The MINOR PLANET CIRCULARS/MINOR PLANETS AND COMETS are published, on behalf of Commission 20 of the International Astronomical Union, usually in batches on the date of each full moon, by:

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EDITORIAL NOTICE.

L. D. Schmadel, chairman of the IAU Commission 20 Study Group on the Origin of Minor Planet Names, remarks that the book "Dictionary of Minor Planet Names" is scheduled for publication in May 1992 by Springer-Verlag (Berlin, Heidelberg and New York). The hard-cover volume, containing viii + 687 pages (ISBN 3-540-54384-8, ISBN 0-387-54384-8 U.S.A.) will cost DM 98.00 (approximately $US 60.00). The information in the book is complete through the end of 1991 and refers to minor planets 1-5012, of which 3957 objects (79 percent) were named. The meaning of only 132 names (3.3 percent) is completely unknown. More than 93 percent of all the citations are interpreted as absolutely correct (entries in the Minor Planet Circulars, Astronomische Nachrichten, etc.).

* * * * *

ERRATA.

MPC	Line	
19274	-19 & -18	Orbits 4943 and 4954 T-1 are to be deleted.
19748	16	Add S. M. Hughes as an observer.

* * * * *

CORRECTED OBSERVATIONS.

The following observations correct those previously published.

Object	Date	UT	R. A. (2000)	Decl.	Reference	Mag.	N	Obs.
1975 AL	1975 01	10.95486	08 48 30.49	+30 42 38.2	MPC 4248	17	1	026
1985 XB	1986 01	06.36632	05 57 28.49	+58 42 26.3	MPC 10489	15.5		675
1985 XB	1986 01	07.21806	05 55 13.59	+59 03 01.0	MPC 10489			675
1985 XB	1986 01	07.24479	05 55 09.30	+59 03 38.2	MPC 10489			675
1985 XB	1986 01	08.21493	05 52 34.77	+59 26 06.5	MPC 10489			675
1985 XB	1986 01	08.32396	05 52 16.58	+59 28 33.3	MPC 10489		2	675
1985 XB	1986 01	08.38337	05 52 06.65	+59 29 53.0	MPC 10489			675
1990 EW7	1990 03	07.30695	10 47 23.85	+05 47 29.8	MPC 17159		3	809
1990 EW7	1990 03	07.31389	10 47 23.44	+05 47 31.6	MPC 17159		3	809
1990 EW7	1990 03	07.32083	10 47 23.02	+05 47 33.4	MPC 17159		3	809
1990 EF10 *	1990 03	07.30695	10 49 13.87	+05 34 03.6	MPC 17934		3	809
1990 EF10	1990 03	07.31389	10 49 13.51	+05 34 06.7	MPC 17934		3	809
1990 EF10	1990 03	07.32083	10 49 13.16	+05 34 09.7	MPC 17934		3	809
(41)	1930 05	16.8819	16 15.3	+05 46	RI 332	8.8		022
(52)	1930 06	02.93160	16 21.5	-11 54	RI 321	10		094
(335)	1930 03	24.97757	12 53.5	+00 15	RI 301	12		094

(433)	1940 08 07.01991	16 57 34.12	-28 52 00.9	RI	2269		4	839
(433)	1940 08 07.03575	16 57 34.51	-28 51 51.7	RI	2269		4	839
(433)	1951 11 29.97189	23 25 20.37	+23 12 49.9	MPC	825		5	760
(433)	1951 11 29.98993	23 25 21.62	+23 12 42.7	MPC	825	12.9	5	760
(433)	1975 03 03.77188	07 56 14.22	-08 36 26.8	MPC	5019			128
(433)	1975 03 03.80899	07 56 16.22	-08 36 56.6	MPC	5019			128
(433)	1975 03 16.75154	08 16 00.00	-12 02 13.7	MPC	5019			128
(1128)	1930 07 18.87639	18 21.9	-24 27	RI	334	13.5		094
(2687)	1963 09 25.21181	00 23 29.98	-12 01 42.0	MPC	7205		6	760
(2687)	1963 09 25.25486	00 23 27.23	-12 01 47.5	MPC	7205		6	760
(3036)	1989 10 21.54931	02 07 21.23	+18 42 37.6	MPC	15486		2	364
(3046)	1988 10 17.24203	02 40 49.97	+03 03 33.1	MPC	15036		6	808
(3046)	1988 10 17.28012	02 40 48.55	+03 03 08.5	MPC	15036		6	808

Note 1: 1975 AL = (2663). 2: time originally in error. 3: date corrected by +1 day. 4: date corrected by -2 days. 5: time corrected by -12 hours. 6: observations originally interchanged.

* * * * *

DELETED OBSERVATIONS.

The following observations are to be deleted.

Object		Date	UT	R. A. (2000)	Decl.	Reference	Obs.
1927 BQ	*	1927 01 28.76890	05 03.4	-05 23		MPC 19725	024
1990 HU5		1990 05 01.75077	18 41 20.09	-22 45 24.5		MPC 19749	413
1990 JS1		1990 05 02.74389	18 41 24.11	-22 47 09.7		MPC 19750	413

* * * * *

IDENTIFICATION CHANGES.

Continuation to MPC 19725.

Object		Date	UT	R. A. (2000)	Decl.	Old desig.	Mag.	N Obs.
1930 GM	*	1930 04 04.00153	12 54.6	+08 45		537	13.2	094
1930 GN		1930 03 28.0035	13 04 41	+07 37.3		292	12.7	006
1930 GN	*	1930 04 04.00153	12 59.5	+08 21		292	12.8	094
1930 HT	*	1930 04 20.93202	13 45.8	-11 15		637	13.4	094
1930 NA	*	1930 07 03.00632	19 17.6	+11 47		1051	13.5	094
1930 OO	*	1930 07 18.87639	18 39.1	-28 19		1068	13.2	094
1930 QX	*	1930 08 26.95600	23 22.5	-02 35		939	13.1	012
1930 QX		1930 08 28.99461	23 20.4	-02 40		939		012
1930 QY	*	1930 08 30.10883	07 31.1	+22 27		42	12	024
1930 RE	*	1930 09 02.10929	23 42.7	-00 08.6		939		012
1930 SF1	*	1930 09 22.00952	01 27.7	+12 24		671	13.2	094
1956 AJ1	*	1956 01 07.94522	07 48 30.18	+18 49 22.6		2494		024
1961 UU	*	1961 10 17.20519	00 29 37.55	+07 14 40.0		1961 TS	16.6	760
1961 UU		1961 10 17.25206	00 29 35.02	+07 14 38.2		1961 TS		760
1976 UY20	*	1976 10 25.79311	00 02 43.59	-01 36 04.0		1976 SY2	17.5	095
1976 YA8	*	1976 12 20.90332	05 44 53.09	+25 24 11.8		1976 YG2	17.0	095
1982 KH4	*	1982 05 16.92847	14 55 21.95	-19 22 55.0		1751		046
1982 KH4		1982 05 16.94259	14 55 20.99	-19 22 50.4		1751		046
1983 CX8	*	1983 02 10.74931	06 24 13.49	+30 37 50.5		2546		095
1983 PQ2	*	1983 08 13.26528	21 26 57.03	-20 26 59.9		1983 NW	16.8	688
1983 PQ2		1983 08 13.29583	21 26 55.23	-20 27 02.2		1983 NW		688
1987 UX9	*	1987 10 23.75001	23 40 09.68	+02 59 23.1		1987 SD26	16.0V	095
1990 JZ1	*	1990 05 02.74389	18 41 36.61	-22 42 12.8		1990 JT1		413
1991 QL	*	1991 08 16.04931	00 28 13.22	+02 41 47.9		1991 PO17		033

1991 YB1	*	1991 12 29.86771	05 52 32.93	+28 46 42.5	1991 YJ	17.5	511
1991 YB1		1991 12 29.89549	05 52 31.17	+28 46 39.0	1991 YJ		511
1991 YB1		1992 01 01.86771	05 49 21.61	+28 38 50.2	1991 YJ		511
1991 YC1	*	1991 12 29.86771	05 59 27.43	+29 19 06.9	1991 YK	17.5	511
1991 YC1		1991 12 29.89549	05 59 25.32	+29 19 05.8	1991 YK		511
1991 YC1		1992 01 01.86771	05 55 46.84	+29 11 18.1	1991 YK		511
1992 CH2	*	1992 02 13.82101	10 13 54.86	+16 35 28.8	1992 CQ	17	372
1992 CH2		1992 02 13.83299	10 13 54.12	+16 35 35.7	1992 CQ		372
1992 DJ1	*	1992 02 26.59549	10 08 51.09	+10 24 01.0	1992 DX	16.5	364
1992 DJ1		1992 02 26.60938	10 08 50.57	+10 24 04.1	1992 DX		364

* * * * *

ERRONEOUS IDENTIFICATION.

The following identification is erroneous:

	Ref.
1952 KW = (2533)	MPC 6633

* * * * *

IDENTIFICATIONS.

The following identifications with numbered minor planets, by G. V. Williams, continue the list on MPC 19826:

1930 GM = (292)	1930 GN = (537)	1930 HT = (821)
1930 QX = (819)	1930 QY = (64)	1952 KW = (2989)
1956 AJ1 = (3971)	1982 KH4 = (4185)	

* * * * *

OBSERVATIONS OF COMETS.

Observations are published here for the following observatory codes:

006 Fabra Observatory, Barcelona. 0.38-m f/11 Mailhat astrograph. Observers J. M. Codina, J. Nunez and N. Torras.
106 Crni vrh, Slovenia. Observer H. Mikuz. Measured by B. Manning. Long. and Parallax 14.0736, 0.69661, +0.71520 (see MPC 19348).
367 Yodoe. 0.2-m f/5 reflector. Observer Z. Tanaka. Measured by T. Seki.
372 Geisei. 0.60-m reflector. Observer T. Seki. In part from Orient. Astron. Assoc. Comet Bull.
394 JCPM Hamatonbetsu Station. 0.40-m f/5 reflector. Observer M. Takeishi.
402 Dynic. 0.25-m f/3.4 reflector. Observer A. Sugie.
411 Oizumi. 0.16-m f/4.8 reflector + CCD. Observer T. Kobayashi.
413 Siding Spring. 1.2-m U.K. Schmidt. Observer A. Savage. Measured by R. H. McNaught.
474 Mt. John. 0.6-m reflector. Observer A. C. Gilmore. Measured by P. M. Kilmartin.
502 Colchester. 0.15-m f/4.5 astrograph. Observer M. J. Hendrie.
540 Linz. 0.3-m f/5.2 Schmidt-Cassegrain. Observers E. Meyer, E. Obermair and H. Raab.
568 Mauna Kea. 2.2-m reflector. Observer K. J. Meech.
595 Farra d'Isonzo. Observers G. Lombardi and F. Piani.
598 Loiano. 0.2-m f/8 reflector + CCD. Observer G. Del Zanna.
657 Climenhaga Observatory. 0.25-m refractor. Observer J. B. Tatum.

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 E. Helin, K. Lawrence, D. H. Levy, P. Rose, C. S. Shoemaker and E. M. Shoemaker. Measured by C. M. Olmstead and P. Rose.
691 Kitt Peak. 0.91-m Spacewatch telescope and 2.3-m Steward reflector. Observers J. D. Scotti and S. M. Larson.
801 Oak Ridge Observatory. 1.5-m reflector + CCD. Observer C.-Y. Shao.
807 Cerro Tololo. 4-m reflector. Observer K. J. Meech.
894 Otomo. 0.25-m f/3.4 reflector. Observer S. Otomo.
896 Yatsugatake South Base. 0.20-m f/4.8 reflector. Observer Y. Kushida.
897 YGCO Chiyoda Station. 0.25-m f/3.4 Wright-Schmidt. Observer T. Kojima.

Object	Date	UT	R. A. (2000)	Decl.	Mag.	N Obs.
		Comet Lovas (1983 XII)				
/1983 XII	1991	05 14.17437	15 29 31.00	-50 16 48.4		807
/1983 XII	1991	05 14.21095	15 29 30.52	-50 16 46.4		807
/1983 XII	1991	05 14.22508	15 29 30.18	-50 16 45.1		807
/1983 XII	1991	05 14.24282	15 29 29.61	-50 16 43.0		807
/1983 XII	1991	05 14.28102	15 29 29.08	-50 16 40.9		807
/1983 XII	1991	05 14.29995	15 29 28.46	-50 16 38.9		807
		Periodic Comet Smirnova-Chernykh				
/1984 V	1992	03 12.19639	09 14 23.59	+24 14 58.9		658
/1984 V	1992	03 12.20179	09 14 23.47	+24 14 59.3		658
/1984 V	1992	03 12.20661	09 14 23.34	+24 14 59.5		658
/1984 V	1992	03 13.32361	09 13 57.48	+24 15 44.1		658
/1984 V	1992	03 13.32709	09 13 57.39	+24 15 44.6		658
/1984 V	1992	03 13.32999	09 13 57.34	+24 15 44.5		658
/1984 V	1992	03 22.50525	09 11 16.99	+24 16 41.8		411
/1984 V	1992	03 22.50688	09 11 16.90	+24 16 40.8		411
/1984 V	1992	03 22.51016	09 11 16.96	+24 16 40.8		411
/1984 V	1992	03 22.51250	09 11 16.93	+24 16 40.3		411
		Periodic Comet Arend-Rigaux				
/1984 XXI	1992	03 13.54064	12 35 15.33	+24 32 24.0		658
/1984 XXI	1992	03 13.54515	12 35 15.07	+24 32 26.5		658
		Comet Shoemaker (1987 IV)				
/1987 IV	1990	12 16.52249	09 41 00.73	-27 13 20.4		568
/1987 IV	1991	02 17.42182	09 16 46.99	-29 10 23.4		568
/1987 IV	1992	01 06.54032	09 25 40.46	-36 09 20.6		568
		Comet Austin (1990 XX)				
/1990 XX	1992	04 01.06850	08 16 53.66	+33 47 32.3		801
/1990 XX	1992	04 01.10630	08 16 52.96	+33 47 32.4		801
		Comet Shoemaker-Levy (1991d)				
/1991d	1991	11 04.81360	13 28 03.23	+34 19 37.9	12 T	897
/1991d	1991	12 16.82870	15 49 40.75	+38 27 55.6	11.5 T	897
/1991d	1991	12 16.84745	15 49 44.86	+38 28 02.2		897
/1991d	1992	02 08.84253	18 56 19.75	+40 22 01.4		897
/1991d	1992	02 08.84566	18 56 20.25	+40 22 01.4		897
/1991d	1992	02 08.86117	18 56 22.91	+40 22 01.1		897
/1991d	1992	02 08.86597	18 56 23.73	+40 22 02.8		897
/1991d	1992	02 08.86910	18 56 24.22	+40 22 01.0		897
/1991d	1992	03 02.43720	19 53 14.60	+40 37 10.9		801
/1991d	1992	03 02.43841	19 53 14.75	+40 37 11.0		801

/1991d	1992	03	05.42507	19 59 38.23	+40 40 24.6				801
/1991d	1992	03	05.42652	19 59 38.41	+40 40 24.8				801
/1991d	1992	03	07.79792	20 04 31.91	+40 43 13.5	10	T		402
/1991d	1992	03	10.79375	20 10 28.68	+40 47 10.8				402
/1991d	1992	03	11.81007	20 12 26.11	+40 48 36.5	13	T		372
/1991d	1992	03	12.80694	20 14 19.73	+40 50 01.4				402
/1991d	1992	03	13.82399	20 16 13.75	+40 51 33.7				894
/1991d	1992	03	13.82813	20 16 14.26	+40 51 33.2				894
/1991d	1992	03	15.77708	20 19 48.01	+40 54 35.2	13	T		372
/1991d	1992	03	16.16306	20 20 29.59	+40 55 11.8				598
/1991d	1992	03	16.16500	20 20 29.80	+40 55 12.0	12.5	T		598
/1991d	1992	03	16.16579	20 20 29.91	+40 55 12.2				598
/1991d	1992	03	16.16825	20 20 30.16	+40 55 12.1				598
/1991d	1992	03	16.17078	20 20 30.42	+40 55 12.7				598
/1991d	1992	03	30.78039	20 43 44.16	+41 23 07.7				411
/1991d	1992	03	30.78110	20 43 44.23	+41 23 07.7				411
/1991d	1992	03	30.78189	20 43 44.30	+41 23 07.9				411
/1991d	1992	03	30.78266	20 43 44.44	+41 23 07.4				411
/1991d	1992	03	30.78407	20 43 44.45	+41 23 08.2				411
/1991d	1992	03	30.78480	20 43 44.50	+41 23 07.9				411
/1991d	1992	03	30.78547	20 43 44.55	+41 23 08.4				411
/1991d	1992	04	05.76686	20 51 35.08	+41 36 50.9				411
/1991d	1992	04	05.76972	20 51 35.28	+41 36 51.9				411
/1991d	1992	04	05.77067	20 51 35.27	+41 36 52.0				411
/1991d	1992	04	05.77166	20 51 35.39	+41 36 51.9				411
/1991d	1992	04	05.77256	20 51 35.48	+41 36 52.2				411
/1991d	1992	04	05.77349	20 51 35.57	+41 36 51.8				411
/1991d	1992	04	05.77431	20 51 35.56	+41 36 52.1				402

Periodic Comet Kowal 1

/1991i	1992	03	05.47693	13 58 05.72	-11 28 01.6			1	691
/1991i	1992	03	05.48142	13 58 05.66	-11 28 01.4				691
/1991i	1992	03	05.48787	13 58 05.60	-11 28 01.1				691
/1991i	1992	03	05.49407	13 58 05.52	-11 28 01.2				691
/1991i	1992	03	05.53340	13 58 05.04	-11 27 59.8				691
/1991i	1992	03	05.53775	13 58 04.96	-11 27 59.7				691
/1991i	1992	03	07.48623	13 57 41.94	-11 26 55.8				691
/1991i	1992	03	07.49907	13 57 41.96	-11 26 55.2	17.3	T	2	691
/1991i	1992	03	07.51169	13 57 41.54	-11 26 54.9				691

Comet Helin-Lawrence (1991l)

/1991l	1992	03	03.38841	01 11 02.23	-34 08 23.8	16.3	N		474
/1991l	1992	03	03.39275	01 11 02.44	-34 08 11.7				474
/1991l	1992	03	08.39873	01 15 55.98	-30 58 11.2				474
/1991l	1992	03	08.40683	01 15 56.31	-30 57 52.5	16.7	N		474

Periodic Comet Faye

/1991n	1991	10	07.86461	01 45 42.88	+10 49 05.3	11	T		502
/1991n	1991	10	07.88370	01 45 43.18	+10 48 51.5	11	T		502
/1991n	1991	10	13.59346	01 47 01.70	+09 29 48.2	9	T		897
/1991n	1991	11	05.42402	01 51 03.62	+04 00 15.6				897
/1991n	1991	11	05.46753	01 51 04.11	+03 59 43.4				897
/1991n	1991	11	05.61736	01 51 05.61	+03 57 51.7				897
/1991n	1991	11	05.86185	01 51 10.22	+03 54 44.4	11	T		502
/1991n	1991	11	10.58067	01 52 36.85	+03 00 06.4				897
/1991n	1991	11	10.60341	01 52 37.21	+02 59 51.4				897
/1991n	1991	11	11.85208	01 53 05.27	+02 46 47.3	11	T		502
/1991n	1991	12	11.61586	02 15 33.87	+00 55 32.8				897
/1991n	1991	12	11.62008	02 15 34.22	+00 55 34.7				897

/1991n	1991 12 24.76076	02 32 31.23	+01 53 48.6	11	T			502
/1991n	1992 03 05.00843	04 44 25.23	+12 05 03.4					801
/1991n	1992 03 05.01066	04 44 25.51	+12 05 04.3					801
/1991n	1992 03 06.44495	04 47 23.99	+12 14 56.1					411
/1991n	1992 03 06.44638	04 47 24.19	+12 14 56.3					411
/1991n	1992 03 06.44758	04 47 24.34	+12 14 57.4					411
/1991n	1992 03 06.44908	04 47 24.62	+12 14 57.3					411
/1991n	1992 03 06.45082	04 47 24.74	+12 14 58.1					411
/1991n	1992 03 06.45212	04 47 24.93	+12 14 57.9					411
/1991n	1992 03 07.44510	04 49 28.66	+12 21 40.4					411
/1991n	1992 03 07.44689	04 49 28.84	+12 21 40.1					411
/1991n	1992 03 07.45379	04 49 29.85	+12 21 42.9					411
/1991n	1992 03 22.45906	05 20 47.74	+13 48 20.2					411
/1991n	1992 03 22.46564	05 20 48.69	+13 48 19.8					411
/1991n	1992 03 22.46852	05 20 49.05	+13 48 20.9					411
/1991n	1992 03 30.44109	05 37 26.66	+14 23 00.4	14.5	T			897
	Periodic Comet Chernykh							
/1991o	1992 03 06.12946	01 59 10.59	+07 52 15.8	18.1	T	3		691
/1991o	1992 03 06.13615	01 59 11.30	+07 52 19.8			3		691
	Periodic Comet Hartley 2							
/1991t	1991 11 04.80012	10 08 48.99	+02 38 13.4	10	T			897
/1991t	1992 02 10.57141	10 20 56.89	-06 55 57.6	15	T			897
/1991t	1992 02 10.59624	10 20 54.92	-06 55 44.7					897
/1991t	1992 03 01.17265	09 57 01.46	-03 31 33.7					801
/1991t	1992 03 01.18968	09 57 00.36	-03 31 22.2					801
/1991t	1992 03 05.19140	09 53 06.75	-02 47 54.3					801
/1991t	1992 03 05.20509	09 53 05.97	-02 47 45.2					801
/1991t	1992 04 01.09605	09 39 32.58	+01 14 30.1					801
/1991t	1992 04 01.11921	09 39 32.38	+01 14 39.6					801
	Comet McNaught-Russell (1991v)							
/1991v	1992 03 08.67911	23 36 38.97	-62 30 49.0	18.1	N			474
/1991v	1992 03 08.70260	23 36 44.18	-62 30 52.6					474
	Periodic Comet Kowal 2							
/1991f 1	1992 02 10.58785	08 03 34.18	-10 42 14.8	15	T			897
/1991f 1	1992 03 01.09816	08 02 21.29	-08 14 44.9					801
/1991f 1	1992 03 01.12155	08 02 21.58	-08 14 32.2					801
/1991f 1	1992 03 06.48842	08 04 11.16	-07 28 07.2					411
/1991f 1	1992 03 12.18369	08 07 03.46	-06 39 48.1					658
/1991f 1	1992 03 12.18612	08 07 03.55	-06 39 46.8					658
/1991f 1	1992 03 12.18890	08 07 03.63	-06 39 45.4					658
/1991f 1	1992 03 13.28149	08 07 42.69	-06 30 42.3					658
/1991f 1	1992 03 13.28543	08 07 42.84	-06 30 40.4					658
/1991f 1	1992 03 13.28899	08 07 42.96	-06 30 38.4					658
/1991f 1	1992 03 22.46302	08 14 22.43	-05 19 02.6	16	T	4		897
/1991f 1	1992 03 22.48779	08 14 23.66	-05 18 50.9					411
/1991f 1	1992 03 22.49260	08 14 23.90	-05 18 47.8					411
/1991f 1	1992 03 22.49543	08 14 24.07	-05 18 47.7			4		897
/1991f 1	1992 03 22.49738	08 14 24.13	-05 18 45.8					411
/1991f 1	1992 04 01.07523	08 23 16.58	-04 14 40.2					801
/1991f 1	1992 04 01.09116	08 23 17.48	-04 14 34.6					801
	Comet Zanotta-Brewington (1991g1)							
/1991g 1	1991 12 29.37604	21 05 00.00	+16 51 33.9					897
/1991g 1	1991 12 29.37795	21 05 00.36	+16 51 36.0					897

/1991g 1	1991 12 29.40799	21 05 07.18	+16 50 40.0						897
/1991g 1	1992 01 06.77434	21 39 41.19	+12 27 02.5		9	T			502
/1991g 1	1992 01 10.39601	21 56 12.71	+09 59 41.7						897
/1991g 1	1992 01 10.40602	21 56 15.33	+09 59 14.5						897
/1991g 1	1992 01 10.41354	21 56 17.73	+09 58 56.8						897
/1991g 1	1992 01 28.38102	23 27 10.23	-09 34 39.7						897
/1991g 1	1992 01 28.38252	23 27 10.76	-09 34 46.9						897
/1991g 1	1992 01 28.38501	23 27 11.55	-09 35 00.0						897
/1991g 1	1992 01 30.76528	23 39 17.99	-13 04 16.6						006
/1991g 1	1992 01 31.76111	23 44 17.84	-14 33 58.0						006
/1991g 1	1992 01 31.76875	23 44 20.02	-14 34 43.0						006
/1991g 1	1992 03 03.41683	02 01 41.59	-53 58 53.0		14.1	N			474
/1991g 1	1992 03 03.42001	02 01 42.51	-53 59 02.4						474
/1991g 1	1992 03 03.42400	02 01 43.52	-53 59 13.7						474
/1991g 1	1992 03 08.43582	02 25 30.17	-57 43 42.2						474
/1991g 1	1992 03 08.44126	02 25 31.64	-57 43 54.0						474

Comet Mueller (1991h1)

/1991h 1	1992 02 19.78368	02 10 22.67	+09 31 00.6						106
/1991h 1	1992 02 19.79471	02 10 20.33	+09 30 11.5						106
/1991h 1	1992 02 19.79500	02 10 20.30	+09 30 11.3						106
/1991h 1	1992 02 19.79531	02 10 20.21	+09 30 10.8						106
/1991h 1	1992 02 20.81042	02 06 45.08	+08 17 24.1						595
/1991h 1	1992 02 22.76528	02 00 08.71	+06 03 14.9						595
/1991h 1	1992 02 22.77500	02 00 06.85	+06 02 35.6						595
/1991h 1	1992 02 24.80457	01 53 33.83	+03 51 06.9						106
/1991h 1	1992 02 25.41365	01 51 38.34	+03 13 10.2						411
/1991h 1	1992 02 25.41441	01 51 38.14	+03 13 07.8						411
/1991h 1	1992 02 25.41582	01 51 37.83	+03 13 02.8						411
/1991h 1	1992 02 25.41756	01 51 37.49	+03 12 56.9						411
/1991h 1	1992 02 25.41814	01 51 37.43	+03 12 53.3						411
/1991h 1	1992 02 25.41870	01 51 37.27	+03 12 52.1						411
/1991h 1	1992 02 25.44896	01 51 31.44	+03 10 59.1						897
/1991h 1	1992 02 25.45191	01 51 30.89	+03 10 48.6						897
/1991h 1	1992 02 25.45521	01 51 30.35	+03 10 36.0						897
/1991h 1	1992 03 03.41771	01 29 45.85	-03 21 54.9		8.5	T			894

Comet Helin-Alu (1992a)

/1992a	1992 02 10.54757	07 56 02.60	+00 40 44.6		16.5	T		4	897
/1992a	1992 02 10.57951	07 56 01.47	+00 40 33.3					4	897
/1992a	1992 03 01.06793	07 44 04.23	-01 10 20.6						801
/1992a	1992 03 01.08826	07 44 03.58	-01 10 25.6						801
/1992a	1992 03 04.80972	07 42 36.71	-01 27 51.8						540
/1992a	1992 03 04.85208	07 42 35.85	-01 28 04.5						540
/1992a	1992 03 05.06545	07 42 31.41	-01 29 01.3						801
/1992a	1992 03 05.10001	07 42 30.61	-01 29 10.7						801
/1992a	1992 03 06.16285	07 42 09.70	-01 33 57.9		16.5	T			675
/1992a	1992 03 06.19248	07 42 08.93	-01 34 04.4						675

Periodic Comet Howell

/1992c	1992 03 05.44889	11 14 53.66	+11 22 03.7		20.8	T			691
/1992c	1992 03 05.45630	11 14 53.31	+11 22 05.5						691
/1992c	1992 03 05.46184	11 14 52.95	+11 22 08.2						691
/1992c	1992 03 05.47157	11 14 52.39	+11 22 11.9						691
/1992c	1992 03 06.43866	11 14 00.29	+11 27 38.2		21.7	T		5	691
/1992c	1992 03 06.47059	11 13 58.49	+11 27 48.2		22.2	T			691
/1992c	1992 03 07.38851	11 13 08.73	+11 32 58.2						691
/1992c	1992 03 07.41396	11 13 07.20	+11 33 04.6						691

Comet Tanaka-Machholz (1992d)

/1992d	1992	03	24.84234	21 54 50.0	+12 57 34	10	T			367
/1992d	1992	04	01.79390	22 12 14.50	+19 47 28.2					372
/1992d	1992	04	01.82409	22 12 18.76	+19 49 07.3	9	T			372
/1992d	1992	04	01.82688	22 12 19.10	+19 49 16.9					372
/1992d	1992	04	02.52431	22 13 57.63	+20 27 04.4					657
/1992d	1992	04	02.77118	22 14 32.77	+20 40 30.4	9	T			894
/1992d	1992	04	02.78247	22 14 34.36	+20 41 07.4					894
/1992d	1992	04	02.78420	22 14 34.60	+20 41 13.6					894
/1992d	1992	04	02.78993	22 14 35.56	+20 41 34.8					402
/1992d	1992	04	02.79155	22 14 35.70	+20 41 38.4	8.5	T			897
/1992d	1992	04	02.79641	22 14 36.24	+20 41 54.1					897
/1992d	1992	04	02.79688	22 14 36.41	+20 41 55.5					402
/1992d	1992	04	02.80087	22 14 37.08	+20 42 09.0	8.7	T			372
/1992d	1992	04	02.80156	22 14 37.19	+20 42 09.7					897
/1992d	1992	04	02.80521	22 14 37.63	+20 42 23.4					372
/1992d	1992	04	02.80613	22 14 37.90	+20 42 27.4					897
/1992d	1992	04	02.80943	22 14 38.33	+20 42 35.7					897
/1992d	1992	04	02.81238	22 14 38.66	+20 42 46.6					897
/1992d	1992	04	02.81311	22 14 38.68	+20 42 48.4					411
/1992d	1992	04	02.81383	22 14 38.82	+20 42 51.4					411
/1992d	1992	04	02.81493	22 14 39.19	+20 42 52.9	9	T			896
/1992d	1992	04	02.81545	22 14 39.00	+20 42 56.1					411
/1992d	1992	04	02.81595	22 14 39.14	+20 42 58.0					411
/1992d	1992	04	02.81641	22 14 39.27	+20 42 59.6					411
/1992d	1992	04	03.77541	22 16 57.44	+21 35 35.6	9	T			394
/1992d	1992	04	03.77784	22 16 57.93	+21 35 41.8					394
/1992d	1992	04	05.78889	22 21 55.88	+23 27 43.8					402
/1992d	1992	04	05.79236	22 21 56.64	+23 27 55.4					402
/1992d	1992	04	05.79583	22 21 57.10	+23 28 07.5					402
/1992d	1992	04	05.79664	22 21 57.16	+23 28 11.0					411
/1992d	1992	04	05.79742	22 21 57.26	+23 28 13.4					411
/1992d	1992	04	05.79757	22 21 57.43	+23 28 10.9					894
/1992d	1992	04	05.79818	22 21 57.39	+23 28 16.4					411
/1992d	1992	04	05.79927	22 21 57.52	+23 28 19.9					411
/1992d	1992	04	05.79931	22 21 57.64	+23 28 18.0					402
/1992d	1992	04	05.79987	22 21 57.56	+23 28 22.0					411
/1992d	1992	04	05.80046	22 21 57.71	+23 28 24.0					411
/1992d	1992	04	05.80278	22 21 58.25	+23 28 31.1					402
/1992d	1992	04	05.80504	22 21 58.46	+23 28 37.0					894
/1992d	1992	04	05.80642	22 21 58.70	+23 28 43.5					894
/1992d	1992	04	07.79271	22 27 05.57	+25 21 32.4					402
/1992d	1992	04	07.80417	22 27 07.11	+25 22 09.0					402
/1992d	1992	04	10.79340	22 35 13.99	+28 15 26.5	8.8	T			372
/1992d	1992	04	10.79549	22 35 14.39	+28 15 33.6					372
/1992d	1992	04	11.81505	22 38 07.99	+29 15 34.8	9	T			372

Periodic Comet Singer Brewster

/1992e	1992	04	01.34536	10 11 30.23	+04 49 29.8	20.4	T			691
/1992e	1992	04	01.36634	10 11 29.83	+04 49 39.0					691
/1992e	1992	04	04.27955	10 10 36.87	+05 09 32.7					691
/1992e	1992	04	04.30044	10 10 36.45	+05 09 40.9					691
/1992e	1992	04	04.32059	10 10 36.14	+05 09 50.1	20.6	T	6		691

Periodic Comet Shoemaker-Levy 8

/1992f	1992	03	30.71911	15 14 14.14	-17 24 32.6			7		413
/1992f	1992	04	05.48923	15 13 08.10	-17 05 41.0					675
/1992f	1992	04	07.43263	15 12 35.93	-16 58 32.3	17.0	T			675
/1992f	1992	04	07.46979	15 12 35.17	-16 58 23.3					675

/1992f	1992 04 08.35277	15 12 19.06	-16 54 59.4					675
/1992f	1992 04 08.36024	15 12 18.91	-16 54 57.2					675
/1992f	1992 04 08.43958	15 12 17.02	-16 54 39.5				8	675
/1992f	1992 04 11.75951	15 11 06.93	-16 41 12.7		16	T		372
/1992f	1992 04 11.77344	15 11 06.58	-16 41 09.2					372

Note 1: tail extending > 40" in p.a. 299 . 2: tail extending 1’.43 in p.a. 298 . 3: primary coma diameter 17"; secondary separated by 80".2 in p.a. 67 , diameter 14", 0.4 mag fainter than primary. 4: faint image. 5: image slightly diffuse. 6: image very slightly diffuse, 8" coma. 7: pre-discovery image; tail extending 30" to northwest. 8: involved with star.

* * * * *

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, B-1180 Brussels, Belgium

1992 AC	1992 03 04.94514	11 19 26.84	+53 12 07.9			012

033 Tautenburg
F. Borngen, Thuringer Landessternwarte, Dorfstrasse 73,
O-6901 Tautenburg, Federal Republic of Germany
1.3-m Schmidt telescope
PPM

1973 UB5		1991 10 15.13229	06 59 18.88	+22 54 27.5	18.4		033
1973 UB5		1991 12 10.94722	06 53 11.39	+23 03 01.5	17.9		033
1973 UB5		1991 12 11.00278	06 53 08.94	+23 03 04.6			033
1973 UB5		1991 12 12.08160	06 52 20.16	+23 04 03.9			033
1973 UB5		1991 12 28.92431	06 38 01.97	+23 18 54.4			033
1973 UB5		1992 01 02.96181	06 33 31.31	+23 22 30.8	17.3		033
1973 UB5		1992 01 03.00347	06 33 28.99	+23 22 31.9			033
1973 UB5		1992 01 07.90347	06 29 12.26	+23 25 28.6			033
1975 TX2		1991 12 10.84583	04 23 49.50	+26 15 21.5			033
1975 TX2		1991 12 10.89931	04 23 45.95	+26 15 25.4			033
1975 TX2		1991 12 11.95833	04 22 36.06	+26 16 42.2	17.2		033
1984 SQ2		1991 10 30.92361	05 03 58.57	+27 16 32.8			033
1984 SQ2		1991 10 31.98958	05 03 31.90	+27 21 41.7	18.0		033
1984 SQ2		1991 11 01.02917	05 03 30.78	+27 21 53.6			033
1985 RD		1991 12 10.84583	04 22 09.98	+23 27 51.2			033
1985 RD		1991 12 10.89931	04 22 07.33	+23 27 44.9			033
1985 RD		1991 12 11.95833	04 21 12.16	+23 25 33.1	18.9		033
1989 AY6		1991 10 30.92361	05 05 20.27	+26 11 36.8		V	033
1989 AY6		1991 10 31.98958	05 04 46.35	+26 11 26.6	19.0		033
1989 AY6		1991 11 01.02917	05 04 45.03	+26 11 26.1			033
1989 AY6		1991 11 10.97917	04 57 50.33	+26 05 38.7			033
1989 AY6		1991 11 11.02639	04 57 47.83	+26 05 35.0			033
1989 AY6		1991 12 10.84583	04 26 06.18	+24 58 14.0			033
1989 AY6		1991 12 10.89931	04 26 02.65	+24 58 03.6			033
1989 AY6		1991 12 11.95833	04 24 52.88	+24 54 30.8	18.3		033
1989 GO4		1991 12 10.84583	04 24 47.14	+24 07 10.8			033
1989 GO4		1991 12 10.89931	04 24 43.70	+24 07 01.6			033
1989 GO4		1991 12 11.95833	04 23 35.77	+24 03 48.2	18.3		033
1991 RF14		1991 09 09.98889	00 25 20.45	+07 59 56.0	17.2		033
1991 RF14		1991 09 10.03264	00 25 18.56	+07 59 34.2			033
1991 UE4	*	1991 10 30.92361	04 58 09.93	+24 57 04.0			033
1991 UE4		1991 10 31.98958	04 57 34.36	+25 01 17.5	17.0		033
1991 UE4		1991 11 01.02917	04 57 32.93	+25 01 27.2			033
1991 UF4	*	1991 10 30.92361	05 01 50.25	+26 07 43.8			033
1991 UF4		1991 10 31.98958	05 01 22.35	+26 15 51.3	17.6		033
1991 UF4		1991 11 01.02917	05 01 21.15	+26 16 09.3			033
1991 UG4	*	1991 10 30.92361	05 04 45.31	+27 12 16.5			033
1991 UG4		1991 10 31.98958	05 04 15.89	+27 17 02.0	18.4		033
1991 UG4		1991 11 01.02917	05 04 14.71	+27 17 13.9			033
1991 UH4	*	1991 10 30.92361	05 05 41.98	+25 45 42.8			033
1991 UH4		1991 10 31.98958	05 05 13.16	+25 42 01.9	17.9		033
1991 UH4		1991 11 01.02917	05 05 11.90	+25 41 54.3			033
1991 UH4		1991 11 10.97917	04 58 32.44	+25 00 58.2			033
1991 UH4		1991 11 11.02639	04 58 29.89	+25 00 45.4			033
1991 UJ4	*	1991 10 30.92361	05 08 37.00	+26 31 28.9		V	033
1991 UJ4		1991 10 31.98958	05 08 08.72	+26 31 58.9	17.6		033
1991 UJ4		1991 11 01.02917	05 08 07.53	+26 32 00.6			033
1991 UJ4		1991 11 10.97917	05 01 45.48	+26 31 53.2			033
1991 UJ4		1991 11 11.02639	05 01 43.01	+26 31 51.7			033
1991 UJ4		1991 12 10.84583	04 30 27.74	+25 34 59.3			033
1991 UJ4		1991 12 10.89931	04 30 24.38	+25 34 49.3			033
1991 UJ4		1991 12 11.95833	04 29 17.76	+25 31 32.8	17.6		033
1991 UK4	*	1991 10 30.92361	05 11 22.15	+27 00 17.5		V	033
1991 UK4		1991 10 31.98958	05 10 59.20	+27 01 08.7	18.2		033

1991	UK4		1991	11	01.02917	05	10	58.25	+27 01 10.5		033
1991	VX2		1991	12	10.87431	03	47	39.32	+25 39 40.4	17.6	033
1991	VX2		1991	12	11.88924	03	46	54.56	+25 35 42.9		033
1991	VX2		1991	12	11.93194	03	46	52.67	+25 35 32.8		033
1991	VX2		1991	12	12.91910	03	46	10.47	+25 31 40.9		033
1991	VY2		1991	12	10.87431	03	41	36.07	+23 56 56.0	18.4	033
1991	VY2		1991	12	11.88924	03	40	44.12	+23 50 00.3		033
1991	VY2		1991	12	11.93194	03	40	41.89	+23 49 42.1		033
1991	VY2		1991	12	12.91910	03	39	53.24	+23 43 00.9		033
1991	VJ3		1991	12	28.84653	03	44	19.36	+23 10 06.0	17.5	033
1991	VJ3		1991	12	28.90035	03	44	18.21	+23 10 08.6		033
1991	VJ3		1992	01	03.78958	03	43	07.80	+23 16 20.9	17.7	033
1991	VJ3		1992	01	03.83194	03	43	07.55	+23 16 24.4		033
1991	VK4		1991	12	28.84653	03	53	32.16	+24 35 49.3	17.6	033
1991	VK4		1991	12	28.90035	03	53	30.76	+24 35 36.7		033
1991	VK4		1992	01	03.78958	03	51	49.53	+24 13 53.7	17.6	033
1991	VK4		1992	01	03.83194	03	51	48.94	+24 13 44.7		033
1991	VK4		1992	01	07.77535	03	51	24.87	+24 01 18.2	18.0	033
1991	VK4		1992	01	07.82361	03	51	24.66	+24 01 09.8		033
1991	VM4		1991	12	10.84583	04	18	39.67	+25 41 33.3		033
1991	VM4		1991	12	10.89931	04	18	36.54	+25 41 29.3		033
1991	VM4		1991	12	11.95833	04	17	34.51	+25 40 10.4	17.4	033
1991	XF		1992	01	03.78958	03	52	06.68	+22 52 58.7	18.4	033
1991	XF		1992	01	03.83194	03	52	06.30	+22 53 09.5		033
1991	XL1	*	1991	12	10.94722	06	46	25.10	+22 41 41.9	17.8	033
1991	XL1		1991	12	11.00278	06	46	21.90	+22 41 59.2		033
1991	XL1		1991	12	12.08160	06	45	19.81	+22 47 38.5		033
1991	XM1	*	1991	12	10.94722	06	48	56.19	+23 15 02.4	17.4	033
1991	XM1		1991	12	11.00278	06	48	53.63	+23 14 54.6		033
1991	XM1		1991	12	12.08160	06	48	03.31	+23 12 05.1		033
1991	XM1		1991	12	28.92431	06	33	17.40	+22 25 21.9		033
1991	XM1		1992	01	02.96181	06	28	37.23	+22 10 25.9	17.0	033
1991	XM1		1992	01	03.00347	06	28	34.87	+22 10 17.9		033
1991	XM1		1992	01	07.90347	06	24	08.31	+21 55 29.8		033
1991	XN1	*	1991	12	10.94722	06	50	06.43	+24 17 59.8	17.7	033
1991	XN1		1991	12	11.00278	06	50	02.83	+24 18 09.7		033
1991	XN1		1991	12	12.08160	06	48	53.55	+24 20 59.8		033
1991	XO1	*	1991	12	10.94722	06	53	26.53	+23 35 19.3	17.2	033
1991	XO1		1991	12	11.00278	06	53	23.40	+23 35 30.0		033
1991	XO1		1991	12	12.08160	06	52	21.50	+23 38 53.5		033
1991	XO1		1991	12	28.92431	06	33	41.29	+24 29 09.0		033
1991	XO1		1992	01	02.96181	06	27	50.45	+24 41 37.4	16.8	033
1991	XO1		1992	01	03.00347	06	27	47.46	+24 41 43.9		033
1991	XO1		1992	01	07.90347	06	22	22.89	+24 52 13.5		033
1991	XP1	*	1991	12	10.84583	04	19	08.09	+26 00 04.9		033
1991	XP1		1991	12	10.89931	04	19	05.15	+25 59 53.7		033
1991	XP1		1991	12	11.95833	04	18	05.53	+25 56 01.5	18.0	033
1991	XQ1	*	1991	12	10.84583	04	20	58.07	+24 41 20.8	V	033
1991	XQ1		1991	12	10.89931	04	20	54.85	+24 41 13.5		033
1991	XQ1		1991	12	11.95833	04	19	50.54	+24 39 24.5	19.4	033
1991	XR1	*	1991	12	10.84583	04	24	38.33	+23 39 43.6		033
1991	XR1		1991	12	10.89931	04	24	35.43	+23 39 39.0		033
1991	XR1		1991	12	11.95833	04	23	37.69	+23 37 54.3	17.5	033
1991	XR1		1991	12	28.81458	04	10	58.30	+23 10 39.4	17.8	033
1991	XS1	*	1991	12	10.84583	04	27	58.11	+24 10 54.4		033
1991	XS1		1991	12	10.89931	04	27	54.95	+24 10 46.2		033
1991	XS1		1991	12	11.95833	04	26	52.97	+24 08 29.9	18.2	033
1991	XT1	*	1991	12	10.84583	04	29	16.31	+24 54 44.8		033
1991	XT1		1991	12	10.89931	04	29	13.03	+24 54 43.2		033

1991 XT1		1991 12 11.95833	04 28 08.59	+24 53 57.5	18.4		033
1991 XU1	*	1991 12 10.84583	04 30 29.19	+24 45 28.9			033
1991 XU1		1991 12 10.89931	04 30 26.01	+24 45 33.6			033
1991 XU1		1991 12 11.95833	04 29 23.60	+24 46 54.1	18.4		033
1991 XV1	*	1991 12 10.84583	04 30 32.10	+23 52 59.8			033
1991 XV1		1991 12 10.89931	04 30 28.63	+23 52 56.9			033
1991 XV1		1991 12 11.95833	04 29 19.71	+23 51 42.5	18.7		033
1991 XW1	*	1991 12 10.84583	04 31 51.58	+24 10 59.2			033
1991 XW1		1991 12 10.89931	04 31 48.40	+24 10 57.8			033
1991 XW1		1991 12 11.95833	04 30 44.89	+24 10 23.8	18.6		033
1991 XX1	*	1991 12 10.84583	04 32 13.06	+24 13 33.7			033
1991 XX1		1991 12 10.89931	04 32 09.92	+24 13 03.4			033
1991 XX1		1991 12 11.95833	04 31 07.92	+24 03 10.0	17.4		033
1991 YD1	*	1991 12 28.92431	06 30 48.72	+24 33 33.8			033
1991 YD1		1992 01 02.96181	06 26 11.32	+24 41 53.6	17.7		033
1991 YD1		1992 01 03.00347	06 26 08.96	+24 41 57.0			033
1991 YE1	*	1991 12 28.92431	06 31 45.07	+22 48 40.8			033
1991 YE1		1992 01 02.96181	06 26 19.57	+23 27 18.6	17.1		033
1991 YE1		1992 01 03.00347	06 26 16.81	+23 27 37.7			033
1991 YE1		1992 01 07.90347	06 21 11.88	+24 03 37.0			033
1991 YH1	*	1991 12 28.92431	06 35 14.92	+24 06 50.5			033
1991 YH1		1992 01 02.96181	06 30 20.06	+24 19 55.5	18.3		033
1991 YH1		1992 01 03.00347	06 30 17.57	+24 20 02.6			033
1991 YJ1	*	1991 12 28.92431	06 36 10.11	+23 58 55.8			033
1991 YJ1		1992 01 02.96181	06 30 23.13	+23 43 14.6	18.1		033
1991 YJ1		1992 01 03.00347	06 30 20.19	+23 43 06.9			033
1991 YJ1		1992 01 07.90347	06 25 01.59	+23 27 19.5			033
1991 YK1	*	1991 12 28.92431	06 36 12.13	+23 48 17.2			033
1991 YK1		1992 01 02.96181	06 31 35.84	+24 08 36.7	18.0		033
1991 YK1		1992 01 03.00347	06 31 33.50	+24 08 47.0			033
1991 YK1		1992 01 07.90347	06 27 10.03	+24 27 39.7			033
1991 YL1	*	1991 12 28.92431	06 36 14.75	+24 01 42.6			033
1991 YL1		1992 01 02.96181	06 30 31.65	+24 04 15.1	17.4		033
1991 YL1		1992 01 03.00347	06 30 28.71	+24 04 15.8			033
1991 YL1		1992 01 07.90347	06 25 01.70	+24 05 37.8			033
1991 YM1	*	1991 12 28.92431	06 40 01.01	+22 22 57.2			033
1991 YM1		1992 01 02.96181	06 34 37.28	+22 41 45.2	16.6		033
1991 YM1		1992 01 03.00347	06 34 34.54	+22 41 53.9			033
1991 YM1		1992 01 07.90347	06 29 25.96	+22 59 34.5			033
1991 YN1	*	1991 12 28.92431	06 40 36.79	+24 28 39.1			033
1991 YN1		1992 01 02.96181	06 34 34.39	+24 12 55.0	18.0		033
1991 YN1		1992 01 03.00347	06 34 31.35	+24 12 46.5			033
1991 YN1		1992 01 07.90347	06 28 49.77	+23 56 19.8			033
1991 YO1	*	1991 12 28.92431	06 40 52.76	+21 40 52.0			033
1991 YO1		1992 01 02.96181	06 35 03.15	+21 55 24.3	17.9		033
1991 YO1		1992 01 03.00347	06 35 00.24	+21 55 31.1			033
1991 YP1	*	1991 12 28.92431	06 43 01.08	+24 20 21.6			033
1991 YP1		1992 01 02.96181	06 37 53.62	+24 15 46.8	18.7		033
1991 YP1		1992 01 03.00347	06 37 50.94	+24 15 43.2			033
(704)		1992 01 02.96181	06 27 24.91	+24 39 50.4	11.1		033
(704)		1992 01 03.00347	06 27 22.32	+24 39 38.8			033
(704)		1992 01 07.90347	06 22 33.70	+24 16 40.4			033
(790)		1991 12 10.87431	03 43 19.78	+23 55 18.3	14.5		033
(790)		1991 12 11.88924	03 42 38.91	+23 48 45.6		I	033
(790)		1991 12 11.93194	03 42 37.20	+23 48 29.2			033
(790)		1991 12 12.91910	03 41 58.39	+23 42 09.7			033
(883)		1991 12 10.84583	04 31 20.45	+26 20 48.2			033
(883)		1991 12 10.89931	04 31 16.76	+26 20 31.7			033
(883)		1991 12 11.95833	04 30 03.63	+26 15 10.5	16.6		033

(939)	1991 12 28.84653	03 44 39.80	+23 54 34.8	16.2	033
(939)	1991 12 28.90035	03 44 38.43	+23 54 24.1		033
(939)	1992 01 03.78958	03 42 52.26	+23 37 43.4	16.2	033
(939)	1992 01 03.83194	03 42 51.71	+23 37 36.5		033
(1180)	1991 12 10.94722	06 56 12.67	+24 14 46.1	16.5	033
(1180)	1991 12 11.00278	06 56 10.75	+24 14 52.3		033
(1180)	1991 12 12.08160	06 55 32.22	+24 16 49.5		033
(1190)	1991 12 10.87431	03 53 41.85	+24 18 02.8	15.6	033
(1190)	1991 12 11.88924	03 52 47.14	+24 16 11.6		033
(1190)	1991 12 11.93194	03 52 44.80	+24 16 06.9		033
(1190)	1991 12 12.91910	03 51 53.21	+24 14 18.3		033
(1190)	1992 01 03.78958	03 40 58.72	+23 43 09.4	16.4	033
(1190)	1992 01 03.83194	03 40 58.40	+23 43 07.9		033
(1417)	1991 12 10.94722	06 45 38.80	+22 27 38.2	16.8	033
(1417)	1991 12 11.00278	06 45 36.26	+22 27 47.6		033
(1417)	1991 12 12.08160	06 44 45.88	+22 30 48.8		033
(1540)	1992 01 07.77535	03 39 44.16	+25 30 56.4	16.5	033
(1540)	1992 01 07.82361	03 39 43.21	+25 30 58.0		033
(1809)	1991 12 10.94722	06 55 13.69	+22 27 05.9	17.1	033
(1809)	1991 12 11.00278	06 55 11.17	+22 27 12.4		033
(1809)	1991 12 12.08160	06 54 21.22	+22 29 09.3		033
(1809)	1991 12 28.92431	06 39 30.49	+23 00 13.4		033
(1809)	1992 01 02.96181	06 34 45.63	+23 08 52.7	16.7	033
(1809)	1992 01 03.00347	06 34 43.28	+23 08 56.3		033
(1809)	1992 01 07.90347	06 30 11.55	+23 16 45.3		033
(2029)	1991 12 28.84653	03 46 40.93	+23 37 17.4	18.2	033
(2029)	1991 12 28.90035	03 46 39.44	+23 36 59.5		033
(2043)	1991 12 10.87431	03 43 24.14	+24 21 11.3	16.2	033
(2043)	1991 12 11.88924	03 42 39.59	+24 17 52.6		033
(2043)	1991 12 11.93194	03 42 37.71	+24 17 44.4		033
(2043)	1991 12 12.91910	03 41 55.65	+24 14 31.9		033
(2465)	1991 12 10.87431	03 49 11.13	+24 26 10.4	17.3	033
(2465)	1991 12 11.88924	03 48 20.99	+24 22 09.4		033
(2465)	1991 12 11.93194	03 48 18.89	+24 21 59.1		033
(2465)	1991 12 12.91910	03 47 31.36	+24 18 05.8		033
(2579)	1991 12 10.94722	06 49 12.45	+24 30 58.4	17.2	033
(2579)	1991 12 11.00278	06 49 09.16	+24 30 54.2		033
(2579)	1991 12 12.08160	06 48 03.96	+24 29 41.2		033
(2739)	1991 12 10.94722	06 46 27.87	+22 52 13.1	17.7	033
(2739)	1991 12 11.00278	06 46 24.80	+22 52 14.1		033
(2739)	1991 12 12.08160	06 45 24.40	+22 52 53.3		033
(3117)	1991 12 10.94722	06 53 37.16	+22 57 02.3	17.6	033
(3117)	1991 12 11.00278	06 53 34.55	+22 57 08.0		033
(3117)	1991 12 12.08160	06 52 43.69	+22 59 14.6		033
(3117)	1991 12 28.92431	06 37 30.87	+23 31 48.5		033
(3117)	1992 01 02.96181	06 32 38.25	+23 40 38.1	17.2	033
(3117)	1992 01 03.00347	06 32 35.76	+23 40 41.8		033
(3117)	1992 01 07.90347	06 27 56.87	+23 48 32.0		033
(3240)	1991 12 10.94722	06 49 45.85	+23 50 25.1	18.6	033
(3240)	1991 12 11.00278	06 49 44.30	+23 50 26.2		033
(3240)	1991 12 12.08160	06 49 12.67	+23 50 55.8		033
(3240)	1992 01 02.96181	06 37 24.74	+23 59 34.3	18.2	033
(3240)	1992 01 03.00347	06 37 23.36	+23 59 34.8		033
(3313)	1992 01 07.77535	03 49 51.24	+25 03 36.1	18.7	033
(3313)	1992 01 07.82361	03 49 50.33	+25 03 21.0		033
(3513)	1991 12 28.84653	03 44 04.49	+23 34 47.1	18.0	033
(3513)	1991 12 28.90035	03 44 03.00	+23 34 38.4		033
(3513)	1992 01 03.78958	03 41 51.77	+23 19 28.0	18.0	033
(3513)	1992 01 03.83194	03 41 50.97	+23 19 21.2		033

(3580)	1991 12 10.87431	03 49 28.78	+25 13 49.0	17.9			033
(3580)	1991 12 11.88924	03 48 33.79	+25 10 40.1				033
(3580)	1991 12 11.93194	03 48 31.46	+25 10 31.7				033
(3580)	1991 12 12.91910	03 47 39.15	+25 07 27.4				033
(3719)	1991 12 28.92431	06 42 45.18	+24 25 40.8				033
(3719)	1992 01 02.96181	06 37 02.45	+24 21 04.2	16.6			033
(3719)	1992 01 03.00347	06 36 59.55	+24 21 01.1				033
(3719)	1992 01 07.90347	06 31 40.23	+24 15 23.8				033
(4628)	1991 12 10.94722	06 56 02.97	+23 41 16.3	15.8			033
(4628)	1991 12 11.00278	06 56 00.18	+23 41 04.9				033
(4628)	1991 12 12.08160	06 55 04.98	+23 37 06.8				033
(4628)	1991 12 28.92431	06 38 03.52	+22 30 09.6				033
(4628)	1992 01 02.96181	06 32 30.21	+22 08 26.1	15.0			033
(4628)	1992 01 03.00347	06 32 27.41	+22 08 14.5				033
(4628)	1992 01 07.90347	06 27 10.13	+21 46 40.2				033
(4708)	1992 01 02.96181	06 28 38.65	+23 49 14.3	17.6			033
(4708)	1992 01 03.00347	06 28 37.16	+23 49 13.6				033
(4708)	1992 01 07.90347	06 25 46.57	+23 47 17.9				033
(4955)	1991 12 10.94722	06 52 31.55	+23 42 32.5	17.5			033
(4955)	1991 12 11.00278	06 52 29.10	+23 42 42.0				033
(4955)	1991 12 12.08160	06 51 40.43	+23 45 37.2				033
(4955)	1991 12 28.92431	06 37 24.03	+24 30 02.8				033
(4955)	1992 01 02.96181	06 32 52.63	+24 42 04.9	16.9			033
(4955)	1992 01 03.00347	06 32 50.33	+24 42 10.2				033
(4955)	1992 01 07.90347	06 28 31.63	+24 52 58.4				033
(5049)	1991 12 10.84583	04 29 43.51	+24 07 27.9				033
(5049)	1991 12 10.89931	04 29 39.83	+24 07 25.5				033
(5049)	1991 12 11.95833	04 28 28.19	+24 06 33.1	16.8			033
(5072)	1992 01 03.78958	03 44 38.27	+22 22 14.3	18.2			033
(5072)	1992 01 03.83194	03 44 37.52	+22 22 11.4				033

046 Klet
J. Ticha, Hvezdarna Klet, CS-37001 Ceske Budejovice, Czechoslovakia
Observers Z. Moravec, J. Ticha, M. Tichy, Z. Vavrova
0.6-m Maksutov reflector

1992 CJ	1992 02 24.93425	10 55 21.33	-00 32 44.0	16.7			046
1992 CJ	1992 02 24.94935	10 55 20.20	-00 32 38.6				046
1992 DB	1992 03 01.00630	11 17 19.31	+09 51 18.2	16.5			046
1992 DB	1992 03 01.02053	11 17 18.53	+09 51 25.4				046
1992 DB	1992 03 01.93760	11 16 30.18	+09 59 06.0				046
1992 DB	1992 03 01.95178	11 16 29.29	+09 59 13.4				046
(16)	1992 02 28.86810	10 51 15.46	+08 08 56.3			E	046
(16)	1992 02 29.00491	10 51 09.35	+08 09 40.1			E	046
(16)	1992 02 29.02250	10 51 08.60	+08 09 46.0			E	046
(16)	1992 02 29.82748	10 50 31.17	+08 14 15.7				046
(16)	1992 02 29.84241	10 50 30.52	+08 14 20.4				046
(46)	1992 02 24.83147	10 45 43.99	+06 24 25.3				046
(46)	1992 02 24.84588	10 45 43.40	+06 24 27.1				046
(46)	1992 02 26.83650	10 43 57.92	+06 36 21.8				046
(46)	1992 02 26.85080	10 43 57.12	+06 36 27.7				046
(59)	1992 02 28.96463	10 56 34.68	+04 45 18.9				046
(59)	1992 02 28.97910	10 56 33.99	+04 45 25.7				046
(59)	1992 02 29.93546	10 55 48.48	+04 52 40.2				046
(59)	1992 02 29.95005	10 55 47.81	+04 52 47.6				046
(61)	1992 02 28.96463	10 53 41.68	+02 51 32.6				046
(61)	1992 02 28.97910	10 53 40.94	+02 51 34.3				046
(61)	1992 02 29.93546	10 52 50.04	+02 52 58.7				046
(61)	1992 02 29.95005	10 52 49.28	+02 53 00.0				046
(102)	1992 02 29.97123	11 05 34.25	+00 07 30.2				046

(102)	1992	02	29.98639	11 05 33.35	+00 07 34.7				046
(102)	1992	03	01.90282	11 04 49.19	+00 12 47.8				046
(102)	1992	03	01.91764	11 04 48.49	+00 12 53.1				046
(138)	1992	02	24.97105	11 02 03.04	+11 22 58.7				046
(138)	1992	02	24.98535	11 02 02.26	+11 23 05.2				046
(138)	1992	02	26.95491	11 00 13.23	+11 34 15.3				046
(138)	1992	02	26.97071	11 00 12.23	+11 34 20.9				046
(138)	1992	02	28.92852	10 58 22.24	+11 45 26.1				046
(138)	1992	02	28.94310	10 58 21.31	+11 45 30.9				046
(159)	1992	02	24.97105	10 58 53.64	+10 50 53.0				046
(159)	1992	02	24.98535	10 58 53.01	+10 51 00.1				046
(159)	1992	02	26.95491	10 57 26.41	+11 04 06.9				046
(159)	1992	02	26.97071	10 57 25.67	+11 04 13.4				046
(159)	1992	02	28.92852	10 55 58.55	+11 17 13.0				046
(159)	1992	02	28.94310	10 55 57.84	+11 17 18.8				046
(221)	1992	02	24.97105	10 55 25.28	+11 47 14.7				046
(221)	1992	02	24.98535	10 55 24.69	+11 47 28.6				046
(221)	1992	02	26.95491	10 53 59.27	+12 01 26.1				046
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(221)	1992	02	28.92852	10 52 32.80	+12 15 28.2				046
(221)	1992	02	28.94310	10 52 32.12	+12 15 34.0				046
(313)	1992	03	01.90282	11 14 17.59	-00 03 44.0				046
(313)	1992	03	01.91764	11 14 16.95	-00 03 32.2				046
(359)	1992	02	24.97105	11 00 38.88	+11 06 21.3				046
(359)	1992	02	24.98535	11 00 38.11	+11 06 26.4				046
(359)	1992	02	26.95491	10 58 54.96	+11 14 08.9				046
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(359)	1992	02	28.92852	10 57 10.57	+11 21 49.1				046
(359)	1992	02	28.94310	10 57 09.65	+11 21 51.9				046
(526)	1992	02	24.89692	10 39 32.23	+09 41 02.2			E	046
(526)	1992	02	24.91150	10 39 31.51	+09 41 06.8			E	046
(526)	1992	02	26.88095	10 38 00.89	+09 51 46.1	16.7		U	046
(526)	1992	02	26.89524	10 38 00.44	+09 51 51.6			U	046
(526)	1992	02	28.85369	10 36 30.56	+10 02 27.5				046
(526)	1992	02	28.86810	10 36 29.89	+10 02 32.2				046
(543)	1992	02	10.04032	09 57 12.83	+05 37 44.9				046
(543)	1992	02	10.05491	09 57 12.04	+05 37 47.0				046
(655)	1992	03	01.00630	11 20 36.27	+10 09 57.2				046
(655)	1992	03	01.02053	11 20 35.54	+10 10 02.9				046
(655)	1992	03	01.93760	11 19 54.92	+10 16 03.0				046
(655)	1992	03	01.95178	11 19 54.17	+10 16 09.8				046
(703)	1992	02	29.97123	11 07 35.87	+02 08 15.7				046
(703)	1992	02	29.98639	11 07 34.95	+02 08 20.5				046
(703)	1992	03	01.90282	11 06 39.59	+02 14 45.8			E	046
(703)	1992	03	01.91764	11 06 38.91	+02 14 51.1			E	046
(811)	1992	02	24.89692	10 44 52.94	+10 10 38.7				046
(811)	1992	02	24.91150	10 44 52.17	+10 10 44.4				046
(811)	1992	02	28.85369	10 41 44.78	+10 32 48.8				046
(811)	1992	02	28.86810	10 41 44.04	+10 32 54.4				046
(823)	1992	02	24.93425	10 59 39.84	-01 00 44.3				046
(823)	1992	02	24.94935	10 59 38.96	-01 00 40.2				046
(823)	1992	02	26.91613	10 57 45.32	-00 50 31.6				046
(823)	1992	02	26.93043	10 57 44.49	-00 50 27.0				046
(823)	1992	02	28.89241	10 55 49.31	-00 39 42.0				046
(823)	1992	02	28.90734	10 55 48.31	-00 39 37.8				046
(847)	1992	02	29.97123	11 09 40.74	+01 29 40.0				046
(847)	1992	02	29.98639	11 09 39.97	+01 29 45.2				046
(847)	1992	03	01.90282	11 08 54.79	+01 34 09.1				046
(847)	1992	03	01.91764	11 08 54.07	+01 34 13.0				046

(987)	1992 02 29.97123	11 11 57.20	+00 01 00.7				046
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(987)	1992 03 01.90282	11 11 16.04	+00 03 48.6				046
(987)	1992 03 01.91764	11 11 15.35	+00 03 51.7				046
(1169)	1992 02 29.97123	11 03 50.06	-01 43 30.0			E	046
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(1169)	1992 03 01.90282	11 02 55.33	-01 37 59.9			E	046
(1169)	1992 03 01.91764	11 02 54.51	-01 37 55.5			E	046
(1258)	1992 02 10.04032	10 00 47.12	+06 49 18.2				046
(1258)	1992 02 10.05491	10 00 46.40	+06 49 19.7				046
(1622)	1992 02 24.97105	10 53 01.66	+12 43 29.3				046
(1622)	1992 02 24.98535	10 53 00.95	+12 43 32.5				046
(1622)	1992 02 26.95491	10 50 49.08	+12 51 10.0				046
(1622)	1992 02 26.97071	10 50 47.98	+12 51 12.1				046
(1726)	1992 02 29.97123	11 08 06.57	+00 18 40.4		16.2		046
(1726)	1992 02 29.98639	11 08 05.81	+00 18 46.1				046
(1726)	1992 03 01.90282	11 07 21.92	+00 23 33.5				046
(1726)	1992 03 01.91764	11 07 20.93	+00 23 38.8				046
(1736)	1992 02 24.89692	10 44 44.75	+07 39 07.6				046
(1736)	1992 02 24.91150	10 44 43.96	+07 39 13.0				046
(1736)	1992 02 26.88095	10 42 46.75	+07 55 54.1				046
(1736)	1992 02 26.89524	10 42 45.98	+07 56 01.8				046
(1736)	1992 02 28.85369	10 40 49.84	+08 12 29.6				046
(1736)	1992 02 28.86810	10 40 48.78	+08 12 38.7				046
(2947)	1992 02 24.93425	10 55 40.52	+01 42 57.7				046
(2947)	1992 02 24.94935	10 55 39.69	+01 43 04.2				046
(3066)	1992 02 24.93425	10 54 05.61	+00 29 22.9				046
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(3066)	1992 02 26.91613	10 52 30.08	+00 48 22.3				046
(3066)	1992 02 26.93043	10 52 29.62	+00 48 29.6				046
(4072)	1992 02 24.89692	10 50 15.80	+10 35 11.6				046
(4072)	1992 02 24.91150	10 50 14.87	+10 35 16.6				046
(4072)	1992 02 26.88095	10 48 10.97	+10 45 32.0				046
(4072)	1992 02 26.89524	10 48 09.95	+10 45 36.5				046
(4072)	1992 02 28.85369	10 46 05.93	+10 55 39.4				046
(4072)	1992 02 28.86810	10 46 04.89	+10 55 44.4				046
(4171)	1992 02 29.93546	10 49 45.84	+04 08 47.4				046
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(5096)	1992 02 26.83650	10 40 49.88	+04 42 40.4				046
(5096)	1992 02 26.85080	10 40 48.74	+04 42 43.4				046

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 03 04.91111	11 19 22.36	+53 11 47.0				104
1992 AC	1992 03 04.91875	11 19 23.37	+53 11 52.7				104
(1622)	1992 02 27.89862	10 49 45.13	+12 54 43.7				104
(1622)	1992 02 27.91257	10 49 44.17	+12 54 47.1				104
(1622)	1992 03 04.85937	10 42 56.06	+13 15 40.0				104
(1622)	1992 03 04.87118	10 42 55.21	+13 15 42.1				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

1992 AC		1992 03 01.38576	11 10 31.12	+52 17 07.5				293
1992 AC		1992 03 01.39201	11 10 32.15	+52 17 10.5				293

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

1981 DG3		1992 02 12.25000	10 17 48.36	+10 09 23.2		15		303
1981 DG3		1992 02 13.28056	10 16 53.87	+10 09 55.1		15		303
1981 EH1		1992 02 12.25000	10 14 52.58	+10 00 37.0		15		303
1981 EH1		1992 02 13.28056	10 14 09.01	+10 07 56.3		15		303
1985 FU1		1992 02 12.25000	10 16 21.59	+12 37 00.5		15		303
1985 FU1		1992 02 13.28056	10 15 26.48	+12 45 07.3		15		303
1985 TB1		1992 02 12.25000	10 17 04.31	+08 51 07.9		15		303
1985 TB1		1992 02 13.28056	10 16 13.55	+08 55 48.3		15		303
1990 TK1		1992 02 06.20854	09 23 17.97	+16 00 56.2				303
1990 TK1		1992 02 07.21896	09 22 26.37	+16 05 59.3				303
1991 RF14		1991 10 04.15963	00 05 39.84	+04 06 53.8				303
1991 RF14		1991 10 05.17161	00 04 52.07	+03 56 38.5				303
1992 CJ1	*	1992 02 12.25000	10 07 14.70	+10 17 33.1		15		303
1992 CJ1		1992 02 13.28056	10 06 09.53	+10 19 44.6		15		303
1992 CK1	*	1992 02 12.25000	10 08 09.77	+10 33 37.2		17		303
1992 CK1		1992 02 13.28056	10 07 25.15	+10 45 01.9		17		303
1992 CM1	*	1992 02 12.25000	10 10 11.55	+10 45 57.6		17		303
1992 CM1		1992 02 13.28056	10 09 23.04	+10 50 38.7		17		303
1992 CN1	*	1992 02 12.25000	10 10 53.20	+11 46 20.7		16		303
1992 CN1		1992 02 13.28056	10 09 47.12	+11 46 35.8		16		303
1992 CO1	*	1992 02 12.25000	10 11 13.22	+12 10 18.6		16		303
1992 CO1		1992 02 13.28056	10 10 14.05	+12 12 33.0		16		303
1992 CP1	*	1992 02 12.25000	10 12 28.96	+09 33 45.4		17		303
1992 CP1		1992 02 13.28056	10 11 45.03	+09 38 03.4		17		303
1992 CQ1	*	1992 02 12.25000	10 14 16.76	+10 32 04.3		16		303
1992 CQ1		1992 02 13.28056	10 13 29.11	+10 41 41.3		16		303
1992 CR1	*	1992 02 12.25000	10 16 21.02	+11 22 53.7		18		303
1992 CR1		1992 02 13.28056	10 15 23.55	+11 27 14.5		18		303
1992 CS1	*	1992 02 12.25000	10 16 36.30	+11 04 46.7		18		303
1992 CS1		1992 02 13.28056	10 15 46.04	+11 06 41.4		18		303
1992 CT1	*	1992 02 12.25000	10 16 48.93	+10 59 07.4		15		303
1992 CT1		1992 02 13.28056	10 15 46.56	+11 01 40.3		15		303
1992 CU1	*	1992 02 12.25000	10 16 51.67	+10 41 24.7		17		303
1992 CU1		1992 02 13.28056	10 15 53.77	+10 46 54.1		17		303
1992 CV1	*	1992 02 12.25000	10 17 54.35	+11 27 35.9		16		303
1992 CV1		1992 02 13.28056	10 16 19.44	+11 16 50.9		16		303
1992 CW1	*	1992 02 12.25000	10 18 13.96	+09 47 03.3		18		303
1992 CW1		1992 02 13.28056	10 17 23.41	+09 51 29.2		18		303
1992 CX1	*	1992 02 12.25000	10 19 16.80	+10 58 16.6		17		303
1992 CX1		1992 02 13.28056	10 18 29.40	+11 02 49.0		17		303
1992 CY1	*	1992 02 12.25000	10 19 24.23	+11 25 57.5		18		303
1992 CY1		1992 02 13.28056	10 18 18.29	+11 25 36.3		18		303
1992 CZ1	*	1992 02 12.25000	10 20 33.51	+09 34 41.4		15		303
1992 CZ1		1992 02 13.28056	10 19 44.67	+09 37 46.2		15		303
1992 CA2	*	1992 02 12.25000	10 21 22.54	+11 29 34.8		16		303
1992 CA2		1992 02 13.28056	10 20 25.93	+11 37 53.0		16		303
1992 CB2	*	1992 02 12.25000	10 21 29.18	+11 28 08.8		16		303
1992 CB2		1992 02 13.28056	10 20 26.39	+11 29 02.7		16		303

