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TWX 710-320-6842 ASTROGRAM CAM EASYLINK 62794505
MARSDEN@CFA.BITNET or .SPAN BRIAN@CFAPS1.SPAN GARETH@CFAPS1.SPAN
Brian G. Marsden, Director Gareth V. Williams, Associate Director

NAG5-864
7N-89-CR
78388
P-186

ERRATA.

MPC	Line				
15470	-9	For	56 9	read	56.9
19484	24	For	(M-P)	read	(M-C)

* * * * *

CORRECTED OBSERVATIONS.

The following observations correct those previously published.

Object	Date	UT	R. A. (2000)	Decl.	Reference	Mag.	N	Obs.
1931 TZ2	1931 10	10.20833	00 01 54.81	+03 36 11.3	MPC 15331			690
1931 TZ2	1931 10	11.21181	00 01 26.04	+03 20 36.5	MPC 15331			690
1990 HM3	* 1990 04	29.76870	18 40 05.55	-23 05 39.6	MPC 17101			413
1990 HM3	1990 05	02.74389	18 40 10.01	-23 07 10.1	MPC 17101			413
1990 HN3	* 1990 04	29.76870	18 40 19.92	-23 32 34.0	MPC 17101			413
1990 HN3	1990 05	02.74389	18 41 10.07	-23 32 25.3	MPC 17101			413
1990 HO3	* 1990 04	29.76870	18 43 28.80	-23 54 06.5	MPC 17101			413
1990 HO3	1990 05	02.74389	18 43 26.37	-23 56 08.7	MPC 17101			413
1967 GK1	1967 04	15.91667	12 46 47.15	+12 05 41.4	MPC 10678		1	033
1992 AD	1992 01	31.89052	08 04 37.89	+20 50 48.8	MPC 19575		2	049
(12)	1929 11	29.0049	05 16 50	+18 47.9	RI 269	10.5	3	006
(56)	1929 11	29.0049	05 28 44	+12 46.6	RI 269	12.4	3	006
(306)	1929 11	29.0049	05 36 49	+12 47.0	RI 269	11.6	3	006
(329)	1929 11	06.0069	05 04 14	+00 35.4	RI 258	12.5	3	006
(339)	1929 10	28.0014	03 27 05	+06 59.3	RI 248	12.7		006
(354)	1929 11	06.0069	05 11 01	-03 27.6	RI 258	10.0	3	006
(482)	1929 07	05.8851	18 36 04	-00 42.3	RI 247	11.4	4	990
(483)	1929 07	05.8851	18 39 43	+02 39.0	RI 247	12.0	4	990
(554)	1929 10	06.81021	23 40.9	+03 21	RI 237	10.2	5	094
(569)	1929 03	12.9292	12 00.49	-01 52.6	RI 229	12.0		022
(1001)	1982 01	28.90521	05 53 20.88	+18 43 01.2	MPC 7562		4	560
(1001)	1982 01	28.95243	05 53 19.89	+18 42 56.2	MPC 7562		4	560
(2111)	1979 06	01.89167	16 21 50.71	-06 28 24.3	MPC 5879		6	552
(2111)	1979 06	01.90972	16 21 49.83	-06 28 21.4	MPC 5879		6	552
(2271)	1981 11	29.50972	04 37 32.21	+17 14 09.4	MPC 6628		6	879
(2271)	1981 11	29.52361	04 37 31.21	+17 14 11.4	MPC 6628	16.0	6	879
(2284)	1988 10	17.16239	00 36 06.42	-03 10 46.2	MPC 15035		6	808
(2284)	1988 10	17.19771	00 36 04.53	-03 10 58.8	MPC 15035		6	808
(3327)	1990 04	29.76870	18 40 19.03	-23 32 24.2	MPC 17104			413
(3327)	1990 05	02.74389	18 40 47.48	-23 33 34.5	MPC 17104			413

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Note 1: 1967 GK1 = (2301). 2: time corrected. 3: date corrected by +1 day. 4: date corrected by -1 day. 5: originally given as (354). 6: observations interchanged.

* * * * *

DELETED OBSERVATIONS.

The following observations are to be deleted.

Object		Date	UT	R. A. (2000)	Decl.	Reference	Obs.
1959 VG	*	1959 11	10.38	05 11.6	+19 55	MPC 2007	760
1959 VG		1959 11	10.42907	05 11 31.57	+19 55 40.3	MPC 12042	760
(238)		1929 11	05.9096	01 01 24	-00 18.5	RI 248	990
(238)		1929 11	07.9131	01 00 06	-00 30.4	RI 248	990
(270)		1929 07	10.9007	19 15 34	-20 03.7	RI 247	990
(597)		1929 11	05.9096	00 49 02	-00 11.8	RI 248	990
(597)		1929 11	07.9131	00 47 50	-00 04.1	RI 248	990
(601)		1929 10	07.8752	23 55 22	-05 56.1	RI 256	990
(617)		1929 10	28.8644	01 01 49	-07 46.7	RI 248	990
(906)		1972 10	06.00764	01 41 03.95	+03 18 43.2	MPC 3600	056
(906)		1972 10	06.04792	01 41 02.10	+03 18 56.1	MPC 3600	056
(914)		1942 07	04.91910	18 17 13.61	-02 24 40.7	RI 2400	028
(914)		1957 03	25.66250	13 46 15.48	-43 52 05.5	MPC 2612	388
(919)		1955 11	13.54097	03 20 31.75	+18 11 05.2	MPC 2587	388
(924)		1971 01	16.78528	05 34 43.44	+12 27 35.2	MPC 5117	073
(924)		1971 01	16.80329	05 34 42.64	+12 27 42.4	MPC 5117	073
(925)		1976 11	17.83615	01 22 40.37	+42 24 50.8	MPC 6234	020
(925)		1976 11	17.83892	01 22 39.65	+42 24 51.9	MPC 6234	020
(929)		1967 02	08.10469	11 44 55.04	-04 54 18.6	MPC 3343	020
(929)		1967 02	08.13725	11 44 54.58	-04 54 26.5	MPC 3343	020
(929)		1967 02	15.08308	11 41 42.43	-04 37 41.9	MPC 3343	020
(929)		1967 02	15.10594	11 41 42.06	-04 37 48.1	MPC 3343	020
(929)		1968 09	04.96488	00 19 33.60	+08 08 09.4	MPC 3445	020
(929)		1968 09	04.97874	00 19 32.63	+08 08 07.1	MPC 3445	020
(936)		1966 12	17.13732	08 05 22.89	+22 34 00.7	MPC 3343	020
(936)		1966 12	17.15255	08 05 21.43	+22 34 17.8	MPC 3343	020
(936)		1966 12	23.05983	08 01 36.68	+22 53 42.1	MPC 3343	020
(936)		1966 12	23.07575	08 01 35.30	+22 53 50.3	MPC 3343	020
(937)		1982 01	22.21184	08 51 03.07	+12 16 04.2	MPC 15033	808
(938)		1971 10	19.98657	01 45 46.55	+06 33 11.7	MPC 6381	020
(939)		1969 02	17.91603	08 51 55.38	+18 19 34.2	MPC 3445	020
(939)		1969 02	17.93058	08 51 54.99	+18 19 38.5	MPC 3445	020
(940)		1971 12	17.11699	07 32 05.95	+26 24 24.3	MPC 6381	020
(940)		1971 12	17.12877	07 32 05.42	+26 24 36.7	MPC 6381	020
(954)		1968 01	18.75993	06 31 18.74	+21 55 37.3	MPC 3445	020
(954)		1968 01	18.77378	06 31 17.82	+21 55 45.7	MPC 3445	020
(954)		1969 02	18.00814	10 32 09.68	+08 40 42.1	MPC 3445	020
(954)		1969 02	18.02268	10 32 08.75	+08 40 48.2	MPC 3445	020
(954)		1971 07	29.99937	22 40 22.07	-07 48 39.2	MPC 5117	073
(954)		1971 07	30.00699	22 40 21.94	-07 48 39.6	MPC 5117	073
(960)		1955 11	10.66736	05 24 01.57	+23 24 16.5	MPC 2587	388
(960)		1957 03	06.67847	12 26 00.56	-07 42 45.5	MPC 8947	388
(962)		1956 12	22.46285	04 32 00.00	+18 08 46.3	MPC 2158	388
(963)		1968 09	05.04694	00 35 31.74	-10 59 14.4	MPC 3446	020
(963)		1968 09	05.06426	00 35 30.79	-10 59 12.9	MPC 3446	020
(966)		1966 11	25.14632	05 30 04.51	+24 35 29.7	MPC 3343	020

(966)	1966 11 25.15673	05 30 04.14	+24 35 40.7	MPC	3343	020
(968)	1969 08 25.03673	23 39 24.19	+09 03 06.7	MPC	3446	020
(968)	1969 08 25.04366	23 39 23.32	+09 03 18.8	MPC	3446	020
(968)	1969 10 06.92589	23 10 34.39	+04 14 44.8	MPC	3446	020
(968)	1969 10 06.93905	23 10 33.22	+04 14 53.6	MPC	3446	020
(974)	1938 01 30.94244	10 05 21.76	+19 17 08.2	MPC	3222	020
(974)	1955 05 18.50452	14 44 58.77	-10 23 48.1	MPC	2612	388
(974)	1955 05 20.65578	14 43 12.59	-10 19 42.5	MPC	1413	377
(975)	1975 04 09.09753	15 51 08.02	-20 41 17.8	MPC	4880	020
(975)	1975 04 09.11381	15 51 07.89	-20 41 16.3	MPC	4881	020
(978)	1957 07 20.93162	18 26 13.16	+07 21 36.7	MPC	1822	020
(981)	1971 07 30.94526	20 04 26.48	-23 50 44.7	MPC	6382	020
(981)	1971 07 30.95288	20 04 25.71	-23 50 42.0	MPC	6382	020
(984)	1967 02 08.10469	11 44 04.55	-05 25 11.0	MPC	3343	020
(984)	1967 02 08.13725	11 44 03.67	-05 25 12.8	MPC	3343	020
(984)	1967 02 15.08308	11 40 00.86	-05 18 33.3	MPC	3343	020
(984)	1967 02 15.10594	11 39 59.74	-05 18 20.6	MPC	3343	020
(996)	1939 03 14.87828	09 42 39.19	+14 03 47.7	MPC	3223	020
(996)	1939 03 14.92191	09 42 37.95	+14 03 54.6	MPC	3223	020
(999)	1978 11 05.15311	22 55 07.95	+00 18 18.5	MPC	9545	808
(999)	1978 11 05.17804	22 55 09.39	+00 18 08.7	MPC	9545	808

* * * * *

IDENTIFICATION CHANGES.

Continuation to MPC 19159.

Object		Date	UT	R. A. (2000)	Decl.	Old desig.	Mag.	N Obs.
A910 NC	*	1910 07	15.00778	20 00 56.33	-24 07 10.3	1029		024
A921 UH	*	1921 10	25.90340	02 26 31.78	+14 36 36.1	1029		024
A922 OC	*	1922 07	29.98979	21 12 04.61	-16 38 33.7	928		024
1927 BQ	*	1927 01	28.76890	05 03.4	-05 23	1051	16.0	024
1930 AH	*	1930 01	06.97348	06 17.1	+33 34	227	13.5	094
1930 DC1	*	1930 02	21.83578	03 47.8	+25 42	408	15.5	024
1930 DD1	*	1930 02	28.90063	11 02.1	-07 37	583	12.7	094
1933 BA1	*	1933 01	24.28615	09 23 42.60	+16 21 32.9	1933 BV	15.0	754
1933 BB1	*	1933 01	31.26626	09 16 34.84	+16 44 50.4	1933 BV	16.0	754
1942 NC	*	1942 07	13.88	19 59.3	-35 47	1087	12.0	078
1947 GK	*	1947 04	11.89260	11 43 07.68	+08 08 01.1	924		012
1947 GK		1947 04	16.95444	11 40 28.25	+08 26 25.7	924		012
1948 KJ	*	1948 05	31.886	16 46.5	-23 45	1079	14.0	078
1951 FD	*	1951 03	26.89	12 48.5	+00 52	1087	13.7	020
1957 YA1	*	1957 12	22.79260	04 49 51.75	+24 38 10.0	966		024
1978 WY16	*	1978 11	30.31702	04 08 56.62	+19 08 48.9	6372 P-L	18.5V	675
1978 WY16		1978 12	01.33472	04 07 58.05	+19 05 24.1	6372 P-L		675
1982 DJ7	*	1982 02	27.97367	11 01 13.21	+08 21 59.2	1982 DJ5		010
1986 CM2	*	1986 02	15.03822	10 07 12.78	+20 03 37.0	1986 CO		046
1989 CK9	*	1989 02	10.35694	11 24 04.06	+05 00 56.8	1989 CM8		809
1989 CK9		1989 02	10.36250	11 24 03.75	+05 00 58.7	1989 CM8		809
1989 CK9		1989 02	10.36806	11 24 03.47	+05 01 00.3	1989 CM8		809
1991 PP17	*	1991 08	10.44618	00 22 53.46	+06 48 36.1	1987 QZ1		675
1991 PQ17	*	1991 08	08.44149	23 42 22.70	+01 18 17.0	1991 PV10	17.2	675
1991 TE8	*	1991 10	08.47049	23 45 44.29	+06 40 07.1	1991 SP1	16.5	400
1991 TE8		1991 10	08.48785	23 45 43.42	+06 40 03.2	1991 SP1		400
1992 CA1	*	1992 02	01.56632	10 21 42.33	+08 49 49.1	1992 BY		364
1992 CA1		1992 02	01.58021	10 21 41.84	+08 49 55.0	1992 BY		364

ERRONEOUS IDENTIFICATIONS.

The following identifications are erroneous:

	Ref.		Ref.		Ref.
A924 LB = (1032)	1	1933 BV = (2267)	2	1963 MB = (1061)	3

Ref. 1: MPC 6484. 2: MPC 14977. 3: MPC 2506.

* * * * *

IDENTIFICATIONS.

Continuation to MPC 18665:

	Note		Note		Note
A910 NC = (1063)	1	1930 DC1 = (1040)	1	1933 BV = (300)	1
1933 BB1 = (2267)	2	1942 NC = (1132)	1	1947 GK = (627)	1
1948 KJ = (1162)	1	1951 FD = (301)	1	1957 YA1 = (198)	1
1963 MB = (3459)	1				

Note 1: identification by G. V. Williams. 2: by S. Nakano.

* * * * *

OBSERVATIONS OF COMETS.

Observations are published here for the following observatory codes:

098 Cima Ekar. Observers A. Boattini and M. Tombelli.
323 Perth Observatory, Bickley. Observer G. Lowe. Measured by T. Smith.
364 JCPM Kagoshima Station. 0.25-m f/4.2 Wright-Schmidt. Observer M. Mukai. Measured by M. Takeishi.
372 Geisei. 0.60-m reflector. Observer T. Seki. In part from Orient. Astron. Assoc. Comet Bull.
373 Oishi. 0.31-m f/4.2 and f/5.3 reflectors. Observer M. Tsumura. Measured by S. Hayakawa and M. Takeishi.
376 Uenohara. 0.30-m reflector + CCD. Observer N. Kawasato.
399 Kushiro. 0.25-m f/3.5 reflector. Observer S. Ueda. Measured by H. Kaneda.
411 Oizumi. 0.16-m f/4.8 reflector + CCD. Observer T. Kobayashi.
413 Siding Spring. Uppsala Southern Schmidt and 1.0-m reflector + CCD. Observers R. H. McNaught and S. D. Ryder. Measured by McNaught.
415 Kambah, near Canberra. Observer D. Herald.
474 Mt. John. 0.6-m reflector. Observer A. C. Gilmore. Measured by P. M. Kilmartin.
540 Linz. 0.3-m f/5.2 Schmidt-Cassegrain. Observers E. Meyer, E. Obermair and H. Raab.
587 Sormano. 0.21-m f/4.9 astrograph. Observers S. Barni, M. Cavagna, E. Colzani, P. Sicoli and G. Ventre.
595 Farra d'Isonzo. Observers G. Lombardi and F. Piani.
598 Loiano. 0.2-m f/8 reflector + CCD. Observer G. Del Zanna. Long. and Parallax 11.3333, 0.71739, +0.69433 (see MPC 19348).
658 Dominion Astrophysical Observatory, Victoria. 1.85-m reflector + CCD. Observer G. C. L. Aikman. Measured by D. D. Balam.
675 Palomar. 0.46-m Schmidt. Observers H. E. Holt, K. A. Lawler and J. Stiffler. Measured by C. M. Olmstead and B. A. Skiff.

801 Oak Ridge Observatory. 1.5-m reflector + CCD. Observers R. E. McCrosky and C.-Y. Shao.
809 European Southern Observatory. 2.2-m and 1.5-m reflectors. Observers W. Landgraf (1988) and R. M. West (1991).
894 Otomo. 0.25-m f/3.4 reflector. Observer S. Otomo.
950 La Palma. 2-m Nordic optical telescope. Observers K. Aksnes and O. Dahl.
984 Eastfield Observatory. 0.17-m f/7 astrograph. Observer H. B. Ridley.

Object	Date UT	R. A. (2000)	Decl.	Mag.	N Obs.
	Periodic Comet Smirnova-Chernykh				
/1984 V	1992 02 04.67257	09 36 19.17	+22 37 42.6	16.7 T	894
/1984 V	1992 02 04.69896	09 36 18.05	+22 37 48.5		894
/1984 V	1992 02 05.55417	09 35 43.73	+22 41 23.4	16 T	399
/1984 V	1992 02 05.56947	09 35 42.93	+22 41 26.6		399
/1984 V	1992 02 21.49696	09 24 58.41	+23 38 37.5		411
/1984 V	1992 02 21.49932	09 24 58.25	+23 38 37.0		411
/1984 V	1992 02 21.50438	09 24 58.12	+23 38 38.8		411
/1984 V	1992 02 21.50786	09 24 57.95	+23 38 38.6		411
/1984 V	1992 02 22.56784	09 24 17.01	+23 41 40.0		411
/1984 V	1992 02 22.56947	09 24 16.94	+23 41 39.5		411
/1984 V	1992 02 22.57609	09 24 16.72	+23 41 40.8		411
/1984 V	1992 02 22.57780	09 24 16.73	+23 41 41.3		411
	Periodic Comet Halley				
/1986 III	1988 05 12.00273	09 31 29.66	-04 21 22.0		809
/1986 III	1991 03 12.09039	09 16 33.92	-03 57 28.7		809
/1986 III	1991 03 12.18940	09 16 32.42	-03 57 16.8		809
/1986 III	1991 03 13.07279	09 16 19.17	-03 55 31.4		809
/1986 III	1991 03 13.17625	09 16 17.64	-03 55 21.6		809
/1986 III	1991 03 14.21069	09 16 02.58	-03 53 18.1		809
/1986 III	1991 03 16.07571	09 15 35.89	-03 49 35.1		809
/1986 III	1991 03 16.17674	09 15 34.37	-03 49 23.2		809
/1986 III	1991 03 17.05153	09 15 22.08	-03 47 40.9		809
/1986 III	1991 03 17.18258	09 15 20.23	-03 47 23.2		809
/1986 III	1991 03 18.05688	09 15 08.20	-03 45 37.3		809
	Periodic Comet Schwassmann-Wachmann 1				
/1989 XV	1992 02 07.52986	03 11 47.42	+27 16 16.8		376
/1989 XV	1992 02 21.47468	03 16 40.16	+27 09 37.9		411
/1989 XV	1992 02 21.47633	03 16 40.40	+27 09 38.2		411
/1989 XV	1992 02 22.43834	03 17 05.10	+27 09 30.7		411
/1989 XV	1992 02 22.44244	03 17 05.13	+27 09 28.1		411
	Comet Levy (1990 XX)				
/1990 XX	1992 02 05.21907	08 56 31.78	+31 33 31.4		801
/1990 XX	1992 02 05.24241	08 56 30.26	+31 33 39.8		801
/1990 XX	1992 02 07.25259	08 54 28.81	+31 44 07.5		801
/1990 XX	1992 02 07.26721	08 54 27.95	+31 44 11.8		801
	Comet Shoemaker-Levy (1991d)				
/1991d	1992 01 03.22095	16 54 20.65	+39 34 24.1		098
/1991d	1992 02 05.45125	18 46 28.02	+40 20 15.3		801
/1991d	1992 02 05.45288	18 46 28.32	+40 20 15.5		801
/1991d	1992 02 06.43392	18 49 21.51	+40 20 46.2		801
/1991d	1992 02 06.43587	18 49 21.86	+40 20 46.3		801
/1991d	1992 02 22.79653	19 33 16.67	+40 29 51.2	12.5 T	372

/1991d	1992 02 22.80313	19 33 17.40	+40 29 51.8			372
/1991d	1992 02 27.79027	19 45 05.22	+40 33 44.6	12	T	372
	Periodic Comet Kowal 1					
/1991i	1992 02 26.76771	13 59 07.51	-11 29 41.8	17.5	T	372
/1991i	1992 02 27.76285	13 59 02.24	-11 29 43.5			372
	Comet Helin-Lawrence (1991l)					
/1991l	1991 12 10.62538	13 16 45.19	-58 58 16.9			474
/1991l	1991 12 10.63152	13 16 46.07	-58 58 37.6			474
/1991l	1992 02 05.49285	00 34 54.17	-56 11 50.6			474
/1991l	1992 02 05.51038	00 34 56.21	-56 10 49.8			474
	Periodic Comet Faye					
/1991n	1991 11 10.87222	01 52 43.21	+02 56 58.4			595
/1991n	1991 12 05.89517	02 09 27.89	+00 47 50.7			598
/1991n	1991 12 05.89844	02 09 28.07	+00 47 50.6			598
/1991n	1992 02 03.00039	03 41 48.96	+07 44 41.9			801
/1991n	1992 02 03.00388	03 41 49.44	+07 44 44.0			801
/1991n	1992 02 06.02860	03 47 42.79	+08 13 09.8			801
/1991n	1992 02 06.04059	03 47 44.17	+08 13 16.6			801
/1991n	1992 02 07.44287	03 50 29.34	+08 26 17.8			411
/1991n	1992 02 07.44410	03 50 29.56	+08 26 20.2			411
/1991n	1992 02 07.44525	03 50 29.62	+08 26 20.4			411
/1991n	1992 02 07.44623	03 50 29.75	+08 26 21.8			411
/1991n	1992 02 21.45575	04 18 35.85	+10 29 29.5			411
/1991n	1992 02 21.45729	04 18 36.08	+10 29 30.0			411
/1991n	1992 02 21.45864	04 18 36.28	+10 29 31.4			411
/1991n	1992 02 21.46002	04 18 36.40	+10 29 31.9			411
/1991n	1992 02 21.46133	04 18 36.56	+10 29 32.2			411
/1991n	1992 02 21.46264	04 18 36.67	+10 29 33.2			411
/1991n	1992 02 22.44741	04 20 37.29	+10 37 36.9			411
/1991n	1992 02 22.44889	04 20 37.48	+10 37 38.4			411
/1991n	1992 02 22.45023	04 20 37.52	+10 37 38.9			411
/1991n	1992 02 22.45155	04 20 37.74	+10 37 38.4			411
/1991n	1992 02 22.45290	04 20 38.04	+10 37 38.8			411
/1991n	1992 02 22.45425	04 20 38.05	+10 37 39.5			411
	Periodic Comet Chernykh					
/1991o	1991 09 15.35226	23 33 48.60	-08 42 24.3	17.2	T	675
/1991o	1991 09 15.38958	23 33 47.38	-08 42 37.9			675
/1991o	1991 09 17.33941	23 32 45.50	-08 53 20.8	17.0	T	675
/1991o	1991 09 17.37222	23 32 44.40	-08 53 30.3			675
	Periodic Comet Levy					
/1991q	1992 02 05.21517	08 29 55.35	+30 30 25.1			801
/1991q	1992 02 05.23163	08 29 54.19	+30 30 22.6			801
/1991q	1992 02 07.23492	08 27 34.07	+30 25 54.1			801
/1991q	1992 02 07.24850	08 27 33.08	+30 25 52.2			801
	Periodic Comet Hartley 2					
/1991t	1992 02 05.26506	10 27 59.43	-07 40 52.9			801
/1991t	1992 02 05.28075	10 27 58.16	-07 40 46.3			801
/1991t	1992 02 07.32976	10 25 15.46	-07 24 17.9			801
/1991t	1992 02 07.33850	10 25 14.65	-07 24 14.7			801
	Periodic Comet McNaught-Hughes					
/1991y	1992 01 15.44255	00 22 01.07	-04 23 42.1			413
/1991y	1992 01 15.44578	00 22 01.52	-04 23 41.2			413

Comet Shoemaker-Levy (1991a1)

/1991a1	1992 02 05.96993	00 10 36.56	+29 18 08.0		801
/1991a1	1992 02 06.00537	00 10 36.74	+29 18 06.3		801
/1991a1	1992 02 06.96869	00 10 42.40	+29 17 36.7		801
/1991a1	1992 02 06.99377	00 10 42.54	+29 17 36.0		801
/1991a1	1992 02 07.42898	00 10 45.28	+29 17 26.2		411
/1991a1	1992 02 24.76944	00 14 48.62	+29 39 13.2		540

Periodic Comet Shoemaker-Levy 7

/1991d1	1991 12 24.96941	03 35 08.49	+37 25 34.7		950
/1991d1	1991 12 24.99728	03 35 09.62	+37 25 14.9		950

Periodic Comet Kowal 2

/1991f1	1992 01 04.58993	08 29 29.93	-08 33 10.3		373
/1991f1	1992 01 04.60069	08 29 29.45	-08 33 19.8		373
/1991f1	1992 02 05.20823	08 06 04.30	-11 07 27.9		801
/1991f1	1992 02 05.23612	08 06 03.30	-11 07 21.6		801
/1991f1	1992 02 07.18291	08 05 03.26	-10 59 25.5		801
/1991f1	1992 02 07.20709	08 05 02.47	-10 59 19.1		801
/1991f1	1992 02 07.30800	08 04 59.62	-10 58 53.8		658
/1991f1	1992 02 07.31042	08 04 59.52	-10 58 52.0		658
/1991f1	1992 02 22.54277	08 01 20.18	-09 18 19.3	14.5 T	411
/1991f1	1992 02 22.54516	08 01 20.19	-09 18 17.9		411
/1991f1	1992 02 22.55769	08 01 20.10	-09 18 11.6		411
/1991f1	1992 02 22.56006	08 01 20.11	-09 18 11.0		411

Comet Zanotta-Brewington (1991g1)

/1991g1	1991 12 29.77640	21 06 32.30	+16 40 53.7		587
/1991g1	1991 12 30.71458	21 10 11.21	+16 15 14.3		595
/1991g1	1991 12 30.72159	21 10 12.69	+16 15 04.0		595
/1991g1	1991 12 30.72847	21 10 14.37	+16 14 52.9		595
/1991g1	1991 12 31.72049	21 14 10.07	+15 46 40.7		595
/1991g1	1991 12 31.72847	21 14 11.94	+15 46 26.3		595
/1991g1	1991 12 31.73542	21 14 13.57	+15 46 15.5		595
/1991g1	1992 01 01.70764	21 18 08.88	+15 17 29.2		595
/1991g1	1992 01 01.71597	21 18 10.79	+15 17 14.2		595
/1991g1	1992 01 01.72431	21 18 12.79	+15 16 58.5		595
/1991g1	1992 01 01.74167	21 18 16.81	+15 16 28.2		587
/1991g1	1992 01 13.71806	22 12 07.55	+07 21 30.0		595
/1991g1	1992 01 13.72639	22 12 10.08	+07 21 02.6		595
/1991g1	1992 01 13.73750	22 12 13.26	+07 20 29.4		595
/1991g1	1992 01 14.76944	22 17 17.74	+06 26 16.6		587
/1991g1	1992 01 21.40382	22 51 00.58	-00 24 59.8		364
/1991g1	1992 01 21.40382	22 51 00.58	-00 24 59.8		364
/1991g1	1992 01 21.40833	22 51 02.04	-00 25 18.1		364
/1991g1	1992 01 21.40833	22 51 02.04	-00 25 18.1		364
/1991g1	1992 01 24.39549	23 06 33.22	-04 07 03.6		894
/1991g1	1992 01 27.39660	23 22 06.42	-08 10 45.0		372
/1991g1	1992 01 27.40632	23 22 09.47	-08 11 33.9		372
/1991g1	1992 02 01.42788	23 47 36.56	-15 34 22.4		413
/1991g1	1992 02 01.42788	23 47 36.56	-15 34 22.4		413
/1991g1	1992 02 01.43234	23 47 37.77	-15 34 46.0		413
/1991g1	1992 02 01.43234	23 47 37.77	-15 34 46.0		413
/1991g1	1992 02 10.40625	00 29 41.50	-29 11 00.4		372
/1991g1	1992 02 10.40868	00 29 42.13	-29 11 12.2		372
/1991g1	1992 02 10.41111	00 29 42.71	-29 11 26.9		372
/1991g1	1992 02 11.76493	22 02 41.14	+08 57 22.2		984
/1991g1	1992 02 25.46863	01 32 01.85	-47 45 17.4		415
/1991g1	1992 02 25.47116	01 32 02.48	-47 45 26.5		415

Comet Mueller (1991h1)

/1991h1	1992 01 04.55816	08 37 43.42	+49 05 18.4				373
/1991h1	1992 01 04.56887	08 37 39.68	+49 05 34.3				373
/1991h1	1992 01 23.42188	05 35 16.49	+48 19 58.5	14		T	372
/1991h1	1992 01 27.49601	04 46 41.88	+44 07 29.4	14		T	372
/1991h1	1992 01 28.61632	04 34 15.62	+42 40 39.3				372
/1991h1	1992 01 28.62135	04 34 12.39	+42 40 17.1	14		T	372
/1991h1	1992 02 01.58229	03 54 45.00	+36 50 06.4	14		T	372
/1991h1	1992 02 03.00661	03 42 22.58	+34 33 14.6				801
/1991h1	1992 02 03.00819	03 42 21.72	+34 33 05.8				801
/1991h1	1992 02 04.57569	03 29 46.91	+31 59 15.7	13.5		T	372
/1991h1	1992 02 04.57778	03 29 45.87	+31 59 06.9				372
/1991h1	1992 02 04.58021	03 29 45.04	+31 58 54.2	13.5		T	372
/1991h1	1992 02 04.58021	03 29 44.94	+31 58 54.0				372
/1991h1	1992 02 06.03031	03 19 05.09	+29 35 39.8				801
/1991h1	1992 02 06.03514	03 19 03.08	+29 35 11.4				801
/1991h1	1992 02 07.45920	03 09 23.80	+27 15 16.3				411
/1991h1	1992 02 07.46072	03 09 23.17	+27 15 05.6				411
/1991h1	1992 02 07.46211	03 09 22.56	+27 14 58.8				411
/1991h1	1992 02 07.50574	03 09 05.32	+27 10 40.4				411
/1991h1	1992 02 07.50766	03 09 04.68	+27 10 30.5				411
/1991h1	1992 02 08.52008	03 02 41.48	+25 32 07.7				411
/1991h1	1992 02 08.52244	03 02 40.82	+25 31 54.9				411
/1991h1	1992 02 08.52572	03 02 39.59	+25 31 36.9				411
/1991h1	1992 02 08.52763	03 02 38.83	+25 31 26.0				411
/1991h1	1992 02 08.52934	03 02 38.16	+25 31 14.7				411
/1991h1	1992 02 08.53116	03 02 37.53	+25 31 04.4				411
/1991h1	1992 02 08.81736	03 00 53.53	+25 03 31.0				540
/1991h1	1992 02 08.82674	03 00 50.01	+25 02 35.1				540
/1991h1	1992 02 08.83681	03 00 46.37	+25 01 37.1				540
/1991h1	1992 02 08.84618	03 00 43.01	+25 00 44.8				540
/1991h1	1992 02 10.42309	02 51 38.67	+22 31 17.3	13		T	372
/1991h1	1992 02 10.55903	02 50 53.50	+22 18 28.3				894
/1991h1	1992 02 19.40620	02 11 44.35	+09 58 43.6				411
/1991h1	1992 02 19.40903	02 11 43.70	+09 58 31.5				411
/1991h1	1992 02 19.41081	02 11 43.19	+09 58 23.5				411
/1991h1	1992 02 19.41289	02 11 42.89	+09 58 13.9				411
/1991h1	1992 02 19.41387	02 11 42.60	+09 58 09.5				411
/1991h1	1992 02 19.41480	02 11 42.41	+09 58 05.2				411
/1991h1	1992 02 22.41384	02 01 18.31	+06 26 49.7	8.5		T	411
/1991h1	1992 02 22.41483	02 01 18.13	+06 26 45.6				411
/1991h1	1992 02 22.41586	02 01 17.97	+06 26 41.0				411
/1991h1	1992 02 22.41702	02 01 17.72	+06 26 36.9				411
/1991h1	1992 02 22.41844	02 01 17.32	+06 26 31.4				411
/1991h1	1992 02 22.42064	02 01 17.00	+06 26 21.8				411
/1991h1	1992 02 22.42208	02 01 16.66	+06 26 15.4				411
/1991h1	1992 02 23.40763	01 58 02.39	+05 20 49.6				411
/1991h1	1992 02 23.40866	01 58 02.23	+05 20 47.1				411
/1991h1	1992 02 23.40969	01 58 01.98	+05 20 41.8				411
/1991h1	1992 02 23.41073	01 58 01.73	+05 20 37.3				411
/1991h1	1992 02 23.41377	01 58 01.11	+05 20 23.8				411
/1991h1	1992 02 23.41569	01 58 00.74	+05 20 17.2				411
/1991h1	1992 02 23.41769	01 58 00.50	+05 20 09.6				411
/1991h1	1992 02 25.40017	01 51 40.91	+03 14 01.1				376
/1991h1	1992 02 25.41476	01 51 38.06	+03 13 05.7				376
/1991h1	1992 02 25.45000	01 51 31.28	+03 10 56.7				364
/1991h1	1992 02 25.45278	01 51 30.85	+03 10 45.0				364
/1991h1	1992 02 26.43056	01 48 27.56	+02 11 10.8				364
/1991h1	1992 02 26.43403	01 48 26.89	+02 10 58.1				364

/1991h1	1992 02 26.43681	01 48 26.32	+02 10 47.0	8.7 T			372
/1991h1	1992 02 28.79097	01 41 09.69	-00 06 24.6	8 T			540
/1991h1	1992 02 28.79861	01 41 08.29	-00 06 50.3				540
	Comet Helin-Alu (1992a)						
/1992a	1992 02 02.48104	08 02 32.72	+01 37 55.4				411
/1992a	1992 02 02.48644	08 02 32.26	+01 37 53.9				411
/1992a	1992 02 02.49191	08 02 32.25	+01 37 53.5				411
/1992a	1992 02 04.60868	08 00 46.27	+01 22 11.3				372
/1992a	1992 02 04.62153	08 00 45.82	+01 22 08.8	17.5 T			372
/1992a	1992 02 05.65451	07 59 55.00	+01 14 40.5	17.5 T			372
/1992a	1992 02 06.12359	07 59 32.17	+01 11 17.1				801
/1992a	1992 02 06.14454	07 59 31.17	+01 11 08.1				801
/1992a	1992 02 08.64329	07 57 31.19	+00 53 39.9				411
/1992a	1992 02 08.64978	07 57 30.95	+00 53 38.2				411
/1992a	1992 02 10.51007	07 56 04.39	+00 41 01.3	17 T			372
/1992a	1992 02 25.42928	07 46 18.25	-00 47 16.2				376
/1992a	1992 02 25.47789	07 46 16.66	-00 47 28.7				376
/1992a	1992 02 29.78125	07 44 12.13	-01 09 04.7				540
/1992a	1992 02 29.82361	07 44 11.13	-01 09 16.8				540
	Comet Bradfield (1992b)						
/1992b	1992 02 03.73782	16 31 11.71	-42 01 19.9				413
/1992b	1992 02 10.82986	17 35 19.99	-41 47 01.8				323
/1992b	1992 02 12.73354	17 53 36.84	-41 18 04.8				413
/1992b	1992 02 12.74081	17 53 41.05	-41 17 57.0				413
/1992b	1992 02 12.74476	17 53 43.35	-41 17 52.7				413
/1992b	1992 02 13.62640	18 02 15.89	-41 00 21.9			1	474
/1992b	1992 02 13.62987	18 02 17.68	-41 00 18.9			1	474
/1992b	1992 02 13.63769	18 02 22.13	-41 00 07.7			1	474
/1992b	1992 02 13.63959	18 02 23.13	-41 00 04.8			1	474

Note 1: poor seeing; increasing cloud, last image very weak, only three reference stars on second pair.

* * * * *

OBSERVATIONS OF MINOR PLANETS.

The observations are listed separately for each observatory code. Alphabetic note codes shown with some of the observations are defined according to the scheme below. Numerical codes are defined in the headings for the individual observatories.

A earlier approximate position inferior
a sense of motion ambiguous
B black or dark plate
b bad seeing
C correction to earlier position
c crowded star field
D declination uncertain
d diffuse image
E at or near edge of plate
F faint image
f involved with emulsion or plate flaw
G poor guiding
g no guiding
I involved with star
i inkdot measured

M measurement difficult
N near edge of plate, measurement uncertain
O image out of focus
o plate measured in one direction only
P position uncertain
p poor image
R right ascension uncertain
r poor distribution of reference stars
S poor sky
s streaked image
T time uncertain
t trailed image
U uncertain image
u unconfirmed image
V very faint image
W weak image
w weak solution

Object	Date UT	R. A. (2000)	Decl.	Mag.	N	Obs.
012 Uccle						
T. Pauwels, Observatoire Royal de Belgique, Avenue Circulaire 3, B-1180 Brussels, Belgium						
Double astrograph						
1992 AC	1992 01 30.00365	09 45 24.24	+27 45 27.3			012
1992 AC	1992 01 30.00417	09 45 24.25	+27 45 27.3			012
1992 AC	1992 01 30.01875	09 45 26.22	+27 46 26.0			012
1992 AC	1992 01 30.03750	09 45 28.79	+27 47 40.3			012
(362)	1992 01 30.00365	09 41 11.57	+27 02 29.0			012
(362)	1992 01 30.00417	09 41 11.57	+27 02 28.5			012
(362)	1992 01 30.01875	09 41 10.63	+27 02 33.2			012
(362)	1992 01 30.01875	09 41 10.68	+27 02 32.5			012
(362)	1992 01 30.03750	09 41 09.57	+27 02 37.7			012
(362)	1992 01 30.06806	09 41 07.68	+27 02 46.0			012
(1002)	1935 02 08.05775	10 05 30.17	+17 33 30.9		R	012
(1002)	1935 02 08.05845	10 05 30.32	+17 33 29.9		T	012
(1002)	1935 02 10.08969	10 03 37.75	+17 38 52.1			012
(1002)	1935 02 10.10700	10 03 36.94	+17 38 55.1			012
033 Tautenburg						
F. Börngen, Karl Schwarzschild Observatorium, O-6901 Tautenburg, Federal Republic of Germany						
L. D. Schmadel, Astronomisches Rechen-Institut, W-6900 Heidelberg, Federal Republic of Germany						
Observers F. Börngen, L. D. Schmadel						
1.3-m Schmidt telescope						
PPM						
1979 SD9	1991 12 10.92222	06 23 28.33	+26 16 18.5			033
1979 SD9	1991 12 10.98056	06 23 25.15	+26 16 23.6	17.5	I	033
1979 SD9	1991 12 12.00347	06 22 31.12	+26 17 57.7			033
1979 SD9	1992 01 02.98264	06 01 56.35	+26 38 10.7	17.3		033
1979 SD9	1992 01 03.02292	06 01 54.22	+26 38 11.2			033
1981 GM1	1991 10 07.88333	00 05 16.60	+02 00 12.9	18.3		033
1981 GM1	1991 10 07.92917	00 05 13.94	+02 00 08.8			033
1981 GM1	1991 10 08.89028	00 04 19.65	+01 58 39.0			033
1982 FA	1991 12 10.92222	06 15 46.80	+23 47 29.5			033
1982 FA	1991 12 10.98056	06 15 43.08	+23 47 35.0	17.4		033
1982 FA	1991 12 12.00347	06 14 38.56	+23 48 59.9			033
1989 CW	1991 12 10.92222	06 18 59.25	+24 34 13.6			033

1989 CW		1991	12	10.98056	06	18	55.35	+24	34	15.9	18.5			033
1989 CW		1991	12	12.00347	06	17	48.88	+24	34	42.9				033
1991 PO17	*	1991	08	14.99618	00	28	19.32	+02	41	22.8	18.5			033
1991 PO17		1991	08	16.04931	00	28	13.22	+02	41	47.9				033
1991 RQ2		1991	10	07.88333	00	07	36.12	+04	01	49.7	18.8		I	033
1991 RQ2		1991	10	07.92917	00	07	34.30	+04	01	22.2				033
1991 RQ2		1991	10	08.89028	00	06	59.25	+03	51	31.8				033
1991 RD7		1991	10	07.88333	00	07	58.03	+03	31	08.3	16.2			033
1991 RD7		1991	10	07.92917	00	07	54.77	+03	31	21.3				033
1991 RD7		1991	10	08.89028	00	06	49.47	+03	35	38.8				033
1991 RR9		1991	10	07.88333	00	00	39.00	+03	01	32.9	17.6			033
1991 RR9		1991	10	07.92917	00	00	36.89	+03	01	28.9				033
1991 RR9		1991	10	08.89028	23	59	56.86	+03	00	03.8				033
1991 RT9		1991	10	07.88333	00	06	47.60	+03	45	57.5	18.0			033
1991 RT9		1991	10	07.92917	00	06	45.45	+03	45	45.9				033
1991 RT9		1991	10	08.89028	00	06	03.72	+03	41	33.3				033
1991 RU9		1991	10	07.88333	00	06	50.81	+03	20	46.5	18.1			033
1991 RU9		1991	10	07.92917	00	06	48.54	+03	20	32.5				033
1991 RU9		1991	10	08.89028	00	06	04.29	+03	15	19.9				033
1991 RA13		1991	10	07.88333	23	58	55.45	+01	18	11.9	19.1			033
1991 RA13		1991	10	07.92917	23	58	53.35	+01	17	57.1				033
1991 RA13		1991	10	08.89028	23	58	11.60	+01	12	36.2				033
1991 RF14		1991	10	07.88333	00	02	48.60	+03	29	30.3	17.4			033
1991 RF14		1991	10	07.92917	00	02	46.46	+03	29	03.6				033
1991 RF14		1991	10	08.89028	00	02	04.47	+03	19	38.7				033
1991 TM7	*	1991	10	07.88333	00	00	42.70	+02	06	04.8	19.1			033
1991 TM7		1991	10	07.92917	00	00	40.57	+02	05	45.5				033
1991 TM7		1991	10	08.89028	23	59	57.10	+01	59	18.2				033
1991 TN7	*	1991	10	07.88333	00	00	59.93	+01	15	10.3	18.5			033
1991 TN7		1991	10	07.92917	00	00	57.73	+01	15	00.4				033
1991 TN7		1991	10	08.89028	00	00	15.24	+01	11	52.1				033
1991 TO7	*	1991	10	07.88333	00	02	09.81	+04	04	04.0	19.2			033
1991 TO7		1991	10	07.92917	00	02	08.01	+04	03	46.5				033
1991 TO7		1991	10	08.89028	00	01	32.54	+03	57	30.2				033
1991 TP7	*	1991	10	07.88333	00	04	11.96	+01	22	45.2	19.2			033
1991 TP7		1991	10	07.92917	00	04	09.13	+01	22	35.8				033
1991 TP7		1991	10	08.89028	00	03	12.53	+01	19	34.4				033
1991 TQ7	*	1991	10	07.88333	00	05	49.30	+03	41	20.5	18.2			033
1991 TQ7		1991	10	07.92917	00	05	46.55	+03	41	20.2				033
1991 TQ7		1991	10	08.89028	00	04	50.78	+03	41	15.5				033
1991 TR7	*	1991	10	07.88333	00	06	00.44	+03	15	11.0	19.4			033
1991 TR7		1991	10	07.92917	00	05	58.51	+03	14	49.2				033
1991 TR7		1991	10	08.89028	00	05	21.92	+03	06	56.2				033
1991 TS7	*	1991	10	07.88333	00	06	01.97	+01	51	50.9	18.4			033
1991 TS7		1991	10	07.92917	00	05	59.43	+01	51	37.7				033
1991 TS7		1991	10	08.89028	00	05	08.20	+01	47	00.1				033
1991 TT7	*	1991	10	07.88333	00	06	16.93	+03	56	44.2	19.4			033
1991 TT7		1991	10	07.92917	00	06	14.97	+03	56	21.8				033
1991 TT7		1991	10	08.89028	00	05	36.32	+03	48	41.4				033
1991 TU7	*	1991	10	07.88333	00	06	42.27	+03	12	25.9	19.5			033
1991 TU7		1991	10	07.92917	00	06	39.68	+03	12	08.0				033
1991 TU7		1991	10	08.89028	00	05	48.34	+03	05	28.7				033
1991 TV7	*	1991	10	07.88333	00	06	52.11	+02	11	36.4	19.0			033
1991 TV7		1991	10	07.92917	00	06	49.81	+02	11	26.8				033
1991 TV7		1991	10	08.89028	00	06	03.40	+02	07	39.2				033
1991 TW7	*	1991	10	07.88333	00	07	51.84	+03	55	04.2	19.2			033
1991 TW7		1991	10	07.92917	00	07	49.13	+03	54	51.6				033
1991 TW7		1991	10	08.89028	00	06	55.64	+03	50	04.2				033
1991 TX7	*	1991	10	07.88333	00	08	21.80	+04	04	19.3	17.9			033

1991	TX7		1991	10	07.92917	00	08	19.57	+04	04	06.9		033
1991	TX7		1991	10	08.89028	00	07	36.07	+03	59	38.6		033
1991	TY7	*	1991	10	07.88333	23	57	10.17	+01	31	37.7	19.3	033
1991	TY7		1991	10	07.92917	23	57	07.77	+01	31	31.3		033
1991	TY7		1991	10	08.89028	23	56	20.81	+01	29	18.4		033
1991	TZ7	*	1991	10	07.88333	23	57	26.01	+03	21	53.5	19.3	033
1991	TZ7		1991	10	07.92917	23	57	23.87	+03	21	27.4		033
1991	TZ7		1991	10	08.89028	23	56	40.47	+03	12	57.0		033
1991	TA8	*	1991	10	07.88333	23	58	15.39	+02	17	21.4	19.7	033
1991	TA8		1991	10	07.92917	23	58	13.60	+02	17	01.0		033
1991	TA8		1991	10	08.89028	23	57	37.26	+02	09	41.2		033
1991	TB8	*	1991	10	07.88333	23	58	25.17	+02	49	39.5	19.5	033
1991	TB8		1991	10	07.92917	23	58	23.25	+02	49	33.0		033
1991	TB8		1991	10	08.89028	23	57	46.01	+02	46	48.5		033
1991	TC8	*	1991	10	07.88333	23	58	40.12	+04	19	05.7	19.0	033
1991	TC8		1991	10	07.92917	23	58	37.80	+04	18	56.2		033
1991	TC8		1991	10	08.89028	23	57	51.02	+04	15	18.9		033
1991	TD8	*	1991	10	07.88333	23	59	13.33	+02	11	45.4	18.6	033
1991	TD8		1991	10	07.92917	23	59	11.08	+02	11	22.8		033
1991	TD8		1991	10	08.89028	23	58	26.78	+02	03	16.2		033
1991	XF1	*	1991	12	10.92222	06	16	41.35	+26	15	48.3		033
1991	XF1		1991	12	10.98056	06	16	38.01	+26	15	48.5	19.1	033
1991	XF1		1991	12	12.00347	06	15	41.46	+26	15	31.3		033
1991	XG1	*	1991	12	10.92222	06	17	47.54	+24	46	17.9		033
1991	XG1		1991	12	10.98056	06	17	45.46	+24	46	28.6	18.3	033
1991	XG1		1991	12	12.00347	06	17	08.35	+24	49	38.3		033
1991	XH1	*	1991	12	10.92222	06	26	05.04	+25	39	27.3		033
1991	XH1		1991	12	10.98056	06	26	01.61	+25	39	35.8	17.9	033
1991	XH1		1991	12	12.00347	06	25	02.53	+25	41	39.0		033
1991	XJ1	*	1991	12	10.92222	06	29	05.69	+23	58	58.5		033
1991	XJ1		1991	12	10.98056	06	29	01.95	+23	59	12.2	18.6	033
1991	XJ1		1991	12	12.00347	06	27	57.33	+24	02	57.2		033
3289	T-1		1991	10	07.88333	23	58	48.69	+03	20	12.8	16.6	033
3289	T-1		1991	10	07.92917	23	58	46.62	+03	19	49.0		033
3289	T-1		1991	10	08.89028	23	58	05.94	+03	11	30.2		033
(222)			1991	11	11.00243	06	34	27.81	+23	27	00.8	15.5	033
(222)			1991	11	11.04861	06	34	27.06	+23	27	02.3		033
(222)			1991	12	10.92222	06	17	23.99	+23	51	12.3		033
(222)			1991	12	10.98056	06	17	21.11	+23	51	15.9	15.4	033
(222)			1991	12	12.00347	06	16	31.07	+23	52	03.9		033
(585)			1991	08	14.99618	00	25	39.60	+04	28	35.6	14.5	033
(585)			1991	08	16.04931	00	25	24.66	+04	24	52.9		033
(585)			1991	08	19.02917	00	24	34.09	+04	13	19.0		033
(656)			1991	11	11.00243	06	32	21.54	+22	34	04.6	16.0	033
(656)			1991	11	11.04861	06	32	21.11	+22	34	04.3		033
(1162)			1991	11	11.00243	06	39	26.34	+24	50	03.9	17.3	033
(1162)			1991	11	11.04861	06	39	25.71	+24	50	05.6		033
(1162)			1991	12	10.92222	06	25	18.06	+25	13	34.6		033
(1162)			1991	12	10.98056	06	25	15.68	+25	13	37.9	16.6	033
(1162)			1991	12	12.00347	06	24	34.60	+25	14	21.2		033
(1453)			1991	10	07.88333	00	04	35.69	+01	25	51.0	15.3	033
(1453)			1991	10	07.92917	00	04	30.86	+01	26	15.7		033
(1453)			1991	10	08.89028	00	02	52.22	+01	34	44.8		033
(1496)			1991	12	10.92222	06	16	31.62	+25	13	36.9		033
(1496)			1991	12	10.98056	06	16	27.49	+25	13	37.0	17.0	033
(1496)			1991	12	12.00347	06	15	16.51	+25	13	23.0		033
(1780)			1992	01	02.98264	06	07	22.19	+27	13	50.8	16.2	033
(1780)			1992	01	03.02292	06	07	19.94	+27	13	45.1		033
(1836)			1991	12	10.92222	06	16	19.18	+24	06	05.6		033

(1836)	1991 12 10.98056	06 16 15.90	+24 06 02.3	17.6		033
(1836)	1991 12 12.00347	06 15 19.39	+24 04 53.3			033
(1841)	1991 12 10.92222	06 18 10.74	+25 55 56.0			033
(1841)	1991 12 10.98056	06 18 07.96	+25 56 00.1	16.3		033
(1841)	1991 12 12.00347	06 17 19.54	+25 57 03.0			033
(1841)	1992 01 02.98264	05 58 44.82	+26 10 50.4	16.9		033
(1841)	1992 01 03.02292	05 58 42.85	+26 10 50.6			033
(2098)	1991 08 14.99618	00 29 38.43	+05 18 16.5	16.0		033
(2098)	1991 08 16.04931	00 29 28.11	+05 22 14.9			033
(2098)	1991 08 19.02917	00 28 47.70	+05 32 27.8			033
(2186)	1991 11 11.00243	06 36 59.34	+24 40 10.3	18.2		033
(2186)	1991 11 11.04861	06 36 59.10	+24 40 09.4			033
(2186)	1991 12 10.92222	06 20 45.06	+24 32 44.8			033
(2186)	1991 12 10.98056	06 20 41.72	+24 32 44.2	16.9		033
(2186)	1991 12 12.00347	06 19 43.80	+24 32 16.9			033
(2618)	1992 01 02.98264	06 03 02.38	+25 17 39.2	17.8		033
(2618)	1992 01 03.02292	06 03 00.16	+25 17 32.4			033
(2633)	1991 12 10.92222	06 22 50.30	+25 37 42.8			033
(2633)	1991 12 10.98056	06 22 46.24	+25 37 51.2	17.2		033
(2633)	1991 12 12.00347	06 21 36.08	+25 40 06.5			033
(2633)	1992 01 02.98264	05 54 57.15	+26 12 16.7	17.2		033
(2633)	1992 01 03.02292	05 54 54.39	+26 12 17.8			033
(2926)	1991 10 07.88333	00 02 02.11	+03 53 27.2	17.5		033
(2926)	1991 10 07.92917	00 01 59.71	+03 53 07.1			033
(2926)	1991 10 08.89028	00 01 12.08	+03 45 54.7			033
(2939)	1991 08 14.99618	00 29 03.95	+03 17 36.8	17.5		033
(2939)	1991 08 16.04931	00 28 41.58	+03 16 47.8			033
(3454)	1991 10 07.88333	00 05 49.38	+01 48 21.9	16.5		033
(3454)	1991 10 07.92917	00 05 46.99	+01 47 56.7			033
(3454)	1991 10 08.89028	00 04 59.77	+01 39 04.2			033
(4331)	1992 01 02.98264	06 07 30.29	+26 57 26.7	18.2		033
(4331)	1992 01 03.02292	06 07 27.41	+26 57 30.2			033
(4623)	1991 12 10.92222	06 27 09.32	+25 56 23.1			033
(4623)	1991 12 10.98056	06 27 06.09	+25 56 27.1	17.8		033
(4623)	1991 12 12.00347	06 26 10.59	+25 57 22.9			033
(4623)	1992 01 02.98264	06 04 41.05	+26 06 09.6	17.6		033
(4623)	1992 01 03.02292	06 04 38.76	+26 06 09.0			033
(4805)	1991 12 10.92222	06 28 59.15	+24 37 17.1			033
(4805)	1991 12 10.98056	06 28 57.21	+24 37 13.7	18.5		033
(4805)	1991 12 12.00347	06 28 22.77	+24 36 24.5			033

046 Kleť
A. Mrkos, Kleť Observatory, CS-38101 Česky Krumlov, Czechoslovakia
Observers A. Mrkos, Z. Vávrová
0.6-m Maksutov reflector

1985 CJ1	1991 11 26.80657	03 43 02.47	+19 53 39.0	16.8	U	046
1985 CJ1	1991 11 26.82069	03 43 01.56	+19 53 42.3			046
1985 CJ1	1991 11 27.79303	03 41 58.61	+19 52 31.8	16.7	U	046
1985 CJ1	1991 11 27.80715	03 41 57.80	+19 52 31.1			046

049 Kvistaberg
C.-I. Lagerkvist, Astronomiska Observatoriet, Box 515,
S-75120 Uppsala, Sweden
Observer T. Oja
Measurer A. Erikson
AGK3

1990 TG16	* 1990 10 10.80144	23 05 54.82	+19 37 43.9	16.5		049
1990 TG16	1990 10 10.81598	23 05 54.53	+19 37 46.0			049
1990 VB14	1990 11 18.94427	04 41 32.88	+24 41 23.6	16.5		049

1990 VB14		1990 11 18.95881	04 41 32.05	+24 41 21.8			049
1990 VB14		1990 12 20.93169	04 12 18.50	+23 01 45.6	16.5		049
1990 VB14		1990 12 20.94762	04 12 17.85	+23 01 44.1			049
1990 WB15	*	1990 11 18.94427	04 35 51.55	+23 43 40.4	16.5		049
1990 WB15		1990 11 18.95881	04 35 50.50	+23 43 40.0			049
1990 WC15	*	1990 11 18.94427	04 36 09.26	+23 15 00.4	16.5		049
1990 WC15		1990 11 18.95881	04 36 08.32	+23 15 00.6			049
1992 AC		1992 02 04.94088	10 00 20.58	+34 11 52.9			049
1992 AC		1992 02 04.96166	10 00 23.69	+34 13 12.1			049
1992 AD		1992 02 04.92392	08 03 25.52	+20 59 52.9			049

091 Aurec-sur-Loire
R. Chanal, Observatoire de Nurol, F-43110 Aurec-sur-Loire, France
0.41-m reflector

1991 JY		1991 05 19.94028	15 30 49.67	-12 53 12.7			091
1991 JY		1991 05 19.94722	15 30 41.46	-12 55 05.6			091
1991 JY		1991 05 19.95833	15 30 27.28	-12 58 08.3			091
(3)		1991 07 12.01181	19 36 37.20	-04 37 32.4	9.5		091
(920)		1991 09 08.87917	22 14 16.17	+00 01 33.9	15.0		091
(920)		1991 09 08.95486	22 14 12.73	+00 00 50.2	15.0		091
(1322)		1991 10 03.91806	22 59 19.78	+34 53 00.8	16.2		091
(1322)		1991 10 03.96806	22 59 17.81	+34 52 17.4	16.2		091
(1360)		1991 10 03.93889	23 28 33.00	+18 18 05.8	15.2		091
(1360)		1991 10 03.98403	23 28 30.64	+18 18 07.4	15.2		091
(2420)		1991 08 16.90972	20 32 32.64	+04 29 32.8	15.3	V	091
(2420)		1991 08 17.09514	20 32 23.83	+04 28 11.4	15.3	V	091
(2642)		1991 08 16.89514	19 59 54.61	+04 35 45.0	15.2		091
(2642)		1991 08 17.08194	19 59 47.26	+04 33 59.9	15.2		091
(4308)		1991 08 04.92569	21 31 41.07	-10 05 56.7	15.8	V	091
(4308)		1991 08 04.98403	21 31 37.77	-10 06 01.8	15.8	V	091
(4558)		1991 07 14.91042	16 09 58.63	-11 06 25.4	15.0	V	091
(4558)		1991 07 14.96528	16 09 57.36	-11 05 34.5	15.0	V	091
(4558)		1991 07 15.92778	16 09 41.85	-10 51 37.8	15.0	r	091
(4558)		1991 07 15.96181	16 09 41.22	-10 51 09.2	15.0	r	091

104 San Marcello Pistoiese
L. Tesi, Osservatorio di Pian dei Termini, Viale Panoramico 45, I-51028
San Marcello Pistoiese (PT), Italy
Observers L. Tesi, P. Gigli
Measurers L. Tesi, G. Cattani
AGK3, SAOC

1992 AC		1992 01 25.85694	09 35 40.93	+23 15 50.3			104
1992 AC		1992 01 25.87014	09 35 42.62	+23 16 42.1			104
1992 AC		1992 01 28.85833	09 42 40.56	+26 30 16.4			104
1992 AC		1992 01 28.86667	09 42 41.78	+26 30 47.5			104
1992 AC		1992 01 30.88750	09 47 34.18	+28 43 33.1			104
1992 AC		1992 01 30.90451	09 47 36.60	+28 44 41.8			104
1992 AC		1992 01 30.92049	09 47 38.82	+28 45 45.4			104
1992 AC		1992 01 31.88750	09 50 01.96	+29 49 17.8			104
1992 AC		1992 02 01.95556	09 52 41.97	+30 59 25.0			104
1992 AC		1992 02 01.96597	09 52 43.25	+31 00 04.8			104
1992 AC		1992 02 06.89514	10 05 30.83	+36 14 12.2			104
1992 AC		1992 02 06.90278	10 05 32.04	+36 14 40.6			104
(1622)		1992 02 05.91458	11 10 42.67	+11 31 05.5			104
(1622)		1992 02 05.92986	11 10 41.99	+11 31 09.3			104
(1622)		1992 02 06.92431	11 10 00.04	+11 34 26.3			104
(2083)		1992 01 31.92604	04 53 12.26	+10 25 52.6			104
(2083)		1992 02 01.85208	04 53 33.49	+10 20 31.6			104
(2083)		1992 02 01.87292	04 53 34.02	+10 20 23.6			104

(2083)		1992 02 05.86597	04 55 27.71	+09 59 45.4			104
(2083)		1992 02 06.85069	04 56 01.23	+09 55 16.2			104
(2083)		1992 02 06.86667	04 56 01.71	+09 55 11.6			104

293 Burlington remote site
T. Handley, 13 Linden Avenue, Burlington, NJ 08016, U.S.A.
0.26-m f/3.9 Wright-Schmidt camera
SAOC

1984 FS		1992 01 01.19618	05 38 44.98	+04 25 18.9		W	293

303 Mérida
O. A. Naranjo, Dept. de Fisica, Universidad de los Andes,
Merida 5101, Venezuela
Observers O. A. Naranjo, J. D. Stock

1983 QH1		1992 02 06.20854	09 28 12.22	+12 57 23.4			303
1983 QH1		1992 02 07.21896	09 27 10.39	+13 03 41.9			303
1990 QY7		1992 02 06.20854	09 34 55.27	+16 14 18.2			303
1990 QY7		1992 02 07.21896	09 33 45.56	+16 17 21.0			303
1991 RR9		1991 10 04.15963	00 03 25.26	+03 07 41.5			303
1991 RR9		1991 10 05.17161	00 02 38.68	+03 05 59.8			303
1991 RB13		1991 10 04.15963	00 03 59.75	+06 26 35.1			303
1991 RB13		1991 10 05.17161	00 03 07.22	+06 25 35.6			303
1991 RV13		1991 10 04.15963	23 52 37.02	+05 29 31.3			303
1991 RV13		1991 10 05.17161	23 51 52.04	+05 20 12.9			303
1991 RA14		1991 10 04.15963	23 55 50.10	+05 06 28.8			303
1991 RA14		1991 10 05.17161	23 55 08.69	+05 04 16.6			303
1991 RE14		1991 10 04.15963	23 55 25.19	+06 15 05.8			303
1991 RE14		1991 10 05.17161	23 54 26.52	+06 13 33.4			303
1991 TF8	*	1991 10 04.15963	00 04 20.43	+06 50 04.3			303
1991 TF8		1991 10 05.17161	00 03 44.50	+06 45 52.7			303
1991 TG8	*	1991 10 04.15963	23 53 46.82	+05 14 25.1			303
1991 TG8		1991 10 05.17161	23 52 56.80	+05 13 33.3			303
1991 TH8	*	1991 10 04.15963	23 54 16.46	+03 49 13.5			303
1991 TH8		1991 10 05.17161	23 53 31.53	+03 43 34.9			303
1991 TJ8	*	1991 10 04.33133	03 39 46.6	+07 32 14			303
1991 TJ8		1991 10 05.32339	03 39 57.9	+07 33 43			303
1992 CV	*	1992 02 06.20854	09 25 24.73	+16 28 40.0	18		303
1992 CV		1992 02 07.21896	09 24 30.27	+16 34 14.2	18		303
1992 CW	*	1992 02 06.20854	09 30 57.67	+15 20 57.3	17		303
1992 CW		1992 02 07.21896	09 29 45.99	+15 19 59.4	17		303
1992 CX	*	1992 02 06.20854	09 33 59.02	+16 09 19.6	16		303
1992 CX		1992 02 07.21896	09 32 55.39	+16 10 17.8	16		303
1992 CY	*	1992 02 06.20854	09 35 28.86	+14 20 21.2	17		303
1992 CY		1992 02 07.21896	09 34 37.65	+14 24 57.5	17		303
1992 CZ	*	1992 02 06.20854	09 37 49.19	+14 37 03.4	18		303
1992 CZ		1992 02 07.21896	09 36 46.09	+14 45 02.1	18		303
3289 T-1		1991 10 04.15963	00 01 36.41	+03 53 21.3			303
3289 T-1		1991 10 05.17161	00 00 49.43	+03 44 13.8			303
(62)		1991 10 05.00494	16 46 22.96	-21 06 35.1			303
(147)		1991 10 05.00494	16 46 33.98	-21 46 23.3			303
(311)		1991 09 11.28222	01 56 04.70	+07 30 36.2			303
(311)		1991 09 12.30289	01 55 44.85	+07 28 06.4			303
(1813)		1991 09 11.28222	01 55 15.94	+07 47 22.2			303
(1813)		1991 09 12.30289	01 54 50.31	+07 46 17.6			303
(2098)		1991 10 04.15963	23 52 31.84	+05 12 27.7			303
(2098)		1991 10 05.17161	23 51 37.48	+05 09 42.9			303
(2162)		1991 09 11.28222	01 54 34.88	+06 43 08.4			303
(2162)		1991 09 12.30289	01 54 28.47	+06 39 36.7			303
(2392)		1992 02 06.20854	09 33 35.39	+14 13 04.7			303

(2392)	1992 02 07.21896	09 32 36.19	+14 20 15.2		303
(2450)	1992 02 06.20854	09 26 18.21	+16 28 33.8		303
(2450)	1992 02 07.21896	09 25 28.51	+16 33 17.2		303
(2492)	1992 02 06.20854	09 30 55.45	+15 48 19.8		303
(2492)	1992 02 07.21896	09 30 07.92	+15 52 05.2		303
(2926)	1991 10 04.15963	00 05 14.81	+04 22 00.7		303
(2926)	1991 10 05.17161	00 04 21.13	+04 14 09.7		303
(3300)	1991 09 11.28222	01 56 14.51	+06 13 29.5		303
(3300)	1991 09 12.30289	01 55 42.49	+06 14 50.6		303
(3844)	1991 09 11.28222	02 04 15.00	+07 27 23.4		303
(3844)	1991 09 12.30289	02 04 04.77	+07 23 58.6		303

364 JCPM Kagoshima Station
M. Takeishi, Odori 4, Hamatonbetsu Esashigun, Hokkaido 098-57, Japan
Observer M. Mukai
Measurer M. Takeishi
0.25-m f/4.2 Wright-Schmidt telescope
GSC

1981 DG3	1992 02 08.61771	10 20 55.78	+10 07 46.1	16.5	364
1981 DG3	1992 02 08.63160	10 20 55.16	+10 07 50.1		364
1981 DG3	1992 02 08.64792	10 20 54.25	+10 07 49.3		364
1981 DG3	1992 02 08.66528	10 20 53.48	+10 07 49.8		364
1981 DG3	1992 02 22.53715	10 08 32.75	+10 15 02.2	17	364
1981 DG3	1992 02 22.55104	10 08 31.92	+10 15 02.0		364
1981 DG3	1992 02 22.56424	10 08 31.30	+10 15 03.0		364
1981 DG3	1992 02 22.57813	10 08 30.39	+10 15 02.1		364
1981 DG3	1992 02 26.59549	10 04 52.24	+10 17 13.3	17	364
1981 DG3	1992 02 26.60938	10 04 51.50	+10 17 13.2		364
1990 VH4	1992 02 02.53785	09 24 17.48	+19 40 12.1		364
1990 VH4	1992 02 02.55174	09 24 16.88	+19 40 17.4		364
1992 CA1	1992 02 08.61771	10 17 21.66	+09 35 23.5	16.5	364
1992 CA1	1992 02 08.63160	10 17 21.09	+09 35 29.4		364
1992 CA1	1992 02 08.64792	10 17 20.32	+09 35 36.2		364
1992 CA1	1992 02 08.66528	10 17 19.57	+09 35 42.2		364
1992 CA1	1992 02 22.53715	10 07 25.17	+11 14 48.4	16.5	364
1992 CA1	1992 02 22.55104	10 07 24.60	+11 14 54.7		364
1992 DX	* 1992 02 25.62951	10 09 39.17	+10 16 22.8	16.5	364
1992 DX	1992 02 25.64340	10 09 38.51	+10 16 28.0		364
1992 DX	1992 02 26.59549	10 08 51.09	+10 24 01.0	16.5	364
1992 DX	1992 02 26.60938	10 08 50.57	+10 24 04.1		364
(227)	1992 02 25.60174	10 02 25.68	+11 11 47.6	13	364
(227)	1992 02 25.61563	10 02 24.90	+11 11 48.9		364
(689)	1992 02 25.62951	10 00 32.34	+09 25 51.8	16.5	364
(689)	1992 02 25.64340	10 00 31.53	+09 25 58.7		364
(1098)	1992 02 25.62951	10 10 22.34	+09 52 36.1		364
(1098)	1992 02 25.64340	10 10 21.46	+09 52 36.9		364
(3842)	1992 02 25.60174	10 10 09.20	+13 05 11.5	16.5	364
(3842)	1992 02 25.61563	10 10 08.28	+13 05 16.8		364
(3842)	1992 02 26.53854	10 09 11.59	+13 07 57.1		364
(3842)	1992 02 26.55243	10 09 10.84	+13 07 59.0		364

367 Yatsuka
S. Miyasaka, 3-8-501, 4 Chome, Nagayama, Tama, Tokyo 206, Japan
Observer H. Abe
Measurer S. Miyasaka
0.26-m reflector
PPM

1990 UP13	* 1990 10 20.54375	23 50 49.28	-02 34 30.8	367
1990 UP13	1990 10 20.56458	23 50 48.55	-02 34 36.1	367

1992 AC		1992 02 05.56597	10 01 59.89	+34 51 35.7			367
1992 AC		1992 02 05.57639	10 02 01.32	+34 52 13.5			367
1992 AC		1992 02 05.58681	10 02 02.90	+34 52 54.8			367

372 Geisei
T. Seki, Kamimachi 2-9-35, Kochi, Japan
0.60-m reflector

1973 RF		1992 02 27.73681	11 51 05.04	+08 39 53.5	17		372
1973 RF		1992 02 27.74826	11 51 04.44	+08 39 56.1			372
1973 RF		1992 03 03.73125	11 46 18.46	+08 51 06.7			372
1973 RF		1992 03 03.74271	11 46 17.69	+08 51 08.5			372
1978 PJ2		1992 02 10.71076	11 23 20.23	+00 25 44.1	18		372
1978 PJ2		1992 02 10.72257	11 23 19.77	+00 25 45.5			372
1978 PJ2		1992 02 12.70208	11 22 15.28	+00 33 54.6	18		372
1978 PJ2		1992 02 12.71267	11 22 14.90	+00 33 57.4			372
1982 WE		1992 01 28.68333	10 33 25.23	+33 56 11.7	17		372
1982 WE		1992 01 28.69375	10 33 25.22	+33 56 21.4			372
1990 UF		1992 01 27.56007	06 33 06.61	+16 42 40.7	19.5		372
1990 VE1		1992 02 05.74340	10 34 34.18	+13 12 36.1	17		372
1990 VE1		1992 02 05.75521	10 34 33.66	+13 12 42.8			372
1990 VP2		1992 01 12.80868	11 14 50.77	+26 25 53.8	17		372
1990 VP2		1992 01 12.82153	11 14 50.65	+26 25 59.7			372
1990 VP2		1992 02 04.74201	11 05 40.67	+28 55 45.9	17.5		372
1990 VP2		1992 02 24.66493	10 49 14.25	+30 39 23.4	17.5		372
1990 VP2		1992 02 24.67674	10 49 13.68	+30 39 26.9			372
1990 VS6		1992 02 25.61285	08 10 26.06	+24 55 36.0	19.5		372
1992 AC		1992 02 13.72569	10 24 16.84	+42 41 03.2	13		372
1992 AC		1992 02 13.73264	10 24 17.93	+42 41 23.2			372
1992 AC		1992 02 22.77465	10 49 57.58	+49 01 55.7	14		372
1992 AP1		1992 01 23.47066	07 04 49.15	+22 11 10.6	17		372
1992 AP1		1992 01 23.47952	07 04 48.72	+22 11 10.4			372
1992 BN		1992 01 14.76771	09 54 49.43	+16 47 35.4	16.5		372
1992 BN		1992 01 14.78160	09 54 48.77	+16 47 41.6			372
1992 BU		1992 02 05.71771	09 38 58.69	+18 33 44.6	17.5		372
1992 BU		1992 02 05.73021	09 38 57.92	+18 33 47.3			372
1992 BR1	*	1992 01 27.51250	07 58 20.37	+21 06 38.7	17.5		372
1992 BR1		1992 02 04.59342	07 49 52.01	+21 46 00.1	18		372
1992 CG	*	1992 02 08.75903	09 49 38.58	+17 04 15.3	17.5		372
1992 CG		1992 02 08.76944	09 49 37.87	+17 04 17.0			372
1992 CG		1992 02 09.59827	09 48 45.75	+17 06 37.1	17		372
1992 CG		1992 02 09.61111	09 48 45.04	+17 06 37.7			372
1992 CK	*	1992 02 04.68472	09 46 25.64	+13 38 14.3	17.5		372
1992 CK		1992 02 04.69583	09 46 24.78	+13 38 20.7			372
1992 CK		1992 02 13.75857	09 37 49.73	+15 02 32.6	17.5		372
1992 CK		1992 02 13.76875	09 37 48.91	+15 02 38.4			372
1992 CL	*	1992 02 05.69271	09 34 19.35	+18 24 02.4	18		372
1992 CL		1992 02 05.70451	09 34 18.73	+18 24 07.0			372
1992 CL		1992 02 08.66528	09 31 54.32	+18 42 02.1	17.5		372
1992 CL		1992 02 08.67627	09 31 53.67	+18 42 05.9			372
1992 CM	*	1992 02 05.69271	09 34 42.43	+18 43 26.7	17		372
1992 CM		1992 02 05.70451	09 34 41.83	+18 43 30.8			372
1992 CM		1992 02 08.66528	09 31 33.91	+18 57 50.6	17.5		372
1992 CM		1992 02 08.67627	09 31 33.07	+18 57 55.2			372
1992 CN	*	1992 02 05.69271	09 35 10.05	+18 38 50.8	18.5		372
1992 CN		1992 02 05.70451	09 35 09.55	+18 38 54.0			372
1992 CN		1992 02 08.66528	09 32 49.26	+18 56 31.4	18.5		372
1992 CN		1992 02 08.67627	09 32 48.59	+18 56 37.2			372
1992 CP	*	1992 02 08.70958	10 16 08.11	+15 49 32.0	18		372
1992 CP		1992 02 08.72015	10 16 07.52	+15 49 39.5			372

1992	CP		1992	02	13.82101	10	13	19.89	+16	38	05.9	18			372
1992	CP		1992	02	13.83299	10	13	19.33	+16	38	12.8				372
1992	CQ	*	1992	02	08.70958	10	17	22.36	+15	46	03.6	17			372
1992	CQ		1992	02	08.72015	10	17	21.87	+15	46	11.7				372
1992	CQ		1992	02	13.82101	10	13	54.86	+16	35	28.8	17			372
1992	CQ		1992	02	13.83299	10	13	54.12	+16	35	35.7				372
1992	CR	*	1992	02	04.65972	09	01	36.59	+21	03	20.7	18.5			372
1992	CR		1992	02	04.67015	09	01	35.95	+21	03	26.4				372
1992	CR		1992	02	10.54096	08	55	48.27	+21	56	29.2	18			372
1992	CR		1992	02	10.55139	08	55	47.60	+21	56	29.1				372
1992	CS		1992	02	05.76997	10	23	07.60	+14	51	54.9	17.5			372
1992	CS		1992	02	05.78264	10	23	06.99	+14	52	01.8				372
1992	CS	*	1992	02	08.80208	10	21	11.09	+15	20	03.7	18			372
1992	CS		1992	02	08.81284	10	21	10.72	+15	20	12.4				372
1992	CS		1992	02	13.80069	10	17	49.43	+16	06	42.2	17.5			372
1992	CS		1992	02	13.81110	10	17	48.89	+16	06	50.9				372
1992	CS		1992	02	25.62813	10	09	28.56	+17	54	05.9	18			372
1992	CS		1992	02	25.63992	10	09	28.00	+17	54	09.6				372
1992	CS		1992	02	26.57396	10	08	48.65	+18	02	15.9	17.5			372
1992	CS		1992	02	27.66702	10	08	02.64	+18	11	36.3	18			372
1992	CS		1992	02	27.67847	10	08	02.08	+18	11	43.7				372
1992	CT		1992	02	05.76997	10	25	12.85	+14	41	59.8	17.5			372
1992	CT		1992	02	05.78264	10	25	12.34	+14	42	03.3				372
1992	CT	*	1992	02	08.80208	10	22	51.34	+14	57	30.4	18			372
1992	CT		1992	02	08.81284	10	22	50.77	+14	57	34.5				372
1992	CT		1992	02	13.80069	10	18	45.29	+15	23	11.0	18			372
1992	CT		1992	02	13.81110	10	18	44.76	+15	23	15.5				372
1992	CT		1992	02	24.64028	10	09	29.29	+16	15	51.8	18			372
1992	CT		1992	02	24.65242	10	09	28.67	+16	15	54.2				372
1992	CT		1992	02	25.65140	10	08	37.71	+16	20	22.6	18			372
1992	CT		1992	02	25.66250	10	08	37.14	+16	20	27.1				372
1992	CC1		1992	02	27.71494	11	25	09.00	+19	05	54.0	16		s	372
1992	CC1		1992	02	27.72552	11	25	06.90	+19	05	48.4			s	372
1992	CF1	*	1992	02	13.80069	10	21	30.61	+15	13	55.1	18			372
1992	CF1		1992	02	13.81110	10	21	30.33	+15	13	56.1				372
1992	CF1		1992	02	24.64028	10	10	22.13	+15	52	48.2	18			372
1992	CF1		1992	02	24.65242	10	10	21.59	+15	52	50.9				372
1992	CF1		1992	02	25.65140	10	09	19.15	+15	56	01.6	18			372
1992	CF1		1992	02	25.66250	10	09	18.46	+15	56	05.8				372
1992	CF1		1992	02	26.59688	10	08	20.43	+15	59	00.5	18			372
1992	CF1		1992	02	26.60800	10	08	19.45	+15	59	03.1				372
1992	CF1		1992	02	27.64479	10	07	15.44	+16	02	09.1	17			372
1992	CF1		1992	02	27.65592	10	07	14.75	+16	02	10.8				372
1992	DA	*	1992	02	24.61458	10	10	18.80	+17	43	19.5	16			372
1992	DA		1992	02	24.62742	10	10	18.10	+17	43	21.4				372
1992	DA		1992	02	25.62813	10	09	16.66	+17	47	01.0	16			372
1992	DA		1992	02	25.63992	10	09	15.83	+17	47	03.1				372
1992	DA		1992	02	26.57396	10	08	19.10	+17	50	19.1	16			372
1992	DA		1992	02	26.58508	10	08	18.30	+17	50	21.7				372
1992	DA		1992	02	27.66702	10	07	12.37	+17	54	00.6	16.5			372
1992	DA		1992	02	27.67847	10	07	11.80	+17	54	02.5				372
1992	DA		1992	03	05.67465	10	00	28.81	+18	12	22.1	17			372
1992	DA		1992	03	05.73507	10	00	25.36	+18	12	28.5				372
1992	DN	*	1992	02	25.72119	10	54	29.45	+15	45	20.8	18			372
1992	DN		1992	02	26.55175	10	53	45.75	+15	47	20.8	18			372
1992	DN		1992	02	27.69097	10	52	45.17	+15	50	02.1	18			372
1992	DO	*	1992	02	25.72119	10	55	05.31	+16	03	48.7	18			372
1992	DO		1992	02	26.55175	10	54	20.76	+16	04	51.1	18			372
1992	DO		1992	02	27.69097	10	53	18.24	+16	06	20.6	18			372

1992 DP	*	1992 02 26.59688	10 08 31.93	+15 40 22.5	17.5	372
1992 DP		1992 02 26.60800	10 08 31.21	+15 40 27.7		372
1992 DP		1992 02 27.64479	10 07 28.72	+15 44 51.0	17.5	372
1992 DP		1992 02 27.65592	10 07 28.16	+15 44 53.6		372
1992 DA1	*	1992 02 27.71494	11 25 32.91	+18 43 30.6	17.5	372
1992 DA1		1992 02 27.72552	11 25 32.40	+18 43 35.6		372
1992 DA1		1992 03 03.75487	11 21 29.16	+19 16 17.7	18	372
1992 DA1		1992 03 03.76562	11 21 28.73	+19 16 18.8		372
1992 DB1	*	1992 02 27.73681	11 53 06.19	+08 15 51.8	18	372
1992 DB1		1992 02 27.74826	11 53 05.75	+08 15 59.1		372
1992 DB1		1992 03 03.73125	11 49 52.00	+08 58 35.1	18	372
1992 DB1		1992 03 03.74271	11 49 51.49	+08 58 41.2		372
1992 EG	*	1992 03 03.81910	13 05 58.00	+05 59 03.9	18	372
1992 EG		1992 03 03.83125	13 05 57.32	+05 59 10.7		372
1992 EG		1992 03 05.74635	13 04 52.20	+06 10 22.1	18	372
1992 EG		1992 03 05.75799	13 04 51.54	+06 10 27.3		372
(545)		1992 01 15.84166	10 06 27.82	+15 41 48.6	15	372
(545)		1992 01 15.84549	10 06 27.50	+15 41 51.3		372
(1358)		1992 02 04.63681	08 46 48.75	+21 09 55.8	17	372
(1358)		1992 02 04.64792	08 46 48.00	+21 09 57.7		372
(1800)		1992 02 26.59688	10 08 06.78	+15 58 45.0	17.5	372
(1800)		1992 02 26.60800	10 08 06.20	+15 58 50.0		372
(1800)		1992 02 27.64479	10 07 07.42	+16 05 42.4	18	372
(1800)		1992 02 27.65592	10 07 06.82	+16 05 47.1		372
(2065)		1992 01 09.73542	09 40 02.86	+17 19 40.8	17	372
(2065)		1992 01 09.74897	09 40 02.37	+17 19 45.4		372
(3066)		1992 02 12.67986	11 03 12.49	-01 17 02.9	17	372
(3066)		1992 02 12.69306	11 03 11.95	-01 16 57.3		372
(3326)		1992 02 08.64337	09 25 11.51	+19 15 48.9	17.5	372
(3326)		1992 02 08.65452	09 25 11.06	+19 15 48.3		372
(3869)		1992 02 12.67986	11 03 17.32	-01 06 33.3	18	372
(3869)		1992 02 12.69306	11 03 16.55	-01 06 31.3		372

376 Uenohara
N. Kawasato, 3-51, Hana-Koganei, Kodaira, Tokyo 187, Japan
0.30-m reflector + CCD
GSC

1988 ED		1992 02 10.58808	08 18 35.10	+30 45 47.5		376
1988 ED		1992 02 10.60856	08 18 33.76	+30 45 42.0		376
1991 YD		1992 02 22.44421	07 02 31.88	+29 03 55.1		376
1991 YD		1992 02 22.47656	07 02 31.85	+29 03 45.8		376
1992 AH1		1992 02 04.54826	07 58 44.45	+31 03 59.8		376
1992 AH1		1992 02 04.55625	07 58 44.08	+31 03 58.4		376
1992 AH1		1992 02 04.70422	07 58 35.44	+31 03 12.3		376
1992 CH	*	1992 02 10.76910	10 57 42.47	-02 47 48.9	17	376
1992 CH		1992 02 10.79219	10 57 41.25	-02 47 53.6		376
1992 CH		1992 02 13.71840	10 55 07.12	-02 54 53.1		376
1992 CH		1992 02 13.73681	10 55 06.08	-02 54 54.9		376
1992 CJ	*	1992 02 10.76910	11 06 24.57	-01 52 21.7	17.5	376
1992 CJ		1992 02 10.79219	11 06 23.63	-01 52 17.2		376
1992 CJ		1992 02 13.75035	11 04 25.52	-01 39 27.9		376
1992 CJ		1992 02 13.76910	11 04 24.57	-01 39 21.8		376
1992 CJ		1992 02 27.55660	10 52 57.48	-00 13 28.2		376
1992 CJ		1992 02 27.57882	10 52 56.04	-00 13 15.7		376
1992 CB1	*	1992 02 13.81597	11 04 37.25	+21 29 59.9	17.5	376
1992 CB1		1992 02 13.83438	11 04 36.55	+21 30 06.1		376
1992 CB1		1992 02 25.63785	10 54 45.08	+22 20 31.6		376
1992 CB1		1992 02 25.65590	10 54 43.96	+22 20 36.5		376
1992 CB1		1992 02 27.59201	10 53 00.68	+22 27 23.3		376

1992 CB1		1992 02 27.61215	10 52 59.69	+22 27 26.3			376
1992 DD	*	1992 02 25.63785	10 56 56.5	+21 56 39	17		376
1992 DD		1992 02 25.65590	10 56 55.5	+21 56 41			376
1992 DD		1992 02 27.59201	10 55 20.28	+22 03 27.5			376
1992 DD		1992 02 27.61215	10 55 19.24	+22 03 31.0			376
1992 DE	*	1992 02 25.63785	10 58 40.55	+22 42 55.3	17		376
1992 DE		1992 02 25.65590	10 58 39.12	+22 42 59.8			376
1992 DE		1992 02 27.59201	10 56 28.31	+22 45 05.9			376
1992 DE		1992 02 27.61215	10 56 26.92	+22 45 08.2			376
1992 DK		1992 02 27.79826	12 15 52.99	+17 05 35.9	16.5		376
1992 DK		1992 02 27.82188	12 15 51.95	+17 05 42.2			376
1992 DY	*	1992 02 27.69167	11 12 38.38	+14 12 38.6	17		376
1992 DY		1992 02 27.71076	11 12 37.39	+14 12 48.5			376
1992 DY		1992 03 03.70660	11 07 57.38	+14 58 34.7			376
1992 DY		1992 03 03.72535	11 07 56.23	+14 58 43.3			376
1992 DZ	*	1992 02 27.69167	11 19 09.98	+14 06 41.6	16.5		376
1992 DZ		1992 02 27.71076	11 19 09.05	+14 06 56.6			376
1992 DZ		1992 03 03.74479	11 15 27.60	+15 09 32.4			376
1992 DZ		1992 03 03.76667	11 15 26.55	+15 09 51.5			376
(991)		1992 02 10.80799	11 44 51.5	+04 35 46	17	W	376
(991)		1992 02 10.82951	11 44 50.8	+04 35 51		W	376

385 Nihondaira Observatory Oohira station
T. Urata, 6-1, Muramatsuhara 1 Chome, Shimizu, Shizuoka-Ken 424, Japan
0.25-m f/3.4 hyperboloid astrocamera
GSC

1990 VF2	1992 02 09.65208	09 19 30.49	+10 30 59.7	17		385
1992 AL	1992 02 02.52500	09 12 24.53	+12 27 51.7	16		385
1992 AL	1992 02 02.54444	09 12 23.37	+12 28 06.0			385
1992 AB1	1992 02 09.56806	07 37 29.05	+13 16 10.6	17		385
1992 AB1	1992 02 09.57708	07 37 28.59	+13 16 10.0			385
1992 BG	1992 02 09.56806	07 35 06.31	+15 03 03.9	16.8		385
1992 BG	1992 02 09.57708	07 35 05.90	+15 03 07.7			385
1992 BG	1992 02 21.45417	07 28 10.41	+16 36 34.2	17		385
1992 BG	1992 02 21.47222	07 28 09.93	+16 36 43.1			385
1992 BH	1992 02 09.59583	07 43 41.90	+13 07 48.2	16.5		385
1992 BH	1992 02 09.61389	07 43 41.18	+13 07 57.3			385
1992 BH	1992 02 21.49097	07 37 44.47	+14 57 58.3	16.8		385
1992 BH	1992 02 21.50000	07 37 44.32	+14 58 02.3			385

399 Kushiro
H. Kaneda, Taiyo MS 2-H, 2 chome 2-15, kawazoe 8 jo, Minami-ku,
Sapporo 005, Japan
Observer S. Ueda
Measurer H. Kaneda
0.25-m f/3.5 reflector (Hyperboloid Astro-Camera)
GSC

1985 CJ1	1991 11 11.60417	03 59 17.17	+20 08 23.6	16		399
1985 CJ1	1991 11 11.61910	03 59 16.25	+20 08 22.6			399
1985 CS1	1992 03 02.58843	11 35 06.56	+01 50 02.5	16		399
1985 CS1	1992 03 02.60313	11 35 05.82	+01 50 11.8			399
1985 CS1	1992 03 03.57500	11 34 17.64	+01 58 33.7	16		399
1985 CS1	1992 03 03.58993	11 34 16.78	+01 58 42.5			399
1987 SM13	1992 02 26.62569	11 45 59.32	+12 08 04.6	17		399
1987 SM13	1992 02 26.64067	11 45 58.46	+12 08 11.0			399
1987 SM13	1992 02 29.71285	11 42 58.23	+12 28 55.8	17		399
1987 SM13	1992 02 29.72622	11 42 57.45	+12 29 01.2			399
1987 UX1	1992 01 24.51389	08 22 52.84	+12 58 04.1	17		399
1987 UX1	1992 01 24.52917	08 22 51.82	+12 58 06.8			399

1987 UX1	1992	01	28.45972	08	18	31.91	+13	08	19.4	17	399
1987 UX1	1992	01	28.47465	08	18	31.10	+13	08	19.3		399
1987 VB	1992	02	22.54236	10	20	50.49	+06	01	45.2	17	399
1987 VB	1992	02	22.56215	10	20	49.23	+06	01	49.3		399
1987 VB	1992	02	25.51667	10	17	42.88	+06	16	59.0	16.5	399
1987 VB	1992	02	25.53160	10	17	41.83	+06	17	04.9		399
1987 VB	1992	02	26.49965	10	16	41.36	+06	22	04.7	16.5	399
1988 CO	1990	10	27.64855	02	07	13.60	+14	06	10.2	16.5	399
1988 CO	1990	10	27.66383	02	07	12.62	+14	06	08.5		399
1988 CO	1992	02	05.59242	10	53	52.73	+12	53	59.3	17.5	399
1988 CO	1992	02	05.61215	10	53	51.85	+12	54	03.8		399
1988 CO	1992	02	08.71771	10	51	31.38	+13	08	15.3	17	399
1988 CO	1992	02	08.73576	10	51	30.50	+13	08	19.5		399
1988 CO	1992	02	25.55069	10	36	10.39	+14	27	55.9	16.5	399
1988 CO	1992	02	25.56562	10	36	09.40	+14	27	59.6		399
1988 CO	1992	02	26.55417	10	35	10.93	+14	32	22.6	16.5	399
1988 CO	1992	02	26.56944	10	35	10.04	+14	32	26.4		399
1989 EL2	1992	01	28.53056	09	13	43.38	+23	59	01.5	17	399
1989 EL2	1992	01	28.54549	09	13	42.34	+23	59	06.7		399
1989 EL2	1992	01	29.51736	09	12	35.36	+24	03	50.4	17	399
1989 EL2	1992	01	29.53229	09	12	34.24	+24	03	55.4		399
1989 EL2	1992	02	05.48333	09	04	20.15	+24	34	47.6	17	399
1989 EL2	1992	02	05.49826	09	04	18.98	+24	34	52.1		399
1989 EL2	1992	02	08.59410	09	00	37.17	+24	46	29.7	17	399
1989 EL2	1992	02	08.60938	09	00	35.99	+24	46	34.8		399
1990 UE	1992	02	05.55417	09	39	00.87	+19	51	11.9	17	399
1990 UE	1992	02	05.56947	09	38	59.83	+19	51	16.2		399
1990 UE	1992	02	08.63264	09	35	36.79	+20	07	23.2	16.5	399
1990 UE	1992	02	08.64757	09	35	35.78	+20	07	28.3		399
1990 UE	1992	02	21.45833	09	21	25.76	+21	04	49.2	17	399
1990 UE	1992	02	21.47326	09	21	24.79	+21	04	53.1		399
1990 UE	1992	02	22.46042	09	20	22.61	+21	08	23.4	17	399
1990 UE	1992	02	22.48333	09	20	21.20	+21	08	28.0		399
1990 UG2	1992	02	05.55417	09	36	04.87	+22	38	01.9	16.5	399
1990 UG2	1992	02	05.56947	09	36	04.03	+22	38	09.4		399
1990 UR2	1992	02	26.59028	11	30	58.76	-11	25	26.6	16.5	399
1990 UR2	1992	02	26.60521	11	30	58.03	-11	25	27.0		399
1990 UR2	1992	02	29.68924	11	28	19.74	-11	26	30.2	16.5	399
1990 UR2	1992	03	02.66545	11	26	35.89	-11	26	13.8	16.5	399
1990 UR2	1992	03	02.68056	11	26	35.07	-11	26	12.2		399
1990 VO3	1992	03	02.51736	10	29	37.47	-03	47	08.7	17	399
1990 VO3	1992	03	02.53229	10	29	36.81	-03	47	02.7		399
1990 VO3	1992	03	03.50139	10	28	53.39	-03	41	48.2	17	399
1990 VO3	1992	03	03.51632	10	28	52.67	-03	41	45.2		399
1990 XH	1992	02	21.42361	09	11	58.79	+09	41	36.6	17	399
1990 XH	1992	02	21.43854	09	11	58.14	+09	41	41.0		399
1990 XH	1992	02	22.42569	09	11	18.61	+09	47	45.2	17	399
1990 XH	1992	02	22.44062	09	11	17.98	+09	47	53.0		399
1991 YH	1987	11	22.57546	02	03	48.23	+15	53	33.4	16	399
1991 YH	1987	11	22.59144	02	03	47.47	+15	53	32.1		399
1991 YH	1987	11	28.63970	01	59	27.66	+15	48	50.2	16	399
1991 YH	1987	11	28.65486	01	59	27.14	+15	48	48.0		399
1992 AC	1992	01	29.62124	09	44	28.81	+27	20	23.1	12	399
1992 AC	1992	01	29.62818	09	44	29.80	+27	20	50.8		399
1992 AC	1992	01	29.63513	09	44	30.59	+27	21	19.3		399
1992 AD	1992	02	08.55833	08	02	22.96	+21	07	52.5	17	399
1992 AD	1992	02	08.57332	08	02	22.66	+21	07	53.5		399
1992 AF1	1992	01	28.53056	09	18	24.66	+24	31	56.7	16.5	399
1992 AF1	1992	01	28.54549	09	18	23.63	+24	32	01.9		399

1992 AF1		1992	01	29.51736	09	17	19.74	+24	36	16.7	16.5	399
1992 AF1		1992	01	29.53229	09	17	18.57	+24	36	20.7		399
1992 AR1		1992	02	08.55833	07	53	13.16	+17	38	17.4	16.5	399
1992 AR1		1992	02	08.57332	07	53	12.28	+17	38	17.5		399
1992 BM		1992	02	05.48333	09	08	31.77	+22	57	36.8	17	399
1992 BM		1992	02	05.49826	09	08	30.56	+22	57	38.3		399
1992 BM		1992	02	08.59410	09	04	50.54	+23	00	55.7	17	399
1992 BM		1992	02	08.60938	09	04	49.48	+23	00	57.0		399
1992 BN		1992	02	05.55417	09	40	05.02	+19	14	38.9	17	399
1992 BN		1992	02	05.56947	09	40	04.17	+19	14	46.6		399
1992 BN		1992	02	08.63264	09	37	37.40	+19	35	33.0	17	399
1992 BN		1992	02	08.64757	09	37	36.71	+19	35	37.3		399
1992 BN		1992	02	21.45833	09	27	27.61	+20	55	35.4	17	399
1992 BN		1992	02	21.47326	09	27	26.64	+20	55	39.7		399
1992 BN		1992	02	22.46042	09	26	41.92	+21	01	13.2	17	399
1992 BN		1992	02	22.48333	09	26	40.74	+21	01	21.2		399
1992 BO		1992	02	05.55417	09	45	18.74	+21	22	14.6	17	399
1992 BO		1992	02	05.56947	09	45	17.77	+21	22	18.3		399
1992 BO		1992	02	08.63264	09	41	52.09	+21	36	33.0	17	399
1992 BO		1992	02	08.64757	09	41	51.16	+21	36	36.3		399
1992 BP		1992	02	05.59242	10	45	50.84	+11	06	39.3	17	399
1992 BP		1992	02	05.61215	10	45	49.82	+11	06	41.7		399
1992 BP		1992	02	08.71771	10	43	11.67	+11	08	49.4	16.5	399
1992 BP		1992	02	08.73576	10	43	10.81	+11	08	51.6		399
1992 BP		1992	02	25.55069	10	26	38.51	+11	23	32.6	16.5	399
1992 BP		1992	02	25.56562	10	26	37.52	+11	23	33.0		399
1992 BP		1992	02	26.55417	10	25	35.75	+11	24	18.8	16	399
1992 BP		1992	02	26.56944	10	25	34.65	+11	24	21.2		399
1992 BQ		1992	02	05.59242	10	54	11.27	+10	28	48.6	17	399
1992 BQ		1992	02	05.61215	10	54	10.54	+10	28	51.9		399
1992 BQ		1992	02	08.71771	10	51	47.17	+10	36	16.4	17	399
1992 BQ		1992	02	08.73576	10	51	46.48	+10	36	19.1		399
1992 BQ		1992	02	25.55069	10	36	10.23	+11	22	55.2	16.5	399
1992 BQ		1992	02	25.56562	10	36	09.33	+11	22	57.1		399
1992 BQ		1992	02	26.55417	10	35	09.21	+11	25	44.0	16	399
1992 BQ		1992	02	26.56944	10	35	08.26	+11	25	46.0		399
1992 BT		1992	02	05.48333	09	01	47.38	+23	40	49.6	17	399
1992 BT		1992	02	05.49826	09	01	46.45	+23	40	50.2		399
1992 BU		1992	02	05.55417	09	39	09.37	+18	33	33.0	17.5	399
1992 BU		1992	02	05.56947	09	39	08.34	+18	33	33.5		399
1992 BU		1992	02	08.63264	09	35	58.16	+18	36	35.6	17.5	399
1992 BU		1992	02	08.64757	09	35	57.05	+18	36	36.2		399
1992 BX		1992	02	08.67431	09	10	13.51	+05	03	26.0	16.5	399
1992 BX		1992	02	08.68929	09	10	12.46	+05	03	25.4		399
1992 BZ		1992	02	05.55417	09	46	29.37	+18	50	41.7	17	399
1992 BZ		1992	02	05.56947	09	46	28.53	+18	50	46.0		399
1992 BZ		1992	02	08.63264	09	43	30.82	+19	08	40.4	16.5	399
1992 BZ		1992	02	08.64757	09	43	29.73	+19	08	46.7		399
1992 BZ		1992	02	21.45833	09	31	11.89	+20	12	54.6	17	399
1992 BZ		1992	02	21.47326	09	31	10.98	+20	13	00.7		399
1992 BZ		1992	02	22.46042	09	30	17.87	+20	17	00.9	17	399
1992 BZ		1992	02	22.48333	09	30	16.70	+20	17	05.1		399
1992 BJ1	*	1992	01	28.53056	09	10	50.59	+22	13	20.5	17	399
1992 BJ1		1992	01	28.54549	09	10	49.64	+22	13	25.6		399
1992 BJ1		1992	01	29.51736	09	09	54.50	+22	18	55.8	17.5	399
1992 BJ1		1992	01	29.53229	09	09	53.46	+22	19	00.1		399
1992 BJ1		1992	02	05.48333	09	03	15.08	+22	55	34.8	17	399
1992 BJ1		1992	02	05.49826	09	03	14.07	+22	55	39.3		399
1992 BJ1		1992	02	08.59410	09	00	19.82	+23	09	54.1	17	399

1992 BJ1		1992	02	08.60938	09	00	18.91	+23	10	02.0		399
1992 CE		1992	02	25.51667	10	11	22.02	+06	54	30.3	16.5	399
1992 CE		1992	02	25.53160	10	11	21.42	+06	54	31.4		399
1992 CE		1992	02	26.49965	10	10	45.23	+06	58	39.2	16.5	399
1992 CG1	*	1992	02	08.71771	10	44	39.59	+11	20	21.9	17	399
1992 CG1		1992	02	08.73576	10	44	38.83	+11	20	27.4		399
1992 CG1		1992	02	25.55069	10	32	23.13	+12	53	30.2	16.5	399
1992 CG1		1992	02	25.56562	10	32	22.53	+12	53	35.1		399
1992 CG1		1992	02	26.55417	10	31	35.74	+12	59	01.3	16	399
1992 CG1		1992	02	26.56944	10	31	35.05	+12	59	06.7		399
1992 DB		1992	02	25.58472	11	21	05.78	+09	14	20.0	16	399
1992 DB		1992	02	25.59931	11	21	05.05	+09	14	27.0		399
1992 DB		1992	02	26.51806	11	20	19.51	+09	22	06.3	16	399
1992 DB		1992	02	26.53299	11	20	18.70	+09	22	13.4		399
1992 DF	*	1992	02	25.55069	10	34	15.86	+13	18	29.5	17	399
1992 DF		1992	02	25.56562	10	34	14.94	+13	18	37.3		399
1992 DF		1992	02	26.55417	10	33	17.43	+13	25	59.0	17	399
1992 DF		1992	02	26.56944	10	33	16.56	+13	26	04.6		399
1992 DG	*	1992	02	25.55069	10	35	31.17	+14	40	42.9	17	399
1992 DG		1992	02	25.56562	10	35	30.39	+14	40	54.6		399
1992 DG		1992	02	26.55417	10	34	40.71	+14	52	43.6	17	399
1992 DG		1992	02	26.56944	10	34	39.95	+14	52	54.2		399
1992 DH	*	1992	02	25.58472	11	20	30.70	+09	03	39.2	16.5	399
1992 DH		1992	02	25.59931	11	20	30.02	+09	03	46.6		399
1992 DH		1992	02	26.51806	11	19	45.32	+09	11	51.1	16.5	399
1992 DH		1992	02	26.53299	11	19	44.64	+09	11	58.3		399
1992 DQ	*	1992	02	25.51667	10	16	24.55	+05	34	50.2	17	399
1992 DQ		1992	02	25.53160	10	16	23.67	+05	34	54.7		399
1992 DQ		1992	02	26.49965	10	15	25.42	+05	40	03.8	17	399
1992 DR	*	1992	02	25.51667	10	16	43.32	+08	07	51.2	17	399
1992 DR		1992	02	25.53160	10	16	42.55	+08	07	56.1		399
1992 DR		1992	02	26.49965	10	15	46.36	+08	11	03.7	17	399
1992 DS	*	1992	02	25.58472	11	16	55.74	+10	51	00.2	16.5	399
1992 DS		1992	02	25.59931	11	16	55.00	+10	51	04.1		399
1992 DS		1992	02	26.51806	11	16	09.45	+10	57	22.1	16.5	399
1992 DS		1992	02	26.53299	11	16	08.67	+10	57	27.7		399
1992 DT	*	1992	02	25.58472	11	23	05.06	+09	03	20.2	17	399
1992 DT		1992	02	25.59931	11	23	04.30	+09	03	21.5		399
1992 DT		1992	02	26.51806	11	22	15.10	+09	06	09.1	17	399
1992 DT		1992	02	26.53299	11	22	14.33	+09	06	11.9		399
1992 DV	*	1992	02	25.58472	11	24	37.38	+07	42	47.1	17	399
1992 DV		1992	02	25.59931	11	24	36.73	+07	42	57.2		399
1992 DV		1992	02	26.51806	11	24	10.29	+07	53	39.6	17	399
1992 DV		1992	02	26.53299	11	24	09.71	+07	53	50.0		399
1992 DW	*	1992	02	26.62569	11	54	13.06	+11	48	00.4	16	399
1992 DW		1992	02	26.64067	11	54	12.22	+11	48	04.9		399
1992 DW		1992	02	29.71285	11	51	26.39	+12	02	13.4	16.5	399
1992 DW		1992	02	29.72622	11	51	25.59	+12	02	18.3		399
1992 DC1	*	1992	02	26.62569	11	43	33.10	+12	13	07.5	17	399
1992 DC1		1992	02	26.64067	11	43	32.39	+12	13	14.8		399
1992 DC1		1992	03	02.62523	11	39	37.14	+13	00	56.9	17	399
1992 DC1		1992	03	02.63999	11	39	36.48	+13	01	01.9		399
1992 EA	*	1992	03	02.55579	11	13	43.61	+04	42	44.9	17	399
1992 EA		1992	03	02.57049	11	13	42.76	+04	42	50.1		399
1992 EA		1992	03	03.53681	11	12	44.64	+04	48	14.3	17	399
1992 EA		1992	03	03.55174	11	12	43.70	+04	48	17.8		399
1992 EB	*	1992	03	02.55579	11	16	34.18	+04	01	50.5	17	399
1992 EB		1992	03	02.57049	11	16	33.21	+04	01	56.0		399
1992 EB		1992	03	03.53681	11	15	33.78	+04	07	43.7	17	399

1992 EB		1992 03 03.55174	11 15 32.89	+04 07 48.1		399
1992 EC	*	1992 03 02.58843	11 28 57.01	+03 52 15.5	17	399
1992 EC		1992 03 02.60313	11 28 55.98	+03 52 17.7		399
1992 EC		1992 03 03.57500	11 27 57.19	+03 54 51.0	17	399
1992 EC		1992 03 03.58993	11 27 56.21	+03 54 51.1		399
1992 ED	*	1992 03 02.58843	11 29 07.34	+03 27 55.9	16.5	399
1992 ED		1992 03 02.60313	11 29 06.39	+03 27 59.3		399
1992 ED		1992 03 03.57500	11 28 08.59	+03 31 50.3	16.5	399
1992 ED		1992 03 03.58993	11 28 07.56	+03 31 52.7		399
1992 EE	*	1992 03 02.58843	11 36 41.67	+03 37 29.7	17	399
1992 EE		1992 03 02.60313	11 36 40.94	+03 37 30.0		399
1992 EE		1992 03 03.57500	11 35 44.00	+03 38 47.3	17	399
1992 EE		1992 03 03.58993	11 35 42.94	+03 38 49.4		399
1992 EF	*	1992 03 02.51736	10 31 58.91	-04 49 18.6	17	399
1992 EF		1992 03 02.53229	10 31 58.18	-04 49 16.1		399
1992 EF		1992 03 03.50139	10 31 11.36	-04 45 31.7	17	399
1992 EF		1992 03 03.51632	10 31 10.63	-04 45 28.5		399
2536 P-L		1991 09 30.45816	23 57 43.30	-05 41 41.0	16	399
2536 P-L		1991 09 30.47326	23 57 42.44	-05 41 41.5		399
7068 P-L		1991 11 09.60307	04 06 17.44	+14 19 59.1	16.5	399
7068 P-L		1991 11 09.62049	04 06 16.71	+14 19 52.2		399
7068 P-L		1991 11 11.56806	04 04 37.69	+14 04 51.6	16.5	399
7068 P-L		1991 11 11.58333	04 04 36.84	+14 04 44.3		399

400 Kitami
K. Watanabe, 3-8 Mason Hashimoto B-203, atsubetsu cyuo 3 jo 4 chome, Atsubetsu-ku, Sapporo 004, Japan
Observer K. Endate
Measurer K. Watanabe
0.25-m f/3.0 reflector, 0.25-m f/2.5 Schmidt
GSC

1985 CJ1		1991 11 09.52951	04 01 18.89	+20 09 36.2	16.0	400
1985 CJ1		1991 11 09.54688	04 01 17.68	+20 09 38.0		400
1985 CJ1		1991 11 10.49965	04 00 22.69	+20 09 04.4		400
1985 CJ1		1991 11 10.51563	04 00 21.76	+20 09 04.4		400
1992 BP		1992 02 09.55313	10 42 27.74	+11 09 27.4	16.0	400
1992 BP		1992 02 09.57396	10 42 26.63	+11 09 29.9		400
1992 BE1		1992 02 02.52535	10 12 01.54	+18 18 57.3	16.5	400
1992 BE1		1992 02 02.54549	10 12 00.24	+18 19 07.6		400
1992 CE	*	1992 02 05.57604	10 23 28.08	+05 37 19.4	16.5	400
1992 CE		1992 02 05.59687	10 23 27.46	+05 37 22.7		400
1992 CE		1992 02 09.51215	10 21 13.84	+05 50 55.3	16.5	400
1992 CE		1992 02 09.53229	10 21 13.23	+05 50 59.9		400
1992 CD1	*	1992 02 09.59201	10 44 49.79	+04 26 29.0	16.0	400
1992 CD1		1992 02 09.61285	10 44 48.88	+04 26 36.8		400
1992 CD1		1992 02 24.57535	10 32 30.97	+06 01 18.0	16.0	400
1992 CD1		1992 02 24.59410	10 32 29.93	+06 01 25.3		400
1992 CE1	*	1992 02 09.59201	10 45 34.42	-00 28 43.9	16.0	400
1992 CE1		1992 02 09.61285	10 45 33.66	-00 28 33.1		400
1992 CE1		1992 02 24.53993	10 36 14.92	+01 43 51.1	16.5	400
1992 CE1		1992 02 24.55938	10 36 14.13	+01 44 00.5		400
(765)		1992 02 05.57604	10 33 17.52	+08 46 35.2	16.0	400
(765)		1992 02 05.59687	10 33 16.39	+08 46 39.7		400

