830209	13
774	New	1	830219	>03
767	18743 & 18744	4	830212	>12
768	New	1	830214	12
770	New	1	830217	04
771	18746	4	830216	12
772	New (vic. of 18745)	1	830216	13
777	New	1	830220	>04
773	18749	2	830217	>12
775	18748	2	830219	>10
779	New (vic. of 18750)	1	830220	>09
778	New (vic. of 18750)	1	830220	>09
780	18750	4	830220	>09
781	18751	3	820221	>08
782	18752	2	830222	>07

1. No CaK Observations at BBSO on Feb. 2, 3, 5-7, 9, 12, 13, 20, 23-29.

2. No CaK Prints on Feb. 2, 3, 5-7, 18, 23-29.

3. No KPNO Magnetograms on Feb. 2-8, 16, 18, 24, 29.

4. Contiguous Plages: 18751/18752
18767/18768

5. Mount Wilson CaK Prints were used on Feb. 9, 12, 13, 19-22.

☆ U.S. GOVERNMENT PRINTING OFFICE:1985—676-027 / 20004