1992 CC2	*	1992 02 12.25000	10 23 04.05	+10 49 01.1	18		303
1992 CC2		1992 02 13.28056	10 22 00.41	+10 54 19.9	18		303
1992 CD2	*	1992 02 12.25000	10 23 07.60	+10 58 59.4	18		303
1992 CD2		1992 02 13.28056	10 22 06.16	+11 02 05.3	18		303
1992 EV1	*	1992 03 06.17480	10 31 23.00	+11 06 08.2	19		303
1992 EV1		1992 03 06.18693	10 31 22.28	+11 06 10.7			303
1992 EV1		1992 03 06.20808	10 31 20.95	+11 06 14.1			303
1992 EV1		1992 03 07.17358	10 30 22.91	+11 08 44.6			303
1992 EV1		1992 03 07.20961	10 30 20.53	+11 08 50.2			303
4077 P-L		1992 03 06.17480	10 32 05.82	+08 06 47.2	17		303
4077 P-L		1992 03 06.18693	10 32 05.13	+08 06 50.1			303
4077 P-L		1992 03 06.20808	10 32 04.08	+08 06 55.7			303
4077 P-L		1992 03 07.17358	10 31 11.66	+08 11 10.9			303
4077 P-L		1992 03 07.20961	10 31 09.85	+08 11 22.1			303
(227)		1992 02 12.25000	10 14 18.52	+10 48 06.6	12		303
(227)		1992 02 13.28056	10 13 25.04	+10 49 54.0	12		303
(228)		1992 03 06.17480	10 22 44.77	+08 19 44.8	16		303
(228)		1992 03 06.18693	10 22 44.07	+08 19 49.3			303
(228)		1992 03 06.20808	10 22 42.74	+08 19 55.7			303
(228)		1992 03 07.17358	10 21 44.61	+08 24 53.2			303
(228)		1992 03 07.20961	10 21 42.72	+08 25 03.9			303
(526)		1992 03 06.17480	10 31 44.03	+10 35 31.9	13		303
(526)		1992 03 06.18693	10 31 43.51	+10 35 36.2			303
(526)		1992 03 06.20808	10 31 42.46	+10 35 43.1			303
(526)		1992 03 07.17358	10 30 59.94	+10 40 30.7			303
(526)		1992 03 07.20961	10 30 58.44	+10 40 41.0			303
(687)		1992 03 06.17480	10 27 28.54	+07 58 25.8	16		303
(687)		1992 03 06.18693	10 27 27.89	+07 58 27.3			303
(687)		1992 03 06.20808	10 27 26.59	+07 58 29.6			303
(687)		1992 03 07.17358	10 26 31.65	+08 00 07.2			303
(687)		1992 03 07.20961	10 26 29.76	+08 00 10.4			303
(717)		1992 03 06.17480	10 31 32.83	+09 32 18.8	17		303
(717)		1992 03 06.18693	10 31 32.32	+09 32 21.8			303
(717)		1992 03 06.20808	10 31 31.39	+09 32 26.7			303
(717)		1992 03 07.17358	10 30 49.74	+09 36 08.1			303
(717)		1992 03 07.20961	10 30 48.45	+09 36 17.7			303
(924)		1992 03 06.17480	10 26 27.22	+11 25 32.4	14		303
(924)		1992 03 06.18693	10 26 26.65	+11 25 36.7			303
(924)		1992 03 06.20808	10 26 25.66	+11 25 45.3			303
(1055)		1992 02 12.25000	10 14 08.52	+11 04 53.6	15		303
(1055)		1992 02 13.28056	10 13 07.62	+11 12 33.7	15		303
(1229)		1992 03 06.17480	10 24 00.34	+09 02 25.3	17		303
(1229)		1992 03 06.18693	10 23 59.90	+09 02 28.6			303
(1229)		1992 03 06.20808	10 23 58.92	+09 02 34.4			303
(1229)		1992 03 07.17358	10 23 18.83	+09 06 35.3			303
(1229)		1992 03 07.20961	10 23 17.57	+09 06 44.4			303
(1597)		1992 03 06.17480	10 26 18.49	+09 42 16.7	15		303
(1597)		1992 03 06.18693	10 26 18.00	+09 42 22.7			303
(1597)		1992 03 06.20808	10 26 16.98	+09 42 35.4			303
(1597)		1992 03 07.17358	10 25 34.91	+09 51 18.2			303
(1597)		1992 03 07.20961	10 25 33.42	+09 51 38.7			303
(1736)		1992 03 06.17480	10 34 41.58	+09 04 33.7	16		303
(1736)		1992 03 06.18693	10 34 40.93	+09 04 39.4			303
(1736)		1992 03 06.20808	10 34 39.64	+09 04 50.8			303
(1736)		1992 03 07.17358	10 33 45.11	+09 12 27.5			303
(1736)		1992 03 07.20961	10 33 43.15	+09 12 45.5			303
(2987)		1992 03 06.17480	10 30 46.59	+09 06 23.7	16		303
(2987)		1992 03 06.18693	10 30 46.07	+09 06 27.7			303
(2987)		1992 03 06.20808	10 30 45.07	+09 06 33.9			303

(2987)	1992 03 07.17358	10 29 59.51	+09 11 20.7			303
(2987)	1992 03 07.20961	10 29 57.95	+09 11 33.7			303
(3186)	1992 02 12.25000	10 20 01.51	+09 59 15.0	16		303
(3186)	1992 02 13.28056	10 19 15.24	+10 03 48.2	16		303
(3773)	1992 03 06.17480	10 35 05.32	+11 13 58.7	17		303
(3773)	1992 03 06.18693	10 35 04.38	+11 14 04.4			303
(3773)	1992 03 06.20808	10 35 02.98	+11 14 12.6			303
(3773)	1992 03 07.17358	10 34 03.79	+11 19 41.5			303
(3773)	1992 03 07.20961	10 34 01.85	+11 19 54.8			303
(3885)	1992 03 06.17480	10 32 25.86	+11 15 08.9	17		303
(3885)	1992 03 06.18693	10 32 25.20	+11 15 14.2			303
(3885)	1992 03 06.20808	10 32 23.91	+11 15 24.9			303
(3885)	1992 03 07.17358	10 31 38.10	+11 21 19.9			303
(3885)	1992 03 07.20961	10 31 36.40	+11 21 33.5			303
(4591)	1992 02 12.25000	10 22 45.35	+10 42 43.9	18		303
(4591)	1992 02 13.28056	10 21 46.74	+10 49 24.2	18		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 EH1	1992 02 25.60174	10 05 11.35	+11 36 50.5	16.5		364
1981 EH1	1992 02 25.61563	10 05 10.70	+11 36 57.1			364
1981 EH1	1992 02 26.56840	10 04 29.69	+11 43 44.8			364
1981 EH1	1992 02 26.58229	10 04 29.06	+11 43 50.9			364
1985 TB1	1992 02 08.64792	10 19 57.21	+08 35 19.0	17		364
1985 TB1	1992 02 08.66528	10 19 56.31	+08 35 23.4			364
1992 CQ1	1992 02 08.61771	10 16 58.45	+09 58 58.6			364
1992 CQ1	1992 02 08.63160	10 16 57.79	+09 59 07.5			364
1992 CZ1	1992 02 01.56632	10 28 13.29	+09 06 45.2	16		364
1992 CZ1	1992 02 01.58021	10 28 12.81	+09 06 46.6			364

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

1985 FU1	1992 03 07.59619	09 54 29.91	+15 37 02.6	16.5		372
1985 FU1	1992 03 07.60594	09 54 29.38	+15 37 07.4			372
1990 QW1	1992 02 01.70417	09 56 51.00	+16 43 46.5	17		372
1990 QW1	1992 02 01.71563	09 56 50.46	+16 43 47.2			372
1990 SQ16	1992 02 25.72118	10 50 28.07	+15 50 49.1	17		372
1990 SQ16	1992 02 25.73160	10 50 27.58	+15 50 55.0			372
1990 VN2	1992 02 25.69687	12 48 02.39	+07 57 48.4	18		372
1990 VN2	1992 02 25.70788	12 48 02.00	+07 57 56.9			372
1990 VN2	1992 03 03.79618	12 44 30.27	+09 06 04.8	18		372
1990 VN2	1992 03 03.80729	12 44 29.85	+09 06 10.0			372
1990 VN2	1992 03 22.51736	12 31 35.98	+12 00 10.8			372
1990 VN2	1992 03 22.52743	12 31 35.69	+12 00 15.2			372
1990 VS2	1992 04 02.68819	12 10 05.13	+07 55 38.7	17.5		372
1990 VS2	1992 04 02.69861	12 10 04.76	+07 55 41.3			372
1990 VS2	1992 04 05.56007	12 07 47.66	+08 12 11.3	17		372
1990 VS2	1992 04 05.57118	12 07 47.07	+08 12 15.4			372
1990 WN2	1992 04 02.73090	13 35 14.89	+11 56 52.3	17.5		372
1990 WN2	1992 04 02.74201	13 35 14.21	+11 56 54.8			372
1990 WN2	1992 04 05.60729	13 32 37.12	+12 07 07.9	18		372
1990 WN2	1992 04 05.61840	13 32 36.50	+12 07 10.3			372
1992 AT1	1992 01 27.51250	07 58 27.67	+21 14 13.5	17.5		372

1992	AT1		1992	02	04.59342	07	50	27.16	+21 54 20.3	17.5	372
1992	CE2	*	1992	02	01.77951	10	23	03.61	+14 40 17.3	17	372
1992	CE2		1992	02	01.79098	10	23	03.12	+14 40 23.7		372
1992	CE2		1992	02	08.70956	10	18	06.05	+15 45 59.4	17.5	372
1992	CE2		1992	02	08.72014	10	18	05.45	+15 46 08.0		372
1992	CF2		1992	02	05.66735	09	30	18.61	+18 33 44.4	17.5	372
1992	CF2		1992	02	05.67167	09	30	17.90	+18 33 48.7		372
1992	CF2		1992	02	05.69271	09	30	17.12	+18 33 52.8	17	372
1992	CF2		1992	02	05.70451	09	30	16.33	+18 33 56.6		372
1992	CF2	*	1992	02	08.64340	09	27	41.72	+18 51 33.4	17	372
1992	CF2		1992	02	08.65452	09	27	41.22	+18 51 38.2		372
1992	CG2		1992	02	01.65729	10	10	13.56	+16 06 35.7	17.0	372
1992	CG2		1992	02	01.66842	10	10	12.99	+16 06 36.0		372
1992	CG2	*	1992	02	08.68750	10	02	01.41	+15 49 04.1	17	372
1992	CG2		1992	02	08.69792	10	02	00.61	+15 49 02.1		372
1992	CJ2	*	1992	02	08.78056	10	07	47.33	+16 22 00.9	17	372
1992	CJ2		1992	02	08.79098	10	07	46.79	+16 22 04.0		372
1992	CJ2		1992	02	13.77986	10	02	53.79	+16 33 48.4	17.5	372
1992	CJ2		1992	02	13.79027	10	02	53.01	+16 33 50.9		372
1992	DV		1992	03	07.68819	11	18	32.66	+09 52 27.4	18	372
1992	DV		1992	03	07.69895	11	18	32.26	+09 52 37.1		372
1992	DV		1992	03	10.66284	11	16	48.65	+10 25 53.7	18	372
1992	DV		1992	03	10.67360	11	16	48.29	+10 26 02.4		372
1992	DV		1992	03	11.69375	11	16	12.73	+10 37 11.9	17.5	372
1992	DK1	*	1992	02	26.55174	10	53	33.19	+15 31 39.5	18.5	372
1992	DK1		1992	02	26.56250	10	53	32.77	+15 31 45.5		372
1992	DK1		1992	02	27.69097	10	52	45.33	+15 38 20.7	18.5	372
1992	DK1		1992	02	27.70277	10	52	44.72	+15 38 24.4		372
1992	EN	*	1992	03	06.67986	11	13	22.13	+06 23 33.6	17.5	372
1992	EN		1992	03	06.69063	11	13	21.53	+06 23 36.1		372
1992	EN		1992	03	07.77778	11	12	28.59	+06 27 21.1	17.5	372
1992	EO	*	1992	03	06.70348	11	25	04.11	+13 22 28.4	17	372
1992	EO		1992	03	06.71459	11	25	03.55	+13 22 28.5		372
1992	EO		1992	03	07.75488	11	24	04.11	+13 24 36.8	17	372
1992	EO		1992	03	07.76494	11	24	03.48	+13 24 38.2		372
1992	EO		1992	03	10.61771	11	21	20.01	+13 30 01.8	16.5	372
1992	EO		1992	03	10.62883	11	21	19.28	+13 30 03.2		372
1992	EO		1992	03	11.62639	11	20	21.90	+13 31 43.7	17	372
1992	EO		1992	03	11.63612	11	20	21.15	+13 31 45.5		372
1992	EW	*	1992	03	07.73160	12	15	06.85	+02 28 08.0	18	372
1992	EW		1992	03	07.74166	12	15	06.33	+02 28 15.7		372
1992	EW		1992	03	10.71008	12	13	01.71	+02 59 06.5	18	372
1992	EW		1992	03	10.72083	12	13	01.13	+02 59 12.8		372
1992	EX	*	1992	03	07.75488	11	22	59.27	+13 26 00.4	17.5	372
1992	EX		1992	03	07.76494	11	22	58.93	+13 26 04.4		372
1992	EX		1992	03	10.61771	11	20	45.78	+13 52 47.6	17.5	372
1992	EX		1992	03	10.62883	11	20	45.18	+13 52 53.6		372
1992	EX		1992	03	11.62639	11	19	58.41	+14 01 57.2	18	372
1992	EX		1992	03	11.63612	11	19	58.08	+14 02 05.2		372
1992	EY	*	1992	03	07.79131	12	12	29.58	+08 13 56.0	18	372
1992	EY		1992	03	07.80209	12	12	29.24	+08 14 02.7		372
1992	EY		1992	03	10.68542	12	10	22.40	+08 37 43.8	18	372
1992	EY		1992	03	10.69826	12	10	21.85	+08 37 50.6		372
1992	EZ	*	1992	03	07.79131	12	14	05.28	+08 34 36.7	18	372
1992	EZ		1992	03	07.80209	12	14	04.64	+08 34 42.1		372
1992	EZ		1992	03	10.68542	12	10	40.73	+08 57 00.0	18	372
1992	EZ		1992	03	10.69826	12	10	40.23	+08 57 07.1		372
1992	EG1	*	1992	03	10.66284	11	15	59.42	+10 39 02.9	18.5	372
1992	EG1		1992	03	10.67360	11	15	58.87	+10 39 02.9		372

1992 EG1		1992 03 11.69375	11 14 59.28	+10 39 11.6			372
1992 EH1	*	1992 03 10.68542	12 13 05.19	+09 22 28.7		17.5	372
1992 EH1		1992 03 10.69826	12 13 04.74	+09 22 33.2			372
1992 EH1		1992 03 11.71042	12 12 08.21	+09 24 34.6		17.5	372
1992 EJ1	*	1992 03 10.75277	12 07 50.02	+09 30 08.4		17.5	372
1992 EJ1		1992 03 10.76354	12 07 49.27	+09 30 13.4			372
1992 EJ1		1992 03 11.64757	12 06 59.30	+09 36 31.4		18	372
1992 EJ1		1992 03 11.65694	12 06 58.84	+09 36 37.4			372
1992 EN1	*	1992 03 10.78681	12 15 28.29	+05 59 57.0		17.5	372
1992 EN1		1992 03 11.66876	12 14 26.37	+06 03 38.8		17.5	372
1992 EN1		1992 03 11.67986	12 14 25.82	+06 03 46.2			372
1992 EO1	*	1992 03 10.79792	13 19 23.49	+04 34 08.2		18	372
1992 EO1		1992 03 10.81111	13 19 23.06	+04 34 15.6			372
1992 EO1		1992 03 11.72448	13 18 58.01	+04 39 46.9		18	372
1992 EO1		1992 03 11.73333	13 18 57.61	+04 39 54.1			372
1992 ER1		1992 03 22.54028	12 04 42.60	+13 58 33.2		17.5	372
1992 ER1		1992 03 22.54965	12 04 42.07	+13 58 39.6			372
1992 ER1		1992 04 02.59097	11 56 52.29	+15 26 47.6		18	372
1992 ER1		1992 04 02.60000	11 56 51.82	+15 26 53.4			372
1992 FB		1992 03 11.72448	13 21 56.59	+04 09 50.8		17	372
1992 FB		1992 03 11.73333	13 21 56.28	+04 09 53.5			372
1992 GB	*	1992 04 02.59097	11 56 14.86	+16 12 20.2		17	372
1992 GB		1992 04 02.60000	11 56 14.45	+16 12 22.8			372
1992 GB		1992 04 05.53646	11 54 06.83	+16 15 50.0		16.5	372
1992 GB		1992 04 05.54826	11 54 06.43	+16 15 50.4			372
1992 GC	*	1992 04 02.71007	13 24 01.51	-04 47 23.2		18	372
1992 GC		1992 04 02.71979	13 24 00.92	-04 47 24.8			372
1992 GC		1992 04 05.58402	13 21 04.79	-04 47 58.4		17.5	372
1992 GC		1992 04 05.59549	13 21 04.06	-04 47 58.4			372
(2009)		1992 03 06.59809	09 57 12.92	+15 48 44.8		16.5	372
(2009)		1992 03 06.61181	09 57 12.25	+15 48 50.1			372
(2682)		1992 03 10.77639	12 14 11.90	+05 57 10.4		17.5	372
(2682)		1992 03 10.78681	12 14 11.12	+05 57 15.6			372
(2682)		1992 03 11.66876	12 13 25.05	+06 04 31.7		17.5	372
(2682)		1992 03 11.67986	12 13 24.42	+06 04 38.1			372
(3281)		1992 02 04.75486	10 40 17.84	+12 21 35.9		16.5	372
(3281)		1992 02 04.76667	10 40 17.21	+12 21 40.2			372
(3293)		1992 01 12.67813	09 41 04.84	+17 04 41.4		17	372
(3293)		1992 01 12.69063	09 41 04.29	+17 04 43.8			372
(3670)		1992 01 15.77465	09 44 27.11	+17 59 24.8		16	372
(3670)		1992 01 15.78507	09 44 26.69	+17 59 29.8			372
(5058)		1992 01 28.60416	06 56 29.54	+23 33 07.4		17.5	372
(5141)		1992 02 26.74792	13 42 11.13	-07 17 28.6		18	372
(5141)		1992 02 27.77882	13 42 02.30	-07 15 11.6		18	372
(5141)		1992 04 02.71007	13 24 29.03	-04 50 56.2		18	372
(5141)		1992 04 02.71979	13 24 28.52	-04 50 49.2			372
(5141)		1992 04 05.58402	13 22 16.74	-04 35 41.8		17.5	372
(5141)		1992 04 05.59549	13 22 16.12	-04 35 35.5			372

391 Sendai Observatory, Ayashi Station
M. Koishikawa, Sendai Municipal Observatory, 1-1 Sakuragaoka-koen, Sendai 980, Japan
0.30-m f/3.8 astrocamera
SAOC

1992 DG1		1992 03 07.67188	12 17 47.78	-03 39 13.6		16.5	391
1992 DG1		1992 03 07.68924	12 17 46.82	-03 39 12.5			391
1992 DG1		1992 03 11.67847	12 14 17.26	-03 34 20.9			391
1992 DG1		1992 03 11.69201	12 14 15.66	-03 34 18.8			391

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H. Kaneda, Taiyo MS 2-H, 2 chome 2-15, kawazoe 8 jo, Minami-ku,
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Observer S. Ueda
Measurer H. Kaneda
0.25-m f/3.5 reflector
GSC

1980 RJ		1992 03 07.61389	11 57 16.56	+00 21 21.4	17	399
1980 RJ		1992 03 07.62882	11 57 15.53	+00 21 25.9		399
1982 UC11		1990 11 12.45069	03 03 59.29	+19 04 41.5	16.5	399
1982 UC11		1990 11 12.46632	03 03 58.33	+19 04 38.6		399
1982 UC11		1990 11 12.48281	03 03 57.48	+19 04 29.3		399
1982 UC11		1990 11 13.45556	03 03 04.58	+18 58 18.1	16.5	399
1982 UC11		1990 11 13.47153	03 03 03.78	+18 58 12.9		399
1986 QR3		1992 03 08.56806	11 55 21.87	+05 42 51.7	17	399
1986 QR3		1992 03 08.58299	11 55 20.92	+05 42 56.0		399
1987 VB		1992 03 07.47292	10 06 54.34	+07 12 52.2	17	399
1987 VB		1992 03 07.48785	10 06 53.48	+07 12 54.9		399
1987 VG1		1987 11 22.65417	02 45 33.26	+23 57 00.7	16.5	399
1987 VG1		1987 11 22.66944	02 45 32.51	+23 56 55.5		399
1987 VG1		1987 11 28.71262	02 41 27.10	+23 17 17.6	16.5	399
1987 VG1		1987 11 28.72882	02 41 26.50	+23 17 10.3		399
1987 VG1		1987 12 12.50602	02 34 44.94	+21 52 32.3	17	399
1987 VG1		1987 12 12.52575	02 34 44.62	+21 52 25.8		399
1987 VG1		1987 12 12.54653	02 34 44.13	+21 52 17.2		399
1988 CU7		1992 03 23.59624	13 04 40.61	-09 40 01.0	17	399
1988 CU7		1992 03 24.61331	13 03 42.50	-09 37 49.1	16.5	399
1988 CU7		1992 03 24.62812	13 03 41.64	-09 37 46.9		399
1990 VN3		1992 03 23.59624	13 05 31.84	-07 40 43.8	17	399
1990 VN3		1992 03 24.61331	13 04 31.58	-07 38 53.9	16.5	399
1990 VN3		1992 03 24.62812	13 04 30.48	-07 38 51.3		399
1990 VO3		1992 03 22.44763	10 16 24.15	-01 50 58.7	17	399
1990 VO3		1992 03 22.46395	10 16 23.55	-01 50 54.2		399
1990 VO3		1992 03 23.50868	10 15 50.52	-01 44 42.6	17	399
1991 TF4		1991 12 04.47292	02 21 57.99	+17 45 09.5	16.5	399
1991 TF4		1991 12 04.49410	02 21 57.59	+17 45 08.0		399
1991 TF4		1991 12 07.62986	02 20 59.87	+17 42 02.9	17	399
1991 TF4		1991 12 07.65116	02 20 59.52	+17 42 03.3		399
1991 UL4	*	1991 10 18.77326	02 55 26.86	+10 30 25.9	17	399
1991 UL4		1991 10 18.78646	02 55 26.17	+10 30 24.2		399
1991 UL4		1991 10 19.78750	02 54 42.89	+10 28 54.3	17.5	399
1991 UL4		1991 10 19.80139	02 54 42.14	+10 28 53.6		399
1991 UL4		1991 10 31.65463	02 44 48.97	+10 11 22.2	17	399
1991 UL4		1991 10 31.67025	02 44 48.05	+10 11 20.3		399
1991 UL4		1991 11 04.53542	02 41 16.83	+10 06 39.2	17	399
1991 UL4		1991 11 04.55035	02 41 15.93	+10 06 37.7		399
1991 UL4		1991 11 09.56383	02 36 42.38	+10 02 07.4	17	399
1991 UL4		1991 11 09.58160	02 36 41.40	+10 02 06.6		399
1991 VW3		1991 12 05.68125	03 48 43.42	+19 46 37.5	17	399
1991 VW3		1991 12 05.69653	03 48 42.58	+19 46 33.3		399
1991 VW3		1991 12 07.67361	03 46 45.22	+19 39 07.3	17	399
1991 VW3		1991 12 07.68854	03 46 44.32	+19 39 02.6		399
1991 VW3		1991 12 09.55764	03 44 59.94	+19 32 14.9	17	399
1991 VW3		1991 12 09.57396	03 44 58.91	+19 32 09.9		399
1991 VW3		1991 12 14.61476	03 40 48.41	+19 15 28.7	17	399
1991 VW3		1991 12 14.63021	03 40 47.53	+19 15 26.4		399
1991 VF7	*	1991 11 11.60417	04 06 54.91	+21 56 04.4	17.5	399
1991 VF7		1991 11 11.61910	04 06 54.14	+21 56 00.3		399
1991 VF7		1991 11 13.52922	04 05 02.44	+21 46 46.3	17.5	399

1991 VF7		1991	11	13.54421	04	05	01.67	+21 46 43.5		399
1991 VF7		1991	12	05.64028	03	42	42.24	+19 48 11.4	17	399
1991 VF7		1991	12	05.65521	03	42	41.45	+19 48 07.4		399
1991 VF7		1991	12	07.54063	03	40	58.48	+19 38 03.4	17.5	399
1991 VF7		1991	12	07.55764	03	40	57.51	+19 37 56.0		399
1991 VF7		1991	12	14.61476	03	35	11.99	+19 02 29.4	17.5	399
1991 VF7		1991	12	14.63021	03	35	11.12	+19 02 24.1		399
1991 VG7		1991	11	11.60417	03	57	46.38	+19 26 09.2	17	399
1991 VG7		1991	11	11.61910	03	57	45.37	+19 26 10.5		399
1991 VG7	*	1991	11	13.52922	03	55	59.16	+19 28 28.2	17	399
1991 VG7		1991	11	13.54421	03	55	58.33	+19 28 30.7		399
1992 DR		1992	02	22.54236	10	19	36.84	+07 58 25.3	17	399
1992 DR		1992	02	22.56215	10	19	35.84	+07 58 29.0		399
1992 DR		1992	03	07.47292	10	06	35.80	+08 41 59.0	17	399
1992 DR		1992	03	07.48785	10	06	34.83	+08 42 01.9		399
1992 DS		1992	03	22.51667	10	55	10.37	+13 16 01.2	17	399
1992 DS		1992	03	22.53194	10	55	09.60	+13 16 03.6		399
1992 EA		1992	03	22.48264	10	54	02.51	+06 31 03.4	17	399
1992 EA		1992	03	22.49757	10	54	01.74	+06 31 08.8		399
1992 EB		1992	03	22.48264	10	56	52.13	+05 57 22.5	17.5	399
1992 EB		1992	03	22.49757	10	56	51.28	+05 57 27.1		399
1992 EE		1992	03	23.52882	11	15	06.59	+04 05 33.1	17	399
1992 EE		1992	03	23.54444	11	15	05.73	+04 05 33.5		399
1992 EF		1992	03	22.44763	10	17	40.05	-03 19 26.9	17	399
1992 EF		1992	03	22.46395	10	17	39.40	-03 19 24.8		399
1992 EF		1992	03	23.50868	10	17	03.79	-03 14 19.7	17	399
1992 EP	*	1992	03	07.54722	12	02	48.21	+11 01 14.1	16.5	399
1992 EP		1992	03	07.56215	12	02	47.42	+11 01 20.1		399
1992 EP		1992	03	08.53333	12	01	55.87	+11 07 42.8	17	399
1992 EP		1992	03	08.54826	12	01	55.12	+11 07 48.2		399
1992 EP		1992	03	24.54792	11	46	29.83	+12 39 00.7	17	399
1992 EP		1992	03	24.56296	11	46	28.95	+12 39 06.4		399
1992 EP		1992	03	28.55139	11	42	39.05	+12 55 02.1	17	399
1992 EP		1992	03	28.56632	11	42	38.15	+12 55 03.9		399
1992 EQ	*	1992	03	07.58194	11	59	44.79	+02 48 45.9	17	399
1992 EQ		1992	03	07.59687	11	59	44.02	+02 48 54.7		399
1992 EQ		1992	03	08.56806	11	59	02.69	+02 59 18.0	17	399
1992 EQ		1992	03	08.58299	11	59	02.03	+02 59 25.8		399
1992 EQ		1992	03	24.51389	11	46	16.15	+05 55 36.6	16.5	399
1992 EQ		1992	03	24.52882	11	46	15.34	+05 55 46.1		399
1992 ER	*	1992	03	07.58194	12	04	30.28	+02 41 20.9	17	399
1992 ER		1992	03	07.59687	12	04	29.38	+02 41 20.9		399
1992 ER		1992	03	08.56806	12	03	30.02	+02 43 34.9	17	399
1992 ER		1992	03	08.58299	12	03	28.99	+02 43 37.9		399
1992 ER		1992	03	24.51389	11	46	25.19	+03 19 37.2	17.5	399
1992 ER		1992	03	24.52882	11	46	24.20	+03 19 37.4		399
1992 ER		1992	03	26.58056	11	44	15.53	+03 23 24.1	17.5	399
1992 ER		1992	03	26.59618	11	44	14.53	+03 23 25.5		399
1992 ES	*	1992	03	07.58194	12	06	27.91	+04 29 02.2	17	399
1992 ES		1992	03	07.59687	12	06	27.09	+04 29 07.7		399
1992 ES		1992	03	08.56806	12	05	42.64	+04 36 09.7	17	399
1992 ES		1992	03	08.58299	12	05	41.80	+04 36 17.1		399
1992 ET	*	1992	03	07.58194	12	06	29.98	+03 43 39.2	16.5	399
1992 ET		1992	03	07.59687	12	06	29.39	+03 43 46.1		399
1992 ET		1992	03	08.56806	12	05	48.13	+03 48 38.6	16.5	399
1992 ET		1992	03	08.58299	12	05	47.40	+03 48 45.6		399
1992 ET		1992	03	24.51389	11	53	57.32	+05 07 12.1	16	399
1992 ET		1992	03	24.52882	11	53	56.53	+05 07 15.9		399
1992 ET		1992	03	26.58056	11	52	26.36	+05 16 26.9	16.5	399

1992 ET		1992 03 26.59618	11 52 25.62	+05 16 31.3		399
1992 EU	*	1992 03 07.58194	12 08 55.46	+05 47 45.6	16.5	399
1992 EU		1992 03 07.59687	12 08 54.22	+05 47 43.1		399
1992 EU		1992 03 08.56806	12 07 29.40	+05 43 46.0	16.5	399
1992 EU		1992 03 08.58299	12 07 27.94	+05 43 42.3		399
1992 EU		1992 03 24.51389	11 44 22.33	+04 35 11.2	16.5	399
1992 EU		1992 03 24.52882	11 44 21.27	+04 35 08.8		399
1992 EU		1992 03 26.58056	11 41 34.42	+04 25 37.6	16.5	399
1992 EU		1992 03 26.59618	11 41 33.18	+04 25 33.1		399
1992 EV	*	1992 03 07.61389	12 03 48.68	-02 05 59.4	17	399
1992 EV		1992 03 07.62882	12 03 47.94	-02 05 56.1		399
1992 EV		1992 03 08.60278	12 02 59.78	-02 01 57.6	17	399
1992 EV		1992 03 08.61771	12 02 58.94	-02 01 54.0		399
1992 EP1	*	1992 03 07.54722	12 01 17.43	+10 00 18.9	17.5	399
1992 EP1		1992 03 07.56215	12 01 16.63	+10 00 18.9		399
1992 EP1		1992 03 24.54792	11 46 31.83	+10 02 03.5	17.5	399
1992 EP1		1992 03 24.56296	11 46 30.89	+10 02 03.5		399
1992 ER1	*	1992 03 08.63611	12 14 45.71	+11 32 29.5	17	399
1992 ER1		1992 03 08.65104	12 14 44.97	+11 32 39.8		399
1992 ES1	*	1992 03 08.63611	12 20 25.38	+09 30 26.1	16.5	399
1992 ES1		1992 03 08.65104	12 20 24.52	+09 30 29.8		399
1992 ES1		1992 03 26.54792	12 01 54.03	+10 23 29.4	16.5	399
1992 ES1		1992 03 26.56285	12 01 52.93	+10 23 30.7		399
1992 ES1		1992 04 03.54028	11 53 31.78	+10 30 57.0	17	399
1992 ES1		1992 04 03.55524	11 53 30.79	+10 30 56.3		399
1992 FA	*	1992 03 23.56319	13 08 02.71	+02 39 20.1	17	399
1992 FA		1992 03 23.57813	13 08 02.05	+02 39 25.9		399
1992 FA		1992 03 24.58125	13 07 17.90	+02 44 21.5	17	399
1992 FA		1992 03 24.59583	13 07 17.18	+02 44 26.4		399
1992 FB	*	1992 03 23.56319	13 14 01.42	+04 56 17.7	16.5	399
1992 FB		1992 03 23.57813	13 14 00.74	+04 56 20.5		399
1992 FB		1992 03 24.58125	13 13 15.76	+05 00 11.4	16.5	399
1992 FB		1992 03 24.59583	13 13 15.10	+05 00 13.1		399
1992 FC	*	1992 03 23.56319	13 16 58.38	+06 35 53.6	17.5	399
1992 FC		1992 03 23.57813	13 16 57.36	+06 35 56.6		399
1992 FC		1992 03 24.58125	13 16 05.46	+06 38 53.1	17.5	399
1992 FC		1992 03 24.59583	13 16 04.64	+06 38 54.6		399
1992 FH		1992 03 26.61528	12 32 10.15	+00 23 46.0	16	399
1992 FH		1992 03 26.63021	12 32 09.09	+00 23 51.3		399
1992 FJ		1992 03 23.59624	13 09 29.81	-10 59 34.3	17	399
1992 FJ	*	1992 03 24.61331	13 08 40.58	-10 52 30.7	17	399
1992 FJ		1992 03 24.62812	13 08 39.76	-10 52 25.1		399
1992 FK	*	1992 03 22.44763	10 18 51.22	-00 10 57.9	16.5	399
1992 FK		1992 03 22.46395	10 18 50.71	-00 10 36.3		399
1992 FK		1992 03 23.50868	10 18 26.84	+00 13 25.2	16.5	399
1992 FO		1992 03 26.61528	12 27 43.11	+01 29 35.9	17	399
1992 FO		1992 03 26.63021	12 27 42.33	+01 29 41.0		399
1992 FP		1992 03 26.61528	12 27 47.25	-00 37 30.1	17	399
1992 FP		1992 03 26.63021	12 27 46.41	-00 37 25.3		399
1992 FR		1992 03 26.61528	12 29 10.49	-01 13 49.0	15.5	399
1992 FR		1992 03 26.63021	12 29 09.81	-01 13 38.4		399
1992 FS		1992 03 26.61528	12 30 19.65	+01 40 15.7	17	399
1992 FS		1992 03 26.63021	12 30 18.95	+01 40 17.5		399
1992 FT		1992 03 26.61528	12 36 50.68	-01 23 56.7	17	399
1992 FT		1992 03 26.63021	12 36 49.86	-01 23 51.6		399
1992 FY	*	1992 03 23.56319	13 06 30.32	+06 58 59.4	16.5	399
1992 FY		1992 03 23.57813	13 06 29.37	+06 59 03.9		399
1992 FY		1992 03 24.58125	13 05 29.13	+07 03 12.2	16.5	399
1992 FY		1992 03 24.59583	13 05 28.26	+07 03 15.2		399

1992 FZ	*	1992 03 26.64931	13 35 54.10	-16 22 40.7	17		399
1992 FZ		1992 03 26.66424	13 35 53.44	-16 22 39.9			399
1992 FZ		1992 03 28.61875	13 34 24.53	-16 21 38.8	17		399
1992 FZ		1992 03 28.63368	13 34 23.87	-16 21 38.2			399
1992 FA1	*	1992 03 26.64931	13 39 08.79	-16 05 02.0	16.5		399
1992 FA1		1992 03 26.66424	13 39 07.94	-16 05 00.0			399
1992 FA1		1992 03 28.61875	13 37 43.30	-15 56 03.3	16.5		399
1992 FA1		1992 03 28.63368	13 37 42.45	-15 55 58.6			399
1992 FD1		1992 03 26.61528	12 36 34.83	-01 03 57.8	17.5		399
1992 FD1		1992 03 26.63021	12 36 33.75	-01 03 57.7			399
1992 FF1	*	1992 03 24.54792	11 49 50.13	+12 47 19.2	17		399
1992 FF1		1992 03 24.56296	11 49 49.25	+12 47 22.7			399
1992 FF1		1992 03 28.55139	11 46 15.93	+13 01 57.5	17		399
1992 FF1		1992 03 28.56632	11 46 15.04	+13 01 59.5			399
1992 FG1	*	1992 03 24.54792	11 52 34.09	+11 59 58.5	17		399
1992 FG1		1992 03 24.56296	11 52 33.34	+12 00 04.8			399
1992 FG1		1992 03 28.55139	11 49 26.43	+12 27 59.5	17		399
1992 FG1		1992 03 28.56632	11 49 25.71	+12 28 06.0			399
1992 FU1	*	1992 03 26.61528	12 25 47.09	+00 17 03.2	17		399
1992 FU1		1992 03 26.63021	12 25 46.35	+00 17 09.1			399
1992 FX1	*	1992 03 23.52882	11 18 37.81	+03 43 37.8	16		399
1992 FX1		1992 03 23.54444	11 18 37.05	+03 43 48.0			399
1992 FX1		1992 04 03.50694	11 11 29.54	+05 31 48.7	16		399
1992 FX1		1992 04 03.52188	11 11 29.15	+05 31 56.3			399
1992 FY1	*	1992 03 26.54792	12 07 24.12	+12 14 18.8	16		399
1992 FY1		1992 03 26.56285	12 07 23.08	+12 14 20.5			399
1992 FY1		1992 04 03.54028	11 59 30.14	+12 22 26.0	16.5		399
1992 FY1		1992 04 03.55524	11 59 29.33	+12 22 27.3			399
1992 FZ1	*	1992 03 28.58333	12 41 35.10	+07 13 42.9	17		399
1992 FZ1		1992 03 28.59826	12 41 34.25	+07 13 50.5			399
1992 FZ1		1992 04 03.57500	12 36 08.95	+07 58 07.6	17		399
1992 FZ1		1992 04 03.59001	12 36 08.04	+07 58 15.5			399
1992 FA2	*	1992 03 28.58333	12 48 28.68	+04 27 02.0	17		399
1992 FA2		1992 03 28.59826	12 48 27.92	+04 27 02.9			399
1992 FA2		1992 04 03.57500	12 43 22.97	+04 52 58.9	17		399
1992 FA2		1992 04 03.59001	12 43 22.17	+04 53 02.2			399
1992 FB2	*	1992 03 28.58333	12 48 49.47	+06 25 27.6	16.5		399
1992 FB2		1992 03 28.59826	12 48 48.59	+06 25 30.9			399
1992 FB2		1992 04 03.57500	12 43 00.61	+06 51 22.9	16.5		399
1992 FB2		1992 04 03.59001	12 42 59.67	+06 51 27.2			399
(3538)		1992 03 07.61389	12 01 53.52	+00 23 34.9	17		399
(3538)		1992 03 07.62882	12 01 52.62	+00 23 43.5			399
(5112)		1992 03 02.62523	11 41 01.77	+12 41 38.1	16.5		399
(5112)		1992 03 02.63999	11 41 00.89	+12 41 43.8			399

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Observers K. Endate, T. Fujii
Measurer K. Watanabe
0.20-m f/4.0 hyperboloid astrocamera, 0.25-m f/2.5 Schmidt
GSC

1981 GQ		1992 03 23.53611	12 35 06.85	+00 03 26.6	15.5		400
1981 GQ		1992 03 23.55556	12 35 05.65	+00 03 23.1			400
1981 GQ		1992 03 24.53819	12 34 07.43	+00 01 11.1	15.5		400
1981 GQ		1992 03 24.55694	12 34 06.29	+00 01 09.3			400
1981 GQ		1992 03 28.52569	12 30 08.69	-00 08 01.1	15.5		400
1981 GQ		1992 03 28.54514	12 30 07.53	-00 08 04.1			400
1986 SF		1992 03 08.64097	12 21 46.20	-03 41 00.2	16.5		400

1986	SF		1992	03	08.66042	12	21	45.05	-03 40 58.3	400
1986	TB3		1992	03	23.57431	12	45	01.46	-02 02 35.4	16.0 400
1986	TB3		1992	03	23.59375	12	45	00.26	-02 02 24.2	400
1986	TB3		1992	03	24.57708	12	44	07.97	-01 53 56.5	16.0 400
1986	TB3		1992	03	24.59583	12	44	06.80	-01 53 44.8	400
1987	SO9		1992	03	02.59583	11	28	43.28	+05 31 32.3	16.5 400
1987	SO9		1992	03	02.61597	11	28	42.19	+05 31 42.7	400
1987	SO9		1992	03	04.51875	11	26	51.57	+05 46 12.9	16.5 400
1987	SO9		1992	03	04.53819	11	26	50.48	+05 46 24.9	400
1988	HF		1992	03	23.53611	12	42	05.62	+00 37 02.0	15.5 400
1988	HF		1992	03	23.55556	12	42	04.78	+00 37 08.4	400
1988	HF		1992	03	24.53819	12	41	20.71	+00 46 47.5	15.5 400
1988	HF		1992	03	24.55694	12	41	20.16	+00 46 58.5	400
1990	SN4		1992	03	08.64097	12	16	02.24	-02 24 47.5	16.5 400
1990	SN4		1992	03	08.66042	12	16	01.19	-02 24 48.5	400
1990	UE3		1992	03	23.53611	12	33	06.99	-00 40 35.7	16.5 400
1990	UE3		1992	03	23.55556	12	33	06.10	-00 40 30.0	400
1990	UE3		1992	03	24.53819	12	32	18.85	-00 36 36.0	16.5 400
1990	UE3		1992	03	24.55694	12	32	17.86	-00 36 32.0	400
1990	UE3		1992	03	28.52569	12	29	07.07	-00 20 55.6	16.0 400
1990	UE3		1992	03	28.54514	12	29	06.23	-00 20 50.7	400
1992	CD1		1992	03	04.47813	10	24	41.40	+07 05 07.2	16.0 400
1992	CD1		1992	03	04.49896	10	24	40.36	+07 05 19.0	400
1992	CD1		1992	03	08.49340	10	21	23.93	+07 33 17.7	16.0 400
1992	CD1		1992	03	08.50868	10	21	23.17	+07 33 21.8	400
1992	CE1		1992	03	04.47813	10	30	18.97	+03 12 08.6	16.0 400
1992	CE1		1992	03	04.49896	10	30	18.14	+03 12 23.6	400
1992	CE1		1992	03	08.49340	10	27	44.58	+03 52 23.9	16.0 400
1992	DG1	*	1992	02	28.66493	12	23	40.77	-03 42 14.3	16.5 400
1992	DG1		1992	03	02.61979	12	21	42.68	-03 42 12.5	16.0 400
1992	DG1		1992	03	02.63889	12	21	41.79	-03 42 13.9	400
1992	DG1		1992	03	04.59097	12	20	15.99	-03 41 27.6	16.0 400
1992	DG1		1992	03	04.61042	12	20	14.86	-03 41 27.1	400
1992	DG1		1992	03	08.64097	12	16	58.84	-03 38 12.7	16.0 400
1992	DG1		1992	03	08.66042	12	16	57.79	-03 38 08.6	400
1992	EJ	*	1992	03	02.55208	10	59	18.35	+06 57 59.8	16.0 400
1992	EJ		1992	03	02.57569	10	59	16.97	+06 58 00.2	400
1992	EJ		1992	03	03.52153	10	58	15.36	+06 59 02.5	16.0 400
1992	EJ		1992	03	03.53924	10	58	14.12	+06 59 07.9	400
1992	EK	*	1992	03	02.55208	11	05	38.81	+06 25 02.2	16.5 400
1992	EK		1992	03	02.57569	11	05	37.45	+06 25 16.7	400
1992	EK		1992	03	03.52153	11	04	43.52	+06 33 07.3	16.5 400
1992	EK		1992	03	03.53924	11	04	42.53	+06 33 14.5	400
1992	EL	*	1992	03	02.57917	11	07	36.22	-04 44 26.5	16.0 400
1992	EL		1992	03	04.52500	11	05	58.48	-04 38 44.2	16.0 400
1992	EL		1992	03	04.54444	11	05	57.61	-04 38 43.6	400
1992	EL		1992	03	22.48611	10	51	39.18	-03 33 46.8	17 400
1992	EL		1992	03	22.50694	10	51	38.31	-03 33 41.9	400
1992	EM	*	1992	03	04.63681	11	37	24.04	-04 10 38.9	16.5 400
1992	EM		1992	03	04.65694	11	37	22.82	-04 10 38.6	400
1992	EM		1992	03	08.56250	11	33	09.95	-04 04 25.9	16.5 400
1992	EM		1992	03	08.58264	11	33	08.47	-04 04 25.3	400
1992	EM		1992	03	22.51806	11	17	34.36	-03 29 08.3	16.0 400
1992	EM		1992	03	22.53750	11	17	33.04	-03 29 06.9	400
1992	EK1		1992	03	04.63681	11	50	03.67	-02 43 22.6	16.5 400
1992	EK1		1992	03	04.65694	11	50	02.55	-02 43 22.2	400
1992	EK1	*	1992	03	08.56250	11	46	00.02	-02 34 53.4	16.0 400
1992	EK1		1992	03	08.58264	11	45	58.63	-02 34 51.2	400
1992	EK1		1992	03	22.51806	11	30	37.32	-01 53 06.1	16.0 400

1992 EK1		1992 03 22.53750	11 30 36.23	-01 53 00.8			400
1992 EK1		1992 03 31.48542	11 21 25.35	-01 23 19.2	16.0		400
1992 EK1		1992 03 31.50764	11 21 23.99	-01 23 13.4			400
1992 EQ1	*	1992 03 08.52674	12 09 51.13	+17 22 37.9	16.5		400
1992 EQ1		1992 03 08.54410	12 09 50.08	+17 22 41.6			400
1992 EQ1		1992 03 22.47986	11 55 23.14	+17 52 36.9	16.5		400
1992 EQ1		1992 03 22.49931	11 55 21.52	+17 52 41.6			400
1992 EQ1		1992 03 23.46146	11 54 22.45	+17 53 30.0	16.5		400
1992 EQ1		1992 03 23.48125	11 54 21.18	+17 53 29.8			400
1992 EU1		1992 04 03.57708	14 01 04.60	+02 34 54.7	16.0		400
1992 EU1		1992 04 03.59861	14 01 03.81	+02 34 57.7			400
1992 EU1		1992 04 07.58403	13 57 41.62	+03 00 02.7	16.0		400
1992 EU1		1992 04 07.60417	13 57 40.48	+03 00 09.9			400
1992 FF	*	1992 03 23.53611	12 23 12.05	+00 00 51.3	16.5		400
1992 FF		1992 03 23.55556	12 23 10.97	+00 00 55.9			400
1992 FF		1992 03 24.53819	12 22 26.13	+00 05 20.6	16.5		400
1992 FF		1992 03 24.55694	12 22 25.25	+00 05 23.4			400
1992 FF		1992 03 28.52569	12 19 23.75	+00 22 49.8	16.0		400
1992 FF		1992 03 28.54514	12 19 22.81	+00 22 57.6			400
1992 FG	*	1992 03 23.53611	12 24 07.37	-00 12 38.0	16.0		400
1992 FG		1992 03 23.55556	12 24 06.10	-00 12 35.6			400
1992 FG		1992 03 24.53819	12 23 02.71	-00 09 39.9	16.0		400
1992 FG		1992 03 24.55694	12 23 01.41	-00 09 37.1			400
1992 FG		1992 03 28.52569	12 18 42.89	+00 01 57.0	16.0		400
1992 FG		1992 03 28.54514	12 18 41.74	+00 01 59.0			400
1992 FH	*	1992 03 23.53611	12 35 24.85	+00 08 02.4	16.5		400
1992 FH		1992 03 23.55556	12 35 23.56	+00 08 07.2			400
1992 FH		1992 03 24.53819	12 34 22.05	+00 13 08.5	16.5		400
1992 FH		1992 03 24.55694	12 34 20.84	+00 13 15.7			400
1992 FH		1992 03 28.52569	12 30 07.90	+00 33 24.7	16.0		400
1992 FH		1992 03 28.54514	12 30 06.67	+00 33 31.7			400
1992 FL	*	1992 03 23.53611	12 24 02.50	-02 35 41.3	16.5		400
1992 FL		1992 03 23.55556	12 24 01.82	-02 35 32.7			400
1992 FL		1992 03 24.53819	12 23 21.19	-02 27 47.4	16.5		400
1992 FL		1992 03 24.55694	12 23 20.19	-02 27 43.2			400
1992 FL		1992 03 28.52569	12 20 34.51	-01 56 38.9	16.5		400
1992 FL		1992 03 28.54514	12 20 33.87	-01 56 27.4			400
1992 FM	*	1992 03 23.53611	12 24 20.15	-03 20 09.2	16.5		400
1992 FM		1992 03 23.55556	12 24 18.77	-03 20 06.3			400
1992 FM		1992 03 24.53819	12 23 14.83	-03 16 07.4	16.5		400
1992 FM		1992 03 24.55694	12 23 13.38	-03 16 02.8			400
1992 FN	*	1992 03 23.53611	12 29 34.73	-03 22 59.0	15.5		400
1992 FN		1992 03 23.55556	12 29 33.69	-03 22 49.9			400
1992 FN		1992 03 24.53819	12 28 41.41	-03 15 58.3	15.5		400
1992 FN		1992 03 24.55694	12 28 40.06	-03 15 51.4			400
1992 FN		1992 03 28.54514	12 25 05.32	-02 47 45.1	16.5		400
1992 FO	*	1992 03 23.53611	12 30 02.43	+01 15 07.5	16.5		400
1992 FO		1992 03 23.55556	12 30 01.62	+01 15 13.6			400
1992 FO		1992 03 24.53819	12 29 17.33	+01 19 52.8	16.5		400
1992 FO		1992 03 24.55694	12 29 16.64	+01 19 57.9			400
1992 FP	*	1992 03 23.53611	12 30 06.62	-00 51 04.1	16.5		400
1992 FP		1992 03 23.55556	12 30 05.74	-00 50 58.1			400
1992 FP		1992 03 24.53819	12 29 21.38	-00 46 40.9	16.5		400
1992 FP		1992 03 24.55694	12 29 20.60	-00 46 34.6			400
1992 FP		1992 03 28.52569	12 26 20.32	-00 29 04.1	17		400
1992 FP		1992 03 28.54514	12 26 19.28	-00 29 02.0			400
1992 FQ	*	1992 03 23.53611	12 30 33.92	-01 40 30.0	16.5		400
1992 FQ		1992 03 23.55556	12 30 32.47	-01 40 24.8			400
1992 FQ		1992 03 24.53819	12 29 28.84	-01 37 23.4	16.5		400

1992 FQ		1992 03 24.55694	12 29 27.42	-01 37 21.1			400
1992 FR	*	1992 03 23.53611	12 31 17.94	-01 50 53.2	15.5		400
1992 FR		1992 03 23.55556	12 31 17.07	-01 50 37.2			400
1992 FR		1992 03 24.53819	12 30 36.86	-01 38 50.8	15.5		400
1992 FR		1992 03 24.55694	12 30 35.94	-01 38 39.0			400
1992 FS	*	1992 03 23.53611	12 33 03.36	+01 28 00.1	16.5		400
1992 FS		1992 03 23.55556	12 33 02.28	+01 28 01.3			400
1992 FS		1992 03 24.53819	12 32 10.53	+01 31 56.0	16.5		400
1992 FS		1992 03 24.55694	12 32 09.65	+01 32 01.9			400
1992 FT	*	1992 03 23.53611	12 39 44.30	-01 47 26.3	16.5		400
1992 FT		1992 03 23.55556	12 39 43.14	-01 47 16.9			400
1992 FT		1992 03 24.53819	12 38 48.46	-01 39 49.0	16.5		400
1992 FT		1992 03 24.55694	12 38 47.56	-01 39 43.4			400
1992 FU	*	1992 03 23.49931	12 22 11.08	+05 16 59.7	17		400
1992 FU		1992 03 23.51875	12 22 09.91	+05 17 01.3			400
1992 FU		1992 03 24.50069	12 21 11.90	+05 20 58.6	17		400
1992 FU		1992 03 24.52014	12 21 10.88	+05 21 04.7			400
1992 FV	*	1992 03 23.49931	12 23 05.94	+05 49 56.1	15.5		400
1992 FV		1992 03 23.51875	12 23 04.71	+05 50 04.3			400
1992 FV		1992 03 24.50069	12 22 06.29	+05 56 55.9	16.0		400
1992 FV		1992 03 24.52014	12 22 05.24	+05 57 05.2			400
1992 FV		1992 04 02.52639	12 13 07.36	+06 53 48.7	16.0		400
1992 FV		1992 04 02.55000	12 13 05.85	+06 53 55.3			400
1992 FW	*	1992 03 23.53611	12 30 08.38	-04 00 04.4	15.5		400
1992 FW		1992 03 23.55556	12 30 07.44	-03 59 52.6			400
1992 FW		1992 03 24.53819	12 29 14.30	-03 51 05.1	15.5		400
1992 FW		1992 03 24.55694	12 29 13.31	-03 50 57.5			400
1992 FX	*	1992 03 23.57431	12 49 31.29	-03 30 37.5	16.0		400
1992 FX		1992 03 23.59375	12 49 30.27	-03 30 35.3			400
1992 FX		1992 03 24.57708	12 48 32.08	-03 27 10.8	16.0		400
1992 FX		1992 03 24.59583	12 48 30.93	-03 27 05.2			400
1992 FX		1992 04 03.49514	12 38 32.62	-02 52 03.2	16.0		400
1992 FX		1992 04 03.51319	12 38 31.40	-02 52 00.2			400
1992 FB1	*	1992 03 23.49931	12 30 14.75	+06 43 22.7	16.0		400
1992 FB1		1992 03 23.51875	12 30 14.06	+06 43 33.9			400
1992 FB1		1992 03 24.50069	12 29 31.68	+06 54 27.4	16.0		400
1992 FB1		1992 03 24.52014	12 29 30.65	+06 54 38.2			400
1992 FC1	*	1992 03 23.53611	12 28 28.25	-01 06 24.8	16.5		400
1992 FC1		1992 03 23.55556	12 28 27.44	-01 06 15.4			400
1992 FC1		1992 03 24.53819	12 27 37.65	-01 00 20.4	16.5		400
1992 FC1		1992 03 24.55694	12 27 36.61	-01 00 19.2			400
1992 FC1		1992 03 28.52569	12 24 14.04	-00 36 22.7	16.5		400
1992 FC1		1992 03 28.54514	12 24 13.13	-00 36 13.7			400
1992 FD1	*	1992 03 23.53611	12 39 36.38	-01 13 57.5	16.5		400
1992 FD1		1992 03 23.55556	12 39 35.41	-01 13 55.4			400
1992 FD1		1992 03 28.52569	12 34 40.69	-00 57 47.5	16.5		400
1992 FD1		1992 03 28.54514	12 34 39.49	-00 57 41.6			400
1992 FE1	*	1992 03 23.57431	12 52 45.80	-00 09 06.0	16.5		400
1992 FE1		1992 03 23.59375	12 52 44.90	-00 09 00.9			400
1992 FE1		1992 03 24.57708	12 51 55.82	-00 04 35.1	16.5		400
1992 FE1		1992 03 24.59583	12 51 54.93	-00 04 27.7			400
1992 FE1		1992 04 03.49514	12 43 27.04	+00 38 58.4	16.5		400
1992 FE1		1992 04 03.51319	12 43 25.76	+00 39 01.6			400
1992 FH1	*	1992 03 24.61389	13 11 31.52	-00 51 49.8	16.0		400
1992 FH1		1992 03 24.63333	13 11 30.51	-00 51 43.2			400
1992 FH1		1992 03 28.52569	13 07 51.50	-00 28 48.8	16.0		400
1992 FH1		1992 03 28.54514	13 07 50.28	-00 28 40.8			400
1992 FN1	*	1992 03 24.61389	13 22 11.58	+00 28 05.2	16.5		400

1992 FN1		1992	03	24.63333	13	22	10.46	+00 28 10.4	400
1992 FN1		1992	03	28.56528	13	18	44.64	+00 44 03.2	16.5 400
1992 FN1		1992	03	28.58542	13	18	43.42	+00 44 06.1	400
1992 FP1	*	1992	03	28.60556	13	31	43.97	-02 48 34.8	16.0 400
1992 FP1		1992	03	28.62674	13	31	43.31	-02 48 18.9	400
1992 FP1		1992	03	31.56319	13	29	58.66	-02 11 27.5	16.0 400
1992 FP1		1992	03	31.58264	13	29	57.89	-02 11 14.4	400
1992 FQ1	*	1992	03	28.65000	13	46	27.78	+00 18 32.6	16.5 400
1992 FQ1		1992	03	28.67222	13	46	26.57	+00 18 40.1	400
1992 FQ1		1992	03	31.63819	13	43	59.08	+00 35 48.6	16.5 400
1992 FQ1		1992	03	31.65764	13	43	57.91	+00 35 54.8	400
1992 FR1	*	1992	03	28.65000	13	53	58.75	+03 06 37.1	16.5 400
1992 FR1		1992	03	28.67222	13	53	57.60	+03 06 42.8	400
1992 FR1		1992	03	31.63819	13	51	36.78	+03 25 52.1	17 400
1992 FR1		1992	03	31.65764	13	51	35.79	+03 25 55.4	400
1992 FS1	*	1992	03	28.65000	13	57	46.26	+01 54 27.9	16.5 400
1992 FS1		1992	03	28.67222	13	57	45.34	+01 54 36.4	400
1992 FS1		1992	03	31.63819	13	55	36.58	+02 15 28.8	16.5 400
1992 FS1		1992	03	31.65764	13	55	35.61	+02 15 36.6	400
1992 FU1		1992	03	28.54514	12	24	10.57	+00 30 27.4	17 400
1992 FV1	*	1992	03	31.60139	13	47	26.67	-03 16 25.1	15.5 400
1992 FV1		1992	03	31.62083	13	47	25.67	-03 16 24.5	400
1992 FV1		1992	04	02.57053	13	45	46.30	-03 14 38.9	15.5 400
1992 FV1		1992	04	02.59375	13	45	45.42	-03 14 37.5	400
1992 FV1		1992	04	03.53750	13	44	55.86	-03 13 46.7	15.5 400
1992 FV1		1992	04	03.55903	13	44	54.69	-03 13 47.2	400
1992 FC2	*	1992	03	23.53611	12	23	00.52	-03 14 10.5	16.5 400
1992 FC2		1992	03	23.55556	12	22	59.64	-03 14 06.2	400
1992 FC2		1992	03	28.52569	12	18	47.76	-02 54 44.4	16.0 400
1992 FC2		1992	03	28.54514	12	18	46.77	-02 54 39.2	400
1992 FE2	*	1992	03	31.60139	13	43	14.70	-05 06 53.6	16.5 400
1992 FE2		1992	03	31.62083	13	43	13.48	-05 06 54.5	400
1992 FE2		1992	04	03.53750	13	40	22.88	-05 06 12.4	16.5 400
1992 FE2		1992	04	03.55903	13	40	21.48	-05 06 12.3	400
1992 FF2	*	1992	03	31.60139	13	46	56.33	-02 51 24.2	16.5 400
1992 FF2		1992	03	31.62083	13	46	55.30	-02 51 21.6	400
1992 FF2		1992	04	03.53750	13	44	38.96	-02 46 29.7	16.0 400
1992 FF2		1992	04	03.55903	13	44	38.00	-02 46 24.8	400
1992 GG	*	1992	04	03.57708	14	11	38.70	+00 23 37.6	16.5 400
1992 GG		1992	04	03.59861	14	11	37.81	+00 23 45.8	400
1992 GG		1992	04	07.58403	14	08	39.63	+00 44 29.8	16.5 400
1992 GG		1992	04	07.60417	14	08	38.71	+00 44 37.7	400
4611 P-L		1992	03	23.53611	12	32	35.78	-01 54 43.8	17 400
4611 P-L		1992	03	23.55556	12	32	34.45	-01 54 45.7	400
4611 P-L		1992	03	24.53819	12	31	26.30	-01 55 42.6	17 400
4611 P-L		1992	03	24.55694	12	31	25.01	-01 55 43.7	400
6573 P-L		1992	03	24.61389	13	16	05.15	-02 00 26.8	16.0 400
6573 P-L		1992	03	24.63333	13	16	04.30	-02 00 19.0	400
(2466)		1992	04	03.53750	13	41	03.49	-05 04 56.6	16.5 400
(2466)		1992	04	03.55903	13	41	02.46	-05 04 49.3	400
(2635)		1992	03	04.63681	11	44	25.63	-06 36 57.8	15.0 400
(2635)		1992	03	04.65694	11	44	24.50	-06 36 54.2	400
(3036)		1992	03	08.52674	12	10	51.84	+17 22 44.5	15.5 400
(3036)		1992	03	08.54410	12	10	50.89	+17 22 46.8	400
(4846)		1992	03	23.53611	12	29	45.26	-00 42 08.5	16.5 400
(4846)		1992	03	23.55556	12	29	44.32	-00 42 04.3	400
(5096)		1992	03	04.47813	10	33	41.42	+05 00 20.6	15.5 400
(5096)		1992	03	04.49896	10	33	40.19	+05 00 24.3	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 UQ		1992 04 05.62500	13 22 35.75	+06 11 20.1	16.0	402
1990 UQ		1992 04 05.64031	13 22 34.22	+06 11 53.5		402
1992 BK1		1992 03 08.56806	09 34 23.00	+05 05 06.0	16.5	402
1992 BK1		1992 03 08.58333	09 34 22.20	+05 05 06.7		402
1992 DK		1992 03 08.59514	12 08 23.82	+17 45 18.2	17.0	402
1992 DK		1992 03 08.61250	12 08 22.95	+17 45 24.7		402
1992 DK		1992 03 10.62083	12 06 44.71	+17 52 31.8	17.0	402
1992 DK		1992 03 10.63750	12 06 43.84	+17 52 34.8		402
1992 EE1	*	1992 03 10.70278	13 32 32.16	+16 30 56.2	16.5	402
1992 EE1		1992 03 10.71875	13 32 31.03	+16 30 53.4		402
1992 EE1		1992 03 11.65833	13 31 26.08	+16 26 02.8		402
1992 EE1		1992 03 11.71944	13 31 21.66	+16 25 44.7		402
1992 EE1		1992 03 12.69149	13 30 12.01	+16 20 33.1		402
1992 EE1		1992 03 12.70608	13 30 10.80	+16 20 26.7		402
1992 EE1		1992 03 12.75000	13 30 07.58	+16 20 11.1		402
1992 EE1		1992 03 12.76736	13 30 06.23	+16 20 07.5		402
1992 EE1		1992 04 05.54740	12 53 04.04	+12 40 24.8	16.0	402
1992 EE1		1992 04 05.56181	12 53 02.63	+12 40 13.7		402
1992 EE1		1992 04 07.59722	12 49 35.49	+12 12 34.3	15.5	402
1992 EE1		1992 04 07.61111	12 49 33.96	+12 12 21.6		402
1992 EL1		1992 02 26.69028	12 12 50.11	+15 24 44.4	17.0	402
1992 EL1		1992 02 26.70764	12 12 49.44	+15 24 50.9		402
1992 EL1		1992 02 27.65486	12 12 12.97	+15 30 34.5		402
1992 EL1		1992 02 27.67361	12 12 12.14	+15 30 41.1		402
1992 EL1	*	1992 03 08.60035	12 05 04.72	+16 27 49.5	17.0	402
1992 EL1		1992 03 08.61250	12 05 04.02	+16 27 56.8		402
1992 EL1		1992 03 10.62083	12 03 30.04	+16 38 29.2		402
1992 EL1		1992 03 10.63750	12 03 29.25	+16 38 35.0		402
1992 EM1	*	1992 03 08.68403	13 39 10.07	+10 53 32.6	16.5	402
1992 EM1		1992 03 08.70417	13 39 09.41	+10 53 44.2		402
1992 EM1		1992 03 10.67569	13 38 16.15	+11 10 58.4		402
1992 EM1		1992 03 10.69167	13 38 15.57	+11 11 07.1		402
1992 EM1		1992 04 05.59861	13 17 53.95	+14 15 47.2	17.0	402
1992 EM1		1992 04 05.61319	13 17 53.06	+14 15 51.3		402
1992 EU1	*	1992 03 12.77847	14 12 01.89	+00 07 17.9	16.5	402
1992 EU1		1992 03 12.79514	14 12 01.54	+00 07 26.0		402
1992 EU1		1992 04 05.67986	13 59 19.94	+02 48 20.6	16.5	402
1992 EU1		1992 04 05.69444	13 59 19.13	+02 48 26.6		402
1992 EU1		1992 04 07.70694	13 57 34.81	+03 00 48.1		402
1992 EU1		1992 04 07.72292	13 57 33.95	+03 00 53.6		402
1992 FD2	*	1992 03 31.50486	11 50 06.20	+18 33 03.4	17.5	402
1992 FD2		1992 03 31.51675	11 50 05.80	+18 33 04.7		402
1992 FD2		1992 04 02.50217	11 48 37.06	+18 35 44.3		402
1992 FD2		1992 04 02.51704	11 48 36.28	+18 35 48.4		402
1992 GD	*	1992 04 05.54740	12 49 27.80	+13 17 45.8	17.0	402
1992 GD		1992 04 05.56181	12 49 26.89	+13 17 51.8		402
1992 GD		1992 04 07.59722	12 47 26.13	+13 33 55.4		402
1992 GD		1992 04 07.61111	12 47 25.19	+13 34 00.4		402
1992 GE	*	1992 04 05.54740	12 54 20.03	+10 26 29.0	17.0	402
1992 GE		1992 04 05.56181	12 54 19.32	+10 26 31.8		402
1992 GE		1992 04 07.59722	12 52 51.74	+10 37 00.9		402
1992 GE		1992 04 07.61111	12 52 51.19	+10 37 05.5		402

408 Nyukasa
K. Watanabe, 3-8 Mason Hashimoto B-203, Atsubetsu Chuo 3 Jo 4 Chome, Atsubetsu-Ku, Sapporo 004, Japan
Observers M. Hirasawa, S. Suzuki
Measurer K. Watanabe
0.30-m f/2.7 Schmidt camera
GSC

(5114)		1992 03 07.63785	10 25 26.25	+15 11 23.0	16.5			408
(5114)		1992 03 07.65382	10 25 25.22	+15 11 26.0				408

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

(2060)		1992 03 06.46914	08 18 25.68	+12 01 13.0				411
(2060)		1992 03 06.47224	08 18 25.79	+12 01 14.1				411
(2060)		1992 03 06.47731	08 18 25.64	+12 01 14.8				411
(2060)		1992 03 06.47968	08 18 25.63	+12 01 14.6				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 R. H. McNaught, J. Barton, M. J. Drinkwater, M. Hartley, S. M. Hughes, Q. A. Parker, K. S. Russell, A. Savage, D. I. Steel
Measurers R. H. McNaught, A. N. Zytkow, M. J. Irwin, D. I. Steel
1.2-m U.K. Schmidt, Uppsala Southern Schmidt, 1.0-m reflector

1983 XX		1992 03 10.58317	10 58 19.38	-16 09 33.6	17	V		413
1983 XX		1992 03 10.63525	10 58 16.28	-16 09 14.8				413
1983 XX		1992 03 11.65000	10 57 17.92	-16 02 55.3				413
1983 XX		1992 03 11.66268	10 57 17.14	-16 02 50.6				413
1988 BH5		1992 03 26.48414	08 49 55.52	+00 49 12.2				413
1988 DD5		1992 03 09.70225	14 04 55.52	-29 34 15.0	17.5	V		413
1988 DD5		1992 03 09.75086	14 04 55.85	-29 34 36.8				413
1988 DD5		1992 03 13.69064	14 05 21.82	-30 03 54.6				413
1988 DD5		1992 03 13.73925	14 05 21.76	-30 04 13.2				413
1989 AV2		1992 03 30.58576	13 23 11.16	-32 54 46.8	17.5	V		413
1989 AV2		1992 03 31.68206	13 22 37.37	-32 53 11.4				413
1990 UQ		1992 04 06.54226	13 21 24.11	+06 41 35.1				413
1991 VK		1992 04 09.53935	13 01 09.34	-26 24 11.2	17	V		413
1991 VK		1992 04 09.58449	13 01 05.03	-26 23 17.5				413
1991 VK		1992 04 10.61597	12 59 35.92	-26 02 18.8				413
1992 DC		1992 04 05.38267	10 12 18.98	+05 59 14.3				413
1992 DC		1992 04 05.39309	10 12 19.48	+05 59 01.0				413
1992 EA1	*	1992 03 10.58317	11 01 29.65	-15 59 05.5	17	V		413
1992 EA1		1992 03 10.63525	11 01 26.91	-15 58 48.9				413
1992 EA1		1992 03 11.65000	11 00 34.79	-15 53 00.9				413
1992 EA1		1992 03 11.66268	11 00 34.04	-15 52 56.0				413
1992 EB1	*	1992 03 10.58317	11 02 36.94	-17 31 40.7	17	V		413
1992 EB1		1992 03 10.63525	11 02 31.49	-17 33 28.7				413
1992 EB1		1992 03 11.66268	11 00 49.02	-18 09 46.6			F	413
1992 EB1		1992 03 13.60359	10 57 34.45	-19 17 29.0				413
1992 EB1		1992 03 14.50266	10 56 04.39	-19 48 24.4			F	413
1992 EB1		1992 03 15.69904	10 54 02.17	-20 29 06.3				413
1992 EB1		1992 03 24.42088	10 39 45.96	-25 05 11.1				413
1992 EB1		1992 03 24.42759	10 39 45.33	-25 05 21.8				413
1992 EB1		1992 03 28.69403	10 33 25.55	-27 04 22.4				413