402 Dynic Astronomical Observatory
A. Sugie, Dynic Astronomical Observatory, Taga 270, Taga-Cho, Inukami-Gun, Shiga-Ken, 522-03, Japan
0.25-m f/3.4 Schmidt
PPM

1990 OO3		1992 01 10.73056	08 40 31.57	+12 58 50.4	17.5	402
1990 OO3		1992 01 10.74531	08 40 30.76	+12 58 55.8		402
1990 OO3		1992 01 11.62778	08 39 46.35	+13 03 52.8		402
1990 OO3		1992 01 11.64167	08 39 45.61	+13 03 57.0		402
1992 AD		1992 02 05.56956	08 03 14.51	+21 01 20.0	17.5	402
1992 AD		1992 02 05.59876	08 03 13.83	+21 01 25.0		402
1992 AC1		1992 02 05.54167	07 55 48.79	+08 29 52.5	17.0	402
1992 AC1		1992 02 05.55697	07 55 47.98	+08 29 54.4		402
1992 AC1		1992 02 09.55069	07 52 38.67	+08 26 50.5		402
1992 AC1		1992 02 09.56458	07 52 38.12	+08 26 49.6		402
1992 AD1		1992 02 05.54167	07 57 12.47	+08 32 00.7	16.5	402
1992 AD1		1992 02 05.55697	07 57 11.58	+08 32 01.0		402
1992 AD1		1992 02 09.55069	07 53 36.23	+08 30 52.0		402
1992 AD1		1992 02 09.56458	07 53 35.53	+08 30 52.3		402
1992 BK1	*	1992 01 26.64028	10 15 20.84	+05 52 13.6	16.0	402
1992 BK1		1992 01 26.65278	10 15 20.26	+05 52 12.6		402
1992 BK1		1992 02 05.63889	10 06 16.31	+05 26 03.4	15.5	402
1992 BK1		1992 02 05.65278	10 06 15.47	+05 26 01.9		402
1992 BK1		1992 02 26.60069	09 44 11.00	+05 05 42.8	15.5	402
1992 BK1		1992 02 26.61875	09 44 09.81	+05 05 42.2		402
1992 BK1		1992 02 27.51111	09 43 17.03	+05 05 33.0		402
1992 BK1		1992 02 27.52569	09 43 16.15	+05 05 32.8		402
1992 DJ	*	1992 02 26.60069	09 49 33.75	+05 29 14.6	17.0	402
1992 DJ		1992 02 26.61875	09 49 32.86	+05 29 26.7		402
1992 DJ		1992 02 27.51111	09 48 54.27	+05 40 15.7		402
1992 DJ		1992 02 27.52569	09 48 53.60	+05 40 23.1		402
1992 DK	*	1992 02 26.69028	12 16 39.71	+17 00 44.8	17.0	402
1992 DK		1992 02 26.70764	12 16 39.07	+17 00 49.5		402
1992 DK		1992 02 27.65492	12 15 59.18	+17 04 58.7		402
1992 DK		1992 02 27.67361	12 15 58.48	+17 05 05.0		402
1992 DL	*	1992 02 26.69028	12 18 58.70	+14 10 33.9	17.5	402
1992 DL		1992 02 26.70764	12 18 57.96	+14 10 36.0		402
1992 DL		1992 02 27.65492	12 18 17.91	+14 13 52.8		402
1992 DL		1992 02 27.67361	12 18 17.11	+14 13 58.1		402
1992 DM	*	1992 02 26.69028	12 20 16.56	+13 19 52.5	17.5	402
1992 DM		1992 02 26.70764	12 20 15.94	+13 20 00.2		402
1992 DM		1992 02 27.65492	12 19 39.02	+13 27 03.7		402
1992 DM		1992 02 27.67361	12 19 38.17	+13 27 11.5		402

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T. Furuta, Mitsuike 17-2, Kakiya-Cho, Tokai, Aichi-Ken 477, Japan
Observers Y. Mizuno, T. Furuta
Measurer T. Furuta
0.25-m f/4.2 Wright-Schmidt camera
GSC

1992 DB		1992 02 26.57130	11 20 16.70	+09 22 35.8	16.0	403
1992 DB		1992 02 26.58206	11 20 16.27	+09 22 41.7		403
1992 DB		1992 02 27.59236	11 19 25.12	+09 31 06.0		403
1992 DB		1992 02 27.60313	11 19 24.44	+09 31 12.6		403

411 Oizumi
T. Kobayashi, 1717-2 Shimo-Koizumi, Oizumi-machi, Ora-gun,
Gunma-ken, 370-05 Japan
0.16-m f/4.8 reflector
AGK3, SAOC

1992 AC		1992 02 22.58599	10 49 28.53	+48 55 42.1	13.5	411
1992 AC		1992 02 22.58695	10 49 28.66	+48 55 44.4		411
1992 AC		1992 02 22.58786	10 49 28.80	+48 55 46.2		411

1992 AC		1992 02 22.58954	10 49 29.05	+48 55 49.7		411
1992 AC		1992 02 22.59047	10 49 29.19	+48 55 51.5		411
1992 AC		1992 02 22.59316	10 49 29.60	+48 55 56.9		411
1992 AC		1992 02 22.59482	10 49 29.86	+48 56 00.3		411
(2060)		1992 02 22.51384	08 21 04.30	+11 45 24.2	16	411
(2060)		1992 02 22.51872	08 21 04.28	+11 45 24.5		411
(2060)		1992 02 22.52383	08 21 04.25	+11 45 24.2		411
(2060)		1992 02 22.52858	08 21 04.14	+11 45 24.3		411
(2060)		1992 02 22.53316	08 21 04.04	+11 45 25.8		411
(2060)		1992 02 22.53654	08 21 04.04	+11 45 25.5		411

413 Siding Spring
R. H. McNaught, Siding Spring Observatory, Coonabarabran, N.S.W. 2357, Australia
A. N. Zytkow, Institute of Astronomy, The Observatories, Madingley Road, Cambridge CB3 0HA, England
Observers J. A. Dawe, R. H. McNaught, S. D. Ryder, D. I. Steel, K. P. Tritton
Measurers R. H. McNaught, A. N. Zytkow, M. J. Irwin
1.2-m U.K. Schmidt, Uppsala Southern Schmidt, 1.0-m reflector + CCD

1982 BJ		1992 01 15.48344	02 21 21.82	-11 57 04.9		413
1982 BJ		1992 01 15.48736	02 21 21.95	-11 57 01.1		413
1988 RG1		1992 01 15.57215	05 58 50.98	-02 37 51.1		413
1988 RG1		1992 01 15.57619	05 58 50.86	-02 37 49.9		413
1988 RG1		1992 01 15.57986	05 58 50.76	-02 37 49.5		413
1990 DJ		1992 01 15.49227	02 38 43.53	-13 42 48.2		413
1990 DJ		1992 01 15.49611	02 38 43.70	-13 42 44.8		413
1990 HM3		1990 05 01.75077	18 40 09.81	-23 06 38.3		413
1990 HN3		1990 05 01.75077	18 40 55.28	-23 32 26.2		413
1990 HO3		1990 05 01.75077	18 43 28.44	-23 55 26.1		413
1990 HG5	*	1990 04 29.76870	18 34 49.64	-24 00 24.2		413
1990 HG5		1990 05 01.75077	18 35 42.97	-24 07 46.3		413
1990 HG5		1990 05 02.74389	18 36 06.79	-24 11 33.7		413
1990 HH5	*	1990 04 29.76870	18 35 22.99	-23 47 02.4		413
1990 HH5		1990 05 01.75077	18 35 29.78	-23 45 42.5		413
1990 HH5		1990 05 02.74389	18 35 31.18	-23 45 03.3		413
1990 HJ5	*	1990 04 29.76870	18 36 23.63	-22 57 24.4		413
1990 HJ5		1990 05 01.75077	18 36 30.81	-22 55 51.8		413
1990 HJ5		1990 05 02.74389	18 36 32.26	-22 55 07.4		413
1990 HK5	*	1990 04 29.76870	18 37 49.62	-25 03 30.1		413
1990 HK5		1990 05 01.75077	18 38 05.34	-25 00 19.3		413
1990 HK5		1990 05 02.74389	18 38 10.90	-24 58 43.5		413
1990 HL5	*	1990 04 29.76870	18 37 59.29	-23 29 12.4		413
1990 HL5		1990 05 01.75077	18 37 54.36	-23 29 19.9		413
1990 HL5		1990 05 02.74389	18 37 50.07	-23 29 25.2		413
1990 HM5	*	1990 04 29.76870	18 38 10.20	-22 29 54.3		413
1990 HM5		1990 05 01.75077	18 38 06.35	-22 30 29.9		413
1990 HM5		1990 05 02.74389	18 38 02.87	-22 30 50.2		413
1990 HN5	*	1990 04 29.76870	18 38 27.00	-22 26 17.5		413
1990 HN5		1990 05 01.75077	18 39 48.37	-22 29 12.6		413
1990 HN5		1990 05 02.74389	18 40 25.96	-22 30 44.8		413
1990 HO5	*	1990 04 29.76870	18 38 45.26	-21 46 42.0		413
1990 HO5		1990 05 01.75077	18 39 00.49	-21 50 30.4		413
1990 HO5		1990 05 02.74389	18 39 05.70	-21 52 29.8		413
1990 HP5	*	1990 04 29.76870	18 38 58.15	-24 49 02.9		413
1990 HP5		1990 05 01.75077	18 39 21.26	-24 49 38.1		413
1990 HP5		1990 05 02.74389	18 39 30.59	-24 49 57.8		413
1990 HQ5	*	1990 04 29.76870	18 39 52.04	-22 19 33.0		413

1990	HQ5		1990	05	01.75077	18	40	07.84	-22	22	50.8	413
1990	HQ5		1990	05	02.74389	18	40	13.11	-22	24	34.2	413
1990	HR5	*	1990	04	29.76870	18	39	59.83	-24	39	35.6	413
1990	HR5		1990	05	01.75077	18	40	04.76	-24	43	33.5	413
1990	HR5		1990	05	02.74389	18	40	05.06	-24	45	35.7	413
1990	HS5	*	1990	04	29.76870	18	40	12.53	-23	55	46.9	413
1990	HS5		1990	05	01.75077	18	41	22.13	-23	59	45.1	413
1990	HS5		1990	05	02.74389	18	41	54.17	-24	01	50.1	413
1990	HT5	*	1990	04	29.76870	18	40	39.26	-22	00	36.6	413
1990	HT5		1990	05	01.75077	18	41	18.22	-21	58	49.9	413
1990	HT5		1990	05	02.74389	18	41	34.95	-21	57	59.2	413
1990	HU5	*	1990	04	29.76870	18	41	07.76	-22	42	01.9	413
1990	HU5		1990	05	01.75077	18	41	20.09	-22	45	24.5	413
1990	HU5		1990	05	02.74389	18	41	24.11	-22	47	09.7	413
1990	HV5	*	1990	04	29.76870	18	41	28.41	-24	47	08.5	413
1990	HV5		1990	05	01.75077	18	42	17.26	-24	46	11.4	413
1990	HV5		1990	05	02.74389	18	42	39.13	-24	45	44.2	413
1990	HW5	*	1990	04	29.76870	18	41	47.13	-21	58	01.9	413
1990	HW5		1990	05	01.75077	18	41	59.64	-21	49	29.6	413
1990	HW5		1990	05	02.74389	18	42	03.15	-21	45	12.0	413
1990	HX5	*	1990	04	29.76870	18	42	17.30	-22	04	38.1	413
1990	HX5		1990	05	01.75077	18	42	40.83	-22	07	20.0	413
1990	HX5		1990	05	02.74389	18	42	49.84	-22	08	46.9	413
1990	HY5	*	1990	04	29.76870	18	43	19.88	-23	23	37.8	413
1990	HY5		1990	05	01.75077	18	43	42.93	-23	21	52.2	413
1990	HY5		1990	05	02.74389	18	43	51.67	-23	21	02.1	413
1990	HZ5	*	1990	04	29.76870	18	43	37.47	-22	00	38.2	413
1990	HZ5		1990	05	01.75077	18	43	32.47	-22	03	48.9	413
1990	HZ5		1990	05	02.74389	18	43	28.12	-22	05	27.5	413
1990	HA6	*	1990	04	29.76870	18	44	25.75	-23	09	09.1	413
1990	HA6		1990	05	01.75077	18	44	47.16	-23	14	02.4	413
1990	HA6		1990	05	02.74389	18	44	55.23	-23	16	34.9	413
1990	HB6	*	1990	04	29.76870	18	44	41.36	-23	42	02.2	413
1990	HB6		1990	05	01.75077	18	45	19.06	-23	43	22.4	413
1990	HB6		1990	05	02.74389	18	45	35.68	-23	44	05.7	413
1990	HC6	*	1990	04	29.76870	18	44	48.22	-23	26	09.4	413
1990	HC6		1990	05	01.75077	18	45	51.63	-23	27	03.9	413
1990	HC6		1990	05	02.74389	18	46	20.66	-23	27	34.8	413
1990	HD6	*	1990	04	29.76870	18	44	52.81	-22	03	02.6	413
1990	HD6		1990	05	01.75077	18	45	04.96	-22	04	30.7	413
1990	HD6		1990	05	02.74389	18	45	08.91	-22	05	18.5	413
1990	HE6	*	1990	04	29.76870	18	45	49.20	-23	24	29.2	413
1990	HE6		1990	05	01.75077	18	46	36.71	-23	25	44.3	413
1990	HE6		1990	05	02.74389	18	46	58.18	-23	26	25.4	413
1990	HF6	*	1990	04	29.76870	18	46	01.54	-24	12	38.9	413
1990	HF6		1990	05	01.75077	18	46	18.19	-24	14	47.4	413
1990	HF6		1990	05	02.74389	18	46	24.21	-24	15	55.2	413
1990	HG6	*	1990	04	29.76870	18	46	13.03	-22	17	55.8	413
1990	HG6		1990	05	01.75077	18	46	30.29	-22	15	26.4	413
1990	HG6		1990	05	02.74389	18	46	36.74	-22	14	13.2	413
1990	HH6	*	1990	04	29.76870	18	46	32.13	-24	08	17.4	413
1990	HH6		1990	05	01.75077	18	46	31.96	-24	09	08.1	413
1990	HH6		1990	05	02.74389	18	46	30.05	-24	09	35.6	413
1990	HJ6	*	1990	04	29.76870	18	46	57.83	-22	57	51.2	413
1990	HJ6		1990	05	01.75077	18	47	29.52	-22	59	29.8	413
1990	HJ6		1990	05	02.74389	18	47	42.86	-23	00	23.5	413
1990	HK6	*	1990	04	29.76870	18	47	11.06	-23	35	33.3	413
1990	HK6		1990	05	01.75077	18	48	03.69	-23	37	26.9	413

1990	HK6		1990	05	02.74389	18	48	27.30	-23	38	27.5		413
1990	HL6	*	1990	04	29.76870	18	48	09.76	-21	58	54.7		413
1990	HL6		1990	05	01.75077	18	48	20.55	-21	59	22.5		413
1990	HL6		1990	05	02.74389	18	48	23.41	-21	59	40.3		413
1990	HM6	*	1990	04	29.76870	18	48	38.20	-23	32	40.4		413
1990	HM6		1990	05	01.75077	18	49	04.00	-23	30	56.1		413
1990	HM6		1990	05	02.74389	18	49	14.72	-23	30	05.6		413
1990	HN6	*	1990	04	29.76870	18	35	55.64	-21	44	32.4		413
1990	HN6		1990	05	01.75077	18	35	38.06	-21	46	18.1		413
1990	HO6	*	1990	04	29.76870	18	39	19.19	-22	30	48.3		413
1990	HO6		1990	05	01.75077	18	39	26.44	-22	26	27.2		413
1990	HP6	*	1990	04	29.76870	18	43	31.39	-22	35	01.4		413
1990	HP6		1990	05	01.75077	18	43	25.38	-22	38	29.4		413
1990	HQ6	*	1990	04	29.76870	18	44	12.91	-22	27	28.1		413
1990	HQ6		1990	05	02.74389	18	44	22.73	-22	22	30.4		413
1990	HR6	*	1990	04	29.76870	18	45	39.14	-22	15	06.6		413
1990	HR6		1990	05	01.75077	18	45	46.89	-22	10	47.2		413
1990	HS6	*	1990	04	29.76870	18	45	46.38	-21	45	43.5		413
1990	HS6		1990	05	01.75077	18	45	34.66	-21	42	15.7		413
1990	HT6	*	1990	04	29.76870	18	46	32.51	-22	02	01.3		413
1990	HT6		1990	05	01.75077	18	46	37.28	-22	01	26.3		413
1990	HU6	*	1990	04	29.76870	18	49	04.96	-25	02	29.1		413
1990	HU6		1990	05	01.75077	18	49	22.10	-24	57	55.3		413
1990	HV6	*	1990	04	29.76870	18	49	11.95	-23	10	59.8		413
1990	HV6		1990	05	01.75077	18	49	14.55	-23	11	40.7		413
1990	JN1	*	1990	05	01.75077	18	34	40.50	-22	37	22.9		413
1990	JN1		1990	05	02.74389	18	34	45.08	-22	36	47.9		413
1990	JO1	*	1990	05	01.75077	18	34	55.93	-22	25	33.4		413
1990	JO1		1990	05	02.74389	18	35	07.68	-22	31	20.2		413
1990	JP1	*	1990	05	01.75077	18	35	35.55	-23	00	18.7		413
1990	JP1		1990	05	02.74389	18	36	04.97	-22	58	08.9		413
1990	JQ1	*	1990	05	01.75077	18	38	09.41	-24	54	17.3		413
1990	JQ1		1990	05	02.74389	18	38	43.74	-24	54	00.2		413
1990	JR1	*	1990	05	01.75077	18	39	21.42	-22	59	04.2		413
1990	JR1		1990	05	02.74389	18	39	23.26	-22	59	27.8		413
1990	JS1	*	1990	05	01.75077	18	41	17.80	-22	49	09.5		413
1990	JS1		1990	05	02.74389	18	41	24.11	-22	47	09.7		413
1990	JT1	*	1990	05	01.75077	18	41	20.09	-22	45	24.6		413
1990	JT1		1990	05	02.74389	18	41	36.61	-22	42	12.8		413
1990	JU1	*	1990	05	01.75077	18	41	24.39	-22	12	11.2		413
1990	JU1		1990	05	02.74389	18	41	32.78	-22	11	27.9		413
1990	JV1	*	1990	05	01.75077	18	43	07.88	-22	49	54.0		413
1990	JV1		1990	05	02.74389	18	43	05.02	-22	45	45.3		413
1990	JW1	*	1990	05	01.75077	18	43	08.32	-24	32	57.0		413
1990	JW1		1990	05	02.74389	18	43	34.28	-24	35	14.2		413
1990	JX1	*	1990	05	01.75077	18	44	40.97	-23	55	45.1		413
1990	JX1		1990	05	02.74389	18	44	46.39	-23	54	18.8		413
1990	JY1	*	1990	05	01.75077	18	48	00.98	-23	09	44.1		413
1990	JY1		1990	05	02.74389	18	48	12.61	-23	09	01.2		413
1991	VB		1992	01	13.51855	03	32	50.83	+16	32	25.1		413
1991	VB		1992	01	13.52042	03	32	51.04	+16	32	24.4		413
1991	VB		1992	01	13.52236	03	32	51.26	+16	32	25.1		413
1991	VB3		1990	04	29.76870	18	39	36.60	-22	07	48.8		413
1991	VB3		1990	05	01.75077	18	39	59.58	-22	02	19.1		413
1991	VB3		1990	05	02.74389	18	40	08.23	-21	59	34.8		413
1992	AD		1977	07	22.76513	23	55	21.45	-21	52	30.6		413
1992	AD		1982	08	22.71951	01	27	26.44	-17	29	15.7		413
1992	AD		1992	02	11.56142	08	01	33.27	+21	14	17.6		413
1992	AD		1992	02	11.56676	08	01	33.18	+21	14	18.2		413

1992 AD	1992 02 11.57350	08 01 33.07	+21 14 19.0			413
1992 AD	1992 02 12.58154	08 01 16.95	+21 16 25.9			413
1992 BB	1992 02 11.50042	05 39 25.57	-55 09 12.4			413
1992 BB	1992 02 11.50432	05 39 25.68	-55 09 07.5			413
1992 BB	1992 02 11.50757	05 39 25.80	-55 09 03.4			413
1992 BB	1992 02 12.49163	05 40 04.06	-54 48 43.8			413
1992 BB	1992 02 12.49441	05 40 04.16	-54 48 40.2			413
1992 BB	1992 02 12.62093	05 40 08.88	-54 45 57.6			413
5119 T-3	1992 01 15.56417	05 34 49.74	-20 27 02.4			413
5119 T-3	1992 01 15.56726	05 34 49.67	-20 26 59.8			413
(196)	1990 04 29.76870	18 43 45.18	-24 43 05.2			413
(196)	1990 05 01.75077	18 44 00.80	-24 47 21.3			413
(196)	1990 05 02.74389	18 44 06.51	-24 49 34.0			413
(557)	1990 04 29.76870	18 47 22.46	-24 47 11.6			413
(557)	1990 05 01.75077	18 47 40.99	-24 46 45.9			413
(557)	1990 05 02.74389	18 47 47.68	-24 46 35.0			413
(2415)	1990 04 29.76870	18 47 36.10	-22 29 17.4			413
(2415)	1990 05 01.75077	18 48 10.00	-22 29 53.1			413
(2415)	1990 05 02.74389	18 48 24.58	-22 30 14.4			413
(2483)	1990 04 29.76870	18 37 11.64	-21 43 43.6			413
(2483)	1990 05 01.75077	18 36 56.66	-21 42 39.8			413
(2483)	1990 05 02.74389	18 36 47.84	-21 42 08.9			413
(3303)	1990 04 29.76870	18 37 47.94	-24 51 29.6			413
(3303)	1990 05 01.75077	18 38 07.56	-24 53 43.2			413
(3303)	1990 05 02.74389	18 38 15.11	-24 54 52.8			413
(3327)	1990 05 01.75077	18 40 39.39	-23 33 09.8			413
(3839)	1990 04 29.76870	18 38 43.50	-22 15 23.2			413
(3839)	1990 05 01.75077	18 40 01.52	-22 10 17.1			413
(3839)	1990 05 02.74389	18 40 37.73	-22 07 43.6			413
(5048)	1990 04 29.76870	18 46 18.41	-24 24 35.5			413
(5048)	1990 05 01.75077	18 47 05.27	-24 23 52.2			413
(5048)	1990 05 02.74389	18 47 25.90	-24 23 32.6			413

474 Mount John
A. C. Gilmore, P.O. Box 57, Lake Tekapo, New Zealand
Observer A. C. Gilmore
Measurer P. M. Kilmartin
0.6-m f/14 Cassegrain reflector
AGK3, SAOC, CPZ, field plates from Carter Observatory

1978 PT4	1991 11 05.57138	02 09 09.72	-16 22 37.0			474
1978 PT4	1991 11 05.58880	02 09 08.83	-16 22 41.5			474
1992 BF	1992 02 05.54372	09 29 54.16	+13 47 10.4			474
1992 BF	1992 02 05.55240	09 29 50.53	+13 47 01.2			474

493 Calar Alto
K. Birkle, Max-Planck-Institut fur Astronomie, Königstuhl, D-6900 Heidelberg 1, Federal Republic of Germany
Observers K. Birkle, U. Hopp
0.8-m f/3 Schmidt

1992 CH1	* 1992 02 08.06250	10 50 05.42	-01 33 54.8	16	R	493
1992 CH1	1992 02 09.10938	10 53 14.95	+00 22 55.7			493
1992 CH1	1992 02 09.99132	10 55 58.12	+02 03 56.0			493
1992 CH1	1992 02 11.20920	10 59 38.93	+04 26 29.0			493
1992 CH1	1992 02 11.21192	10 59 39.31	+04 26 47.6			493
1992 CH1	1992 02 11.92299	11 01 54.56	+05 51 24.2			493
1992 CH1	1992 02 11.92455	11 01 54.72	+05 51 36.4			493
1992 CH1	1992 02 12.20764	11 02 42.96	+06 25 34.5			493
1992 CH1	1992 02 12.20920	11 02 43.25	+06 25 46.5			493
1992 CH1	1992 02 15.19392	11 11 55.63	+12 28 10.1			493

1992 CH1	1992 02 15.19416	11 11 55.69	+12 28 11.8		493
(148)	1992 01 24.93588	05 10 31.78	-06 12 40.1		493
(148)	1992 01 26.88576	05 10 19.13	-05 42 06.8		493
(148)	1992 02 01.88738	05 10 20.91	-04 07 12.4		493
(148)	1992 02 07.89097	05 11 23.82	-02 32 20.3		493
(148)	1992 02 09.90035	05 11 58.20	-02 00 50.0		493
(148)	1992 02 13.85000	05 13 24.40	-00 59 34.8		493

511 Haute Provence
E. W. Elst, Royal Observatory, B-1180 Brussels, Belgium
Observer E. W. Elst
Measurers E. W. Elst, J. P. Olivier
0.6-m Schmidt

1991 YG	1991 12 30.07049	06 58 19.26	+16 30 33.7		511
1991 YG	1991 12 30.10938	06 58 16.52	+16 30 27.9		511
1991 YG	1992 01 02.02118	06 55 09.68	+16 25 43.7	17.3	511
1991 YG	1992 01 02.05521	06 55 07.47	+16 25 40.4		511

565 Bassano Bresciano
U. Quadri, Osservatorio di Bassano Bresciano, Via S. Michele 4,
I-25020 Bassano Bresciano (Brescia), Italy
Observers U. Quadri, L. Strabla
0.3-0.4-m f/3.3 Schmidt

(5058)	1992 01 25.82869	06 59 00.20	+23 21 36.2	17.5	565
(5058)	1992 01 25.84921	06 58 59.08	+23 21 44.3		565

567 Osservatorio Chaonis
J. M. Baur, Via Zara 20, I-33083 Chions, Italy
Observers J. M. Baur, G. Carniel
Measurer J. M. Baur
0.6-m f/3 Wright-Schmidt reflector

1990 VC	1991 12 15.06528	09 13 42.06	-02 36 14.8	18.3	567
1990 VC	1991 12 15.09305	09 13 41.99	-02 36 26.8		567
1990 VC	1991 12 15.12083	09 13 41.85	-02 36 39.1		567
1990 VC	1991 12 16.05139	09 13 37.66	-02 43 22.5		567
1990 VC	1991 12 16.07916	09 13 37.47	-02 43 35.3		567
1990 VC	1991 12 16.09652	09 13 37.37	-02 43 42.8		567
1990 VC	1991 12 31.01667	09 09 27.37	-04 14 44.3		567
1990 VC	1991 12 31.03750	09 09 26.74	-04 14 50.7		567
1990 VC	1991 12 31.05833	09 09 26.07	-04 14 55.7		567
1990 VC	1992 01 25.92778	08 50 30.11	-05 06 19.5		567
1990 VC	1992 01 25.94583	08 50 29.07	-05 06 17.9		567
1990 VC	1992 01 27.91944	08 48 40.01	-05 03 39.2		567
1990 VC	1992 01 27.93750	08 48 38.96	-05 03 37.8		567
1990 VC	1992 01 27.95556	08 48 37.96	-05 03 35.4		567

573 Eldagsen
W. Bonk, Nordstrasse 33, W-3257 Springe 3, Federal Republic of Germany
AGK3

(145)	1992 02 23.76694	10 19 03.62	+32 32 09.3		573
(145)	1992 02 23.77440	10 19 03.11	+32 32 12.3		573
(346)	1992 02 23.79257	09 26 14.20	+25 32 59.0		573
(346)	1992 02 23.79651	09 26 13.99	+25 33 00.4		573

587 Sormano
P. Sicoli, Via Valli 9, I-22040 Garbagnate Monastero (Como), Italy
Observers M. Cavagna, E. Colzani, P. Sicoli, A. Testa
0.5-m f/5.9 reflector, 0.21-m f/4.9 astrograph
PPM

1991 VL	1991 12 02.80108	00 08 27.44	+18 10 17.1	587
1991 VL	1991 12 29.82222	23 56 36.07	+12 54 58.3	587
1992 AC	1992 01 31.93368	09 50 08.62	+29 52 22.5	587

595 Farra d'Isonzo
L. Bittesini, Via dei Conventi 10, I-34070 Farra D'Isonzo (GO), Italy
Observers G. Lombardi, F. Piani
Measurers G. Lombardi, F. Piani
0.4-m f/4.5 reflector
PPM

(2719)	1991 10 10.93542	01 34 03.78	+08 33 20.6	595
(3285)	1991 12 03.87222	02 40 42.03	+22 09 45.9	595
(4159)	1991 12 27.88681	05 50 46.18	+23 08 32.8	595
(4159)	1991 12 27.94028	05 50 42.38	+23 08 53.8	595

597 Springe
N. Ehring, Detmoldstrasse 8, W-3000 Hannover 1, Federal Republic of Germany

(38)	1992 01 10.90764	06 46 35.52	+25 27 01.9	597
(38)	1992 01 10.91970	06 46 34.75	+25 26 59.6	597
(193)	1992 01 10.88351	08 55 53.46	+36 33 33.6	597
(193)	1992 01 10.89498	08 55 52.66	+36 33 34.4	597
(278)	1992 01 08.02808	06 11 33.32	+30 20 15.4	597
(278)	1992 01 08.03569	06 11 32.85	+30 20 15.7	597
(679)	1992 01 10.95492	09 00 22.85	+24 23 54.3	597
(679)	1992 01 10.97308	09 00 21.81	+24 24 09.3	597
(773)	1992 01 10.96454	09 04 20.40	+24 44 33.3	597
(773)	1992 01 10.97308	09 04 19.96	+24 44 33.6	597
(785)	1992 01 08.00064	06 44 16.65	+33 26 53.4	597
(785)	1992 01 08.01834	06 44 15.31	+33 26 59.0	597
(928)	1992 01 10.93889	07 02 27.50	+11 43 21.3	597
(928)	1992 01 10.94253	07 02 27.33	+11 43 23.5	597

657 Victoria, Climenhaga Observatory
J. B. Tatum, Dept. of Physics, University of Victoria, P.O. Box 1700, Victoria, BC V8W 2Y2, Canada
Observers J. B. Tatum, D. D. Balam
0.25-m astrograph, 0.5-m reflector + CCD

1992 CC1	1992 02 28.25096	11 23 22.73	+19 00 29.7	657
1992 CC1	1992 02 28.25513	11 23 21.78	+19 00 26.7	657
1992 CC1	1992 02 28.26146	11 23 20.40	+19 00 23.4	657
(1286)	1991 10 03.29660	00 48 49.85	+07 38 48.9	657
(1286)	1991 10 03.33826	00 48 48.12	+07 38 28.5	657
(1493)	1991 09 03.28854	22 53 20.65	-06 02 29.4	657
(1493)	1991 09 03.32674	22 53 18.58	-06 02 36.2	657
(1971)	1991 09 03.27674	22 29 35.08	-00 31 44.7	657
(1971)	1991 09 03.31563	22 29 33.20	-00 31 49.2	657
(2878)	1991 09 17.42090	01 07 53.30	+20 38 31.2	657
(2878)	1991 09 17.47785	01 07 50.95	+20 38 31.9	657

658 Dominion Astrophysical Observatory, Victoria
D. D. Balam, Dept. of Physics, University of Victoria, P.O. Box 1700, Victoria, BC V8W 2Y2, Canada
Observer G. C. L. Aikman
Measurer D. D. Balam
1.85-m reflector + CCD
GSC

1992 AA	1992 02 06.30220	05 47 34.64	+34 02 07.4	658
1992 AA	1992 02 06.30334	05 47 35.36	+34 02 11.7	658
1992 AA	1992 02 06.30630	05 47 35.91	+34 02 14.8	658

1992 AA	1992 02 07.25279	05 50 30.97	+34 17 49.2		658
1992 AA	1992 02 07.25973	05 50 32.19	+34 17 55.8		658
1992 AA	1992 02 07.26425	05 50 32.96	+34 17 59.7		658
1992 AC	1992 02 06.40973	10 04 11.78	+35 44 14.1		658
1992 AC	1992 02 06.41112	10 04 11.99	+35 44 19.2		658
1992 AC	1992 02 07.49010	10 07 04.07	+36 50 33.8		658
1992 AC	1992 02 07.49150	10 07 04.28	+36 50 38.8		658
1992 AD	1992 02 06.32503	08 03 01.12	+21 03 00.1		658
1992 AD	1992 02 06.32882	08 03 01.00	+21 03 00.1		658
1992 AD	1992 02 06.33304	08 03 00.93	+21 03 00.4		658
1992 AD	1992 02 07.27778	08 02 44.75	+21 05 05.0		658
1992 AD	1992 02 07.28126	08 02 44.67	+21 05 06.1		658
1992 AD	1992 02 07.28647	08 02 44.58	+21 05 06.5		658
1992 AE	1992 02 07.12780	03 30 06.56	+19 25 08.1		658
1992 AE	1992 02 07.13384	03 30 07.34	+19 25 12.0		658
1992 BC	1992 02 07.40869	10 02 22.56	+53 17 06.1		658
1992 BC	1992 02 07.40991	10 02 23.06	+53 17 19.7		658
1992 BC	1992 02 07.42639	10 02 30.38	+53 20 26.9		658
(1981)	1992 02 07.54828	14 15 06.68	+21 52 37.4		658
(1981)	1992 02 07.55035	14 15 06.90	+21 52 35.4		658
(1981)	1992 02 07.55209	14 15 07.11	+21 52 33.5		658

675 Palomar
E. Helin, MS 183-501, Jet Propulsion Laboratory, Pasadena, CA 91109, U.S.A. (2)
C. Shoemaker, P.O. Box 984, Flagstaff, AZ 86002, U.S.A. (3)
C. J. van Houten, Sterrewacht Leiden, Postbus 9513, NL-2300 RA Leiden, The Netherlands (4)
E. Bowell, Lowell Observatory, 1400 West Mars Hill Road, Flagstaff, AZ 86001, U.S.A. (6)
J. Mueller, Palomar Observatory, Palomar Mountain, CA 92060, U.S.A. (7)
9 = 3 + 6
Observers T. Gehrels (4, L), E. Helin (2, S), H. E. Holt (9, S), T. M. King (3, S), C. Kowal (6, L), K. A. Lawler (9, S), K. Lawrence (2, S), D. H. Levy (3, S), J. D. Mendenhall (7, L), P. Rose (2, S), C. S. Shoemaker (3, S), E. M. Shoemaker (3, S), J. Stiffler (9, S)
Measurers J. Alu (2), K. Lawrence (2), T. M. King (3), J. Mueller (7), C. M. Olmstead (9), P. Rose (2), C. S. Shoemaker (2), B. A. Skiff (9), C. J. van Houten (4), I. van Houten-Groeneveld (4), A. Wisse (4)
1.2-m (L) and 0.46-m (S) Schmidt telescopes

1969 TQ1	1991 09 11.37431	00 09 29.34	-03 52 51.8	18.0	9	675
1969 TQ1	1991 09 14.39288	00 07 22.73	-04 06 45.1	17.5	9	675
1969 TQ1	1991 09 14.44635	00 07 20.27	-04 06 59.3		9	675
1969 TQ1	1991 09 15.36128	00 06 40.99	-04 11 11.7	18.0	9	675
1969 TQ1	1991 09 15.39861	00 06 39.33	-04 11 22.1		9	675
1969 TQ1	1991 09 16.38663	00 05 56.31	-04 15 58.1	17.0	9	675
1969 TQ1	1991 09 16.42674	00 05 54.48	-04 16 08.8		9	675
1976 GO3	1978 11 30.26007	03 40 20.08	+16 51 49.6	17.5 V	6	675
1976 GO3	1978 12 01.27691	03 39 23.61	+16 49 21.1		6	675
1977 RG	1991 09 11.35451	23 02 43.46	-05 41 15.2		9	675
1977 RG	1991 09 17.22847	22 58 28.37	-06 28 03.0		9	675
1978 VP1	1978 11 30.26007	03 21 46.06	+19 30 32.4	17.2 V	6	675
1978 VP1	1978 12 01.27691	03 21 01.08	+19 25 24.7		6	675
1978 VN2	1978 11 30.26007	03 26 59.72	+20 36 48.8	16.8 V	6	675
1978 VN2	1978 12 01.27691	03 26 11.25	+20 33 57.5		6	675
1978 VO2	1978 11 30.26007	03 26 05.60	+19 45 54.7	17.0 V	6	675
1978 VO2	1978 12 01.27691	03 25 13.76	+19 39 07.0		6	675
1978 VP2	1978 11 30.26007	03 22 19.41	+20 55 23.0	18.2 V	6	675
1978 VP2	1978 12 01.27691	03 21 17.72	+20 50 32.6		6	675

1978 VQ2		1978	11	30.26007	03	24	08.58	+20	10	41.7	17.8	V	6	675
1978 VQ2		1978	12	01.27691	03	23	12.33	+20	04	15.3			6	675
1978 WZ16	*	1978	11	30.26007	03	20	46.64	+17	54	52.4	17.2	V	6	675
1978 WZ16		1978	12	01.27691	03	19	56.08	+17	52	46.7			6	675
1978 WA17	*	1978	11	30.26007	03	21	14.73	+20	13	06.3	18.2	V	6	675
1978 WA17		1978	12	01.27691	03	20	16.78	+20	13	03.2			6	675
1978 WB17	*	1978	11	30.26007	03	21	59.83	+16	52	10.2	17.8	V	6	675
1978 WB17		1978	12	01.27691	03	21	00.38	+16	53	00.6			6	675
1978 WC17	*	1978	11	30.26007	03	22	17.91	+18	04	43.8	18.0	V	6	675
1978 WC17		1978	12	01.27691	03	21	31.37	+18	01	46.4			6	675
1978 WD17	*	1978	11	30.26007	03	22	50.05	+18	40	38.9	16.8	V	6	675
1978 WD17		1978	12	01.27691	03	21	58.39	+18	41	12.5			6	675
1978 WE17	*	1978	11	30.26007	03	24	03.22	+18	57	07.3	18.2	V	6	675
1978 WE17		1978	12	01.27691	03	23	13.59	+18	53	44.8			6	675
1978 WF17	*	1978	11	30.26007	03	24	09.15	+20	17	23.6	17.8	V	6	675
1978 WF17		1978	12	01.27691	03	23	20.92	+20	14	05.0			6	675
1978 WG17	*	1978	11	30.26007	03	24	20.80	+18	56	15.5	18.5	V	6	675
1978 WG17		1978	12	01.27691	03	23	43.77	+18	56	57.0			6	675
1978 WH17	*	1978	11	30.26007	03	25	30.06	+20	49	51.9	18.5	V	6	675
1978 WH17		1978	12	01.27691	03	24	32.44	+20	45	34.7			6	675
1978 WJ17	*	1978	11	30.26007	03	25	54.55	+19	17	03.5	17.5	V	6	675
1978 WJ17		1978	12	01.27691	03	24	53.18	+19	17	56.1			6	675
1978 WK17	*	1978	11	30.26007	03	27	13.12	+19	58	10.0	18.0	V	6	675
1978 WK17		1978	12	01.27691	03	26	03.40	+20	01	55.8			6	675
1978 WL17	*	1978	11	30.26007	03	27	47.64	+18	50	10.6	18.8	V	6	675
1978 WL17		1978	12	01.27691	03	26	56.35	+18	40	20.5			6	675
1978 WM17	*	1978	11	30.26007	03	27	58.69	+18	57	27.4	17.8	V	6	675
1978 WM17		1978	12	01.27691	03	27	10.49	+18	53	29.7			6	675
1978 WN17	*	1978	11	30.26007	03	28	26.67	+18	09	48.0	18.8	V	6	675
1978 WN17		1978	12	01.27691	03	27	40.39	+18	07	03.2			6	675
1978 WO17	*	1978	11	30.26007	03	28	27.52	+16	11	38.1	18.2	V	6	675
1978 WO17		1978	12	01.27691	03	27	21.73	+16	10	49.2			6	675
1978 WP17	*	1978	11	30.26007	03	28	30.32	+19	27	14.5	17.5	V	6	675
1978 WP17		1978	12	01.27691	03	27	24.88	+19	26	32.9			6	675
1978 WQ17	*	1978	11	30.26007	03	28	51.88	+18	43	07.7	17.0	V	6	675
1978 WQ17		1978	12	01.27691	03	27	51.68	+18	41	21.8			6	675
1978 WR17	*	1978	11	30.26007	03	28	53.89	+20	04	31.0	17.2	V	6	675
1978 WR17		1978	12	01.27691	03	27	55.27	+19	58	19.3			6	675
1978 WS17	*	1978	11	30.26007	03	29	30.51	+18	36	14.0	18.2	V	6	675
1978 WS17		1978	12	01.27691	03	28	30.61	+18	31	26.8			6	675
1978 WT17	*	1978	11	30.26007	03	30	36.18	+16	58	30.6	17.8	V	6	675
1978 WT17		1978	12	01.27691	03	29	46.69	+16	57	00.5			6	675
1978 WU17	*	1978	11	30.26007	03	30	55.37	+16	53	00.7	18.5	V	6	675
1978 WU17		1978	12	01.27691	03	30	14.48	+16	50	42.1			6	675
1978 WV17	*	1978	11	30.26007	03	31	03.62	+17	53	36.1	18.2	V	6	675
1978 WV17		1978	12	01.27691	03	30	03.41	+17	51	58.9			6	675
1978 WW17	*	1978	11	30.26007	03	31	41.13	+19	31	15.9	18.5	V	6	675
1978 WW17		1978	12	01.27691	03	30	42.03	+19	32	19.8			6	675
1978 WX17	*	1978	11	30.26007	03	32	45.72	+20	41	33.2	17.2	V	6	675
1978 WX17		1978	12	01.27691	03	31	53.98	+20	36	28.6			6	675
1978 WY17	*	1978	11	30.26007	03	32	57.68	+17	25	43.2	19.8	V	6	675
1978 WY17		1978	12	01.27691	03	32	26.43	+17	24	09.7			6	675
1978 WZ17	*	1978	11	30.26007	03	33	04.92	+18	40	59.8	17.5	V	6	675
1978 WZ17		1978	12	01.27691	03	32	15.12	+18	37	46.0			6	675
1978 WA18	*	1978	11	30.26007	03	33	32.83	+21	11	59.1	17.8	V	6	675
1978 WA18		1978	12	01.27691	03	32	40.83	+21	09	07.4			6	675
1978 WB18	*	1978	11	30.26007	03	33	43.95	+20	08	51.7	18.2	V	6	675
1978 WB18		1978	12	01.27691	03	32	54.76	+20	06	01.3			6	675
1978 WC18	*	1978	11	30.26007	03	33	58.71	+18	14	45.7	18.0	V	6	675

1978	WC18		1978	12	01.27691	03	33	03.07	+18	16	10.8		6	675
1978	WD18	*	1978	11	30.26007	03	34	18.09	+15	50	03.9	17.5 V	6	675
1978	WD18		1978	12	01.27691	03	33	17.29	+15	51	05.6		6	675
1978	WE18	*	1978	11	30.26007	03	34	32.65	+21	38	19.5	18.0 V	6	675
1978	WE18		1978	12	01.27691	03	33	37.10	+21	35	25.4		6	675
1978	WF18	*	1978	11	30.26007	03	34	35.53	+16	16	13.7	17.8 V	6	675
1978	WF18		1978	12	01.27691	03	33	31.21	+16	20	23.5		6	675
1978	WG18	*	1978	11	30.26007	03	34	36.44	+15	55	42.5	18.2 V	6	675
1978	WG18		1978	12	01.27691	03	33	45.25	+15	47	24.9		6	675
1978	WH18	*	1978	11	30.26007	03	34	48.77	+18	54	06.3	17.2 V	6	675
1978	WH18		1978	12	01.27691	03	34	00.90	+18	50	22.1		6	675
1978	WJ18	*	1978	11	30.26007	03	35	16.31	+15	57	10.3	17.8 V	6	675
1978	WJ18		1978	12	01.27691	03	34	26.57	+15	57	17.0		6	675
1978	WK18	*	1978	11	30.26007	03	35	28.91	+20	31	32.8	17.8 V	6	675
1978	WK18		1978	12	01.27691	03	34	20.87	+20	31	03.4		6	675
1978	WL18	*	1978	11	30.26007	03	35	35.84	+20	51	08.9	17.0 V	6	675
1978	WL18		1978	12	01.27691	03	34	47.94	+20	44	37.4		6	675
1978	WM18	*	1978	11	30.26007	03	35	52.19	+20	43	56.0	17.2 V	6	675
1978	WM18		1978	12	01.27691	03	34	48.60	+20	44	55.7		6	675
1978	WN18	*	1978	11	30.26007	03	35	56.77	+21	22	20.9	17.5 V	6	675
1978	WN18		1978	12	01.27691	03	34	59.49	+21	16	47.3		6	675
1978	WO18	*	1978	11	30.26007	03	36	51.21	+21	06	01.7	17.8 V	6	675
1978	WO18		1978	12	01.27691	03	35	54.72	+21	03	22.4		6	675
1978	WP18	*	1978	11	30.26007	03	38	01.08	+20	56	26.0	18.2 V	6	675
1978	WP18		1978	12	01.27691	03	37	06.88	+20	48	33.8		6	675
1978	WQ18	*	1978	11	30.26007	03	38	11.48	+19	09	27.3	16.5 V	6	675
1978	WQ18		1978	12	01.27691	03	37	19.09	+19	00	10.0		6	675
1978	WR18	*	1978	11	30.26007	03	38	32.64	+19	52	42.7	17.2 V	6	675
1978	WR18		1978	12	01.27691	03	37	30.44	+19	51	11.0		6	675
1978	WS18	*	1978	11	30.26007	03	38	36.82	+21	08	36.2	17.5 V	6	675
1978	WS18		1978	12	01.27691	03	37	45.60	+21	04	01.8		6	675
1978	WT18	*	1978	11	30.26007	03	38	49.20	+16	38	34.4	18.0 V	6	675
1978	WT18		1978	12	01.27691	03	37	57.10	+16	36	50.1		6	675
1978	WU18	*	1978	11	30.26007	03	38	50.89	+18	09	00.8	18.2 V	6	675
1978	WU18		1978	12	01.27691	03	37	56.25	+18	04	53.8		6	675
1978	WV18	*	1978	11	30.26007	03	38	52.25	+17	14	07.4	18.0 V	6	675
1978	WV18		1978	12	01.27691	03	37	56.44	+17	13	17.6		6	675
1978	WW18	*	1978	11	30.26007	03	38	57.17	+20	32	22.0	16.5 V	6	675
1978	WW18		1978	12	01.27691	03	37	58.19	+20	26	47.6		6	675
1978	WX18	*	1978	11	30.26007	03	38	57.42	+17	15	03.6	18.0 V	6	675
1978	WX18		1978	12	01.27691	03	38	05.52	+17	12	00.3		6	675
1978	WY18	*	1978	11	30.26007	03	39	35.16	+16	36	44.7	18.0 V	6	675
1978	WY18		1978	12	01.27691	03	38	42.23	+16	30	53.2		6	675
1978	WZ18	*	1978	11	30.26007	03	39	46.55	+18	19	45.3	16.2 V	6	675
1978	WZ18		1978	12	01.27691	03	38	50.24	+18	13	25.0		6	675
1978	WA19	*	1978	11	30.26007	03	40	02.82	+17	08	54.6	18.2 V	6	675
1978	WA19		1978	12	01.27691	03	39	05.92	+17	11	36.0		6	675
1978	WB19	*	1978	11	30.26007	03	40	09.93	+15	44	12.9	17.5 V	6	675
1978	WB19		1978	12	01.27691	03	39	09.20	+15	44	51.4		6	675
1978	WC19	*	1978	11	30.26007	03	40	19.74	+21	10	29.9	18.5 V	6	675
1978	WC19		1978	12	01.27691	03	39	12.68	+21	13	01.4		6	675
1978	WD19	*	1978	11	30.26007	03	40	36.99	+16	43	48.4	18.5 V	6	675
1978	WD19		1978	12	01.27691	03	39	41.17	+16	37	03.8		6	675
1978	WE19	*	1978	11	30.26007	03	40	46.44	+19	06	16.7	17.5 V	6	675
1978	WE19		1978	12	01.27691	03	39	57.47	+19	03	50.1		6	675
1978	WF19	*	1978	11	30.26007	03	40	50.90	+15	47	19.6	18.0 V	6	675
1978	WF19		1978	12	01.27691	03	39	49.72	+15	45	50.4		6	675
1978	WG19	*	1978	11	30.26007	03	40	52.99	+21	15	43.6	18.2 V	6	675
1978	WG19		1978	12	01.27691	03	39	57.58	+21	09	07.0		6	675

1978	WH19	*	1978	11	30.26007	03	41	04.50	+16	42	58.8	18.0	V	6	675
1978	WH19		1978	12	01.27691	03	40	01.80	+16	46	02.1			6	675
1978	WJ19	*	1978	11	30.26007	03	41	08.26	+15	43	08.8	17.5	V	6	675
1978	WJ19		1978	12	01.27691	03	40	22.69	+15	36	22.5			6	675
1978	WK19	*	1978	11	30.26007	03	41	13.68	+20	32	34.4	17.5	V	6	675
1978	WK19		1978	12	01.27691	03	40	12.27	+20	31	49.9			6	675
1978	WL19	*	1978	11	30.26007	03	41	36.46	+15	41	51.6	18.0	V	6	675
1978	WL19		1978	12	01.27691	03	40	45.09	+15	39	38.1			6	675
1978	WM19	*	1978	11	30.26007	03	41	39.18	+19	32	56.8	16.8	V	6	675
1978	WM19		1978	12	01.27691	03	40	35.16	+19	33	55.9			6	675
1978	WN19	*	1978	11	30.26007	03	41	57.92	+20	40	06.5	17.0	V	6	675
1978	WN19		1978	12	01.27691	03	41	06.34	+20	34	15.2			6	675
1978	WO19	*	1978	11	30.26007	03	42	09.16	+18	42	49.2	16.2	V	6	675
1978	WO19		1978	12	01.27691	03	41	17.65	+18	40	31.1			6	675
1978	WP19	*	1978	11	30.26007	03	42	34.04	+16	56	45.6	16.0	V	6	675
1978	WP19		1978	12	01.27691	03	41	39.24	+16	52	22.4			6	675
1978	XW		1978	11	30.26007	03	18	50.51	+16	01	46.6	17.2	V	6	675
1978	XX		1978	11	30.26007	03	22	06.53	+16	22	18.0	17.5	V	6	675
1978	XX		1978	12	01.27691	03	21	06.34	+16	23	29.3			6	675
1978	XH1		1978	11	30.26007	03	34	36.40	+16	39	29.8	17.5	V	6	675
1978	XH1		1978	12	01.27691	03	33	36.50	+16	26	02.7			6	675
1978	XJ1		1978	11	30.26007	03	35	07.91	+18	04	06.2	17.0	V	6	675
1978	XJ1		1978	12	01.27691	03	34	06.46	+17	59	13.7			6	675
1980	TX3		1992	02	02.44878	09	57	08.43	+10	27	52.9	16.5		2	675
1980	TX3		1992	02	03.38941	09	56	24.38	+10	31	53.9			2	675
1980	TX3		1992	02	03.40747	09	56	23.37	+10	31	57.9			2	675
1981	EK7		1978	11	30.26007	03	34	09.73	+17	29	40.8	18.2	V	6	675
1981	EK7		1978	12	01.27691	03	33	23.11	+17	26	10.5			6	675
1981	EH11		1991	09	11.29878	23	09	41.24	-03	56	31.7	16.2		9	675
1981	EH11		1991	09	11.35451	23	09	37.46	-03	56	22.8			9	675
1981	EH11		1991	09	17.22847	23	03	16.77	-03	39	22.1			9	675
1981	EH11		1991	09	17.27188	23	03	13.88	-03	39	14.8			9	675
1981	EW20		1978	11	30.26007	03	24	44.81	+19	35	27.9	18.2	V	6	675
1981	EW20		1978	12	01.27691	03	23	57.92	+19	32	41.2			6	675
1981	EO40		1991	09	11.29878	23	10	20.66	-02	33	48.6	17.2		9	675
1981	EO40		1991	09	11.35451	23	10	18.30	-02	34	33.5			9	675
1981	EO40		1991	09	17.22847	23	06	30.16	-03	52	38.7			9	675
1981	JO		1981	05	08.35938	14	55	12.19	-16	41	47.9	16.5		6	675
1981	JO		1981	05	09.31562	14	54	15.53	-16	33	18.8			6	675
1981	JM2		1981	05	08.35938	14	55	21.70	-16	04	07.0			6	675
1981	JM2		1981	05	09.31562	14	54	28.23	-15	59	10.4			6	675
1981	JP2		1981	05	08.35938	14	46	51.64	-18	59	19.2			6	675
1981	JP2		1981	05	09.28958	14	45	57.34	-18	53	45.3			6	675
1981	JR2		1981	05	08.33333	14	52	28.89	-18	05	22.2			6	675
1981	JS2		1981	05	08.35938	14	54	52.37	-19	48	12.2			6	675
1981	JT2		1981	05	08.35938	14	55	34.22	-18	34	13.1			6	675
1981	JB3		1981	05	08.35938	14	54	00.96	-15	07	25.0			6	675
1981	JB3		1981	05	09.31562	14	52	59.36	-15	07	07.3			6	675
1981	JE3		1981	05	08.35938	14	59	20.07	-15	53	44.1			6	675
1981	JE3		1981	05	09.31562	14	58	30.94	-15	49	32.1			6	675
1981	JM3	*	1981	05	08.33333	14	47	00.85	-15	58	30.3			6	675
1981	JM3		1981	05	09.28958	14	46	02.30	-15	55	07.5			6	675
1981	JN3	*	1981	05	08.35938	14	46	03.11	-19	59	53.6	18.5		6	675
1981	JN3		1981	05	09.31562	14	45	04.93	-19	53	13.0			6	675
1981	JO3	*	1981	05	08.35938	14	46	12.55	-18	01	53.0	18.0		6	675
1981	JO3		1981	05	09.31562	14	45	19.62	-17	54	52.9			6	675
1981	JP3	*	1981	05	08.35938	14	46	41.50	-16	46	33.7	17.0		6	675
1981	JP3		1981	05	09.31562	14	45	53.26	-16	38	59.2			6	675
1981	JQ3	*	1981	05	08.35938	14	46	45.04	-15	53	52.8			6	675

1981	JQ3		1981	05	09.31562	14	45	50.61	-15	52	32.0		6	675
1981	JR3	*	1981	05	08.35938	14	46	52.20	-17	32	42.1	19.5	6	675
1981	JR3		1981	05	09.31562	14	46	05.38	-17	29	11.2		6	675
1981	JS3	*	1981	05	08.35938	14	47	14.81	-15	31	52.1	18.5	6	675
1981	JS3		1981	05	09.31562	14	46	17.45	-15	29	28.4		6	675
1981	JT3	*	1981	05	08.35938	14	47	18.83	-19	22	28.7		6	675
1981	JT3		1981	05	09.31562	14	46	21.07	-19	18	20.1		6	675
1981	JU3	*	1981	05	08.35938	14	48	10.36	-18	26	58.2	16.5	6	675
1981	JU3		1981	05	09.31562	14	47	16.41	-18	22	11.5		6	675
1981	JV3	*	1981	05	08.35938	14	48	19.47	-20	07	20.3	19.0	6	675
1981	JV3		1981	05	09.31562	14	47	20.04	-20	00	51.3		6	675
1981	JW3	*	1981	05	08.35938	14	48	49.85	-18	35	57.1	16.5	6	675
1981	JW3		1981	05	09.31562	14	47	56.93	-18	26	45.8		6	675
1981	JX3	*	1981	05	08.35938	14	49	14.89	-19	19	23.5	19.0	6	675
1981	JX3		1981	05	09.31562	14	48	18.79	-19	17	25.5		6	675
1981	JY3	*	1981	05	08.35938	14	49	23.21	-15	58	25.8	19.0	6	675
1981	JY3		1981	05	09.31562	14	48	38.56	-15	55	14.4		6	675
1981	JZ3	*	1981	05	08.35938	14	49	34.08	-18	13	57.6	17.5	6	675
1981	JZ3		1981	05	09.31562	14	48	42.83	-18	10	42.7		6	675
1981	JA4	*	1981	05	08.35938	14	49	50.53	-17	21	04.3		6	675
1981	JA4		1981	05	09.31562	14	49	04.35	-17	18	07.9		6	675
1981	JB4	*	1981	05	08.35938	14	49	52.26	-18	25	43.7	18.0	6	675
1981	JB4		1981	05	09.31562	14	48	56.67	-18	23	43.4		6	675
1981	JC4	*	1981	05	08.35938	14	49	57.67	-15	45	38.2	17.0	6	675
1981	JC4		1981	05	09.31562	14	49	00.71	-15	39	26.6		6	675
1981	JD4	*	1981	05	08.35938	14	50	01.12	-17	24	53.0	19.5	6	675
1981	JD4		1981	05	09.31562	14	49	09.68	-17	24	46.3		6	675
1981	JE4	*	1981	05	08.35938	14	50	10.46	-17	13	58.9		6	675
1981	JE4		1981	05	09.31562	14	49	05.18	-17	11	46.2		6	675
1981	JF4	*	1981	05	08.35938	14	50	25.28	-19	10	16.1	17.0	6	675
1981	JF4		1981	05	09.31562	14	49	20.29	-19	07	57.6		6	675
1981	JG4	*	1981	05	08.35938	14	50	41.80	-18	06	41.2	17.0	6	675
1981	JG4		1981	05	09.31562	14	49	45.19	-18	05	24.6		6	675
1981	JH4	*	1981	05	08.35938	14	51	34.55	-20	07	37.0	16.5	6	675
1981	JH4		1981	05	09.31562	14	50	44.46	-20	04	18.6		6	675
1981	JJ4	*	1981	05	08.35938	14	51	39.31	-20	18	17.8	18.5	6	675
1981	JJ4		1981	05	09.31562	14	50	36.70	-20	15	33.1		6	675
1981	JK4	*	1981	05	08.35938	14	51	45.01	-18	26	45.0		6	675
1981	JK4		1981	05	09.31562	14	50	44.88	-18	24	01.8		6	675
1981	JL4	*	1981	05	08.35938	14	52	56.98	-14	50	30.5	18.5	6	675
1981	JL4		1981	05	09.31562	14	52	02.10	-14	47	58.2		6	675
1981	JM4	*	1981	05	08.35938	14	53	37.00	-19	56	08.5	18.0	6	675
1981	JM4		1981	05	09.31562	14	52	46.85	-19	51	55.8		6	675
1981	JN4	*	1981	05	08.35938	14	54	07.53	-17	45	12.3	17.0	6	675
1981	JN4		1981	05	09.31562	14	53	17.05	-17	44	34.1		6	675
1981	JO4	*	1981	05	08.35938	14	54	23.58	-17	06	28.5	19.5	6	675
1981	JO4		1981	05	09.31562	14	53	29.81	-17	02	13.6		6	675
1981	JP4	*	1981	05	08.35938	14	54	53.90	-16	26	25.6	17.0	6	675
1981	JP4		1981	05	09.31562	14	53	53.84	-16	24	19.1		6	675
1981	JQ4	*	1981	05	08.35938	14	56	21.91	-19	28	56.6	19.0	6	675
1981	JQ4		1981	05	09.31562	14	55	27.65	-19	23	22.4		6	675
1981	JR4	*	1981	05	08.35938	14	56	56.43	-17	02	05.1	18.0	6	675
1981	JR4		1981	05	09.31562	14	55	59.07	-16	59	16.4		6	675
1981	JS4	*	1981	05	08.35938	14	56	57.87	-16	29	28.8	17.0	6	675
1981	JS4		1981	05	09.31562	14	56	00.94	-16	24	25.9		6	675
1981	JT4	*	1981	05	08.35938	14	57	02.39	-18	34	42.9	18.0	6	675
1981	JT4		1981	05	09.31562	14	56	01.15	-18	29	16.7		6	675
1981	JU4	*	1981	05	08.35938	14	57	02.49	-14	18	50.9	17.0	6	675
1981	JU4		1981	05	09.31562	14	56	03.35	-14	16	16.1		6	675

1981	JV4	*	1981	05	08.35938	14	57	05.03	-17	22	09.1	17.0	6	675
1981	JV4		1981	05	09.31562	14	56	17.40	-17	13	38.9		6	675
1981	JW4	*	1981	05	08.35938	14	57	14.49	-18	14	06.6	18.0	6	675
1981	JW4		1981	05	09.31562	14	56	26.21	-18	05	24.1		6	675
1981	JX4	*	1981	05	08.35938	14	57	36.34	-16	38	25.3	17.0	6	675
1981	JX4		1981	05	09.31562	14	56	40.28	-16	34	58.0		6	675
1981	JY4	*	1981	05	08.35938	14	58	03.35	-18	18	50.3	19.0	6	675
1981	JY4		1981	05	09.31562	14	57	15.20	-18	17	22.1		6	675
1981	JZ4	*	1981	05	08.35938	14	58	29.91	-19	11	55.5	18.0	6	675
1981	JZ4		1981	05	09.31562	14	57	33.68	-19	06	16.5		6	675
1981	JA5	*	1981	05	08.35938	14	58	46.36	-17	58	39.6	17.0	6	675
1981	JA5		1981	05	09.31562	14	57	52.29	-17	56	34.7		6	675
1981	JB5	*	1981	05	08.35938	14	58	52.43	-15	21	04.7	18.0	6	675
1981	JB5		1981	05	09.31562	14	58	00.77	-15	16	07.5		6	675
1981	JC5	*	1981	05	08.35938	14	59	24.59	-16	28	45.3	17.0	6	675
1981	JC5		1981	05	09.31562	14	58	36.85	-16	24	56.5		6	675
1981	JD5	*	1981	05	08.35938	14	59	32.45	-16	37	50.7	19.0	6	675
1981	JD5		1981	05	09.31562	14	58	38.70	-16	32	38.5		6	675
1981	JE5	*	1981	05	08.35938	14	59	59.75	-17	11	51.3	17.0	6	675
1981	JE5		1981	05	09.31562	14	59	11.66	-17	09	33.8		6	675
1981	JF5	*	1981	05	08.35938	15	00	30.65	-16	07	35.0	17.0	6	675
1981	JF5		1981	05	09.31562	14	59	37.23	-16	07	42.8		6	675
1981	JG5	*	1981	05	08.35938	15	00	41.13	-17	52	32.9	19.0	6	675
1981	JG5		1981	05	09.31562	14	59	59.00	-17	46	32.8		6	675
1981	JH5	*	1981	05	08.35938	15	00	53.48	-15	09	02.6		6	675
1981	JH5		1981	05	09.31562	15	00	07.72	-15	06	20.4		6	675
1981	JJ5	*	1981	05	08.35938	15	01	54.04	-18	51	04.7	19.0	6	675
1981	JJ5		1981	05	09.31562	15	00	57.17	-18	49	04.9		6	675
1981	JK5	*	1981	05	08.35938	15	01	59.44	-15	18	00.1	18.5	6	675
1981	JK5		1981	05	09.31562	15	01	18.96	-15	16	28.8		6	675
1981	JL5	*	1981	05	08.35938	15	02	34.77	-17	05	03.9		6	675
1981	JL5		1981	05	09.31562	15	01	35.75	-17	04	57.1		6	675
1981	JM5	*	1981	05	08.35938	15	03	18.35	-16	29	37.9	18.5	6	675
1981	JM5		1981	05	09.31562	15	02	24.47	-16	27	50.6		6	675
1981	JN5	*	1981	05	08.35938	15	03	24.04	-16	04	43.9	18.0	6	675
1981	JN5		1981	05	09.31562	15	02	38.39	-16	01	18.0		6	675
1981	JO5	*	1981	05	08.35938	15	03	31.82	-16	12	36.2	19.0	6	675
1981	JO5		1981	05	09.31562	15	02	34.67	-16	12	07.0		6	675
1981	JP5	*	1981	05	08.35938	15	03	33.36	-17	07	42.9	18.5	6	675
1981	JP5		1981	05	09.31562	15	02	44.19	-17	01	04.5		6	675
1981	JQ5	*	1981	05	08.35938	15	03	58.63	-17	42	53.4	19.5	6	675
1981	JQ5		1981	05	09.31562	15	03	10.09	-17	39	13.0		6	675
1981	JR5	*	1981	05	08.35938	15	04	33.30	-14	18	40.4	17.0	6	675
1981	JR5		1981	05	09.31562	15	03	44.53	-14	16	05.7		6	675
1981	JS5	*	1981	05	08.35938	15	04	36.40	-16	06	36.6	18.0	6	675
1981	JS5		1981	05	09.31562	15	03	49.51	-16	03	06.9		6	675
1981	JT5	*	1981	05	08.35938	15	05	12.61	-17	54	53.1	17.0	6	675
1981	JT5		1981	05	09.31562	15	04	28.62	-17	47	00.2		6	675
1981	JU5	*	1981	05	08.35938	15	05	15.73	-18	49	35.6	17.0	6	675
1981	JU5		1981	05	09.31562	15	04	20.80	-18	42	44.4		6	675
1981	JV5	*	1981	05	08.35938	15	05	25.55	-16	38	51.6	18.0	6	675
1981	JV5		1981	05	09.31562	15	04	23.58	-16	36	19.5		6	675
1981	JW5	*	1981	05	08.35938	15	06	38.31	-14	58	03.4	16.0	6	675
1981	JW5		1981	05	09.31562	15	05	08.69	-15	10	48.7		6	675
1981	JX5	*	1981	05	08.35938	15	07	00.07	-17	26	14.3	18.5	6	675
1981	JX5		1981	05	09.31562	15	06	12.91	-17	23	23.4		6	675
1981	JY5	*	1981	05	08.35938	15	07	05.35	-15	16	30.3	18.5	6	675
1981	JY5		1981	05	09.31562	15	06	15.24	-15	11	38.2		6	675
1981	JZ5	*	1981	05	08.35938	15	07	14.64	-20	04	58.4	16.5	6	675

1981	JZ5		1981	05	09.31562	15	06	16.83	-19	59	34.4			6	675
1981	JA6	*	1981	05	08.35938	15	07	20.18	-14	26	16.3	17.0		6	675
1981	JA6		1981	05	09.31562	15	06	34.84	-14	20	47.5			6	675
1981	JB6	*	1981	05	08.35938	15	07	29.03	-19	56	53.8	16.5		6	675
1981	JB6		1981	05	09.31562	15	06	30.47	-19	57	18.5			6	675
1981	JC6	*	1981	05	08.35938	15	08	24.34	-19	32	54.4	18.5		6	675
1981	JC6		1981	05	09.31562	15	07	17.83	-19	31	23.5			6	675
1981	JD6	*	1981	05	08.35938	15	08	57.28	-19	44	53.5	17.5		6	675
1981	JD6		1981	05	09.31562	15	07	53.33	-19	42	59.9			6	675
1981	JE6	*	1981	05	08.35938	15	09	01.59	-17	31	37.7	17.0		6	675
1981	JE6		1981	05	09.31562	15	08	04.18	-17	28	18.8			6	675
1981	JF6	*	1981	05	08.35938	15	09	44.46	-17	33	07.5	16.5		6	675
1981	JF6		1981	05	09.31562	15	08	47.18	-17	32	30.2			6	675
1981	JG6	*	1981	05	08.35938	15	10	39.62	-14	27	22.6	17.0		6	675
1981	JG6		1981	05	09.31562	15	09	52.82	-14	20	28.8			6	675
1982	UT6		1991	09	11.29878	23	00	40.37	-07	00	00.2	17.2		9	675
1982	UT6		1991	09	11.35451	23	00	37.44	-07	00	15.0			9	675
1982	UT6		1991	09	17.27188	22	55	56.90	-07	24	29.5			9	675
1982	UY6		1981	05	08.35938	14	51	46.37	-18	57	39.6			6	675
1983	WJ		1978	11	30.26007	03	37	27.95	+16	11	08.5	16.2	V	6	675
1983	WJ		1978	12	01.27691	03	36	35.73	+16	09	34.9			6	675
1984	SX5		1991	09	11.29878	23	25	35.57	-05	03	22.3	16.8		9	675
1984	SX5		1991	09	11.35451	23	25	32.61	-05	03	54.5			9	675
1984	SX5		1991	09	15.38958	23	22	08.63	-05	42	30.2			9	675
1984	SX5		1991	09	17.22847	23	20	36.18	-05	59	55.1			9	675
1984	SX5		1991	09	17.27188	23	20	33.84	-06	00	18.6			9	675
1984	SX5		1991	09	17.33941	23	20	30.29	-06	00	57.3	16.8		9	675
1984	SX5		1991	09	17.37222	23	20	28.55	-06	01	15.3			9	675
1985	CH2		1991	09	11.29878	23	09	55.41	-09	01	47.6	18.0		9	675
1985	CH2		1991	09	11.35451	23	09	51.37	-09	02	23.4			9	675
1986	PD1		1986	08	02.38021	22	03	51.08	-12	33	42.9			2	675
1986	PD1		1986	08	02.40278	22	03	50.22	-12	33	57.9			2	675
1986	QB1		1991	09	15.35226	23	41	28.28	-07	02	45.8	17.0		9	675
1986	QB1		1991	09	15.38958	23	41	26.44	-07	02	56.5			9	675
1986	QB1		1991	09	17.33941	23	39	52.35	-07	11	58.6	16.5		9	675
1986	QB1		1991	09	17.37222	23	39	50.73	-07	12	07.6			9	675
1986	TN1		1981	05	08.35938	15	10	25.79	-20	13	51.5			6	675
1986	TN1		1981	05	09.31562	15	09	31.86	-20	04	25.5			6	675
1986	TL4		1981	05	08.35938	15	01	00.69	-15	47	11.9			6	675
1986	TL4		1981	05	09.31562	15	00	03.60	-15	44	06.7			6	675
1986	TR6		1990	01	26.46927	10	41	33.00	-04	59	26.0	17.9		3	675
1986	TR6		1990	01	26.52274	10	41	31.75	-04	59	26.8			3	675
1986	TR6		1990	01	28.45052	10	40	47.64	-04	59	39.3			3	675
1986	TR6		1990	01	28.48681	10	40	46.75	-04	59	38.0			3	675
1986	TR6		1990	02	20.36267	10	30	01.54	-04	36	35.5	17.7		3	675
1986	TR6		1990	02	20.39531	10	30	00.51	-04	36	31.7			3	675
1986	TR6		1990	03	27.17378	10	13	31.66	-03	01	59.0	17.9		3	675
1986	TR6		1990	03	27.20573	10	13	30.94	-03	01	53.1			3	675
1987	QZ1		1991	09	13.39444	00	08	42.89	+07	55	52.2	17.2		9	675
1987	QZ1		1991	09	13.43212	00	08	40.81	+07	55	48.6			9	675
1987	QZ1		1991	09	15.37153	00	06	58.40	+07	52	42.8	17.0		9	675
1987	QZ1		1991	09	15.40851	00	06	56.30	+07	52	38.4			9	675
1987	QS7		1978	11	30.26007	03	23	36.27	+15	39	41.6	17.5	V	6	675
1987	QS7		1978	12	01.27691	03	22	47.68	+15	36	49.2			6	675
1987	QW7		1991	09	11.29878	23	08	54.98	-01	44	41.3	16.8		9	675
1987	QW7		1991	09	11.35451	23	08	51.90	-01	44	59.4			9	675
1987	QW7		1991	09	17.22847	23	04	11.84	-02	20	55.0			9	675
1987	QW7		1991	09	17.27188	23	04	09.70	-02	21	11.4			9	675
1987	RA1		1978	11	30.26007	03	36	03.43	+20	04	16.0	16.5	V	6	675

1987	RA1		1978	12	01.27691	03	35	11.81	+20	01	01.8		6	675
1987	SG2		1991	09	17.27188	23	26	24.28	-04	37	22.8		9	675
1988	PL		1981	05	08.35938	14	49	18.94	-15	02	50.5		6	675
1988	PL		1981	05	09.31562	14	48	18.34	-14	57	19.3		6	675
1988	PZ1		1981	05	08.38542	14	45	35.82	-16	15	26.0		6	675
1988	RD5		1981	05	08.35938	14	57	42.79	-16	34	23.1		6	675
1988	RD5		1981	05	09.31562	14	56	58.45	-16	31	36.1		6	675
1988	SK2		1978	11	30.26007	03	26	59.89	+16	50	43.2	19.5 V	6	675
1988	SK2		1978	12	01.27691	03	26	30.17	+16	48	59.4		6	675
1988	SW2		1981	05	08.35938	15	09	09.73	-17	15	39.5		6	675
1988	SW2		1981	05	09.31562	15	08	23.62	-17	13	03.9		6	675
1989	BK2	*	1989	01	31.28333	07	54	11.56	+21	40	55.2	17.5	3	675
1989	BK2		1989	01	31.32144	07	54	10.03	+21	41	02.0		3	675
1989	CA		1991	09	11.29878	23	12	26.62	-02	23	56.2	16.8	9	675
1989	CA		1991	09	11.35451	23	12	23.48	-02	24	17.7		9	675
1989	CA		1991	09	17.22847	23	07	07.98	-03	01	47.6		9	675
1989	CA		1991	09	17.27188	23	07	05.48	-03	02	04.0		9	675
1989	CH2		1990	01	26.48681	11	54	20.08	+28	04	42.4	18.3	3	675
1989	CH2		1990	01	26.53958	11	54	19.49	+28	05	03.8		3	675
1989	CH2		1990	01	28.51319	11	54	01.91	+28	19	16.2		3	675
1989	CH2		1990	01	28.54601	11	54	01.71	+28	19	29.6		3	675
1989	CH2		1990	03	27.24010	11	29	23.89	+33	47	28.9	18	3	675
1989	CH2		1990	03	27.27865	11	29	22.71	+33	47	35.2		3	675
1989	CL3		1981	05	08.35938	15	05	27.76	-19	44	55.1		6	675
1989	CL3		1981	05	09.31562	15	04	39.48	-19	40	18.7		6	675
1989	EC2		1991	09	15.35226	23	41	12.48	-06	32	41.2	18.0	9	675
1989	EC2		1991	09	15.38958	23	41	10.78	-06	32	49.8		9	675
1989	EC2		1991	09	17.33941	23	39	41.45	-06	39	51.0	17.5	9	675
1989	EC2		1991	09	17.37222	23	39	39.97	-06	39	58.1		9	675
1989	GN		1992	01	30.11476	06	08	46.59	+08	54	55.6	15.5	2	675
1989	GN		1992	01	30.14219	06	08	45.80	+08	55	06.8		2	675
1989	GN		1992	02	01.13628	06	07	54.49	+09	09	20.3		2	675
1989	GN		1992	02	01.16111	06	07	53.91	+09	09	30.7		2	675
1989	NE		1992	01	30.46806	10	17	22.60	+12	36	59.1	16.5	2	675
1989	NE		1992	01	30.50764	10	17	20.87	+12	37	19.6		2	675
1989	NE		1992	01	31.53733	10	16	38.93	+12	46	34.7		2	675
1990	DP9	*	1990	02	20.43299	11	38	18.20	+13	26	46.3	16.0	3	675
1990	DP9		1990	02	20.48993	11	38	16.30	+13	28	15.1		3	675
1990	DP9		1990	02	22.43125	11	37	15.09	+14	19	01.9		3	675
1990	OE		1981	05	08.35938	14	59	41.50	-17	35	44.7		6	675
1990	OE		1981	05	09.31562	14	58	50.32	-17	28	22.4		6	675
1990	SW3		1992	01	30.37500	08	41	03.66	+28	31	19.6	16.0	2	675
1990	SW3		1992	01	30.39757	08	41	02.33	+28	31	26.8		2	675
1990	SW3		1992	02	02.43194	08	38	10.21	+28	48	31.9		2	675
1990	SW3		1992	02	02.45451	08	38	08.96	+28	48	41.3		2	675
1990	SB4		1992	01	30.46806	10	29	04.48	+13	33	59.4	15.5	2	675
1990	SB4		1992	01	30.50764	10	29	02.29	+13	33	59.2		2	675
1990	SB4		1992	01	31.53733	10	28	05.72	+13	33	54.4		2	675
1990	TL4		1992	01	09.46181	07	52	06.86	+17	37	37.9	16	2	675
1990	TL4		1992	01	09.47934	07	52	05.91	+17	37	37.6		2	675
1990	TV12		1978	11	30.26007	03	41	01.35	+21	11	06.6	17.8 V	6	675
1990	TV12		1978	12	01.27691	03	40	28.01	+21	06	22.1		6	675
1990	XE		1981	05	08.35938	15	03	40.18	-19	34	43.1		6	675
1990	XE		1981	05	09.31562	15	02	44.26	-19	28	51.4		6	675
1991	EG		1981	05	08.35938	15	02	37.23	-17	05	53.7	17.0	6	675
1991	EG		1981	05	09.31562	15	01	32.48	-17	04	15.0		6	675
1991	LW5	*	1991	06	07.26302	15	05	45.89	-12	21	15.3	18.9	3	675
1991	LW5		1991	06	09.25260	15	04	36.09	-12	18	45.5		3	675
1991	LW5		1991	06	09.28698	15	04	34.93	-12	18	44.3		3	675

1991	LX5	*	1991	06	07.26302	15	08	25.51	-12	26	42.2	18.9	3	675
1991	LX5		1991	06	07.29965	15	08	24.43	-12	26	35.6		3	675
1991	LX5		1991	06	09.28698	15	07	09.86	-12	21	36.2		3	675
1991	NX2		1991	07	16.29010	19	09	15.54	-26	15	00.6	17.2	9	675
1991	NX2		1991	07	16.32602	19	09	13.17	-26	15	05.6		9	675
1991	PY5		1991	08	05.29363	21	52	59.97	-12	54	20.9	17.0	9	675
1991	PY5		1991	08	05.32951	21	52	58.50	-12	54	43.2		9	675
1991	PE10		1991	09	11.29878	22	53	29.04	-05	15	24.9	17.5	9	675
1991	PE10		1991	09	11.35451	22	53	25.74	-05	15	26.9		9	675
1991	PF10		1991	09	11.29878	22	57	43.60	-08	18	55.4	17.2	9	675
1991	PF10		1991	09	11.35451	22	57	40.35	-08	19	18.9		9	675
1991	PH10		1991	09	11.29878	23	04	56.49	-08	19	58.3	17.2	9	675
1991	PH10		1991	09	11.35451	23	04	53.57	-08	20	17.3		9	675
1991	PH10		1991	09	17.22847	23	00	05.75	-08	52	50.2		9	675
1991	PH10		1991	09	17.27188	23	00	03.55	-08	53	02.8		9	675
1991	PN10		1991	09	11.29878	23	09	20.77	-05	25	24.2	16.8	9	675
1991	PN10		1991	09	11.35451	23	09	17.82	-05	26	45.7		9	675
1991	PN10		1991	09	17.22847	23	04	36.90	-07	47	38.6		9	675
1991	PU11		1991	09	11.29878	23	03	13.87	-05	24	16.8	16.2	9	675
1991	PU11		1991	09	11.35451	23	03	10.37	-05	24	20.8		9	675
1991	PU11		1991	09	17.22847	22	57	31.79	-05	30	39.5		9	675
1991	PU11		1991	09	17.27188	22	57	29.22	-05	30	41.6		9	675
1991	PO16		1991	09	11.29878	23	26	16.77	-06	24	08.6	17.2	9	675
1991	PO16		1991	09	11.35451	23	26	14.12	-06	24	45.8		9	675
1991	PO16		1991	09	15.35226	23	23	16.42	-07	08	13.8	17.5	9	675
1991	PO16		1991	09	15.38958	23	23	14.71	-07	08	38.2		9	675
1991	PO16		1991	09	17.22847	23	21	54.15	-07	28	10.9		9	675
1991	PO16		1991	09	17.33941	23	21	49.20	-07	29	21.3	17.2	9	675
1991	PO16		1991	09	17.37222	23	21	47.70	-07	29	41.6		9	675
1991	PP16		1991	09	15.35226	23	31	34.68	-07	00	59.9	16.5	9	675
1991	PP16		1991	09	15.38958	23	31	32.85	-07	01	20.0		9	675
1991	PP16		1991	09	17.33941	23	30	03.76	-07	18	39.7	16.5	9	675
1991	PP16		1991	09	17.37222	23	30	02.19	-07	18	56.4		9	675
1991	PS16		1991	09	15.35226	23	30	33.00	-09	16	53.7	17.2	9	675
1991	PS16		1991	09	15.38958	23	30	30.86	-09	17	11.7		9	675
1991	PS16		1991	09	17.33941	23	28	44.07	-09	32	52.7	17.0	9	675
1991	PS16		1991	09	17.37222	23	28	42.25	-09	33	08.0		9	675
1991	PU16		1991	09	15.35226	23	36	06.70	-05	53	21.0	17.0	9	675
1991	PU16		1991	09	15.38958	23	36	04.50	-05	53	29.3		9	675
1991	PU16		1991	09	17.33941	23	34	14.20	-06	00	55.4	17.5	9	675
1991	PU16		1991	09	17.37222	23	34	12.27	-06	01	01.9		9	675
1991	PV16		1991	09	15.35226	23	40	41.14	-07	19	49.5	17.2	9	675
1991	PV16		1991	09	15.38958	23	40	39.37	-07	20	01.4		9	675
1991	PV16		1991	09	17.33941	23	39	09.04	-07	30	20.0	17.2	9	675
1991	PV16		1991	09	17.37222	23	39	07.64	-07	30	32.2		9	675
1991	PR17	*	1991	08	08.42483	23	33	40.23	-04	59	50.9	17.5	9	675
1991	PR17		1991	08	08.45660	23	33	39.12	-04	59	55.8		9	675
1991	PR17		1991	09	11.29878	23	04	53.52	-07	09	50.5	17.2	9	675
1991	PR17		1991	09	11.35451	23	04	50.09	-07	10	04.6		9	675
1991	PR17		1991	09	17.22847	22	59	12.66	-07	33	50.3		9	675
1991	PR17		1991	09	17.27188	22	59	10.15	-07	34	01.3		9	675
1991	PS17	*	1991	08	07.39306	23	34	45.86	-08	06	39.9	18.8	9	675
1991	PS17		1991	08	07.42257	23	34	45.02	-08	06	44.2		9	675
1991	PS17		1991	09	11.29878	23	07	24.12	-10	01	27.2	17.2	9	675
1991	PS17		1991	09	11.35451	23	07	20.46	-10	01	37.2	17.8	9	675
1991	PT17	*	1991	08	07.40035	22	52	43.79	+04	26	43.4		9	675
1991	PT17		1991	08	07.43166	22	52	42.89	+04	26	32.0		9	675
1991	RL		1991	09	11.29878	23	00	26.01	-02	36	34.7	17.2	9	675
1991	RL		1991	09	11.35451	23	00	20.43	-02	36	02.0		9	675

1991 RF1	1991	09	11.29878	23	19	03.92	-06	49	16.8	17.5	9	675
1991 RF1	1991	09	11.35451	23	19	00.72	-06	49	44.5		9	675
1991 RF1	1991	09	15.35226	23	15	28.70	-07	20	57.3		9	675
1991 RF1	1991	09	15.38958	23	15	26.60	-07	21	12.4		9	675
1991 RF1	1991	09	17.33941	23	13	46.50	-07	35	40.7	17.5	9	675
1991 RF1	1991	09	17.37222	23	13	44.98	-07	35	54.5		9	675
1991 RG1	1991	09	11.29878	23	21	00.77	-06	56	47.2	17.2	9	675
1991 RG1	1991	09	11.35451	23	20	57.65	-06	57	02.0		9	675
1991 RG1	1991	09	15.35226	23	17	32.18	-07	13	08.1		9	675
1991 RG1	1991	09	15.38958	23	17	30.15	-07	13	16.0	18.5	9	675
1991 RG1	1991	09	17.33941	23	15	52.25	-07	20	35.8	17.8	9	675
1991 RG1	1991	09	17.37222	23	15	50.57	-07	20	43.6		9	675
1991 RH1	1991	09	11.29878	23	23	38.48	-06	13	10.8	17.2	9	675
1991 RH1	1991	09	11.35451	23	23	35.05	-06	13	13.9		9	675
1991 RH1	1991	09	15.35226	23	19	43.34	-06	15	50.2		9	675
1991 RH1	1991	09	15.38958	23	19	41.00	-06	15	49.4		9	675
1991 RH1	1991	09	17.27188	23	17	53.23	-06	16	41.4		9	675
1991 RH1	1991	09	17.33941	23	17	49.13	-06	16	43.2	17.8	9	675
1991 RH1	1991	09	17.37222	23	17	47.23	-06	16	42.8		9	675
1991 RJ1	1991	09	11.29878	23	23	48.29	-06	39	32.9	16.8	9	675
1991 RJ1	1991	09	11.35451	23	23	44.65	-06	39	15.8		9	675
1991 RJ1	1991	09	15.35226	23	19	41.75	-06	17	21.2		9	675
1991 RJ1	1991	09	15.38958	23	19	39.35	-06	17	07.4		9	675
1991 RJ1	1991	09	17.22847	23	17	50.08	-06	06	49.0		9	675
1991 RJ1	1991	09	17.27188	23	17	47.35	-06	06	34.1		9	675
1991 RJ1	1991	09	17.33941	23	17	43.14	-06	06	10.9	16.8	9	675
1991 RJ1	1991	09	17.37222	23	17	41.16	-06	05	59.3		9	675
1991 RC2	1991	09	11.29878	23	06	22.60	-02	05	56.7	17.0	9	675
1991 RC2	1991	09	11.35451	23	06	18.90	-02	06	02.9		9	675
1991 RH2	1991	09	11.29878	23	24	16.68	-05	52	00.3	17.8	9	675
1991 RH2	1991	09	11.35451	23	24	13.61	-05	52	05.9		9	675
1991 RH2	1991	09	15.35226	23	20	42.28	-05	57	54.0		9	675
1991 RH2	1991	09	15.38958	23	20	40.34	-05	57	55.2	18.2	9	675
1991 RH2	1991	09	17.33941	23	18	57.87	-06	00	34.3	18.0	9	675
1991 RH2	1991	09	17.37222	23	18	56.21	-06	00	36.9		9	675
1991 RJ2	1991	09	11.29878	22	59	34.28	-02	56	29.6	17.5	9	675
1991 RJ2	1991	09	11.35451	22	59	38.23	-02	58	07.5		9	675
1991 RK2	1991	09	15.35226	23	18	00.85	-10	16	41.1	16.5	9	675
1991 RK2	1991	09	15.38958	23	17	59.03	-10	17	02.1		9	675
1991 RK2	1991	09	17.33941	23	16	30.76	-10	35	22.3	16.8	9	675
1991 RK2	1991	09	17.37222	23	16	29.17	-10	35	40.6		9	675
1991 RN4	1991	09	11.29878	23	03	45.83	-07	45	14.2	16.8	9	675
1991 RN4	1991	09	11.35451	23	03	43.20	-07	45	49.0		9	675
1991 RN4	1991	09	17.22847	22	59	35.38	-08	46	15.3		9	675
1991 RM6	1991	09	15.35226	23	33	27.50	-09	35	51.1	17.2	9	675
1991 RM6	1991	09	15.38958	23	33	25.47	-09	36	11.1		9	675
1991 RM6	1991	09	17.33941	23	31	44.56	-09	53	23.9	17.0	9	675
1991 RM6	1991	09	17.37222	23	31	42.79	-09	53	39.6		9	675
1991 RN6	1991	09	11.29878	23	11	55.92	-07	29	32.2	16.8	9	675
1991 RN6	1991	09	11.35451	23	11	53.77	-07	30	22.8		9	675
1991 RN6	1991	09	17.27188	23	08	41.51	-08	56	39.3		9	675
1991 RT17	1991	09	17.22847	23	13	50.56	-02	18	32.2		9	675
1991 RT17	1991	09	17.27188	23	13	48.54	-02	18	44.3		9	675
1991 RU17	1991	09	17.22847	23	14	49.08	-02	33	29.2		9	675
1991 RU17	1991	09	17.27188	23	14	46.74	-02	33	49.9		9	675
1991 RV17	1991	09	17.22847	23	17	38.82	-02	33	08.3		9	675
1991 RV17	1991	09	17.27188	23	17	36.58	-02	33	18.0		9	675
1991 RX17	1991	09	17.22847	23	20	57.90	-03	13	39.0		9	675
1991 RX17	1991	09	17.27188	23	20	55.80	-03	14	03.1		9	675

1991	RY17		1991	09	15.35226	23	25	35.13	-06	47	32.3		9	675
1991	RY17		1991	09	15.38958	23	25	32.54	-06	47	32.7		9	675
1991	RY17		1991	09	17.22847	23	23	31.59	-06	47	40.6		9	675
1991	RY17		1991	09	17.27188	23	23	28.52	-06	47	40.6		9	675
1991	RY17		1991	09	17.33941	23	23	23.89	-06	47	40.9	16.8	9	675
1991	RY17		1991	09	17.37222	23	23	21.65	-06	47	40.5		9	675
1991	RD18		1991	09	17.33941	23	28	33.99	-05	09	12.0	17.8	9	675
1991	RD18		1991	09	17.37222	23	28	32.15	-05	09	25.0		9	675
1991	RE18		1991	09	15.35226	23	30	42.75	-07	06	18.2	17.5	9	675
1991	RE18		1991	09	15.38958	23	30	40.87	-07	06	31.4		9	675
1991	RE18		1991	09	17.33941	23	29	03.97	-07	18	11.5	17.0	9	675
1991	RE18		1991	09	17.37222	23	29	02.33	-07	18	22.3		9	675
1991	RS20		1991	09	17.33941	23	41	02.04	-06	31	46.2	17.8	9	675
1991	RS20		1991	09	17.37222	23	41	00.45	-06	31	54.8		9	675
1991	RT20		1991	09	17.33941	23	42	28.28	-06	46	22.2	17.5	9	675
1991	RT20		1991	09	17.37222	23	42	26.29	-06	46	28.1		9	675
1991	RQ21	*	1991	09	11.29878	23	16	31.08	-09	37	39.1	17.8	9	675
1991	RQ21		1991	09	11.35451	23	16	28.15	-09	37	56.0	17.5	9	675
1991	RQ21		1991	09	15.35226	23	13	07.09	-09	56	26.4	18.2	9	675
1991	RQ21		1991	09	15.38958	23	13	05.16	-09	56	35.9		9	675
1991	RQ21		1991	09	17.22847	23	11	33.71	-10	04	45.4		9	675
1991	RQ21		1991	09	17.27188	23	11	31.62	-10	04	56.9		9	675
1991	RQ21		1991	09	17.33941	23	11	28.09	-10	05	13.7	18.2	9	675
1991	RQ21		1991	09	17.37222	23	11	26.36	-10	05	22.3		9	675
1991	RR21	*	1991	09	11.29878	23	17	32.53	-08	43	08.8	17.8	9	675
1991	RR21		1991	09	11.35451	23	17	29.82	-08	43	28.0		9	675
1991	RR21		1991	09	15.35226	23	14	22.86	-09	05	46.1	17.8	9	675
1991	RR21		1991	09	15.38958	23	14	20.99	-09	05	58.0		9	675
1991	RR21		1991	09	17.33941	23	12	51.19	-09	16	25.6	18.0	9	675
1991	RR21		1991	09	17.37222	23	12	49.56	-09	16	34.9		9	675
1991	RS21	*	1991	09	15.35226	23	20	25.03	-09	32	55.0	17.5	9	675
1991	RS21		1991	09	15.38958	23	20	22.65	-09	33	02.6		9	675
1991	RS21		1991	09	17.27188	23	18	27.97	-09	39	40.1		9	675
1991	RS21		1991	09	17.33941	23	18	23.79	-09	39	54.1	17.5	9	675
1991	RS21		1991	09	17.37222	23	18	21.72	-09	40	00.2		9	675
1991	RT21	*	1991	09	15.35226	23	23	05.31	-08	29	46.6	18.0	9	675
1991	RT21		1991	09	15.38958	23	23	03.49	-08	29	55.2		9	675
1991	RT21		1991	09	17.33941	23	21	31.64	-08	37	35.9	17.8	9	675
1991	RT21		1991	09	17.37222	23	21	30.05	-08	37	42.1		9	675
1991	RU21	*	1991	09	15.35226	23	40	54.85	-07	29	24.3	16.5	9	675
1991	RU21		1991	09	15.38958	23	40	53.11	-07	29	30.3		9	675
1991	RU21		1991	09	17.33941	23	39	23.74	-07	34	28.4	16.5	9	675
1991	RU21		1991	09	17.37222	23	39	22.13	-07	34	32.8		9	675
1991	RV21	*	1991	09	15.35226	23	42	20.99	-09	26	30.2	17.0	9	675
1991	RV21		1991	09	15.38958	23	42	18.95	-09	26	41.4		9	675
1991	RV21		1991	09	17.33941	23	40	40.07	-09	36	30.0	17.0	9	675
1991	RV21		1991	09	17.37222	23	40	38.27	-09	36	39.3		9	675
1991	RW21	*	1991	09	11.29878	23	06	12.54	-03	33	49.9	17.0	9	675
1991	RW21		1991	09	11.35451	23	06	08.57	-03	33	47.7		9	675
1991	RW21		1991	09	17.22847	22	59	32.15	-03	29	51.7		9	675
1991	RW21		1991	09	17.27188	22	59	29.08	-03	29	49.5		9	675
1991	RX21	*	1991	09	11.29878	23	25	38.47	-07	39	40.8	17.5	9	675
1991	RX21		1991	09	11.35451	23	25	36.25	-07	40	09.3		9	675
1991	RX21		1991	09	15.35226	23	22	58.79	-08	14	53.5		9	675
1991	RX21		1991	09	15.38958	23	22	57.25	-08	15	13.1		9	675
1991	RX21		1991	09	17.33941	23	21	40.66	-08	31	53.9	17.8	9	675
1991	RX21		1991	09	17.37222	23	21	39.37	-08	32	09.4		9	675
1991	RY21	*	1991	09	15.35226	23	14	03.67	-10	20	49.5	18.2	9	675
1991	RY21		1991	09	15.38958	23	14	01.48	-10	21	01.6		9	675

1991	RY21		1991	09	17.33941	23	12	16.89	-10	32	01.7	17.5	9	675
1991	RY21		1991	09	17.37222	23	12	14.97	-10	32	11.9		9	675
1991	RZ21	*	1991	09	15.35226	23	18	45.24	-09	16	43.4	18.8	9	675
1991	RZ21		1991	09	15.38958	23	18	43.18	-09	16	46.8		9	675
1991	RZ21		1991	09	17.33941	23	16	59.51	-09	19	37.2	18.5	9	675
1991	RZ21		1991	09	17.37222	23	16	57.63	-09	19	39.3		9	675
1991	RA22	*	1991	09	15.35226	23	19	15.96	-07	58	58.9		9	675
1991	RA22		1991	09	15.38958	23	19	13.95	-07	59	04.5		9	675
1991	RA22		1991	09	17.33941	23	17	33.66	-08	04	53.1	17.5	9	675
1991	RA22		1991	09	17.37222	23	17	31.86	-08	04	58.2		9	675
1991	RB22	*	1991	09	15.35226	23	22	07.37	-08	24	14.9	17.8	9	675
1991	RB22		1991	09	15.38958	23	22	04.87	-08	24	16.6		9	675
1991	RB22		1991	09	17.33941	23	20	02.80	-08	25	18.7	17.8	9	675
1991	RB22		1991	09	17.37222	23	20	00.61	-08	25	18.7		9	675
1991	RC22	*	1991	09	15.35226	23	22	11.84	-11	11	28.8	17.2	9	675
1991	RC22		1991	09	15.38958	23	22	09.56	-11	11	35.4		9	675
1991	RC22		1991	09	17.33941	23	20	17.22	-11	17	24.7	17.0	9	675
1991	RC22		1991	09	17.37222	23	20	15.21	-11	17	30.1		9	675
1991	RD22	*	1991	09	15.35226	23	22	48.50	-12	08	04.8		9	675
1991	RD22		1991	09	15.38958	23	22	46.55	-12	08	13.7	18.8	9	675
1991	RD22		1991	09	17.33941	23	21	12.01	-12	15	21.7	17.5	9	675
1991	RD22		1991	09	17.37222	23	21	10.27	-12	15	28.5		9	675
1991	RE22	*	1991	09	15.35226	23	23	02.16	-07	31	20.5		9	675
1991	RE22		1991	09	15.38958	23	22	59.88	-07	31	17.3		9	675
1991	RE22		1991	09	17.33941	23	21	20.26	-07	34	29.5	18.0	9	675
1991	RE22		1991	09	17.37222	23	21	18.70	-07	34	38.0		9	675
1991	RF22	*	1991	09	15.35226	23	23	18.87	-07	56	21.0	18.0	9	675
1991	RF22		1991	09	15.38958	23	23	16.37	-07	56	17.1		9	675
1991	RF22		1991	09	17.33941	23	21	06.68	-07	52	17.4	17.5	9	675
1991	RF22		1991	09	17.37222	23	21	04.38	-07	52	13.1		9	675
1991	RG22	*	1991	09	15.35226	23	24	53.99	-09	23	08.9	18.0	9	675
1991	RG22		1991	09	15.38958	23	24	51.83	-09	23	11.8		9	675
1991	RG22		1991	09	17.33941	23	23	05.02	-09	26	15.0	17.5	9	675
1991	RG22		1991	09	17.37222	23	23	03.24	-09	26	17.4		9	675
1991	RH22	*	1991	09	15.35226	23	25	47.62	-05	51	22.4		9	675
1991	RH22		1991	09	15.38958	23	25	45.69	-05	51	31.9	18.8	9	675
1991	RH22		1991	09	17.33941	23	24	06.62	-05	59	12.5	17.8	9	675
1991	RH22		1991	09	17.37222	23	24	04.99	-05	59	19.4		9	675
1991	RJ22	*	1991	09	15.35226	23	26	04.11	-12	40	54.2	16.2	9	675
1991	RJ22		1991	09	15.38958	23	26	02.34	-12	41	11.2		9	675
1991	RJ22		1991	09	17.33941	23	24	39.93	-12	55	02.2	15.8	9	675
1991	RJ22		1991	09	17.37222	23	24	38.41	-12	55	15.7		9	675
1991	RK22	*	1991	09	15.35226	23	26	16.08	-06	50	15.3		9	675
1991	RK22		1991	09	15.38958	23	26	14.28	-06	50	24.5		9	675
1991	RK22		1991	09	17.33941	23	24	48.11	-06	59	19.9	17.8	9	675
1991	RK22		1991	09	17.37222	23	24	46.61	-06	59	27.8		9	675
1991	RL22	*	1991	09	15.35226	23	26	27.99	-12	23	54.3	18.2	9	675
1991	RL22		1991	09	15.38958	23	26	26.12	-12	24	09.2		9	675
1991	RL22		1991	09	17.33941	23	24	59.34	-12	35	13.6	17.5	9	675
1991	RL22		1991	09	17.37222	23	24	57.77	-12	35	24.3		9	675
1991	RM22	*	1991	09	15.35226	23	26	46.03	-08	00	53.3		9	675
1991	RM22		1991	09	15.38958	23	26	44.46	-08	01	15.1	18.2	9	675
1991	RM22		1991	09	17.33941	23	25	24.56	-08	20	09.1	17.5	9	675
1991	RM22		1991	09	17.37222	23	25	23.15	-08	20	26.8		9	675
1991	RN22	*	1991	09	15.35226	23	27	15.93	-07	31	02.7	18.5	9	675
1991	RN22		1991	09	15.38958	23	27	13.55	-07	31	06.3		9	675
1991	RN22		1991	09	17.33941	23	25	16.05	-07	33	52.3	17.8	9	675
1991	RN22		1991	09	17.37222	23	25	13.94	-07	33	54.1		9	675
1991	RO22	*	1991	09	15.35226	23	27	21.02	-07	22	13.8	18.0	9	675

1991	RO22		1991	09	15.38958	23	27	19.29	-07	22	25.5		9	675
1991	RO22		1991	09	17.33941	23	25	50.59	-07	32	40.3	18.2	9	675
1991	RO22		1991	09	17.37222	23	25	49.06	-07	32	49.9		9	675
1991	RP22	*	1991	09	15.35226	23	27	35.53	-12	22	26.3	17.5	9	675
1991	RP22		1991	09	15.38958	23	27	33.33	-12	22	29.9		9	675
1991	RP22		1991	09	17.33941	23	25	43.39	-12	25	06.9	17.8	9	675
1991	RP22		1991	09	17.37222	23	25	41.47	-12	25	10.0		9	675
1991	RQ22	*	1991	09	15.35226	23	29	40.57	-05	24	47.7		9	675
1991	RQ22		1991	09	15.38958	23	29	38.50	-05	24	50.6		9	675
1991	RQ22		1991	09	17.33941	23	27	56.72	-05	27	51.5	17.8	9	675
1991	RQ22		1991	09	17.37222	23	27	54.99	-05	27	54.2		9	675
1991	RR22	*	1991	09	15.35226	23	30	05.09	-07	52	47.8	17.0	9	675
1991	RR22		1991	09	15.38958	23	30	03.48	-07	53	10.7		9	675
1991	RR22		1991	09	17.33941	23	28	41.97	-08	12	57.1	16.8	9	675
1991	RR22		1991	09	17.37222	23	28	40.54	-08	13	16.7		9	675
1991	RS22	*	1991	09	15.35226	23	30	55.10	-10	27	58.7	17.8	9	675
1991	RS22		1991	09	15.38958	23	30	53.62	-10	28	22.8		9	675
1991	RS22		1991	09	17.33941	23	29	38.48	-10	48	46.3	17.5	9	675
1991	RS22		1991	09	17.37222	23	29	37.20	-10	49	07.0		9	675
1991	RT22	*	1991	09	15.35226	23	32	07.86	-07	49	53.7	18.5	9	675
1991	RT22		1991	09	15.38958	23	32	05.95	-07	50	03.9		9	675
1991	RT22		1991	09	17.33941	23	30	31.35	-07	58	56.3	18.5	9	675
1991	RT22		1991	09	17.37222	23	30	29.77	-07	59	03.4		9	675
1991	RU22	*	1991	09	15.35226	23	32	10.39	-10	42	07.1	17.8	9	675
1991	RU22		1991	09	15.38958	23	32	08.69	-10	42	23.8		9	675
1991	RU22		1991	09	17.33941	23	30	48.52	-10	57	04.7	17.8	9	675
1991	RU22		1991	09	17.37222	23	30	46.99	-10	57	18.8		9	675
1991	RV22	*	1991	09	15.35226	23	32	34.90	-08	16	03.6	17.5	9	675
1991	RV22		1991	09	15.38958	23	32	33.06	-08	16	15.0		9	675
1991	RV22		1991	09	17.33941	23	31	01.70	-08	25	37.0	17.5	9	675
1991	RV22		1991	09	17.37222	23	31	00.31	-08	25	47.7		9	675
1991	RW22	*	1991	09	15.35226	23	34	17.15	-10	30	36.6	16.8	9	675
1991	RW22		1991	09	15.38958	23	34	14.80	-10	30	40.7		9	675
1991	RW22		1991	09	17.33941	23	32	16.25	-10	34	07.8	16.5	9	675
1991	RW22		1991	09	17.37222	23	32	14.14	-10	34	10.7		9	675
1991	RX22	*	1991	09	15.35226	23	34	53.09	-13	04	57.9	17.5	9	675
1991	RX22		1991	09	15.38958	23	34	51.40	-13	05	10.8		9	675
1991	RX22		1991	09	17.33941	23	33	26.61	-13	15	05.2	17.0	9	675
1991	RX22		1991	09	17.37222	23	33	25.16	-13	15	14.5		9	675
1991	RY22	*	1991	09	15.35226	23	35	11.19	-08	57	23.8	17.5	9	675
1991	RY22		1991	09	15.38958	23	35	08.84	-08	57	28.7		9	675
1991	RY22		1991	09	17.33941	23	33	12.02	-09	01	08.9	17.2	9	675
1991	RY22		1991	09	17.37222	23	33	10.20	-09	01	12.4		9	675
1991	RZ22	*	1991	09	15.35226	23	35	16.51	-08	33	38.5	18.5	9	675
1991	RZ22		1991	09	15.38958	23	35	14.24	-08	33	41.6		9	675
1991	RZ22		1991	09	17.33941	23	33	15.40	-08	37	00.8	18.0	9	675
1991	RZ22		1991	09	17.37222	23	33	13.41	-08	37	02.3		9	675
1991	RA23	*	1991	09	15.35226	23	35	48.74	-09	26	33.2	18.0	9	675
1991	RA23		1991	09	15.38958	23	35	46.43	-09	26	35.1		9	675
1991	RA23		1991	09	17.33941	23	33	46.35	-09	28	34.6	18.2	9	675
1991	RA23		1991	09	17.37222	23	33	44.26	-09	28	37.1		9	675
1991	RB23	*	1991	09	15.35226	23	37	01.14	-09	18	32.2	17.5	9	675
1991	RB23		1991	09	15.38958	23	36	59.57	-09	18	50.7		9	675
1991	RB23		1991	09	17.33941	23	35	38.37	-09	34	51.1	17.8	9	675
1991	RB23		1991	09	17.37222	23	35	36.94	-09	35	06.3		9	675
1991	RC23	*	1991	09	15.35226	23	37	06.45	-08	11	24.8	18.0	9	675
1991	RC23		1991	09	15.38958	23	37	04.93	-08	11	43.3		9	675
1991	RC23		1991	09	17.33941	23	35	46.84	-08	27	17.9	18.2	9	675
1991	RC23		1991	09	17.37222	23	35	45.53	-08	27	32.6		9	675