1992 EB1		1992	04	04.61481	10	24	56.34	-29	53	11.2		413
1992 EC1		1992	02	11.67499	11	14	33.68	-23	10	32.1	17.5 V	413
1992 EC1	*	1992	03	10.58317	11	03	04.43	-14	34	26.6	17 V	413
1992 EC1		1992	03	10.63525	11	03	02.77	-14	33	10.5		413
1992 EC1		1992	03	11.65000	11	02	33.03	-14	06	55.1	p	413
1992 EC1		1992	03	15.70590	11	00	41.16	-12	19	26.9		413
1992 ED1	*	1992	03	10.58317	11	03	17.43	-15	42	16.9	17 V	413
1992 ED1		1992	03	10.63525	11	03	14.86	-15	41	55.9		413
1992 ED1		1992	03	11.65000	11	02	23.04	-15	34	31.3		413
1992 ED1		1992	03	11.66268	11	02	22.30	-15	34	25.9		413
1992 FD	*	1992	03	26.45984	09	01	43.19	+02	34	09.8	17.5 V	413
1992 FD		1992	03	26.50845	09	01	43.46	+02	35	00.8		413
1992 FD		1992	03	30.47720	09	02	30.40	+03	44	11.7		413
1992 FE	*	1992	03	26.45984	09	02	08.67	-02	10	31.0	17 V	413
1992 FE		1992	03	26.50845	09	02	12.40	-02	09	46.4		413
1992 FE		1992	03	29.48920	09	06	48.75	-01	27	59.2		413
1992 FE		1992	03	31.50440	09	09	50.42	-01	04	10.0		413
1992 FE		1992	04	01.40919	09	11	12.32	-00	54	30.2		413
1992 FE		1992	04	01.65279	09	11	31.79	-00	52	00.6	p	413
1992 FE		1992	04	04.58287	09	15	51.92	-00	25	01.6		413
1992 FE		1992	04	06.49137	09	18	41.15	-00	10	13.9		413
1992 FE		1992	04	09.48403	09	23	05.78	+00	09	01.8		413
1992 FE		1992	04	10.59363	09	24	43.44	+00	15	04.6	p	413
1992 FJ1	*	1992	03	24.57126	11	42	58.37	-23	19	37.4	16 V	413
1992 FJ1		1992	03	24.63376	11	42	54.49	-23	19	37.9		413
1992 FJ1		1992	03	28.70317	11	38	52.66	-23	18	01.0		413
1992 FK1	*	1992	03	26.39405	09	03	09.75	-27	50	13.0	17 V	413
1992 FK1		1992	03	26.43850	09	03	09.94	-27	49	51.5		413
1992 FK1		1992	03	28.67384	09	03	37.60	-27	30	38.6		413
1992 FL1	*	1992	03	26.64128	13	45	03.27	-24	32	23.8	17 V	413
1992 FL1		1992	03	26.70378	13	45	03.27	-24	32	59.9		413
1992 FL1		1992	03	28.71389	13	45	12.88	-24	54	23.7		413
1992 FL1		1992	04	03.75405	13	44	57.28	-25	48	58.6		413
1992 FL1		1992	04	06.53264	13	44	32.62	-26	09	03.7		413
1992 FM1	*	1992	03	29.61856	13	35	14.40	-41	14	39.2	17 V	413
1992 FM1		1992	03	29.66718	13	35	10.02	-41	15	19.8		413
1992 FM1		1992	03	30.62346	13	33	43.87	-41	28	47.7		413
1992 FM1		1992	03	30.67902	13	33	38.40	-41	29	35.7		413
1992 FM1		1992	03	31.57086	13	32	16.34	-41	41	44.5		413
1992 FM1		1992	03	31.64030	13	32	09.65	-41	42	41.0		413
1992 FW1	*	1992	03	27.50559	10	46	32.65	-05	32	27.7	17.5 V	413
1992 FW1		1992	03	27.55420	10	46	31.62	-05	31	27.2		413
1992 FW1		1992	03	28.68600	10	46	10.74	-05	06	49.2		413
(15)		1992	03	13.71494	14	06	48.35	-29	22	15.7		413
(80)		1992	04	06.49933	10	56	24.89	-02	35	33.4		413
(86)		1990	04	29.76870	18	57	02.59	-22	48	34.3		413
(149)		1990	04	29.76870	18	57	38.62	-21	30	28.0		413
(276)		1992	03	10.58317	10	56	56.10	-16	26	30.9		413
(276)		1992	03	10.63525	10	56	53.89	-16	26	02.7		413
(276)		1992	03	11.65000	10	56	12.60	-16	16	19.3		413
(276)		1992	03	11.66268	10	56	11.97	-16	16	11.7		413
(353)		1990	04	29.76870	18	33	29.88	-20	54	52.4		413
(598)		1990	04	29.76870	18	41	37.16	-20	24	34.1		413
(695)		1992	03	10.58317	10	53	00.14	-14	35	18.7		413
(695)		1992	03	10.63525	10	52	57.30	-14	35	04.8		413
(1113)		1992	03	09.72655	14	05	05.61	-28	36	30.0		413
(1113)		1992	03	13.71494	14	03	26.15	-28	50	08.8		413
(1209)		1990	04	29.76870	18	33	29.87	-21	33	21.1		413
(1307)		1990	04	29.76870	18	52	12.55	-20	30	27.4		413

(1685)		1978	05	01.50241	13	54	20.27	-28	34	54.4	413
(1685)		1978	05	01.56491	13	54	13.35	-28	34	04.4	413
(1788)		1990	04	29.76870	18	52	45.63	-22	02	06.3	413
(1815)		1990	04	29.76870	18	56	59.16	-21	34	19.9	413
(2026)		1990	04	29.76870	18	45	39.46	-25	42	07.2	413
(2085)		1990	04	29.76870	18	50	16.51	-20	09	52.9	413
(2160)		1990	04	29.76870	18	41	14.95	-20	08	52.0	413
(2670)		1992	03	26.64128	13	44	49.46	-25	22	22.5	413
(2670)		1992	03	26.70378	13	44	46.96	-25	22	16.1	413
(2670)		1992	03	28.71389	13	43	26.16	-25	18	54.9	413
(2728)		1990	04	29.76870	18	43	55.59	-19	57	13.3	413
(2775)		1990	04	29.76870	18	54	58.74	-21	17	40.5	413
(2946)		1990	04	29.76870	18	33	10.76	-23	53	59.3	413
(3043)		1992	03	09.70225	14	04	28.10	-29	45	36.9	413
(3043)		1992	03	09.75086	14	04	26.30	-29	46	15.2	413
(3043)		1992	03	13.69064	14	01	42.06	-30	40	15.1	413
(3043)		1992	03	13.73925	14	01	39.70	-30	40	51.8	413
(3353)		1980	02	20.56588	09	49	02.15	-31	11	22.3	413
(3353)		1980	02	20.61102	09	48	58.59	-31	11	18.0	413
(3353)		1988	08	10.37465	16	37	39.92	-00	18	33.0	413
(3353)		1988	08	10.43021	16	37	42.92	-00	18	32.0	413
(3719)		1990	04	29.76870	18	56	12.66	-24	34	06.3	413
(4164)		1992	03	26.48414	08	57	44.19	-00	04	05.2	413
(4198)		1990	04	29.76870	18	58	31.58	-21	41	45.9	413
(4291)		1992	03	26.64128	13	50	49.35	-25	38	29.3	413
(4291)		1992	03	26.70378	13	50	47.18	-25	38	16.0	413
(4291)		1992	03	28.71389	13	49	34.96	-25	30	43.8	413
(4980)		1990	04	29.76870	18	53	38.58	-23	52	36.2	413
(5006)		1990	04	29.76870	18	33	54.47	-19	56	09.7	413
(5023)		1992	03	26.67253	13	46	14.77	-25	46	52.1	413
(5023)		1992	03	28.71389	13	45	18.55	-25	45	07.7	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

1988 HE		1992	03	03.61590	13	32	24.52	-25	41	19.2	18.9		474
1988 HE		1992	03	03.63442	13	32	24.06	-25	41	26.5			474
1988 HE		1992	03	04.54906	13	32	04.11	-25	46	51.5	18.8		474
1988 HE		1992	03	04.56718	13	32	03.62	-25	46	58.1			474
1990 UQ		1992	03	07.61973	13	33	23.31	-02	41	28.9	18.8		474
1990 UQ		1992	03	07.64878	13	33	23.75	-02	41	14.0			474
1990 UQ		1992	03	08.57170	13	33	40.46	-02	33	13.3	18.9		474
1990 UQ		1992	03	08.60399	13	33	40.79	-02	32	57.0			474
1991 VK		1992	03	04.58512	14	16	32.54	-35	11	37.1	17.3		474
1991 VK		1992	03	04.59796	14	16	30.78	-35	11	34.7			474
1991 VK		1992	03	08.63744	14	07	48.56	-34	49	52.3	16.7		474
1991 VK		1992	03	08.65041	14	07	46.53	-34	49	46.8			474
1992 BF		1992	03	04.38905	06	09	00.27	-00	02	25.6			474
1992 BF		1992	03	04.40282	06	08	55.59	-00	02	48.8			474
1992 BF		1992	03	05.43963	06	03	35.90	-00	30	38.3		I	474
1992 BF		1992	03	05.45873	06	03	30.05	-00	31	09.5			474
1992 BF		1992	03	07.43490	05	53	55.63	-01	21	53.6	18.7		474
1992 BF		1992	03	07.45689	05	53	49.16	-01	22	26.7			474
1992 GA	*	1992	04	04.59957	13	11	17.83	-28	16	40.4		t	474
1992 GA		1992	04	04.60924	13	11	17.18	-28	16	38.5		t	474
1992 GA		1992	04	05.58921	13	10	19.60	-28	15	25.1	17.8		474

1992 GA	1992 04 05.60218	13 10 18.81	-28 15 23.8			474
5119 T-3	1991 12 10.57145	05 59 58.52	-22 19 18.6	17.0		474
5119 T-3	1991 12 10.59431	05 59 57.42	-22 19 30.8			474

511 Haute Provence
E. W. Elst, Royal Observatory, B-1180 Brussels, Belgium
Observers E. W. Elst, G. Traversa
Measurer E. W. Elst
0.6-m Schmidt

1991 RL	1991 09 07.95139	23 05 53.34	-03 08 26.8	17.5	511
1991 RW21	1991 09 07.95139	23 09 58.67	-03 36 08.9	17.5	511

540 Linz
E. Meyer, F. Marklstr. 1/62, A-4040 Linz, Austria
Observers E. Meyer, H. Raab
0.30-m f/5.2 Schmidt Cassegrain
PPM

1992 CC1	1992 03 08.84896	10 52 12.33	+17 06 16.8		540
1992 CC1	1992 03 08.88090	10 52 06.53	+17 05 51.4		540

553 Chorzow
I. Wlodarczyk, Planetarium and Astronomical Observatory,
PL-41501 Chorzow 1 s.p.10, Poland
Observers I. Wlodarczyk, M. Szczepanski
Measurer B. Osiejuk
PPM
0.2-m f/5 astrograph

(4)	1992 02 25.89306	11 47 56.94	+12 58 27.4		553
(4)	1992 02 25.91022	11 47 56.21	+12 58 36.5		553
(4)	1992 02 25.94288	11 47 54.64	+12 58 52.9		553
(10)	1991 12 02.85799	03 01 17.74	+21 15 11.3		553
(10)	1991 12 02.87535	03 01 16.89	+21 15 07.6		553
(10)	1991 12 02.88785	03 01 16.40	+21 15 04.5		553

589 Santa Lucia Stroncone
A. Vagnozzi, Santa Lucia 68, I-05039 Stroncone (Terni), Italy
Observer A. Vagnozzi
0.5-m f/7.5 Ritchey-Chretien, 0.25-m f/3 Baker-Schmidt + CCD
GSC

1992 CC1	1992 03 01.87431	11 14 39.08	+18 32 30.9		589
1992 CC1	1992 03 01.88680	11 14 36.50	+18 32 23.2		589
1992 CC1	1992 03 01.90347	11 14 32.86	+18 32 14.6		589
1992 CC1	1992 03 01.91181	11 14 31.28	+18 32 07.1		589
1992 CC1	1992 03 01.92500	11 14 28.61	+18 31 57.1		589
1992 CC1	1992 03 01.93194	11 14 27.18	+18 31 53.8		589
1992 CC1	1992 03 01.93889	11 14 25.78	+18 31 49.0		589

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

(3141)	1991 12 03.84931	02 23 55.86	+30 15 27.2		595
(3141)	1991 12 03.91667	02 23 53.64	+30 15 07.0		595
(5116)	1991 10 10.93542	01 33 29.67	+08 22 46.6		595
(5116)	1991 11 10.90208	01 10 33.76	+07 06 28.4		595
(5116)	1991 11 27.87639	01 04 08.61	+06 58 30.1		595
(5116)	1991 11 28.83472	01 03 58.70	+06 59 07.9		595

(5116)	1991 11 28.92292	01 03 57.63	+06 59 11.8	595
(5116)	1991 12 02.85347	01 03 30.96	+07 02 58.7	595
(5116)	1991 12 02.92014	01 03 30.82	+07 03 01.3	595

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

(67)	1992 02 08.98270	09 35 37.98	+05 54 06.8	597
(67)	1992 02 08.99086	09 35 37.52	+05 54 10.9	597
(145)	1992 02 09.00811	10 32 26.24	+30 45 32.6	597
(145)	1992 02 09.01109	10 32 26.16	+30 45 34.2	597
(346)	1992 02 08.96638	09 39 12.93	+24 16 42.4	597
(346)	1992 02 08.97241	09 39 12.60	+24 16 44.4	597

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

1984 WE1	1992 03 31.24277	06 21 52.56	+44 38 15.3	657
1984 WE1	1992 03 31.24508	06 21 52.88	+44 38 14.6	657
1984 WE1	1992 03 31.24725	06 21 53.14	+44 38 14.2	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

1990 TR	1992 03 12.38103	11 13 57.73	+10 40 55.8	658
1990 TR	1992 03 12.38508	11 13 57.47	+10 40 56.0	658
1990 TR	1992 03 12.38903	11 13 57.23	+10 40 58.4	658
1991 JW	1992 03 11.35833	09 37 08.50	+56 02 28.7	658
1991 JW	1992 03 11.36218	09 37 07.92	+56 02 21.3	658
1991 JW	1992 03 11.36598	09 37 07.32	+56 02 14.5	658
1991 JW	1992 03 12.28265	09 35 22.69	+55 34 26.3	658
1991 JW	1992 03 12.28890	09 35 21.89	+55 34 14.2	658
1991 JW	1992 03 12.29338	09 35 21.32	+55 34 06.4	658
1991 JW	1992 03 13.44098	09 33 18.63	+54 58 22.0	658
1991 JW	1992 03 13.44480	09 33 18.23	+54 58 14.7	658
1992 AA	1992 03 11.29584	07 37 28.40	+36 19 54.7	658
1992 AA	1992 03 11.30382	07 37 29.91	+36 19 51.6	658
1992 AA	1992 03 12.15105	07 40 09.34	+36 14 32.0	658
1992 AA	1992 03 12.15418	07 40 09.90	+36 14 30.6	658
1992 AA	1992 03 13.23786	07 43 31.37	+36 07 14.2	658
1992 AA	1992 03 13.24064	07 43 31.90	+36 07 13.0	658
1992 AB	1992 03 13.22397	04 25 55.84	+48 44 28.0	658
1992 AB	1992 03 13.22675	04 25 56.19	+48 44 31.5	658
1992 CC1	1992 03 11.34515	10 44 40.45	+16 32 00.0	658
1992 CC1	1992 03 11.34896	10 44 39.83	+16 31 57.1	658
1992 CC1	1992 03 11.35383	10 44 38.91	+16 31 52.9	658
1992 CC1	1992 03 12.35464	10 41 43.76	+16 17 44.6	658
1992 CC1	1992 03 12.35800	10 41 43.16	+16 17 41.9	658
1992 CC1	1992 03 12.36078	10 41 42.66	+16 17 39.5	658
(1622)	1992 03 12.32501	10 34 35.13	+13 36 12.3	658
(1622)	1992 03 12.32847	10 34 34.90	+13 36 12.7	658
(1622)	1992 03 12.33125	10 34 34.71	+13 36 13.1	658
(2651)	1992 03 12.16458	07 56 19.86	+23 45 31.5	658
(2651)	1992 03 12.16807	07 56 19.87	+23 45 32.2	658

(2651)	1992 03 12.17162	07 56 19.92	+23 45 33.1			658
(2651)	1992 03 13.26147	07 56 28.18	+23 49 56.3			658
(2651)	1992 03 13.27050	07 56 28.19	+23 49 58.6			658
(4055)	1992 03 12.22744	07 34 14.33	+04 46 03.3			658
(4055)	1992 03 12.23265	07 34 14.37	+04 46 06.3			658
(4055)	1992 03 12.23543	07 34 14.37	+04 46 09.2			658
(4867)	1992 03 12.21459	05 20 11.34	+47 47 01.6			658
(4867)	1992 03 12.21806	05 20 11.41	+47 47 00.9			658
(4867)	1992 03 12.22084	05 20 11.40	+47 46 59.7			658
(5145)	1992 03 11.30973	07 56 05.77	+22 05 55.6			658
(5145)	1992 03 11.31250	07 56 05.70	+22 05 55.9			658
(5145)	1992 03 11.34515	07 56 05.70	+22 05 56.2			658
(5145)	1992 03 12.15801	07 56 01.32	+22 07 08.7			658
(5145)	1992 03 12.17571	07 56 01.16	+22 07 09.8			658
(5145)	1992 03 12.17987	07 56 01.09	+22 07 09.7			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. Lawrence (2, S), D. H. Levy (3, S), J. D. Mendenhall (7, L), J. Mueller (7, L), P. Rose (2, S), C. S. Shoemaker (3, S), E. M. Shoemaker (3, 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

1943 DL	1991 09 12.30469	23 02 06.26	-09 40 50.7	17.2	9	675
1943 DL	1991 09 12.34618	23 02 03.65	-09 40 55.0		9	675
1943 DL	1991 09 16.28715	22 58 08.58	-09 46 10.7	17.2	9	675
1943 DL	1991 09 16.31007	22 58 07.32	-09 46 14.4		9	675
1943 DL	1991 09 16.33368	22 58 05.79	-09 46 14.0	17.5	9	675
1943 DL	1991 09 16.35521	22 58 04.55	-09 46 16.8	17.2	9	675
1953 TA1	1991 09 14.33438	22 09 30.61	-01 52 44.4		9	675
1972 KL	1991 09 12.30469	23 10 04.55	-11 37 49.3	17.0	9	675
1972 KL	1991 09 12.34618	23 10 02.34	-11 38 08.4		9	675
1972 KL	1991 09 16.31007	23 06 46.98	-12 07 27.0		9	675
1972 KL	1991 09 16.35521	23 06 44.83	-12 07 43.8		9	675
1976 GR2	1982 01 30.44827	09 05 01.95	+15 12 30.4	16.0 V	6	675
1976 GR2	1982 01 31.42118	09 03 58.61	+15 18 51.8		6	675
1976 QP	1982 01 30.44827	08 55 37.82	+14 45 47.7	19.2 V	6	675
1976 QP	1982 01 31.42118	08 54 38.74	+14 49 50.8		6	675
1979 HH3	1991 09 12.36510	00 46 32.29	-03 36 25.1		9	675
1979 HH3	1991 09 17.41823	00 42 11.52	-03 58 11.0		9	675
1979 HH3	1991 09 17.46997	00 42 08.64	-03 58 22.7		9	675
1979 UQ	1971 05 14.19427	12 26 13.74	-05 41 50.2		4	675
1979 UQ	1971 05 14.24549	12 26 12.64	-05 41 39.5		4	675
1979 UQ	1971 05 16.27535	12 25 38.44	-05 34 45.7	18.5	4	675
1980 PF	1982 01 30.44827	09 01 23.99	+17 08 45.0	17.8 V	6	675
1980 PF	1982 01 31.42118	09 00 16.24	+17 10 27.9		6	675
1980 TX3	1992 02 25.19461	09 38 25.25	+12 10 16.3	17.8	3	675
1980 TX3	1992 02 25.23663	09 38 23.19	+12 10 29.6		3	675

1980	TX3		1992	02	27.28107	09	36	47.37	+12	19	22.7			3	675
1980	TB12		1991	09	10.38420	00	47	27.83	+13	28	15.5			9	675
1980	TB12		1991	09	10.45156	00	47	25.56	+13	27	58.1			9	675
1980	TB12		1991	09	17.44479	00	43	26.47	+12	56	02.9			9	675
1980	TB12		1991	09	17.49497	00	43	24.53	+12	55	46.2	17.0		9	675
1981	DC2		1991	09	17.44479	00	49	10.79	+19	07	11.8			9	675
1981	DC2		1991	09	17.49497	00	49	08.86	+19	06	50.0	17.0		9	675
1981	DT2		1991	09	14.28889	22	22	42.59	-04	21	45.3	17.5		9	675
1981	DT2		1991	09	14.33438	22	22	39.90	-04	21	45.7			9	675
1981	EH11		1991	09	17.23872	23	03	15.96	-03	39	18.4			9	675
1981	EH11		1991	09	17.28123	23	03	13.17	-03	39	10.9			9	675
1981	TM3		1991	09	12.30469	23	03	33.02	-13	48	08.3	16.5		9	675
1981	TM3		1991	09	12.34618	23	03	30.29	-13	48	12.8			9	675
1981	TM3		1991	09	16.31007	22	59	22.62	-13	54	00.1			9	675
1981	TM3		1991	09	16.35521	22	59	19.73	-13	54	03.1	16.8		9	675
1982	BP12	*	1982	01	30.44827	08	53	18.80	+14	01	41.6	17.8	V	6	675
1982	BP12		1982	01	31.42118	08	52	22.68	+14	06	00.2			6	675
1982	BQ12	*	1982	01	30.44827	08	53	19.65	+14	16	02.6	17.5	V	6	675
1982	BQ12		1982	01	31.42118	08	52	19.02	+14	20	26.6			6	675
1982	BR12	*	1982	01	30.44827	08	53	42.28	+17	44	02.2	18.0	V	6	675
1982	BR12		1982	01	31.42118	08	52	42.70	+17	47	29.6			6	675
1982	BS12	*	1982	01	30.44827	08	53	50.13	+18	59	23.2	17.2	V	6	675
1982	BS12		1982	01	31.42118	08	53	00.37	+19	02	28.7			6	675
1982	BT12	*	1982	01	30.44827	08	54	09.56	+17	56	19.9	17.5	V	6	675
1982	BT12		1982	01	31.42118	08	53	07.31	+18	00	46.3			6	675
1982	BU12	*	1982	01	30.44827	08	54	25.96	+18	39	11.7	18.0	V	6	675
1982	BU12		1982	01	31.42118	08	53	29.53	+18	45	35.5			6	675
1982	BV12	*	1982	01	30.44827	08	55	08.14	+17	02	29.0	18.2	V	6	675
1982	BV12		1982	01	31.42118	08	54	13.43	+17	04	25.4			6	675
1982	BW12	*	1982	01	30.44827	08	55	28.78	+17	07	50.7	16.2	V	6	675
1982	BW12		1982	01	31.42118	08	54	27.81	+17	12	05.4			6	675
1982	BX12	*	1982	01	30.44827	08	55	28.83	+14	56	46.2	18.0	V	6	675
1982	BX12		1982	01	31.42118	08	54	32.25	+15	00	09.2			6	675
1982	BY12	*	1982	01	30.44827	08	56	39.40	+19	23	43.5	17.5	V	6	675
1982	BY12		1982	01	31.42118	08	55	38.56	+19	28	19.3			6	675
1982	BZ12	*	1982	01	30.44827	08	56	42.53	+14	28	41.6	17.2	V	6	675
1982	BZ12		1982	01	31.42118	08	55	43.76	+14	30	52.8			6	675
1982	BA13	*	1982	01	30.44827	08	56	44.62	+17	13	35.6	17.8	V	6	675
1982	BA13		1982	01	31.42118	08	55	38.87	+17	17	11.9			6	675
1982	BB13	*	1982	01	30.44827	08	57	44.36	+15	14	27.3	16.5	V	6	675
1982	BB13		1982	01	31.42118	08	56	37.31	+15	16	41.2			6	675
1982	BC13	*	1982	01	30.44827	08	57	48.63	+15	47	11.3	16.0	V	6	675
1982	BC13		1982	01	31.42118	08	56	50.24	+15	54	57.3			6	675
1982	BD13	*	1982	01	30.44827	08	59	24.16	+17	45	17.2	16.0	V	6	675
1982	BD13		1982	01	31.42118	08	58	16.04	+17	47	02.5			6	675
1982	BE13	*	1982	01	30.44827	08	59	36.06	+18	59	36.3	17.8	V	6	675
1982	BE13		1982	01	31.42118	08	58	43.05	+19	00	44.6			6	675
1982	BF13	*	1982	01	30.44827	08	59	59.70	+18	21	26.4	18.8	V	6	675
1982	BF13		1982	01	31.42118	08	59	11.02	+18	25	18.7			6	675
1982	BG13	*	1982	01	30.44827	09	00	15.16	+19	28	01.9	16.2	V	6	675
1982	BG13		1982	01	31.42118	08	59	16.67	+19	30	59.3			6	675
1982	BH13	*	1982	01	30.44827	09	02	27.54	+14	17	15.4	15.8	V	6	675
1982	BH13		1982	01	31.42118	09	01	38.26	+14	22	21.3			6	675
1982	BJ13	*	1982	01	30.44827	09	03	15.12	+15	06	25.1	17.8	V	6	675
1982	BJ13		1982	01	31.42118	09	02	13.03	+15	08	51.2			6	675
1982	BK13	*	1982	01	30.44827	09	04	24.11	+14	06	05.4	17.8	V	6	675
1982	BK13		1982	01	31.42118	09	03	25.15	+14	11	30.7			6	675
1982	BL13	*	1982	01	30.44827	09	04	50.24	+19	01	12.7	17.2	V	6	675
1982	BL13		1982	01	31.42118	09	04	00.68	+19	05	41.9			6	675

1982	BM13	*	1982	01	30.44827	09	05	09.47	+13	47	04.1	16.0 V	6 675
1982	BM13		1982	01	31.42118	09	04	05.24	+13	49	36.3		6 675
1982	BN13	*	1982	01	30.44827	09	05	56.93	+14	45	31.6	16.5 V	6 675
1982	BN13		1982	01	31.42118	09	04	58.36	+14	52	40.5		6 675
1982	BO13	*	1982	01	30.44827	09	06	03.66	+17	08	56.4	16.0 V	6 675
1982	BO13		1982	01	31.42118	09	05	05.06	+17	13	29.7		6 675
1982	BP13	*	1982	01	30.44827	09	06	25.14	+18	36	00.0	16.8 V	6 675
1982	BP13		1982	01	31.42118	09	05	36.60	+18	40	25.8		6 675
1982	BQ13	*	1982	01	30.44827	09	06	26.72	+15	05	26.3	17.0 V	6 675
1982	BQ13		1982	01	31.42118	09	05	28.77	+15	13	50.1		6 675
1982	BR13	*	1982	01	30.44827	09	06	58.62	+17	27	54.7	15.8 V	6 675
1982	BR13		1982	01	31.42118	09	05	58.52	+17	27	56.8		6 675
1982	BS13	*	1982	01	30.44827	09	08	30.18	+15	22	00.5	16.8 V	6 675
1982	BS13		1982	01	31.42118	09	07	22.73	+15	20	33.2		6 675
1982	BT13	*	1982	01	30.44827	09	09	38.01	+17	59	58.6	16.5 V	6 675
1982	BT13		1982	01	31.42118	09	08	46.03	+18	03	28.8		6 675
1982	BU13	*	1982	01	30.44827	09	09	46.65	+18	20	51.4	18.0 V	6 675
1982	BU13		1982	01	31.42118	09	08	46.66	+18	24	02.8		6 675
1982	BV13	*	1982	01	30.44827	09	09	54.80	+14	46	40.6	17.2 V	6 675
1982	BV13		1982	01	31.42118	09	09	03.91	+14	56	15.0		6 675
1982	BW13	*	1982	01	30.44827	09	10	07.06	+17	37	26.7	16.5 V	6 675
1982	BW13		1982	01	31.42118	09	09	15.60	+17	40	08.8		6 675
1982	BX13	*	1982	01	30.44827	09	10	18.26	+15	15	32.4	15.8 V	6 675
1982	BX13		1982	01	31.42118	09	09	20.50	+15	24	07.2		6 675
1982	BY13	*	1982	01	30.44827	09	10	19.67	+19	06	30.9	18.0 V	6 675
1982	BY13		1982	01	31.42118	09	09	31.68	+19	10	04.0		6 675
1982	BZ13	*	1982	01	30.44827	09	10	24.38	+17	53	19.3	17.5 V	6 675
1982	BZ13		1982	01	31.42118	09	09	40.20	+18	00	48.7		6 675
1982	BA14	*	1982	01	30.44827	09	10	45.30	+17	52	39.3	18.5 V	6 675
1982	BA14		1982	01	31.42118	09	09	47.09	+18	00	42.7		6 675
1982	BB14	*	1982	01	30.44827	09	10	47.95	+19	18	57.7	16.0 V	6 675
1982	BB14		1982	01	31.42118	09	09	51.11	+19	18	08.8		6 675
1982	BC14	*	1982	01	30.44827	09	10	51.23	+16	07	25.0	17.5 V	6 675
1982	BC14		1982	01	31.42118	09	10	03.24	+16	10	49.5		6 675
1982	BD14	*	1982	01	30.44827	09	11	04.89	+18	33	39.6	16.2 V	6 675
1982	BD14		1982	01	31.42118	09	10	05.63	+18	36	43.8		6 675
1982	BE14	*	1982	01	30.44827	09	11	16.55	+18	20	01.0	18.0 V	6 675
1982	BE14		1982	01	31.42118	09	10	30.14	+18	23	56.2		6 675
1982	BF14	*	1982	01	30.44827	09	11	26.41	+18	31	51.4	17.8 V	6 675
1982	BF14		1982	01	31.42118	09	10	22.56	+18	31	32.9		6 675
1982	BG14	*	1982	01	30.44827	09	11	38.89	+14	31	26.4	17.2 V	6 675
1982	BG14		1982	01	31.42118	09	10	49.76	+14	39	04.9		6 675
1982	BH14	*	1982	01	30.44827	09	11	47.75	+17	41	40.4	18.0 V	6 675
1982	BH14		1982	01	31.42118	09	10	51.90	+17	43	49.2		6 675
1982	BJ14	*	1982	01	30.44827	09	11	51.58	+13	39	13.4	16.2 V	6 675
1982	BJ14		1982	01	31.42118	09	10	53.90	+13	46	07.1		6 675
1982	BK14	*	1982	01	30.44827	09	15	12.95	+17	05	09.5	17.0 V	6 675
1982	BK14		1982	01	31.42118	09	14	07.01	+17	05	37.4		6 675
1982	BL14	*	1982	01	30.44827	09	16	35.79	+14	35	44.3	17.2 V	6 675
1982	BL14		1982	01	31.42118	09	15	40.07	+14	36	52.7		6 675
1982	BM14	*	1982	01	30.44827	09	16	44.61	+18	33	16.9	16.2 V	6 675
1982	BM14		1982	01	31.42118	09	15	58.94	+18	39	26.1		6 675
1982	JR1		1987	08	24.22431	21	25	59.69	-29	37	38.0	15.5	2 675
1982	JR1		1987	08	24.24965	21	25	58.50	-29	37	46.8		2 675
1982	JR1		1987	08	27.25677	21	23	48.58	-29	50	33.3		2 675
1982	JR1		1987	08	27.28333	21	23	47.39	-29	50	43.0		2 675
1982	TK3		1991	09	16.30035	22	53	28.09	+00	26	24.8	17.2	9 675
1982	TK3		1991	09	16.34583	22	53	25.48	+00	26	19.2		9 675
1982	TK3		1991	09	17.23872	22	52	38.76	+00	24	25.5		9 675

1982	TK3		1991	09	17.28123	22	52	36.48	+00	24	19.3			9	675
1984	QF		1982	01	30.44827	09	06	28.46	+15	59	31.6	17.5	V	6	675
1984	QF		1982	01	31.42118	09	05	37.14	+16	06	42.3			6	675
1984	WE1		1984	11	21.40833	05	24	20.43	+33	33	41.5	16.5		3	675
1984	WE1		1984	11	21.42500	05	24	19.57	+33	33	57.7			3	675
1984	WE1		1991	11	13.41649	05	16	48.52	+30	14	00.2	16.7		3	675
1984	WE1		1991	11	13.44513	05	16	47.59	+30	14	25.8			3	675
1984	WE1		1991	12	01.37135	05	02	18.00	+34	52	34.9	16		3	675
1984	WE1		1991	12	01.40503	05	02	15.63	+34	53	06.6			3	675
1984	WE1		1991	12	03.35938	05	00	02.71	+35	23	02.9			3	675
1984	WE1		1991	12	03.39236	05	00	00.24	+35	23	31.8			3	675
1985	XB		1978	05	04.31319	15	52	14.35	+06	26	51.6	17		2	675
1985	XB		1978	05	04.33333	15	52	12.52	+06	26	36.7			2	675
1985	XB		1986	01	06.39340	05	57	23.90	+58	43	04.2			2	675
1985	XB		1986	01	06.41788	05	57	19.95	+58	43	39.8			2	675
1985	XB		1986	01	07.48194	05	54	30.00	+59	09	08.5			2	675
1986	EJ		1991	09	10.38420	00	22	11.26	+19	08	24.2			9	675
1986	EJ		1991	09	10.45156	00	22	06.91	+19	08	32.8			9	675
1986	ET		1991	09	10.30260	22	48	41.56	-08	33	39.3	17.2		9	675
1986	ET		1991	09	10.35573	22	48	38.27	-08	33	52.1			9	675
1986	ET		1991	09	16.28715	22	42	52.06	-08	54	58.6	17.8		9	675
1986	ET		1991	09	16.33368	22	42	49.32	-08	55	07.8			9	675
1986	RQ		1971	04	16.18087	11	57	33.96	-05	21	44.2	18.5		4	675
1986	RQ		1971	04	16.26458	11	57	30.28	-05	20	57.2			4	675
1986	RQ		1971	05	13.18941	11	47	25.22	-02	09	46.1	19.0		4	675
1986	RQ		1971	05	14.21962	11	47	24.47	-02	05	03.5			4	675
1986	TZ11		1991	09	14.28889	22	06	14.40	-05	08	41.0	17.8		9	675
1986	TZ11		1991	09	14.33438	22	06	12.55	-05	08	49.0			9	675
1987	HK		1982	01	30.44827	09	10	52.02	+16	15	45.4	18.0	V	6	675
1987	HK		1982	01	31.42118	09	09	55.75	+16	19	33.7			6	675
1987	QW7		1991	09	17.23872	23	04	11.29	-02	20	57.4			9	675
1987	QW7		1991	09	17.28123	23	04	09.21	-02	21	13.9			9	675
1987	SG1		1991	09	14.28889	22	03	29.67	-05	03	55.2	16.8		9	675
1987	SG1		1991	09	14.33438	22	03	28.77	-05	04	33.8			9	675
1987	SR1		1991	09	12.28472	22	29	58.55	-01	19	01.7	16.8		9	675
1987	SR1		1991	09	12.32465	22	29	56.92	-01	19	30.1			9	675
1987	SR1		1991	09	14.28889	22	28	45.63	-01	42	10.6	16.8		9	675
1987	SR1		1991	09	14.33438	22	28	43.86	-01	42	41.5			9	675
1988	CN2		1991	09	10.30260	22	42	06.79	-07	54	14.4	17.8		9	675
1988	CN2		1991	09	10.35573	22	42	04.53	-07	54	29.6	17.2		9	675
1988	CN2		1991	09	16.28715	22	37	57.44	-08	20	28.9	18.2		9	675
1988	CN2		1991	09	16.33368	22	37	55.45	-08	20	41.0			9	675
1988	EA2		1971	05	13.17535	11	47	55.46	+05	23	05.3	19.0		4	675
1988	EA2		1971	05	14.20694	11	48	12.78	+05	21	06.8			4	675
1988	RL10		1982	01	30.44827	08	54	27.36	+16	34	25.6	18.8	V	6	675
1988	RL10		1982	01	31.42118	08	53	55.65	+16	36	58.0			6	675
1988	RS10		1982	01	30.44827	09	11	04.25	+16	43	07.4	19.0	V	6	675
1988	RS10		1982	01	31.42118	09	10	33.32	+16	45	43.9			6	675
1988	TJ2		1991	09	10.30260	22	55	52.10	-11	10	09.4	16.8		9	675
1988	TJ2		1991	09	10.35573	22	55	48.50	-11	10	17.3			9	675
1988	TJ2		1991	09	12.30469	22	53	44.47	-11	15	35.6	16.5		9	675
1988	TJ2		1991	09	12.34618	22	53	41.68	-11	15	40.5			9	675
1988	TJ2		1991	09	14.30590	22	51	39.05	-11	20	32.9			9	675
1988	TJ2		1991	09	14.35660	22	51	35.73	-11	20	38.4			9	675
1988	TJ2		1991	09	16.28715	22	49	38.14	-11	24	53.7			9	675
1988	TJ2		1991	09	16.31007	22	49	36.65	-11	24	56.5			9	675
1988	TJ2		1991	09	16.33368	22	49	35.16	-11	24	58.5	17.0		9	675
1988	TJ2		1991	09	16.35521	22	49	33.82	-11	25	02.5	17.0		9	675
1988	TE5	*	1988	10	08.36111	02	59	33.44	+25	11	19.5			7	675

1988 TE5		1988	10	08.38889	02	59	32.52	+25	11	12.1		7 675
1988 TF5	*	1988	10	08.36111	03	01	35.56	+27	00	14.9		7 675
1988 TF5		1988	10	08.38889	03	01	35.01	+27	00	30.7		7 675
1988 UC		1971	05	14.19427	12	27	28.25	-01	44	07.9		4 675
1988 UC		1971	05	14.24549	12	27	27.38	-01	44	04.2		4 675
1988 UC		1971	05	16.27535	12	26	54.53	-01	42	24.1	19.5	4 675
1988 VD		1988	10	08.36111	03	12	34.70	+22	08	41.1		7 675
1988 VD		1988	10	08.38889	03	12	33.08	+22	09	10.1		7 675
1988 VK		1991	09	15.26059	22	31	08.18	-19	24	02.9	17.0	9 675
1988 VK		1991	09	15.31203	22	31	05.71	-19	24	20.8		9 675
1988 VP3		1991	09	14.30590	22	49	43.69	-16	59	57.0	18.0	9 675
1988 VP3		1991	09	14.35660	22	49	40.48	-17	00	02.6		9 675
1989 EC3		1991	09	14.28889	22	34	51.54	-03	35	49.6	18.0	9 675
1989 EC3		1991	09	14.33438	22	34	49.41	-03	36	12.4		9 675
1989 GB1		1991	09	14.28889	22	12	18.54	-03	36	05.4	18.0	9 675
1989 GB1		1991	09	14.33438	22	12	16.76	-03	36	20.0		9 675
1990 DX		1991	09	16.30035	22	57	00.01	-01	22	42.5	17.5	9 675
1990 DX		1991	09	16.34583	22	56	57.54	-01	22	55.2		9 675
1990 DX		1991	09	17.23872	22	56	11.10	-01	27	08.9		9 675
1990 DX		1991	09	17.28123	22	56	08.80	-01	27	21.0		9 675
1990 KK		1975	12	02.35486	04	38	43.61	+12	02	49.8	15.5	2 675
1990 KK		1975	12	02.37500	04	38	41.22	+12	03	08.7		2 675
1990 OB		1992	03	06.16285	07	38	17.24	-00	30	16.1	17	2 675
1990 OB		1992	03	06.19248	07	38	17.06	-00	30	00.8		2 675
1990 OA1		1982	10	17.20000	23	04	02.65	+18	19	51.8	15.5	2 675
1990 OA1		1982	10	17.22917	23	04	01.89	+18	19	36.9		2 675
1990 OA1		1982	10	19.14861	23	03	23.00	+18	01	36.9		2 675
1990 OA1		1982	10	19.17083	23	03	22.40	+18	01	21.5		2 675
1990 OF2		1971	03	26.29653	12	35	49.74	-05	58	12.0	20.0	4 675
1990 OF2		1971	03	26.33611	12	35	47.27	-05	58	00.7		4 675
1990 OF2		1971	03	27.33854	12	34	48.74	-05	53	27.0		4 675
1990 QQ		1982	01	30.44827	09	15	21.00	+14	06	42.1	16.8 V	6 675
1990 QQ		1982	01	31.42118	09	14	13.62	+14	07	31.7		6 675
1990 RS17		1982	01	30.44827	09	04	40.96	+18	24	14.6	17.8 V	6 675
1990 RS17		1982	01	31.42118	09	03	33.20	+18	27	12.5		6 675
1990 TZ		1975	10	09.48611	02	14	17.52	+35	03	10.2	15	2 675
1990 TZ		1975	12	02.13958	01	37	36.05	+19	33	55.5	14.5	2 675
1990 TZ		1975	12	02.18542	01	37	35.79	+19	33	02.0		2 675
1990 TZ		1975	12	03.14722	01	37	34.09	+19	14	42.5		2 675
1990 TZ		1975	12	03.22917	01	37	33.87	+19	13	11.9		2 675
1990 TZ		1975	12	04.15972	01	37	34.52	+18	55	44.1		2 675
1990 TZ		1975	12	04.32569	01	37	34.35	+18	52	39.3		2 675
1991 GY		1988	10	08.36111	02	56	00.89	+22	35	52.1		7 675
1991 GY		1988	10	08.38889	02	55	59.61	+22	35	53.0		7 675
1991 LE1		1985	01	18.21667	06	53	22.95	+20	42	24.6	15	2 675
1991 LE1		1985	01	18.25278	06	53	20.43	+20	42	51.7		2 675
1991 LE1		1985	01	21.27604	06	50	19.17	+21	18	58.9		2 675
1991 PD10		1991	09	10.30260	22	49	32.89	-04	39	45.1		9 675
1991 PD10		1991	09	10.35573	22	49	29.46	-04	39	56.6		9 675
1991 PD10		1991	09	16.30035	22	43	39.07	-04	55	24.7	17.8	9 675
1991 PD10		1991	09	16.34583	22	43	36.39	-04	55	30.8		9 675
1991 PD10		1991	09	17.23872	22	42	46.09	-04	57	46.6		9 675
1991 PD10		1991	09	17.28123	22	42	43.65	-04	57	51.6		9 675
1991 PE10		1991	09	10.30260	22	54	24.71	-05	14	39.8		9 675
1991 PE10		1991	09	10.35573	22	54	21.32	-05	14	42.4		9 675
1991 PE10		1991	09	16.28715	22	48	56.86	-05	19	03.0	17.5	9 675
1991 PE10		1991	09	16.30035	22	48	56.16	-05	19	02.4	17.2	9 675
1991 PE10		1991	09	16.33368	22	48	54.33	-05	19	04.4		9 675
1991 PE10		1991	09	16.34583	22	48	53.69	-05	19	03.9		9 675

1991 PE10	1991 09 17.23872	22 48 06.83	-05 19 38.4		9	675
1991 PE10	1991 09 17.28123	22 48 04.44	-05 19 40.0		9	675
1991 PF10	1991 09 10.30260	22 58 38.44	-08 11 40.6		9	675
1991 PF10	1991 09 10.35573	22 58 35.21	-08 12 06.7		9	675
1991 PF10	1991 09 12.30469	22 56 48.54	-08 26 06.7	17.0	9	675
1991 PF10	1991 09 12.34618	22 56 46.17	-08 26 26.8		9	675
1991 PF10	1991 09 16.28715	22 53 16.57	-08 53 36.2	17.2	9	675
1991 PF10	1991 09 16.33368	22 53 14.07	-08 53 55.4		9	675
1991 PH10	1991 09 12.30469	23 04 06.34	-08 25 42.9	17.2	9	675
1991 PH10	1991 09 12.34618	23 04 04.26	-08 25 57.1		9	675
1991 PH10	1991 09 16.31007	23 00 49.70	-08 47 55.9	17.5	9	675
1991 PH10	1991 09 16.35521	23 00 47.34	-08 48 10.9		9	675
1991 PC11	1991 09 14.30590	22 29 44.01	-12 51 54.8	16.8	9	675
1991 PC11	1991 09 14.35660	22 29 41.75	-12 52 17.2		9	675
1991 PD11	1991 09 14.30590	22 28 29.80	-14 26 06.9	17.5	9	675
1991 PD11	1991 09 14.35660	22 28 27.62	-14 26 29.5		9	675
1991 PE11	1991 09 10.30260	22 31 30.96	-09 17 10.3		9	675
1991 PE11	1991 09 10.35573	22 31 28.10	-09 17 15.7		9	675
1991 PE11	1991 09 16.28715	22 26 47.89	-09 26 50.1	17.2	9	675
1991 PE11	1991 09 16.33368	22 26 45.78	-09 26 53.8		9	675
1991 PT11	1991 09 10.30260	22 42 01.73	-06 07 58.9	17.0	9	675
1991 PT11	1991 09 10.35573	22 41 59.36	-06 08 18.5		9	675
1991 PT11	1991 09 16.28715	22 37 57.79	-06 44 00.4	17.2	9	675
1991 PT11	1991 09 16.33368	22 37 55.88	-06 44 15.7		9	675
1991 PV11	1991 09 12.30469	23 13 50.85	-12 52 52.0	17.5	9	675
1991 PV11	1991 09 12.34618	23 13 48.70	-12 53 17.3		9	675
1991 PV11	1991 09 16.31007	23 10 33.95	-13 33 12.0	17.8	9	675
1991 PV11	1991 09 16.35521	23 10 31.63	-13 33 38.5		9	675
1991 PW11	1991 09 14.28889	22 17 42.48	-04 21 01.5	17.2	9	675
1991 PW11	1991 09 14.33438	22 17 40.75	-04 21 27.0		9	675
1991 PY11	1991 09 14.28889	22 22 59.75	-03 10 07.4	17.0	9	675
1991 PY11	1991 09 14.33438	22 22 57.54	-03 10 26.6		9	675
1991 PZ11	1991 09 12.28472	22 31 40.74	+03 01 22.7	17.2	9	675
1991 PZ11	1991 09 12.32465	22 31 38.46	+03 01 14.7		9	675
1991 PA12	1991 09 12.28472	22 38 22.83	+01 51 01.3	16.5	9	675
1991 PA12	1991 09 12.32465	22 38 20.74	+01 50 46.6		9	675
1991 PC12	1991 09 16.30035	22 47 49.76	+00 56 07.5	17.2	9	675
1991 PC12	1991 09 16.34583	22 47 48.30	+00 55 26.4		9	675
1991 PC12	1991 09 17.23872	22 47 23.24	+00 42 14.5		9	675
1991 PC12	1991 09 17.28123	22 47 21.90	+00 41 39.8		9	675
1991 PD12	1991 09 16.30035	22 49 10.06	-00 49 07.2	17.5	9	675
1991 PD12	1991 09 16.34583	22 49 08.49	-00 49 42.6		9	675
1991 PD12	1991 09 17.23872	22 48 39.59	-01 01 27.1		9	675
1991 PD12	1991 09 17.28123	22 48 38.02	-01 02 01.2		9	675
1991 PK13	1991 09 14.28889	22 16 49.11	-05 06 04.8	18.0	9	675
1991 PK13	1991 09 14.33438	22 16 46.87	-05 06 02.6		9	675
1991 PL13	1991 09 14.28889	22 20 46.19	-07 04 34.2	17.8	9	675
1991 PL13	1991 09 14.33438	22 20 44.21	-07 04 45.6	17.5	9	675
1991 PP13	1991 09 14.28889	22 23 50.85	-06 13 23.7	17.2	9	675
1991 PP13	1991 09 14.33438	22 23 48.56	-06 13 26.6		9	675
1991 PA15	1991 09 14.28889	22 05 23.89	-06 06 06.4	18.0	9	675
1991 PA15	1991 09 14.33438	22 05 22.39	-06 06 30.3		9	675
1991 PD15	1991 09 12.28472	22 16 57.10	+02 18 57.1	16.8	9	675
1991 PD15	1991 09 12.32465	22 16 55.73	+02 18 55.2		9	675
1991 PG15	1991 09 10.30260	22 39 30.22	-11 41 44.0	16.2	9	675
1991 PG15	1991 09 10.35573	22 39 27.63	-11 42 01.6		9	675
1991 PG15	1991 09 14.30590	22 36 35.73	-12 00 06.4	17.0	9	675
1991 PG15	1991 09 14.35660	22 36 33.44	-12 00 18.8		9	675
1991 PG15	1991 09 16.28715	22 35 15.31	-12 08 12.8	17.8	9	675

1991	PG15		1991	09	16.33368	22	35	13.33	-12	08	23.8	17.2	9 675
1991	PH15		1991	09	16.28715	22	30	17.67	-09	06	13.1	17.5	9 675
1991	PH15		1991	09	16.33368	22	30	15.52	-09	06	26.0	17.2	9 675
1991	PJ15		1991	09	10.30260	22	40	34.01	-12	41	18.3		9 675
1991	PJ15		1991	09	10.35573	22	40	31.21	-12	41	36.7		9 675
1991	PJ15		1991	09	14.30590	22	37	18.73	-13	03	48.0	17.8	9 675
1991	PJ15		1991	09	14.35660	22	37	16.21	-13	04	04.3		9 675
1991	PK15		1991	09	10.30260	22	47	36.14	-04	18	24.8		9 675
1991	PK15		1991	09	16.28715	22	42	54.87	-04	30	29.7	16.8	9 675
1991	PK15		1991	09	16.30035	22	42	54.26	-04	30	30.0	16.5	9 675
1991	PK15		1991	09	16.33368	22	42	52.66	-04	30	34.1		9 675
1991	PK15		1991	09	16.34583	22	42	52.10	-04	30	35.2		9 675
1991	PK15		1991	09	17.23872	22	42	13.32	-04	32	18.6		9 675
1991	PK15		1991	09	17.28123	22	42	11.39	-04	32	23.0		9 675
1991	PM15		1991	09	14.28889	22	33	06.69	-04	32	52.3	17.5	9 675
1991	PM15		1991	09	14.33438	22	33	04.56	-04	33	01.5		9 675
1991	PW16		1971	05	13.20278	12	27	22.51	+02	14	15.2	18.5	4 675
1991	PW16		1971	05	14.23246	12	27	08.90	+02	14	38.3		4 675
1991	PW16		1971	05	16.29774	12	26	46.85	+02	14	48.9		4 675
1991	PW16		1982	01	30.44827	09	04	08.96	+16	18	52.6	19.0 V	6 675
1991	PW16		1982	01	31.42118	09	03	11.78	+16	24	05.0		6 675
1991	PU17	*	1991	08	05.29363	21	52	50.40	-09	15	38.4	17.2	9 675
1991	PU17		1991	08	05.32951	21	52	48.92	-09	15	51.9		9 675
1991	PU17		1991	08	07.33698	21	51	27.25	-09	28	15.9	17.2	9 675
1991	PU17		1991	08	07.36840	21	51	25.71	-09	28	28.2		9 675
1991	PV17	*	1991	08	07.39306	23	26	49.27	-09	17	25.5	18.0	9 675
1991	PV17		1991	08	07.42257	23	26	48.70	-09	17	31.7		9 675
1991	PV17		1991	09	12.30469	23	02	52.24	-12	32	41.6	17.2	9 675
1991	PV17		1991	09	12.34618	23	02	49.94	-12	32	55.2		9 675
1991	PV17		1991	09	16.31007	22	59	21.64	-12	52	04.4	17.5	9 675
1991	PV17		1991	09	16.35521	22	59	19.14	-12	52	16.4		9 675
1991	PW17	*	1991	08	08.42483	23	26	14.38	+00	27	52.1	18.2	9 675
1991	PW17		1991	08	08.43003	23	26	14.06	+00	27	50.6	18.2	9 675
1991	PW17		1991	08	08.45660	23	26	13.46	+00	27	45.3		9 675
1991	PW17		1991	08	08.46441	23	26	13.19	+00	27	45.4		9 675
1991	PW17		1991	09	11.29878	23	00	24.30	-02	57	58.3	17.5	9 675
1991	PW17		1991	09	11.35451	23	00	21.06	-02	58	24.9		9 675
1991	PW17		1991	09	16.30035	22	55	54.89	-03	36	46.9	17.2	9 675
1991	PW17		1991	09	16.34583	22	55	52.40	-03	37	08.6		9 675
1991	PX17	*	1991	08	07.39306	23	22	07.75	-10	02	02.5	16.8	9 675
1991	PX17		1991	08	07.42257	23	22	06.70	-10	02	04.0		9 675
1991	PX17		1991	09	10.30260	22	51	07.85	-11	15	25.2	16.5	9 675
1991	PX17		1991	09	10.35573	22	51	04.45	-11	15	30.0		9 675
1991	PX17		1991	09	14.30590	22	47	07.34	-11	21	02.4	16.8	9 675
1991	PX17		1991	09	14.35660	22	47	04.22	-11	21	06.0		9 675
1991	PX17		1991	09	16.28715	22	45	13.48	-11	23	07.1	17.0	9 675
1991	PX17		1991	09	16.33368	22	45	10.70	-11	23	08.9		9 675
1991	PY17	*	1991	08	07.39306	23	26	44.52	-09	38	06.1	18.0	9 675
1991	PY17		1991	08	07.42257	23	26	43.46	-09	38	04.4		9 675
1991	PY17		1991	09	10.30260	22	58	36.89	-09	31	38.1		9 675
1991	PY17		1991	09	10.35573	22	58	33.66	-09	31	37.4		9 675
1991	PY17		1991	09	12.30469	22	56	43.73	-09	30	47.4	17.5	9 675
1991	PY17		1991	09	12.34618	22	56	41.35	-09	30	47.5		9 675
1991	PY17		1991	09	16.28715	22	53	03.36	-09	28	24.8	17.8	9 675
1991	PY17		1991	09	16.31007	22	53	02.23	-09	28	26.0	17.5	9 675
1991	PY17		1991	09	16.33368	22	53	00.80	-09	28	22.4	17.5	9 675
1991	PY17		1991	09	16.35521	22	52	59.66	-09	28	23.7		9 675
1991	PZ17	*	1991	08	07.39306	23	35	35.20	-10	28	18.6	17.8	9 675
1991	PZ17		1991	08	07.42257	23	35	34.73	-10	28	30.1		9 675

1991 PZ17		1991	09	12.30469	23	11	55.85	-15	22	01.1	17.2	9	675
1991 PZ17		1991	09	12.34618	23	11	53.49	-15	22	20.6		9	675
1991 PZ17		1991	09	16.31007	23	08	17.33	-15	51	07.6	17.2	9	675
1991 PZ17		1991	09	16.35521	23	08	14.79	-15	51	25.9		9	675
1991 PA18	*	1991	08	07.40035	22	50	02.50	+07	48	35.9	17.5	9	675
1991 PA18		1991	08	07.43166	22	50	01.67	+07	48	22.4		9	675
1991 PA18		1991	09	12.28472	22	31	14.11	+01	37	58.2	16.8	9	675
1991 PA18		1991	09	12.32465	22	31	12.74	+01	37	26.2		9	675
1991 PB18	*	1991	08	07.40035	22	50	45.66	+05	10	33.3	17.5	9	675
1991 PB18		1991	08	07.43166	22	50	44.73	+05	10	28.4		9	675
1991 PB18		1991	09	12.28472	22	28	42.09	+00	28	16.8	17.8	9	675
1991 PB18		1991	09	12.32465	22	28	40.66	+00	27	53.3		9	675
1991 PC18	*	1991	08	08.38038	22	54	03.42	-00	48	28.5	17.8	9	675
1991 PC18		1991	08	08.41649	22	54	02.06	-00	48	29.9		9	675
1991 PC18		1991	09	12.28472	22	26	42.17	-02	17	48.7	17.2	9	675
1991 PC18		1991	09	12.32465	22	26	40.23	-02	17	57.8		9	675
1991 PC18		1991	09	14.28889	22	22	14.90	-05	31	05.1	17.2	9	675
1991 PC18		1991	09	14.28889	22	25	08.09	-02	25	16.3	18.0	9	675
1991 PC18		1991	09	14.33438	22	25	05.87	-02	25	26.0	17.5	9	675
1991 PD18	*	1991	08	08.38038	22	54	06.33	+00	19	25.6	15.8	9	675
1991 PD18		1991	08	08.41649	22	54	05.26	+00	19	36.6		9	675
1991 PD18		1991	09	12.28472	22	28	14.74	+01	22	18.1	15.8	9	675
1991 PD18		1991	09	12.32465	22	28	12.78	+01	22	15.2		9	675
1991 PE18	*	1991	08	08.38038	22	54	45.69	+01	01	56.8	17.8	9	675
1991 PE18		1991	08	08.41649	22	54	44.24	+01	01	53.1		9	675
1991 PE18		1991	09	12.28472	22	25	37.36	-01	29	30.4	17.8	9	675
1991 PE18		1991	09	12.32465	22	25	35.23	-01	29	45.6		9	675
1991 PF18	*	1991	08	08.38038	22	56	02.87	-00	36	12.7	18.0	9	675
1991 PF18		1991	08	08.41649	22	56	01.57	-00	36	13.9		9	675
1991 PF18		1991	09	12.28472	22	28	20.33	-02	46	50.3	17.2	9	675
1991 PF18		1991	09	12.32465	22	28	18.29	-02	47	03.1		9	675
1991 PF18		1991	09	14.28889	22	26	42.65	-02	57	13.9	17.5	9	675
1991 PF18		1991	09	14.33438	22	26	40.39	-02	57	28.5		9	675
1991 PG18	*	1991	08	08.38038	23	00	14.48	-03	33	32.2	17.8	9	675
1991 PG18		1991	08	08.41649	23	00	13.46	-03	33	35.9		9	675
1991 PG18		1991	09	10.30260	22	38	57.29	-05	16	29.1		9	675
1991 PG18		1991	09	10.35573	22	38	55.01	-05	16	41.5	17.0	9	675
1991 PG18		1991	09	14.28889	22	36	16.56	-05	31	49.5	17.8	9	675
1991 PG18		1991	09	14.33438	22	36	14.71	-05	31	59.8	17.2	9	675
1991 PG18		1991	09	16.28715	22	35	00.38	-05	39	17.5	17.8	9	675
1991 PG18		1991	09	16.33368	22	34	58.56	-05	39	28.8		9	675
1991 PH18	*	1991	08	08.42483	23	24	39.48	-02	31	57.1	17.8	9	675
1991 PH18		1991	08	08.45660	23	24	39.15	-02	32	16.5		9	675
1991 PH18		1991	09	12.30469	23	07	32.46	-10	29	07.7	17.5	9	675
1991 PH18		1991	09	12.34618	23	07	30.70	-10	29	42.0		9	675
1991 PH18		1991	09	16.31007	23	05	00.12	-11	22	38.7	17.0	9	675
1991 PH18		1991	09	16.35521	23	04	58.31	-11	23	12.9		9	675
1991 PJ18	*	1991	08	08.42483	23	27	47.05	-03	33	48.4	17.8	9	675
1991 PJ18		1991	08	08.45660	23	27	45.89	-03	33	42.5		9	675
1991 PJ18		1991	09	16.30035	22	51	54.89	-02	51	53.7	17.0	9	675
1991 PJ18		1991	09	16.34583	22	51	52.19	-02	51	53.4		9	675
1991 PJ18		1991	09	17.23872	22	51	01.31	-02	51	46.2		9	675
1991 PJ18		1991	09	17.28123	22	50	58.81	-02	51	46.4		9	675
1991 PK18	*	1991	08	08.43003	23	05	12.02	+01	24	03.3	17.8	9	675
1991 PK18		1991	08	08.46441	23	05	10.99	+01	24	04.3		9	675
1991 PK18		1991	09	12.28472	22	39	15.62	+00	44	00.2	17.2	9	675
1991 PK18		1991	09	12.32465	22	39	13.61	+00	43	53.4		9	675
1991 PL18	*	1991	08	08.43003	23	06	04.94	-01	35	39.3	17.8	9	675
1991 PL18		1991	08	08.46441	23	06	03.86	-01	35	37.9	18.5	9	675

1991	PL18		1991	09	14.28889	22	35	04.81	-02	50	52.7	17.8	9	675
1991	PL18		1991	09	14.33438	22	35	02.39	-02	51	02.6		9	675
1991	PL18		1991	09	16.30035	22	33	27.60	-02	58	02.1	17.2	9	675
1991	PL18		1991	09	16.34583	22	33	25.29	-02	58	12.3	18.0	9	675
1991	PL18		1991	09	17.23872	22	32	44.32	-03	01	21.3		9	675
1991	PL18		1991	09	17.28123	22	32	42.13	-03	01	28.0		9	675
1991	PM18	*	1991	08	08.43003	23	11	08.57	-00	25	39.3	17.5	9	675
1991	PM18		1991	08	08.46441	23	11	07.63	-00	25	50.4		9	675
1991	PM18		1991	09	10.30260	22	47	22.41	-05	02	09.7		9	675
1991	PM18		1991	09	10.35573	22	47	19.63	-05	02	37.7		9	675
1991	PM18		1991	09	16.28715	22	42	39.66	-05	58	51.5	17.0	9	675
1991	PM18		1991	09	16.30035	22	42	39.09	-05	58	56.6	16.8	9	675
1991	PM18		1991	09	16.33368	22	42	37.46	-05	59	16.6		9	675
1991	PM18		1991	09	16.34583	22	42	36.90	-05	59	22.0		9	675
1991	PN18	*	1991	08	08.43003	23	20	46.65	+02	57	45.3	16.8	9	675
1991	PN18		1991	08	08.46441	23	20	45.65	+02	57	46.0		9	675
1991	PN18		1991	09	16.30035	22	46	40.74	+01	01	53.5	16.2	9	675
1991	PN18		1991	09	16.34583	22	46	38.00	+01	01	38.8		9	675
1991	PN18		1991	09	17.23872	22	45	46.33	+00	56	44.3		9	675
1991	PN18		1991	09	17.28123	22	45	43.76	+00	56	30.9		9	675
1991	PO18	*	1991	08	07.38524	23	03	30.93	-09	39	28.9	17.0	9	675
1991	PO18		1991	08	07.41406	23	03	29.62	-09	39	29.8	16.8	9	675
1991	PO18		1991	09	10.30260	22	30	05.59	-10	16	21.7	16.8	9	675
1991	PO18		1991	09	10.35573	22	30	02.39	-10	16	23.4		9	675
1991	PP18	*	1991	08	07.39306	23	15	23.03	-10	22	48.6	18.0	9	675
1991	PP18		1991	08	07.42257	23	15	22.20	-10	23	02.6		9	675
1991	PP18		1991	09	14.30590	22	48	50.33	-15	48	04.5	17.8	9	675
1991	PP18		1991	09	14.35660	22	48	47.87	-15	48	24.2		9	675
1991	PQ18	*	1991	08	08.38038	22	41	27.56	-02	39	38.7	17.5	9	675
1991	PQ18		1991	08	08.41649	22	41	26.82	-02	39	40.4		9	675
1991	PQ18		1991	09	14.33438	22	22	13.52	-05	31	21.4		9	675
1991	PR18	*	1991	08	08.38038	22	41	39.61	-02	38	56.0	17.5	9	675
1991	PR18		1991	08	08.41649	22	41	37.94	-02	39	03.1		9	675
1991	PR18		1991	09	14.28889	22	08	07.52	-05	47	59.8	18.0	9	675
1991	PR18		1991	09	14.33438	22	08	05.19	-05	48	14.2	17.2	9	675
1991	PS18	*	1991	08	08.38038	22	50	32.01	+00	42	39.8	17.8	9	675
1991	PS18		1991	08	08.41649	22	50	30.87	+00	42	30.0		9	675
1991	PS18		1991	09	14.28889	22	26	35.83	-03	30	15.5	17.5	9	675
1991	PS18		1991	09	14.33438	22	26	34.10	-03	30	36.5		9	675
1991	PT18	*	1991	08	08.38038	22	56	47.83	-00	29	48.9	18.2	9	675
1991	PT18		1991	08	08.41649	22	56	46.79	-00	29	57.1		9	675
1991	PT18		1991	09	14.28889	22	33	35.40	-04	15	11.3	17.8	9	675
1991	PT18		1991	09	14.33438	22	33	33.65	-04	15	29.0		9	675
1991	QC		1991	09	14.28889	22	12	00.76	-04	48	40.0	16.8	9	675
1991	QC		1991	09	14.33438	22	11	58.90	-04	48	55.2		9	675
1991	QD		1991	09	12.28472	22	22	19.64	-01	45	49.2	16.2	9	675
1991	QD		1991	09	12.32465	22	22	17.23	-01	45	54.6		9	675
1991	QD		1991	09	14.28889	22	20	30.73	-01	50	05.5	16.0	9	675
1991	QD		1991	09	14.33438	22	20	28.17	-01	50	11.2		9	675
1991	QG		1991	09	12.28472	22	10	09.42	-00	45	27.5	16.5	9	675
1991	QG		1991	09	12.32465	22	10	08.45	-00	45	51.1		9	675
1991	QG		1991	09	14.28889	22	09	33.95	-01	05	05.2		9	675
1991	QG		1991	09	14.33438	22	09	33.02	-01	05	32.0	16.5	9	675
1991	QJ		1991	09	10.30260	22	47	26.95	-08	25	11.8	16.8	9	675
1991	QJ		1991	09	10.35573	22	47	24.72	-08	25	45.8		9	675
1991	QJ		1991	09	16.28715	22	43	51.64	-09	25	31.7	17.0	9	675
1991	QJ		1991	09	16.33368	22	43	49.93	-09	25	58.1		9	675
1991	QK		1991	09	13.31910	23	41	19.22	-03	58	25.1	16.2	9	675
1991	QK		1991	09	13.35712	23	41	16.76	-03	58	25.5		9	675

1991 QK	*	1991	09	16.37674	23	38	14.46	-03	58	37.9	16.0	9	675
1991 QK		1991	09	16.41684	23	38	11.87	-03	58	37.6		9	675
1991 RE		1991	09	16.30035	23	04	02.25	-00	54	50.8	17.0	9	675
1991 RE		1991	09	16.34583	23	03	59.86	-00	55	00.6		9	675
1991 RE		1991	09	17.23872	23	03	18.36	-00	58	23.5		9	675
1991 RE		1991	09	17.28123	23	03	16.34	-00	58	31.8		9	675
1991 RL		1991	09	16.30035	22	52	35.02	-01	50	29.6	17.2	9	675
1991 RL		1991	09	16.34583	22	52	30.67	-01	50	04.5		9	675
1991 RL		1991	09	17.23872	22	51	10.05	-01	42	06.2		9	675
1991 RL		1991	09	17.28123	22	51	06.23	-01	41	41.5		9	675
1991 RM		1991	09	12.30469	23	11	56.87	-11	13	27.8	16.8	9	675
1991 RM		1991	09	12.34618	23	11	55.93	-11	14	17.4		9	675
1991 RM		1991	09	16.31007	23	10	42.92	-12	30	48.0	16.5	9	675
1991 RM		1991	09	16.35521	23	10	41.92	-12	31	37.8		9	675
1991 RS		1991	09	14.28889	22	09	48.02	-04	54	10.4	17.0	9	675
1991 RS		1991	09	14.33438	22	09	46.67	-04	54	48.3		9	675
1991 RT		1991	09	10.30260	22	52	09.46	-09	39	12.2	16.8	9	675
1991 RT		1991	09	10.35573	22	52	07.70	-09	40	07.2		9	675
1991 RT		1991	09	12.30469	22	51	08.85	-10	13	37.2	17.0	9	675
1991 RT		1991	09	12.34618	22	51	07.49	-10	14	19.3		9	675
1991 RT		1991	09	16.28715	22	49	15.80	-11	19	43.8		9	675
1991 RT		1991	09	16.31007	22	49	15.16	-11	20	05.8	17.0	9	675
1991 RT		1991	09	16.33368	22	49	14.40	-11	20	27.5	17.5	9	675
1991 RT		1991	09	16.35521	22	49	13.80	-11	20	49.2		9	675
1991 RE1		1991	09	14.28889	22	18	21.94	-06	49	45.0	17.5	9	675
1991 RE1		1991	09	14.33438	22	18	19.44	-06	49	55.1		9	675
1991 RL1		1991	09	12.28472	22	26	37.92	+02	29	32.9	17.0	9	675
1991 RL1		1991	09	12.32465	22	26	36.29	+02	28	57.0		9	675
1991 RP1		1991	09	17.44479	00	42	18.74	+12	52	36.0		9	675
1991 RP1		1991	09	17.49497	00	42	15.49	+12	52	45.5	16.8	9	675
1991 RC2		1991	09	16.30035	23	01	06.76	-02	16	02.6	17.2	9	675
1991 RC2		1991	09	16.34583	23	01	03.85	-02	16	08.0		9	675
1991 RC2		1991	09	17.23872	23	00	08.94	-02	17	58.4		9	675
1991 RC2		1991	09	17.28123	23	00	06.09	-02	18	02.4		9	675
1991 RK2		1991	09	12.30469	23	20	20.97	-09	47	01.8	16.8	9	675
1991 RK2		1991	09	12.34618	23	20	19.00	-09	47	26.8		9	675
1991 RK2		1991	09	16.31007	23	17	17.33	-10	25	46.5	16.0	9	675
1991 RK2		1991	09	16.35521	23	17	15.14	-10	26	10.7		9	675
1991 RN4		1991	09	12.30469	23	03	02.37	-07	55	45.9	17.0	9	675
1991 RN4		1991	09	12.34618	23	03	00.46	-07	56	12.7		9	675
1991 RN4		1991	09	16.28715	23	00	13.69	-08	36	48.0	17.0	9	675
1991 RN4		1991	09	16.31007	23	00	12.79	-08	37	02.7	16.8	9	675
1991 RN4		1991	09	16.33368	23	00	11.68	-08	37	16.7		9	675
1991 RN4		1991	09	16.35521	23	00	10.75	-08	37	29.3		9	675
1991 RZ5		1991	09	12.36510	00	54	05.72	-04	25	52.5		9	675
1991 RZ5		1991	09	17.41823	00	49	47.44	-04	21	41.0	17.5	9	675
1991 RZ5		1991	09	17.46997	00	49	44.51	-04	21	37.7		9	675
1991 RA6		1991	09	12.36510	00	50	01.82	-03	41	26.5		9	675
1991 RA6		1991	09	17.41823	00	45	33.28	-04	03	44.8	16.5	9	675
1991 RA6		1991	09	17.46997	00	45	30.27	-04	03	58.4		9	675
1991 RL6		1991	09	14.30590	22	43	40.78	-16	00	30.5	17.8	9	675
1991 RL6		1991	09	14.35660	22	43	38.29	-16	00	41.0		9	675
1991 RN6		1991	09	12.30469	23	11	21.99	-07	44	39.5	16.8	9	675
1991 RN6		1991	09	12.34618	23	11	20.45	-07	45	17.0		9	675
1991 RN6		1991	09	16.31007	23	09	11.25	-08	43	08.2	17.0	9	675
1991 RN6		1991	09	16.35521	23	09	09.69	-08	43	45.5	16.5	9	675
1991 RY9		1991	09	10.38420	00	25	31.28	+13	33	27.2		9	675
1991 RY9		1991	09	10.45156	00	25	27.88	+13	33	15.3		9	675
1991 RA10		1991	09	10.38420	00	28	43.55	+13	18	18.1		9	675

1991	RA10		1991	09	10.45156	00	28	40.37	+13	18	04.8		9	675
1991	RE10		1991	09	10.38420	00	33	50.79	+13	25	35.6		9	675
1991	RE10		1991	09	10.45156	00	33	47.96	+13	25	34.2		9	675
1991	RE10		1991	09	17.44479	00	28	38.90	+13	19	14.5		9	675
1991	RE10		1991	09	17.49497	00	28	36.44	+13	19	08.3	16.8	9	675
1991	RF10		1991	09	10.38420	00	36	09.28	+12	40	21.3		9	675
1991	RF10		1991	09	10.45156	00	36	06.81	+12	40	02.7		9	675
1991	RC11		1991	09	10.38420	00	45	03.25	+16	14	43.8		9	675
1991	RC11		1991	09	10.45156	00	45	01.32	+16	14	10.1		9	675
1991	RC11		1991	09	17.44479	00	41	35.95	+15	06	39.4		9	675
1991	RC11		1991	09	17.49497	00	41	34.27	+15	06	06.4	17.0	9	675
1991	RD11		1991	09	10.38420	00	51	25.49	+14	28	08.1	17.8	9	675
1991	RD11		1991	09	10.45156	00	51	22.73	+14	28	24.6		9	675
1991	RD11		1991	09	17.44479	00	46	36.98	+14	50	03.4		9	675
1991	RD11		1991	09	17.49497	00	46	34.66	+14	50	09.6	17.8	9	675
1991	RE11		1991	09	17.44479	00	47	03.55	+14	16	00.9		9	675
1991	RE11		1991	09	17.49497	00	47	01.20	+14	15	55.8	17.0	9	675
1991	RB12		1991	08	05.27500	21	31	30.72	-15	52	41.3	17.2	9	675
1991	RB12		1991	08	05.31302	21	31	28.52	-15	52	42.2		9	675
1991	RB12		1991	08	07.32240	21	29	30.60	-15	52	11.7	17.8	9	675
1991	RB12		1991	08	07.35069	21	29	28.69	-15	52	10.9		9	675
1991	RY16		1991	09	12.36510	00	32	34.64	-07	01	27.0		9	675
1991	RA17		1991	09	12.36510	00	33	46.42	-06	21	55.0		9	675
1991	RE17		1991	09	12.36510	00	40	32.18	-04	56	28.4		9	675
1991	RF17		1991	09	12.36510	00	41	19.77	-04	37	58.3		9	675
1991	RF17		1991	09	17.46997	00	36	59.26	-04	50	19.6	17.8	9	675
1991	RQ21		1991	09	12.30469	23	15	40.41	-09	42	25.8	17.8	9	675
1991	RQ21		1991	09	12.34618	23	15	38.22	-09	42	36.5		9	675
1991	RQ21		1991	09	16.31007	23	12	19.31	-10	00	44.1	17.8	9	675
1991	RQ21		1991	09	16.35521	23	12	16.97	-10	00	56.6		9	675
1991	RR21		1991	09	12.30469	23	16	45.23	-08	48	52.0	17.8	9	675
1991	RR21		1991	09	12.34618	23	16	43.35	-08	49	07.2		9	675
1991	RR21		1991	09	16.31007	23	13	38.54	-09	10	56.4	17.5	9	675
1991	RR21		1991	09	16.35521	23	13	36.45	-09	11	10.9	17.0	9	675
1991	RW21		1991	08	08.42483	23	34	45.35	-04	28	18.8	18.2	9	675
1991	RW21		1991	08	08.45660	23	34	44.50	-04	28	12.9		9	675
1991	RW21		1991	09	16.30035	23	00	33.85	-03	30	30.0	16.8	9	675
1991	RW21		1991	09	16.34583	23	00	30.72	-03	30	28.3		9	675
1991	RW21		1991	09	17.23872	22	59	31.52	-03	29	50.9		9	675
1991	RW21		1991	09	17.28123	22	59	28.49	-03	29	48.6		9	675
1991	RY21		1991	09	12.30469	23	16	50.43	-10	02	47.2	17.2	9	675
1991	RY21		1991	09	12.34618	23	16	48.06	-10	03	03.1		9	675
1991	RY21		1991	09	16.31007	23	13	12.03	-10	26	18.0	18.0	9	675
1991	RY21		1991	09	16.35521	23	13	09.51	-10	26	33.3	17.5	9	675
1991	RZ21		1991	09	16.31007	23	17	54.17	-09	18	08.1	17.8	9	675
1991	RZ21		1991	09	16.35521	23	17	51.66	-09	18	12.6		9	675
1991	RC22		1991	09	16.31007	23	21	16.39	-11	14	25.8	17.0	9	675
1991	RC22		1991	09	16.35521	23	21	13.62	-11	14	33.4		9	675
1991	RD22		1991	09	16.31007	23	22	01.93	-12	11	42.2	17.5	9	675
1991	RD22		1991	09	16.35521	23	21	59.64	-12	11	51.0		9	675
1991	RQ23	*	1991	09	10.38420	00	26	11.88	+16	06	13.6		9	675
1991	RQ23		1991	09	10.45156	00	26	09.53	+16	06	00.2		9	675
1991	RQ23		1991	09	17.44479	00	21	24.83	+15	37	28.3		9	675
1991	RQ23		1991	09	17.49497	00	21	22.67	+15	37	13.3	17.0	9	675
1991	RR23	*	1991	09	10.38420	00	30	11.47	+16	06	59.1		9	675
1991	RR23		1991	09	10.45156	00	30	08.68	+16	06	59.0		9	675
1991	RR23		1991	09	17.44479	00	24	59.70	+16	03	37.6		9	675
1991	RR23		1991	09	17.49497	00	24	57.30	+16	03	32.9	17.2	9	675
1991	RS23	*	1991	09	10.38420	00	37	05.87	+16	11	43.6		9	675

1991	RS23		1991	09	10.45156	00	37	03.12	+16	11	43.8		9	675
1991	RS23		1991	09	17.44479	00	32	08.39	+16	06	13.7		9	675
1991	RS23		1991	09	17.49497	00	32	06.06	+16	06	08.7	17.5	9	675
1991	RT23	*	1991	09	11.29878	22	56	30.75	-04	37	40.6	17.5	9	675
1991	RT23		1991	09	11.35451	22	56	27.81	-04	38	10.7		9	675
1991	RT23		1991	09	16.28715	22	52	37.62	-05	21	39.2	17.8	9	675
1991	RT23		1991	09	16.33368	22	52	35.42	-05	22	02.7		9	675
1991	RU23	*	1991	09	11.29878	23	01	52.88	-06	28	12.3	17.0	9	675
1991	RU23		1991	09	11.35451	23	01	49.88	-06	28	27.7		9	675
1991	RU23		1991	09	16.28715	22	57	48.69	-06	50	40.8	17.0	9	675
1991	RU23		1991	09	16.33368	22	57	46.34	-06	50	52.6		9	675
1991	RV23	*	1991	09	11.29878	23	02	35.71	-07	53	10.1	18.5	9	675
1991	RV23		1991	09	11.35451	23	02	32.06	-07	53	14.5		9	675
1991	RV23		1991	09	12.30469	23	01	32.77	-07	54	14.5	18.2	9	675
1991	RV23		1991	09	12.34618	23	01	30.10	-07	54	17.7		9	675
1991	RV23		1991	09	16.28715	22	57	28.58	-07	57	44.5	18.0	9	675
1991	RV23		1991	09	16.33368	22	57	25.72	-07	57	47.9		9	675
1991	RW23	*	1991	09	11.29878	23	02	53.64	-02	19	12.0	17.5	9	675
1991	RW23		1991	09	11.35451	23	02	50.95	-02	19	34.1		9	675
1991	RW23		1991	09	16.30035	22	59	06.17	-02	51	22.2	17.2	9	675
1991	RW23		1991	09	16.34583	22	59	04.02	-02	51	39.2		9	675
1991	RW23		1991	09	17.23872	22	58	24.61	-02	57	19.0		9	675
1991	RW23		1991	09	17.28123	22	58	22.73	-02	57	37.9		9	675
1991	RX23	*	1991	09	11.29878	23	06	00.16	-08	37	07.1	17.8	9	675
1991	RX23		1991	09	11.35451	23	05	57.14	-08	37	13.9		9	675
1991	RX23		1991	09	12.30469	23	05	08.64	-08	39	09.0	17.8	9	675
1991	RX23		1991	09	12.34618	23	05	06.48	-08	39	13.8		9	675
1991	RX23		1991	09	16.31007	23	01	46.06	-08	46	38.8	17.0	9	675
1991	RX23		1991	09	16.35521	23	01	43.89	-08	46	47.2		9	675
1991	RY23	*	1991	09	11.29878	23	07	36.81	-09	14	06.1	17.8	9	675
1991	RY23		1991	09	11.35451	23	07	34.56	-09	14	39.2		9	675
1991	RY23		1991	09	12.30469	23	06	58.73	-09	24	19.9	17.5	9	675
1991	RY23		1991	09	12.34618	23	06	57.07	-09	24	44.4		9	675
1991	RZ23	*	1991	09	11.29878	23	08	28.20	-09	56	52.1	17.2	9	675
1991	RZ23		1991	09	11.35451	23	08	25.13	-09	56	55.5		9	675
1991	RZ23		1991	09	12.30469	23	07	35.48	-09	58	10.8	17.5	9	675
1991	RZ23		1991	09	12.34618	23	07	33.27	-09	58	14.9		9	675
1991	RZ23		1991	09	16.31007	23	04	07.80	-10	02	42.5	17.5	9	675
1991	RZ23		1991	09	16.35521	23	04	05.40	-10	02	43.7		9	675
1991	RA24	*	1991	09	11.29878	23	08	57.14	-07	36	10.6	17.2	9	675
1991	RA24		1991	09	11.35451	23	08	53.96	-07	36	23.0	17.8	9	675
1991	RA24		1991	09	12.30469	23	08	03.16	-07	39	50.4	17.8	9	675
1991	RA24		1991	09	12.34618	23	08	00.81	-07	39	59.2		9	675
1991	RA24		1991	09	16.31007	23	04	30.48	-07	53	42.7	17.2	9	675
1991	RA24		1991	09	16.35521	23	04	27.96	-07	53	51.3	17.5	9	675
1991	RB24	*	1991	09	11.29878	23	09	32.93	-08	54	58.3	17.2	9	675
1991	RB24		1991	09	11.35451	23	09	29.97	-08	55	24.0		9	675
1991	RB24		1991	09	12.30469	23	08	42.69	-09	02	35.2	17.0	9	675
1991	RB24		1991	09	12.34618	23	08	40.46	-09	02	55.0		9	675
1991	RC24	*	1991	09	12.30469	22	54	44.77	-11	52	14.5	16.8	9	675
1991	RC24		1991	09	12.34618	22	54	42.83	-11	52	43.2		9	675
1991	RC24		1991	09	16.31007	22	51	51.78	-12	35	03.7	17.2	9	675
1991	RC24		1991	09	16.35521	22	51	49.71	-12	35	32.7		9	675
1991	RD24	*	1991	09	12.30469	22	55	37.11	-13	56	03.7	17.5	9	675
1991	RD24		1991	09	12.34618	22	55	34.86	-13	56	20.9		9	675
1991	RD24		1991	09	14.30590	22	53	56.03	-14	08	47.9		9	675
1991	RD24		1991	09	14.35660	22	53	53.40	-14	09	05.5		9	675
1991	RD24		1991	09	16.31007	22	52	17.67	-14	20	50.0	17.0	9	675
1991	RD24		1991	09	16.35521	22	52	15.25	-14	21	04.4	17.5	9	675

1991 RE24	*	1991	09	12.30469	23	00	46.28	-14	37	22.8	17.8	9	675
1991 RE24		1991	09	12.34618	23	00	44.33	-14	37	28.9		9	675
1991 RE24		1991	09	16.31007	22	57	39.10	-14	45	54.6	17.8	9	675
1991 RE24		1991	09	16.35521	22	57	36.90	-14	45	59.2		9	675
1991 RF24	*	1991	09	12.30469	23	04	47.83	-08	47	20.5	17.5	9	675
1991 RF24		1991	09	12.34618	23	04	46.01	-08	47	40.0		9	675
1991 RF24		1991	09	16.31007	23	02	10.20	-09	17	14.0	17.5	9	675
1991 RF24		1991	09	16.35521	23	02	08.29	-09	17	34.4		9	675
1991 RG24	*	1991	09	12.30469	23	08	20.68	-10	01	16.1	17.5	9	675
1991 RG24		1991	09	12.34618	23	08	17.91	-10	01	17.8		9	675
1991 RG24		1991	09	16.31007	23	04	11.77	-10	01	10.3	17.2	9	675
1991 RG24		1991	09	16.35521	23	04	08.93	-10	01	08.9		9	675
1991 RH24	*	1991	09	12.30469	23	09	02.65	-10	31	09.3	17.0	9	675
1991 RH24		1991	09	12.34618	23	09	00.50	-10	31	27.4		9	675
1991 RH24		1991	09	16.31007	23	05	56.83	-10	58	53.8	17.0	9	675
1991 RH24		1991	09	16.35521	23	05	54.60	-10	59	10.7		9	675
1991 RJ24	*	1991	09	12.30469	23	13	01.73	-12	14	19.5	17.0	9	675
1991 RJ24		1991	09	12.34618	23	12	59.96	-12	14	54.2		9	675
1991 RJ24		1991	09	16.31007	23	10	16.76	-13	09	07.4	17.0	9	675
1991 RJ24		1991	09	16.35521	23	10	14.79	-13	09	43.0		9	675
1991 RK24	*	1991	09	12.30469	23	14	37.58	-13	10	40.7	17.0	9	675
1991 RK24		1991	09	12.34618	23	14	34.82	-13	10	48.0		9	675
1991 RK24		1991	09	16.31007	23	10	32.08	-13	20	02.1	16.8	9	675
1991 RK24		1991	09	16.35521	23	10	29.23	-13	20	07.1		9	675
1991 RL24	*	1991	09	12.30469	23	18	23.23	-11	29	35.8	17.5	9	675
1991 RL24		1991	09	12.34618	23	18	20.75	-11	29	47.8		9	675
1991 RL24		1991	09	16.31007	23	15	04.29	-11	45	02.9	17.5	9	675
1991 RL24		1991	09	16.35521	23	15	01.97	-11	45	12.2		9	675
1991 RM24	*	1991	09	12.30469	23	18	28.06	-13	13	57.3	17.8	9	675
1991 RM24		1991	09	12.34618	23	18	26.10	-13	14	11.0		9	675
1991 RM24		1991	09	16.31007	23	15	19.03	-13	36	50.0	17.5	9	675
1991 RM24		1991	09	16.35521	23	15	16.83	-13	37	04.1		9	675
1991 RN24	*	1991	09	12.30469	23	19	53.52	-12	27	48.9	17.8	9	675
1991 RN24		1991	09	12.34618	23	19	50.86	-12	28	02.5		9	675
1991 RN24		1991	09	16.31007	23	15	47.05	-12	48	06.4	17.8	9	675
1991 RN24		1991	09	16.35521	23	15	44.14	-12	48	18.5	17.2	9	675
1991 RO24	*	1991	09	12.30469	23	19	54.68	-12	30	24.6	17.2	9	675
1991 RO24		1991	09	12.34618	23	19	53.73	-12	31	03.9		9	675
1991 RO24		1991	09	16.31007	23	18	42.22	-13	30	09.7	17.2	9	675
1991 RO24		1991	09	16.35521	23	18	41.17	-13	30	47.8		9	675
1991 RP24	*	1991	09	12.36510	00	41	02.26	-10	31	59.5		9	675
1991 RP24		1991	09	17.41823	00	37	58.85	-11	16	53.6	16.2	9	675
1991 RP24		1991	09	17.46997	00	37	56.80	-11	17	20.5		9	675
1991 RQ24	*	1991	09	12.36510	00	46	09.29	-08	16	48.5		9	675
1991 RQ24		1991	09	17.41823	00	43	22.99	-08	46	58.2	17.5	9	675
1991 RQ24		1991	09	17.46997	00	43	20.90	-08	47	16.0		9	675
1991 RR24	*	1991	09	12.36510	00	46	40.51	-06	51	54.7		9	675
1991 RR24		1991	09	17.41823	00	42	50.37	-07	30	20.1	17.0	9	675
1991 RR24		1991	09	17.46997	00	42	47.69	-07	30	43.0		9	675
1991 RS24	*	1991	09	12.36510	00	46	59.43	-07	14	22.5		9	675
1991 RS24		1991	09	17.41823	00	44	20.85	-08	05	44.5	17.2	9	675
1991 RS24		1991	09	17.46997	00	44	18.80	-08	06	14.7		9	675
1991 RT24	*	1991	09	12.36510	00	54	51.19	-09	55	36.0		9	675
1991 RT24		1991	09	17.41823	00	50	23.27	-09	51	09.4	16.5	9	675
1991 RT24		1991	09	17.46997	00	50	20.25	-09	51	05.4		9	675
1991 RU24	*	1991	09	12.36510	01	01	54.42	-09	03	01.3		9	675
1991 RU24		1991	09	17.41823	00	59	36.31	-10	09	28.1	17.0	9	675
1991 RU24		1991	09	17.46997	00	59	34.61	-10	10	08.5		9	675
1991 RV24	*	1991	09	10.30260	22	37	32.67	-10	19	04.3	17.0	9	675

1991	RV24		1991	09	10.35573	22	37	29.84	-10	19	25.6		9	675
1991	RV24		1991	09	14.30590	22	34	18.81	-10	46	05.5	17.5	9	675
1991	RV24		1991	09	14.35660	22	34	16.37	-10	46	23.4		9	675
1991	RW24	*	1991	09	10.30260	22	40	21.40	-12	06	09.1	17.0	9	675
1991	RW24		1991	09	10.35573	22	40	18.54	-12	06	17.8		9	675
1991	RW24		1991	09	14.30590	22	37	07.15	-12	16	31.2	17.0	9	675
1991	RW24		1991	09	14.35660	22	37	04.62	-12	16	38.1		9	675
1991	RX24		1991	09	10.30260	22	59	18.88	-07	54	20.7		9	675
1991	RX24		1991	09	10.35573	22	59	15.72	-07	54	21.8	18.0	9	675
1991	RX24	*	1991	09	11.29878	22	58	25.83	-07	55	01.0	18.0	9	675
1991	RX24		1991	09	11.35451	22	58	22.72	-07	55	02.8		9	675
1991	RY24	*	1991	09	12.28472	22	28	38.14	-01	49	35.7	18.0	9	675
1991	RY24		1991	09	12.32465	22	28	35.75	-01	49	35.9		9	675
1991	RY24		1991	09	14.28889	22	26	42.96	-01	52	02.1	18.0	9	675
1991	RY24		1991	09	14.33438	22	26	40.30	-01	52	07.8	18.8	9	675
1991	RZ24	*	1991	09	14.30590	22	30	51.66	-16	03	36.9	17.0	9	675
1991	RZ24		1991	09	14.35660	22	30	49.47	-16	03	42.1	17.2	9	675
1991	RA25		1991	09	14.30590	22	37	11.90	-18	09	10.6	17.2	9	675
1991	RA25		1991	09	14.35660	22	37	09.16	-18	09	20.6		9	675
1991	RA25	*	1991	09	15.26059	22	36	22.94	-18	11	55.2	17.8	9	675
1991	RA25		1991	09	15.31203	22	36	20.19	-18	12	04.3		9	675
1991	SA		1991	09	10.38420	00	48	05.94	+17	55	57.5		9	675
1991	SA		1991	09	17.44479	00	43	35.33	+17	43	10.5		9	675
1991	SA		1991	09	17.49497	00	43	32.98	+17	43	00.0	16.8	9	675
1991	SG		1991	09	11.29878	23	11	06.11	-07	46	07.5	17.0	9	675
1991	SG		1991	09	11.35451	23	11	03.78	-07	46	34.5	17.5	9	675
1991	SG		1991	09	12.30469	23	10	25.78	-07	53	52.0	17.5	9	675
1991	SG		1991	09	12.34618	23	10	23.96	-07	54	11.7		9	675
1991	SG		1991	09	16.31007	23	07	46.81	-08	24	08.1	17.2	9	675
1991	SG		1991	09	16.35521	23	07	44.94	-08	24	27.6		9	675
1991	SJ		1991	09	16.31007	23	19	45.09	-09	18	00.3	18.5	9	675
1991	SJ		1991	09	16.35521	23	19	42.34	-09	18	21.7	18.0	9	675
1991	SK		1991	09	16.31007	23	18	27.65	-09	04	15.8	16.8	9	675
1991	SK		1991	09	16.35521	23	18	25.41	-09	04	22.3		9	675
1991	SF1		1991	09	10.38420	00	28	44.22	+12	39	54.7		9	675
1991	SF1		1991	09	10.45156	00	28	41.38	+12	39	14.8		9	675
1991	SR1		1991	09	10.38420	00	45	44.13	+15	21	31.8		9	675
1991	SR1		1991	09	10.45156	00	45	42.17	+15	21	02.3		9	675
1991	SR1		1991	09	17.44479	00	42	17.84	+14	21	36.3		9	675
1991	SR1		1991	09	17.49497	00	42	16.07	+14	21	06.2	16.5	9	675
1991	SS1		1991	09	12.36510	00	35	06.95	-07	30	16.2		9	675
1991	SS1		1991	09	17.41823	00	32	50.29	-07	24	32.5	17.2	9	675
1991	SS1		1991	09	17.46997	00	32	48.41	-07	24	28.4		9	675
1991	SV1		1991	09	10.40573	01	32	22.90	+07	11	25.8		9	675
1991	SV1		1991	09	10.46042	01	32	21.26	+07	11	29.5	17.5	9	675
1991	SV1	*	1991	09	16.46272	01	28	57.32	+07	16	38.3		9	675
1991	SV1		1991	09	16.49449	01	28	55.89	+07	16	39.3	17.8	9	675
1991	SW1		1991	09	10.30260	22	51	39.49	-04	47	25.8		9	675
1991	SW1		1991	09	10.35573	22	51	36.59	-04	47	38.6		9	675
1991	SW1	*	1991	09	16.28715	22	46	38.91	-05	14	32.4	17.5	9	675
1991	SW1		1991	09	16.30035	22	46	38.27	-05	14	35.2	17.0	9	675
1991	SW1		1991	09	16.33368	22	46	36.59	-05	14	44.5		9	675
1991	SW1		1991	09	16.34583	22	46	35.96	-05	14	47.1		9	675
1991	SW1		1991	09	17.23872	22	45	53.98	-05	18	40.9		9	675
1991	SW1		1991	09	17.28123	22	45	51.99	-05	18	50.8		9	675
1991	SX1		1991	09	10.30260	22	37	57.19	-07	43	13.9	17.0	9	675
1991	SX1		1991	09	10.35573	22	37	54.02	-07	43	28.9		9	675
1991	SX1	*	1991	09	16.28715	22	32	24.49	-08	10	50.6	17.0	9	675
1991	SX1		1991	09	16.33368	22	32	21.90	-08	11	01.9	17.2	9	675

1991	SY1		1991	09	10.30260	22	38	32.22	-09	42	55.6		9	675
1991	SY1		1991	09	10.35573	22	38	28.80	-09	42	52.4		9	675
1991	SY1	*	1991	09	16.28715	22	32	43.13	-09	33	33.2	18.0	9	675
1991	SY1		1991	09	16.33368	22	32	40.50	-09	33	26.3		9	675
1991	SZ1		1991	09	14.30590	22	35	06.96	-10	44	51.5	17.8	9	675
1991	SZ1		1991	09	14.35660	22	35	04.78	-10	45	04.5		9	675
1991	SZ1	*	1991	09	16.28715	22	33	45.99	-10	53	53.9	17.8	9	675
1991	SZ1		1991	09	16.33368	22	33	44.07	-10	54	06.1		9	675
1991	SA2		1991	09	10.30260	22	39	02.18	-08	27	47.7	17.2	9	675
1991	SA2		1991	09	10.35573	22	38	59.30	-08	27	58.7		9	675
1991	SA2	*	1991	09	16.28715	22	34	09.93	-08	46	31.3	17.8	9	675
1991	SA2		1991	09	16.33368	22	34	07.65	-08	46	38.4	17.2	9	675
1991	SB2		1991	09	10.30260	22	39	51.90	-07	42	32.7	17.2	9	675
1991	SB2		1991	09	10.35573	22	39	49.09	-07	42	16.4		9	675
1991	SB2	*	1991	09	16.28715	22	35	34.83	-07	12	33.3	17.5	9	675
1991	SB2		1991	09	16.33368	22	35	32.83	-07	12	19.5		9	675
1991	SC2		1991	09	10.30260	22	43	06.63	-11	14	47.4	17.8	9	675
1991	SC2		1991	09	10.35573	22	43	04.04	-11	15	03.2		9	675
1991	SC2		1991	09	14.30590	22	40	10.40	-11	34	28.9	17.8	9	675
1991	SC2		1991	09	14.35660	22	40	08.17	-11	34	42.8		9	675
1991	SC2	*	1991	09	16.28715	22	38	46.78	-11	43	37.3	18.0	9	675
1991	SC2		1991	09	16.33368	22	38	44.74	-11	43	49.5		9	675
1991	SD2		1991	09	10.30260	22	45	25.25	-09	27	46.3	17.2	9	675
1991	SD2		1991	09	10.35573	22	45	22.69	-09	28	09.1		9	675
1991	SD2		1991	09	14.35660	22	42	28.97	-09	55	50.2	17.5	9	675
1991	SD2	*	1991	09	16.28715	22	41	10.05	-10	08	29.2	17.8	9	675
1991	SD2		1991	09	16.33368	22	41	08.10	-10	08	47.4	17.5	9	675
1991	SE2		1991	09	10.30260	22	47	56.91	-07	13	51.8	16.5	9	675
1991	SE2		1991	09	10.35573	22	47	54.48	-07	14	14.0		9	675
1991	SE2	*	1991	09	16.28715	22	43	57.32	-07	53	10.8	17.0	9	675
1991	SE2		1991	09	16.33368	22	43	55.49	-07	53	27.7		9	675
1991	SF2		1991	09	10.30260	22	51	05.36	-05	48	16.1		9	675
1991	SF2		1991	09	10.35573	22	51	02.49	-05	48	26.1		9	675
1991	SF2	*	1991	09	16.28715	22	46	15.61	-06	07	10.0	16.8	9	675
1991	SF2		1991	09	16.30035	22	46	14.99	-06	07	10.2	16.5	9	675
1991	SF2		1991	09	16.33368	22	46	13.36	-06	07	18.0		9	675
1991	SF2		1991	09	16.34583	22	46	12.73	-06	07	18.3		9	675
1991	SG2		1991	09	10.30260	22	51	29.31	-08	01	29.1	17.5	9	675
1991	SG2		1991	09	10.35573	22	51	26.75	-08	01	52.8	17.8	9	675
1991	SG2	*	1991	09	16.28715	22	47	04.74	-08	42	31.1	18.0	9	675
1991	SG2		1991	09	16.33368	22	47	02.63	-08	42	48.8		9	675
1991	SH2		1991	09	10.30260	22	52	08.69	-07	10	06.7		9	675
1991	SH2		1991	09	10.35573	22	52	06.30	-07	10	37.0		9	675
1991	SH2	*	1991	09	16.28715	22	48	03.10	-08	06	42.1	16.8	9	675
1991	SH2		1991	09	16.33368	22	48	01.14	-08	07	07.5		9	675
1991	SJ2	*	1991	09	16.30035	22	47	19.28	+01	32	03.0	17.5	9	675
1991	SJ2		1991	09	16.34583	22	47	16.66	+01	32	04.7		9	675
1991	SJ2		1991	09	17.23872	22	46	30.13	+01	32	23.2		9	675
1991	SJ2		1991	09	17.28123	22	46	27.79	+01	32	24.6		9	675
1991	SK2	*	1991	09	16.30035	22	51	10.60	-02	17	39.0	17.0	9	675
1991	SK2		1991	09	16.34583	22	51	08.27	-02	17	42.7		9	675
1991	SK2		1991	09	17.23872	22	50	25.31	-02	19	14.3		9	675
1991	SK2		1991	09	17.28123	22	50	23.19	-02	19	19.1		9	675
1991	TB1		1992	03	30.38576	11	13	43.45	+04	19	11.0	15	2	675
1991	TB1		1992	03	30.41354	11	13	38.12	+04	16	14.3		2	675
1991	UG3		1971	04	16.30139	12	22	39.69	-06	29	29.0	20.0	4	675
1991	UG3		1971	05	14.19427	12	07	05.92	-04	37	45.3	19.5	4	675
1991	UG3		1971	05	14.24549	12	07	05.02	-04	37	39.9		4	675
1991	XC		1992	02	28.20069	07	44	47.59	+49	45	14.9	16.6	3	675

1991 XC		1992	03	01.13125	07	45	32.24	+48	56	55.8	3	675
1991 XC		1992	03	01.17621	07	45	33.25	+48	55	47.9	3	675
1992 AA		1992	02	25.12690	06	48	31.43	+36	54	31.1	17	3	675
1992 AA		1992	02	25.15364	06	48	36.61	+36	54	35.4	3	675
1992 AA		1992	02	27.17638	06	55	15.64	+36	57	32.5	3	675
1992 BF		1992	02	04.43072	09	37	05.58	+14	05	42.4	16.5	3	675
1992 BF		1992	02	04.46284	09	36	52.71	+14	05	06.7	3	675
1992 BF		1992	02	08.40607	09	09	52.43	+12	47	02.3	3	675
1992 BF		1992	02	08.44097	09	09	36.08	+12	46	12.1	3	675
1992 BW		1992	03	06.21372	07	56	24.52	+17	35	49.8	16.5	2	675
1992 BW		1992	03	06.23924	07	56	23.90	+17	35	32.2	2	675
1992 BL1		1992	03	06.25069	09	55	53.71	+24	55	51.1	16.0	2	675
1992 BL1		1992	03	06.27396	09	55	52.72	+24	56	10.5	2	675
1992 BV1	*	1992	01	29.42552	08	52	03.53	+08	42	40.0	16.0	2	675
1992 BV1		1992	01	29.45399	08	52	01.91	+08	42	49.0	2	675
1992 BV1		1992	01	31.40278	08	50	17.53	+08	55	05.6	2	675
1992 BV1		1992	01	31.43090	08	50	15.96	+08	55	17.2	2	675
1992 BW1	*	1992	01	29.42552	08	54	56.58	+08	39	30.7	16.0	2	675
1992 BW1		1992	01	29.45399	08	54	54.82	+08	39	43.0	2	675
1992 BW1		1992	01	31.40278	08	53	01.04	+08	54	39.9	2	675
1992 BW1		1992	01	31.43090	08	52	59.30	+08	54	53.8	2	675
1992 CA		1992	02	04.43072	09	54	50.48	+11	20	58.9	17	3	675
1992 CA		1992	02	04.46284	09	54	48.39	+11	21	41.7	3	675
1992 CA		1992	02	08.42743	09	50	48.63	+12	51	51.5	3	675
1992 CA		1992	02	08.46232	09	50	46.32	+12	52	37.5	3	675
1992 DH1	*	1992	02	25.19461	09	32	43.04	+11	47	29.2	16.5	3	675
1992 DH1		1992	02	25.23664	09	32	38.79	+11	47	06.3	3	675
1992 DH1		1992	02	27.23975	09	29	30.93	+11	29	03.8	3	675
1992 DH1		1992	02	27.28107	09	29	26.96	+11	28	41.8	3	675
2197 P-L		1991	09	14.28889	22	20	15.57	-06	02	03.9	17.0	9	675
2197 P-L		1991	09	14.33438	22	20	13.67	-06	02	23.3	9	675
2530 P-L		1991	09	16.31007	23	19	26.56	-09	36	21.0	17.2	9	675
2530 P-L		1991	09	16.35521	23	19	23.61	-09	36	30.3	9	675
3086 P-L	*	1960	09	24.27708	00	32	55.25	+16	19	54.2	17.7	4	675
3086 P-L		1960	09	25.22986	00	32	12.60	+16	14	34.1	4	675
3086 P-L		1960	09	25.46250	00	32	01.83	+16	13	14.3	4	675
3086 P-L		1960	09	26.24514	00	31	27.00	+16	08	44.2	4	675
3086 P-L		1960	09	27.27569	00	30	40.34	+16	02	38.7	4	675
3086 P-L		1960	09	28.34722	00	29	51.83	+15	56	10.8	4	675
3086 P-L		1960	09	28.46181	00	29	46.45	+15	55	29.3	4	675
3086 P-L		1960	09	29.47153	00	29	00.72	+15	49	13.2	4	675
3086 P-L		1960	10	26.28264	00	11	25.75	+12	37	09.3	4	675
3086 P-L		1960	10	26.37951	00	11	22.92	+12	36	27.0	4	675
4641 P-L		1991	09	16.31007	23	14	48.95	-08	17	47.9	18.0	9	675
4641 P-L		1991	09	16.35521	23	14	46.76	-08	18	04.0	9	675
2246 T-1		1991	09	12.30469	23	13	10.23	-12	14	03.5	16.2	9	675
2246 T-1		1991	09	12.34618	23	13	07.97	-12	14	10.0	9	675
2246 T-1		1991	09	16.31007	23	09	46.19	-12	22	25.7	16.2	9	675
2246 T-1		1991	09	16.35521	23	09	43.79	-12	22	30.3	9	675
3105 T-1		1982	01	30.44827	09	10	52.67	+17	06	06.5	17.8 V	6	675
3105 T-1		1982	01	31.42118	09	09	52.36	+17	09	33.2	6	675
4325 T-1		1971	03	24.40486	12	41	03.00	+00	17	38.9	4	675
4325 T-1		1971	03	26.31007	12	39	17.58	+00	28	30.6	4	675
4325 T-1	*	1971	03	26.34896	12	39	15.37	+00	28	42.8	19.5	4	675
4325 T-1		1971	03	27.35208	12	38	19.42	+00	34	23.4	4	675
1324 T-2		1991	09	12.30469	23	06	46.71	-11	04	35.9	17.5	9	675
1324 T-2		1991	09	12.34618	23	06	44.18	-11	04	43.7	9	675
1324 T-2		1991	09	16.31007	23	02	53.41	-11	16	16.0	17.5	9	675
1324 T-2		1991	09	16.35521	23	02	50.71	-11	16	23.1	9	675

1607	T-2		1991	09	10.35573	22	57	30.82	-06	38	17.7			9	675
1607	T-2		1991	09	16.28715	22	51	25.85	-06	44	08.1	17.8		9	675
1607	T-2		1991	09	16.33368	22	51	22.95	-06	44	10.1			9	675
1617	T-2		1991	09	16.28715	23	00	05.34	-07	30	13.4			9	675
3181	T-2		1971	05	13.17535	11	42	38.09	+06	34	38.1	20.0		4	675
3181	T-2		1971	05	14.20694	11	42	38.96	+06	32	59.4			4	675
4234	T-2		1971	03	24.37118	11	57	57.89	+04	26	23.9	18.0		4	675
4234	T-2		1971	03	25.24340	11	57	18.08	+04	29	37.2			4	675
4234	T-2		1971	03	25.28715	11	57	15.97	+04	29	47.1			4	675
4234	T-2		1973	09	19.19948	00	45	41.25	+01	27	15.8			4	675
4234	T-2		1973	09	19.22500	00	45	40.10	+01	27	11.7			4	675
4234	T-2		1973	09	19.25006	00	45	38.96	+01	27	06.6			4	675
4234	T-2		1973	09	19.27865	00	45	37.68	+01	26	59.3			4	675
4234	T-2		1973	09	20.26458	00	44	54.26	+01	23	41.3			4	675
4234	T-2		1973	09	20.30278	00	44	52.46	+01	23	31.6			4	675
4234	T-2		1973	09	24.36181	00	41	48.62	+01	09	32.5			4	675
4234	T-2		1973	09	24.38750	00	41	47.34	+01	09	28.2			4	675
4234	T-2		1973	09	24.42847	00	41	45.44	+01	09	18.5			4	675
4234	T-2		1973	09	24.45434	00	41	44.16	+01	09	14.1			4	675
4234	T-2		1973	09	25.28125	00	41	06.11	+01	06	21.7			4	675
4234	T-2		1973	09	25.34601	00	41	03.11	+01	06	08.3			4	675
4234	T-2	*	1973	09	29.29219	00	37	58.37	+00	52	26.5	17.6		4	675
4234	T-2		1973	09	29.35694	00	37	55.19	+00	52	12.5			4	675
4234	T-2		1973	09	30.24826	00	37	13.37	+00	49	11.7			4	675
4234	T-2		1973	09	30.31476	00	37	10.15	+00	48	57.0			4	675
4234	T-2		1973	10	04.32708	00	34	01.17	+00	35	27.9			4	675
4234	T-2		1973	10	04.38889	00	33	58.22	+00	35	15.2			4	675
4234	T-2		1973	10	05.35382	00	33	13.21	+00	32	04.7			4	675
4234	T-2		1973	10	05.41597	00	33	10.12	+00	31	52.0			4	675
4253	T-2		1973	09	19.22500	00	46	41.78	-02	06	41.4			4	675
4253	T-2		1973	09	19.27865	00	46	39.62	-02	07	15.5			4	675
4253	T-2		1973	09	20.30278	00	46	01.60	-02	17	33.9			4	675
4253	T-2		1973	09	24.38750	00	43	20.45	-02	58	30.3			4	675
4253	T-2		1973	09	24.45434	00	43	17.44	-02	59	10.6			4	675
4253	T-2		1973	09	25.28125	00	42	43.86	-03	07	22.2			4	675
4253	T-2		1973	09	25.34601	00	42	41.04	-03	08	01.1			4	675
4253	T-2	*	1973	09	29.29219	00	39	53.66	-03	46	10.6	18.3		4	675
4253	T-2		1973	09	29.35694	00	39	50.66	-03	46	46.7			4	675
4253	T-2		1973	09	30.24826	00	39	12.51	-03	55	04.5			4	675
4253	T-2		1973	09	30.31476	00	39	09.37	-03	55	41.9			4	675
4265	T-2		1971	05	13.17535	11	47	01.52	+06	26	34.5	18.5		4	675
4265	T-2		1971	05	14.20694	11	46	52.13	+06	23	46.4			4	675
4293	T-2		1971	03	24.37118	12	02	50.30	+04	56	30.2	18.0		4	675
4293	T-2		1971	03	25.24340	12	02	09.27	+05	00	52.9			4	675
4293	T-2		1971	03	25.28715	12	02	07.15	+05	01	06.2			4	675
4293	T-2		1973	09	19.22500	00	50	01.68	-00	21	32.4			4	675
4293	T-2		1973	09	19.27865	00	49	59.35	-00	21	48.3			4	675
4293	T-2		1973	09	20.30278	00	49	15.17	-00	27	01.0			4	675
4293	T-2		1973	09	25.28125	00	45	31.06	-00	52	33.5			4	675
4293	T-2		1973	09	25.34601	00	45	27.92	-00	52	52.3			4	675
4293	T-2	*	1973	09	29.29219	00	42	21.69	-01	12	59.4	17.8		4	675
4293	T-2		1973	09	29.35694	00	42	18.47	-01	13	18.7			4	675
4293	T-2		1973	09	30.24826	00	41	36.12	-01	17	46.4			4	675
4293	T-2		1973	10	04.32708	00	38	19.89	-01	37	40.5			4	675
4293	T-2		1973	10	04.38889	00	38	16.80	-01	37	58.5			4	675
4293	T-2		1973	10	05.35382	00	37	30.46	-01	42	29.9			4	675
4293	T-2		1973	10	05.41597	00	37	27.42	-01	42	48.0			4	675
1076	T-3		1982	01	30.44827	09	13	46.94	+15	02	09.2	17.0	V	6	675
1076	T-3		1982	01	31.42118	09	12	38.82	+15	04	16.0			6	675

4391	T-3		1977	10	11.31111	01 43 33.34	-01 26 31.4		4	675
4391	T-3		1977	10	11.37865	01 43 29.40	-01 26 44.0		4	675
4391	T-3		1977	10	12.30885	01 42 39.11	-01 29 39.1		4	675
4391	T-3		1977	10	12.37500	01 42 35.30	-01 29 51.6		4	675
4391	T-3	*	1977	10	16.28368	01 39 00.76	-01 40 02.4	18.0	4	675
4391	T-3		1977	10	16.29444	01 39 00.30	-01 40 05.7		4	675
4391	T-3		1977	10	16.34931	01 38 56.87	-01 40 11.6		4	675
4391	T-3		1977	10	16.36024	01 38 56.40	-01 40 13.5		4	675
4391	T-3		1977	10	17.28628	01 38 05.78	-01 42 09.9		4	675
4391	T-3		1977	10	17.29688	01 38 05.23	-01 42 10.6		4	675
4391	T-3		1977	10	17.35313	01 38 01.89	-01 42 17.8		4	675
4391	T-3		1977	10	17.36372	01 38 01.33	-01 42 19.0		4	675
4391	T-3		1977	10	21.37622	01 34 25.10	-01 48 19.6		4	675
4391	T-3		1977	10	21.38698	01 34 24.56	-01 48 23.5		4	675
4391	T-3		1977	10	21.43611	01 34 21.78	-01 48 22.7		4	675
4391	T-3		1977	10	21.44705	01 34 21.28	-01 48 27.6		4	675
4391	T-3		1977	10	22.38542	01 33 32.32	-01 49 17.9		4	675
4391	T-3		1977	10	22.43872	01 33 29.37	-01 49 17.0		4	675
4391	T-3		1977	10	22.44878	01 33 28.77	-01 49 19.0		4	675
5170	T-3		1977	10	12.30885	01 47 16.96	-02 02 12.7		4	675
5170	T-3		1977	10	12.37500	01 47 13.73	-02 02 40.1		4	675
5170	T-3	*	1977	10	16.29444	01 44 04.25	-02 29 58.9	19.8	4	675
5170	T-3		1977	10	16.36024	01 44 00.93	-02 30 26.2		4	675
5170	T-3		1977	10	17.29688	01 43 15.06	-02 36 43.5		4	675
5170	T-3		1977	10	17.36372	01 43 11.57	-02 37 10.2		4	675
5170	T-3		1977	10	21.37622	01 39 54.28	-03 03 02.7		4	675
5170	T-3		1977	10	21.43611	01 39 51.23	-03 03 25.3		4	675
(6)			1991	09	15.26059	22 20 49.10	-21 40 43.3		9	675
(6)			1991	09	15.31203	22 20 47.24	-21 41 19.7		9	675
(56)			1991	09	16.30035	22 58 32.02	+00 17 33.9		9	675
(56)			1991	09	16.34583	22 58 30.08	+00 17 05.6		9	675
(56)			1991	09	17.23872	22 57 55.28	+00 07 55.3		9	675
(56)			1991	09	17.28123	22 57 53.53	+00 07 29.4		9	675
(133)			1991	09	16.30035	22 59 39.22	-00 48 05.4		9	675
(133)			1991	09	16.34583	22 59 37.02	-00 48 15.1		9	675
(133)			1991	09	17.23872	22 58 55.84	-00 51 12.6		9	675
(133)			1991	09	17.28123	22 58 53.80	-00 51 20.9		9	675
(275)			1991	09	10.30260	22 35 54.80	-12 00 46.6		9	675
(275)			1991	09	10.35573	22 35 52.28	-12 01 03.8		9	675
(275)			1991	09	14.30590	22 32 56.27	-12 21 20.0		9	675
(275)			1991	09	14.35660	22 32 54.00	-12 21 35.1		9	675
(277)			1971	03	27.33854	12 20 08.43	-03 30 47.6	16.0	4	675
(284)			1991	09	10.38420	00 24 31.80	+15 51 02.3		9	675
(284)			1991	09	10.45156	00 24 28.62	+15 50 38.1		9	675
(284)			1991	09	17.44479	00 18 51.08	+15 02 20.1		9	675
(284)			1991	09	17.49497	00 18 48.41	+15 01 55.7		9	675
(353)			1991	09	12.36510	00 44 27.67	-06 14 34.4		9	675
(353)			1991	09	17.41823	00 41 30.73	-06 50 21.7		9	675
(353)			1991	09	17.46997	00 41 28.62	-06 50 43.9		9	675
(361)			1991	09	15.26059	22 22 27.03	-22 36 48.6	15.5	9	675
(361)			1991	09	15.31203	22 22 24.96	-22 36 51.2		9	675
(417)			1991	09	16.30035	23 03 59.83	-00 32 38.5		9	675
(417)			1991	09	16.34583	23 03 57.61	-00 32 58.2		9	675
(417)			1991	09	17.23872	23 03 18.40	-00 38 44.3		9	675
(417)			1991	09	17.28123	23 03 16.47	-00 39 00.9		9	675
(431)			1982	01	30.44827	09 00 33.44	+17 39 00.2		6	675
(431)			1982	01	31.42118	08 59 46.99	+17 42 35.3		6	675
(467)			1982	01	30.44827	09 12 12.15	+17 55 16.4		6	675
(467)			1982	01	31.42118	09 11 17.81	+17 57 11.7		6	675

(499)		1982	01	30.44827	08	54	28.90	+14	56	12.3		6	675
(499)		1982	01	31.42118	08	53	46.70	+14	58	49.7		6	675
(522)		1991	09	12.30469	23	15	45.25	-09	59	02.0	15.0	9	675
(522)		1991	09	12.34618	23	15	43.60	-09	59	13.9		9	675
(522)		1991	09	16.31007	23	13	09.62	-10	17	33.6		9	675
(522)		1991	09	16.35521	23	13	07.81	-10	17	46.0		9	675
(571)		1991	09	10.30260	22	56	59.37	-10	32	24.2		9	675
(571)		1991	09	10.35573	22	56	56.06	-10	32	28.2		9	675
(571)		1991	09	12.30469	22	55	01.81	-10	35	00.1	14.8	9	675
(571)		1991	09	12.34618	22	54	59.26	-10	35	02.7		9	675
(571)		1991	09	16.28715	22	51	13.26	-10	38	46.2		9	675
(571)		1991	09	16.31007	22	51	11.97	-10	38	47.6		9	675
(571)		1991	09	16.33368	22	51	10.51	-10	38	47.8		9	675
(571)		1991	09	16.35521	22	51	09.27	-10	38	49.0		9	675
(578)		1991	09	12.30469	22	56	01.60	-15	10	05.2	14.0	9	675
(578)		1991	09	12.34618	22	55	59.32	-15	10	09.9		9	675
(578)		1991	09	14.30590	22	54	18.28	-15	13	23.1		9	675
(578)		1991	09	14.35660	22	54	15.59	-15	13	27.8		9	675
(706)		1991	09	12.28472	22	27	36.81	-01	02	10.8		9	675
(706)		1991	09	12.32465	22	27	34.26	-01	02	06.7		9	675
(706)		1991	09	14.28889	22	25	39.79	-00	57	37.3		9	675
(706)		1991	09	14.33438	22	25	37.10	-00	57	30.6		9	675
(720)		1982	01	30.44827	09	14	36.47	+19	44	44.3		6	675
(720)		1982	01	31.42118	09	13	44.49	+19	48	36.6		6	675
(721)		1991	09	12.30469	23	09	14.49	-16	09	17.0	15.2	9	675
(721)		1991	09	12.34618	23	09	12.59	-16	09	24.2		9	675
(721)		1991	09	16.31007	23	06	19.37	-16	19	19.1		9	675
(721)		1991	09	16.35521	23	06	17.32	-16	19	22.3		9	675
(727)		1982	01	30.44827	08	59	39.50	+16	19	01.1		6	675
(727)		1982	01	31.42118	08	58	46.01	+16	29	11.2		6	675
(741)		1991	09	15.26059	22	19	07.65	-21	34	04.1	15.2	9	675
(741)		1991	09	15.31203	22	19	05.33	-21	34	15.0		9	675
(802)		1991	09	12.30469	23	04	11.40	-09	43	41.5	16.5	9	675
(802)		1991	09	12.34618	23	04	08.65	-09	43	51.0		9	675
(802)		1991	09	16.31007	22	59	59.43	-09	58	00.1		9	675
(802)		1991	09	16.35521	22	59	56.51	-09	58	08.9		9	675
(821)		1991	09	14.28889	22	19	12.01	-03	39	08.2		9	675
(821)		1991	09	14.33438	22	19	10.11	-03	39	25.2		9	675
(876)		1991	09	12.36510	00	39	36.71	-05	11	51.7		9	675
(876)		1991	09	17.41823	00	36	39.99	-05	57	21.6		9	675
(876)		1991	09	17.46997	00	36	38.01	-05	57	49.0		9	675
(884)		1982	01	30.44827	09	05	37.54	+14	15	00.4		6	675
(884)		1982	01	31.42118	09	05	06.33	+14	16	27.5		6	675
(920)		1991	09	12.28472	22	11	48.74	-00	28	11.7	16.0	9	675
(920)		1991	09	12.32465	22	11	46.95	-00	28	32.7		9	675
(920)		1991	09	14.28889	22	10	26.35	-00	45	47.2		9	675
(920)		1991	09	14.33438	22	10	24.40	-00	46	11.7		9	675
(943)		1991	09	15.26059	22	40	57.76	-20	58	16.6	16.0	9	675
(943)		1991	09	15.31203	22	40	55.54	-20	58	31.3		9	675
(1004)		1982	01	30.44827	09	04	28.75	+15	09	55.4		6	675
(1004)		1982	01	31.42118	09	03	44.83	+15	13	42.0		6	675
(1028)		1991	09	15.26059	22	32	23.11	-23	15	05.4	15.5	9	675
(1028)		1991	09	15.31203	22	32	20.90	-23	15	12.0		9	675
(1044)		1991	09	12.30469	23	21	32.20	-11	51	07.3	15.0	9	675
(1044)		1991	09	12.34618	23	21	29.91	-11	51	19.0		9	675
(1044)		1991	09	16.31007	23	17	59.17	-12	07	59.4		9	675
(1044)		1991	09	16.35521	23	17	56.69	-12	08	09.9		9	675
(1069)		1991	09	12.36510	00	32	44.14	-08	57	48.9		9	675
(1080)		1991	09	12.30469	23	05	10.87	-08	27	27.3	15.0	9	675

(1080)	1991	09	12.34618	23	05	08.20	-08	27	34.8		9 675
(1080)	1991	09	16.31007	23	01	06.27	-08	39	31.7		9 675
(1080)	1991	09	16.35521	23	01	03.41	-08	39	39.0		9 675
(1122)	1991	09	15.26059	22	21	49.60	-19	35	39.8	15.2	9 675
(1122)	1991	09	15.31203	22	21	47.10	-19	35	47.0		9 675
(1123)	1991	09	12.36510	00	37	49.26	-10	00	10.1		9 675
(1155)	1991	09	12.30469	23	20	06.19	-13	38	20.4	16.5	9 675
(1155)	1991	09	12.34618	23	20	03.68	-13	38	29.6		9 675
(1155)	1991	09	16.31007	23	16	13.80	-13	52	24.8		9 675
(1155)	1991	09	16.35521	23	16	11.13	-13	52	33.1		9 675
(1209)	1991	09	17.41823	00	58	21.48	-04	34	30.2		9 675
(1209)	1991	09	17.46997	00	58	19.38	-04	34	45.9		9 675
(1311)	1991	09	14.28889	22	10	33.31	-06	22	20.6	16.8	9 675
(1311)	1991	09	14.33438	22	10	31.16	-06	22	34.5		9 675
(1339)	1991	09	10.38420	00	39	13.88	+17	21	15.2		9 675
(1339)	1991	09	10.45156	00	39	11.19	+17	21	12.4		9 675
(1339)	1991	09	17.44479	00	34	25.70	+17	10	56.6		9 675
(1339)	1991	09	17.49497	00	34	23.47	+17	10	49.6		9 675
(1348)	1991	09	15.26059	22	31	12.84	-19	12	10.5	16.5	9 675
(1348)	1991	09	15.31203	22	31	10.42	-19	12	22.2		9 675
(1443)	1991	09	10.30260	22	51	55.68	-06	34	34.7		9 675
(1443)	1991	09	10.35573	22	51	53.20	-06	34	51.9		9 675
(1443)	1991	09	16.28715	22	47	32.97	-07	06	03.6		9 675
(1443)	1991	09	16.33368	22	47	30.91	-07	06	17.8		9 675
(1485)	1991	09	10.38420	00	41	07.34	+18	04	26.3		9 675
(1485)	1991	09	10.45156	00	41	04.56	+18	04	28.1		9 675
(1485)	1991	09	17.44479	00	36	14.00	+18	00	04.7		9 675
(1485)	1991	09	17.49497	00	36	11.69	+18	00	00.2		9 675
(1493)	1991	09	10.30260	22	47	19.84	-06	22	55.8		9 675
(1493)	1991	09	10.35573	22	47	17.00	-06	23	04.9		9 675
(1493)	1991	09	16.28715	22	42	34.31	-06	39	02.2		9 675
(1493)	1991	09	16.33368	22	42	32.10	-06	39	09.1		9 675
(1529)	1991	09	15.26059	22	41	23.40	-19	46	12.4		9 675
(1529)	1991	09	15.31203	22	41	21.48	-19	46	23.8		9 675
(1534)	1991	09	15.26059	22	44	18.58	-23	35	07.5	17.0	9 675
(1534)	1991	09	15.31203	22	44	15.66	-23	35	15.9		9 675
(1545)	1991	09	12.30469	23	15	28.86	-08	58	32.1	16.8	9 675
(1545)	1991	09	12.34618	23	15	26.77	-08	58	44.3		9 675
(1545)	1991	09	16.31007	23	12	14.80	-09	17	08.6		9 675
(1545)	1991	09	16.35521	23	12	12.55	-09	17	20.5		9 675
(1661)	1991	09	14.28889	22	26	45.25	-03	59	31.3	16.5	9 675
(1661)	1991	09	14.33438	22	26	42.76	-03	59	46.9		9 675
(1662)	1991	09	10.30260	22	33	19.93	-07	44	19.1		9 675
(1662)	1991	09	10.35573	22	33	17.10	-07	44	28.4		9 675
(1662)	1991	09	16.28715	22	28	24.98	-08	00	52.1		9 675
(1662)	1991	09	16.33368	22	28	22.72	-08	01	01.1		9 675
(1668)	1992	02	04.43072	09	53	52.41	+10	35	13.3		3 675
(1668)	1992	02	08.42743	09	50	39.91	+10	55	51.2	17.5	3 675
(1668)	1992	02	08.46232	09	50	38.19	+10	56	02.2		3 675
(1686)	1991	09	10.30260	22	50	39.94	-07	47	25.0		9 675
(1686)	1991	09	10.35573	22	50	37.51	-07	47	38.4		9 675
(1686)	1991	09	16.28715	22	46	24.10	-08	11	38.6		9 675
(1686)	1991	09	16.33368	22	46	22.09	-08	11	49.0		9 675
(1696)	1991	09	14.30590	22	35	22.32	-15	51	51.4	17.2	9 675
(1696)	1991	09	14.35660	22	35	19.30	-15	51	58.1		9 675
(1697)	1982	01	30.44827	09	14	06.05	+19	28	57.1		6 675
(1697)	1982	01	31.42118	09	13	00.36	+19	30	51.3		6 675
(1812)	1991	09	14.28889	22	25	35.85	-04	46	51.5	16.5	9 675
(1812)	1991	09	14.33438	22	25	33.99	-04	47	11.2		9 675

(1821)		1982	01	30.44827	09	10	41.95	+15	21	16.9		6	675
(1821)		1982	01	31.42118	09	09	41.93	+15	25	02.7		6	675
(1971)		1991	09	12.28472	22	22	22.87	-00	58	15.1	17.5	9	675
(1971)		1991	09	12.32465	22	22	20.95	-00	58	23.0		9	675
(1971)		1991	09	14.28889	22	20	52.08	-01	04	32.5	17.0	9	675
(1971)		1991	09	14.33438	22	20	49.99	-01	04	40.3		9	675
(1973)		1991	09	16.30035	22	58	41.90	-01	41	05.0		9	675
(1973)		1991	09	16.34583	22	58	40.15	-01	41	27.5		9	675
(1973)		1991	09	17.23872	22	58	06.53	-01	48	34.4		9	675
(1973)		1991	09	17.28123	22	58	04.92	-01	48	54.8		9	675
(2128)		1991	09	15.26059	22	20	02.32	-22	43	55.7	16.5	9	675
(2128)		1991	09	15.31203	22	19	59.23	-22	42	53.3		9	675
(2136)		1991	09	10.30260	22	50	46.55	-11	09	22.1		9	675
(2136)		1991	09	10.35573	22	50	44.20	-11	09	44.3		9	675
(2136)		1991	09	12.30469	22	49	23.40	-11	23	17.5	16.5	9	675
(2136)		1991	09	12.34618	22	49	21.57	-11	23	35.4		9	675
(2136)		1991	09	14.30590	22	48	01.63	-11	36	52.8	16.8	9	675
(2136)		1991	09	14.35660	22	47	59.49	-11	37	13.0		9	675
(2136)		1991	09	16.28715	22	46	42.44	-11	49	57.2		9	675
(2136)		1991	09	16.33368	22	46	40.51	-11	50	16.2		9	675
(2174)		1991	09	12.30469	23	07	39.62	-10	06	20.8	16.0	9	675
(2174)		1991	09	12.34618	23	07	37.07	-10	06	14.3		9	675
(2174)		1991	09	16.31007	23	03	49.65	-09	55	11.4		9	675
(2174)		1991	09	16.35521	23	03	46.92	-09	55	02.5		9	675
(2291)		1991	09	12.36510	00	43	03.06	-04	07	42.6		9	675
(2291)		1991	09	17.41823	00	40	12.14	-05	06	17.4		9	675
(2291)		1991	09	17.46997	00	40	10.24	-05	06	53.5		9	675
(2300)		1991	09	12.30469	23	00	05.55	-09	20	53.3	16.0	9	675
(2300)		1991	09	12.34618	23	00	03.47	-09	21	03.6		9	675
(2300)		1991	09	16.28715	22	56	54.09	-09	36	57.6	16.8	9	675
(2300)		1991	09	16.31007	22	56	53.07	-09	37	04.9		9	675
(2300)		1991	09	16.33368	22	56	51.84	-09	37	08.3		9	675
(2300)		1991	09	16.35521	22	56	50.81	-09	37	14.5		9	675
(2330)		1991	09	12.36510	00	52	24.13	-03	36	03.3		9	675
(2330)		1991	09	17.41823	00	49	28.51	-04	09	13.0		9	675
(2330)		1991	09	17.46997	00	49	26.55	-04	09	33.8		9	675
(2334)		1982	01	30.44827	08	51	57.27	+18	45	54.7		6	675
(2334)		1982	01	31.42118	08	50	54.81	+18	52	12.0		6	675
(2336)		1991	09	10.30260	22	53	19.71	-11	09	44.6		9	675
(2336)		1991	09	10.35573	22	53	17.32	-11	09	56.2		9	675
(2336)		1991	09	12.30469	22	51	54.50	-11	18	16.2	17.2	9	675
(2336)		1991	09	12.34618	22	51	52.64	-11	18	26.5		9	675
(2336)		1991	09	14.30590	22	50	30.26	-11	26	36.0	18.0	9	675
(2336)		1991	09	14.35660	22	50	27.98	-11	26	48.1		9	675
(2336)		1991	09	16.28715	22	49	08.04	-11	34	32.9		9	675
(2336)		1991	09	16.31007	22	49	07.19	-11	34	38.7		9	675
(2336)		1991	09	16.33368	22	49	06.10	-11	34	43.9	17.2	9	675
(2336)		1991	09	16.35521	22	49	05.24	-11	34	49.5		9	675
(2365)		1991	09	14.28889	22	17	55.56	-03	08	33.4	16.5	9	675
(2365)		1991	09	14.33438	22	17	53.30	-03	08	46.1		9	675
(2408)		1991	09	12.36510	00	43	42.87	-04	05	47.3		9	675
(2408)		1991	09	17.41823	00	40	12.61	-05	10	06.2		9	675
(2408)		1991	09	17.46997	00	40	10.25	-05	10	45.1		9	675
(2471)		1991	09	12.30469	23	06	10.00	-15	04	27.6	16.5	9	675
(2471)		1991	09	12.34618	23	06	07.76	-15	04	31.3		9	675
(2471)		1991	09	16.31007	23	02	42.55	-15	09	10.9		9	675
(2471)		1991	09	16.35521	23	02	40.13	-15	09	13.6		9	675
(2490)		1991	09	10.38420	00	30	38.65	+15	10	08.4		9	675
(2490)		1991	09	10.45156	00	30	36.21	+15	09	41.6		9	675

(2490)	1991	09	17.44479	00	26	15.97	+14 17 49.1	9	675
(2490)	1991	09	17.49497	00	26	13.92	+14 17 23.0	9	675
(2504)	1991	09	10.30260	22	55	25.19	-09 53 58.7	9	675
(2504)	1991	09	10.35573	22	55	22.43	-09 54 10.7	9	675
(2504)	1991	09	12.30469	22	53	45.11	-10 01 33.2	17.0	9 675
(2504)	1991	09	12.34618	22	53	43.03	-10 01 41.9	9	675
(2504)	1991	09	16.28715	22	50	30.45	-10 15 48.6	17.0	9 675
(2504)	1991	09	16.31007	22	50	29.44	-10 15 54.6	9	675
(2504)	1991	09	16.33368	22	50	28.15	-10 15 58.6	9	675
(2504)	1991	09	16.35521	22	50	27.15	-10 16 03.4	9	675
(2563)	1982	01	30.44827	08	57	43.05	+18 06 57.1	6	675
(2563)	1982	01	31.42118	08	56	55.09	+18 10 57.8	6	675
(2606)	1991	09	12.28472	22	27	41.02	+01 26 56.5	17.5	9 675
(2606)	1991	09	12.32465	22	27	39.25	+01 26 39.2	9	675
(2612)	1991	09	15.26059	22	48	59.35	-22 07 43.9	16.8	9 675
(2612)	1991	09	15.31203	22	48	57.04	-22 08 05.7	9	675
(2741)	1991	09	12.30469	22	59	14.72	-10 35 58.6	16.5	9 675
(2741)	1991	09	12.34618	22	59	12.67	-10 36 19.6	9	675
(2741)	1991	09	16.28715	22	56	10.76	-11 09 04.3	16.5	9 675
(2741)	1991	09	16.31007	22	56	09.81	-11 09 17.5	9	675
(2741)	1991	09	16.33368	22	56	08.60	-11 09 27.3	9	675
(2741)	1991	09	16.35521	22	56	07.69	-11 09 39.5	9	675
(2752)	1991	09	16.30035	22	45	08.80	-01 46 09.7	9	675
(2752)	1991	09	16.34583	22	45	07.00	-01 46 32.4	9	675
(2752)	1991	09	17.23872	22	44	33.24	-01 53 52.3	9	675
(2752)	1991	09	17.28123	22	44	31.57	-01 54 13.0	9	675
(2802)	1991	09	12.30469	23	21	21.48	-13 07 26.6	16.8	9 675
(2802)	1991	09	12.34618	23	21	19.71	-13 07 41.3	9	675
(2802)	1991	09	16.31007	23	18	33.47	-13 30 34.0	9	675
(2802)	1991	09	16.35521	23	18	31.51	-13 30 49.1	9	675
(2862)	1991	09	16.30035	23	03	05.61	-00 42 17.9	9	675
(2862)	1991	09	16.34583	23	03	02.91	-00 42 37.5	9	675
(2862)	1991	09	17.23872	23	02	12.93	-00 49 00.8	9	675
(2862)	1991	09	17.28123	23	02	10.48	-00 49 19.0	9	675
(2944)	1991	09	12.28472	22	27	04.13	+01 16 55.3	16.2	9 675
(2944)	1991	09	12.32465	22	27	02.55	+01 16 29.0	9	675
(2959)	1991	09	12.30469	23	18	34.39	-10 23 51.2	16.5	9 675
(2959)	1991	09	12.34618	23	18	32.75	-10 24 04.5	9	675
(2959)	1991	09	16.31007	23	16	00.00	-10 43 57.4	9	675
(2959)	1991	09	16.35521	23	15	58.17	-10 44 11.0	9	675
(3019)	1991	09	12.30469	23	17	09.86	-09 26 49.1	16.5	9 675
(3019)	1991	09	12.34618	23	17	07.83	-09 27 03.3	9	675
(3019)	1991	09	16.31007	23	14	01.85	-09 47 51.2	9	675
(3019)	1991	09	16.35521	23	13	59.66	-09 48 05.1	9	675
(3032)	1991	09	12.30469	23	18	04.67	-10 02 09.9	16.0	9 675
(3032)	1991	09	12.34618	23	18	02.65	-10 02 23.1	9	675
(3032)	1991	09	16.31007	23	14	56.73	-10 21 50.9	9	675
(3032)	1991	09	16.35521	23	14	54.51	-10 22 04.0	9	675
(3149)	1991	09	14.28889	22	19	18.67	-04 15 08.9	16.8	9 675
(3149)	1991	09	14.33438	22	19	16.41	-04 15 34.9	9	675
(3247)	1991	09	12.30469	23	00	53.06	-12 19 52.1	17.2	9 675
(3247)	1991	09	12.34618	23	00	50.68	-12 20 03.6	9	675
(3247)	1991	09	16.31007	22	57	09.92	-12 37 11.9	9	675
(3247)	1991	09	16.35521	22	57	07.31	-12 37 22.7	9	675
(3255)	1991	09	16.30035	22	38	35.83	+01 08 33.8	9	675
(3255)	1991	09	16.34583	22	38	31.11	+01 09 06.5	9	675
(3255)	1991	09	17.23872	22	37	01.60	+01 19 24.1	9	675
(3255)	1991	09	17.28123	22	36	57.15	+01 19 51.9	9	675
(3288)	1991	09	12.32465	22	39	44.56	+00 23 43.3	19.0	9 675

(3288)	1991	09	16.30035	22 35 35.40	-00 13 36.5	19.0	9	675
(3288)	1991	09	16.34583	22 35 32.57	-00 14 03.0		9	675
(3333)	1991	09	10.45156	00 36 41.12	+18 18 17.3		9	675
(3333)	1991	09	17.44479	00 32 15.21	+17 41 44.9		9	675
(3333)	1991	09	17.49497	00 32 13.13	+17 41 26.4		9	675
(3353)	1988	05	19.38160	17 08 52.39	-21 49 26.1		2	675
(3353)	1988	05	19.40764	17 08 50.80	-21 48 48.6		2	675
(3353)	1988	05	20.32760	17 07 54.09	-21 25 36.8		2	675
(3353)	1988	05	20.34913	17 07 52.62	-21 25 03.3		2	675
(3357)	1991	09	12.30469	23 12 46.95	-11 24 04.1	16.8	9	675
(3357)	1991	09	12.34618	23 12 45.13	-11 24 22.4		9	675
(3357)	1991	09	16.31007	23 09 59.20	-11 52 09.2		9	675
(3357)	1991	09	16.35521	23 09 57.24	-11 52 27.5		9	675
(3368)	1991	09	12.30469	23 10 13.21	-16 12 54.5	16.8	9	675
(3368)	1991	09	12.34618	23 10 10.84	-16 12 53.4		9	675
(3368)	1991	09	16.31007	23 06 35.73	-16 09 45.4		9	675
(3368)	1991	09	16.35521	23 06 33.23	-16 09 43.1		9	675
(3371)	1991	09	12.28472	22 26 35.76	+02 39 52.7	16.8	9	675
(3371)	1991	09	12.32465	22 26 33.72	+02 39 44.3		9	675
(3389)	1991	09	10.30260	22 37 04.63	-10 54 17.1		9	675
(3389)	1991	09	10.35573	22 37 02.15	-10 54 40.1	16.5	9	675
(3389)	1991	09	14.30590	22 34 07.41	-11 22 30.1		9	675
(3389)	1991	09	14.35660	22 34 05.13	-11 22 51.3		9	675
(3389)	1991	09	16.28715	22 32 43.27	-11 35 51.7		9	675
(3389)	1991	09	16.33368	22 32 41.27	-11 36 09.4	17.0	9	675
(3411)	1991	09	12.30469	23 17 06.25	-14 34 39.8	17.5	9	675
(3411)	1991	09	12.34618	23 17 03.62	-14 34 54.9		9	675
(3411)	1991	09	16.31007	23 13 04.86	-14 55 58.9		9	675
(3411)	1991	09	16.35521	23 13 02.09	-14 56 12.4		9	675
(3435)	1991	09	14.28889	22 19 42.80	-07 57 35.0	16.8	9	675
(3435)	1991	09	14.33438	22 19 40.67	-07 57 58.3		9	675
(3465)	1991	09	17.41823	00 56 07.24	-04 39 25.5		9	675
(3465)	1991	09	17.46997	00 56 04.70	-04 39 48.6		9	675
(3524)	1991	09	16.30035	22 40 27.51	-02 36 24.4	18.8	9	675
(3524)	1991	09	16.34583	22 40 25.32	-02 36 45.8		9	675
(3524)	1991	09	17.23872	22 39 47.66	-02 44 38.9		9	675
(3524)	1991	09	17.28123	22 39 45.69	-02 45 01.1		9	675
(3620)	1991	09	12.28472	22 15 33.21	+03 01 45.3	17.0	9	675
(3620)	1991	09	12.32465	22 15 31.43	+03 01 35.5		9	675
(3696)	1991	09	12.28472	22 38 07.86	+00 37 08.3	16.8	9	675
(3696)	1991	09	12.32465	22 38 05.88	+00 37 03.6		9	675
(3696)	1991	09	16.30035	22 34 59.01	+00 29 49.7	16.8	9	675
(3696)	1991	09	16.34583	22 34 56.85	+00 29 44.5		9	675
(3696)	1991	09	17.23872	22 34 16.74	+00 28 03.7		9	675
(3696)	1991	09	17.28123	22 34 14.83	+00 27 57.5		9	675
(3767)	1991	09	15.26059	22 18 38.83	-22 45 40.3	16.8	9	675
(3767)	1991	09	15.31203	22 18 36.54	-22 45 56.6		9	675
(3787)	1991	09	16.30035	22 51 20.99	-00 52 05.5	16.5	9	675
(3787)	1991	09	16.34583	22 51 19.04	-00 52 27.5		9	675
(3787)	1991	09	17.23872	22 50 42.11	-00 59 27.0		9	675
(3787)	1991	09	17.28123	22 50 40.35	-00 59 46.7		9	675
(3806)	1991	09	12.28472	22 12 26.95	+02 35 42.2	16.5	9	675
(3806)	1991	09	12.32465	22 12 25.43	+02 35 12.2		9	675
(3807)	1991	09	10.30260	22 57 24.72	-07 17 56.8		9	675
(3807)	1991	09	10.35573	22 57 21.84	-07 18 23.7		9	675
(3807)	1991	09	16.28715	22 52 37.99	-08 07 38.1	16.2	9	675
(3807)	1991	09	16.33368	22 52 35.75	-08 08 00.2		9	675
(3816)	1991	09	12.28472	22 30 29.05	+01 09 19.8	16.8	9	675

(3816)	1991	09	12.32465	22	30	26.82	+01 09 12.3	9	675
(3821)	1991	09	16.28715	22	55	43.75	-07 32 29.0	17.8	9	675
(3821)	1991	09	16.33368	22	55	41.62	-07 32 40.2	9	675
(3845)	1991	09	14.28889	22	25	02.01	-05 29 31.9	17.5	9	675
(3845)	1991	09	14.33438	22	25	00.26	-05 29 46.1	9	675
(3860)	1991	09	10.38420	00	50	14.70	+19 07 59.0	9	675
(3860)	1991	09	10.45156	00	50	11.94	+19 07 59.1	9	675
(3860)	1991	09	17.44479	00	45	29.35	+19 05 06.0	9	675
(3860)	1991	09	17.49497	00	45	27.04	+19 05 01.1	9	675
(3954)	1991	09	10.30260	22	43	48.05	-08 10 47.5	17.5	9	675
(3954)	1991	09	10.35573	22	43	44.98	-08 11 11.8	9	675
(3954)	1991	09	16.28715	22	38	27.82	-08 54 14.8	18.5	9	675
(3954)	1991	09	16.33368	22	38	25.36	-08 54 35.0	18.0	9	675
(3963)	1982	01	30.44827	09	16	56.94	+18 06 57.6	6	675
(3963)	1982	01	31.42118	09	15	57.02	+18 12 51.6	6	675
(4005)	1991	09	12.36510	00	58	47.05	-06 53 05.2	9	675
(4005)	1991	09	17.41823	00	55	11.75	-07 19 07.9	9	675
(4005)	1991	09	17.46997	00	55	09.26	-07 19 23.1	9	675
(4093)	1991	09	17.44479	00	47	26.67	+18 56 30.3	9	675
(4093)	1991	09	17.49497	00	47	24.67	+18 56 21.2	17.5	9	675
(4198)	1991	09	10.30260	22	54	46.67	-09 52 24.5	9	675
(4198)	1991	09	10.35573	22	54	44.41	-09 52 40.9	18.5	9	675
(4198)	1991	09	12.30469	22	53	21.28	-10 01 26.8	18.5	9	675
(4198)	1991	09	16.28715	22	50	34.56	-10 18 44.8	18.5	9	675
(4198)	1991	09	16.33368	22	50	32.72	-10 18 58.0	19.0	9	675
(4239)	1982	01	30.44827	08	54	24.10	+16 51 06.9	6	675
(4239)	1982	01	31.42118	08	53	17.91	+16 55 10.6	6	675
(4462)	1991	09	10.30260	22	37	43.99	-10 16 01.5	9	675
(4462)	1991	09	10.35573	22	37	41.55	-10 16 14.9	9	675
(4462)	1991	09	14.30590	22	34	51.67	-10 31 58.6	17.2	9	675
(4462)	1991	09	14.35660	22	34	49.60	-10 32 11.8	9	675
(4462)	1991	09	16.28715	22	33	30.25	-10 39 21.8	17.2	9	675
(4462)	1991	09	16.33368	22	33	28.28	-10 39 31.3	9	675
(4534)	1991	09	10.45156	00	38	04.06	+13 19 21.3	9	675
(4534)	1991	09	17.44479	00	32	32.88	+13 04 44.3	9	675
(4534)	1991	09	17.49497	00	32	30.34	+13 04 35.1	17.0	9	675
(4556)	1982	01	30.44827	09	12	04.71	+19 00 52.7	6	675
(4556)	1982	01	31.42118	09	11	04.23	+19 07 00.4	6	675
(4557)	1991	09	15.26059	22	27	48.27	-21 46 16.5	17.2	9	675
(4557)	1991	09	15.31203	22	27	46.14	-21 46 30.3	9	675
(4571)	1982	01	30.44827	09	03	49.33	+15 33 47.2	6	675
(4571)	1982	01	31.42118	09	03	03.46	+15 37 17.7	6	675
(4630)	1991	09	12.36510	00	33	41.93	-06 26 33.6	9	675
(4658)	1971	05	13.17535	11	42	04.36	+02 46 09.8	4	675
(4770)	1982	01	30.44827	09	12	13.79	+18 38 35.7	6	675
(4770)	1982	01	31.42118	09	11	25.52	+18 46 22.7	6	675
(4917)	1991	09	10.30260	22	33	17.26	-06 50 53.5	9	675
(4917)	1991	09	10.35573	22	33	14.68	-06 51 14.3	9	675
(4917)	1991	09	14.28889	22	30	23.14	-07 15 47.7	16.8	9	675
(4917)	1991	09	14.33438	22	30	21.07	-07 16 04.8	9	675
(4917)	1991	09	16.28715	22	29	00.22	-07 27 57.5	17.2	9	675
(4917)	1991	09	16.33368	22	28	58.24	-07 28 13.8	9	675
(4959)	1991	09	12.30469	23	05	07.83	-14 06 54.4	16.2	9	675
(4959)	1991	09	12.34618	23	05	06.07	-14 07 09.8	9	675
(4959)	1991	09	16.31007	23	02	21.95	-14 30 17.6	9	675
(4959)	1991	09	16.35521	23	02	20.02	-14 30 32.9	9	675
(5006)	1991	09	14.30590	22	46	01.99	-17 40 12.5	17.0	9	675
(5006)	1991	09	14.35660	22	45	59.78	-17 40 24.6	9	675