1991	RD23	*	1991	09	15.35226	23	37	12.54	-06	59	49.3		9	675
1991	RD23		1991	09	15.38958	23	37	10.92	-07	00	02.6		9	675
1991	RD23		1991	09	17.33941	23	35	53.03	-07	11	11.4	17.8	9	675
1991	RD23		1991	09	17.37222	23	35	51.58	-07	11	21.6		9	675
1991	RE23	*	1991	09	15.35226	23	37	13.47	-08	47	07.8	17.2	9	675
1991	RE23		1991	09	15.38958	23	37	11.76	-08	47	26.6		9	675
1991	RE23		1991	09	17.33941	23	35	45.82	-09	03	18.4	17.5	9	675
1991	RE23		1991	09	17.37222	23	35	44.28	-09	03	32.9		9	675
1991	RF23	*	1991	09	15.35226	23	38	22.62	-12	53	20.3	17.5	9	675
1991	RF23		1991	09	15.38958	23	38	20.17	-12	53	26.0		9	675
1991	RF23		1991	09	17.33941	23	36	20.59	-12	57	30.2	17.2	9	675
1991	RF23		1991	09	17.37222	23	36	18.37	-12	57	33.5		9	675
1991	RG23	*	1991	09	15.35226	23	38	22.90	-05	45	51.9	17.8	9	675
1991	RG23		1991	09	15.38958	23	38	20.44	-05	45	55.6		9	675
1991	RG23		1991	09	17.33941	23	36	15.84	-05	48	51.9	17.5	9	675
1991	RG23		1991	09	17.37222	23	36	13.76	-05	48	54.4		9	675
1991	RH23	*	1991	09	15.35226	23	39	40.09	-07	10	09.9	17.8	9	675
1991	RH23		1991	09	15.38958	23	39	37.47	-07	10	12.2		9	675
1991	RH23		1991	09	17.33941	23	37	30.34	-07	12	06.4	17.5	9	675
1991	RH23		1991	09	17.37222	23	37	28.10	-07	12	06.5		9	675
1991	RJ23	*	1991	09	15.35226	23	42	26.57	-09	40	26.5	17.2	9	675
1991	RJ23		1991	09	15.38958	23	42	24.09	-09	40	26.8		9	675
1991	RJ23		1991	09	17.33941	23	40	19.98	-09	40	26.2	17.5	9	675
1991	RJ23		1991	09	17.37222	23	40	17.81	-09	40	25.1		9	675
1991	RK23	*	1991	09	15.35226	23	42	38.24	-08	53	45.9	17.5	9	675
1991	RK23		1991	09	15.38958	23	42	35.93	-08	53	59.5		9	675
1991	RK23		1991	09	17.33941	23	40	46.43	-09	06	03.7	17.5	9	675
1991	RK23		1991	09	17.37222	23	40	44.49	-09	06	15.5		9	675
1991	RL23	*	1991	09	15.35226	23	42	49.99	-08	13	08.9	18.0	9	675
1991	RL23		1991	09	15.38958	23	42	47.79	-08	13	19.5		9	675
1991	RL23		1991	09	17.33941	23	40	58.87	-08	23	08.3	17.5	9	675
1991	RL23		1991	09	17.37222	23	40	56.98	-08	23	16.7		9	675
1991	RM23	*	1991	09	15.35226	23	43	17.25	-08	50	20.7	17.2	9	675
1991	RM23		1991	09	15.38958	23	43	15.44	-08	50	37.9		9	675
1991	RM23		1991	09	17.33941	23	41	45.83	-09	06	09.9	17.2	9	675
1991	RM23		1991	09	17.37222	23	41	44.21	-09	06	24.9		9	675
1991	RN23	*	1991	09	15.35226	23	43	19.55	-08	18	09.2	17.5	9	675
1991	RN23		1991	09	15.38958	23	43	17.70	-08	18	22.5		9	675
1991	RN23		1991	09	17.33941	23	41	44.99	-08	29	59.8	17.0	9	675
1991	RN23		1991	09	17.37222	23	41	43.37	-08	30	11.5		9	675
1991	RO23	*	1991	09	15.35226	23	43	25.77	-09	46	16.0	16.8	9	675
1991	RO23		1991	09	15.38958	23	43	23.57	-09	46	15.2		9	675
1991	RO23		1991	09	17.33941	23	41	32.41	-09	45	25.5	16.8	9	675
1991	RO23		1991	09	17.37222	23	41	30.46	-09	45	24.5		9	675
1991	RP23	*	1991	09	15.35226	23	43	33.16	-10	18	11.0	17.8	9	675
1991	RP23		1991	09	15.38958	23	43	30.62	-10	18	11.6		9	675
1991	RP23		1991	09	17.33941	23	41	23.85	-10	18	07.7	17.8	9	675
1991	RP23		1991	09	17.37222	23	41	21.65	-10	18	06.4		9	675
1991	SJ		1991	09	15.35226	23	20	38.93	-09	10	24.3	18.2	9	675
1991	SJ		1991	09	15.38958	23	20	36.67	-09	10	42.7		9	675
1991	SJ		1991	09	17.33941	23	18	47.57	-09	25	59.9	18.2	9	675
1991	SJ		1991	09	17.37222	23	18	45.70	-09	26	16.3		9	675
1991	SK		1991	09	11.29878	23	22	25.88	-08	51	25.3	16.8	9	675
1991	SK		1991	09	11.35451	23	22	23.11	-08	51	35.6		9	675
1991	SK		1991	09	15.35226	23	19	12.94	-09	01	55.3	17.0	9	675
1991	SK		1991	09	15.38958	23	19	11.11	-09	02	00.7		9	675
1991	SK		1991	09	17.22847	23	17	44.57	-09	06	24.3		9	675
1991	SK		1991	09	17.33941	23	17	39.21	-09	06	42.1	16.8	9	675
1991	SK		1991	09	17.37222	23	17	37.58	-09	06	46.8		9	675

1991	SU1		1991	09	11.29878	23	24	54.83	-04	22	22.8	17.0		9	675
1991	SU1	*	1991	09	16.37674	23	16	02.66	-03	28	50.5	17.8		9	675
1991	SU1		1991	09	16.41684	23	15	58.34	-03	28	24.9			9	675
1991	TL1		1991	11	13.28715	02	20	32.15	-05	34	17.3	17.0		3	675
1991	TL1		1991	11	13.32535	02	20	30.84	-05	34	57.3			3	675
1991	TL1		1991	12	01.23906	02	14	27.90	-09	21	49.8	17.0		3	675
1991	TL1		1991	12	01.27483	02	14	27.68	-09	22	04.6			3	675
1991	TL1		1991	12	03.23438	02	14	22.04	-09	36	11.3			3	675
1991	UP1		1981	05	08.35938	14	56	02.70	-15	52	04.1	16.5		6	675
1991	UP1		1981	05	09.31562	14	55	13.48	-15	44	45.3			6	675
1991	VB		1991	12	02.15434	02	22	14.40	+20	10	53.1	18.5		3	675
1991	VB		1991	12	03.22865	02	23	41.53	+19	57	39.0			3	675
1991	VB3		1978	11	30.26007	03	32	25.96	+20	42	14.9	15.8	V	6	675
1991	VB3		1978	12	01.27691	03	31	25.43	+20	34	40.7			6	675
1991	XC		1992	02	04.25989	07	53	51.22	+59	01	36.5	16.8		3	675
1991	XC		1992	02	05.22222	07	52	44.37	+58	42	31.7			3	675
1991	XC		1992	02	05.25989	07	52	41.59	+58	41	49.8			3	675
1991	XX		1989	11	05.34618	02	35	25.03	+26	28	49.4	16.8		3	675
1991	XX		1989	11	05.38263	02	35	23.76	+26	28	44.0			3	675
1991	XX		1989	11	24.23506	02	25	20.60	+25	36	24.6	17		3	675
1991	XX		1989	11	24.27048	02	25	19.58	+25	36	20.2			3	675
1991	XX		1989	11	25.23541	02	24	52.26	+25	33	24.1			3	675
1991	XX		1989	11	25.27188	02	24	51.27	+25	33	20.5			3	675
1991	XX		1992	02	05.13055	05	48	08.40	+30	56	08.3	18.2		3	675
1991	XX		1992	02	05.18541	05	48	07.67	+30	56	06.1			3	675
1991	XX		1992	02	08.11579	05	47	23.61	+30	52	04.0			3	675
1991	XX		1992	02	08.17222	05	47	22.78	+30	51	59.2			3	675
1991	XK1	*	1991	12	02.17205	03	06	37.17	+21	39	44.7	17.5		3	675
1991	XK1		1991	12	02.20347	03	06	35.70	+21	39	00.4			3	675
1991	XK1		1991	12	03.25920	03	05	49.19	+21	12	12.7			3	675
1991	YA		1992	02	04.12586	04	56	32.56	-00	04	08.8			3	675
1991	YA		1992	02	04.20938	04	56	35.08	-00	06	21.2			3	675
1991	YX		1991	12	03.44913	07	41	22.86	+14	59	40.2	17.5		3	675
1991	YX		1991	12	03.48073	07	41	22.47	+14	59	40.8			3	675
1992	AA		1992	02	04.16631	05	41	08.51	+33	24	17.1	16.5		3	675
1992	AA		1992	02	04.22188	05	41	17.66	+33	25	17.5			3	675
1992	AA		1992	02	05.16996	05	44	09.56	+33	42	39.3			3	675
1992	AB		1992	02	04.15329	03	51	32.62	+33	40	06.2	18		3	675
1992	AB		1992	02	05.11493	03	51	21.58	+34	06	41.1			3	675
1992	AB		1992	02	05.15451	03	51	20.97	+34	07	48.9			3	675
1992	AD		1989	11	06.37014	05	57	28.92	+07	35	07.1			7	675
1992	AD		1989	11	06.39097	05	57	28.74	+07	35	06.4			7	675
1992	AD		1989	11	06.41181	05	57	28.56	+07	35	05.8			7	675
1992	AD		1991	01	19.23874	06	48	31.29	+15	00	48.1	17.6		3	675
1992	AD		1991	01	19.27951	06	48	30.40	+15	00	53.3			3	675
1992	AD		1992	02	04.30365	08	03	36.65	+20	58	29.8	17.9		3	675
1992	AD		1992	02	04.33594	08	03	35.99	+20	58	31.1			3	675
1992	AD		1992	02	05.29583	08	03	19.07	+21	00	41.1			3	675
1992	AD		1992	02	05.35295	08	03	18.13	+21	00	50.1			3	675
1992	AG		1992	01	10.39728	07	59	33.85	+30	13	49.9	15.0		2	675
1992	AG		1992	01	10.42135	07	59	32.09	+30	14	29.5			2	675
1992	AG		1992	01	11.41771	07	58	25.90	+30	43	10.5			2	675
1992	AG		1992	01	30.21823	07	36	56.01	+38	28	23.5	15.0		2	675
1992	AG		1992	01	30.24271	07	36	54.36	+38	28	53.0			2	675
1992	AG		1992	02	01.28802	07	34	51.75	+39	08	00.7			2	675
1992	AM		1992	01	30.12899	06	38	52.91	+33	20	05.3	16.5		2	675
1992	AM		1992	01	30.15451	06	38	51.78	+33	20	25.9			2	675
1992	AN		1992	01	30.16701	06	42	43.32	+19	11	57.1	16.5		2	675
1992	AN		1992	01	30.18872	06	42	42.30	+19	12	10.9			2	675

1992 AN		1992	02	01.17361	06	41	12.85	+19	34	26.0		2	675
1992 AO		1992	01	30.17257	06	57	35.76	+14	20	13.2	16.0	2	675
1992 AO		1992	01	30.19410	06	57	34.75	+14	20	30.7		2	675
1992 AO		1992	01	31.19792	06	56	48.67	+14	35	06.0		2	675
1992 AO		1992	01	31.22205	06	56	47.49	+14	35	25.8		2	675
1992 AO		1992	02	01.22448	06	56	03.17	+14	49	55.4		2	675
1992 AQ		1992	01	31.20451	07	08	11.81	+34	47	19.4	16.5	2	675
1992 AQ		1992	01	31.22899	07	08	10.45	+34	47	49.5		2	675
1992 AQ		1992	02	01.18455	07	07	20.50	+35	07	37.6		2	675
1992 AQ		1992	02	01.20660	07	07	19.20	+35	08	04.9		2	675
1992 AR		1992	01	30.12899	06	39	00.81	+28	57	11.9	16.5	2	675
1992 AR		1992	01	30.15451	06	38	40.01	+28	57	20.3		2	675
1992 AR		1992	02	01.16808	06	37	54.75	+29	07	09.4		2	675
1992 AX		1992	02	04.30365	07	49	11.63	+24	27	20.7	16.5	3	675
1992 AX		1992	02	05.29583	07	47	50.20	+24	40	32.1		3	675
1992 AX		1992	02	05.35295	07	47	45.25	+24	41	17.7		3	675
1992 AU1	*	1992	01	09.41441	07	48	43.88	+43	28	14.5	15.0	2	675
1992 AU1		1992	01	09.44236	07	48	41.78	+43	29	03.7		2	675
1992 AU1		1992	01	10.40365	07	47	35.51	+43	57	12.7		2	675
1992 AU1		1992	01	11.25330	07	46	36.58	+44	21	42.0		2	675
1992 AU1		1992	01	11.40625	07	46	24.74	+44	26	05.0		2	675
1992 AU1		1992	01	30.20625	07	22	58.25	+51	32	03.3	15.0	2	675
1992 AU1		1992	01	30.23073	07	22	56.56	+51	32	27.0		2	675
1992 AU1		1992	02	01.25781	07	20	46.44	+52	03	20.4		2	675
1992 AV1	*	1992	01	09.40851	07	25	12.97	+20	24	17.9	16.0	2	675
1992 AV1		1992	01	09.43681	07	25	10.35	+20	25	00.5		2	675
1992 AV1		1992	01	10.38507	07	23	52.31	+20	49	22.8		2	675
1992 AV1		1992	01	11.24705	07	22	41.29	+21	11	26.5		2	675
1992 AV1		1992	01	11.39288	07	22	28.59	+21	15	11.9		2	675
1992 AV1		1992	01	30.17795	06	58	33.83	+28	36	44.1	16.0	2	675
1992 AV1		1992	01	30.19948	06	58	32.46	+28	37	09.9		2	675
1992 AV1		1992	02	01.26510	06	56	29.98	+29	18	11.7		2	675
1992 AX1	*	1992	01	10.47674	08	16	00.79	-03	41	41.6	16.5	2	675
1992 AX1		1992	01	10.51372	08	15	58.63	-03	40	59.8		2	675
1992 AX1		1992	01	29.37170	07	57	51.56	+03	08	11.2	16.5	2	675
1992 AX1		1992	01	29.39497	07	57	50.15	+03	08	43.3		2	675
1992 AX1		1992	01	29.41840	07	57	48.97	+03	09	16.8		2	675
1992 AX1		1992	01	30.25417	07	57	06.06	+03	28	52.5		2	675
1992 BF1	*	1992	01	29.49132	09	53	08.54	+22	00	21.8	16.5	2	675
1992 BF1		1992	01	30.43125	09	52	30.84	+22	22	34.7		2	675
1992 BF1		1992	01	30.45538	09	52	29.51	+22	23	08.1		2	675
1992 BF1		1992	02	02.44306	09	50	18.88	+23	34	21.3		2	675
1992 BF1		1992	02	02.46563	09	50	17.77	+23	34	52.5		2	675
1992 BG1	*	1992	01	30.20625	07	19	07.28	+51	58	05.7	16.5	2	675
1992 BG1		1992	01	30.23073	07	19	05.84	+51	58	05.1		2	675
1992 BG1		1992	02	01.25781	07	17	04.27	+51	57	03.9		2	675
1992 BH1	*	1992	01	30.21823	07	36	00.00	+37	35	30.1	16.5	2	675
1992 BH1		1992	01	30.24271	07	35	58.29	+37	35	18.9		2	675
1992 BH1		1992	02	01.28802	07	33	50.36	+37	20	03.3		2	675
1992 BJ1		1992	01	29.44774	09	09	58.08	+22	18	33.3	16.5	2	675
1992 BJ1		1992	01	29.47222	09	09	56.68	+22	18	39.3		2	675
1992 BJ1		1992	01	31.45156	09	08	03.36	+22	29	40.2		2	675
1992 BJ1		1992	01	31.47431	09	08	01.93	+22	29	46.1		2	675
1992 BL1	*	1992	01	30.46806	10	26	26.81	+12	49	24.5	15.5	2	675
1992 BL1		1992	01	30.50764	10	26	24.97	+12	50	19.6		2	675
1992 BL1		1992	01	31.53733	10	25	41.40	+13	14	14.0		2	675
1992 BM1	*	1992	01	29.48455	09	38	15.23	+06	18	40.4	16.0	2	675
1992 BM1		1992	01	30.41979	09	37	24.60	+06	34	32.8		2	675
1992 BM1		1992	01	30.44288	09	37	23.31	+06	34	56.2		2	675

1992	BN1	*	1992	01	29.48455	09	50	43.23	+03	44	41.8	17	2	675
1992	BN1		1992	01	30.41979	09	50	02.13	+04	05	01.0		2	675
1992	BN1		1992	01	30.44288	09	50	01.06	+04	05	31.2		2	675
1992	BO1	*	1992	01	31.28472	07	02	37.71	+34	35	54.9	16.5	2	675
1992	BO1		1992	02	01.18455	07	01	47.27	+34	25	53.4		2	675
1992	BO1		1992	02	01.20660	07	01	46.00	+34	25	38.0		2	675
1992	BP1	*	1992	01	31.28472	07	12	01.91	+33	28	56.3	16.0	2	675
1992	BP1		1992	02	01.18455	07	10	53.16	+33	21	23.3		2	675
1992	BP1		1992	02	01.20600	07	10	51.44	+33	21	12.9		2	675
1992	BQ1	*	1992	01	30.22431	07	46	48.65	-02	38	32.0	16.0	2	675
1992	BQ1		1992	01	30.24826	07	46	47.42	-02	38	19.3		2	675
1992	BQ1		1992	01	31.30208	07	45	58.01	-02	28	50.1		2	675
1992	BQ1		1992	01	31.32500	07	45	57.00	-02	28	38.1		2	675
1992	BS1	*	1992	01	30.22431	07	46	05.79	-02	39	25.5	16.5	2	675
1992	BS1		1992	01	30.24826	07	46	04.42	-02	39	15.9		2	675
1992	BS1		1992	01	31.30208	07	45	13.79	-02	32	57.2		2	675
1992	BS1		1992	01	31.32500	07	45	12.64	-02	32	47.8		2	675
1992	BT1	*	1992	01	30.19410	06	55	37.14	+11	08	43.0	17.0	2	675
1992	BT1		1992	01	31.19792	06	54	54.70	+11	12	13.3		2	675
1992	BT1		1992	01	31.22205	06	54	53.58	+11	12	19.7		2	675
1992	BU1	*	1992	01	30.37500	08	46	07.13	+26	28	42.5	16.5	2	675
1992	BU1		1992	01	30.39757	08	46	05.43	+26	28	47.9		2	675
1992	BU1		1992	02	02.43194	08	42	28.01	+26	38	31.4		2	675
1992	BU1		1992	02	02.45451	08	42	26.40	+26	38	34.1		2	675
1992	CC1	*	1992	02	09.51649	12	20	31.44	+21	04	37.6	17.7	3	675
1992	CC1		1992	02	09.54983	12	20	26.32	+21	04	30.2		3	675
1992	CC1		1992	02	25.31197	11	33	09.37	+19	28	38.9	16.8	3	675
1992	CC1		1992	02	25.34131	11	33	03.37	+19	28	22.6	16.8	3	675
1992	CC1		1992	02	26.27517	11	29	57.64	+19	19	50.6	17.8	3	675
1992	CC1		1992	02	26.30764	11	29	50.99	+19	19	31.0	17.8	3	675
1992	CC1		1992	02	26.41545	11	29	29.05	+19	18	30.2	16.8	3	675
1992	CC1		1992	02	27.28975	11	26	34.87	+19	10	07.4		3	675
1992	CC1		1992	02	27.46840	11	25	58.35	+19	08	21.9		3	675
1992	CC1		1992	02	28.28350	11	23	16.03	+19	00	12.6		3	675
1992	CC1		1992	02	28.45156	11	22	41.68	+18	58	29.9		3	675
1992	DC	*	1992	02	26.22500	10	00	13.94	+25	09	42.0	17.5	3	675
1992	DC		1992	02	26.26128	10	00	12.85	+25	08	34.9		3	675
1992	DC		1992	02	27.32065	09	59	48.31	+24	35	04.6		3	675
1992	DC		1992	02	27.35781	09	59	47.20	+24	33	53.8		3	675
1992	DC		1992	02	28.25086	09	59	29.34	+24	05	25.0		3	675
1992	DC		1992	02	28.41927	09	59	24.52	+24	00	00.4		3	675
2530	P-L	*	1960	09	24.46184	00	57	02.02	+03	35	56.6	17.5	4	675
2530	P-L		1960	09	26.37988	00	55	14.02	+03	30	32.0		4	675
2530	P-L		1960	09	28.43822	00	53	14.28	+03	24	30.8		4	675
2530	P-L		1960	09	29.39514	00	52	17.79	+03	21	42.3		4	675
2530	P-L		1960	10	17.31529	00	34	21.65	+02	31	43.8		4	675
2530	P-L		1960	10	22.26809	00	30	00.74	+02	22	20.3		4	675
2530	P-L		1960	10	25.30351	00	27	37.51	+02	18	14.1		4	675
2530	P-L		1960	10	26.35766	00	26	51.09	+02	17	09.2		4	675
4319	P-L	*	1960	09	24.37573	00	34	52.89	+10	06	20.9	19.2	4	675
4319	P-L		1960	09	25.42780	00	33	50.93	+09	59	05.2		4	675
4319	P-L		1960	09	26.30558	00	32	59.66	+09	52	55.1		4	675
4319	P-L		1960	09	28.36808	00	30	57.44	+09	38	02.1		4	675
4319	P-L		1960	10	26.32573	00	08	34.51	+06	11	56.9		4	675
4556	P-L	*	1960	09	24.41183	00	36	20.55	+00	27	39.9	17.8	4	675
4556	P-L		1960	09	26.31530	00	34	51.34	+00	20	01.5		4	675
4556	P-L		1960	09	27.40836	00	33	59.37	+00	15	39.6		4	675
4556	P-L		1960	09	28.39725	00	33	12.35	+00	11	42.7		4	675
4556	P-L		1960	10	17.31529	00	18	54.42	-00	53	19.3		4	675

4556	P-L		1960	10	22.26809	00	15	50.38	-01	04	35.1		4	675
4556	P-L		1960	10	25.25350	00	14	12.62	-01	09	44.8		4	675
4556	P-L		1960	10	25.30351	00	14	11.11	-01	09	51.4		4	675
4556	P-L		1960	10	26.31531	00	13	40.39	-01	11	16.8		4	675
4556	P-L		1960	10	26.35766	00	13	39.19	-01	11	22.0		4	675
4559	P-L	*	1960	09	26.31530	00	36	51.69	+03	46	39.8	18.8	4	675
4559	P-L		1960	09	27.40836	00	36	04.20	+03	41	24.0		4	675
4559	P-L		1960	09	28.39725	00	35	21.25	+03	36	35.0		4	675
4559	P-L		1960	10	17.31529	00	22	16.93	+02	08	53.1		4	675
4559	P-L		1960	10	22.26809	00	19	28.51	+01	49	57.0		4	675
4559	P-L		1960	10	25.30351	00	17	57.67	+01	39	44.0		4	675
4559	P-L		1960	10	26.35766	00	17	28.43	+01	36	28.0		4	675
4641	P-L		1991	09	11.29878	23	18	47.74	-07	45	58.4	18.5	9	675
4641	P-L		1991	09	11.35451	23	18	44.93	-07	46	18.5		9	675
4641	P-L		1991	09	17.33941	23	14	00.51	-08	24	07.5	18.5	9	675
6058	P-L	*	1960	09	24.33613	00	03	40.61	+04	22	41.7	18.3	4	675
6058	P-L		1960	09	25.32502	00	02	42.08	+04	20	10.8		4	675
6058	P-L		1960	09	26.27573	00	01	46.12	+04	17	42.0		4	675
6058	P-L		1960	09	28.32780	23	59	46.45	+04	12	17.2		4	675
6058	P-L		1960	10	17.21390	23	44	34.34	+03	26	48.6		4	675
6058	P-L		1960	10	22.15559	23	41	58.91	+03	19	06.8		4	675
6058	P-L		1960	10	24.18787	23	41	07.28	+03	16	44.2		4	675
6058	P-L		1960	10	26.26113	23	40	22.04	+03	14	49.6		4	675
6328	P-L	*	1960	09	24.33613	00	14	52.02	+00	59	42.4	19.1	4	675
6328	P-L		1960	09	25.32502	00	13	59.78	+00	55	05.7		4	675
6328	P-L		1960	09	26.27573	00	13	09.58	+00	50	39.7		4	675
6328	P-L		1960	09	28.32780	00	11	21.18	+00	41	07.5		4	675
6328	P-L		1960	10	17.28198	23	56	12.95	-00	36	42.8		4	675
6328	P-L		1960	10	22.23406	23	53	07.40	-00	51	38.3		4	675
6328	P-L		1960	10	25.25350	23	51	28.89	-00	59	11.0		4	675
6328	P-L		1960	10	26.26113	23	50	58.72	-01	01	25.9		4	675
6328	P-L		1960	10	26.31531	23	50	57.11	-01	01	34.3		4	675
6588	P-L	*	1960	09	24.35002	00	03	44.63	-00	41	01.5	18.5	4	675
6588	P-L		1960	09	26.28543	00	02	20.10	-00	50	09.1		4	675
6588	P-L		1960	09	27.34237	00	01	34.00	-00	55	06.0		4	675
6588	P-L		1960	09	28.33822	00	00	50.76	-00	59	44.3		4	675
6588	P-L		1960	10	17.21390	23	48	41.46	-02	16	02.5		4	675
6588	P-L		1960	10	22.15559	23	46	18.45	-02	30	21.7		4	675
6588	P-L		1960	10	24.18787	23	45	27.34	-02	35	21.9		4	675
6588	P-L		1960	10	26.26113	23	44	40.26	-02	39	53.6		4	675
6615	P-L	*	1960	09	24.35002	23	55	28.76	-03	30	24.0	18.4	4	675
6615	P-L		1960	09	26.28543	23	53	30.35	-03	38	42.9		4	675
6615	P-L		1960	09	27.34237	23	52	26.10	-03	43	08.7		4	675
6615	P-L		1960	09	28.33822	23	51	26.19	-03	47	13.9		4	675
6615	P-L		1960	10	17.22501	23	35	25.15	-04	42	14.7		4	675
6615	P-L		1960	10	22.16324	23	32	33.04	-04	47	52.4		4	675
6615	P-L		1960	10	24.23753	23	31	32.83	-04	48	59.4		4	675
6615	P-L		1960	10	26.27157	23	30	40.89	-04	49	22.8		4	675
9508	P-L		1978	11	30.26007	03	36	07.57	+17	16	19.1	17.8 V	6	675
9508	P-L		1978	12	01.27691	03	35	19.40	+17	14	07.9		6	675
9575	P-L	*	1960	10	17.22501	23	49	11.46	-07	32	21.6	18.2	4	675
9575	P-L		1960	10	22.16324	23	47	45.10	-07	23	03.1		4	675
9575	P-L		1960	10	24.23753	23	47	24.37	-07	17	11.6		4	675
9575	P-L		1960	10	26.27157	23	47	13.58	-07	10	17.8		4	675
1081	T-1		1971	03	24.38924	12	03	09.51	-03	02	57.5		4	675
1081	T-1		1971	03	25.27326	12	02	29.39	-02	58	32.7		4	675
1081	T-1	*	1971	03	25.31562	12	02	27.37	-02	58	20.6	18.4	4	675
1081	T-1		1971	03	26.26771	12	01	44.32	-02	53	37.2		4	675
1081	T-1		1971	03	27.32500	12	00	56.43	-02	48	22.8		4	675

1081	T-1		1971	04	02.40000	11	56	27.93	-02	18	14.4		4	675
1181	T-1		1971	03	24.38924	12	12	58.59	-05	16	44.2		4	675
1181	T-1		1971	03	25.27326	12	12	15.20	-05	13	10.3		4	675
1181	T-1	*	1971	03	25.31562	12	12	13.13	-05	13	00.3	17.2	4	675
1181	T-1		1971	03	26.26771	12	11	26.34	-05	09	06.8		4	675
1181	T-1		1971	03	27.32500	12	10	34.31	-05	04	45.5		4	675
1181	T-1		1971	04	02.40000	12	05	41.15	-04	39	22.7		4	675
1181	T-1		1971	04	16.18087	11	56	03.11	-03	45	03.3		4	675
1181	T-1		1971	04	16.26458	11	56	00.10	-03	44	46.5		4	675
1181	T-1		1971	05	13.18941	11	48	12.38	-02	50	38.5		4	675
1181	T-1		1971	05	14.21962	11	48	15.02	-02	50	28.9		4	675
1198	T-1		1971	03	24.38924	12	14	28.08	-06	47	55.6		4	675
1198	T-1		1971	03	25.27326	12	13	46.41	-06	44	21.1		4	675
1198	T-1	*	1971	03	25.31562	12	13	44.34	-06	44	10.4	18.1	4	675
1198	T-1		1971	03	26.26771	12	12	59.35	-06	40	19.7		4	675
1198	T-1		1971	03	27.32500	12	12	09.38	-06	35	57.5		4	675
1198	T-1		1971	04	02.40000	12	07	27.67	-06	10	17.8		4	675
1198	T-1		1971	04	16.18087	11	58	11.06	-05	13	34.0		4	675
1198	T-1		1971	04	16.26458	11	58	08.10	-05	13	14.6		4	675
1198	T-1		1971	05	13.18941	11	50	14.35	-04	06	36.8		4	675
1198	T-1		1971	05	14.21962	11	50	15.34	-04	05	47.0		4	675
1293	T-1		1971	03	25.27326	12	20	46.24	-04	47	58.7		4	675
1293	T-1	*	1971	03	25.31562	12	20	43.41	-04	47	47.5	18.8	4	675
1293	T-1		1971	03	25.33090	12	20	42.34	-04	47	41.6		4	675
1293	T-1		1971	03	26.26771	12	19	42.40	-04	43	01.6		4	675
1293	T-1		1971	03	26.29653	12	19	40.45	-04	42	54.7		4	675
1293	T-1		1971	03	26.33611	12	19	37.85	-04	42	43.1		4	675
1293	T-1		1971	03	27.32500	12	18	34.62	-04	37	46.3		4	675
1293	T-1		1971	04	02.40000	12	12	09.50	-04	07	00.2		4	675
1293	T-1		1971	04	16.18087	11	59	19.76	-03	02	24.0		4	675
1293	T-1		1971	04	16.26458	11	59	15.46	-03	02	00.6		4	675
1293	T-1		1971	05	13.18941	11	47	52.76	-02	03	08.3		4	675
1293	T-1		1971	05	14.21962	11	47	51.73	-02	03	12.4		4	675
1295	T-1		1971	03	24.42015	12	21	42.22	-03	42	46.4		4	675
1295	T-1		1971	03	25.27326	12	21	03.98	-03	37	12.7		4	675
1295	T-1	*	1971	03	25.31562	12	21	02.05	-03	36	55.3	18.5	4	675
1295	T-1		1971	03	25.33090	12	21	01.29	-03	36	49.5		4	675
1295	T-1		1971	03	26.26771	12	20	19.38	-03	30	43.3		4	675
1295	T-1		1971	03	26.29653	12	20	17.88	-03	30	31.0		4	675
1295	T-1		1971	03	26.33611	12	20	16.01	-03	30	16.1		4	675
1295	T-1		1971	03	27.32500	12	19	31.97	-03	23	51.8		4	675
1295	T-1		1971	03	27.33854	12	19	30.81	-03	23	41.6		4	675
1295	T-1		1971	04	02.40000	12	15	00.79	-02	44	05.8		4	675
1295	T-1		1971	04	16.18087	12	05	51.67	-01	20	06.9		4	675
1295	T-1		1971	04	16.26458	12	05	48.67	-01	19	40.2		4	675
2081	T-1		1971	03	24.37118	12	03	27.48	+04	10	50.8		4	675
2081	T-1		1971	03	25.24340	12	02	43.04	+04	14	43.5		4	675
2081	T-1	*	1971	03	25.28715	12	02	40.66	+04	14	54.8	17.5	4	675
2081	T-1		1971	03	26.25208	12	01	51.42	+04	19	07.9		4	675
2081	T-1		1971	03	27.31181	12	00	57.42	+04	23	38.9		4	675
2151	T-1		1971	03	24.37118	12	09	31.28	+03	17	14.2		4	675
2151	T-1		1971	03	25.24340	12	08	44.68	+03	23	55.5		4	675
2151	T-1	*	1971	03	25.28715	12	08	42.28	+03	24	15.3	19.5	4	675
2151	T-1		1971	03	26.25208	12	07	50.61	+03	31	34.4		4	675
2151	T-1		1971	03	27.31181	12	06	53.95	+03	39	33.0		4	675
2151	T-1		1971	04	02.41285	12	01	36.64	+04	23	23.7		4	675
3048	T-1		1971	03	24.42015	12	23	58.73	-02	07	58.0		4	675
3048	T-1		1971	03	25.33090	12	23	09.75	-02	04	12.7		4	675
3048	T-1		1971	03	26.29653	12	22	17.65	-02	00	10.9		4	675

3048	T-1		1971	03	26.31007	12	22	16.95	-02	00	10.0	4	675
3048	T-1	*	1971	03	26.33611	12	22	15.37	-02	00	01.7	17.7	4 675
3048	T-1		1971	03	26.34896	12	22	14.71	-02	00	00.6	4	675
3048	T-1		1971	03	27.33854	12	21	21.02	-01	55	52.0	4	675
3048	T-1		1971	03	27.35208	12	21	20.38	-01	55	51.5	4	675
3048	T-1		1971	04	02.40000	12	15	55.81	-01	31	02.6	4	675
3048	T-1		1971	04	16.16458	12	05	04.87	-00	43	26.1	4	675
3048	T-1		1971	04	16.18087	12	05	04.19	-00	43	22.4	4	675
3048	T-1		1971	04	16.25069	12	05	01.20	-00	43	10.6	4	675
3048	T-1		1971	04	16.26458	12	05	00.78	-00	43	07.7	4	675
3048	T-1		1971	05	13.18941	11	56	14.79	-00	23	12.4	4	675
3048	T-1		1971	05	14.21962	11	56	18.26	-00	24	42.8	4	675
3068	T-1		1971	03	25.33090	12	24	21.65	-06	42	38.0	4	675
3068	T-1		1971	03	26.29653	12	23	34.44	-06	36	37.2	4	675
3068	T-1	*	1971	03	26.33611	12	23	32.51	-06	36	22.3	20.5	4 675
3068	T-1		1971	03	27.33854	12	22	43.53	-06	30	03.3	4	675
3090	T-1		1971	03	25.33090	12	25	47.10	-07	18	40.7	4	675
3090	T-1		1971	03	26.29653	12	24	50.32	-07	15	21.0	4	675
3090	T-1	*	1971	03	26.33611	12	24	47.94	-07	15	11.4	19.8	4 675
3090	T-1		1971	03	27.33854	12	23	48.69	-07	11	37.8	4	675
3090	T-1		1971	04	16.18087	12	05	13.43	-05	55	39.7	4	675
3090	T-1		1971	04	16.26458	12	05	08.92	-05	55	19.0	4	675
3100	T-1		1971	03	25.33090	12	26	37.74	-08	11	48.0	4	675
3100	T-1		1971	03	26.29653	12	25	49.19	-08	04	04.9	4	675
3100	T-1	*	1971	03	26.33611	12	25	47.02	-08	03	45.4	17.7	4 675
3100	T-1		1971	03	27.33854	12	24	56.77	-07	55	38.2	4	675
3100	T-1		1971	04	02.40000	12	19	56.55	-07	05	58.9	4	675
3100	T-1		1971	04	02.42604	12	19	55.29	-07	05	47.5	4	675
3100	T-1		1971	04	16.18087	12	09	54.80	-05	15	52.2	4	675
3100	T-1		1971	04	16.26458	12	09	51.64	-05	15	14.8	4	675
3159	T-1		1971	03	24.42015	12	31	49.06	-06	31	54.8	4	675
3159	T-1		1971	03	25.33090	12	30	58.81	-06	25	11.0	4	675
3159	T-1		1971	03	26.29653	12	30	04.99	-06	17	56.5	4	675
3159	T-1	*	1971	03	26.33611	12	30	02.68	-06	17	38.9	18.7	4 675
3159	T-1		1971	03	27.33854	12	29	06.50	-06	10	01.8	4	675
3159	T-1		1971	04	02.42604	12	23	23.96	-05	22	47.9	4	675
3163	T-1		1971	03	24.42015	12	31	14.60	-02	59	38.4	4	675
3163	T-1		1971	03	25.33090	12	30	47.90	-02	56	45.5	4	675
3163	T-1		1971	03	26.29653	12	30	20.76	-02	54	07.4	4	675
3163	T-1	*	1971	03	26.33611	12	30	19.59	-02	54	01.3	20.5	4 675
3163	T-1		1971	03	27.33854	12	29	51.39	-02	51	15.4	4	675
3163	T-1		1971	04	02.42604	12	26	59.50	-02	34	36.7	4	675
3279	T-1		1971	03	25.33090	12	40	31.25	-04	55	26.6	4	675
3279	T-1		1971	03	26.29653	12	39	29.19	-04	55	36.1	4	675
3279	T-1	*	1971	03	26.33611	12	39	26.59	-04	55	36.2	19.5	4 675
3279	T-1		1971	03	27.33854	12	38	21.35	-04	55	41.5	4	675
3279	T-1		1971	04	02.42604	12	31	41.00	-04	55	43.6	4	675
3332	T-1		1971	03	25.33090	12	44	14.51	-07	23	54.8	4	675
3332	T-1		1971	03	26.29653	12	43	18.88	-07	18	16.6	4	675
3332	T-1	*	1971	03	26.33611	12	43	16.55	-07	18	03.0	19.5	4 675
3332	T-1		1971	03	27.33854	12	42	18.72	-07	12	07.9	4	675
3332	T-1		1971	04	02.42604	12	36	26.10	-06	35	21.0	4	675
4195	T-1		1971	03	24.40486	12	33	37.78	+01	43	12.0	4	675
4195	T-1		1971	03	26.31007	12	32	07.26	+01	53	19.1	4	675
4195	T-1	*	1971	03	26.34896	12	32	05.33	+01	53	29.9	18.5	4 675
4195	T-1		1971	03	27.35208	12	31	17.18	+01	58	42.9	4	675
4195	T-1		1971	04	02.43993	12	26	25.68	+02	29	26.5	4	675
4195	T-1		1971	04	16.21476	12	16	18.50	+03	26	34.7	4	675
4195	T-1		1971	04	16.27708	12	16	15.81	+03	26	48.2	4	675

4195	T-1		1971	05	13.17535	12	05	34.02	+04	00	46.7	4	675
4195	T-1		1971	05	13.20278	12	05	33.86	+04	00	42.9	4	675
4195	T-1		1971	05	14.20694	12	05	28.03	+03	59	47.3	4	675
4195	T-1		1971	05	14.23246	12	05	27.95	+03	59	44.4	4	675
4195	T-1		1971	05	16.29774	12	05	20.36	+03	57	17.9	4	675
4195	T-1		1971	05	16.31510	12	05	20.36	+03	57	20.2	4	675
4214	T-1		1971	03	24.40486	12	34	25.28	+00	29	22.1	4	675
4214	T-1		1971	03	26.31007	12	32	51.57	+00	43	12.2	4	675
4214	T-1	*	1971	03	26.34896	12	32	49.64	+00	43	28.9	19.1	4	675
4214	T-1		1971	03	27.35208	12	32	00.03	+00	50	43.1	4	675
4214	T-1		1971	04	02.43993	12	27	00.50	+01	33	14.4	4	675
4214	T-1		1971	04	16.21476	12	16	56.02	+02	53	47.7	4	675
4214	T-1		1971	04	16.27708	12	16	53.37	+02	54	05.2	4	675
4232	T-1		1971	03	24.40486	12	35	42.51	-01	27	04.1	4	675
4232	T-1		1971	03	26.31007	12	33	56.01	-01	23	22.1	4	675
4232	T-1	*	1971	03	26.34896	12	33	53.77	-01	23	17.3	17.7	4	675
4232	T-1		1971	03	27.35208	12	32	57.60	-01	21	19.0	4	675
4232	T-1		1971	04	02.43993	12	27	17.13	-01	09	57.5	4	675
4232	T-1		1971	04	16.21476	12	15	42.85	-00	52	28.0	4	675
4232	T-1		1971	04	16.27708	12	15	39.85	-00	52	24.6	4	675
4232	T-1		1971	05	13.20278	12	04	38.68	-01	18	16.6	4	675
4232	T-1		1971	05	14.21962	12	04	35.84	-01	21	01.9	4	675
4232	T-1		1971	05	14.23246	12	04	35.69	-01	21	05.2	4	675
4277	T-1		1971	03	24.40486	12	37	59.93	-01	26	03.4	4	675
4277	T-1		1971	03	26.31007	12	36	43.89	-01	13	57.5	4	675
4277	T-1	*	1971	03	26.34896	12	36	42.33	-01	13	41.3	17.7	4	675
4277	T-1		1971	03	27.35208	12	36	02.14	-01	07	19.4	4	675
4277	T-1		1971	04	02.43993	12	31	56.46	-00	28	55.4	4	675
4277	T-1		1971	04	16.21476	12	23	13.48	+00	51	10.9	4	675
4277	T-1		1971	04	16.27708	12	23	11.29	+00	51	29.7	4	675
4277	T-1		1971	05	13.20278	12	12	49.92	+02	29	13.0	4	675
4277	T-1		1971	05	14.23246	12	12	40.68	+02	31	00.1	4	675
4277	T-1		1971	05	16.29774	12	12	25.70	+02	34	09.2	4	675
4349	T-1		1971	03	24.40486	12	43	01.07	+01	52	17.4	4	675
4349	T-1		1971	03	26.31007	12	41	35.45	+02	04	55.8	4	675
4349	T-1	*	1971	03	26.34896	12	41	33.70	+02	05	11.4	19.3	4	675
4349	T-1		1971	03	27.35208	12	40	48.61	+02	11	42.9	4	675
4349	T-1		1971	04	02.43993	12	36	11.65	+02	50	58.8	4	675
4349	T-1		1971	04	16.21476	12	26	07.80	+04	10	35.6	4	675
4349	T-1		1971	04	16.27708	12	26	05.29	+04	10	55.1	4	675
4854	T-1		1971	04	16.21476	12	35	06.73	+01	43	53.2	18.5	4	675
4854	T-1		1971	04	16.27708	12	35	03.59	+01	43	59.3	18.5	4	675
4854	T-1	*	1971	05	13.20278	12	19	39.41	+01	37	11.8	19.5	4	675
4854	T-1		1971	05	14.23246	12	19	20.88	+01	35	07.0	19.5	4	675
4854	T-1		1971	05	16.29774	12	18	47.83	+01	30	35.3	19.5	4	675
1079	T-2		1981	05	08.33333	15	01	05.83	-19	10	48.5	18.0	6	675
1079	T-2		1981	05	09.34167	15	00	10.14	-19	07	30.8	6	675
1107	T-2		1978	11	30.26007	03	20	26.28	+20	36	39.3	18.5 V	6	675
1107	T-2		1978	12	01.27691	03	19	35.06	+20	32	33.8	6	675
1210	T-2		1973	09	19.18611	00	23	10.73	+04	07	00.0	4	675
1210	T-2		1973	09	19.23785	00	23	07.54	+04	06	46.7	4	675
1210	T-2		1973	09	20.22847	00	22	08.49	+04	02	18.2	4	675
1210	T-2		1973	09	24.34688	00	17	58.49	+03	42	57.4	4	675
1210	T-2		1973	09	24.41597	00	17	54.14	+03	42	38.1	4	675
1210	T-2		1973	09	25.24375	00	17	03.75	+03	38	36.7	4	675
1210	T-2		1973	09	25.30729	00	16	59.80	+03	38	20.8	4	675
1210	T-2	*	1973	09	29.25330	00	12	58.45	+03	19	02.3	18.0	4	675
1210	T-2		1973	09	29.31806	00	12	54.41	+03	18	43.0	4	675
1210	T-2		1973	09	30.21007	00	12	00.36	+03	14	20.8	4	675

1210	T-2		1973	09	30.27431	00	11	56.37	+03	14	01.5		4	675
1210	T-2		1973	10	04.28958	00	07	56.61	+02	54	22.1		4	675
1210	T-2		1973	10	04.35208	00	07	52.75	+02	54	05.5		4	675
1210	T-2		1973	10	05.31684	00	06	56.60	+02	49	25.6		4	675
1210	T-2		1973	10	05.37917	00	06	52.82	+02	49	07.5		4	675
1221	T-2		1973	09	19.18611	00	21	06.27	+04	55	58.9		4	675
1221	T-2		1973	09	19.23785	00	21	04.02	+04	55	45.5		4	675
1221	T-2		1973	09	20.22847	00	20	20.39	+04	51	11.2		4	675
1221	T-2		1973	09	24.34688	00	17	17.27	+04	31	40.6		4	675
1221	T-2		1973	09	24.41597	00	17	14.20	+04	31	19.2		4	675
1221	T-2		1973	09	25.24375	00	16	37.26	+04	27	16.1		4	675
1221	T-2		1973	09	25.30729	00	16	34.34	+04	27	00.7		4	675
1221	T-2	*	1973	09	29.25330	00	13	37.85	+04	07	40.2	18.7	4	675
1221	T-2		1973	09	29.31806	00	13	34.79	+04	07	20.8		4	675
1221	T-2		1973	09	30.21007	00	12	55.20	+04	02	57.1		4	675
1221	T-2		1973	09	30.27431	00	12	52.23	+04	02	39.1		4	675
1221	T-2		1973	10	04.28958	00	09	55.80	+03	42	49.0		4	675
1221	T-2		1973	10	04.35208	00	09	53.05	+03	42	29.6		4	675
1221	T-2		1973	10	05.31684	00	09	11.49	+03	37	46.5		4	675
1221	T-2		1973	10	05.37917	00	09	08.70	+03	37	29.1		4	675
1274	T-2		1973	09	19.18611	00	25	18.03	+02	17	13.1		4	675
1274	T-2		1973	09	19.19948	00	25	17.44	+02	17	10.6		4	675
1274	T-2		1973	09	19.22500	00	25	16.11	+02	17	05.3		4	675
1274	T-2		1973	09	19.23785	00	25	15.43	+02	16	59.8		4	675
1274	T-2		1973	09	19.25006	00	25	14.98	+02	16	56.4		4	675
1274	T-2		1973	09	20.22847	00	24	27.27	+02	12	32.5		4	675
1274	T-2		1973	09	20.30278	00	24	23.57	+02	12	15.1		4	675
1274	T-2		1973	09	24.34688	00	21	02.45	+01	53	32.3		4	675
1274	T-2		1973	09	24.38750	00	21	00.30	+01	53	23.2		4	675
1274	T-2		1973	09	24.41597	00	20	58.78	+01	53	13.6		4	675
1274	T-2		1973	09	24.45434	00	20	56.81	+01	53	04.5		4	675
1274	T-2		1973	09	25.24375	00	20	17.36	+01	49	20.4		4	675
1274	T-2		1973	09	25.30729	00	20	14.13	+01	49	03.9		4	675
1274	T-2	*	1973	09	29.25330	00	16	54.36	+01	30	31.0	18.5	4	675
1274	T-2		1973	09	29.31806	00	16	50.96	+01	30	13.7		4	675
1274	T-2		1973	09	30.21007	00	16	05.86	+01	26	03.4		4	675
1274	T-2		1973	09	30.27431	00	16	02.59	+01	25	45.4		4	675
1274	T-2		1973	10	04.28958	00	12	41.87	+01	07	12.0		4	675
1274	T-2		1973	10	04.35208	00	12	38.68	+01	06	53.9		4	675
1274	T-2		1973	10	05.31684	00	11	51.38	+01	02	33.3		4	675
1274	T-2		1973	10	05.37917	00	11	48.24	+01	02	17.3		4	675
1607	T-2		1991	09	11.29878	22	56	31.84	-06	39	17.9	17.8	9	675
1607	T-2		1991	09	11.35451	22	56	28.15	-06	39	21.4		9	675
1617	T-2		1973	09	19.18611	00	04	58.17	+00	52	32.0		4	675
1617	T-2		1973	09	19.23785	00	04	55.08	+00	52	18.6		4	675
1617	T-2		1973	09	20.22847	00	03	56.71	+00	47	37.6		4	675
1617	T-2		1973	09	24.34688	23	59	54.11	+00	28	10.6		4	675
1617	T-2	*	1973	09	24.41597	23	59	50.03	+00	27	51.8	17.7	4	675
1617	T-2		1973	09	25.24375	23	59	01.74	+00	23	56.9		4	675
1617	T-2		1973	09	25.30729	23	58	57.89	+00	23	40.8		4	675
2067	T-2		1973	09	19.19948	00	34	20.09	+07	21	38.1		4	675
2067	T-2		1973	09	19.25006	00	34	17.79	+07	21	28.1		4	675
2067	T-2		1973	09	20.26458	00	33	32.12	+07	17	38.0		4	675
2067	T-2		1973	09	24.36181	00	30	23.52	+07	01	30.5		4	675
2067	T-2		1973	09	24.42847	00	30	20.32	+07	01	14.4		4	675
2067	T-2		1973	09	25.25642	00	29	41.87	+06	57	47.8		4	675
2067	T-2		1973	09	25.32031	00	29	38.72	+06	57	31.7		4	675
2067	T-2		1973	09	29.26632	00	26	32.84	+06	40	51.5		4	675
2067	T-2	*	1973	09	29.33073	00	26	29.73	+06	40	36.0	18.1	4	675

2067	T-2		1973	09	30.22257	00	25	47.64	+06	36	41.8		4	675
2067	T-2		1973	09	30.28785	00	25	44.53	+06	36	24.9		4	675
2067	T-2		1973	10	04.30208	00	22	35.44	+06	18	45.1		4	675
2067	T-2		1973	10	04.36476	00	22	32.46	+06	18	28.4		4	675
2067	T-2		1973	10	05.32917	00	21	47.40	+06	14	11.3		4	675
2067	T-2		1973	10	05.39132	00	21	44.48	+06	13	55.9		4	675
1194	T-3		1977	10	16.25156	01	06	43.45	+18	38	50.5		4	675
1194	T-3		1977	10	16.31684	01	06	39.31	+18	38	30.0		4	675
1194	T-3	*	1977	10	17.25365	01	05	43.29	+18	33	32.5	17.6	4	675
1194	T-3		1977	10	17.32083	01	05	39.17	+18	33	11.3		4	675
1194	T-3		1977	10	22.42812	01	00	44.08	+18	04	24.3		4	675
1194	T-3		1977	10	22.48003	01	00	41.09	+18	04	06.1		4	675
2247	T-3		1977	10	07.25868	01	14	27.17	+14	56	38.7		4	675
2247	T-3		1977	10	11.27743	01	10	20.27	+14	34	31.9		4	675
2247	T-3		1977	10	11.34375	01	10	16.04	+14	34	09.4		4	675
2247	T-3		1977	10	12.27587	01	09	19.12	+14	28	46.9		4	675
2247	T-3		1977	10	12.34271	01	09	14.90	+14	28	23.1		4	675
2247	T-3	*	1977	10	16.26233	01	05	18.17	+14	05	08.2	18.3	4	675
2247	T-3		1977	10	16.32795	01	05	14.15	+14	04	44.8		4	675
2247	T-3		1977	10	17.26458	01	04	18.71	+13	59	06.7		4	675
2247	T-3		1977	10	17.33177	01	04	14.61	+13	58	41.2		4	675
2247	T-3		1977	10	21.40868	01	00	20.04	+13	33	39.8		4	675
2247	T-3		1977	10	21.46910	01	00	16.49	+13	33	17.5		4	675
2247	T-3		1977	10	22.41528	00	59	24.18	+13	27	28.5		4	675
2247	T-3		1977	10	22.46962	00	59	21.19	+13	27	06.9		4	675
2327	T-3		1977	10	07.25868	01	19	36.48	+12	22	08.0		4	675
2327	T-3		1977	10	11.27743	01	16	20.13	+12	00	50.7		4	675
2327	T-3		1977	10	11.34375	01	16	16.69	+12	00	29.8		4	675
2327	T-3		1977	10	12.27587	01	15	30.85	+11	55	20.3		4	675
2327	T-3		1977	10	12.34271	01	15	27.39	+11	54	58.8		4	675
2327	T-3	*	1977	10	16.26233	01	12	14.10	+11	32	50.4	18.0	4	675
2327	T-3		1977	10	16.32795	01	12	10.80	+11	32	29.4		4	675
2327	T-3		1977	10	17.26458	01	11	24.93	+11	27	09.0		4	675
2327	T-3		1977	10	17.33177	01	11	21.58	+11	26	45.8		4	675
2327	T-3		1977	10	21.40868	01	08	05.78	+11	03	12.3		4	675
2327	T-3		1977	10	21.46910	01	08	02.84	+11	02	49.6		4	675
2327	T-3		1977	10	22.41528	01	07	18.62	+10	57	22.4		4	675
2327	T-3		1977	10	22.46962	01	07	15.93	+10	57	03.2		4	675
3220	T-3		1977	10	07.27031	01	26	25.72	+08	32	02.4		4	675
3220	T-3		1977	10	11.28819	01	23	24.72	+08	13	06.8		4	675
3220	T-3		1977	10	11.35642	01	23	21.55	+08	12	47.6		4	675
3220	T-3		1977	10	12.28681	01	22	39.53	+08	08	22.6		4	675
3220	T-3		1977	10	12.35347	01	22	36.44	+08	08	02.0		4	675
3220	T-3	*	1977	10	16.27309	01	19	38.64	+07	49	24.3	18.8	4	675
3220	T-3		1977	10	16.33872	01	19	35.56	+07	49	04.2		4	675
3220	T-3		1977	10	17.27552	01	18	53.42	+07	44	40.8		4	675
3220	T-3		1977	10	17.34236	01	18	50.25	+07	44	20.2		4	675
3220	T-3		1977	10	21.39792	01	15	49.77	+07	25	21.0		4	675
3220	T-3		1977	10	21.45799	01	15	47.10	+07	25	04.4		4	675
3220	T-3		1977	10	22.39844	01	15	06.33	+07	20	45.1		4	675
3220	T-3		1977	10	22.45920	01	15	03.49	+07	20	28.4		4	675
4179	T-3		1978	11	30.26007	03	25	52.00	+16	24	23.6	19.5 V	6	675
4179	T-3		1978	12	01.27691	03	25	19.93	+16	23	07.8		6	675
(46)			1978	11	30.26007	03	37	51.45	+15	50	52.2		6	675
(46)			1978	12	01.27691	03	36	56.70	+15	47	39.2		6	675
(107)			1991	09	11.29878	23	19	03.56	-03	03	57.2		9	675
(107)			1991	09	11.35451	23	19	01.40	-03	04	17.6		9	675
(107)			1991	09	17.22847	23	15	21.77	-03	40	27.4		9	675
(107)			1991	09	17.27188	23	15	20.09	-03	40	43.5		9	675

(153)	1978	11	30.26007	03	39	03.94	+17	37	22.0		6	675
(153)	1978	12	01.27691	03	38	25.82	+17	34	15.3		6	675
(171)	1991	09	15.35226	23	32	05.94	-06	40	29.2		9	675
(171)	1991	09	15.38958	23	32	04.30	-06	40	39.9		9	675
(171)	1991	09	17.33941	23	30	40.91	-06	49	49.2	13.8	9	675
(171)	1991	09	17.37222	23	30	39.46	-06	49	57.8		9	675
(184)	1978	11	30.26007	03	43	52.72	+21	26	25.9		6	675
(184)	1978	12	01.27691	03	43	02.77	+21	23	39.5		6	675
(503)	1978	11	30.26007	03	26	37.65	+17	15	21.2		6	675
(503)	1978	12	01.27691	03	25	41.25	+17	14	43.4		6	675
(519)	1981	05	08.35938	15	11	39.82	-19	13	27.6		6	675
(519)	1981	05	09.31562	15	10	43.69	-19	13	03.0		6	675
(522)	1991	09	11.29878	23	16	24.54	-09	54	13.5	14.8	9	675
(522)	1991	09	11.35451	23	16	22.30	-09	54	29.8		9	675
(522)	1991	09	15.35226	23	13	46.60	-10	13	12.4		9	675
(522)	1991	09	15.38958	23	13	45.10	-10	13	22.6		9	675
(522)	1991	09	17.22847	23	12	34.43	-10	21	39.0		9	675
(522)	1991	09	17.27188	23	12	32.72	-10	21	50.7		9	675
(522)	1991	09	17.33941	23	12	30.07	-10	22	08.9	14.8	9	675
(522)	1991	09	17.37222	23	12	28.73	-10	22	17.1		9	675
(546)	1988	10	08.36111	02	58	08.67	+22	51	03.2		7	675
(546)	1988	10	08.38889	02	58	07.35	+22	51	10.1		7	675
(637)	1978	11	30.26007	03	37	32.94	+19	48	17.1		6	675
(637)	1978	12	01.27691	03	36	43.02	+19	45	29.3		6	675
(749)	1991	09	15.35226	23	41	22.08	-11	04	58.5		9	675
(749)	1991	09	15.38958	23	41	19.83	-11	05	15.0		9	675
(749)	1991	09	17.33941	23	39	25.83	-11	18	52.8	15.2	9	675
(749)	1991	09	17.37222	23	39	23.85	-11	19	05.9		9	675
(802)	1991	09	11.29878	23	05	15.61	-09	39	51.8	16.2	9	675
(802)	1991	09	11.35451	23	05	11.90	-09	40	04.4		9	675
(809)	1991	09	15.35226	23	42	54.79	-07	07	28.9		9	675
(809)	1991	09	15.38958	23	42	53.09	-07	07	52.3		9	675
(809)	1991	09	17.33941	23	41	34.46	-07	30	20.3	14.0	9	675
(809)	1991	09	17.37222	23	41	33.03	-07	30	42.3		9	675
(901)	1978	11	30.26007	03	33	55.36	+21	53	52.6		6	675
(901)	1978	12	01.27691	03	32	53.84	+21	47	45.7		6	675
(951)	1981	05	08.38542	14	47	06.42	-19	21	49.0		6	675
(951)	1981	05	09.28958	14	46	09.44	-19	16	18.5		6	675
(958)	1991	09	11.29878	23	04	16.54	-05	40	50.0	16.5	9	675
(958)	1991	09	11.35451	23	04	14.28	-05	41	00.0		9	675
(958)	1991	09	17.22847	23	00	27.24	-05	58	07.9		9	675
(958)	1991	09	17.27188	23	00	25.56	-05	58	15.0		9	675
(1044)	1991	09	15.35226	23	18	49.51	-12	04	08.5		9	675
(1044)	1991	09	15.38958	23	18	47.47	-12	04	17.8		9	675
(1044)	1991	09	17.33941	23	17	05.33	-12	11	57.5	14.8	9	675
(1044)	1991	09	17.37222	23	17	03.50	-12	12	04.9		9	675
(1061)	1991	09	15.35226	23	32	21.09	-07	23	01.5		9	675
(1061)	1991	09	15.38958	23	32	19.36	-07	23	12.9		9	675
(1061)	1991	09	17.33941	23	30	52.13	-07	32	52.6	15.2	9	675
(1061)	1991	09	17.37222	23	30	50.60	-07	33	01.8		9	675
(1062)	1977	10	17.26458	01	20	24.62	+14	37	58.3		4	675
(1062)	1977	10	17.33177	01	20	21.04	+14	37	45.0		4	675
(1080)	1991	09	11.29878	23	06	12.66	-08	24	15.0	15.0	9	675
(1080)	1991	09	11.35451	23	06	09.07	-08	24	25.8		9	675
(1080)	1991	09	17.22847	23	00	11.18	-08	42	05.7		9	675
(1080)	1991	09	17.27188	23	00	08.45	-08	42	12.5		9	675
(1164)	1991	09	15.35226	23	31	42.87	-13	16	17.1		9	675
(1164)	1991	09	15.38958	23	31	40.87	-13	16	49.4		9	675
(1164)	1991	09	17.33941	23	30	00.00	-13	44	27.2		9	675

(1164)	1991	09	17.37222	23	29	58.40	-13	44	50.3		9	675
(1232)	1988	10	08.36111	02	45	38.91	+25	58	42.2		7	675
(1232)	1988	10	08.38889	02	45	37.86	+25	58	37.7		7	675
(1261)	1991	09	15.35226	23	32	07.69	-06	32	52.0		9	675
(1261)	1991	09	15.38958	23	32	06.07	-06	33	01.9		9	675
(1261)	1991	09	17.33941	23	30	42.61	-06	41	34.9		9	675
(1261)	1991	09	17.37222	23	30	41.68	-06	41	41.0		9	675
(1318)	1991	09	15.35226	23	28	48.61	-10	00	34.8		9	675
(1318)	1991	09	15.38958	23	28	45.74	-10	00	32.8		9	675
(1318)	1991	09	17.33941	23	26	17.47	-09	58	56.3	16.8	9	675
(1318)	1991	09	17.37222	23	26	14.92	-09	58	54.0		9	675
(1319)	1978	11	30.26007	03	44	20.22	+20	54	23.0		6	675
(1319)	1978	12	01.27691	03	43	29.13	+20	51	02.0		6	675
(1438)	1981	05	08.35938	15	05	39.40	-17	57	13.9		6	675
(1438)	1981	05	09.31562	15	04	55.30	-17	53	52.6		6	675
(1439)	1981	05	08.35938	15	05	23.85	-18	43	07.1		6	675
(1439)	1981	05	09.31562	15	04	44.72	-18	41	12.6		6	675
(1448)	1991	09	15.35226	23	39	10.25	-10	37	30.6		9	675
(1448)	1991	09	15.38958	23	39	08.01	-10	37	42.0		9	675
(1448)	1991	09	17.33941	23	37	12.45	-10	47	11.2	16.8	9	675
(1448)	1991	09	17.37222	23	37	10.43	-10	47	20.8		9	675
(1497)	1981	05	08.35938	15	11	12.28	-19	24	24.3		6	675
(1497)	1981	05	09.31562	15	10	23.06	-19	21	06.8		6	675
(1545)	1991	09	11.29878	23	16	17.73	-08	53	43.9	17.0	9	675
(1545)	1991	09	11.35451	23	16	14.98	-08	54	01.1		9	675
(1545)	1991	09	15.35226	23	13	00.97	-09	12	45.4		9	675
(1545)	1991	09	15.38958	23	12	59.15	-09	12	55.6		9	675
(1545)	1991	09	17.22847	23	11	30.82	-09	21	16.3		9	675
(1545)	1991	09	17.27188	23	11	28.63	-09	21	27.8		9	675
(1545)	1991	09	17.33941	23	11	25.36	-09	21	46.4	16.8	9	675
(1545)	1991	09	17.37222	23	11	23.70	-09	21	54.4		9	675
(1561)	1978	11	30.26007	03	42	30.29	+18	52	55.8		6	675
(1561)	1978	12	01.27691	03	41	43.41	+18	49	32.9		6	675
(1587)	1988	10	08.36111	02	59	32.05	+25	08	49.2		7	675
(1587)	1988	10	08.38889	02	59	30.99	+25	08	54.6		7	675
(1688)	1978	11	30.26007	03	34	27.61	+21	11	45.4		6	675
(1688)	1978	12	01.27691	03	33	32.83	+21	05	01.7		6	675
(1713)	1978	11	30.26007	03	31	04.73	+18	56	52.2		6	675
(1713)	1978	12	01.27691	03	30	00.08	+18	55	09.0		6	675
(1770)	1991	09	15.35226	23	33	37.02	-07	55	45.8		9	675
(1770)	1991	09	15.38958	23	33	34.80	-07	55	54.2		9	675
(1770)	1991	09	17.33941	23	31	42.54	-08	03	00.7	15.8	9	675
(1770)	1991	09	17.37222	23	31	40.59	-08	03	07.1		9	675
(1837)	1988	10	08.36111	03	09	32.76	+23	23	57.2		7	675
(1837)	1988	10	08.38889	03	09	31.67	+23	23	54.3		7	675
(1841)	1981	05	08.35938	14	58	14.27	-17	01	54.3		6	675
(1841)	1981	05	09.31562	14	57	30.70	-16	59	30.9		6	675
(1879)	1981	05	08.35938	15	08	52.12	-18	43	28.5		6	675
(1879)	1981	05	09.31562	15	07	51.87	-18	38	50.7		6	675
(1897)	1978	11	30.26007	03	24	05.13	+18	05	49.5		6	675
(1897)	1978	12	01.27691	03	23	04.51	+18	04	32.4		6	675
(1974)	1991	09	11.29878	23	25	44.00	-04	00	51.6	17.5	9	675
(1974)	1991	09	11.35451	23	25	41.70	-04	01	16.1	17.8	9	675
(1974)	1991	09	17.22847	23	21	44.70	-04	44	35.7		9	675
(2057)	1981	05	08.35938	15	03	46.63	-18	25	10.7	18.0	6	675
(2057)	1981	05	09.31562	15	03	01.66	-18	22	19.9		6	675
(2174)	1991	09	11.29878	23	08	38.30	-10	08	50.3	15.8	9	675
(2174)	1991	09	11.35451	23	08	34.86	-10	08	42.1		9	675
(2174)	1991	09	17.22847	23	02	58.58	-09	52	19.5		9	675

(2174)	1991	09	17.27188	23	02	55.96	-09	52	11.1		9	675
(2181)	1991	09	15.35226	23	41	00.04	-11	55	44.3		9	675
(2181)	1991	09	15.38958	23	40	57.64	-11	55	51.5		9	675
(2181)	1991	09	17.33941	23	39	01.58	-12	00	00.7	16.8	9	675
(2181)	1991	09	17.37222	23	38	59.57	-12	00	04.5		9	675
(2182)	1981	05	09.31562	15	10	48.28	-17	37	48.4		6	675
(2213)	1992	01	29.38333	08	34	13.13	+18	44	18.2	16.0	2	675
(2213)	1992	01	29.40677	08	34	11.54	+18	44	27.3		2	675
(2213)	1992	01	31.39653	08	31	57.54	+18	56	44.8		2	675
(2213)	1992	01	31.42448	08	31	55.64	+18	56	53.9		2	675
(2236)	1988	10	08.36111	02	53	21.56	+24	18	45.1		7	675
(2236)	1988	10	08.38889	02	53	19.97	+24	18	50.6		7	675
(2300)	1991	09	11.29878	23	00	54.79	-09	16	38.4	16.2	9	675
(2300)	1991	09	11.35451	23	00	51.96	-09	16	52.5		9	675
(2363)	1977	10	16.26233	01	20	22.55	+15	04	33.0		4	675
(2363)	1977	10	16.32795	01	20	20.54	+15	04	09.3		4	675
(2363)	1977	10	17.26458	01	19	53.20	+14	58	13.3		4	675
(2363)	1977	10	17.33177	01	19	51.23	+14	57	48.2		4	675
(2393)	1978	11	30.26007	03	37	08.39	+16	09	21.0		6	675
(2393)	1978	12	01.27691	03	36	22.35	+16	04	14.4		6	675
(2425)	1981	05	08.35938	14	52	19.34	-14	16	53.8		6	675
(2425)	1981	05	09.31562	14	51	27.38	-14	16	32.6		6	675
(2426)	1978	11	30.26007	03	41	14.83	+19	02	20.0		6	675
(2426)	1978	12	01.27691	03	40	24.64	+18	57	32.1		6	675
(2454)	1981	05	08.35938	15	01	25.06	-20	13	08.5		6	675
(2454)	1981	05	09.31562	15	00	24.84	-20	06	38.2		6	675
(2606)	1973	09	24.34688	23	58	40.27	+05	15	11.8		4	675
(2606)	1973	09	24.41597	23	58	37.13	+05	14	41.5		4	675
(2606)	1973	09	25.24375	23	58	00.66	+05	08	35.3		4	675
(2606)	1973	09	25.30729	23	57	57.65	+05	08	09.0		4	675
(2651)	1992	01	30.31094	08	14	45.54	+18	33	54.6	15.0	2	675
(2651)	1992	01	30.33924	08	14	44.06	+18	34	12.2		2	675
(2651)	1992	02	01.23247	08	13	05.53	+18	53	44.1		2	675
(2651)	1992	02	01.27222	08	13	03.48	+18	54	09.2		2	675
(2712)	1978	11	30.26007	03	23	42.99	+17	10	10.7		6	675
(2712)	1978	12	01.27691	03	22	41.32	+17	06	25.3		6	675
(2918)	1991	09	11.29878	23	15	09.75	-06	41	29.1	16.2	9	675
(2918)	1991	09	11.35451	23	15	07.21	-06	41	46.6		9	675
(2918)	1991	09	17.22847	23	10	54.73	-07	11	50.8		9	675
(2918)	1991	09	17.27188	23	10	52.74	-07	12	04.2		9	675
(2921)	1978	11	30.26007	03	35	22.55	+17	08	33.9		6	675
(2921)	1978	12	01.27691	03	34	35.35	+17	06	04.3		6	675
(2959)	1991	09	15.35226	23	16	36.81	-10	39	13.7		9	675
(2959)	1991	09	15.38958	23	16	35.29	-10	39	24.3		9	675
(2959)	1991	09	17.33941	23	15	20.52	-10	48	57.0	16.5	9	675
(2959)	1991	09	17.37222	23	15	19.16	-10	49	06.3		9	675
(2981)	1978	11	30.26007	03	45	12.81	+18	54	11.0		6	675
(2981)	1978	12	01.27691	03	44	24.47	+18	51	33.4		6	675
(2982)	1981	05	08.35938	14	50	59.60	-17	09	54.4		6	675
(2982)	1981	05	09.31562	14	50	09.03	-17	08	52.9		6	675
(2996)	1991	09	11.29878	23	18	46.81	-02	53	48.1	16.2	9	675
(2996)	1991	09	11.35451	23	18	43.84	-02	54	01.5		9	675
(2996)	1991	09	17.22847	23	13	48.98	-03	17	28.5		9	675
(2996)	1991	09	17.27188	23	13	46.75	-03	17	39.0		9	675
(3019)	1991	09	11.29878	23	17	57.39	-09	21	21.8	16.5	9	675
(3019)	1991	09	11.35451	23	17	54.56	-09	21	40.6		9	675
(3019)	1991	09	15.35226	23	14	46.52	-09	42	55.0		9	675
(3019)	1991	09	15.38958	23	14	44.66	-09	43	06.8		9	675
(3019)	1991	09	17.22847	23	13	19.36	-09	52	29.9		9	675

(3019)	1991	09	17.27188	23	13	17.28	-09	52	42.5		9	675
(3019)	1991	09	17.33941	23	13	14.04	-09	53	03.4	16.5	9	675
(3019)	1991	09	17.37222	23	13	12.43	-09	53	12.6		9	675
(3032)	1991	09	15.35226	23	15	41.33	-10	17	15.9		9	675
(3032)	1991	09	15.38958	23	15	39.49	-10	17	26.2		9	675
(3032)	1991	09	17.33941	23	14	08.97	-10	26	40.9	16.0	9	675
(3032)	1991	09	17.37222	23	14	07.35	-10	26	49.8		9	675
(3111)	1981	05	08.35938	15	04	47.40	-14	49	01.1		6	675
(3111)	1981	05	09.31562	15	03	46.57	-14	45	14.8		6	675
(3138)	1978	12	01.27691	03	44	32.53	+17	24	36.0		6	675
(3238)	1988	10	08.36111	03	07	25.14	+26	02	23.0		7	675
(3238)	1988	10	08.38889	03	07	24.21	+26	02	34.3		7	675
(3280)	1991	09	11.29878	23	17	52.52	-02	12	47.3	15.5	9	675
(3280)	1991	09	11.35451	23	17	49.46	-02	13	02.1		9	675
(3280)	1991	09	17.22847	23	12	50.40	-02	37	57.2		9	675
(3280)	1991	09	17.27188	23	12	48.11	-02	38	08.5		9	675
(3297)	1978	11	30.26007	03	31	19.12	+15	58	39.1		6	675
(3297)	1978	12	01.27691	03	30	31.79	+15	56	50.0		6	675
(3541)	1978	11	30.26007	03	41	57.68	+16	20	24.2		6	675
(3541)	1978	12	01.27691	03	40	57.33	+16	18	27.8		6	675
(3748)	1981	05	08.35938	15	02	37.66	-19	52	59.5		6	675
(3748)	1981	05	09.31562	15	01	38.25	-19	51	34.5		6	675
(3785)	1991	09	11.29878	23	08	13.96	-06	22	38.4	16.5	9	675
(3785)	1991	09	11.35451	23	08	11.45	-06	22	55.9		9	675
(3785)	1991	09	17.22847	23	04	01.61	-06	53	24.2		9	675
(3785)	1991	09	17.27188	23	03	59.69	-06	53	37.8		9	675
(3807)	1991	09	11.29878	22	56	35.36	-07	26	28.3	16.0	9	675
(3807)	1991	09	11.35451	22	56	32.41	-07	26	57.3		9	675
(3814)	1978	11	30.26007	03	36	35.38	+17	11	31.2		6	675
(3814)	1978	12	01.27691	03	35	47.84	+17	09	00.1		6	675
(3821)	1991	09	11.29878	22	59	19.00	-07	10	01.0	18.0	9	675
(3821)	1991	09	11.35451	22	59	16.48	-07	10	17.2		9	675
(3837)	1981	05	08.35938	14	57	11.47	-17	54	55.6		6	675
(4042)	1991	09	15.35226	23	31	09.17	-09	32	06.9	18.0	9	675
(4042)	1991	09	17.33941	23	29	17.70	-09	43	02.9	17.8	9	675
(4042)	1991	09	17.37222	23	29	15.90	-09	43	13.0		9	675
(4056)	1991	09	15.35226	23	33	30.69	-13	03	43.7	17.5	9	675
(4056)	1991	09	17.33941	23	31	57.70	-13	20	37.7	17.2	9	675
(4056)	1991	09	17.37222	23	31	56.14	-13	20	54.1		9	675
(4261)	1981	05	09.28958	14	52	41.20	-19	09	02.6		6	675
(4406)	1991	09	11.29878	23	25	57.42	-06	22	40.3	18.5	9	675
(4406)	1991	09	11.35451	23	25	54.85	-06	22	55.8		9	675
(4406)	1991	09	17.33941	23	21	39.36	-06	50	38.3	18.0	9	675
(4406)	1991	09	17.37222	23	21	37.98	-06	50	46.3		9	675
(4441)	1978	11	30.26007	03	32	47.75	+18	56	36.5		6	675
(4441)	1978	12	01.27691	03	31	56.75	+18	54	21.4		6	675
(4506)	1978	11	30.26007	03	33	39.99	+18	50	11.0		6	675
(4506)	1978	12	01.27691	03	32	47.41	+18	48	08.4		6	675
(4619)	1977	10	12.28681	01	05	58.95	+09	56	05.9		4	675
(4619)	1977	10	12.35347	01	05	55.45	+09	55	45.5		4	675
(4734)	1981	05	08.33333	15	04	27.77	-18	26	01.5		6	675
(4734)	1981	05	09.31562	15	03	29.46	-18	22	16.1		6	675
(4741)	1973	09	30.22257	00	47	25.99	+02	49	02.5		4	675
(4741)	1973	09	30.28785	00	47	22.89	+02	48	45.3		4	675
(4741)	1973	10	05.32917	00	43	34.77	+02	26	59.0		4	675
(4741)	1973	10	05.39132	00	43	31.85	+02	26	43.2		4	675
(4778)	1981	05	08.35938	15	02	55.66	-17	45	06.6		6	675
(4778)	1981	05	09.31562	15	02	11.21	-17	42	21.2		6	675
(4846)	1981	05	08.35938	14	54	48.80	-19	53	12.2		6	675

(4846)	1981 05 09.31562	14 54 02.52	-19 51 00.0		6	675
(4971)	1991 09 15.35226	23 42 09.03	-07 34 55.2	17.0	9	675
(4971)	1991 09 15.38958	23 42 06.90	-07 35 10.7		9	675
(4971)	1991 09 17.33941	23 40 18.89	-07 48 19.3	16.8	9	675
(4971)	1991 09 17.37222	23 40 17.00	-07 48 32.4		9	675
(4972)	1978 11 30.26007	03 43 23.03	+18 00 49.9		6	675
(4972)	1978 12 01.27691	03 42 33.50	+17 58 07.5		6	675
(4980)	1991 09 11.29878	23 22 28.05	-06 58 20.1	17.0	9	675
(4980)	1991 09 11.35451	23 22 25.30	-06 58 36.1		9	675
(4980)	1991 09 15.35226	23 19 26.89	-07 16 36.9	17.5	9	675
(4980)	1991 09 15.38958	23 19 25.16	-07 16 45.7		9	675
(4980)	1991 09 17.22847	23 18 03.45	-07 24 51.9		9	675
(4980)	1991 09 17.27188	23 18 01.52	-07 25 02.2		9	675
(4980)	1991 09 17.33941	23 17 58.40	-07 25 20.5	17.0	9	675
(4980)	1991 09 17.37222	23 17 56.87	-07 25 28.0		9	675
(4988)	1991 09 11.29878	23 19 19.41	-02 57 03.4	16.0	9	675
(4988)	1991 09 11.35451	23 19 16.63	-02 57 26.0		9	675
(4988)	1991 09 17.22847	23 14 49.20	-03 37 38.5		9	675
(4988)	1991 09 17.27188	23 14 47.16	-03 37 56.1		9	675
(5000)	1991 09 15.35226	23 35 36.82	-07 36 55.8	16.5	9	675
(5000)	1991 09 15.38958	23 35 35.25	-07 37 19.0		9	675
(5000)	1991 09 17.33941	23 34 19.88	-07 56 56.7	16.8	9	675
(5000)	1991 09 17.37222	23 34 18.47	-07 57 15.7		9	675
(5005)	1978 11 30.26007	03 24 05.60	+21 24 09.4		6	675
(5005)	1978 12 01.27691	03 23 11.38	+21 20 10.6		6	675
(5009)	1978 11 30.26007	03 40 18.94	+20 19 29.7		6	675
(5009)	1978 12 01.27691	03 39 12.45	+20 16 24.0		6	675
(5043)	1991 12 06.24322	03 56 34.82	+21 06 36.3		9	675
(5043)	1991 12 06.37344	03 56 28.19	+21 06 20.1		9	675

688 Lowell Observatory, Anderson Mesa Station
E. Bowell, Lowell Observatory, 1400 West Mars Hill Road, Flagstaff AZ 86001, U.S.A.
Observers H. L. Giclas, B. A. Skiff
Measurer B. A. Skiff

1991 VL	1982 07 24.30833	22 20 11.19	-08 33 31.0		688
1991 VL	1982 07 24.31875	22 20 09.51	-08 33 37.2		688
1991 XX	1974 08 10.16944	16 39 13.33	-30 51 33.6		688

690 Lowell Observatory
E. Bowell, Lowell Observatory, 1400 West Mars Hill Road, Flagstaff, AZ 86001, U.S.A.
Observers E. C. Slipher, C. W. Tombaugh
Measurers C. M. Olmstead, B. A. Skiff

1931 TX2	1931 10 10.20833	23 49 30.02	-00 50 16.6	R	690
1931 TZ2	1931 10 07.22500	00 03 28.86	+04 23 34.6	P	690
1983 TR2	1930 12 13.19236	03 19 21.21	+32 14 18.4		690
1983 TR2	1930 12 16.19444	03 17 11.94	+32 07 26.8	R	690
1987 DE6	1930 12 13.19236	03 25 39.50	+27 09 50.6	R	690
1987 DE6	1930 12 14.20069	03 25 03.69	+27 05 15.0	R	690
1987 DE6	1930 12 16.19444	03 23 57.57	+26 56 18.3	R	690
(41)	1931 10 07.22500	00 03 25.69	-01 41 31.7		690
(41)	1931 10 10.20833	00 01 24.60	-02 05 11.3		690
(41)	1931 10 11.21181	00 00 45.23	-02 12 57.0		690
(302)	1931 10 07.22500	23 44 03.47	-02 20 06.3		690
(302)	1931 10 10.20833	23 41 39.87	-02 29 09.6		690
(302)	1931 10 11.21181	23 40 53.87	-02 31 57.8		690
(334)	1931 10 07.22500	00 15 04.18	-03 45 15.8		690
(334)	1931 10 10.20833	00 13 21.38	-03 56 51.6		690

(334)	1931 10 11.21181	00 12 47.63	-04 00 36.2			690
(516)	1930 12 14.20069	02 42 32.03	+34 03 11.1			690
(572)	1931 10 07.22500	23 49 49.16	+02 32 30.4			690
(572)	1931 10 10.20833	23 48 09.72	+01 55 25.9			690
(572)	1931 10 11.21181	23 47 38.67	+01 43 15.6			690
(1030)	1931 10 07.22500	23 41 26.50	+01 15 41.6		R	690
(1030)	1931 10 10.20833	23 39 46.64	+00 54 11.2			690
(1030)	1931 10 11.21181	23 39 14.49	+00 47 03.2			690
(1155)	1930 12 16.19444	03 23 16.20	+22 41 03.1		R	690
(1176)	1930 12 14.20069	03 24 59.26	+23 57 32.4		p	690
(1205)	1931 10 07.22500	00 08 51.72	-05 00 39.4			690
(1205)	1931 10 10.20833	00 06 16.95	-04 45 30.9			690
(1205)	1931 10 11.21181	00 05 27.09	-04 40 04.3			690
(1223)	1931 10 07.22500	00 05 24.99	-02 01 15.9			690
(1223)	1931 10 10.20833	00 03 11.72	-02 12 23.5			690
(1223)	1931 10 11.21181	00 02 28.28	-02 15 57.1			690
(1396)	1930 12 13.19236	03 24 22.23	+25 09 04.5		R	690
(1442)	1931 10 10.20833	00 04 33.65	+01 43 40.0		R	690
(1442)	1931 10 11.21181	00 03 52.08	+01 38 34.9			690
(1495)	1930 12 13.19236	03 35 24.86	+34 34 52.8		P	690
(1495)	1930 12 14.20069	03 34 31.09	+34 31 41.3		V	690
(1495)	1930 12 16.19444	03 32 47.82	+34 25 03.3		R	690
(1576)	1931 10 07.22500	23 37 04.25	-02 50 14.0			690
(1576)	1931 10 10.20833	23 35 17.00	-03 02 37.4		R	690
(1576)	1931 10 11.21181	23 34 42.60	-03 06 36.0			690
(1622)	1930 12 13.19236	03 27 51.10	+27 54 42.8		R	690
(1622)	1930 12 14.20069	03 26 57.17	+27 50 50.7		V	690
(3588)	1930 12 16.19444	03 36 39.59	+29 45 22.1		R	690
(3820)	1930 12 13.19236	02 48 28.84	+30 57 30.2		I	690
(3820)	1930 12 16.19444	02 47 16.83	+30 40 05.7		P	690

691 Kitt Peak, Steward Observatory
T. Gehrels, Space Sciences Building, University of Arizona,
Tucson, AZ 85721, U.S.A.
Observers T. Gehrels, D. Rabinowitz, J. V. Scotti
0.91-m SPACEWATCH telescope
GSC
See also MPC 9198, MPC 10373 and Astron. J. 91, 1242, 1986

1992 BA	1992 02 10.09623	07 49 20.66	+16 49 18.5			691
1992 BA	1992 02 10.10243	07 49 20.16	+16 49 29.3	20.6	V	691
1992 BA	1992 02 10.10751	07 49 19.78	+16 49 37.1			691
1992 BD	1992 02 09.09299	03 23 13.78	+25 28 12.0	19.3	V	691
1992 BD	1992 02 09.10812	03 23 14.75	+25 28 27.5			691
1992 BD	1992 02 09.12060	03 23 15.57	+25 28 40.6			691
1992 BE	1992 02 09.14033	07 53 39.49	+24 36 32.3			691
1992 BE	1992 02 09.16687	07 53 38.68	+24 36 34.3			691
1992 BE	1992 02 09.19621	07 53 37.80	+24 36 35.8	20.3	V	691
1992 DU	* 1992 02 26.46413	11 42 29.59	+02 53 55.1	19.3	V	691
1992 DU	1992 02 26.48371	11 41 58.11	+02 43 56.8	19.5	V	691
1992 DU	1992 02 26.50207	11 41 28.52	+02 34 25.2	19.5	V	691
1992 DU	1992 02 26.50974	11 41 16.83	+02 30 40.9	19.8	V	691
1992 DU	1992 02 26.52461	11 40 53.08	+02 23 04.5	19.9	V	691
1992 DU	1992 02 26.53906	11 40 29.91	+02 15 36.0	19.6	V	691
1992 DU	1992 02 27.20973	11 24 04.32	-03 16 44.6	19.9	V	691
1992 DU	1992 02 27.21714	11 23 53.51	-03 20 14.7	19.5	V	691
1992 DU	1992 02 27.22411	11 23 42.87	-03 23 36.3	19.5	V	691
1992 DU	1992 02 27.23704	11 23 23.37	-03 29 47.6	19.0	V	691
1992 DU	1992 02 27.24368	11 23 13.34	-03 32 57.0	19.0	V	691
1992 DU	1992 02 27.33861	11 20 49.96	-04 17 58.8	19.1	V	691

1992 DU	1992 02 27.34542	11 20 39.44	-04 21 14.2	19.2 V		691
1992 DU	1992 02 27.48743	11 17 08.29	-05 27 18.2	19.4 V		691
1992 DU	1992 02 27.49472	11 16 58.00	-05 30 33.0	20.4 V		691
1992 DU	1992 02 28.29057	10 59 10.18	-11 16 48.7			691
1992 DU	1992 02 28.30489	10 58 50.53	-11 22 37.7	19.1 V		691
1992 DU	1992 02 29.29157	10 38 42.54	-17 27 38.2	19.8 V		691
1992 DU	1992 02 29.29867	10 38 33.68	-17 30 02.6	19.8 V		691
1992 DU	1992 02 29.30327	10 38 28.11	-17 31 34.2	19.8 V		691

760 Goethe Link
E. Bowell, Lowell Observatory, 1400 West Mars Hill Road,
Flagstaff, AZ 86001, U.S.A.
Observer V. Pytko
Measurer C. M. Olmstead
0.25-m refractor
PDS scanning microdensitometer
PPM, global solutions

1966 DA	1966 02 17.10740	08 16 47.28	+05 15 58.3			760
1966 DA	1966 02 17.15288	08 16 44.90	+05 16 02.3			760
(429)	1966 02 17.10740	08 39 50.27	+03 12 08.1		E	760
(429)	1966 02 17.15288	08 39 48.07	+03 12 24.3		E	760
(777)	1966 02 17.10740	08 33 46.90	+09 02 52.8			760
(777)	1966 02 17.15288	08 33 44.71	+09 02 53.4			760

801 Oak Ridge
R. E. McCrosky, Harvard-Smithsonian Center for Astrophysics,
60 Garden Street, Cambridge, MA 02138, U.S.A.
Observers R. E. McCrosky, C.-Y. Shao
1.5-m reflector + CCD
GSC

1931 UD	1992 02 03.11336	06 41 34.15	+37 39 14.2			801
1931 UD	1992 02 03.13166	06 41 33.46	+37 39 06.5			801
1931 UD	1992 02 06.11542	06 39 46.90	+37 18 40.4			801
1931 UD	1992 02 06.14693	06 39 45.79	+37 18 27.0			801
1936 QE1	1992 01 01.28429	08 00 15.03	+02 25 55.5			801
1936 QE1	1992 01 06.29427	07 55 55.26	+02 43 59.2			801
1936 QE1	1992 01 06.31377	07 55 54.17	+02 44 04.0			801
1940 GO	1992 01 01.43375	14 21 39.76	-01 46 59.6			801
1940 GO	1992 01 01.44582	14 21 40.96	-01 47 03.4			801
1940 GO	1992 02 06.38951	15 07 13.60	-03 34 13.6			801
1940 GO	1992 02 06.40157	15 07 14.32	-03 34 13.8			801
1972 RX1	1991 12 31.95957	00 37 07.27	+00 48 54.6			801
1972 RX1	1992 01 05.98133	00 44 24.50	+01 34 06.9			801
1976 WC1	1992 02 06.16844	08 12 52.20	+34 52 39.3			801
1976 WC1	1992 02 06.18308	08 12 51.09	+34 52 43.5			801
1976 WC1	1992 02 07.22887	08 11 42.21	+34 58 03.3			801
1976 WC1	1992 02 07.24326	08 11 41.25	+34 58 07.3			801
1978 LG	1992 02 06.05027	03 54 04.11	+24 23 49.4			801
1978 LG	1992 02 06.07947	03 54 04.98	+24 23 45.8			801
1978 LG	1992 02 07.06722	03 54 37.31	+24 21 45.2			801
1978 LG	1992 02 07.09441	03 54 38.17	+24 21 42.0			801
1978 RH1	1991 10 09.25436	01 31 10.81	+07 38 55.0			801
1978 RH1	1991 10 09.27045	01 31 09.83	+07 38 47.5			801
1978 RH1	1991 10 11.23611	01 29 13.40	+07 23 37.7			801
1978 RH1	1991 10 11.25145	01 29 12.50	+07 23 30.5			801
1978 RH1	1991 11 06.12221	01 06 00.33	+04 26 37.9			801
1978 RH1	1991 11 06.13916	01 05 59.60	+04 26 32.7			801
1979 YO	1992 02 06.33633	13 03 05.31	+02 01 48.7			801
1979 YO	1992 02 06.36618	13 03 05.70	+02 01 55.8			801

1980	TX3	1992	02	05.25818	09	54	54.80	+10	39	55.0	801
1980	TX3	1992	02	05.27316	09	54	54.09	+10	39	57.1	801
1980	TL13	1992	02	06.44787	16	11	10.31	-20	29	50.5	801
1980	TL13	1992	02	06.45115	16	11	10.65	-20	29	50.0	801
1981	EY17	1987	11	23.27904	04	41	06.99	+18	03	27.6	801
1981	RP2	1992	02	07.19231	08	08	28.82	+16	55	41.7	801
1981	RP2	1992	02	07.20902	08	08	27.85	+16	55	41.6	801
1981	SD4	1992	02	07.04163	03	31	31.77	+20	01	17.2	801
1981	SD4	1992	02	07.06234	03	31	32.57	+20	01	18.7	801
1981	WA1	1991	12	05.19065	04	13	58.53	+17	12	36.2	801
1981	WA1	1991	12	05.21535	04	13	57.20	+17	12	32.8	801
1982	DU	1992	02	05.25433	09	53	39.30	+26	15	49.5	801
1982	DU	1992	02	05.30317	09	53	35.76	+26	15	41.1	801
1982	DU	1992	02	07.32093	09	51	12.46	+26	09	41.1	801
1982	DU	1992	02	07.33446	09	51	11.47	+26	09	38.5	801
1982	FJ	1992	02	06.04692	04	07	51.78	+40	08	02.6	801
1982	FJ	1992	02	06.08264	04	07	52.35	+40	07	54.4	801
1982	FJ	1992	02	07.07959	04	08	13.02	+40	03	34.4	801
1982	FJ	1992	02	07.10787	04	08	13.62	+40	03	27.6	801
1982	WE	1992	02	07.32348	10	24	58.59	+35	11	47.9	801
1982	WE	1992	02	07.33650	10	24	57.78	+35	11	53.1	801
1982	YQ	1992	02	05.35002	13	37	37.87	+10	30	52.9	801
1982	YQ	1992	02	05.36823	13	37	38.51	+10	30	58.7	801
1982	YQ	1992	02	05.37438	13	37	38.65	+10	30	59.9	801
1982	YQ	1992	02	05.39615	13	37	39.41	+10	31	05.7	801
1983	AA3	1992	02	07.28669	09	16	35.33	+31	51	02.5	801
1983	AA3	1992	02	07.30258	09	16	34.27	+31	51	04.0	801
1983	CE	1992	02	05.38729	13	51	08.32	+05	16	28.7	801
1983	CE	1992	02	05.40102	13	51	08.82	+05	16	31.3	801
1983	CE	1992	02	06.39206	13	51	52.10	+05	21	40.0	801
1983	CE	1992	02	06.40936	13	51	52.82	+05	21	45.3	801
1983	RC5	1992	02	05.31287	11	02	01.35	+04	07	22.5	801
1983	RC5	1992	02	05.33164	11	02	00.41	+04	07	23.4	801
1983	TD2	1992	02	07.05355	03	35	52.65	+09	58	10.7	801
1983	TD2	1992	02	07.06481	03	35	53.52	+09	58	15.9	801
1984	DN	1992	02	06.11329	06	47	38.76	+15	29	54.2	801
1984	DN	1992	02	06.13683	06	47	38.08	+15	30	03.8	801
1984	FS	1992	02	03.03984	05	22	25.93	+08	42	59.7	801
1984	FS	1992	02	03.05726	05	22	25.93	+08	43	07.0	801
1985	CG	1992	02	07.02468	03	21	15.68	+17	18	14.8	801
1985	CG	1992	02	07.03427	03	21	16.46	+17	18	18.5	801
1985	DY1	1992	02	07.11105	04	35	31.40	+22	19	10.7	801
1985	DY1	1992	02	07.14093	04	35	32.19	+22	19	12.3	801
1985	GW	1992	02	07.10473	04	26	37.24	+20	02	44.2	801
1985	GW	1992	02	07.13432	04	26	38.19	+20	02	53.4	801
1985	RS	1992	02	05.22632	09	38	22.81	+27	46	45.0	801
1985	RS	1992	02	05.25090	09	38	21.13	+27	46	47.8	801
1985	UB5	1992	02	06.12762	08	07	21.66	+04	39	52.0	801
1985	UB5	1992	02	06.15696	08	07	20.33	+04	40	00.5	801
1985	UB5	1992	02	07.18800	08	06	35.01	+04	44	45.3	801
1985	UB5	1992	02	07.20139	08	06	34.39	+04	44	48.7	801
1986	QS	1992	02	06.96263	01	45	26.03	+19	11	27.3	801
1986	QS	1992	02	06.97463	01	45	27.17	+19	11	32.4	801
1986	RD1	1992	02	07.00617	02	16	56.60	+22	15	34.1	801
1986	RD1	1992	02	07.01655	02	16	57.46	+22	15	36.3	801
1986	RP1	1991	10	09.29891	01	47	32.59	+08	39	31.7	801
1986	RP1	1991	10	09.31531	01	47	31.79	+08	39	25.8	801
1986	RP1	1992	01	08.00167	01	27	13.98	+05	39	03.8	801
1986	RP1	1992	01	08.01811	01	27	14.63	+05	39	08.1	801

1986	RP1	1992	01	08.97127	01	27	54.65	+05	43	12.4		801
1986	RP1	1992	01	08.99428	01	27	55.62	+05	43	18.5		801
1986	RU5	1992	02	07.10176	04	21	10.02	+05	27	11.2		801
1986	RU5	1992	02	07.13839	04	21	10.65	+05	27	21.3		801
1986	TM1	1992	02	07.33194	10	18	46.81	-08	29	02.6		801
1986	TM1	1992	02	07.34581	10	18	46.17	-08	28	59.9		801
1987	DJ	1992	02	07.28308	09	14	13.97	+28	38	39.7		801
1987	DJ	1992	02	07.29826	09	14	13.15	+28	38	44.1		801
1987	DS6	1992	02	03.12882	07	12	39.04	+10	36	59.9		801
1987	DS6	1992	02	03.14837	07	12	38.31	+10	37	04.7		801
1987	EH	1992	02	07.26214	09	00	35.74	+07	47	37.0		801
1987	EH	1992	02	07.27894	09	00	34.93	+07	47	43.5		801
1987	SM13	1992	02	06.31339	12	00	11.76	+09	57	47.2		801
1987	SM13	1992	02	06.33896	12	00	11.12	+09	57	55.0		801
1987	UX1	1992	02	06.13142	08	09	31.90	+13	32	30.1		801
1987	UX1	1992	02	06.16157	08	09	30.04	+13	32	35.0		801
1987	UX1	1992	02	07.19576	08	08	30.63	+13	35	31.2		801
1987	UX1	1992	02	07.21322	08	08	29.61	+13	35	34.0		801
1987	WF	1992	02	06.30388	11	09	37.03	+18	50	51.5		801
1987	WF	1992	02	06.32413	11	09	36.13	+18	50	58.9		801
1988	BN2	1992	02	05.35481	13	50	17.09	+28	01	53.6		801
1988	BN2	1992	02	05.37124	13	50	17.60	+28	02	03.7		801
1988	BN2	1992	02	06.35157	13	50	59.26	+28	10	16.6		801
1988	BN2	1992	02	06.36966	13	50	59.98	+28	10	25.9		801
1988	CD4	1992	02	07.02797	03	24	44.73	+19	37	42.3		801
1988	CD4	1992	02	07.04867	03	24	45.62	+19	37	43.1		801
1988	ED	1992	02	06.17082	08	23	19.62	+31	05	08.1		801
1988	ED	1992	02	06.18547	08	23	18.61	+31	05	04.4		801
1988	ED	1992	02	07.23112	08	22	08.86	+31	00	47.9		801
1988	ED	1992	02	07.24507	08	22	07.92	+31	00	44.2		801
1988	EU	1992	02	05.97690	01	42	31.77	+12	08	09.5		801
1988	EU	1992	02	06.00209	01	42	33.41	+12	08	20.0		801
1988	EU	1992	02	06.97233	01	43	38.94	+12	15	14.7		801
1988	EU	1992	02	06.99718	01	43	40.59	+12	15	25.3		801
1988	EM1	1991	12	05.34970	08	41	15.83	+02	06	23.5		801
1988	EM1	1991	12	05.37634	08	41	16.47	+02	06	13.6		801
1988	EM1	1992	02	07.19763	08	12	54.15	+04	07	25.4		801
1988	GH	1992	02	06.05297	04	20	06.13	+32	06	42.4		801
1988	GH	1992	02	06.08897	04	20	06.72	+32	06	39.8		801
1988	GH	1992	02	07.09800	04	20	24.74	+32	05	03.7		801
1988	GH	1992	02	07.14365	04	20	25.54	+32	04	59.5		801
1988	PK1	1992	02	06.37770	14	12	01.10	-21	59	53.8	r	801
1988	PK1	1992	02	06.39542	14	12	01.71	-21	59	58.9		801
1988	RA1	1992	02	06.09922	06	40	03.19	+33	15	10.0		801
1988	RA1	1992	02	06.13410	06	40	02.29	+33	15	05.5		801
1989	GF	1991	12	05.25041	06	39	21.90	+24	31	20.4		801
1989	GN	1992	02	03.09797	06	07	11.63	+09	23	32.0		801
1989	GN	1992	02	03.11778	06	07	11.20	+09	23	40.6		801
1989	TZ15	1992	02	06.33284	12	02	09.91	+01	41	59.3		801
1989	TZ15	1992	02	06.37212	12	02	09.10	+01	41	58.1		801
1990	BG	1992	02	05.44484	18	05	33.58	+13	50	41.3		801
1990	BG	1992	02	05.44794	18	05	34.71	+13	50	37.1		801
1990	BG	1992	02	06.42916	18	11	46.10	+13	25	35.9		801
1990	BG	1992	02	06.43081	18	11	46.72	+13	25	33.6		801
1990	HC1	1992	02	06.00917	02	23	00.83	-08	03	40.0		801
1990	HC1	1992	02	06.02396	02	23	01.81	-08	03	32.0		801
1990	HC1	1992	02	07.01013	02	24	08.79	-07	54	39.2		801
1990	HC1	1992	02	07.02045	02	24	09.45	-07	54	32.2		801
1990	OJ2	1992	02	06.29714	10	46	39.29	+15	46	41.8		801

1990	OJ2	1992	02	06.31024	10	46	38.61	+15	46	47.2		801
1990	OD4	1992	02	07.11339	04	53	44.61	+08	29	36.3		801
1990	OD4	1992	02	07.14603	04	53	44.96	+08	29	45.5		801
1990	PA	1992	02	06.29301	10	41	24.27	+24	24	31.7		801
1990	PA	1992	02	06.30797	10	41	23.57	+24	24	38.6		801
1990	RV2	1992	02	06.12581	08	06	08.18	+06	31	03.2		801
1990	RV2	1992	02	06.15419	08	06	06.73	+06	31	10.7		801
1990	RV2	1992	02	07.18618	08	05	17.17	+06	35	48.6		801
1990	RV2	1992	02	07.21816	08	05	15.60	+06	35	57.2		801
1990	SA1	1992	02	06.12935	08	09	29.17	+14	07	45.6		801
1990	SA1	1992	02	06.15913	08	09	27.31	+14	07	50.5		801
1990	SA1	1992	02	07.19397	08	08	25.45	+14	10	39.8		801
1990	SA1	1992	02	07.21081	08	08	24.42	+14	10	42.6		801
1990	TN	1992	02	05.34703	13	16	08.08	+01	55	03.2		801
1990	TN	1992	02	05.38427	13	16	08.58	+01	55	01.7		801
1990	TK1	1992	01	02.34686	09	45	49.71	+13	34	31.9		801
1990	TK1	1992	01	02.37579	09	45	49.19	+13	34	36.8		801
1990	TK1	1992	01	08.34572	09	43	32.26	+13	52	11.1		801
1990	TK1	1992	01	08.36994	09	43	31.59	+13	52	15.6		801
1990	TZ2	1992	02	05.32057	12	00	15.99	+07	01	27.1		801
1990	TZ2	1992	02	05.33767	12	00	15.70	+07	01	35.2		801
1990	UY	1992	02	06.17829	08	33	22.02	+08	45	30.0		801
1990	UY	1992	02	06.19727	08	33	21.11	+08	45	36.6		801
1990	UY	1992	02	07.22502	08	32	33.99	+08	51	35.1		801
1990	UY	1992	02	07.24090	08	32	33.25	+08	51	40.4		801
1990	UG2	1992	02	05.22130	09	36	21.24	+22	35	44.1		801
1990	UG2	1992	02	05.24547	09	36	20.01	+22	35	54.2		801
1990	VD2	1992	02	06.32854	11	49	46.03	+00	30	15.7		801
1990	VD2	1992	02	06.35970	11	49	45.37	+00	30	19.9		801
1990	VP2	1992	02	06.30144	11	04	36.12	+29	05	38.5		801
1990	VP2	1992	02	06.32168	11	04	35.22	+29	05	46.1		801
1990	XH	1992	02	07.29480	09	22	06.59	+08	14	40.9		801
1990	XH	1992	02	07.30775	09	22	06.02	+08	14	45.6		801
1991	CC	1992	02	05.39880	14	40	38.50	+00	34	03.1		801
1991	CC	1992	02	05.43066	14	40	39.38	+00	34	05.4		801
1991	VL	1992	02	02.96079	00	22	11.60	+10	28	42.1	r	801
1991	VL	1992	02	02.98060	00	22	12.81	+10	28	38.8	r	801
1991	VL	1992	02	05.97412	00	25	21.53	+10	18	11.0		801
1991	VL	1992	02	05.99920	00	25	23.05	+10	18	05.0		801
1991	YA	1992	02	03.02522	04	55	57.15	+00	27	07.1		801
1991	YA	1992	02	03.03447	04	55	57.45	+00	26	51.4		801
1991	YA	1992	02	07.11572	04	58	21.32	-01	22	38.0		801
1991	YA	1992	02	07.12894	04	58	21.83	-01	22	57.8		801
1992	AA	1992	02	06.10522	05	46	59.48	+33	58	52.0		801
1992	AA	1992	02	06.10777	05	46	59.79	+33	58	53.0		801
1992	AB	1992	02	03.01058	03	51	50.40	+33	08	08.8		801
1992	AB	1992	02	03.01742	03	51	50.30	+33	08	19.1		801
1992	AB	1992	02	06.04340	03	51	13.86	+34	32	10.4		801
1992	AB	1992	02	06.06019	03	51	13.70	+34	32	37.6		801
1992	AB	1992	02	07.07668	03	51	09.02	+35	00	15.2		801
1992	AB	1992	02	07.09206	03	51	08.93	+35	00	40.2		801
1992	AD	1992	02	05.20126	08	03	20.78	+21	00	31.3		801
1992	AD	1992	02	05.23963	08	03	20.09	+21	00	36.4		801
1992	AE	1992	02	06.02657	03	27	33.92	+19	11	09.8		801
1992	AE	1992	02	07.03117	03	29	53.01	+19	23	55.4		801
1992	AE	1992	02	07.03751	03	29	53.88	+19	24	00.1		801
1992	BC	1992	02	05.19331	09	47	23.89	+46	23	50.5	t	801
1992	BC	1992	02	05.19510	09	47	24.42	+46	24	10.6	t	801
1992	BC	1992	02	06.28584	09	54	05.26	+49	45	16.9		801

1992 BC		1992	02	06.28700	09	54	05.69	+49	45	28.8		801
1992 BF		1992	02	06.16373	09	25	45.36	+13	33	53.3		801
1992 BF		1992	02	06.16576	09	25	44.55	+13	33	49.5		801
4577 P-L		1992	02	07.22052	08	23	53.26	+04	08	16.7		801
4577 P-L		1992	02	07.23858	08	23	52.39	+04	08	26.8		801
7068 P-L		1991	10	09.31236	04	19	35.39	+18	02	32.1		801
7068 P-L		1991	10	09.34207	04	19	35.49	+18	02	22.0		801
7068 P-L		1991	11	07.24497	04	08	13.00	+14	38	21.8		801
7068 P-L		1991	11	07.26909	04	08	11.79	+14	38	10.5		801
7571 P-L		1988	12	10.21721	05	53	28.02	+32	02	14.7		801
7604 P-L		1992	02	07.25509	08	50	20.38	+23	09	33.4		801
7604 P-L		1992	02	07.26950	08	50	19.47	+23	09	37.7		801
1017 T-3		1991	11	03.15870	01	21	43.55	+21	10	06.7		801
1017 T-3		1991	11	03.17480	01	21	42.80	+21	09	59.9		801
2078 T-3		1992	02	06.34779	13	45	43.32	-14	24	55.4		801
2078 T-3		1992	02	06.36300	13	45	43.94	-14	25	03.0		801
5119 T-3		1992	02	06.10280	05	36	42.18	-14	04	35.4		801
5119 T-3		1992	02	06.11013	05	36	42.37	-14	04	25.9		801
5119 T-3		1992	02	07.11980	05	37	13.96	-13	43	50.4		801
5119 T-3		1992	02	07.13110	05	37	14.30	-13	43	36.2		801
(243)		1992	02	06.09117	05	02	21.69	+23	54	53.2		801
(243)		1992	02	06.15173	05	02	22.15	+23	54	51.5		801
(348)		1992	02	05.45571	15	23	24.94	-09	43	53.8		801
(348)		1992	02	05.45829	15	23	25.09	-09	43	53.9		801
(348)		1992	02	06.41856	15	24	12.58	-09	45	30.7		801
(348)		1992	02	06.44152	15	24	13.70	-09	45	33.2		801
(944)		1992	02	06.34404	13	27	44.83	+16	52	15.2		801
(944)		1992	02	06.37446	13	27	44.10	+16	52	17.5		801
(1134)		1992	02	07.12510	05	57	26.13	+43	39	02.8		801
(1134)		1992	02	07.15074	05	57	25.61	+43	38	51.9		801
(1346)		1992	02	07.05117	02	46	45.29	+01	02	14.2		801
(1346)		1992	02	07.05980	02	46	45.99	+01	02	19.7		801
(3200)		1992	02	06.96544	01	40	35.92	+15	36	21.6		801
(3200)		1992	02	06.99968	01	40	36.65	+15	36	02.9		801

808 El Leoncito
J. G. Sanguin, Felix Aguilar Observatory, Benavidez 8175 (Oeste),
AR-5413 Chimbas, San Juan, Argentina
Observers M. R. Cesco, R. Gil-Hutton, C. E. Lopez, H. S. Lopez, H. Mira,
J. G. Sanguin, J. E. Torres, J. A. Vicentela

1974 OE		1991	03	19.21412	12	44	57.11	-02	27	59.5	G	808
1974 OE		1991	03	19.26260	12	44	54.36	-02	27	49.0	G	808
1974 OE		1991	03	21.24086	12	42	57.86	-02	21	59.8		808
1974 OE		1991	03	21.27549	12	42	55.50	-02	21	53.1		808
1980 TL13		1991	01	21.11974	06	58	38.83	-27	43	19.8		808
1980 TL13		1991	01	21.14052	06	58	37.67	-27	43	17.3		808
1988 RB		1991	02	21.24183	11	31	20.39	-15	36	37.5		808
1988 RB		1991	02	21.28338	11	31	18.54	-15	36	35.4		808
1988 RR2		1991	03	19.21412	12	47	24.92	-02	09	36.8	G	808
1988 RR2		1991	03	19.26260	12	47	22.39	-02	09	18.4	G	808
1990 VJ15	*	1990	11	15.18010	03	06	26.10	+01	34	37.2		808
1990 VJ15		1990	11	15.21473	03	06	24.83	+01	34	26.8		808
1990 WD15	*	1990	11	17.25290	05	36	18.04	-18	18	44.6	b	808
1990 WD15		1990	11	17.30207	05	36	16.86	-18	19	10.7	b	808
1990 WE15	*	1990	11	17.25290	05	37	33.76	-17	55	20.7	b	808
1990 WE15		1990	11	17.30207	05	37	30.45	-17	55	41.7	b	808
1990 WF15	*	1990	11	17.25290	05	38	51.86	-18	31	21.2	b	808
1990 WF15		1990	11	17.30207	05	38	50.09	-18	31	34.8	b	808
1990 WG15	*	1990	11	17.25290	05	42	25.02	-18	41	32.0	b	808