(5006)	1991 09 15.26059	22 45 22.78	-17 44 07.4	17.0	9	675
(5006)	1991 09 15.31203	22 45 20.54	-17 44 20.3		9	675
(5010)	1991 09 16.28715	22 39 30.98	-04 31 41.3	17.0	9	675
(5010)	1991 09 16.30035	22 39 30.45	-04 31 47.6	17.2	9	675
(5010)	1991 09 16.33368	22 39 28.99	-04 32 06.0	17.5	9	675
(5010)	1991 09 16.34583	22 39 28.49	-04 32 11.3		9	675
(5010)	1991 09 17.23872	22 38 52.29	-04 40 10.5		9	675
(5010)	1991 09 17.28123	22 38 50.55	-04 40 33.9		9	675
(5031)	1991 09 10.30260	22 48 07.20	-11 46 45.0		9	675
(5031)	1991 09 10.35573	22 48 04.22	-11 47 00.6	17.8	9	675
(5031)	1991 09 14.30590	22 44 34.97	-12 05 21.4	17.8	9	675
(5031)	1991 09 14.35660	22 44 32.13	-12 05 33.6	18.0	9	675
(5031)	1991 09 16.28715	22 42 54.14	-12 13 48.9	17.8	9	675
(5031)	1991 09 16.33368	22 42 51.68	-12 14 01.3		9	675
(5046)	1991 09 10.38420	00 28 27.64	+18 01 50.3		9	675
(5046)	1991 09 10.45156	00 28 24.96	+18 01 27.3		9	675
(5046)	1991 09 17.44479	00 23 46.66	+17 15 43.8		9	675
(5046)	1991 09 17.49497	00 23 44.38	+17 15 20.5	17.2	9	675
(5051)	1991 09 10.45156	00 48 35.97	+16 55 28.1		9	675
(5051)	1991 09 17.44479	00 43 29.34	+16 39 46.2		9	675
(5051)	1991 09 17.49497	00 43 26.78	+16 39 35.0	16.8	9	675
(5094)	1991 09 16.28715	22 56 42.41	-07 20 36.4	17.5	9	675
(5094)	1991 09 16.33368	22 56 40.12	-07 20 47.5		9	675
(5097)	1991 07 14.48299	21 34 34.13	-14 45 36.4		9	675
(5098)	1991 09 12.30469	23 09 07.19	-09 10 22.3	17.5	9	675
(5098)	1991 09 12.34618	23 09 05.04	-09 10 43.8		9	675
(5098)	1991 09 16.31007	23 05 57.52	-09 43 52.3	17.8	9	675
(5098)	1991 09 16.35521	23 05 55.37	-09 44 13.2		9	675
(5119)	1992 02 04.22969	06 40 50.85	+33 19 00.1	18.5	3	675
(5119)	1992 02 04.26736	06 40 50.08	+33 18 56.4		3	675
(5119)	1992 02 05.23038	06 40 24.96	+33 16 58.0		3	675
(5120)	1992 02 04.23697	07 07 02.28	+25 50 20.7	18.3	3	675
(5120)	1992 02 04.27500	07 07 01.04	+25 50 18.0		3	675
(5120)	1992 02 05.20104	07 06 34.37	+25 48 48.7		3	675
(5120)	1992 02 05.27552	07 06 32.26	+25 48 41.0		3	675
(5144)	1984 03 01.37361	11 34 38.70	-03 04 31.4		3	675
(5144)	1984 03 01.40277	11 34 37.83	-03 04 27.0		3	675
(5144)	1984 03 04.42708	11 33 09.66	-02 58 06.3		3	675
(5144)	1984 03 28.25763	11 21 22.09	-01 59 11.8	17.3	3	675
(5144)	1984 03 28.31527	11 21 20.42	-01 59 03.0		3	675
(5144)	1988 10 13.30885	00 15 02.95	+10 39 54.3	16	3	675
(5144)	1988 10 13.35156	00 15 01.73	+10 39 46.7		3	675
(5150)	1991 09 12.30469	23 23 56.75	-12 20 24.2	17.0	9	675
(5150)	1991 09 12.34618	23 23 54.41	-12 20 35.2	17.5	9	675
(5150)	1991 09 15.35226	23 21 03.53	-12 32 31.4		9	675
(5150)	1991 09 15.38958	23 21 01.38	-12 32 40.1		9	675
(5150)	1991 09 16.31007	23 20 09.45	-12 36 09.3	17.5	9	675
(5150)	1991 09 16.35521	23 20 06.85	-12 36 18.8		9	675
(5150)	1991 09 17.33941	23 19 11.46	-12 39 52.2	17.8	9	675
(5150)	1991 09 17.37222	23 19 09.52	-12 40 00.3		9	675

690 Lowell Observatory
E. Bowell, Lowell Observatory, 1400 West Mars Hill Road,
Flagstaff, AZ 86001, U.S.A.
Observer H. L. Giclas
Measurer C. M. Olmstead
0.33-m photographic telescope

(1862)	1957 03 31.27916	13 14 24.78	-00 15 37.3		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

1986 GY		1992 03 07.29893	09 54 04.97	+16 22 30.0	18.9 V		691
1986 GY		1992 03 07.32011	09 54 03.67	+16 22 34.4			691
1986 GY		1992 03 07.34100	09 54 02.47	+16 22 38.0			691
1991 FE		1992 04 04.45142	16 25 07.65	-17 19 02.1			691
1991 FE		1992 04 04.46438	16 25 07.39	-17 19 00.6			691
1991 FE		1992 04 04.47736	16 25 07.17	-17 18 59.1			691
1991 FE		1992 04 05.46302	16 24 49.60	-17 16 41.5	19.9 V		691
1991 FE		1992 04 05.47672	16 24 49.33	-17 16 39.3	19.9 V		691
1991 FE		1992 04 05.49030	16 24 49.00	-17 16 37.1	19.9 V		691
1992 AE		1992 02 24.11359	04 09 23.92	+22 27 12.6			691
1992 AE		1992 02 24.12427	04 09 25.37	+22 27 18.4	18.7 V		691
1992 BD		1992 03 07.18241	04 03 41.72	+32 14 35.6			691
1992 BD		1992 03 07.19240	04 03 42.78	+32 14 43.2	20.1 V		691
1992 BD		1992 03 07.20209	04 03 43.94	+32 14 51.5			691
1992 DD1	*	1992 02 23.21865	09 59 41.17	+20 29 25.3	19.4 V		691
1992 DD1		1992 02 23.25039	09 59 38.85	+20 28 55.2			691
1992 DD1		1992 02 23.27600	09 59 37.04	+20 28 29.6			691
1992 DD1		1992 02 28.24643	09 54 27.62	+19 03 45.4			691
1992 DD1		1992 02 28.25633	09 54 26.91	+19 03 34.7			691
1992 DD1		1992 02 28.26511	09 54 26.39	+19 03 26.6	19.3 V		691
1992 DD1		1992 03 07.29452	09 47 43.26	+16 39 18.5	20.1 V		691
1992 DD1		1992 03 07.31570	09 47 42.28	+16 38 54.1			691
1992 DD1		1992 03 07.33660	09 47 41.32	+16 38 31.2			691
1992 DD1		1992 03 11.17344	09 45 26.11	+15 28 14.4			691
1992 DD1		1992 03 11.19425	09 45 25.24	+15 27 52.6			691
1992 DD1		1992 03 11.21508	09 45 24.46	+15 27 30.9	19.9 V		691
1992 DE1	*	1992 02 26.19535	09 58 09.40	+16 14 14.3			691
1992 DE1		1992 02 26.21657	09 58 08.54	+16 14 16.3	20.5 V		691
1992 DE1		1992 02 26.23940	09 58 07.53	+16 14 18.8			691
1992 DE1		1992 02 27.17718	09 57 28.97	+16 16 01.5	20.8 V		691
1992 DE1		1992 02 27.18436	09 57 28.64	+16 16 03.2			691
1992 DE1		1992 02 27.19144	09 57 28.37	+16 16 03.4			691
1992 DE1		1992 02 28.17696	09 56 47.99	+16 17 49.0			691
1992 DE1		1992 02 28.18417	09 56 47.68	+16 17 49.4	20.8 V		691
1992 DE1		1992 03 06.21363	09 52 11.83	+16 28 33.8			691
1992 DE1		1992 03 06.24309	09 52 10.69	+16 28 35.4	21.2 V		691
1992 DE1		1992 03 06.26413	09 52 09.83	+16 28 37.3			691
1992 DE1		1992 03 07.29716	09 51 31.48	+16 29 53.8	21.4 V		691
1992 DE1		1992 03 07.31834	09 51 30.68	+16 29 54.6			691
1992 DE1		1992 03 07.33924	09 51 29.86	+16 29 56.3			691
1992 DE1		1992 03 11.36964	09 49 07.22	+16 34 09.1			691
1992 DE1		1992 03 11.38261	09 49 06.76	+16 34 09.6	21.6 V		691
1992 DE1		1992 03 11.39546	09 49 06.36	+16 34 10.9			691
1992 DF1	*	1992 02 28.36974	11 30 22.77	+13 32 48.3			691
1992 DF1		1992 02 28.39507	11 30 21.31	+13 33 14.2			691
1992 DF1		1992 02 28.43577	11 30 19.21	+13 33 56.1	18.4 V		691
1992 DF1		1992 03 01.34876	11 28 33.59	+14 06 45.4			691
1992 DF1		1992 03 01.35468	11 28 33.24	+14 06 51.8	18.9 V		691
1992 DF1		1992 03 01.36051	11 28 32.90	+14 06 57.8			691
1992 DF1		1992 03 05.42729	11 24 43.01	+15 14 41.5			691
1992 DF1		1992 03 05.44852	11 24 41.76	+15 15 02.2	18.8 V		691
1992 DF1		1992 03 05.46957	11 24 40.54	+15 15 22.4			691
1992 DF1		1992 03 11.40940	11 19 03.86	+16 47 25.6	19.1 V		691

1992 DF1		1992 03 11.43088	11 19 02.64	+16 47 44.4			691
1992 DF1		1992 03 11.45194	11 19 01.41	+16 48 02.2			691
1992 EH	*	1992 03 05.50251	13 41 56.93	-02 33 55.3			691
1992 EH		1992 03 05.51841	13 41 56.96	-02 33 31.6			691
1992 EH		1992 03 05.53341	13 41 56.97	-02 33 09.6	20.2	V	691
1992 EH		1992 03 06.49179	13 42 00.92	-02 09 27.4	19.6	V	691
1992 EH		1992 03 06.50240	13 42 00.95	-02 09 11.6			691
1992 EH		1992 03 06.51302	13 42 00.96	-02 08 55.8			691
1992 EH		1992 03 07.43115	13 42 02.81	-01 45 50.8	19.8	V	691
1992 EH		1992 03 07.45124	13 42 02.92	-01 45 19.6			691
1992 EH		1992 03 07.47127	13 42 02.79	-01 44 49.9			691
1992 EH		1992 03 11.47464	13 41 47.01	-00 00 10.4			691
1992 EH		1992 03 11.49532	13 41 46.80	+00 00 23.2	20.0	V	691
1992 EH		1992 03 11.51356	13 41 46.55	+00 00 51.4			691
(1156)		1992 04 05.40956	13 43 14.94	-08 13 11.5	16.0	V	691
(1156)		1992 04 05.43196	13 43 13.59	-08 13 03.7	16.0	V	691
(1156)		1992 04 05.45413	13 43 12.30	-08 12 57.1	16.2	V	691
(1578)		1992 04 05.39561	13 23 06.43	-07 49 37.9	16.7	V	691
(1578)		1992 04 05.41801	13 23 05.58	-07 49 33.1	16.8	V	691
(1578)		1992 04 05.44019	13 23 04.75	-07 49 28.2	16.9	V	691
(1599)		1992 04 05.34753	13 43 25.01	-07 36 01.4	16.9	V	691
(1599)		1992 04 05.36838	13 43 24.06	-07 35 57.5	16.9	V	691
(1599)		1992 04 05.38847	13 43 23.14	-07 35 53.9	16.9	V	691
(2664)		1992 04 04.45029	16 23 12.43	-17 34 31.7			691
(2664)		1992 04 04.46324	16 23 12.37	-17 34 30.5			691
(2664)		1992 04 04.47623	16 23 12.26	-17 34 27.2			691
(2664)		1992 04 05.46194	16 23 06.92	-17 32 26.9	19.0	V	691
(2664)		1992 04 05.47565	16 23 06.86	-17 32 24.3	19.2	V	691
(2664)		1992 04 05.48923	16 23 06.71	-17 32 22.6	18.9	V	691
(2955)		1992 04 05.33698	13 28 10.83	-07 33 14.1	16.0	V	691
(2955)		1992 04 05.35782	13 28 09.52	-07 33 10.0	16.0	V	691
(2955)		1992 04 05.37791	13 28 08.24	-07 33 05.5	16.0	V	691
(3604)		1992 04 05.39320	13 19 28.53	-07 54 00.6	17.2	V	691
(3604)		1992 04 05.41561	13 19 27.07	-07 54 01.2	17.3	V	691
(3604)		1992 04 05.43778	13 19 25.60	-07 54 02.0	17.3	V	691
(4189)		1992 04 05.39936	13 28 31.40	-08 15 01.0	17.5	V	691
(4189)		1992 04 05.42176	13 28 30.11	-08 14 50.9	17.5	V	691
(4189)		1992 04 05.44394	13 28 28.93	-08 14 39.7	17.6	V	691
(4334)		1992 04 05.40131	13 31 20.24	-07 59 24.2	20.0	V	691
(4334)		1992 04 05.44589	13 31 18.25	-07 59 13.1	19.4	V	691

695 Kitt Peak
A. Dunn, Institute of Astronomy, The Observatories, Madingley Road, Cambridge, CB3 0HA, England
MDM 1.3-m reflector

1992 ET1	*	1992 03 11.41418	12 59 15.64	-04 11 20.6	18		695
1992 ET1		1992 03 11.43649	12 59 14.72	-04 11 17.9			695
1992 ET1		1992 03 12.41368	12 58 33.18	-04 09 14.1			695
1992 ET1		1992 03 13.29880	12 57 54.80	-04 07 17.3			695
1992 ET1		1992 03 13.30260	12 57 54.63	-04 07 17.0			695
1992 ET1		1992 03 13.30642	12 57 54.44	-04 07 16.5			695

760 Goethe Link
E. Bowell, Lowell Observatory, 1400 West Mars Hill Road, Flagstaff, AZ 86001, U.S.A.
Observers C. F. Capen, Jr., H. L. Charlip, W. E. Crawley, R. N. Englander, T. D. Fuller, P. J. Guyer, R. L. LaFara, D. J. May, G. S. Mumford III, C. J. Murphy, S. F. Strother, J. N. Williams, Jr., H. S. Yun
Measurers B. A. Skiff, C. M. Olmstead

0.25-m refractor
PDS scanning microdensitometer
PPM, global solutions

1955 TH	1955 10 11.17083	00 07 11.51	+10 20 06.6			760
1955 TH	1955 10 11.21388	00 07 09.11	+10 20 13.6			760
1972 HR	1963 11 12.21111	04 04 01.94	+20 19 19.9			760
1972 HR	1963 11 12.25486	04 03 59.54	+20 19 20.1		V	760
1984 WE1	1963 11 12.21111	04 24 40.35	+24 10 52.5	17.2		760
1984 WE1	1963 11 12.25486	04 24 37.74	+24 11 22.2		D	760
1985 CR2	1963 11 12.25486	04 24 15.39	+22 18 33.4		R	760
1987 DG6	1963 11 12.21111	04 25 14.18	+23 01 32.5		P	760
1987 DG6	1963 11 12.25486	04 25 11.75	+23 01 28.0		U	760
1991 AF	1955 10 11.17083	00 06 54.78	+10 06 27.6			760
1991 AF	1955 10 11.21388	00 06 52.55	+10 06 05.7			760
1991 VB3	1955 10 11.17083	23 47 46.69	+08 16 23.5			760
1991 VB3	1955 10 11.21388	23 47 44.61	+08 16 02.1			760
(143)	1955 10 11.17083	23 52 26.87	+09 34 05.1	13.8		760
(143)	1955 10 11.21388	23 52 24.74	+09 33 56.3			760
(567)	1963 11 12.21111	04 21 00.49	+22 12 14.4	14.9		760
(567)	1963 11 12.25486	04 20 58.34	+22 12 15.5			760
(692)	1963 11 12.21111	04 23 03.35	+19 02 20.6	14.0		760
(692)	1963 11 12.25486	04 23 00.80	+19 02 35.9			760
(983)	1963 11 12.21111	04 16 21.84	+24 52 29.9	15.4		760
(983)	1963 11 12.25486	04 16 19.76	+24 52 18.1			760
(984)	1955 10 11.17083	00 01 50.46	+14 50 21.2	13.2		760
(984)	1955 10 11.21388	00 01 48.22	+14 50 12.4			760
(1100)	1963 11 12.21111	04 04 08.84	+22 14 46.6	15.9		760
(1100)	1963 11 12.25486	04 04 06.54	+22 14 40.4			760
(1193)	1963 11 12.21111	04 20 51.41	+25 49 58.6		R	760
(1193)	1963 11 12.25486	04 20 48.65	+25 50 05.7			760
(1258)	1955 10 11.17083	23 59 48.89	+11 25 38.4	15.8		760
(1258)	1955 10 11.21388	23 59 47.02	+11 25 27.1			760
(1296)	1963 11 12.21111	04 03 15.07	+19 32 52.2	14.5		760
(1296)	1963 11 12.25486	04 03 12.52	+19 32 38.2			760
(1302)	1963 11 12.21111	04 25 57.15	+19 37 49.3	15.3		760
(1302)	1963 11 12.25486	04 25 55.07	+19 37 47.5			760
(1358)	1963 11 12.21111	04 20 45.82	+23 40 58.9			760
(1358)	1963 11 12.25486	04 20 43.00	+23 40 55.2			760
(1793)	1963 11 12.21111	04 28 40.59	+21 09 15.8		R	760
(1793)	1963 11 12.25486	04 28 37.94	+21 09 06.7			760
(2194)	1963 11 12.21111	04 22 41.60	+24 47 51.5			760
(2194)	1963 11 12.25486	04 22 38.64	+24 47 58.8		P	760
(2276)	1963 11 12.21111	04 10 39.93	+19 32 48.1		V	760
(2276)	1963 11 12.25486	04 10 37.25	+19 32 38.4		P	760
(2811)	1963 11 12.21111	04 26 51.38	+23 19 43.8			760
(2811)	1963 11 12.25486	04 26 49.01	+23 19 38.5			760
(3145)	1955 10 11.17083	23 47 41.75	+10 52 00.8			760
(3145)	1955 10 11.21388	23 47 40.21	+10 51 42.3			760
(3194)	1963 11 12.21111	04 12 26.25	+19 34 26.8			760
(3194)	1963 11 12.25486	04 12 23.65	+19 34 29.9			760
(3515)	1963 11 12.21111	04 25 38.90	+23 46 35.0		f	760
(3515)	1963 11 12.25486	04 25 36.56	+23 46 30.3		P	760
(3572)	1963 11 12.21111	04 20 22.93	+20 50 38.7			760
(3572)	1963 11 12.25486	04 20 20.54	+20 50 31.8			760
(3618)	1963 11 12.21111	04 15 31.82	+20 58 19.5		V	760
(3799)	1963 11 12.25486	04 18 33.28	+19 32 32.4			760
(3874)	1955 10 11.17083	23 51 01.47	+11 52 21.0			760
(3874)	1955 10 11.21388	23 50 59.52	+11 52 04.9			760
(4009)	1963 11 12.21111	04 02 34.94	+19 55 41.8			760

(4009)		1963 11 12.25486	04 02 32.66	+19 55 35.4			P	760
(4061)		1963 11 12.21111	04 25 44.52	+23 08 27.0			P	760
(4061)		1963 11 12.25486	04 25 42.59	+23 08 24.1			V	760
(4235)		1963 11 12.21111	04 18 41.00	+23 13 29.8				760
(4235)		1963 11 12.25486	04 18 38.72	+23 13 24.7			R	760
(4311)		1963 11 12.21111	04 02 18.70	+18 29 51.6			E	760
(4633)		1963 11 12.21111	04 26 14.16	+20 11 28.2	17.8		V	760
(5094)		1963 11 12.21111	04 24 02.90	+23 55 12.9				760
(5094)		1963 11 12.25486	04 23 59.96	+23 55 10.1			V	760
(5144)		1949 05 04.23889	13 20 34.47	-19 36 33.5				760
(5144)		1949 05 04.26667	13 20 33.54	-19 36 30.2				760
(5144)		1963 07 25.32570	21 52 30.51	-13 43 02.3				760
(5144)		1963 07 25.36701	21 52 29.13	-13 43 04.3				760
(5144)		1963 07 30.27361	21 49 54.90	-13 47 49.4			G	760
(5144)		1963 08 21.23541	21 36 53.03	-14 13 51.3				760
(5144)		1963 08 21.28541	21 36 51.16	-14 13 54.5				760
(5144)		1965 10 28.34028	02 47 07.31	+27 15 45.0			G	760
(5144)		1965 10 28.39166	02 47 05.80	+27 15 42.7				760

776 Foggy Bottom Observatory
T. J. Balonek, Dept. of Physics and Astronomy, Colgate University,
Hamilton, NY 13346, U.S.A.
Observers T. J. Balonek, T. Tongue

1992 FO1	*	1992 03 30.17588	12 56 06.23	-05 50 40.3	17.9	V			776
1992 FO1		1992 03 30.18017	12 56 06.01	-05 50 39.1					776
1992 FO1		1992 03 30.33031	12 55 57.81	-05 49 35.7					776
1992 FO1		1992 04 01.11192	12 54 24.09	-05 37 16.5					776
1992 FO1		1992 04 01.12880	12 54 23.16	-05 37 09.4					776
1992 GF	*	1992 04 07.10865	12 49 17.5	-04 59 43	19				776
1992 GF		1992 04 07.14021	12 49 16.1	-04 59 03					776
1992 GF		1992 04 07.14910	12 49 15.5	-04 58 52					776
1992 GF		1992 04 07.20466	12 49 13.2	-04 57 39					776
1992 GF		1992 04 07.22801	12 49 12.1	-04 57 11					776
1992 GF		1992 04 09.12387	12 47 51.3	-04 16 53					776
1992 GF		1992 04 09.12644	12 47 51.2	-04 16 50					776
1992 GF		1992 04 09.13315	12 47 50.8	-04 16 41					776

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

A920 TA		1992 04 01.17225	11 25 10.47	-02 19 50.7					801
A920 TA		1992 04 01.18755	11 25 09.52	-02 19 46.2					801
1931 FC		1992 02 06.18089	08 34 33.91	+25 26 42.7					801
1931 FC		1992 02 06.19453	08 34 32.91	+25 26 43.8					801
1941 HA		1992 03 02.41708	16 23 14.42	-05 27 48.9					801
1941 HA		1992 03 02.42685	16 23 14.94	-05 27 46.8					801
1975 BP1		1992 03 05.32929	13 22 18.70	-06 39 42.0			r		801
1975 BP1		1992 03 05.34795	13 22 18.22	-06 39 38.0			r		801
1975 BP1		1992 04 01.22491	13 05 37.26	-04 37 29.7					801
1975 BP1		1992 04 01.23929	13 05 36.59	-04 37 25.0					801
1976 QE1		1992 03 05.05992	07 31 15.53	+38 07 41.9					801
1976 QE1		1992 03 05.09138	07 31 15.00	+38 07 31.0					801
1977 RG		1986 08 06.17443	20 29 34.36	-09 26 16.5					801
1978 RZ9		1992 03 05.35227	13 29 50.37	+06 11 04.1					801
1978 RZ9		1992 03 05.36365	13 29 50.31	+06 11 16.5					801
1979 YO		1992 03 01.31468	13 01 24.85	+04 29 50.3					801

1979	YO	1992	03	01.33128	13	01	24.40	+04	29	58.2	801
1979	YO	1992	03	05.31791	12	59	35.60	+05	02	52.8	801
1979	YO	1992	03	05.33817	12	59	34.95	+05	03	03.1	801
1980	LE1	1992	04	01.10309	09	35	40.35	-05	22	16.7	801
1980	LE1	1992	04	01.12301	09	35	40.20	-05	22	07.2	801
1981	DG3	1992	03	01.19644	10	01	40.64	+10	18	51.9	801
1981	DG3	1992	03	01.21894	10	01	39.47	+10	18	52.7	801
1981	GQ	1992	03	01.30793	12	53	24.17	+00	55	10.6	801
1981	GQ	1992	03	01.32675	12	53	23.49	+00	55	07.2	801
1981	RP2	1992	03	05.07918	07	50	03.61	+16	46	35.4	801
1981	RP2	1992	03	05.11116	07	50	02.76	+16	46	33.9	801
1982	YQ	1992	03	05.36745	13	42	10.69	+13	39	46.9	801
1982	YQ	1992	03	05.38711	13	42	10.32	+13	39	56.1	801
1983	CE	1992	03	01.34322	14	01	36.86	+08	17	24.7	801
1983	CE	1992	03	01.36093	14	01	36.91	+08	17	34.3	801
1983	CE	1992	03	02.33971	14	01	40.25	+08	26	33.3	801
1983	CE	1992	03	02.36534	14	01	40.27	+08	26	47.3	801
1983	EV	1992	03	01.27354	11	56	52.11	+02	38	59.5	801
1983	EV	1992	03	01.29139	11	56	51.25	+02	39	03.4	801
1983	EV	1992	04	01.18215	11	31	05.19	+04	29	36.1 w	801
1983	EV	1992	04	01.20177	11	31	04.29	+04	29	39.5 w	801
1983	WL	1992	04	01.29333	14	16	06.94	-00	39	00.1	801
1983	WL	1992	04	01.30652	14	16	06.25	-00	38	57.4	801
1984	QJ	1992	03	05.05417	06	18	59.22	+22	39	08.8	801
1984	QJ	1992	03	05.08845	06	18	59.97	+22	39	10.3	801
1985	CH1	1992	03	01.20582	10	17	24.09	+15	44	29.4	801
1985	CH1	1992	03	01.22792	10	17	22.71	+15	44	33.1	801
1985	CS1	1992	03	05.27810	11	32	50.72	+02	13	36.8	801
1985	CS1	1992	03	05.29177	11	32	49.98	+02	13	44.3	801
1985	CS1	1992	04	01.14328	11	09	34.49	+06	18	33.6	801
1985	CS1	1992	04	01.16714	11	09	33.43	+06	18	44.8	801
1985	FU1	1992	03	01.19326	09	59	49.17	+14	55	08.1	801
1985	FU1	1992	03	01.21541	09	59	47.95	+14	55	17.4	801
1985	RH	1992	03	01.20324	10	03	46.08	+19	55	21.1	801
1985	RH	1992	03	01.22176	10	03	44.84	+19	55	20.1	801
1985	RH	1992	03	05.22824	09	59	29.66	+19	52	16.8	801
1985	RH	1992	03	05.24513	09	59	28.58	+19	52	15.7	801
1986	QR3	1992	03	01.27725	12	02	01.71	+05	08	18.4	801
1986	QR3	1992	03	01.29537	12	02	00.70	+05	08	23.9	801
1986	QR3	1992	04	01.18450	11	31	57.00	+07	20	05.9	801
1986	QR3	1992	04	01.19821	11	31	56.27	+07	20	08.2	801
1987	DE6	1992	04	01.01888	07	01	30.61	+23	53	30.5	801
1987	DE6	1992	04	01.03848	07	01	31.41	+23	53	27.7	801
1987	EH	1992	03	01.12674	08	45	22.27	+10	22	00.7	801
1987	EH	1992	03	01.14957	08	45	21.52	+10	22	10.3	801
1987	VB	1992	01	02.35992	10	50	41.31	+04	46	03.8	801
1987	VB	1992	01	02.40803	10	50	41.61	+04	45	53.2 p	801
1988	BN2	1992	03	01.34848	13	57	12.87	+31	56	15.1	801
1988	BN2	1992	03	01.36850	13	57	12.56	+31	56	26.4	801
1988	BN2	1992	03	02.34645	13	56	58.52	+32	05	43.5	801
1988	BN2	1992	03	02.38740	13	56	57.69	+32	06	07.0	801
1988	EF	1992	04	01.31280	14	42	02.19	-07	34	08.4	801
1988	EF	1992	04	01.32237	14	42	01.74	-07	34	00.1	801
1988	EN	1992	03	01.35310	14	10	45.28	-08	33	31.5	801
1988	EN	1992	03	01.38198	14	10	45.94	-08	33	27.3	801
1988	HF	1992	03	05.31439	12	53	13.29	-02	12	42.4	801
1988	HF	1992	03	05.33204	12	53	12.80	-02	12	33.7	801
1988	JV	1992	04	01.34064	15	09	45.51	+00	55	26.1	801
1988	JV	1992	04	01.35940	15	09	44.90	+00	55	30.7	801

1988	KF	1992	03	01.33940	13	51	58.79	+06	25	35.4	W 801
1988	KF	1992	03	01.36543	13	51	58.61	+06	25	47.0	W 801
1988	KF	1992	03	02.33720	13	51	49.31	+06	31	54.7	801
1988	KF	1992	03	02.39043	13	51	48.71	+06	32	14.5	801
1988	KF	1992	04	01.26097	13	36	03.06	+09	49	06.5	801
1988	KF	1992	04	01.27450	13	36	02.38	+09	49	10.8	801
1988	PR1	1992	04	01.33742	15	34	25.88	-04	24	33.3	801
1988	PR1	1992	04	01.35576	15	34	25.75	-04	24	24.4	801
1989	CJ1	1992	03	02.40428	16	02	26.74	+13	37	22.4	801
1989	CJ1	1992	03	02.41211	16	02	27.25	+13	37	29.3	801
1989	GO	1992	03	04.05486	05	16	27.92	+25	27	02.4	801
1989	GO	1992	03	04.07054	05	16	28.84	+25	27	03.2	801
1989	GL1	1992	03	01.20927	10	14	20.64	+08	45	44.2	801
1989	GL1	1992	03	01.23292	10	14	19.11	+08	45	51.3	801
1989	NE	1992	03	01.16110	09	52	23.80	+17	24	43.6	801
1989	NE	1992	03	01.17978	09	52	22.85	+17	24	53.5	801
1989	NE	1992	03	05.20221	09	49	11.83	+17	58	29.3	801
1989	NE	1992	03	05.21475	09	49	11.25	+17	58	35.3	801
1989	NX	1992	03	06.35705	14	33	01.24	+20	39	25.0	801
1989	NX	1992	03	06.36519	14	33	01.28	+20	39	32.8	801
1990	OB	1992	03	05.06809	07	38	18.87	-00	39	58.5	801
1990	OB	1992	03	05.09747	07	38	18.73	-00	39	42.6	801
1990	OE2	1992	03	05.05701	06	29	58.48	+22	46	52.9	801
1990	OE2	1992	03	05.08568	06	29	59.08	+22	46	59.7	801
1990	QM2	1992	03	02.33056	13	38	28.66	+05	43	02.8	801
1990	QM2	1992	03	02.34376	13	38	28.53	+05	43	17.7	801
1990	QM2	1992	03	05.36057	13	37	58.32	+06	40	16.6	801
1990	QM2	1992	03	05.36980	13	37	58.18	+06	40	27.6	801
1990	QM2	1992	04	01.23410	13	21	33.05	+15	41	19.9	801
1990	QM2	1992	04	01.25249	13	21	32.01	+15	41	40.6	801
1990	QP3	1992	01	01.19878	05	39	47.83	+22	50	44.5	801
1990	QP3	1992	01	01.21902	05	39	46.86	+22	50	44.6	801
1990	QY7	1992	03	01.15627	09	09	22.91	+17	05	54.9	801
1990	QY7	1992	03	01.17675	09	09	21.82	+17	05	55.6	801
1990	RV2	1992	03	05.08263	07	52	17.81	+08	46	49.2	801
1990	RV2	1992	03	05.11403	07	52	17.53	+08	46	57.5	801
1990	SA1	1992	03	05.07501	07	50	17.52	+15	13	52.2	801
1990	SA1	1992	03	05.10766	07	50	16.88	+15	13	55.8	801
1990	SB4	1992	03	01.16605	09	56	23.27	+13	30	36.8	801
1990	SB4	1992	03	01.18589	09	56	22.01	+13	30	36.4	801
1990	SB4	1992	03	05.19572	09	52	20.56	+13	27	05.5	801
1990	SB4	1992	03	05.20986	09	52	19.71	+13	27	04.7	801
1990	SM6	1992	03	01.27090	11	55	06.41	+06	12	32.9	801
1990	SM6	1992	03	01.28855	11	55	05.40	+06	12	37.8	801
1990	SM6	1992	04	01.17725	11	25	10.47	+08	13	31.1	801
1990	SM6	1992	04	01.19148	11	25	09.74	+08	13	32.8	801
1990	TN	1992	03	01.32146	13	12	44.24	+02	17	30.3	801
1990	TN	1992	03	01.34573	13	12	43.44	+02	17	33.5	801
1990	TK1	1992	02	07.28987	09	22	22.54	+16	06	16.4	801
1990	TK1	1992	02	07.30578	09	22	21.71	+16	06	21.2	801
1990	TZ2	1992	03	01.26410	11	47	33.18	+11	13	09.7	801
1990	TZ2	1992	03	01.28200	11	47	32.34	+11	13	21.0	801
1990	TZ2	1992	03	05.28699	11	44	28.83	+11	56	13.4	801
1990	TZ2	1992	03	05.31059	11	44	27.67	+11	56	28.4	801
1990	TF4	1992	04	01.27887	13	42	56.02	-13	16	17.7	801
1990	TF4	1992	04	01.28891	13	42	55.51	-13	16	15.9	801
1990	UQ	1992	04	01.25668	13	27	24.83	+04	03	30.8	E 801
1990	UQ	1992	04	01.26889	13	27	24.02	+04	03	50.7	801
1990	VH1	1992	03	01.33539	13	44	47.52	+05	17	17.6	801

1990 VH1	1992 03 01.37124	13 44 46.95	+05 17 20.0			801
1990 VC4	1992 03 06.33387	12 51 03.38	+08 08 40.7			801
1990 VC4	1992 03 06.34671	12 51 02.94	+08 08 44.6			801
1990 WC	1992 03 06.32939	12 17 50.90	+14 28 17.1			801
1990 WC	1992 03 06.34212	12 17 50.21	+14 28 20.8			801
1990 YL	1992 04 01.29731	14 17 31.52	-12 02 46.2			801
1990 YL	1992 04 01.31684	14 17 30.71	-12 02 42.8			801
1991 AE	1992 03 02.40951	15 39 57.90	-01 22 11.5			801
1991 AE	1992 03 02.42281	15 39 58.47	-01 22 07.9			801
1991 AE	1992 03 05.40116	15 42 02.08	-01 08 17.9			801
1991 AE	1992 03 05.41295	15 42 02.51	-01 08 14.5			801
1991 BO	1992 04 01.28222	13 53 50.35	-13 29 04.2			801
1991 BO	1992 04 01.30372	13 53 49.43	-13 28 58.3			801
1991 CC	1992 03 05.38365	14 47 12.74	+01 46 54.0			801
1991 CC	1992 03 05.41504	14 47 12.59	+01 47 01.2			801
1991 WB	1992 03 04.06370	05 14 25.57	+45 46 13.3			801
1991 WB	1992 03 04.07856	05 14 26.54	+45 46 15.0			801
1992 AB	1992 03 04.07527	04 09 53.01	+45 31 49.2			801
1992 AJ	1992 03 01.11363	08 10 41.44	+16 45 19.7			801
1992 AJ	1992 03 01.13550	08 10 40.99	+16 45 30.0			801
1992 AJ	1992 03 04.13554	08 09 43.55	+17 03 21.0			801
1992 AJ	1992 03 04.16046	08 09 43.10	+17 03 29.7			801
1992 AJ	1992 04 01.05855	08 10 36.60	+19 05 27.3			801
1992 AJ	1992 04 01.08795	08 10 37.16	+19 05 32.4			801
1992 AX	1992 03 01.05321	07 26 13.22	+28 56 11.9			801
1992 AX	1992 03 01.07727	07 26 12.74	+28 56 22.1			801
1992 AX	1992 03 04.12024	07 25 42.02	+29 17 06.8			801
1992 AX	1992 03 04.15063	07 25 41.78	+29 17 18.4			801
1992 AX	1992 04 01.04463	07 43 54.09	+30 51 40.8			801
1992 AX	1992 04 01.05571	07 43 54.92	+30 51 41.1			801
1992 CC1	1992 03 01.23659	11 16 45.49	+18 39 35.7			801
1992 CC1	1992 03 01.24444	11 16 43.82	+18 39 30.5			801
1992 CC1	1992 03 05.25704	11 03 33.23	+17 52 42.8			801
1992 CC1	1992 03 05.26483	11 03 31.70	+17 52 37.0			801
1992 CC1	1992 04 01.11603	09 58 44.03	+11 24 06.6			801
1992 CC1	1992 04 01.12668	09 58 43.08	+11 23 57.1			801
9508 P-L	1992 04 01.29976	14 18 43.79	-10 17 47.3			801
9508 P-L	1992 04 01.31934	14 18 43.08	-10 17 43.4			801
1210 T-2	1992 04 01.13917	11 00 49.93	+05 16 55.8			801
1210 T-2	1992 04 01.16398	11 00 48.77	+05 16 59.6			801
1210 T-2	1992 04 01.19530	11 00 47.36	+05 17 04.1			801
3070 T-2	1992 03 01.24101	11 22 35.63	+08 23 36.1			801
3070 T-2	1992 03 01.25656	11 22 34.75	+08 23 44.1			801
3070 T-2	1992 03 05.25972	11 18 58.67	+08 57 27.4			801
3070 T-2	1992 03 05.26885	11 18 58.14	+08 57 32.1			801
3070 T-2	1992 04 01.13574	10 57 36.55	+11 51 28.2			801
3070 T-2	1992 04 01.16175	10 57 35.67	+11 51 34.1			801
4170 T-2	1992 04 01.22240	12 59 45.61	+02 14 11.7			801
4170 T-2	1992 04 01.23681	12 59 44.78	+02 14 19.1			801
5174 T-3	1992 03 02.33450	13 45 29.46	+08 19 23.6			801
5174 T-3	1992 03 02.39319	13 45 28.78	+08 19 41.9			801
5174 T-3	1992 04 01.25899	13 30 29.88	+10 54 18.6			801
5174 T-3	1992 04 01.27171	13 30 29.28	+10 54 21.6			801
(243)	1992 03 01.01365	05 13 14.59	+23 54 54.5			801
(243)	1992 03 01.02932	05 13 15.26	+23 54 54.8			801
(243)	1992 03 04.05238	05 15 34.64	+23 55 53.2			801
(243)	1992 03 04.07291	05 15 35.60	+23 55 53.5			801
(243)	1992 04 01.01025	05 44 45.07	+24 04 11.9			801
(243)	1992 04 01.02332	05 44 46.04	+24 04 11.9			801

(348)		1992 03 02.40720	15 39 23.15	-10 01 21.7			801
(348)		1992 03 02.42469	15 39 23.52	-10 01 21.4			801
(348)		1992 04 01.32484	15 40 32.76	-09 23 56.7			801
(348)		1992 04 01.35370	15 40 32.20	-09 23 53.2			801
(944)		1992 03 06.33689	13 07 44.95	+17 34 33.3			801
(944)		1992 03 06.35025	13 07 44.19	+17 34 33.9			801
(1685)		1992 03 01.02436	05 46 49.40	+05 25 12.2			801
(5112)		1992 03 05.28315	11 38 15.62	+12 58 45.5			801
(5112)		1992 03 05.30104	11 38 14.45	+12 58 52.3			801
(5145)		1992 03 04.12600	07 56 57.59	+21 54 53.4			801
(5145)		1992 03 04.16919	07 56 57.17	+21 54 58.1			801
(5145)		1992 03 05.10314	07 56 49.23	+21 56 28.1			801
(5145)		1992 03 05.18279	07 56 48.53	+21 56 35.8			801

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L. Kohoutek, Hamburger Sternwarte, Gojenbergsweg 112, W-2050 Hamburg 80, Federal Republic of Germany (9)
Observers H. Bohnhardt, H. Debehogne, E. W. Elst, G. Pizarro, O. Pizarro
Measurers H. Debehogne, E. W. Elst, L. Kohoutek
GPO 0.4-m astrograph, 1.0-m Schmidt
SAOC

1991 GW10	*	1991 04 10.24722	13 46 36.29	-14 33 43.5	20.0	4	809
1991 GW10		1991 04 10.26042	13 46 35.54	-14 33 44.3		4	809
1991 GW10		1991 04 10.27361	13 46 34.79	-14 33 43.9		4	809
1991 GW10		1991 04 19.19028	13 38 20.87	-14 29 08.0	19.3	4	809
1991 GW10		1991 04 19.20347	13 38 20.16	-14 29 07.3		4	809
1991 GW10		1991 04 19.21667	13 38 19.40	-14 29 06.8		4	809
1991 GX10	*	1991 04 14.26632	14 29 00.49	-31 05 12.2		9	809
1991 GX10		1991 04 16.31632	14 27 03.22	-31 10 25.6		9	809
(177)		1991 04 13.27917	16 26 14.21	-23 24 44.1		9	809
(177)		1991 04 14.16181	16 25 56.41	-23 24 33.4		9	809
(177)		1991 04 14.28958	16 25 53.60	-23 24 32.2		9	809
(177)		1991 04 16.34769	16 25 07.12	-23 23 57.1		9	809
(177)		1991 04 17.15521	16 24 47.60	-23 23 38.4		9	809
(177)		1991 04 17.27552	16 24 44.45	-23 23 36.3		9	809
(177)		1991 04 18.19965	16 24 20.67	-23 23 12.3		9	809
(177)		1991 04 18.30833	16 24 17.64	-23 23 09.9		9	809
(177)		1991 04 19.24479	16 23 52.23	-23 22 42.1		9	809
(177)		1991 04 20.26146	16 23 23.23	-23 22 08.8		9	809
(554)		1991 04 10.33056	21 09 55.78	-16 24 46.6		9	809
(554)		1991 04 10.38403	21 10 00.84	-16 24 22.4		9	809
(554)		1991 04 17.34201	21 19 33.94	-15 36 34.6		9	809
(554)		1991 04 17.40799	21 19 38.72	-15 36 08.8		9	809
(762)		1991 04 13.40799	21 28 05.71	-15 21 32.9		9	809
(762)		1991 04 14.32431	21 28 55.99	-15 15 53.3		9	809
(762)		1991 04 14.37361	21 28 59.08	-15 15 32.2		9	809
(762)		1991 04 19.33750	21 33 24.22	-14 44 53.7		9	809
(762)		1991 04 19.39792	21 33 27.23	-14 44 34.3		9	809
(762)		1991 04 20.36736	21 34 17.37	-14 38 38.1		9	809
(816)		1991 04 18.34201	21 48 45.45	-13 25 59.9		9	809
(816)		1991 04 18.39931	21 48 48.83	-13 25 49.2		9	809
(947)		1991 04 13.27917	16 28 14.01	-22 56 49.5		9	809
(947)		1991 04 14.16181	16 27 55.53	-22 57 36.1		9	809
(947)		1991 04 14.28958	16 27 52.61	-22 57 43.3		9	809
(947)		1991 04 16.34769	16 27 04.59	-22 59 25.0		9	809

(947)	1991 04 17.15521	16 26 44.36	-23 00 00.8		9	809
(947)	1991 04 17.27552	16 26 41.13	-23 00 07.0		9	809
(947)	1991 04 18.19965	16 26 16.61	-23 00 46.2		9	809
(947)	1991 04 18.30833	16 26 13.46	-23 00 51.3		9	809
(947)	1991 04 19.24479	16 25 47.30	-23 01 28.1		9	809
(947)	1991 04 20.26146	16 25 17.42	-23 02 06.0		9	809
(951)	1991 04 13.27917	16 27 44.71	-23 56 05.5		9	809
(951)	1991 04 14.16181	16 27 30.16	-23 55 01.4		9	809
(951)	1991 04 14.28958	16 27 27.68	-23 54 52.6		9	809
(951)	1991 04 16.34769	16 26 46.94	-23 52 06.6		9	809
(951)	1991 04 17.15521	16 26 29.15	-23 50 54.0		9	809
(951)	1991 04 17.27552	16 26 26.13	-23 50 43.6		9	809
(951)	1991 04 18.19965	16 26 03.82	-23 49 16.0		9	809
(951)	1991 04 18.30833	16 26 00.84	-23 49 06.0		9	809
(951)	1991 04 19.24479	16 25 36.39	-23 47 31.1		9	809
(951)	1991 04 20.26146	16 25 07.83	-23 45 43.1		9	809
(953)	1991 04 12.10035	15 58 36.97	-22 57 45.1		9	809
(953)	1991 04 12.17361	15 58 35.61	-22 58 00.1		9	809
(953)	1991 04 12.26563	15 58 33.86	-22 58 18.0		9	809
(1128)	1991 04 18.36910	21 39 56.00	-14 50 45.6		9	809
(1497)	1991 04 16.34769	16 26 58.89	-23 05 32.2		9	809
(1497)	1991 04 17.27552	16 26 42.28	-23 05 09.6		9	809
(1497)	1991 04 18.19965	16 26 24.46	-23 04 43.3		9	809
(1497)	1991 04 19.24479	16 26 02.53	-23 04 10.7		9	809
(1497)	1991 04 20.26146	16 25 39.70	-23 03 34.1		9	809
(2137)	1991 04 09.39792	14 29 15.62	-31 31 45.0		9	809
(2137)	1991 04 14.18785	14 25 34.95	-31 30 02.2		9	809
(2137)	1991 04 14.26632	14 25 31.01	-31 29 58.3		9	809
(2137)	1991 04 17.12988	14 23 11.25	-31 26 59.9		9	809
(2137)	1991 04 17.14063	14 23 10.69	-31 26 58.7		9	809
(2137)	1991 04 18.17778	14 22 18.91	-31 25 33.2		9	809
(2137)	1991 04 19.12778	14 21 30.87	-31 24 04.7		9	809
(2137)	1991 04 20.08264	14 20 42.73	-31 22 26.2		9	809
(4411)	1985 09 05.08785	22 08 13.75	-15 24 11.6		3	809
(4411)	1985 09 05.09271	22 08 13.55	-15 24 13.4		3	809
(4411)	1985 09 05.09757	22 08 13.35	-15 24 15.0		3	809

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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

1992 AG	1992 02 21.47604	07 23 53.26	+43 27 29.4	16.0		877
1992 AG	1992 02 21.49896	07 23 53.04	+43 27 39.5			877
1992 AL	1992 02 24.61389	08 54 20.85	+16 39 43.3			877
1992 AL	1992 02 24.63177	08 54 20.22	+16 39 54.1			877
1992 AY	1992 02 24.64653	08 49 58.25	+32 00 18.9			877
1992 AY	1992 02 24.66406	08 49 57.55	+32 00 24.2			877
1992 AE1	1992 02 24.55000	08 59 22.34	+30 04 59.8			877
1992 AE1	1992 02 24.56826	08 59 21.52	+30 05 03.9			877
1992 AF1	1992 02 22.52778	08 52 05.30	+25 30 26.9	16.0		877
1992 AF1	1992 02 22.54479	08 52 04.38	+25 30 27.6			877
1992 AF1	1992 02 27.67292	08 48 14.04	+25 27 13.1			877
1992 AF1	1992 02 27.69826	08 48 12.84	+25 27 09.9			877
1992 AO1	1992 02 24.67899	09 31 05.25	+22 59 11.9			877
1992 AO1	1992 02 24.69549	09 31 04.50	+22 59 15.2			877
1992 AS1	1992 02 22.55972	08 56 45.20	+13 06 02.6	16.0		877
1992 AS1	1992 02 22.57650	08 56 44.47	+13 06 09.9			877

1992 CC		1992 02 26.58958	10 31 30.93	+10 24 52.1			877
1992 CC		1992 02 26.61250	10 31 29.85	+10 25 09.1			877
(5138)		1992 02 27.62569	11 38 16.00	+01 47 48.3			877
(5138)		1992 02 27.64861	11 38 14.93	+01 47 54.9			877

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

1985 CS1		1992 03 07.72743	11 30 41.71	+02 35 51.1			894
1985 CS1		1992 03 07.74074	11 30 41.03	+02 35 57.1			894
1987 VB		1992 02 10.67465	10 33 03.16	+05 06 32.0		16.5	894
1987 VB		1992 02 10.70104	10 33 01.53	+05 06 38.6			894
1987 WF		1992 02 26.67118	10 50 13.35	+20 41 30.6		16.5	894
1987 WF		1992 02 26.68507	10 50 12.39	+20 41 34.2			894
1989 EL2		1992 01 28.69549	09 13 31.83	+23 59 51.2		16.8	894
1989 EL2		1992 01 28.70938	09 13 30.73	+23 59 56.1			894
1989 TZ15		1992 03 13.70660	11 36 52.20	+02 34 25.6			894
1989 TZ15		1992 03 13.71806	11 36 51.48	+02 34 26.6			894
1989 TZ15		1992 03 13.73021	11 36 50.71	+02 34 29.5			894
1990 OJ2		1992 02 12.71898	10 40 43.07	+16 31 36.6		17.2	894
1990 OJ2		1992 02 12.73333	10 40 42.28	+16 31 42.7			894
1991 UY		1991 12 03.54375	02 17 12.37	+08 33 30.2		16.7	894
1991 UY		1991 12 03.58194	02 17 11.33	+08 33 37.7			894
1991 VQ1		1991 12 03.54375	02 17 01.58	+08 53 10.5		16.7	894
1991 VQ1		1991 12 03.58194	02 17 00.79	+08 53 22.4			894
1991 VE5		1991 12 03.54375	02 22 06.95	+08 10 31.9		17.0	894
1991 VE5		1991 12 03.58194	02 22 05.87	+08 10 35.5			894
1992 CF		1992 03 03.51360	09 03 16.56	+05 19 11.2		17.2	894
1992 CF		1992 03 03.52847	09 03 15.94	+05 19 13.8			894
1992 CO		1992 03 07.59306	10 24 01.67	+21 55 12.9		17.0	894
1992 CO		1992 03 07.60804	10 24 00.94	+21 55 18.0			894
1992 EF1	*	1992 03 08.70038	11 40 47.29	+00 57 11.3		16.8	894
1992 EF1		1992 03 08.71424	11 40 46.57	+00 57 13.4			894
1992 EF1		1992 03 13.70660	11 36 21.76	+01 06 37.2		16.7	894
1992 EF1		1992 03 13.71806	11 36 21.13	+01 06 40.4			894
1992 EF1		1992 03 13.73021	11 36 20.42	+01 06 41.3			894
1992 FT1	*	1992 03 30.62240	12 23 51.17	-05 28 47.8		16.2	894
1992 FT1		1992 03 30.63611	12 23 50.32	-05 28 47.0			894
1992 FT1		1992 04 02.66476	12 20 54.85	-05 22 11.0			894
1992 FT1		1992 04 02.67813	12 20 54.05	-05 22 10.8			894
1992 FT1		1992 04 05.69144	12 18 04.76	-05 15 36.5		16.5	894
1992 FT1		1992 04 05.70451	12 18 04.02	-05 15 35.2			894
1210 T-2		1992 03 07.72755	11 23 54.40	+03 48 48.0		17.0	894
1210 T-2		1992 03 07.74074	11 23 53.50	+03 48 51.1			894
1210 T-2		1992 03 08.64282	11 22 57.61	+03 52 35.5		17.0	894
1210 T-2		1992 03 08.65660	11 22 56.76	+03 52 39.4			894
(48)		1992 03 13.70660	11 38 29.50	+00 34 15.0			894
(48)		1992 03 13.71806	11 38 29.06	+00 34 20.0			894
(48)		1992 03 13.73021	11 38 28.53	+00 34 24.9			894
(1622)		1992 02 27.68264	10 49 59.30	+12 53 55.3			894
(1622)		1992 02 27.69792	10 49 58.25	+12 53 59.1			894
(5133)		1992 02 08.68542	10 39 30.31	+24 42 43.5		16.5	894
(5133)		1992 02 08.71319	10 39 28.79	+24 42 56.1			894

896 Yatsugatake South Base Observatory
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Observers Y. Kushida, R. Kushida, O. Muramatsu

Measurers Y. Kushida, O. Muramatsu
0.20-m f/4.0 reflector, 0.40-m f/4.1 reflector

1990 VC4	1992 03 08.63194	12 49 31.6	+08 22 11	896
1992 BK	1992 02 04.63715	08 46 06.27	+23 28 46.0	896
1992 BK	1992 02 04.66111	08 46 04.87	+23 28 47.0	896
1992 BK	1992 03 03.54097	08 27 42.91	+23 00 15.6	896

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Observer O. Dahl

1979 FD3	1992 03 07.08075	07 41 55.90	+21 58 53.4	950
1979 FD3	1992 03 07.09314	07 41 55.87	+21 58 53.8	950
1979 FD3	1992 03 07.12079	07 41 55.78	+21 58 55.7	950
1979 OB9	1992 03 07.04845	11 44 57.23	-03 49 16.4	950
1979 OB9	1992 03 07.06856	11 44 56.22	-03 49 08.3	950
1981 EE18	1992 03 06.08807	09 55 36.05	+15 47 57.3	950
1981 EE18	1992 03 06.09932	09 55 35.56	+15 47 58.4	950
1982 DX3	1992 03 06.03965	09 23 27.92	+22 33 57.9	950
1982 DX3	1992 03 06.05413	09 23 27.16	+22 33 56.2	950
4063 P-L	1992 03 06.09596	08 02 45.52	+21 42 00.9	950
4063 P-L	1992 03 06.10652	08 02 45.52	+21 41 59.0	950
4063 P-L	1992 03 06.86343	08 02 45.56	+21 40 00.1	950
4063 P-L	1992 03 06.88277	08 02 45.54	+21 39 57.1	950
5568 P-L	1992 03 05.99482	08 05 31.57	+31 15 58.0	950
5568 P-L	1992 03 06.01197	08 05 31.22	+31 15 55.0	950
4098 T-1	1992 03 06.06850	07 42 20.15	+32 53 20.0	950
4098 T-1	1992 03 06.08394	07 42 20.19	+32 53 14.9	950

* * * * *

ORBITAL ELEMENTS.

Orbital elements have been computed by the following contributors:

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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 principal 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 Tanaka-Machholz (1992d)

T 1992 Apr. 22.62391 TT				Marsden
q 1.2623589		(2000.0)	P	Q
	Peri.	65.41087	+0.35717660	-0.39478668
	Node	300.50474	-0.60540711	+0.59228742
e 1.0	Incl.	79.26318	+0.71127147	+0.70238101

From 44 observations 1992 Apr. 1-11.

Periodic Comet Shoemaker-Levy 8 (1992f)

T 1992 May 21.03305 TT				Nakano
q 2.7242511		(2000.0)	P	Q
n 0.12978992	Peri.	16.55511	-0.64475217	+0.76221141
a 3.8634510	Node	213.36257	-0.71266958	-0.62670207
e 0.2948659	Incl.	6.02183	-0.27639953	-0.16210578
P 7.59				

From 8 observations 1992 Mar. 30-Apr. 11.

One-opposition minor planets

Planet	H	Epoch	M	Peri.	Node	Incl.	e	a	Arc	O	N	C
1978 WO19	12.5	781218	3.18	333.64	87.93	1.33	0.0905	2.9939	3	2	F	N
1988 VD	15.7	881026	306.09	80.23	27.74	22.24	0.1333	1.9233	37	8		E
1990 HU5		900419	59.10	111.12	84.86	7.43	0.0517	3.0510	3	3	F	M
1990 VN14	12.9	901105	335.67	314.42	126.22	2.26	0.1697	3.2057	11	6	D	a
1991 NV3	12.5	910703	5.27	204.69	83.58	2.94	0.0971	2.8365	10	0	D	N
1991 PD10	13.7	910901	256.59	117.12	332.26	7.26	0.0378	2.3688	41	0		E
1991 PE10	13.7	910901	336.42	37.01	338.73	8.69	0.1768	2.7889	41	0		E
1991 PH10	13.8	910901	323.92	274.54	116.23	1.67	0.1499	2.6181	41	0		E
1991 PC11	12.8	910901	318.25	247.59	146.55	7.20	0.1642	2.6675	40	7		E
1991 PD11	14.3	910901	42.17	135.30	141.66	6.34	0.1989	2.2080	40	7		E
1991 PE11	13.7	910901	351.47	9.28	341.10	4.78	0.1732	2.7276	42	0		E
1991 PV11	13.5	910812	80.40	93.15	147.40	13.14	0.1557	2.4175	40	8		W
1991 PW11	13.9	910901	34.53	101.75	187.12	7.50	0.1814	2.4568	38	6		E
1991 PY11	13.0	910901	92.83	18.50	213.60	4.84	0.1246	2.2992	38	6		E
1991 PZ11	12.7	910901	97.46	284.90	305.28	11.60	0.1307	2.6520	36	6		E
1991 PA12	12.0	910901	93.93	324.47	259.87	6.14	0.2200	2.5280	36	6		E
1991 PC12	14.4	910901	25.59	99.42	187.68	11.75	0.3689	2.6801	41	8		E
1991 PD12	14.0	910901	359.21	161.81	181.74	13.82	0.2050	2.7758	41	8		E
1991 PK13	15.5	910901	1.90	13.25	321.46	6.52	0.2126	2.3439	40	7		E
1991 PL13	14.6	910901	15.47	47.04	268.20	1.63	0.1800	2.4509	40	0		E
1991 PP13	12.4	910901	340.55	33.71	329.09	10.65	0.1140	3.0446	40	7		E
1991 PA15	15.5	910901	354.54	151.71	192.10	5.14	0.1686	2.3384	39	9	D	E
1991 PG15	14.4	910901	353.04	246.73	102.62	1.67	0.2049	2.4303	40	9		E

1991	PJ15	14.5	910901	40.15	167.54	118.95	3.05	0.1425	2.2965	38	7		E
1991	PM15	13.5	910812	27.25	344.37	305.98	3.74	0.2244	2.5997	37	5		W
1991	PX17	13.3	910901	50.71	278.26	0.40	6.67	0.1122	2.3258	40	8		E
1991	PY17	12.8	910901	357.07	355.26	349.89	16.83	0.0731	3.0942	40	0		E
1991	PZ17	14.0	910901	302.29	306.69	109.92	6.01	0.1552	2.2960	40	6		E
1991	PC18	12.9	910901	294.22	118.11	295.87	6.11	0.0801	2.8033	37	6		E
1991	PG18	13.4	910901	5.94	48.10	281.84	2.07	0.2402	3.2399	39	8		E
1991	PH18	14.5	910901	23.29	150.19	156.28	12.41	0.2146	2.4463	39	6		E
1991	PL18	15.1	910901	22.71	7.77	301.03	3.92	0.1620	2.2469	40	8		E
1991	PM18	12.8	910901	169.86	358.46	172.14	9.96	0.0442	2.4049	39	8		E
1991	RE	14.9	910921	353.37	65.31	297.17	2.96	0.2261	2.5957	13	0		E
1991	RL	14.0	910901	33.43	301.91	343.67	33.61	0.2878	2.8122	13	0		W
1991	RM	14.7	910901	356.43	190.89	157.36	12.48	0.2761	2.2897	12	0		E
1991	RS	13.5	910901	20.00	132.12	173.89	14.60	0.2014	2.5907	10	5		W
1991	RT	14.3	910901	5.20	171.53	160.15	15.86	0.2431	2.5759	12	0		E
1991	RE1	13.7	910901	259.40	138.52	310.67	3.88	0.0989	2.2476	13	7		E
1991	RL1	13.5	910901	31.35	102.74	193.43	11.53	0.1678	2.2663	8	6		W
1991	RC2	14.1	910921	302.42	87.68	333.78	7.73	0.1274	2.3385	11	9		E
1991	RN4	14.6	910921	338.04	226.20	159.31	6.30	0.2309	2.3822	21	0		E
1991	RZ5	14.7	910921	5.37	328.43	26.41	11.25	0.2000	2.5721	5	7	E	E
1991	RA6	13.2	910921	83.95	219.45	48.92	6.45	0.0954	2.2887	5	7		E
1991	RL6	14.5	910901	346.67	278.16	80.57	3.62	0.1946	2.3883	10	5		W
1991	RN6	14.8	910921	20.62	155.07	162.03	10.39	0.2484	2.3392	23	0		E
1991	RY9	14.0	910921	39.34	37.14	273.92	4.97	0.1500	2.1603	4	6	E	E
1991	RA10		910921	45.10	42.94	265.44	5.25	0.1171	2.3462	4	6		E
1991	RE10	12.9	910921	308.67	133.82	307.65	6.84	0.2294	2.7966	7	8		E
1991	RF10	12.5	910921	38.71	89.89	219.90	8.86	0.2000	3.1316	4	6	E	E
1991	RC11	13.0	910921	329.62	206.52	202.88	22.80	0.1676	3.1073	26	0	D	W
1991	RD11	14.5	910921	353.96	45.94	331.52	8.73	0.2204	2.7450	7	8		E
1991	RE11	14.5	910921	319.62	129.20	293.89	4.61	0.1810	2.2565	4	6		E
1991	RB12	13.5	910812	296.35	81.50	320.41	12.72	0.1758	2.8153	32	0		W
1991	RY16	12.7	910921	67.63	213.74	66.34	6.84	0.1181	2.9150	5	5		E
1991	RA17	14.7	910921	19.58	294.35	37.40	6.72	0.1808	2.2703	5	5		E
1991	RE17	13.5	910921	27.08	318.61	8.97	29.54	0.1061	2.6702	5	5		E
1991	RF17	14.9	910921	345.91	345.05	34.82	7.75	0.1241	2.4262	5	6		E
1991	RR21	13.3	910921	3.02	229.10	117.13	3.09	0.0627	2.8378	6	0		E
1991	RW21	14.5	910812	311.02	71.38	341.27	9.91	0.2541	2.4274	40	0		W
1991	RY21	13.8	910921	97.01	138.97	100.74	3.19	0.1164	2.3916	5	8		E
1991	RZ21	12.9	910921	111.16	216.96	359.19	16.30	0.2280	2.9725	2	6		E
1991	RC22	14.8	910921	39.18	247.55	47.42	3.60	0.2015	2.1826	2	6		E
1991	RD22	16.0	910921	353.68	294.01	68.51	3.28	0.2200	2.2461	2	6		E
1991	RV23	15.5	910921	346.82	13.17	352.85	6.79	0.1159	2.3023	5	6		E
1991	RW23	12.1	910921	106.93	25.37	189.41	6.17	0.2737	2.8259	6	6		E
1991	RX23	12.9	910921	324.26	32.11	356.56	8.88	0.0746	3.0285	5	6		E
1991	RZ23	13.5	910921	337.24	21.70	3.52	7.92	0.2348	3.0778	5	6		E
1991	RA24	15.4	910921	337.88	14.86	12.26	2.11	0.2393	2.3454	5	6		E
1991	RD24	13.6	910921	66.18	147.05	120.82	5.42	0.1128	2.3977	4	6		E
1991	SG	13.0	910921	48.67	133.18	158.56	10.96	0.0884	3.1735	19	9		W
1991	SJ	14.7	910921	117.92	81.96	139.85	5.25	0.1199	2.2003	15	8		E
1991	SK	12.0	910921	1.62	335.95	11.92	7.14	0.0899	3.2287	19	0		E
1991	TF4	12.9	911011	357.87	21.06	16.53	3.23	0.2127	2.6385	58	8		N
1991	VQ1	13.3	911120	25.20	296.87	71.95	7.35	0.2074	2.2825	33	0		N
1991	VX2	12.5	911120	40.76	63.96	303.77	4.41	0.1553	3.1714	37	0		W
1991	VY2	14.0	911120	79.48	60.49	268.77	6.60	0.1064	2.2840	37	8		W
1991	VJ3	13.5	911120	351.85	19.45	53.49	4.50	0.1397	2.2482	53	0		W
1991	VW3	13.7	911210	65.68	100.94	239.48	1.10	0.1886	2.1554	33	0		N
1991	VE5	13.8	911120	53.78	221.93	110.32	3.75	0.2008	2.2048	29	8		N
1991	VF7	13.2	911230	194.90	351.32	244.55	5.43	0.0300	2.4186	33	0		N
1991	XF	15.0	911210	349.42	19.50	68.61	6.39	0.2265	2.4035	30	8		W

1991 XR1		911210	357.85	43.22	31.20	1.94	0.0917	2.9204	18	4		W
1991 YE1	13.5	911230	44.24	297.86	98.11	13.72	0.1826	2.6525	10	4		W
1991 YF1	11.0	911230	193.59	352.21	275.88	20.32	0.1813	3.0940	10	4	E	W
1991 YG1	13.0	911230	62.30	282.48	85.16	3.45	0.2440	2.4430	10	4		W
1991 YJ1	15.0	911230	41.47	113.21	281.66	5.96	0.2294	2.4447	10	4		W
1991 YK1	13.5	911230	5.32	356.02	95.32	9.53	0.1112	3.1857	10	4		W
1991 YL1	14.0	911230	311.76	205.61	312.15	0.84	0.1226	2.3951	10	4		W
1991 YM1	14.0	911230	349.92	8.33	103.68	3.94	0.1433	2.4073	10	4		W
1991 YN1	15.0	911230	10.43	161.69	284.58	6.43	0.0749	2.2778	10	4		W
1992 AG	12.4	920119	18.42	342.68	103.82	27.22	0.2451	2.3837	51	0		N
1992 AY	11.6	920208	10.02	18.95	101.01	15.38	0.1510	3.1284	51	0		N
1992 AE1	12.4	920208	6.65	27.60	97.78	10.69	0.1945	2.7353	45	0		N
1992 AO1	13.5	920208	23.70	41.24	62.50	4.09	0.2110	2.4113	45	0		N
1992 BD	15.5	920208	350.49	21.20	79.22	28.99	0.0654	1.8975	38	0		M
1992 BL1	12.5	920208	43.30	287.09	138.32	22.82	0.3458	2.3647	36	5		W
1992 CA	13.5	920119	125.36	221.56	142.63	27.67	0.0724	1.9972	6	7	E	W
1992 CF	13.1	920228	281.57	307.54	284.15	9.69	0.0570	2.3810	24	0		N
1992 CJ	13.5	920208	285.78	40.64	203.85	5.53	0.1281	2.2469	17	8		W
1992 CO	11.7	920228	255.38	152.70	111.88	11.02	0.0512	3.0248	24	0		N
1992 CD1	13.0	920228	14.66	310.67	187.96	2.94	0.1274	2.3687	28	8		N
1992 CE1	10.7	920228	52.98	290.96	170.26	21.27	0.0434	3.2521	28	7		N
1992 CQ1	12.1	920208	308.84	72.86	149.36	10.25	0.2284	2.7500	5	4		N
1992 CZ1	11.3	920208	355.29	192.77	322.20	3.46	0.1465	3.1355	24	6	D	N
1992 CE2	13.8	920208	352.35	30.47	124.64	7.45	0.1129	2.4353	12	6	D	N
1992 DR	13.9	920228	344.01	223.23	313.65	3.60	0.1431	2.4730	14	7		N
1992 DV	15.1	920228	4.62	4.66	149.91	7.99	0.2963	2.6713	15	9		N
1992 DD1	19.0	920228	2.56	163.42	344.21	11.69	0.3547	2.3681	17	0		M
1992 DE1	15.0	920228	307.75	221.11	347.68	8.27	0.0795	3.9980	14	0		M
1992 DF1	15.5	920228	70.65	269.34	149.72	20.82	0.3034	2.2667	12	0		M
1992 EA	13.9	920228	291.60	266.50	338.69	1.13	0.1145	2.2213	20	6		N
1992 EE	14.3	920408	344.54	211.15	352.63	5.93	0.1674	2.2870	21	6		N
1992 EH	18.0	920228	35.33	325.63	175.23	23.72	0.0790	1.8937	6	0		M
1992 EO	12.2	920319	300.89	238.28	12.77	12.81	0.2108	2.9969	5	8		N
1992 EU	12.6	920319	51.44	82.16	1.51	27.85	0.3667	2.7398	19	8		N
1992 EX	14.5	920319	340.96	68.94	129.95	7.76	0.1877	2.5769	4	6		N
1992 EC1	15.0	920228	7.89	319.53	190.98	26.07	0.2685	2.5809	33	5		W
1992 EE1	13.1	920319	355.85	160.48	28.54	26.76	0.1834	2.3598	28	0		N
1992 EK1	12.9	920319	291.64	282.06	334.29	6.15	0.1003	2.1775	27	8		N
1992 EM1	13.1	920319	46.80	25.56	100.87	11.42	0.1588	2.3697	28	6		N
1992 ER1	13.5	920319	32.72	353.12	140.95	12.65	0.1529	2.6912	25	6		N
1992 ES1	13.2	920319	304.74	215.70	36.15	9.18	0.1749	2.3836	26	6		N
1992 ET1	13.5	920228	298.08	234.71	17.36	6.35	0.0682	2.6276	2	6		M
1992 EU1	13.2	920408	27.23	56.96	110.02	7.08	0.1318	2.2406	26	0		N
1992 FG	13.5	920319	319.01	216.64	16.86	5.08	0.1165	2.1642	5	6	E	N
1992 FH	13.0	920319	261.02	258.32	37.85	3.79	0.1152	2.1586	5	8	E	N
1992 FN	13.3	920408	12.54	346.58	188.99	1.50	0.1138	2.2455	5	5	E	N
1992 FO	14.3	920319	0.89	94.36	86.98	2.03	0.2626	2.6239	3	6	E	N
1992 FP	12.1	920319	325.25	176.56	50.55	2.06	0.1022	3.1630	5	8	E	N
1992 FR	12.6	920319	339.03	33.18	181.56	10.18	0.1841	2.5484	3	6	E	N
1992 FS	13.8	920408	332.43	191.08	45.70	3.74	0.2565	2.6012	3	6	E	N
1992 FX	11.0	920319	177.39	354.97	15.35	11.16	0.3008	2.3376	11	6		N
1992 FC1	12.0	920319	265.40	161.04	145.88	1.86	0.2561	2.7017	5	6	E	W
1992 FD1	12.2	920319	239.76	308.28	17.65	10.07	0.2275	2.4869	5	6	E	N
1992 FE1	12.3	920319	45.97	72.18	60.97	3.94	0.0944	2.7282	11	6		N
1992 FM1	14.0	920319	358.37	219.97	344.41	24.22	0.0849	2.1906	2	6		W
1992 FT1	13.9	920408	3.15	194.81	353.03	4.69	0.1721	2.3435	6	6		N
1992 FV1	12.1	920408	8.29	141.92	47.51	8.41	0.1797	2.6340	3	6	E	N

1978 WO19 = 1978 WO14 (S. Nakano)
1990 HU5 = 1990 JT1 (S. Nakano)

1990 VN14 = 1990 VJ9 (A. Lowe)
1991 NV3 = 1991 NV7 (S. Nakano)
1991 PA15 = 1991 RW6 (S. Nakano, MPC 19822)
1991 RC11 = 1991 TL4 (G. V. Williams)
1992 CZ1 = 1992 DX (S. Nakano)
1992 CE2 = 1992 CH2 (S. Nakano)

Epoch 1992 June 27.0 TT = JDT 2448800.5					Goffin
(203) Pompeja		Obs. 154	M	292.69612	Peri. 56.69538
H 8.76	G 0.15	Opp. 47	n	0.21762986	Node 348.28461
rms res. 1".03	(M-C)	1879-1990	e	0.0608270	Incl. 3.18458
Epoch 1992 June 27.0 TT = JDT 2448800.5					Goffin
(209) Dido		Obs. 225	M	189.59781	Peri. 255.73820
H 8.24	G 0.15	Opp. 52	n	0.17692741	Node 1.02569
rms res. 0".97	(M-C)	1879-1991	e	0.0673886	Incl. 7.19471
Epoch 1992 June 27.0 TT = JDT 2448800.5					Goffin
(264) Libussa		Obs. 136	M	202.49867	Peri. 340.33785
H 8.42	G 0.15	Opp. 42	n	0.21071678	Node 49.90275
rms res. 1".07	(M-C)	1886-1989	e	0.1368427	Incl. 10.43111
Epoch 1992 June 27.0 TT = JDT 2448800.5					Goffin
(395) Delia		Obs. 128	M	146.74856	Peri. 11.19922
H 10.38	G 0.15	Opp. 28	n	0.21223063	Node 259.88744
rms res. 1".00	(M-N)	1894-1991	e	0.0873891	Incl. 3.35513
Epoch 1992 June 27.0 TT = JDT 2448800.5					Goffin
(609) Fulvia		Obs. 87	M	2.78552	Peri. 126.05797
H 10.0	G 0.15	Opp. 26	n	0.18160354	Node 165.67248
rms res. 1".09	(M-N)	1906-1991	e	0.0331013	Incl. 4.17309
Epoch 1992 June 27.0 TT = JDT 2448800.5					Williams
(744) Aguntina		Obs. 59	M	345.01616	Peri. 33.08602
H 10.21	G 0.15	Opp. 19	n	0.17464499	Node 142.89752
rms res. 1".04	(M-C)	1913-1990	e	0.1248611	Incl. 7.70988
Epoch 1992 June 27.0 TT = JDT 2448800.5					Goffin
(855) Newcombia		Obs. 44	M	322.51711	Peri. 232.86919
H 11.8	G 0.15	Opp. 16	n	0.27164131	Node 17.51649
rms res. 1".12	(M-N)	1916-1989	e	0.1800207	Incl. 10.91049
Epoch 1992 June 27.0 TT = JDT 2448800.5					Williams
(951) Gaspra		Obs. 352	M	353.25639	Peri. 129.01970
H 11.46	G 0.15	Opp. 24	n	0.30005229	Node 253.43771
rms res. 0".60	(M-C)	1913-1991	e	0.1738165	Incl. 4.09740
Epoch 1992 June 27.0 TT = JDT 2448800.5					Filenko
(1146) Biarmia		Obs. 69	M	286.58614	Peri. 61.19938
H 9.80	G 0.15	Opp. 16	n	0.18440295	Node 214.79585
rms res. 1".37	(M-P)	1930-1989	e	0.2445255	Incl. 17.14234
Epoch 1992 June 27.0 TT = JDT 2448800.5					Filenko
(1149) Volga		Obs. 49	M	221.81957	Peri. 115.46094
H 10.57	G 0.15	Opp. 20	n	0.19988944	Node 261.97375
rms res. 1".84	(M-P)	1937-1988	e	0.0974922	Incl. 11.74201

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1150) Achaia Obs. 84 M 133.62312 Peri. 138.70713
H 13.2 G 0.15 Opp. 14 n 0.30390589 Node 206.90418
rms res. 1".38 (M-P) 1929-1989 e 0.2044203 Incl. 2.38269

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1153) Wallenbergia Obs. 54 M 331.06623 Peri. 28.50346
H 12.1 G 0.15 Opp. 17 n 0.30291200 Node 280.83762
rms res. 1".84 (M-P) 1930-1991 e 0.1601014 Incl. 3.33342

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1154) Astronomia Obs. 73 M 34.05055 Peri. 179.80986
H 10.51 G 0.15 Opp. 23 n 0.15812090 Node 83.23316
rms res. 1".68 (M-P) 1911-1990 e 0.0664751 Incl. 4.55181

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1162) Larissa Obs. 99 M 223.37293 Peri. 217.09949
H 9.44 G 0.15 Opp. 19 n 0.12656762 Node 40.12377
rms res. 1".62 (M-P) 1930-1989 e 0.1113988 Incl. 1.90379

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1174) Marmara Obs. 35 M 299.11305 Peri. 353.44049
H 12.0 G 0.15 Opp. 13 n 0.18784043 Node 1.35705
rms res. 1".52 (M-P) 1930-1990 e 0.1176431 Incl. 10.10013

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1180) Rita Obs. 61 M 172.57832 Peri. 212.83785
H 9.14 G 0.15 Opp. 20 n 0.12392874 Node 88.61164
rms res. 1".69 (M-P) 1907-1985 e 0.1625084 Incl. 7.20374

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1182) Ilona Obs. 64 M 178.57307 Peri. 62.73024
H 11.3 G 0.15 Opp. 23 n 0.29022046 Node 336.63163
rms res. 1".62 (M-P) 1927-1989 e 0.1177877 Incl. 9.39467

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1184) Gaea Obs. 59 M 81.17691 Peri. 309.48734
H 11.1 G 0.15 Opp. 15 n 0.22620216 Node 356.16124
rms res. 1".45 (M-P) 1926-1987 e 0.0732085 Incl. 11.30626

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1185) Nikko Obs. 77 M 91.75882 Peri. 1.88752
H 12.09 G 0.15 Opp. 19 n 0.29437400 Node 72.10488
rms res. 2".24 (M-P) 1942-1989 e 0.1056487 Incl. 5.70313

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1191) Alfaterna Obs. 54 M 131.91028 Peri. 55.95329
H 11.3 G 0.15 Opp. 14 n 0.20022872 Node 134.99564
rms res. 1".31 (M-P) 1931-1990 e 0.0455309 Incl. 18.46731

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1193) Africa Obs. 33 M 62.63768 Peri. 185.00938
H 12.2 G 0.15 Opp. 11 n 0.22874218 Node 49.89599
rms res. 1".89 (M-P) 1931-1990 e 0.1206959 Incl. 14.12516

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1194) Aletta Obs. 35 M 153.49828 Peri. 244.47787
H 10.2 G 0.15 Opp. 14 n 0.19795426 Node 291.62940
rms res. 2".06 (M-P) 1931-1987 e 0.0882436 Incl. 10.87653

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1196) Sheba Obs. 31 M 305.77682 Peri. 261.64765
H 10.26 G 0.15 Opp. 13 n 0.22824242 Node 101.19361
rms res. 1".59 (M-P) 1912-1987 e 0.1800225 Incl. 17.70011

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1199) Geldonia Obs. 66 M 48.12168 Peri. 278.81785
H 10.36 G 0.15 Opp. 25 n 0.18800627 Node 236.22629
rms res. 2".38 (M-P) 1921-1989 e 0.0351466 Incl. 8.77407

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1203) Nanna Obs. 35 M 127.19338 Peri. 176.06617
H 11.2 G 0.15 Opp. 13 n 0.20064949 Node 225.06361
rms res. 2".30 (M-P) 1926-1990 e 0.2468243 Incl. 5.95048

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1204) Renzia Obs. 96 M 327.65010 Peri. 313.26937
H 12.2 G 0.15 Opp. 16 n 0.28949883 Node 7.85223
rms res. 1".41 (M-P) 1931-1991 e 0.2936360 Incl. 1.88394

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1207) Ostenia Obs. 39 M 199.84425 Peri. 43.24846
H 11.0 G 0.15 Opp. 14 n 0.18802268 Node 20.62429
rms res. 1".66 (M-P) 1931-1991 e 0.0943021 Incl. 10.37325

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1210) Morosovia Obs. 33 M 237.26725 Peri. 160.19513
H 9.91 G 0.15 Opp. 15 n 0.18861181 Node 107.23850
rms res. 1".99 (M-P) 1904-1990 e 0.0595594 Incl. 11.26197

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1212) Francette Obs. 68 M 206.18329 Peri. 350.25622
H 9.54 G 0.15 Opp. 19 n 0.12520496 Node 149.76329
rms res. 2".04 (M-P) 1932-1989 e 0.1889081 Incl. 7.58631

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1217) Maximiliana Obs. 48 M 203.50156 Peri. 91.68798
H 12.5 G 0.15 Opp. 14 n 0.27312208 Node 148.59394
rms res. 1".92 (M-P) 1925-1987 e 0.1539746 Incl. 5.14951

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1218) Aster Obs. 26 M 273.80464 Peri. 68.81217
H 12.9 G 0.15 Opp. 9 n 0.28952476 Node 64.00195
rms res. 1".56 (M-P) 1932-1988 e 0.1092586 Incl. 3.16050

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1220) Crocus Obs. 29 M 270.36652 Peri. 326.97047
H 11.72 G 0.23 Opp. 11 n 0.18911518 Node 113.78645
rms res. 1".66 (M-P) 1932-1989 e 0.0707936 Incl. 11.35892

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1224) Fantasia Obs. 79 M 166.87176 Peri. 128.91690
H 11.36 G 0.15 Opp. 11 n 0.28174481 Node 258.40281
rms res. 1".17 (M-P) 1939-1988 e 0.1991040 Incl. 7.87601

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1231) Auricula Obs. 73 M 114.02166 Peri. 247.60665
H 11.6 G 0.15 Opp. 17 n 0.22596213 Node 342.30886
rms res. 1".51 (M-P) 1931-1990 e 0.0855152 Incl. 11.47599

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1243) Pamela Obs. 81 M 299.26031 Peri. 60.52670
H 9.68 G 0.15 Opp. 20 n 0.18065678 Node 246.18293
rms res. 1".45 (M-P) 1932-1989 e 0.0346369 Incl. 13.23936

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1252) Celestia Obs. 39 M 114.37619 Peri. 63.42002
H 10.89 G 0.15 Opp. 14 n 0.22255182 Node 141.14991
rms res. 1".81 (M-P) 1933-1989 e 0.2033735 Incl. 33.87509

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1261) Legia Obs. 93 M 226.85337 Peri. 106.40939
H 11.0 G 0.15 Opp. 17 n 0.17652499 Node 67.47730
rms res. 1".52 (M-P) 1933-1990 e 0.1689837 Incl. 2.43180

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1266) Tone Obs. 75 M 91.08144 Peri. 277.34748
H 9.41 G 0.15 Opp. 19 n 0.15998987 Node 321.85514
rms res. 1".58 (M-P) 1933-1986 e 0.0388904 Incl. 17.24949

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1268) Libya Obs. 147 M 81.12300 Peri. 127.31482
H 9.12 G 0.15 Opp. 29 n 0.12513105 Node 351.88327
rms res. 1".45 (M-P) 1930-1989 e 0.1041552 Incl. 4.42701

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1270) Datura Obs. 37 M 229.24019 Peri. 258.67811
H 12.5 G 0.15 Opp. 13 n 0.29505278 Node 98.01268
rms res. 2".40 (M-P) 1930-1985 e 0.2081407 Incl. 5.98680

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1288) Santa Obs. 52 M 352.73355 Peri. 53.01191
H 11.41 G 0.15 Opp. 17 n 0.20113958 Node 299.44762
rms res. 1".93 (M-P) 1933-1990 e 0.0656193 Incl. 7.56825

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1292) Luce Obs. 74 M 33.64131 Peri. 238.37349
H 11.3 G 0.15 Opp. 24 n 0.24312386 Node 272.06598
rms res. 1".93 (M-P) 1905-1990 e 0.0600658 Incl. 2.15410

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1296) Andree Obs. 60 M 183.37536 Peri. 235.97183
H 10.9 G 0.15 Opp. 21 n 0.26208161 Node 227.23867
rms res. 1".75 (M-P) 1925-1991 e 0.1406561 Incl. 4.11028

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1297) Quadea Obs. 56 M 96.26004 Peri. 129.93801
H 10.8 G 0.15 Opp. 18 n 0.18741081 Node 296.48674
rms res. 1".68 (M-P) 1927-1989 e 0.0701754 Incl. 9.00371

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1301) Yvonne Obs. 86 M 284.58971 Peri. 302.05613
H 10.8 G 0.15 Opp. 18 n 0.21420091 Node 161.84768
rms res. 1".18 (M-P) 1934-1989 e 0.2708880 Incl. 34.02861

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1305) Pongola Obs. 170 M 148.76109 Peri. 153.22101
H 10.65 G 0.15 Opp. 30 n 0.18831718 Node 63.21394
rms res. 1".90 (M-P) 1927-1990 e 0.0721506 Incl. 2.32366

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1311) Knopfia Obs. 58 M 290.00701 Peri. 241.66822
H 12.2 G 0.15 Opp. 11 n 0.26077858 Node 245.65362
rms res. 1".72 (M-P) 1929-1989 e 0.0451436 Incl. 2.81915

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1313) Berna Obs. 42 M 171.36748 Peri. 98.99037
H 11.8 G 0.15 Opp. 12 n 0.22765984 Node 298.78512
rms res. 3".22 (M-P) 1933-1991 e 0.2068883 Incl. 12.54564

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1335) Demoulina Obs. 38 M 72.79232 Peri. 198.05774
H 13.8 G 0.15 Opp. 9 n 0.29395865 Node 172.79567
rms res. 25".14 (M-P) 1934-1989 e 0.1540757 Incl. 2.54146

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1399) Teneriffa Obs. 40 M 294.41309 Peri. 223.31338
H 13.8 G 0.15 Opp. 9 n 0.29878514 Node 161.87512
rms res. 1".72 (M-P) 1936-1991 e 0.1662860 Incl. 6.50806

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1405) Sibelius Obs. 74 M 148.89615 Peri. 95.44982
H 12.3 G 0.15 Opp. 9 n 0.29168735 Node 312.37861
rms res. 1".14 (M-P) 1936-1990 e 0.1463394 Incl. 7.03286

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1414) Jerome Obs. 36 M 321.27565 Peri. 2.28439
H 12.4 G 0.15 Opp. 7 n 0.21189449 Node 144.09083
rms res. 0".93 (M-P) 1937-1990 e 0.1578962 Incl. 8.83045

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1418) Fayeta Obs. 77 M 190.57686 Peri. 323.66537
H 12.09 G 0.15 Opp. 18 n 0.29356673 Node 355.37212
rms res. 1".43 (M-P) 1903-1987 e 0.2034339 Incl. 7.19715

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1426) Riviera Obs. 89 M 83.56392 Peri. 274.98350
H 10.8 G 0.15 Opp. 29 n 0.23792419 Node 335.34990
rms res. 1".75 (M-P) 1937-1988 e 0.1642189 Incl. 9.04921

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1427) Ruvuma Obs. 41 M 337.58395 Peri. 241.75752
H 10.7 G 0.15 Opp. 17 n 0.21622857 Node 78.83658
rms res. 1".92 (M-P) 1937-1986 e 0.2127090 Incl. 9.34420

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1439) Vogtia Obs. 53 M 215.39840 Peri. 106.90723
H 10.45 G 0.15 Opp. 12 n 0.12318067 Node 36.04733
rms res. 1".12 (M-P) 1937-1984 e 0.1149537 Incl. 4.20095

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1440) Rostia Obs. 57 M 269.43785 Peri. 351.57011
H 11.8 G 0.15 Opp. 9 n 0.17694467 Node 47.09404
rms res. 1".66 (M-P) 1937-1987 e 0.2030663 Incl. 2.29015

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1498) Lahti Obs. 29 M 300.34045 Peri. 97.58558
H 11.7 G 0.15 Opp. 8 n 0.18130084 Node 265.51232
rms res. 2".00 (M-P) 1938-1987 e 0.2451902 Incl. 12.66368

Epoch 1992 June 27.0 TT = JDT 2448800.5 Goffin
(1627) Ivar Obs. 294 M 264.25713 Peri. 167.42668
H 13.2 G 0.60 Opp. 14 n 0.38736655 Node 133.29340
rms res. 0".91 (M-N) 1929-1990 e 0.3965268 Incl. 8.44018

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(2210) Lois Obs. 52 M 200.56332 Peri. 215.18159
H 14.3 G 0.15 Opp. 6 n 0.26413813 Node 123.65379
rms res. 0".81 (M-C) 1960-1986 e 0.2263366 Incl. 2.92834

Epoch 1992 June 27.0 TT = JDT 2448800.5 Goffin
(2368) Beltrovata Obs. 74 M 310.78407 Peri. 42.22399
H 15.21 G 0.15 Opp. 4 n 0.32283785 Node 287.83547
rms res. 0".88 (M-N) 1977-1986 e 0.4138691 Incl. 5.25021

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(2529) Rockwell Kent Obs. 23 M 263.12445 Peri. 115.44755
H 12.7 G 0.15 Opp. 7 n 0.24443985 Node 207.55334
rms res. 1".05 (M-C) 1953-1988 e 0.0958646 Incl. 4.39384

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(2572) Annschnell Obs. 33 M 77.83682 Peri. 50.58897
H 13.4 G 0.15 Opp. 10 n 0.26641336 Node 200.69940
rms res. 1".14 (M-C) 1950-1991 e 0.1449198 Incl. 5.14095

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(2596) Vainu Bappu Obs. 14 M 58.10735 Peri. 246.01515
H 12.8 G 0.15 Opp. 4 n 0.18670911 Node 139.42449
rms res. 0".58 (M-C) 1979-1988 e 0.0649821 Incl. 10.24215

Epoch 1992 June 27.0 TT = JDT 2448800.5 Goffin
(2629) 1980 RB1 Obs. 30 M 111.16816 Peri. 280.53276
H 14.5 G 0.15 Opp. 4 n 0.42931290 Node 343.61925
rms res. 1".11 (M-N) 1959-1989 e 0.2291197 Incl. 23.44304

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(3025) Higson Obs. 23 M 202.63886 Peri. 121.41973
H 11.6 G 0.15 Opp. 4 n 0.17230855 Node 293.79244
rms res. 0".68 (M-C) 1982-1988 e 0.0866644 Incl. 20.98936

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(3073) Kursk Obs. 28 M 244.99786 Peri. 231.70286
H 13.5 G 0.15 Opp. 5 n 0.29345431 Node 204.37693
rms res. 1".19 (M-C) 1969-1991 e 0.1363491 Incl. 5.03225

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(3119) Dobronravin Obs. 39 M 265.51149 Peri. 325.11292
H 12.2 G 0.15 Opp. 5 n 0.18417349 Node 111.06679
rms res. 1".03 (M-C) 1973-1989 e 0.2049075 Incl. 4.73540

Epoch 1992 June 27.0 TT = JDT 2448800.5 Goffin
(3200) Phaethon Obs. 90 M 55.58799 Peri. 321.78432
H 14.6 G 0.15 Opp. 5 n 0.68756661 Node 265.62175
rms res. 0".91 (M-N) 1983-1991 e 0.8900838 Incl. 22.08750

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(3245) Jensch Obs. 22 M 95.79794 Peri. 85.20217
H 13.4 G 0.15 Opp. 3 n 0.17794691 Node 349.33377
rms res. 0".79 (M-C) 1973-1984 e 0.1581942 Incl. 0.33461

Epoch 1992 June 27.0 TT = JDT 2448800.5				Williams	
(3289) Mitani	Obs. 14	M	72.10816	Peri.	351.72009
H 14.2 G 0.15	Opp. 3	n	0.27761754	Node	46.51654
rms res. 1".17 (M-C)	1934-1985	e	0.2069670	Incl.	1.76280
Epoch 1992 June 27.0 TT = JDT 2448800.5				Williams	
(3294) Carlvesely	Obs. 25	M	259.56201	Peri.	156.79327
H 12.7 G 0.15	Opp. 6	n	0.22246215	Node	7.43062
rms res. 0".88 (M-C)	1958-1991	e	0.0692345	Incl.	6.97763
Epoch 1992 June 27.0 TT = JDT 2448800.5				Williams	
(3307) Athabasca	Obs. 27	M	240.28096	Peri.	145.56491
H 13.8 G 0.15	Opp. 5	n	0.29028014	Node	263.46764
rms res. 0".78 (M-C)	1977-1989	e	0.0961677	Incl.	6.37050
Epoch 1992 June 27.0 TT = JDT 2448800.5				Williams	
(3353) Jarvis	Obs. 23	M	193.08742	Peri.	34.44457
H 13.3 G 0.15	Opp. 5	n	0.38764665	Node	245.75431
rms res. 0".70 (M-C)	1980-1988	e	0.0847237	Incl.	21.80400
Epoch 1992 June 27.0 TT = JDT 2448800.5				Goffin	
(3361) Orpheus	Obs. 62	M	282.27233	Peri.	301.55275
H 19.03 G 0.15	Opp. 4	n	0.74117273	Node	189.86653
rms res. 0".86 (M-N)	1982-1990	e	0.3226026	Incl.	2.68164
Epoch 1992 June 27.0 TT = JDT 2448800.5				Goffin	
(3362) Khufu	Obs. 53	M	64.15178	Peri.	54.85498
H 18.1 G 0.15	Opp. 4	n	1.00139319	Node	152.67845
rms res. 0".88 (M-N)	1984-1987	e	0.4686100	Incl.	9.91430
Epoch 1992 June 27.0 TT = JDT 2448800.5				Williams	
(3411) Debetencourt	Obs. 31	M	322.13540	Peri.	49.91096
H 13.5 G 0.15	Opp. 5	n	0.29345498	Node	69.52382
rms res. 0".68 (M-C)	1971-1991	e	0.1177299	Incl.	5.38928
Epoch 1992 June 27.0 TT = JDT 2448800.5				Williams	
(3473) Sapporo	Obs. 18	M	277.34224	Peri.	57.50883
H 13.7 G 0.15	Opp. 4	n	0.27131493	Node	129.58653
rms res. 0".79 (M-C)	1924-1987	e	0.1558754	Incl.	0.96057
Epoch 1992 June 27.0 TT = JDT 2448800.5				Williams	
(3476) 1978 UF2	Obs. 17	M	127.17991	Peri.	27.85500
H 11.9 G 0.15	Opp. 5	n	0.17517779	Node	43.98884
rms res. 0".98 (M-C)	1976-1989	e	0.1923939	Incl.	21.61137
Epoch 1992 June 27.0 TT = JDT 2448800.5				Williams	
(3489) Lottie	Obs. 25	M	236.16743	Peri.	45.56683
H 13.3 G 0.15	Opp. 4	n	0.26375668	Node	18.45456
rms res. 0".90 (M-C)	1974-1989	e	0.0967209	Incl.	6.33295
Epoch 1992 June 27.0 TT = JDT 2448800.5				Williams	
(3532) Tracie	Obs. 22	M	36.73934	Peri.	341.95236
H 12.0 G 0.15	Opp. 5	n	0.19803191	Node	56.72466
rms res. 0".71 (M-C)	1981-1989	e	0.0545989	Incl.	10.34777
Epoch 1992 June 27.0 TT = JDT 2448800.5				Williams	
(3629) 1982 WK	Obs. 18	M	224.49987	Peri.	172.00243
H 12.6 G 0.15	Opp. 4	n	0.26468254	Node	235.43489
rms res. 0".75 (M-C)	1974-1989	e	0.1037941	Incl.	5.64414

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(3712) 1984 YC Obs. 24 M 229.21477 Peri. 200.04169
H 11.8 G 0.15 Opp. 4 n 0.21764420 Node 288.21183
rms res. 0".76 (M-C) 1984-1991 e 0.2532104 Incl. 31.70908

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(3753) 1986 TO Obs. 53 M 158.85696 Peri. 43.61695
H 14.4 G 0.15 Opp. 8 n 0.98896174 Node 126.41099
rms res. 0".75 (M-C) 1973-1990 e 0.5148423 Incl. 19.81191

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(3913) 1986 XO2 Obs. 62 M 138.93932 Peri. 43.18818
H 12.0 G 0.15 Opp. 3 n 0.27215305 Node 156.05936
rms res. 0".50 (M-C) 1986-1991 e 0.2239498 Incl. 23.92453

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell
(4005) 1972 TC2 Obs. 17 M 89.44015 Peri. 265.15677
H 12.5 G 0.15 Opp. 6 n 0.25689389 Node 74.49338
rms res. 0".77 (M-C) 1968-1991 e 0.1505874 Incl. 6.83084

Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden
(4189) 1979 SV9 Obs. 14 M 276.56562 Peri. 126.81074
H 13.4 G 0.15 Opp. 5 n 0.28220540 Node 194.38981
rms res. 1".04 (M-C) 1965-1992 e 0.1352345 Incl. 5.34764

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(4658) 1979 SO11 Obs. 32 M 118.52139 Peri. 204.13898
H 12.6 G 0.15 Opp. 5 n 0.17619775 Node 153.17403
rms res. 0".90 (M-C) 1968-1990 e 0.2009449 Incl. 1.12819

(5152)* 1931 UD = 1986 PR5 = 1986 PR6
Discovered 1931 Oct. 18 by K. Reinmuth at Heidelberg.
Id. T. Kobayashi (MPC 15873)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi
M 106.78259 (2000.0) P Q
n 0.23169730 Peri. 37.81487 +0.95070981 -0.29972107
a 2.6253592 Node 339.19900 +0.20052876 +0.78980032
e 0.1783115 Incl. 12.93400 +0.23651443 +0.53514740
P 4.25 H 12.3 G 0.15
Residuals in seconds of arc

311018 024	1.4+	1.7+	900718 474	0.4-	0.8-	920111 367	0.9+	1.0+
311020 024	1.0-	1.2-	900718 474	0.4-	0.3-	920111 367	(3.0+	1.5-)
311022 024	0.9-	0.4+	911213 366	1.2+	1.3-	920111 367	0.7+	0.1-
311108 024	(4.6+	2.4+)	911230 366	2.3-	1.5+	920203 801	0.7-	0.6-
311113 024	(4.4+	0.9-)	911230 366	(2.9-	0.6-)	920203 801	0.0	0.8-
860809 095	(0.6-	5.2-)	920101 801	0.2-	0.1+	920206 801	0.3+	0.3-
860812 095	0.9+	1.0-	920101 801	0.2-	0.0	920206 801	0.0	0.5-
900503 413	0.1+	1.2+	920106 801	0.0	0.4-			
900504 413	1.4+	0.1-	920106 801	0.1-	0.4-			

(5153)* 1940 GO = 1957 GC = 1990 VL3
Discovered 1940 Apr. 9 by Y. Vaisala at Turku.
Id. B. G. Marsden (MPC 17423)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden
M 84.25628 (2000.0) P Q
n 0.22796747 Peri. 38.92538 -0.63088182 -0.74350020
a 2.6539178 Node 91.35557 +0.64482222 -0.66142148
e 0.1766131 Incl. 12.81847 +0.43150020 -0.09863610
P 4.32 H 11.5 G 0.15

Residuals in seconds of arc

400409	062	0.0	0.3+	901115	809	1.6-	1.7-	901117	885	1.2-	0.8+
400410	062	0.5+	0.3+	901115	885	0.2+	0.1-	901207	877	0.0	0.4+
400413	062	(3.7+	1.7-)	901115	402	1.4+	0.5+	901207	877	0.9+	0.0
400413	062	0.0	0.8-	901115	885	0.3-	0.6-	901210	885	(2.5+	2.7+)
400501	062	0.8-	1.5-	901115	402	1.1+	0.8+	901210	885	1.9+	1.6+
570401	062	0.1-	1.6+	901116	402	0.7+	1.2+	901210	877	0.4-	0.6+
570401	062	0.7+	0.7+	901116	402	0.1-	1.6+	901210	877	0.1-	0.8+
570401	062	1.0+	0.2+	901117	809	2.0-	1.7-	920101	801	1.1-	0.8-
570401	062	1.3-	0.5-	901117	809	2.1-	1.9-	920101	801	0.9+	0.9-
901115	809	0.0	1.9-	901117	809	(2.5-	1.9-)	920206	801	0.7-	0.7-
901115	809	0.1+	1.8-	901117	885	2.0+	0.3-	920206	801	0.4-	0.3-

(5154)* 1969 TL1 = 1931 TQ4 = 1978 GP3

Discovered 1969 Oct. 8 by L. I. Chernykh at the Crimean Astrophysical Observatory.

Id. T. Kobayashi (MPC 11743), L. D. Schmadel (ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	152.03265	(2000.0)	P	Q	
n	0.18283682	Peri.	223.17050	+0.43727441	+0.89804223
a	3.0743994	Node	72.81238	-0.81081732	+0.41680075
e	0.1140412	Incl.	2.88450	-0.38905830	+0.14070288
P	5.39	H	11.9	G	0.15

Residuals in seconds of arc

311012	024	(9.4+	6.7+)	900816	801	0.1-	0.1+	901018	801	1.3+	0.1-
311016	024	(2.3+	4.9+)	900828	095	1.9-	1.3+	911205	801	1.0-	0.7+
691008	095	(4.0+	0.6-)	900828	095	(4.0-	2.5-)	911205	801	0.0	0.2+
691013	095	0.7+	1.6-	900917	675	0.5-	0.1+	911206	675	1.4-	0.0
691016	095	0.7+	1.8-	900917	675	0.4+	0.5-	911206	675	(1.6+	2.5+)
691104	095	1.3-	0.7+	900920	675	0.1+	0.9-	920102	801	0.4+	0.0
691111	095	0.8+	0.2+	900920	675	0.1+	0.7-	920102	801	0.4+	0.2+
770211	675	0.4+	0.3-	901017	801	0.3+	0.5+	920108	801	0.4+	0.1+
770212	675	0.4+	0.6-	901017	801	0.4+	0.7+	920108	801	0.1+	0.5+
780411	095	0.8-	0.4-	901017	801	0.7+	0.5+				

(5155)* 1972 HR = 1962 QA = 1968 UL2 = 1988 GW

Discovered 1972 Apr. 18 by T. M. Smirnova at the Crimean Astrophysical Observatory.

Id. T. Kobayashi (MPC 13690)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	191.14092	(2000.0)	P	Q	
n	0.17958463	Peri.	230.40153	+0.37180671	+0.92349753
a	3.1114055	Node	61.66722	-0.81545365	+0.37350931
e	0.1453844	Incl.	6.15692	-0.44361595	+0.08742484
P	5.49	H	11.8	G	0.15

Residuals in seconds of arc

620827	760	1.1-	1.5+	720509	095	0.4-	0.6+	900924	095	1.2-	0.9-
631112	760	0.9+	1.2-	720512	095	1.4-	1.5-	900924	095	0.3+	1.9-
631112	760	0.9-	1.4+	880409	054	0.4+	1.1+	901021	801	0.9+	0.2+
681023	095	(95.2-	16.4-)	880409	054	0.3+	0.1+	901021	801	0.9+	0.2+
720418	095	1.7+	1.6-	880415	054	0.7-	0.7+	901120	801	0.2+	0.7+

(5156)* 1972 KL = 1968 HO1 = 1990 ER5

Discovered 1972 May 18 by T. M. Smirnova at the Crimean Astrophysical Observatory.

Id. G. V. Williams (MPC 17196)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 123.62379 (2000.0) P Q
n 0.26543600 Peri. 148.05628 +0.19321455 +0.97858139
a 2.3978914 Node 132.97737 -0.91939387 +0.20585956
e 0.1890148 Incl. 5.57211 -0.34261209 -0.00055414
P 3.71 H 13.5 G 0.15
Residuals in seconds of arc

680422	095	0.0	0.3+	900303	809	0.3+	0.5-	910916	675	1.1-	2.0-
720518	095	2.6-	1.8+	900303	809	0.6+	0.5-	910916	675	1.0+	0.1+
720609	095	1.9+	0.5+	910807	675	0.6+	0.9-	911005	801	0.4+	0.4+
720613	095	0.7+	2.4-	910807	675	0.2+	1.0-	911005	801	0.1-	0.2+
900302	809	0.8-	0.0	910808	675	0.5-	0.7+	911008	801	0.3+	0.5+
900302	809	0.4-	0.2-	910808	675	0.4-	0.9+	911008	801	0.8-	0.2+
900302	809	0.3-	0.3-	910912	675	0.4+	0.2-				
900303	809	0.1+	0.5-	910912	675	0.2+	0.1-				

(5157)* 1973 UB5 = 1962 WG2
Discovered 1973 Oct. 27 by F. Borngen at Tautenburg.
Id. T. Kobayashi (MPC 15698)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 112.62360 (2000.0) P Q
n 0.17179990 Peri. 48.11612 +0.99966154 +0.02586012
a 3.2047005 Node 310.40184 -0.02483593 +0.91618291
e 0.1576757 Incl. 0.21348 -0.00774424 +0.39992515
P 5.74 H 11.7 G 0.15
Residuals in seconds of arc

621130	760	1.4-	0.7+	900914	675	(0.8-	3.2-)	901011	095	2.1-	0.2-
621130	760	0.8-	1.1+	900915	675	0.6+	0.2-	901014	095	0.3+	2.4+
621203	760	0.3-	0.1+	900915	095	1.7-	1.1+	901014	095	1.4-	0.4+
621203	760	2.2+	0.6-	900915	095	0.5-	1.5-	901015	095	(4.3-	0.7-)
731027	033	0.7+	0.2+	900916	400	0.1+	1.1+	901015	095	(3.7-	1.8+)
731027	033	0.3-	0.5-	900916	400	2.1+	1.8+	911015	033	0.2-	0.7-
731028	033	0.5+	0.4+	900916	400	(3.0+	0.4+)	911210	033	1.0-	0.1-
731031	033	0.2-	0.3+	900917	675	0.9+	0.9-	911211	033	0.2+	0.2-
731101	033	0.8-	0.2+	900917	675	0.9+	0.3-	911212	033	0.0	0.7-
900826	095	(3.1+	1.4-)	900918	675	0.7+	2.0-	911228	033	0.1+	0.3-
900827	095	1.3+	1.2-	900918	675	1.0+	1.1-	920102	033	0.2+	0.0
900830	095	1.9-	0.7-	900923	095	0.2+	0.8+	920103	033	0.6-	0.5-
900831	095	(1.1-	2.9+)	900926	095	0.0	0.7+	920107	033	1.0+	0.2+
900914	675	1.4-	2.0-	900926	095	0.9+	0.9+				

(5158)* 1976 YY = 1953 TX1 = 1972 TX1 = 1983 PT = 1987 SJ6
Discovered 1976 Dec. 16 by L. I. Chernykh at the Crimean Astrophysical Observatory.
Id. T. Kobayashi (MPC 13597)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi
M 87.02967 (2000.0) P Q
n 0.26114598 Peri. 339.62790 +0.96998101 -0.24119724
a 2.4240811 Node 34.37644 +0.23002544 +0.86867131
e 0.1769491 Incl. 3.14687 +0.07889949 +0.43270549
P 3.77 H 14.1 G 0.15
Residuals in seconds of arc

531009	760	0.4+	1.9-	830813	688	1.1+	1.3+	870920	071	(3.3-	0.3-)
531009	760	0.4+	0.9-	830813	688	1.0-	0.3-	870921	071	(3.6-	0.1-)
721006	095	(3.7+	1.4+)	870831	095	0.8-	0.6-	870921	046	0.4-	1.0-
721007	095	1.6+	0.2+	870904	095	1.8+	1.9-	870921	046	0.5+	0.4-
761216	095	(5.3-	0.9+)	870919	071	(5.0-	0.4-)	870921	071	(1.7-	3.2+)
761218	095	0.2-	1.0+	870919	071	(3.1-	0.9-)	870922	071	0.9-	2.0+
761220	095	0.6-	0.8-	870919	071	2.4-	0.8+	870924	095	0.3+	2.2+

870927 095 (3.6+ 1.2+) 911105 403 0.6+ 0.9+ 911205 801 0.9+ 0.1+
911104 403 (2.7+ 1.3+) 911105 403 1.0- 0.4- 920108 801 0.1- 0.1-
911104 403 0.9- 0.2+ 911205 801 1.0+ 0.1- 920108 801 0.2- 0.0

(5159)* 1977 RG

Discovered 1977 Sept. 9 at the Agassiz Station of the Harvard College Observatory.

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	142.98095	(2000.0)	P	Q
n	0.21170066	Peri. 83.84072	-0.31713551	+0.94774326
a	2.7881828	Node 167.50073	-0.92120950	-0.29913408
e	0.1124894	Incl. 9.24038	-0.22538442	-0.11091220
P	4.66	H 13.0	G 0.15	

Residuals in seconds of arc

710324 675 (2.6- 1.6-) 770911 801 (2.7+ 1.3+) 850425 801 0.1- 0.4-
710325 675 0.6+ 1.7- 770912 801 1.6+ 0.5- 860806 801 0.2- 1.4+
710325 675 0.6- 0.1- 770915 801 (2.4+ 1.5-) 910808 675 0.4+ 1.0-
710326 675 0.6- 0.3- 771007 801 0.7- 0.1+ 910808 675 (2.7- 1.6-)
770908 801 0.9+ 0.7- 771016 801 0.8+ 0.2+ 910808 675 0.9+ 0.0
770908 675 0.1- 0.1+ 771211 801 0.7- 0.1- 910808 675 1.1- 0.0
770909 801 1.5- 0.0 850322 688 (2.4- 3.4+) 910911 675 0.2- 0.5-
770909 675 0.2- 0.1- 850322 688 (4.5- 1.1-) 910917 675 0.5+ 1.1-

(5160)* 1979 YO = 1988 BB3

Discovered 1979 Dec. 23 by H. Debehogne and E. R. Netto at the European Southern Observatory.

Id. S. Nakano (MPC 12941)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	295.04516	(2000.0)	P	Q
n	0.26479179	Peri. 155.13371	+0.25289735	+0.96106279
a	2.4017790	Node 129.31478	-0.90999468	+0.27537552
e	0.0707104	Incl. 8.27574	-0.32856142	-0.02294859
P	3.72	H 12.8	G 0.15	

Residuals in seconds of arc

791223 809 1.4- 0.6+ 880119 033 0.3+ 0.3- 901220 801 0.1- 0.3+
791225 809 1.1+ 0.1+ 880120 033 0.4+ 0.8- 901220 801 0.3- 0.6+
791225 809 1.0+ 0.9- 880120 033 0.5- 0.2+ 901220 801 0.0 0.6+
791226 809 0.3- 0.0 880121 033 0.7- 0.3- 920206 801 0.4+ 0.1-
791226 809 0.8+ 0.2+ 880122 033 0.3- 0.3+ 920206 801 0.0 0.3-
791226 809 0.1+ 0.0 890710 801 0.3+ 0.1- 920301 801 0.2+ 0.2+
791228 809 1.4- 0.6+ 890731 801 0.3- 0.7- 920301 801 0.1- 0.1+
791228 809 0.1+ 0.0 901120 801 0.5+ 0.8- 920305 801 0.1- 0.1+
791229 809 0.2+ 0.6- 901120 801 0.1- 0.9- 920305 801 0.1- 0.1+

(5161)* 1980 TX3 = 1951 RM = 1987 BL2

Discovered 1980 Oct. 9 by C. S. Shoemaker at Palomar.

Id. T. Kobayashi (MPC 14016, MPC 18282)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	170.81995	(2000.0)	P	Q
n	0.20484982	Peri. 154.03467	+0.99822324	+0.05872549
a	2.8500052	Node 202.60549	-0.05821140	+0.92502431
e	0.0800664	Incl. 1.50317	-0.01271958	+0.37534163
P	4.81	H 12.1	G 0.15	

Residuals in seconds of arc

510904 024 1.2+ 1.9+ 801007 675 0.9- 1.7- 801015 095 (1.5+ 2.8-)
510905 024 (5.4- 3.3+) 801008 675 0.8- 1.2- 870130 046 1.4+ 0.6+
510906 024 (0.5- 5.7+) 801009 675 0.3- 1.1- 870130 046 1.1+ 1.0+
780315 675 0.0 0.9- 801010 675 1.2- 1.4- 870131 046 (3.8- 0.2+)
780316 675 1.1- 0.4+ 801010 095 0.3- 2.2- 870131 046 0.6- 1.8+

870201	046	0.8-	0.1+	890801	675	0.3+	1.4+	920203	675	0.4-	0.7+
870201	046	2.4-	0.5-	901115	095	(4.5+	4.5+)	920205	801	0.5-	0.0
890701	675	0.0	1.1-	901115	095	0.8+	2.1+	920205	801	0.0	1.8-
890701	675	0.6-	0.5-	901123	095	1.4+	1.2+	920225	675	(0.6+	3.3-)
890703	675	1.4+	0.8-	901123	095	1.5+	0.4+	920225	675	0.4+	1.2-
890703	675	0.1+	0.0	920202	675	0.5-	1.1-	920227	675	0.5-	1.7-
890801	675	0.1+	2.1+	920203	675	1.5+	1.3+				

(5162)* 1982 BW = 1952 JF = 1970 WF = 1978 GS4 = 1988 FG

Discovered 1982 Jan. 18 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Id. T. Kobayashi (MPC 13056)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	37.20386	(2000.0)	P	Q	
n	0.18779473	Peri. 1.09592	+0.34973831	-0.91918509	
a	3.0200476	Node 68.45358	+0.85805295	+0.23670463	
e	0.0598533	Incl. 11.22489	+0.37606947	+0.31475338	
P	5.25	H 11.3	G 0.15		

Residuals in seconds of arc

520503	839	0.0	1.8+	880317	399	0.2-	0.1+		911130	367	0.4+	0.6-
701125	026	1.6+	0.4+	880317	399	1.2-	1.3+		911130	367	1.0+	0.6-
701125	026	0.3+	1.4-	880317	399	0.6-	0.5+		911130	367	0.9+	0.5+
701206	026	0.5-	0.6-	880321	399	1.8+	1.9-	Y	911201	596	0.0	1.6+
780412	095	1.9+	1.1+	880321	399	0.8+	0.6+	Y	911201	596	0.0	0.7+
780505	095	0.3-	0.3+	880321	399	1.5+	0.5-	Y	911204	367	0.3+	0.3-
820118	688	(0.0	4.6-)	880411	808	0.3-	0.3-		911204	367	0.2+	0.2+
820118	688	(0.7+	5.0-)	880411	808	0.7-	1.3-		911204	367	1.0+	0.3+
820120	095	0.2-	0.9-	911108	366	0.9-	1.0+		911227	589	0.7-	0.2+
820131	688	(2.9-	2.8-)	911108	366	0.1-	0.3-		911227	589	0.7-	0.4+
820131	688	(1.0+	3.1-)	911114	901	1.2-	1.5+		911228	589	0.9+	0.8-
880316	399	0.8+	0.6+	911114	901	1.3-	1.0+		911228	589	0.1+	0.1+
880316	399	0.6-	0.4-	911115	366	0.5-	0.7-		911229	589	0.7+	0.3-
880316	399	1.2-	0.8+	911115	366	1.8-	1.3+		911229	589	0.8-	0.2-

(5163)* 1983 TD2 = 1929 WZ = 1979 SO6

Discovered 1983 Oct. 9 by J. Wagner at the Anderson Mesa Station of the Lowell Observatory.

Id. S. Nakano (MPC 13301)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	49.92263	(2000.0)	P	Q	
n	0.25418986	Peri. 238.68927	+0.46363721	-0.88598439	
a	2.4681065	Node 183.71954	+0.85091507	+0.44791729	
e	0.1995415	Incl. 7.52613	+0.24694954	+0.12000735	
P	3.88	H 13.0	G 0.15		

Residuals in seconds of arc

291128	690	0.8+	0.1-	830914	688	0.5+	1.3-		870921	095	(0.5-	4.0+)
291204	690	0.8-	0.5-	831005	688	1.7-	1.2-		911104	894	0.5-	0.8-
790923	095	0.2-	0.9+	831009	688	1.2-	0.5+		911104	894	1.2-	0.9+
830903	095	(3.5+	3.8-)	831009	688	(2.3+	3.3+)		911110	675	1.0+	0.2+
830910	095	(2.0-	4.1-)	831012	688	(3.9+	2.7+)		911110	675	0.6+	0.3-
830912	688	1.2+	0.9-	831012	688	1.4+	0.9+		920207	801	0.1-	0.2+
830913	095	(4.5+	0.8+)	870918	095	0.1+	1.4+		920207	801	0.1-	0.2+

(5164)* 1984 WE1

Discovered 1984 Nov. 20 by C. Pollas at Caussols.

Id. C. S. Shoemaker (1991 obs.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 14.91488	(2000.0)	P	Q	
n 0.14084719	Peri. 65.54170	-0.47387366	-0.83493303	
a 3.6585072	Node 55.68029	+0.63403946	-0.54406325	
e 0.5015634	Incl. 19.80818	+0.61109550	-0.08295791	
P 7.00	H 13.0	G 0.15		

Residuals in seconds of arc

631112 760	0.2+	1.2+	841122 010	(4.5-	3.0+)	911201 675	0.9+	1.0-
631112 760	1.2-	1.2+	841217 095	0.3-	2.6-	911201 675	0.7+	0.2-
841120 010	0.3+	1.0+	841220 095	0.1-	1.8-	911203 675	0.3+	0.4+
841120 010	1.6+	1.3-	841223 095	(9.5-	3.1+)	911203 675	0.4-	0.6-
841121 010	0.3+	1.6+	841227 095	(2.4-	4.4-)	920331 657	1.1+	1.0+
841121 675	0.3+	0.2+	911113 675	0.7-	0.4+	920331 657	0.4+	0.9+
841121 675	1.1-	0.2+	911113 675	1.1-	0.3+	920331 657	0.7-	1.1+

(5165)* 1985 CG = 1980 WU = 1989 CP6

Discovered 1985 Feb. 11 at Brorfelde.

Id. T. Kobayashi (MPC 15066)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M 32.63302	(2000.0)	P	Q	
n 0.26673803	Peri. 351.38211	+0.01331610	-0.99820358	
a 2.3900818	Node 97.84011	+0.92087954	-0.01052094	
e 0.1709422	Incl. 3.38046	+0.38961976	+0.05898238	
P 3.70	H 13.4	G 0.15		

Residuals in seconds of arc

801130 095	0.9-	0.5+	890306 033	0.3-	0.1+	911109 675	0.4+	0.5-
850211 054	0.9-	0.4-	890306 033	0.1-	0.1-	911109 675	0.4+	1.2-
850212 054	(2.6+	0.4-)	911011 801	0.4-	0.0	911113 894	0.9-	0.6-
850213 054	0.5+	0.8+	911011 801	0.1-	0.2+	911113 894	0.6-	0.4-
850218 054	1.1+	0.7+	911103 366	1.4+	1.6-	911207 366	1.0-	1.0+
850220 675	0.0	0.4+	911103 366	1.1+	0.7+	911207 366	1.4-	1.6+
850223 675	1.2+	0.3-	911105 894	0.0	0.2-	911213 366	1.1+	0.1-
870924 095	0.1+	1.2+	911105 894	0.3+	0.4+	911213 366	1.0+	0.1+
870927 095	(1.7+	4.7+)	911106 366	(2.7+	0.6-)	920207 801	0.9-	0.4-
890204 033	0.4-	0.5-	911108 801	0.3-	0.1-	920207 801	0.5-	0.8-
890204 033	1.0-	0.4-	911108 801	0.1-	0.3-			

(5166)* 1985 FU1 = 1974 CM

Discovered 1985 Mar. 22 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Id. C. M. Bardwell (MPC 9767)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 355.15332	(2000.0)	P	Q	
n 0.27527041	Peri. 64.58197	-0.94441261	+0.32453083	
a 2.3404338	Node 134.30490	-0.32182167	-0.87988514	
e 0.1068563	Incl. 4.21343	-0.06719843	-0.34710499	
P 3.58	H 12.8	G 0.15		

Residuals in seconds of arc

740214 095	1.1+	0.4+	860908 809	0.3-	0.2-	901017 675	1.7-	0.5+
740218 095	1.6-	1.2+	860908 809	0.3-	0.1-	901017 675	1.8-	0.5+
850322 688	0.5-	0.7+	860911 809	1.7+	0.2-	920102 801	0.3-	0.2+
850322 688	0.8+	0.4-	860911 809	1.2+	0.2-	920102 801	0.1-	0.2+
850411 675	1.3+	0.4-	860911 809	1.3+	0.1+	920212 303	1.5+	1.9-
850415 675	0.2+	0.0	890709 801	1.4-	0.1-	920213 303	0.2-	1.4-
860907 809	0.9-	0.3+	901012 413	1.3+	0.5-	920301 801	0.3+	0.4+
860907 809	0.6-	0.2+	901012 413	2.2+	0.2+	920301 801	0.4+	0.4+
860907 809	0.3-	0.1+	901015 675	0.4-	0.3-	920307 372	1.2-	0.8-
860908 809	0.6-	0.1-	901015 675	0.2+	0.8-	920307 372	1.9-	0.5+

(5167)* 1985 GU1 = 1976 GH1 = 1976 GW7 = 1982 TS2 = 1982 VY9 = 1986 TF15
Discovered 1985 Apr. 11 by C. S. Shoemaker at Palomar.
Id. T. Kobayashi (MPC 14948), K. Ichikawa (ibid.), S. Nakano (d, ibid.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M 174.88277		(2000.0)	P	Q
n 0.22651163	Peri.	272.29128	+0.25190665	+0.96606143
a 2.6652771	Node	12.74535	-0.75252951	+0.23268534
e 0.2065319	Incl.	15.01865	-0.60847545	+0.11217332
P 4.35	H	12.1	G 0.15	

Residuals in seconds of arc

760401	095	(6.7+	10.5+)	850425	675	1.2-	1.0-	911107	675	1.2-	2.1-
760404	095	(4.3+	9.1+)	861006	095	0.7+	0.8+	911109	675	1.3+	1.2-
821015	095	0.8-	0.5+	861010	095	0.3+	1.1+	911109	675	1.4+	1.0-
821111	095	2.3-	1.3+	861011	095	0.4-	0.1-	911112	675	1.5+	0.8-
850411	675	0.7-	0.2-	900718	474	0.5+	2.2-	911201	675	0.1+	0.2-
850412	675	0.1-	0.4-	900718	474	1.1+	1.8-	911203	675	0.1-	1.5-
850415	675	(5.6-	1.7-)	900916	474	0.3+	0.5-	911203	675	1.1+	1.8-
850423	675	0.8+	1.2-	900916	474	0.2+	0.5-	920101	675	0.4+	0.2+
850424	675	1.0-	1.0-	911107	675	(2.9-	0.6-)	920101	675	1.2-	1.4-

(5168)* 1986 EJ = 1990 MZ
Discovered 1986 Mar. 6 by C. S. Shoemaker at Palomar.
Id. G. V. Williams (MPC 16871)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 268.17892		(2000.0)	P	Q
n 0.27534220	Peri.	201.02970	-0.98943561	+0.03182574
a 2.3400270	Node	339.22080	+0.07841752	-0.70307127
e 0.2050109	Incl.	23.49529	-0.12193382	-0.71040687
P 3.58	H	13.0	G 0.15	

Residuals in seconds of arc

790309	413	0.8-	0.7-	900622	413	0.7-	0.6+	910913	801	0.5+	0.1-
790309	413	0.2+	0.6-	900622	413	0.2+	0.5+	911005	675	(0.3+	3.8-)
860306	675	0.8-	0.2-	900623	413	0.9+	1.3-	911005	675	(0.2-	3.5-)
860306	675	0.1+	0.3-	900629	413	0.4-	0.5+	911006	675	0.2-	1.1-
860306	675	1.0-	0.7-	910909	801	0.3+	0.2-	911009	801	0.6+	0.2+
860404	675	0.1+	0.0	910909	801	0.2+	0.1-	911009	801	0.5+	0.2+
860405	675	0.1-	0.1-	910910	675	0.7-	1.1+	911011	801	0.0	0.3+
871014	413	0.2+	1.1-	910910	675	0.5+	1.5-	911011	801	0.2+	0.2+
871014	413	0.7+	1.3-	910913	801	0.5+	0.2-				

(5169)* 1986 RU2 = 1969 TV2 = 1976 UY4 = 1988 FY2
Discovered 1986 Sept. 6 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.
Id. T. Kobayashi (MPC 15885), H. Kaneda
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M 217.81477		(2000.0)	P	Q
n 0.29014157	Peri.	61.68008	+0.71756757	-0.69635246
a 2.2597622	Node	342.44307	+0.62194696	+0.64955287
e 0.1491248	Incl.	2.61926	+0.31349443	+0.30524470
P 3.40	H	13.7	G 0.15	

Residuals in seconds of arc

691009	095	(2.7-	6.6-)	860906	688	1.2+	1.5-	880317	809	0.5-	0.0
710324	675	0.6+	1.1-	860906	095	(9.3+	3.7+)	880317	809	0.3+	0.0
710325	675	0.3-	0.3+	860912	688	(2.6+	2.9-)	910209	675	0.9+	1.5-
710325	675	0.3-	0.4+	860912	688	(3.7+	0.7-)	910209	675	0.0	1.7-
710326	675	0.0	0.1-	861002	095	1.9+	1.0+	910210	801	0.0	1.0+
761030	095	0.7-	1.6+	861008	095	(3.2-	0.1-)	910210	801	0.1+	1.0+
860906	688	1.8-	2.1-	861010	095	(5.2-	1.4-)	910211	675	0.7-	2.3-

910211 675 0.1- 0.8- 910320 801 0.2- 0.2+ 910321 801 0.4- 0.1-
910217 801 0.1- 0.8+ 910320 801 0.0 0.4+
910217 801 0.3- 0.8+ 910321 801 0.3- 0.5+

(5170)* 1987 EH = 1969 VY1 = 1977 FM1 = 1990 UX
Discovered 1987 Mar. 3 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.
Id. S. Nakano (MPC 17439)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	51.37506	(2000.0)	P	Q
n	0.18718623	Peri. 297.61688	-0.30549738	-0.95168417
a	3.0265890	Node 170.02105	+0.92463381	-0.30430356
e	0.0591385	Incl. 10.34640	+0.22742836	-0.04118949
P	5.27	H 12.2	G 0.15	

Residuals in seconds of arc
691115 095 (0.5- 4.6-) 870301 809 0.1+ 0.2- 870307 809 0.4+ 0.7+
770326 095 0.1- 0.7+ 870301 809 0.2+ 0.0 870310 809 1.2- 0.3+
790920 675 0.4+ 0.1+ 870301 809 0.1+ 0.0 870310 809 1.0- 0.3+
790921 675 0.1- 0.0 870302 809 0.4- 0.2- 870310 809 0.9- 0.5+
870223 809 0.6- 0.5- 870302 809 0.2+ 0.1+ 870311 809 0.9- 0.5+
870223 809 0.2- 0.4- 870302 809 0.6+ 0.3+ 870311 809 0.6- 0.5+
870223 809 0.1- 0.2- 870303 809 0.2+ 0.4- 870311 809 0.6- 0.7+
870224 809 0.0 0.5- 870303 809 0.6+ 0.7- 901019 402 2.2+ 0.6+
870224 809 0.1+ 0.5- 870303 809 0.8+ 0.7- 901019 402 (1.8+ 3.9+)
870224 809 0.2+ 0.5- 870303 688 0.9+ 0.3- 901020 402 0.1+ 1.0+
870225 809 0.7- 0.5- 870303 688 0.4+ 0.9+ 901020 402 (3.5+ 1.1+)
870225 809 0.5- 0.5- 870304 809 0.4+ 0.2- 901021 402 1.0- 0.5-
870225 809 0.3- 0.5- 870304 809 0.6+ 0.2- 901021 402 1.3- 1.1-
870226 809 0.2- 0.1- 870304 809 0.7+ 0.1+ 901024 809 0.1+ 0.5-
870226 809 0.3- 0.2- 870305 809 0.3+ 0.2- 901024 809 0.4+ 0.0
870226 809 0.3- 0.2+ 870305 809 0.3+ 0.1- 901024 809 0.6- 0.3-
870227 809 0.1- 0.4- 870305 809 0.6+ 0.1- 901113 402 0.8- 0.1+
870227 809 0.4- 0.9- 870306 809 0.3+ 0.3+ 901113 402 0.4+ 1.5+
870227 809 0.6- 0.9- 870306 809 0.3+ 0.3+ 920207 801 0.5+ 0.1-
870228 809 0.0 1.0+ 870306 809 0.5+ 0.4+ 920207 801 0.5+ 0.2-
870228 809 0.2+ 1.1+ 870307 809 0.3+ 0.4+ 920301 801 0.1- 0.2-
870228 809 0.2+ 0.7+ 870307 809 0.2+ 0.4+ 920301 801 0.8- 0.5+

(5171)* 1987 SQ3 = 1953 RP = 1953 RP1 = 1989 CH8
Discovered 1987 Sept. 25 by P. Jensen at Brorfelde.
Id. D. W. E. Green (MPC 15249), B. G. Marsden (d, MPC 7055)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Green

M	81.84720	(2000.0)	P	Q
n	0.26114464	Peri. 44.35559	+0.98965930	-0.12197359
a	2.4240894	Node 322.45678	+0.07046833	+0.87176995
e	0.1319450	Incl. 7.11517	+0.12493471	+0.47448878
P	3.77	H 12.8	G 0.15	

Residuals in seconds of arc
530905 024 1.2- 0.0 870929 054 0.2- 0.9- 890210 809 0.1- 0.5-
530909 760 0.6+ 2.0- 870930 054 0.1- 0.4+ 890210 809 0.1+ 0.4-
530909 760 1.2+ 0.8+ 870930 054 0.5+ 0.9- 890211 809 0.9- 0.4-
870827 095 1.4+ 2.6- 871001 054 0.4- 0.4+ 890211 809 1.0- 0.3-
870902 095 (3.0+ 0.7-) 890208 809 0.8- 0.6- 890211 809 0.8- 0.3-
870916 095 1.6+ 1.7- 890208 809 0.7- 0.5- 890213 809 0.4- 0.4-
870917 095 1.9- 0.3- 890208 809 0.6- 0.7- 890213 809 0.4- 0.4-
870923 095 (3.5- 2.0+) 890209 809 0.2- 0.1- 890213 809 0.4- 0.4-
870925 054 0.7+ 0.3+ 890209 809 0.0 0.0 890303 809 1.4+ 0.1-
870925 054 0.5+ 0.4- 890209 809 0.1+ 0.1- 890303 809 1.4+ 0.2+
870929 054 0.4+ 1.3+ 890210 809 0.3- 0.4- 890303 809 1.3+ 0.4+

910930 399 0.9- 1.0+ 911007 801 0.1- 0.7+ 911103 801 0.9- 0.7+
910930 399 0.4+ 0.5+ 911007 293 (0.7+ 5.2-) 911103 801 0.9- 0.8+
911002 596 0.2- 0.4+ 911007 293 1.6+ 2.3- 911106 801 0.4- 0.3+
911002 596 0.3- 0.4- 911011 801 0.2+ 0.3+ 911106 801 0.3- 0.3+
911007 801 0.1- 0.6+ 911011 801 0.4+ 0.0

(5172)* 1987 UX1 = 1980 TZ14
Discovered 1987 Oct. 28 by S. Ueda and H. Kaneda at Kushiro.
Id. T. Kobayashi (MPC 12688)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 130.44621		(2000.0)	P	Q
n 0.27994492	Peri.	123.19651	+0.94697738	-0.31098304
a 2.3143071	Node	255.03365	+0.25988625	+0.88918507
e 0.1686980	Incl.	4.79573	+0.18892587	+0.33561804
P 3.52	H	13.3	G 0.15	

Residuals in seconds of arc
801015 095 0.5- 2.8+ 871117 399 1.5+ 0.3- 920107 801 0.4+ 0.4+
801017 095 0.3- 1.8+ 871122 399 0.1- 0.6- 920124 399 1.4- 0.2+
871027 095 (0.7- 3.9+) 871122 399 0.5+ 0.9+ 920124 399 1.0- 0.5+
871028 399 0.4- 1.2- Y 871128 399 1.2+ 0.3+ 920128 399 1.4- 0.7+
871028 399 0.6- 1.2- Y 871128 399 1.0- 0.9- 920128 399 1.3+ 1.9-
871028 399 1.3- 0.7- Y 900626 801 0.2- 1.0- 920206 801 0.1+ 0.1-
871114 399 1.2+ 0.8+ 900626 801 0.4+ 0.5+ 920206 801 0.6- 0.4-
871114 399 0.4- 0.1- 920102 801 0.8+ 0.3+ 920207 801 0.4+ 0.3-
871114 399 0.2- 0.8- 920102 801 0.3+ 0.5+ 920207 801 0.5+ 0.4-
871117 399 1.2+ 0.8- 920107 801 0.5+ 0.2+

(5173)* 1988 EM1 = 1975 EU5 = 1986 VY1
Discovered 1988 Mar. 13 by P. Jensen at Brorfelde.
Id. H. Kaneda (MPC 15889)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 22.06247		(2000.0)	P	Q
n 0.22783537	Peri.	328.90978	-0.82260812	-0.56846183
a 2.6549435	Node	176.36769	+0.55456014	-0.80709795
e 0.1986097	Incl.	11.77092	+0.12561420	-0.15951190
P 4.33	H	12.8	G 0.15	

Residuals in seconds of arc
750315 095(12.6- 7.8+) 880409 054 1.3- 0.9- 900925 809 (1.3+ 3.2-)
861103 010 0.8- 0.8- 880414 054 0.1- 0.0 900925 809 (1.7+ 3.5-)
861103 010 0.2+ 0.6- 880415 054 0.6+ 0.4- 911205 801 1.0- 1.5+
861103 010 1.7+ 0.1- 890802 675 1.4+ 2.0- 911205 801 1.2+ 0.5+
880313 054 0.7- 0.2- 890802 675 (0.3+ 3.2-) 920101 801 0.6- 0.9-
880314 054 0.1+ 0.1- 900915 675 0.1- 0.1+ 920101 801 0.2+ 0.6-
880318 054 0.6+ 0.6- 900917 675 0.9- 1.1- 920107 801 0.2+ 0.6-
880318 054 0.4- 0.0 900917 675 0.5- 0.4- 920107 801 0.1+ 1.0-
880409 054 0.3- 0.2+ 900925 809 (1.3+ 3.4-) 920207 801 0.3+ 0.2+

(5174)* 1988 HF = 1980 JF = 1990 UZ3
Discovered 1988 Apr. 16 by M. Yanai and K. Watanabe at Kitami.
Id. T. Kobayashi (MPC 13451), S. Nakano (ibid.), H. Kaneda (MPC 18113)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 45.28820		(2000.0)	P	Q
n 0.24054614	Peri.	350.05289	-0.92495754	-0.37887978
a 2.5605728	Node	167.55426	+0.35759056	-0.89432089
e 0.1350483	Incl.	8.01797	+0.12877318	-0.23799213
P 4.10	H	12.6	G 0.15	

Residuals in seconds of arc

800511	046	0.8-	0.8-		880514	400	(3.6+ | 0.3+)	920102	801	0.5-	0.5-
800511	046	1.2-	0.1-		880514	400	0.1+	1.0+	920102	801	1.1-	0.6-
800512	046	0.4+	2.4-		880514	400	0.2+	0.2+	920107	801	0.8-	0.1-
800512	046	0.0	1.9-		901016	809	0.9-	1.7-	920107	801	1.0-	0.2-
800513	046	1.7-	2.2-		901016	809	0.2-	1.1-	920305	801	1.7-	0.4+
800513	046	(1.8+ | 4.4-)		901016	809	1.6-	1.2-	920305	801	1.7-	0.3+
880416	400	(2.4+	5.9-)		901020	809	(1.3+	3.5-)	920323	400	(0.7-	3.5+)
880416	400	(2.7- | 4.4-)		901020	809	1.3+	1.5-	920323	400	0.2+	1.5-
880416	400	(1.9+	5.3-)		901020	809	(0.6+	3.1-)	920324	400	(3.5-	0.6+)
880509	400	2.4+	0.7+		901024	809	2.5+	1.2-	920324	400	1.4+	0.6+
880509	400	0.3+	1.2-		901024	809	1.0+	1.4-				
880509	400	2.1+	1.1-		901024	809	0.0	0.8-				

(5175)* 1988 VS4 = 1990 KH

Discovered 1988 Nov. 4 by C. S. Shoemaker at Palomar.

Id. C. M. Bardwell (MPC 16582)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell

M	323.69836	(2000.0)	P	Q
n	0.35719816	Peri.	313.24447	-0.96494369	+0.11405162
a	1.9672667	Node	234.68890	-0.05926024	-0.97206598
e	0.0389337	Incl.	16.83840	-0.25567930	-0.20513401
P	2.76	H	13.8	G	0.15

Residuals in seconds of arc

881007	675	0.3+	0.2-		900625	675	0.3+	0.4+	911206	675	0.7+	1.1-
881008	675	0.2+	0.6+		900625	675	0.5+	0.6+	920101	675	1.1-	0.9-
881104	675	0.2+	2.6-		900627	675	0.1-	0.7-	920101	675	0.7-	0.2-
881109	675	0.3-	0.1-		900627	675	0.0	0.0	920102	801	0.2-	0.2-
900520	675	0.0	0.9-		911103	801	0.2+	0.6-	920102	801	0.2-	0.0
900520	675	0.3-	2.6-		911103	801	0.1+	0.4-	920109	801	0.0	0.1+
900523	675	0.2-	1.2-		911106	801	0.2+	0.6-	920109	801	0.0	0.2-
900523	675	0.3+	1.4-		911106	801	0.2+	0.8-				

(5176)* 1989 AU = 1935 YH = 1948 VS = 1948 WS = 1952 OH1 = 1961 TK1

Discovered 1989 Jan. 4 by S. Ueda and H. Kaneda at Kushiro.

Id. T. Kobayashi (MPC 14357)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	353.54008	(2000.0)	P	Q
n	0.22384866	Peri.	268.36659	+0.98982054	-0.04847150
a	2.6863734	Node	94.39696	+0.09696277	+0.91791861
e	0.3100206	Incl.	7.71280	-0.10418025	+0.39379683
P	4.40	H	11.5	G	0.15

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

351226	078	0.1-	0.8+		890106	399	1.0-	0.1-	910511	399	0.0	1.3+
481107	020	(0.08+ | 0.04+)X		890106	399	0.5+	0.0	910511	399	0.4+	0.2-
481127	012	(9.4- | 10.3-)		890113	399	0.4-	2.0+	910511	399	0.2+	1.1-
520724	078	(1.8- | 3.3-)Y		890113	399	1.7-	0.5+	910512	801	0.4+	0.1+
611011	760	0.0	0.2-		890113	399	1.1-	1.2-	910512	801	0.4+	0.1-
611011	760	0.2+	0.3-		890128	881	1.4+	0.2-	910514	376	(3.7+ | 0.5-)
890101	881	1.2-	0.1+		890128	881	0.1+	0.5+	910514	376	0.7+	0.0
890101	881	2.1-	1.8-		890129	399	2.4+	0.0	910514	399	1.0-	0.6+
890102	881	1.8-	0.8+		890129	399	2.4+	0.1-	910514	399	1.4-	0.6+
890104	399	0.1-	0.0		890129	399	2.3+	0.3-	910611	801	0.3-	0.1-
890104	399	0.3+	0.3+		890129	399	1.0+	0.9-	910611	801	0.2-	0.2-
890104	399	0.5-	0.4-		910511	801	0.1-	0.6-	910614	801	0.3-	0.3-
890104	399	0.1+	0.1-		910511	801	0.4+	0.0	910614	801	0.5+	0.6-

M. P. C. 20 000

(5177)* 1989 AY6 = 1990 OA4

Discovered 1989 Jan. 10 by F. Borngen at Tautenburg.

Id. H. E. Holt (MPC 16875)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 268.99738		(2000.0)	P	Q
n 0.27569277	Peri.	284.22006	-0.69732613	+0.71564148
a 2.3380429	Node	301.49458	-0.63823790	-0.64531929
e 0.1317932	Incl.	2.68332	-0.32617273	-0.26724573
P 3.58	H 13.9	G 0.15		

Residuals in seconds of arc

801101 675	0.2-	0.5+	890213 809	0.4-	0.4-	900727 675	1.2+	1.4-
801102 675	0.1+	0.1-	890213 809	0.1+	0.8-	900728 033	0.3+	0.1+
890110 033	0.1+	0.4+	890225 809	0.3+	0.4+	900730 675	1.4-	1.7-
890111 033	0.4+	0.4+	890225 809	0.1+	0.3+	900730 675	0.4-	1.0-
890112 033	0.8+	0.1+	890225 809	0.3-	0.4+	900914 675	(2.2+	2.9-)
890207 809	0.6-	0.6-	890226 809	0.1+	0.3+	900914 675	(3.0+	1.4-)
890207 809	0.2-	0.7-	890226 809	0.2+	0.6+	900918 675	0.9+	1.7-
890207 809	0.1-	0.8-	890226 809	0.5+	0.5+	900918 675	(0.3+	3.2-)
890209 809	0.1-	0.4-	890301 809	0.4-	0.4+	911030 033	0.8-	1.1-
890209 809	0.1+	0.2-	890301 809	0.3-	0.4+	911031 033	1.2-	0.2-
890209 809	0.4+	0.1-	890301 809	0.3-	0.3+	911101 033	0.8-	0.3-
890210 809	0.1+	1.1-	890303 809	0.7-	0.5+	911110 033	0.9+	0.9+
890210 809	0.4+	1.1-	890303 809	0.6-	0.6+	911111 033	0.0	0.1-
890210 809	0.4+	1.0-	900529 413	(0.9+	3.1-)	911210 033	0.2+	0.4+
890212 809	0.4-	0.5-	900529 413	0.3-	1.3+	911210 033	1.3+	0.5+
890212 809	0.2-	0.6-	900726 033	1.0+	0.6+	911211 033	0.0	0.3+
890212 809	0.0	0.5-	900727 033	1.6+	0.6+			
890213 809	0.7-	0.4-	900727 675	1.3-	0.1-			

(5178)* 1989 CD4 = 1971 UY1 = 1971 VB1 = 1979 BL2 = 1981 UL8 = 1981 UC18

Discovered 1989 Feb. 1 by R. Rajamohan at Kavalur.