1990 WG15		1990	11	17.30207	05	42	22.72	-18	41	40.3	b 808
1990 WH15	*	1990	11	17.25290	05	42	57.28	-17	02	41.1	b 808
1990 WH15		1990	11	17.30207	05	42	55.42	-17	03	31.6	b 808
1990 WJ15	*	1990	11	17.25290	05	44	15.57	-18	17	41.1	b 808
1990 WJ15		1990	11	17.30207	05	44	14.23	-18	17	59.1	b 808
1990 WK15	*	1990	11	17.25290	05	45	24.01	-16	55	27.3	b 808
1990 WK15		1990	11	17.30207	05	45	24.37	-16	55	52.9	b 808
1991 FQ4	*	1991	03	19.21412	12	36	58.82	-03	13	15.0	G 808
1991 FQ4		1991	03	19.26260	12	36	56.05	-03	13	08.5	G 808
1991 FQ4		1991	03	21.24086	12	34	56.15	-03	11	28.7	808
1991 FQ4		1991	03	21.27549	12	34	53.66	-03	11	26.0	808
(68)		1991	06	06.04828	14	06	54.03	-13	21	33.4	808
(68)		1991	06	06.08291	14	06	52.91	-13	21	31.5	808
(146)		1991	04	20.18215	12	57	18.44	+14	48	00.7	808
(146)		1991	04	20.22301	12	57	16.21	+14	47	59.4	808
(177)		1991	05	21.21039	16	00	08.98	-22	34	36.6	808
(177)		1991	05	21.23809	16	00	07.28	-22	34	36.4	808
(186)		1991	06	13.15313	16	26	33.11	-43	03	37.1	808
(186)		1991	06	13.18499	16	26	30.59	-43	03	40.9	808
(218)		1990	11	21.25063	05	35	45.82	+01	25	22.5	808
(218)		1990	11	21.28942	05	35	44.10	+01	25	12.0	808
(218)		1990	11	24.28884	05	33	32.54	+01	12	11.7	808
(218)		1990	11	24.31828	05	33	31.24	+01	12	05.5	808
(309)		1991	03	21.24086	12	34	38.89	-04	47	03.5	808
(309)		1991	03	21.27549	12	34	36.74	-04	46	54.1	808
(330)		1990	11	21.16891	02	54	59.21	+02	07	20.7	808
(330)		1990	11	21.20354	02	54	57.64	+02	07	21.0	808
(373)		1991	06	13.15313	16	22	22.90	-43	11	59.5	808
(373)		1991	06	13.18499	16	22	21.52	-43	12	00.1	808
(391)		1991	01	20.25821	08	46	04.55	-18	10	47.6	808
(391)		1991	01	20.27830	08	46	03.29	-18	10	45.9	808
(391)		1991	02	08.17933	08	26	59.53	-16	39	00.0	808
(391)		1991	02	08.21465	08	26	57.41	-16	38	43.5	808
(433)		1991	03	21.37071	16	48	07.36	-42	54	17.0	808
(433)		1991	03	21.39149	16	48	09.26	-42	54	31.0	808
(433)		1991	04	19.32893	17	07	43.26	-47	47	48.3	808
(433)		1991	04	19.36494	17	07	42.17	-47	48	03.2	808
(433)		1991	04	22.30620	17	06	07.08	-48	07	52.2	808
(433)		1991	04	22.33390	17	06	05.76	-48	08	02.4	808
(433)		1991	05	21.26372	16	17	17.97	-47	26	59.5	808
(433)		1991	05	21.28726	16	17	14.62	-47	26	43.7	808
(502)		1990	11	23.13575	03	25	26.64	-22	20	35.2	808
(502)		1990	11	23.17384	03	25	24.28	-22	20	31.1	808
(530)		1991	04	20.29607	16	21	34.75	-09	52	55.7	808
(530)		1991	04	20.34109	16	21	33.62	-09	52	47.3	808
(614)		1990	11	21.08615	01	20	50.25	+08	50	51.7	808
(619)		1990	11	21.20354	02	51	48.69	+00	43	30.5	808
(619)		1990	12	18.07476	02	39	07.42	-00	20	15.8	808
(619)		1990	12	18.10662	02	39	07.10	-00	20	13.5	808
(631)		1991	06	06.04828	14	14	58.90	-11	30	41.2	808
(631)		1991	06	06.08291	14	14	58.25	-11	30	26.2	808
(652)		1991	03	18.25009	13	35	49.58	+14	37	21.3	808
(652)		1991	03	18.28195	13	35	48.26	+14	37	34.8	808
(652)		1991	04	20.18215	13	07	11.79	+16	56	24.3	808
(652)		1991	04	20.22301	13	07	09.51	+16	56	25.6	808
(692)		1991	05	21.32362	17	33	18.10	-32	25	30.9	808
(692)		1991	05	21.35479	17	33	16.64	-32	25	39.6	808
(694)		1991	04	19.25968	15	00	14.88	-21	04	57.9	808
(694)		1991	04	19.29569	15	00	13.15	-21	04	41.8	808

(694)	1991	06	06.04828	14	21	32.82	-14	03	23.6		808
(694)	1991	06	06.08291	14	21	31.66	-14	03	06.4		808
(774)	1991	05	21.21039	15	57	10.12	-21	59	06.5		808
(774)	1991	05	21.23809	15	57	08.55	-21	58	58.9		808
(810)	1991	03	19.12859	10	13	21.33	+11	38	46.0		808
(810)	1991	03	19.16668	10	13	19.63	+11	38	57.7		808
(824)	1991	04	19.17449	13	43	13.95	+01	45	30.7		808
(824)	1991	04	19.21605	13	43	11.84	+01	45	45.6		808
(849)	1991	01	18.26644	10	38	37.07	-16	40	14.6		808
(849)	1991	01	24.30339	10	36	15.81	-16	54	39.9		808
(849)	1991	01	24.32624	10	36	15.16	-16	54	42.5		808
(849)	1991	02	21.18469	10	18	58.82	-16	26	09.9		808
(849)	1991	02	21.20131	10	18	58.07	-16	26	06.1		808
(870)	1991	04	19.08723	12	14	25.34	+08	21	28.5	p	808
(870)	1991	04	19.12878	12	14	23.26	+08	21	39.2	p	808
(889)	1991	04	19.08723	12	26	05.89	+08	29	18.8	p	808
(889)	1991	04	19.12878	12	26	04.05	+08	29	29.3	p	808
(947)	1991	05	21.21039	16	01	19.97	-22	55	19.1		808
(947)	1991	05	21.23809	16	01	18.22	-22	55	27.9		808
(951)	1991	05	21.21039	15	58	21.80	-22	00	47.9		808
(951)	1991	05	21.23809	15	58	19.72	-22	00	39.9		808
(965)	1991	04	22.17427	13	45	58.88	-02	26	34.1		808
(965)	1991	04	22.20543	13	45	57.11	-02	26	33.9		808
(965)	1991	05	13.11173	13	28	37.88	-02	45	41.4		808
(965)	1991	05	13.14844	13	28	36.31	-02	45	45.8		808
(1011)	1991	02	19.27880	14	07	01.87	-05	31	33.6		808
(1011)	1991	02	19.32312	14	07	03.48	-05	31	26.2		808
(1011)	1991	02	21.32389	14	08	13.98	-05	25	32.4		808
(1011)	1991	02	21.35575	14	08	14.90	-05	25	26.8		808
(1011)	1991	03	23.31712	14	06	18.78	-02	27	32.1		808
(1011)	1991	03	23.33582	14	06	17.92	-02	27	23.4		808
(1011)	1991	04	19.17449	13	42	24.24	+00	40	53.4		808
(1011)	1991	04	19.21605	13	42	21.68	+00	41	06.3		808
(1011)	1991	05	13.03624	13	25	16.04	+01	28	39.4		808
(1011)	1991	05	13.07087	13	25	15.10	+01	28	37.6		808
(1036)	1991	02	15.09442	08	16	11.09	-16	45	27.0		808
(1036)	1991	02	15.13113	08	16	09.41	-16	45	09.9		808
(1036)	1991	02	19.08973	08	13	12.26	-16	13	51.5		808
(1036)	1991	02	19.12990	08	13	10.56	-16	13	32.4		808
(1056)	1991	04	19.08723	12	22	47.10	+07	15	52.3		808
(1056)	1991	04	19.12878	12	22	44.88	+07	16	02.0		808
(1088)	1991	04	19.08723	12	10	36.63	+07	52	48.1		808
(1088)	1991	04	19.12878	12	10	34.59	+07	52	50.8		808
(1222)	1991	01	20.17684	08	14	59.37	-04	05	42.8		808
(1222)	1991	01	20.21424	08	14	57.37	-04	05	43.4		808
(1222)	1991	01	22.21882	08	13	12.78	-04	05	00.5		808
(1222)	1991	01	22.25206	08	13	10.95	-04	04	59.9		808
(1288)	1991	05	21.32362	17	40	22.48	-30	58	35.6		808
(1319)	1991	04	19.25968	14	48	19.39	-19	16	01.5		808
(1319)	1991	04	19.29569	14	48	17.83	-19	15	53.0		808
(1343)	1990	11	21.08615	01	18	41.26	+07	02	36.9	p	808
(1343)	1990	11	21.12563	01	18	40.04	+07	02	35.5	p	808
(1465)	1991	04	19.17449	13	43	51.41	+00	13	07.3		808
(1465)	1991	04	19.21605	13	43	49.60	+00	13	26.6		808
(1497)	1991	05	21.21039	16	04	17.62	-22	12	56.8		808
(1497)	1991	05	21.23809	16	04	15.98	-22	12	58.0		808
(1656)	1991	03	23.27384	13	24	25.41	+05	25	31.4		808
(1656)	1991	03	23.29184	13	24	24.58	+05	26	02.7		808
(1679)	1991	02	19.27880	14	09	58.45	-05	49	34.9	p	808

(1679)	1991	02	19.32312	14	09	59.28	-05	49	18.7	p	808
(1679)	1991	02	21.32389	14	10	34.92	-05	38	20.6		808
(1679)	1991	02	21.35575	14	10	35.44	-05	38	09.4		808
(1679)	1991	04	19.17449	13	53	58.07	+02	49	57.6	p	808
(1679)	1991	04	19.21605	13	53	56.24	+02	50	21.4	p	808
(1754)	1991	02	21.35575	14	09	39.68	-04	11	43.0	p	808
(1754)	1991	04	19.17449	13	51	25.60	+00	51	53.5		808
(1876)	1990	08	13.03785	18	54	37.16	-26	07	38.2	b	808
(1876)	1990	08	13.07941	18	54	35.19	-26	06	58.7	b	808
(1886)	1991	03	18.25009	13	30	32.02	+14	18	27.8		808
(1886)	1991	03	18.28195	13	30	30.77	+14	18	39.1		808
(1886)	1991	04	20.18215	13	01	41.29	+16	31	24.8		808
(1886)	1991	04	20.22301	13	01	39.02	+16	31	25.3		808
(1958)	1991	04	22.23763	14	35	35.67	-28	56	47.1		808
(1958)	1991	04	22.27364	14	35	33.60	-28	56	48.0		808
(2000)	1991	01	20.32678	09	48	33.93	-05	15	35.7		808
(2000)	1991	01	20.34755	09	48	32.36	-05	15	50.7		808
(2000)	1991	01	22.28392	09	46	09.17	-05	38	14.4		808
(2000)	1991	01	22.30400	09	46	07.67	-05	38	28.1		808
(2000)	1991	01	24.24487	09	43	38.25	-05	59	44.1		808
(2000)	1991	01	24.27326	09	43	35.94	-06	00	01.7		808
(2000)	1991	02	12.20442	09	17	10.95	-08	17	08.8		808
(2000)	1991	02	12.23489	09	17	08.38	-08	17	15.2		808
(2048)	1990	11	23.23859	05	34	31.78	-18	47	23.2	p	808
(2048)	1990	11	23.28153	05	34	29.22	-18	47	43.9		808
(2048)	1990	12	18.14609	05	07	03.42	-19	10	23.9	p	808
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(2060)	1991	01	24.17596	07	37	07.64	+13	51	34.5		808
(2060)	1991	01	24.20366	07	37	07.11	+13	51	35.9		808
(2093)	1991	03	19.12859	10	19	39.80	+11	55	54.7		808
(2093)	1991	03	19.16668	10	19	37.99	+11	56	11.9		808
(2226)	1990	11	21.08615	01	12	44.30	+06	59	24.7		808
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(2311)	1991	04	05.01119	10	12	36.98	+11	41	23.4		808
(2311)	1991	04	05.04443	10	12	36.39	+11	41	29.5		808
(2370)	1991	03	19.21412	12	41	03.85	-03	30	37.5	G	808
(2370)	1991	03	19.26260	12	41	01.45	-03	30	28.6	G	808
(2370)	1991	03	21.24086	12	39	20.27	-03	24	16.7		808
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809 European Southern Observatory
H. Debehogne, Observatoire Royal de Belgique, Avenue Circulaire 3, B-1180 Brussels, Belgium (3)
E. W. Elst, Observatoire Royal de Belgique, Avenue Circulaire 3, B-1180 Brussels, Belgium (4)
O. Hainaut, European Southern Observatory, Casilla 567, La Serena, Chile (5)
Observers H. Debehogne, E. W. Elst, O. Hainaut, G. Pizarro, O. Pizarro, A. Smette
GPO 0.4-m astrograph, 1.0-m Schmidt, 1.5-m reflector + CCD

1976 YP1	1991 07 10.25174	20 02 20.74	-22 52 15.4	17.5	3	809
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1976 YP1	1991 07 11.19341	20 01 35.38	-22 54 30.5		3	809
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1977 RW6	1991 07 10.25174	19 59 28.24	-24 00 30.2	16.0	3	809
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1977	RW6	1991	07	11.11493	19	58	43.93	-24	02	46.9		3	809
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1978	RM2	1991	07	05.14133	20	09	55.36	-12	29	34.0		3	809
1978	RM2	1991	07	05.15244	20	09	54.88	-12	29	35.3		3	809
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1991	NJ		1991	07	14.21216	19	34	19.50	-23	57	30.5		3	809
1991	NJ		1991	07	14.22256	19	34	18.93	-23	57	37.3		3	809
1991	NJ		1991	07	14.23299	19	34	18.36	-23	57	43.9		3	809
1991	NP2		1991	07	05.18195	21	26	47.05	-19	00	48.2	16.9	3	809
1991	NP2		1991	07	05.19444	21	26	46.76	-19	00	46.6		3	809
1991	NP2		1991	07	05.20694	21	26	46.48	-19	00	45.1		3	809
1991	NP2		1991	07	06.20070	21	26	23.51	-18	58	42.6		3	809
1991	NP2		1991	07	06.21320	21	26	23.21	-18	58	41.1		3	809
1991	NP2		1991	07	06.22569	21	26	22.92	-18	58	39.8		3	809
1991	NP2		1991	07	08.38542	21	25	25.01	-18	54	29.7		3	809
1991	NP2		1991	07	08.39792	21	25	24.64	-18	54	28.1		3	809
1991	NU2	*	1991	07	03.11493	19	24	40.70	-24	07	50.9	15.0	3	809
1991	NU2		1991	07	03.12674	19	24	40.09	-24	07	55.7		3	809
1991	NU2		1991	07	03.13853	19	24	39.46	-24	08	00.9		3	809
1991	NU2		1991	07	04.07987	19	23	49.75	-24	14	51.6		3	809
1991	NU2		1991	07	04.09236	19	23	49.09	-24	14	57.0		3	809
1991	NU2		1991	07	04.10486	19	23	48.42	-24	15	02.4		3	809
1991	NU2		1991	07	05.07465	19	22	56.47	-24	22	03.7		3	809
1991	NU2		1991	07	05.08507	19	22	55.92	-24	22	08.2		3	809
1991	NU2		1991	07	05.09549	19	22	55.36	-24	22	12.8		3	809
1991	NV2	*	1991	07	03.11493	19	25	12.26	-25	19	39.8	15.9	3	809
1991	NV2		1991	07	03.12674	19	25	11.61	-25	19	38.5		3	809
1991	NV2		1991	07	03.13853	19	25	10.95	-25	19	37.3		3	809
1991	NV2		1991	07	04.07987	19	24	17.95	-25	18	07.4		3	809
1991	NV2		1991	07	04.09236	19	24	17.24	-25	18	06.1		3	809
1991	NV2		1991	07	04.10486	19	24	16.53	-25	18	05.1		3	809
1991	NV2		1991	07	05.07465	19	23	21.01	-25	16	28.3		3	809
1991	NV2		1991	07	05.08507	19	23	20.42	-25	16	27.2		3	809
1991	NV2		1991	07	05.09549	19	23	19.82	-25	16	26.1		3	809
1991	NW2	*	1991	07	04.02153	15	39	23.27	-20	03	53.5	17.7	3	809
1991	NW2		1991	07	04.03958	15	39	23.05	-20	03	52.8		3	809
1991	NW2		1991	07	04.05763	15	39	22.84	-20	03	52.3		3	809
1991	NW2		1991	07	05.02014	15	39	11.68	-20	03	17.6		3	809
1991	NW2		1991	07	05.03819	15	39	11.47	-20	03	17.0		3	809
1991	NW2		1991	07	05.05624	15	39	11.23	-20	03	16.5		3	809
1991	NX2	*	1991	07	04.07987	19	22	53.69	-25	27	54.8	15.9	3	809
1991	NX2		1991	07	04.09236	19	22	52.85	-25	27	58.3		3	809
1991	NX2		1991	07	04.10486	19	22	52.03	-25	28	01.8		3	809
1991	NX2		1991	07	05.07465	19	21	48.15	-25	32	07.8		3	809
1991	NX2		1991	07	05.08507	19	21	47.46	-25	32	10.5		3	809
1991	NX2		1991	07	05.09549	19	21	46.77	-25	32	13.0		3	809
1991	NY2	*	1991	07	04.07987	19	25	19.65	-25	25	07.0	16.2	3	809
1991	NY2		1991	07	04.09236	19	25	18.98	-25	25	13.0		3	809
1991	NY2		1991	07	04.10486	19	25	18.34	-25	25	19.0		3	809
1991	NY2		1991	07	05.07465	19	24	27.55	-25	33	13.6		3	809

1991 NY2		1991	07	05.08507	19	24	27.01	-25	33	18.7		3 809
1991 NY2		1991	07	05.09549	19	24	26.48	-25	33	23.8		3 809
1991 NZ2	*	1991	07	04.07987	19	27	29.41	-24	33	19.5	16.5	3 809
1991 NZ2		1991	07	04.09236	19	27	28.76	-24	33	20.0		3 809
1991 NZ2		1991	07	04.10486	19	27	28.11	-24	33	20.6		3 809
1991 NZ2		1991	07	05.07465	19	26	37.37	-24	34	03.4		3 809
1991 NZ2		1991	07	05.08507	19	26	36.83	-24	34	03.9		3 809
1991 NZ2		1991	07	05.09549	19	26	36.29	-24	34	04.3		3 809
1991 NA3	*	1991	07	04.12013	19	26	55.98	-23	22	34.8	17.0	3 809
1991 NA3		1991	07	04.13264	19	26	55.23	-23	22	35.2		3 809
1991 NA3		1991	07	04.14514	19	26	54.49	-23	22	35.8		3 809
1991 NA3		1991	07	05.10729	19	25	56.42	-23	23	02.1		3 809
1991 NA3		1991	07	05.11771	19	25	55.77	-23	23	02.3		3 809
1991 NA3		1991	07	05.12813	19	25	55.14	-23	23	02.7		3 809
1991 NB3	*	1991	07	04.12013	19	26	58.68	-22	27	39.3	16.3	3 809
1991 NB3		1991	07	04.13264	19	26	57.87	-22	27	38.3		3 809
1991 NB3		1991	07	04.14514	19	26	57.06	-22	27	37.2		3 809
1991 NB3		1991	07	05.10729	19	25	54.97	-22	26	14.4		3 809
1991 NB3		1991	07	05.11771	19	25	54.30	-22	26	13.7		3 809
1991 NB3		1991	07	05.12813	19	25	53.61	-22	26	13.0		3 809
1991 NC3	*	1991	07	04.12013	19	27	33.39	-21	56	26.6	16.9	3 809
1991 NC3		1991	07	04.13264	19	27	32.59	-21	56	22.7		3 809
1991 NC3		1991	07	04.14514	19	27	31.80	-21	56	18.9		3 809
1991 NC3		1991	07	05.10729	19	26	31.03	-21	51	28.7		3 809
1991 NC3		1991	07	05.11771	19	26	30.35	-21	51	25.3		3 809
1991 NC3		1991	07	05.12813	19	26	29.68	-21	51	22.1		3 809
1991 ND3	*	1991	07	04.12013	19	28	12.18	-21	58	08.9	17.1	3 809
1991 ND3		1991	07	04.13264	19	28	11.43	-21	58	09.7		3 809
1991 ND3		1991	07	04.14514	19	28	10.66	-21	58	10.3		3 809
1991 ND3		1991	07	05.10729	19	27	13.10	-21	58	59.4		3 809
1991 ND3		1991	07	05.11771	19	27	12.45	-21	58	59.8		3 809
1991 ND3		1991	07	05.12813	19	27	11.83	-21	59	00.2		3 809
1991 NE3	*	1991	07	04.15973	20	06	46.89	-11	22	33.4	17.5	3 809
1991 NE3		1991	07	04.16806	20	06	46.54	-11	22	34.8		3 809
1991 NE3		1991	07	04.17639	20	06	46.20	-11	22	36.2		3 809
1991 NE3		1991	07	05.14133	20	06	04.22	-11	25	20.5		3 809
1991 NE3		1991	07	05.15244	20	06	03.72	-11	25	22.8		3 809
1991 NE3		1991	07	05.16354	20	06	03.22	-11	25	24.8		3 809
1991 NE3		1991	07	08.09618	20	03	51.16	-11	34	31.8		3 809
1991 NE3		1991	07	08.10660	20	03	50.70	-11	34	34.1		3 809
1991 NE3		1991	07	10.28368	20	02	08.09	-11	41	56.5		3 809
1991 NE3		1991	07	10.29410	20	02	07.60	-11	41	58.6		3 809
1991 NE3		1991	07	10.30452	20	02	07.10	-11	42	00.7		3 809
1991 NF3	*	1991	07	04.15973	20	07	45.97	-13	02	30.5	16.6	3 809
1991 NF3		1991	07	04.16806	20	07	45.54	-13	02	28.4		3 809
1991 NF3		1991	07	04.17639	20	07	45.11	-13	02	26.7		3 809
1991 NF3		1991	07	05.14133	20	06	55.87	-12	58	45.2		3 809
1991 NF3		1991	07	05.15244	20	06	55.30	-12	58	42.7		3 809
1991 NF3		1991	07	05.16354	20	06	54.75	-12	58	40.3		3 809
1991 NF3		1991	07	11.22534	20	01	24.71	-12	36	55.6		3 809
1991 NF3		1991	07	11.23576	20	01	24.13	-12	36	53.5		3 809
1991 NF3		1991	07	11.24619	20	01	23.55	-12	36	51.4		3 809
1991 NF3		1991	07	12.26633	20	00	24.73	-12	33	27.9		3 809
1991 NF3		1991	07	12.27673	20	00	24.14	-12	33	25.9		3 809
1991 NF3		1991	07	12.28716	20	00	23.54	-12	33	23.6		3 809
1991 NF3		1991	07	14.28021	19	58	26.81	-12	27	01.7		3 809
1991 NF3		1991	07	14.29062	19	58	26.21	-12	26	59.4		3 809
1991 NF3		1991	07	14.30104	19	58	25.61	-12	26	57.2		3 809
1991 NF3		1991	07	15.30313	19	57	26.07	-12	23	52.0		3 809

1991	NF3		1991	07	15.31354	19	57	25.44	-12	23	50.2	3	809
1991	NF3		1991	07	15.32396	19	57	24.83	-12	23	48.3	3	809
1991	NF3		1991	07	16.29271	19	56	26.85	-12	20	52.5	3	809
1991	NF3		1991	07	16.30313	19	56	26.24	-12	20	50.7	3	809
1991	NF3		1991	07	16.31354	19	56	25.62	-12	20	48.4	3	809
1991	NG3	*	1991	07	04.15973	20	08	12.23	-11	09	19.1	16.6	3	809
1991	NG3		1991	07	04.16806	20	08	11.83	-11	09	15.9	3	809
1991	NG3		1991	07	04.17639	20	08	11.44	-11	09	12.8	3	809
1991	NG3		1991	07	05.14133	20	07	24.52	-11	03	36.4	3	809
1991	NG3		1991	07	05.15244	20	07	23.97	-11	03	32.6	3	809
1991	NG3		1991	07	05.16354	20	07	23.44	-11	03	28.7	3	809
1991	NG3		1991	07	08.09618	20	04	53.50	-10	47	07.4	3	809
1991	NG3		1991	07	08.10660	20	04	52.96	-10	47	04.1	3	809
1991	NG3		1991	07	10.28368	20	02	55.02	-10	35	29.3	3	809
1991	NG3		1991	07	10.29410	20	02	54.46	-10	35	25.7	3	809
1991	NG3		1991	07	10.30452	20	02	53.88	-10	35	22.3	3	809
1991	NG3		1991	07	11.25729	20	02	01.14	-10	30	27.7	3	809
1991	NG3		1991	07	11.26772	20	02	00.56	-10	30	24.4	3	809
1991	NG3		1991	07	11.27812	20	02	00.00	-10	30	20.9	3	809
1991	NG3		1991	07	12.30035	20	01	02.28	-10	25	12.2	3	809
1991	NG3		1991	07	12.31076	20	01	01.71	-10	25	09.0	3	809
1991	NG3		1991	07	12.32118	20	01	01.13	-10	25	05.8	3	809
1991	NH3	*	1991	07	06.02257	19	31	11.37	-20	22	50.3	17.0	3	809
1991	NH3		1991	07	06.03299	19	31	10.75	-20	22	49.0	3	809
1991	NH3		1991	07	06.04340	19	31	10.12	-20	22	47.6	3	809
1991	NH3		1991	07	07.26181	19	29	58.16	-20	19	56.4	3	809
1991	NH3		1991	07	07.26875	19	29	57.76	-20	19	55.0	3	809
1991	NJ3	*	1991	07	06.05869	19	28	30.55	-18	56	09.8	16.3	3	809
1991	NJ3		1991	07	06.06909	19	28	29.97	-18	56	06.3	3	809
1991	NJ3		1991	07	06.07951	19	28	29.38	-18	56	02.8	3	809
1991	NJ3		1991	07	07.27708	19	27	22.18	-18	49	44.3	3	809
1991	NK3	*	1991	07	06.05869	19	28	56.01	-19	28	56.9	17.6	3	809
1991	NK3		1991	07	06.06909	19	28	55.38	-19	28	55.1	3	809
1991	NK3		1991	07	06.07951	19	28	54.74	-19	28	53.2	3	809
1991	NK3		1991	07	07.27708	19	27	42.07	-19	25	24.9	3	809
1991	NL3	*	1991	07	06.05869	19	32	08.41	-18	06	43.9	16.9	3	809
1991	NL3		1991	07	06.06909	19	32	07.91	-18	06	48.2	3	809
1991	NL3		1991	07	06.07951	19	32	07.41	-18	06	52.7	3	809
1991	NL3		1991	07	07.27708	19	31	10.40	-18	14	55.1	3	809
1991	NM3	*	1991	07	06.09271	19	36	33.01	-23	58	11.2	16.4	3	809
1991	NM3		1991	07	06.10312	19	36	32.46	-23	58	15.6	3	809
1991	NM3		1991	07	06.11354	19	36	31.91	-23	58	20.3	3	809
1991	NM3		1991	07	07.28542	19	35	30.52	-24	06	46.5	3	809
1991	NM3		1991	07	07.29236	19	35	30.18	-24	06	49.5	3	809
1991	NN3	*	1991	07	06.09271	19	36	43.92	-24	14	47.7	16.8	3	809
1991	NN3		1991	07	06.10312	19	36	43.29	-24	14	49.1	3	809
1991	NN3		1991	07	06.11354	19	36	42.66	-24	14	50.6	3	809
1991	NN3		1991	07	07.28542	19	35	32.49	-24	17	19.4	3	809
1991	NN3		1991	07	07.29236	19	35	32.05	-24	17	19.9	3	809
1991	NO3	*	1991	07	06.09271	19	38	33.45	-23	18	17.2	15.6	3	809
1991	NO3		1991	07	06.10312	19	38	32.87	-23	18	15.0	3	809
1991	NO3		1991	07	06.11354	19	38	32.31	-23	18	12.9	3	809
1991	NO3		1991	07	07.28542	19	37	27.34	-23	14	17.9	3	809
1991	NO3		1991	07	07.29236	19	37	26.95	-23	14	16.0	3	809
1991	NO3		1991	07	12.05763	19	32	59.92	-22	57	39.3	3	809
1991	NO3		1991	07	12.06876	19	32	59.31	-22	57	37.2	3	809
1991	NO3		1991	07	12.07987	19	32	58.69	-22	57	35.0	3	809
1991	NO3		1991	07	14.21216	19	30	57.52	-22	49	55.0	3	809
1991	NO3		1991	07	14.22256	19	30	56.91	-22	49	52.8	3	809

1991 NO3		1991	07	14.23299	19	30	56.30	-22	49	50.3		3 809
1991 NP3	*	1991	07	06.09271	19	38	59.06	-24	42	17.1	17.1	3 809
1991 NP3		1991	07	06.10312	19	38	58.41	-24	42	16.0		3 809
1991 NP3		1991	07	06.11354	19	38	57.75	-24	42	15.4		3 809
1991 NP3		1991	07	07.28542	19	37	45.54	-24	40	25.4		3 809
1991 NP3		1991	07	07.29236	19	37	45.08	-24	40	24.8		3 809
1991 NQ3	*	1991	07	06.12813	19	34	53.16	-23	04	41.2	17.3	3 809
1991 NQ3		1991	07	06.13853	19	34	52.56	-23	04	46.3		3 809
1991 NQ3		1991	07	06.14896	19	34	51.97	-23	04	51.0		3 809
1991 NQ3		1991	07	07.28542	19	33	47.68	-23	13	20.1		3 809
1991 NQ3		1991	07	07.29236	19	33	47.30	-23	13	23.0		3 809
1991 NR3	*	1991	07	06.12813	19	37	20.17	-21	48	04.6	16.2	3 809
1991 NR3		1991	07	06.13853	19	37	19.59	-21	48	03.6		3 809
1991 NR3		1991	07	06.14896	19	37	19.01	-21	48	02.5		3 809
1991 NR3		1991	07	07.30000	19	36	14.05	-21	46	24.0		3 809
1991 NR3		1991	07	07.30695	19	36	13.67	-21	46	23.5		3 809
1991 NR3		1991	07	08.07222	19	35	30.81	-21	45	18.7		3 809
1991 NR3		1991	07	08.08055	19	35	30.33	-21	45	17.9		3 809
1991 NS3	*	1991	07	06.12813	19	37	37.41	-21	55	30.2	16.2	3 809
1991 NS3		1991	07	06.13853	19	37	36.77	-21	55	31.5		3 809
1991 NS3		1991	07	06.14896	19	37	36.13	-21	55	32.6		3 809
1991 NS3		1991	07	07.30000	19	36	26.59	-21	57	26.4		3 809
1991 NS3		1991	07	07.30695	19	36	26.15	-21	57	27.2		3 809
1991 NS3		1991	07	08.07222	19	35	40.14	-21	58	45.4		3 809
1991 NS3		1991	07	08.08055	19	35	39.61	-21	58	46.4		3 809
1991 NT3	*	1991	07	06.12813	19	37	59.72	-22	26	38.4	15.0	3 809
1991 NT3		1991	07	06.13853	19	37	58.64	-22	26	23.4		3 809
1991 NT3		1991	07	06.14896	19	37	57.57	-22	26	08.1		3 809
1991 NT3		1991	07	07.30000	19	35	57.61	-21	58	33.1		3 809
1991 NT3		1991	07	07.30695	19	35	56.92	-21	58	23.1		3 809
1991 NT3		1991	07	08.07222	19	34	40.36	-21	40	16.0		3 809
1991 NT3		1991	07	08.08055	19	34	39.52	-21	40	04.2		3 809
1991 NT3		1991	07	12.01666	19	28	10.44	-20	09	26.5		3 809
1991 NT3		1991	07	12.02222	19	28	09.87	-20	09	18.9		3 809
1991 NT3		1991	07	12.02777	19	28	09.32	-20	09	11.3		3 809
1991 NT3		1991	07	12.03473	19	28	08.64	-20	09	02.2		3 809
1991 NT3		1991	07	12.04028	19	28	08.08	-20	08	54.5		3 809
1991 NT3		1991	07	12.04584	19	28	07.56	-20	08	46.8		3 809
1991 NT3		1991	07	13.00487	19	26	36.82	-19	47	31.3		3 809
1991 NT3		1991	07	13.01042	19	26	36.30	-19	47	23.8		3 809
1991 NT3		1991	07	13.01598	19	26	35.78	-19	47	16.4		3 809
1991 NT3		1991	07	15.00243	19	23	33.89	-19	04	18.3		3 809
1991 NT3		1991	07	15.01285	19	23	32.94	-19	04	04.8		3 809
1991 NT3		1991	07	15.02327	19	23	31.98	-19	03	51.1		3 809
1991 NT3		1991	07	16.00070	19	22	05.88	-18	43	17.6		3 809
1991 NT3		1991	07	16.00903	19	22	05.15	-18	43	07.1		3 809
1991 NT3		1991	07	16.01736	19	22	04.43	-18	42	56.6		3 809
1991 NT3		1991	07	16.99722	19	20	40.34	-18	22	44.1		3 809
1991 NT3		1991	07	17.00278	19	20	39.87	-18	22	37.3		3 809
1991 NT3		1991	07	17.00833	19	20	39.39	-18	22	30.4		3 809
1991 NT3		1991	07	18.06805	19	19	11.09	-18	01	09.5		3 809
1991 NT3		1991	07	18.07361	19	19	10.64	-18	01	02.9		3 809
1991 NT3		1991	07	18.07916	19	19	10.19	-18	00	56.0		3 809
1991 NT3		1991	07	19.07916	19	17	49.81	-17	41	12.4		3 809
1991 NT3		1991	07	19.08472	19	17	49.37	-17	41	06.0		3 809
1991 NT3		1991	07	19.09027	19	17	48.92	-17	40	59.4		3 809
1991 NT3		1991	07	21.22917	19	15	05.60	-17	00	17.7		3 809
1991 NT3		1991	07	21.23889	19	15	04.87	-17	00	06.1		3 809
1991 NT3		1991	07	22.10902	19	14	03.28	-16	44	10.0		3 809

1991	NT3		1991	07	22.11874	19	14	02.59	-16	43	59.4		3	809
1991	NT3		1991	07	24.05902	19	11	51.96	-16	09	40.5		3	809
1991	NT3		1991	07	24.06805	19	11	51.37	-16	09	30.9		3	809
1991	NU3	*	1991	07	06.16493	20	51	29.24	-15	25	11.9	16.5	3	809
1991	NU3		1991	07	06.17535	20	51	28.82	-15	25	11.5		3	809
1991	NU3		1991	07	06.18576	20	51	28.39	-15	25	10.8		3	809
1991	NU3		1991	07	08.35695	20	49	59.47	-15	23	23.0		3	809
1991	NU3		1991	07	08.36945	20	49	58.97	-15	23	22.3		3	809
1991	NU3		1991	07	10.35834	20	48	31.43	-15	22	04.1		3	809
1991	NU3		1991	07	10.37083	20	48	30.87	-15	22	03.8		3	809
1991	NU3		1991	07	10.38333	20	48	30.31	-15	22	03.3		3	809
1991	NV3	*	1991	07	06.24132	20	23	32.58	-21	56	41.4	16.8	3	809
1991	NV3		1991	07	06.25174	20	23	32.12	-21	56	43.9		3	809
1991	NV3		1991	07	06.26215	20	23	31.67	-21	56	46.0		3	809
1991	NV3		1991	07	08.32535	20	22	00.92	-22	04	49.6		3	809
1991	NV3		1991	07	08.33577	20	22	00.44	-22	04	51.6		3	809
1991	NW3	*	1991	07	06.24132	20	24	43.44	-22	08	21.2	17.0	3	809
1991	NW3		1991	07	06.25174	20	24	43.01	-22	08	23.3		3	809
1991	NW3		1991	07	06.26215	20	24	42.57	-22	08	25.2		3	809
1991	NW3		1991	07	08.32535	20	23	15.26	-22	15	54.9		3	809
1991	NW3		1991	07	08.33577	20	23	14.84	-22	15	57.5		3	809
1991	NX3	*	1991	07	07.33958	19	46	53.02	-19	16	01.3	17.2	3	809
1991	NX3		1991	07	07.34792	19	46	52.45	-19	16	01.7		3	809
1991	NX3		1991	07	08.20348	19	45	58.96	-19	16	57.5		3	809
1991	NX3		1991	07	08.21181	19	45	58.43	-19	16	57.9		3	809
1991	NX3		1991	07	08.22014	19	45	57.90	-19	16	58.7		3	809
1991	NX3		1991	07	08.28993	19	45	53.53	-19	17	03.4		3	809
1991	NX3		1991	07	08.30035	19	45	52.88	-19	17	03.8		3	809
1991	NX3		1991	07	08.31076	19	45	52.23	-19	17	04.4		3	809
1991	NX3		1991	07	10.08681	19	44	00.58	-19	19	00.9		3	809
1991	NX3		1991	07	10.09792	19	43	59.89	-19	19	01.7		3	809
1991	NY3	*	1991	07	07.33958	19	49	26.96	-20	32	17.9	16.6	3	809
1991	NY3		1991	07	07.34792	19	49	26.51	-20	32	21.3		3	809
1991	NY3		1991	07	08.20348	19	48	42.39	-20	38	13.8		3	809
1991	NY3		1991	07	08.21181	19	48	41.96	-20	38	17.3		3	809
1991	NY3		1991	07	08.22014	19	48	41.53	-20	38	20.7		3	809
1991	NY3		1991	07	08.28993	19	48	37.93	-20	38	49.5		3	809
1991	NY3		1991	07	08.30035	19	48	37.39	-20	38	53.9		3	809
1991	NY3		1991	07	08.31076	19	48	36.85	-20	38	58.2		3	809
1991	NY3		1991	07	10.08681	19	47	03.47	-20	51	11.8		3	809
1991	NY3		1991	07	10.09792	19	47	02.88	-20	51	16.6		3	809
1991	NZ3	*	1991	07	08.09618	20	05	28.94	-10	46	19.2	17.2	3	809
1991	NZ3		1991	07	08.10660	20	05	28.43	-10	46	18.6		3	809
1991	NZ3		1991	07	10.28368	20	03	43.08	-10	43	59.9		3	809
1991	NZ3		1991	07	10.29410	20	03	42.58	-10	43	59.2		3	809
1991	NZ3		1991	07	10.30452	20	03	42.08	-10	43	58.6		3	809
1991	NZ3		1991	07	11.25729	20	02	55.08	-10	43	04.3		3	809
1991	NZ3		1991	07	11.26772	20	02	54.54	-10	43	03.6		3	809
1991	NZ3		1991	07	11.27812	20	02	54.03	-10	43	02.9		3	809
1991	NZ3		1991	07	12.30035	20	02	02.81	-10	42	12.0		3	809
1991	NZ3		1991	07	12.31076	20	02	02.27	-10	42	11.3		3	809
1991	NZ3		1991	07	12.32118	20	02	01.75	-10	42	10.8		3	809
1991	NA4	*	1991	07	08.09618	20	05	51.74	-10	49	36.5	17.6	3	809
1991	NA4		1991	07	08.10660	20	05	51.25	-10	49	34.9		3	809
1991	NA4		1991	07	10.28368	20	04	07.44	-10	45	00.7		3	809
1991	NA4		1991	07	10.29410	20	04	06.94	-10	44	59.0		3	809
1991	NA4		1991	07	10.30452	20	04	06.45	-10	44	57.7		3	809
1991	NA4		1991	07	11.25729	20	03	20.22	-10	43	05.3		3	809
1991	NA4		1991	07	11.26772	20	03	19.71	-10	43	04.0		3	809

1991 NA4		1991	07	11.27812	20	03	19.22	-10	43	03.0		3 809
1991 NA4		1991	07	12.30035	20	02	29.02	-10	41	09.7		3 809
1991 NA4		1991	07	12.31076	20	02	28.52	-10	41	08.5		3 809
1991 NA4		1991	07	12.32118	20	02	27.98	-10	41	07.4		3 809
1991 NB4	*	1991	07	08.17049	19	37	50.31	-19	28	55.0	17.2	3 809
1991 NB4		1991	07	08.18091	19	37	49.65	-19	28	55.3		3 809
1991 NB4		1991	07	08.19131	19	37	48.97	-19	28	55.6		3 809
1991 NB4		1991	07	10.02951	19	35	52.10	-19	30	16.2		3 809
1991 NB4		1991	07	10.03993	19	35	51.42	-19	30	16.8		3 809
1991 NB4		1991	07	10.05035	19	35	50.73	-19	30	17.4		3 809
1991 NB4		1991	07	11.02743	19	34	47.84	-19	31	00.0		3 809
1991 NB4		1991	07	11.03784	19	34	47.15	-19	31	00.4		3 809
1991 NB4		1991	07	11.04826	19	34	46.45	-19	31	00.8		3 809
1991 NC4	*	1991	07	08.17049	19	38	49.48	-20	53	33.6	17.6	3 809
1991 NC4		1991	07	08.18091	19	38	48.92	-20	53	34.0		3 809
1991 NC4		1991	07	08.19131	19	38	48.35	-20	53	34.9		3 809
1991 NC4		1991	07	18.09097	19	29	48.52	-21	01	24.7		3 809
1991 NC4		1991	07	18.09792	19	29	48.15	-21	01	25.1		3 809
1991 NC4		1991	07	18.10486	19	29	47.77	-21	01	25.5		3 809
1991 ND4	*	1991	07	08.17049	19	38	51.06	-19	05	36.0	17.4	3 809
1991 ND4		1991	07	08.18091	19	38	50.53	-19	05	36.3		3 809
1991 ND4		1991	07	08.19131	19	38	50.02	-19	05	36.5		3 809
1991 ND4		1991	07	10.02951	19	37	18.06	-19	06	48.6		3 809
1991 ND4		1991	07	10.03993	19	37	17.54	-19	06	48.9		3 809
1991 ND4		1991	07	10.05035	19	37	17.02	-19	06	49.4		3 809
1991 ND4		1991	07	11.02743	19	36	26.87	-19	07	31.5		3 809
1991 ND4		1991	07	11.03784	19	36	26.31	-19	07	31.9		3 809
1991 ND4		1991	07	11.04826	19	36	25.78	-19	07	32.4		3 809
1991 NE4	*	1991	07	08.17049	19	40	23.92	-19	43	49.3	17.2	3 809
1991 NE4		1991	07	08.18091	19	40	23.36	-19	43	50.2		3 809
1991 NE4		1991	07	08.19131	19	40	22.78	-19	43	51.2		3 809
1991 NE4		1991	07	08.20348	19	40	22.11	-19	43	52.1		3 809
1991 NE4		1991	07	08.21181	19	40	21.61	-19	43	52.8		3 809
1991 NE4		1991	07	08.22014	19	40	21.14	-19	43	53.6		3 809
1991 NE4		1991	07	10.02951	19	38	39.33	-19	46	08.9		3 809
1991 NE4		1991	07	10.03993	19	38	38.74	-19	46	09.8		3 809
1991 NE4		1991	07	10.05035	19	38	38.18	-19	46	10.5		3 809
1991 NE4		1991	07	11.02743	19	37	42.39	-19	47	24.3		3 809
1991 NE4		1991	07	11.03784	19	37	41.78	-19	47	25.4		3 809
1991 NE4		1991	07	11.04826	19	37	41.17	-19	47	26.5		3 809
1991 NF4	*	1991	07	08.17049	19	41	36.81	-20	18	34.1	17.3	3 809
1991 NF4		1991	07	08.18091	19	41	36.15	-20	18	33.4		3 809
1991 NF4		1991	07	08.19131	19	41	35.49	-20	18	32.7		3 809
1991 NF4		1991	07	08.20348	19	41	34.73	-20	18	31.8		3 809
1991 NF4		1991	07	08.21181	19	41	34.21	-20	18	31.2		3 809
1991 NF4		1991	07	08.22014	19	41	33.68	-20	18	30.7		3 809
1991 NF4		1991	07	10.02951	19	39	39.81	-20	16	18.7		3 809
1991 NF4		1991	07	10.03993	19	39	39.17	-20	16	18.0		3 809
1991 NF4		1991	07	10.05035	19	39	38.52	-20	16	17.4		3 809
1991 NF4		1991	07	11.02743	19	38	36.16	-20	15	06.1		3 809
1991 NF4		1991	07	11.03784	19	38	35.50	-20	15	05.1		3 809
1991 NF4		1991	07	11.04826	19	38	34.83	-20	15	04.6		3 809
1991 NG4	*	1991	07	08.17049	19	41	58.82	-20	34	27.0	16.9	3 809
1991 NG4		1991	07	08.18091	19	41	58.21	-20	34	30.6		3 809
1991 NG4		1991	07	08.19131	19	41	57.60	-20	34	33.9		3 809
1991 NG4		1991	07	08.20348	19	41	56.89	-20	34	37.8		3 809
1991 NG4		1991	07	08.21181	19	41	56.40	-20	34	40.4		3 809
1991 NG4		1991	07	08.22014	19	41	55.91	-20	34	43.0		3 809
1991 NG4		1991	07	18.09097	19	32	15.87	-21	26	35.8		3 809

1991	NG4		1991	07	18.09792	19	32	15.47	-21	26	37.9		3	809
1991	NG4		1991	07	18.10486	19	32	15.06	-21	26	40.2		3	809
1991	NH4	*	1991	07	08.22917	19	44	24.72	-22	32	57.9	15.4	3	809
1991	NH4		1991	07	08.23750	19	44	24.17	-22	32	54.4		3	809
1991	NH4		1991	07	08.24583	19	44	23.65	-22	32	51.1		3	809
1991	NH4		1991	07	10.06424	19	42	27.09	-22	21	06.6		3	809
1991	NH4		1991	07	10.07465	19	42	26.42	-22	21	02.6		3	809
1991	NJ4	*	1991	07	08.25729	19	45	06.68	-17	47	18.4	17.6	3	809
1991	NJ4		1991	07	08.26772	19	45	06.04	-17	47	22.0		3	809
1991	NJ4		1991	07	08.27812	19	45	05.40	-17	47	25.9		3	809
1991	NJ4		1991	07	10.10938	19	43	14.10	-17	58	52.6		3	809
1991	NJ4		1991	07	10.11980	19	43	13.48	-17	58	56.5		3	809
1991	NJ4		1991	07	10.13020	19	43	12.85	-17	59	00.5		3	809
1991	NJ4		1991	07	11.06076	19	42	15.68	-18	04	52.3		3	809
1991	NJ4		1991	07	11.07118	19	42	15.06	-18	04	56.7		3	809
1991	NJ4		1991	07	11.08160	19	42	14.42	-18	05	01.0		3	809
1991	NK4	*	1991	07	08.25729	19	45	08.04	-17	25	29.3	15.0	3	809
1991	NK4		1991	07	08.26772	19	45	07.60	-17	25	34.9		3	809
1991	NK4		1991	07	08.27812	19	45	07.14	-17	25	40.4		3	809
1991	NK4		1991	07	10.10938	19	43	45.77	-17	42	19.7		3	809
1991	NK4		1991	07	10.11980	19	43	45.32	-17	42	25.5		3	809
1991	NK4		1991	07	10.13020	19	43	44.84	-17	42	31.1		3	809
1991	NK4		1991	07	11.06076	19	43	02.42	-17	51	06.5		3	809
1991	NK4		1991	07	11.07118	19	43	01.95	-17	51	12.6		3	809
1991	NK4		1991	07	11.08160	19	43	01.47	-17	51	18.6		3	809
1991	NK4		1991	07	18.11458	19	37	27.09	-18	58	42.5		3	809
1991	NK4		1991	07	18.12292	19	37	26.68	-18	58	47.5		3	809
1991	NK4		1991	07	18.13126	19	37	26.29	-18	58	52.5		3	809
1991	NK4		1991	07	22.12708	19	34	16.94	-19	37	55.6		3	809
1991	NK4		1991	07	22.14653	19	34	16.01	-19	38	07.2		3	809
1991	NK4		1991	07	23.04028	19	33	35.15	-19	46	49.0		3	809
1991	NK4		1991	07	23.04652	19	33	34.87	-19	46	52.7		3	809
1991	NK4		1991	07	23.05278	19	33	34.58	-19	46	56.5		3	809
1991	NK4		1991	07	24.07916	19	32	47.80	-19	56	57.6		3	809
1991	NL4	*	1991	07	08.25729	19	46	48.17	-18	26	00.1	17.4	3	809
1991	NL4		1991	07	08.26772	19	46	47.61	-18	26	01.9		3	809
1991	NL4		1991	07	08.27812	19	46	47.06	-18	26	03.5		3	809
1991	NL4		1991	07	18.11458	19	38	06.26	-18	51	16.1		3	809
1991	NL4		1991	07	18.12292	19	38	05.84	-18	51	17.3		3	809
1991	NL4		1991	07	18.13126	19	38	05.40	-18	51	18.6		3	809
1991	NM4	*	1991	07	08.25729	19	49	05.32	-17	04	43.7	17.3	3	809
1991	NM4		1991	07	08.26772	19	49	04.75	-17	04	41.7		3	809
1991	NM4		1991	07	08.27812	19	49	04.20	-17	04	39.7		3	809
1991	NM4		1991	07	10.10938	19	47	24.63	-16	58	54.9		3	809
1991	NM4		1991	07	10.11980	19	47	24.06	-16	58	53.1		3	809
1991	NM4		1991	07	10.13020	19	47	23.49	-16	58	51.1		3	809
1991	NM4		1991	07	11.06076	19	46	32.16	-16	55	58.2		3	809
1991	NM4		1991	07	11.07118	19	46	31.57	-16	55	56.3		3	809
1991	NM4		1991	07	11.08160	19	46	31.02	-16	55	54.6		3	809
1991	NN4	*	1991	07	08.25729	19	49	43.65	-18	31	19.6	17.4	3	809
1991	NN4		1991	07	08.26772	19	49	43.09	-18	31	21.1		3	809
1991	NN4		1991	07	08.27812	19	49	42.55	-18	31	22.5		3	809
1991	NN4		1991	07	18.11458	19	40	52.39	-18	54	30.5		3	809
1991	NN4		1991	07	18.12292	19	40	51.95	-18	54	31.7		3	809
1991	NN4		1991	07	18.13126	19	40	51.51	-18	54	32.8		3	809
1991	NO4	*	1991	07	08.28993	19	51	34.39	-19	52	57.8	17.6	3	809
1991	NO4		1991	07	08.30035	19	51	33.80	-19	53	00.5		3	809
1991	NO4		1991	07	08.31076	19	51	33.22	-19	53	03.3		3	809
1991	NO4		1991	07	10.08681	19	49	56.22	-20	00	41.6		3	809

1991	NO4		1991	07	10.09792	19	49	55.63	-20	00	44.3		3	809
1991	NP4	*	1991	07	08.28993	19	51	37.59	-20	14	28.5	17.6	3	809
1991	NP4		1991	07	08.30035	19	51	36.85	-20	14	26.0		3	809
1991	NP4		1991	07	08.31076	19	51	36.10	-20	14	23.5		3	809
1991	NP4		1991	07	10.08681	19	49	29.21	-20	07	06.9		3	809
1991	NP4		1991	07	10.09792	19	49	28.43	-20	07	03.7		3	809
1991	NQ4	*	1991	07	08.35695	20	52	04.98	-14	23	18.5	14.6	3	809
1991	NQ4		1991	07	08.36945	20	52	04.55	-14	23	26.6		3	809
1991	NQ4		1991	07	10.35834	20	51	01.82	-14	43	47.0		3	809
1991	NQ4		1991	07	10.37083	20	51	01.42	-14	43	54.7		3	809
1991	NQ4		1991	07	10.38333	20	51	01.04	-14	44	02.4		3	809
1991	NR4	*	1991	07	08.35695	20	54	22.85	-15	16	44.6	16.8	3	809
1991	NR4		1991	07	08.36945	20	54	22.34	-15	16	45.9		3	809
1991	NR4		1991	07	10.35834	20	52	58.96	-15	20	22.2		3	809
1991	NR4		1991	07	10.37083	20	52	58.45	-15	20	23.6		3	809
1991	NR4		1991	07	10.38333	20	52	57.92	-15	20	25.0		3	809
1991	NS4	*	1991	07	10.02951	19	40	47.71	-19	09	40.7	17.1	3	809
1991	NS4		1991	07	10.03993	19	40	47.15	-19	09	45.5		3	809
1991	NS4		1991	07	10.05035	19	40	46.57	-19	09	50.4		3	809
1991	NS4		1991	07	11.02743	19	39	53.24	-19	17	22.4		3	809
1991	NS4		1991	07	11.03784	19	39	52.67	-19	17	27.2		3	809
1991	NS4		1991	07	11.04826	19	39	52.12	-19	17	32.0		3	809
1991	NT4	*	1991	07	10.02951	19	41	17.32	-18	34	14.6	17.7	3	809
1991	NT4		1991	07	10.03993	19	41	16.52	-18	34	13.6		3	809
1991	NT4		1991	07	10.05035	19	41	15.73	-18	34	12.4		3	809
1991	NT4		1991	07	11.02743	19	40	01.32	-18	32	27.1		3	809
1991	NT4		1991	07	11.03784	19	40	00.50	-18	32	26.1		3	809
1991	NT4		1991	07	11.04826	19	39	59.69	-18	32	25.0		3	809
1991	NU4	*	1991	07	10.10938	19	47	29.68	-16	39	18.2	16.8	3	809
1991	NU4		1991	07	10.11980	19	47	29.14	-16	39	17.7		3	809
1991	NU4		1991	07	10.13020	19	47	28.60	-16	39	17.3		3	809
1991	NU4		1991	07	11.06076	19	46	40.09	-16	38	45.0		3	809
1991	NU4		1991	07	11.07118	19	46	39.55	-16	38	44.7		3	809
1991	NU4		1991	07	11.08160	19	46	39.00	-16	38	44.5		3	809
1991	NV4	*	1991	07	10.14410	19	51	32.73	-23	27	12.2	17.5	3	809
1991	NV4		1991	07	10.15451	19	51	32.13	-23	27	13.3		3	809
1991	NV4		1991	07	10.16493	19	51	31.53	-23	27	14.8		3	809
1991	NV4		1991	07	11.09410	19	50	39.30	-23	29	17.2		3	809
1991	NV4		1991	07	11.10451	19	50	38.72	-23	29	18.4		3	809
1991	NV4		1991	07	11.11493	19	50	38.14	-23	29	20.0		3	809
1991	NW4	*	1991	07	10.14410	19	54	04.23	-22	45	41.7	17.2	3	809
1991	NW4		1991	07	10.15451	19	54	03.65	-22	45	42.3		3	809
1991	NW4		1991	07	10.16493	19	54	03.07	-22	45	42.9		3	809
1991	NW4		1991	07	11.09410	19	53	11.59	-22	46	31.7		3	809
1991	NW4		1991	07	11.10451	19	53	11.01	-22	46	32.0		3	809
1991	NW4		1991	07	11.11493	19	53	10.44	-22	46	32.6		3	809
1991	NX4	*	1991	07	10.14410	19	55	19.04	-23	29	43.9	17.4	3	809
1991	NX4		1991	07	10.15451	19	55	18.36	-23	29	45.4		3	809
1991	NX4		1991	07	10.16493	19	55	17.68	-23	29	47.0		3	809
1991	NX4		1991	07	11.09410	19	54	16.62	-23	32	11.9		3	809
1991	NX4		1991	07	11.10451	19	54	15.93	-23	32	13.6		3	809
1991	NX4		1991	07	11.11493	19	54	15.25	-23	32	15.3		3	809
1991	NY4	*	1991	07	10.14410	19	56	54.10	-24	09	10.4	17.7	3	809
1991	NY4		1991	07	10.15451	19	56	53.30	-24	09	10.5		3	809
1991	NY4		1991	07	10.16493	19	56	52.48	-24	09	10.1		3	809
1991	NY4		1991	07	11.09410	19	55	41.47	-24	09	12.9		3	809
1991	NY4		1991	07	11.10451	19	55	40.65	-24	09	12.8		3	809
1991	NY4		1991	07	11.11493	19	55	39.86	-24	09	12.9		3	809
1991	NZ4	*	1991	07	10.14410	19	57	42.35	-23	08	39.2	16.6	3	809

1991	NZ4		1991	07	10.15451	19	57	41.81	-23	08	39.1		3	809
1991	NZ4		1991	07	10.16493	19	57	41.28	-23	08	39.1		3	809
1991	NZ4		1991	07	11.09410	19	56	51.97	-23	08	31.1		3	809
1991	NZ4		1991	07	11.10451	19	56	51.41	-23	08	30.9		3	809
1991	NZ4		1991	07	11.11493	19	56	50.86	-23	08	30.9		3	809
1991	NA5	*	1991	07	10.14410	19	58	37.59	-23	50	15.2	15.9	3	809
1991	NA5		1991	07	10.15451	19	58	36.99	-23	50	20.0		3	809
1991	NA5		1991	07	10.16493	19	58	36.38	-23	50	24.7		3	809
1991	NA5		1991	07	10.25174	19	58	31.33	-23	51	04.6		3	809
1991	NA5		1991	07	10.26215	19	58	30.72	-23	51	09.4		3	809
1991	NA5		1991	07	10.27257	19	58	30.13	-23	51	14.3		3	809
1991	NA5		1991	07	11.09410	19	57	42.27	-23	57	33.4		3	809
1991	NA5		1991	07	11.10451	19	57	41.65	-23	57	38.3		3	809
1991	NA5		1991	07	11.11493	19	57	41.04	-23	57	43.0		3	809
1991	NA5		1991	07	11.19341	19	57	36.48	-23	58	19.1		3	809
1991	NA5		1991	07	11.20383	19	57	35.87	-23	58	23.8		3	809
1991	NB5	*	1991	07	10.14410	19	58	40.29	-23	10	07.7	17.3	3	809
1991	NB5		1991	07	10.15451	19	58	39.81	-23	10	09.2		3	809
1991	NB5		1991	07	10.16493	19	58	39.31	-23	10	11.0		3	809
1991	NB5		1991	07	11.09410	19	57	54.53	-23	12	51.5		3	809
1991	NB5		1991	07	11.10451	19	57	54.04	-23	12	53.2		3	809
1991	NB5		1991	07	11.11493	19	57	53.52	-23	12	55.4		3	809
1991	NC5	*	1991	07	10.14410	19	58	50.88	-24	08	44.6	17.6	3	809
1991	NC5		1991	07	10.15451	19	58	50.30	-24	08	45.2		3	809
1991	NC5		1991	07	10.16493	19	58	49.72	-24	08	45.9		3	809
1991	NC5		1991	07	11.09410	19	57	58.31	-24	09	51.0		3	809
1991	NC5		1991	07	11.10451	19	57	57.73	-24	09	51.7		3	809
1991	NC5		1991	07	11.11493	19	57	57.16	-24	09	52.5		3	809
1991	NC5		1991	07	11.19341	19	57	52.83	-24	09	58.0		3	809
1991	NC5		1991	07	11.20383	19	57	52.25	-24	09	58.7		3	809
1991	ND5	*	1991	07	10.17674	19	50	47.58	-20	41	21.1	17.5	3	809
1991	ND5		1991	07	10.18715	19	50	47.03	-20	41	24.4		3	809
1991	ND5		1991	07	10.19757	19	50	46.46	-20	41	27.7		3	809
1991	ND5		1991	07	11.12674	19	49	56.97	-20	45	52.8		3	809
1991	ND5		1991	07	11.13715	19	49	56.41	-20	45	55.8		3	809
1991	ND5		1991	07	11.14757	19	49	55.85	-20	45	58.7		3	809
1991	NE5	*	1991	07	10.17674	19	51	49.87	-22	16	03.1	16.4	3	809
1991	NE5		1991	07	10.18715	19	51	49.37	-22	16	05.0		3	809
1991	NE5		1991	07	10.19757	19	51	48.87	-22	16	06.8		3	809
1991	NE5		1991	07	11.12674	19	51	03.60	-22	18	46.4		3	809
1991	NE5		1991	07	11.13715	19	51	03.07	-22	18	48.0		3	809
1991	NE5		1991	07	11.14757	19	51	02.57	-22	18	49.4		3	809
1991	NF5	*	1991	07	10.17674	19	53	52.28	-22	02	59.9	17.3	3	809
1991	NF5		1991	07	10.18715	19	53	51.72	-22	03	03.0		3	809
1991	NF5		1991	07	10.19757	19	53	51.17	-22	03	06.6		3	809
1991	NF5		1991	07	11.12674	19	53	01.30	-22	08	01.5		3	809
1991	NF5		1991	07	11.13715	19	53	00.75	-22	08	04.9		3	809
1991	NF5		1991	07	11.14757	19	53	00.17	-22	08	08.0		3	809
1991	NG5	*	1991	07	10.17674	19	55	50.68	-20	58	46.0	16.1	3	809
1991	NG5		1991	07	10.18715	19	55	50.16	-20	58	45.1		3	809
1991	NG5		1991	07	10.19757	19	55	49.62	-20	58	43.9		3	809
1991	NG5		1991	07	11.12674	19	55	01.34	-20	56	47.6		3	809
1991	NG5		1991	07	11.13715	19	55	00.81	-20	56	46.2		3	809
1991	NG5		1991	07	11.14757	19	55	00.27	-20	56	44.9		3	809
1991	NG5		1991	07	23.17708	19	44	08.75	-20	31	24.4		3	809
1991	NG5		1991	07	23.18958	19	44	08.09	-20	31	22.8		3	809
1991	NG5		1991	07	24.20416	19	43	14.50	-20	29	09.6		3	809
1991	NG5		1991	07	24.21667	19	43	13.85	-20	29	07.7		3	809
1991	NH5	*	1991	07	10.17674	19	58	36.37	-21	54	13.0	17.4	3	809

1991 NH5		1991	07	10.18715	19	58	35.81	-21	54	13.5		3 809
1991 NH5		1991	07	10.19757	19	58	35.25	-21	54	14.0		3 809
1991 NH5		1991	07	10.21979	19	58	33.88	-21	54	15.2	17.1	3 809
1991 NH5		1991	07	10.23021	19	58	33.33	-21	54	15.6		3 809
1991 NH5		1991	07	10.24063	19	58	32.76	-21	54	16.1		3 809
1991 NH5		1991	07	11.12674	19	57	45.21	-21	54	53.8		3 809
1991 NH5		1991	07	11.13715	19	57	44.64	-21	54	54.2		3 809
1991 NH5		1991	07	11.14757	19	57	44.09	-21	54	54.4		3 809
1991 NH5		1991	07	11.16077	19	57	43.29	-21	54	54.5		3 809
1991 NH5		1991	07	11.17117	19	57	42.74	-21	54	54.8		3 809
1991 NH5		1991	07	11.18159	19	57	42.18	-21	54	55.5		3 809
1991 NK5	*	1991	07	10.21979	20	01	36.44	-22	28	26.5	16.8	3 809
1991 NK5		1991	07	10.23021	20	01	35.94	-22	28	27.8		3 809
1991 NK5		1991	07	10.24063	20	01	35.44	-22	28	29.0		3 809
1991 NK5		1991	07	11.16077	20	00	50.99	-22	30	25.4		3 809
1991 NK5		1991	07	11.17117	20	00	50.49	-22	30	26.5		3 809
1991 NK5		1991	07	11.18159	20	00	50.00	-22	30	27.6		3 809
1991 NL5	*	1991	07	10.21979	20	02	30.34	-20	56	43.8	17.3	3 809
1991 NL5		1991	07	10.23021	20	02	29.99	-20	56	43.6		3 809
1991 NL5		1991	07	10.24063	20	02	29.63	-20	56	43.5		3 809
1991 NL5		1991	07	11.16077	20	01	57.07	-20	56	30.7		3 809
1991 NL5		1991	07	11.17117	20	01	56.70	-20	56	30.5		3 809
1991 NL5		1991	07	11.18159	20	01	56.35	-20	56	30.4		3 809
1991 NM5	*	1991	07	10.21979	20	03	35.41	-20	50	49.7	17.5	3 809
1991 NM5		1991	07	10.23021	20	03	34.73	-20	50	51.4		3 809
1991 NM5		1991	07	10.24063	20	03	34.05	-20	50	53.5		3 809
1991 NM5		1991	07	11.16077	20	02	34.53	-20	53	55.8		3 809
1991 NM5		1991	07	11.17117	20	02	33.86	-20	53	57.9		3 809
1991 NM5		1991	07	11.18159	20	02	33.18	-20	54	00.2		3 809
1991 NN5	*	1991	07	10.21979	20	03	44.09	-20	58	33.9	17.3	3 809
1991 NN5		1991	07	10.23021	20	03	43.48	-20	58	33.0		3 809
1991 NN5		1991	07	10.24063	20	03	42.88	-20	58	32.2		3 809
1991 NN5		1991	07	11.16077	20	02	48.76	-20	57	10.6		3 809
1991 NN5		1991	07	11.17117	20	02	48.15	-20	57	09.6		3 809
1991 NN5		1991	07	11.18159	20	02	47.54	-20	57	08.5		3 809
1991 NO5	*	1991	07	10.21979	20	04	08.62	-21	34	53.1	16.8	3 809
1991 NO5		1991	07	10.23021	20	04	08.16	-21	34	55.2		3 809
1991 NO5		1991	07	10.24063	20	04	07.69	-21	34	57.2		3 809
1991 NO5		1991	07	11.16077	20	03	26.21	-21	37	52.6		3 809
1991 NO5		1991	07	11.17117	20	03	25.75	-21	37	54.6		3 809
1991 NO5		1991	07	11.18159	20	03	25.28	-21	37	56.5		3 809
1991 NP5	*	1991	07	10.21979	20	04	40.12	-20	46	45.6	16.9	3 809
1991 NP5		1991	07	10.23021	20	04	39.65	-20	46	48.5		3 809
1991 NP5		1991	07	10.24063	20	04	39.16	-20	46	51.5		3 809
1991 NP5		1991	07	11.16077	20	03	58.00	-20	51	15.2		3 809
1991 NP5		1991	07	11.17117	20	03	57.53	-20	51	18.6		3 809
1991 NP5		1991	07	11.18159	20	03	57.06	-20	51	21.9		3 809
1991 NQ5	*	1991	07	10.21979	20	05	13.94	-20	55	10.3	17.0	3 809
1991 NQ5		1991	07	10.23021	20	05	13.40	-20	55	12.7		3 809
1991 NQ5		1991	07	10.24063	20	05	12.84	-20	55	15.3		3 809
1991 NQ5		1991	07	11.16077	20	04	23.29	-20	58	54.2		3 809
1991 NQ5		1991	07	11.17117	20	04	22.73	-20	58	56.6		3 809
1991 NQ5		1991	07	11.18159	20	04	22.17	-20	58	59.1		3 809
1991 NR5	*	1991	07	10.21979	20	06	30.93	-21	30	23.2	16.8	3 809
1991 NR5		1991	07	10.23021	20	06	30.33	-21	30	26.2		3 809
1991 NR5		1991	07	10.24063	20	06	29.73	-21	30	29.5		3 809
1991 NR5		1991	07	11.16077	20	05	36.65	-21	35	15.1		3 809
1991 NR5		1991	07	11.17117	20	05	36.05	-21	35	18.3		3 809
1991 NR5		1991	07	11.18159	20	05	35.43	-21	35	21.7		3 809

1991	NS5	*	1991	07	10.25174	20	02	33.51	-23	39	00.4	17.7	3	809
1991	NS5		1991	07	10.26215	20	02	32.99	-23	39	01.2		3	809
1991	NS5		1991	07	10.27257	20	02	32.49	-23	39	01.9		3	809
1991	NS5		1991	07	11.19341	20	01	47.72	-23	40	09.0		3	809
1991	NS5		1991	07	11.20383	20	01	47.23	-23	40	09.9		3	809
1991	NT5	*	1991	07	10.25174	20	05	25.68	-23	29	26.3	17.5	3	809
1991	NT5		1991	07	10.26215	20	05	25.10	-23	29	26.7		3	809
1991	NT5		1991	07	10.27257	20	05	24.53	-23	29	26.8		3	809
1991	NT5		1991	07	11.19341	20	04	34.26	-23	29	39.3		3	809
1991	NT5		1991	07	11.20383	20	04	33.64	-23	29	39.4		3	809
1991	NU5	*	1991	07	10.28368	20	03	07.43	-10	34	07.9	17.4	3	809
1991	NU5		1991	07	10.29410	20	03	06.96	-10	34	10.1		3	809
1991	NU5		1991	07	10.30452	20	03	06.50	-10	34	12.5		3	809
1991	NU5		1991	07	11.25729	20	02	24.09	-10	37	40.4		3	809
1991	NU5		1991	07	11.26772	20	02	23.61	-10	37	42.7		3	809
1991	NU5		1991	07	11.27812	20	02	23.15	-10	37	44.9		3	809
1991	NU5		1991	07	12.30035	20	01	36.97	-10	41	35.1		3	809
1991	NU5		1991	07	12.31076	20	01	36.48	-10	41	37.4		3	809
1991	NU5		1991	07	12.32118	20	01	36.01	-10	41	39.9		3	809
1991	NV5	*	1991	07	10.31737	20	07	19.10	-19	10	43.0	17.3	3	809
1991	NV5		1991	07	10.32987	20	07	18.49	-19	10	44.7		3	809
1991	NV5		1991	07	10.34236	20	07	17.88	-19	10	46.0		3	809
1991	NV5		1991	07	11.36389	20	06	28.15	-19	13	03.0		3	809
1991	NV5		1991	07	11.37639	20	06	27.55	-19	13	04.7		3	809
1991	NV5		1991	07	11.38888	20	06	26.94	-19	13	06.4		3	809
1991	NW5	*	1991	07	10.31737	20	08	29.61	-18	21	08.1	17.8	3	809
1991	NW5		1991	07	10.32987	20	08	28.85	-18	21	07.1		3	809
1991	NW5		1991	07	10.34236	20	08	28.12	-18	21	06.1		3	809
1991	NW5		1991	07	12.36319	20	06	27.49	-18	17	33.0		3	809
1991	NW5		1991	07	12.37430	20	06	26.80	-18	17	31.4		3	809
1991	NW5		1991	07	12.38542	20	06	26.12	-18	17	29.8		3	809
1991	NX5	*	1991	07	10.31737	20	08	47.97	-18	39	32.0	16.6	3	809
1991	NX5		1991	07	10.32987	20	08	47.40	-18	39	33.9		3	809
1991	NX5		1991	07	10.34236	20	08	46.81	-18	39	36.0		3	809
1991	NX5		1991	07	11.36389	20	08	00.91	-18	42	22.6		3	809
1991	NX5		1991	07	11.37639	20	08	00.37	-18	42	24.4		3	809
1991	NX5		1991	07	11.38888	20	07	59.82	-18	42	26.4		3	809
1991	NX5		1991	07	12.36319	20	07	15.60	-18	45	08.1		3	809
1991	NX5		1991	07	12.37430	20	07	15.08	-18	45	09.7		3	809
1991	NX5		1991	07	12.38542	20	07	14.59	-18	45	11.8		3	809
1991	NY5	*	1991	07	10.31737	20	09	01.95	-19	14	14.2	17.4	3	809
1991	NY5		1991	07	10.32987	20	09	01.26	-19	14	11.7		3	809
1991	NY5		1991	07	10.34236	20	09	00.58	-19	14	09.2		3	809
1991	NY5		1991	07	11.36389	20	08	04.52	-19	11	03.9		3	809
1991	NY5		1991	07	11.37639	20	08	03.84	-19	11	01.6		3	809
1991	NY5		1991	07	11.38888	20	08	03.15	-19	10	59.2		3	809
1991	NY5		1991	07	12.36319	20	07	09.80	-19	08	04.8		3	809
1991	NY5		1991	07	12.37430	20	07	09.19	-19	08	02.6		3	809
1991	NY5		1991	07	12.38542	20	07	08.57	-19	08	00.6		3	809
1991	NZ5	*	1991	07	10.31737	20	09	12.85	-18	21	44.5	17.6	3	809
1991	NZ5		1991	07	10.32987	20	09	12.17	-18	21	44.5		3	809
1991	NZ5		1991	07	10.34236	20	09	11.48	-18	21	44.5		3	809
1991	NZ5		1991	07	11.36389	20	08	15.11	-18	21	45.9		3	809
1991	NZ5		1991	07	11.37639	20	08	14.42	-18	21	45.9		3	809
1991	NZ5		1991	07	11.38888	20	08	13.72	-18	21	45.8		3	809
1991	NZ5		1991	07	12.36319	20	07	19.61	-18	21	48.3		3	809
1991	NZ5		1991	07	12.37430	20	07	18.99	-18	21	48.2		3	809
1991	NZ5		1991	07	12.38542	20	07	18.39	-18	21	48.2		3	809
1991	NA6	*	1991	07	10.31737	20	09	42.49	-17	48	24.7	17.6	3	809

1991 NA6		1991	07	10.32987	20	09	41.76	-17	48	26.2		3 809
1991 NA6		1991	07	10.34236	20	09	41.04	-17	48	27.8		3 809
1991 NA6		1991	07	11.32292	20	08	43.70	-17	50	24.4		3 809
1991 NA6		1991	07	11.33542	20	08	42.97	-17	50	25.9		3 809
1991 NA6		1991	07	11.34792	20	08	42.24	-17	50	27.1		3 809
1991 NA6		1991	07	11.36389	20	08	41.31	-17	50	28.9		3 809
1991 NA6		1991	07	11.37639	20	08	40.58	-17	50	30.1		3 809
1991 NA6		1991	07	11.38888	20	08	39.84	-17	50	31.6		3 809
1991 NA6		1991	07	12.36319	20	07	42.20	-17	52	29.3		3 809
1991 NA6		1991	07	12.37430	20	07	41.54	-17	52	30.6		3 809
1991 NA6		1991	07	12.38542	20	07	40.87	-17	52	31.8		3 809
1991 NA6		1991	07	15.08090	20	04	59.99	-17	58	06.0		3 809
1991 NA6		1991	07	15.09132	20	04	59.37	-17	58	07.3		3 809
1991 NA6		1991	07	15.10173	20	04	58.74	-17	58	08.5		3 809
1991 NA6		1991	07	16.03021	20	04	02.58	-18	00	04.1		3 809
1991 NA6		1991	07	16.04062	20	04	01.95	-18	00	05.3		3 809
1991 NA6		1991	07	16.05104	20	04	01.33	-18	00	06.6		3 809
1991 NB6	*	1991	07	10.31737	20	12	21.69	-18	27	49.0	16.8	3 809
1991 NB6		1991	07	10.32987	20	12	21.19	-18	27	56.6		3 809
1991 NB6		1991	07	10.34236	20	12	20.66	-18	28	04.5		3 809
1991 NB6		1991	07	11.36389	20	11	39.56	-18	38	42.0		3 809
1991 NB6		1991	07	11.37639	20	11	39.05	-18	38	49.8		3 809
1991 NB6		1991	07	11.38888	20	11	38.58	-18	38	57.7		3 809
1991 NB6		1991	07	12.36319	20	10	58.47	-18	49	15.4		3 809
1991 NB6		1991	07	12.37430	20	10	58.01	-18	49	22.5		3 809
1991 NB6		1991	07	12.38542	20	10	57.56	-18	49	29.4		3 809
1991 NC6	*	1991	07	10.31737	20	13	02.18	-19	13	33.0	17.6	3 809
1991 NC6		1991	07	10.32987	20	13	01.53	-19	13	35.8		3 809
1991 NC6		1991	07	10.34236	20	13	00.87	-19	13	38.5		3 809
1991 NC6		1991	07	11.36389	20	12	07.25	-19	17	31.0		3 809
1991 NC6		1991	07	11.37639	20	12	06.59	-19	17	33.6		3 809
1991 NC6		1991	07	11.38888	20	12	05.93	-19	17	36.4		3 809
1991 NC6		1991	07	12.36319	20	11	13.65	-19	21	21.4		3 809
1991 NC6		1991	07	12.37430	20	11	13.06	-19	21	23.8		3 809
1991 NC6		1991	07	12.38542	20	11	12.44	-19	21	26.3		3 809
1991 ND6	*	1991	07	10.31737	20	14	07.47	-18	20	29.7	16.8	3 809
1991 ND6		1991	07	10.32987	20	14	06.89	-18	20	31.3		3 809
1991 ND6		1991	07	10.34236	20	14	06.31	-18	20	32.8		3 809
1991 ND6		1991	07	11.36389	20	13	18.45	-18	22	42.3		3 809
1991 ND6		1991	07	11.37639	20	13	17.87	-18	22	44.3		3 809
1991 ND6		1991	07	11.38888	20	13	17.31	-18	22	45.8		3 809
1991 ND6		1991	07	12.36319	20	12	31.13	-18	24	50.4		3 809
1991 ND6		1991	07	12.37430	20	12	30.60	-18	24	51.7		3 809
1991 ND6		1991	07	12.38542	20	12	30.09	-18	24	53.5		3 809
1991 NE6	*	1991	07	10.31737	20	14	50.11	-19	00	25.1	16.2	3 809
1991 NE6		1991	07	10.32987	20	14	49.48	-19	00	24.9		3 809
1991 NE6		1991	07	10.34236	20	14	48.85	-19	00	24.3		3 809
1991 NE6		1991	07	11.36389	20	13	56.87	-19	00	01.3		3 809
1991 NE6		1991	07	11.37639	20	13	56.23	-19	00	00.8		3 809
1991 NE6		1991	07	11.38888	20	13	55.60	-19	00	00.4		3 809
1991 NE6		1991	07	12.36319	20	13	05.63	-18	59	38.2		3 809
1991 NE6		1991	07	12.37430	20	13	05.04	-18	59	37.9		3 809
1991 NE6		1991	07	12.38542	20	13	04.45	-18	59	37.8		3 809
1991 NF6	*	1991	07	10.39860	21	38	11.99	-18	14	30.2	17.3	3 809
1991 NF6		1991	07	10.41251	21	38	11.62	-18	14	35.3		3 809
1991 NF6		1991	07	10.42639	21	38	11.27	-18	14	40.3		3 809
1991 NF6		1991	07	11.40451	21	37	45.67	-18	20	37.3		3 809
1991 NF6		1991	07	11.41771	21	37	45.34	-18	20	42.3		3 809
1991 NF6		1991	07	11.43091	21	37	45.00	-18	20	47.2		3 809

1991	NG6	*	1991	07	11.22534	20	00	02.78	-12	47	24.7	17.3	3	809
1991	NG6		1991	07	11.23576	20	00	02.27	-12	47	27.2		3	809
1991	NG6		1991	07	11.24619	20	00	01.76	-12	47	29.6		3	809
1991	NG6		1991	07	12.26633	19	59	11.73	-12	51	32.5		3	809
1991	NG6		1991	07	12.27673	19	59	11.24	-12	51	35.0		3	809
1991	NG6		1991	07	12.28716	19	59	10.70	-12	51	37.4		3	809
1991	NH6	*	1991	07	11.22534	20	02	21.98	-13	20	35.8	17.2	3	809
1991	NH6		1991	07	11.23576	20	02	21.34	-13	20	34.4		3	809
1991	NH6		1991	07	11.24619	20	02	20.70	-13	20	32.9		3	809
1991	NH6		1991	07	12.26633	20	01	18.11	-13	18	30.9		3	809
1991	NH6		1991	07	12.27673	20	01	17.48	-13	18	29.7		3	809
1991	NH6		1991	07	12.28716	20	01	16.86	-13	18	28.4		3	809
1991	NH6		1991	07	14.28021	19	59	12.79	-13	14	44.6		3	809
1991	NH6		1991	07	14.29062	19	59	12.14	-13	14	43.4		3	809
1991	NH6		1991	07	14.30104	19	59	11.51	-13	14	42.3		3	809
1991	NH6		1991	07	15.30313	19	58	08.48	-13	12	57.9		3	809
1991	NH6		1991	07	15.31354	19	58	07.83	-13	12	56.8		3	809
1991	NH6		1991	07	15.32396	19	58	07.16	-13	12	55.8		3	809
1991	NH6		1991	07	16.29271	19	57	06.14	-13	11	19.3		3	809
1991	NH6		1991	07	16.30313	19	57	05.48	-13	11	18.5		3	809
1991	NH6		1991	07	16.31354	19	57	04.82	-13	11	17.4		3	809
1991	NJ6	*	1991	07	11.22534	20	03	14.28	-13	07	30.1	17.5	3	809
1991	NJ6		1991	07	11.23576	20	03	13.71	-13	07	30.7		3	809
1991	NJ6		1991	07	11.24619	20	03	13.16	-13	07	31.3		3	809
1991	NJ6		1991	07	12.26633	20	02	18.59	-13	08	33.3		3	809
1991	NJ6		1991	07	12.27673	20	02	18.02	-13	08	33.6		3	809
1991	NJ6		1991	07	12.28716	20	02	17.46	-13	08	34.1		3	809
1991	NJ6		1991	07	15.30313	19	59	31.74	-13	12	27.4	16.9	3	809
1991	NJ6		1991	07	15.31354	19	59	31.10	-13	12	27.1		3	809
1991	NJ6		1991	07	15.32396	19	59	30.46	-13	12	26.9		3	809
1991	NJ6		1991	07	16.29271	19	58	36.25	-13	13	59.4		3	809
1991	NJ6		1991	07	16.30313	19	58	35.67	-13	14	00.2		3	809
1991	NJ6		1991	07	16.31354	19	58	35.10	-13	14	01.1		3	809
1991	NK6	*	1991	07	11.28923	19	59	20.34	-15	55	15.7	16.6	3	809
1991	NK6		1991	07	11.29965	19	59	19.73	-15	55	17.1		3	809
1991	NK6		1991	07	11.31007	19	59	19.12	-15	55	18.8		3	809
1991	NK6		1991	07	12.33194	19	58	20.22	-15	57	47.9		3	809
1991	NK6		1991	07	12.34166	19	58	19.67	-15	57	49.3		3	809
1991	NK6		1991	07	12.35140	19	58	19.11	-15	57	50.6		3	809
1991	NK6		1991	07	16.09757	19	54	37.95	-16	07	36.4		3	809
1991	NK6		1991	07	16.10799	19	54	37.33	-16	07	38.2		3	809
1991	NK6		1991	07	16.11841	19	54	36.71	-16	07	39.8		3	809
1991	NL6	*	1991	07	11.28923	20	02	09.26	-15	56	15.4	17.4	3	809
1991	NL6		1991	07	11.29965	20	02	08.67	-15	56	15.2		3	809
1991	NL6		1991	07	11.31007	20	02	08.08	-15	56	15.1		3	809
1991	NL6		1991	07	12.33194	20	01	09.63	-15	56	08.6		3	809
1991	NL6		1991	07	12.34166	20	01	09.07	-15	56	08.3		3	809
1991	NL6		1991	07	12.35140	20	01	08.50	-15	56	08.1		3	809
1991	NL6		1991	07	16.09757	19	57	29.62	-15	56	34.9		3	809
1991	NL6		1991	07	16.10799	19	57	29.01	-15	56	35.1		3	809
1991	NL6		1991	07	16.11841	19	57	28.41	-15	56	35.1		3	809
1991	NM6	*	1991	07	11.28923	20	02	47.20	-15	11	27.1	17.1	3	809
1991	NM6		1991	07	11.29965	20	02	46.69	-15	11	29.5		3	809
1991	NM6		1991	07	11.31007	20	02	46.17	-15	11	32.0		3	809
1991	NM6		1991	07	12.33194	20	01	55.78	-15	15	33.4		3	809
1991	NM6		1991	07	12.34166	20	01	55.30	-15	15	35.6		3	809
1991	NM6		1991	07	12.35140	20	01	54.82	-15	15	37.9		3	809
1991	NM6		1991	07	16.09757	19	58	46.24	-15	31	00.5		3	809
1991	NM6		1991	07	16.10799	19	58	45.72	-15	31	03.0		3	809

1991 NM6		1991	07	16.11841	19	58	45.20	-15	31	05.3		3 809
1991 NN6	*	1991	07	11.28923	20	03	47.19	-14	33	59.5	16.8	3 809
1991 NN6		1991	07	11.29965	20	03	46.59	-14	34	00.3		3 809
1991 NN6		1991	07	11.31007	20	03	45.98	-14	34	01.4		3 809
1991 NN6		1991	07	12.33194	20	02	46.57	-14	35	46.8		3 809
1991 NN6		1991	07	12.34166	20	02	46.00	-14	35	47.8		3 809
1991 NN6		1991	07	12.35140	20	02	45.46	-14	35	48.9		3 809
1991 NO6	*	1991	07	11.28923	20	06	07.23	-15	45	47.0	17.5	3 809
1991 NO6		1991	07	11.29965	20	06	06.79	-15	45	47.0		3 809
1991 NO6		1991	07	11.31007	20	06	06.35	-15	45	47.2		3 809
1991 NO6		1991	07	12.33194	20	05	23.21	-15	45	53.8		3 809
1991 NO6		1991	07	12.34166	20	05	22.80	-15	45	54.0		3 809
1991 NO6		1991	07	12.35140	20	05	22.37	-15	45	54.2		3 809
1991 NP6	*	1991	07	11.32292	20	08	58.56	-17	03	33.7	16.9	3 809
1991 NP6		1991	07	11.33542	20	08	57.84	-17	03	31.4		3 809
1991 NP6		1991	07	11.34792	20	08	57.12	-17	03	29.2		3 809
1991 NP6		1991	07	15.08090	20	05	20.95	-16	52	31.0		3 809
1991 NP6		1991	07	15.09132	20	05	20.35	-16	52	29.5		3 809
1991 NP6		1991	07	15.10173	20	05	19.75	-16	52	27.6		3 809
1991 NP6		1991	07	16.03021	20	04	24.51	-16	49	46.8		3 809
1991 NP6		1991	07	16.04062	20	04	23.90	-16	49	44.8		3 809
1991 NP6		1991	07	16.05104	20	04	23.27	-16	49	43.3		3 809
1991 NQ6	*	1991	07	11.32292	20	09	08.62	-17	15	32.0	16.8	3 809
1991 NQ6		1991	07	11.33542	20	09	07.89	-17	15	31.8		3 809
1991 NQ6		1991	07	11.34792	20	09	07.13	-17	15	31.7		3 809
1991 NQ6		1991	07	15.08090	20	05	20.47	-17	15	06.5		3 809
1991 NQ6		1991	07	15.09132	20	05	19.84	-17	15	06.3		3 809
1991 NQ6		1991	07	15.10173	20	05	19.21	-17	15	06.2		3 809
1991 NQ6		1991	07	16.03021	20	04	20.97	-17	15	05.8		3 809
1991 NQ6		1991	07	16.04062	20	04	20.32	-17	15	05.6		3 809
1991 NQ6		1991	07	16.05104	20	04	19.67	-17	15	05.4		3 809
1991 NR6	*	1991	07	11.32292	20	10	37.14	-17	13	00.3	17.3	3 809
1991 NR6		1991	07	11.33542	20	10	36.46	-17	13	03.7		3 809
1991 NR6		1991	07	11.34792	20	10	35.81	-17	13	06.9		3 809
1991 NR6		1991	07	15.08090	20	07	14.48	-17	28	51.2		3 809
1991 NR6		1991	07	15.09132	20	07	13.90	-17	28	53.8		3 809
1991 NR6		1991	07	15.10173	20	07	13.34	-17	28	56.8		3 809
1991 NS6	*	1991	07	11.32292	20	11	51.27	-17	04	40.3	17.6	3 809
1991 NS6		1991	07	11.33542	20	11	50.65	-17	04	44.6		3 809
1991 NS6		1991	07	11.34792	20	11	50.02	-17	04	48.9		3 809
1991 NS6		1991	07	15.08090	20	08	43.24	-17	26	20.1		3 809
1991 NS6		1991	07	15.09132	20	08	42.71	-17	26	23.7		3 809
1991 NS6		1991	07	15.10173	20	08	42.19	-17	26	27.3		3 809
1991 NS6		1991	07	16.03021	20	07	54.04	-17	32	02.0		3 809
1991 NS6		1991	07	16.04062	20	07	53.50	-17	32	05.8		3 809
1991 NS6		1991	07	16.05104	20	07	52.96	-17	32	09.8		3 809
1991 NT6	*	1991	07	11.40451	21	36	57.25	-18	44	55.9	16.8	3 809
1991 NT6		1991	07	11.41771	21	36	56.93	-18	45	02.7		3 809
1991 NT6		1991	07	11.43091	21	36	56.62	-18	45	09.4		3 809
1991 NT6		1991	07	12.39999	21	36	33.75	-18	53	35.5		3 809
1991 NU6	*	1991	07	12.05763	19	38	11.60	-23	45	26.9	16.8	3 809
1991 NU6		1991	07	12.06876	19	38	10.90	-23	45	25.8		3 809
1991 NU6		1991	07	12.07987	19	38	10.20	-23	45	24.8		3 809
1991 NU6		1991	07	13.03334	19	37	09.82	-23	43	39.2		3 809
1991 NU6		1991	07	13.04375	19	37	09.15	-23	43	38.1		3 809
1991 NU6		1991	07	13.05452	19	37	08.47	-23	43	36.9		3 809
1991 NU6		1991	07	14.21216	19	35	54.79	-23	41	26.9		3 809
1991 NU6		1991	07	14.22256	19	35	54.13	-23	41	25.8		3 809
1991 NU6		1991	07	14.23299	19	35	53.48	-23	41	24.5		3 809

1991	NV6	*	1991	07	12.05763	19	38	39.15	-24	29	34.3	17.2	3	809
1991	NV6		1991	07	12.06876	19	38	38.55	-24	29	34.0		3	809
1991	NV6		1991	07	12.07987	19	38	37.96	-24	29	33.9		3	809
1991	NV6		1991	07	13.03334	19	37	47.52	-24	29	30.0		3	809
1991	NV6		1991	07	13.04375	19	37	46.96	-24	29	29.9		3	809
1991	NV6		1991	07	13.05452	19	37	46.40	-24	29	29.7		3	809
1991	NV6		1991	07	14.21216	19	36	44.79	-24	29	22.2		3	809
1991	NV6		1991	07	14.22256	19	36	44.24	-24	29	22.2		3	809
1991	NV6		1991	07	14.23299	19	36	43.69	-24	29	22.0		3	809
1991	NW6	*	1991	07	12.12743	19	51	48.34	-20	15	08.2	16.6	3	809
1991	NW6		1991	07	12.13785	19	51	47.71	-20	15	08.1		3	809
1991	NW6		1991	07	12.14827	19	51	47.09	-20	15	08.1		3	809
1991	NW6		1991	07	13.06702	19	50	51.96	-20	15	04.9		3	809
1991	NW6		1991	07	13.07742	19	50	51.34	-20	15	04.7		3	809
1991	NW6		1991	07	13.08784	19	50	50.71	-20	15	04.5		3	809
1991	NX6	*	1991	07	12.12743	19	54	53.21	-19	50	01.4	17.9	3	809
1991	NX6		1991	07	12.13785	19	54	52.58	-19	50	01.7		3	809
1991	NX6		1991	07	12.14827	19	54	51.95	-19	50	02.0		3	809
1991	NX6		1991	07	13.06702	19	53	57.65	-19	50	19.7		3	809
1991	NX6		1991	07	13.07742	19	53	57.02	-19	50	19.9		3	809
1991	NX6		1991	07	13.08784	19	53	56.40	-19	50	20.1		3	809
1991	NY6	*	1991	07	12.12743	19	57	31.27	-19	28	22.0	16.8	3	809
1991	NY6		1991	07	12.13785	19	57	30.72	-19	28	26.3		3	809
1991	NY6		1991	07	12.14827	19	57	30.17	-19	28	30.4		3	809
1991	NY6		1991	07	13.06702	19	56	41.35	-19	34	35.6		3	809
1991	NY6		1991	07	13.07742	19	56	40.81	-19	34	39.7		3	809
1991	NY6		1991	07	13.08784	19	56	40.25	-19	34	43.8		3	809
1991	NY6		1991	07	15.11354	19	54	49.68	-19	48	11.9		3	809
1991	NY6		1991	07	15.12396	19	54	49.12	-19	48	16.1		3	809
1991	NY6		1991	07	15.13437	19	54	48.55	-19	48	20.3		3	809
1991	NY6		1991	07	16.06424	19	53	57.33	-19	54	34.7		3	809
1991	NY6		1991	07	16.07465	19	53	56.76	-19	54	38.9		3	809
1991	NY6		1991	07	16.08507	19	53	56.19	-19	54	43.2		3	809
1991	NZ6	*	1991	07	12.12743	19	57	51.78	-20	16	44.1	17.5	3	809
1991	NZ6		1991	07	12.13785	19	57	51.26	-20	16	46.4		3	809
1991	NZ6		1991	07	12.14827	19	57	50.74	-20	16	48.8		3	809
1991	NZ6		1991	07	12.23299	19	57	46.49	-20	17	06.9		3	809
1991	NZ6		1991	07	12.24341	19	57	45.96	-20	17	09.1		3	809
1991	NZ6		1991	07	12.25381	19	57	45.44	-20	17	11.3		3	809
1991	NZ6		1991	07	13.06702	19	57	04.65	-20	20	10.2		3	809
1991	NZ6		1991	07	13.07742	19	57	04.14	-20	20	12.7		3	809
1991	NZ6		1991	07	13.08784	19	57	03.62	-20	20	15.4		3	809
1991	NZ6		1991	07	15.11354	19	55	19.70	-20	27	43.4		3	809
1991	NZ6		1991	07	15.12396	19	55	19.17	-20	27	45.5		3	809
1991	NZ6		1991	07	15.13437	19	55	18.63	-20	27	48.0		3	809
1991	NZ6		1991	07	16.06424	19	54	30.65	-20	31	14.2		3	809
1991	NZ6		1991	07	16.07465	19	54	30.10	-20	31	16.6		3	809
1991	NZ6		1991	07	16.08507	19	54	29.57	-20	31	19.1		3	809
1991	NA7	*	1991	07	12.12743	19	58	25.38	-20	23	42.4	17.6	3	809
1991	NA7		1991	07	12.13785	19	58	24.75	-20	23	41.5		3	809
1991	NA7		1991	07	12.14827	19	58	24.12	-20	23	40.6		3	809
1991	NA7		1991	07	12.23299	19	58	18.99	-20	23	34.1		3	809
1991	NA7		1991	07	12.24341	19	58	18.37	-20	23	33.2		3	809
1991	NA7		1991	07	12.25381	19	58	17.74	-20	23	32.4		3	809
1991	NA7		1991	07	13.06702	19	57	28.51	-20	22	28.6		3	809
1991	NA7		1991	07	13.07742	19	57	27.88	-20	22	27.6		3	809
1991	NA7		1991	07	13.08784	19	57	27.25	-20	22	27.0		3	809
1991	NA7		1991	07	15.11354	19	55	22.00	-20	19	53.2		3	809
1991	NA7		1991	07	15.12396	19	55	21.36	-20	19	52.4		3	809

1991 NA7		1991 07 15.13437	19	55	20.72	-20	19	51.5		3	809
1991 NA7		1991 07 16.06424	19	54	23.05	-20	18	39.2		3	809
1991 NA7		1991 07 16.07465	19	54	22.41	-20	18	38.5		3	809
1991 NA7		1991 07 16.08507	19	54	21.76	-20	18	37.7		3	809
1991 NB7	*	1991 07 12.16077	19	50	17.70	-17	32	40.0	17.6	3	809
1991 NB7		1991 07 12.17117	19	50	17.13	-17	32	42.7		3	809
1991 NB7		1991 07 12.18159	19	50	16.58	-17	32	45.3		3	809
1991 NB7		1991 07 15.04617	19	47	42.96	-17	44	12.1		3	809
1991 NB7		1991 07 15.05660	19	47	42.41	-17	44	14.6		3	809
1991 NB7		1991 07 15.06702	19	47	41.86	-17	44	16.9		3	809
1991 NC7	*	1991 07 12.16077	19	51	31.02	-17	35	00.8	17.4	3	809
1991 NC7		1991 07 12.17117	19	51	30.43	-17	35	01.3		3	809
1991 NC7		1991 07 12.18159	19	51	29.87	-17	35	01.8		3	809
1991 NC7		1991 07 14.24548	19	49	35.93	-17	36	28.3		3	809
1991 NC7		1991 07 14.25591	19	49	35.35	-17	36	28.7		3	809
1991 NC7		1991 07 14.26633	19	49	34.77	-17	36	28.9		3	809
1991 NC7		1991 07 15.04617	19	48	51.76	-17	37	04.7		3	809
1991 NC7		1991 07 15.05660	19	48	51.17	-17	37	05.3		3	809
1991 NC7		1991 07 15.06702	19	48	50.59	-17	37	06.0		3	809
1991 NC7		1991 07 16.25798	19	47	43.07	-17	38	04.8		3	809
1991 NC7		1991 07 16.26840	19	47	42.49	-17	38	05.1		3	809
1991 NC7		1991 07 16.27882	19	47	41.90	-17	38	05.4		3	809
1991 ND7	*	1991 07 12.16077	19	53	09.61	-17	48	28.7	17.4	3	809
1991 ND7		1991 07 12.17117	19	53	09.06	-17	48	30.5		3	809
1991 ND7		1991 07 12.18159	19	53	08.51	-17	48	32.3		3	809
1991 ND7		1991 07 14.24548	19	51	19.40	-17	54	57.4		3	809
1991 ND7		1991 07 14.25591	19	51	18.87	-17	54	59.0		3	809
1991 ND7		1991 07 14.26633	19	51	18.31	-17	55	01.0		3	809
1991 ND7		1991 07 15.04617	19	50	37.20	-17	57	29.5		3	809
1991 ND7		1991 07 15.05660	19	50	36.65	-17	57	31.2		3	809
1991 ND7		1991 07 15.06702	19	50	36.11	-17	57	33.1		3	809
1991 ND7		1991 07 16.25798	19	49	32.05	-18	01	22.1		3	809
1991 ND7		1991 07 16.26840	19	49	31.50	-18	01	24.4		3	809
1991 ND7		1991 07 16.27882	19	49	30.94	-18	01	26.6		3	809
1991 NE7	*	1991 07 12.16077	19	53	18.88	-17	27	11.1	17.1	3	809
1991 NE7		1991 07 12.17117	19	53	18.36	-17	27	11.6		3	809
1991 NE7		1991 07 12.18159	19	53	17.86	-17	27	11.9		3	809
1991 NE7		1991 07 13.10104	19	52	33.07	-17	27	48.3		3	809
1991 NE7		1991 07 13.11146	19	52	32.58	-17	27	48.7		3	809
1991 NE7		1991 07 13.12187	19	52	32.09	-17	27	49.0		3	809
1991 NE7		1991 07 14.24548	19	51	36.81	-17	28	36.2		3	809
1991 NE7		1991 07 14.25591	19	51	36.28	-17	28	36.7		3	809
1991 NE7		1991 07 14.26633	19	51	35.75	-17	28	37.2		3	809
1991 NE7		1991 07 15.04617	19	50	57.64	-17	29	11.3		3	809
1991 NE7		1991 07 15.05660	19	50	57.13	-17	29	11.7		3	809
1991 NE7		1991 07 15.06702	19	50	56.63	-17	29	12.2		3	809
1991 NE7		1991 07 16.25798	19	49	57.40	-17	30	07.1		3	809
1991 NE7		1991 07 16.26840	19	49	56.88	-17	30	07.5		3	809
1991 NE7		1991 07 16.27882	19	49	56.36	-17	30	08.0		3	809
1991 NF7	*	1991 07 12.16077	19	56	41.22	-16	55	23.8	17.4	3	809
1991 NF7		1991 07 12.17117	19	56	40.69	-16	55	25.5		3	809
1991 NF7		1991 07 12.18159	19	56	40.14	-16	55	27.1		3	809
1991 NF7		1991 07 14.24548	19	54	51.56	-17	01	25.2		3	809
1991 NF7		1991 07 14.25591	19	54	51.02	-17	01	27.1		3	809
1991 NF7		1991 07 14.26633	19	54	50.47	-17	01	29.0		3	809
1991 NF7		1991 07 15.04617	19	54	09.53	-17	03	48.7		3	809
1991 NF7		1991 07 15.05660	19	54	09.00	-17	03	50.5		3	809
1991 NF7		1991 07 15.06702	19	54	08.45	-17	03	52.4		3	809
1991 NF7		1991 07 16.25798	19	53	04.39	-17	07	31.4		3	809

1991	NF7		1991	07	16.26840	19	53	03.83	-17	07	33.3		3 809
1991	NF7		1991	07	16.27882	19	53	03.28	-17	07	35.3		3 809
1991	NG7	*	1991	07	12.19237	19	59	14.70	-17	56	09.2	17.2	3 809
1991	NG7		1991	07	12.20070	19	59	14.27	-17	56	10.6		3 809
1991	NG7		1991	07	12.20903	19	59	13.85	-17	56	11.6		3 809
1991	NG7		1991	07	15.15938	19	56	43.85	-18	03	46.4		3 809
1991	NG7		1991	07	15.16978	19	56	43.31	-18	03	48.1		3 809
1991	NG7		1991	07	15.18021	19	56	42.79	-18	03	49.7		3 809
1991	NH7	*	1991	07	12.19237	20	05	51.30	-18	07	39.1	17.4	3 809
1991	NH7		1991	07	12.20070	20	05	50.76	-18	07	41.3		3 809
1991	NH7		1991	07	12.20903	20	05	50.25	-18	07	43.5		3 809
1991	NH7		1991	07	15.15938	20	02	46.78	-18	20	50.8		3 809
1991	NH7		1991	07	15.16978	20	02	46.12	-18	20	53.5		3 809
1991	NH7		1991	07	15.18021	20	02	45.46	-18	20	56.0		3 809
1991	NJ7	*	1991	07	12.23299	20	00	52.22	-19	59	49.9	17.3	3 809
1991	NJ7		1991	07	12.24341	20	00	51.66	-19	59	50.5		3 809
1991	NJ7		1991	07	12.25381	20	00	51.09	-19	59	51.3		3 809
1991	NJ7		1991	07	14.31285	19	59	00.10	-20	01	56.4		3 809
1991	NJ7		1991	07	14.32326	19	58	59.52	-20	01	56.9		3 809
1991	NJ7		1991	07	14.33368	19	58	58.95	-20	01	57.5		3 809
1991	NJ7		1991	07	15.11354	19	58	16.81	-20	02	45.7		3 809
1991	NJ7		1991	07	15.12396	19	58	16.25	-20	02	46.2		3 809
1991	NJ7		1991	07	15.13437	19	58	15.67	-20	02	47.1		3 809
1991	NJ7		1991	07	16.06424	19	57	24.59	-20	03	45.0		3 809
1991	NJ7		1991	07	16.07465	19	57	24.00	-20	03	45.4		3 809
1991	NJ7		1991	07	16.08507	19	57	23.45	-20	03	46.1		3 809
1991	NK7	*	1991	07	12.23299	20	02	45.68	-19	48	50.6	17.8	3 809
1991	NK7		1991	07	12.24341	20	02	45.00	-19	48	51.6		3 809
1991	NK7		1991	07	12.25381	20	02	44.32	-19	48	52.3		3 809
1991	NK7		1991	07	14.31285	20	00	29.99	-19	51	24.7		3 809
1991	NK7		1991	07	14.32326	20	00	29.31	-19	51	25.3		3 809
1991	NK7		1991	07	14.33368	20	00	28.64	-19	51	25.8		3 809
1991	NL7	*	1991	07	12.23299	20	03	32.83	-20	08	59.1	17.1	3 809
1991	NL7		1991	07	12.24341	20	03	32.18	-20	09	00.6		3 809
1991	NL7		1991	07	12.25381	20	03	31.55	-20	09	02.0		3 809
1991	NL7		1991	07	14.31285	20	01	24.74	-20	13	42.8		3 809
1991	NL7		1991	07	14.32326	20	01	24.09	-20	13	44.2		3 809
1991	NL7		1991	07	14.33368	20	01	23.44	-20	13	45.6		3 809
1991	NL7		1991	07	15.11354	20	00	35.54	-20	15	32.4		3 809
1991	NL7		1991	07	15.12396	20	00	34.90	-20	15	33.7		3 809
1991	NL7		1991	07	15.13437	20	00	34.23	-20	15	35.5		3 809
1991	NL7		1991	07	16.06424	19	59	36.32	-20	17	41.4		3 809
1991	NL7		1991	07	16.07465	19	59	35.69	-20	17	42.9		3 809
1991	NL7		1991	07	16.08507	19	59	35.06	-20	17	44.6		3 809
1991	NM7	*	1991	07	12.23299	20	03	47.53	-19	21	58.8	16.9	3 809
1991	NM7		1991	07	12.24341	20	03	47.01	-19	22	00.5		3 809
1991	NM7		1991	07	12.25381	20	03	46.52	-19	22	02.2		3 809
1991	NM7		1991	07	14.31285	20	02	07.50	-19	28	10.4		3 809
1991	NM7		1991	07	14.32326	20	02	06.99	-19	28	12.4		3 809
1991	NM7		1991	07	14.33368	20	02	06.49	-19	28	14.1		3 809
1991	NM7		1991	07	15.11354	20	01	28.95	-19	30	32.6		3 809
1991	NM7		1991	07	15.12396	20	01	28.43	-19	30	34.4		3 809
1991	NM7		1991	07	15.13437	20	01	27.93	-19	30	36.4		3 809
1991	NM7		1991	07	16.06424	20	00	42.69	-19	33	23.3		3 809
1991	NM7		1991	07	16.07465	20	00	42.19	-19	33	25.2		3 809
1991	NM7		1991	07	16.08507	20	00	41.70	-19	33	27.1		3 809
1991	NN7	*	1991	07	12.33194	20	00	54.17	-16	09	56.6	16.5	3 809
1991	NN7		1991	07	12.34166	20	00	53.69	-16	09	59.2		3 809
1991	NN7		1991	07	12.35140	20	00	53.19	-16	10	01.9		3 809

1991	NN7		1991	07	16.09757	19	57	43.69	-16	27	57.6		3	809
1991	NN7		1991	07	16.10799	19	57	43.17	-16	28	00.9		3	809
1991	NN7		1991	07	16.11841	19	57	42.62	-16	28	03.6		3	809
1991	NO7	*	1991	07	15.19409	20	10	46.58	-22	45	42.4	16.5	3	809
1991	NO7		1991	07	15.20451	20	10	45.91	-22	45	42.0		3	809
1991	NO7		1991	07	15.21494	20	10	45.27	-22	45	41.5		3	809
1991	NO7		1991	07	16.13091	20	09	48.76	-22	44	51.1		3	809
1991	NO7		1991	07	16.14133	20	09	48.11	-22	44	50.5		3	809
1991	NO7		1991	07	16.15173	20	09	47.47	-22	44	50.0		3	809
1991	NP7	*	1991	07	15.19409	20	12	11.07	-23	08	06.8	16.9	3	809
1991	NP7		1991	07	15.20451	20	12	10.61	-23	08	11.1		3	809
1991	NP7		1991	07	15.21494	20	12	10.14	-23	08	15.5		3	809
1991	NP7		1991	07	16.13091	20	11	28.88	-23	14	47.3		3	809
1991	NP7		1991	07	16.14133	20	11	28.39	-23	14	51.7		3	809
1991	NP7		1991	07	16.15173	20	11	27.91	-23	14	56.3		3	809
1991	NQ7	*	1991	07	15.23715	20	08	31.53	-20	43	22.4	16.8	3	809
1991	NQ7		1991	07	15.24757	20	08	30.99	-20	43	23.7		3	809
1991	NQ7		1991	07	15.25798	20	08	30.44	-20	43	25.3		3	809
1991	NQ7		1991	07	16.17882	20	07	42.82	-20	45	28.9		3	809
1991	NQ7		1991	07	16.18924	20	07	42.28	-20	45	30.2		3	809
1991	NQ7		1991	07	16.19965	20	07	41.74	-20	45	31.7		3	809
1991	NR7	*	1991	07	15.23715	20	09	10.60	-21	06	15.6	16.8	3	809
1991	NR7		1991	07	15.24757	20	09	10.07	-21	06	17.2		3	809
1991	NR7		1991	07	15.25798	20	09	09.51	-21	06	18.8		3	809
1991	NR7		1991	07	16.17882	20	08	20.70	-21	08	47.0		3	809
1991	NR7		1991	07	16.18924	20	08	20.15	-21	08	48.7		3	809
1991	NR7		1991	07	16.19965	20	08	19.59	-21	08	50.3		3	809
1991	NS7	*	1991	07	15.23715	20	10	25.62	-20	57	38.4	16.9	3	809
1991	NS7		1991	07	15.24757	20	10	24.99	-20	57	42.3		3	809
1991	NS7		1991	07	15.25798	20	10	24.35	-20	57	46.0		3	809
1991	NS7		1991	07	16.17882	20	09	29.39	-21	03	23.5		3	809
1991	NS7		1991	07	16.18924	20	09	28.78	-21	03	27.5		3	809
1991	NS7		1991	07	16.19965	20	09	28.16	-21	03	31.2		3	809
1991	NT7	*	1991	07	15.23715	20	11	30.73	-21	20	45.0	16.0	3	809
1991	NT7		1991	07	15.24757	20	11	30.20	-21	20	50.4		3	809
1991	NT7		1991	07	15.25798	20	11	29.68	-21	20	55.7		3	809
1991	NT7		1991	07	16.17882	20	10	42.67	-21	28	44.6		3	809
1991	NT7		1991	07	16.18924	20	10	42.12	-21	28	49.8		3	809
1991	NT7		1991	07	16.19965	20	10	41.60	-21	28	55.2		3	809
1991	NU7	*	1991	07	15.37952	20	15	43.26	-23	47	01.7	16.9	3	809
1991	NU7		1991	07	15.38992	20	15	42.63	-23	47	03.6		3	809
1991	NU7		1991	07	15.40034	20	15	42.02	-23	47	06.3		3	809
1991	NU7		1991	07	16.22327	20	14	53.51	-23	50	02.2		3	809
1991	NU7		1991	07	16.23367	20	14	52.89	-23	50	04.6		3	809
1991	NU7		1991	07	16.24409	20	14	52.28	-23	50	06.7		3	809
1991	NV7	*	1991	07	15.37952	20	16	22.65	-22	32	43.0	16.8	3	809
1991	NV7		1991	07	15.38992	20	16	22.14	-22	32	45.5		3	809
1991	NV7		1991	07	15.40034	20	16	21.62	-22	32	47.6		3	809
1991	NV7		1991	07	16.22327	20	15	40.06	-22	36	01.9		3	809
1991	NV7		1991	07	16.23367	20	15	39.55	-22	36	04.3		3	809
1991	NV7		1991	07	16.24409	20	15	39.02	-22	36	06.6		3	809
1991	NW7	*	1991	07	15.37952	20	18	39.13	-23	40	56.6	17.0	3	809
1991	NW7		1991	07	15.38992	20	18	38.67	-23	40	59.6		3	809
1991	NW7		1991	07	15.40034	20	18	38.19	-23	41	02.5		3	809
1991	NW7		1991	07	16.22327	20	18	00.89	-23	44	40.8		3	809
1991	NW7		1991	07	16.23367	20	18	00.41	-23	44	44.0		3	809
1991	NW7		1991	07	16.24409	20	17	59.94	-23	44	47.0		3	809
1991	OC1	*	1991	07	18.16736	20	31	14.93	-21	27	52.6	17.4	3	809
1991	OC1		1991	07	18.17569	20	31	14.25	-21	27	51.0		3	809