Id. D. W. E. Green (MPC 14794)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Green

M 58.90406		(2000.0)	P	Q
n 0.29613097	Peri.	102.68743	+0.40771362	-0.91215587
a 2.2291887	Node	323.16225	+0.80843322	+0.38184296
e 0.1372790	Incl.	3.99100	+0.42450599	+0.14888798
P 3.33	H 13.9	G 0.15		

Residuals in seconds of arc

711020 095	(0.8+	4.3-)	890201 220	(4.1-	5.0-)	911010 801	0.8-	0.0
711111 095	1.6+	1.8-	890201 220	(0.7-	5.4-)	911103 801	0.5+	0.7+
790124 095	1.3-	0.0	890202 220	(1.0+	4.4-)	911103 801	0.5+	0.6+
811024 095	1.1+	0.4-	890202 033	0.2-	0.3+	911106 801	0.1-	0.3-
811030 381	0.7-	0.2+	890203 033	0.1-	0.2+	911106 801	0.2-	0.3-
811030 381	1.1-	0.8-	890205 033	0.1+	0.5-	911201 675	0.5+	0.3-
890111 033	0.2+	0.1+	911007 801	1.0-	0.1+	911201 675	0.4+	1.0+
890111 033	0.4+	0.1-	911007 801	0.5-	0.6+	911203 675	0.1+	0.1-
890114 033	0.7+	0.2-	911010 801	0.9-	0.1+	911203 675	0.3+	1.1+

(5179)* 1989 EO1 = 1966 UK = 1975 FJ = 1982 FA1
Discovered 1989 Mar. 1 by T. Seki at Geisei.
Id. D. W. E. Green (MPC 15252)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Green

M	317.98653	(2000.0)	P	Q
n	0.28054557	Peri. 203.31658	-0.99463051	-0.08924279
a	2.3110026	Node 331.41133	+0.10346230	-0.86914954
e	0.0469022	Incl. 6.28689	-0.00238598	-0.48643067
P	3.51	H 13.7	G 0.15	

Residuals in seconds of arc

661018	095	1.1+	2.2-	890226	809	0.8+	0.1-	900720	372	(12.1-	8.0-)
750317	095	0.9+	1.6+	890227	809	0.5-	0.3-	900815	372	0.4-	0.3+
820323	801	0.8+	1.2+	890227	809	0.6-	0.1-	900815	372	0.2+	0.7+
870902	095	(4.7+	0.1-)	890227	809	0.7-	0.2-	911108	801	0.5+	1.2-
890211	809	0.3-	0.2-	890301	809	0.1-	0.3-	911108	801	0.5+	1.8-
890211	809	0.4-	0.3-	890301	809	0.0	0.3-	911204	372	1.3-	0.2-
890211	809	0.1-	0.4-	890301	809	0.0	0.2-	911204	372	0.1+	1.9+
890212	809	0.7-	0.4-	890301	372	1.4+	2.0+	911208	372	1.6-	1.4+
890212	809	0.6-	0.4-	890301	372	(0.6+	3.2+)	911208	372	1.2-	2.7+
890212	809	0.2-	0.2-	890303	809	0.2-	0.4-	911229	372	1.7+	2.5+
890213	809	0.2+	0.6-	890303	809	0.0	0.1-	911229	372	1.2+	1.0+
890213	809	0.6+	0.6-	890305	372	(3.5-	0.4-)	920101	801	0.3+	0.7-
890213	809	0.8+	0.5-	890305	372	0.1+	0.2-	920101	801	0.3+	0.6-
890226	809	0.5+	0.1+	890310	372	1.8-	0.7-	920106	801	0.3+	0.5-
890226	809	0.4+	0.1+	890310	372	1.1-	0.2+	920106	801	1.1-	1.5-

(5180)* 1989 GF = 1978 JN1 = 1990 OM1
Discovered 1989 Apr. 6 by T. Fujii and K. Watanabe at Kitami.
Id. H. E. Holt (k, MPC 16876), G. V. Williams (ibid.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	10.63864	(2000.0)	P	Q
n	0.26645099	Peri. 57.03864	-0.72886708	-0.67672310
a	2.3917980	Node 80.14013	+0.58768721	-0.69625654
e	0.0624225	Incl. 6.05450	+0.35124995	-0.23931711
P	3.70	H 13.0	G 0.15	

Residuals in seconds of arc

780506	095	0.2-	0.3-	890508	400	(2.2+	3.1-)	900916	675	0.7-	0.3+
890402	400	(3.7+	1.5-)	890508	400	2.1+	1.7+	900916	675	2.0+	0.3+
890402	400	(3.2+	1.7-)	900725	675	0.9-	0.2+	911205	801	0.8-	1.5+
890402	400	1.8-	0.4-	900725	675	0.2-	0.2+	911230	589	(5.0-	0.8-)
890406	400	0.4-	0.9-	900729	675	0.6+	1.0-	911230	589	0.5+	1.1+
890406	400	0.1-	0.1-	900729	675	0.5-	0.3-	911230	589	(3.3-	1.6-)
890406	400	1.9-	0.6-	900729	675	0.1+	0.1+	911230	589	(3.0+	0.8+)
890412	400	(6.9+	5.1+)	900729	675	0.2-	0.0	920102	801	(0.5-	2.4+)
890412	400	(8.7+	4.0+)	900730	675	2.1-	1.1+	920102	801	0.1-	0.3-
890412	400	2.1+	0.2-	900730	675	0.2-	0.4-	920107	801	0.1+	1.6-
890412	400	(1.5+	3.7-)	900914	675	1.4+	1.3-	920107	801	0.3+	1.4-
890508	400	0.0	0.3-	900914	675	1.3+	1.1-				

(5181)* 1989 GO = 1981 AF3
Discovered 1989 Apr. 7 by E. F. Helin at Palomar.
Id. G. V. Williams (MPC 17021)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	332.91911	(2000.0)	P	Q
n	0.26343584	Peri. 111.51242	-0.99766197	-0.04637728
a	2.4100135	Node 65.85846	+0.02120020	-0.90828415
e	0.1337669	Incl. 3.15332	+0.06497030	-0.41577523
P	3.74	H 12.9	G 0.15	

Residuals in seconds of arc

810108	381	0.5+	0.5+	890502	675	(2.2-	1.2-)	900916	675	(1.8+	2.3-)
810108	381	0.4+	0.5+	890502	675	1.4-	0.4-	900916	675	0.5+	0.8-
871119	675	0.4-	1.8-	890604	675	1.4-	1.2+	920102	801	0.2+	0.4+
871119	675	0.5+	1.6-	890606	675	0.1-	0.4-	920102	801	0.0	0.2+
871120	675	1.5-	0.9-	900529	413	(9.6-	4.0-)	920106	801	0.2+	0.1-
871120	675	0.2+	1.2-	900529	413	(13.3-	5.5-)	920106	801	0.3+	0.1-
890407	675	0.9+	0.6-	900818	675	0.2-	0.5+	920109	675	0.1+	0.9-
890407	675	1.0-	0.8-	900818	675	0.8+	0.0	920110	675	0.6+	0.7-
890408	675	0.6+	1.2-	900820	675	1.1+	0.7-	920110	675	0.6-	0.6-
890408	675	0.5+	1.7-	900820	675	0.3+	0.7-	920304	801	0.4+	0.4+
890430	675	1.3-	1.2-	900826	675	(1.2+	3.3-)	920304	801	0.3+	0.3+
890430	675	(2.0-	2.2-)	900826	675	(0.0	2.6-)				

(5182)* 1989 NE = 1952 UA

Discovered 1989 July 1 by E. F. Helin at Palomar.

Id. G. V. Williams (MPC 17824)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	260.86532	(2000.0)	P	Q	
n	0.23653381	Peri.	150.18008	+0.35751609	+0.91718359
a	2.5894482	Node	140.02023	-0.90185178	+0.38799822
e	0.1580723	Incl.	15.89269	-0.24258116	-0.09072838
P	4.17	H	12.4	G 0.15	

Residuals in seconds of arc

521021	760	0.7+	0.9-	890728	403	1.0+	1.4+	910112	413	1.6+	0.5-
521021	760	0.7-	0.7+	890728	403	1.6+	0.0	920130	675	0.4+	0.3+
890701	675	0.3-	1.2-	890729	675	(0.2-	2.9+)	920130	675	0.8-	0.3-
890701	675	0.9-	0.6-	890729	675	0.6-	0.4+	920131	675	0.1-	0.4-
890703	675	0.2+	0.0	890731	675	0.1+	1.4-	920301	801	0.2+	0.6-
890703	675	0.6+	0.3-	890731	675	0.3-	0.4-	920301	801	0.0	0.3-
890724	403	1.7-	0.8+	901118	675	1.4-	0.6+	920305	801	0.1-	0.1-
890724	403	0.2+	1.7-	901118	675	0.0	0.8-	920305	801	0.1+	0.1-
890725	403	1.1+	0.6+	910107	413	1.0+	0.6-				
890725	403	1.2-	0.5+	910108	413	0.6-	0.1+				

(5183)* 1990 OA1 = 1986 RG16

Discovered 1990 July 22 by E. F. Helin at Palomar.

Id. G. V. Williams (MPC 19679)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	211.16057	(2000.0)	P	Q	
n	0.23923989	Peri.	4.48667	-0.01713942	+0.96699588
a	2.5698848	Node	264.67919	-0.92510888	-0.11179286
e	0.1057165	Incl.	14.79225	-0.37931491	+0.22895705
P	4.12	H	11.4	G 0.15	

Residuals in seconds of arc

821017	675	0.9+	0.5-	900820	675	0.3-	0.2+	911111	596	(1.7+	3.3+)
821017	675	0.1-	1.1+	900820	675	0.9-	0.7+	911112	596	0.6+	1.5+
821019	675	1.7-	2.1+	901023	675	0.7+	2.0-	911112	596	(4.0+	2.0-)
821019	675	(3.8-	0.8-)	901023	675	0.5+	1.4-	911205	801	0.5+	0.8-
860913	095	0.6-	0.4-	901115	801	0.4-	0.0	911205	801	0.5+	0.3-
900722	675	2.2+	0.6-	901115	801	0.0	0.2-	911207	675	0.9-	1.5-
900722	675	0.5+	0.2-	901120	801	0.2+	0.3+	911207	675	0.4+	1.4-
900723	675	0.6+	1.2-	901120	801	0.2+	0.2+	920101	801	0.2+	0.4+
900723	675	0.3+	0.1+	911107	801	0.2+	0.3-	920101	801	0.0	0.6+
900817	675	1.2-	0.6+	911107	801	0.3+	0.3-	920106	801	0.0	0.3+
900817	675	0.5-	0.8+	911111	596	2.2-	0.6+	920106	801	0.2+	0.1+

(5184)* 1990 QY7 = 1981 UC9 = 1981 UF21 = 1987 RZ4 = 1987 SJ20 = 1987 UD7

Discovered 1990 Aug. 16 by E. W. Elst at the European Southern Observatory.

Id. H. Kaneda (MPC 18296), N. S. Chernykh (d, ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	18.36772	(2000.0)	P	Q
n	0.31112986	Peri. 194.00232	-0.97123759	-0.23589066
a	2.1569575	Node 332.28868	+0.22463067	-0.86248844
e	0.0328348	Incl. 4.00175	+0.07898487	-0.44773796
P	3.17	H 13.7	G 0.15	

Residuals in seconds of arc

811024	095	(3.4+	6.1+)	900818	809	0.3+	1.1-	900914	675	0.5+	1.0-
811030	381	0.1+	1.0+	900818	809	0.3-	1.4-	920202	886	1.3-	1.0-
811030	381	0.4-	0.8+	900818	809	1.2+	0.1+	920202	886	0.8-	0.1+
870902	095	(2.7+	3.6-)	900826	809	0.8-	0.5-	920206	303	0.4+	0.7-
870917	095	0.3-	2.4-	900826	809	0.4-	0.2-	920207	303	2.3+	0.8-
871023	095	0.9+	0.5+	900826	809	0.0	0.0	920301	801	1.0-	0.3-
900816	809	0.1-	0.2+	900913	675	0.7+	1.3+	920301	801	1.2-	0.7-
900816	809	0.3-	0.1-	900913	675	1.5+	0.6+				
900816	809	0.5-	0.3-	900914	675	0.4-	0.3+				

(5185)* 1990 RV2 = 1933 SE = 1955 SM = 1981 RA1 = 1984 HG = 1986 UR4 = 1988 FQ3

Discovered 1990 Sept. 15 by H. E. Holt at Palomar.

Id. H. Oishi (MPC 17826)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	77.90331	(2000.0)	P	Q
n	0.22485325	Peri. 218.00114	+0.26842575	-0.95937233
a	2.6783660	Node 216.66096	+0.91562371	+0.28213029
e	0.0816015	Incl. 8.36908	+0.29930059	-0.00268944
P	4.38	H 12.4	G 0.15	

Residuals in seconds of arc

330921	012	0.5+	0.4-	861103	511	0.5-	0.9+	901017	095	0.7+	0.7-
550917	760	1.0-	1.0+	880320	808	0.8-	1.7-	901017	095	(0.5-	4.4+)
550917	760	0.2+	1.1+	880320	808	0.7-	1.0+	920206	801	0.3+	0.2-
810902	033	0.0	0.4-	900915	675	0.2-	1.6-	920206	801	0.1-	0.3-
810902	033	0.0	0.4-	900915	675	0.1-	1.2-	920207	801	0.1-	0.6-
840419	046	(3.7-	4.3-)	900918	675	0.3+	0.3+	920207	801	0.1-	0.6-
840419	046	(0.9-	3.2-)	900918	675	0.8+	0.1-	920305	801	0.6+	0.2-
861031	511	1.0+	1.8+	900920	675	0.5+	0.9-	920305	801	0.6+	0.7-
861103	511	2.1-	1.1-	900920	675	0.3+	0.2-				

(5186)* 1990 SB4 = A901 DA = 1948 OB = 1959 ER = 1984 FF2 = 1986 PO4

Discovered 1990 Sept. 22 by B. Roman at Palomar.

Id. G. V. Williams (MPC 17450)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	120.25787	(2000.0)	P	Q
n	0.23790622	Peri. 76.10970	+0.62579362	-0.77181893
a	2.5794801	Node 334.08968	+0.57832548	+0.55600049
e	0.0834857	Incl. 14.93234	+0.52337557	+0.30847850
P	4.14	H 11.2	G 0.15	

Residuals in seconds of arc

010222	024	(15.2+	2.9-)	590310	690	0.5-	1.4-	900922	675	0.5+	0.4-
480727	078	(44.5-	9.7-)X	840330	095	1.0-	0.7+	900924	675	0.4+	0.3+
590306	690	(0.4-	1.5+)X	860809	071	2.3-	2.4+	900924	675	0.4+	0.1-
590306	690	0.4-	0.4-	860809	071	(0.7-	3.3+)	901015	675	0.5+	1.2-
590307	690	0.7-	1.0-	860809	071	(0.8-	4.5+)	901015	675	0.0	1.0-
590309	690	(15.8-	8.4-)X	900915	095	1.2-	0.4-	901018	808	0.6-	1.0+
590309	690	(4.0+	1.8-)	900922	675	0.4+	0.0	901018	808	1.6+	0.6-

901019 675	0.5+	0.1-	920130 675	1.8+	0.5+	920305 801	0.6-	0.2-
911205 801	0.3-	0.0	920131 675	1.4+	0.6+	920305 801	0.7-	0.1-
911205 801	0.3-	0.4-	920301 801	0.4-	0.0			
920130 675	1.5+	0.4+	920301 801	0.3-	0.4+			

(5187)* 1990 TK1 = 1975 VU4 = 1979 ON4 = 1985 UB4 = 1985 VT3
Discovered 1990 Oct. 15 by K. Endate and K. Watanabe at Kitami.
Id. H. Kaneda (MPC 17452), L. V. Zhuravleva (d, ibid.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	106.34252	(2000.0)	P	Q	
n	0.19656547	Peri.	281.68325	+0.62814833	-0.77702680
a	2.9295297	Node	129.32568	+0.73282841	+0.57320097
e	0.0721828	Incl.	3.01826	+0.26151901	+0.26013457
P	5.01	H	12.1	G 0.15	

Residuals in seconds of arc

751102 095	(4.1+	2.9-)	901111 809	0.8-	0.7-	901117 809	0.1-	0.4-
790724 675	1.5-	1.2+	901111 809	0.7-	0.6-	901120 809	0.4-	1.2-
790724 413	0.2-	1.7-	901111 400	1.2+	0.2-	901120 809	0.6-	1.2-
790725 675	0.7-	0.7+	901111 400	2.0+	0.4-	901120 809	0.7-	0.9-
790727 675	2.5+	0.8-	901112 809	0.4-	0.9+	920102 801	0.7-	0.5-
851021 095	(6.3-	0.4-)	901112 809	0.5+	1.4+	920102 801	0.2+	0.0
851111 095	0.2+	0.6-	901112 809	0.8+	1.2+	920108 801	0.4-	0.3+
901015 400	0.2-	1.1+	901114 809	0.3-	0.6+	920108 801	0.2-	0.1+
901015 400	0.3+	1.3+	901114 809	0.3-	0.5+	920206 303	(2.6+	1.8-)
901019 400	(0.7+	5.0+)	901114 809	0.2+	0.8+	920207 303	1.5+	0.7+
901019 400	(3.6-	3.1+)	901117 809	0.1-	0.4-	920207 801	0.3-	0.5-
901111 809	0.7-	0.9-	901117 809	0.2+	0.5-	920207 801	0.3-	0.4-

(5188)* 1990 TZ2 = 1938 DY1 = 1971 BW2 = 1988 FZ
Discovered 1990 Oct. 15 by E. F. Helin at Palomar.
Id. S. Nakano (k, MPC 17453), G. V. Williams (ibid.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	114.94357	(2000.0)	P	Q	
n	0.23772455	Peri.	282.44579	+0.38526692	-0.91242973
a	2.5807941	Node	143.89679	+0.91121258	+0.35252209
e	0.1364769	Incl.	13.54348	+0.14581161	+0.20784647
P	4.15	H	12.7	G 0.15	

Residuals in seconds of arc

380224 024	0.7+	2.4+	901016 399	(2.3-	3.1-)	901112 413	0.4+	0.1+
710127 805	0.6-	1.5-	901016 399	1.0+	0.7-	901113 413	(3.7-	2.1-)
880317 033	0.1-	0.2+	901017 675	0.4-	1.8+	901119 413	1.2-	0.8+
880318 033	0.5+	0.3-	901017 675	0.1+	1.9+	920205 801	0.6+	0.1-
880318 033	0.8-	0.2+	901019 399	(4.6+	1.0-)	920205 801	0.1+	0.8-
880319 033	0.7-	0.3+	901022 399	1.6+	1.4-	920301 801	0.4+	0.2+
901015 675	1.9-	0.6+	901022 399	(0.1+	3.9-)	920301 801	0.2+	0.1-
901015 675	1.7-	1.3+	901022 399	1.7+	1.8-	920305 801	0.1+	0.0
901016 399	0.0	1.5-	901112 413	0.2+	0.4-	920305 801	0.1-	0.0

(5189)* 1990 UQ
Discovered 1990 Oct. 20 by R. H. McNaught at Siding Spring.
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	358.38063	(2000.0)	P	Q	
n	0.51024061	Peri.	159.45211	+0.42152460	+0.90576004
a	1.5510270	Node	135.44846	-0.84045623	+0.40834667
e	0.4778691	Incl.	3.57697	-0.34051480	+0.11336552
P	1.93	H	17.5	G 0.15	

Residuals in seconds of arc

901020 675	(4.3+	0.7+)	901020 413	0.8-	0.7-	901022 675	(3.7+	1.8+)
901020 675	(3.4+	0.1-)	901020 413	0.6+	0.3+	901022 675	(4.4+	1.7+)

901027	413	1.2-	1.6-		901120	801	0.2+	0.9+		920401	801	0.1+	0.2+
901027	413	0.4+	0.3+		920307	474	0.3-	0.1+		920401	801	0.2-	0.4+
901115	801	0.4+	0.2+		920307	474	0.1+	0.3+		920405	402	1.1+	0.9-
901115	801	1.0+	0.6+		920308	474	0.1+	0.0		920405	402	(1.9-	3.3+)
901120	801	0.2-	0.3+		920308	474	0.8-	1.0-		920406	413	0.6-	0.5+

(5190)* 1990 UR2 = 1969 AN = 1986 AN1 = 1989 PS

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

Id. H. Kaneda (MPC 17457)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	69.43131		(2000.0)	P	Q
n	0.17638248	Peri.	150.52937	-0.23203645	-0.95588305
a	3.1489500	Node	312.24372	+0.83803961	-0.10244266
e	0.2068801	Incl.	14.08272	+0.49381039	-0.27530547
P	5.59	H	11.6	G 0.15	

Residuals in seconds of arc

690115	095	0.6+	1.7+		890811	675	0.1+	0.3-		901111	399	1.3+	0.7+
860111	688	0.8-	0.4-		901016	399	1.3-	2.2-		920102	801	0.3-	1.4-
860111	688	0.6+	0.2-		901016	399	1.1-	1.3-		920102	801	0.3-	1.3-
860117	688	0.7+	1.2+		901016	399	1.5+	2.0-		920226	399	1.7-	1.6-
860117	688	0.6+	1.9+		901019	399	0.7-	1.3-		920226	399	1.1-	1.5-
890809	675	1.7+	0.9-		901019	399	0.1+	0.2-		920229	399	1.3-	2.4-
890809	675	0.3+	2.5-		901111	399	1.9+	1.1+		920302	399	0.4-	1.2-
890811	675	0.1-	0.2-		901111	399	0.0	1.2-		920302	399	0.4-	0.1+

(5191)* 1990 VO3 = 1958 TD1 = 1974 VJ = 1976 EH = 1979 WO4 = 1988 PC3

Discovered 1990 Nov. 13 by S. Ueda and H. Kaneda at Kushiro.

Id. H. Kaneda (MPC 17460)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	156.14933		(2000.0)	P	Q
n	0.18821138	Peri.	145.30774	+0.94210668	-0.31090554
a	3.0155889	Node	233.29735	+0.26110487	+0.91520098
e	0.1075537	Incl.	9.01220	+0.21037882	+0.25640770
P	5.24	H	11.4	G 0.15	

Residuals in seconds of arc

581009	690(11.3- | 1.6-)Y		901113	399	0.2+	0.6+		901213	399	0.5-	0.1-
581011	690(11.4-	2.3+)Y		901115	095	(2.3-	4.8+)		901215	399	1.1-	2.0-
741112	095	0.1-	1.6+		901116	095	(2.9- | 3.5+)	901215	399	1.1-	0.9+
741117	095	(0.6-	6.6+)		901117	399	0.6+	0.4+		920302	399	0.7-	0.4-
760307	808	0.8+	0.8+		901117	399	1.0+	0.6+		920302	399	0.3-	0.8+
760307	808	2.0+	1.0+		901121	399	0.7+	0.9-		920303	399	0.5-	0.3-
791117	095	2.0-	2.3-		901121	399	1.0+	0.8-		920303	399	1.1-	2.2-
880804	413	2.0+	0.6+		901213	399	0.5+	0.0		920322	399	1.0-	0.5+
880804	413	0.6+	0.6-		901213	399	1.4+	1.1+		920322	399	1.9-	0.7-
901113	399	0.4-	0.9-		901213	399	0.4+	0.0		920323	399	0.4+	1.2+

(5192)* 1991 CC = 1951 EX1 = 1963 FL = 1972 WB = 1979 BD = 1986 HO = 1989 VA2

Discovered 1991 Feb. 4 by T. Fujii and K. Watanabe at Kitami.

Id. H. Kaneda (MPC 17969)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	181.97325		(2000.0)	P	Q
n	0.17262642	Peri.	308.03599	+0.74619573	-0.61407047
a	3.1944631	Node	91.36855	+0.66240696	+0.64634165
e	0.0773910	Incl.	14.90344	+0.06639990	+0.45294584
P	5.71	H	10.2	G 0.15	

Residuals in seconds of arc

510301	711 (4.1-	32.5-)Y		630328	760	1.5+	0.6+		790124	688 (1.5+	3.2-)
630328	760	1.0+	0.6+		721130	330	2.1-	1.6-		790124	688	0.4+	2.5-

860429 675 1.8+ 1.0- 910204 400 0.5+ 0.2- 910310 400 1.2- 0.2-
860503 675 0.0 0.7+ 910204 400 0.2- 0.9- 910310 400 0.8- 0.5-
860503 675 0.7+ 0.9+ 910206 400 1.7+ 1.4+ 920205 801 1.2- 0.1-
891106 095 (1.2+ 3.2+) 910206 400 0.4- 1.1+ 920205 801 1.6- 0.1-
891106 095 0.5+ 2.1+ 910220 400 0.5+ 0.3- 920305 801 0.6- 0.0
891124 095 0.3+ 2.1+ 910220 400 0.4- 0.5- 920305 801 0.8- 0.3+

(5193)* 1992 ET = A909 TD = 1952 DQ = 1952 FG = 1973 YY1 = 1975 FQ
= 1979 YO8 = 1984 UQ4 = 1989 RA5 = 1990 VA14 = 1990 WF13
Discovered 1992 Mar. 7 by S. Ueda and H. Kaneda at Kushiro.
Id. H. Kaneda; 1979 MZ2 = 1984 UQ4 (MPC 16576) is invalid
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 67.52241		(2000.0)	P	Q
n 0.17353884	Peri.	21.26319	-0.37963452	-0.92392712
a 3.1832562	Node	91.07299	+0.84182733	-0.36619551
e 0.1566815	Incl.	2.71098	+0.38367223	-0.11072274
P 5.68	H	11.3	G 0.15	

Residuals in seconds of arc (or two decimals in units of degrees)
091005 000(12.9- 0.1-) 731220 095 (6.0- 5.5-) 901120 095 0.1+ 1.5-
091005 000 1.7+ 1.2+ 750317 095 1.1+ 2.2+ 920307 399 0.3- 1.6-
091006 000 0.1- 2.4+ 791223 095 1.1+ 1.2+ 920307 399 0.6+ 0.7+
091006 000 1.1+ 1.1- 841020 095 1.6- 0.2- 920308 399 0.0 1.7-
091008 000(0.03+ 0.04+) 890909 095 0.6+ 2.5- 920308 399 1.0- 0.7+
520226 760(11.8- 26.6+) 890909 095 1.3- 1.3- 920324 399 1.3+ 1.4-
520226 760 0.7- 0.7+ 901114 095 2.0+ 0.5+ 920324 399 0.3- 1.6-
520320 760 1.6- 0.3- 901114 095 0.2- 0.3- 920326 399 0.1+ 0.3-
520320 760 0.7- 0.4+ 901120 095 0.4- 0.2+ 920326 399 0.5- 0.0

(5194)* 4641 P-L = 1982 QW = 1982 QZ = 1989 AT3
Discovered 1960 Sept. 24 by C. J. van Houten and I. van Houten-Groeneveld on Palomar Schmidt plates taken by T. Gehrels.
Id. S. Nakano (MPC 14629), T. Kobayashi (ibid.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 162.47355		(2000.0)	P	Q
n 0.22138874	Peri.	103.14849	-0.43394110	+0.89970643
a 2.7062362	Node	141.02392	-0.85291760	-0.39338777
e 0.0472522	Incl.	4.29929	-0.29021834	-0.18914122
P 4.45	H	13.8	G 0.15	

Residuals in seconds of arc
600924 675 0.1- 0.5- 820822 801 0.2+ 0.9- 910808 675 0.2- 0.7+
600926 675 0.3+ 0.4- 820826 801 (3.4+ 6.4+) 910911 675 0.3+ 0.7-
600927 675 0.7+ 0.2- 890104 413 1.0- 2.5+ 910911 675 0.3- 0.9+
601017 675 0.8+ 0.8+ 890104 413 0.1+ 1.5- 910916 675 0.1+ 0.7-
601022 675 0.6- 0.7+ 890110 413 (4.5- 0.0) 910916 675 0.3+ 0.0
601025 675 0.7- 0.2- 890110 413 0.7+ 1.7- 910917 675 0.7- 0.7-
601026 675 0.8- 0.6+ 910808 675 0.7+ 0.3+

(5195)* 3289 T-1 = 1978 NA2 = 1988 VB2
Discovered 1971 Mar. 26 by C. J. van Houten and I. van Houten-Groeneveld on Palomar Schmidt plates taken by T. Gehrels.
Id. D. W. E. Green (MPC 19325)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Green

M 101.93725		(2000.0)	P	Q
n 0.31006713	Peri.	130.27724	+0.94668483	+0.32025282
a 2.1618832	Node	211.09101	-0.31231851	+0.88566547
e 0.1314243	Incl.	3.88784	-0.07902516	+0.33620650
P 3.18	H	13.7	G 0.15	

Residuals in seconds of arc

710324	675	1.3-	1.3+		780706	095	0.4+	1.6-		881111	399	2.3+	1.0-
710325	675	0.2+	0.1+		881102	399	0.2-	0.2+		910913	675	0.0	0.9-
710326	675	2.6-	0.5-		881102	399	0.2+	0.3+		910913	675	0.0	0.9-
710326	675	1.8-	0.8-		881102	399	0.5-	0.9-		910915	675	0.4-	0.7-
710327	675	0.4-	1.0-		881104	046	0.8-	1.1-		910915	675	0.2-	0.4-
710402	675	2.2-	0.7-		881104	046	1.8-	1.0-		911004	303	0.5-	1.3+
710416	675	1.9+	1.9-		881105	046	(3.0-	0.2-)		911005	303	1.0+	1.9-
710416	675	0.9+	1.9-		881105	046	0.5+	0.8+		911007	033	0.3+	0.1+
710513	675	0.9+	2.1-		881108	399	(1.6+	3.6+)		911007	033	0.6+	0.2+
710514	675	0.3-	1.4-		881108	399	1.3-	1.3+		911008	033	0.1+	0.5+
710514	675	0.6+	1.1-		881108	399	0.4+	2.4-		911109	675	0.7+	1.3-
710514	675	0.5-	0.5-		881111	399	2.7+	0.8-		911109	675	0.1-	1.3-
710516	675	1.0+	0.6-		881111	399	(3.2+	0.5+)					

(5196)* 3102 T-2 = 1982 SY9 = 1984 DP1 = 1984 FP1

Discovered 1973 Sept. 30 by C. J. van Houten and I. van Houten-Groeneveld on Palomar Schmidt plates taken by T. Gehrels.

Id. T. Kobayashi (MPC 15728)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	338.33948	(2000.0)	P	Q	
n	0.22226211	Peri.	113.84731	-0.51327589	-0.85773815
a	2.6991421	Node	7.23975	+0.68025859	-0.42711598
e	0.1378771	Incl.	13.24056	+0.52325530	-0.28610698
P	4.43	H	12.6	G 0.15	

Residuals in seconds of arc

710324	675	1.0-	1.0-		730924	675	(0.3+	3.2-)		731005	675	0.6+	0.2-
710325	675	1.1-	1.7-		730924	675	0.8-	0.0		731005	675	0.6+	0.0
710326	675	1.3-	1.9-		730924	675	(1.6+	3.1-)		731005	675	0.3+	0.5-
710326	675	1.6-	1.6-		730924	675	0.5-	0.6+		731005	675	1.1+	0.1-
710327	675	(0.8- | 2.3-)		730925	675	(2.3- | 2.2-)		820921	095	1.4+	1.6+
710402	675	1.8-	0.7-		730925	675	0.1+	0.6-		840226	095	1.6+	0.1+
710416	675	0.4+	1.6-		730925	675	(0.9+	2.2-)		840321	095	0.7-	0.5+
710416	675	0.8-	1.6-		730925	675	0.1-	1.2-		911008	801	0.4+	0.7-
710513	675	0.0	0.8+		730929	675	0.5+	0.5-		911008	801	0.4+	0.7-
710514	675	0.4-	0.2-		730929	675	0.3-	0.7+		911009	801	0.6+	1.0-
730919	675	0.4+	1.0-		730930	675	0.4-	0.0		911009	801	0.6+	1.0-
730919	675	0.6-	0.5+		730930	675	0.9+	0.8-		911231	801	0.1+	0.2+
730919	675	0.5+	0.2-		731004	675	0.2+	1.2-		920101	801	0.3-	0.4-
730919	675	0.4+	1.4+		731004	675	1.0+	0.5-		920107	801	0.4-	0.8-
730920	675	0.8-	1.1-		731004	675	0.6+	1.8-		920108	801	0.2-	0.8-
730920	675	0.6+	0.4-		731004	675	(2.1+	1.2-)					

(5197)* 4265 T-2 = 1989 UB1

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

Id. T. Kobayashi (MPC 15572)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	231.36197	(2000.0)	P	Q	
n	0.18872759	Peri.	313.10526	+0.94034894	+0.32782633
a	3.0100875	Node	28.12459	-0.22807859	+0.80584579
e	0.1121577	Incl.	11.12567	-0.25243620	+0.49309478
P	5.22	H	12.0	G 0.15	

Residuals in seconds of arc

710513	675	0.6-	0.4-		730924	675	0.3+	1.1-		730929	675	0.1-	0.4+
710514	675	1.3-	1.8-		730924	675	0.5+	0.6-		730930	675	0.3+	1.2+
730919	675	0.9-	0.2+		730925	675	0.3-	1.8-		730930	675	0.7-	2.0+
730919	675	0.5-	0.4+		730925	675	2.3+	0.9-		731004	675	1.2+	1.0+
730920	675	0.1-	0.1-		730929	675	1.8-	0.4-		731004	675	0.9+	0.3-

731005	675	1.2-	0.6+	891030	400	2.1+	0.5-	891129	046	1.1-	0.0
731005	675	0.7-	0.8+	891030	400	(4.5+	0.2+)	910217	801	0.4-	0.6+
891025	400	1.3-	0.4-	891118	046	1.9-	0.4+	910217	801	0.3-	0.8+
891025	400	0.4-	1.2-	891118	046	2.4+	0.4+	910320	801	0.4+	0.3+
891025	400	0.3-	1.6-	891123	046	(2.7+	0.2-)	910320	801	0.5+	0.3+
891029	400	(2.7-	2.0-)	891123	046	2.3+	0.6-	910321	801	0.4+	0.1+
891029	400	0.1+	0.9+	891129	046	0.5-	0.5-	910321	801	0.5+	0.2+

1943 DL = 1964 FF = 1987 UX9 = 1989 CS
Id. S. Nakano (MPC 14341), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	319.99979		(2000.0)	P	Q
n	0.23550214	Peri.	111.85930	-0.28443030	-0.95847782
a	2.5970052	Node	354.54173	+0.78074765	-0.21918196
e	0.1303874	Incl.	12.43713	+0.55635646	-0.18242681
P	4.19	H	12.5	G 0.15	

Residuals in seconds of arc

430226	062	1.2-	0.6+	890207	385	0.4-	0.8-	890308	372	1.0-	0.6+
430226	062	1.7+	0.1+	890207	385	0.2-	0.4-	890310	372	(3.1-	0.0)
430301	062	(1.6-	2.7+)	890207	385	1.3+	0.2-	910912	675	0.5+	0.7+
430312	062	1.2+	1.9+	890213	385	(2.4-	0.8+)	910912	675	0.0	0.0
640316	760	0.6-	1.1+	890213	385	(2.5+	1.1-)	910916	675	1.2-	0.9+
640316	760	0.1+	1.4-	890301	372	0.4-	0.7-	910916	675	0.8+	1.2-
871023	095	0.2-	0.3-	890301	372	1.8+	0.4+	910916	675	0.7-	0.9+
890205	385	1.5-	0.5-	890306	372	(2.3-	2.6-)	910916	675	0.3+	0.4-
890205	385	1.1+	0.5+	890308	372	1.6-	0.4-				

1976 GY3 = 1953 EE1 = 1992 FW
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	62.38357		(2000.0)	P	Q
n	0.30480466	Peri.	317.61423	-0.85037771	-0.52598606
a	2.1866955	Node	190.67754	+0.50076495	-0.80085069
e	0.0650993	Incl.	4.33807	+0.16153084	-0.28631597
P	3.23	H	12.9	G 0.15	

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

530310	210(0.24-	0.01+)X		760405	095	1.6-	0.0	920324	400	1.0-	0.9+
530314	760	0.6-	1.2+	760502	095	0.4+	1.1-	920324	400	0.0	1.6-
530314	760	0.5+	1.6-	920323	400	0.6-	0.2-				
760402	095	1.1+	1.1+	920323	400	1.7+	1.2+				

1976 UG2 = 1976 WU = 1991 SF2
Id. H. Oishi (d, MPC 9581), E. Bowell
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	71.85625		(2000.0)	P	Q
n	0.25923200	Peri.	23.12517	+0.98477307	+0.17254879
a	2.4359982	Node	326.91678	-0.16494883	+0.88892799
e	0.2014890	Incl.	2.22449	-0.05489878	+0.42430407
P	3.80	H	14.0	G 0.15	

Residuals in seconds of arc

761024	381	0.1+	0.5+	761118	381	0.6-	0.1-	910916	675	0.2+	1.1+
761024	381	1.4-	0.4-	910910	675	0.3+	0.4-	910916	675	0.2+	0.8-
761026	095	1.2+	0.5+	910910	675	0.1-	0.0	910916	675	0.2-	1.1+
761118	381	0.7+	0.4-	910916	675	0.3-	1.0-				

1976 YR1 = 1992 FF1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	79.42487	(2000.0)	P	Q
n	0.27106900	Peri. 24.12008	-0.32034144	-0.94168854
a	2.3645553	Node 84.69551	+0.85145645	-0.33387040
e	0.1482332	Incl. 5.93608	+0.41521474	-0.04187172
P	3.64	H 13.7	G 0.15	

Residuals in seconds of arc

761216 095	0.4+	1.1-	770113 095	0.7-	0.5+	920328 399	0.3+	0.9+
761218 095	0.6-	0.0	920324 399	0.4+	0.4-	920328 399	0.9-	0.1+
761220 095	0.8+	0.7+	920324 399	0.1+	0.7-			

1977 DY3 = 1978 LJ = 1982 BY13
Id. S. J. Bus (k), L. D. Schmadel, G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	196.17458	(2000.0)	P	Q
n	0.18535349	Peri. 253.18120	+0.35174009	+0.93587033
a	3.0465071	Node 37.43311	-0.84541167	+0.32705079
e	0.1781737	Incl. 1.94509	-0.40194281	+0.13108968
P	5.32	H 13.0	G 0.15	

Residuals in seconds of arc

770218 381	0.8+	0.2+	770312 381	0.1+	0.6+	780602 485	1.1-	0.1+
770218 381	0.1-	1.4-	770312 381	0.1+	0.0	780602 485	1.1+	0.1-
770219 381	0.1+	0.3+	770315 381	0.8-	0.1+	820130 675	0.2-	0.9-
770219 381	0.4-	0.5+	770315 381	0.2+	0.5-	820131 675	0.2+	0.9+

1978 SD3 = 1991 QL = 1991 RY12
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	121.20738	(2000.0)	P	Q
n	0.30378914	Peri. 319.18455	+0.58037519	+0.81413458
a	2.1915660	Node 346.25851	-0.72519580	+0.50625630
e	0.2125793	Incl. 4.51406	-0.37048035	+0.28441069
P	3.24	H 14.6	G 0.15	

Residuals in seconds of arc

780926 095	1.2-	1.3+	910910 675	0.8+	0.5-	910915 675	(0.8-	3.3-)
781002 095	0.1+	0.7+	910910 675	1.3-	0.3-	910915 675	1.0+	1.4-
781005 095	0.1+	0.4-	910913 675	0.4+	0.3+	910915 675	0.7+	0.9-
781008 095	0.4-	1.1+	910913 675	0.4-	0.1-			
910816 033	0.2-	1.2+	910915 675	0.3+	0.8-			

1978 TH6 = 1976 GQ5 = 1980 BO2 = 1985 DK2 = 1985 GS1 = 1991 RB21
Id. A. Lowe (k), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	294.07670	(2000.0)	P	Q
n	0.22347383	Peri. 122.56577	-0.66884477	-0.74241169
a	2.6893765	Node 9.70027	+0.58262587	-0.55554466
e	0.1017700	Incl. 13.15983	+0.46172910	-0.37442624
P	4.41	H 13.0	G 0.15	

Residuals in seconds of arc

760402 095	0.4+	0.4-	850224 010(69.3-		9.2+)	910914 675	0.6-	0.1-
781002 095	0.9+	0.7-	850224 010(71.9-		33.5+)	910916 675	0.1-	0.6+
781008 095	0.8-	0.2-	850415 675	0.2-	0.7+	910916 675	0.1+	0.8+
800123 095	0.3+	0.6+	910914 675	0.1+	0.3+			

1978 YM = 1974 OW1 = 1981 TQ2 = 1991 RY17
Epoch 1992 June 27.0 TT = JDT 2448800.5 Ichikawa

M 61.78392	(2000.0)	P	Q	
n 0.29522605	Peri. 19.47092	+0.93752998	-0.34789796	
a 2.2337416	Node 0.89628	+0.29839742	+0.80095370	
e 0.1365631	Incl. 7.83153	+0.17887569	+0.48727834	
P 3.34	H 14.1	G 0.15		

Residuals in seconds of arc

740726 808	0.7-	0.5-	910913 675	0.9-	0.2+	910917 675	0.8+	0.3-
740726 808	0.8+	0.4-	910913 675	1.8-	1.9+	910917 675	0.4-	0.2-
781222 095	0.0	0.6-	910915 675	0.5+	0.2-	910917 675	0.1+	0.6-
781228 095	0.2+	0.4-	910915 675	0.4+	0.4-	910917 675	0.4+	0.2-
781231 095	0.1-	0.8+	910916 675	0.5-	1.0+			
811005 095	1.1+	1.9-	910916 675	0.1+	0.9+			

1979 MF = 1949 KL = 1992 EQ
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 353.26858	(2000.0)	P	Q	
n 0.29661126	Peri. 70.70108	-0.61682084	+0.78636019	
a 2.2267816	Node 161.09014	-0.75596766	-0.57976099	
e 0.2113166	Incl. 6.05785	-0.21919157	-0.21334209	
P 3.32	H 14.5	G 0.15		

Residuals in seconds of arc

490529 760	0.7-	0.4-	790618 809	0.2-	0.4+	920308 399	0.1-	0.3-
490529 760	0.5+	0.8-	920307 399	0.6+	0.0	920324 399	0.8+	0.0
790616 809	0.1+	0.2+	920307 399	0.9-	0.7-	920324 399	0.2+	0.1-
790617 809	0.2+	0.5+	920308 399	0.5-	1.6+			

1979 MZ2 = 1990 FU2
Id. S. Nakano (MPC 16576)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 247.52088	(2000.0)	P	Q	
n 0.24435041	Peri. 328.73287	-0.55196686	-0.83369267	
a 2.5339264	Node 154.75709	+0.77305335	-0.51925067	
e 0.0824134	Incl. 2.28509	+0.31260375	-0.18797679	
P 4.03	H 14.0	G 0.15		

Residuals in seconds of arc

790623 413	0.1+	0.3+	790724 675	(3.8-	0.7-)	790823 675	1.6-	0.8-
790624 413	0.5+	0.2-	790724 413	0.9-	1.0-	900317 033	0.1+	0.0
790625 413	1.0-	0.5+	790725 675	(4.9+	1.2+)	900318 033	0.2-	0.4-
790629 413	0.5+	2.3+	790727 675	2.1+	1.3-			

1980 TA4 = 1991 RT20
Epoch 1992 June 27.0 TT = JDT 2448800.5 Ichikawa

M 330.76882	(2000.0)	P	Q	
n 0.26569445	Peri. 85.55234	-0.23498212	-0.97139738	
a 2.3963361	Node 18.14901	+0.84255540	-0.22111301	
e 0.0515870	Incl. 6.30594	+0.48464812	-0.08658044	
P 3.71	H 13.7	G 0.15		

Residuals in seconds of arc

801008 675	0.3-	0.0	910914 675	1.0+	0.7-	910916 675	0.2+	1.2+
801009 675	0.5-	0.1-	910914 675	0.2-	0.6+	910917 675	0.9-	1.1-
801010 675	0.8+	0.2+	910916 675	0.3+	0.2+	910917 675	0.3-	0.1-

1980 VG = 1982 BH14
Id. S. J. Bus

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell
M 201.54594 (2000.0) P Q
n 0.21219565 Peri. 37.24181 +0.99511123 +0.03794230
a 2.7838451 Node 320.28521 -0.07831081 +0.86568896
e 0.2322686 Incl. 8.20418 +0.06017523 +0.49914226
P 4.64 H 12.8 G 0.15
Residuals in seconds of arc

801106 688	0.3+	0.1-	801129 688	0.2+	0.6+	820130 675	0.8-	0.3-
801106 688	0.2-	0.0	801204 688	0.4+	0.1+	820131 675	0.8+	0.3+
801129 688	0.6-	0.5+	801204 688	0.1-	1.1-			

1981 ET10 = 1991 PJ18
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell
M 107.31898 (2000.0) P Q
n 0.22270131 Peri. 310.96736 +0.31331398 +0.94562049
a 2.6955923 Node 336.84434 -0.79083109 +0.20886406
e 0.1710791 Incl. 12.83974 -0.52575711 +0.24935455
P 4.43 H 13.5 G 0.15
Residuals in seconds of arc

810212 413	0.5-	0.5-	810315 413	1.6+	0.7+	910808 675	0.9-	0.4-
810213 413	0.7+	0.8-	810407 413	(4.2-	0.2+)	910808 675	0.0	0.0
810214 413	1.4-	0.5+	810407 413	1.2+	0.7-	910916 675	0.5-	0.1+
810301 413	0.7+	0.7-	810408 413	1.1-	0.7+	910916 675	0.1-	0.0
810307 413	1.5+	0.1+	810408 413	1.2-	1.3+	910917 675	0.8+	0.2+
810311 413	0.6+	0.3+	810409 413	1.9-	0.1+	910917 675	0.9+	0.4-
810311 413	0.9-	0.9-	810409 413	0.3+	0.3-			
810315 413	0.5-	0.0	810429 413	0.6+	0.3-			

1981 QK = 1961 UU = 1991 QK
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 83.71456 (2000.0) P Q
n 0.29513659 Peri. 353.85691 +0.99389619 +0.11031888
a 2.2341930 Node 359.80840 -0.09640618 +0.86704931
e 0.1864430 Incl. 5.82288 -0.05363038 +0.48585516
P 3.34 H 14.5 G 0.15
Residuals in seconds of arc

611017 760	1.5-	1.4+	810925 688	0.3+	1.0-	811005 688	0.2+	0.9-
611017 760	0.9-	1.6+	810925 688	1.3+	1.4-	811005 046	1.5+	0.3-
810830 688	0.1+	0.4-	810925 046	0.5+	0.0	811005 046	(2.6-	0.5+)
810830 688	0.7+	0.4-	810925 095	1.6+	0.8+	811022 095	(1.5-	4.0+)
810902 095	0.9-	0.1+	810925 046	0.3+	0.5-	910913 675	1.3-	1.5+
810922 046	1.1-	0.4-	810926 688	1.0+	1.1-	910913 675	1.8-	1.4+
810922 046	0.8-	0.1-	810926 688	0.7+	0.9-	910916 675	0.5-	1.1+
810925 688	1.3+	1.7-	811005 688	(3.1+	1.2-)	910916 675	0.9-	1.4+

1982 UC6 = 1960 WY = 1986 RU8 = 1988 DJ4 = 1991 XP1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 89.69257 (2000.0) P Q
n 0.22304640 Peri. 60.81976 +0.98307717 -0.17805425
a 2.6928112 Node 309.40256 +0.14267023 +0.89166402
e 0.1727881 Incl. 3.19608 +0.11491073 +0.41621143
P 4.42 H 14.0 G 0.15
Residuals in seconds of arc

601124 033	1.3+	0.0	860908 095	0.6+	0.4+	911210 033	0.1+	0.5-
821020 095	1.9-	0.1+	880223 809	1.3-	0.1-	911210 033	2.6+	0.2-
821022 095	1.7-	2.3-	880223 809	0.5-	0.1-	911211 033	1.0+	0.0
821109 095	0.8-	2.1+	880223 809	0.3+	1.3+			

1984 SU = 1982 BA13
Id. S. J. Bus
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M 46.48237	(2000.0)	P	Q	
n 0.27402230	Peri. 68.40645	+0.94643704	-0.32168448	
a 2.3475352	Node 310.34704	+0.28107978	+0.86327663	
e 0.2393707	Incl. 2.09471	+0.15890591	+0.38893773	
P 3.60	H 14.9	G 0.15		

Residuals in seconds of arc

820130 675	0.3+	0.1-	840927 675	0.3-	1.3+	840930 046	0.2+	0.2-
820131 675	0.3-	0.0	840927 046	0.3+	1.3-	840930 046	0.0	1.1-
840920 046	0.2-	1.1-	840927 046	1.4+	1.1+	841023 675	0.4+	0.8+
840920 046	1.3+	1.6+	840929 046	1.2-	1.4-	841023 675	0.3-	0.3+
840926 675	1.1-	1.7+	840929 046	0.6-	1.5-			

1984 SQ2 = 1927 SO
Id. G. V. Williams (MPC 16870)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 101.62813	(2000.0)	P	Q	
n 0.29385739	Peri. 341.70275	+0.96876693	-0.24225808	
a 2.2406721	Node 32.46383	+0.23804532	+0.84875609	
e 0.1775068	Incl. 5.65913	+0.06946260	+0.47002566	
P 3.35	H 14.5	G 0.15		

Residuals in seconds of arc

270922 024	1.2-	2.3+	840928 688	0.1+	1.8-	911030 033	0.4-	0.1-
270926 024	1.3-	2.3+	840928 688	1.3+	1.3-	911031 033	0.1+	0.1-
840925 688	0.7+	0.3-	841026 688	0.3+	0.7-	911101 033	0.3+	0.2+
840925 688	0.3-	1.0-	841026 688	0.4+	0.4+			

1985 HS1 = 1992 FK
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 356.65979	(2000.0)	P	Q	
n 0.27825030	Peri. 31.41513	-0.84061426	+0.54153626	
a 2.3236941	Node 181.49645	-0.54152967	-0.84067367	
e 0.1984089	Incl. 23.23663	-0.01064391	+0.00250232	
P 3.54	H 13.5	G 0.15		

Residuals in seconds of arc

850411 675	1.3-	1.6+	850425 675	0.3-	1.5+	920322 399	0.7-	0.8-
850415 675	2.2+	1.6-	850622 801	0.1+	0.0	920323 399	0.0	0.5+
850424 675	0.7-	1.5-	920322 399	0.6+	0.2+			

1985 RD = 1990 OU3
Id. R. Nagata (MPC 17016), K. Ichikawa
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 131.61630	(2000.0)	P	Q	
n 0.18654035	Peri. 316.31374	+0.72530005	+0.68843288	
a 3.0335711	Node 0.18013	-0.62473931	+0.65824228	
e 0.1820931	Incl. 1.39665	-0.28920692	+0.30459360	
P 5.28	H 12.9	G 0.15		

Residuals in seconds of arc

850910 046	1.1-	1.1-	850917 054	2.0+	0.1+	900730 675	0.1+	0.8-
850910 046	2.1-	1.5-	850918 688	1.5+	0.9+	900918 675	0.4-	1.6+
850911 054	0.7-	0.2-	850918 688	0.6+	0.0	900918 675	0.2+	0.5+
850914 688	1.2-	0.6+	900727 675	0.5-	0.0	911210 033	1.0-	0.3+
850914 688	0.0	1.1-	900727 675	0.4-	0.4-	911210 033	1.8+	0.5+
850915 054	1.7+	0.8+	900730 675	0.6+	0.6+	911211 033	1.0-	0.2-

1985 TB1 = 1978 EU10
Id. H. Kaneda (MPC 18284)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M	90.01284	(2000.0)	P	Q	
n	0.20676691	Peri.	204.65306	+0.12002489	-0.99263726
a	2.8323616	Node	238.45715	+0.91399117	+0.11689072
e	0.0418027	Incl.	1.09509	+0.38757472	+0.03174637
P	4.77	H	12.0	G 0.15	

Residuals in seconds of arc

780315	675	0.2-	0.1-	851015	688	1.1+	2.0+	920212 303	0.2+	1.3-
780316	675	0.2-	0.9-	851018	095	1.6-	0.1+	920213 303	0.2-	0.8-
850921	095	1.8-	0.5-	920208	364	0.5+	1.3+			
851015	688	2.5+	2.2-	920208	364	0.3-	1.2+			

1986 EF5 = 1982 BW12

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	242.93492	(2000.0)	P	Q	
n	0.26904738	Peri.	15.95482	-0.98075971	+0.19521866
a	2.3763854	Node	175.30266	-0.17945861	-0.90105157
e	0.0093757	Incl.	0.18375	-0.07684400	-0.38729284
P	3.66	H	13.5	G 0.15	

Residuals in seconds of arc

820130	675	1.1+	0.6-	860305	809	1.1-	0.0	860314 809	0.1+	0.4-
820131	675	0.9-	0.6+	860310	809	0.0	0.3-	860314 809	0.0	1.1+
860305	809	0.8+	0.4-	860310	809	0.2+	0.1+			

1986 QR3 = 1989 LN

Id. C. M. Bardwell (MPC 14787)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	292.03642	(2000.0)	P	Q	
n	0.28217059	Peri.	252.73614	+0.19844806	+0.97929807
a	2.3021214	Node	28.80259	-0.86482520	+0.19412590
e	0.0844124	Incl.	4.75288	-0.46118949	+0.05736218
P	3.49	H	13.5	G 0.15	

Residuals in seconds of arc

860829	809	0.1-	0.5+	860902	809	0.0	0.1+	890630 675	0.2+	1.5+
860829	809	0.2+	0.7+	860904	809	1.0-	0.1-	890630 675	(2.4-	1.3+)
860829	809	0.2+	0.7+	860904	809	1.0-	0.1-	890703 675	1.1+	0.5+
860831	809	0.2+	0.9+	860904	809	0.9-	0.2-	890703 675	1.1-	1.6+
860831	809	0.0	0.9+	860907	809	(2.5-	0.5-)	920301 801	1.6+	1.3+
860831	809	0.1-	0.8+	860907	809	(2.4-	0.6-)	920301 801	0.8+	1.8+
860901	809	0.2-	0.3+	860907	809	(2.4- | 0.7-)	920308 399	(2.7+ | 1.7+)
860901	809	0.2+	0.2+	890604	675	0.3-	1.5-	920308 399	1.9+	1.6+
860901	809	0.1+	0.2+	890604	675	0.1+	1.4-	920401 801	0.7-	0.7+
860902	809	0.1-	0.3+	890606	675	0.7+	1.5-	920401 801	0.2-	0.8+
860902	809	0.0	0.1+	890606	675	1.0-	0.2-			

1986 RA

Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M	341.65566	(2000.0)	P	Q	
n	0.16082908	Peri.	161.15721	+0.93462522	+0.35543549
a	3.3488292	Node	177.90721	-0.35352480	+0.93219769
e	0.6315528	Incl.	18.99792	-0.03867714	+0.06835991
P	6.13	H	15.5	G 0.15	

From 78 observations 1986 Sept. 2-1987 Mar. 1, mean residual 0".85.

1986 RQ = 1965 UO2 = 1972 TX2 = 1972 TR6 = 1979 SO2

Id. B. G. Marsden (MPC 11342)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 256.69711 (2000.0) P Q
n 0.28066790 Peri. 113.57227 +0.80790689 +0.58341038
a 2.3103311 Node 210.92788 -0.58227747 +0.76853306
e 0.1860148 Incl. 9.31373 -0.09077117 +0.26265808
P 3.51 H 14.0 G 0.15
Residuals in seconds of arc

651020 330	1.5+	1.5-	721013 095	1.6-	0.6+	861004 054	0.1+	0.2+
710416 675	0.4-	1.2-	790922 095	1.1+	0.2+	861005 675	0.9-	1.7-
710416 675	0.8-	0.4+	790928 095	0.9-	1.9-	861005 675	0.7+	1.3+
710513 675	0.7+	1.3-	860911 054	1.4-	0.5+	861005 095	0.8-	0.5+
710514 675	0.4-	2.2-	861003 054	0.2+	1.1-	861008 054	0.4+	0.0
721005 095	(2.2-	6.6+)	861004 675	0.3-	1.8-	861008 054	1.1+	0.1-
721006 095	(6.8+	11.1-)	861004 675	1.6+	1.7+			

1987 DY4 = 1978 RF2 = 1991 XM1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 307.77043 (2000.0) P Q
n 0.17034948 Peri. 277.63078 -0.94365716 +0.21904088
a 3.2228654 Node 275.26683 -0.10394681 -0.90784505
e 0.1075370 Incl. 14.42478 -0.31417548 -0.35754506
P 5.79 H 11.4 G 0.15
Residuals in seconds of arc

780908 095	0.1-	0.2+	870321 046	1.3-	0.7-	911228 033	0.2-	0.0
870224 046	0.3+	0.0	870321 046	0.9-	0.4-	920102 033	0.4+	0.1+
870224 046	0.7+	0.0	911210 033	1.3-	0.3-	920103 033	0.2+	0.4-
870225 046	0.6+	1.6+	911211 033	0.5-	0.5+	920107 033	1.3+	0.2+
870225 046	0.6+	0.3-	911212 033	0.0	0.3-			

1987 HK
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell
M 41.93403 (2000.0) P Q
n 0.24123397 Peri. 339.03842 +0.38009315 +0.92485185
a 2.5557031 Node 313.29832 -0.84599159 +0.34177549
e 0.0867021 Incl. 1.05112 -0.37393505 +0.16684894
P 4.09 H 14.0 G 0.15
Residuals in seconds of arc

820130 675	1.5-	0.1-	870529 675	1.0-	1.6-	870601 675	0.2+	0.7+
820131 675	1.3+	0.4-	870530 675	0.5-	1.9-	910513 675	0.0	0.2-
870421 675	1.3+	0.8+	870530 413	0.2+	0.9+	910515 675	0.1+	0.4+
870422 675	0.4-	2.1+	870530 413	0.1+	1.0-			

1987 RQ2 = 1979 SG4 = 1991 RZ24
Id. E. Bowell, G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 61.43013 (2000.0) P Q
n 0.24461058 Peri. 297.93477 +0.99845652 +0.03082866
a 2.5321294 Node 60.33160 -0.00850468 +0.90685381
e 0.2650815 Incl. 3.04768 -0.05488386 +0.42031626
P 4.03 H 14.5 G 0.15
Residuals in seconds of arc

790924 095	0.1+	0.3-	870924 413	2.2-	0.6-	910914 675	0.3-	0.2+
870901 095	0.3+	0.5-	870925 095	1.2+	1.2+			
870922 095	0.6+	0.1-	910914 675	0.2+	0.0			

1987 SO9 = 1971 SP = 1979 BR2
Id. H. Kaneda (MPC 18288)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 100.86948		(2000.0)	P	Q
n 0.30998046	Peri.	315.23194	-0.03667178	-0.99901326
a 2.1622862	Node	136.85114	+0.92682155	-0.04337572
e 0.0911761	Incl.	2.09943	+0.37370710	+0.00954213
P 3.18	H 14.5	G 0.15		

Residuals in seconds of arc

710916 808	1.0+	2.5-	870919 071	1.5-	0.6-	870927 095	(5.4+	5.1+)
790127 675	0.2-	0.2-	870920 071	(4.2-	2.4-)	920302 400	0.0	0.3-
790129 675	0.1+	0.8-	870921 071	1.0-	0.1+	920302 400	1.8+	0.9+
870919 071	1.0-	1.2-	870921 071	0.3+	2.3+	920304 400	1.4-	0.2+
870919 071	0.9+	0.1+	870922 071	1.1+	2.1+	920304 400	(0.1-	3.3+)

1987 YD = 1951 WB2 = 1992 FY

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 89.17391		(2000.0)	P	Q
n 0.27512516	Peri.	42.46142	-0.27010403	-0.95308132
a 2.3412575	Node	63.63073	+0.83734838	-0.30259418
e 0.1718304	Incl.	8.77453	+0.47528045	-0.00853044
P 3.58	H 13.1	G 0.15		

Residuals in seconds of arc

511129 711	0.2+	0.7- Y	871231 897	1.4+	0.5-	880116 894	1.5+	0.2+
871220 897	0.1-	0.9+	871231 897	1.1+	0.3+	920323 399	0.4+	0.8-
871220 897	1.5-	0.6-	880110 897	0.7+	0.1-	920323 399	0.0	0.1-
871225 897	0.0	0.9+	880110 897	1.6-	0.3+	920324 399	0.5-	0.7+
871225 897	0.5+	2.0+	880114 894	0.1+	1.9-	920324 399	0.1+	0.1+
871226 897	1.0-	1.1+	880114 894	0.5-	1.5-			
871226 897	0.4-	0.4-	880116 894	(0.4+	3.5-)			

1988 DE2 = 1958 DU = 1992 DS

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 41.60983		(2000.0)	P	Q
n 0.26132618	Peri.	53.06060	-0.85040923	-0.52297232
a 2.4229667	Node	95.34045	+0.46249243	-0.79516829
e 0.1441921	Incl.	3.30963	+0.25080847	-0.30693214
P 3.77	H 13.5	G 0.15		

Residuals in seconds of arc

580224 760	1.7+	0.5-	880217 809	0.3+	0.8+	920225 399	0.1-	1.2+
580224 760	1.2-	1.6+	880217 809	0.9+	0.5+	920225 399	0.1+	1.0-
880216 809	0.5-	1.0-	880219 801	0.5+	1.7+	920226 399	0.3+	0.2-
880216 809	0.5+	1.3-	880221 809	0.1+	0.1-	920226 399	0.3+	0.8-
880216 809	0.4+	1.4-	880221 809	0.7-	0.1-	920322 399	0.2+	0.3+
880217 809	0.6-	1.1+	880221 809	0.9-	0.8-	920322 399	1.2-	0.4-

1988 DD5

Id. R. H. McNaught (1992 obs.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 354.08927		(2000.0)	P	Q
n 0.26562169	Peri.	328.17590	-0.32307586	+0.93199636
a 2.3967737	Node	282.52971	-0.82914230	-0.36246548
e 0.2277898	Incl.	9.69135	-0.45622915	-0.00124951
P 3.71	H 14.0	G 0.15		

Residuals in seconds of arc

880223 413	0.5+	1.1-	880310 413	0.0	0.3+	920309 413	0.3-	0.4+
880225 413	0.5-	0.4+	880420 413	0.6+	1.3-	920313 413	0.2+	0.8-
880225 413	0.4+	0.3+	880420 413	0.5-	1.2+	920313 413	0.2-	0.9+
880310 413	0.5-	0.2+	920309 413	0.3+	0.5-			

1988 TM1 = 1982 BQ12
Id. S. J. Bus
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell
M 338.16351 (2000.0) P Q
n 0.26157075 Peri. 192.48955 +0.69566371 -0.71815978
a 2.4214561 Node 213.43499 +0.66175758 +0.65001604
e 0.1865130 Incl. 1.79700 +0.27951548 +0.24844653
P 3.77 H 14.0 G 0.15
Residuals in seconds of arc

820130	675	0.3-	0.2-	881014	046	(3.2- 2.7-)	881102	399 0.0 0.7+
820131	675	0.3+	0.4+	881016	399	1.5- 1.1+	881102	399 0.0 0.4+
881013	399	0.5+	0.7-	881016	399	0.3- 0.4-	881103	033 0.1+ 0.3-
881013	399	0.2+	0.9+	881016	046	(3.0- 3.4-)	881103	033 0.2- 0.1-
881013	399	0.8+	0.2+	881016	046	(3.0- 0.6-)	881104	033 0.1+ 0.7-
881014	046	(4.6-	3.0-)	881102	399	0.4+ 1.1-		

1988 XZ = 1991 PE18
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell
M 311.68045 (2000.0) P Q
n 0.26426228 Peri. 220.39191 -0.36747674 -0.92683175
a 2.4049863 Node 251.29370 +0.87289582 -0.31510601
e 0.0528162 Incl. 4.66878 +0.32095753 -0.20418400
P 3.73 H 12.9 G 0.15
Residuals in seconds of arc

881203	400	1.0-	0.9-	881206	400	1.6+ 0.7-	910808	675 0.2+ 0.9-
881203	400	0.6-	0.7+	881216	400	1.7+ 0.5-	910808	675 0.2- 0.8-
881203	400	0.6-	0.2+	881216	400	0.7- 0.6+	910912	675 0.2+ 1.3+
881206	400	0.6+	0.5+	881230	400	(3.1+ 0.9+)	910912	675 0.2- 0.2+
881206	400	1.0-	0.1-	881230	400	(8.8+ 3.1+)		

1989 EN2 = 1983 NQ = 1992 CC2
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 304.46148 (2000.0) P Q
n 0.30515362 Peri. 282.99332 -0.07134455 +0.99741684
a 2.1850281 Node 342.90883 -0.90379026 -0.06818131
e 0.1836017 Incl. 1.62657 -0.42198712 -0.02260414
P 3.23 H 14.0 G 0.15
Residuals in seconds of arc

830711	688	0.6-	1.0-	890326	400	0.1+ 0.7+	890412	400 (7.2+ 4.0-)
830711	688	1.2+	0.8-	890326	400	0.5- 0.2-	890412	400 1.2- 1.3-
890312	400	1.5+	0.4+	890406	400	(1.5+ 4.2-)	890428	400 0.9+ 1.5-
890312	400	1.7+	0.6+	890406	400	(3.4+ 3.2-)	890428	400 (0.5- 3.6-)
890312	400	(2.5+	0.9-)	890406	400	(2.6- 0.8-)	920212	303 0.8- 2.0-
890326	400	0.3+	2.3+	890406	400	1.8- 0.7+	920213	303 0.9- 1.9-

1989 GO4 = 1976 YH2 = 1976 YA8 = 1985 DE4
Id. T. Kobayashi (MPC 14796), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 325.19835 (2000.0) P Q
n 0.26060289 Peri. 223.17476 -0.99035844 -0.13644461
a 2.4274478 Node 308.96753 +0.13399897 -0.89973666
e 0.1142356 Incl. 1.76433 +0.03513466 -0.41455616
P 3.78 H 14.0 G 0.15
Residuals in seconds of arc

761216	095	0.0	1.9-	890403	809	(6.3+ 0.3+)	890405	809 0.4- 0.1-
761220	095	0.0	0.5-	890403	809	(6.9+ 0.5+)	890405	809 0.1- 0.1+
850222	675	0.4-	0.8+	890403	809	1.1- 0.7-	890405	809 0.3- 0.0
850223	675	1.0+	0.5+	890403	809	1.0- 1.5-	890405	809 0.0 0.1-
890403	809	(5.6+	0.0)	890403	809	0.6- 1.3-	890409	809 0.3+ 1.2+

890409 809 0.4+ 0.4+ 890410 809 0.3+ 0.3+ 911210 033 0.6- 0.4+
890409 809 1.0+ 0.4+ 890410 809 0.6+ 0.9+ 911210 033 0.6+ 0.7+
890410 809 1.3- 0.1- 890411 809 1.7- 0.7- 911211 033 0.3- 0.5+
890410 809 0.6- 1.0+ 890411 809 0.0 0.4-
890410 809 2.1+ 0.1- 890411 809 1.9+ 0.1-

1989 JF = 1992 FM
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 312.05107 (2000.0) P Q
n 0.30585449 Peri. 281.14732 +0.20566176 +0.97862265
a 2.1816889 Node 0.72309 -0.86495417 +0.18224056
e 0.1694919 Incl. 4.43920 -0.45777454 +0.09532099
P 3.22 H 13.5 G 0.15
Residuals in seconds of arc
890502 675 0.2- 1.4- 890603 675 0.1- 0.3- 920323 400 0.3- 0.0
890502 675 0.2- 0.7- 890605 675 0.1+ 0.3+ 920324 400 1.1+ 0.9-
890504 675 0.1+ 1.3+ 890605 675 0.1- 0.2- 920324 400 1.6- 0.9-
890504 675 0.4+ 1.1+ 920323 400 0.8+ 1.8+

1989 SW2 = 1992 FA
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 2.47837 (2000.0) P Q
n 0.20240768 Peri. 128.94037 -0.83633310 +0.53916225
a 2.8728838 Node 83.89885 -0.52879679 -0.74560319
e 0.1493030 Incl. 5.72867 -0.14464055 -0.39163752
P 4.87 H 13.2 G 0.15
Residuals in seconds of arc
890926 809 0.1+ 0.1+ 891007 809 0.3+ 0.9- 891008 809 1.4+ 1.0+
890926 809 0.5+ 0.3- 891007 809 0.4+ 1.3- 891008 809 0.3+ 0.8+
890926 809 0.3+ 0.4+ 891007 809 0.1+ 0.7- 891008 809 0.6- 0.8+
890928 809 0.1+ 0.1- 891007 809 0.2- 0.3+ 920323 399 0.5+ 1.4-
890928 809 0.0 0.0 891007 809 0.7- 0.4+ 920323 399 0.7+ 0.1-
890928 809 0.1+ 0.1+ 891007 809 0.6- 1.0+ 920324 399 0.2- 0.4+
891003 809 0.3- 0.2+ 891008 809 0.5+ 0.5- 920324 399 0.9- 1.1+
891003 809 0.8- 0.7- 891008 809 0.1+ 0.2-
891003 809 1.6- 0.1- 891008 809 0.6+ 0.3-

1989 SU3 = 1976 GD5 = 1992 FL
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 3.10733 (2000.0) P Q
n 0.18437631 Peri. 15.68633 -0.93332773 +0.35866770
a 3.0572619 Node 185.41312 -0.34496300 -0.90824716
e 0.0389322 Incl. 9.78086 -0.09949811 -0.21551003
P 5.35 H 12.5 G 0.15
Residuals in seconds of arc
760402 095 0.1+ 0.2+ 891003 809 0.2+ 0.6+ 920323 400 1.2- 0.5+
890926 809 0.6- 0.8- 891003 809 0.9+ 0.0 920323 400 1.0+ 0.0
890926 809 0.3- 0.4- 891007 809 0.9+ 0.5+ 920324 400 (3.9+ 4.7+)
890926 809 0.4- 0.4- 891007 809 0.5+ 0.0 920324 400 0.9+ 0.1+
890928 809 0.5- 0.2+ 891007 809 0.2+ 0.5+ 920328 400 1.9- 1.6-
890928 809 0.6- 0.3+ 891008 809 0.3+ 0.4- 920328 400 1.1+ 0.8+
890928 809 0.5- 0.2+ 891008 809 0.4- 0.8-
891003 809 0.7+ 0.6+ 891008 809 0.6- 0.1-

1989 XD2 = 1982 BU12
Id. S. J. Bus

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell
M 233.50314 (2000.0) P Q
n 0.23036391 Peri. 260.42209 +0.89986720 -0.42395090
a 2.6354802 Node 124.59478 +0.43282808 +0.83897302
e 0.2310346 Incl. 7.15225 +0.05384117 +0.34115965
P 4.28 H 14.4 G 0.15
Residuals in seconds of arc

820130	675	0.2-	0.2-	891106	809	0.2-	0.5+	891203 809	1.1+	0.1+
820131	675	0.2+	0.2+	891202	809	0.0	0.0	891203 809	0.5+	0.3-
891106	809	0.4+	0.2-	891202	809	0.4-	0.7+	891203 809	0.2-	0.5-
891106	809	0.2-	0.4-	891202	809	1.1-	0.0			

1990 BZ = 1982 BS13
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell
M 276.99267 (2000.0) P Q
n 0.24415778 Peri. 103.70351 +0.56050315 -0.80657747
a 2.5352590 Node 310.60466 +0.63152658 +0.56298769
e 0.0882912 Incl. 14.32136 +0.53573351 +0.18021558
P 4.04 H 13.3 G 0.15
Residuals in seconds of arc

820130	675	0.2-	0.3+	900121	372	2.1+	0.8+	900129 372 (5.7+ | 0.4-)
820131	675	0.2+	0.3-	900124	372	0.9+	1.0-	900129 372	0.0	0.7+
900121	372	1.9-	0.3+	900124	372	1.1-	0.7-			

1990 EA5 = 1990 GQ = 1979 MC1 = 1991 SW1
Id. G. V. Williams (d, MPC 16553; unpublished), E. Bowell (k)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 111.21626 (2000.0) P Q
n 0.25431701 Peri. 350.23108 +0.39777682 +0.91708393
a 2.4672838 Node 303.20356 -0.83957806 +0.35196264
e 0.1690514 Incl. 1.85129 -0.36997606 +0.18729488
P 3.88 H 14.5 G 0.15
Residuals in seconds of arc

790622	805	0.2-	0.7+	900415	809 (3.1+ | 1.5-)	910916 675	0.5+	0.0
790622	805	0.2+	0.7-	900416	809	1.8+	0.6-	910916 675	0.8+	0.7+
900302	809	0.1+	0.3-	900416	809	1.2-	0.4-	910916 675	0.8+	0.1+
900302	809	0.7+	0.1-	900416	809 (2.9+ | 0.7+)	910916 675	0.5+	0.7+
900302	809	1.5+	0.4-	900417	809	0.5+	0.6+	910917 675	0.4-	0.6-
900304	809	1.2-	0.1-	900417	809	0.2-	0.7+	910917 675	1.2+	0.5+
900304	809	1.1-	0.1+	910910	675	1.6-	2.0-			
900304	809	1.2-	0.4-	910910	675	1.4-	0.0			

1990 OF2 = 1972 TC5
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 170.38724 (2000.0) P Q
n 0.27166111 Peri. 349.78319 +0.96045880 +0.27827378
a 2.3611183 Node 354.03622 -0.24887884 +0.84345423
e 0.2410313 Incl. 5.01816 -0.12481274 +0.45950915
P 3.63 H 15.0 G 0.15
Residuals in seconds of arc