1991	OC1		1991	07	18.18402	20	31	13.57	-21	27	49.7		3	809
1991	OC1		1991	07	19.31424	20	29	40.68	-21	24	25.0		3	809
1991	OC1		1991	07	19.32465	20	29	39.82	-21	24	23.1		3	809
1991	OD1	*	1991	07	18.16736	20	33	20.69	-22	33	40.2	17.1	3	809
1991	OD1		1991	07	18.17569	20	33	20.17	-22	33	40.6		3	809
1991	OD1		1991	07	18.18402	20	33	19.65	-22	33	41.4		3	809
1991	OD1		1991	07	19.31424	20	32	09.79	-22	34	59.4		3	809
1991	OD1		1991	07	19.32465	20	32	09.16	-22	34	59.7		3	809
1991	OE1	*	1991	07	18.16736	20	35	36.88	-21	10	24.5	16.8	3	809
1991	OE1		1991	07	18.17569	20	35	36.40	-21	10	24.2		3	809
1991	OE1		1991	07	18.18402	20	35	35.91	-21	10	24.0		3	809
1991	OE1		1991	07	19.31424	20	34	28.27	-21	09	39.8		3	809
1991	OE1		1991	07	19.32465	20	34	27.65	-21	09	39.3		3	809
1991	OF1	*	1991	07	18.16736	20	36	52.81	-21	31	16.4	16.0	3	809
1991	OF1		1991	07	18.17569	20	36	52.43	-21	31	22.3		3	809
1991	OF1		1991	07	18.18402	20	36	52.03	-21	31	28.0		3	809
1991	OF1		1991	07	19.31424	20	36	00.59	-21	44	47.4		3	809
1991	OF1		1991	07	19.32465	20	36	00.12	-21	44	54.9		3	809
1991	OG1	*	1991	07	18.19618	20	32	09.76	-19	18	09.1	16.0	3	809
1991	OG1		1991	07	18.20660	20	32	09.26	-19	18	13.7		3	809
1991	OG1		1991	07	18.21701	20	32	08.73	-19	18	18.2		3	809
1991	OG1		1991	07	19.33577	20	31	15.23	-19	26	32.9		3	809
1991	OG1		1991	07	19.34618	20	31	14.74	-19	26	37.3		3	809
1991	OH1	*	1991	07	18.19618	20	33	19.26	-20	09	52.6	17.3	3	809
1991	OH1		1991	07	18.20660	20	33	18.74	-20	09	55.3		3	809
1991	OH1		1991	07	18.21701	20	33	18.23	-20	09	57.6		3	809
1991	OH1		1991	07	19.33577	20	32	24.10	-20	14	37.4		3	809
1991	OH1		1991	07	19.34618	20	32	23.60	-20	14	40.1		3	809
1991	OJ1	*	1991	07	18.19618	20	34	32.11	-20	14	15.0	17.3	3	809
1991	OJ1		1991	07	18.20660	20	34	31.61	-20	14	13.9		3	809
1991	OJ1		1991	07	18.21701	20	34	31.10	-20	14	12.7		3	809
1991	OJ1		1991	07	19.33577	20	33	38.19	-20	12	21.9		3	809
1991	OJ1		1991	07	19.34618	20	33	37.71	-20	12	20.8		3	809
1991	OK1	*	1991	07	18.19618	20	34	51.15	-19	33	23.2	17.2	3	809
1991	OK1		1991	07	18.20660	20	34	50.64	-19	33	23.3		3	809
1991	OK1		1991	07	18.21701	20	34	50.11	-19	33	23.6		3	809
1991	OK1		1991	07	19.33577	20	33	54.40	-19	33	46.0		3	809
1991	OK1		1991	07	19.34618	20	33	53.87	-19	33	46.1		3	809
1991	OL1	*	1991	07	18.19618	20	35	52.66	-19	18	44.1	17.0	3	809
1991	OL1		1991	07	18.20660	20	35	52.17	-19	18	46.4		3	809
1991	OL1		1991	07	18.21701	20	35	51.71	-19	18	48.4		3	809
1991	OL1		1991	07	19.33577	20	35	01.79	-19	23	03.2		3	809
1991	OL1		1991	07	19.34618	20	35	01.33	-19	23	05.5		3	809
1991	OM1	*	1991	07	18.23090	20	38	07.97	-18	11	53.0	15.5	3	809
1991	OM1		1991	07	18.24132	20	38	07.42	-18	11	54.1		3	809
1991	OM1		1991	07	18.25174	20	38	06.86	-18	11	55.3		3	809
1991	OM1		1991	07	19.35799	20	37	07.87	-18	14	03.5		3	809
1991	OM1		1991	07	19.36841	20	37	07.29	-18	14	04.9		3	809
1991	OM1		1991	07	21.31424	20	35	22.22	-18	17	55.6		3	809
1991	OM1		1991	07	21.32465	20	35	21.66	-18	17	56.7		3	809
1991	OM1		1991	07	21.33507	20	35	21.10	-18	17	58.0		3	809
1991	ON1	*	1991	07	18.23090	20	38	39.81	-19	31	03.6	17.5	3	809
1991	ON1		1991	07	18.24132	20	38	39.30	-19	31	03.9		3	809
1991	ON1		1991	07	18.25174	20	38	38.80	-19	31	04.1		3	809
1991	ON1		1991	07	21.31424	20	35	59.85	-19	32	54.2		3	809
1991	ON1		1991	07	21.32465	20	35	59.29	-19	32	54.7		3	809
1991	ON1		1991	07	21.33507	20	35	58.75	-19	32	55.3		3	809
1991	OO1	*	1991	07	18.23090	20	45	22.95	-18	33	39.4	17.5	3	809
1991	OO1		1991	07	18.24132	20	45	22.44	-18	33	39.4		3	809

1991	OO1		1991	07	18.25174	20	45	21.95	-18	33	39.1		3	809
1991	OO1		1991	07	21.31424	20	42	39.68	-18	32	03.7		3	809
1991	OO1		1991	07	21.32465	20	42	39.10	-18	32	03.2		3	809
1991	OO1		1991	07	21.33507	20	42	38.52	-18	32	02.7		3	809
1991	OP1	*	1991	07	18.27812	20	46	21.33	-21	11	28.1	16.8	3	809
1991	OP1		1991	07	18.28854	20	46	20.88	-21	11	35.7		3	809
1991	OP1		1991	07	18.29895	20	46	20.45	-21	11	43.1		3	809
1991	OP1		1991	07	18.31285	20	46	19.84	-21	11	53.3		3	809
1991	OP1		1991	07	18.32326	20	46	19.39	-21	12	01.1		3	809
1991	OP1		1991	07	18.33368	20	46	18.94	-21	12	08.7		3	809
1991	OP1		1991	07	19.38785	20	45	33.44	-21	24	57.6		3	809
1991	OP1		1991	07	19.39827	20	45	32.98	-21	25	05.3		3	809
1991	OQ1	*	1991	07	18.31285	20	50	08.22	-21	15	21.8	17.0	3	809
1991	OQ1		1991	07	18.32326	20	50	07.72	-21	15	23.9		3	809
1991	OQ1		1991	07	18.33368	20	50	07.22	-21	15	26.0		3	809
1991	OQ1		1991	07	19.38785	20	49	16.91	-21	19	07.5		3	809
1991	OQ1		1991	07	19.39827	20	49	16.36	-21	19	10.3		3	809
1991	PQ1		1991	07	23.37987	21	37	30.04	-13	03	38.2	17.0	3	809
1991	PQ1		1991	07	23.39653	21	37	29.41	-13	03	41.8		3	809
1991	PQ1		1991	07	23.41319	21	37	28.78	-13	03	45.8		3	809
1991	PQ1		1991	07	24.41562	21	36	50.90	-13	07	45.4		3	809
1991	PQ1		1991	07	24.43021	21	36	50.35	-13	07	49.0		3	809
1991	PN8		1991	07	23.37987	21	36	00.56	-12	00	14.7	17.4	3	809
1991	PN8		1991	07	23.39653	21	35	59.94	-12	00	18.2		3	809
1991	PN8		1991	07	23.41319	21	35	59.33	-12	00	21.7		3	809
1991	PN8		1991	07	24.41562	21	35	21.92	-12	03	51.5		3	809
1991	PN8		1991	07	24.43021	21	35	21.36	-12	03	54.3		3	809
1992	AD		1992	02	06.17292	08	03	03.50	+21	02	41.7	17.0 V	5	809
4045	T-3		1991	07	06.02257	19	28	52.89	-20	20	27.5	16.8	3	809
4045	T-3		1991	07	06.03299	19	28	52.26	-20	20	30.8		3	809
4045	T-3		1991	07	06.04340	19	28	51.63	-20	20	34.2		3	809
4045	T-3		1991	07	07.26181	19	27	39.35	-20	27	03.5		3	809
4045	T-3		1991	07	07.26875	19	27	38.93	-20	27	05.8		3	809
4157	T-3		1991	11	02.21389	03	59	19.91	+10	58	36.8	19.4	4	809
4157	T-3		1991	11	02.22708	03	59	19.17	+10	58	31.0		4	809
4157	T-3		1991	11	02.24028	03	59	18.42	+10	58	26.7		4	809
4157	T-3		1991	11	06.11806	03	56	00.20	+10	36	45.3	19.5	4	809
4157	T-3		1991	11	06.13125	03	55	59.46	+10	36	40.5		4	809
4157	T-3		1991	11	06.14444	03	55	58.78	+10	36	34.6		4	809
4157	T-3		1991	11	09.11528	03	53	14.19	+10	20	13.0	19.4	4	809
4157	T-3		1991	11	09.12847	03	53	13.39	+10	20	09.2		4	809
4157	T-3		1991	11	09.14375	03	53	12.50	+10	20	03.7		4	809
(1589)			1991	07	23.13333	19	46	25.72	-25	16	02.9		3	809
(1589)			1991	07	23.14583	19	46	25.02	-25	16	07.8		3	809
(1589)			1991	07	24.14514	19	45	24.33	-25	20	48.0		3	809
(1589)			1991	07	24.15833	19	45	23.54	-25	20	51.8		3	809
(1721)			1991	07	06.20070	21	26	41.32	-19	14	09.3	16.4	3	809
(1721)			1991	07	06.21320	21	26	40.88	-19	14	08.8		3	809
(1721)			1991	07	06.22569	21	26	40.45	-19	14	08.5		3	809
(1721)			1991	07	08.38542	21	25	24.92	-19	13	13.4		3	809
(1721)			1991	07	08.39792	21	25	24.51	-19	13	12.7		3	809
(4941)			1991	07	22.40973	21	52	31.63	-13	12	59.2	16.1	3	809
(4941)			1991	07	22.41945	21	52	31.27	-13	13	01.1		3	809
(4941)			1991	07	22.42917	21	52	30.93	-13	13	02.7		3	809
(5055)			1991	07	06.02257	19	30	50.74	-19	46	44.5	16.8	3	809
(5055)			1991	07	06.03299	19	30	50.23	-19	46	46.4		3	809
(5055)			1991	07	06.04340	19	30	49.72	-19	46	48.3		3	809
(5055)			1991	07	07.26181	19	29	51.12	-19	50	12.0		3	809
(5055)			1991	07	07.26875	19	29	50.80	-19	50	13.0		3	809

877 Okutama
S. Hayakawa, 1-31-33, Nagano, Gyoda-Shi, Saitama-Ken, 361 Japan
Observer T. Hioki
Measurers S. Hayakawa, T. Hioki
0.30-m f/3.8 hyperboloid astrocamera
GSC

1988 CC2		1992 02 08.69201	11 13 36.89	+02 19 40.0	16.5	F	877
1988 CC2		1992 02 08.72396	11 13 35.72	+02 19 42.7		F	877
1990 VD2		1992 02 08.74271	11 48 53.82	+00 36 09.1	16.5		877
1990 VD2		1992 02 08.77361	11 48 53.06	+00 36 12.3			877
1990 VD2		1992 02 09.73264	11 48 30.26	+00 38 45.7			877
1990 VD2		1992 02 09.75972	11 48 29.36	+00 38 52.4			877
1992 AG		1992 02 02.56389	07 33 39.17	+39 31 07.9	15.0		877
1992 AG		1992 02 02.57847	07 33 38.31	+39 31 22.5			877
1992 AG		1992 02 10.55903	07 27 30.40	+41 34 18.0	15.5		877
1992 AG		1992 02 10.58333	07 27 29.36	+41 34 36.2			877
1992 AL		1992 01 27.57396	09 17 50.98	+11 15 30.9	16.0		877
1992 AL		1992 01 27.59201	09 17 49.80	+11 15 45.3			877
1992 AL		1992 02 04.61215	09 10 28.62	+12 53 25.2	15.5		877
1992 AL		1992 02 04.62951	09 10 27.56	+12 53 38.8			877
1992 AL		1992 02 08.61632	09 06 48.97	+13 42 08.0			877
1992 AL		1992 02 08.63403	09 06 47.68	+13 42 22.8			877
1992 AY		1992 01 28.62344	09 11 12.12	+28 53 28.2	16.5		877
1992 AY		1992 01 28.64294	09 11 11.50	+28 53 37.2			877
1992 AY		1992 02 09.60243	09 01 07.50	+30 34 19.0	16.0		877
1992 AY		1992 02 09.65660	09 01 04.61	+30 34 40.3			877
1992 AY		1992 02 09.67523	09 01 03.67	+30 34 52.2			877
1992 AY		1992 02 10.63993	09 00 15.81	+30 41 50.9			877
1992 AY		1992 02 10.66042	09 00 15.07	+30 41 58.2			877
1992 AE1		1992 01 28.65775	09 21 09.88	+26 46 36.9			877
1992 AE1		1992 01 28.67465	09 21 08.71	+26 46 47.5			877
1992 AF1		1992 01 28.65775	09 18 16.30	+24 32 32.2			877
1992 AF1		1992 01 28.67465	09 18 15.01	+24 32 36.0			877
1992 AO1		1992 02 01.58368	09 52 42.00	+21 13 16.4	16.5		877
1992 AO1		1992 02 01.59063	09 52 40.98	+21 13 20.5			877
1992 AO1		1992 02 02.59132	09 51 46.83	+21 19 31.3	15.5		877
1992 AO1		1992 02 02.60885	09 51 45.88	+21 19 37.9			877
1992 BN		1992 02 13.76181	09 33 29.73	+20 09 09.4	16.5		877
1992 BN		1992 02 13.78229	09 33 28.96	+20 09 13.1			877
1992 CC	*	1992 02 04.64514	10 45 27.84	+06 25 53.7	16.5		877
1992 CC		1992 02 04.66354	10 45 27.15	+06 26 03.7			877
1992 CC		1992 02 08.65243	10 43 30.02	+07 04 25.3	16.0		877
1992 CC		1992 02 08.67431	10 43 29.28	+07 04 37.9			877
1992 CD	*	1992 02 04.64514	10 55 13.98	+07 06 29.7	16.5		877
1992 CD		1992 02 04.66354	10 55 13.21	+07 06 33.2			877
1992 CD		1992 02 08.65243	10 52 49.78	+07 18 08.3	16.5		877
1992 CD		1992 02 08.67431	10 52 48.94	+07 18 13.8			877
(687)		1992 02 07.64907	10 54 04.01	+07 11 27.5			877
(687)		1992 02 07.67118	10 54 02.91	+07 11 31.3			877
(687)		1992 02 13.82882	10 48 27.59	+07 20 07.0			877
(687)		1992 02 13.84583	10 48 26.39	+07 20 02.1			877

885 JCPM Yakiimo Station
T. Urata, 6-1, Muramatsuhara 1 Chome, Shimizu, Shizuoka-Ken 424, Japan
Observers A. Natori, T. Urata
Measurer T. Urata
0.20-m f/4.0 hyperboloid astrocamera

1992 BH		1992 02 22.50313	07 37 23.23	+15 06 54.0	16.8		885
1992 BH		1992 02 22.53229	07 37 22.67	+15 07 09.8			885

1992 CB	*	1992 02 02.56424	09 17 29.75	+01 13 09.6	16.5	885
1992 CB		1992 02 02.57813	09 17 28.77	+01 13 05.7		885
1992 CB		1992 02 08.67361	09 11 10.46	+00 59 23.0	16	885
1992 CB		1992 02 08.68125	09 11 09.96	+00 59 22.8		885

886 Susono
T. Furuta, 17-2 Mitsuike, Kagiya, Tokai 477, Japan
Observers M. Akiyama, T. Furuta
Measurer T. Furuta
0.25-m f/4.2 Wright-Schmidt camera
GSC

1990 QY7		1992 02 02.57535	09 39 01.75	+16 03 08.4	16.0	886
1990 QY7		1992 02 02.58628	09 39 01.03	+16 03 11.6		886
1992 CU	*	1992 02 13.71667	11 11 54.77	+20 59 00.1	16.0	886
1992 CU		1992 02 13.72882	11 11 54.29	+20 59 04.4		886
1992 CU		1992 02 14.76250	11 11 13.98	+21 06 48.1		886
1992 CU		1992 02 14.77344	11 11 13.49	+21 06 51.5		886
1992 CU		1992 02 25.66563	11 03 13.70	+22 22 59.5	16.0	886
1992 CU		1992 02 25.67639	11 03 13.10	+22 23 03.8		886
1992 CU		1992 02 26.53264	11 02 32.45	+22 28 29.7		886
1992 CU		1992 02 26.54028	11 02 32.07	+22 28 32.8		886
1992 DB	*	1992 02 25.64132	11 21 02.91	+09 14 48.3	16.0	886
1992 DB		1992 02 25.65208	11 21 02.54	+09 14 52.5		886
1992 DB		1992 02 27.78785	11 19 14.57	+09 32 46.5		886

889 Karasuyama
T. Urata, 6-1, Muramatsubara 1 Chome, Shimizu, Shizuoka-Ken 424, Japan
Observers S. Inoda, T. Urata
Measurer T. Urata
0.31-m f/5.6 reflector
ACRS, GSC

1991 YX		1992 01 11.60451	07 08 43.14	+17 35 40.9	17	889
1991 YX		1992 01 11.62396	07 08 41.85	+17 35 48.0		889

894 Otomo
S. Otomo, Kiyosato 3545-3902, Takane-cho, Kitakoma-gun, Yamanashi-ken, 407-03, Japan
0.25-m f/3.4 reflector
PPM

1976 GU3		1992 01 24.54444	07 48 41.06	+23 44 27.8	17.5	894
1976 GU3		1992 01 24.55694	07 48 40.27	+23 44 32.2		894
1982 DU		1992 02 06.66667	09 51 59.23	+26 11 44.4	16.0	894
1982 DU		1992 02 06.73733	09 51 53.96	+26 11 31.5		894
1987 DW6		1992 01 24.54444	07 46 30.22	+23 30 23.9	17.2	894
1987 DW6		1992 01 24.55694	07 46 29.50	+23 30 24.3		894
1987 DW6		1992 01 26.60662	07 44 41.48	+23 34 30.0	17.5	894
1987 DW6		1992 01 26.61910	07 44 40.84	+23 34 31.1		894
1987 VQ		1992 01 12.64223	07 45 41.60	+18 02 57.2	16.5	894
1987 VQ		1992 01 12.65521	07 45 40.71	+18 02 59.2		894
1987 VQ		1992 01 15.73385	07 42 32.28	+18 11 48.9	16.5	894
1990 SM2		1992 01 10.68438	07 29 56.81	+25 57 42.8	16.8	894
1990 SM2		1992 01 10.69826	07 29 55.87	+25 57 45.2		894
1990 SQ16		1992 02 26.64410	10 49 32.19	+15 57 33.0	17.0	894
1990 SQ16		1992 02 26.65729	10 49 31.41	+15 57 38.9		894
1990 SQ16		1992 02 27.64931	10 48 30.94	+16 04 47.9		894
1990 SQ16		1992 02 27.66458	10 48 29.97	+16 04 48.8		894
1990 TL4		1992 01 12.64223	07 49 05.84	+17 39 12.5	16.6	894
1990 TL4		1992 01 12.65521	07 49 05.06	+17 39 11.2		894
1990 TL4		1992 01 15.73385	07 46 08.49	+17 40 52.6	16.8	894

1991	RA22		1991	09	09.68715	23	24	10.72	-07	40	23.3	16.8	894
1991	RA22		1991	09	09.70035	23	24	10.05	-07	40	26.3		894
1991	VF4		1991	11	12.61510	02	57	33.33	+07	51	16.9	16.7	894
1991	VF4		1991	11	12.62639	02	57	32.63	+07	51	16.8		894
1991	VK5		1991	12	07.50781	02	55	20.45	+05	06	05.5	17.0	894
1991	VK5		1991	12	07.53472	02	55	19.51	+05	06	09.3		894
1991	XU		1992	02	02.51215	06	51	09.51	+21	10	59.6	16.7	894
1991	XU		1992	02	02.52674	06	51	08.80	+21	10	55.2		894
1991	XU		1992	02	09.52882	06	46	43.00	+20	44	29.2	17.0	894
1991	YF		1992	01	24.50625	07	03	27.93	+23	17	09.1	16.5	894
1991	YF		1992	01	25.53576	07	02	24.02	+23	12	58.4		894
1991	YF		1992	01	25.54965	07	02	23.13	+23	12	56.1		894
1991	YF		1992	01	26.57755	07	01	20.96	+23	08	43.3	16.5	894
1991	YF		1992	01	26.59132	07	01	20.04	+23	08	39.2		894
1991	YF		1992	01	27.60938	07	00	20.16	+23	04	27.2	16.6	894
1991	YF		1992	01	28.67789	06	59	19.10	+22	59	58.3	16.7	894
1992	AC		1992	01	14.66337	09	12	01.84	+12	35	11.6		894
1992	AC		1992	01	14.66529	09	12	02.08	+12	35	18.1		894
1992	AC		1992	01	14.66944	09	12	02.39	+12	35	31.2		894
1992	AL		1992	01	26.63576	09	18	40.94	+11	04	19.9	16.8	894
1992	AL		1992	01	26.66215	09	18	39.36	+11	04	38.0		894
1992	AL		1992	01	27.63854	09	17	47.29	+11	16	16.3	16.6	894
1992	AL		1992	01	27.65243	09	17	46.53	+11	16	28.8		894
1992	AL1		1992	02	10.59809	07	30	20.02	+24	10	09.8	17.0	894
1992	AL1		1992	02	10.61076	07	30	19.40	+24	10	12.2		894
1992	AW1		1992	01	12.65521	07	39	32.88	+19	09	55.4	16.5	894
1992	AW1	*	1992	01	15.73385	07	36	20.57	+19	12	58.8	16.8	894
1992	AW1		1992	01	15.74479	07	36	19.86	+19	12	59.1		894
1992	CF	*	1992	02	08.61288	09	26	31.32	+04	32	10.7	17.0	894
1992	CF		1992	02	08.62674	09	26	30.35	+04	32	13.0		894
1992	CF		1992	02	10.62569	09	24	21.31	+04	34	21.4	17.0	894
1992	CF		1992	02	10.63958	09	24	20.36	+04	34	22.0		894
1992	CF		1992	02	21.49549	09	12	59.99	+04	53	02.0	17.0	894
1992	CF		1992	02	21.50660	09	12	59.04	+04	53	04.7		894
1992	CF		1992	02	26.55451	09	08	13.05	+05	04	33.9	17.0	894
1992	CF		1992	02	27.50804	09	07	22.30	+05	06	50.1	17.2	894
1992	CF		1992	02	27.52188	09	07	21.47	+05	06	50.8		894
1992	CO	*	1992	02	12.71898	10	42	11.63	+19	16	32.4	17.0	894
1992	CO		1992	02	12.73333	10	42	11.06	+19	16	39.3		894
1992	CO		1992	02	14.79566	10	40	42.93	+19	32	14.4	16.8	894
1992	CO		1992	02	14.80833	10	40	42.43	+19	32	21.9		894
1992	CO		1992	03	01.57951	10	28	36.25	+21	21	26.1	17.2	894
1992	CO		1992	03	01.59271	10	28	35.43	+21	21	34.1		894
1992	CO		1992	03	03.56563	10	27	03.90	+21	33	13.3		894
1992	CO		1992	03	03.57951	10	27	03.47	+21	33	17.3		894
4113	P-L		1992	01	09.64271	07	40	25.73	+17	49	37.8	17.2	894
4113	P-L		1992	01	09.65729	07	40	24.67	+17	49	38.3		894
4113	P-L		1992	01	12.64223	07	37	21.27	+17	56	20.0	17.0	894
4113	P-L		1992	01	12.65521	07	37	20.39	+17	56	22.9		894
(922)			1992	02	08.61288	09	25	33.28	+05	08	53.8		894
(922)			1992	02	08.62674	09	25	32.46	+05	08	56.6		894
(922)			1992	02	10.62569	09	23	50.43	+05	18	39.6		894
(922)			1992	02	10.63958	09	23	49.68	+05	18	43.5		894
(3586)			1992	02	26.64410	10	49	07.94	+16	10	29.6		894
(3586)			1992	02	26.65729	10	49	07.04	+16	10	31.4		894
(4968)			1992	01	09.64271	07	44	03.82	+18	00	09.5	16.5	894
(4968)			1992	01	09.65729	07	44	02.80	+18	00	12.3		894
(4968)			1992	01	12.64223	07	41	02.74	+18	15	13.4	16.0	894
(4968)			1992	01	12.65521	07	41	01.88	+18	15	16.4		894

(4968)	1992 01 15.73385	07 37 55.17	+18 30 56.4	16.5	894
(4968)	1992 01 15.74479	07 37 54.41	+18 30 59.3		894
(5059)	1991 12 14.77361	06 54 14.32	+31 21 51.6		894

898 Fujieda
M. Kizawa, 1458-10, Minami Numagami, Shizuoka-Ken 420, Japan
Observers H. Shiozawa, M. Kizawa
Measurer M. Kizawa
0.20-m f/4.0 hyperboloid astrocamera, 0.20-m f/4.9 reflector
GSC

1989 FA	1991 12 14.68097	07 00 22.51	+17 18 19.9	16	898
1989 FA	1991 12 14.69240	07 00 21.79	+17 18 20.0	16	898
1989 FA	1991 12 30.49578	06 44 31.51	+17 50 28.1	16.5	898
1989 FA	1991 12 30.51862	06 44 29.96	+17 50 32.0	16.5	898
1989 FA	1992 01 01.63672	06 42 08.19	+17 56 14.1	16	898
1989 FA	1992 01 01.65891	06 42 06.51	+17 56 16.6	16	898

950 La Palma
K. Aksnes, Institute of Theoretical Astrophysics, P.O. Box 1029, N-0315 Blindern, Oslo, Norway
Observers K. Aksnes, O. Dahl
2-m Nordic optical telescope + CCD

1988 QY	1991 12 25.06676	04 57 44.12	+00 56 20.0	950
1988 QY	1991 12 25.07707	04 57 43.81	+00 56 18.7	950
1988 RG1	1991 12 24.16181	06 09 47.55	-03 23 52.5	950
1988 RG1	1991 12 24.16598	06 09 47.35	-03 23 52.6	950
1988 RY10	1991 12 24.21003	06 02 53.40	+22 27 18.7	950
1988 RY10	1991 12 24.21690	06 02 53.16	+22 27 18.7	950
1988 RY10	1991 12 24.22357	06 02 52.97	+22 27 18.3	950
(4450)	1991 12 24.98924	03 43 58.22	+27 47 32.0	950
(4450)	1991 12 25.01308	03 43 56.13	+27 47 22.6	950

* * * * *

ORBITAL ELEMENTS.

Orbital elements have been computed by the following contributors:

C. M. Bardwell, Harvard-Smithsonian Center for Astrophysics, 60 Garden Street, Cambridge, MA 02138, U.S.A.
E. Bowell, Lowell Observatory, 1400 West Mars Hill Road, Flagstaff, AZ 86001, U.S.A. (E)
K. Ichikawa, 45 Shiromae Kamiwada-cho, Okazaki-shi, Aichi, 444-02 Japan
H. Kaneda, 2-15-2H, Kawazoe 8 Jo 2 Chome, Minami-ku, Sapporo 005, Japan
T. Kobayashi, 1717-2 Shimo-Koizumi, Oizumi-machi, Ora-gun, Gunma-ken, 370-05 Japan
B. G. Marsden, Harvard-Smithsonian Center for Astrophysics, 60 Garden Street, Cambridge, MA 02138, U.S.A. (M)
S. Nakano, 3-19, 1 chome, Takenokuchi, Sumoto, Hyogo-ken 656, Japan (N)
T. Urata, 6-1, Muramatsuhara 1 Chome, Shimizu, Shizuoka-Ken 424, Japan (U)
G. V. Williams, Harvard-Smithsonian Center for Astrophysics, 60 Garden Street, Cambridge, MA 02138, U.S.A. (W)

The name of the orbit computer is shown on the line giving T for a comet and Epoch for a displayed minor-planet orbit; for many of the minor planets (O-C) residuals are shown in full (in R.A. and Decl.); observations are identified by date and observatory code, X referring to an approximate and Y to a semiaccurate position. For displayed minor planets "Id." shows those involved in establishing the identifications (generally with the prin-

cipal contributors first), "k" indicating key identifications and "d" (only) double (or multiple) designations; no identifier is shown if only the orbit computer is involved and the results were not previously published. J-P indicates that only the perturbations by the outer planets were considered, and a and n are then related by a gravitational constant augmented by the masses of the inner planets. For the one-opposition orbits, equinox 2000.0 is used, and the columns headed Arc and O show the time span in days covered by the observations and the number of observations utilized in the computation (0 = 10 or more). In the note column N, D means that there are double (or multiple) designations, E means that the value of the eccentricity was assumed, F means both; the double designations are listed at the end; the codes for the orbit computers (column C) are as listed above.

Comet Zanotta-Brewington (1991g1)
Epoch 1992 Jan. 19.0 TT = JDT 2448640.5
T 1992 Jan. 31.99137 TT

				Nakano
q	0.6439682	(2000.0)	P	Q
z	-0.0000810	Peri. 197.87249	+0.05743377	-0.67023040
	+/-0.0000173	Node 254.90884	+0.98374193	+0.16431336
e	1.0000522	Incl. 50.02786	+0.17015632	-0.72373499

From 182 observations 1991 Dec. 24-1992 Feb. 25, mean residual 0".84.

Comet Bradfield (1992b)
T 1992 Mar. 19.53924 TT

				Marsden
q	0.5001574	(2000.0)	P	Q
		Peri. 15.33682	+0.33700658	+0.87624642
		Node 275.35027	-0.89611684	+0.18632197
e	1.0	Incl. 20.23783	-0.28879261	+0.44438310

From 19 observations 1992 Feb. 2-13.

Comet Mueller (1991h1)
Epoch 1992 Apr. 8.0 TT = JDT 2448720.5
T 1992 Mar. 21.20003 TT

				Nakano
q	0.1987705	(2000.0)	P	Q
z	-0.0008790	Peri. 306.99023	+0.26709932	+0.20195118
	+/-0.0001541	Node 288.78477	-0.18351411	-0.94924194
e	1.0001747	Incl. 95.56640	-0.94603410	+0.24115443

From 103 observations 1991 Dec. 13-1992 Feb. 26, mean residual 0".99.

Comet Helin-Alu (1992a)
Epoch 1992 June 27.0 TT = JDT 2448800.5
T 1992 July 8.86540 TT

				Marsden
q	3.0123184	(2000.0)	P	Q
z	-0.0014623	Peri. 239.97194	-0.79666361	-0.08676706
	+/-0.0000822	Node 288.87765	+0.45300696	-0.74087677
e	1.0044050	Incl. 39.21009	-0.40013970	-0.66601283

From 35 observations 1992 Jan. 9-Feb. 29, mean residual 1".17.

One-opposition minor planets

Planet	H	Epoch	M	Peri.	Node	Incl.	e	a	Arc	O	N	C
1931 TZ2		311006	38.70	109.70	196.48	12.57	0.2500	2.2687	4	3	E	E
1978 VN2	12.6	781108	38.46	358.43	1.82	1.35	0.1817	3.0935	31	5		E
1978 VO2	13.8	781108	321.14	215.60	244.42	7.21	0.0944	2.6251	31	5		E
1978 VP2	15.1	781108	291.88	217.97	284.31	1.88	0.1832	2.3575	31	5		E
1978 VQ2	15.3	781108	322.71	208.51	252.19	3.93	0.1333	2.3081	31	5		E
1978 XW	13.4	781128	328.84	349.07	104.80	1.92	0.0884	2.9185	6	6		E
1978 XX	13.4	781128	212.02	147.56	62.95	14.68	0.0984	2.6230	6	6		E
1978 XH1	14.4	781128	74.19	74.43	237.05	23.56	0.3000	2.3854	6	5	E	E
1978 XJ1	14.3	781128	92.80	88.79	227.58	2.85	0.1000	2.2226	6	5	E	E

1981	JO	14.6	810516	307.87	74.14	227.07	5.88	0.1861	2.1848	6	6	D	E
1981	JP2	15.4	810516	325.19	22.31	260.39	2.31	0.2200	2.2207	6	5	E	E
1981	JT2	15.0	810516	349.48	212.74	34.23	4.15	0.2252	2.7825	6	4		E
1990	HM3		900419	245.26	305.53	84.66	2.69	0.1333	3.1638	3	3	E	M
1990	HN3		900419	52.04	182.19	9.11	0.32	0.1008	2.3648	3	3	E	M
1990	HO3		900419	183.65	12.42	68.12	2.39	0.1589	2.9013	3	3	E	M
1990	HG5		900419	11.99	160.71	70.08	7.05	0.2408	2.7995	3	3		M
1990	HH5		900419	278.49	95.97	270.08	3.69	0.2065	3.2239	3	3	E	M
1990	HK5		900419	276.64	82.55	271.82	7.61	0.1091	2.8492	3	3	E	M
1990	HL5		900419	182.92	138.18	302.99	0.45	0.1242	3.2327	3	3	E	M
1990	HM5		900419	247.76	292.49	97.19	2.97	0.1227	3.8540	3	3	E	M
1990	HN5		900419	11.58	150.83	78.46	3.32	0.1881	2.2641	3	3	E	M
1990	HO5		900419	218.59	318.85	87.01	8.43	0.1046	2.4748	3	3	E	M
1990	HP5		900419	287.06	17.11	337.80	1.33	0.2023	2.9001	3	3	E	M
1990	HQ5		900419	47.17	97.86	84.91	5.72	0.2553	2.8677	3	3		M
1990	HR5		900419	75.70	95.23	71.50	6.44	0.1562	3.0428	3	3	E	M
1990	HS5		900419	302.30	253.04	66.31	3.99	0.1092	2.1646	3	3	E	M
1990	HT5		900419	235.88	199.12	186.25	0.81	0.0870	2.1407	3	3	E	M
1990	HU5		900419	59.10	111.12	84.86	7.43	0.0517	3.0510	3	3	E	M
1990	HV5		900419	359.31	320.75	295.05	2.01	0.1946	2.9602	3	3		M
1990	HW5		900419	105.68	243.75	254.45	10.64	0.1172	2.3441	3	3		M
1990	HX5		900419	132.56	30.15	86.30	5.22	0.0827	2.2548	3	3	E	M
1990	HY5		900419	49.13	277.47	265.17	2.01	0.2288	2.6640	3	3	E	M
1990	HZ5		900419	184.55	351.08	90.51	11.49	0.1893	3.0797	3	3	E	M
1990	HA6		900419	149.49	23.60	78.87	7.58	0.0931	2.2922	3	3		M
1990	HB6		900419	316.62	247.75	69.16	2.44	0.1646	3.0013	3	3		M
1990	HC6		900419	308.89	245.77	67.12	1.75	0.0957	2.2789	3	3		M
1990	HD6		900419	230.26	309.09	92.52	4.94	0.1310	2.7751	3	3	E	M
1990	HE6		900419	301.53	265.30	73.44	2.56	0.2100	2.7269	3	3		M
1990	HF6		900419	230.95	337.57	65.82	3.27	0.1843	2.4963	3	3	E	M
1990	HG6		900419	43.65	322.29	253.29	3.30	0.0212	2.9640	3	3		M
1990	HH6		900419	201.46	33.23	36.06	1.22	0.1621	3.1364	3	3		M
1990	HJ6		900419	239.23	313.87	80.32	3.37	0.1849	2.2350	3	3	E	M
1990	HK6		900419	358.94	186.94	68.35	2.66	0.0547	2.3558	3	3	E	M
1990	HL6		900419	143.91	5.55	99.21	2.47	0.1858	2.2626	3	3	E	M
1990	HM6		900419	274.63	92.66	271.54	3.00	0.1584	2.8245	3	3	E	M
1990	VB14	13.5	901125	5.62	124.38	293.72	1.62	0.1995	2.4226	36	8		W
1991	BA3	12.6	910305	216.38	145.51	140.20	10.87	0.0549	3.0046	54	0	D	N
1991	FX2	13.1	910325	164.19	5.71	18.56	12.65	0.1517	2.5915	21	0	D	N
1991	GR2	14.3	910414	264.65	295.67	18.60	2.23	0.1887	2.3005	27	0	D	N
1991	GA3	15.0	910414	28.66	332.02	192.44	6.14	0.1030	2.4820	27	0	D	N
1991	MB	11.5	910703	359.34	211.25	40.90	0.72	0.1095	3.1477	5	0	E	W
1991	NJ	13.0	910703	339.28	210.77	106.45	13.65	0.1703	2.5984	8	0		W
1991	NU2	11.5	910703	0.63	186.41	98.28	9.19	0.1389	2.6280	2	9	E	W
1991	NE3	13.5	910703	37.09	69.26	168.87	6.36	0.2077	2.8910	6	0	E	W
1991	NF3	12.5	910703	301.32	101.32	272.71	11.78	0.2001	2.6387	12	0		W
1991	NG3	13.0	910703	321.91	81.47	267.75	11.48	0.2103	2.5747	8	0		W
1991	NR3	12.0	910703	359.80	358.37	290.01	7.82	0.0958	2.7789	2	7	E	W
1991	NS3	11.5	910703	180.04	172.48	296.16	2.00	0.1379	2.4278	2	7	E	W
1991	NU3	12.5	910703	295.48	97.95	287.08	5.84	0.1945	2.4464	4	8	E	W
1991	NX3	13.0	910703	181.36	196.00	272.89	3.60	0.1002	2.2832	3	0	E	W
1991	NY3	11.5	910703	176.13	1.17	113.07	16.52	0.1062	2.7219	3	0	E	W
1991	NZ3	13.0	910703	358.13	47.73	248.46	7.75	0.1174	2.8299	4	0	E	W
1991	NA4	13.0	910703	358.54	33.08	263.59	11.11	0.1122	3.0934	4	0	E	W
1991	NB4	13.0	910703	178.98	196.74	272.97	4.12	0.0937	2.2994	3	9	E	W
1991	NE4	14.0	910703	359.86	29.73	258.90	1.80	0.0989	2.5131	3	0	E	W
1991	NF4	13.0	910703	179.03	183.22	287.32	11.08	0.1293	2.4478	3	0	E	W
1991	NJ4	13.5	910703	174.91	350.69	123.22	9.72	0.1158	2.2518	3	9	E	W
1991	NK4	13.0	910703	351.80	176.85	123.16	6.92	0.2096	2.2366	16	0		W

1991	NM4	13.0	910703	359.05	11.84	280.16	11.44	0.1389	2.9155	3	9	E	W
1991	NG5	14.0	910703	358.14	358.70	292.98	4.39	0.2265	2.3930	14	0		W
1991	NU5	13.0	910703	358.82	129.98	164.80	7.62	0.1396	2.9031	2	9	E	W
1991	NX5	12.0	910703	358.98	147.20	148.15	1.72	0.1289	3.1638	2	9	E	W
1991	NZ5	12.5	910703	175.63	189.09	289.30	9.48	0.1304	2.6586	2	9	E	W
1991	NA6	13.5	910703	99.82	271.05	264.19	2.64	0.1781	2.4539	6	0	E	W
1991	NB6	14.0	910703	358.04	176.34	118.38	10.42	0.2258	2.5923	2	9	E	W
1991	NC6	15.0	910703	357.76	166.76	127.80	1.47	0.1153	2.2687	2	9	E	W
1991	ND6	12.5	910703	359.00	62.59	232.83	1.00	0.1381	2.9053	2	9	E	W
1991	NE6	12.0	910703	358.59	4.23	291.72	6.40	0.1232	2.8559	2	9	E	W
1991	NH6	12.5	910703	174.98	200.68	277.79	14.14	0.1369	2.4263	5	0	E	W
1991	NJ6	14.5	910703	356.75	74.35	221.22	3.73	0.1273	2.3032	5	0	E	W
1991	NK6	14.0	910703	357.36	92.87	200.92	2.30	0.0849	2.2003	5	9	E	W
1991	NM6	13.5	910703	357.35	139.96	155.62	4.36	0.1339	2.6117	5	9	E	W
1991	NP6	13.5	910703	356.67	11.79	285.46	9.67	0.1274	2.5920	5	9	E	W
1991	NQ6	13.5	910703	297.21	95.06	275.93	4.52	0.1445	2.2466	5	9	E	W
1991	NU6	14.5	910703	359.59	345.91	302.11	5.59	0.1365	2.3348	2	9	E	W
1991	NV6	12.5	910703	2.61	336.30	309.48	5.94	0.1175	3.1341	2	9	E	W
1991	NY6	14.0	910703	357.55	173.50	119.80	5.39	0.1301	2.3169	4	0	E	W
1991	NZ6	13.5	910703	1.31	171.34	118.88	2.90	0.1087	2.8220	4	0	E	W
1991	NA7	15.0	910703	359.05	359.28	292.11	5.25	0.1256	2.3052	4	0	E	W
1991	NC7	14.5	910703	327.83	83.02	253.31	2.71	0.1878	2.4943	4	0	E	W
1991	ND7	14.5	910703	24.79	80.05	169.73	1.89	0.2390	2.6165	4	0	E	W
1991	NE7	12.5	910703	357.92	31.17	263.70	4.21	0.1206	3.1437	4	0	E	W
1991	NF7	14.5	910703	22.85	51.25	195.14	1.57	0.2950	2.2834	4	9	E	W
1991	NJ7	14.0	910703	356.98	7.80	287.75	2.55	0.1431	2.6433	4	0	E	W
1991	NL7	13.0	910703	173.13	189.01	289.75	1.63	0.0787	2.3310	4	0	E	W
1991	NM7	12.5	910703	0.27	158.00	135.14	1.91	0.0927	3.0462	4	0	E	W
1991	OM1	10.5	910703	174.06	184.22	300.89	4.65	0.1322	2.6575	3	8	E	W
1991	PU5	16.1	910812	33.09	159.29	121.57	2.88	0.1037	2.1782	29	9	D	N
1991	PX5	15.0	910812	0.53	339.75	340.78	5.73	0.0398	2.3621	31	0	D	N
1991	PN8	14.0	910812	314.50	211.89	175.51	1.95	0.2335	2.7656	45	0		W
1991	PE10	13.8	910901	336.12	37.46	338.74	8.70	0.1774	2.7894	35	7		E
1991	PH10	13.8	910901	324.04	274.38	116.22	1.67	0.1496	2.6177	41	0		E
1991	PU11	13.7	910901	343.92	22.27	343.34	4.94	0.1777	2.2647	41	0		E
1991	PT14	14.2	910812	486.26	51.28	141.85	2.81	0.0446	2.3721	31	0	D	N
1991	PA15	15.5	910812	347.47	154.27	191.79	5.21	0.1688	2.3480	29	7	D	N
1991	PO16	13.2	910901	56.62	110.33	162.68	13.33	0.1609	2.6706	41	0		E
1991	PP16	14.0	910901	3.34	189.86	151.71	5.40	0.1562	2.3923	41	0		E
1991	PS16	13.2	910901	101.92	92.61	138.87	6.14	0.1269	2.2728	41	6		E
1991	PU16	14.5	910901	17.63	303.49	21.14	3.27	0.1226	2.3730	41	0		E
1991	PV16	12.9	910901	330.91	289.24	96.89	3.06	0.1255	2.9330	41	6		E
1991	RL	13.5	910901	30.48	302.68	343.86	36.74	0.3207	3.0405	7	9		E
1991	RF1	15.0	910901	41.13	133.94	147.63	3.06	0.2291	2.2365	10	0		W
1991	RG1	15.1	910921	16.78	294.29	32.43	1.72	0.2000	2.3704	10	0		E
1991	RH1	15.4	910921	352.01	5.65	359.51	5.02	0.2033	2.2755	10	0		E
1991	RJ1	14.7	910921	6.61	344.95	354.66	10.90	0.3107	2.6961	10	0		E
1991	RC2	13.5	910901	288.40	93.47	334.49	8.33	0.1042	2.3506	5	5		W
1991	RE2	14.5	910901	310.04	147.67	265.79	4.60	0.1420	2.2679	11	7	D	N
1991	RH2	13.5	910901	342.20	12.90	355.58	10.11	0.1035	3.0279	10	0		W
1991	RQ2	16.0	910921	341.99	187.57	203.44	5.46	0.2315	2.3263	29	0		W
1991	RM6	13.5	910901	298.12	285.25	138.71	6.29	0.1402	2.3461	13	7		W
1991	RD7	13.0	910921	2.93	354.30	4.06	16.42	0.1835	2.5650	36	9		W
1991	RY8	14.2	910921	350.86	7.79	8.64	3.72	0.1389	2.2869	19	6	D	N
1991	RR9	15.5	910921	4.64	5.37	347.32	3.29	0.2505	2.3381	29	9		W
1991	RT9	15.0	910921	15.14	22.46	315.03	1.64	0.2267	2.3846	29	7		W
1991	RU9	15.0	910921	11.53	64.42	281.31	1.17	0.1667	2.2901	29	7		W
1991	RN10	12.9	910921	0.11	6.25	3.83	5.76	0.1126	2.7667	25	0	D	N
1991	RA13	14.5	910921	67.26	61.82	213.84	1.73	0.1653	2.7190	29	7		W

1991	RN13	14.5	910921	29.44	43.35	273.95	4.25	0.1956	2.2041	25	8	D	N
1991	RS13	14.0	910921	53.18	4.60	288.23	4.35	0.1459	2.2338	17	6	D	W
1991	RV13	14.0	910921	340.91	167.88	217.11	5.75	0.1202	2.3629	22	6		W
1991	RA14	13.0	910921	351.35	38.41	338.73	7.73	0.2698	3.9536	22	6		W
1991	RE14	14.0	910921	31.13	335.08	343.42	8.48	0.1656	2.3860	22	6		W
1991	RU17	14.0	910812	330.18	180.16	191.25	3.32	0.0293	2.2474	40	0	D	W
1991	RX17	14.2	910921	23.26	144.84	177.50	4.63	0.1401	2.3522	4	6		E
1991	RY17	14.6	910921	336.27	23.86	1.19	7.49	0.1507	2.2155	4	0		E
1991	RD18	13.6	910921	144.95	41.71	160.22	4.93	0.1000	2.4602	4	6	E	E
1991	RE18	13.8	910921	319.99	292.55	113.56	2.47	0.1553	2.6453	4	8		E
1991	RS20	12.8	910921	261.62	52.98	50.51	3.25	0.1000	2.9171	4	0	E	E
1991	RT20	12.7	910921	228.42	132.28	10.65	9.86	0.2485	2.4281	3	6		E
1991	RX21	12.8	910921	311.16	253.10	158.92	13.80	0.1275	3.2111	6	6		E
1991	RA22	14.7	910921	353.42	338.20	24.07	2.85	0.2039	2.4300	8	6		N
1991	SJ	14.5	910921	118.91	81.92	139.65	5.20	0.1129	2.1977	15	6		W
1991	SK	12.0	910921	1.61	335.99	11.88	7.15	0.0893	3.2289	19	9		W
1991	XU	12.1	920119	301.96	251.55	288.71	11.92	0.1148	2.5987	58	0		N
1991	YD	13.6	920119	1.24	118.16	352.71	5.35	0.1602	2.4625	56	0		N
1992	AG	12.4	920119	18.43	342.65	103.82	27.24	0.2454	2.3847	40	0		N
1992	AM	13.5	920119	42.23	300.12	100.24	23.76	0.2782	2.3450	21	6		W
1992	AN	12.5	920119	78.51	240.74	117.26	23.45	0.2786	2.3399	23	6		W
1992	AO	12.5	920119	54.08	280.14	127.21	22.24	0.0937	2.3533	23	8		W
1992	AQ	14.5	920119	352.96	19.68	105.82	24.91	0.2198	2.2884	22	8		W
1992	AR	13.0	920119	356.58	19.87	93.98	10.56	0.1858	2.6307	23	6		W
1992	AY	11.6	920119	6.60	18.78	100.98	15.35	0.1515	3.1277	37	0		N
1992	AB1	13.5	920119	10.21	214.70	252.39	5.84	0.0691	2.3261	30	0		U
1992	AC1	13.4	920119	30.78	156.62	272.58	11.59	0.2694	2.6176	30	0		N
1992	AE1	12.4	920119	2.73	27.01	97.66	10.64	0.1956	2.7323	18	8		N
1992	AL1	13.2	920119	19.26	343.12	111.89	6.71	0.0619	2.3468	31	0		N
1992	AO1	13.5	920208	23.84	40.89	62.51	4.08	0.2125	2.4121	25	9		N
1992	AP1	12.7	920208	358.95	209.52	267.43	0.64	0.1704	3.1655	11	6	E	N
1992	AR1	12.8	920119	328.83	235.30	290.21	6.57	0.1918	2.6760	33	0		N
1992	AU1	13.0	920119	350.29	45.01	87.93	24.81	0.2537	2.2769	23	8		W
1992	AV1	14.0	920119	28.08	329.90	110.72	24.74	0.0728	1.9460	23	8		W
1992	AX1	14.0	920119	37.64	263.57	146.66	21.73	0.3250	2.2999	20	6		W
1992	BD	15.0	920119	343.52	20.74	79.16	29.00	0.0702	1.9102	11	0		M
1992	BG	13.0	920208	295.42	58.37	147.18	9.89	0.1529	2.3296	28	0		U
1992	BH	11.8	920208	331.41	21.16	140.55	18.30	0.1537	3.1185	29	0		U
1992	BN	11.4	920208	128.21	240.93	121.90	11.38	0.1109	3.0013	39	0		N
1992	BO	13.5	920208	281.65	212.29	19.36	4.76	0.1188	2.2437	11	9		N
1992	BU	13.9	920208	0.47	160.97	337.85	7.41	0.1404	2.6411	11	9		N
1992	BX	13.7	920208	24.55	177.15	285.52	9.82	0.1945	2.3852	11	6		N
1992	BE1	13.3	920208	352.93	81.43	69.59	3.80	0.0583	2.2084	7	6		N
1992	BF1	14.5	920119	316.02	66.35	122.93	17.95	0.1525	1.9982	4	4		W
1992	BJ1	13.8	920208	33.69	3.01	78.11	3.94	0.2382	2.6767	11	8		N
1992	BK1	11.9	920208	13.15	180.33	309.09	12.12	0.1165	2.5831	32	8		N
1992	CF	13.1	920228	280.60	308.74	284.20	9.71	0.0594	2.3831	19	8		N
1992	CJ	13.8	920208	288.22	35.70	204.40	5.45	0.1131	2.2391	17	6		N
1992	CO	11.8	920228	265.98	143.31	111.39	10.88	0.0554	3.0301	20	8		N
1992	CS	12.0	920208	154.70	210.72	140.16	23.29	0.0675	3.2409	22	0		N
1992	CB1	12.4	920228	349.90	129.37	37.75	10.70	0.0301	2.9990	14	6		N
1992	CF1	13.7	920228	272.20	259.68	357.61	5.93	0.1529	2.4813	14	9		N
1992	DB	13.7	920228	30.47	343.85	123.92	3.56	0.2967	2.3762	2	0		N
1992	DN	11.9	920228	209.51	323.41	356.71	18.23	0.2812	2.9504	2	3	E	N

1981 JO = 1981 JJ3 (S. Nakano, MPC 10752)
1991 BA3 = 1991 EB2 (S. Nakano)
1991 FX2 = 1991 GL2 (S. Nakano)
1991 GR2 = 1991 FG4 (S. Nakano)
1991 GA3 = 1991 FH4 (S. Nakano)

1991 PU5 = 1991 RG12 (S. Nakano)
1991 PX5 = 1991 RF12 (S. Nakano)
1991 PT14 = 1991 RQ12 (S. Nakano)
1991 PA15 = 1991 RW6 (S. Nakano)
1991 RE2 = 1991 RH19 (S. Nakano)
1991 RY8 = 1991 SK1 (S. Nakano)
1991 RN10 = 1991 TS5 (S. Nakano)
1991 RN13 = 1991 SO1 (S. Nakano)
1991 RS13 = 1991 SP1 (G. V. Williams, S. Nakano)
1991 RU17 = 1991 PQ17 (S. Nakano)

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Epoch 1992 June 27.0 TT = JDT 2448800.5                    Williams
(1308) Halleria            Obs.   48    M 145.06622        Peri.  164.81117
H   10.8        G   0.15   Opp.   14    n   0.19858034     Node   354.55582
rms res.  1".19   (M-C)    1901-1990    e   0.0084870      Incl.    5.57598

Epoch 1992 June 27.0 TT = JDT 2448800.5                    Williams
(1310) Villigera           Obs.   42    M 147.80189        Peri.   87.72705
H   11.45        G   0.15   Opp.   15    n   0.26642602     Node   357.92398
rms res.  1".09   (M-C)    1932-1991    e   0.3566006      Incl.   21.06559

Epoch 1992 June 27.0 TT = JDT 2448800.5                    Williams
(1312) Vassar              Obs.   56    M 233.89875        Peri.  262.83057
H   10.8        G   0.15   Opp.   13    n   0.18165645     Node   129.61816
rms res.  0".90   (M-C)    1933-1991    e   0.2196964      Incl.   21.92948

Epoch 1992 June 27.0 TT = JDT 2448800.5                    Williams
(2327) Gershberg           Obs.   34    M  83.58238        Peri.  210.60563
H   13.9        G   0.15   Opp.    4    n   0.27042928     Node   175.16441
rms res.  1".07   (M-C)    1969-1987    e   0.1289768      Incl.    4.02868

Epoch 1992 June 27.0 TT = JDT 2448800.5                    Bowell
(4778) 1978 TV8            Obs.   22    M 132.77776        Peri.   42.38771
H   12.6        G   0.15   Opp.    5    n   0.17574660     Node    35.39071
rms res.  0".86   (M-C)    1978-1991    e   0.1770129      Incl.    1.58728

Epoch 1992 June 27.0 TT = JDT 2448800.5                    Williams
(4846) 6575 P-L            Obs.   19    M  81.80162        Peri.   82.52168
H   12.2        G   0.15   Opp.    5    n   0.17056497     Node    23.08168
rms res.  0".73   (M-C)    1960-1990    e   0.1325742      Incl.    5.27616

(5072)*  1931 TS1 = 1981 UX15 = 1986 WW10 = 1987 BH
     Discovered 1931 Oct. 9 by K. Reinmuth at Heidelberg.
Id. S. Nakano (MPC 12795), H. Oishi (d, MPC 12560)
Epoch 1992 June 27.0 TT = JDT 2448800.5                    Nakano
M  88.42279                (2000.0)          P              Q
n   0.19862233     Peri.   359.75966     +0.98060680    -0.19585702
a   2.9092698      Node     11.54249     +0.17987227    +0.88502068
e   0.0841545      Incl.     2.03194     +0.07782206    +0.42234869
P   4.96           H   12.1            G   0.15
Residuals in seconds of arc
311009 024  1.0+  2.5-    861201 381  1.0+  2.0+    911108 801  0.1+  0.1+
311017 024  0.2+  0.0     861201 381  0.2+  0.4+    911108 801  0.0   0.2+
311020 024 (7.4-  0.4-)   870130 887  1.0-  0.4-    911203 675  0.7-  1.2+
311102 024 (7.3-  0.4-)   870130 887  0.1+  0.9+    911203 675  0.6-  0.3-
311103 024  1.1+  2.9-    900915 675  0.4-  1.8+    911205 801  0.2-  0.0
811024 095 (3.1+  2.0+)   900915 675  0.5-  1.8+    911205 801  0.1-  0.6-
861130 381 (0.8+  2.7+)   901114 801  0.3-  0.6+
861130 381  0.0   1.4+    901114 801  0.2-  0.2+
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(5073)* 1943 EN = 1973 FW = 1978 YN = 1983 GM1
Discovered 1943 Mar. 3 by Y. Väisälä at Turku.
Id. T. Kobayashi (MPC 14342)

Epoch 1992 June 27.0 TT = JDT 2448800.5				Kobayashi
M 273.47989		(2000.0)	P	Q
n 0.29674627	Peri.	183.99510	-0.94662463	+0.32098541
a 2.2261061	Node	14.83039	-0.29245365	-0.81677503
e 0.1005298	Incl.	6.61794	-0.13554581	-0.47942353
P 3.32	H 13.2		G 0.15	

Residuals in seconds of arc

430303	062	0.6-	0.9+	781222	095	0.3-	0.5+	911103	801	0.2-	0.3-
430307	062	0.4-	0.8-	830409	095	0.1-	0.3+	911103	801	0.3-	0.1-
430309	062	0.0	0.5-	830411	095	0.1-	0.4-	911106	801	0.1-	0.5-
430325	062	1.0+	0.0	911010	801	0.0	0.1+	911106	801	0.3-	0.4-
730326	095	0.6-	0.6+	911010	801	0.1+	0.2+				

(5074)* 1949 QQ1 = 1980 RE4 = 1983 EL1
Discovered 1949 Aug. 24 at the Goethe Link Observatory.
Id. A. Lowe (k, MPC 13480), C. M. Bardwell (MPC 17011)

Epoch 1992 June 27.0 TT = JDT 2448800.5				Bardwell
M 48.73442		(2000.0)	P	Q
n 0.19025881	Peri.	84.87347	+0.80821476	-0.57785737
a 2.9939155	Node	310.37325	+0.46388223	+0.74339948
e 0.0974803	Incl.	8.56371	+0.36277014	+0.33680568
P 5.18	H 11.5		G 0.15	

Residuals in seconds of arc

490824	760	2.2-	0.9+	900722	801	0.3+	0.9-	911103	801	0.5+	1.2-
490824	760	0.7+	2.2+	900722	801	0.4+	1.0-	911106	801	0.1+	0.2-
490921	760	(6.8+	2.0+)	900816	801	0.1+	1.2-	911106	801	0.1+	0.2-
490921	760	(8.9+	2.6+)	900816	801	0.3+	0.8-	911205	801	0.2+	0.1-
800907	095	0.9-	1.5+	900817	801	0.6+	1.1-	911205	801	0.1-	0.4-
800909	095	1.7-	2.0+	900817	801	0.8+	1.1-				
830314	095	0.5+	0.8+	911103	801	0.6+	1.3-				

(5075)* 1969 TN4 = 1973 YA2 = 1988 XJ
Discovered 1969 Oct. 13 by B. A. Burnasheva at the Crimean Astrophysical Observatory.
Id. T. Kobayashi (MPC 14183)

Epoch 1992 June 27.0 TT = JDT 2448800.5				Kobayashi
M 333.31480		(2000.0)	P	Q
n 0.26282538	Peri.	183.85556	+0.06324156	-0.99773655
a 2.4137438	Node	262.51957	+0.91626090	+0.06712296
e 0.1731543	Incl.	1.32076	+0.39555843	+0.00403550
P 3.75	H 13.5		G 0.15	

Residuals in seconds of arc

691013	095	0.8-	1.5+	881205	385	0.4-	0.5-	910807	675	0.0	2.7-
691016	095	0.8-	1.9+	881205	385	0.9-	0.0	910904	809	0.2+	0.8+
691111	095	(3.7-	0.5+)	881206	385	0.2+	0.4+	910904	809	0.1+	0.4-
691113	095	1.3+	2.1-	881206	385	0.1+	0.2+	910904	809	0.4+	0.5+
731220	095	0.3+	2.7-	881228	896	1.7+	2.1+	910906	809	2.3+	0.9+
881203	385	(4.2-	3.3-)	910805	675	0.6-	1.7-	910906	809	0.6-	1.1+
881203	385	0.7-	1.0-	910805	675	1.1-	1.2-	910906	809	0.4+	1.0+

(5076)* 1973 SG4 = 1973 US3 = 1988 RS2
Discovered 1973 Sept. 26 by L. I. Chernykh at the Crimean Astrophysical Observatory.
Id. B. G. Marsden (d, MPC 9064), T. Kobayashi (MPC 13852)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	332.82689		(2000.0)	P	Q
n	0.26234903	Peri.	219.02130	+0.66091810	-0.74994110
a	2.4166648	Node	189.71985	+0.72321865	+0.64639759
e	0.2326367	Incl.	9.49469	+0.20035481	+0.14056493
P	3.76	H	12.8	G 0.15	

Residuals in seconds of arc

730926	095	0.8-	0.0	881015	399	0.6+	0.3-	910609	801	0.0	0.3-
731002	095	(0.8-	5.1-)	881015	399	0.1+	1.8-	910613	801	0.9-	0.3-
731029	095	0.8+	0.2+	881015	399	0.4-	0.5-	910709	801	0.1+	0.3+
880905	675	0.9+	0.1+	900327	675	0.4-	1.0-	910709	801	0.0	0.6+
880907	675	0.8-	0.6+	900327	675	0.2-	1.1-	910710	801	0.2+	0.2+
880917	095	(0.8-	6.1+)	910609	801	0.1-	0.5-	910710	801	0.8+	0.7-

(5077)* 1974 MG = 1981 SE3 = 1981 UH13

Discovered 1974 June 17 at El Leoncito.

Id. T. Furuta (JAM 1946)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	131.51036		(2000.0)	P	Q
n	0.29604068	Peri.	337.36163	+0.52724551	+0.84787856
a	2.2296419	Node	324.38837	-0.76418796	+0.44443870
e	0.1843213	Incl.	5.49946	-0.37152246	+0.28909548
P	3.33	H	14.2	G 0.15	

Residuals in seconds of arc

740617	808	0.5+	0.3-	740724	808	1.3+	0.1-	910913	675	0.6+	0.5-
740617	808	0.4-	0.6-	810927	095	0.1+	0.4-	910915	675	0.5-	0.3-
740622	808	0.1-	0.5+	811023	095	0.1+	0.4-	910915	675	0.0	0.1+
740622	808	0.7-	0.0	870501	801	0.2+	0.4+	911106	801	0.1+	1.0+
740719	808	0.5-	0.3+	910913	801	0.4-	0.5+	911106	801	0.3+	0.8+
740719	808	0.3-	0.9-	910913	801	0.3-	0.4+				
740724	808	0.3+	1.1+	910913	675	0.1-	0.7-				

(5078)* 1974 SW = 1978 NY1 = 1987 RC = 1987 SZ5 = 1987 SV6

Discovered 1974 Sept. 19 by L. I. Chernykh at the Crimean Astrophysical Observatory.

Id. S. Nakano (MPC 12695)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	33.57583		(2000.0)	P	Q
n	0.22615343	Peri.	123.06013	+0.97851963	+0.20313283
a	2.6680907	Node	225.24746	-0.20177737	+0.90875594
e	0.2137567	Incl.	2.83807	-0.04225185	+0.36455411
P	4.36	H	13.6	G 0.15	

Residuals in seconds of arc

740919	095	0.2-	1.4+	870902	095	0.3-	2.3-	910611	801	0.3+	0.0
740921	095	0.1+	1.3+	870916	095	(0.6+	4.5-)	910614	801	1.9-	0.9+
740923	095	1.1-	1.0+	870918	071	(3.5+	10.4-)	910614	801	1.2+	0.9+
741009	095	0.2-	0.2+	870918	071	(2.7+	3.3-)	910709	801	0.4-	0.8-
780706	095	0.3-	1.2+	870920	095	0.5-	1.9-	910709	801	0.1+	0.6-
870827	095	2.4+	0.3-	870921	046	(3.7+	4.1-)	910710	801	0.7-	0.0
870901	046	(7.6+	2.4-)	870921	046	(7.3+	2.2-)	910710	801	0.4+	0.5+
870901	046	(8.3+	3.5-)	910611	801	1.0+	0.6-				

(5079)* 1975 DB = 1979 BN = 1989 OK

Discovered 1975 Feb. 16 at El Leoncito.

Id. H. Oishi (JAM 1625), L. D. Schmadel (MPC 15062), C. M. Bardwell (ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell

					P	Q
M	20.82424		(2000.0)			
n	0.22985568	Peri.	245.14338		-0.88898890	-0.41812039
a	2.6393636	Node	269.67334		+0.45772204	-0.79908984
e	0.2092683	Incl.	10.76312		+0.01375752	-0.43200783
P	4.29	H	12.6	G	0.15	

Residuals in seconds of arc

750216	808	0.3-	0.1+	750307	808	0.6+	0.1-	790126	330	0.2-	1.1-
750216	808	0.4-	0.5+	750307	808	0.2+	0.4+	890729	675	1.1+	0.8+
750217	808	0.1-	0.0	750307	808	0.3-	0.2-	890729	675	1.7+	0.4+
750217	808	0.0	0.2-	750307	808	0.2+	0.5-	890731	675	0.5-	1.3-
750218	808	0.4+	0.2-	750308	808	0.6+	0.3+	890731	675	1.5-	1.9-
750218	808	0.2-	0.4+	750308	808	0.5+	0.4+	911106	801	0.2+	0.3+
750219	808	0.1+	0.2+	750308	808	0.5-	0.3-	911106	801	0.3+	0.2+
750219	808	0.1-	0.2+	750308	808	0.6-	0.9-	920106	801	0.2-	0.2-
750306	808	0.0	1.3+	750309	808	0.3+	0.1-	920106	801	0.1-	0.2-
750306	808	0.2+	0.5+	750309	808	0.8+	0.8-	920107	801	0.2-	0.3-
750306	808	1.1-	0.4-	750309	808	0.5-	0.4-	920107	801	0.2-	0.4-
750306	808	0.1+	0.2+	750309	808	0.1-	0.3-				

(5080)* 1976 EB = A924 SB = 1951 WO = 1951 XA = 1988 XH

Discovered 1976 Mar. 2 by C.-I. Lagerkvist at the Uppsala Kvistaberg Station.

Id. T. Kobayashi (MPC 14185), O. Kippes (d, MPC 969)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

					P	Q
M	16.30485		(2000.0)			
n	0.29362604	Peri.	88.78485		+0.27659314	-0.96067535
a	2.2418489	Node	345.08862		+0.83953268	+0.25395183
e	0.1239191	Incl.	5.45822		+0.46763353	+0.11230021
P	3.36	H	12.6	G	0.15	

Residuals in seconds of arc

240929	024	(5.4+	0.4-)	760321	414	0.7+	1.5+	910807	801	0.6+	0.3-
241001	024	0.8-	1.0+	760321	414	2.3-	0.3+	910807	801	0.7+	0.3-
511128	094	(65.3-	26.6-)X	760322	414	(2.7-	7.4-)	910807	675	0.7+	1.3-
511203	760	1.0-	0.6+	760322	414	(1.2-	27.0+)	910808	675	0.7+	1.4-
511203	760	1.2+	0.1+	881202	888	2.5+	2.8-	910812	801	0.7+	0.0
760302	049	0.0	0.1-	881202	888	2.3+	1.8-	910812	801	0.5+	0.0
760302	049	0.7+	0.0	881203	888	0.1-	1.5+	910907	801	0.2-	0.6+
760303	049	0.0	0.5-	881203	888	1.8-	1.5+	910907	801	0.4-	0.5+
760303	049	0.2+	0.1+	881207	888	1.2-	0.7+	910909	801	0.3-	0.5+
760304	049	1.7+	0.7-	881207	888	1.4-	1.6+	910909	801	0.5-	0.4+
760304	049	2.3+	1.2-	881210	888	1.2-	1.1-	910913	675	0.1-	0.4-
760321	414	(2.9-	0.6-)	881210	888	1.4+	2.5-	910913	675	1.0-	0.1+
760321	414	2.6-	0.2+	890101	888	0.7+	0.8+	910916	675	0.1-	0.1-
760321	414	1.5-	0.1+	890101	888	1.4-	0.3+	910916	675	0.1-	0.1+

(5081)* 1976 WC1 = 1968 HD1 = 1989 JN

Discovered 1976 Nov. 18 at El Leoncito.

Id. B. G. Marsden (MPC 14780)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

					P	Q
M	291.51389		(2000.0)			
n	0.27908563	Peri.	162.61023		-0.39763862	+0.88906810
a	2.3190551	Node	83.46859		-0.86663761	-0.28273277
e	0.1145550	Incl.	13.19634		-0.30136817	-0.36002792
P	3.53	H	12.2	G	0.15	

Residuals in seconds of arc

680426	095	0.6+	0.3-	761123	808	0.5+	0.0	761126	808	0.8-	1.7-
761118	808	0.3+	0.0	761123	808	0.4-	0.2-	890505	046	0.5-	0.3+
761118	808	0.4-	0.6+	761126	808	0.0	1.0-	890505	046	0.8-	0.1+

890507	046	1.2-	0.6-	901120	801	1.0+	0.1-	920112	886	0.3-	0.5-
890507	046	0.3-	0.0	901215	801	0.1+	0.5-	920112	886	1.9+	0.8-
890508	046	1.8-	0.7+	901215	801	0.4+	0.5-	920114	402	0.3-	0.1+
890508	046	0.4-	0.3-	920102	402	0.4+	0.6+	920114	402	0.5+	0.3+
890509	046	1.5+	0.1-	920102	402	0.6+	0.9+	920206	801	0.4+	0.6-
890509	046	0.5+	0.7-	920108	801	0.0	0.7+	920206	801	0.9-	1.0-
890509	046	0.1+	0.3-	920108	801	0.3-	0.1+	920207	801	0.9-	0.2-
890509	046	0.9+	1.0-	920110	402	0.3+	0.3+	920207	801	0.8-	0.4-
901120	801	0.6+	0.1-	920110	402	0.3+	0.7+				

(5082)* 1977 DN4 = 1975 WS = 1978 LY

Discovered 1977 Feb. 18 by H. Kosai and K. Hurukawa at the Kiso Station of the Tokyo Astronomical Observatory.

Id. S. J. Bus (k, MPC 11153), L. D. Schmadel (ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 264.60660		(2000.0)	P	Q
n 0.17746168	Peri.	58.86661	-0.95165542	-0.30306876
a 3.1361704	Node	103.45137	+0.26140338	-0.88456728
e 0.1199770	Incl.	2.94765	+0.16130789	-0.35452794
P 5.55	H	12.8	G 0.15	

Residuals in seconds of arc

751128	095	0.1+	1.7-	780610	675	0.4+	0.8+	861201	381	0.4+	0.8+
770218	381	0.5+	0.3-	780610	675	0.3+	0.2-	910912	675	0.0	0.2+
770218	381	0.4+	1.7+	861125	010	(6.1-	5.4-)	910912	675	0.5-	0.3-
770219	381	0.1+	0.4+	861125	010	(0.0	4.4-)	910914	675	1.1-	0.3-
770219	381	0.8+	0.8-	861125	010	(3.4-	4.8-)	910914	675	0.6+	2.0-
770312	381	0.7-	0.1-	861130	381	0.6+	1.4+	911109	675	(3.0-	0.3+)
770312	381	0.6-	0.4-	861130	381	0.0	1.5+	911109	675	0.3+	0.1+
770315	381	0.6-	0.1-	861201	801	(0.4+	4.0+)				
770315	381	0.7-	1.1-	861201	381	0.3-	0.1+				

(5083)* 1977 EV = 1989 CD2

Discovered 1977 Mar. 13 by N. S. Chernykh at the Crimean Astrophysical Observatory.

Id. S. Nakano (MPC 14343)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 242.20742		(2000.0)	P	Q
n 0.24183306	Peri.	238.27932	-0.92168410	+0.35452744
a 2.5514806	Node	321.82907	-0.20893163	-0.79572955
e 0.0812701	Incl.	14.76547	-0.32687305	-0.49104457
P 4.08	H	11.9	G 0.15	

Residuals in seconds of arc

770313	095	0.5+	1.3-	890205	071	(2.0-	4.4-)	890305	033	0.6-	0.7+
770322	095	0.8+	0.5+	890205	872	1.8-	0.7+	900714	474	0.0	0.7+
770325	095	0.6+	2.4+	890205	872	(3.7-	0.1+)	900714	474	0.4-	0.7+
870922	095	1.4-	0.2+	890210	872	1.7+	2.5-	911105	801	0.0	0.9+
870925	095	0.6-	0.9-	890210	872	0.7+	1.3+	911105	801	0.0	0.9+
870926	095	0.4-	1.1-	890226	872	1.4+	1.1+	911107	801	0.3+	1.1+
890204	220	(1.1-	5.2-)	890228	872	2.1-	0.0	911107	801	0.1+	1.1+
890204	220	(1.3+	5.9-)	890228	872	0.4+	1.2-	911205	801	0.0	0.3+
890204	071	(3.8+	0.4-)	890305	033	0.3-	0.4+	911205	801	0.4+	0.1+

(5084)* 1977 FN1 = 1982 DB1 = 1988 GU

Discovered 1977 Mar. 26 by N. S. Chernykh at the Crimean Astrophysical Observatory.

Id. C. M. Bardwell (MPC 13310)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell

M	293.48441		(2000.0)	P	Q	
n	0.17624513	Peri.	120.96453	-0.95228636	-0.29258025	
a	3.1505857	Node	42.19683	+0.21676096	-0.84873583	
e	0.0970805	Incl.	7.43156	+0.21486129	-0.44050458	
P	5.59	H	11.8	G	0.15	

Residuals in seconds of arc

770326	095	0.2+	0.3+	880409	054	0.2-	0.1+	911106	801	0.6-	0.2-
770515	095	0.3+	0.1+	880415	054	0.1+	0.0	911106	801	0.7-	0.1-
770518	095	1.5-	1.6+	880415	054	0.0	0.6+	911205	801	0.4+	0.6+
820221	688	2.6+	1.9-	900529	413	3.3+	0.5-	911205	801	0.4-	0.1+
820221	688	1.5-	1.4-	911103	801	0.9-	0.4+				
880409	054	0.6+	0.7+	911103	801	0.7-	0.4+				

(5085)* 1977 NN = 1977 PX = 1984 SK5

Discovered 1977 July 14 by N. S. Chernykh at the Crimean Astrophysical Observatory.

Id. H. Oishi (d, JAM 1391), S. Nakano (MPC 9754)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	143.36076		(2000.0)	P	Q	
n	0.29095554	Peri.	353.99259	+0.66177413	+0.74750644	
a	2.2555457	Node	317.42325	-0.68426232	+0.57098094	
e	0.1800679	Incl.	4.86258	-0.30633329	+0.33943318	
P	3.39	H	13.9	G	0.15	

Residuals in seconds of arc

770714	095	1.1+	2.0-	840927	675	0.4-	0.0	911103	801	0.3+	0.6+
770722	095	1.2+	1.1+	841020	095	0.7+	1.4+	911103	801	0.4-	0.6+
770814	095	2.3-	1.5+	911008	801	0.7+	1.4-	911106	801	0.0	0.5+
790127	675	0.3-	0.1+	911008	801	0.6-	0.2-	911106	801	0.1-	0.1-
790129	675	0.5+	0.7+	911011	801	0.1-	0.8-				
840926	675	0.4-	1.0-	911011	801	0.2+	0.7-				

(5086)* 1978 RH1 = 1978 TM1 = 1987 HA2

Discovered 1978 Sept. 5 by N. S. Chernykh at the Crimean Astrophysical Observatory.

Id. T. Furuta (d, JAM 1968), T. Kobayashi (MPC 13056)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	182.90179		(2000.0)	P	Q	
n	0.30696944	Peri.	82.02251	-0.07998331	+0.99679006	
a	2.1764029	Node	183.39577	-0.93623700	-0.07632846	
e	0.1142067	Incl.	3.38665	-0.34214463	-0.02415657	
P	3.21	H	13.7	G	0.15	

Residuals in seconds of arc

780905	095	0.2+	0.5-	900226	809	0.4-	0.6+	900319	403	0.7-	0.2-
781002	095	0.6+	0.6-	900226	809	0.0	0.4+	900322	095	1.4-	1.8-
781008	095	1.3-	2.2+	900227	809	0.1-	0.3-	900424	801	0.5+	0.1-
870428	046	0.5-	0.2-	900227	809	0.6+	0.4-	900424	801	0.5+	0.2-
870428	046	0.6+	0.0	900227	809	1.2+	0.5-	911009	801	0.3-	0.6+
870429	046	0.3+	1.3+	900301	809	0.1-	0.2-	911009	801	0.3-	0.5+
870429	046	0.0	0.5+	900301	809	0.6+	0.3-	911011	801	0.2+	0.5+
900224	809	1.0+	0.6+	900301	809	1.2+	0.4-	911011	801	0.9+	0.4+
900224	809	1.2+	0.7+	900318	400	(1.1-	4.4+)	911106	801	0.5-	0.2-
900224	809	1.3+	0.8+	900318	400	2.0-	1.3+	911106	801	0.7-	0.3-
900226	809	1.0-	0.7+	900319	403	1.4-	0.8+				

(5087)* 1978 RM2 = 1985 DB2

Discovered 1978 Sept. 12 by N. S. Chernykh at the Crimean Astrophysical Observatory.

Id. H. Oishi (MPC 11142)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	34.71311	(2000.0)		P	Q
n	0.21669745	Peri.	147.02381	+0.92888940	+0.36997974
a	2.7451549	Node	191.29878	-0.35558724	+0.87831588
e	0.0085459	Incl.	4.89466	-0.10354799	+0.30278077
P	4.55	H	12.9	G 0.15	

Residuals in seconds of arc

780901	095	1.3+	0.0	850227	809	0.2+	1.1+	910712	801	0.4+	1.1+
780912	095	1.8-	0.3+	850227	809	0.1+	0.5+	910712	801	1.0+	0.2-
780928	095	0.8+	1.8+	870916	095	(11.1+	2.1+)	910712	809	0.4-	0.5+
781004	095	0.5-	0.2+	900327	400	(4.8-	7.7+)	910712	809	0.2+	0.7+
781009	095	0.3-	0.3-	900327	400	(1.9-	8.9+)	910712	809	0.4+	0.8+
850220	809	1.5+	0.1-	900329	400	0.0	0.3-	910714	809	0.8-	0.2+
850220	809	1.6+	0.0	900329	400	0.4-	2.1-	910714	809	0.4-	0.6+
850220	809	1.9+	0.1+	910704	809	1.3+	0.9+	910714	809	0.3-	0.4+
850222	809	0.1-	0.5+	910704	809	1.4+	0.8+	910715	809	1.1-	1.1-
850222	809	0.3+	0.4+	910704	809	1.7+	0.7+	910715	809	0.7-	1.1-
850222	809	0.6+	0.5+	910705	809	1.0-	0.6+	910715	809	0.3-	1.2-
850224	809	0.0	0.1+	910705	809	0.5-	0.5+	910716	809	0.7-	0.4-
850224	809	0.0	0.1-	910705	809	0.5-	0.4+	910716	809	0.7-	0.3-
850224	809	0.2-	0.1-	910708	809	0.6-	1.3-	910716	809	0.6-	0.3-
850225	809	0.3-	0.2+	910708	809	0.1-	1.2-	910807	801	0.2+	0.0
850225	809	0.1-	0.2+	910711	801	0.0	0.1+	910807	801	0.7+	0.3+
850225	809	0.3-	0.3+	910711	809	0.5-	1.1+	910808	801	0.4+	0.5-
850226	809	1.4-	0.9+	910711	801	0.2-	0.0	910808	801	0.2+	0.4-
850226	809	1.1-	1.2+	910711	809	0.2+	1.2+				
850226	809	1.0-	1.0+	910711	809	0.7+	1.2+				

(5088)* 1979 QZ1 = 1982 DP6 = 1985 RS3

Discovered 1979 Aug. 22 by C.-I. Lagerkvist at the European Southern Observatory.

Id. H. Oishi (JAM 2034), E. Goffin (MPC 11514)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	11.16072	(2000.0)		P	Q
n	0.17934568	Peri.	84.90678	-0.02746113	-0.99962214
a	3.1141685	Node	6.66719	+0.91294499	-0.02557442
e	0.1447277	Incl.	0.59889	+0.40715763	-0.01007648
P	5.50	H	12.5	G 0.15	

Residuals in seconds of arc

790822	809	0.0	0.7-	850911	809	0.1+	0.1+	850921	809	1.0-	1.6+
790822	809	0.6+	0.1-	850911	809	0.3+	0.2+	850921	809	0.9-	1.7+
790822	809	0.3-	0.4-	850914	809	0.1+	0.7+	850922	809	0.1-	0.2-
790823	809	0.5-	1.5-	850914	809	0.1+	0.8+	850922	809	0.0	0.1-
790823	809	0.9-	1.1-	850914	809	0.5+	0.8+	870130	801	0.7-	0.5-
790826	809	0.3-	0.2-	850915	809	0.3+	0.7-	900529	413	(4.1+	1.8+)
790826	809	0.1+	1.1-	850915	809	0.5+	0.7-	900529	413	(0.6+	4.4+)
790826	809	0.2+	1.0-	850915	809	0.5+	0.7-	900816	511	1.2-	1.3+
790830	809	1.0+	0.2-	850916	809	0.5-	0.6+	900915	675	0.4+	0.1-
790830	809	(0.6+	10.7-)	850916	809	0.2-	0.6+	900915	675	0.2+	0.3+
820227	010	0.9+	0.1+	850916	809	0.1-	0.6+	911103	801	0.3+	0.2-
850907	809	0.9+	0.4-	850918	809	0.1-	0.5+	911103	801	0.3+	0.1-
850907	809	0.7+	0.3-	850918	809	0.2+	0.6+	911106	801	0.1-	0.7-
850907	809	0.9+	0.3-	850918	809	0.4+	0.7+	911106	801	0.1-	0.7-
850908	809	0.4+	0.5-	850920	809	0.8-	0.1-	911205	801	0.6-	0.6-
850908	809	0.6+	0.4-	850920	809	0.8-	0.3-	911205	801	0.0	0.5-
850908	809	0.7+	0.3-	850920	809	0.8-	0.1-				
850911	809	0.1-	0.1+	850921	809	0.9-	1.6+				

(5089)* 1979 SN = 1979 SG = 1977 FG2 = 1986 CO = 1988 RJ9
Discovered 1979 Sept. 25 by A. Mrkos at Klet.
Id. S. Nakano (d, MPC 10610; MPC 14945)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	159.84253		(2000.0)		P		Q
n	0.21114411	Peri.	126.40291		-0.37801577		-0.92407836
a	2.7930802	Node	345.48779		+0.76088851		-0.27538602
e	0.0806692	Incl.	13.01189		+0.52740189		-0.26503154
P	4.67	H	12.5	G	0.15		

Residuals in seconds of arc

770326	095	0.9+	0.4+	880904	809	0.1+	0.3+	880919	809	0.5+	1.1-
790917	046	1.5+	0.5+	880904	809	0.2+	0.3+	880919	809	0.5+	0.9-
790917	046	0.7+	0.3+	880905	809	0.3-	0.5+	891130	046	1.2+	0.7+
790925	046	0.3+	0.2-	880905	809	0.3-	0.3+	891130	046	0.2-	0.3+
790925	046	1.3+	1.0-	880905	809	0.4-	1.1+	891201	046	(3.7+	1.0+)
790926	046	1.2-	1.6-	880907	809	0.8-	0.4+	891201	046	0.9-	0.2+
790926	046	0.3+	0.7-	880907	809	0.7-	0.4+	910211	801	0.5-	0.5-
790927	046	(0.9-	2.2-)	880910	809	1.1-	0.7+	910211	801	0.8-	0.4-
790927	046	1.8-	0.5-	880910	809	0.9-	0.7+	910212	801	0.7-	0.2-
860207	046	(4.9+	0.1-)	880910	809	0.9-	0.6+	910212	801	0.3-	0.8+
880901	809	0.9+	0.4+	880913	809	0.8-	0.1-	910314	046	0.4-	0.9+
880901	809	1.1+	0.2+	880913	809	0.7-	0.3-	910314	046	(2.7-	0.1+)
880901	809	1.2+	0.2+	880913	809	0.6-	0.1-	910315	046	(2.6-	1.1-)
880903	809	0.2+	0.2+	880917	809	0.6+	0.8-	910315	046	(2.1-	1.1-)
880903	809	0.4+	0.2+	880917	809	0.4+	0.7-	910318	402	0.3+	0.2-
880903	809	0.5+	0.1+	880917	809	0.1+	0.4-	910318	402	0.6+	0.6-
880904	809	0.1-	0.2+	880919	809	0.5+	1.0-	910319	402	0.5-	1.1-

(5090)* 1980 CG = 1934 PG = 1978 NV1 = 1986 LJ
Discovered 1980 Feb. 9 at the Agassiz Station of the Harvard College Observatory.
Id. S. Nakano (MPC 11423; unpublished)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	104.67883		(2000.0)		P		Q
n	0.24480387	Peri.	228.91138		+0.96387120		-0.24856420
a	2.5307963	Node	145.16718		+0.26540470		+0.92674452
e	0.2933332	Incl.	9.65035		-0.02264198		+0.28170985
P	4.03	H	12.7	G	0.15		

Residuals in seconds of arc

340804	078	0.0	0.4-	860604	675	(26.4+	2.2-)	911205	801	0.2-	0.1-
780706	095	1.4+	1.5+	860606	675	(28.9+	4.7-)	911205	801	0.6-	0.1+
800209	801	0.2+	0.1-	860606	675	(31.2+	4.6-)	911229	877	(8.6+	1.9+)
800211	801	0.4+	0.4+	900626	801	0.4-	1.0-	911229	877	(2.7+	0.5+)
800213	801	(3.9-	0.5-)	900626	801	0.5-	0.8-	911230	877	0.9+	0.5-
800218	801	1.6-	0.3-	900816	801	0.9-	0.5-	911230	877	0.9+	0.6-
800312	801	0.5+	0.4+	911106	801	0.4-	0.0				
860604	675	(24.9+	4.8-)	911106	801	0.4-	0.2-				

(5091)* 1981 SD4 = 1973 YO3 = 1977 UA2 = 1979 FF1 = 1990 OS3
Discovered 1981 Sept. 25 by L. I. Chernykh at the Crimean Astrophysical Observatory.
Id. S. Nakano (MPC 17013), R. Nagata (ibid.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	231.26552		(2000.0)		P		Q
n	0.21238399	Peri.	324.35653		-0.57308869		+0.81759389
a	2.7821990	Node	270.61415		-0.73835226		-0.54467001
e	0.0142655	Incl.	3.19686		-0.35553521		-0.18674797
P	4.64	H	12.0	G	0.15		

Residuals in seconds of arc

731225	095	0.4+	1.4-	900727	675	1.7+	2.1-	911206	675	0.4-	0.9-
771020	033	0.2+	0.0	900727	675	0.8-	0.5-	911206	675	0.5+	1.0-
790323	095	1.1-	0.9-	900730	675	0.2-	1.4-	920207	801	0.1+	0.3+
810925	095	1.8+	1.2+	900730	675	0.3+	1.5-	920207	801	0.2-	0.3+
810928	095	2.5-	0.9+	900916	675	0.7+	0.6+				
811005	095	1.1-	0.2+	900916	675	0.8+	0.7+				

(5092)* 1982 FJ = 1950 TA3 = 1979 VY = 1990 QR3

Discovered 1982 Mar. 21 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Id. E. Bowell (k, MPC 17014), G. V. Williams (ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	268.29637		(2000.0)	P	Q
n	0.17248553	Peri.	207.70597	-0.88997554	+0.45599897
a	3.1962024	Node	359.39974	-0.34984693	-0.68686493
e	0.0618152	Incl.	16.13342	-0.29249045	-0.56593418
P	5.71	H	11.0	G 0.15	

Residuals in seconds of arc (or two decimals in units of degrees)

501013	760	0.8+	0.2-	900915	095	0.1+	0.8+	901015	095	(0.1-	3.0+)
501013	760	(0.03-	0.02-)X	900915	095	(1.0+	4.3+)	920106	801	0.2+	0.3-
791114	095	2.1-	0.2+	900918	675	0.7-	0.4+	920106	801	0.6-	0.6+
820321	688	2.4-	1.0+	900918	675	0.3-	0.5+	920108	801	0.2+	0.2-
820321	688	0.2-	0.6+	900920	675	1.0-	1.4-	920108	801	0.1+	0.3-
820414	688	0.3+	0.5-	900920	675	0.7-	0.0	920206	801	0.4+	0.9-
820414	688	2.3+	0.0	900923	095	0.0	1.1+	920206	801	0.8-	0.4+
820425	688	0.7+	0.0	901010	400	1.8+	0.3-	920207	801	0.7+	0.2-
820425	688	0.2-	0.2-	901010	400	(3.7+	1.6+)	920207	801	0.9+	0.4+
900824	675	0.7+	0.5-	901010	400	(4.1+	1.8+)				
900824	675	0.3+	0.7-	901015	095	0.2-	0.9+				

(5093)* 1982 TG1 = 1969 UL2 = 1988 FL1

Discovered 1982 Oct. 14 by L. G. Karachkina at the Crimean Astrophysical Observatory.

Id. T. Kobayashi (MPC 10939), S. Nakano (MPC 13448)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	71.49670		(2000.0)	P	Q
n	0.22669592	Peri.	190.88267	+0.68211809	-0.71951872
a	2.6638325	Node	216.32260	+0.68635130	+0.69150413
e	0.1666679	Incl.	12.71903	+0.25226334	+0.06414715
P	4.35	H	13.0	G 0.15	

Residuals in seconds of arc

691018	095	1.0-	2.2+	860909	095	(1.7+	5.4+)	911103	801	0.6+	0.1+
691105	095	1.3+	1.3+	860929	095	0.4-	1.6+	911106	801	0.6+	0.3-
821014	095	0.7+	2.5-	861003	095	(1.3+	55.2+)	911106	801	1.1+	0.2-
821020	095	1.3-	0.5+	861006	801	0.1-	1.4-	911205	801	1.4-	0.9-
821024	095	0.7-	0.3+	880317	033	0.2-	0.3-	911205	801	0.0	0.8-
860804	801	1.4+	0.7-	880317	033	0.8-	0.1-				
860902	801	0.1+	1.3-	911103	801	0.4+	0.0				

(5094)* 1982 UT6 = 1977 UF1 = 1980 GW

Discovered 1982 Oct. 20 by L. G. Karachkina at the Crimean Astrophysical Observatory.

Id. W. Landgraf (k, MPC 9032), T. Furuta (k, JAM 1631), H. Oishi (MPC 16425)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	58.57974		(2000.0)	P	Q
n	0.20606507	Peri.	348.28947	+0.97332917	+0.22941165
a	2.8387891	Node	358.44744	-0.20806272	+0.88129320
e	0.0864677	Incl.	1.66782	-0.09664487	+0.41314960
P	4.78	H	13.0	G 0.15	

Residuals in seconds of arc

770919	095	0.0	1.0+	821114	095	2.5-	1.5-	910906	801	1.2-	0.3-
771007	095	(0.6+	3.1+)	910807	801	0.1-	0.8+	910906	801	0.3-	0.4+
771013	095	(4.4+	0.0)	910807	801	0.4-	0.6+	910909	801	0.3-	0.2+
771017	095	0.8-	1.1+	910807	675	0.7-	0.1-	910909	801	0.2-	0.3+
800414	805	0.2-	0.2-	910807	675	(3.3-	0.7-)	910909	894	(2.5+	2.3-)
800415	805	0.3-	0.3+	910808	675	0.3-	0.8+	910909	894	1.8+	1.4-
800416	805	0.6+	0.2+	910808	675	0.5+	0.3-	910911	675	1.4+	0.5-
821020	095	1.4+	0.2+	910810	675	0.6-	0.0	910911	675	0.4-	1.2-
821025	095	1.7+	0.8+	910811	801	(0.6+	2.3-)	910917	675	1.1+	0.6-
821109	095	0.2-	0.4-	910811	801	0.0	0.4+				

(5095)* 1983 NL = 1967 GD1 = 1990 HA1

Discovered 1983 July 10 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Id. G. V. Williams (MPC 16578)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	110.71543		(2000.0)	P	Q
n	0.26030368	Peri.	187.18901	+0.89856950	+0.41678216
a	2.4293076	Node	147.07137	-0.38899541	+0.90137255
e	0.2198126	Incl.	14.63576	-0.20311432	+0.11755916
P	3.79	H	12.9	G 0.15	

Residuals in seconds of arc

670411	033	1.7-	0.8+	830713	688	(5.2-	0.2+)	900519	675	0.4+	0.7-
670411	033	1.7+	0.7-	830813	688	0.5+	0.2-	900519	675	0.6-	0.9+
790528	413	0.0	0.7+	830813	688	1.1+	0.3+	910812	801	0.6-	0.1-
830614	413	0.1+	0.3+	900426	675	0.2+	1.0-	910812	801	0.2-	0.2-
830710	688	0.6-	0.9+	900426	675	0.6+	0.3-	910908	801	0.3+	0.2-
830710	688	1.4-	0.1-	900429	675	0.3+	0.4+	910908	801	0.3+	0.1-
830713	688	0.3+	1.5-	900429	675	1.1-	0.2-				

(5096)* 1983 RC5 = 1972 TH = 1981 CO = 1985 FA1 = 1985 GZ1 = 1990 SK16

Discovered 1983 Sept. 5 by L. V. Zhuravleva at the Crimean Astrophysical Observatory.

Id. G. V. Williams (MPC 18283)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	102.43578		(2000.0)	P	Q
n	0.27328563	Peri.	109.04445	+0.29188784	-0.95353904
a	2.3517520	Node	323.71704	+0.82329311	+0.29018266
e	0.1499215	Incl.	7.24183	+0.48681613	+0.08097733
P	3.61	H	12.9	G 0.15	

Residuals in seconds of arc

721004	095	(10.5-	4.8+)	850324	688	0.2+	1.3-	900917	675	0.2+	0.6+
810208	688	0.9-	1.5-	850414	688	0.9-	0.8+	900917	675	0.3-	0.4+
810208	688	0.6-	0.1+	850414	688	0.9+	0.7-	900920	675	0.5+	0.2+
830905	095	0.9-	0.7+	900826	095	0.2-	2.0+	900920	675	0.5-	0.5+
830907	095	1.0+	0.3+	900826	095	(7.7+	2.4-)	920102	801	0.2+	0.8+
830909	095	(2.9+	1.0-)	900828	095	0.1+	0.6-	920102	801	0.2+	0.5+
830912	095	1.4+	1.2-	900828	095	(1.1-	3.9-)	920107	801	0.6+	0.1+
850321	688	1.0+	0.0	900830	095	0.6-	1.6-	920107	801	0.7+	0.1+
850321	688	0.7-	0.4-	900830	095	0.3-	1.1-	920205	801	0.2+	0.2-
850324	688	1.0-	0.1+	900914	675	0.2+	1.3-	920205	801	0.1-	0.4+

(5097)* 1983 TW1 = 1966 RG = 1978 JG2 = 1987 SZ1

Discovered 1983 Oct. 12 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Id. T. Kobayashi (MPC 12454)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	82.99486		(2000.0)	P	Q
n	0.23532024	Peri.	180.96746	+0.57609495	+0.81546505
a	2.5983433	Node	124.21113	-0.74947884	+0.55431650
e	0.2250174	Incl.	3.88000	-0.32618412	+0.16658323
P	4.19	H	13.4	G 0.15	

Residuals in seconds of arc

660915	095	0.4-	2.3-	871001	372	(1.4-	15.9+)	910717	675	1.1+	2.0+
780506	095	1.7+	1.1-	900303	809	0.8-	0.6-	910803	809	1.3-	0.1+
831011	688	1.2-	2.2-	900303	809	0.8-	0.7-	910803	809	1.4-	0.3-
831011	688	0.7+	0.4+	900303	809	0.8-	0.7-	910803	809	1.1-	1.0+
831012	688	2.7+	1.2-	900308	809	0.4-	1.0-	910805	675	0.1-	0.4-
831012	688	1.0+	1.7-	900308	809	0.4-	1.1-	910805	675	0.0	0.4-
831104	688	0.0	0.1-	900308	809	0.4-	1.0-	910806	801	0.2+	0.2-
831104	688	1.6+	1.3-	900316	046	(3.7-	2.1-)	910806	801	0.0	0.5-
870827	095	1.1+	1.2+	900316	046	1.6-	3.5-	910807	675	0.3+	1.0-
870902	095	(5.3+	0.5-)	910712	801	0.0	0.7-	910807	675	0.5-	1.2-
870916	372	(7.3-	1.7+)Y	910712	801	0.1-	0.7-	910811	801	0.5+	0.6-
870917	372	2.7-	0.9+ Y	910712	675	1.6+	0.6-	910811	801	0.6+	0.7-
870918	372	(4.6-	1.4+)Y	910712	675	0.5+	0.0	910906	809	(1.3+	3.8+)
870920	095	1.4-	0.9-	910713	801	0.1-	0.4-	910906	809	(0.0	4.3+)
870922	095	1.2+	2.0+	910714	675	0.1+	0.0	910906	809	(0.5-	3.7+)
870926	372	0.5+	0.1+	910717	675	1.9+	0.3-				

(5098)* 1985 CH2 = 1979 UN1 = 1981 EJ1

Discovered 1985 Feb. 14 by H. Debehogne at the European Southern Observatory.

Id. K. Hurukawa (MPC 10310), A. Lowe (ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	299.36807		(2000.0)	P	Q
n	0.23907190	Peri.	328.58226	-0.53614963	-0.84083401
a	2.5710885	Node	153.61772	+0.80504931	-0.53586029
e	0.0718285	Incl.	9.64419	+0.25384875	-0.07649785
P	4.12	H	13.8	G 0.15	

Residuals in seconds of arc

791021	805	0.6+	1.5+	850214	809	0.2-	1.5+	850220	809	0.6-	0.6-
791023	805	0.1-	0.8+	850214	809	0.0	1.5+	850220	809	0.5-	0.8-
791023	805	1.2-	0.4+	850214	809	0.0	1.6+	850220	809	0.3-	0.5-
810306	809	0.1+	0.5+	850215	809	0.3+	0.0	850221	809	0.0	0.5-
810306	809	0.2-	0.5+	850215	809	0.3+	0.1-	850221	809	0.3+	0.9-
810306	809	1.2-	1.4+	850215	809	0.5+	0.1-	850221	809	0.4+	0.9-
810307	809	0.9+	0.1-	850216	809	0.5-	0.0	850222	809	0.2+	0.2+
810307	809	1.3+	0.8-	850216	809	0.3-	0.2+	850222	809	0.1+	0.2+
810307	809	1.3+	0.4+	850216	809	0.0	0.4+	850222	809	0.0	0.1-
810308	809	0.4-	1.0+	850217	809	0.2+	0.2-	850224	809	0.8+	1.7-
810308	809	0.1+	1.0+	850217	809	0.1+	0.0	850224	809	0.8+	1.5-
810308	809	0.4+	1.0+	850217	809	0.4+	0.3+	850224	809	0.8+	1.4-
810309	809	0.9-	0.9-	850218	809	0.9-	0.5+	850225	809	0.5+	1.6-
810309	809	0.7-	0.4-	850218	809	0.8-	0.5+	850225	809	0.2+	1.6-
810309	809	0.1+	0.1+	850218	809	0.8-	0.4+	850225	809	0.5+	1.5-
810310	809	0.0	0.9+	850219	809	0.4-	0.3+	850227	809	0.3-	0.4-
810310	809	0.0	1.0+	850219	809	0.5-	0.0	850227	809	0.4-	0.3-
810310	809	0.3+	0.9+	850219	809	0.1-	0.3-	850227	809	0.5-	0.3-

850228	809	(2.9+	2.6-)	910808	675	0.7+	0.4-	910929	413	0.4+	0.1+
850228	809	(3.1+	2.9-)	910911	675	0.7+	1.1-	910930	413	0.9-	0.7-
910808	675	0.4-	0.4-	910911	675	(18.2-	8.3-)				

(5099)* 1985 DY1 = 1971 TD1 = 1979 WC7 = 1990 HJ2

Discovered 1985 Feb. 16 by H. Debehogne at the European Southern Observatory.

Id. S. Nakano (MPC 16579)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

			(2000.0)	P	Q
M	111.88814				
n	0.25166554	Peri.	288.91023	+0.98483861	-0.17226805
a	2.4845832	Node	81.01346	+0.16592108	+0.90108085
e	0.0518420	Incl.	1.18412	+0.05062723	+0.39796610
P	3.92	H	13.1	G 0.15	

Residuals in seconds of arc

711011	095	0.6+	1.6-	850222	809	0.5-	0.5-	850228	809	0.1+	0.4-
791117	095	0.5+	1.0-	850222	809	0.4-	0.5-	900427	413	1.3+	0.4+
850216	809	0.2-	0.3-	850223	809	0.1-	0.4-	900427	413	1.5-	0.3+
850216	809	0.2-	0.3-	850223	809	0.2-	0.3-	900430	413	2.5+	0.1+
850216	809	0.2-	0.2-	850223	809	0.4-	0.3-	900430	413	0.2+	0.6-
850220	809	0.5-	0.9+	850224	809	0.8-	0.5-	900722	801	1.6-	0.3-
850220	809	0.0	0.7+	850224	809	0.5-	0.5-	920102	801	0.4+	0.5+
850220	809	0.6+	0.4+	850224	809	0.4-	0.5-	920106	801	0.1+	0.6+
850221	809	0.3-	0.1+	850226	809	0.9+	0.2+	920106	801	0.3-	0.3+
850221	809	0.0	0.2+	850226	809	1.2+	0.3+	920207	801	0.4-	0.4+
850221	809	0.3+	0.1+	850226	809	1.6+	0.2+	920207	801	0.1-	0.0
850222	809	0.6-	0.2-	850228	809	0.4-	0.4-				

(5100)* 1985 GW = 1978 NC8

Discovered 1985 Apr. 15 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Id. E. Bowell (MPC 11154)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

			(2000.0)	P	Q
M	0.49306				
n	0.25384329	Peri.	36.35780	-0.74092557	-0.65853726
a	2.4703525	Node	101.90515	+0.58005033	-0.72637705
e	0.1349259	Incl.	7.73814	+0.33848324	-0.19673603
P	3.88	H	13.3	G 0.15	

Residuals in seconds of arc

780707	675	0.6+	0.4+	850515	688	1.3+	0.6-	900914	675	0.3-	1.4-
780708	675	0.2-	0.3-	850515	688	0.4+	1.1-	920106	801	0.2-	0.0
780709	675	0.5-	0.1-	900529	413	(6.4+	1.1-)	920106	801	0.0	0.1+
850415	688	(2.5+	0.1-)	900529	413	1.8+	1.4+	920109	801	0.1+	0.2-
850415	688	1.0-	0.1-	900725	675	0.2-	0.0	920109	801	0.1-	0.2-
850424	688	0.8-	0.9+	900725	675	0.6-	0.3+	920207	801	0.5+	0.7-
850424	688	0.3-	0.8-	900914	675	0.1+	1.6-	920207	801	0.3+	0.7-

(5101)* 1985 UB5 = 1969 TQ

Discovered 1985 Oct. 22 by L. V. Zhuravleva at the Crimean Astrophysical Observatory.

Id. C. M. Bardwell (MPC 12317)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell

			(2000.0)	P	Q
M	121.23046				
n	0.18860471	Peri.	174.28258	+0.93530305	-0.34421112
a	3.0113948	Node	206.31646	+0.31687699	+0.91792191
e	0.1085477	Incl.	10.66139	+0.15747120	+0.19732734
P	5.23	H	12.1	G 0.15	

Residuals in seconds of arc

691007	095	0.2-	0.5-	901015	095	(0.5+	4.4+)	920101	801	0.4-	0.4-
691016	095	0.5+	0.6-	901015	095	1.9+	1.3-	920101	801	0.5+	0.3+
851022	095	0.3+	1.7+	901016	801	0.4-	0.1+	920107	801	0.2+	0.2-
851109	095	1.0+	0.8+	901016	801	0.4-	0.1+	920107	801	0.3+	0.3-
851111	095	1.6+	0.4+	901017	801	0.2-	0.0	920206	801	0.2-	0.3-
851120	095	2.9-	1.1-	901017	801	0.2-	0.1+	920206	801	0.1-	0.2+
900924	095	0.6+	1.6-	901119	801	0.1-	0.4+	920207	801	0.0	0.0
900930	095	1.2-	1.4+	901119	801	0.1-	0.2+	920207	801	0.4-	0.4-

(5102)* 1986 RD1 = 1930 UA1 = 1939 PB = 1988 AJ1

Discovered 1986 Sept. 2 by A. Mrkos at Kleť.

Id. T. Kobayashi (MPC 11857), S. Nakano (MPC 13159; unpublished)

Epoch 1992 June 27.0 TT = JDT 2448800.5

					Nakano
M	67.12629	(2000.0)	P		Q
n	0.21047038	Peri.	50.99785	+0.98201116	-0.16356828
a	2.7990376	Node	318.17120	+0.09712994	+0.86602066
e	0.1966085	Incl.	8.13204	+0.16192548	+0.47249723
P	4.68	H	12.2	G 0.15	

Residuals in seconds of arc

301017	690	(35.9+	21.4-)X	860911	046	(3.8+	3.6-)	911007	046	1.9-	1.0-
301019	690	(27.8-	15.7-)X	860929	010	(23.1-	2.1+)	911007	046	2.0-	0.9-
390808	020	1.3+	0.6-	860929	010	(16.7-	3.3+)	911013	366	1.1-	0.7+
390811	020	0.3-	1.7-	880110	046	0.5-	1.6-	911013	366	0.3-	0.2+
390811	020	(2.4+	7.8+)	880110	046	1.4-	1.8-	911017	367	1.3+	0.4+
830114	095	0.5+	1.4+	880112	046	1.0+	1.2-	911017	367	0.2+	0.8+
860806	095	(3.8-	0.5-)	880112	046	0.1-	1.7-	911017	367	1.8+	1.4+
860808	095	1.4-	1.3+	880113	046	0.1-	0.2-	911103	801	0.1-	0.6+
860812	095	(5.2-	1.7+)	880113	046	1.8+	0.8-	911103	801	0.1-	0.6+
860829	095	(5.7-	1.0-)	880119	046	1.9-	0.1-	911106	801	0.1-	0.7+
860902	046	2.6+	1.9-	880119	046	0.9-	1.7-	911106	801	0.1-	0.6+
860902	046	1.9+	2.3-	880120	046	0.6+	0.3-	911115	366	0.6+	0.5+
860904	046	(4.6+	0.5+)	880120	046	2.1-	0.9+	920207	801	0.3+	0.8-
860904	046	(3.8+	0.5-)	911007	801	0.3-	0.6+	920207	801	0.1-	0.9-
860911	046	0.4+	2.6-	911007	801	0.6-	0.4+				

(5103)* 1986 RP1 = 1977 QT3 = 1977 RD9 = 1985 JR1

Discovered 1986 Sept. 4 by A. Mrkos at Kleť.

Id. H. Oishi (MPC 15245)

Epoch 1992 June 27.0 TT = JDT 2448800.5

					Nakano
M	141.52528	(2000.0)	P		Q
n	0.21632819	Peri.	110.66213	+0.45158908	+0.89217860
a	2.7482779	Node	186.20712	-0.84700527	+0.42543727
e	0.0161482	Incl.	4.88116	-0.28044496	+0.15172496
P	4.56	H	12.7	G 0.15	

Residuals in seconds of arc

770823	095	1.6-	0.3+	860904	046	0.4+	0.6+	911009	801	0.0	0.3-
770909	675	0.8+	0.1+	860905	046	0.7-	1.1-	911009	801	0.4-	0.0
770909	095	0.0	0.5+	860905	046	0.1-	0.5+	920108	801	0.4+	0.2-
770910	675	0.5+	0.5-	900625	801	0.4+	0.3+	920108	801	0.2+	0.0
850514	675	(1.4-	9.0+)	900625	801	0.8+	0.2-	920108	801	0.1-	0.0
860829	095	1.9+	2.1+	900720	801	0.5-	0.1+	920108	801	0.1+	0.2+
860904	046	1.2-	2.0-	900720	801	0.8-	0.5-				

(5104)* 1986 RU5 = 1982 SN4 = 1989 OQ = 1990 TE

Discovered 1986 Sept. 7 by L. I. Chernykh at the Crimean Astrophysical Observatory.

Id. G. V. Williams (MPC 17205)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	283.85136		(2000.0)	P	Q
n	0.23315298	Peri.	8.17517	-0.89525723	+0.43858095
a	2.6144202	Node	198.46347	-0.42152216	-0.89080278
e	0.1156927	Incl.	14.35023	-0.14433835	-0.11881565
P	4.23	H	11.7	G 0.15	

Residuals in seconds of arc

820920	095	(3.5+	3.5-)	890729	675	(1.0-	2.5-)	901009	413	0.5-	1.1+
860907	095	0.2+	1.0+	890729	675	0.4-	1.5-	901011	413	0.4-	1.1-
860911	095	0.8-	0.6-	900918	675	0.6+	0.5-	901011	413	0.1-	1.4+
861005	095	0.7+	0.8-	900918	675	0.7+	0.7-	920102	801	0.0	0.6-
861010	095	(0.9+	2.9-)	900920	675	1.3+	0.1-	920102	801	0.2+	0.7-
890705	675	0.2+	0.6+	900920	675	1.2+	0.6-	920106	801	0.1-	0.7-
890705	675	0.2-	0.7+	900926	095	2.1-	1.4+	920106	801	0.1-	0.5-
890707	675	0.3-	1.4-	900926	095	(5.1-	5.8+)	920207	801	0.2+	0.1+
890707	675	0.4+	1.5-	901009	413	0.5-	0.9-	920207	801	0.6-	0.2-

(5105)* 1986 TM1 = 1982 UL10 = 1990 SQ10

Discovered 1986 Oct. 4 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Id. H. E. Holt (k, MPC 17632), R. H. McNaught (k, ibid.), B. G. Marsden (ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M	109.34069		(2000.0)	P	Q
n	0.23544545	Peri.	189.95973	+0.54840024	-0.82315200
a	2.5974220	Node	226.96032	+0.78040612	+0.56704961
e	0.1564291	Incl.	11.62163	+0.30037222	+0.02958917
P	4.19	H	12.5	G 0.15	

Residuals in seconds of arc

821023	095	0.8-	0.4-	861204	688	1.4+	1.5+	901012	413	0.2-	0.0
861003	095	(1.3-	4.7-)	900917	675	0.3+	0.7+	901012	413	0.2-	0.0
861004	688	0.9+	0.3-	900917	675	0.6-	0.9+	901012	413	1.0+	1.0+
861004	688	0.5-	0.1+	900917	675	1.0-	2.8-	901012	413	1.0+	1.0+
861007	095	0.3-	2.2-	900917	675	0.1-	0.8-	920107	801	0.6+	0.4-
861011	095	1.9+	0.9-	900919	675	0.2-	0.5+	920107	801	0.4+	0.4-
861105	688	1.4-	1.4+	900919	675	0.3-	1.3+	920207	801	0.9-	0.5-
861105	688	1.9-	0.9+	900920	675	0.1-	1.7-	920207	801	0.2-	0.3-
861204	688	1.6+	0.4+	900920	675	0.3-	1.1-				

(5106)* 1987 DJ = 1985 YN1

Discovered 1987 Feb. 19 by P. Jensen at Brorfelde.

Id. S. Nakano (MPC 12001)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	147.30972		(2000.0)	P	Q
n	0.18710149	Peri.	279.47484	+0.98113412	-0.04869267
a	3.0275028	Node	83.48401	+0.12308104	+0.90362164
e	0.1161532	Incl.	10.85431	-0.14908688	+0.42555488
P	5.27	H	11.7	G 0.15	

Residuals in seconds of arc

851217	010	0.9+	0.3-	870302	054	1.1-	2.1+	901214	801	0.6-	0.1+
851217	010	(5.3+	0.8+)	880419	801	0.2-	2.8-	901220	801	1.0-	0.3+
851219	010	1.8+	1.7-	901020	402	0.1+	0.5-	901220	801	1.2-	0.2+
870219	054	0.6-	0.3-	901020	402	1.8+	0.7+	920106	801	0.6+	0.2-
870220	054	0.4-	1.0+	901021	402	0.5-	0.2-	920106	801	0.7+	0.0
870222	054	0.4+	0.9+	901021	402	0.0	0.2-	920207	801	0.4+	0.5-
870224	054	1.6+	0.5-	901027	413	0.1-	0.6-	920207	801	0.3+	0.6-
870226	054	2.5-	0.2+	901214	801	0.6-	0.1+				

(5107)* 1987 DS6 = 1976 GE1 = 1985 VY2

Discovered 1987 Feb. 24 by H. Debehogne at the European Southern Observatory.

Id. C. M. Bardwell (MPC 13313)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell

M	42.66356		(2000.0)	P	Q
n	0.17734520	Peri.	277.68470	-0.11677097	-0.99315516
a	3.1375435	Node	179.00882	+0.96184504	-0.11377009
e	0.0733031	Incl.	9.03298	+0.24742405	-0.02644246
P	5.56	H	12.0	G 0.15	

Residuals in seconds of arc

760401	095	0.6+	2.5-	870301	809	0.3+	0.3-	870310	809	(2.5-	0.2-)
760402	095	(5.3-	3.2-)	870301	809	0.6+	0.4-	870310	809	(2.4-	0.2-)
760404	095	0.2+	2.1-	870302	809	0.4-	0.5-	870310	809	(2.2-	0.2-)
851110	095	2.4-	2.2+	870302	809	0.2-	0.6-	890801	675	0.0	1.5-
870224	809	0.9-	0.8+	870302	809	0.0	0.9-	890801	675	0.3+	0.7-
870224	809	0.6-	1.3+	870303	809	0.2-	0.2+	900922	095	1.1+	0.2-
870224	809	0.0	1.4+	870303	809	0.0	0.2+	900922	095	(1.3+	3.0-)
870225	809	0.7-	0.2+	870303	809	0.2+	0.3+	901020	801	0.2+	1.1-
870225	809	0.3-	0.1+	870304	809	0.1+	0.4-	901020	801	0.5+	0.9-
870225	809	0.1-	0.4+	870304	809	0.0	0.3-	901120	801	0.5-	0.9-
870226	809	0.4+	0.1+	870304	809	0.1-	0.3-	901215	801	0.3+	0.7-
870226	809	0.6+	0.1+	870306	809	0.1+	0.3-	901215	801	0.3+	0.6-
870226	809	0.8+	0.0	870306	809	0.1-	0.3-	920102	801	0.4-	0.5-
870227	809	0.0	0.3-	870306	809	0.0	0.4-	920102	801	0.2-	0.7-
870227	809	0.1+	0.0	870307	809	0.4-	0.2+	920107	801	0.9+	0.0
870227	809	0.1+	0.2-	870307	809	0.7-	0.1-	920107	801	0.9+	0.2-
870228	809	0.3+	0.4+	870307	809	0.4-	0.2+	920203	801	0.5+	0.3-
870228	809	0.3+	0.3+	870308	809	0.8-	0.0	920203	801	0.6+	0.8-
870228	809	0.4+	0.3+	870308	809	0.9-	0.2+				
870301	809	0.6+	0.2-	870308	809	0.6-	0.2+				

(5108)* 1987 QG2 = 1952 RP = 1952 SQ1 = 1989 CU

Discovered 1987 Aug. 21 by E. W. Elst at the European Southern Observatory.

Id. S. Nakano (MPC 14351)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	71.80990		(2000.0)	P	Q
n	0.28161570	Peri.	77.57397	+0.69926718	-0.71236059
a	2.3051444	Node	327.79438	+0.60460251	+0.63392835
e	0.1093458	Incl.	6.43491	+0.38142001	+0.30112661
P	3.50	H	13.2	G 0.15	

Residuals in seconds of arc

520914	074	1.6-	0.4+	870826	809	0.1+	0.2+	890213	049	0.7-	1.1+
520916	839	0.4+	0.4+	870826	809	1.6+	0.1-	911007	801	0.6+	0.3-
520916	839	0.2-	2.1+	890204	399	0.5-	0.7-	911007	801	0.6+	0.6+
870821	809	0.9+	0.0	890204	399	(3.0+	1.5-)	911010	801	0.3+	0.3+
870821	809	0.4-	0.0	890204	399	1.2+	0.5+	911010	801	0.2+	0.2+
870821	809	1.7-	0.1-	890204	399	1.0+	0.7+	911103	801	0.4+	0.1+
870824	809	0.2-	0.7-	890205	399	1.1+	0.9+	911103	801	0.4+	0.2+
870824	809	(2.8+	0.3-)	890207	399	0.3+	0.2+	911106	801	1.0-	0.5-
870825	809	0.5-	0.6+	890207	399	(2.8-	0.9+)	911106	801	0.5-	0.3+
870825	809	0.8+	1.2+	890207	399	(2.6-	1.1+)	911201	675	0.0	0.7-
870825	809	0.3+	0.6+	890211	399	0.2+	0.6+	911201	675	0.4-	0.8+
870825	809	0.6-	1.3-	890211	399	1.8-	0.1-	911203	675	0.2-	1.7-
870825	809	0.1-	0.7-	890211	399	2.0+	1.0-	911203	675	0.1+	0.0
870826	809	0.1+	0.2-	890213	049	1.3-	0.0				

(5109)* 1987 RM1 = 1989 CK

Discovered 1987 Sept. 13 by H. Debehogne at the European Southern Observatory.

Id. S. Nakano (MPC 14352)

Epoch 1992 June 27.0 TT = JDT 2448800.5

					Nakano P	Nakano Q
M	271.00651		(2000.0)			
n	0.29394786	Peri.	83.30045		-0.63921537	+0.76827412
a	2.2402123	Node	146.88763		-0.72789672	-0.59015312
e	0.0661710	Incl.	3.57232		-0.24813319	-0.24793983
P	3.35	H	13.7	G	0.15	

Residuals in seconds of arc

870913	809	1.4-	0.3-	870928	809	1.4+	0.4+	900625	801	0.4+	0.1-
870913	809	0.0	0.8-	890104	413	1.0+	0.9+	900625	801	0.7+	0.3+
870913	809	0.2-	0.9-	890104	413	0.8+	0.2-	900719	801	0.3+	0.0
870916	809	0.4-	0.1-	890106	413	1.0+	0.4+	900720	801	0.4-	0.0
870916	809	0.2-	0.1+	890110	413	0.9-	1.2+	900720	801	0.9+	0.2+
870916	809	0.2-	0.2+	890110	413	1.0+	1.6-	900725	675	(3.4-	0.7+)
870917	809	0.3-	0.6-	890112	413	(3.6-	2.1-)	900725	675	(2.6-	0.9+)
870917	809	0.3-	0.7-	890113	413	1.6-	0.1-	900727	675	0.9-	0.0
870917	809	0.1-	0.7-	890113	413	(3.1-	1.8+)	900727	675	0.8-	0.3+
870918	809	0.2-	0.1+	890115	413	(2.5-	1.7+)	900728	675	1.1-	1.0+
870918	809	0.0	0.2+	890201	567	0.2-	0.2+	900728	675	0.8-	0.5+
870918	809	0.1+	0.1+	890201	567	0.8+	0.0	900816	801	0.5+	1.0+
870924	809	(2.4-	0.1+)	890208	567	0.1-	0.5+	900816	801	0.1+	0.6+
870924	809	0.1-	0.6+	890208	567	0.4-	0.1-	900817	801	0.6+	0.1+
870924	809	0.0	0.5+	890209	567	0.3-	0.2+	900817	801	0.2+	0.2+
870926	809	2.1-	0.2+	890209	567	0.5-	1.0-	911107	801	0.3+	0.0
870926	809	0.9+	0.5+	890210	567	0.7-	0.8+	911107	801	0.1+	0.3+
870926	809	0.9+	0.4+	890210	567	1.1-	0.2+	911205	801	0.7-	0.3+
870928	809	0.9+	0.5+	890227	567	1.2+	1.9+	911205	801	0.3+	0.0
870928	809	1.1+	0.5+	890227	567	1.2+	0.8+				

(5110)* 1987 SV = 1937 AW = 1937 AC1 = 1937 BH = 1939 RG = 1974 CG

Discovered 1987 Sept. 19 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Id. S. Nakano (MPC 12449)

Epoch 1992 June 27.0 TT = JDT 2448800.5

					Nakano P	Nakano Q
M	79.47082		(2000.0)			
n	0.26722071	Peri.	76.34142		+0.86327027	-0.50244165
a	2.3872028	Node	313.79511		+0.43348471	+0.78687009
e	0.1087361	Incl.	3.82352		+0.25856420	+0.35831251
P	3.69	H	12.8	G	0.15	

Residuals in seconds of arc (or two decimals in units of degrees)

370107	020	(0.08+	0.05-)X	870828	095	0.5-	0.8-	871026	688	0.2+	1.6+
370109	020	(7.0+	3.6-)	870916	095	1.0-	0.5-	871026	688	0.6-	0.7+
370117	029	0.9-	0.8-	870919	688	1.0+	0.4+	911114	901	0.2-	0.1-
370117	029	0.7+	0.4-	870919	688	1.1-	0.6+	911114	901	0.7+	1.0-
390908	024	0.2-	1.1+	870926	688	0.1-	0.2-	920102	801	0.1-	0.2-
390909	024	1.0+	2.8-	870926	688	0.5-	0.3-	920102	801	0.1-	0.1-
740214	095	0.1+	0.7+	871016	688	1.2+	1.6+	920108	801	0.2-	0.0
740218	095	0.5+	1.1+	871016	688	(1.0-	2.5+)	920108	801	0.2-	0.1-

(5111)* 1987 SE4 = 1962 XO = 1980 TV14

Discovered 1987 Sept. 29 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Id. S. Nakano (MPC 12450)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	126.97451	(2000.0)		P	Q
n	0.27288571	Peri.	98.65484	+0.96704716	+0.23678639
a	2.3540491	Node	247.69029	-0.25459335	+0.89733407
e	0.1263817	Incl.	5.80376	-0.00141845	+0.37245640
P	3.61	H	13.0	G 0.15	

Residuals in seconds of arc

621202	760	0.5-	0.1+	870926	095	0.1+	0.6+	871026	688	0.6+	0.8+
621202	760	0.6+	0.9+	870929	688	1.5+	1.2+	911007	801	0.4+	0.2-
801015	095	0.7+	0.9+	870929	688	1.0+	0.4+	911007	801	0.3+	0.1-
801017	095	0.6-	0.1+	871016	688	0.1-	1.3-	911009	801	0.2+	0.6-
801101	675	0.5-	0.2+	871016	688	1.8-	1.6-	911009	801	0.3+	0.3-
801102	675	0.5-	0.3-	871023	095	0.1+	0.1+	920108	801	0.4-	0.0
870902	095	0.5-	0.2+	871025	054	0.1-	0.9-	920108	801	0.3-	0.0
870917	095	0.6-	1.2+	871026	688	0.2+	1.6-				

(5112)* 1987 SM13 = 1987 SL29 = 1971 TK1 = 1990 OV1

Discovered 1987 Sept. 23 by S. Ueda and H. Kaneda at Kushiro.

Id. H. Kaneda (MPC 17634)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	145.12558	(2000.0)		P	Q
n	0.30727372	Peri.	341.50885	+0.71326693	-0.69516068
a	2.1749658	Node	62.87283	+0.65507100	+0.61579553
e	0.1301246	Incl.	5.76853	+0.24926346	+0.37087397
P	3.21	H	13.5	G 0.15	

Residuals in seconds of arc

711011	095	0.2-	0.3+	900729	675	0.7+	0.1-	920206	801	0.7+	0.4-
870923	399	(3.2+	1.2+)	900729	675	0.2+	0.0	920206	801	1.0+	1.0-
870923	399	(4.3+	1.1-)	900730	675	0.2+	0.2+	920226	399	2.3-	0.6+
870923	399	1.6+	1.2-	900730	675	0.4+	0.4+	920226	399	1.9-	0.9+
870924	095	(5.2-	0.4+)	900914	675	0.8-	1.0-	920229	399	0.6+	0.9-
871025	399	0.1-	0.3+	900914	675	0.1-	0.7-	920229	399	1.3+	0.8-
871025	399	1.2-	0.2-	900915	675	0.5+	0.3+				
871025	399	0.1+	0.0	900915	675	0.9-	0.3+				

(5113)* 1988 BN

Discovered 1988 Jan. 19 by T. Seki at Geisei.

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	342.37144	(2000.0)		P	Q
n	0.22679728	Peri.	217.34829	-0.94094343	+0.03051725
a	2.6630388	Node	320.04314	+0.23199379	-0.66724569
e	0.2267679	Incl.	31.67087	-0.24658538	-0.74421226
P	4.35	H	12.6	G 0.15	

Residuals in seconds of arc

880119	372	2.6+	0.2-	880213	675	(9.7-	1.8-)	890701	474	(3.2-	0.4-)
880120	372	0.6-	2.7-	880213	894	(3.2-	0.4-)	890728	474	0.6+	0.5+
880123	372	0.8+	2.1+	880213	894	0.4-	2.1+	890728	474	1.2+	0.4+
880125	372	0.1+	0.3+	880218	871	(3.2+	2.2+)	900921	372	(3.6-	0.9+)
880129	372	0.1-	2.1+	880221	372	0.9-	2.0-	900921	372	0.1-	1.6+
880208	372	0.0	0.1-	880221	372	0.1+	0.9-	911209	372	0.2+	0.5-
880208	372	0.3-	0.1-	880414	801	0.1+	0.6-	911209	372	1.5+	1.2+
880211	675	(13.2-	1.9-)	890629	474	0.7-	0.6+	911229	372	0.4+	0.8-
880212	894	0.5+	0.3-	890629	474	1.6-	0.5+	911229	372	1.5-	0.8+
880212	894	0.4+	1.7+	890701	474	2.7-	0.6-	920102	372	0.5-	0.3-

(5114)* 1988 CO = 1986 TS3

Discovered 1988 Feb. 15 by S. Ueda and H. Kaneda at Kushiro.

Id. T. Kobayashi (MPC 12952)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	309.94704		(2000.0)	P	Q
n	0.25366763	Peri.	213.43055	-0.52943056	+0.84781266
a	2.4714928	Node	24.64342	-0.76156777	-0.45924038
e	0.0120689	Incl.	4.16466	-0.37378845	-0.26516404
P	3.89	H	12.6	G 0.15	

Residuals in seconds of arc

861004	046	1.4+	1.6+	880211	399	1.8-	0.8+	901027	399	0.5+	0.2+
861004	046	(1.8+	2.5+)	880211	399	1.0+	0.4+	901111	400	0.7-	0.9-
861005	046	2.1-	1.5+	880211	399	1.7+	1.0+	901111	400	0.2-	0.5+
861005	046	(5.2-	0.9-)	880215	399	(3.3-	1.1+)	920205	399	1.4-	0.4+
861009	046	0.2-	1.5-	880215	399	0.1-	0.0	920205	399	1.4-	0.5-
861009	046	0.2+	0.3-	880215	399	1.6+	0.4+	920208	399	0.2+	1.3-
861010	046	(5.0-	4.2-)	880219	399	(0.6+	4.6+)Y	920208	399	0.3+	2.1-
861010	046	(2.1-	3.0-)	880219	399	0.0	1.6+	920225	399	1.1+	0.1-
880208	399	0.1-	1.1-	880219	399	1.2-	0.2- Y	920225	399	0.1-	0.4-
880208	399	1.2+	0.3-	880312	054	2.1-	1.4+	920226	399	0.4-	0.4+
880208	399	1.0+	0.1-	880312	054	(3.6-	1.5+)	920226	399	0.2+	0.2+
880211	399	(3.9-	1.0+)	901027	399	1.0+	1.3-				

(5115)* 1988 CD4 = 1985 QR3 = 1990 MS

Discovered 1988 Feb. 13 by E. W. Elst at the European Southern Observatory.

Id. E. Bowell (k, MPC 16697), B. G. Marsden (ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M	92.75905		(2000.0)	P	Q
n	0.18780036	Peri.	93.53873	+0.98053897	+0.12925688
a	3.0199872	Node	259.07450	-0.17573125	+0.91344055
e	0.1311068	Incl.	8.65578	+0.08753204	+0.38590027
P	5.25	H	12.2	G 0.15	

Residuals in seconds of arc

850823	675	0.2-	0.8-	880223	413	0.1-	0.5+	900728	675	0.4+	2.1-
850823	675	0.9+	0.3-	880225	413	0.8-	0.3-	900728	675	0.3+	0.6-
880213	809	0.4+	1.1-	880225	413	1.0+	0.4-	900728	675	0.8+	2.4-
880215	809	0.2+	2.1-	900618	675	1.5+	0.3-	900729	675	1.0-	0.5+
880216	809	0.2+	1.1-	900618	675	0.6+	0.2-	900729	675	0.8-	0.2+
880216	809	0.0	1.1-	900621	675	0.0	0.1-	900730	675	0.2+	0.2-
880216	809	0.2-	1.1-	900621	675	0.5+	0.7-	900730	675	0.9+	1.0-
880221	809	1.5-	0.1+	900724	675	1.1-	0.5-	911205	801	0.6+	1.7-
880221	809	1.3-	0.2+	900724	675	0.1+	0.4-	911205	801	0.4+	2.2-
880221	809	1.6-	0.3+	900725	675	1.2+	1.3-	920207	801	0.2+	1.4-
880223	809	0.0	1.1-	900725	675	0.6+	2.6-	920207	801	0.1-	1.0-
880223	809	0.5-	1.3-	900727	675	1.1-	1.6+				
880223	809	0.6-	1.8-	900728	675	0.3+	0.1-				

(5116)* 1988 EU = 1970 BC = 1982 DH3 = 1982 HQ2

Discovered 1988 Mar. 13 by P. Jensen at Brorfelde.

Id. S. Nakano (MPC 13161)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	14.42050		(2000.0)	P	Q
n	0.17283654	Peri.	29.30186	+0.49273968	-0.86886021
a	3.1918735	Node	31.24856	+0.77933976	+0.41617462
e	0.1191873	Incl.	5.29243	+0.38708803	+0.26810561
P	5.70	H	11.4	G 0.15	

Residuals in seconds of arc

700131	095	0.4-	1.4-	710402	675	0.7-	0.4-	710514	675	2.1-	0.4+
710326	675	0.2+	1.4-	710416	675	0.4+	1.6-	710516	675	0.5-	1.8+
710326	675	0.5+	1.4-	710416	675	2.3-	2.3-	820220	033	1.6+	0.1+
710327	675	0.4+	0.8-	710513	675	0.3-	1.7+	820220	033	1.6+	0.2+

820220	033	1.6+	0.0	880314	054	0.4-	0.8-	911009	595	0.5+	0.0
820427	033	2.0-	1.2-	880318	054	0.3-	0.0	911009	595	0.2-	0.8-
820427	033	1.2-	0.8-	880323	809	0.5-	0.7+	911009	595	0.5-	0.5+
850818	095	(3.4+	4.1-)	880323	809	1.8-	0.6-	920205	801	0.2-	0.4-
850823	095	2.5+	1.5-	880324	809	1.3+	0.8-	920206	801	0.7-	0.6-
850915	095	0.1-	1.9-	880324	809	1.4-	0.2+	920206	801	0.2-	0.1-
850920	095	2.7+	2.7-	911008	596	0.9-	0.3-	920206	801	0.4-	0.1-
880313	054	1.7+	0.2-	911008	596	1.0+	1.1-				
880313	054	0.3-	0.3-	911008	596	0.0	0.8+				

(5117)* 1988 GH = 1972 GH = 1980 XP1
Discovered 1988 Apr. 8 by K. Endate and K. Watanabe at Kitami.
Id. S. Nakano (MPC 13154), T. Kobayashi (ibid.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	305.01106		(2000.0)	P	Q
n	0.18447860	Peri.	153.14399	-0.99551280	-0.06648644
a	3.0561316	Node	23.33904	+0.02020403	-0.84450476
e	0.0749417	Incl.	9.78556	+0.09244495	-0.53140500
P	5.34	H	11.8	G 0.15	

Residuals in seconds of arc

720414	095	(3.8-	2.0-)	880416	399	0.7-	1.3+	901020	801	0.1-	0.3+
801210	095	0.5+	1.1-	880416	046	2.2+	1.9-	901021	801	0.0	0.4+
851018	095	(1.2+	3.8+)	880416	046	1.0+	1.1-	920101	801	0.4+	0.5+
880408	400	1.5-	0.6-	880509	400	0.1+	0.0	920106	801	0.1-	0.3+
880408	400	2.3+	1.7+	880509	400	0.5-	0.5+	920106	801	0.1-	0.1+
880410	046	0.3-	0.2+	880509	400	0.0	1.6+	920206	801	0.1-	0.6-
880410	046	1.9-	1.2-	900914	809	0.2+	0.6-	920206	801	0.1+	0.4+
880414	046	2.3-	1.9-	900914	809	0.9+	0.7-	920207	801	0.1-	0.4-
880414	046	0.1-	0.5-	900914	809	0.2+	0.8-	920207	801	0.3-	0.1-
880416	399	0.2-	0.5+	901020	801	0.1-	0.3+				
880416	399	0.9+	0.1+	901020	801	0.3-	0.2+				

(5118)* 1988 RB = 1937 KH = 1976 YB1 = 1980 TS11 = 1980 VH2
Discovered 1988 Sept. 7 by P. Jensen at Brorfelde.
Id. B. G. Marsden (MPC 13682)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M	348.68797		(2000.0)	P	Q
n	0.23457809	Peri.	61.19914	+0.67881288	+0.70635172
a	2.6038208	Node	253.02550	-0.72539635	+0.60257924
e	0.2163981	Incl.	12.11306	-0.11407549	+0.37143710
P	4.20	H	11.6	G 0.15	

Residuals in seconds of arc (or two decimals in units of degrees)

370531	078	(0.03+	0.04+)X	880907	054	0.9-	1.1-	881002	054	0.3+	0.5+
761216	095	3.5-	2.5-	880908	054	0.0	0.2-	910221	808	0.8-	0.2+
761218	095	1.3+	1.0-	880909	054	0.1+	0.4-	910221	808	0.6-	1.2-
801009	095	0.2+	0.4+	880916	054	0.3-	1.0-	910506	413	0.7+	1.3-
801110	330	2.2+	3.6+	880920	054	0.5+	0.2-				
880907	054	0.5+	0.0	880920	054	0.5+	0.9-				

(5119)* 1988 RA1
Discovered 1988 Sept. 8 by P. Jensen at Brorfelde.
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	133.31204		(2000.0)	P	Q
n	0.08304403	Peri.	15.52164	+0.88039338	+0.43575051
a	5.2031192	Node	317.02718	-0.45908342	+0.68408423
e	0.1078242	Incl.	15.93633	-0.11895339	+0.58493611
P	11.87	H	10.2	G 0.15	

Residuals in seconds of arc

880908	054	0.6-	0.2+	890929	675	0.9+	0.4-	911202	675	0.3+	0.2+
880909	054	0.8+	1.9+	890929	675	0.5+	0.9-	911202	675	0.7+	0.7-
880909	054	0.8-	0.2+	891101	675	1.3-	0.9+	911206	675	0.2-	0.1+
880911	675	0.9+	1.9-	891101	675	0.0	0.2+	911206	675	0.3-	0.0
880911	675	0.3+	1.1-	891122	675	0.2+	1.1-	920106	801	0.3+	1.0+
880916	054	0.7-	1.0+	891122	675	1.4-	0.3-	920106	801	0.5+	0.5+
880920	054	0.2+	0.8+	901111	675	0.2+	1.6+	920206	801	0.7-	0.6+
881002	054	0.1+	1.3+	901111	675	0.6+	0.9-	920206	801	0.8-	0.5+
881010	054	0.1+	1.2+	901114	675	0.8+	1.2-				
881010	054	0.9-	1.9-	901114	675	0.4+	1.2-				

(5120)* 1988 TZ1

Discovered 1988 Oct. 13 by C. S. Shoemaker at Palomar.

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	155.96397	(2000.0)		P	Q
n	0.08100230	Peri.	22.54667	+0.71607341	+0.58570137
a	5.2901884	Node	295.89754	-0.68735312	+0.49689745
e	0.1091144	Incl.	24.96836	-0.12159178	+0.64034899
P	12.17	H	9.8	G 0.15	

Residuals in seconds of arc

880914	675	0.2-	1.3+	891102	675	0.4-	0.2-	911202	675	0.5-	1.0+
880914	675	0.3-	1.9+	891103	675	1.0-	1.5-	911202	675	(2.3+	5.0-)
881013	675	0.3-	0.6+	891103	675	0.1-	1.6-	911206	675	1.0+	1.0-
881013	675	0.4-	1.2+	901111	675	1.7+	1.9-	920102	801	0.1+	1.2+
881104	675	0.4+	1.3-	901113	675	0.5+	1.7-	920102	801	0.2+	1.1+
881106	675	0.2-	0.2-	910120	675	0.5-	0.4+	920106	801	0.2+	0.7+
891102	675	0.7-	0.1+	910120	675	(4.7-	1.3-)	920106	801	0.3+	0.7+

(5121)* 1989 AX1 = 1941 WO = 1954 PA = 1984 QF1

Discovered 1989 Jan. 15 by M. Yanai and K. Watanabe at Kitami.

Id. T. Kobayashi (MPC 15893)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	95.48114	(2000.0)		P	Q
n	0.29579389	Peri.	20.31172	+0.94632412	-0.32320641
a	2.2308819	Node	358.53600	+0.27882895	+0.82082611
e	0.1702326	Incl.	6.46353	+0.16347804	+0.47093748
P	3.33	H	13.0	G 0.15	

Residuals in seconds of arc

411116	062	0.3+	0.8+	890130	400	1.3-	1.4-	911104	411	1.1+	0.6-
411116	062	0.1-	2.2+	890207	400	0.3-	2.2-	911106	366	0.5-	0.8+
540807	760	1.6-	2.1-	890207	400	(1.0+	4.3-)	911106	366	(0.5-	2.6+)
540807	760	0.5+	0.3+	910812	801	0.6-	0.4+	911130	366	1.1+	0.1+
840831	688	0.7+	2.1-	910812	801	0.0	1.2+	911130	366	0.1+	0.4+
840831	688	1.8+	1.0-	910912	801	0.2-	0.5+	911130	367	0.4-	0.5+
840831	688	1.7+	0.7-	910912	801	0.2-	0.6+	911130	367	0.9-	0.3+
890113	400	(0.3-	5.3-)	911007	801	0.2+	0.4+	911130	367	0.8-	0.3+
890113	400	(0.9-	6.4-)	911007	801	0.0	0.2+	911201	902	1.4+	0.5+
890115	400	(1.0-	7.9-)	911009	801	0.1+	0.3+	911201	902	1.1-	1.0-
890115	400	(2.8-	9.4-)	911009	801	0.1+	0.4+	911201	366	0.4-	0.7-
890115	400	(0.2+	10.0-)	911103	366	(2.3+	0.9-)	911204	367	0.5-	1.5-
890130	400	0.3+	0.2-	911103	366	0.2-	0.0	911204	367	0.0	1.1-
890130	400	0.1+	2.4-	911104	411	1.2+	0.3-	911204	367	1.3-	0.8-

(5122)* 1989 AZ1 = 1979 UH3 = 1983 NV = 1985 BE

Discovered 1989 Jan. 3 by A. Mrkos at Kleť.

Id. S. Nakano (MPC 14358)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	9.67670		(2000.0)	P	Q
n	0.23664361	Peri.	259.40094	+0.95389126	-0.22146223
a	2.5886472	Node	113.14989	+0.27681129	+0.91004822
e	0.2011777	Incl.	12.72900	-0.11604729	+0.35038082
P	4.16	H	12.1	G 0.15	

Residuals in seconds of arc

620803	760	(3.7-	4.1+)	890104	046	2.6+	0.0	900325	801	0.5-	0.6+
620803	760	(4.4-	4.8+)	890104	046	1.7+	0.3+	910610	801	0.0	0.4-
791025	808	0.0	0.8+	890109	046	(3.3-	1.2-)	910610	801	0.4-	0.6-
791025	808	1.1-	0.5+	890109	046	2.1-	1.9-	910611	801	0.0	0.9-
830713	688	1.0+	2.7-	890111	675	1.2-	1.2-	910611	801	0.0	1.1-
830713	688	(1.3-	5.3-)	890111	675	0.5-	0.9-	910614	293	(1.3+	3.1-)
850116	046	(3.5+	2.0-)	890114	293	1.7-	1.2+	910709	801	(0.0	2.8-)
850116	046	1.0+	0.9+	890114	293	(3.3-	2.6+)	910709	801	0.0	0.7+
850118	046	0.8+	0.1+	890207	071	0.8-	0.2-	910711	801	0.6+	0.2+
850118	046	(3.3+	1.1+)	890207	071	1.3-	1.3+	910711	801	0.0	0.1-
890103	046	1.4+	1.3-	890207	071	0.4-	1.0-				
890103	046	1.9+	1.9-	900325	801	0.7-	0.6+				

(5123)* 1989 BL = 1951 YW = 1986 WA9

Discovered 1989 Jan. 28 by Y. Oshima at the Gekko Observatory.

Id. H. Oishi (MPC 14358)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	120.18346		(2000.0)	P	Q
n	0.08226012	Peri.	30.62635	-0.31879716	-0.93663892
a	5.2361227	Node	78.29743	+0.83680206	-0.35006528
e	0.1043171	Incl.	8.52594	+0.44511873	-0.01272128
P	11.98	H	9.9	G 0.15	

Residuals in seconds of arc

511223	711	1.0-	3.6+	890203	888	0.0	0.0	900128	675	1.7-	0.1+
511223	711	(0.7-	7.5+)	890203	888	0.1-	0.4+	900221	675	0.7+	1.8-
861130	381	0.0	0.6-	890205	888	0.2+	0.0	900221	675	1.7+	0.4-
861130	381	0.4+	0.8-	890205	888	0.3-	0.1+	900327	675	2.3+	0.7+
861201	381	1.4+	0.5-	890207	888	0.7-	0.6+	900327	675	(1.5-	2.6-)
861201	381	0.1-	1.2-	890207	888	0.2-	0.4+	910309	675	0.9+	0.1-
890111	675	0.9-	0.4-	890210	888	0.0	0.3+	910312	675	0.6+	1.7+
890111	675	0.9-	0.9+	890210	888	0.2-	0.1-	910312	675	0.2+	0.7+
890128	888	(3.3-	2.6+)	890213	888	(7.1-	1.8-)	910414	675	0.4-	0.3-
890128	888	(4.2-	4.3+)	890213	888	(6.0-	0.1-)	910414	675	0.6+	0.6-
890129	888	0.2-	0.4-	890226	888	0.9-	0.1+	910416	675	0.7-	0.3+
890129	888	0.3-	0.1-	890226	888	0.7-	0.2-	910514	675	(3.0-	0.5-)
890131	675	1.9+	1.2-	900126	675	0.6-	0.2+	910516	675	1.0-	1.0-
890201	675	0.5+	2.0-	900126	675	0.1-	0.5+	910518	675	0.9-	0.7-
890201	675	1.4+	0.3+	900128	675	1.1-	0.1-				

(5124)* 1989 CW = 1982 BL10 = 1990 OP3

Discovered 1989 Feb. 4 by T. Seki at Geisei.

Id. H. E. Holt (k, MPC 16876), G. V. Williams (ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	264.92700		(2000.0)	P	Q
n	0.28924231	Peri.	280.94142	-0.43095465	+0.90232730
a	2.2644435	Node	323.52604	-0.82179085	-0.39663387
e	0.0799537	Incl.	0.88099	-0.37274374	-0.16878099
P	3.41	H	13.7	G 0.15	

Residuals in seconds of arc

820119	095	0.3+	1.4+	890205	049	0.2-	2.3-	890206	875	0.2-	1.3+
890204	372	(6.3-	3.6-)	890205	049	0.3-	0.8-	890210	875	2.1-	0.6+
890204	372	(0.4+	3.0-)	890206	875	0.4+	0.0	890210	372	(4.1-	1.1-)Y

890210	875	(5.4-	2.6+)	890213	372	2.3-	0.1+	900914	675	2.2+	2.3-
890211	372	0.8-	0.6-	890214	809	0.3+	0.7-	900914	675	1.4+	0.9-
890211	372	1.1-	0.6-	890214	809	0.6+	0.1-	900915	675	1.6+	0.3-
890212	809	0.4-	0.2-	890214	372	1.4-	0.1+	900915	675	1.0-	0.6-
890212	809	0.1-	0.1-	890214	372	1.0+	0.3-	900918	675	1.4+	1.5-
890212	809	0.3-	0.2-	890227	399	(3.6-	0.5-)	900918	675	(2.1+	3.9-)
890213	049	0.3-	0.8-	890227	399	1.4+	2.1-	911204	372	1.1+	1.0-
890213	049	(0.2-	3.2+)	890227	399	1.8+	0.7-	911208	372	1.4+	0.9+
890213	049	0.7+	0.8-	890306	372	0.8-	0.1-	911208	372	(3.1-	0.1+)
890213	049	1.2+	0.7+	890306	372	0.9+	0.8+	911210	033	0.3+	1.3-
890213	809	0.3+	0.5-	900727	675	0.5-	0.7-	911210	033	0.4-	0.7-
890213	809	0.5+	0.7-	900727	675	0.2+	0.2-	911211	372	2.5-	1.1+
890213	809	0.3+	0.6-	900730	675	1.4-	1.2-	911212	033	0.0	0.2+
890213	875	2.3-	1.4+	900730	675	0.9-	0.4-	911229	372	(3.5-	0.6-)
890213	875	0.9-	0.4-	900815	372	(1.6-	2.9+)	911229	372	0.1-	0.8+
890213	372	1.7+	0.4-	900815	372	0.2-	1.0+				

(5125)* 1989 CN1 = 1976 YX4

Discovered 1989 Feb. 10 by S. Ueda and H. Kaneda at Kushiro.

Id. T. Kobayashi (MPC 14478)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 340.03779		(2000.0)	P	Q
n 0.25473428	Peri.	85.29463	-0.32315763	-0.94595879
a 2.4645887	Node	23.61450	+0.83929875	-0.29968655
e 0.1594678	Incl.	3.87040	+0.43720333	-0.12389487
P 3.87	H 13.2		G 0.15	

Residuals in seconds of arc

761218	095	0.7-	1.4+	890227	399	1.1-	1.2+	910915	675	0.8+	0.8-
761220	095	0.1-	1.4+	890227	399	0.1-	0.8-	910917	675	1.5+	1.3-
870924	413	0.7-	0.1+	890308	372	1.9-	1.1-	910917	675	0.7+	1.1-
870924	413	0.7+	1.1+	890308	372	1.3-	1.1-	910930	399	0.7-	0.2+
890210	399	0.4-	0.5-	910907	399	1.3-	0.9+	910930	399	0.2-	0.1+
890210	399	1.5+	0.6-	910907	399	0.4-	1.5+	911008	801	0.2-	1.0-
890210	399	0.4-	0.8+	910913	801	0.3+	0.4+	911008	801	0.1-	1.1-
890212	400	0.2+	1.0-	910913	801	0.5+	0.4+	911009	801	0.3-	1.0-
890212	400	1.6+	0.6+	910915	675	0.4-	0.2-	911009	801	0.3-	0.8-
890212	400	0.0	1.8-	910915	675	0.6+	0.0				
890227	399	0.4-	0.4-	910915	675	2.0+	2.5-				

(5126)* 1989 CH2

Discovered 1989 Feb. 1 by C. S. Shoemaker at Palomar.

Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M 124.00598		(2000.0)	P	Q
n 0.08283711	Peri.	353.38876	-0.35373403	-0.82202520
a 5.2117802	Node	116.48882	+0.87937989	-0.45483522
e 0.0268170	Incl.	29.90749	+0.31868988	+0.34263610
P 11.90	H 10.1		G 0.15	

Residuals in seconds of arc

890111	675	1.4-	1.4+	900128	675	1.9+	0.6-	910313	801	0.1+	1.0+
890111	675	0.7-	0.9+	900221	675	0.1-	0.3-	910313	801	0.0	0.7+
890201	675	1.1+	0.5+	900224	675	0.5-	0.3-	910317	801	0.0	0.7+
890201	675	0.4+	0.3+	900327	675	0.8-	0.7-	910317	801	0.0	1.0+
890307	675	0.5+	0.3+	900327	675	0.8-	0.0	910414	675	1.2+	0.3-
890308	675	0.6-	1.2-	910209	801	0.5-	0.4+	910414	675	0.6+	1.1-
900126	675	0.9+	0.6-	910209	801	0.4-	0.3+	910416	675	0.1-	0.3-
900126	675	0.7-	1.8-	910216	801	0.1+	0.4-				
900128	675	0.0	0.1+	910216	801	0.3-	0.6+				

(5127)* 1989 CO3 = 1969 TX = 1980 TR7

Discovered 1989 Feb. 4 by E. W. Elst at the European Southern Observatory.

Id. S. Nakano (MPC 14623)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	46.48768		(2000.0)	P	Q
n	0.26899640	Peri.	202.04576	+0.67729033	-0.73428076
a	2.3766856	Node	205.39404	+0.68998862	+0.65562150
e	0.1524348	Incl.	6.14835	+0.25533022	+0.17604606
P	3.66	H	14.5	G 0.15	

Residuals in seconds of arc

691007	095	0.8-	0.3+	890302	809	2.3-	0.1+	910914	033	0.3-	0.9+
691016	095	0.2-	0.9+	890302	809	1.7-	0.7+	910915	033	0.1-	1.1+
801010	095	2.0+	2.4-	890303	809	1.7+	0.0	910915	033	0.5-	0.5+
890204	809	0.6-	0.2-	890303	809	1.3+	0.3-	910915	675	0.6-	0.3-
890204	809	0.6-	0.3-	890303	809	1.5+	0.4-	910918	033	0.3-	1.5+
890204	809	1.5+	0.5-	890303	809	1.2-	0.3+	911003	033	1.5+	0.1-
890207	809	1.3+	0.3+	890303	809	1.6-	0.2-	911004	033	1.3+	0.2-
890207	809	0.5+	1.1+	890303	809	0.8-	0.6-	911004	033	0.9+	0.1-
890207	809	0.6+	0.6+	910913	033	0.5-	0.2+	911109	675	1.2-	0.7-
890302	809	1.0+	0.1-	910913	033	0.4-	0.5+	911109	675	0.3-	0.7+
890302	809	0.5+	0.2+	910913	675	0.5-	0.8-	911110	801	0.5-	0.1-
890302	809	0.6+	0.0	910913	675	0.7+	0.8-	911110	801	0.2-	0.4+
890302	809	1.8-	0.0	910913	033	0.5+	0.7+	911110	675	1.0-	1.8-

(5128)* 1989 FJ = 1970 AK = 1980 KW = 1982 UA5

Discovered 1989 Mar. 30 by M. Koishikawa at the Ayashi Station of the Sendai Astronomical Observatory.

Id. S. Nakano (MPC 14625)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	269.21143		(2000.0)	P	Q
n	0.21419770	Peri.	123.38063	-0.95342552	-0.29145402
a	2.7664713	Node	39.83009	+0.22039042	-0.84896879
e	0.1433714	Incl.	6.96594	+0.20593165	-0.44080216
P	4.60	H	12.3	G 0.15	

Residuals in seconds of arc

700104	095	0.2+	1.0-	890405	391	1.4-	0.8+	910913	801	0.4-	0.7+
800517	095	0.2-	0.1+	890405	391	2.0-	1.3+	910913	675	0.1+	0.8-
821020	033	0.4-	0.0	890406	391	0.4+	0.1+	910913	675	0.3+	0.3-
890330	391	(8.4-	0.9+)	890406	391	1.9-	2.0+	910916	675	0.2+	1.0-
890330	391	(9.6-	0.5-)	890413	391	1.4-	1.0-	910916	675	0.1+	1.4-
890331	391	(6.4-	0.8+)	890413	391	(3.9-	0.2+)	911106	801	0.8+	0.2-
890331	391	1.3-	1.4+	890428	391	0.5+	2.4-	911106	801	0.3-	0.1-
890402	391	2.3+	1.6+	890428	391	0.3-	1.8-	911107	675	0.5+	1.0+
890402	391	2.3+	0.3+	890429	391	2.2+	2.4-	911107	675	1.3-	0.7+
890404	391	0.1-	0.6+	890429	391	1.5+	1.5-	911109	675	1.2+	0.9+
890404	391	0.2-	0.2+	910913	801	0.3-	0.7+	911109	675	0.6-	0.2+

(5129)* 1989 GN = 1949 MH

Discovered 1989 Apr. 7 by E. F. Helin at Palomar.

Id. B. G. Marsden (MPC 17020)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M	356.05995		(2000.0)	P	Q
n	0.26840734	Peri.	350.94817	-0.93196286	-0.36053560
a	2.3801617	Node	167.70897	+0.34285671	-0.91068169
e	0.0849552	Incl.	10.33771	+0.11787492	-0.20167532
P	3.67	H	12.1	G 0.15	

Residuals in seconds of arc

490620	024	0.1-	1.7-	890502	675	1.1+	1.6+	900925	675	(0.7+	3.1-)
890406	400	1.5-	0.4-	900818	675	1.8-	0.0	900925	675	(0.7+	2.7-)
890406	400	1.9-	0.2-	900818	675	0.7-	0.3-	911009	801	0.0	0.2-
890406	400	0.3+	0.2+	900820	675	0.4-	0.7+	911009	801	0.8-	1.0-
890407	675	0.5-	0.2-	900820	675	0.5-	0.4+	920130	675	0.2+	0.0
890407	675	0.4-	1.2-	900826	095	2.4+	0.7-	920130	675	0.5+	0.6-
890408	675	(1.4-	2.8-)	900826	095	(6.3+	1.5-)	920201	675	0.7-	0.7-
890408	675	0.9-	1.2-	900914	675	0.8+	2.1-	920201	675	0.1+	1.0-
890430	675	1.8+	1.9-	900914	675	(0.3+	2.8-)	920203	801	0.2+	0.6-
890430	675	0.5+	0.6-	900923	675	(1.8+	3.4-)	920203	801	0.2+	0.7-
890502	675	0.7+	1.4+	900923	675	1.2+	2.0-				

(5130)* 1989 SC7 = 1990 VE8

Discovered 1989 Sept. 30 by C. S. Shoemaker at Palomar.

Id. C. S. Shoemaker (MPC 17637)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	102.66937	(2000.0)		P	Q
n	0.08117653	Peri.	105.38868	+0.94602159	+0.21792074
a	5.2826163	Node	242.53870	-0.28039062	+0.92154797
e	0.0096927	Incl.	15.68616	+0.16255541	+0.32134077
P	12.14	H	9.8	G 0.15	

Residuals in seconds of arc

880914	675	0.5+	1.0-	901022	675	0.3+	0.1+	911206	675	1.1-	1.4-
880914	675	(7.3+	4.3+)	901111	675	0.7-	0.3+	920101	675	0.1-	1.1-
890830	675	1.3-	0.3+	901111	675	0.5-	0.3+	920101	675	0.9+	0.0
890901	675	2.5+	0.8+	901113	675	0.2+	1.1+	920102	801	0.1+	1.0+
890902	675	0.3+	2.6-	901113	675	0.1+	0.6+	920102	801	0.1+	1.2+
890930	675	0.3-	0.5+	911107	675	0.9+	2.3-	920104	675	0.2-	0.3+
890930	675	0.0	0.3-	911107	675	0.6+	2.1-	920106	801	0.3-	0.8+
891101	675	0.5-	1.1+	911109	675	0.3+	0.7-	920106	801	0.3-	0.8+
891102	675	1.0-	0.1-	911202	675	1.3-	0.2+				
901020	675	0.5+	0.6+	911206	675	0.0	0.5+				

(5131)* 1990 BG

Discovered 1990 Jan. 21 by E. F. Helin and B. Roman at Palomar.

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell

M	58.84932	(2000.0)		P	Q
n	0.54383002	Peri.	135.68276	-0.27564949	+0.78464704
a	1.4864852	Node	110.54580	-0.96061800	-0.24593454
e	0.5698419	Incl.	36.37087	+0.03507732	-0.56907400
P	1.81	H	14.1	G 0.15	

Residuals in seconds of arc

781206	413	0.4+	0.8+	900220	675	0.1-	1.5-	900324	675	2.1-	0.0
781206	413	0.4+	1.5-	900223	675	0.6+	0.6-	900324	675	2.0-	0.2+
900121	675	1.0-	0.8+	900223	675	0.4+	0.7-	900327	801	1.0+	0.4+
900122	675	(0.8+	3.1-)	900227	801	2.6+	0.2-	900327	801	1.3+	0.4+
900124	675	0.6+	0.9-	900228	801	1.7+	0.2+	900621	413	0.4-	0.3-
900124	675	0.4+	0.5-	900228	801	1.0+	0.4-	900917	474	0.4-	1.2+
900125	675	0.3-	0.7-	900228	675	0.7+	0.1-	900917	474	0.6+	0.1+
900126	675	1.3-	1.2+	900228	675	0.6+	0.7+	900919	474	0.5+	0.3-
900126	675	(2.9-	1.1+)	900301	675	1.1-	0.1+	900919	474	0.8+	0.0
900126	657	0.3+	2.7+	900301	675	1.1-	0.5+	910210	801	0.8-	0.8-
900130	675	1.9-	0.2-	900322	801	0.6+	0.2-	910211	801	1.1-	0.9-
900203	685	(4.3+	10.1-)	900322	801	0.5+	0.2-	920101	801	0.7+	0.3-
900203	685	(13.2+	17.1-)	900322	675	0.5-	0.1+	920101	801	0.5-	0.1-
900220	675	0.9+	0.6-	900322	675	0.9-	0.6+	920102	801	0.8+	0.0

920102	801	0.5+	0.3+	920109	675	(5.3-	1.2+)	920205	801	0.2-	0.7+
920106	801	0.3-	0.1+	920109	675	(5.0+	1.0+)	920206	801	0.7-	0.9-
920106	801	0.1-	0.3+	920205	801	0.4+	0.3+	920206	801	0.7-	0.7-

(5132)* 1990 ME = 1973 QU1 = 1976 GQ = 1985 HW1 = 1986 QS5
Discovered 1990 June 22 by H. E. Holt at Palomar.
Id. G. V. Williams (MPC 16881)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 135.20443		(2000.0)	P	Q	
n	0.22550456	Peri.	142.31866	+0.56984752	+0.81953698
a	2.6732065	Node	162.16604	-0.79367155	+0.56790356
e	0.1148961	Incl.	11.35027	-0.21297714	+0.07645056
P	4.37	H	12.0	G 0.15	

Residuals in seconds of arc

730831	095	0.1-	2.6+	900622	675	0.5-	1.1-	911004	801	0.1+	0.3+
730905	095	0.2-	0.7-	900622	675	0.4-	0.6-	911004	801	0.1-	0.1+
760401	095	0.2+	2.2+	900623	675	0.7-	1.3-	911004	801	0.1+	0.2+
760402	095	(6.2-	3.9+)	900623	675	0.8-	1.2-	911007	801	0.1-	0.3+
760404	095	0.2-	2.4+	900818	675	0.8-	2.2+	911007	801	0.3-	0.0
850419	046	2.4+	1.6-	900818	675	1.2+	0.8+	911108	801	0.1+	0.1-
850419	046	1.0-	2.2+	900821	675	1.9+	0.8+	911108	801	0.0	0.3-
860830	095	0.1+	1.7+	911004	801	0.1+	0.3+				

(5133)* 1990 PA = 1983 EB3
Discovered 1990 Aug. 12 by R. H. McNaught at Siding Spring.
Id. G. V. Williams (MPC 17212)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 153.53465		(2000.0)	P	Q	
n	0.22011256	Peri.	279.22608	+0.97039275	-0.12330658
a	2.7166863	Node	88.05890	+0.19860128	+0.89671419
e	0.2234874	Incl.	11.99375	-0.13746068	+0.42508722
P	4.48	H	11.6	G 0.15	

Residuals in seconds of arc

790324	413	0.2+	0.5+	901015	801	0.3-	0.8+	901206	592	(2.9-	4.2-)
830314	095	0.5-	0.0	901015	413	0.2+	0.0	910114	592	2.1+	0.2+
880124	413	1.3+	0.5-	901016	801	0.2-	0.1+	910114	592	1.4+	0.8+
900812	413	0.6-	0.1+	901016	801	0.3-	0.0	910115	592	(3.5-	1.2-)
900813	413	0.5+	0.1-	901016	095	1.7+	0.9-	910115	592	(4.2-	0.8-)
900818	413	0.8+	0.6+	901016	095	1.2+	0.8-	920108	801	0.5-	0.3-
900828	413	1.2-	1.1-	901108	413	0.3-	0.1-	920108	801	1.2-	0.2+
900916	413	0.6+	0.8-	901109	413	0.0	0.1+	920206	801	0.1-	0.4-
901014	095	0.6+	0.4-	901205	592	1.2-	2.0+	920206	801	0.2+	0.4-
901014	095	0.4-	0.5-	901205	592	1.5-	0.8+				
901015	801	0.3-	0.8+	901206	592	1.6-	1.4-				

(5134)* 1990 SM2 = 1947 LL = 1981 WN6 = 1983 CG = 1985 PL2 = 1986 WS6
Discovered 1990 Sept. 17 by H. E. Holt at Palomar.
Id. S. Nakano (MPC 17450)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 220.33839		(2000.0)	P	Q	
n	0.21145106	Peri.	195.07891	+0.26960769	+0.95261039
a	2.7903765	Node	90.71645	-0.86828894	+0.30374093
e	0.0358240	Incl.	8.09899	-0.41639646	-0.01657987
P	4.66	H	12.0	G 0.15	

Residuals in seconds of arc

470615	690	0.6+	0.4-	830211	688	0.0	0.5-	861128	010	1.3+	2.6-
470616	690	1.0-	0.6-	830215	688	0.7-	2.3-	861128	010	0.4-	1.3-
811124	095	0.5+	0.8+	830215	688	0.3-	2.1-	861128	010	0.3-	1.5-
830211	688	0.3+	1.0-	850813	095	2.2+	2.8-	900917	675	0.4+	0.8-

900917	675	0.1-	0.8-	900930	372	0.7-	0.2+	911228	376	0.3-	1.1+
900919	675	0.2-	1.8-	901001	809	0.5-	0.6+	920102	801	0.2-	0.5+
900919	675	0.7+	0.5-	901001	809	0.2-	0.7+	920102	801	0.0	0.4+
900930	809	0.4-	0.9+	901001	809	0.3+	0.8+	920106	801	0.1+	0.5+
900930	809	0.2-	1.1+	911205	801	0.4+	0.4+	920106	801	0.1+	0.6+
900930	809	0.3+	1.1+	911205	801	0.4+	0.6+	920110	894	0.8+	1.1+
900930	372	1.1-	0.8-	911228	376	0.9-	1.0+	920110	894	0.6-	0.2-

(5135)* 1990 UE = 1969 JG = 1982 DE = 1989 GV7

Discovered 1990 Oct. 16 by S. Ueda and H. Kaneda at Kushiro.

Id. H. Kaneda (MPC 17454)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	287.97692		(2000.0)	P	Q
n	0.29408571	Peri.	229.35668	-0.08672778	+0.99566131
a	2.2395122	Node	35.71047	-0.89570488	-0.06311586
e	0.1279951	Incl.	3.31156	-0.43610900	-0.06837353
P	3.35	H	12.9	G 0.15	

Residuals in seconds of arc

690505	095	(5.0-	1.8-)	901016	399	0.2-	1.0+	920129	399	0.2-	1.7+
690516	095	0.4-	1.5+	901016	399	0.7+	0.6+	920205	399	0.2+	0.5+
820216	046	0.5-	0.5-	901016	399	0.2-	0.7+	920205	399	0.1+	0.2-
820216	046	0.5+	0.5+	901019	399	0.4-	1.4-	920208	399	0.5-	1.5-
820220	688	(3.6+	2.9-)	901019	399	1.1-	0.7-	920208	399	0.3-	1.0-
820220	688	1.9+	2.4-	901019	399	1.5+	1.0-	920221	399	1.6-	0.7+
890404	391	0.6-	0.4-	901022	399	0.2+	0.2+	920221	399	1.5-	1.3+
890404	391	1.6-	1.2+	920128	399	1.0+	0.0	920222	399	1.0-	0.8+
890412	400	1.5+	1.8-	920128	399	1.6+	0.5-	920222	399	0.1-	0.5+
890412	400	0.7+	1.4-	920129	399	0.4+	0.8+				

(5136)* 1990 UG2 = 1964 WC = 1979 RF

Discovered 1990 Oct. 20 by R. H. McNaught at Siding Spring.

Id. G. V. Williams (MPC 17827)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	112.83708		(2000.0)	P	Q
n	0.18715226	Peri.	290.31797	+0.74914104	-0.63683390
a	3.0269552	Node	109.69944	+0.65669812	+0.67794170
e	0.1072581	Incl.	11.16434	+0.08680599	+0.36720245
P	5.27	H	11.9	G 0.15	

Residuals in seconds of arc

641129	760	0.2-	2.0-	901022	413	(3.9-	1.4-)	920101	801	0.4+	0.4-
641129	760	1.8+	1.5-	901022	413	(3.3+	1.7+)	920108	801	0.4+	0.5+
790901	095	1.4-	1.0-	901108	413	2.2-	1.1+	920108	801	0.3+	0.3+
890830	413	1.1+	0.0	901109	413	0.6-	0.7+	920204	894	0.5+	0.8+
901014	095	0.3+	1.2+	901109	413	0.5-	1.6+	920204	894	0.3+	2.4+
901014	095	(2.6+	2.9-)	901215	675	0.8+	0.4+	920205	801	0.3+	0.1-
901016	095	1.7+	0.1-	901215	675	0.4-	1.1-	920205	801	0.2+	0.1-
901016	095	2.3+	0.8-	901218	675	1.3-	0.5-	920205	399	1.0-	1.6-
901020	413	1.3-	0.8+	901218	675	0.6+	0.2+	920205	399	1.9-	0.5-
901020	413	(2.1+	3.2+)	920101	801	0.3+	0.2+				

(5137)* 1990 VC = 1982 VR5 = 1982 XO4 = 1986 WS3

Discovered 1990 Nov. 8 by J. M. Baur at Chions.

Id. B. G. Marsden (MPC 17643)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M	281.61018		(2000.0)	P	Q
n	0.23991987	Peri.	24.54174	-0.27319560	+0.94339185
a	2.5650268	Node	230.18146	-0.91809088	-0.31407591
e	0.0706274	Incl.	14.17463	-0.28718166	+0.10662145
P	4.11	H	13.3	G 0.15	

Residuals in seconds of arc

821114	381	1.5+	2.4+	901113	567	0.2-	1.0-	910215	493	0.7-	0.5-
821114	381	1.4+	1.7+	901113	567	0.8-	1.6-	911215	567	0.4-	0.8-
821214	381	0.3+	0.9+	901206	567	1.7+	0.7-	911215	567	0.7+	0.6-
821214	381	0.1+	0.2-	901206	567	0.7+	0.1+	911215	567	0.7+	0.7-
861125	010	(3.0-	3.3+)	901206	567	1.1+	0.0	911216	567	0.1-	0.7+
861125	010	3.4-	0.6+	901207	493	1.3+	0.0	911216	567	0.2-	0.1-
861125	010	(4.7-	0.0)	901207	493	1.1+	0.3-	911216	567	0.0	0.1-
861125	010	3.3-	0.1+	901211	567	0.0	0.7-	911231	567	0.5+	0.0
901108	567	0.9+	0.0	901211	567	0.3+	0.5-	911231	567	0.3+	0.3-
901108	567	1.1-	0.6+	901211	567	0.6+	0.3-	911231	567	0.5-	0.7+
901109	567	0.1+	1.2-	901212	493	0.8+	0.5+	920125	567	0.1-	0.1-
901109	567	(3.1-	1.7-)	901212	493	0.8-	0.0	920125	567	0.5-	0.3+
901110	567	0.7+	0.4-	901215	567	0.1-	1.0+	920127	567	0.2-	0.3-
901110	567	0.1+	0.3-	901215	567	1.0-	1.1+	920127	567	0.5-	0.6-
901112	567	0.4-	1.5-	901215	567	1.9-	1.0+	920127	567	0.0	0.1+
901112	567	0.4+	0.6-	910215	493	2.1+	0.2+				

(5138)* 1990 VD2 = 1957 VB = 1987 HX

Discovered 1990 Nov. 13 by T. Hioki and S. Hayakawa at Okutama.

Id. G. V. Williams (MPC 19307)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	74.76140		(2000.0)	P	Q
n	0.18048242	Peri.	264.50075	-0.14465853	-0.98947607
a	3.1010787	Node	193.81808	+0.91324331	-0.13222135
e	0.1694232	Incl.	0.79595	+0.38086818	-0.05877597
P	5.46	H	11.7	G 0.15	

Residuals in seconds of arc

571114	330	0.4+	0.5+	901113	877	1.5-	0.6+	920106	801	0.2+	0.3-
571116	330	(0.6-	3.8+)	901115	877	1.2-	0.5-	920106	801	0.3+	0.1+
571118	330	0.5-	0.4-	901115	877	0.3+	0.6+	920107	801	0.1-	0.3-
870423	046	(0.3-	3.9-)	901115	095	(7.0+	5.9+)	920107	801	0.6+	0.3+
870423	046	0.5-	1.7-	901115	095	(0.7+	3.3+)	920206	801	0.2+	0.2+
901028	095	2.1-	0.4-	901117	399	0.1+	0.7-	920206	801	0.3+	0.2+
901029	095	1.9+	0.4+	901117	399	1.6+	0.2-	920208	877	0.2+	1.2+
901112	399	(1.7-	5.2-)	901123	877	1.3-	0.7+	920208	877	0.2+	0.4-
901112	399	1.7+	0.5-	901123	877	2.3-	0.1+	920209	877	0.7+	1.3-
901112	399	1.6+	2.2-	901123	095	1.7+	0.4+	920209	877	2.2-	1.0+
901113	877	2.1-	0.1-	901123	095	2.1+	0.5+				

(5139)* 1990 VH4 = 1956 UM = 1959 JH = 1973 FG2 = 1989 QK1

Discovered 1990 Nov. 13 by M. Mukai and M. Takeishi at JCPM Kagoshima Station.

Id. H. Kaneda (MPC 18433)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	247.90904		(2000.0)	P	Q
n	0.20411048	Peri.	222.49469	+0.16962444	+0.98461533
a	2.8568834	Node	57.31239	-0.89026370	+0.17135084
e	0.0315487	Incl.	2.85735	-0.42267967	+0.03422780
P	4.83	H	11.3	G 0.15	

Residuals in seconds of arc

561029	760	0.0	0.2+	901017	095	2.6+	0.4-	901115	095	1.1+	1.0-
590502	760	1.2-	2.2+	901028	095	0.5-	2.6+	901121	364	(3.5-	2.0-)
590502	760	0.8+	0.2-	901029	095	0.0	0.4+	901121	364	1.1-	0.7-
730330	095	3.0+	1.7+	901113	364	1.9+	1.4-	901121	095	0.2-	0.3-
730331	095	(4.9+	1.8+)	901113	364	(3.2+	2.1-)	901121	095	0.4-	0.0
890829	808	0.6-	0.5+	901114	095	(6.1+	0.4+)	901122	364	2.0-	0.6+
890829	808	0.9+	0.1-	901114	095	0.1+	1.1+	901122	364	0.8-	0.1-
901017	095	0.2-	0.6+	901115	095	(9.8+	3.2+)	901123	095	1.6-	0.9+

901123	095	0.1+	0.3+	920126	364	0.2+	2.0-	920202	364	0.6-	0.5-
920112	372	(2.3-	4.4+)	920126	364	0.6-	0.6+	920202	364	1.5+	1.0+
920114	372	(2.4-	4.8+)	920127	364	1.0-	1.4-				
920115	372	0.8-	1.8+	920127	364	0.4-	1.5-				

(5140)* 1990 XH = 1950 TP3 = 1953 FC1 = 1967 TF = 1976 GH6 = 1978 RG

Discovered 1990 Dec. 8 by S. Ueda and H. Kaneda at Kushiro.

Id. H. Kaneda (MPC 17648)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	138.31333		(2000.0)	P	Q
n	0.17311167	Peri.	210.49955	+0.96433936	-0.25915436
a	3.1884907	Node	164.24589	+0.26461733	+0.94005595
e	0.1056232	Incl.	11.41724	+0.00522261	+0.22166152
P	5.69	H	11.2	G 0.15	

Residuals in seconds of arc

501013	760	0.1-	1.1+	901208	399	1.4-	0.7-	920129	399	0.0	0.7+
530316	024	(0.7-	4.2-)	901208	399	1.5-	0.3-	920129	399	1.6-	0.5-
530320	024	0.7-	1.7-	901213	399	0.1-	1.2+	920202	399	0.3-	0.2-
671012	095	2.0+	0.4+	901213	399	1.1+	1.9-	920202	399	(2.9-	0.8+)
671029	095	1.7-	1.8-	901223	399	1.3+	0.2+	920207	801	1.4+	0.0
760402	095	(3.7-	5.5+)	901223	399	1.2+	0.5+	920207	801	1.7+	0.1+
780901	095	(1.8+	3.7-)	920102	801	0.9+	0.5+	920221	399	0.8+	1.4+
780905	095	0.7-	0.4-	920102	801	1.2+	0.6+	920221	399	0.3+	0.3+
780907	095	0.8+	1.3+	920128	399	0.0	0.5-	920222	399	0.9-	1.2-
901208	399	0.9-	0.6-	920128	399	1.4-	0.1-	920222	399	1.2-	1.0+

(5141)* 1990 YB = 1974 RZ = 1977 DD10 = 1979 RP = 1979 SK4 = 1985 XN2 = 1989 UE9

Discovered 1990 Dec. 16 by T. Seki at Geisei.

Id. S. Nakano (MPC 17828), N. S. Chernykh (d, ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	259.33754		(2000.0)	P	Q
n	0.20244580	Peri.	184.90635	+0.79354824	+0.60758705
a	2.8725231	Node	137.61868	-0.55659252	+0.74696889
e	0.0607702	Incl.	2.84479	-0.24593894	+0.26995454
P	4.87	H	12.6	G 0.15	

Residuals in seconds of arc

740911	095	(7.4-	2.9+)	890930	675	0.6+	0.6+	901219	372	0.1-	0.2-
770219	381	1.2-	0.6+	890930	675	0.7-	0.0	901219	372	1.3+	0.0
770219	381	1.1+	0.8-	891030	095	2.5+	0.7-	901221	372	0.0	0.5-
790902	095	0.0	0.5-	891030	095	1.7+	1.4-	901221	372	0.7+	1.3+
790924	095	1.2-	2.5+	891103	675	0.8-	0.2+	901227	372	(4.2+	1.6-)
790924	095	1.2+	2.0-	891103	675	0.5-	0.5+	901227	372	0.6+	0.4+
851214	675	(20.9+	0.8-)	891104	675	0.7-	0.3+	910118	511	0.2+	1.1-
851214	675	(23.2+	0.2-)	891104	675	0.1+	0.9+	910118	511	0.7+	0.9-
890928	675	0.8-	0.3+	901216	372	0.4-	0.5-	910121	372	2.2-	0.5-
890928	675	1.4-	1.0-	901216	372	0.6-	2.3+	910121	372	(0.1-	4.1+)

(5142)* 1990 YD = A921 TD = 1929 SN = 1933 SF = 1971 CE = 1974 YR = 1975 BN1

Discovered 1990 Dec. 18 by T. Hioki and S. Hayakawa at Okutama.

Id. R. Nagata (MPC 17649)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	161.11244		(2000.0)	P	Q
n	0.24335885	Peri.	192.61284	+0.78602456	-0.61639639
a	2.5408047	Node	205.62371	+0.57622802	+0.75814062
e	0.2724662	Incl.	6.25609	+0.22388982	+0.21278697
P	4.05	H	12.0	G 0.15	

Residuals in seconds of arc

211010	024	(6.9-	6.8-)	741220	330	1.4+	0.4+	901223	877	0.7-	0.6-
211011	024	0.2-	1.1-	750116	330	(10.3-	1.0+)	901223	877	0.9-	0.6-
211031	024	(2.3-	3.5+)	901115	095	1.9+	0.5-	910106	877	0.3-	0.1+
290929	690	1.6+	0.8+	901116	095	(0.8+	2.3-)	910106	877	0.5-	0.2-
291009	690	1.3-	0.9+	901218	877	0.7+	1.1-	910113	877	0.3-	0.2+
330921	012	0.6-	0.7+	901218	877	0.6+	0.0	910114	877	0.1-	1.3+
710201	029	0.1+	0.4+	901219	877	0.1+	0.1+	910114	877	0.8+	0.7-
710202	029	0.5-	1.7+	901219	877	1.6-	0.4+				

(5143)* 1991 VL = 1962 PG

Discovered 1991 Nov. 7 by C. S. Shoemaker at Palomar.

Id. G. V. Williams (MPC 19682), B. A. Skiff (ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5

					Williams
M	41.67923		(2000.0)	P	Q
n	0.39682620	Peri.	226.31476	-0.99170650	-0.04346574
a	1.8340133	Node	310.80872	+0.09758039	-0.86710085
e	0.7714824	Incl.	9.19515	-0.08364379	-0.49623265
P	2.48	H	13.9	G 0.15	

Residuals in seconds of arc

620803	760	0.1-	0.9-	911108	675	0.2+	1.5-	911229	587	(2.4-	2.7+)
620803	760	0.1-	1.9+	911109	675	0.2+	0.6+	911231	675	0.7+	1.5-
820724	688	0.4+	0.0	911129	587	0.4+	1.3-	911231	675	0.2+	1.4-
820724	688	0.5+	0.5-	911201	675	0.8-	0.1-	920101	801	0.1-	0.7+
820820	413	0.4-	0.0	911201	675	0.5-	0.6+	920101	801	0.3-	0.7+
820820	413	0.2-	0.0	911202	587	0.3-	0.7+	920105	801	0.0	0.8+
911005	675	0.8-	0.8-	911203	675	0.7+	0.3-	920105	801	0.1-	0.8+
911005	675	0.7-	0.2-	911203	675	0.6+	0.1+	920202	801	0.1+	0.1-
911010	675	0.3-	1.2-	911204	801	0.2-	1.0+	920202	801	0.1+	0.5+
911010	675	2.0+	1.7-	911205	801	0.3-	0.6+	920205	801	0.7-	0.4+
911012	675	0.8-	0.6+	911206	801	0.2-	1.0+	920205	801	0.8-	0.3+
911012	675	0.3+	1.0+	911206	801	0.1-	1.2+				
911107	675	0.9+	1.6-	911207	587	1.0-	1.2+				

(5144)* 1991 XX = 1939 PC = 1951 PK = 1975 QA = 1987 QV11 = 1988 SS4

Discovered 1991 Dec. 2 by C. S. Shoemaker at Palomar.

Id. G. V. Williams, C. S. Shoemaker (1989 obs.)

Epoch 1992 June 27.0 TT = JDT 2448800.5

					Williams
M	160.40815		(2000.0)	P	Q
n	0.08199434	Peri.	329.38628	+0.38624647	+0.91775640
a	5.2474316	Node	323.10878	-0.81204226	+0.29081642
e	0.2712291	Incl.	8.85390	-0.43749403	+0.27046072
P	12.02	H	8.9	G 0.15	

Residuals in seconds of arc (or two decimals in units of degrees)

390809	020	(9.6-	1.8-)X	870827	095	0.1-	0.7+	911202	675	0.2+	0.3+
390811	020	(0.04-	0.00+)X	880917	095	1.3-	2.3+	911202	675	0.6+	0.6+
510806	711	1.8+	2.4- Y	891105	675	0.8-	0.4+	911206	675	0.4+	0.7-
510806	711	0.3-	0.7- Y	891105	675	0.7-	0.4+	911206	675	0.1+	0.4-
510808	094	(0.03-	0.00-)X	891124	675	0.1+	1.5-	920205	675	1.3-	2.3-
740810	688	1.1-	1.1-	891124	675	0.3+	0.5+	920205	675	1.1+	0.1-
750825	485	0.1-	0.7+	891125	675	0.6-	2.2-	920208	675	0.3+	0.1-
750825	485	1.2+	0.0	891125	675	0.2+	0.7+	920208	675	0.2+	0.2-

(5145)* 1992 AD

Discovered 1992 Jan. 9 by Spacewatch at Kitt Peak.

Id. C. S. Shoemaker (1991 obs.), J. Mueller (1989 obs.), R. H. McNaught (1977, 1982 obs.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	2.91832	(2000.0)	P	Q	
n	0.01063419	Peri.	354.88402	-0.41810032	-0.83234241
a	20.4801433	Node	119.38374	+0.84755304	-0.50156630
e	0.5758518	Incl.	24.68233	+0.32687302	+0.23587574
P	92.68	H	7.3	G	0.15

Residuals in seconds of arc

770722	413	0.2+	1.1+	920118	413	0.4+	0.1-	920205	691	1.0-	0.7+
820822	413	1.0-	1.3+	920118	413	0.4+	0.0	920205	691	1.1-	0.8+
891106	675	0.4+	0.5-	920118	413	0.5+	0.2-	920205	801	0.5+	0.5+
891106	675	0.8+	0.8-	920123	372	0.2+	0.6-	920205	801	0.4+	0.5+
891106	675	1.2+	0.9-	920123	568	0.3+	0.3+	920205	675	(0.4-	2.4-)
910119	675	0.6+	0.9-	920124	399	0.3+	1.0+	920205	675	0.8+	1.0-
910119	675	1.5-	0.5-	920124	399	0.4+	1.0+	920205	402	(2.8+	0.2+)
920101	675	1.2+	0.9-	920125	399	1.1-	1.0+	920205	402	0.6+	1.3+
920101	675	(1.6+	3.3-)	920125	399	1.1-	1.0+	920206	809	(3.9-	1.0+)
920109	691	0.4-	0.4-	920126	691	0.7-	0.1+	920206	658	0.2-	0.7+
920109	691	0.2-	0.5-	920126	691	1.0-	0.1-	920206	658	1.0-	0.2+
920109	691	0.5-	0.1-	920126	691	1.1-	0.1+	920206	658	0.9-	0.0
920109	675	1.3+	0.9-	920126	657	0.6+	0.7+	920207	658	0.5+	0.5+
920110	691	0.7-	0.2-	920126	657	0.3+	0.7+	920207	658	0.2+	1.1+
920110	691	0.5-	0.3-	920126	402	(1.8+	2.0+)	920207	658	0.3+	0.8+
920110	691	0.3-	0.0	920126	402	0.2-	0.4+	920208	399	0.8+	1.0+
920110	675	1.1+	0.6+	920127	372	0.6+	0.2+	920208	399	0.2+	0.0
920113	691	0.4-	0.1+	920131	049	1.3-	1.9-	920211	413	0.6+	0.1-
920113	691	0.3-	0.0	920204	675	0.9+	1.7-	920211	413	0.6+	0.2-
920113	691	0.6-	0.2-	920204	675	(0.2-	4.7-)	920211	413	0.6+	0.3-
920114	399	0.2+	0.2-	920204	049	1.6-	0.8-	920212	413	1.4+	0.4-
920114	399	0.6+	0.6-	920205	691	1.2-	0.4+				

(5146)* 1992 BP = 1974 DC2 = 1974 DE2 = 1975 LH = 1980 RS6 = 1980 TX6 = 1988 JU2

Discovered 1992 Jan. 28 by S. Ueda and H. Kaneda at Kushiro.

Id. H. Kaneda, T. Urata (d, NOC 1160)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	307.42403	(2000.0)	P	Q	
n	0.21667669	Peri.	272.56966	-0.30693760	+0.94780352
a	2.7453302	Node	338.92160	-0.74958500	-0.29665924
e	0.1525868	Incl.	13.89372	-0.58643980	-0.11688364
P	4.55	H	11.7	G	0.15

Residuals in seconds of arc

740227	808	0.5+	0.2+	880512	808	0.1+	0.7-	920208	399	1.5-	0.5-
740227	808	0.4-	0.0	880512	808	0.3+	1.0-	920208	399	0.2+	0.9+
740228	808	0.6+	0.4-	920128	399	0.6+	0.2-	920209	400	0.8+	1.1-
750613	805	2.1-	0.3+	920128	399	1.4+	0.2-	920209	400	1.2+	0.4+
750614	805	1.1-	0.2-	920129	399	0.1+	1.4+	920225	399	0.3-	0.2+
800913	675	2.0+	0.6-	920129	399	(2.9+	1.4+)	920225	399	0.8-	0.1-
800914	675	2.1+	0.1-	920205	399	1.0-	1.0-	920226	399	0.7+	0.4-
801012	095	1.8-	0.6+	920205	399	1.4-	0.6+	920226	399	1.1-	1.3+

(5147)* 1992 BQ = 1950 JU = 1972 TS8 = 1981 SS7 = 1981 WE5 = 1984 JT = 1986 XS1 = 1988 GD2

Discovered 1992 Jan. 28 by S. Ueda and H. Kaneda at Kushiro.

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	306.15979	(2000.0)	P	Q	
n	0.23218342	Peri.	275.01303	-0.14302104	+0.98915121
a	2.6216934	Node	346.62330	-0.84088601	-0.13931590
e	0.2021642	Incl.	8.33554	-0.52197289	-0.04659368
P	4.24	H	12.1	G	0.15

Residuals in seconds of arc

500511	839	0.8+	1.7+	861201	010	(3.5-	0.0)	920205	399	(3.9+	0.1-)
500512	839	0.0	0.6-	861201	010	1.3+	0.9-	920208	399	2.0-	0.6+
721006	095	0.9-	0.2-	880413	054	1.9+	0.9-	920208	399	0.9+	0.6+
810929	095	0.8+	2.7+	920128	399	0.6-	0.1+	920225	399	0.2-	0.1+
811124	095	0.1-	0.0	920128	399	0.0	0.5+	920225	399	0.3+	0.5-
840503	688	0.6-	1.2-	920129	399	(3.1-	0.4-)	920226	399	0.8+	0.6+
840503	688	0.5-	0.5-	920129	399	2.4-	2.2+	920226	399	0.9+	0.0
861201	010	1.9-	2.1-	920205	399	1.5+	0.7-				

(5148)* 5557 P-L = 1974 CS = 1980 GC1

Discovered 1960 Oct. 17 by C. J. van Houten and I. van Houten-Groeneveld on Palomar Schmidt plates taken by T. Gehrels.

Id. K. Hurukawa (MPC 9301)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	72.52802		(2000.0)	P	Q
n	0.17825465	Peri.	218.17449	-0.89074773	+0.45448075
a	3.1268627	Node	348.85498	-0.41178587	-0.81070151
e	0.1334608	Incl.	1.17595	-0.19235613	-0.36906680
P	5.53	H	13.5	G 0.15	

Residuals in seconds of arc

600924	675	0.9-	0.0	740214	095	0.5+	1.5+	910325	809	0.5+	1.1-
600926	675	0.9-	0.0	800414	805	0.6+	1.2+	910325	809	1.0+	1.1-
600928	675	0.5-	0.6+	800415	805	0.9+	0.1+	910325	809	1.1+	1.4-
601017	675	0.4-	1.3+	800416	805	0.2-	1.7+	910419	809	1.8+	1.8+
601022	675	0.8+	0.9+	910323	809	1.6-	0.5-	910419	809	(0.8-	3.5+)
601025	675	0.5+	1.4+	910323	809	1.9-	0.3-	910419	809	0.4+	1.7+
601026	675	0.3-	0.4-	910323	809	1.7-	0.0				

(5149)* 6582 P-L = 1985 DF4

Discovered 1960 Sept. 24 by C. J. van Houten and I. van Houten-Groeneveld on Palomar Schmidt plates taken by T. Gehrels.

Id. E. Bowell (MPC 11844)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	142.73493		(2000.0)	P	Q
n	0.17618224	Peri.	103.71615	-0.42760670	-0.90396100
a	3.1513354	Node	11.60069	+0.82419353	-0.39107503
e	0.1566429	Incl.	0.75542	+0.37129172	-0.17295905
P	5.59	H	12.6	G 0.15	

Residuals in seconds of arc

600924	675	0.4+	1.2-	881008	807	1.0-	0.9-	910324	809	1.1-	0.5+
600926	675	0.1+	1.4-	881103	807	0.9+	0.3-	910324	809	0.9-	0.5+
600927	675	1.3+	0.5-	881106	807	0.3+	0.2-	910324	809	0.9-	0.5+
600928	675	0.1+	1.0-	881108	807	0.5+	0.7-	910325	809	0.8-	1.6+
601017	675	1.1-	1.4-	910317	809	1.4+	0.6-	910325	809	0.6-	1.5+
601022	675	0.0	0.3-	910317	809	1.6+	0.7-	910325	809	0.3-	1.6+
601024	675	0.9-	1.4+	910317	809	1.9+	0.6-	910408	809	0.4-	0.5-
601026	675	2.1+	0.2-	910319	809	0.7+	0.4-	910408	809	0.8-	0.6-
850222	675	1.2-	1.7-	910319	809	0.7+	0.4-	910408	809	1.4-	2.3-
850223	675	0.2-	1.7-	910319	809	0.8+	0.6-	910410	809	0.3-	1.8-
880916	807	1.1+	0.2+	910323	809	0.4+	0.7+	910410	809	1.1-	1.8-
880918	807	1.2+	0.4-	910323	809	0.6+	0.4+	910410	809	2.1-	2.0-
881004	807	1.5-	1.1-	910323	809	0.8+	0.6+				

(5150)* 7571 P-L = 1939 EK = 1970 EW = 1974 FL1 = 1976 UG5 = 1978 EJ3 = 1978 GL1 = 1978 JL2

Discovered 1960 Oct. 17 by C. J. van Houten and I. van Houten-Groeneveld on Palomar Schmidt plates taken by T. Gehrels.

Id. S. Nakano (MPC 11522)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	268.11264	(2000.0)		P	Q
n	0.25290182	Peri.	120.12949	-0.90504262	-0.42002992
a	2.4764795	Node	35.15747	+0.33922724	-0.80771454
e	0.1091402	Incl.	6.66959	+0.25655943	-0.41372949
P	3.90	H	12.9	G 0.15	

Residuals in seconds of arc

390314	062	0.1-	0.1+	761030	095	(3.5+	0.2-)	881210	801	0.8-	0.0
390318	062	(1.3-	9.6-)	780306	095	0.5-	1.5+	910905	413	1.2+	0.5+
601017	675	0.2-	0.1-	780407	095	(4.0-	0.4+)	910905	413	(2.6+	1.0+)
601022	675	0.6-	0.3-	780509	095	1.3-	0.1+	911008	801	0.3+	0.5+
601025	675	0.1+	0.2-	841119	675	0.2+	0.4+	911009	801	1.5-	0.3+
601026	675	0.1+	0.3-	841121	675	0.5+	0.9+	911011	801	0.6+	0.0
700307	095	1.2+	1.3-	841127	010	0.4-	0.1+	911011	801	0.7+	0.3-
740321	095	0.6+	0.4-	841128	010	0.5-	1.2-				

(5151)* 2160 T-2 = 1962 WB2 = 1979 WA6 = 1985 VL3 = 1987 GH = 1990 QW8

Discovered 1973 Sept. 29 by C. J. van Houten and I. van Houten-Groeneveld on Palomar Schmidt plates taken by T. Gehrels.

Id. D. W. E. Green (k, MPC 14965; MPC 17464), S. Nakano (MPC 17464)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	61.31194	(2000.0)		P	Q
n	0.17163065	Peri.	4.65483	+0.61227459	-0.79054416
a	3.2068069	Node	47.59165	+0.72484907	+0.55486561
e	0.1880138	Incl.	0.98087	+0.31577470	+0.25916034
P	5.74	H	12.8	G 0.15	

Residuals in seconds of arc

621130	760	0.8+	0.6+	851110	095	0.9+	0.1-	900911	809	0.2-	0.6+
621130	760	0.3-	1.3+	851120	095	0.0	1.6+	900912	809	1.0-	0.1-
730919	675	1.1-	0.4+	870401	675	(14.9-	1.0-)	900912	809	0.9-	0.1-
730919	675	0.1+	0.0	870401	675	(12.5-	1.8-)	900912	809	0.5-	0.1-
730920	675	1.1-	1.2-	870403	675	(12.9-	0.9-)	900912	809	(3.3-	1.6+)
730924	675	1.8-	0.5+	870403	675	(12.1-	2.1-)	900913	809	(3.1-	1.7+)
730924	675	1.4-	0.7+	900816	809	(2.2+	0.3-)	900913	809	(2.8-	1.7+)
730925	675	0.7+	1.4-	900816	809	0.1+	1.6-	900913	809	0.6-	1.0+
730925	675	1.0+	1.9-	900816	809	(1.0-	2.4-)	900914	809	0.4-	1.0+
730929	675	0.3-	1.2-	900818	809	1.8+	0.3-	900914	809	0.5-	1.0+
730929	675	0.1+	0.6-	900818	809	0.4+	0.7-	900916	675	0.7-	1.1-
730930	675	0.6+	0.2-	900818	809	0.2+	1.1-	900916	675	(1.3-	4.6-)
730930	675	0.3+	0.7-	900826	809	0.2+	1.1+	911205	801	0.6-	0.2+
731004	675	1.0+	0.1+	900826	809	0.0	1.7+	911205	801	0.1+	0.1-
731004	675	0.9+	0.3+	900826	809	1.5+	1.8+	920101	801	0.2-	0.1+
731005	675	0.7+	1.4-	900910	809	0.2-	0.3+	920101	801	0.6-	0.2+
731005	675	(2.4-	3.1+)	900910	809	0.2+	0.4+	920107	801	0.4-	0.0
731005	675	0.9+	0.8-	900910	809	0.6+	0.6+	920107	801	0.2+	0.4-
731005	675	(0.9-	2.8+)	900911	809	0.7-	0.9+				
791117	095	0.7+	0.0	900911	809	0.4-	0.9+				

A920 TA = 1978 WW18 = 1981 JZ5

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	246.43372	(2000.0)		P	Q
n	0.25526799	Peri.	82.09815	+0.87647079	+0.47694828
a	2.4611522	Node	249.39486	-0.46475749	+0.80251553
e	0.2604069	Incl.	4.02622	-0.12569579	+0.35845385
P	3.86	H	13.5	G 0.15	

Residuals in seconds of arc

201008	029	1.2+	2.1+	201017	029	(3.7-	1.7-)	781201	675	0.1-	0.2+
201010	029	0.5-	2.6-	201020	029	1.1-	0.9-	810508	675	0.6-	0.5+
201017	029	0.2+	1.6+	781130	675	0.0	0.5+	810509	675	0.8+	0.5+

1931 FC = 1982 DJ5 = 1983 RE8 = 2177 T-2
Id. S. Nakano (MPC 15062), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	328.24709		(2000.0)	P	Q
n	0.28974449	Peri.	223.82602	-0.79809417	+0.60243190
a	2.2618263	Node	353.19166	-0.52403649	-0.70303333
e	0.1260397	Incl.	5.33506	-0.29737425	-0.37791526
P	3.40	H	13.5	G 0.15	

Residuals in seconds of arc

310316	024	2.2-	2.4+	730925	675	0.9-	2.4-	731005	675	1.5+	1.2-
310318	024	2.6+	0.5+	730925	675	1.2-	0.8-	731005	675	1.9+	0.2+
310326	024	2.2+	1.5+	730929	675	0.3-	2.6+	820222	010	0.5-	0.6-
730919	675	1.0-	0.2+	730929	675	0.3+	2.7+	830911	095	1.3-	2.4+
730919	675	1.8-	0.8+	730930	675	0.1+	0.2+	900920	675	0.3+	0.2+
730920	675	1.6-	0.2+	730930	675	0.0	1.0-	900920	675	0.1-	1.3+
730924	675	(3.4- | 0.8+)	731004	675	1.0+	0.3-				
730924	675	(3.7- | 1.6+)	731004	675	0.9+	0.6-				

1936 QE1 = 1986 RU1
Id. H. Kaneda (MPC 16574)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	125.92009		(2000.0)	P	Q
n	0.23677513	Peri.	202.92914	+0.98239584	-0.17848808
a	2.5876885	Node	166.98516	+0.18531103	+0.96842036
e	0.1662201	Incl.	14.17271	-0.02362718	+0.17408049
P	4.16	H	12.3	G 0.15	

Residuals in seconds of arc

360828	024	(0.4- | 6.7-)	860912	095	2.4+	1.9-	900817	801	0.1+	0.7+
360911	024	0.4+	3.2-	900718	801	0.4-	0.1-	900819	801	0.2+	0.7+
360917	024	(4.1+ | 6.5+)	900718	801	0.4-	0.0	900819	801	0.2+	0.5+
860905	046	1.0-	0.7+	900720	801	0.0	0.1+	920101	801	0.2-	0.2+
860906	046	0.9-	1.4+	900720	801	0.3+	0.4-	920106	801	0.2+	0.5+
860907	095	1.2-	1.5+	900817	801	0.1+	0.7+	920106	801	0.0	0.4+

1969 TQ1 = 1980 TN15 = 1986 WD2
Id. H. Oishi (JAM 2056; unpublished)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	21.40183		(2000.0)	P	Q
n	0.17677925	Peri.	328.72381	+0.79244087	-0.60800479
a	3.1442364	Node	68.79998	+0.56984254	+0.70952584
e	0.1690670	Incl.	2.99165	+0.21752460	+0.35623483
P	5.58	H	12.9	G 0.15	

Residuals in seconds of arc

691008	095	0.6+	1.3-	861130	046	0.0	1.6+	910914	675	0.4-	0.3+
691013	095	1.4+	0.7-	861201	046	0.8-	2.2-	910915	675	0.4-	1.7+
691016	095	0.5+	3.0-	861201	046	0.1+	0.8-	910915	675	0.0	1.6+
691104	095	(7.4- | 0.4-)	861203	046	1.0+	2.1+	910916	675	0.1-	0.4-
801005	046	0.8-	1.7+	861203	046	1.1-	0.1-	910916	675	0.2-	0.1-
801005	046	0.3-	0.7-	910911	675	0.6-	0.2-				
861130	046	0.4+	1.8+	910914	675	0.8+	0.2-				

1972 RU1 = 1979 UE4 = 3159 T-1
Id. S. Nakano, T. Kobayashi
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	275.09359		(2000.0)	P	Q
n	0.28363153	Peri.	119.29625	+0.85210563	+0.52187290
a	2.2942093	Node	209.29840	-0.50384759	+0.79752510
e	0.1759898	Incl.	4.63640	-0.14161073	+0.30265886
P	3.47	H	14.4	G 0.15	

Residuals in seconds of arc

710324	675	0.9+	1.0+	710327	675	0.9-	0.1+	721013	095	2.0+	2.3-
710325	675	1.5+	0.8-	710402	675	2.3-	0.4-	791016	095	0.6-	2.0+
710326	675	0.2+	1.0-	720911	095	1.2-	0.0				
710326	675	0.1-	1.3-	721005	095	0.4+	1.6-				

1974 OE = 1978 TR6 = 1978 TN9
Id. E. Bowell (k, MPC 10612), B. G. Marsden (d, ibid.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	35.54345		(2000.0)	P	Q
n	0.28041145	Peri.	277.90367	+0.40396178	+0.91412950
a	2.3117395	Node	16.05558	-0.78267168	+0.36483711
e	0.1175588	Incl.	7.14127	-0.47353977	+0.17680819
P	3.51	H	13.5	G 0.15	

Residuals in seconds of arc

740716	808	0.0	0.1-	740720	808	0.7+	0.5+	910319	808	1.2+	1.6-
740716	808	0.1-	0.4-	740818	809	(5.1+	5.9-)	910319	808	(3.6+	0.5+)
740717	808	0.1-	0.2+	781002	095	0.0	0.1+	910321	808	1.3-	1.4+
740717	808	0.7-	0.6-	781004	675	0.3+	0.0	910321	808	(4.6-	1.9+)
740720	808	0.1+	0.4+	781005	675	0.2-	0.4-				

1975 SK = 1981 WZ8 = 1986 RG13 = 1991 NB5
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	344.28041		(2000.0)	P	Q
n	0.17579838	Peri.	324.52085	+0.82529093	-0.56332039
a	3.1559211	Node	69.81200	+0.52735408	+0.74375148
e	0.1959613	Incl.	2.41572	+0.20197168	+0.35986648
P	5.61	H	12.5	G 0.15	

Residuals in seconds of arc

750930	675	0.4+	1.3-	860909	095	0.3-	0.7+	910711	809	0.3-	0.5+
751001	675	0.4+	0.4-	910710	809	0.4-	0.2-	910711	809	0.0	0.7+
751002	675	0.0	0.2-	910710	809	0.1+	0.1+	910711	809	0.0	0.3+
811125	095	0.4-	2.0+	910710	809	0.3+	0.2+				

1976 GO3 = 1981 NX = 1984 CF1
Id. H. Oishi (MPC 12122)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	284.48320		(2000.0)	P	Q
n	0.23036868	Peri.	90.93370	-0.91308514	+0.40627229
a	2.6354438	Node	113.03786	-0.38758482	-0.83810507
e	0.0941645	Incl.	2.17376	-0.12670257	-0.36403670
P	4.28	H	13.5	G 0.15	

Residuals in seconds of arc

760401	095	1.4-	1.3+	840204	688	1.7+	1.6+	900826	809	1.3-	1.6-
760402	095	(2.0-	4.3-)	900816	809	(3.5+	1.3+)	900826	809	1.0-	1.7-
760404	095	0.6-	1.7-	900816	809	1.7+	2.1+	900826	809	1.3-	2.0-
760423	095	1.2-	1.7-	900816	809	1.3+	0.9+	900827	675	(0.2-	4.0-)
781130	675	0.1-	0.7-	900820	809	1.4+	2.0+	900827	675	0.9-	2.3-
781201	675	0.0	0.8-	900820	809	1.1+	1.6+	900913	675	2.1-	1.3-
810702	805	2.1+	0.9+	900820	809	1.7+	0.6+	900913	675	0.9-	0.9-
810702	805	1.1+	1.7+	900823	675	1.3-	0.5-				
840204	688	0.3+	1.1-	900823	675	(0.6-	2.7-)				

1977 EX = 1991 NO7
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 191.02189		(2000.0)		P	Q
n	0.22797678	Peri.	229.59914	-0.98177460	-0.08148944
a	2.6538455	Node	305.04799	+0.15804224	-0.85181852
e	0.1049366	Incl.	12.10595	-0.10555223	-0.51745984
P	4.32	H	12.5	G 0.15	

Residuals in seconds of arc

770313 095	0.1-	0.1+	910715 809	0.6+	0.2-	910716 809	0.8-	0.2+
770322 095	0.9-	0.4-	910715 809	0.4+	0.3-	910716 809	0.6-	0.3+
770325 095	1.1+	0.3+	910715 809	0.8+	0.4-	910716 809	0.3-	0.3+

1977 RW6 = 1975 EP5 = 1982 SM4
Id. S. Nakano (MPC 9754)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 20.60251		(2000.0)		P	Q
n	0.20090007	Peri.	327.76537	+0.98989983	+0.14096495
a	2.8872385	Node	24.14454	-0.12099531	+0.89547123
e	0.0853207	Incl.	2.11186	-0.07388138	+0.42220867
P	4.91	H	12.6	G 0.15	

Residuals in seconds of arc

750315 095	3.5-	2.5-	870925 095	(4.8+	0.9-)	910710 809	0.6+	0.7-
770911 095	1.0-	0.8+	871022 095	1.9-	2.3-	910711 809	2.2-	0.4-
770918 095	0.2+	1.1-	871027 095	0.4-	0.4+	910711 809	1.7-	0.5-
770921 095	1.5+	0.6-	900401 675	2.0+	0.1+	910711 809	1.5-	0.3-
790127 675	0.2-	0.1-	900401 675	0.6+	1.0+	910711 809	1.4+	0.0
790129 675	0.2-	1.1-	900525 675	1.1+	0.3-	910711 809	1.7+	0.1+
820920 095	2.8+	1.2+	910710 809	0.3+	0.4-			
820926 095	0.2+	0.8+	910710 809	0.5+	0.3-			

1978 VP1 = 1989 UD4
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 169.36666		(2000.0)		P	Q
n	0.17973809	Peri.	173.81504	+0.52595771	-0.84587117
a	3.1096342	Node	244.42048	+0.77605264	+0.51997545
e	0.1345374	Incl.	5.64449	+0.34800975	+0.11885915
P	5.48	H	13.5	G 0.15	

Residuals in seconds of arc

781030 010	0.7+	0.2-	781201 675	0.1+	0.0	891026 033	0.3-	0.3-
781101 010	0.8-	0.1-	891023 033	0.4+	0.1+			
781130 675	0.0	0.1+	891023 033	0.0	0.5+			

1978 VN3 = 3068 T-1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 356.54801		(2000.0)		P	Q
n	0.21890362	Peri.	214.40791	+0.18530614	-0.98153064
a	2.7266794	Node	224.96583	+0.91603584	+0.19004592
e	0.0903673	Incl.	3.85661	+0.35572457	+0.02191238
P	4.50	H	15.9	G 0.15	

Residuals in seconds of arc

710325 675	0.7+	1.4+	781105 675	0.0	0.4+	781129 675	(5.2-	1.2-)
710326 675	0.9-	0.4-	781106 675	1.8-	0.2+	781129 675	2.2+	0.6+
710326 675	0.1+	0.4-	781107 675	1.3+	0.7-	781130 675	2.6-	0.7-
710327 675	0.1+	0.6-	781108 675	0.9+	0.2+	781130 675	(3.7+	1.5+)

1980 TT3 = 1991 TA5
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	62.71818	(2000.0)		P	Q
n	0.27194411	Peri.	37.23286	+0.78045368	-0.62520549
a	2.3594799	Node	1.47598	+0.53972670	+0.67115946
e	0.1193065	Incl.	7.10544	+0.31557431	+0.39832534
P	3.62	H	14.3	G 0.15	

Residuals in seconds of arc

801007	675	1.2-	0.4+	801015	095	(5.1+	2.2-)	911009	033	0.3+	0.0
801008	675	1.0-	0.6-	911005	033	0.5-	0.3-	911009	033	0.4-	0.0
801009	675	1.0+	0.2-	911006	033	0.0	0.6+	911010	033	0.8+	0.5-
801010	675	1.2+	0.3+	911006	033	0.2-	0.3+				

1981 DF = 1992 BT
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	30.73712	(2000.0)		P	Q
n	0.17514262	Peri.	153.47499	-0.58158017	-0.80660262
a	3.1637937	Node	331.71266	+0.70115875	-0.43119256
e	0.1034719	Incl.	12.87874	+0.41248141	-0.40430829
P	5.63	H	12.5	G 0.15	

Residuals in seconds of arc

810228	809	0.1+	0.2+	810304	809	0.4+	0.2-	810308	809	0.6+	0.1+
810228	809	0.6+	0.1+	810304	809	0.6+	0.3-	810308	809	0.6+	0.1-
810228	809	1.3+	0.1+	810304	809	0.5+	0.0	810308	809	0.2+	0.3+
810301	809	0.3-	0.3+	810305	809	0.6-	0.4-	810309	809	0.0	0.2-
810301	809	0.1-	0.4+	810305	809	0.9-	0.5-	810309	809	0.2-	0.1+
810301	809	0.1+	0.3+	810305	809	1.2-	0.6-	810309	809	0.5-	0.3+
810302	809	0.6-	0.0	810306	809	0.5+	0.0	920128	399	(5.5-	0.0)
810302	809	0.7-	0.1-	810306	809	0.9+	0.0	920128	399	(4.8-	0.2-)
810302	809	0.6-	0.1-	810306	809	1.2+	0.2-	920129	399	1.0+	0.5-
810303	809	0.8-	0.0	810307	809	0.1-	0.3+	920129	399	0.6-	0.1+
810303	809	0.6-	0.1-	810307	809	0.1-	0.2+	920205	399	0.0	0.4-
810303	809	0.3-	0.1-	810307	809	0.2-	0.3+	920205	399	0.4-	0.7+

1981 EH1 = 1992 CA1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Urata

M	23.97719	(2000.0)		P	Q
n	0.17839616	Peri.	356.21599	-0.85614599	-0.51376401
a	3.1252088	Node	152.64612	+0.47719884	-0.82716947
e	0.1718759	Incl.	6.91526	+0.19823044	-0.22767787
P	5.52	H	12.5	G 0.15	

Residuals in seconds of arc

810306	809	0.7+	0.5-	810309	809	0.1+	0.1-	920201	364	1.4+	0.6-
810306	809	0.0	0.1-	810309	809	0.3+	0.1-	920201	364	1.3+	0.2+
810306	809	0.4+	0.2-	810309	809	0.4+	0.0	920208	364	0.8-	0.1+
810307	809	0.4-	0.6-	810310	809	0.3-	0.2+	920208	364	0.7-	0.3+
810307	809	0.2-	0.9-	810310	809	0.2-	0.3+	920208	364	2.0-	0.5+
810307	809	0.1+	0.8-	810310	809	0.1-	0.3+	920208	364	2.3-	0.6-
810308	809	0.1-	0.8+	810314	809	0.3-	0.2-	920222	364	1.1+	0.1+
810308	809	0.1+	0.8+	810314	809	0.5-	0.1-	920222	364	2.0+	0.3+
810308	809	0.4+	0.9+	810314	809	0.5-	0.1+				

1981 ES5 = 1991 NP3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	14.96340	(2000.0)		P	Q
n	0.22868855	Peri.	76.95317	+0.94487658	-0.29029987
a	2.6483361	Node	299.74293	+0.18920277	+0.86156556
e	0.1880926	Incl.	10.04481	+0.26722753	+0.41645020
P	4.31	H	14.0	G 0.15	

Residuals in seconds of arc

810202	413	0.0	1.1-	810409	413	1.5-	0.1+	910706	809	0.1-	0.2+
810307	413	0.5-	1.4+	810409	413	0.4+	0.3-	910707	809	0.1+	0.4-
810307	413	1.0+	0.2-	810429	413	0.7+	1.4-	910707	809	0.1-	0.5-
810310	413	1.2-	1.4+	910706	809	0.0	0.3+				
810312	413	1.2+	0.1-	910706	809	0.0	0.5+				

1981 EK7 = 1989 UG7
Id. S. Nakano (MPC 15879)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	263.05811	(2000.0)		P	Q
n	0.17599646	Peri.	73.78129	+0.43183866	+0.90054164
a	3.1535527	Node	221.91920	-0.85366451	+0.39004335
e	0.1463358	Incl.	4.32647	-0.29115678	+0.19207015
P	5.60	H	13.7	G 0.15	

Residuals in seconds of arc

781130	675	0.3+	0.3-	810315	413	0.6+	1.3-	810430	413	(4.6+	3.1-)
781201	675	0.3-	0.3-	810405	413	1.2-	0.8-	810502	413	0.0	1.1-
810209	413	0.2-	1.3+	810405	413	0.1-	1.3-	891023	033	1.2+	1.1-
810301	413	1.5+	0.1+	810406	413	(2.0-	1.2+)	891023	033	0.1-	0.6+
810307	413	1.6+	0.7+	810406	413	0.3+	0.5-	891025	033	0.1+	0.6+
810307	413	1.2+	0.0	810407	413	1.2-	1.0+	891025	033	0.1+	0.7+
810311	413	1.6-	1.0+	810407	413	0.6+	0.4+	891027	033	1.4-	0.6-
810311	413	0.1-	0.2-	810412	413	0.2-	1.1+				
810315	413	1.1-	0.4-	810412	413	(3.3+	1.8-)				

1981 EZ18
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	43.48967	(2000.0)		P	Q
n	0.22348460	Peri.	50.48320	+0.90391249	+0.42683117
a	2.6892900	Node	284.23442	-0.40062059	+0.82235598
e	0.0474533	Incl.	1.62696	-0.14981773	+0.37622572
P	4.41	H	13.5	G 0.15	

Residuals in seconds of arc

770424	675	0.8+	1.5+	810311	413	0.5+	0.1+	810502	413	0.8-	1.6-
770425	675	0.2+	1.2+	810311	413	1.2+	0.5-	910710	809	0.2+	0.2-
810209	413	0.2+	0.4-	810316	413	1.2-	0.8+	910710	809	0.6+	0.2-
810213	413	0.7-	0.4-	810316	413	(4.3+	1.2-)	910710	809	0.9+	0.1+
810302	413	0.1+	0.5+	810329	413	0.7+	0.6-	910711	809	0.7-	0.4-
810302	413	0.2+	1.1-	810329	413	(3.3-	1.1-)	910711	809	0.7-	0.6-
810303	413	(2.3-	0.9+)	810408	413	1.1-	0.5+	910711	809	0.7-	0.7-
810303	413	1.0+	1.1-	810408	413	1.2-	0.4+	910712	809	0.1-	0.2+
810307	413	0.1-	1.0+	810411	413	1.2-	0.0	910712	809	0.2+	0.2+
810307	413	1.7+	0.3-	810430	413	1.0-	0.4-	910712	809	0.5+	0.0

1981 EW20 = 1989 VU5
Id. E. Bowell (MPC 18621)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	232.96198	(2000.0)		P	Q
n	0.17420583	Peri.	299.97321	+0.71367795	+0.70046093
a	3.1751257	Node	15.56416	-0.63705849	+0.65159204
e	0.1322365	Incl.	0.91275	-0.29123918	+0.29117400
P	5.66	H	13.1	G 0.15	

Residuals in seconds of arc

781130	675	0.5-	1.1+	810303	413	1.6+	0.9-	810316	413	1.2-	0.0
781201	675	0.1-	1.2+	810303	413	0.8+	0.1+	810316	413	(2.7-	0.1+)
810202	413	1.3+	1.6-	810307	413	1.2-	1.5+	810329	413	0.9-	1.1+
810213	413	0.0	1.4-	810307	413	1.1+	0.6-	810329	413	(1.9-	1.8+)
810302	413	1.2-	0.8+	810311	413	1.0+	0.4-	810408	413	0.8-	0.0

810408	413	0.2+	0.1-	810426	413	(1.2+	3.4-)	891103	675	1.0+	0.9-
810411	413	0.8-	0.3-	810502	413	0.6-	0.3+	891104	675	0.4+	0.5-
810411	413	0.4+	0.0	891103	675	0.9-	1.1-	891104	675	0.6+	0.4-

1981 EZ25 = 1955 SD2 = 1955 TH = 1992 DO
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	133.60813	(2000.0)		P	Q
n	0.17149528	Peri.	31.61824	+0.89284664	-0.44921840
a	3.2084943	Node	354.75848	+0.30397060	+0.65362046
e	0.1902779	Incl.	20.54351	+0.33230521	+0.60908384
P	5.75	H	12.4	G 0.15	

Residuals in seconds of arc

550922	024	2.2+	2.3-	810306	413	1.3+	0.2-	810409	413	1.5+	0.7+
551011	760	(95.1+	55.1+)X	810311	413	0.9-	0.0	810501	413	0.8+	0.7-
810212	413	1.1-	0.1-	810311	413	0.1+	0.1-	810503	413	0.2-	1.5-
810212	413	0.8-	0.4-	810315	413	1.3-	0.2+	920225	372	0.4+	0.7+
810213	413	0.0	1.2-	810406	413	1.3-	1.7+	920226	372	(5.5+	3.0-)
810302	413	1.0-	0.2-	810408	413	0.6+	1.0-	920227	372	0.3+	0.0
810302	413	0.6+	0.7-	810408	413	0.4-	0.9-				
810306	413	0.8-	0.1-	810409	413	0.5-	1.0+				

1981 ES27 = 3279 T-1
Id. S. Nakano, T. Kobayashi
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	114.51698	(2000.0)		P	Q
n	0.29467349	Peri.	200.88794	-0.89616050	+0.44356553
a	2.2365331	Node	5.48942	-0.38710043	-0.76819108
e	0.1533828	Incl.	7.25574	-0.21690922	-0.46166231
P	3.34	H	17.0	G 0.15	

Residuals in seconds of arc

710325	675	(5.0+	3.1-)	810212	413	0.7-	1.2+	810315	413	1.1+	0.3-
710326	675	1.2+	2.1-	810213	413	0.6-	1.2+	810410	413	0.8+	2.1+
710326	675	2.5+	1.8-	810302	413	1.2+	0.9-	810501	413	0.6+	0.1+
710327	675	2.5-	0.6+	810311	413	0.8+	0.7-	810503	413	0.5-	0.6+
710402	675	2.3-	1.3+	810311	413	0.7+	0.2+				
810209	413	0.5-	0.1-	810315	413	1.9-	0.8-				

1981 WA1 = 1988 EO2 = 1990 OG3
Id. A. Lowe (k, MPC 17013), G. V. Williams (ibid.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	85.36245	(2000.0)		P	Q
n	0.19912549	Peri.	249.06256	+0.95614514	-0.29010445
a	2.9043669	Node	127.77963	+0.28409797	+0.88511819
e	0.0709266	Incl.	2.92432	+0.07123780	+0.36387524
P	4.95	H	12.5	G 0.15	

Residuals in seconds of arc

811124	688	0.3+	1.8-	900727	675	1.1-	0.5-	900918	675	1.7+	0.6+
811124	688	0.0	0.1-	900730	675	0.8-	0.4+	900918	675	1.2+	1.8-
811202	688	(4.1+	2.1-)	900730	675	0.1-	0.7-	911205	801	0.3-	0.8+
811202	688	0.2+	0.1+	900914	675	0.8+	0.6-	911205	801	0.2+	0.3-
880310	552	0.3+	1.7-	900914	675	1.2-	0.8+	920102	801	0.1-	0.7+
880310	552	1.0-	0.6-	900915	675	0.1-	0.2-	920102	801	0.2-	0.5+
900727	675	0.6-	0.3-	900915	675	1.0+	0.4+				

1982 UR6 = 1981 JM3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	240.92688		(2000.0)	P	Q
n	0.26466368	Peri.	313.81277	+0.99918433	-0.01097585
a	2.4025540	Node	46.85719	+0.02665823	+0.90213593
e	0.2212837	Incl.	3.05303	-0.03033173	+0.43131229
P	3.72	H	13.9	G 0.15	

Residuals in seconds of arc

810508	675	0.3+	0.5-	821020	095	0.4-	0.3+	821109	095	0.6+	0.0
810509	675	0.0	1.3+	821025	095	0.1+	0.0	821114	095	0.6-	0.4+

1985 CT = 1978 EC6 = 1992 BM1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	105.83289		(2000.0)	P	Q
n	0.28001079	Peri.	258.58711	+0.65164199	-0.72890677
a	2.3139441	Node	147.50512	+0.75305544	+0.65485537
e	0.2355731	Incl.	22.99871	-0.09094073	+0.19964808
P	3.52	H	13.0	G 0.15	

Residuals in seconds of arc

780306	095	2.6-	0.7+	850225	688	2.2+	0.8-	850324	688	0.3+	0.3+
850212	675	1.2+	0.1+	850318	688	0.5+	0.3-	920129	675	1.2-	0.1+
850216	675	0.5-	1.2-	850318	688	1.0+	1.3-	920130	675	0.7-	0.2+
850225	688	1.4+	1.7+	850324	688	1.3-	0.6+	920130	675	0.3-	0.0

1985 CJ1 = 1987 SF22 = 1989 FK
Id. T. Kobayashi (MPC 14616; unpublished), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	13.98330		(2000.0)	P	Q
n	0.26248743	Peri.	54.17953	-0.39766582	-0.91566170
a	2.4158152	Node	59.35377	+0.81835260	-0.38280533
e	0.1251273	Incl.	3.90083	+0.41492279	-0.12257131
P	3.75	H	10.5	G 0.15	

Residuals in seconds of arc

850215	046	0.0	0.0	890404	372	0.7+	1.2-	911110	400	1.2+	0.6+
850215	046	(2.9-	0.3+)	890404	372	0.1+	1.1-	911111	399	0.3+	0.2-
850216	046	0.8-	0.5+	890411	372	1.3-	1.2+	911111	399	0.4+	0.6-
850216	046	1.2-	0.0	890411	372	(0.3+	2.7+)	911126	046	1.3-	2.3-
850220	046	1.8+	0.6-	890412	372	(0.4+	3.3-)	911126	046	0.9-	1.9+
850220	046	(2.9+	1.3-)	890412	372	0.8-	1.6-	911127	046	1.5-	0.0
870918	095	0.8+	1.8-	911109	400	1.6+	1.0-	911127	046	0.2+	0.2+
890329	372	0.6+	1.1+	911109	400	0.9-	1.2+				
890329	372	(1.4-	3.0+)	911110	400	0.8+	0.1+				

1985 CM1 = 1992 DH
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	1.13582		(2000.0)	P	Q
n	0.28311169	Peri.	69.55288	-0.92091695	+0.38478314
a	2.2970168	Node	133.02016	-0.38171485	-0.85820426
e	0.0958686	Incl.	4.87092	-0.07877649	-0.33974605
P	3.48	H	13.7	G 0.15	

Residuals in seconds of arc

850213	809	0.6-	0.6+	850217	809	1.1-	0.3+	850220	809	1.4-	0.4-
850213	809	0.5-	0.4+	850218	809	1.0+	0.1+	850220	809	0.8-	0.6+
850213	809	0.6-	0.3+	850218	809	1.4+	0.1-	850221	809	0.5+	0.9-
850215	809	1.4+	0.6-	850218	809	1.7+	0.0	850221	809	0.7+	0.8-
850215	809	1.0+	0.3-	850219	809	0.3-	1.0+	850221	809	0.9+	0.8-
850215	809	0.4+	0.2-	850219	809	0.2+	0.8+	850224	809	0.2+	0.8-
850217	809	1.7-	0.8+	850219	809	0.7+	0.6+	850224	809	0.9-	0.5-
850217	809	1.4-	0.5+	850220	809	1.4-	0.6-	850224	809	1.6-	0.4-

850227	809	0.4-	0.0	850228	809	1.2+	0.2-	920226	399	0.6-	0.5+
850227	809	0.7-	0.1-	850228	809	1.5+	0.2-	920226	399	0.6+	0.3-
850227	809	1.0-	0.1-	920225	399	0.3-	0.6+				
850228	809	1.2+	0.3-	920225	399	0.6+	0.3+				

1986 RX2 = 1964 TD1 = 1975 TR1 = 1991 NK5
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	16.52366	(2000.0)		P	Q
n	0.17796143	Peri.	15.87965	+0.99997025	-0.00097603
a	3.1302963	Node	344.17035	-0.00234721	+0.90641575
e	0.2006692	Incl.	1.60736	+0.00734765	+0.42238552
P	5.54	H	13.0	G 0.15	

Residuals in seconds of arc

641008	330	0.1-	0.8+	860929	046	(4.8-	4.1+)	910710	809	0.3-	0.1+
751003	095	0.1+	1.1-	860930	046	(4.5+	1.7+)	910710	809	0.0	0.2+
860906	688	1.8-	0.4-	860930	046	(4.0+	2.2+)	910710	809	0.3+	0.3+
860906	688	1.3-	0.1-	861001	046	(5.7-	1.5+)	910711	809	0.4-	0.4-
860912	688	(5.9+	0.5+)	861001	046	3.0+	1.9+	910711	809	0.0	0.2-
860912	688	0.2+	0.7-	861006	095	(5.0+	2.1-)	910711	809	0.5+	0.1+
860929	046	(0.3+	3.6+)	861010	095	0.2-	0.4-				

1986 TR4 = 1943 VH = 1992 AW1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	108.45937	(2000.0)		P	Q
n	0.22776177	Peri.	108.40632	+0.93165812	-0.35642515
a	2.6555154	Node	272.52277	+0.30099499	+0.86584834
e	0.1867123	Incl.	4.04827	+0.20350717	+0.35109511
P	4.33	H	12.5	G 0.15	

Residuals in seconds of arc

431103	062	1.1+	0.4-	860911	095	0.2-	0.5-	920112	894	0.1-	0.7+
431104	062	1.1-	0.1+	861005	095	0.0	0.6-	920115	894	0.2+	0.1-
860907	095	0.4+	0.4+	861011	054	0.3-	1.0+	920115	894	0.0	0.4-

1986 WM5 = 1991 NO3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	60.89965	(2000.0)		P	Q
n	0.18152562	Peri.	0.61780	+0.41562678	+0.88926834
a	3.0891862	Node	293.95470	-0.83537582	+0.29020582
e	0.1826164	Incl.	12.05971	-0.35972436	+0.35352849
P	5.43	H	11.5	G 0.15	

Residuals in seconds of arc

860909	095	0.5-	1.0+	910706	809	0.8+	1.2+	910712	809	0.2-	0.5-
860929	095	0.3-	0.4+	910706	809	1.1+	1.3+	910712	809	0.2+	0.6-
861003	095	0.6+	0.9-	910707	809	0.1-	1.4-	910714	809	0.6-	0.0
861127	010	0.2+	0.5-	910707	809	0.0	1.0-	910714	809	0.6-	0.1-
910706	809	0.7+	1.0+	910712	809	0.7-	0.3-	910714	809	0.5-	0.1+

1986 XR5 = 1991 RU21
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	43.05258	(2000.0)		P	Q
n	0.18351189	Peri.	338.31277	+0.98291915	-0.17990692
a	3.0668550	Node	32.12818	+0.17774946	+0.87342030
e	0.3001591	Incl.	4.18111	+0.04769771	+0.45251572
P	5.37	H	13.3	G 0.15	

Residuals in seconds of arc

861130	381	0.1+	0.2+	861201	381	0.1+	0.7-	910915	675	0.3+	0.0
861130	381	0.0	0.2-	861205	801	0.7-	0.7+	910917	675	0.2+	0.3-
861201	381	0.5+	0.1-	910915	675	0.6-	0.2+	910917	675	0.0	0.1+

1987 DK6 = 1991 PJ16 = 1991 RJ17
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	161.52615		(2000.0)	P	Q
n	0.30938859	Peri.	293.43987	-0.17827296	+0.98368678
a	2.1650429	Node	326.26309	-0.88623515	-0.17114218
e	0.1819778	Incl.	2.48331	-0.42755819	-0.05541361
P	3.19	H	14.3	G 0.15	

Residuals in seconds of arc

870223	809	0.2+	0.5-	870228	809	0.8-	0.3+	870305	809	0.3+	0.4-
870223	809	0.4+	0.4-	870228	809	1.0-	0.4+	870305	809	0.7+	0.6-
870223	809	1.0+	0.4-	870228	809	1.0-	0.1+	870305	809	0.3+	0.8-
870224	809	0.6-	0.5-	870301	809	0.1-	0.2-	870306	809	0.3+	0.7-
870224	809	0.1-	0.5-	870301	809	0.3+	0.1+	870306	809	0.5+	0.6-
870224	809	0.2-	0.6-	870301	809	0.6+	0.2+	870306	809	0.2+	0.6-
870225	809	0.9-	0.3+	870302	809	0.4+	0.3+	910807	675	1.6+	1.4-
870225	809	0.8-	0.1+	870302	809	0.9+	0.3+	910808	675	0.4+	2.4-
870225	809	0.8-	0.2+	870302	809	0.8+	0.1+	910911	675	1.9+	1.6+
870226	809	1.3-	0.0	870303	809	0.1+	0.1+	910911	675	0.3-	1.4+
870226	809	1.3-	0.0	870303	809	0.3+	0.3+	910913	675	0.5-	1.2-
870226	809	1.1-	0.3+	870303	809	0.5+	0.4+	910913	675	1.1-	0.4-
870227	809	0.2-	0.1-	870304	809	0.3+	0.2-	910916	675	0.9-	0.8-
870227	809	0.1+	0.5+	870304	809	0.4+	0.2-	910916	675	0.4+	0.3+
870227	809	0.5-	0.5+	870304	809	0.5+	0.1-				

1987 QZ1 = 1989 CG5 = 1991 TE8
Id. T. Kobayashi (MPC 15067; unpublished)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	45.38601		(2000.0)	P	Q
n	0.26026274	Peri.	78.67929	+0.78558191	-0.61563417
a	2.4295623	Node	319.27647	+0.52408254	+0.71537036
e	0.1522976	Incl.	5.46146	+0.32893550	+0.33051449
P	3.79	H	13.8	G 0.15	

Residuals in seconds of arc

870821	809	0.5+	1.4+	870828	809	0.7-	0.3-	870903	809	0.7+	2.2-
870821	809	0.5-	1.5+	870829	809	2.2+	1.1+	890202	033	0.5-	0.4+
870821	809	0.3+	1.8+	870829	809	1.4+	1.5+	890204	033	0.3+	0.2-
870825	809	2.8-	1.9-	870829	809	1.1+	1.5+	890210	033	0.3+	0.1+
870825	809	0.3-	0.6-	870831	809	2.1+	0.8+	890210	033	0.1+	0.3+
870825	809	1.5-	1.2+	870831	809	0.2+	0.1-	910913	675	0.0	0.2-
870826	809	0.0	1.1-	870831	809	0.3-	0.1+	910913	675	0.4-	0.5-
870826	809	0.3+	1.0-	870831	809	1.3-	0.2-	910915	675	0.2-	0.4+
870826	809	0.5-	0.4-	870831	809	1.2-	0.5+	910915	675	0.4-	0.1-
870828	809	0.5-	0.7-	870831	809	1.0-	0.7-	911008	400	0.3+	0.2+
870828	809	0.8+	0.5-	870903	809	0.7+	1.8-	911008	400	0.6+	0.3+

1987 SR1 = 1987 WD3 = 1978 JZ = 1991 PT17
Id. S. Nakano (d, MPC 15384), E. Bowell (k), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	101.38588		(2000.0)	P	Q
n	0.23899811	Peri.	111.67139	+0.45101657	+0.89234480
a	2.5716177	Node	185.23810	-0.87316123	+0.43710020
e	0.1834609	Incl.	11.02481	-0.18486080	+0.11253518
P	4.12	H	13.5	G 0.15	

Residuals in seconds of arc

780505	095	0.0	0.2-	870929	688	(0.6-	4.3-)	910807	675	0.3+	0.6+
870902	095	0.7-	0.9-	870929	688	0.8-	1.5+	910807	675	0.4-	0.2-
870921	688	0.3-	1.9-	871117	010	0.2+	0.6-				
870921	688	1.9+	1.1+	871117	010	0.4-	0.2+				

1987 UQ3 = 1979 HO4 = 1984 YG6
Id. S. Nakano (MPC 15416); 1987 UQ3 = 1959 VG (ibid.) is invalid (cf. MPC 19724, where these observations are deleted)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	153.23840		(2000.0)	P	Q
n	0.27865445	Peri.	257.38279	+0.93084008	+0.34889155
a	2.3214468	Node	82.11780	-0.27796997	+0.86908234
e	0.1234284	Incl.	6.29900	-0.23721182	+0.35067161
P	3.54	H	13.5	G 0.15	

Residuals in seconds of arc

790424	095	0.0	0.1+	871026	054	0.9+	1.0+	920102	801	0.0	0.4+
841223	010	(14.7-	16.8-)	871026	054	0.9-	0.3+	920107	801	0.0	0.1+
841223	010	(14.2-	15.2-)	911205	801	0.1+	0.1-	920107	801	0.2+	0.1+
870927	095	1.0+	1.1-	911205	801	0.4-	1.3-				
871023	095	1.0-	0.1+	920102	801	0.0	0.4+				

1987 WO1 = 1991 UX1

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	58.13886		(2000.0)	P	Q
n	0.23868387	Peri.	162.73077	+0.79280809	-0.60213746
a	2.5738743	Node	234.66776	+0.54464838	+0.76937176
e	0.0359684	Incl.	6.63517	+0.27352053	+0.21330162
P	4.13	H	12.8	G 0.15	

Residuals in seconds of arc

871122	688	0.7+	1.2+	871126	046	1.3-	0.3+	911031	399	0.1-	1.4-
871122	688	1.4-	0.7-	871126	046	0.4-	0.4-	911031	399	0.1+	0.8-
871123	046	0.7+	0.4-	871127	046	0.7+	0.4+	911109	399	0.2+	0.1+
871123	046	(6.1+	2.3+)	911029	399	0.5+	0.9+	911109	399	0.0	0.6+
871126	046	1.0+	0.3-	911029	399	0.7-	0.6+				

1988 FM = 1951 EL2 = 1992 DE

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	356.24896		(2000.0)	P	Q
n	0.24005680	Peri.	181.76922	-0.95621985	+0.28589820
a	2.5640513	Node	15.29276	-0.26550656	-0.75770094
e	0.1130852	Incl.	13.70674	-0.12308476	-0.58664427
P	4.11	H	13.1	G 0.15	

Residuals in seconds of arc

510313	711	1.3+	1.7+ Y	880409	875	0.1-	2.1+	920225	376	0.8+	3.1-
880318	875	0.9+	0.3-	880409	875	0.1-	0.5+	920225	376	1.6-	0.1+
880318	875	0.7+	0.8-	880409	875	0.9-	2.0-	920227	376	0.0	0.3+
880323	875	0.7-	1.7+	880413	875	0.8+	1.3-	920227	376	0.4+	1.5+
880323	875	2.3-	1.2+	880413	875	1.2+	2.0-				

1988 RW3 = 1981 JA4

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	273.32431		(2000.0)	P	Q
n	0.17409007	Peri.	292.97401	+0.70892371	+0.70519651
a	3.1765331	Node	22.18579	-0.63575717	+0.64582137
e	0.1429636	Incl.	1.69703	-0.30535225	+0.29259637
P	5.66	H	13.7	G 0.15	

Residuals in seconds of arc

810508	675	0.2-	0.3+	880910	033	0.5-	0.3-	881005	807	0.9+	0.1-
810509	675	0.2+	0.3-	880910	033	1.2-	0.6-	881008	807	1.4+	0.3-
880908	033	0.1+	0.9+	880911	033	1.0-	0.3-	881104	807	0.2-	0.7+
880909	033	0.1-	0.8+	880915	675	0.4+	0.1-	881106	807	0.4-	0.1-
880909	033	0.7+	0.1+	880915	675	0.2-	0.7-				

1988 ST2 = 1981 JH5
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	276.65332	(2000.0)		P	Q
n	0.17337655	Peri.	228.31245	+0.63056182	+0.77517529
a	3.1852424	Node	80.82091	-0.69995293	+0.58948462
e	0.1300295	Incl.	2.24471	-0.33534712	+0.22718089
P	5.68	H	12.8	G 0.15	

Residuals in seconds of arc

810508	675	0.8-	0.2+	880918	807	0.2+	0.1-	881008	807	0.6+	1.0-
810509	675	0.8+	0.1-	881004	807	1.0-	0.1+	881105	807	0.2+	0.4+
880916	807	0.2+	0.1+	881005	807	0.4+	0.1+	881107	807	0.7-	0.5+

1989 EL2 = 1990 RY1
Id. H. E. Holt (MPC 17636)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	299.69554	(2000.0)		P	Q
n	0.30428695	Peri.	223.64973	-0.37396976	+0.92687296
a	2.1891751	Node	24.44395	-0.82792727	-0.31786998
e	0.1032038	Incl.	4.49799	-0.41795103	-0.19966269
P	3.24	H	13.5	G 0.15	

Residuals in seconds of arc

890312	399	1.4+	0.3+	890404	399	0.6+	0.6-	900922	809	(5.2+	0.4-)
890312	399	0.9+	0.4+	890406	399	0.5-	0.8-	900922	809	(4.8+	0.5-)
890312	399	(2.5-	0.6+)	890406	399	0.9-	1.5-	920128	399	1.0-	0.8-
890312	399	1.9-	1.5+	890406	399	0.6-	1.0-	920128	399	0.8-	0.1-
890312	399	0.6-	0.5-	900915	809	0.2+	1.2-	920129	399	1.2+	0.5-
890326	399	0.5-	0.5+	900915	809	0.4-	1.3-	920129	399	0.5+	0.1+
890326	399	0.4+	0.4+	900915	809	0.5+	0.6-	920205	399	0.2+	0.6-
890326	399	1.5-	0.5-	900915	675	0.3+	0.6+	920205	399	0.8-	0.2+
890326	399	1.2+	0.1+	900917	675	0.1-	0.2-	920208	399	0.6+	0.2-
890404	399	1.1+	0.3-	900917	675	0.5+	0.9+	920208	399	0.2-	1.7+
890404	399	(1.7+	2.2-)	900922	809	(5.0+	0.6-)				

1989 FA = 1990 OJ3
Id. S. Nakano (MPC 17020)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	18.47011	(2000.0)		P	Q
n	0.28876770	Peri.	350.93320	-0.75388612	-0.65611213
a	2.2669240	Node	147.97972	+0.60676640	-0.71528187
e	0.0871109	Incl.	3.70290	+0.25197274	-0.24060074
P	3.41	H	13.6	G 0.15	

Residuals in seconds of arc

890328	402	1.1+	1.2-	900730	675	0.1-	0.2-	911214	898	0.9+	0.7-
890328	402	0.9+	0.4-	900730	675	0.1-	0.3-	911214	898	0.8-	1.6-
890329	402	1.2-	1.4-	900914	675	1.3+	0.2-	911230	898	0.1-	0.0
890329	402	2.0-	0.2-	900914	675	0.1-	0.0	911230	898	0.2+	0.1+
900727	675	0.0	1.6-	900915	675	0.1-	2.3-	920101	898	0.8+	0.1+
900727	675	0.5+	1.0-	900915	675	0.0	0.2+	920101	898	1.1-	1.1-

1989 GF1 = 1992 AK
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	40.06003	(2000.0)		P	Q
n	0.28660742	Peri.	150.33831	-0.62692481	-0.77871129
a	2.2783010	Node	338.45682	+0.70133387	-0.55070450
e	0.1052128	Incl.	3.74096	+0.33925814	-0.30055494
P	3.44	H	14.0	G 0.15	

Residuals in seconds of arc

890403	809	0.4-	0.5-	890403	809	0.5-	0.3-	890405	809	0.9+	0.4+
890403	809	0.5-	0.6-	890405	809	1.3+	0.5+	890405	809	0.6+	0.7+

890408	809	0.2+	0.3+	890410	809	0.1-	0.6-	920104	877	0.7-	0.8+
890408	809	0.3-	0.7+	890410	809	1.0-	0.8-	920104	877	(4.0-	1.8+)
890408	809	0.0	0.3+	920103	877	1.4+	0.8+				
890410	809	0.1+	0.2-	920103	877	0.7-	1.6-				

1990 BF2 = 1991 NX2
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	272.03333	(2000.0)		P	Q
n	0.29846195	Peri.	40.93669	-0.49282315	-0.86722297
a	2.2175669	Node	78.70092	+0.77825179	-0.47583880
e	0.0393596	Incl.	4.15562	+0.38916514	-0.14663482
P	3.30	H	13.5	G 0.15	

Residuals in seconds of arc

900121	402	0.4+	0.1+	900202	399	(3.2+	0.5-)	900302	399	0.3+	0.9+
900121	402	0.1-	0.5-	900202	399	(5.6+	2.6+)	900302	399	1.4+	1.0-
900127	675	0.4-	1.0-	900218	399	(3.7-	0.5-)	910704	809	0.9+	0.2+
900127	675	0.1+	1.5-	900218	399	0.8-	2.0+	910704	809	0.9+	0.0
900130	675	0.1-	1.6-	900218	399	0.8-	2.6+	910704	809	1.2+	0.1-
900130	675	0.6-	0.4-	900223	675	0.8+	0.1+	910705	809	0.9-	0.2-
900130	399	0.3-	0.3-	900223	675	0.5-	0.8-	910705	809	0.7-	0.1-
900130	399	1.8-	0.7-	900228	399	1.0+	0.9-	910705	809	0.4-	0.2+
900130	399	0.3+	0.9-	900228	399	1.0+	2.3+	910716	675	1.1-	2.1-
900202	399	(0.6+	3.2+)	900302	399	0.3-	0.1+	910716	675	0.2+	0.1+

1990 DM2 = 1978 RK3 = 1987 QT2 = 1988 VH4
Epoch 1992 June 27.0 TT = JDT 2448800.5 Ichikawa

M	96.41658	(2000.0)		P	Q
n	0.21393666	Peri.	308.66083	-0.48001905	+0.87618984
a	2.7687213	Node	292.60075	-0.78960650	-0.45302744
e	0.0378847	Incl.	2.68696	-0.38223460	-0.16449164
P	4.61	H	12.3	G 0.15	

Residuals in seconds of arc

780903	095	0.7-	1.7+	870826	809	0.7+	0.9-	900225	809	0.8-	1.8+
870822	809	0.3+	0.0	870826	809	0.7+	1.3-	900225	809	0.5-	1.8+
870822	809	0.8-	0.3-	881103	054	0.0	0.4-	900225	809	0.1-	1.8+
870822	809	0.6+	0.4-	881103	054	1.2+	0.4-	900301	809	0.3-	0.7-
870825	809	0.6-	0.1+	881104	054	0.8-	0.5-	900301	809	0.1-	0.9-
870825	809	0.0	0.1+	900224	809	0.6+	1.6-	900301	809	0.0	0.8-
870825	809	0.8+	0.4-	900224	809	0.9+	1.4-	900317	095	1.1-	1.9-
870826	809	0.1+	2.1-	900224	809	1.3+	1.4-	900317	095	1.7-	0.4-

1990 QW1 = 1992 CG
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	100.32596	(2000.0)		P	Q
n	0.25211174	Peri.	80.77455	+0.42138765	-0.90647204
a	2.4816508	Node	344.21804	+0.78780127	+0.38075935
e	0.1065882	Incl.	5.74375	+0.44922333	+0.18256714
P	3.91	H	13.7	G 0.15	

Residuals in seconds of arc

900816	809	1.5-	0.9-	900828	675	1.9+	0.1+	900919	675	0.2-	1.1-
900816	809	2.2-	0.2-	900828	675	2.1+	0.9+	920208	372	0.7+	0.3-
900816	809	2.3-	0.4-	900914	675	0.9-	0.5-	920208	372	0.2+	0.3-
900822	675	1.9+	1.1+	900914	675	0.3-	0.3+	920209	372	1.3-	1.2+
900822	675	2.0+	0.8+	900919	675	0.7-	0.1+	920209	372	0.6+	0.3-

1990 QO3 = 1990 SL26
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	65.83773	(2000.0)	P	Q	
n	0.17813991	Peri.	48.71594	+0.72360025	-0.69001877
a	3.1282052	Node	354.83473	+0.56508144	+0.60607872
e	0.0741279	Incl.	10.64878	+0.39634031	+0.39565474
P	5.53	H 12.0	G 0.15		

Residuals in seconds of arc

900816	801	0.1+	0.9+	900826	809	0.6-	1.3-	900921	095	2.2+	0.0
900816	801	0.4-	0.4+	900827	675	0.1+	2.3-	901015	801	0.1-	0.0
900817	801	0.7+	0.9+	900827	675	0.7-	0.5-	901015	801	0.3+	0.3+
900817	801	0.2+	0.0	900828	095	(3.1-	2.5-)	901016	801	0.1+	0.2+
900818	801	0.3-	0.6+	900828	095	1.8+	1.1-	901016	801	0.2+	0.2+
900818	801	0.2-	0.7+	900913	809	1.4-	0.3-	901018	801	0.3+	0.1+
900819	801	0.5+	0.6+	900913	809	1.0-	0.3-	901018	801	0.3+	0.2+
900819	801	0.4-	0.5+	900913	809	0.6-	0.3-	901021	801	0.2-	0.4+
900820	809	1.6+	0.5+	900914	809	1.3-	0.5+	901021	801	0.0	0.4+
900820	809	0.2+	0.7+	900914	809	1.2-	0.4+	901114	801	0.1-	0.0
900820	809	0.4-	0.2+	900914	809	0.8-	0.1+	901115	801	0.1+	0.1-
900820	801	0.5+	0.8+	900914	675	0.4+	0.6-	901116	801	0.7-	0.1+
900820	801	0.3+	0.9+	900914	675	0.1+	0.5-	901116	801	0.4+	0.4+
900823	675	0.7-	0.2+	900916	801	0.2+	0.2+	911008	801	0.3-	0.3-
900823	675	0.3-	0.3+	900916	801	0.4+	0.2+	911008	801	0.5-	0.1+
900825	675	1.3+	0.6-	900919	801	0.2+	0.4+	911103	801	0.4+	0.2+
900825	675	0.1+	0.1+	900919	801	0.1+	0.3+	911103	801	0.1+	0.1-
900826	809	1.2-	1.2-	900919	675	0.1+	1.2-	911107	801	0.1+	0.2-
900826	809	0.8-	1.7-	900919	675	0.7+	0.1-	911107	801	0.1+	0.2+

1990 SK6 = 1978 GT1 = 1985 DM1 = 1992 BS
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	332.60312	(2000.0)	P	Q	
n	0.27271213	Peri.	174.44537	-0.90892267	+0.41148608
a	2.3550479	Node	30.13727	-0.38753848	-0.77405651
e	0.0615340	Incl.	7.71147	-0.15386196	-0.48116080
P	3.61	H 13.9	G 0.15		

Residuals in seconds of arc

780407	095	0.6-	1.3+	900922	809	0.1+	0.7-	920128	399	1.2-	1.5-
850225	688	0.3-	0.2+	900922	809	0.7+	0.5-	920128	399	0.9-	2.0+
850225	688	2.1+	2.2-	900922	809	0.2-	0.2-	920129	399	1.5+	0.1+
900915	809	0.2-	0.8-	900925	809	0.7+	1.6+	920129	399	0.7-	0.5+
900915	809	0.9-	1.1-	900925	809	0.3+	1.4+				
900915	809	0.4-	0.6-	900925	809	0.0	1.4+				

1990 SZ7 = 1992 DW
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	56.52029	(2000.0)	P	Q	
n	0.29361141	Peri.	99.17605	-0.76069216	-0.64483799
a	2.2419234	Node	40.72125	+0.54176196	-0.69381927
e	0.1059893	Incl.	6.54614	+0.35754919	-0.32062250
P	3.36	H 13.8	G 0.15		

Residuals in seconds of arc

900914	809	0.1-	0.2-	900922	809	0.2+	0.5-	920226	399	0.9-	0.9+
900914	809	1.0+	0.6+	900925	809	0.1+	0.3+	920229	399	0.8+	1.4-
900914	809	0.7-	0.0	900925	809	0.0	0.5+	920229	399	0.5+	0.1-
900922	809	0.1-	0.6-	900925	809	0.2-	0.2+				
900922	809	0.2-	0.4-	920226	399	0.5-	0.6+				

1990 SD14 = 1978 WH18
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	132.55791		(2000.0)	P	Q
n	0.24120817	Peri.	161.69512	+0.81695913	-0.57641779
a	2.5558854	Node	233.51713	+0.52628811	+0.75788055
e	0.2521843	Incl.	1.27546	+0.23579357	+0.30554802
P	4.09	H	15.0	G 0.15	

Residuals in seconds of arc

781130	675	0.3+	0.9-	900924	809	0.3-	0.3+	900925	809	1.0+	0.1+
781201	675	0.3-	0.8+	900924	809	0.0	0.4+	900927	809	0.8-	0.7+
900923	809	0.3-	0.8-	900924	809	0.2+	0.2+	900927	809	0.4-	0.7+
900923	809	0.0	1.0-	900925	809	0.3-	0.2-	900927	809	0.1+	0.6+
900923	809	0.5+	1.0-	900925	809	0.2+	0.2+				

1990 TK1 = 1975 VU4 = 1979 ON4 = 1985 UB4 = 1985 VT3
Id. H. Kaneda (MPC 17452), L. V. Zhuravleva (d, ibid.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	106.34264		(2000.0)	P	Q
n	0.19656547	Peri.	281.68309	+0.62815027	-0.77702524
a	2.9295297	Node	129.32570	+0.73282699	+0.57320280
e	0.0721825	Incl.	3.01826	+0.26151835	+0.26013521
P	5.01	H	12.1	G 0.15	

Residuals in seconds of arc

751102	095	(4.1+	2.9-)	901111	809	0.7-	0.9-	901117	809	0.1-	0.4-
790724	675	1.5-	1.2+	901111	809	0.8-	0.7-	901117	809	0.2+	0.5-
790724	413	0.2-	1.7-	901111	809	0.7-	0.6-	901117	809	0.1-	0.4-
790725	675	0.7-	0.7+	901111	400	1.2+	0.2-	901120	809	0.4-	1.2-
790727	675	2.5+	0.8-	901111	400	2.0+	0.4-	901120	809	0.6-	1.2-
851021	095	(6.3-	0.4-)	901112	809	0.4-	0.9+	901120	809	0.7-	0.9-
851111	095	0.2+	0.6-	901112	809	0.5+	1.4+	920102	801	0.4-	0.6-
901015	400	0.2-	1.1+	901112	809	0.8+	1.2+	920102	801	0.4+	0.1-
901015	400	0.3+	1.3+	901114	809	0.3-	0.6+	920108	801	0.2-	0.3+
901019	400	(0.7+	5.0+)	901114	809	0.3-	0.5+	920108	801	0.1+	0.0
901019	400	(3.6-	3.1+)	901114	809	0.2+	0.8+				

1990 TV12 = 1989 SX13
Id. B. G. Marsden (MPC 18124)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	107.52022		(2000.0)	P	Q
n	0.08303387	Peri.	111.52184	+0.92322577	+0.12963042
a	5.2035436	Node	242.65914	-0.20973491	+0.95878091
e	0.0910774	Incl.	24.03051	+0.32197119	+0.25285394
P	11.87	H	10.5	G 0.15	

Residuals in seconds of arc

781130	675	0.0	0.6+	891004	493	0.1+	0.4-	901018	033	0.1-	0.4+
781201	675	0.2+	0.8+	891005	493	0.7+	0.6+	901113	675	0.2+	0.8-
890926	493	(4.9-	4.8-)	901014	033	0.2+	0.2-	901113	675	0.8-	0.4-
890927	493	(5.4-	5.7-)	901015	033	0.1+	0.4+	901114	675	0.4-	0.2-
891003	493	0.5+	1.0-	901015	033	0.2-	0.4+	901114	675	0.3-	0.8-
891003	493	1.3-	0.6+	901018	033	1.0+	0.1+				

1990 VU14 = 1990 UM13 = 1990 WU11 = 1979 UJ1
Id. A. Lowe (d), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	67.06643		(2000.0)	P	Q
n	0.18413795	Peri.	19.56290	-0.18867259	-0.97289650
a	3.0598996	Node	81.48984	+0.88204072	-0.22773702
e	0.1064642	Incl.	7.76938	+0.43174856	+0.04010302
P	5.35	H	11.5	G 0.15	

Residuals in seconds of arc

791021	805	1.0+	1.4+	901029	095	0.5+	0.4-	901121	095	(2.6-	5.2-)
791023	805	1.2-	0.9-	901115	095	(8.4+	1.4+)	901123	809	0.1-	0.4-
791023	805	0.3+	0.5-	901115	095	0.2+	1.1+	901123	809	0.2-	0.3-
901028	095	0.9-	0.0	901121	095	(0.8-	5.6-)	901123	809	0.4+	0.1+

1990 WE = 1983 EP3 = 1992 DM

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	81.46900	(2000.0)		P	Q
n	0.21720198	Peri.	3.61353	-0.08350219	-0.98395786
a	2.7409022	Node	91.22170	+0.91027907	-0.13969092
e	0.1959371	Incl.	9.07275	+0.40548663	+0.11096566
P	4.54	H	12.6	G 0.15	

Residuals in seconds of arc

830315	095	1.1+	2.2+	901119	413	1.3+	1.3+	920226	402	0.1+	0.4-
901012	808	0.5-	0.3-	901121	372	0.7+	0.8-	920227	402	0.7+	0.1-
901012	808	0.8-	0.1-	901121	413	0.4+	0.7+	920227	402	0.4-	0.7-
901014	808	2.3-	0.3-	901123	372	1.2+	0.6-				
901119	413	0.1+	1.4+	920226	402	1.1-	0.3-				

1991 NT3

Epoch 1991 July 3.0 TT = JDT 2448440.5 Williams

M	36.11271	(2000.0)		P	Q
n	0.40441963	Peri.	292.68952	-0.73784328	+0.63509727
a	1.8109838	Node	287.53766	-0.49712420	-0.74037602
e	0.3039627	Incl.	13.86880	-0.45656853	-0.22021538
P	2.44	H	14.5	G 0.15	

From 37 observations 1991 July 6-24.

1991 PY5 = 1991 RN12 = 1980 PM3

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	102.18234	(2000.0)		P	Q
n	0.18122187	Peri.	118.01898	-0.16781683	+0.96794552
a	3.0926372	Node	140.86493	-0.97606898	-0.13655233
e	0.2034479	Incl.	17.22185	-0.13829988	-0.21079596
P	5.44	H	13.4	G 0.15	

Residuals in seconds of arc

800803	675	0.0	0.2+	910806	809	0.3-	1.3-	910904	809	0.1+	2.0-
800805	675	0.0	0.3-	910814	809	1.4+	0.1+	910906	809	0.6-	0.9+
910805	675	0.3-	1.6+	910814	809	0.5+	0.0	910906	809	1.1-	1.0+
910805	675	0.0	1.8+	910814	809	0.3+	0.2-	910906	809	0.7-	1.0+
910806	809	0.9-	1.1-	910904	809	0.9+	0.5-				
910806	809	0.0	0.8-	910904	809	0.7+	0.4-				

1991 PO8 = 1991 RC12 = 1982 RL1

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	46.93140	(2000.0)		P	Q
n	0.21455081	Peri.	24.83070	+0.99701906	+0.04902254
a	2.7634352	Node	332.16069	-0.07225072	+0.86414280
e	0.2819991	Incl.	7.32990	+0.02707087	+0.50085329
P	4.59	H	14.8	G 0.15	

Residuals in seconds of arc

820914	046	(7.2+	1.1-)	910805	675	0.6-	0.9+	910904	809	0.6+	0.6+
820914	046	2.3+	0.5+	910806	675	0.2+	0.1-	910904	809	0.3+	1.0+
820915	046	2.6-	0.3-	910806	675	0.8+	0.7+	910904	809	0.6+	0.5+
820915	046	1.2+	0.5-	910807	675	0.6-	1.7-	910906	809	0.2-	1.0-
820916	046	1.3+	0.1+	910807	675	1.7-	0.2-	910906	809	1.0-	0.3-
820916	046	2.2-	0.2+	910810	675	2.5+	0.9-	910906	809	0.7-	0.4-
910805	675	1.8-	0.3+	910810	675	1.4+	0.6+				

1991 PF10 = 1969 TS2 = 1988 TD3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	83.17899		(2000.0)	P	Q
n	0.31302016	Peri.	209.14345	+0.99431001	+0.10420104
a	2.1482649	Node	144.85400	-0.08876652	+0.92532339
e	0.0694114	Incl.	2.20319	-0.05889072	+0.36458027
P	3.15	H	14.5	G 0.15	

Residuals in seconds of arc

691007	095	0.3+	0.7-	881017	071	0.0	2.0+	910808	675	0.0	0.1+
881015	071	1.4-	0.7-	910807	675	1.4-	0.5-	910810	675	0.2+	0.3-
881015	071	0.9+	0.9-	910807	675	0.3-	0.8-	910911	675	0.6+	0.6+
881017	071	0.5+	0.4-	910808	675	0.3+	0.2+	910911	675	0.3+	1.1+

1991 PT10 = 1987 SL20
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	70.59459		(2000.0)	P	Q
n	0.24355198	Peri.	68.06720	+0.98516301	+0.16334302
a	2.5394613	Node	282.50098	-0.17052155	+0.89695710
e	0.2656221	Incl.	3.09187	-0.01939696	+0.41083697
P	4.05	H	14.5	G 0.15	

Residuals in seconds of arc

870917	095	1.1-	0.4-	910808	675	1.1-	0.5+	910917	675	0.5-	0.5+
870926	095	1.5+	0.6-	910915	675	0.2-	0.2-	910917	675	0.8-	0.4+
910807	675	1.7+	1.2-	910915	675	0.6+	0.8+				

1991 PO14 = 1991 RL12 = 1981 QW1 = 1986 QS2 = 1989 CM8 = 1989 EC1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	286.25058		(2000.0)	P	Q
n	0.19213266	Peri.	118.76716	-0.22993777	-0.97211698
a	2.9744174	Node	344.32267	+0.82295993	-0.16898467
e	0.0826081	Incl.	9.80409	+0.51948588	-0.16258151
P	5.13	H	12.0	G 0.15	

Residuals in seconds of arc

810830	688	3.1-	1.3-	890301	875	0.4-	1.4-	910904	809	0.8+	1.5-
810830	688	0.6-	1.9-	890301	875	0.5+	2.3-	910904	809	0.0	1.1-
860828	809	1.8+	2.3+	890308	875	0.2-	1.1-	910904	809	0.5-	1.8-
860828	809	2.5+	2.6+	890308	875	0.2+	0.1+	910906	809	0.2+	1.5-
860828	809	2.7+	2.9+	910806	675	1.0-	1.8+	910906	809	1.3-	0.9-
890209	809	0.8+	1.8+	910806	675	0.5-	0.4+	910906	809	1.4-	1.4-
890209	809	0.4-	3.5+	910810	675	0.4-	1.7+				
890209	809	(1.6-	5.0+)	910810	675	(4.3-	5.8+)				

1991 RY4 = 1978 WP1 = 1978 WY16
Id. K. Ichikawa; 6372 P-L = 1978 WP1 (MPC 16242) is invalid
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	67.20361		(2000.0)	P	Q
n	0.22201219	Peri.	146.49750	+0.99909830	-0.03610970
a	2.7011674	Node	215.59237	+0.02533686	+0.92914014
e	0.1707319	Incl.	2.19888	+0.03406793	+0.36796017
P	4.44	H	15.0	G 0.15	

Residuals in seconds of arc

781129	675	1.1-	0.5+	910913	033	0.4+	0.1+	910916	675	0.4-	0.3+
781130	675	0.8+	0.0	910913	033	0.7-	0.4-	910916	675	0.0	0.9-
781130	675	0.1+	0.6+	910913	033	0.3-	0.1+	910918	033	0.1-	0.2+
781201	675	0.2+	1.1-	910914	033	0.1-	0.3+	911003	033	0.5-	0.0
910910	675	0.5+	0.6+	910915	033	0.6+	0.3-	911004	033	0.6+	0.1+
910910	675	0.2+	0.2+	910915	033	0.5-	0.1-	911004	033	0.3+	0.1-

1991 RF14 = 1984 SS2 = 1990 GR
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	132.45191		(2000.0)	P	Q
n	0.28271904	Peri.	93.04857	+0.40236481	+0.91447264
a	2.2991431	Node	200.84004	-0.88055474	+0.37376271
e	0.1467353	Incl.	6.92965	-0.25045143	+0.15505236
P	3.49	H	14.0	G 0.15	

Residuals in seconds of arc

840925	688	1.9+	2.7-	900416	809	1.3-	1.0-	910915	675	1.3-	0.7-
840925	688	(7.4+	0.6-)	900416	809	0.4+	1.0-	910915	675	0.3-	0.2+
840928	688	0.4-	2.4-	900417	809	0.4-	1.2-	911007	033	1.2+	0.3-
840928	688	(4.2+	2.1-)	900417	809	1.2-	0.8-	911007	033	1.0+	0.0
900415	809	0.1+	1.1-	910913	675	0.0	0.1-	911008	033	1.3+	0.1-
900416	809	0.5+	1.0-	910913	675	1.7-	0.9+				

1991 RQ21 = 1976 JM6 = 1980 DG5 = 1989 EA2 = 2081 T-1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	304.46790		(2000.0)	P	Q
n	0.21771822	Peri.	64.57227	-0.43607424	-0.89878401
a	2.7365677	Node	51.35608	+0.80356355	-0.41141934
e	0.1113510	Incl.	3.30422	+0.40512329	-0.15139829
P	4.53	H	13.0	G 0.15	

Residuals in seconds of arc

710324	675	1.7-	1.6-	890305	046	0.5+	0.8-	910911	675	0.3-	0.7-
710325	675	0.5+	0.4-	890305	046	1.2-	0.3+	910915	675	0.5+	0.2-
710325	675	0.3-	0.7-	890306	046	0.4+	0.4-	910915	675	0.4+	0.3+
710326	675	0.4+	0.6+	890306	046	1.2-	1.4-	910917	675	0.6-	0.9-
710327	675	0.0	0.4+	890307	046	0.5+	0.6-	910917	675	1.3+	1.0-
760503	809	0.3+	0.4+	890307	046	0.6-	0.0	910917	675	0.3+	0.2-
800221	095	1.5+	2.0+	910911	675	0.1+	0.4+	910917	675	0.5-	0.3-

1991 VB
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	72.82053		(2000.0)	P	Q
n	0.29436955	Peri.	134.14773	+0.85341186	-0.50984015
a	2.2380724	Node	256.78671	+0.44079168	+0.81691786
e	0.4098354	Incl.	6.39320	+0.27819217	+0.26964464
P	3.35	H	17.0	G 0.15	

From 16 observations 1991 Nov. 1-1992 Jan. 13, mean residual 0".95.

1991 YA
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell

M	39.55624		(2000.0)	P	Q
n	0.21704966	Peri.	174.12976	-0.00331865	-0.71800953
a	2.7421843	Node	274.40099	+0.88673544	+0.31963899
e	0.4414965	Incl.	44.27346	+0.46226534	-0.61829866
P	4.54	H	14.5	G 0.15	

From 13 observations 1991 Dec. 2-1992 Feb. 7, mean residual 0".96.

1991 YX = 1984 YT2 = 1987 QP9
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	99.68067		(2000.0)	P	Q
n	0.28719894	Peri.	265.73855	+0.75552217	-0.65120833
a	2.2751716	Node	134.87393	+0.63395939	+0.69922497
e	0.1594166	Incl.	5.79165	+0.16517185	+0.29497821
P	3.43	H	14.2	G 0.15	

Residuals in seconds of arc

841223	095	0.3+	1.9-	911203	675	1.0-	0.5-	920102	511	0.2-	1.1+
841227	095(17.0- | 5.0+)		911203	675	1.8+	2.1-	920102	511	1.1-	1.4+
870821	809	0.3-	0.7+	911231	511	1.5+	0.2+	920111	889	0.3-	0.9+
870821	809	0.1-	0.8+	911231	511	0.7-	0.1+	920111	889	0.2+	1.3+

1992 AA
Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M	61.36138		(2000.0)	P	Q
n	0.35335905	Peri.	354.39670	-0.12670351	-0.98192629
a	1.9814901	Node	102.82498	+0.91559635	-0.17029962
e	0.3898655	Incl.	8.29051	+0.38161438	+0.08257604
P	2.79	H	16.0	G 0.15	

From 25 observations 1991 Dec. 8-1992 Feb. 7, mean residual 0".82.

1992 AB
Epoch 1992 Jan. 19.0 TT = JDT 2448640.5 Bardwell

M	346.31360		(2000.0)	P	Q
n	0.16542517	Peri.	55.66436	-0.61449891	-0.44245687
a	3.2865102	Node	88.92531	+0.31358546	-0.89669772
e	0.5533854	Incl.	40.78927	+0.72391661	+0.01284969
P	5.96	H	14.0	G 0.15	

From 20 observations 1992 Jan. 1-Feb. 7.

1992 AE
Epoch 1992 Jan. 19.0 TT = JDT 2448640.5 Williams

M	28.67689		(2000.0)	P	Q
n	0.30466880	Peri.	283.70479	+0.97002247	-0.21609060
a	2.1873455	Node	88.86096	+0.24269179	+0.88499890
e	0.4336791	Incl.	6.38468	-0.01253423	+0.41240974
P	3.24	H	14.5	G 0.15	

From 27 observations 1992 Jan. 10-Feb. 7.

1992 AX
Epoch 1992 Jan. 19.0 TT = JDT 2448640.5 Williams

M	285.07533		(2000.0)	P	Q
n	0.39590438	Peri.	108.35631	-0.67447099	+0.71755564
a	1.8368591	Node	117.94578	-0.72963034	-0.61184980
e	0.2769363	Incl.	11.34579	-0.11282045	-0.33279680
P	2.49	H	14.0	G 0.15	

From 13 observations 1992 Jan. 4-Feb. 5.

1992 AT1 = 1969 TG3 = 1983 NY
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	147.64767		(2000.0)	P	Q
n	0.27656408	Peri.	242.98853	+0.99613700	-0.01355133
a	2.3331296	Node	117.67706	+0.04355082	+0.93418824
e	0.1422980	Incl.	5.62232	-0.07625224	+0.35652306
P	3.56	H	13.0	G 0.15	

Residuals in seconds of arc

691009	095	0.0	0.0	830713	688	0.4-	0.6+	920124	400	1.1+	1.3-
830711	688	1.9+	1.3-	920106	400	0.7+	0.7+	920205	400	0.9+	0.8+
830711	688	2.3-	0.8+	920106	400	1.0-	0.2+	920205	400	1.0+	0.1-
830713	688	0.8+	0.2-	920124	400	2.5-	0.2-				

1992 BA
Epoch 1992 Jan. 19.0 TT = JDT 2448640.5 Marsden

M	239.09954	(2000.0)		P	Q
n	0.63449477	Peri.	107.18555	-0.37224750	+0.92084535
a	1.3412735	Node	140.33103	-0.90560115	-0.33296623
e	0.0676389	Incl.	10.47758	-0.20326917	-0.20292197
P	1.55	H	20.5	G 0.15	

From 18 observations 1992 Jan. 27-Feb. 10.

1992 BB
Epoch 1992 Jan. 19.0 TT = JDT 2448640.5 Williams

M	327.96890	(2000.0)		P	Q
n	0.38097893	Peri.	330.31577	-0.92859941	-0.32455125
a	1.8845258	Node	194.65620	+0.24746584	-0.90289304
e	0.2678013	Incl.	45.32261	-0.27652088	+0.28186991
P	2.59	H	15.5	G 0.15	

From 11 observations 1992 Jan. 25-Feb. 12.

1992 BC
Epoch 1992 Jan. 19.0 TT = JDT 2448640.5 Williams

M	317.08421	(2000.0)		P	Q
n	0.58636854	Peri.	77.03336	-0.91137401	+0.35707158
a	1.4136946	Node	123.53622	-0.40241735	-0.87742445
e	0.3485319	Incl.	14.21529	+0.08635798	-0.32035329
P	1.68	H	19.0	G 0.15	

From 19 observations 1992 Jan. 29-Feb. 7.

1992 BF
Epoch 1992 Jan. 19.0 TT = JDT 2448640.5 Bardwell

M	200.27748	(2000.0)		P	Q
n	1.13903778	Peri.	336.30367	+0.37697049	+0.92206213
a	0.9080518	Node	315.70504	-0.82845187	+0.29330985
e	0.2695288	Incl.	7.21592	-0.41419892	+0.25252872
P	0.87	H	18.5	G 0.15	

From 13 observations 1992 Jan. 30-Feb. 6.

1992 BM = 1982 DN2 = 1984 WP1 = 1984 YC1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	92.77141	(2000.0)		P	Q
n	0.29209277	Peri.	77.18655	+0.39539751	-0.91833316
a	2.2496874	Node	349.46846	+0.79982641	+0.35389066
e	0.1626598	Incl.	5.66054	+0.45159552	+0.17727267
P	3.37	H	14.2	G 0.15	

Residuals in seconds of arc

820221	046	0.9-	1.5+	920128	399	0.2-	0.5-	920205	399	1.9-	1.9-
820221	046	1.7+	0.1-	920128	399	0.6+	2.4+	920208	399	1.2+	0.7+
841120	688	1.2+	0.1-	920129	399	1.7-	0.3-	920208	399	1.9+	1.3+
841120	688	(7.5+	0.9+)	920129	399	0.1-	1.4-				
841217	095	1.3-	0.7+	920205	399	0.5-	2.1-				

1992 CE = 1973 US1 = 1977 EW1 = 1979 OO15 = 1981 WF3 = 1987 QF11
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	317.62639	(2000.0)		P	Q
n	0.12421303	Peri.	21.15435	-0.78673080	+0.61690528
a	3.9782427	Node	196.99229	-0.57660105	-0.74710670
e	0.0721457	Incl.	4.31067	-0.22042203	-0.24750646
P	7.93	H	10.3	G 0.15	

Residuals in seconds of arc

731026	095	0.4+	0.7-	811124	033	0.0	0.2+	920209	400	0.2-	0.5+
770313	095	1.0+	0.2-	811124	033	0.3-	0.0	920209	400	1.4+	0.7+
770322	095	0.7-	0.6-	870828	095	0.7+	1.3-	920225	399	0.8-	0.3+
770325	095	0.4-	0.1+	920205	400	0.2+	0.9+	920225	399	1.2-	2.4-
790730	095	0.7-	1.4+	920205	400	1.5+	0.0	920226	399	0.7-	0.4+

1992 CT = 1976 YQ1 = 1985 UA6 = 1990 UK13 = 1990 WA12

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	134.11912		(2000.0)	P	Q
n	0.20625056	Peri.	326.56605	+0.82070047	-0.56920430
a	2.8370868	Node	68.20575	+0.53521656	+0.73552027
e	0.0707057	Incl.	3.06025	+0.19998491	+0.36744577
P	4.78	H	12.7	G 0.15	

Residuals in seconds of arc

761216	095	0.6+	2.5-	901121	364	0.2+	2.8+	920213	372	0.8-	0.7+
761218	095	0.6-	1.1-	901121	364	0.2-	0.8+	920213	372	0.8-	2.1+
761220	095	0.6+	1.0-	920205	372	0.3-	1.3+	920224	372	0.5-	0.3-
851018	095	0.8-	1.4+	920205	372	1.0+	0.9+	920224	372	0.2-	1.2-
901028	095	1.1-	0.6-	920208	372	1.7+	0.2-	920225	372	0.0	1.1-
901029	095	0.3+	0.3-	920208	372	1.0+	0.6+	920225	372	0.2+	0.4+

1992 CU = 1969 VC2 = 1990 WG3

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	19.30601		(2000.0)	P	Q
n	0.18881081	Peri.	78.32164	-0.93926076	-0.29731427
a	3.0092029	Node	84.20112	+0.20705776	-0.88928368
e	0.1129224	Incl.	9.92314	+0.27370843	-0.34753238
P	5.22	H	11.7	G 0.15	

Residuals in seconds of arc

691115	095	1.0+	2.5-	901119	809	0.6+	0.5+	920214	886	1.0-	1.1-
901118	809	1.6-	0.3-	901119	809	0.8+	1.4+	920225	886	0.1-	0.3+
901118	809	0.5-	0.1-	920213	886	1.0+	1.1-	920225	886	1.0-	0.5+
901118	809	0.0	0.4+	920213	886	1.1+	2.2-	920226	886	0.2+	1.4+
901119	809	0.2-	0.7+	920214	886	0.5-	0.3+	920226	886	0.2+	1.6+

1992 CC1

Epoch 1992 Feb. 8.0 TT = JDT 2448660.5 Williams

M	105.91809		(2000.0)	P	Q
n	0.60364985	Peri.	21.97208	+0.96692105	-0.23099387
a	1.3865834	Node	349.45687	+0.02848185	+0.51927719
e	0.3741584	Incl.	36.24871	+0.25348069	+0.82279587
P	1.63	H	15.0	G 0.15	

From 18 observations 1992 Feb. 9-28.

1992 CG1 = 1981 CC1 = 1981 EX48 = 1985 XJ2 = 1987 FR1 = 1989 TG9

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	331.54084		(2000.0)	P	Q
n	0.18162895	Peri.	105.05820	-0.77538795	+0.62914846
a	3.0880146	Node	113.96003	-0.59979560	-0.70686687
e	0.1309659	Incl.	3.40495	-0.19753168	-0.32328229
P	5.43	H	12.2	G 0.15	

Residuals in seconds of arc

810201	801	3.9+	0.4-	870323	033	2.2-	0.1-	920208	399	0.2+	1.5-
810308	095	1.8+	1.9+	891007	809	0.9+	1.3-	920225	399	0.1+	0.8-
851214	675	4.0-	0.8+	891007	809	2.0+	0.3-	920225	399	1.9+	0.9-
851214	675	3.8-	1.5+	891007	809	0.7+	1.3-	920226	399	1.0-	1.1-
870322	033	1.7-	0.0	920208	399	0.9+	1.4-	920226	399	0.3-	0.7-

1992 CH1
Epoch 1992 Feb. 8.0 TT = JDT 2448660.5 Marsden

M	0.50351		(2000.0)	P	Q
n	0.48248033	Peri.	355.38679	-0.78390320	-0.58648132
a	1.6099645	Node	145.94839	+0.58066001	-0.80872293
e	0.2840960	Incl.	21.34435	+0.21984024	+0.04479835
P	2.04	H	19.0	G 0.15	

From 11 observations 1992 Feb. 8-15.

1992 DA = 1974 DW = 1979 SM13
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	4.76280		(2000.0)	P	Q
n	0.27501187	Peri.	164.39699	-0.97711743	+0.21054376
a	2.3419004	Node	27.81252	-0.20142171	-0.87028021
e	0.1677623	Incl.	3.71278	-0.06834337	-0.44529057
P	3.58	H	13.5	G 0.15	

Residuals in seconds of arc

740216	095	0.2-	0.8-	920225	372	0.8+	0.2-	920227	372	1.2+	1.5+
790920	675	0.5+	0.1+	920225	372	0.2-	0.6-	920305	372	0.5-	0.2+
790921	675	0.7-	0.3+	920226	372	1.4+	0.6-	920305	372	1.2-	0.0
920224	372	1.0-	0.1+	920226	372	0.1+	0.4-				
920224	372	0.8+	0.9-	920227	372	1.0-	1.8+				

1992 DC
Epoch 1992 Feb. 8.0 TT = JDT 2448660.5 Marsden

M	357.94828		(2000.0)	P	Q
n	0.23906875	Peri.	154.20379	-0.82661370	-0.56210536
a	2.5711111	Node	351.43667	+0.47932077	-0.67775554
e	0.4773085	Incl.	10.57924	+0.29489216	-0.47400949
P	4.12	H	17.5	G 0.15	

From 6 observations 1992 Feb. 26-28.

1992 DU
Epoch 1992 Feb. 28.0 TT = JDT 2448680.5 Marsden

M	43.58677		(2000.0)	P	Q
n	0.78887444	Peri.	121.64053	-0.19750397	-0.96736786
a	1.1600164	Node	337.99983	+0.69282547	-0.02319923
e	0.1750459	Incl.	25.06784	+0.69353086	-0.25231174
P	1.25	H	25.0	G 0.15	

From 15 observations 1992 Feb. 26-29.

2530 P-L = 1991 RS21
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	25.79715		(2000.0)	P	Q
n	0.28501920	Peri.	35.49096	+0.52345702	-0.85145354
a	2.2867568	Node	22.99563	+0.76165281	+0.45079273
e	0.1305347	Incl.	4.68842	+0.38193944	+0.26797909
P	3.46	H	14.4	G 0.15	

Residuals in seconds of arc

600924	675	0.8+	0.7-	601022	675	0.0	0.1-	910917	675	1.2-	0.1-
600926	675	0.5-	0.1+	601025	675	0.2+	0.3-	910917	675	0.3+	0.4-
600928	675	0.3-	0.7-	601026	675	0.1-	0.6+	910917	675	0.5+	0.2+
600929	675	0.4+	1.1+	910915	675	0.2+	0.0				
601017	675	0.4-	0.2-	910915	675	0.1+	0.4+				

4319 P-L = 1991 NL6
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	107.65466	(2000.0)		P	Q
n	0.31493361	Peri.	43.59648	+0.46266118	+0.88490840
a	2.1395546	Node	254.02934	-0.82792856	+0.40963219
e	0.1309995	Incl.	3.20089	-0.31698410	+0.22167225
P	3.13	H	15.5	G 0.15	

Residuals in seconds of arc

600924	675	0.3+	0.2-	910711	809	0.0	0.3-	910712	809	0.5-	0.5+
600925	675	1.3-	0.5-	910711	809	0.5+	0.2-	910716	809	0.4-	0.3-
600926	675	0.3+	0.4-	910711	809	1.0+	0.3-	910716	809	0.3+	0.2-
600928	675	0.8+	0.3+	910712	809	1.2-	0.3+	910716	809	1.1+	0.1+
601026	675	0.1-	0.9+	910712	809	0.8-	0.5+				

4556 P-L = 1991 RT21
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	36.91101	(2000.0)		P	Q
n	0.18990041	Peri.	328.85556	+0.97544628	-0.21691564
a	2.9976812	Node	43.72519	+0.21170548	+0.87582095
e	0.1371783	Incl.	3.16042	+0.06070700	+0.43114414
P	5.19	H	13.7	G 0.15	

Residuals in seconds of arc

600924	675	0.7-	0.5-	601022	675	1.1+	0.2+	910915	675	0.3-	0.2-
600926	675	0.1-	0.3-	601025	675	0.7-	0.7+	910915	675	0.0	0.2+
600927	675	0.1-	0.5+	601025	675	1.1+	1.3-	910917	675	0.1+	0.8-
600928	675	0.2+	0.4+	601026	675	1.4-	0.5+	910917	675	0.3+	0.6+
601017	675	0.4+	1.3+	601026	675	0.2+	1.3-				

4559 P-L = 1978 WN17
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	160.72345	(2000.0)		P	Q
n	0.16770555	Peri.	181.11712	+0.99752346	+0.07032905
a	3.2566500	Node	174.84975	-0.06445477	+0.91904532
e	0.1548565	Incl.	0.55882	-0.02815181	+0.38782667
P	5.88	H	14.5	G 0.15	

Residuals in seconds of arc

600926	675	0.3-	0.8-	601017	675	0.4-	0.8+	601026	675	0.4-	0.6+
600927	675	0.0	0.5+	601022	675	0.1-	0.5-	781130	675	0.1+	0.4-
600928	675	0.7+	0.4-	601025	675	0.5+	0.2-	781201	675	0.1-	0.3+

6058 P-L = 3090 T-1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	15.28893	(2000.0)		P	Q
n	0.24620622	Peri.	319.14363	+0.54781634	+0.83597119
a	2.5211772	Node	343.98822	-0.73376091	+0.46151629
e	0.1904448	Incl.	6.74453	-0.40186091	+0.29690888
P	4.00	H	15.3	G 0.15	

Residuals in seconds of arc

600924	675	0.0	0.2+	601022	675	0.1-	0.2+	710326	675	0.0	0.6+
600925	675	0.3+	0.9+	601024	675	0.8+	0.4+	710327	675	3.1-	1.3+
600926	675	0.8-	0.1-	601026	675	0.0	0.2+	710416	675	1.9+	1.9-
600928	675	0.9-	0.9-	710325	675	3.0+	0.3+	710416	675	1.5-	0.3+
601017	675	1.0+	0.9-	710326	675	0.3-	0.7-				

6328 P-L = 3048 T-1
Id. S. Nakano, T. Kobayashi

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	30.14994		(2000.0)	P	Q
n	0.23611019	Peri.	179.15832	-0.98889744	+0.14834748
a	2.5925446	Node	9.38616	-0.13664567	-0.88492014
e	0.0891590	Incl.	3.04152	-0.05839362	-0.44148541
P	4.17	H	14.4	G 0.15	

Residuals in seconds of arc

600924 675	0.1-	0.5+	601026 675	0.5+	1.0-	710327 675	0.5+	2.9-
600925 675	0.4+	0.2+	710324 675	0.7-	1.3+	710402 675	0.2-	0.3-
600926 675	0.4+	0.2-	710325 675	1.0-	0.1+	710416 675	0.0	0.9-
600928 675	0.5+	1.2-	710326 675	0.0	1.1+	710416 675	0.1+	0.1+
601017 675	1.0+	0.7-	710326 675	0.9+	1.4-	710416 675	0.5-	0.4+
601022 675	0.3+	1.7-	710326 675	0.7-	0.4+	710416 675	2.0+	1.0+
601025 675	0.8-	0.1-	710326 675	0.2+	1.7-	710513 675	0.9-	1.1-
601026 675	0.3-	0.4+	710327 675	1.4-	0.0	710514 675	0.0	0.4+

6588 P-L = 1978 WE19

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	125.94612		(2000.0)	P	Q
n	0.17081133	Peri.	330.71185	+0.49563026	-0.86845679
a	3.2170533	Node	89.57467	+0.79909517	+0.45075355
e	0.1395745	Incl.	0.66192	+0.34029039	+0.20640748
P	5.77	H	13.5	G 0.15	

Residuals in seconds of arc

600924 675	0.5-	0.7+	601017 675	0.8-	0.5+	781130 675	0.3-	0.2+
600926 675	0.5-	0.4+	601022 675	0.4+	0.4-	781201 675	0.2+	0.0
600927 675	0.3+	0.5+	601024 675	0.1+	1.1-			
600928 675	0.0	0.3+	601026 675	1.1+	1.3-			

6615 P-L = 1992 BU1

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	342.65372		(2000.0)	P	Q
n	0.29538307	Peri.	180.12267	-0.94373421	+0.32960304
a	2.2329499	Node	19.18931	-0.30334590	-0.83029119
e	0.0935723	Incl.	4.70722	-0.13170805	-0.44942004
P	3.34	H	14.0	G 0.15	

Residuals in seconds of arc

600924 675	0.5-	0.6+	601017 675	1.1+	0.7+	920130 675	0.2+	0.6-
600926 675	0.1+	0.3+	601022 675	1.4-	0.6-	920130 675	0.1-	0.2+
600927 675	0.2+	0.4-	601024 675	0.4+	0.1+	920202 675	0.4-	0.7+
600928 675	0.2+	0.8-	601026 675	0.1-	0.2+	920202 675	0.2+	0.3-

7068 P-L = 1982 SO8

Id. T. Kobayashi (MPC 13693)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	82.96904		(2000.0)	P	Q
n	0.22457277	Peri.	154.34745	+0.99483521	-0.07160307
a	2.6805957	Node	210.02785	+0.04880935	+0.95892019
e	0.2517635	Incl.	8.26586	+0.08899752	+0.27449058
P	4.39	H	13.7	G 0.15	

Residuals in seconds of arc

601017 675	0.2+	0.2-	820921 095	(1.4-	5.4+)	911109 399	2.1-	2.1-
601022 675	0.6+	0.3-	911009 801	0.4+	0.0	911109 399	0.5+	0.9-
601024 675	0.3-	0.3+	911009 801	0.5+	0.1+	911111 399	2.1+	1.1+
601026 675	0.8+	0.2+	911107 801	0.6+	0.7+	911111 399	1.8+	0.8+
820919 095	0.5+	0.4+	911107 801	0.6+	0.7+			

9508 P-L = 1986 ED1

Id. T. Kobayashi (MPC 14630)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	28.48721		(2000.0)	P	Q
n	0.17466391	Peri.	93.26516	-0.98468040	+0.16945543
a	3.1695719	Node	96.49381	-0.17185639	-0.90327349
e	0.1348527	Incl.	2.37086	-0.02949406	-0.39418506
P	5.64	H	12.8	G 0.15	

Residuals in seconds of arc

601017	675	0.1-	0.2+	601026	675	0.3+	1.1+	860305	688	0.3-	1.0+
601022	675	1.2-	0.8-	781130	675	0.2-	0.0	860305	688	1.1+	1.4-
601024	675	0.9+	0.4-	781201	675	0.2+	0.1-	860312	809	0.8-	0.6+

9575 P-L = 1991 RV21

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	85.74629		(2000.0)	P	Q
n	0.31781736	Peri.	280.94745	+0.99874533	+0.00632609
a	2.1265926	Node	78.70378	+0.01442561	+0.91359450
e	0.1876777	Incl.	2.90371	-0.04795476	+0.40657727
P	3.10	H	15.5	G 0.15	

Residuals in seconds of arc

601017	675	0.1+	0.1-	601026	675	0.3+	0.5+	910917	675	0.0	0.6-
601022	675	0.2-	0.5+	910915	675	0.1-	0.3+	910917	675	0.2+	0.4-
601024	675	0.1-	0.8-	910915	675	0.1-	0.6+				

1081 T-1 = 1221 T-2

Id. S. Nakano, T. Kobayashi

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	275.52410		(2000.0)	P	Q
n	0.18199707	Peri.	341.45366	-0.33225782	+0.94274155
a	3.0838491	Node	269.13232	-0.86164297	-0.31590956
e	0.0648005	Incl.	1.66409	-0.38363542	-0.10695572
P	5.42	H	13.6	G 0.15	

Residuals in seconds of arc

710324	675	1.0+	0.8-	730919	675	1.8+	0.4+	730929	675	0.4+	0.2-
710325	675	0.2-	1.0+	730920	675	1.9-	0.0	730930	675	0.4+	0.5+
710325	675	0.7-	0.5+	730924	675	2.0-	0.4+	730930	675	0.1-	1.5+
710326	675	0.6+	0.1-	730924	675	0.1-	0.9-	731004	675	0.1+	0.0
710327	675	0.7+	1.7-	730925	675	(1.6-	3.5-)	731004	675	0.8+	1.0-
710402	675	1.4-	1.2+	730925	675	1.3-	0.4-	731005	675	0.1+	0.4-
730919	675	0.9+	0.4-	730929	675	1.5+	0.1+	731005	675	0.5-	0.5+

1181 T-1 = 1991 EF4 = 2067 T-2

Id. S. Nakano, T. Kobayashi

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	67.59292		(2000.0)	P	Q
n	0.19502243	Peri.	228.65208	-0.96791002	+0.24879257
a	2.9449619	Node	325.71052	-0.20770599	-0.87130991
e	0.0897345	Incl.	3.60157	-0.14145110	-0.42299090
P	5.05	H	12.8	G 0.15	

Residuals in seconds of arc

710324	675	0.6+	0.2-	710514	675	1.1-	0.2-	730929	675	1.1+	0.9+
710325	675	0.9-	0.4-	730919	675	1.3-	0.9+	730930	675	0.4+	1.4-
710325	675	0.5+	0.7-	730919	675	1.1-	2.1+	730930	675	1.4+	1.2-
710326	675	0.1-	0.1-	730920	675	1.1-	0.4+	731004	675	1.1+	1.1-
710327	675	0.1+	0.3+	730924	675	0.5-	1.3+	731004	675	1.6+	1.1-
710402	675	1.0+	0.2+	730924	675	0.6-	1.6+	731005	675	0.3-	1.0-
710416	675	1.0-	0.3-	730925	675	0.0	1.2-	731005	675	0.4+	0.2+
710416	675	0.4+	1.2-	730925	675	1.0-	1.5-	910312	809	0.6-	0.4+
710513	675	0.7-	0.7+	730929	675	0.7+	0.3-	910312	809	0.4-	0.3+

910312	809	0.3-	0.1+	910314	809	0.7+	0.7-	910317	809	0.1+	0.8+
910314	809	0.2+	0.9-	910317	809	0.1-	0.5+				
910314	809	0.5+	0.7-	910317	809	0.1+	0.7+				

1198 T-1 = 1990 TM9
Id. S. Nakano, T. Kobayashi
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	351.78074		(2000.0)	P	Q
n	0.18128035	Peri.	199.27631	-0.89636934	-0.44041425
a	3.0919720	Node	314.48522	+0.41546814	-0.79480515
e	0.1140176	Incl.	4.06467	+0.15462288	-0.41751655
P	5.44	H	13.7	G 0.15	

Residuals in seconds of arc

710324	675	0.5+	0.5-	710416	675	0.3+	1.6-	901011	033	0.7+	0.9+
710325	675	0.0	0.8+	710416	675	1.0+	1.3-	901012	033	0.3+	0.3-
710325	675	0.1+	1.2+	710513	675	0.1+	0.4+	901013	033	1.2+	1.3-
710326	675	0.6-	0.6-	710514	675	0.3+	0.7+	901014	033	0.3-	0.2-
710327	675	0.1-	0.3+	901010	033	1.3-	1.4+				
710402	675	1.4-	0.8+	901011	033	0.6-	0.4-				

1293 T-1 = 1991 PW15
Id. S. Nakano, T. Kobayashi
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	54.15571		(2000.0)	P	Q
n	0.31029103	Peri.	32.55279	+0.95162078	-0.30678383
a	2.1608431	Node	345.28258	+0.26526206	+0.84872057
e	0.0943902	Incl.	3.91950	+0.15509328	+0.43076336
P	3.18	H	15.0	G 0.15	

Residuals in seconds of arc

710325	675	1.1+	0.5+	710327	675	1.8+	0.4-	910806	675	0.6-	0.2+
710325	675	0.7+	0.9-	710402	675	1.3-	0.8+	910806	675	0.4-	0.9-
710325	675	0.1-	0.5+	710416	675	0.6+	2.6-	910810	675	0.6+	0.5+
710326	675	0.4-	1.5+	710416	675	1.3-	0.1+	910810	675	0.4+	0.3+
710326	675	1.0-	0.2-	710513	675	0.8+	0.6+				
710326	675	0.5-	0.4-	710514	675	0.2-	0.4+				

1295 T-1 = 1990 BV3 = 1991 GF3
Id. S. Nakano, T. Kobayashi
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	231.64059		(2000.0)	P	Q
n	0.19877370	Peri.	218.51998	+0.61172367	-0.79074986
a	2.9077926	Node	193.81394	+0.74718717	+0.58691880
e	0.0489439	Incl.	5.42088	+0.25981820	+0.17389932
P	4.96	H	13.9	G 0.15	

Residuals in seconds of arc

710324	675	1.3+	0.7-	710327	675	1.4-	0.6+	910408	809	1.5-	0.1-
710325	675	0.1-	0.3-	710402	675	2.3-	0.5-	910408	809	0.2+	1.0+
710325	675	0.5+	0.6+	710416	675	0.1-	0.3+	910408	809	0.9+	0.6+
710325	675	0.2-	0.4+	710416	675	0.3+	0.8-	910408	809	0.4+	1.4+
710326	675	2.4+	0.5-	900124	033	0.1-	0.0	910410	809	1.3+	0.3-
710326	675	0.0	0.5+	900124	033	0.1+	0.1+	910410	809	1.4+	0.9-
710326	675	0.4-	0.2-	910408	809	2.4-	0.1+	910410	809	0.9+	1.1-
710327	675	(6.5+	4.3-)	910408	809	1.1-	0.0				

2151 T-1 = 1987 SO12
Id. S. Nakano, T. Kobayashi

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	86.70284		(2000.0)	P	Q
n	0.27113969	Peri.	232.73319	+0.86655957	-0.49736945
a	2.3641443	Node	157.00580	+0.48476041	+0.81919972
e	0.1854272	Incl.	6.05542	+0.11866698	+0.28554414
P	3.64	H	14.8	G 0.15	

Residuals in seconds of arc

710324	675	1.1-	0.7+	870916	809	0.4+	0.4+	870923	809	0.3-	1.1-
710325	675	0.2-	0.8+	870916	809	0.5+	0.5+	870927	809	0.3+	0.0
710325	675	0.1+	0.5+	870918	809	0.4-	0.2+	870927	809	0.2+	0.2-
710326	675	0.1-	0.6-	870918	809	0.2-	0.2+	870927	809	0.5+	0.1-
710327	675	0.1+	0.6-	870918	809	0.1+	0.0	871001	809	0.3-	0.6+
710402	675	1.3+	0.8-	870923	809	0.4-	0.8-	871001	809	0.0	0.4+
870916	809	0.2+	0.6+	870923	809	0.3-	1.0-	871001	809	0.2-	0.2+

3100 T-1 = 1969 VS = 1990 VG4

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	119.86282		(2000.0)	P	Q
n	0.23653829	Peri.	232.52039	+0.11227403	-0.99148077
a	2.5894155	Node	211.22637	+0.94715944	+0.12687603
e	0.1688205	Incl.	7.31790	+0.30047221	-0.02946792
P	4.17	H	13.3	G 0.15	

Residuals in seconds of arc

691111	095	0.3+	1.4-	710402	675	1.4-	0.9+	901112	364	1.3-	1.9-
710325	675	2.5+	0.2-	710402	675	0.8-	0.6-	901121	364	0.9-	0.0
710326	675	0.0	0.5-	710416	675	0.3+	1.4-	901121	364	0.7+	0.7+
710326	675	1.7-	0.1-	710416	675	2.0+	1.7-	901122	364	0.5+	3.2+
710327	675	1.1-	2.2+	901112	364	1.1-	2.6-	901122	364	2.0+	1.1+

3163 T-1 = 1992 BE

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	119.68814		(2000.0)	P	Q
n	0.08202464	Peri.	346.22176	+0.99964363	+0.02382200
a	5.2461395	Node	12.43199	-0.01591984	+0.89424618
e	0.1254116	Incl.	3.20794	-0.02142846	+0.44694102
P	12.02	H	12.5	G 0.15	

Residuals in seconds of arc

710324	675	(16.8+	24.2-)	710402	675	0.0	0.7+	920130	691	0.1+	0.5-
710325	675	0.6-	0.2-	920129	691	0.1+	0.1-	920130	691	0.3+	0.2+
710326	675	0.0	0.3-	920129	691	0.3-	0.5+	920209	691	0.3+	0.3-
710326	675	0.4-	0.7-	920129	691	0.2+	0.1-	920209	691	0.1-	0.2+
710327	675	1.0+	0.6+	920130	691	0.3-	0.0	920209	691	0.2-	0.2+

3332 T-1 = 1987 YE1

Id. S. Nakano, T. Kobayashi

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	128.30238		(2000.0)	P	Q
n	0.27804306	Peri.	118.71519	+0.71149303	-0.70220800
a	2.3248486	Node	285.90294	+0.63486803	+0.65829984
e	0.2183477	Incl.	1.55556	+0.30119805	+0.27119226
P	3.54	H	15.2	G 0.15	

Residuals in seconds of arc

710325	675	2.5+	0.1-	710402	675	0.7+	1.0-	880111	033	0.2+	0.4+
710326	675	1.2-	0.3+	871222	033	0.3-	0.3-	880111	033	0.0	0.2+
710326	675	0.9-	0.0	871225	033	0.2+	0.3-				
710327	675	1.1-	0.7+	871225	033	0.1-	0.0				

4195 T-1 = 1991 LD2

Id. S. Nakano, T. Kobayashi

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	92.99934		(2000.0)	P	Q
n	0.20369954	Peri.	140.43703	-0.55384176	+0.83078269
a	2.8607244	Node	95.86452	-0.77731164	-0.49209998
e	0.0146094	Incl.	3.18746	-0.29840563	-0.26007254
P	4.84	H	14.0	G 0.15	

Residuals in seconds of arc

710324 675	0.6+	2.0-	710513 675	0.2+	0.4-	910606 809	0.0	2.0+
710326 675	1.0+	1.7+	710514 675	0.8-	0.5+	910606 809	0.2+	1.9+
710326 675	0.9+	0.2+	710514 675	0.5+	0.8-	910606 809	1.0-	1.1+
710327 675	1.0-	1.5-	710516 675	0.4+	1.7-	910608 809	0.6+	1.5-
710402 675	1.2-	0.1+	710516 675	1.3+	2.0+	910608 809	0.5-	1.2-
710416 675	0.5+	0.4-	910518 809	0.9+	0.0	910608 809	0.2+	1.5-
710416 675	1.6-	0.7+	910518 809	0.4-	0.3-			
710513 675	0.7-	2.0+	910518 809	0.2+	0.8-			

4214 T-1 = 1977 RE19

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	65.45221		(2000.0)	P	Q
n	0.23410977	Peri.	331.64146	-0.58326619	-0.81159554
a	2.6072921	Node	153.99655	+0.75889373	-0.55911676
e	0.1246661	Incl.	4.36456	+0.28962192	-0.16941408
P	4.21	H	15.0	G 0.15	

Residuals in seconds of arc

710324 675	0.6+	0.2+	710327 675	0.1+	0.1+	710416 675	1.4-	0.2-
710326 675	1.0-	0.0	710402 675	0.3+	0.1-	770909 675	0.0	1.4-
710326 675	0.1+	0.2-	710416 675	1.2+	0.2+	770910 675	0.0	1.4+

4232 T-1 = 1980 BA1 = 1980 DY1

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	235.93382		(2000.0)	P	Q
n	0.21111376	Peri.	123.77383	-0.75655541	-0.65288018
a	2.7933478	Node	15.57487	+0.54507189	-0.66088833
e	0.1658445	Incl.	7.92771	+0.36127627	-0.37010009
P	4.67	H	13.9	G 0.15	

Residuals in seconds of arc

710324 675	0.2+	1.0+	710402 675	1.8+	1.0+	710514 675	0.7+	0.9+
710326 675	2.0-	1.1-	710416 675	1.5+	0.5-	710514 675	0.8-	0.2-
710326 675	1.7-	0.8-	710416 675	0.5-	0.5+	800123 095	0.6-	0.2+
710327 675	1.0+	0.1+	710513 675	0.3-	0.9-	800220 095	0.6+	0.2-

4277 T-1 = 1950 TX1 = 1985 QO5 = 1991 RH5

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	55.34057		(2000.0)	P	Q
n	0.16821473	Peri.	183.74100	+0.99949985	+0.02864512
a	3.2500749	Node	174.56308	-0.02408187	+0.96404985
e	0.0227585	Incl.	8.12912	-0.02049668	+0.26417293
P	5.86	H	12.1	G 0.15	

Residuals in seconds of arc

501015 024	0.6+	2.2-	710416 675	1.4+	0.3-	910913 675	0.2-	2.2-
710324 675	1.3-	1.1-	710513 675	0.3+	0.2-	910913 675	0.0	0.5-
710326 675	2.6-	1.9-	710514 675	0.2+	0.5-	910914 675	0.3-	1.9+
710326 675	1.9-	0.5-	710516 675	1.2+	0.2+	910914 675	0.8+	1.6+
710327 675	0.1+	1.3-	850823 095	0.3+	0.1-	910916 675	0.1+	2.0-
710402 675	0.6+	0.9-	910911 675	0.2+	0.5-	910916 675	0.6+	1.5-
710416 675	0.7+	0.6+	910911 675	0.4-	0.5-			

4349 T-1 = 1977 RJ8
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	71.35182	(2000.0)	P	Q	
n	0.21392486	Peri.	190.89244	+0.98277005	+0.17592973
a	2.7688231	Node	158.72023	-0.15566776	+0.95314296
e	0.3105800	Incl.	8.98383	-0.09965228	+0.24610410
P	4.61	H	13.4	G 0.15	

Residuals in seconds of arc

710324 675	(8.4+	4.7-)	710327 675	1.2+	2.4-	710416 675	1.0+	0.1+
710326 675	1.0-	0.8+	710402 675	0.2-	0.6+	770908 675	0.2+	0.1+
710326 675	0.3-	1.0+	710416 675	0.7-	0.2-	770909 675	0.2-	0.1-

4854 T-1 = 1973 UC5
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	290.15314	(2000.0)	P	Q	
n	0.19008732	Peri.	271.48246	+0.53412849	+0.83980013
a	2.9957158	Node	31.42345	-0.68245612	+0.49615937
e	0.0690635	Incl.	10.74178	-0.49895931	+0.22036701
P	5.19	H	13.5	G 0.15	

Residuals in seconds of arc

710416 675	0.8+	0.6-	710514 675	0.0	0.2-	731027 033	0.3+	0.7-
710416 675	0.9-	0.5+	710516 675	0.5+	0.9-	731028 033	0.1-	0.4+
710513 675	0.3-	1.3+	731027 033	0.2-	0.3+			

1079 T-2 = 1991 RQ8 = 1991 RX8
Id. E. Bowell (MPC 19328), G. V. Williams (d, ibid.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	98.57857	(2000.0)	P	Q	
n	0.21982525	Peri.	310.95051	+0.74454480	+0.66755995
a	2.7190530	Node	7.17386	-0.60221801	+0.67428790
e	0.1325774	Incl.	1.87819	-0.28807379	+0.31575234
P	4.48	H	13.5	G 0.15	

Residuals in seconds of arc

730919 675	0.7+	1.0-	730930 675	0.5-	0.1-	910911 675	1.1-	0.4-
730919 675	0.7-	0.7+	730930 675	0.0	0.7+	910913 400	0.7+	0.7+
730920 675	0.8+	0.8-	731004 675	1.0+	0.0	910913 400	0.3+	1.7+
730924 675	1.0-	1.1-	731004 675	0.6+	0.7+	910914 675	0.4-	0.1+
730924 675	0.5-	1.1-	731005 675	0.8-	0.7+	910914 675	0.4-	0.4+
730925 675	0.2-	1.0-	731005 675	0.7+	1.1+	911107 675	0.9+	0.4-
730925 675	0.7-	0.3+	810508 675	1.8-	1.5-	911107 675	0.8+	0.2+
730929 675	1.2+	0.1-	810509 675	1.7+	1.3+	911109 675	1.7-	0.8-
730929 675	0.0	0.4-	910911 675	0.2-	0.4-	911109 675	0.5+	0.1-

1210 T-2 = 1992 ED
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	347.20879	(2000.0)	P	Q	
n	0.29345204	Peri.	232.81599	-0.75244442	+0.65853697
a	2.2427350	Node	348.35455	-0.58296703	-0.67469678
e	0.0774716	Incl.	3.55272	-0.30655641	-0.33333665
P	3.36	H	13.7	G 0.15	

Residuals in seconds of arc

730919 675	1.3+	0.9-	730929 675	0.4-	0.6+	731005 675	0.2+	0.9-
730919 675	0.7+	0.4-	730929 675	0.3+	0.3+	920302 399	0.4+	0.2+
730920 675	0.4+	0.3+	730930 675	0.8-	1.4+	920302 399	0.3-	0.1+
730924 675	1.1-	0.2-	730930 675	0.2-	1.0+	920303 399	0.7+	0.5+
730924 675	0.8-	0.4+	731004 675	1.6+	1.0-	920303 399	0.8-	0.7-
730925 675	2.0-	1.4-	731004 675	0.7+	0.4+			
730925 675	0.8-	1.2+	731005 675	0.9+	0.8-			

1274 T-2 = 1978 WE18
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	349.38245	(2000.0)	P	Q	
n	0.21884519	Peri.	66.82688	+0.21807427	-0.97591306
a	2.7271648	Node	10.58265	+0.88279909	+0.19459147
e	0.0345706	Incl.	1.90585	+0.41606417	+0.09862987
P	4.50	H 14.3	G 0.15		

Residuals in seconds of arc

730919	675	0.7-	0.7-	730924	675	0.1-	1.2+	730930	675	1.4-	0.1+
730919	675	0.4+	0.3+	730924	675	0.7-	0.4-	731004	675	0.3+	0.1-
730919	675	0.5-	1.9+	730924	675	0.5-	1.3+	731004	675	0.4+	1.1-
730919	675	1.2-	0.2-	730925	675	0.5-	1.3-	731005	675	1.1+	0.3+
730919	675	1.2+	0.3-	730925	675	0.8+	0.0	731005	675	1.3+	1.2+
730920	675	0.5-	0.4+	730929	675	0.2+	1.2-	781130	675	0.6-	0.1-
730920	675	(0.3+	3.2+)	730929	675	0.1+	0.3-	781201	675	0.6+	0.2+
730924	675	0.4+	1.1-	730930	675	(2.6-	0.1+)				

1617 T-2 = 1954 JP = 1983 GN2 = 1984 SY3 = 1988 XP4 = 1990 ED8 = 1991 PR17
Id. E. Bowell (k), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	179.28298	(2000.0)	P	Q	
n	0.27179824	Peri.	233.79094	-0.64063365	+0.76783482
a	2.3603240	Node	356.36132	-0.68113739	-0.57084731
e	0.1420625	Incl.	3.85648	-0.35445787	-0.29079725
P	3.63	H 13.0	G 0.15		

Residuals in seconds of arc

540501	839	0.7+	0.6-	881214	888	0.3+	1.1+	900309	809	1.3-	0.6+
730919	675	0.1-	0.7-	881214	888	0.4+	0.3+	900309	809	0.9-	0.6+
730919	675	0.3+	0.4+	900304	809	0.5-	0.8-	900309	809	0.4-	0.5+
730920	675	1.7-	1.5-	900304	809	0.7-	0.8-	910808	675	0.1+	0.6+
730924	675	0.1-	1.9-	900304	809	0.3-	0.7-	910808	675	0.3-	0.1+
730924	675	1.4+	1.1-	900306	809	0.4+	0.6-	910911	675	0.5+	0.5-
730925	675	0.5-	2.0-	900306	809	0.7+	0.5-	910911	675	0.1+	0.4-
730925	675	0.6-	0.2-	900306	809	0.8+	0.5-	910917	675	0.1+	1.3+
830410	095	(0.1-	7.0-)	900308	809	0.5-	0.0	910917	675	0.1+	0.3+
840927	033	1.0+	0.7+	900308	809	0.0	0.1+				
840927	033	0.8+	1.4+	900308	809	0.5+	0.2+				

1017 T-3 = 1986 RZ2
Id. S. Nakano (MPC 12700), K. Hurukawa
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	114.96425	(2000.0)	P	Q	
n	0.21277849	Peri.	26.87814	+0.66019131	+0.73971386
a	2.7787591	Node	284.74102	-0.71107410	+0.55967750
e	0.1406964	Incl.	7.74161	-0.24191126	+0.37361010
P	4.63	H 13.0	G 0.15		

Residuals in seconds of arc

771007	675	0.7+	0.2-	771017	675	0.9+	0.7+	860929	095	2.2-	0.5+
771011	675	2.2+	0.1-	771017	675	0.9+	0.5+	861004	688	0.7+	0.6-
771011	675	2.2+	0.4-	771022	675	1.8-	2.0-	861004	688	0.2+	0.6+
771012	675	0.1+	0.6+	771022	675	2.3-	0.5-	911103	801	0.2-	0.5+
771012	675	0.4-	1.6+	860906	095	(8.9-	2.4+)	911103	801	0.2-	0.4+
771016	675	1.1-	1.9-	860911	688	0.9+	0.1-	920105	801	0.2+	0.1-
771016	675	0.5-	0.5-	860911	688	0.1+	0.2+	920106	801	0.0	0.0

1194 T-3 = 1991 OE1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	78.78053		(2000.0)	P	Q
n	0.27383493	Peri.	8.66088	+0.77562946	+0.62612964
a	2.3486059	Node	312.26020	-0.58536754	+0.66629373
e	0.1292210	Incl.	6.18624	-0.23610120	+0.40498683
P	3.60	H	14.0	G 0.15	

Residuals in seconds of arc

771016	675	0.2+	0.0	771022	675	0.1+	0.3-	910718	809	0.3-	0.3+
771016	675	0.2-	0.2-	771022	675	0.6-	0.3+	910719	809	0.8+	0.5-
771017	675	0.3-	0.0	910718	809	1.2-	0.4+	910719	809	1.3+	0.5-
771017	675	0.7+	0.3+	910718	809	0.7-	0.4+				

2247 T-3 = 1991 NV2
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	109.51964		(2000.0)	P	Q
n	0.27159620	Peri.	319.81771	-0.06449980	+0.99624972
a	2.3614944	Node	306.40750	-0.89619624	-0.08324961
e	0.2113453	Incl.	4.10939	-0.43894428	+0.02357949
P	3.63	H	14.0	G 0.15	

Residuals in seconds of arc

771007	675	0.5+	0.8+	771017	675	0.1+	0.1+	910704	809	0.6+	0.6-
771011	675	1.0-	1.1+	771021	675	1.4+	0.5-	910704	809	1.1+	0.3-
771011	675	1.3-	1.3+	771021	675	0.1-	0.1-	910704	809	1.6+	0.3-
771012	675	1.2-	0.2+	771022	675	0.6+	0.4+	910705	809	0.2-	0.5-
771012	675	1.0-	0.4-	771022	675	1.4+	0.8-	910705	809	0.2+	0.2-
771016	675	0.1+	1.8-	910703	809	2.0-	0.2+	910705	809	0.6+	0.0
771016	675	0.5+	1.4-	910703	809	1.2-	0.6+				
771017	675	0.0	1.1+	910703	809	0.6-	0.8+				

2327 T-3 = 1990 HJ5
Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M	40.07464		(2000.0)	P	Q
n	0.21084323	Peri.	138.61348	+0.80443715	-0.59235597
a	2.7957367	Node	257.76541	+0.53229324	+0.75216438
e	0.0999460	Incl.	2.61971	+0.26371346	+0.28872678
P	4.67	H	14.0	G 0.15	

Residuals in seconds of arc

771007	675	1.2+	0.5-	771016	675	0.1+	1.1-	771022	675	1.3-	0.3-
771011	675	0.6+	1.1+	771017	675	2.0-	0.8+	900429	413	0.6+	0.2-
771011	675	0.1+	1.9+	771017	675	1.0-	0.7+	900501	413	0.4-	0.3+
771012	675	0.5+	0.1-	771021	675	1.2+	0.6+	900502	413	0.1-	0.1-
771012	675	0.2+	0.5+	771021	675	0.9+	0.8-				
771016	675	0.7-	2.6-	771022	675	0.3+	0.1-				

3220 T-3 = 1981 JN5
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	320.91091		(2000.0)	P	Q
n	0.17702648	Peri.	98.19436	+0.11859417	+0.99294272
a	3.1413082	Node	178.61640	-0.91774525	+0.10977491
e	0.1227444	Incl.	1.00070	-0.37905024	+0.04488011
P	5.57	H	13.6	G 0.15	

Residuals in seconds of arc

771007	675	0.2+	0.2-	771016	675	0.2+	0.4+	771021	675	0.8-	0.2-
771011	675	1.1-	0.1-	771016	675	0.2-	1.0-	771022	675	2.0+	0.3-
771011	675	0.8-	0.2+	771017	675	0.3+	1.9+	771022	675	0.2-	0.2-
771012	675	0.8+	0.6+	771017	675	0.7-	0.3+	810508	675	0.2+	0.4-
771012	675	1.2+	1.0-	771021	675	1.1-	0.3-	810509	675	0.2-	0.4+

4045 T-3 = 1990 BP
Id. S. Nakano (MPC 15908)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 146.02976		(2000.0)	P	Q
n 0.26814132	Peri.	110.77979	-0.68327290	+0.72465209
a 2.3817357	Node	115.79194	-0.70144262	-0.61738713
e 0.1101641	Incl.	5.70735	-0.20277175	-0.30612495
P 3.68	H 13.5		G 0.15	

Residuals in seconds of arc

771007	675	1.1+	1.0+	771017	675	0.5-	0.6+	900124	887	2.2+	0.9-
771011	675	0.7-	1.9-	771021	675	1.7+	0.7+	910706	809	0.0	0.7-
771011	675	0.2-	1.1-	771021	675	1.8+	0.8+	910706	809	0.1-	0.6-
771012	675	1.0-	0.6-	771022	675	0.2+	0.4-	910706	809	0.2-	0.5-
771012	675	0.7-	1.7-	771022	675	1.4+	1.0-	910707	809	0.1+	1.6+
771016	675	1.9-	1.5+	900121	887	0.2-	0.5+	910707	809	0.2+	1.5+
771016	675	1.3-	1.1+	900121	887	1.8-	1.1+				
771017	675	0.1+	1.4+	900124	887	0.0	0.7+				

4157 T-3 = 1989 BH1
Id. S. Nakano (MPC 14480)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 341.93376		(2000.0)	P	Q
n 0.28692472	Peri.	345.40642	-0.86058392	-0.50850589
a 2.2766210	Node	163.93386	+0.47702305	-0.82442470
e 0.1027752	Incl.	5.92851	+0.17844977	-0.24848677
P 3.44	H 15.1		G 0.15	

Residuals in seconds of arc

771007	675	0.2+	1.3-	771021	675	0.1-	1.2+	890203	046	3.6-	0.6-
771011	675	0.7+	0.2+	771022	675	0.2+	1.3-	911102	809	0.7+	1.6+
771011	675	1.1+	0.6-	771022	675	0.6+	0.8-	911102	809	0.3-	0.2+
771012	675	0.2+	0.8-	890126	046	1.2+	1.0-	911102	809	1.5-	0.4+
771012	675	0.4+	0.8-	890126	046	0.4+	0.6+	911106	809	0.1+	1.3+
771016	675	0.7-	1.5+	890127	046	2.0-	1.2+	911106	809	0.0	0.8+
771016	675	0.4-	1.5+	890127	046	0.1-	0.9-	911106	809	0.8+	0.7-
771017	675	0.4-	1.6-	890128	046	3.4+	0.8+	911109	809	0.1+	0.6-
771017	675	0.4-	1.4-	890128	046	3.3+	0.7+	911109	809	0.3-	0.1-
771021	675	0.8-	1.8+	890203	046	2.8-	2.0-	911109	809	0.1-	0.7-

* * * * *

EPHEMERIDES.

1992 AB a,e,i = 3.29, 0.55, 41 Elements MPC 19871

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 02 28	04 03.13	+43 38.5	1.192	1.535	88.9	40.2	16.9
1992 03 09	04 17.89	+47 17.3	1.261	1.508	83.1	40.8	17.0
1992 03 19	04 38.69	+50 37.9	1.324	1.487	78.4	41.0	17.1
1992 03 29	05 05.92	+53 36.5	1.381	1.474	74.6	40.8	17.1
1992 04 08	05 40.07	+56 05.7	1.432	1.468	71.8	40.4	17.2
1992 04 18	06 21.22	+57 54.6	1.477	1.470	69.7	39.8	17.3
1992 04 28	07 08.46	+58 49.6	1.518	1.479	68.3	39.2	17.3
1992 05 08	07 59.50	+58 38.5	1.557	1.496	67.4	38.6	17.4
1992 05 18	08 50.90	+57 15.5	1.596	1.519	67.0	37.8	17.4
1992 05 28	09 39.39	+54 43.0	1.639	1.549	66.7	36.9	17.5
1992 06 07	10 23.08	+51 11.5	1.687	1.585	66.5	36.0	17.6
1992 06 17	11 01.48	+46 55.6	1.744	1.626	66.2	34.9	17.7
1992 06 27	11 35.05	+42 10.4	1.810	1.671	65.6	33.7	17.8

1992 07 07	12 04.64	+37 09.4	1.888	1.720	64.7	32.3	17.9
1992 07 17	12 31.08	+32 04.4	1.978	1.773	63.4	30.8	18.0
1992 07 27	12 55.08	+27 04.0	2.079	1.828	61.5	29.2	18.2
1992 08 06	13 17.27	+22 14.8	2.191	1.885	59.2	27.5	18.3
1992 08 16	13 38.07	+17 41.2	2.312	1.945	56.4	25.7	18.4
1992 08 26	13 57.81	+13 25.6	2.439	2.005	53.2	23.8	18.6

1991 YA a,e,i = 2.74, 0.44, 44 Elements MPC 19870

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 02 28	05 18.28	-07 27.7	1.169	1.633	97.9	36.9	17.4
1992 03 09	05 31.21	-09 10.0	1.298	1.666	92.4	36.5	17.7
1992 03 19	05 45.77	-10 27.5	1.424	1.702	87.5	35.8	17.9
1992 03 29	06 01.65	-11 29.9	1.548	1.742	83.3	34.7	18.1
1992 04 08	06 18.65	-12 24.0	1.668	1.783	79.6	33.5	18.3
1992 04 18	06 36.60	-13 15.1	1.785	1.828	76.2	32.2	18.4
1992 04 28	06 55.32	-14 06.3	1.899	1.874	73.1	30.9	18.6
1992 05 08	07 14.70	-15 00.1	2.010	1.921	70.3	29.6	18.7
1992 05 18	07 34.62	-15 58.4	2.119	1.970	67.6	28.4	18.9
1992 05 28	07 54.94	-17 01.9	2.225	2.019	65.1	27.1	19.0
1992 06 07	08 15.61	-18 11.3	2.330	2.069	62.6	25.8	19.1
1992 06 17	08 36.50	-19 26.8	2.434	2.120	60.2	24.6	19.2
1992 06 27	08 57.55	-20 47.9	2.537	2.171	57.7	23.3	19.3

1992 BB a,e,i = 1.88, 0.27, 45 Elements MPC 19872

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 02 28	05 58.03	-48 12.2	0.914	1.419	96.2	43.9	17.8
1992 03 09	06 16.70	-42 35.5	0.870	1.404	97.5	44.5	17.6
1992 03 19	06 39.91	-35 52.9	0.834	1.392	98.7	45.0	17.5
1992 03 29	07 06.65	-28 10.4	0.811	1.384	99.3	45.4	17.5
1992 04 08	07 35.98	-19 48.9	0.807	1.380	98.9	45.8	17.5
1992 04 18	08 06.91	-11 25.2	0.827	1.381	97.4	46.2	17.5
1992 04 28	08 38.53	-03 39.1	0.872	1.385	94.7	46.4	17.7
1992 05 08	09 10.13	+02 59.3	0.939	1.394	91.2	46.4	17.8
1992 05 18	09 41.16	+08 17.2	1.024	1.406	87.4	45.9	18.0
1992 05 28	10 11.27	+12 17.0	1.122	1.422	83.4	45.1	18.2
1992 06 07	10 40.32	+15 07.9	1.228	1.442	79.4	43.8	18.4
1992 06 17	11 08.29	+17 02.2	1.338	1.464	75.5	42.2	18.6
1992 06 27	11 35.23	+18 11.0	1.449	1.489	71.9	40.4	18.8
1992 07 07	12 01.29	+18 43.8	1.560	1.517	68.4	38.6	18.9
1992 07 17	12 26.61	+18 48.6	1.667	1.546	65.2	36.6	19.0
1992 07 27	12 51.33	+18 31.6	1.770	1.577	62.2	34.7	19.2
1992 08 06	13 15.64	+17 57.8	1.868	1.610	59.4	32.9	19.3

1992 AX a,e,i = 1.84, 0.28, 11 Elements MPC 19871

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 02 28	07 26.88	+28 40.9	0.885	1.700	130.0	26.5	16.1
1992 03 09	07 26.02	+29 45.7	0.931	1.663	119.6	31.3	16.3
1992 03 19	07 30.64	+30 27.6	0.983	1.627	110.6	34.9	16.5
1992 03 29	07 40.22	+30 48.8	1.037	1.591	102.8	37.7	16.6
1992 04 08	07 54.08	+30 49.7	1.091	1.556	96.0	39.8	16.7
1992 04 18	08 11.52	+30 30.0	1.143	1.522	90.1	41.3	16.8
1992 04 28	08 31.85	+29 48.9	1.190	1.489	84.9	42.3	16.9
1992 05 08	08 54.50	+28 45.0	1.234	1.459	80.4	43.0	16.9
1992 05 18	09 18.93	+27 17.7	1.274	1.430	76.6	43.5	17.0
1992 05 28	09 44.67	+25 26.5	1.309	1.405	73.2	43.7	17.0
1992 06 07	10 11.40	+23 11.2	1.341	1.382	70.3	43.7	17.0
1992 06 17	10 38.82	+20 33.1	1.370	1.363	67.8	43.6	17.0
1992 06 27	11 06.70	+17 33.8	1.398	1.348	65.7	43.4	17.1
1992 07 07	11 34.96	+14 15.5	1.426	1.337	63.8	43.0	17.1

1992 07 17	12 03.50	+10 41.9	1.454	1.330	62.2	42.5	17.1
1992 07 27	12 32.32	+06 56.9	1.485	1.328	60.8	41.9	17.1
1992 08 06	13 01.46	+03 05.3	1.519	1.331	59.5	41.0	17.1
1992 08 16	13 30.98	-00 47.4	1.558	1.338	58.2	40.0	17.2
1992 08 26	14 00.92	-04 35.9	1.602	1.350	56.9	38.9	17.2

1992 DC a,e,i = 2.57, 0.48, 11 Elements MPC 19874

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 02 28	09 59.57	+24 13.5	0.373	1.349	161.2	13.7	16.8
1992 03 09	09 57.72	+18 48.7	0.394	1.362	155.5	17.6	17.1
1992 03 19	09 59.74	+13 33.7	0.431	1.382	148.5	22.1	17.4
1992 03 29	10 05.63	+08 49.8	0.482	1.408	141.6	26.2	17.8
1992 04 08	10 14.92	+04 43.6	0.547	1.441	135.1	29.4	18.3
1992 04 18	10 26.96	+01 12.3	0.623	1.479	129.3	31.7	18.7
1992 04 28	10 41.02	-01 49.9	0.711	1.522	123.9	33.3	19.1
1992 05 08	10 56.59	-04 29.8	0.809	1.569	118.9	34.3	19.4
1992 05 18	11 13.25	-06 53.3	0.917	1.619	114.1	34.8	19.8

1992 CC1 a,e,i = 1.39, 0.37, 36 Elements MPC 19873

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 02 28	11 24.21	+19 03.1	0.768	1.744	165.1	8.4	16.2
1992 03 09	10 51.76	+17 04.3	0.795	1.774	165.7	7.9	16.3
1992 03 19	10 24.11	+14 40.1	0.855	1.801	153.4	14.4	16.7
1992 03 29	10 03.73	+12 10.0	0.943	1.825	140.0	20.6	17.2
1992 04 08	09 50.78	+09 46.3	1.052	1.845	127.9	25.3	17.6
1992 04 18	09 44.21	+07 33.0	1.175	1.863	117.3	28.6	18.0
1992 04 28	09 42.66	+05 29.3	1.306	1.878	107.8	30.7	18.3
1992 05 08	09 44.99	+03 32.1	1.441	1.889	99.4	31.8	18.5
1992 05 18	09 50.28	+01 38.5	1.575	1.898	91.7	32.2	18.7
1992 05 28	09 57.81	-00 14.0	1.706	1.903	84.7	32.0	18.9
1992 06 07	10 07.13	-02 07.6	1.832	1.905	78.3	31.4	19.1

1992 CH1 a,e,i = 1.61, 0.28, 21 Elements MPC 19874

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 02 28	11 49.96	+35 35.1	0.201	1.166	148.5	26.3	17.0
1992 03 09	12 14.48	+46 33.5	0.245	1.182	136.2	35.6	17.8
1992 03 19	12 32.62	+52 07.2	0.300	1.203	127.8	40.8	18.4
1992 03 29	12 44.92	+54 13.3	0.360	1.229	122.3	43.4	18.9
1992 04 08	12 53.30	+54 05.7	0.422	1.259	118.6	44.3	19.3
1992 04 18	13 00.09	+52 27.4	0.485	1.292	115.9	44.3	19.7
1992 04 28	13 06.76	+49 45.7	0.549	1.328	113.9	43.9	20.0

(4769) Castalia a,e,i = 1.06, 0.48, 9 Elements MPC 17949

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 02 28	18 10.96	-34 15.1	0.539	0.923	66.9	80.6	18.2
1992 03 09	18 17.31	-36 39.3	0.556	1.010	75.6	72.2	18.2
1992 03 19	18 23.13	-38 58.1	0.558	1.092	84.3	65.2	18.1
1992 03 29	18 25.60	-41 21.4	0.547	1.167	93.4	58.7	18.0
1992 04 08	18 21.81	-43 54.4	0.528	1.236	103.4	52.0	17.9
1992 04 18	18 08.55	-46 32.2	0.506	1.298	114.4	44.8	17.7
1992 04 28	17 42.72	-48 52.2	0.485	1.353	126.5	36.7	17.5
1992 05 08	17 03.46	-50 06.9	0.475	1.402	138.9	28.2	17.3
1992 05 18	16 16.76	-49 23.5	0.480	1.445	149.3	20.9	17.1
1992 05 28	15 33.98	-46 36.4	0.505	1.482	153.1	18.0	17.2
1992 06 07	15 03.18	-42 39.4	0.551	1.512	148.4	20.6	17.5
1992 06 17	14 45.39	-38 39.1	0.616	1.537	139.4	25.5	17.9
1992 06 27	14 37.94	-35 13.6	0.694	1.555	129.8	30.2	18.4
1992 07 07	14 38.01	-32 34.4	0.783	1.568	120.7	33.9	18.8
1992 07 17	14 43.44	-30 38.6	0.877	1.575	112.4	36.6	19.1

1992 07 27	14 52.72	-29 18.3	0.975	1.577	104.7	38.5	19.4
1992 08 06	15 04.94	-28 25.2	1.072	1.572	97.7	39.7	19.6
1992 08 16	15 19.49	-27 51.9	1.167	1.562	91.3	40.4	19.8
1992 08 26	15 35.92	-27 32.1	1.258	1.546	85.2	40.6	19.9
1992 09 05	15 54.03	-27 20.5	1.343	1.524	79.4	40.6	20.1
1992 09 15	16 13.61	-27 12.6	1.419	1.496	74.0	40.2	20.1

Comet Zanotta-Brewington (1991g1) Elements MPC 19818

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 04 08	06 13.48	-68 16.4	1.011	1.445	91.7	43.9	10.6
1992 04 18	07 39.61	-66 29.1	1.085	1.594	99.4	38.4	11.2
1992 04 28	08 48.30	-62 48.9	1.178	1.742	105.5	33.8	11.8
1992 05 08	09 39.55	-58 19.0	1.292	1.887	109.5	30.3	12.3
1992 05 18	10 18.33	-53 46.2	1.431	2.029	111.2	27.7	12.9
1992 05 28	10 48.98	-49 35.9	1.593	2.169	110.7	25.9	13.4
1992 06 07	11 14.41	-45 59.5	1.777	2.306	108.3	24.7	13.9
1992 06 17	11 36.36	-42 59.9	1.980	2.441	104.5	23.8	14.4
1992 06 27	11 55.92	-40 35.0	2.198	2.574	99.8	22.9	14.8
1992 07 07	12 13.82	-38 40.9	2.429	2.704	94.4	22.0	15.2
1992 07 17	12 30.52	-37 13.3	2.668	2.832	88.6	21.0	15.7
1992 07 27	12 46.30	-36 07.8	2.913	2.958	82.6	19.9	16.0
1992 08 06	13 01.41	-35 20.7	3.160	3.082	76.3	18.6	16.4
1992 08 16	13 15.97	-34 48.7	3.407	3.205	69.9	17.3	16.7
1992 08 26	13 30.10	-34 29.0	3.651	3.325	63.5	15.8	17.0
1992 09 05	13 43.87	-34 19.1	3.888	3.444	57.0	14.2	17.3
1992 09 15	13 57.31	-34 17.3	4.116	3.562	50.5	12.6	17.6
1992 09 25	14 10.45	-34 21.7	4.333	3.677	44.0	10.9	17.8
1992 10 05	14 23.31	-34 31.2	4.536	3.792	37.5	9.2	18.1
1992 10 15	14 35.87	-34 44.5	4.723	3.905	31.3	7.6	18.3

Periodic Comet Holmes Elements MPC 16379

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m2
1992 04 08	18 09.14	-44 45.0	2.851	3.266	105.6	17.2	19.8
1992 04 18	18 13.85	-45 36.4	2.689	3.226	113.7	16.6	19.6
1992 04 28	18 15.96	-46 28.2	2.537	3.186	121.9	15.6	19.4
1992 05 08	18 15.11	-47 18.2	2.398	3.146	130.2	14.2	19.2
1992 05 18	18 11.11	-48 02.3	2.275	3.105	138.4	12.5	19.0
1992 05 28	18 04.04	-48 35.4	2.172	3.065	146.0	10.7	18.8
1992 06 07	17 54.33	-48 51.5	2.091	3.025	151.9	9.1	18.6
1992 06 17	17 42.96	-48 45.1	2.035	2.984	154.6	8.4	18.5
1992 06 27	17 31.23	-48 14.0	2.003	2.944	152.9	9.0	18.5
1992 07 07	17 20.58	-47 19.0	1.995	2.904	147.5	10.9	18.5
1992 07 17	17 12.25	-46 05.0	2.011	2.865	139.9	13.2	18.6
1992 07 27	17 07.00	-44 38.8	2.047	2.825	131.6	15.6	18.7
1992 08 06	17 05.18	-43 07.1	2.100	2.786	123.0	17.8	18.8
1992 08 16	17 06.76	-41 35.3	2.167	2.747	114.6	19.6	18.9
1992 08 26	17 11.48	-40 06.7	2.243	2.709	106.4	21.0	18.9
1992 09 05	17 19.01	-38 42.9	2.327	2.671	98.6	21.9	19.0
1992 09 15	17 29.00	-37 23.7	2.415	2.634	91.1	22.4	19.1
1992 09 25	17 41.08	-36 08.3	2.503	2.597	84.0	22.6	19.1
1992 10 05	17 54.97	-34 55.0	2.592	2.561	77.1	22.4	19.2
1992 10 15	18 10.34	-33 42.0	2.678	2.527	70.5	21.8	19.2
1992 10 25	18 26.96	-32 27.4	2.760	2.493	64.2	21.0	19.2
1992 11 04	18 44.60	-31 09.4	2.836	2.460	58.1	20.0	19.2
1992 11 14	19 03.03	-29 46.5	2.907	2.429	52.1	18.8	19.2
1992 11 24	19 22.08	-28 17.4	2.971	2.398	46.3	17.3	19.2
1992 12 04	19 41.58	-26 40.9	3.028	2.370	40.7	15.7	19.1
1992 12 14	20 01.37	-24 56.5	3.077	2.343	35.2	14.0	19.1

Periodic Comet Slaughter-Burnham Elements MPC 16380

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m2
1992 04 08	20 59.00	-23 11.2	4.223	3.959	68.1	13.6	18.9
1992 04 18	21 07.72	-22 40.5	4.040	3.915	75.7	14.4	18.8
1992 04 28	21 15.50	-22 13.0	3.852	3.871	83.6	15.0	18.7
1992 05 08	21 22.22	-21 49.8	3.663	3.827	91.6	15.3	18.6
1992 05 18	21 27.71	-21 31.7	3.475	3.782	99.9	15.3	18.4
1992 05 28	21 31.81	-21 19.7	3.291	3.738	108.5	14.9	18.3
1992 06 07	21 34.34	-21 14.4	3.115	3.694	117.4	14.1	18.1
1992 06 17	21 35.17	-21 16.1	2.950	3.650	126.7	12.9	17.9
1992 06 27	21 34.18	-21 24.7	2.801	3.605	136.4	11.2	17.7
1992 07 07	21 31.33	-21 39.1	2.670	3.562	146.4	9.1	17.5
1992 07 17	21 26.74	-21 57.6	2.561	3.518	156.8	6.5	17.3
1992 07 27	21 20.68	-22 17.6	2.477	3.474	167.0	3.8	17.0
1992 08 06	21 13.59	-22 36.0	2.421	3.431	173.8	1.8	16.8
1992 08 16	21 06.13	-22 49.6	2.393	3.388	167.3	3.8	16.9
1992 08 26	20 59.02	-22 56.0	2.392	3.345	156.9	6.8	17.0
1992 09 05	20 52.97	-22 53.5	2.418	3.303	146.2	9.8	17.1
1992 09 15	20 48.56	-22 41.7	2.465	3.261	135.7	12.4	17.3
1992 09 25	20 46.17	-22 20.8	2.532	3.220	125.6	14.7	17.4
1992 10 05	20 46.01	-21 51.4	2.613	3.179	115.9	16.4	17.5
1992 10 15	20 48.11	-21 14.1	2.704	3.139	106.7	17.7	17.6
1992 10 25	20 52.34	-20 29.6	2.802	3.099	97.9	18.5	17.6
1992 11 04	20 58.55	-19 38.1	2.903	3.060	89.6	18.9	17.7
1992 11 14	21 06.52	-18 39.8	3.004	3.022	81.6	18.9	17.8
1992 11 24	21 16.02	-17 34.7	3.103	2.985	74.0	18.5	17.8
1992 12 04	21 26.85	-16 22.7	3.197	2.949	66.7	17.9	17.8
1992 12 14	21 38.80	-15 04.0	3.284	2.914	59.7	17.0	17.8
1992 12 24	21 51.69	-13 38.5	3.364	2.879	52.9	15.8	17.8
1993 01 03	22 05.38	-12 06.5	3.434	2.846	46.4	14.5	17.8
1993 01 13	22 19.72	-10 28.2	3.495	2.815	40.1	13.0	17.7
1993 01 23	22 34.61	-08 44.0	3.546	2.784	33.9	11.4	17.7

Periodic Comet Ciffréo (1985 XVI) Elements MPC 16378

Date TT	R. A. (2000)	Decl.	Delta	r	Variation		m2
1992 04 08	22 04.26	-23 30.5	3.460	2.992	-0.71	-3.8	19.9
1992 04 18	22 18.86	-22 40.1	3.294	2.935	-0.75	-4.4	19.8
1992 04 28	22 33.14	-21 51.9	3.121	2.878	-0.79	-5.0	19.7
1992 05 08	22 47.04	-21 06.9	2.945	2.821	-0.85	-5.6	19.6
1992 05 18	23 00.48	-20 26.4	2.766	2.764	-0.91	-6.4	19.5
1992 05 28	23 13.37	-19 51.9	2.587	2.707	-0.98	-7.2	19.3
1992 06 07	23 25.59	-19 25.0	2.408	2.649	-1.06	-8.1	19.1
1992 06 17	23 36.97	-19 07.2	2.233	2.592	-1.15	-9.1	18.9
1992 06 27	23 47.34	-19 00.2	2.063	2.534	-1.26	-10.2	18.7
1992 07 07	23 56.43	-19 05.6	1.899	2.477	-1.39	-11.4	18.4
1992 07 17	00 03.93	-19 24.7	1.745	2.420	-1.54	-12.8	18.2
1992 07 27	00 09.51	-19 58.1	1.601	2.364	-1.70	-14.2	17.9
1992 08 06	00 12.73	-20 45.1	1.471	2.308	-1.89	-15.5	17.6
1992 08 16	00 13.26	-21 42.7	1.357	2.253	-2.09	-16.7	17.3
1992 08 26	00 10.83	-22 45.3	1.260	2.199	-2.30	-17.7	17.0
1992 09 05	00 05.47	-23 43.7	1.184	2.146	-2.48	-18.1	16.7
1992 09 15	23 57.72	-24 25.9	1.129	2.094	-2.61	-18.0	16.5
1992 09 25	23 48.61	-24 40.3	1.096	2.045	-2.67	-17.4	16.5
1992 10 05	23 39.64	-24 17.8	1.083	1.997	-2.64	-16.7	16.5
1992 10 15	23 32.39	-23 15.3	1.090	1.952	-2.53	-16.0	16.6
1992 10 25	23 28.03	-21 35.2	1.113	1.909	-2.37	-15.7	16.7
1992 11 04	23 27.25	-19 23.1	1.149	1.870	-2.20	-15.6	16.9
1992 11 14	23 30.20	-16 45.8	1.195	1.834	-2.03	-15.9	17.0
1992 11 24	23 36.64	-13 49.3	1.249	1.802	-1.89	-16.3	17.1

1992 12 04	23 46.23	-10 38.5	1.310	1.774	-1.77	-16.8	17.2
1992 12 14	23 58.53	-07 17.3	1.375	1.751	-1.68	-17.2	17.3
1992 12 24	00 13.13	-03 49.2	1.444	1.732	-1.60	-17.5	17.4

Comet Mueller (1991h1) Elements MPC 19818

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 04 08	23 12.26	+24 25.6	1.132	0.612	32.6	61.9	11.1
1992 04 13	23 14.65	+33 00.4	1.170	0.737	38.7	58.3	12.0
1992 04 18	23 18.87	+40 47.6	1.219	0.855	43.9	54.6	12.7
1992 04 23	23 24.44	+47 49.9	1.277	0.968	48.4	51.0	13.4
1992 04 28	23 31.17	+54 10.5	1.344	1.076	52.1	47.6	14.0
1992 05 03	23 39.01	+59 53.4	1.417	1.180	55.1	44.5	14.5
1992 05 08	23 48.11	+65 02.4	1.495	1.280	57.6	41.8	14.9
1992 05 13	23 58.81	+69 41.1	1.578	1.377	59.6	39.3	15.4
1992 05 18	00 11.8	+73 52.9	1.663	1.472	61.2	37.0	15.8
1992 05 23	00 28.7	+77 40.5	1.751	1.564	62.3	35.0	16.2
1992 05 28	00 53.0	+81 05.7	1.841	1.654	63.2	33.2	16.5
1992 06 02	01 34.3	+84 07.4	1.932	1.742	63.8	31.5	16.8
1992 06 07	03 06	+86 34.5	2.023	1.827	64.2	30.0	17.1
1992 06 12	06 41	+87 29.8	2.115	1.912	64.5	28.6	17.4
1992 06 17	09 32	+86 11.4	2.206	1.994	64.6	27.4	17.7
1992 06 22	10 39.0	+84 12.1	2.297	2.075	64.6	26.3	18.0
1992 06 27	11 12.9	+82 10.4	2.388	2.155	64.5	25.2	18.2
1992 07 02	11 34.7	+80 13.4	2.477	2.233	64.3	24.2	18.5
1992 07 07	11 50.9	+78 22.7	2.564	2.310	64.2	23.3	18.7
1992 07 12	12 04.2	+76 38.5	2.651	2.386	64.0	22.5	18.9
1992 07 17	12 15.7	+75 00.6	2.736	2.461	63.8	21.7	19.1
1992 07 22	12 26.1	+73 28.6	2.818	2.535	63.6	21.0	19.3
1992 07 27	12 35.8	+72 02.4	2.899	2.608	63.4	20.4	19.5

Comet Shoemaker-Levy (1991a1) Elements MPC 19655

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 04 28	00 52.65	+39 13.5	2.492	1.722	31.9	18.0	11.8
1992 05 03	00 56.86	+40 42.7	2.396	1.656	33.8	19.8	11.6
1992 05 08	01 01.33	+42 22.1	2.293	1.589	35.9	21.9	11.3
1992 05 13	01 06.13	+44 13.4	2.184	1.523	38.2	24.2	11.0
1992 05 18	01 11.39	+46 18.5	2.069	1.457	40.5	26.8	10.7
1992 05 23	01 17.30	+48 40.1	1.950	1.391	42.9	29.7	10.4
1992 05 28	01 24.17	+51 21.8	1.826	1.327	45.3	32.9	10.0
1992 06 02	01 32.53	+54 27.7	1.700	1.263	47.7	36.4	9.7
1992 06 07	01 43.34	+58 03.1	1.571	1.201	49.9	40.2	9.3
1992 06 12	01 58.55	+62 13.7	1.442	1.141	51.9	44.4	8.9
1992 06 17	02 22.55	+67 03.9	1.316	1.084	53.5	48.9	8.4
1992 06 22	03 06.9	+72 27.5	1.196	1.030	54.7	53.7	8.0
1992 06 27	04 45.4	+77 25.8	1.088	0.980	55.4	58.6	7.6
1992 07 02	07 50.1	+77 55.0	0.996	0.936	55.4	63.4	7.2
1992 07 07	10 05.9	+70 51.6	0.930	0.899	54.8	67.5	6.9
1992 07 12	11 04.63	+59 50.9	0.897	0.869	53.6	70.2	6.7
1992 07 17	11 32.62	+47 35.6	0.902	0.849	52.1	70.9	6.6
1992 07 22	11 47.87	+35 39.8	0.943	0.838	50.5	69.3	6.6
1992 07 27	11 56.89	+24 59.4	1.014	0.838	48.8	65.7	6.8
1992 08 01	12 02.50	+15 54.8	1.107	0.848	46.9	60.8	7.0
1992 08 06	12 06.09	+08 22.2	1.214	0.869	44.8	55.3	7.3
1992 08 11	12 08.47	+02 07.1	1.328	0.898	42.5	49.7	7.6
1992 08 16	12 10.13	-03 06.3	1.444	0.935	40.1	44.2	8.0
1992 08 21	12 11.38	-07 32.0	1.559	0.979	37.7	39.2	8.4
1992 08 26	12 12.44	-11 21.2	1.671	1.029	35.3	34.6	8.7
1992 08 31	12 13.41	-14 42.7	1.777	1.082	33.1	30.6	9.1
1992 09 05	12 14.37	-17 43.0	1.877	1.140	31.1	27.2	9.4

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1992 03 09    11 22.60   +03 54.1    1.134    2.127   178.9     0.5    15.7
-10.13 -0.15  + 40.3 + 0.5   1210 T-2    19881   - 5.06 +1.58  + 12.4 - 8.3
1992 04 08    10 56.59   +05 29.5    1.209    2.108   144.7    15.9    16.6

1992 03 09    11 43.16   +12 37.2    1.045    2.030   169.8     5.0    15.9
-10.21 -0.34  + 36.0 - 6.8   1990 SZ7    19866   - 5.67 +1.58  - 25.9 -11.2
1992 04 08    11 15.78   +13 00.3    1.146    2.051   145.5    16.1    16.5

1992 03 09    11 45.33   -04 40.4    2.032    3.012   168.7     3.7    17.8
- 8.57 -0.33  + 53.2 + 5.0   A920 TA     19853   - 6.76 +0.87  + 57.2 - 3.7
1992 04 08    11 20.11   -01 38.7    2.049    2.973   152.5     9.0    18.0

1992 03 09    11 57.87   +07 32.9    1.913    2.896   169.8     3.5    17.9
- 9.12 -0.36  + 61.5 - 1.4   1990 TX     17451   - 7.17 +0.92  + 29.2 - 8.1
1992 04 08    11 31.07   +10 01.3    2.013    2.925   150.2     9.8    18.3

1992 03 09    12 05.89   +02 20.8    1.396    2.376   168.1     5.0    18.0
- 7.46 -0.55  + 73.2 + 2.0   4214 T-1    19880   - 5.83 +1.01  + 48.5 - 9.1
1992 04 08    11 43.09   +05 44.1    1.463    2.409   155.1    10.1    18.4

1992 03 09    12 11.88   +14 41.1    1.572    2.540   163.4     6.4    16.1
- 8.07 -0.51  + 65.6 - 5.8   1990 WE     19868   - 6.43 +0.96    +6.9 -11.6
1992 04 08    11 47.40   +16 40.6    1.693    2.601   148.8    11.5    16.5

1992 03 09    12 26.65   -32 11.8    1.935    2.770   140.0    13.3    17.4
- 8.21 -0.75  + 39.1 +16.6   1990 UO2    17965   - 8.00 +0.80  +121.5 + 8.1
1992 04 08    11 59.45   -27 55.3    1.876    2.809   153.7     9.1    17.2

1992 03 09    12 33.86   +00 11.0    1.988    2.944   160.8     6.4    17.5
- 6.76 -0.72  + 40.1 + 3.0   1977 DS4    15699   - 7.48 +0.52  + 34.9 - 4.7
1992 04 08    12 10.21   +02 17.6    1.942    2.913   162.6     5.9    17.4

1992 03 09    13 26.75   -06 03.8    2.451    3.323   146.4     9.5    18.0
- 4.28 -0.88  + 29.7 + 4.6   1988 ST2    19864   - 7.30 -0.02  + 42.6 - 0.9
1992 04 08    13 07.81   -04 05.3    2.288    3.288   176.8     1.0    17.3

1992 04 08    13 29.37   -10 35.8    1.369    2.367   173.8     2.6    17.2
- 8.79 -0.27  + 34.4 + 2.7   6328 P-L    19875   - 7.53 +0.86  + 32.6 - 3.6
1992 04 28    13 11.91   -09 22.5    1.394    2.372   162.0     7.5    17.5

1992 04 08    13 30.59   -11 19.0    1.742    2.739   173.2     2.5    17.0
- 8.25 -0.15  + 73.5 + 2.4   3100 T-1    19879   - 7.01 +0.73  + 69.3 - 4.4
1992 04 28    13 14.44   -08 49.4    1.794    2.771   162.4     6.3    17.3

1992 04 08    13 37.11   -10 58.9    1.480    2.475   172.0     3.2    17.5
- 9.01 -0.45  + 71.3 + 4.3   1972 RU1    19854   - 8.51 +0.69  + 72.5 - 3.8
1992 04 28    13 18.45   -08 27.0    1.460    2.441   163.2     6.8    17.7

1992 04 08    13 36.97   -12 43.4    1.311    2.306   171.1     3.9    16.6
- 9.13 -0.30  + 51.9 + 4.1   1990 TF4    17642   - 7.85 +0.89  + 52.9 - 3.6
1992 04 28    13 18.80   -10 51.0    1.352    2.336   164.0     6.8    16.8

1992 04 08    13 38.35   -05 30.4    1.539    2.535   172.3     3.0    16.8
- 9.62 -0.24  + 52.2 - 0.8   1988 BV     12945   - 8.39 +0.81  + 37.3 - 6.4
1992 04 28    13 19.29   -03 55.3    1.597    2.571   161.3     7.2    17.1

1992 04 08    13 38.31   -05 01.4    0.996    1.992   172.2     3.9    17.8
- 8.10 -0.54  + 79.6 + 0.2   1979 MR6    12696   - 7.31 +0.90  + 59.0 -10.0
1992 04 28    13 21.46   -02 32.6    0.997    1.976   160.9     9.6    18.1
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1992 04 08    13 40.49   +31 07.0    2.432    3.271   140.9    11.1    17.7
-10.10 -0.30  + 30.2 -13.8   1988 JP     15712   - 9.51 +0.58  - 27.9 -14.6
1992 04 28    13 20.00   +31 10.0    2.460    3.224   132.2    13.4    17.8

1992 04 08    13 40.45   -13 14.4    1.605    2.597   170.1     3.8    18.1
- 9.96 -0.28  + 37.1 + 3.8    (4812)     18266   - 8.88 +0.79  + 40.8 - 2.0
1992 04 28    13 20.54   -11 50.6    1.649    2.634   164.7     5.8    18.3

1992 04 08    13 40.54   -06 17.2    1.535    2.531   171.9     3.2    16.8
- 9.76 -0.40  + 59.9 + 0.6   1990 XM     18299   - 9.09 +0.71  + 48.8 - 6.0
1992 04 28    13 20.58   -04 21.9    1.546    2.522   161.8     7.2    17.0

1992 04 08    13 40.23   -25 31.0    4.559    5.512   160.2     3.5    17.3
- 5.09 -0.14  + 17.8 + 3.9    (5023)     19488   - 4.93 +0.22  + 29.9 + 2.1
1992 04 28    13 29.86   -24 41.5    4.538    5.512   163.7     2.9    17.3

1992 04 08    13 44.67   -05 51.6    2.141    3.134   170.9     2.9    17.4
- 9.07 -0.31  + 19.1 - 0.2   1985 VC1    14196   - 8.65 +0.51  + 11.7 - 3.5
1992 04 28    13 26.13   -05 17.5    2.160    3.138   163.5     5.2    17.6

1992 04 08    13 43.72   -07 12.8    2.602    3.595   171.2     2.4    18.1
- 7.07 -0.24  + 40.2 + 0.5   1989 VX     15721   - 6.77 +0.38  + 34.9 - 3.1
1992 04 28    13 29.26   -05 54.1    2.618    3.599   164.4     4.3    18.3

1992 04 08    13 45.64   -11 23.9    1.991    2.982   169.9     3.4    18.2
- 9.56 -0.34  + 14.9 + 2.4   1973 SR6    13600   - 9.08 +0.56  + 17.2 - 1.4
1992 04 28    13 26.10   -10 48.1    2.013    2.999   165.8     4.7    18.3

1992 04 08    13 45.56   +14 02.3    1.416    2.369   156.8     9.6    15.8
- 7.71 -0.39  + 66.9 -12.4   1983 CE     14189   - 7.03 +0.69   +8.2 -15.9
1992 04 28    13 29.74   +15 20.9    1.465    2.377   147.7    13.1    16.0

1992 04 08    13 46.80   -11 34.0    1.889    2.880   169.6     3.6    18.0
- 8.91 -0.38  + 46.5 + 3.0    (4734)     17806   - 8.56 +0.54  + 47.9 - 2.3
1992 04 28    13 28.41   -09 54.3    1.894    2.882   166.0     4.8    18.1

1992 04 08    13 45.37   -08 05.2    2.136    3.129   170.8     2.9    17.2
- 7.43 -0.25  + 41.7 + 0.7   1990 YE     17829   - 6.93 +0.49  + 35.8 - 3.5
1992 04 28    13 30.26   -06 43.4    2.178    3.162   165.1     4.7    17.4

1992 04 08    13 45.49   -06 10.8    2.152    3.145   170.7     2.9    17.0
- 7.43 -0.32  + 48.4 + 0.3    (4727)     17804   - 7.18 +0.43  + 40.5 - 4.2
1992 04 28    13 30.14   -04 37.4    2.157    3.137   163.9     5.1    17.1

1992 04 08    13 49.34   -16 04.8    1.033    2.021   166.6     6.6    15.6
- 9.41 -0.87  + 10.1 + 7.5   1989 NO     15071   - 9.68 +0.75  + 28.8 + 1.2
1992 04 28    13 28.63   -15 19.6    1.000    1.993   166.9     6.6    15.5

1992 04 08    13 48.69   -16 20.8    1.271    2.257   166.6     5.9    16.2
- 8.56 -0.68  + 58.1 + 8.1   1989 OA     15072   - 8.65 +0.64  + 75.2 - 0.2
1992 04 28    13 30.16   -13 59.2    1.234    2.227   167.2     5.7    16.1

1992 04 08    13 48.89   -12 56.9    1.794    2.783   168.5     4.1    16.0
- 7.58 -0.44  + 49.9 + 3.9   1991 BO     17968   - 7.49 +0.48  + 54.6 - 1.8
1992 04 28    13 32.90   -11 06.7    1.778    2.769   167.4     4.5    16.0

1992 04 08    13 48.24   -09 32.3    2.536    3.526   169.9     2.9    17.6
- 7.04 -0.32  + 36.7 + 1.5   1988 SW2    18115   - 7.01 +0.33  + 35.6 - 2.1
1992 04 28    13 33.54   -08 16.4    2.516    3.503   166.6     3.8    17.6
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1992 04 08    13 51.43   -08 28.6    1.646    2.637   169.3     4.1    18.1
- 8.74 -0.59  + 61.0 + 2.7   1989 RD2    15255   - 9.01 +0.46  + 58.5 - 4.0
1992 04 28    13 32.63   -06 22.5    1.605    2.592   165.4     5.6    18.0

1992 04 08    13 52.85   -05 02.7    1.478    2.468   168.7     4.6    16.7
- 9.50 -0.53  + 57.2 - 0.2   1990 VB15   19505   - 9.28 +0.63  + 43.1 - 6.7
1992 04 28    13 32.90   -03 15.9    1.487    2.469   163.5     6.6    16.8

1992 04 08    13 53.38   -14 47.5    1.581    2.566   166.6     5.2    17.3
-10.00 -0.51  + 33.8 + 5.0   1990 TS     17217   - 9.70 +0.64  + 43.0 - 0.7
1992 04 28    13 32.53   -13 24.9    1.591    2.584   167.8     4.7    17.3

1992 04 08    13 53.18   -05 25.6    1.740    2.729   168.7     4.1    17.8
- 8.83 -0.53  + 70.1 + 0.8   1986 RR2    11349   - 8.96 +0.47  + 60.1 - 5.7
1992 04 28    13 34.40   -03 08.8    1.719    2.701   163.7     6.0    17.8

1992 04 08    13 54.95   -16 41.4    1.088    2.072   165.2     7.1    15.9
-10.15 -0.77    +1.2 + 7.4   2272 T-2    18133   -10.01 +0.83  + 20.4 + 1.6
1992 04 28    13 33.21   -16 14.0    1.091    2.087   167.9     5.8    15.8

1992 04 08    13 54.12   -03 43.1    1.500    2.488   168.1     4.8    17.5
- 9.43 -0.55  + 62.2 - 0.8   1990 VG3    17460   - 9.32 +0.60  + 45.3 - 7.4
1992 04 28    13 34.21   -01 49.0    1.504    2.484   162.8     6.9    17.6

1992 04 08    13 53.63   -13 01.6    1.347    2.334   167.5     5.3    18.4
- 8.08 -0.66  + 75.5 + 6.0   1981 EE14   15241   - 8.30 +0.55  + 82.8 - 2.7
1992 04 28    13 36.05   -10 14.6    1.316    2.310   167.9     5.2    18.3

1992 04 08    13 55.50   -09 18.4    1.922    2.910   168.2     4.1    17.8
- 9.33 -0.49  + 33.7 + 1.8    (4895)     18612   - 9.39 +0.46  + 32.1 - 2.7
1992 04 28    13 35.83   -08 08.2    1.912    2.902   167.0     4.5    17.8

1992 04 08    13 55.77   -02 38.6    1.377    2.364   167.3     5.3    16.6
- 9.15 -0.55  + 64.6 - 1.9   1985 CA2    17203   - 8.90 +0.65  + 42.5 - 8.7
1992 04 28    13 36.52   -00 44.8    1.399    2.378   162.3     7.4    16.7

1992 04 08    13 55.62   -10 52.5    1.902    2.889   167.8     4.2    17.5
- 8.68 -0.59  + 37.2 + 3.0   1989 YT     16435   - 9.18 +0.35  + 40.2 - 1.7
1992 04 28    13 36.83   -09 30.4    1.845    2.837   167.8     4.3    17.4

1992 04 08    13 55.02   -14 11.0    2.312    3.294   166.6     4.0    17.3
- 6.30 -0.37  + 29.6 + 3.2   1984 DE1    12942   - 6.38 +0.32  + 35.1 - 0.5
1992 04 28    13 41.65   -13 02.6    2.302    3.298   169.9     3.1    17.2

1992 04 08    14 05.58   -41 31.7    1.236    2.126   143.5    16.3    17.0
-14.85 -1.60  - 77.6 +20.6   1982 ST     17432   -16.70 +0.77  + 11.7 +21.7
1992 04 28    13 31.67   -42 38.8    1.193    2.123   149.5    13.9    16.8

1992 04 08    13 56.03   -16 17.7    0.801    1.788   165.3     8.2    16.0
- 6.56 -0.93  + 39.8 + 9.5   1933 FE1    13477   - 6.94 +0.75  + 59.4 - 0.4
1992 04 28    13 40.84   -14 28.7    0.785    1.785   169.8     5.7    15.8

1992 04 08    13 58.43   -08 46.8    1.397    2.385   167.5     5.2    17.0
- 8.80 -0.79  + 41.7 + 2.6   1981 JE2    16230   - 9.56 +0.43  + 39.8 - 3.7
1992 04 28    13 38.84   -07 18.9    1.346    2.338   167.2     5.5    16.9

1992 04 08    13 59.55   -19 58.9    1.663    2.634   162.2     6.7    17.9
- 9.43 -0.57  + 38.1 + 7.6    (4680)     17606   - 9.46 +0.55  + 58.1 + 1.9
1992 04 28    13 39.54   -18 17.0    1.657    2.652   168.8     4.2    17.8
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1992 04 08    13 57.78   -13 12.7    1.986    2.968   166.5     4.5    17.3
- 7.61 -0.50  + 78.7 + 4.8   1985 VN      17203   - 7.93 +0.35  + 85.4 - 1.6
1992 04 28    13 41.39   -10 22.2    1.942    2.937   169.2     3.7    17.2

1992 04 08    13 59.63   -00 45.6    1.592    2.574   165.7     5.5    16.9
- 8.75 -0.61  + 48.5 - 2.4   1991 AO3     18125   - 9.07 +0.46  + 27.4 - 7.9
1992 04 28    13 40.74   +00 35.7    1.579    2.555   161.9     7.0    16.9

1992 04 08    13 58.26   -05 28.0    2.030    3.015   167.5     4.1    17.3
- 7.78 -0.44  + 41.6 - 0.1   1991 AA1     17832   - 7.89 +0.38  + 32.5 - 4.4
1992 04 28    13 41.77   -04 09.6    2.029    3.015   165.8     4.7    17.3

1992 04 08    13 59.83   -22 45.7    1.222    2.190   160.2     8.9    15.7
- 8.50 -0.76  + 44.4 +11.5   1988 BB4     14792   - 8.71 +0.65  + 76.6 + 3.7
1992 04 28    13 41.21   -20 37.0    1.207    2.202   168.2     5.4    15.6

1992 04 08    14 00.55   -25 00.2    1.759    2.715   158.3     7.8    16.5
- 8.93 -0.65  + 10.4 + 9.2   3523 P-L     15256   - 9.35 +0.45  + 41.0 + 5.4
1992 04 28    13 41.18   -24 04.9    1.725    2.713   166.1     5.1    16.3

1992 04 08    13 57.74   +04 12.6    2.091    3.064   163.2     5.4    16.0
- 6.90 -0.38  + 61.0 - 4.4   1990 YH      17829   - 6.89 +0.38  + 34.4 - 8.6
1992 04 28    13 43.19   +05 52.2    2.121    3.076   157.7     7.1    16.1

1992 04 08    14 00.95   -10 38.7    1.866    2.849   166.6     4.7    17.9
- 8.78 -0.59  + 40.6 + 2.8   1982 UR6     19860   - 9.23 +0.37  + 42.2 - 2.1
1992 04 28    13 41.99   -09 10.9    1.831    2.825   168.8     4.0    17.8

1992 04 08    14 01.36   -04 31.2    1.478    2.463   166.5     5.4    17.7
- 8.65 -0.56  + 70.4 - 0.6   1988 BT3     17821   - 8.65 +0.55  + 53.5 - 7.5
1992 04 28    13 42.95   -02 20.4    1.497    2.483   164.6     6.2    17.8

1992 04 08    14 01.14   -07 01.7    1.902    2.886   166.9     4.5    17.6
- 7.41 -0.51  + 44.6 + 0.9   7633 P-L      7374   - 7.74 +0.35  + 38.3 - 4.0
1992 04 28    13 45.13   -05 33.9    1.884    2.875   167.3     4.4    17.6

1992 04 08    14 04.46   -11 52.3    1.334    2.317   165.4     6.2    17.9
- 9.53 -0.72  + 32.2 + 3.7   3151 T-2     17653   - 9.80 +0.59  + 35.5 - 2.3
1992 04 28    13 43.82   -10 38.5    1.336    2.333   169.8     4.4    17.9

1992 04 08    14 05.29   -13 15.7    1.182    2.164   164.8     7.0    15.6
- 9.26 -1.06  + 13.9 + 5.0   1979 SA8     11430   -10.74 +0.38  + 24.3 - 0.3
1992 04 28    13 43.84   -12 32.2    1.117    2.117   170.4     4.6    15.3

1992 04 08    14 02.43   -13 28.9    1.067    2.052   165.3     7.1    15.1
- 7.10 -0.70  +118.1 + 6.4   1990 UH      17455   - 7.14 +0.66  +117.5 - 6.7
1992 04 28    13 46.83   -09 20.2    1.083    2.082   169.9     4.8    15.1

1992 04 08    14 01.78   -09 31.6    2.543    3.525   166.6     3.8    17.1
- 6.82 -0.41  + 36.6 + 1.6   1971 SN2     15401   - 7.18 +0.23  + 36.0 - 1.9
1992 04 28    13 47.14   -08 15.4    2.507    3.502   169.4     3.0    17.0

1992 04 08    14 06.27   -17 16.6    1.381    2.356   162.7     7.3    16.0
- 9.47 -0.74  + 33.6 + 7.0   1990 UW      17456   - 9.84 +0.56  + 50.3 + 0.8
1992 04 28    13 45.65   -15 46.6    1.375    2.374   170.9     3.8    15.8

1992 04 08    14 05.09   -11 00.5    1.264    2.248   165.5     6.4    18.3
- 8.62 -0.67  + 69.8 + 3.5   1979 ME8      5847   - 8.71 +0.61  + 67.1 - 4.9
1992 04 28    13 46.47   -08 35.2    1.282    2.279   169.5     4.6    18.2
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1992 04 08    14 04.62   -10 17.8    1.902    2.883   165.8     4.9    16.7
- 7.50 -0.53  + 34.3 + 2.1   1991 AC     17830   - 7.88 +0.34  + 34.0 - 2.3
1992 04 28    13 48.37   -09 05.0    1.889    2.886   170.1     3.4    16.6

1992 04 08    14 04.43   -00 08.6    2.373    3.348   164.3     4.6    16.2
- 6.99 -0.40  + 34.7 - 2.2    (4870)     18408   - 7.21 +0.29  + 18.8 - 5.5
1992 04 28    13 49.55   +00 48.1    2.384    3.359   162.9     5.1    16.2

1992 04 08    14 04.81   -00 08.7    2.136    3.112   164.2     5.0    15.6
- 7.45 -0.49  + 31.8 - 2.3    (4717)     17620   - 7.88 +0.28  + 14.9 - 6.0
1992 04 28    13 48.70   +00 41.6    2.118    3.095   162.9     5.5    15.6

1992 04 08    14 06.01   -07 59.4    2.047    3.028   165.7     4.7    17.3
- 8.32 -0.50  + 33.0 + 0.9   1981 SA7    14188   - 8.60 +0.35  + 28.7 - 3.1
1992 04 28    13 48.24   -06 53.7    2.046    3.041   168.8     3.7    17.2

1992 04 08    14 04.88   -05 02.8    1.047    2.033   165.8     7.0    15.7
- 6.62 -0.95  + 78.3 + 1.8   1988 EN     13153   - 7.80 +0.40  + 64.5 - 8.6
1992 04 28    13 49.10   -02 29.6    1.001    1.992   165.6     7.2    15.5

1992 04 08    14 04.76   -12 08.0    1.929    2.908   165.3     5.0    17.2
- 6.77 -0.55  + 39.3 + 3.2   1978 VJ8    17954   - 7.30 +0.29  + 43.0 - 1.5
1992 04 28    13 49.86   -10 41.1    1.895    2.894   171.2     3.0    17.0

1992 04 08    14 07.90   -14 46.8    1.299    2.277   163.6     7.1    17.4
- 8.34 -0.97  + 29.1 + 6.2   1981 JS2    16230   - 9.75 +0.32  + 43.5 + 0.5
1992 04 28    13 48.52   -13 28.6    1.231    2.232   171.7     3.8    17.0

1992 04 08    14 05.05   -12 47.6    2.670    3.646   165.0     4.1    18.3
- 6.84 -0.40  + 37.8 + 2.6   1978 TO8    12949   - 7.20 +0.22  + 41.6 - 0.8
1992 04 28    13 50.40   -11 24.8    2.639    3.638   171.6     2.3    18.2

1992 04 08    14 09.99   -00 17.8    1.436    2.412   163.1     6.9    16.5
- 9.51 -0.70  + 28.6 - 3.6   1983 WL     17434   - 9.88 +0.51   +4.5 - 8.1
1992 04 28    13 49.39   +00 19.8    1.448    2.430   163.3     6.8    16.5

1992 04 08    14 09.01   -20 06.5    1.451    2.418   160.5     8.0    16.9
- 8.55 -0.75  + 51.4 + 8.8   1983 WM     17434   - 9.10 +0.47  + 74.0 + 1.9
1992 04 28    13 50.14   -17 54.2    1.432    2.432   171.3     3.6    16.7

1992 04 08    14 10.63   -26 25.7    1.514    2.462   155.8     9.6    16.9
- 9.78 -0.82    +8.0 +11.1    (4705)     17615   -10.43 +0.50  + 45.5 + 6.8
1992 04 28    13 49.10   -25 28.0    1.496    2.485   166.2     5.5    16.7

1992 04 08    14 10.48   -05 19.0    1.577    2.556   164.4     6.0    17.9
- 9.11 -0.69  + 48.4   0.0   1980 XX     17429   - 9.69 +0.41  + 36.8 - 5.7
1992 04 28    13 50.58   -03 48.1    1.569    2.560   166.9     5.1    17.8

1992 04 08    14 07.55   -22 22.1    1.965    2.923   159.2     7.0    15.3
- 6.86 -0.59  + 44.2 + 7.8   1988 PK1    17823   - 7.50 +0.28  + 67.2 + 3.2
1992 04 28    13 52.31   -20 26.1    1.913    2.911   170.4     3.3    15.1

1992 04 08    14 11.37   -03 32.2    1.237    2.217   163.9     7.2    16.3
- 8.54 -0.80  + 52.9 - 1.4    (4689)     17609   - 9.13 +0.51  + 32.8 - 8.3
1992 04 28    13 52.40   -01 59.6    1.243    2.232   165.7     6.4    16.3

1992 04 08    14 09.73   -12 29.4    2.341    3.315   164.0     4.8    17.4
- 6.56 -0.48  + 58.2 + 3.2   1981 ES8    14187   - 7.08 +0.22  + 61.9 - 1.4
1992 04 28    13 55.41   -10 24.7    2.307    3.307   172.3     2.3    17.2
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1992 04 08    14 10.05   -09 11.1    1.828    2.806   164.6     5.4    16.0
- 6.48 -0.62  + 42.8 + 2.1    (4751)      17813   - 7.29 +0.23  + 41.3 - 2.9
1992 04 28    13 55.43   -07 42.0    1.784    2.782   170.7     3.4    15.8

1992 04 08    14 13.81   -05 05.2    2.061    3.035   163.6     5.4    17.6
- 8.55 -0.63  + 33.6   0.0   1939 VD     16227   - 9.40 +0.23  + 25.4 - 4.1
1992 04 28    13 55.00   -04 02.1    2.020    3.011   167.7     4.1    17.5

1992 04 08    14 11.73   -19 03.1    1.421    2.389   160.6     8.0    16.2
- 6.69 -0.85  + 81.1 +10.1   1989 UT2    15719   - 7.90 +0.28  +107.2 + 2.1
1992 04 28    13 56.01   -15 46.8    1.351    2.354   173.3     2.8    15.8

1992 04 08    14 13.75   -12 59.9    2.020    2.992   162.9     5.6    17.9
- 7.79 -0.64    +7.5 + 2.8   4854 T-1    19881   - 8.68 +0.21  + 13.1 - 0.2
1992 04 28    13 56.43   -12 36.3    1.976    2.978   173.4     2.2    17.6

1992 04 08    14 12.90   -11 43.2    2.370    3.342   163.5     4.9    16.8
- 7.15 -0.46  + 30.3 + 2.1   1990 YL     17830   - 7.56 +0.25  + 32.0 - 1.3
1992 04 28    13 57.49   -10 37.5    2.371    3.373   172.9     2.1    16.7

1992 04 08    14 17.01   -09 48.4    1.365    2.340   162.8     7.3    16.6
- 9.32 -0.95  - 20.1 + 1.1   1952 SW1    19288   -10.63 +0.34  - 20.4 - 1.4
1992 04 28    13 55.77   -10 26.4    1.335    2.337   172.4     3.3    16.3

1992 04 08    14 14.38   -09 53.8    1.786    2.760   163.5     5.9    16.7
- 6.63 -0.62  + 35.5 + 2.0   9508 P-L    19876   - 7.38 +0.26  + 34.2 - 2.7
1992 04 28    13 59.48   -08 39.5    1.769    2.770   172.0     2.9    16.5

1992 04 08    14 18.32   -17 33.1    1.673    2.637   160.1     7.4    17.8
- 8.47 -0.87  + 31.3 + 6.5   1982 QK3    13593   - 9.89 +0.20  + 49.3 + 2.0
1992 04 28    13 58.90   -16 08.1    1.604    2.607   173.9     2.3    17.4

1992 04 08    14 18.01   -05 29.4    1.327    2.302   162.6     7.5    17.5
- 8.37 -0.89  + 10.6 - 0.8   4327 T-3    13304   - 9.49 +0.35   -1.4 - 5.1
1992 04 28    13 58.91   -05 15.8    1.312    2.309   169.3     4.6    17.3

1992 04 08    14 27.00   -29 40.6    1.295    2.225   150.9    12.6    16.5
-14.04 -1.21  - 75.4 +14.4   1981 GP     13167   -15.13 +0.69  - 15.9 +13.8
1992 04 28    13 55.92   -31 11.2    1.320    2.298   161.9     7.8    16.5

1992 04 08    14 18.72   -07 52.9    1.500    2.474   162.5     7.0    16.4
- 8.20 -0.82  + 62.8 + 2.1   1988 BJ4    17634   - 9.31 +0.29  + 57.4 - 4.8
1992 04 28    14 00.10   -05 45.9    1.472    2.470   169.9     4.1    16.2

1992 04 08    14 19.77   -31 34.9    1.911    2.826   150.5    10.0    14.8
- 8.47 -0.93    -9.5 +10.4   1949 PN     17953   -10.15 +0.13  + 31.7 + 9.5
1992 04 28    14 00.10   -31 11.7    1.817    2.793   162.2     6.3    14.5

1992 04 08    14 20.20   -07 49.2    1.648    2.619   162.2     6.7    18.2
- 8.75 -0.84  + 41.0 + 1.6   1982 JE1    10938   -10.04 +0.22  + 37.0 - 3.7
1992 04 28    14 00.35   -06 25.9    1.602    2.600   170.5     3.7    17.9

1992 04 08    14 19.39   -03 51.7    1.508    2.480   162.0     7.2    17.9
- 7.79 -0.91  + 67.7 + 0.8   1978 NU3    11835   - 9.39 +0.15  + 56.0 - 6.6
1992 04 28    14 01.14   -01 40.7    1.443    2.433   166.4     5.6    17.7

1992 04 08    14 20.11   +28 55.7    1.576    2.430   139.9    15.4    16.8
- 8.07 -0.97  +121.4 -15.9   1989 NX     17824   - 9.66 +0.22  + 41.6 -22.8
1992 04 28    14 01.20   +31 45.6    1.567    2.378   133.8    17.8    16.8
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1992 04 08    14 19.33   -17 08.7    1.419    2.385   160.1     8.2    16.3
- 7.79 -0.82  + 47.9 + 6.7   1982 TP1     17200   - 8.73 +0.36  + 62.9 + 0.3
1992 04 28    14 01.62   -15 11.5    1.407    2.412   174.8     2.2    16.0

1992 04 08    14 17.25   -13 07.5    1.929    2.898   162.1     6.1    16.1
- 6.63 -0.60  + 37.4 + 3.2    (4779)      18092   - 7.37 +0.24  + 41.9 - 1.2
1992 04 28    14 02.42   -11 43.7    1.916    2.919   174.5     1.9    15.9

1992 04 08    14 19.43   -19 13.8    2.603    3.556   159.0     5.8    18.1
- 6.81 -0.54  + 20.1 + 4.5   9073 P-L     15571   - 7.69 +0.12  + 33.6 + 2.0
1992 04 28    14 04.27   -18 17.5    2.540    3.543   174.0     1.7    17.8

1992 04 08    14 19.63   +13 46.8    3.213    4.127   152.5     6.4    18.1
- 6.59 -0.40  + 42.3 - 5.3   1983 WF1      9687   - 7.17 +0.12  + 15.2 - 7.9
1992 04 28    14 05.35   +14 46.9    3.205    4.112   150.7     6.9    18.1

1992 04 08    14 23.14   -16 50.6    1.797    2.757   159.4     7.4    18.5
- 8.21 -0.85  + 30.7 + 5.7   1978 PX2      8797   - 9.70 +0.14  + 46.2 + 1.6
1992 04 28    14 04.24   -15 29.6    1.726    2.730   175.3     1.7    18.1

1992 04 08    14 24.10   -10 40.1    1.623    2.591   161.0     7.2    17.2
- 8.67 -0.86  + 38.1 + 2.9    (4692)      17610   - 9.99 +0.22  + 39.9 - 2.2
1992 04 28    14 04.36   -09 17.0    1.586    2.588   173.3     2.6    16.9

1992 04 08    14 23.79   +08 45.1    1.956    2.896   155.3     8.3    15.8
- 7.92 -0.70  + 49.9 - 6.0   1991 AJ1     17832   - 9.02 +0.17  + 15.8 -10.6
1992 04 28    14 05.98   +09 55.5    1.932    2.879   155.5     8.3    15.8

1992 04 08    14 21.92   -14 00.2    2.531    3.491   160.7     5.4    17.8
- 6.74 -0.50  + 30.4 + 2.8    (4778)      18092   - 7.44 +0.16  + 35.6 - 0.3
1992 04 28    14 07.09   -12 51.0    2.511    3.516   176.0     1.2    17.5

1992 04 08    14 24.18   -08 05.4    0.912    1.888   161.2     9.8    15.0
- 7.02 -1.33   -3.4 + 0.3   7637 P-L     18642   - 9.43 +0.21  - 11.7 - 4.5
1992 04 28    14 06.18   -08 15.6    0.868    1.872   172.8     3.9    14.6

1992 04 08    14 24.97   -18 18.0    1.869    2.824   158.3     7.5    17.7
- 8.18 -0.80  + 35.0 + 6.2   1986 XF1     17959   - 9.53 +0.16  + 52.3 + 2.0
1992 04 28    14 06.29   -16 46.6    1.810    2.815   175.3     1.7    17.2

1992 04 08    14 25.86   -22 11.9    1.431    2.382   156.1     9.8    16.9
- 8.15 -1.14  + 28.8 + 9.9   1986 TK1     15886   -10.42 +0.07  + 62.3 + 6.0
1992 04 28    14 06.08   -20 36.9    1.337    2.339   172.4     3.2    16.4

1992 04 08    14 38.34   -31 01.8    1.185    2.104   148.3    14.5    16.6
-13.57 -2.10  -126.3 +10.0   1987 SJ3     15888   -18.56 -0.18  - 67.1 +18.3
1992 04 28    14 04.29   -34 23.5    1.112    2.085   159.4     9.8    16.3

1992 04 08    14 22.21   -13 18.0    1.980    2.944   160.9     6.4    17.9
- 6.33 -0.69  + 35.7 + 3.6   3220 T-3     19883   - 7.54 +0.11  + 42.3 - 0.5
1992 04 28    14 07.53   -11 55.8    1.918    2.923   175.6     1.5    17.5

1992 04 08    14 25.33   -14 14.5    1.911    2.872   159.9     6.9    18.0
- 8.11 -0.73  + 44.6 + 4.3   1990 YQ      17650   - 9.23 +0.19  + 52.8 - 0.4
1992 04 28    14 07.07   -12 32.4    1.874    2.879   175.8     1.5    17.7

1992 04 08    14 27.10   -33 44.1    1.982    2.880   147.9    10.7    16.3
- 8.78 -1.00  - 22.8 +10.4    (4860)      18404   -10.76 +0.06  + 20.4 +10.4
1992 04 28    14 06.49   -33 46.5    1.890    2.858   160.1     6.9    16.0
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1992 04 08    14 34.59   -34 17.1    2.004    2.892   146.5    11.0    17.5
-11.37 -1.04  - 34.3 +11.2   1990 WZ2    18825   -13.17 +0.19  + 12.1 +11.1
1992 04 28    14 08.82   -34 39.2    1.963    2.927   159.3     7.0    17.3

1992 04 08    14 27.32   -11 22.2    1.465    2.431   160.1     8.1    17.3
- 7.05 -0.88  + 52.5 + 3.6   1136 T-2    17976   - 8.47 +0.20  + 54.6 - 2.7
1992 04 28    14 10.71   -09 28.7    1.439    2.443   174.4     2.3    17.0

1992 04 08    14 21.65   -09 25.7    4.558    5.518   161.7     3.3    17.3
- 4.34 -0.27  + 24.5 + 0.7   1973 SH1    17197   - 4.79 +0.05  + 23.9 - 1.0
1992 04 28    14 12.21   -08 35.6    4.521    5.523   173.8     1.1    17.2

1992 04 08    14 28.76   -28 48.9    2.166    3.082   151.3     9.0    16.7
- 7.14 -0.74  + 12.1 + 8.6   1991 AF1    17832   - 8.44 +0.12  + 43.2 + 6.4
1992 04 28    14 12.31   -27 51.3    2.108    3.095   166.1     4.5    16.5

1992 04 08    14 33.03   -12 26.8    1.893    2.849   158.5     7.4    18.2
- 8.09 -0.80  + 34.4 + 3.2   1986 TL4    11436   - 9.50 +0.12  + 39.3 - 1.0
1992 04 28    14 14.52   -11 08.8    1.854    2.860   176.3     1.3    17.8

1992 04 08    14 31.98   -06 50.1    1.327    2.291   159.2     8.9    17.5
- 7.16 -0.99  + 72.4 + 1.5   1981 EF30   17431   - 8.83 +0.19  + 62.6 - 6.4
1992 04 28    14 14.81   -04 27.2    1.307    2.306   170.1     4.3    17.3

1992 04 08    14 34.38   -15 40.3    1.441    2.396   157.3     9.3    18.3
- 7.91 -1.19  + 41.3 + 6.8   4116 P-L    14628   -10.60 -0.07  + 59.7 + 1.8
1992 04 28    14 14.75   -13 54.3    1.340    2.346   178.0     0.8    17.6

1992 04 08    14 30.88   -13 57.5    1.007    1.974   158.7    10.6    16.1
- 6.11 -1.20  + 87.0 + 7.6   1990 UF2    18823   - 8.16 +0.22  + 96.4 - 3.3
1992 04 28    14 15.18   -10 43.2    0.984    1.989   176.1     2.0    15.6

1992 04 08    14 26.85   -25 19.5    4.667    5.584   154.0     4.5    17.4
- 4.74 -0.32    +6.2 + 3.4    (5025)    19489   - 5.35 +0.03  + 18.2 + 2.4
1992 04 28    14 16.41   -24 54.1    4.596    5.588   169.2     1.9    17.2

1992 04 08    14 30.56   -12 40.8    1.850    2.808   159.1     7.3    15.2
- 5.97 -0.73  + 66.0 + 3.9   1010 T-2    15906   - 7.24 +0.11  + 70.4 - 1.9
1992 04 28    14 16.52   -10 18.7    1.817    2.822   175.8     1.5    14.8

1992 04 08    14 33.05   -18 47.7    2.167    3.110   156.4     7.4    16.4
- 7.26 -0.71    +0.8 + 4.5    (4716)    17619   - 8.53 +0.10  + 15.1 + 2.3
1992 04 28    14 16.45   -18 29.6    2.133    3.138   175.4     1.5    16.0

1992 04 08    14 33.73   -21 31.8    1.069    2.021   154.9    12.1    17.9
- 6.60 -1.37    +1.5 + 9.7   1981 ED14   10539   - 9.40 +0.05  + 35.1 + 6.2
1992 04 28    14 16.31   -20 51.7    1.011    2.014   173.2     3.4    17.4

1992 04 08    14 33.90   -28 39.4    2.249    3.160   150.6     9.0    16.6
- 7.37 -0.78    -6.1 + 7.8   1991 BH2    17969   - 8.87 +0.06  + 23.5 + 6.5
1992 04 28    14 16.81   -28 20.7    2.189    3.175   165.8     4.5    16.3

1992 04 08    14 37.04   -15 32.8    1.622    2.573   156.8     8.8    17.9
- 8.74 -1.00  + 22.5 + 4.9   6643 P-L    17651   -10.60 +0.11  + 35.1 + 1.0
1992 04 28    14 16.60   -14 31.3    1.577    2.583   178.5     0.6    17.4

1992 04 08    14 33.73   -13 21.9    2.216    3.168   158.1     6.8    18.2
- 7.27 -0.66  + 41.0 + 3.1   1985 QH5    14350   - 8.40 +0.11  + 46.2 - 0.7
1992 04 28    14 17.29   -11 50.8    2.187    3.194   177.3     0.9    17.9
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1992 04 08    14 36.64   -05 56.6    1.407    2.366   158.0     9.1    16.7
- 8.46 -0.80  +144.4 - 0.5   1988 EF     13054   - 9.29 +0.38  +119.9 -11.3
1992 04 28    14 17.71   -01 21.6    1.457    2.449   167.1     5.3    16.7

1992 04 08    14 35.49   -20 33.9    2.049    2.987   155.1     8.1    18.5
- 7.43 -0.81  + 21.7 + 6.0   1985 SX2    14194   - 9.01 +0.05  + 40.9 + 3.1
1992 04 28    14 18.19   -19 28.4    1.986    2.990   174.6     1.8    18.1

1992 04 08    14 36.73   -04 47.7    1.181    2.143   157.9    10.1    18.2
- 7.52 -1.16  +183.5 + 4.2   7082 P-L    17652   - 9.65 +0.15  +167.2 -12.4
1992 04 28    14 18.25   +01 19.5    1.156    2.143   164.4     7.2    18.0

1992 04 08    14 29.27   -19 37.4    4.867    5.800   156.8     3.9    18.1
- 4.16 -0.29  + 33.5 + 2.6   1987 YU1    16428   - 4.71 +0.02  + 40.9 + 1.0
1992 04 28    14 20.09   -18 21.4    4.798    5.803   175.8     0.7    17.8

1992 04 08    14 34.52   +04 03.6    2.500    3.437   155.7     6.9    15.5
- 6.45 -0.59  + 36.9 - 3.3   1991 CC     17969   - 7.54 +0.05  + 16.5 - 6.7
1992 04 28    14 19.89   +05 00.4    2.473    3.439   160.8     5.5    15.4

1992 04 08    14 33.68   -09 45.3    1.868    2.824   158.8     7.4    17.1
- 5.60 -0.77  + 52.9 + 2.5   2570 P-L    12698   - 7.13 +0.03  + 52.9 - 2.6
1992 04 28    14 20.15   -07 54.3    1.814    2.817   173.7     2.3    16.8

1992 04 08    14 36.46   -11 47.3    1.133    2.094   157.8    10.4    17.5
- 5.94 -1.33  + 52.7 + 5.9   1981 EO20   16228   - 9.07 -0.14  + 62.7 - 1.5
1992 04 28    14 20.26   -09 44.6    1.042    2.047   175.5     2.2    16.9

1992 04 08    14 37.03   -09 29.5    2.081    3.033   158.0     7.1    17.3
- 6.94 -0.75  + 46.1 + 2.1   1991 AD2    18125   - 8.46 +0.03  + 46.0 - 2.3
1992 04 28    14 20.85   -07 53.0    2.026    3.028   173.7     2.1    17.0

1992 04 08    14 30.49   -14 27.9    4.279    5.224   158.6     4.0    17.1
- 4.25 -0.33  + 27.6 + 1.8   1973 SQ1    14343   - 4.90 +0.01  + 31.4 + 0.1
1992 04 28    14 21.00   -13 27.1    4.214    5.221   179.1     0.2    16.8

1992 04 08    14 38.39   -18 50.6    1.042    1.996   155.2    12.1    18.3
- 6.47 -1.33  + 25.9 + 8.7   1981 EO11   10761   - 9.03 +0.12  + 50.6 + 2.9
1992 04 28    14 21.45   -17 28.2    1.011    2.017   176.7     1.6    17.8

1992 04 08    14 38.83   -35 05.3    2.498    3.369   145.3     9.7    16.3
- 7.31 -0.83  - 19.1 + 8.6   1991 BY     17968   - 9.08 -0.02  + 16.3 + 8.6
1992 04 28    14 21.64   -35 08.0    2.416    3.376   159.1     6.1    16.0

1992 04 08    14 39.54   -20 49.5    2.048    2.981   154.1     8.4    17.4
- 7.14 -0.87  + 16.6 + 6.0   1989 TB11   16236   - 9.02 -0.03  + 36.5 + 3.5
1992 04 28    14 22.55   -19 53.9    1.965    2.968   174.3     1.9    17.0

1992 04 28    14 23.83   -11 18.5    1.393    2.399   177.1     1.2    15.7
- 9.27 -0.04  + 26.2 - 1.0    (4753)     17813   - 4.79 +1.31   +0.6 - 6.6
1992 05 28    14 00.26   -10 28.0    1.490    2.389   144.6    14.2    16.5

1992 04 28    14 24.62   -14 39.5    2.163    3.169   179.4     0.2    17.2
- 7.84 +0.05  + 37.3 + 0.5   1991 BM2    18436   - 4.55 +0.92  + 23.6 - 4.5
1992 05 28    14 04.44   -12 58.9    2.324    3.217   146.4    10.0    18.0

1992 04 28    14 25.19   -13 15.2    2.601    3.608   178.9     0.3    16.9
- 7.15 -0.02  + 45.2 + 0.3   1983 XG     13675   - 4.69 +0.76  + 31.5 - 4.4
1992 05 28    14 06.00   -11 11.5    2.699    3.586   146.2     9.1    17.5
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1992 04 28    14 26.78   -33 39.5    1.835    2.804   160.5     6.9    17.1
- 9.94 -0.01  + 46.6 +10.4   1987 BS1     17959   - 5.52 +1.26  + 78.0 - 0.6
1992 05 28    14 01.25   -30 12.3    1.923    2.831   147.6    11.1    17.4

1992 04 28    14 26.97   -13 49.8    2.654    3.661   178.9     0.3    17.2
- 7.46 -0.03  + 33.0 + 0.4   1988 RD5     18290   - 5.05 +0.75  + 22.1 - 3.8
1992 05 28    14 06.76   -12 19.5    2.755    3.645   146.7     8.8    17.8

1992 04 28    14 27.72   -19 46.6    2.582    3.585   174.3     1.6    17.0
- 7.65 -0.04  + 33.0 + 2.6   1980 FR1     19291   - 5.09 +0.80  + 32.8 - 2.6
1992 05 28    14 07.08   -17 58.3    2.679    3.582   148.4     8.5    17.5

1992 04 28    14 28.44   -14 27.3    4.282    5.288   178.6     0.3    17.3
- 5.25 -0.02  + 15.8 + 0.3   1973 SR1     16421   - 3.86 +0.45  + 10.5 - 1.9
1992 05 28    14 13.91   -13 43.8    4.404    5.297   148.9     5.7    17.8

1992 04 28    14 30.61   -24 58.2    2.386    3.380   169.1     3.2    16.5
- 7.50 -0.02  + 63.1 + 4.8    (4840)      18276   - 4.63 +0.86  + 68.8 - 2.8
1992 05 28    14 10.79   -21 26.3    2.486    3.401   149.8     8.6    16.8

1992 04 28    14 31.20   -20 04.0    1.253    2.257   173.8     2.8    16.0
-10.49 -0.20   -0.7 + 4.9   1988 GS      13598   - 5.83 +1.50   +6.2 - 2.8
1992 05 28    14 03.58   -19 41.5    1.327    2.251   147.9    13.8    16.7

1992 04 28    14 32.95   -13 19.2    1.137    2.144   177.4     1.2    15.6
- 9.41 -0.09  + 25.2   0.0   1988 EB1     13161   - 4.46 +1.46   +2.3 - 6.7
1992 05 28    14 09.30   -12 25.5    1.250    2.173   147.4    14.6    16.5

1992 04 28    14 33.23   -05 32.7    1.456    2.456   171.0     3.7    16.2
- 9.70 -0.05  + 51.4 - 4.7    (4703)      17615   - 5.47 +1.24   +5.3 - 9.2
1992 05 28    14 08.08   -03 59.4    1.588    2.476   143.4    14.1    16.9

1992 04 28    14 33.81   -25 25.1    2.482    3.474   168.5     3.3    17.0
- 9.05 -0.13  + 27.4 + 5.1   1989 TH1     15422   - 6.48 +0.88  + 41.2 - 0.9
1992 05 28    14 08.66   -23 31.0    2.538    3.450   149.5     8.6    17.3

1992 04 28    14 34.09   -05 13.5    1.734    2.732   170.6     3.4    17.9
- 8.10 -0.15  + 71.4 - 3.4   1980 RE1     16576   - 5.10 +1.02  + 28.9 - 9.4
1992 05 28    14 12.15   -02 32.0    1.805    2.688   143.4    13.0    18.4

1992 04 28    14 34.28   -01 58.4    1.860    2.851   167.5     4.4    16.1
- 7.97 -0.03  + 69.7 - 5.8    (4695)      17611   - 4.72 +0.96  + 19.3 - 9.5
1992 05 28    14 13.44   +00 21.7    2.019    2.886   142.0    12.5    16.7

1992 04 28    14 34.18   -02 19.0    1.720    2.713   167.8     4.5    17.7
- 8.26 -0.23  + 54.5 - 4.6   1978 NN1      8148   - 5.58 +1.02   +7.7 - 9.7
1992 05 28    14 11.12   -00 36.4    1.746    2.621   142.1    13.7    18.1

1992 04 28    14 35.56   -27 15.8    1.938    2.926   166.6     4.6    17.0
- 8.44 -0.14  + 35.4 + 6.8   5200 T-2     17978   - 5.27 +1.04  + 53.3 - 1.3
1992 05 28    14 12.82   -24 47.6    2.007    2.932   150.5     9.8    17.3

1992 04 28    14 36.67   -17 08.7    1.328    2.333   175.5     1.9    15.7
- 9.81 -0.19  + 60.7 + 3.2   1983 TN1     13170   - 5.60 +1.36  + 47.2 - 7.0
1992 05 28    14 10.71   -14 08.0    1.405    2.329   148.2    13.2    16.3

1992 04 28    14 37.65   -13 24.3    1.890    2.896   176.3     1.3    16.4
- 7.96 -0.15  + 43.7 + 0.5   1989 VR      15720   - 5.17 +0.96  + 27.0 - 5.5
1992 05 28    14 15.93   -11 27.4    1.970    2.883   148.5    10.6    16.9
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1992 04 28    14 38.55   -11 20.4    1.741    2.745   175.2     1.8    17.4
- 9.39 -0.10  + 48.4 - 0.8   1990 WS2    17647   - 5.92 +1.08  + 23.5 - 6.6
1992 05 28    14 13.41   -09 21.8    1.867    2.773   147.1    11.5    18.1

1992 04 28    14 38.30   -17 44.5    1.521    2.525   174.9     2.0    16.7
- 8.93 -0.35  + 82.4 + 5.2   1988 KC     13452   - 6.06 +1.17  + 77.9 - 6.5
1992 05 28    14 13.00   -13 22.4    1.501    2.424   148.5    12.6    17.1

1992 04 28    14 37.93   -15 14.3    1.736    2.741   176.2     1.4    16.0
- 7.78 -0.14  + 35.4 + 1.2    (4831)     18273   - 4.72 +1.02  + 22.6 - 4.9
1992 05 28    14 17.05   -13 36.1    1.832    2.754   149.5    10.8    16.6

1992 04 28    14 38.98   -19 38.0    1.396    2.399   173.3     2.8    17.4
-10.37 -0.35  + 38.0 + 5.1   1979 QT8    15877   - 6.83 +1.35  + 40.2 - 4.4
1992 05 28    14 10.05   -17 23.1    1.421    2.349   149.0    12.9    17.9

1992 04 28    14 40.27   -22 43.0    1.431    2.429   170.5     3.9    16.7
-10.71 -0.33  + 27.5 + 6.6    (4787)     18096   - 7.02 +1.36  + 40.3 - 2.8
1992 05 28    14 10.54   -20 43.9    1.471    2.401   149.7    12.3    17.1

1992 04 28    14 40.38   -12 36.9    2.675    3.680   175.4     1.2    17.9
- 7.46 -0.11  + 31.6   0.0   1989 WU2    16878   - 5.46 +0.70  + 19.2 - 3.8
1992 05 28    14 19.51   -11 13.7    2.774    3.682   149.2     8.1    18.4

1992 04 28    14 40.93   -01 15.7    1.198    2.190   166.3     6.2    17.4
- 8.67 -0.20  + 41.8 - 8.3   1984 CP     12800   - 4.67 +1.30  - 22.4 -11.0
1992 05 28    14 18.14   -00 41.6    1.301    2.201   143.6    15.9    17.9

1992 04 28    14 40.72   -16 18.0    2.019    3.024   175.2     1.6    18.1
- 7.74 -0.12  + 45.8 + 1.5   1981 GD1    12126   - 5.01 +0.90  + 35.3 - 4.6
1992 05 28    14 19.70   -14 05.1    2.131    3.053   150.3     9.5    18.7

1992 04 28    14 42.36   -21 10.6    1.425    2.425   171.6     3.5    18.0
-10.18 -0.16  + 43.5 + 5.1   1981 EK10   17627   - 6.00 +1.32  + 44.7 - 4.5
1992 05 28    14 15.36   -18 40.6    1.536    2.469   150.5    11.7    18.6

1992 04 28    14 40.69   -18 56.6    4.366    5.367   173.6     1.2    17.0
- 4.96 -0.06  + 27.3 + 1.3   1989 AU1    18816   - 3.81 +0.41  + 26.7 - 1.4
1992 05 28    14 26.65   -17 30.7    4.463    5.385   152.8     4.9    17.3

1992 04 28    14 41.12   -28 06.7    4.363    5.344   165.4     2.7    17.1
- 5.33 -0.08  + 26.2 + 3.3   1986 TR6    15067   - 4.11 +0.45  + 36.9 + 0.1
1992 05 28    14 26.00   -26 26.3    4.423    5.348   153.4     4.9    17.3

1992 04 28    14 45.20   -06 09.1    3.909    4.905   170.2     2.0    17.2
- 5.49 -0.10    +9.8 - 1.6   1989 BB1    18631   - 4.40 +0.43   -5.6 - 3.2
1992 05 28    14 29.38   -05 59.8    3.997    4.893   148.9     6.1    17.4

1992 04 28    14 47.13   -11 15.3    1.825    2.828   173.4     2.4    16.8
- 8.10 -0.23  + 38.1 - 0.7   6555 P-L    15727   - 5.59 +0.94  + 16.6 - 5.9
1992 05 28    14 24.45   -09 43.6    1.908    2.830   149.7    10.4    17.3

1992 04 28    14 48.26   -18 10.0    1.017    2.020   172.7     3.6    14.3
- 8.57 -0.36  + 81.4 + 4.5   1990 VE2    17644   - 4.44 +1.46  + 63.7 - 9.2
1992 05 28    14 25.38   -14 06.7    1.088    2.037   151.6    13.7    14.9

1992 04 28    14 49.89   -17 22.2    1.426    2.428   172.8     3.0    17.0
-10.61 -0.27  + 20.0 + 2.8   1981 CB1     8683   - 6.90 +1.29  + 15.8 - 4.1
1992 05 28    14 20.74   -16 15.6    1.534    2.471   151.2    11.4    17.6
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1992 04 28    14 49.36   +02 28.0    2.028    3.002   162.1     5.9    15.9
- 8.94 -0.20  + 20.5 - 6.8   1988 JV     15251   - 6.51 +0.89  - 27.3 - 8.0
1992 05 28    14 24.17   +02 19.7    2.140    3.011   142.9    11.7    16.3

1992 04 28    14 51.15   -22 43.3    2.394    3.388   169.1     3.2    17.6
- 8.07 -0.18  + 27.8 + 3.8   1978 TP6    12325   - 5.93 +0.80  + 35.1 - 1.6
1992 05 28    14 28.35   -20 59.0    2.496    3.435   153.8     7.5    17.9

1992 04 28    14 52.08   -18 14.1    1.719    2.720   171.9     3.0    17.2
- 9.12 -0.39  + 30.6 + 3.3   9540 P-L    18831   - 6.86 +1.03  + 30.0 - 3.5
1992 05 28    14 25.50   -16 30.5    1.745    2.684   152.3    10.1    17.5

1992 04 28    14 53.42   -19 39.5    1.599    2.598   170.9     3.5    15.6
- 9.30 -0.32  + 58.5 + 4.3   1990 XE     17648   - 6.44 +1.11  + 56.0 - 4.9
1992 05 28    14 27.16   -16 30.7    1.668    2.610   152.7    10.3    16.1

1992 04 28    14 55.85   -18 35.8    1.272    2.272   170.9     4.0    17.2
-10.21 -0.70  + 19.1 + 4.4   1981 ED37   16229   - 8.06 +1.30  + 22.8 - 3.7
1992 05 28    14 24.72   -17 18.0    1.248    2.197   152.4    12.4    17.4

1992 04 28    14 57.37   -28 38.8    1.468    2.450   163.5     6.7    17.3
-10.95 -0.43  + 31.3 + 9.7   1983 RM3    12964   - 7.59 +1.34  + 61.6 - 0.7
1992 05 28    14 26.28   -26 00.0    1.532    2.481   153.5    10.5    17.6

1992 04 28    14 55.33   -17 58.3    2.219    3.218   171.3     2.7    18.1
- 8.14 -0.24  + 34.3 + 2.2   1989 SL12   18118   - 6.14 +0.81  + 31.4 - 3.1
1992 05 28    14 31.99   -16 10.0    2.308    3.248   153.7     7.9    18.4

1992 04 28    14 56.22   -16 42.5    1.491    2.491   171.6     3.4    17.2
- 9.12 -0.50  + 62.6 + 3.6   1971 UK     10938   - 6.92 +1.11  + 54.8 - 6.1
1992 05 28    14 29.20   -13 28.4    1.495    2.438   152.3    11.2    17.5

1992 04 28    14 55.97   -04 00.6    2.318    3.307   166.9     3.9    16.2
- 7.75 -0.26  + 24.7 - 3.4   (4749)      17812   - 6.15 +0.72   -5.8 - 6.1
1992 05 28    14 33.31   -03 27.4    2.390    3.295   148.3     9.3    16.5

1992 04 28    14 56.72   -11 59.6    1.853    2.852   171.4     3.0    15.9
- 7.98 -0.31  + 36.7 - 0.3   1991 AX1    18635   - 5.94 +0.89  + 17.9 - 5.5
1992 05 28    14 33.63   -10 28.1    1.924    2.859   152.1     9.6    16.3

1992 04 28    14 56.80   -17 26.6    1.898    2.897   171.2     3.0    16.5
- 7.57 -0.34  + 26.4 + 2.3   1980 FB     10830   - 5.73 +0.86  + 23.2 - 3.3
1992 05 28    14 34.64   -16 02.0    1.942    2.889   154.3     8.7    16.8

1992 04 28    14 58.07   -04 18.7    1.763    2.753   166.8     4.8    16.3
- 9.07 -0.27  + 27.9 - 4.4   1942 CG     17622   - 6.58 +0.97  - 10.2 - 7.2
1992 05 28    14 32.30   -03 46.9    1.881    2.794   148.3    11.0    16.8

1992 04 28    14 55.10   -17 49.7    4.589    5.586   171.4     1.5    17.8
- 4.99 -0.13  + 16.3 + 1.0   (5012)      19288   - 4.26 +0.35  + 15.9 - 1.1
1992 05 28    14 40.34   -16 57.4    4.634    5.575   155.9     4.3    18.0

1992 04 28    14 55.23   -07 29.2    4.394    5.387   169.6     1.9    16.6
- 4.69 -0.12  + 29.1 - 1.1   (4902)      18615   - 3.93 +0.35  + 15.6 - 3.2
1992 05 28    14 41.44   -06 18.5    4.480    5.393   151.6     5.1    16.8

1992 04 28    14 58.93   -21 35.0    1.111    2.107   168.7     5.4    18.3
- 8.70 -0.59  + 53.5 + 7.1   1981 ER15   10539   - 5.78 +1.37  + 60.0 - 5.2
1992 05 28    14 33.58   -18 21.9    1.139    2.100   154.6    11.9    18.6
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1992 04 28    14 58.99   -20 52.4    1.912    2.907   169.1     3.8    17.2
- 8.41 -0.36  + 35.9 + 4.1   1950 DO      18279   - 6.48 +0.91  + 41.1 - 2.6
1992 05 28    14 34.31   -18 44.6    1.953    2.903   154.9     8.5    17.5

1992 04 28    14 59.05   -24 33.9    2.134    3.122   166.6     4.3    16.7
- 8.67 -0.41    -2.0 + 4.9    (4813)      18266   - 7.17 +0.84  + 15.8 + 0.4
1992 05 28    14 32.98   -24 04.9    2.147    3.095   155.1     7.9    16.9

1992 04 28    15 00.59   -00 59.6    1.282    2.267   163.8     7.1    15.3
- 9.19 -0.41  + 34.3 - 7.9   1966 CF      13055   - 6.29 +1.19  - 26.2 -10.4
1992 05 28    14 34.42   -00 43.1    1.377    2.294   146.8    14.0    15.8

1992 04 28    15 00.28   -31 19.0    2.184    3.153   160.8     6.0    17.2
- 8.84 -0.44    +7.2 + 7.6    (4991)      19279   - 7.29 +0.88  + 40.0 + 2.2
1992 05 28    14 33.67   -29 58.1    2.180    3.126   154.5     8.0    17.2

1992 04 28    15 02.82   -19 31.8    1.858    2.853   169.0     3.8    18.2
- 9.62 -0.39  + 36.2 + 3.7   1991 AP1     17967   - 7.55 +0.97  + 38.4 - 3.1
1992 05 28    14 34.54   -17 27.4    1.915    2.865   154.7     8.7    18.5

1992 04 28    15 03.21   -04 23.5    2.028    3.015   166.0     4.6    17.8
- 9.06 -0.39  + 17.3 - 3.6   1989 SA      15420   - 7.57 +0.82  - 14.9 - 6.4
1992 05 28    14 36.04   -04 14.8    2.071    2.988   149.3    10.0    18.1

1992 04 28    15 02.28   -14 25.1    2.619    3.615   170.4     2.7    17.7
- 7.38 -0.29  + 30.3 + 0.8   1983 TS1     14191   - 6.23 +0.62  + 22.8 - 3.2
1992 05 28    14 40.18   -12 58.0    2.654    3.595   154.6     7.0    17.9

1992 04 28    15 09.78   -62 00.1    2.338    3.098     +1.76    -2.1   18.1
-15.58 -0.93  - 11.8 +18.1   1991 AS1     18436  -11.83 +1.87  + 87.1 +11.8
1992 05 28    14 23.46   -59 55.5    2.316    3.129     +1.60    -4.6   18.1

1992 04 28    15 04.42   -22 28.7    1.809    2.800   167.1     4.6    18.2
- 9.49 -0.42  + 19.6 + 4.9   1990 YX      17966   - 7.41 +0.99  + 31.3 - 1.4
1992 05 28    14 36.46   -21 00.5    1.873    2.828   155.7     8.5    18.5

1992 04 28    15 04.36   -10 34.5    0.943    1.941   169.2     5.6    15.8
- 8.77 -0.71  + 52.2 - 1.4   1976 GR2     11341   - 6.00 +1.42  + 12.0 -10.4
1992 05 28    14 38.26   -08 41.6    0.982    1.937   152.2    14.1    16.2

1992 04 28    15 04.87   -10 20.6    1.497    2.492   169.0     4.4    16.8
- 9.24 -0.53  + 58.1 - 0.6    (4964)      19002   - 7.33 +1.05  + 29.6 - 8.1
1992 05 28    14 37.09   -07 55.1    1.529    2.468   151.6    11.3    17.2

1992 04 28    15 05.30   -00 45.0    1.597    2.577   162.9     6.6    15.1
- 9.24 -0.34  + 12.6 - 6.8   1940 GO      17423   - 6.79 +1.02  - 34.9 - 7.8
1992 05 28    14 38.76   -01 16.7    1.719    2.634   148.0    11.8    15.5

1992 04 28    15 06.00   -17 24.4    1.349    2.346   169.1     4.6    15.9
- 9.75 -0.48  + 26.4 + 2.8   1988 FB      13858   - 6.99 +1.21  + 21.3 - 4.4
1992 05 28    14 37.76   -15 59.5    1.439    2.397   155.0    10.3    16.3

1992 04 28    15 05.55   -04 39.5    1.277    2.267   165.8     6.3    16.4
- 8.26 -0.61  + 89.2 - 3.6    (4760)      17946   - 6.46 +1.10  + 33.7 -12.9
1992 05 28    14 40.32   -01 18.0    1.297    2.224   148.3    13.9    16.7

1992 04 28    15 05.29   +04 00.2    1.907    2.870   159.0     7.2    16.7
- 8.02 -0.44  + 52.1 - 7.1   1984 QF      13465   - 6.76 +0.79   -6.0 -10.7
1992 05 28    14 40.86   +05 16.0    1.934    2.816   143.7    12.3    16.9
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1992 04 28    15 07.97   -27 00.8    1.597    2.578     +1.57    +2.8  14.6
-10.00 -0.32  +110.4 + 8.2   1990 TZ     17965   - 6.87 +1.16  +117.9 - 5.7
1992 05 28    14 39.95   -20 52.2    1.696    2.657     +1.44    +1.1  14.9

1992 04 28    15 15.65   -57 21.1    1.124    1.974    135.7    20.9   16.3
-16.55 -2.03  - 49.4 +27.8   1989 CE2    17020   -13.03 +2.85  +116.2 +19.8
1992 05 28    14 22.10   -55 25.9    1.074    1.959    139.5    19.6   16.1

1992 04 28    15 06.14   -05 09.9    2.017    3.004    166.0     4.6   17.8
- 7.17 -0.35  + 55.8 - 3.1   3289 T-2    14969   - 5.76 +0.74  + 20.2 - 7.8
1992 05 28    14 44.75   -03 07.3    2.088    3.010    150.3     9.6   18.1

1992 04 28    15 08.56   -09 03.2    1.508    2.501    167.7     4.9   17.3
- 9.49 -0.47    +7.1 - 2.3   1983 AD     11619   - 7.29 +1.06  - 18.4 - 5.5
1992 05 28    14 40.57   -09 14.3    1.597    2.542    153.0    10.4   17.7

1992 04 28    15 09.23   -14 55.0    1.333    2.329    168.7     4.8   17.5
- 9.87 -0.76  + 47.8 + 2.7    (4781)     18093   - 8.45 +1.15  + 36.6 - 6.3
1992 05 28    14 38.23   -12 31.8    1.316    2.270    153.9    11.3   17.7

1992 04 28    15 15.51   -52 02.3    1.050    1.937    140.7    19.2   16.0
-13.91 -1.50  - 26.0 +26.6   1990 TN1    17453   -10.04 +2.38  +117.1 +14.7
1992 05 28    14 32.34   -49 23.2    1.043    1.960    144.8    17.3   16.0

1992 04 28    15 11.80   -37 14.2    1.308    2.259    154.5    11.1   18.0
-10.45 -0.93  - 36.2 +14.0   4100 P-L    19317   - 8.54 +1.43  + 37.2 + 7.4
1992 05 28    14 38.92   -37 00.3    1.319    2.269    153.0    11.7   18.1

1992 04 28    15 11.97   -27 12.4    1.242    2.223    162.7     7.8   16.2
-10.21 -0.71  + 26.5 + 9.7    (4670)     17419   - 7.69 +1.35  + 57.3 - 0.7
1992 05 28    14 41.31   -24 47.3    1.287    2.255    156.9    10.1   16.4

1992 04 28    15 10.47   -15 07.2    2.214    3.207    168.4     3.6   16.1
- 8.22 -0.35  +117.8 + 2.5   1989 VP     17208   - 6.83 +0.74  +102.6 - 7.1
1992 05 28    14 45.89   -09 18.8    2.256    3.199    154.1     7.9   16.4

1992 04 28    15 08.56   -42 49.0    4.693    5.585    149.7     5.2   17.0
- 6.14 -0.25    +2.8 + 5.6   1989 DJ     16432   - 5.54 +0.42  + 31.5 + 3.5
1992 05 28    14 49.81   -41 53.5    4.667    5.583    152.1     4.9   17.0

1992 04 28    15 12.66   -22 54.8    1.476    2.463    165.3     5.9   18.3
- 9.79 -0.78  + 33.5 + 6.8   1979 SK     11504   - 8.71 +1.08  + 52.5 - 1.6
1992 05 28    14 41.45   -20 30.2    1.439    2.404    156.8     9.6   18.3

1992 04 28    15 13.19   -12 50.5    1.387    2.381    167.7     5.2   17.9
- 8.92 -0.77  + 33.7 + 0.8   1989 TN     19025   - 8.04 +1.02  + 16.5 - 6.2
1992 05 28    14 44.43   -11 22.1    1.359    2.316    154.8    10.7   18.1

1992 04 28    15 13.88   -26 21.9    1.578    2.558    162.9     6.6   16.5
- 8.65 -0.53    +9.4 + 7.0   2086 T-2    15257   - 6.72 +1.04  + 33.4 + 0.2
1992 05 28    14 47.91   -25 05.1    1.658    2.627    158.4     8.2   16.8

1992 04 28    15 12.52   -15 28.4    2.043    3.035    167.9     4.0   17.8
- 7.56 -0.48  + 36.5 + 1.6   1041 T-2    15424   - 6.69 +0.72  + 29.8 - 3.8
1992 05 28    14 48.94   -13 39.0    2.043    3.001    156.8     7.7   18.0

1992 04 28    15 10.93   -34 28.9    4.373    5.315    157.0     4.2   17.7
- 5.65 -0.24    +9.2 + 4.4   5493 T-2    16884   - 5.16 +0.38  + 29.9 + 2.1
1992 05 28    14 53.57   -33 25.9    4.360    5.309    157.3     4.2   17.7
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1992 04 28    15 15.85   -29 32.9    1.162    2.137   160.4     9.1    17.3
- 8.97 -0.93  + 24.5 +11.6   1981 EX28   15242   - 7.45 +1.31  + 69.7 + 1.2
1992 05 28    14 47.07   -26 52.2    1.148    2.122   158.0    10.3    17.3

1992 04 28    15 17.04   -06 36.4    1.051    2.039   164.7     7.5    17.2
- 8.80 -1.01  + 48.6 - 3.2   1989 NH1    15254   - 8.17 +1.18   -0.9 -11.8
1992 05 28    14 47.53   -05 09.0    1.016    1.969   152.1    13.9    17.3

1992 04 28    15 16.93   -14 12.7    1.192    2.184   166.9     6.0    17.0
- 9.10 -0.92  + 46.3 + 2.2   1986 RF7    15413   - 8.26 +1.14  + 31.5 - 7.0
1992 05 28    14 47.10   -11 59.0    1.163    2.128   155.7    11.3    17.2

1992 04 28    15 15.95   -15 47.2    2.590    3.578   167.1     3.6    18.2
- 7.21 -0.39  + 30.7 + 1.3   1983 VN7    15411   - 6.60 +0.56  + 26.5 - 2.7
1992 05 28    14 53.48   -14 13.9    2.594    3.554   158.0     6.1    18.3

1992 04 28    15 19.92   -24 48.6    1.716    2.694   162.9     6.3    16.7
- 9.81 -0.77  + 15.1 + 6.4   1991 CK     17969   - 9.23 +0.92  + 39.2 + 0.4
1992 05 28    14 48.21   -23 16.1    1.678    2.647   158.5     8.0    16.7

1992 04 28    15 19.24   -30 05.7    2.481    3.442   159.5     5.9    16.5
- 8.85 -0.50  - 14.9 + 6.0   1991 CL3    18127   - 8.09 +0.70  + 14.4 + 2.8
1992 05 28    14 51.61   -30 00.5    2.512    3.474   158.2     6.2    16.6

1992 04 28    15 14.51   -08 40.5    4.496    5.479   166.2     2.5    17.7
- 4.54 -0.19  + 34.2 - 0.8   1973 SY     16693   - 4.20 +0.29  + 22.5 - 3.0
1992 05 28    15 00.52   -07 11.4    4.537    5.478   155.9     4.3    17.9

1992 04 28    15 19.49   +08 05.4    1.872    2.810   153.6     9.2    17.7
- 7.91 -0.59  + 57.2 - 8.7   1984 OA     14192   - 7.42 +0.72  - 12.0 -12.6
1992 05 28    14 54.09   +09 20.3    1.871    2.746   142.5    13.0    17.8

1992 04 28    15 15.50   -08 56.7    4.937    5.919   166.1     2.3    17.1
- 4.85 -0.18  + 10.3 - 0.8   1989 BW     18431   - 4.55 +0.26   +1.0 - 2.2
1992 05 28    15 00.60   -08 37.1    4.986    5.931   156.8     3.9    17.2

1992 04 28    15 20.55   -22 44.6    2.009    2.989   163.9     5.4    17.0
- 8.04 -0.56  + 29.3 + 4.7   1984 SG1    18109   - 7.35 +0.75  + 41.8 - 1.0
1992 05 28    14 55.04   -20 47.4    2.004    2.977   160.0     6.7    17.1

1992 04 28    15 19.12   -09 34.7    2.412    3.396   165.5     4.3    16.9
- 6.97 -0.39  + 34.4 - 1.1    (4907)     18616   - 6.26 +0.58  + 15.5 - 4.8
1992 05 28    14 57.48   -08 13.0    2.462    3.413   155.9     7.0    17.1

1992 04 28    15 21.08   -19 42.7    1.429    2.416   165.0     6.2    18.2
- 8.03 -0.74  + 40.2 + 4.5   6207 P-L    19318   - 7.11 +0.97  + 44.0 - 3.6
1992 05 28    14 55.23   -17 21.4    1.434    2.410   159.4     8.5    18.3

1992 04 28    15 16.80   -22 02.6    4.369    5.348   165.0     2.8    17.6
- 4.91 -0.21  + 23.3 + 1.9   1990 DK     18433   - 4.55 +0.32  + 28.0 - 0.5
1992 05 28    15 01.64   -20 41.3    4.393    5.364   161.5     3.4    17.7

1992 04 28    15 21.46   -19 55.8    1.442    2.428   164.9     6.2    16.3
- 7.76 -0.74  + 32.2 + 4.3   1987 DH6    17959   - 6.97 +0.94  + 37.5 - 3.0
1992 05 28    14 56.24   -17 57.6    1.442    2.419   159.8     8.3    16.4

1992 04 28    15 23.43   -22 24.1    1.072    2.058   163.5     8.0    15.7
- 8.81 -0.98  + 31.6 + 7.1    (4698)     17613   - 7.61 +1.26  + 47.6 - 2.8
1992 05 28    14 54.63   -20 06.7    1.083    2.065   159.8     9.7    15.8
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1992 04 28    15 25.12   -22 48.9    1.439    2.420   162.9     7.0    17.7
- 9.17 -0.99  + 36.5 + 7.0   1989 TE     15422   - 9.35 +0.94  + 58.8 - 1.0
1992 05 28    14 53.77   -20 11.0    1.356    2.333   159.6     8.7    17.6

1992 04 28    15 23.69   -16 17.0    2.273    3.256   165.2     4.5    16.2
- 7.18 -0.53  + 24.9 + 1.6   1988 UP     13862   - 7.01 +0.57  + 22.3 - 2.6
1992 05 28    15 00.36   -14 58.5    2.238    3.209   159.8     6.2    16.3

1992 04 28    15 23.42   -00 40.9    1.510    2.479   159.8     8.1    15.9
- 6.59 -0.66  + 76.8 - 5.5   1988 PR1    13681   - 6.11 +0.78  + 17.9 -12.3
1992 05 28    15 01.71   +01 53.7    1.523    2.452   149.7    12.1    16.1

1992 04 28    15 28.30   -22 01.9    1.067    2.050   162.6     8.5    15.9
- 8.49 -1.24  + 36.8 + 7.8    (4894)     18612   - 8.88 +1.13  + 58.6 - 2.2
1992 05 28    14 57.86   -19 20.1    0.997    1.982   160.5     9.8    15.7

1992 04 28    15 24.46   -01 33.3    2.070    3.037   160.2     6.4    17.0
- 6.46 -0.50  + 64.4 - 4.1   6766 P-L    12700   - 6.06 +0.59  + 21.8 - 9.0
1992 05 28    15 03.67   +00 45.1    2.098    3.024   150.9     9.4    17.1

1992 04 28    15 28.38   -05 22.3    0.994    1.975   161.6     9.3    15.2
- 8.46 -1.19  + 19.3 - 5.7    (4724)     17803   - 8.75 +1.11  - 36.8 -11.3
1992 05 28    14 58.29   -05 38.2    0.953    1.918   154.5    13.1    15.2

1992 04 28    15 23.59   -22 12.5    4.939    5.911   163.5     2.8    17.5
- 5.23 -0.24    -0.4 + 1.6    (5028)     19490   - 5.14 +0.26    +5.4 + 0.2
1992 05 28    15 07.13   -22 02.3    4.936    5.912   162.9     2.9    17.5

1992 04 28    15 24.46   -03 40.5    4.892    5.856   161.5     3.1    17.1
- 4.89 -0.21    +8.3 - 1.8   1986 VG1    18111   - 4.76 +0.24    -6.5 - 3.0
1992 05 28    15 09.15   -03 35.6    4.927    5.861   155.0     4.2    17.2

1992 04 28    15 29.79   -29 04.2    1.141    2.110   158.5    10.1    18.1
- 7.48 -1.21  + 53.6 +13.1   1985 RV     13170   - 8.04 +1.06  +108.4 + 2.1
1992 05 28    15 02.27   -24 40.6    1.040    2.028   161.7     9.0    17.7

1992 04 28    15 25.64   -00 32.6    4.932    5.885   159.3     3.5    16.8
- 4.98 -0.21    +7.3 - 2.3    (4834)     18274   - 4.85 +0.24  - 10.6 - 3.4
1992 05 28    15 10.07   -00 35.6    4.976    5.896   152.9     4.5    16.9

1992 04 28    15 31.18   -14 59.8    2.373    3.351   163.4     4.9    16.4
- 7.74 -0.54    +6.1 + 0.7    (4747)     17811   - 7.64 +0.55    +1.8 - 2.2
1992 05 28    15 06.08   -14 42.8    2.377    3.352   161.0     5.6    16.5

1992 04 28    15 26.40   +19 33.9    4.882    5.716   142.8     6.1    17.1
- 5.04 -0.22  + 15.9 - 5.7    (4833)     18273   - 4.88 +0.26  - 22.0 - 6.4
1992 05 28    15 10.64   +19 25.8    4.941    5.710   135.6     7.1    17.2

1992 04 28    15 33.52   -21 25.1    2.080    3.052   161.7     5.9    18.0
- 8.88 -0.73    +5.5 + 3.6   1981 SC7    10836   - 9.14 +0.64  + 18.0 - 0.1
1992 05 28    15 03.94   -20 43.2    2.034    3.015   162.1     5.9    17.9

1992 04 28    15 36.46   -13 50.8    1.149    2.130   162.1     8.3    16.5
- 8.73 -0.97  + 28.6 + 0.4   1985 HG1    13039   - 8.12 +1.07  + 10.7 - 6.0
1992 05 28    15 07.40   -12 40.0    1.191    2.173   160.4     9.0    16.7

1992 04 28    15 35.95   -29 24.1    2.140    3.094   157.3     7.2    16.6
- 8.42 -0.62  + 29.4 + 6.8   1971 TY2    17623   - 7.95 +0.72  + 56.6 + 1.2
1992 05 28    15 08.93   -27 04.8    2.166    3.148   162.7     5.5    16.6
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1992 04 28    15 34.40   -08 43.6    2.496    3.466   161.6     5.3    17.5
- 6.99 -0.45  + 47.4 - 1.3   1981 ET31   16577   - 6.73 +0.51  + 26.4 - 5.3
1992 05 28    15 12.05   -06 45.4    2.548    3.508   157.8     6.3    17.6

1992 04 28    15 39.95   -23 17.5    2.005    2.970   159.6     6.8    17.9
- 7.82 -0.83    -1.6 + 3.9   4136 T-2    14969   - 8.78 +0.55  + 15.8 + 1.0
1992 05 28    15 12.49   -22 50.8    1.917    2.905   164.1     5.5    17.7

1992 04 28    15 38.60   +06 40.4    2.212    3.136   151.9     8.7    16.6
- 7.23 -0.55  + 42.6 - 7.4   1991 CB     18126   - 7.16 +0.54  - 13.6 -10.0
1992 05 28    15 15.01   +07 28.5    2.262    3.160   146.8    10.1    16.7

1992 04 28    15 40.02   +04 26.0    1.458    2.401   153.3    10.9    14.7
- 6.99 -0.89  + 48.5 - 8.7   1991 AE     17831   - 7.58 +0.70  - 25.1 -13.7
1992 05 28    15 15.24   +05 10.2    1.440    2.366   148.9    12.8    14.7

1992 04 28    15 41.76   -21 53.8    1.369    2.339   159.7     8.6    16.1
- 7.96 -0.93  + 81.3 + 6.7   1986 TN1    18286   - 7.90 +0.90  + 89.0 - 4.8
1992 05 28    15 14.58   -17 17.1    1.373    2.363   163.8     6.9    16.1

1992 04 28    15 43.17   -21 06.7    1.078    2.052   159.7     9.8    16.5
- 7.91 -1.32    +4.9 + 5.0   1976 SA6    15875   - 9.07 +0.98  + 20.8 - 0.9
1992 05 28    15 13.40   -20 17.3    1.036    2.031   164.2     7.8    16.3

1992 04 28    15 45.00   -16 55.4    1.489    2.460   160.0     8.0    17.9
- 8.76 -1.05  + 23.4 + 2.5   1986 QN3    12127   - 9.77 +0.75  + 23.0 - 3.1
1992 05 28    15 13.86   -15 35.5    1.438    2.426   163.1     7.0    17.7

1992 04 28    15 42.98   -30 48.6    2.218    3.160   155.2     7.7    17.3
- 7.42 -0.70  + 17.1 + 6.7   1988 QP     13859   - 7.69 +0.59  + 48.2 + 2.6
1992 05 28    15 17.92   -29 02.9    2.199    3.185   163.9     5.1    17.2

1992 04 28    15 38.76   -25 05.8    4.197    5.150   159.1     4.0    17.5
- 5.19 -0.34    +1.7 + 2.3    (5041)     19659   - 5.44 +0.26  + 11.9 + 0.8
1992 05 28    15 21.73   -24 42.5    4.169    5.158   166.0     2.7    17.5

1992 04 28    15 43.18   -17 51.7    2.195    3.162   160.4     6.1    17.9
- 7.25 -0.66  + 39.6 + 2.4   1989 UL     18293   - 7.64 +0.52  + 40.0 - 2.5
1992 05 28    15 18.67   -15 43.1    2.170    3.158   164.2     5.0    17.8

1992 04 28    15 42.81   -03 37.9    2.177    3.132   157.6     7.0    17.5
- 6.89 -0.60  + 32.3 - 3.5   1979 YN     17955   - 7.16 +0.50    -1.1 - 6.9
1992 05 28    15 19.70   -02 45.0    2.193    3.146   156.1     7.5    17.5

1992 04 28    15 42.49   -22 11.9    1.835    2.800   159.5     7.2    16.6
- 6.68 -0.77  + 24.8 + 4.2   1978 VV9    17815   - 7.16 +0.61  + 36.7 - 0.8
1992 05 28    15 19.19   -20 30.4    1.812    2.805   165.6     5.2    16.5

1992 04 28    15 45.68   -20 04.5    1.477    2.445   159.4     8.3    16.5
- 7.62 -1.06  + 26.7 + 4.2    (4799)     18100   - 8.84 +0.70  + 36.7 - 1.8
1992 05 28    15 17.73   -18 18.3    1.410    2.403   164.8     6.3    16.2

1992 04 28    15 45.05   -09 07.2    1.976    2.940   159.2     7.0    15.9
- 7.50 -0.75  + 25.8 - 1.4    (4804)     18102   - 8.20 +0.53    +4.2 - 5.4
1992 05 28    15 19.16   -08 14.7    1.944    2.917   160.1     6.8    15.9

1992 04 28    15 48.75   -24 31.2    1.607    2.565   157.3     8.7    17.4
- 9.04 -1.06    -1.4 + 5.4    (4728)     17804  -10.08 +0.74  + 23.6 + 1.6
1992 05 28    15 16.72   -23 51.0    1.566    2.559   165.0     5.9    17.2
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1992 04 28    15 46.87   -15 44.6    2.015    2.979   159.6     6.8    16.9
- 6.96 -0.73  + 25.6 + 1.3   1989 VT1     15721   - 7.64 +0.51  + 20.9 - 3.0
1992 05 28    15 22.67   -14 27.2    1.988    2.977   164.5     5.2    16.8

1992 04 28    15 47.29   -17 02.4    2.452    3.413   159.5     5.9    18.1
- 6.54 -0.66  + 27.6 + 1.8   1971 UT1     13593   - 7.45 +0.38  + 27.8 - 1.9
1992 05 28    15 24.41   -15 32.4    2.368    3.359   165.4     4.4    17.9

1992 04 28    15 50.00   -23 07.5    1.719    2.677   157.5     8.3    16.7
- 7.65 -0.91  + 16.7 + 4.7   1991 AK      17967   - 8.48 +0.65  + 33.4   0.0
1992 05 28    15 22.92   -21 43.9    1.695    2.691   166.6     5.0    16.5

1992 04 28    15 50.90   -08 06.2    1.180    2.146   157.6    10.3    16.4
- 7.95 -1.10  + 24.9 - 3.5   1990 WB2     18435   - 8.53 +0.88  - 13.3 - 8.1
1992 05 28    15 22.54   -07 40.4    1.208    2.189   160.3     9.0    16.4

1992 04 28    15 53.62   -25 56.3    1.603    2.555   155.7     9.3    17.1
- 9.11 -1.06    +6.0 + 6.2   1986 QQ      17632  -10.05 +0.76  + 34.5 + 1.8
1992 05 28    15 21.49   -24 47.4    1.584    2.579   166.0     5.5    16.9

1992 04 28    15 54.03   -14 55.3    1.570    2.531   157.9     8.6    17.1
- 8.21 -1.01  + 49.6 + 1.9   1990 XP      17828   - 9.34 +0.65  + 40.8 - 5.0
1992 05 28    15 24.64   -12 26.8    1.537    2.526   163.8     6.4    16.9

1992 04 28    15 54.99   -14 01.3    1.347    2.311   157.7     9.5    17.1
- 7.95 -1.09  + 47.7 + 1.1   1979 MJ5     13455   - 9.00 +0.75  + 32.3 - 6.1
1992 05 28    15 26.14   -11 47.8    1.341    2.331   163.7     7.0    17.0

1992 04 28    15 47.68   -15 41.4    4.558    5.513   159.4     3.7    17.2
- 4.59 -0.31  + 10.5 + 0.4    (5123)      19842   - 4.96 +0.19    +8.4 - 1.1
1992 05 28    15 32.43   -15 10.4    4.540    5.532   166.9     2.4    17.2

1992 04 28    15 55.94   -09 29.3    1.512    2.469   156.7     9.3    16.9
- 8.19 -0.94  + 64.8 - 1.2    (4706)      17616   - 8.85 +0.70  + 33.6 - 8.4
1992 05 28    15 27.34   -06 48.6    1.536    2.514   160.5     7.8    16.9

1992 04 28    15 49.52   -30 29.9    4.376    5.301   154.2     4.7    17.7
- 4.89 -0.38    +9.7 + 3.3   1991 GX1     18440   - 5.38 +0.22  + 25.8 + 1.8
1992 05 28    15 33.02   -29 33.9    4.316    5.307   166.5     2.5    17.6

1992 04 28    15 50.03   -11 16.9    4.795    5.744   158.5     3.7    18.1
- 4.22 -0.29  + 23.7 - 0.3   1973 SO1     18280   - 4.61 +0.16  + 16.4 - 2.0
1992 05 28    15 35.95   -10 13.6    4.778    5.760   164.4     2.7    18.1

1992 04 28    16 03.28   -22 55.3    1.133    2.088   154.7    11.9    15.6
- 7.99 -1.47  - 16.0 + 4.7   1990 UF3     17458  -10.20 +0.82    +8.0 + 1.8
1992 05 28    15 31.74   -23 02.0    1.111    2.114   168.6     5.5    15.3

1992 04 28    16 04.73   -33 53.8    1.432    2.357   149.7    12.5    17.9
- 8.71 -1.32  + 10.2 +10.6   1988 DO      14355  -10.30 +0.83  + 66.6 + 5.6
1992 05 28    15 32.22   -31 49.4    1.408    2.402   165.0     6.3    17.6

1992 04 28    15 59.06   -20 10.3    2.003    2.952   156.3     7.9    17.0
- 6.74 -0.87  + 11.4 + 2.6   1989 XM      15898   - 8.21 +0.42  + 19.1 - 0.6
1992 05 28    15 34.26   -19 18.8    1.942    2.942   168.9     3.8    16.7

1992 04 28    16 02.48   -27 06.3    2.108    3.042   153.4     8.5    17.6
- 7.68 -0.98  + 20.4 + 5.8   1989 YB      15899   - 9.70 +0.39  + 49.2 + 2.6
1992 05 28    15 33.88   -25 16.1    1.976    2.976   168.6     3.9    17.2
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1992 04 28    15 53.47   -00 50.2    4.631    5.553   153.9     4.6    17.4
- 4.45 -0.31  + 15.8 - 2.3   1989 CK2    19025   - 4.92 +0.16   -3.3 - 3.8
1992 05 28    15 38.55   -00 28.9    4.619    5.563   156.6     4.1    17.4

1992 04 28    16 02.13   -10 34.0    1.574    2.525   155.5     9.5    16.4
- 6.80 -1.04  + 58.7   0.0    (4839)     18275   - 8.65 +0.49  + 36.0 - 7.3
1992 05 28    15 36.12   -07 58.6    1.519    2.505   162.7     6.9    16.2

1992 04 28    15 59.77   -11 57.3    2.467    3.413   156.3     6.8    16.4
- 5.83 -0.66  + 27.5 - 0.3   1978 CH     18104   - 6.95 +0.31  + 15.5 - 3.6
1992 05 28    15 38.83   -10 46.8    2.423    3.413   165.3     4.3    16.3

1992 04 28    16 06.19   -29 59.9    1.932    2.857   151.4     9.7    16.3
- 8.04 -1.01    -9.3 + 6.2    (4719)     17620   - 9.60 +0.54  + 25.9 + 4.1
1992 05 28    15 36.86   -29 31.2    1.908    2.906   167.3     4.4    16.1

1992 04 28    15 58.51   -31 38.2    4.453    5.363   152.0     5.1    17.3
- 4.85 -0.42    +3.6 + 3.3   1989 CW1    16432   - 5.60 +0.18  + 20.9 + 2.2
1992 05 28    15 41.74   -30 59.3    4.372    5.364   167.1     2.4    17.1

1992 04 28    16 06.27   -18 04.1    1.590    2.538   154.9     9.7    17.7
- 7.32 -1.17  + 43.2 + 3.5   1981 EN17   15879   - 9.78 +0.45  + 47.9 - 2.7
1992 05 28    15 37.61   -15 36.0    1.492    2.493   168.2     4.8    17.3

1992 04 28    16 04.74   -11 30.5    2.247    3.188   155.0     7.7    17.8
- 6.84 -0.74  + 44.9 - 0.2    (4740)     17808   - 7.99 +0.37  + 30.0 - 4.6
1992 05 28    15 40.43   -09 29.9    2.230    3.218   164.6     4.8    17.7

1992 04 28    16 06.66   -17 14.1    2.351    3.291   154.8     7.5    17.0
- 6.11 -0.74  + 44.9 + 2.0   1978 SN7    15700   - 7.50 +0.31  + 44.2 - 2.5
1992 05 28    15 44.29   -14 52.4    2.296    3.296   169.1     3.3    16.7

1992 04 28    16 16.80   -23 46.0    1.988    2.913   151.5     9.5    17.4
- 9.78 -1.11  - 44.5 + 2.9   1990 VX2    18823   -11.92 +0.47  - 21.4 + 3.7
1992 05 28    15 41.33   -25 26.3    1.967    2.971   170.1     3.4    17.2

1992 04 28    16 01.06   +10 33.3    4.497    5.356   145.3     6.1    17.4
- 4.17 -0.35  + 34.9 - 4.2   1989 EO11   16433   - 4.83 +0.14   +2.5 - 6.1
1992 05 28    15 46.66   +11 33.0    4.484    5.354   145.9     6.1    17.4

1992 04 28    16 09.57   -03 14.2    1.563    2.494   151.5    11.1    18.0
- 6.36 -1.01  + 83.4 - 3.8   3111 T-2    17978   - 8.08 +0.47  + 33.4 -11.5
1992 05 28    15 45.17   -00 04.8    1.565    2.529   156.9     9.0    18.0

1992 04 28    16 12.87   -23 12.6    1.542    2.479   152.5    10.8    16.9
- 7.40 -1.23  + 36.4 + 5.5   1991 AF     18125   - 9.84 +0.50  + 55.9 - 0.2
1992 05 28    15 43.78   -20 43.7    1.478    2.485   171.3     3.5    16.5

1992 04 28    16 07.80   -08 47.0    2.273    3.207   153.7     8.0    17.9
- 5.84 -0.76  + 51.5 - 0.8   1988 PX2    15890   - 7.39 +0.28  + 31.2 - 5.7
1992 05 28    15 46.03   -06 33.9    2.214    3.197   162.9     5.4    17.7

1992 04 28    16 08.54   -10 48.4    2.352    3.286   154.0     7.7    18.4
- 6.27 -0.71  + 39.5 - 0.6   1989 TC3    19502   - 7.47 +0.32  + 23.4 - 4.5
1992 05 28    15 46.02   -09 06.9    2.345    3.334   165.1     4.5    18.3

1992 04 28    16 10.79   -21 44.7    2.545    3.474   153.3     7.5    17.3
- 6.11 -0.79  + 12.8 + 2.6   1982 PR     13856   - 8.02 +0.21  + 23.2 + 0.4
1992 05 28    15 47.74   -20 46.6    2.422    3.429   172.3     2.3    16.9
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