710326	675	0.1-	0.9-	900726	675	0.6-	0.2-	900915 675	1.4-	0.9+
710326	675	1.5-	0.3-	900729	675	0.1-	0.3+	900915 675 (0.8- | 3.2+)
710327	675	0.6+	0.8-	900729	675	0.2-	0.1+	900915 675	1.1+	1.0-
721006	095	0.6+	1.1-	900730	675	0.3+	0.4+	900915 675	1.7+	0.6-
900726	675	0.2+	0.1+	900730	675	0.7-	0.3-			

1990 QL2 = 1992 EK
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 162.47000 (2000.0) P Q
n 0.28955233 Peri. 224.49095 +0.90750416 -0.41895544
a 2.2628269 Node 160.21692 +0.40596539 +0.85635544
e 0.1300705 Incl. 5.12057 +0.10783458 +0.30188029
P 3.40 H 13.4 G 0.15
Residuals in seconds of arc

900822	675	0.2-	0.4+	900920	675	0.3+	0.5-	900922	809	0.0	0.4+
900822	675	0.1-	0.1-	900920	675	0.4-	1.0-	900922	809	0.6+	0.4+
900828	675	0.0	0.5-	900921	809	1.0-	0.2+	920302	400	0.3-	1.8-
900828	675	0.3+	0.1+	900921	809	0.2-	0.2+	920302	400	0.1+	0.9+
900914	675	0.2+	0.2+	900921	809	0.5+	0.0	920303	400	0.3-	1.3+
900914	675	0.3+	0.1-	900922	809	0.2-	0.2+	920303	400	0.5+	0.4-

1990 QP3 = 1979 SG7
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 116.74513 (2000.0) P Q
n 0.17575140 Peri. 245.91927 +0.95959191 +0.27794217
a 3.1564834 Node 97.91956 -0.23937166 +0.88837642
e 0.1799614 Incl. 2.54317 -0.14793435 +0.36542508
P 5.61 H 13.0 G 0.15
Residuals in seconds of arc

790923	095	1.0+	2.4-	900826	809	0.3+	1.5-	900919	801	0.1+	0.2+
900816	809	2.1+	1.2+	900826	809	0.0	1.0-	900919	801	0.2+	0.2+
900816	809	1.6+	0.7+	900826	809	0.5-	1.7-	900919	675	1.1+	0.8+
900816	809	0.6+	0.4-	900827	675	1.2-	2.0-	900919	675	1.2+	0.4+
900819	801	0.6+	0.5+	900827	675	0.8-	0.1+	901016	801	0.4-	0.8+
900819	801	0.1-	0.3+	900913	809	1.4-	0.3+	901016	801	0.3-	0.7+
900820	809	1.7+	0.7+	900913	809	0.9-	0.4+	901017	801	0.3-	0.9+
900820	809	0.0	0.4+	900913	809	0.9-	0.0	901017	801	0.2-	0.5+
900820	809	0.3-	0.4+	900914	809	1.1-	0.0	901018	801	0.0	0.5+
900820	801	0.0	1.3+	900914	809	0.9-	0.1-	901018	801	0.1-	0.3+
900820	801	0.1+	1.6+	900914	809	0.6-	0.2-	901114	801	0.0	0.5+
900823	675	0.1-	0.0	900914	675	0.3-	0.6-	901115	801	0.0	0.1+
900823	675	0.3-	0.3-	900914	675	0.0	1.0-	920101	801	0.4-	0.2+
900825	675	0.3-	1.5-	900916	801	0.3+	0.1+	920101	801	0.4+	0.0
900825	675	0.3+	0.5-	900916	801	0.1+	0.1+				

1990 SL9 = 1982 BE14
Id. S. J. Bus
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell
M 185.25789 (2000.0) P Q
n 0.17502567 Peri. 168.44044 -0.03734359 +0.99831915
a 3.1652028 Node 99.40799 -0.92038585 -0.01708583
e 0.1651933 Incl. 2.57489 -0.38922404 -0.05538010
P 5.63 H 12.8 G 0.15
Residuals in seconds of arc

820130	675	0.1-	0.3-	900918	675	1.1-	0.2+	900925	809	(3.6+	1.8-)
820131	675	0.0	0.0	900922	809	1.5+	0.5-	900925	809	(2.9+	2.4-)
900914	675	0.9-	0.1+	900922	809	1.6+	0.3-	901022	675	0.1-	1.3+
900914	675	0.7-	0.4-	900922	809	1.6+	0.2-	901022	675	1.2-	0.5+
900918	675	0.7-	0.7-	900925	809	(3.2+	2.0-)				

1990 ST10 = 1986 RM4 = 1992 EJ
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 111.11031 (2000.0) P Q
n 0.23687698 Peri. 74.01191 +0.52046656 -0.85143517
a 2.5869467 Node 344.12417 +0.66493233 +0.45159589
e 0.1861532 Incl. 13.65875 +0.53570473 +0.26668204
P 4.16 H 12.6 G 0.15
Residuals in seconds of arc

860906	071	1.0-	1.1+	900918	095	(5.2+	0.2+)	920302	400	1.3-	0.5+
860906	071	0.6+	0.4-	900918	095	(8.3+	2.6-)	920302	400	1.7+	0.8-
900829	095	(0.2+	4.7-)	900919	675	0.1-	0.2+	920303	400	0.1+	2.2-
900829	095	1.8-	0.8-	900919	675	0.2+	0.2-	920303	400	0.8-	2.0+
900916	675	1.0+	0.2+	900920	675	0.4+	0.5-				
900916	675	0.8+	0.5-	900920	675	0.1+	0.6+				

1990 TR
Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden
M 208.04709 (2000.0) P Q
n 0.31401302 Peri. 335.32184 +0.98266780 +0.18222884
a 2.1437342 Node 14.30307 -0.13883394 +0.84503256
e 0.4370718 Incl. 7.91255 -0.12283781 +0.50270531
P 3.14 H 14.5 G 0.15
Residuals in seconds of arc

900503	413	0.8-	1.4-	901020	801	0.1+	0.2+	901113	589	0.4+	0.0
900504	413	1.5+	0.0	901020	801	0.2+	0.1+	901113	589	1.0+	0.2-
900924	095	(3.8+	6.9+)	901020	372	1.0-	0.8-	901113	589	0.5-	1.3-
900924	095	1.2+	1.2-	901020	372	(0.2-	2.4+)	901113	589	0.1+	0.8-
901011	399	2.0+	0.3-	901021	801	0.1+	0.2+	901113	589	0.7+	0.4-
901011	399	1.3+	0.1+	901021	801	0.1+	0.3+	901115	095	0.4+	0.8+
901011	399	(3.2+	0.8-)	901023	392	0.6-	0.5-	901115	095	0.1+	0.5+
901014	095	(1.4-	5.3+)	901023	392	0.1-	0.7-	901116	801	0.4-	0.5-
901014	095	0.4-	0.3-	901024	095	0.6-	0.3+	901116	801	0.5-	0.5-
901015	675	0.0	1.0-	901024	095	1.1-	0.6-	901120	801	0.1-	0.2+
901015	675	0.1+	0.1-	901028	095	0.3-	0.3-	901120	801	0.1-	0.1-
901015	399	0.0	1.5+	901028	095	(2.0-	1.1+)	901207	657	0.6-	1.4-
901015	392	1.2-	1.1-	901108	589	(1.0+	3.4+)	901207	657	(3.3-	1.4-)
901015	399	1.4+	0.8+	901108	589	(2.2+	2.9+)	901208	399	1.1-	0.6-
901015	392	1.3-	1.4-	901108	589	(3.2+	2.1+)	901208	399	0.5+	1.1-
901015	399	1.1+	0.4+	901109	589	0.6-	1.1+	901214	801	0.3-	0.4+
901015	095	0.3-	0.1+	901109	589	1.0+	1.0+	901214	801	0.4-	0.4+
901015	095	0.5-	0.3-	901109	589	2.0+	1.4+	901215	801	0.1-	0.1+
901016	675	0.5+	0.4-	901109	589	0.8+	0.9+	901215	801	0.2-	0.0
901016	095	0.5-	0.2+	901109	589	1.3+	1.3+	901218	413	0.0	1.1-
901017	372	1.7-	1.3-	901109	589	1.9+	1.5+	910120	801	0.5+	0.6+
901017	372	0.8-	1.7+	901110	046	0.7+	0.2+	910120	801	1.3+	0.9+
901017	095	1.1-	0.4+	901110	046	0.4+	0.3-	910209	801	0.1-	1.0-
901017	095	0.5-	0.3-	901110	540	0.3-	1.2-	910210	801	1.0+	0.5+
901018	392	(1.2-	2.9-)	901110	540	0.4+	1.2-	910212	801	1.0-	1.1+
901018	385	0.0	1.4+	901110	540	0.2-	1.7-	910212	801	0.8-	0.2+
901018	385	0.7+	2.1+	901110	540	0.1-	1.6-	920312	658	0.0	0.3+
901018	871	1.8-	1.6+	901113	046	0.3+	0.4-	920312	658	0.0	0.7-
901018	871	1.3-	2.1+	901113	046	0.0	0.1-	920312	658	0.3+	0.6+
901019	376	0.8+	1.4-	901113	589	0.1-	0.3+				

1990 TZ
Id. P. Rose (1975 obs.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	104.48091		(2000.0)		P		Q				
n	0.26114157	Peri.	226.51599		-0.24872300		-0.91182475				
a	2.4241084	Node	240.63114		+0.96108171		-0.19046817				
e	0.2681855	Incl.	22.01464		+0.12024482		-0.36372724				
P	3.77	H	11.0	G	0.15						

Residuals in seconds of arc

751009	675	0.5+	1.5+	901014	675	0.3+	0.4+	901214	801	0.2+	0.0
751202	675	0.5-	0.9+	901016	675	0.4+	0.2-	901215	801	0.3+	0.1+
751202	675	0.4-	0.1-	901016	675	0.3+	0.0	901219	801	0.4+	0.2-
751203	675	0.6-	1.6-	901118	675	0.3-	0.9-	901219	801	0.4-	0.1+
751203	675	0.4+	0.6+	901118	675	0.5-	0.5-	910211	801	0.6-	0.5+
751204	675	0.6+	0.5-	901119	675	0.1-	1.7-	910212	801	0.1+	0.4+
751204	675	0.2+	0.6+	901207	010	0.6+	0.4+				
901014	675	0.2-	0.8+	901207	010	(2.3-	4.2+)				

1990 TK3 = 1992 EQ1
Id. K. Watanabe
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	148.41192		(2000.0)		P		Q				
n	0.23738078	Peri.	1.79359		+0.82606647		-0.54090870				
a	2.5832851	Node	32.58519		+0.51334148		+0.60632219				
e	0.1732746	Incl.	17.08427		+0.23258271		+0.58291611				
P	4.15	H	12.4	G	0.15						

Residuals in seconds of arc

901015	400	0.1+	0.2-	901021	400	2.2+	0.1+	901115	400	0.8+	1.0+
901015	400	1.5+	0.5+	901021	402	0.6-	0.2-	920308	400	0.9+	0.5-
901016	095	(4.9-	5.4+)	901023	095	2.2-	1.2+	920308	400	1.1+	0.2-
901016	095	(3.3-	3.7+)	901111	675	0.2-	0.2-	920322	400	1.2-	0.8-
901020	402	1.7-	0.5-	901111	675	0.2-	0.9-	920322	400	(6.8-	2.7+)
901020	402	0.1-	0.0	901113	675	0.6+	0.4-	920323	400	0.2-	1.4+
901021	400	1.0+	0.8-	901113	675	0.4+	0.4-	920323	400	0.6-	0.2+
901021	402	1.9-	0.1-	901115	400	0.3+	0.9+				

1990 UP3 = 1988 AQ5 = 1992 FQ1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	34.29866		(2000.0)		P		Q				
n	0.29360940	Peri.	93.89037		-0.98479216		+0.14106876				
a	2.2419336	Node	94.23962		-0.16975518		-0.90554061				
e	0.0582838	Incl.	5.83640		+0.03698094		-0.40011974				
P	3.36	H	14.2	G	0.15						

Residuals in seconds of arc

880111	033	0.4+	0.3-	901016	809	0.5-	0.0	901024	809	0.6+	1.0+
880111	033	0.2-	0.2+	901019	809	0.9-	1.0+	901024	809	0.3-	1.0+
901016	809	2.1+	1.1-	901019	809	0.0	0.7-	901024	809	0.6-	1.1+
901016	809	1.5+	0.5-	901019	809	1.4-	1.1+	920328	400	0.2+	0.6-
901016	809	0.1+	1.1-	901020	809	0.1+	0.8-	920328	400	1.2-	0.8-
901016	809	0.8-	0.4+	901020	809	0.8+	0.4-	920331	400	1.4+	0.9+
901016	809	1.2-	0.3-	901020	809	0.7+	0.6-	920331	400	0.4-	0.4+

1990 VS2
Id. T. Seki (1992 obs.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	327.90694		(2000.0)		P		Q				
n	0.25219238	Peri.	108.99337		-0.50172518		+0.86120899				
a	2.4811218	Node	130.61936		-0.82843224		-0.45136980				
e	0.0106907	Incl.	6.13982		-0.24894148		-0.23363299				
P	3.91	H	13.4	G	0.15						

Residuals in seconds of arc

901111 372	1.1+	0.1-	901115 809	1.6-	1.4+	901121 809	0.7-	0.1-
901111 372	1.2+	1.5-	901115 809	1.1-	0.4+	901219 372	0.5+	1.0-
901113 372	(5.1-	2.9-)	901117 809	0.8-	1.1+	901219 372	0.4-	0.9+
901113 372	(7.5-	2.5-)	901117 809	0.1+	0.6+	920402 372	1.5-	1.1+
901114 372	(3.6-	0.2+)	901117 809	0.3+	1.2+	920402 372	0.9+	0.1-
901114 372	(4.2-	4.5+)	901117 372	1.0+	1.9-	920405 372	0.7+	0.7-
901114 372	(3.1-	5.0-)	901117 372	1.1+	1.0-	920405 372	0.0	0.3-
901114 372	(1.4-	3.6-)	901121 809	0.8+	0.7-			
901115 809	1.3-	0.9+	901121 809	0.4-	0.2-			

1990 VQ5 = 1992 FG1

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 357.50571		(2000.0)	P		Q
n 0.23622664	Peri.	72.74782	-0.88924052		+0.44392393
a 2.5916924	Node	133.44676	-0.45574505		-0.83901690
e 0.0615771	Incl.	8.74459	-0.03934134		-0.31461434
P 4.17	H	14.0	G	0.15	

Residuals in seconds of arc

901115 809	0.1-	1.5+	901117 809	1.0-	1.1+	901123 809	0.5-	0.3-
901115 809	1.3-	0.2-	901117 809	1.1+	0.5+	901123 809	1.3-	0.5-
901115 809	1.4-	0.3+	901117 809	0.2-	0.3-	920324 399	1.2+	1.1+
901115 809	0.0	0.4+	901117 809	0.2+	1.6-	920324 399	1.1+	0.7+
901115 809	0.2-	1.7+	901121 809	1.3+	1.6-	920328 399	1.1-	1.2-
901115 809	2.4+	0.6+	901121 809	1.1+	0.6-	920328 399	1.2-	0.6-
901117 809	0.3-	0.7-	901121 809	0.2+	0.6-			
901117 809	0.8-	0.0	901123 809	0.8+	0.2+			

1990 WN2

Id. T. Seki (1992 obs.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 119.90353		(2000.0)	P		Q
n 0.22776652	Peri.	0.81551	+0.17415268		-0.95303078
a 2.6554785	Node	79.18144	+0.90202741		+0.05345606
e 0.1355035	Incl.	14.61251	+0.39499038		+0.29811875
P 4.33	H	12.8	G	0.15	

Residuals in seconds of arc

901117 372	1.1-	0.6-	901212 372	0.4-	0.3-	920402 372	1.3+	0.6-
901117 372	2.0-	0.2+	901212 372	1.0+	0.2-	920402 372	0.4+	0.6-
901121 372	1.9+	0.3-	910109 372	2.1-	0.5+	920405 372	1.0-	0.5+
901121 372	1.3+	0.8+	910109 372	1.2+	0.2-	920405 372	0.8-	0.6+

1990 WY3 = 1992 FR1

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 187.79368		(2000.0)	P		Q
n 0.26610505	Peri.	287.42229	+0.82714480		-0.54337376
a 2.3938704	Node	105.71121	+0.55539593		+0.75138206
e 0.0566072	Incl.	8.56968	+0.08583029		+0.37439277
P 3.70	H	12.4	G	0.15	

Residuals in seconds of arc

901121 400	0.2+	0.6+	901213 400	0.2-	1.7-	920328 400	1.2-	1.4-
901124 400	1.4-	0.1+	901213 400	0.1+	1.8+	920331 400	0.6+	1.9+
901124 400	1.4+	0.8-	920328 400	0.1+	1.6+	920331 400	0.5+	2.2-

1991 JW
Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden
M 265.08590 (2000.0) P Q
n 0.93196669 Peri. 301.71304 +0.98934602 +0.07813973
a 1.0380122 Node 54.08831 -0.01055674 +0.88003488
e 0.1183309 Incl. 8.72336 -0.14519988 +0.46843655
P 1.06 H 19.5 G 0.15
Residuals in seconds of arc

910419	675	0.8+	1.4-	910514	801	0.8-	1.5-	910701 413	0.7+	0.5-
910419	675	1.2+	1.0-	910514	801	(1.7-	2.6-)	920311 658	0.0	0.5-
910508	675	0.5-	1.0+	910515	568	1.9-	1.2+	920311 658	0.6-	0.7-
910509	675	(2.6+	3.6+)	910515	413	1.2-	0.3-	920311 658	1.3-	0.4-
910509	675	0.2+	1.4+	910516	568	0.1+	1.2+	920312 658	0.6+	0.7+
910510	675	0.6+	1.9+	910516	413	0.4-	0.3+	920312 658	0.6+	0.2+
910510	675	1.0+	0.5+	910517	801	1.6+	0.3-	920312 658	0.6+	0.7+
910512	675	(2.9- | 0.1-)	910517	801	0.7+	0.2-	920313 658	(4.4+ | 2.0+)
910512	675	2.1-	2.0-	910518	568	0.0	0.9-	920313 658	(4.5+	2.3+)

1991 LE1 = 1984 YJ5
Id. J. Alu (1985 obs.), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 351.05181 (2000.0) P Q
n 0.23178201 Peri. 262.27928 +0.86405716 -0.24210051
a 2.6247195 Node 110.85396 +0.35625951 +0.91352148
e 0.1186473 Incl. 28.18322 -0.35564644 +0.32690342
P 4.25 H 11.0 G 0.15
Residuals in seconds of arc

841228	095	1.3-	1.6+	910615	675	1.1+	0.1-	910711 675	2.7-	0.8+
850118	675	2.2+	0.9-	910617	675	0.5+	1.0-	910711 675	0.1+	1.2+
850118	675	1.1-	0.1-	910617	675	0.8+	0.3-	910913 801	0.3-	0.7-
850121	675	0.1+	0.1+	910710	675	1.1+	1.0+	910913 801	0.0	0.3+
910615	675	0.3-	1.1-	910710	675	0.1+	0.5+			

1991 NE3 = 1987 SZ27
Epoch 1992 June 27.0 TT = JDT 2448800.5 Ichikawa
M 1.72947 (2000.0) P Q
n 0.21713700 Peri. 217.54309 +0.94841028 -0.31396753
a 2.7414490 Node 160.61484 +0.31343625 +0.90759450
e 0.0713683 Incl. 7.63025 +0.04770384 +0.27874110
P 4.54 H 12.5 G 0.15
Residuals in seconds of arc

870924	095	1.6-	0.4-	910705	809	1.2-	1.0+	910710 809	0.3+	0.3+
870927	095	1.6+	0.4+	910705	809	1.2-	0.7+	910710 809	0.7+	0.4+
910704	809	0.7+	0.4-	910705	809	1.1-	0.7+	910710 809	0.9+	0.5+
910704	809	1.0+	0.4-	910708	809	1.1-	1.1-			
910704	809	1.5+	0.4-	910708	809	0.6-	1.3-			

1991 NM6 = 1987 SG28
Epoch 1992 June 27.0 TT = JDT 2448800.5 Ichikawa
M 22.95370 (2000.0) P Q
n 0.21736987 Peri. 206.70681 +0.99556861 +0.07803779
a 2.7394906 Node 148.68108 -0.05752769 +0.94680468
e 0.0683409 Incl. 5.79360 -0.07438896 +0.31220345
P 4.53 H 12.3 G 0.15
Residuals in seconds of arc

870924	095	0.2+	0.3-	910711	809	0.3+	0.0	910716 809	0.8-	0.3-
870927	095	0.2-	0.3+	910712	809	0.0	0.0	910716 809	0.4-	0.2-
910711	809	0.1-	0.0	910712	809	0.2+	0.1+	910716 809	0.0	0.2+
910711	809	0.2+	0.1+	910712	809	0.5+	0.1+			

1991 PC6 = 1982 BA14
Id. S. J. Bus
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M 17.79540	(2000.0)	P	Q	
n 0.26934615	Peri. 278.15831	+0.71102645	-0.69531002	
a 2.3746278	Node 125.97077	+0.68532254	+0.65187752	
e 0.1260033	Incl. 7.44103	+0.15739888	+0.30265437	
P 3.66	H 15.2	G 0.15		

Residuals in seconds of arc

820130 675	1.1+	0.8-	910814 809	0.7+	0.1-	910904 809	0.8+	0.2-
820131 675	1.0-	0.9+	910814 809	0.9-	1.0-	910906 809	0.8-	1.2-
910806 809	0.7+	0.6+	910814 809	0.4-	0.5-	910906 809	1.4-	0.2-
910806 809	0.7-	0.2-	910904 809	0.2+	1.4+	910906 809	0.2+	0.1+
910806 809	0.2+	0.9+	910904 809	1.2+	0.5+			

1991 PT11 = 1975 VJ3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 26.19987	(2000.0)	P	Q	
n 0.18033220	Peri. 203.21916	+0.91048887	-0.41353136	
a 3.1028006	Node 181.21022	+0.38875743	+0.85705065	
e 0.2312212	Incl. 3.67711	+0.14098824	+0.30733693	
P 5.47	H 13.0	G 0.15		

Residuals in seconds of arc

751102 095	1.8-	2.1-	910808 675	0.7-	0.0	910910 675	1.2-	0.1+
751107 095	1.8+	1.9+	910808 675	1.6-	0.5+	910916 675	1.0+	0.1-
910807 675	1.7+	0.9-	910810 675	(0.1-	3.4-)	910916 675	1.0+	1.0+
910807 675	0.8+	0.8-	910910 675	0.9-	0.2+			

1991 PC13 = 1953 UX = 1968 QN1 = 1982 BU13 = 1990 EW7
Id. S. J. Bus (k), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 104.27680	(2000.0)	P	Q	
n 0.25766503	Peri. 326.55331	+0.43101070	+0.90140833	
a 2.4458645	Node 328.92095	-0.80943169	+0.36607502	
e 0.2079703	Incl. 4.57141	-0.39881087	+0.23119710	
P 3.83	H 13.0	G 0.15		

Residuals in seconds of arc

531018 760	0.3-	0.9+	900303 809	1.0+	0.6-	910805 675	0.5+	0.3-
531018 760	0.1-	0.1-	900306 809	0.1+	0.8+	910808 675	1.7+	0.7+
680828 095	(4.4-	6.2-)	900306 809	0.4+	1.1+	910808 675	0.0	0.4-
820130 675	0.6-	1.3-	900306 809	0.6+	1.1+	910907 399	0.5-	1.3-
820131 675	0.0	0.8-	900307 809	1.1-	0.2-	910907 399	0.9-	0.2-
900303 809	0.3+	0.5-	900307 809	0.9-	0.3-			
900303 809	0.7+	0.6-	900307 809	1.0-	0.3-			

1991 PH15 = 1976 GS8 = 1984 SA4 = 1987 KD = 1987 KM5 = 1990 DE4
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 127.37845	(2000.0)	P	Q	
n 0.27311056	Peri. 99.52796	+0.09896261	+0.99509083	
a 2.3527569	Node 176.15121	-0.91759569	+0.09156703	
e 0.1847659	Incl. 0.68374	-0.38499941	+0.03754623	
P 3.61	H 14.0	G 0.15		

Residuals in seconds of arc

760405 808	(12.8+	5.6-)	870522 675	1.4-	0.1-	900227 809	0.1+	0.3-
760405 808	(11.3+	7.0-)	870523 675	1.6+	1.1+	900301 809	1.6-	1.1-
840927 033	0.9-	2.2+	900227 809	0.8-	0.4-	900301 809	1.3-	1.3-
840927 033	0.2+	0.5-	900227 809	0.3-	0.5-	900301 809	0.7-	1.4-

900302 809 0.7+ 0.5- 910807 675 1.1+ 1.8- 910916 675 0.2+ 0.5-
900302 809 0.8+ 0.5- 910807 675 0.6+ 1.7- 910916 675 0.2+ 0.1-
900302 809 0.8+ 0.4- 910810 675 0.6+ 2.5-

1991 PK15 = 1987 UE2
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 71.36427 (2000.0) P Q
n 0.23762223 Peri. 19.40343 +0.94363650 +0.32824160
a 2.5815349 Node 321.35158 -0.31195791 +0.83910236
e 0.2332643 Incl. 3.90347 -0.11060029 +0.43377954
P 4.15 H 13.5 G 0.15
Residuals in seconds of arc
870926 095 0.3- 0.4- 910810 675 0.5+ 0.4- 910916 675 0.1+ 0.7+
871025 054 0.5+ 0.0 910910 675 1.9- 1.4- 910917 675 0.2+ 0.0
871025 054 0.2- 0.2+ 910916 675 0.1- 0.6- 910917 675 0.8+ 0.5+
910807 675 0.6+ 0.4- 910916 675 0.2+ 0.6+
910807 675 0.3- 0.9+ 910916 675 0.1- 0.4+

1991 PG16 = 1982 BF13
Id. S. J. Bus
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell
M 45.13979 (2000.0) P Q
n 0.17584585 Peri. 253.09248 +0.99617739 -0.07645105
a 3.1553531 Node 111.27610 +0.08681846 +0.91996318
e 0.2958025 Incl. 2.59926 -0.00965198 +0.38447754
P 5.60 H 13.5 G 0.15
Residuals in seconds of arc
820130 675 0.0 0.1- 910808 675 0.4- 0.6- 910916 675 0.3- 0.0
820131 675 0.0 0.1+ 910914 675 0.7+ 0.1+ 910916 675 0.3- 0.2-
910807 675 0.4+ 0.5+ 910914 675 0.1- 0.2+

1991 PV17 = 4325 T-1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 44.60702 (2000.0) P Q
n 0.26536320 Peri. 317.20568 +0.84696848 -0.52920013
a 2.3983299 Node 74.81235 +0.50091871 +0.76227312
e 0.1923817 Incl. 3.02378 +0.17811470 +0.37267535
P 3.71 H 14.5 G 0.15
Residuals in seconds of arc
710324 675 0.6+ 0.4+ 910807 675 0.6+ 0.2- 910916 675 0.6+ 0.2+
710326 675 0.1- 0.7+ 910807 675 0.5- 0.5+ 910916 675 0.1+ 0.3+
710326 675 0.2+ 0.4- 910912 675 0.6- 0.1+
710327 675 0.6- 0.8- 910912 675 0.1- 0.8-

1991 PW17 = 1978 XN1 = 1981 SR4 = 1990 FJ1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 268.99972 (2000.0) P Q
n 0.29272314 Peri. 329.76921 -0.95357909 -0.30074331
a 2.2464565 Node 192.75683 +0.28844475 -0.89736659
e 0.0412529 Incl. 4.02629 +0.08652483 -0.32293445
P 3.37 H 14.0 G 0.15
Residuals in seconds of arc
781205 033 0.3- 1.2+ 900329 400 0.1+ 0.6+ 910808 675 0.3- 0.8+
781205 033 0.3- 1.4+ 900329 400 1.6+ 2.7+ 910911 675 1.0+ 1.7+
810925 095 0.6+ 1.5- 910808 675 0.8+ 0.1- 910911 675 0.1+ 1.1+
900327 400 0.7- 1.2+ 910808 675 1.8- 0.6- 910916 675 0.9- 1.5+
900327 400 0.4+ 0.4- 910808 675 0.4+ 0.8- 910916 675 0.9- 0.8+

1991 PF18 = 1983 RG7 = 1987 SP17
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 15.10486 (2000.0) P Q
n 0.24125446 Peri. 147.23544 +0.63922700 -0.76624933
a 2.5555584 Node 262.94386 +0.69066338 +0.60931376
e 0.1282500 Incl. 3.76680 +0.33819069 +0.20395759
P 4.09 H 13.5 G 0.15
Residuals in seconds of arc
830909 095 0.9+ 2.7- 910808 675 1.3+ 1.8- 910914 675 0.9- 0.2-
870916 095 (4.0- 2.1+) 910808 675 1.1+ 0.2- 910914 675 0.6- 0.7-
870917 095 1.8+ 1.4+ 910912 675 0.8- 1.8+
870923 095 2.1- 0.7+ 910912 675 0.5- 1.4+

1991 PN18 = 1962 TM = 1972 XY = 1978 SY1 = 1988 RH14
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 349.69566 (2000.0) P Q
n 0.30409713 Peri. 173.49686 -0.12740416 -0.98816648
a 2.1900860 Node 283.79814 +0.90599724 -0.08089809
e 0.1131324 Incl. 5.04568 +0.40365478 -0.13031698
P 3.24 H 13.0 G 0.15
Residuals in seconds of arc
621004 760 1.3- 0.8+ 781002 095 1.7- 0.8+ 910916 675 0.3+ 0.9-
621004 760 0.3+ 2.3+ 880915 095 (6.5- 2.4-) 910916 675 0.7+ 0.6-
721202 095 2.2- 1.7- 880915 095 0.6- 0.1+ 910917 675 1.1+ 0.8-
721206 095 2.5+ 0.0 910808 675 0.8- 1.1- 910917 675 1.0+ 0.2-
780926 095 0.5- 1.8+ 910808 675 1.1+ 1.6-

1991 RK2 = 1973 SN5 = 1982 BJ14 = 1986 EK3
Id. S. J. Bus (k), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 67.64865 (2000.0) P Q
n 0.27095407 Peri. 216.11996 +0.99672654 -0.04589363
a 2.3652239 Node 146.32473 +0.06402709 +0.95075725
e 0.1425960 Incl. 6.89417 -0.04936326 +0.30651988
P 3.64 H 13.5 G 0.15
Residuals in seconds of arc
730927 095 0.7+ 2.1- 910915 675 0.4+ 0.2+ 910928 894 0.2+ 0.4+
820130 675 0.8+ 1.5+ 910915 675 0.3+ 0.4+ 910928 894 1.4- 1.0-
820131 675 0.5- 0.8+ 910916 675 0.0 0.5- 910929 413 0.2- 0.8+
860312 809 0.2- 0.7- 910916 675 0.1- 0.8+ 910930 413 0.2- 1.3+
910909 894 0.5- 0.5- 910917 675 0.6+ 0.2+ 911002 894 1.3+ 0.7-
910909 894 0.7- 1.4+ 910917 675 0.3+ 0.0 911002 894 0.4+ 1.6-
910912 675 0.2- 0.0 910919 894 1.6- 1.7+
910912 675 0.8+ 0.4- 910919 894 0.1- 0.1-

1991 RM6 = 1982 BC13 = 1989 AT9
Id. E. Bowell (k), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 22.78601 (2000.0) P Q
n 0.27574387 Peri. 283.52695 +0.46885983 -0.88037461
a 2.3377540 Node 138.26963 +0.84624131 +0.42453852
e 0.1404529 Incl. 6.16573 +0.25307331 +0.21144170
P 3.57 H 14.0 G 0.15
Residuals in seconds of arc
820130 675 0.2- 0.3- 910904 675 1.6+ 0.6+ 910915 675 0.3- 0.2+
820131 675 0.1+ 0.2- 910904 675 0.0 0.3+ 910917 675 0.4- 1.1-
890109 033 0.0 0.3+ 910905 675 0.4- 0.7- 910917 675 0.2- 0.3+
890109 033 0.0 0.0 910915 675 0.3- 0.3+

1991 RM15 = 1980 TP7
Epoch 1992 June 27.0 TT = JDT 2448800.5 Ichikawa

M	103.66214	(2000.0)	P	Q
n	0.26734355	Peri. 3.50606	+0.68397626	+0.72895774
a	2.3864715	Node 309.65158	-0.67019591	+0.61261330
e	0.2262215	Incl. 2.10144	-0.28812136	+0.30549230
P	3.69	H 14.7	G 0.15	

Residuals in seconds of arc

801010	095	1.4- 0.4+	910911	675	0.8- 0.0	910917	675	0.7- 0.5+
801015	095	1.4+ 0.3-	910915	675	0.0 0.3+	910917	675	1.2- 0.5-
910911	675	0.8+ 0.5+	910915	675	1.9+ 0.9-			

1991 RP15 = 1975 TK2 = 1975 VA2 = 1982 BE11 = 1986 TE18 = 1986 VO6 = 1988 CY6
Id. K. Ichikawa, H. Oishi (d, JAM 1815)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Ichikawa

M	3.10653	(2000.0)	P	Q
n	0.18272122	Peri. 11.21364	+0.51396038	-0.85760393
a	3.0756959	Node 47.86152	+0.78503569	+0.46132128
e	0.1424055	Incl. 1.46668	+0.34577983	+0.22737233
P	5.39	H 12.5	G 0.15	

Residuals in seconds of arc

751003	095	0.5- 0.9+	861106	688	1.4+ 0.8+	910914	675	0.3+ 0.8-
751102	095	(1.3- 6.5+)	880215	046	(1.0- 6.4-)	910915	675	0.4+ 0.4-
751107	095	(4.3- 9.8+)	880215	046	2.2- 5.0-	910915	675	1.3+ 0.8-
820120	095	0.9+ 0.0	910911	675	1.3+ 0.3+	910916	675	0.0 2.0-
861012	095	4.9- 1.1+	910911	675	0.1+ 1.0-	910916	675	0.4- 1.0-
861106	688	1.2+ 1.0+	910914	675	1.1+ 1.6-			

1991 RA16 = 1984 AM = 1987 SD11 = 1989 CN6
Epoch 1992 June 27.0 TT = JDT 2448800.5 Ichikawa

M	333.04464	(2000.0)	P	Q
n	0.22387720	Peri. 345.53068	-0.22303495	-0.97216848
a	2.6861451	Node 117.31410	+0.90220242	-0.23372606
e	0.1307230	Incl. 4.63000	+0.36916961	-0.01614252
P	4.40	H 13.3	G 0.15	

Residuals in seconds of arc

840105	688	0.2+ 0.3+	890204	033	0.5- 1.5-	910916	675	0.5- 0.8-
840105	688	0.1+ 0.8-	890204	033	0.9- 1.7-	910916	675	0.2+ 0.4-
840108	688	0.2- 0.5+	910914	675	0.9+ 0.4-	910917	675	0.5+ 0.9-
840108	688	0.0 0.9-	910914	675	0.1- 0.4-	910917	675	0.9+ 0.5-
870930	033	0.5- 1.2+	910915	675	0.5+ 0.7-			
870930	033	0.5- 0.9+	910915	675	0.4- 0.5-			

1991 SS1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	61.44480	(2000.0)	P	Q
n	0.26965616	Peri. 353.49463	+0.85242875	-0.51920857
a	2.3728074	Node 37.99023	+0.48409288	+0.73929246
e	0.3655865	Incl. 5.73837	+0.19753305	+0.42879962
P	3.66	H 16.5	G 0.15	

From 21 observations 1991 Sept. 12-Nov. 27, mean residual 0".60.

1991 TB1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 90.22673 (2000.0) P Q
n 0.56236631 Peri. 103.57923 -0.33086467 -0.94267317
a 1.4536388 Node 6.27670 +0.63561226 -0.25672003
e 0.3520835 Incl. 23.46928 +0.69751389 -0.21321847
P 1.75 H 17.0 G 0.15
From 13 observations 1991 Oct. 2-1992 Mar. 30, mean residual 0".97.

1991 UG3 = 1989 CY5
Id. H. Kaneda (MPC 19515)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 86.56718 (2000.0) P Q
n 0.26480932 Peri. 44.30327 +0.99804412 -0.05190832
a 2.4016730 Node 318.63447 +0.03170834 +0.90058592
e 0.2156565 Incl. 3.02153 +0.05387501 +0.43156753
P 3.72 H 14.0 G 0.15
Residuals in seconds of arc

710416 675	0.2+	0.4-	911031 399	0.1+	0.9+	911105 399	0.3-	0.8+
710514 675	0.3+	1.0+	911031 399	0.7-	0.4+	911109 399	0.2+	1.6-
710514 675	0.7-	0.8-	911104 399	1.6+	0.4+	911109 399	0.6-	0.3-
890202 033	0.1-	0.1+	911104 399	0.3+	0.9-			
890204 033	0.2+	0.0	911105 399	0.5-	0.1+			

1991 UJ4 = 1960 WH1 = 1975 RE2 = 1979 QF9 = 1979 SW4 = 1983 VV
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 107.07003 (2000.0) P Q
n 0.25488761 Peri. 32.57562 +0.99858423 +0.04819864
a 2.4636002 Node 324.64057 -0.05319279 +0.90288766
e 0.1866862 Incl. 2.22860 -0.00024180 +0.42716597
P 3.87 H 14.0 G 0.15
Residuals in seconds of arc

601124 033	0.1-	0.1+	831012 688	2.5+	1.6-	911110 033	0.6+	0.8+
750904 808	0.4+	1.3+	831104 688	1.0+	0.0	911111 033	0.6-	0.5+
750904 808	0.4+	1.2+	831104 688	(0.5+	3.6-)	911210 033	0.4+	0.9+
790828 095	3.5-	2.1-	911030 033	2.2-	1.0-	911210 033	2.0+	0.5+
790923 095	0.9-	1.3+	911031 033	1.0-	0.1+	911211 033	0.2+	0.5+
831012 688	1.5+	0.7-	911101 033	1.3-	0.7+			

1991 UL4 = 1978 WW1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 59.13877 (2000.0) P Q
n 0.22534004 Peri. 315.55439 +0.85056905 -0.51933901
a 2.6745074 Node 75.90227 +0.50307483 +0.75788623
e 0.2245318 Incl. 4.88426 +0.15312738 +0.39483599
P 4.37 H 14.4 G 0.15
Residuals in seconds of arc

781129 675	1.0-	0.4-	911019 399	0.5+	0.1+	911104 399	1.1+	0.7+
781130 675	1.0+	0.4+	911019 399	1.3-	0.8+	911104 399	0.5+	0.1+
911018 399	1.3+	0.4-	911031 399	0.8-	0.7+	911109 399	0.1-	0.5-
911018 399	0.2-	0.9-	911031 399	1.3-	0.1+	911109 399	0.2+	0.6-

1991 VK = 1991 TS1 = 1981 UX12
Id. G. V. Williams (d, MPC 19516; unpublished)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	67.46356	(2000.0)	P	Q
n	0.39389729	Peri. 173.17213	-0.31494836	-0.94525391
a	1.8430936	Node 295.15655	+0.86626472	-0.24950102
e	0.5061359	Incl. 5.41736	+0.38780532	-0.21034327
P	2.50	H 17.0	G 0.15	

Residuals in seconds of arc

811023	095	3.9+	5.2-	911112	675	(2.9-	0.1-)	911211	411	0.1-	1.0-
911003	675	0.4-	1.0-	911126	587	1.2-	0.1-	911211	411	1.3-	0.3-
911003	675	1.1+	1.5-	911129	587	0.8+	0.0	911212	411	0.8+	0.7-
911007	675	(1.5-	2.8-)	911129	587	0.5-	0.5-	911212	411	0.3+	0.8-
911007	675	(1.3-	2.6-)	911130	587	0.1-	0.5+	911212	411	0.6+	1.1+
911010	675	1.4-	0.5+	911204	801	0.7+	0.2-	911215	691	0.6-	0.5+
911010	675	0.3-	0.3+	911204	801	0.9+	0.2+	911215	691	0.4-	0.4+
911012	675	0.9-	1.9-	911207	675	0.5+	0.4-	911215	691	0.4-	0.4+
911012	675	0.4-	0.9-	911207	675	1.5-	1.3-	920304	474	0.2-	0.8-
911101	675	0.2+	1.1+	911209	411	0.4+	0.2+	920304	474	0.4-	0.9-
911101	675	0.1+	1.5+	911209	411	0.4-	0.2-	920308	474	(2.7-	0.5-)
911102	675	0.0	1.4+	911209	411	0.0	0.4+	920308	474	(4.7-	0.3-)
911104	675	0.2+	1.6+	911209	411	0.6+	0.4+	920409	413	0.2+	1.6-
911109	675	0.6-	0.0	911209	411	0.2-	0.7+	920409	413	(0.7+	2.8-)
911109	675	0.6-	0.2+	911209	411	0.2+	0.0	920410	413	1.2-	0.7-

1991 VK4 = 1987 RB2 = 1987 SB16

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	101.03346	(2000.0)	P	Q
n	0.27718651	Peri. 68.31161	+0.97446241	-0.21913004
a	2.3296356	Node 304.31471	+0.17775973	+0.88622858
e	0.1341391	Incl. 3.40396	+0.13720238	+0.40814327
P	3.56	H 13.0	G 0.15	

Residuals in seconds of arc

870901	095	0.2+	0.1-	911115	402	1.5+	1.0+	920103	033	0.4+	1.3+
870925	095	0.3-	0.3+	911115	402	1.1+	1.8+	920103	033	0.4-	0.8+
911109	402	0.8+	1.0-	911130	402	0.6-	0.4-	920107	033	0.2+	0.2-
911109	402	0.1-	1.0-	911130	402	0.1+	0.3-	920107	033	0.3-	0.2-
911112	402	1.3-	0.3+	911228	033	0.2+	0.8-				
911112	402	1.6-	0.9-	911228	033	0.0	0.5-				

1991 VM4 = 1976 SY2 = 1987 RQ5 = 1987 SR27 = 1987 WW2

Id. G. V. Williams, S. Nakano

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	62.40381	(2000.0)	P	Q
n	0.26792087	Peri. 32.18256	+0.50612674	-0.86212567
a	2.3830420	Node 27.43335	+0.77985431	+0.44559951
e	0.1819254	Incl. 2.98361	+0.36832457	+0.24120617
P	3.68	H 14.5	G 0.15	

Residuals in seconds of arc

760924	095	0.2+	0.6+	871117	010	0.1-	0.2-	911210	033	1.3-	0.6+
760929	095	0.6+	2.2-	911109	402	0.5+	1.9-	911210	033	0.8+	0.2+
870904	095	1.5-	1.7+	911109	402	1.4+	1.4-	911211	033	0.9-	0.2+
870924	095	0.3+	0.5+	911115	402	0.6-	1.4+				
871117	010	0.4+	0.4-	911115	402	0.0	1.3+				

1991 WB
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell
M 69.53830 (2000.0) P Q
n 0.21604799 Peri. 314.60828 +0.69651234 -0.42777508
a 2.7506536 Node 79.36298 +0.70154601 +0.57457134
e 0.3285459 Incl. 35.88511 -0.15067764 +0.69776518
P 4.56 H 12.5 G 0.15
From 28 observations 1991 Nov. 30-1992 Mar. 4, mean residual 0".91.

1991 XC
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 51.74874 (2000.0) P Q
n 0.25872669 Peri. 92.56122 -0.06138538 -0.99809269
a 2.4391690 Node 1.02893 +0.70785596 -0.04815540
e 0.3044196 Incl. 21.37146 +0.70368443 -0.03862700
P 3.81 H 13.5 G 0.15
From 12 observations 1991 Dec. 3-1992 Mar. 1, mean residual 0".73.

1991 XO1 = 1950 TW1 = 1983 NW
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 106.39982 (2000.0) P Q
n 0.26698715 Peri. 292.09448 +0.95826783 -0.28065718
a 2.3885948 Node 84.23832 +0.27827274 +0.87223131
e 0.2088345 Incl. 3.13160 +0.06547560 +0.40055473
P 3.69 H 13.5 G 0.15
Residuals in seconds of arc
501015 024 0.5- 1.2+ 911211 033 0.1+ 0.5- 920103 033 0.2- 0.0
830713 688 0.8+ 2.6- 911212 033 0.5- 0.7- 920107 033 0.6+ 0.8+
830713 688 (3.7- 5.4-) 911228 033 0.7+ 0.7-
911210 033 1.3- 0.5- 920102 033 0.6+ 0.8-

1992 AA
Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden
M 61.36028 (2000.0) P Q
n 0.35335048 Peri. 354.39582 -0.12668474 -0.98192825
a 1.9815221 Node 102.82476 +0.91559952 -0.17028333
e 0.3898723 Incl. 8.29069 +0.38161302 +0.08258631
P 2.79 H 16.0 G 0.15
From 34 observations 1991 Dec. 8-1992 Mar. 13, mean residual 0".84.

1992 AB
Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden
M 12.78462 (2000.0) P Q
n 0.16548465 Peri. 55.68939 -0.61484317 -0.44229100
a 3.2857227 Node 88.92533 +0.31326565 -0.89678554
e 0.5534026 Incl. 40.77325 +0.72376274 +0.01242466
P 5.96 H 14.0 G 0.15
From 18 observations 1992 Jan. 1-Mar. 13, mean residual 0".78.

1992 AE
Epoch 1992 Jan. 19.0 TT = JDT 2448640.5 Marsden
M 28.27363 (2000.0) P Q
n 0.30141265 Peri. 284.01933 +0.96900230 -0.22053611
a 2.2030705 Node 88.80972 +0.24681707 +0.88381821
e 0.4366782 Incl. 6.39441 -0.01076477 +0.41258841
P 3.27 H 15.0 G 0.15
From 29 observations 1992 Jan. 10-Feb. 24.

1992 AJ = 1957 BC = 1977 QB4 = 1983 OE = 1990 SC18
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	23.97305	(2000.0)	P	Q
n	0.16803950	Peri. 347.13227	-0.62163832	-0.76270130
a	3.2523339	Node 140.88501	+0.74139986	-0.64643119
e	0.0349304	Incl. 16.43309	+0.25276877	+0.02033333
P	5.87	H 11.0	G 0.15	

Residuals in seconds of arc

570121 024	0.2+	0.9+	920104 399	0.5-	0.4-	920128 399	1.0-	0.1+
770818 095	1.2-	1.7+	920104 399	0.8-	1.9+	920128 399	2.0-	0.5+
830717 688	0.7+	0.9-	920110 402	0.3+	1.2-	920301 801	(0.1+	2.6-)
830717 688	0.8+	2.1-	920110 402	1.9+	0.5-	920301 801	0.6+	0.3-
900928 413	0.2-	0.4-	920111 402	0.7+	1.0-	920304 801	0.6+	0.5-
900928 413	0.1-	0.7+	920111 402	0.1+	0.6-	920304 801	0.7+	0.5-
920102 399	0.4-	1.2+	920124 399	0.5-	0.5-	920401 801	0.7+	0.1-
920102 399	1.3-	0.8+	920124 399	0.9+	0.8-	920401 801	0.5+	0.1-

1992 AX
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	348.28961	(2000.0)	P	Q
n	0.39549114	Peri. 108.47267	-0.67287769	+0.71890300
a	1.8381384	Node 117.94726	-0.73109103	-0.61028168
e	0.2774378	Incl. 11.38610	-0.11287831	-0.33276831
P	2.49	H 14.0	G 0.15	

From 16 observations 1992 Jan. 4-Apr. 1, mean residual 0".60.

1992 AS1 = 1965 AM = 1968 UO1 = 1985 OS
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	85.99164	(2000.0)	P	Q
n	0.22088508	Peri. 277.82876	+0.32129909	-0.94242256
a	2.7103484	Node 152.85738	+0.92908253	+0.29475590
e	0.1088325	Incl. 11.73320	+0.18322815	+0.15798313
P	4.46	H 11.8	G 0.15	

Residuals in seconds of arc

650101 330	0.0	4.1+	920107 877	1.8-	0.3-	920127 877	1.2+	0.3-
681023 095	0.3+	1.7-	920107 877	1.1-	3.4-	920202 385	0.1+	0.7+
850719 033	0.0	0.8+	920114 877	1.1+	1.0-	920202 385	2.9-	1.8+
920104 877	0.6-	0.5+	920114 877	1.9+	0.6-	920222 877	0.1-	0.4-
920104 877	1.6+	0.1-	920127 877	0.8+	1.4+	920222 877	0.3-	1.5-

1992 BF
Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M	22.76445	(2000.0)	P	Q
n	1.13927537	Peri. 336.25555	+0.37591791	+0.92243486
a	0.9079256	Node 315.68603	-0.82865527	+0.29197593
e	0.2710423	Incl. 7.26276	-0.41474831	+0.25271326
P	0.87	H 19.0	G 0.15	

From 23 observations 1992 Jan. 30-Mar. 7, mean residual 0".93.

1992 BK = 1948 XG = 1982 VX9 = 1990 RY5
Id. S. Nakano, H. Kaneda
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	52.90788	(2000.0)	P	Q
n	0.22981104	Peri. 105.45468	-0.15674051	-0.98760582
a	2.6397054	Node 353.54635	+0.87589418	-0.13516787
e	0.2296779	Incl. 4.18084	+0.45633517	-0.07977710
P	4.29	H 13.5	G 0.15	

Residuals in seconds of arc

481210 012	0.1-	0.5-	900914 675	0.3+	0.9-	920124 896	0.9+	1.6+	Y
821111 095	0.7+	1.5-	900914 675	0.0	0.8-	920124 896	2.3+	1.1+	
900908 809	1.3-	0.4+	900914 809	0.1+	0.6+	920126 896	1.2+	0.2+	
900909 809	1.2-	0.4+	900915 809	0.3+	0.5+	920204 896	2.2-	0.2-	
900909 809	0.7-	0.8+	900915 809	0.5+	0.7+	920204 896	1.1-	0.4-	
900909 809	2.0-	0.9+	900915 809	1.5+	0.3+	920303 896	0.2+	2.0+	
900910 809	1.8-	0.8+	900916 809	1.8+	0.1+				
900910 809	1.8-	0.9+	900916 809	2.2+	0.1+				

1992 BW = 1985 QC3

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 130.02110		(2000.0)	P		Q
n 0.36536267	Peri.	86.22899	+0.69646309		-0.66874802
a 1.9378490	Node	315.48818	+0.41657300		+0.67205939
e 0.0862032	Incl.	21.78871	+0.58429967		+0.31798155
P 2.70	H	14.0	G	0.15	

Residuals in seconds of arc

850820 675	(2.7+	3.8-)	920130 675	0.3+	0.5-	920306 675	0.2+	0.0	
850820 675	0.0	0.1+	920130 675	0.7+	0.0	920306 675	0.2-	0.0	
850823 675	1.1-	0.7-	920202 675	0.6-	0.1-				
850823 675	1.1+	0.6+	920202 675	0.6-	0.6+				

1992 CC1 = 1987 GE

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 190.30558		(2000.0)	P		Q
n 0.60041952	Peri.	21.86372	+0.96716963		-0.22850284
a 1.3915522	Node	349.32626	+0.02182823		+0.51071600
e 0.3749622	Incl.	36.90388	+0.25319248		+0.82882786
P 1.64	H	14.5	G	0.15	

Residuals in seconds of arc

870401 675	1.1+	1.2+	920228 657	1.6+	0.4+	920301 589	1.2-	0.8-	
870401 675	1.1+	0.7+	920228 657	0.1+	0.1-	920305 801	0.1+	0.1-	
920209 675	0.3+	0.8+	920228 657	1.3-	0.4+	920305 801	0.2+	0.1-	
920209 675	1.1+	1.2+	920228 675	0.1-	0.0	920308 540	(2.2-	1.0-)	
920225 675	0.5-	1.1+	920228 675	0.8-	0.2+	920308 540	0.5+	0.9-	
920225 675	1.2-	0.4+	920301 801	0.8+	0.1-	920311 658	0.2+	0.6-	
920226 675	(0.0	2.4+)	920301 801	0.3-	0.1-	920311 658	1.1+	0.3-	
920226 675	0.7-	0.7+	920301 589	(2.5+	1.6-)	920311 658	0.5+	0.4-	
920226 675	0.4-	0.5+	920301 589	1.6+	1.1-	920312 658	0.1-	0.4-	
920227 675	0.2+	0.8+	920301 589	(2.3-	1.3+)	920312 658	0.2-	0.2-	
920227 675	0.9-	0.6+	920301 589	0.8-	0.7-	920312 658	0.3-	0.2-	
920227 372	(4.2-	1.5-)	920301 589	0.8-	1.9-	920401 801	1.0+	0.0	
920227 372	(3.4-	0.7-)	920301 589	1.2-	0.6-	920401 801	0.9+	0.2-	

1992 DB = 1954 HG = 1971 DP = 1978 ED6 = 1980 WD2 = 1985 DL4 = 1990 SO3

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 29.60791		(2000.0)	P		Q
n 0.28336726	Peri.	41.59279	-0.97774387		-0.20105296
a 2.2956355	Node	126.71044	+0.16727426		-0.91952990
e 0.0784185	Incl.	4.28905	+0.12663427		-0.33770174
P 3.48	H	13.5	G	0.15	

Residuals in seconds of arc

540426 760	(2.1+	4.3-)	850222 675	1.5+	0.4+	920225 399	0.9-	0.1+	
540426 760	0.8-	2.4-	850223 675	2.2+	0.0	920225 399	0.5-	0.2-	
710218 095	(0.1+	6.9+)	900918 675	0.3+	1.6-	920225 886	0.7-	0.8-	
780306 095	1.7-	0.3+	900918 675	0.7+	0.9-	920225 886	2.1+	2.0-	
801130 095	1.3-	0.2-	900920 675	0.9+	1.0-	920226 399	0.4-	0.7-	
801210 095	0.9+	0.5+	900920 675	0.3+	1.8-	920226 399	0.9-	1.1-	

920226 403 1.9- 1.1+ 920227 403 0.4- 0.2- 920301 046 0.9- 0.8-
920226 403 0.1+ 1.6+ 920227 886 0.4+ 1.1+ 920301 046 1.0+ 0.2+
920227 403 1.2+ 1.4- 920301 046 0.9- 0.9- 920301 046 0.5- 0.5+

1992 DC
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 33.89711 (2000.0) P Q
n 0.25292079 Peri. 151.95554 -0.80669599 -0.59040503
a 2.4763557 Node 351.71319 +0.50326998 -0.66348607
e 0.4613646 Incl. 10.29494 +0.30977556 -0.45957386
P 3.90 H 17.5 G 0.15
From 8 observations 1992 Feb. 26-Apr. 5, mean residual 0".48.

1992 DK = 1946 UJ = 1957 YY = 1968 YA = 1973 UW3 = 1979 YK2
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 143.47912 (2000.0) P Q
n 0.18094148 Peri. 349.93529 +0.85011264 -0.49290062
a 3.0958314 Node 41.33240 +0.50055705 +0.64703122
e 0.2049925 Incl. 16.29982 +0.16355774 +0.58172122
P 5.45 H 11.0 G 0.15
Residuals in seconds of arc
461023 062 2.0+ 0.0 791224 095 0.3+ 0.1+ 920227 376 0.6- 0.6-
461023 062 0.6+ 0.5+ 920226 402 0.3- 0.1+ 920308 402 1.2- 2.1-
461026 062 1.2- 0.6- 920226 402 1.2+ 0.2+ 920308 402 1.3- 0.6+
571222 760 4.1- 1.3+ 920227 402 1.4- 0.6- 920310 402 0.9+ 0.1-
681222 095 1.1+ 0.1- 920227 402 0.3+ 0.8+ 920310 402 0.5+ 0.6-
731029 095 2.4+ 3.1- 920227 376 0.4- 0.8-

1992 DG1 = 1952 HD2 = 1959 EN = 1970 EH3 = 1988 BN1
Id. H. Kaneda, S. Nakano
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 358.37440 (2000.0) P Q
n 0.27022688 Peri. 231.30529 -0.76974383 +0.63804882
a 2.3694653 Node 348.29659 -0.55137997 -0.68010479
e 0.1518409 Incl. 5.57360 -0.32167462 -0.36104180
P 3.65 H 13.1 G 0.15
Residuals in seconds of arc
520423 711 2.4- 3.5- Y 700310 805 0.2+ 0.0 920304 400 (2.9+ 0.4+)
520423 711 (5.7- 0.7-)Y 880122 511 1.2- 0.9- 920304 400 0.1- 0.3+
520424 711 (2.1+ 6.7-)Y 880122 511 0.6+ 0.0 920307 391 (1.6- 3.7-)
520424 711 1.6+ 2.1+ Y 880123 511 0.0 0.8- 920307 391 (2.3- 3.6-)
590306 690(16.1- 8.5+) 880123 511 0.1- 0.1- 920308 400 1.4+ 1.5-
590309 690(12.0+ 3.2+) 920228 400 1.4- 0.6+ 920308 400 1.4+ 1.4+
700310 805 0.2+ 0.5+ 920302 400 0.3- 0.8+ 920311 391 (3.2+ 0.9-)
700310 805 0.7+ 0.9+ 920302 400 0.8- 0.9- 920311 391 (9.1- 0.0)

1992 EB = 1984 YE2 = 1987 SV15 = 1990 QD10 = 1990 SU25
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 158.16566 (2000.0) P Q
n 0.30511360 Peri. 71.51246 +0.81240056 -0.58302637
a 2.1852192 Node 324.14960 +0.52884826 +0.74340477
e 0.0823738 Incl. 0.90504 +0.24561117 +0.32776454
P 3.23 H 13.9 G 0.15
Residuals in seconds of arc
841223 095 0.3+ 0.9- 900816 809 0.3+ 0.3+ 900820 809 0.0 0.0
841227 095 0.2- 0.6+ 900816 809 0.5+ 0.2+ 900820 809 0.9- 0.6-
870925 095 0.3- 0.2+ 900816 809 0.5- 0.4- 900820 809 1.3- 0.1-

900916 400 (3.2+ 2.5+) 920302 399 1.1+ 0.8+ 920322 399 0.7- 0.7-
900916 400 2.0+ 0.5+ 920303 399 0.8- 0.5+ 920322 399 1.3- 0.6-
920302 399 1.7+ 0.6+ 920303 399 0.1+ 0.5-

1992 EF = 1976 EF = 1979 SR10 = 1979 VX = 1981 AY = 1990 XN1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 0.15923 (2000.0) P Q
n 0.18794175 Peri. 273.68283 -0.98221525 +0.09948100
a 3.0184724 Node 272.07369 -0.02834935 -0.91695384
e 0.0448617 Incl. 9.16873 -0.18560584 -0.38639254
P 5.24 H 11.9 G 0.15
Residuals in seconds of arc
760307 808 0.1+ 1.6+ 810109 688 0.4+ 2.4- 920303 399 0.7+ 0.5-
760307 808 0.3+ 1.5+ 901208 046 (5.5+ 1.2+) 920322 399 1.0+ 0.6+
790929 095 0.0 0.4+ 901208 046 0.5- 2.1+ 920322 399 0.0 2.1-
791114 095 0.8+ 2.2- 920302 399 1.6- 0.2+ 920323 399 0.2- 0.4+
810108 046 (8.5- 7.0+)Y 920302 399 1.4- 0.7-
810108 046 (5.4- 7.4+)Y 920303 399 0.5+ 0.2-

1992 EL = 1969 TB4 = 1971 BE3 = 1981 BH = 1990 VJ4 = 1990 WU13
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 115.46276 (2000.0) P Q
n 0.19067393 Peri. 120.22200 +0.45100133 -0.88248165
a 2.9895684 Node 302.37944 +0.75489091 +0.45696655
e 0.1053254 Incl. 9.09579 +0.47616962 +0.11138993
P 5.17 H 11.0 G 0.15
Residuals in seconds of arc
691011 095 0.8- 3.2+ 901115 374 0.3- 0.3+ 920304 400 2.2- 2.4+
710127 805 0.0 1.2+ 901120 095 0.8+ 2.3- 920304 400 0.3- 0.6-
710129 805 0.2+ 1.1+ 901120 095 (0.1- 4.1-) 920322 400 1.5+ 1.4-
810130 688 0.2+ 0.5- 901123 374 1.2- 0.6+ 920322 400 2.2+ 1.4-
810130 688 0.0 2.1- 920302 400 0.1+ 2.3+

1992 EM = 1959 UL = 1979 OT15 = 1985 DL3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 310.42813 (2000.0) P Q
n 0.28879675 Peri. 305.21111 +0.05464598 +0.99528578
a 2.2667720 Node 327.63872 -0.86056233 +0.00624745
e 0.1636405 Incl. 8.60925 -0.50640527 +0.09678423
P 3.41 H 13.3 G 0.15
Residuals in seconds of arc
591029 760 0.9- 1.5+ 850222 675 0.5+ 0.1+ 920308 400 (3.3- 1.4-)
591029 760 0.7+ 1.6- 920304 400 0.0 0.2+ 920322 400 0.1+ 1.6+
790730 095 0.2+ 0.2- 920304 400 1.4+ 1.1- 920322 400 0.1- 0.5-
850220 675 0.3- 0.7- 920308 400 1.6- 0.2+

1992 EP = 1985 JL2
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 332.03546 (2000.0) P Q
n 0.26848180 Peri. 180.21183 -0.33316089 +0.93789419
a 2.3797216 Node 70.32855 -0.86491515 -0.26315308
e 0.1888906 Incl. 5.89664 -0.37540059 -0.22606404
P 3.67 H 13.5 G 0.15
Residuals in seconds of arc
850514 675 0.5- 0.2+ 920308 399 1.8- 1.2- 920328 399 1.6+ 2.7+
850515 675 0.4+ 0.7- 920308 399 0.7- 1.7- 920328 399 1.3+ 1.3+
920307 399 0.3- 0.4- 920324 399 (1.8+ 5.0+)
920307 399 0.0 0.4- 920324 399 (2.3+ 6.7+)

1992 ER = 1976 SH = 1978 CE = 1978 ES4
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	78.27883	(2000.0)	P	Q
n	0.28381998	Peri. 115.52531	-0.52950740	-0.84817231
a	2.2931937	Node 6.50783	+0.72295718	-0.46045884
e	0.0627860	Incl. 7.61611	+0.44379593	-0.26188048
P	3.47	H 13.9	G 0.15	

Residuals in seconds of arc

760920 049	0.9-	0.3-	780306 095	0.1+	1.7-	920324 399	0.6+	1.3+
760920 049	1.6+	1.4- Y	920307 399	0.1+	1.0+	920324 399	0.4+	0.3-
760920 049	0.4+	0.2+	920307 399	0.7+	1.1-	920326 399	0.1+	0.1-
760920 049	0.4-	0.4+	920308 399	0.7-	1.2-	920326 399	0.1+	0.3-
780210 801	0.0	1.8+	920308 399	1.9-	0.3-			

1992 EB1
Epoch 1992 Mar. 19.0 TT = JDT 2448700.5 Williams

M	354.44005	(2000.0)	P	Q
n	0.15993812	Peri. 231.18414	-0.89689356	+0.40613562
a	3.3612545	Node 331.47836	-0.19617626	-0.72007414
e	0.5699072	Incl. 21.50386	-0.39635440	-0.56262517
P	6.16	H 16.5	G 0.15	

From 10 observations 1992 Mar. 10-Apr. 4.

1992 EL1 = 1964 VZ1 = 1972 JJ = 1981 BF
Id. S. Nakano; 1972 JJ = 1979 UH1 (MPC 13480) is invalid
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	135.22286	(2000.0)	P	Q
n	0.19001880	Peri. 334.59654	+0.63569141	-0.75050309
a	2.9964360	Node 75.38824	+0.73628169	+0.51916903
e	0.0813516	Incl. 10.76075	+0.23191745	+0.40891151
P	5.19	H 11.5	G 0.15	

Residuals in seconds of arc

641110 330	0.8-	1.2+	810130 046	0.3-	1.9-	920227 402	0.2-	0.2+
720509 095	2.3+	0.1-	810131 046	0.4-	0.4-	920308 402	2.8+	1.1-
720512 095	2.9-	1.4-	810131 046	0.8+	1.6+	920308 402	1.0+	2.3+
810129 046	0.0	1.0-	920226 402	1.2-	0.3+	920310 402	0.8-	0.0
810129 046	0.3+	1.3-	920226 402	1.0-	0.5+	920310 402	0.5-	0.7+
810130 046	0.2+	0.7-	920227 402	0.8+	0.4+			

1992 FB = 1950 EX = 1970 AT = 1987 HG = 1989 TM2 = 1991 CS3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	200.26646	(2000.0)	P	Q
n	0.18999947	Peri. 310.69938	+0.97410753	-0.15110376
a	2.9966392	Node 58.62427	+0.21514015	+0.84816529
e	0.1140027	Incl. 11.36022	-0.06949271	+0.50772364
P	5.19	H 11.1	G 0.15	

Residuals in seconds of arc

500307 012	1.6-	1.4+	910208 400	2.1-	1.4-	920323 399	0.7+	1.0-
700104 095	3.2+	0.7+	910208 400	0.5-	0.3-	920323 399	0.7+	1.6-
870430 675	0.6+	0.3+	910209 400	0.3+	1.0+	920324 399	0.5-	0.5+
870502 675	0.0	0.3-	910209 400	0.1+	0.2+	920324 399	0.3-	1.1-
891003 807	0.1+	0.4-	920311 372	0.3-	0.5+			
891006 807	0.2-	0.5-	920311 372	0.2-	1.1+			

1992 FE
Epoch 1992 Mar. 19.0 TT = JDT 2448700.5 Williams
M 100.10865 (2000.0) P Q
n 1.10356671 Peri. 82.31884 +0.82168026 -0.56657505
a 0.9274069 Node 312.16882 +0.48443644 +0.75150323
e 0.4053169 Incl. 4.79239 +0.30027135 +0.33798758
P 0.89 H 18.0 G 0.15
From 10 observations 1992 Mar. 26-Apr. 10.

1992 FF = 1979 YJ7 = 1980 BO3 = 1989 TJ15
Id. H. Kaneda, W. Landgraf (d)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 44.33109 (2000.0) P Q
n 0.17529212 Peri. 91.60840 -0.83663812 -0.54707389
a 3.1619946 Node 55.22598 +0.48840048 -0.76763792
e 0.1583736 Incl. 1.90657 +0.24799522 -0.33382957
P 5.62 H 11.9 G 0.15
Residuals in seconds of arc
791218 095 1.9+ 1.4- 891004 809 0.6+ 0.1+ 920324 400 0.2+ 1.2+
800122 095 2.0- 1.3+ 891004 809 0.5+ 0.2+ 920324 400 0.2+ 1.0-
891003 809 0.6- 0.6- 891004 809 0.6+ 0.2+ 920328 400 0.4- 1.8-
891003 809 0.4- 0.7- 920323 400 1.4+ 0.0 920328 400 0.8- 0.9+
891003 809 0.1- 0.3- 920323 400 1.1- 0.6-

1992 FT = 1977 RZ10 = 1982 BQ10
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 6.85227 (2000.0) P Q
n 0.30808031 Peri. 54.35851 -0.85992072 +0.51015159
a 2.1711679 Node 156.30181 -0.48077158 -0.79847582
e 0.0295717 Incl. 2.39339 -0.17144985 -0.31965875
P 3.20 H 14.2 G 0.15
Residuals in seconds of arc
770909 675 0.2- 1.2- 920323 400 0.4+ 0.6- 920326 399 1.5- 1.4+
770910 675 0.1+ 1.4+ 920323 400 0.2- 0.0 920326 399 0.5- 0.4-
820119 095 0.5+ 0.1+ 920324 400 1.7+ 0.2-
820120 095 0.4- 0.0 920324 400 (4.6+ 3.1-)

1992 FV = 1979 BW1 = 1986 LC1 = 1990 VH9
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 330.59859 (2000.0) P Q
n 0.31272330 Peri. 158.56547 -0.26432799 +0.96201711
a 2.1496243 Node 96.05664 -0.89452296 -0.21811316
e 0.1161014 Incl. 3.93367 -0.36049880 -0.16416370
P 3.15 H 13.4 G 0.15
Residuals in seconds of arc
790124 095 0.2- 1.4- 901110 046 0.1- 0.4+ 920324 400 0.1+ 0.8+
860607 675 0.9+ 0.6- 901110 046 0.8- 2.0+ 920324 400 2.3+ 2.0+
860607 675 (8.1+ 0.0) 920323 400 0.0 1.0- 920402 400 0.0 1.2+
860608 675 0.9- 1.0+ 920323 400 0.5- 1.0- 920402 400 1.1- 0.0

1992 FL1
Epoch 1992 Mar. 19.0 TT = JDT 2448700.5 Williams
M 358.35010 (2000.0) P Q
n 0.24193173 Peri. 236.85440 -0.96397167 +0.25869361
a 2.5507868 Node 318.04493 -0.20259185 -0.86488152
e 0.4225976 Incl. 5.31578 -0.17238089 -0.43018319
P 4.07 H 16.5 G 0.15
From 5 observations 1992 Mar. 26-Apr. 6.

3086 P-L = 1991 RQ23
Id. E. Bowell
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 104.72749 (2000.0) P Q
n 0.19076943 Peri. 59.80304 +0.57753500 +0.80325448
a 2.9885707 Node 246.18599 -0.79303618 +0.50965077
e 0.0870079 Incl. 9.16544 -0.19377033 +0.30828288
P 5.17 H 12.5 G 0.15
Residuals in seconds of arc

600924	675	0.4+	0.7+	600928	675	0.4+	0.8-	910910	675	0.4+	0.4-
600925	675	1.0-	0.4+	600928	675	0.1+	0.2+	910910	675	(5.2+	0.0)
600925	675	0.5-	0.0	600929	675	0.8+	0.5-	910917	675	0.6-	0.6+
600926	675	0.1+	0.2+	601026	675	0.6+	0.4+	910917	675	0.1+	0.1+
600927	675	1.2-	1.1-	601026	675	0.6+	0.3+				

3105 T-1 = 1986 ED5
Id. D. W. E. Green (MPC 19323)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell
M 217.40475 (2000.0) P Q
n 0.26108243 Peri. 233.26318 -0.94310413 +0.33193914
a 2.4244745 Node 326.11124 -0.29298940 -0.85703489
e 0.1130096 Incl. 1.97964 -0.15719987 -0.39409085
P 3.78 H 14.8 G 0.15
Residuals in seconds of arc

710324	675	0.7+	0.1+	710416	675	0.5-	0.9+	860304	809	0.5-	0.1+
710325	675	1.4+	0.7-	710416	675	0.8-	0.6+	860305	809	0.8+	0.9-
710326	675	0.1+	1.4-	710513	675	0.2+	1.1-	860305	809	(2.1+	0.6-)
710326	675	0.6+	0.4-	710514	675	0.3-	0.8-	860310	809	0.7-	0.3+
710327	675	0.0	0.7+	820130	675	0.7+	0.8-	860310	809	0.5-	0.9+
710402	675	1.6-	1.3+	820131	675	0.9-	0.2+	860314	809	0.2-	0.4-
710402	675	(3.1-	0.5+)	860304	809	0.9+	0.1-	860314	809	0.5+	1.0+

1335 T-2 = 1990 TG7 = 1992 CM1
Id. B. G. Marsden (MPC 17463), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 58.19450 (2000.0) P Q
n 0.17820127 Peri. 285.03138 -0.22142300 -0.97517776
a 3.1274870 Node 177.76110 +0.89902006 -0.20430715
e 0.1478905 Incl. 0.65156 +0.37780257 -0.08536352
P 5.53 H 13.5 G 0.15
Residuals in seconds of arc

730919	675	0.2-	1.3-	730929	675	0.3+	1.8-	731005	675	0.7-	1.9-
730919	675	0.8+	0.5-	730930	675	1.4-	1.8+	731005	675	0.8-	0.2-
730924	675	0.1-	0.6-	730930	675	1.7+	2.0+	901013	033	0.7-	0.1-
730924	675	0.5-	0.2+	730930	675	1.6-	1.2+	901013	033	0.9+	0.6+
730925	675	1.9+	1.9-	730930	675	1.7+	2.6+	901014	033	0.5-	0.2+
730925	675	1.9+	1.0-	731004	675	0.9-	1.0-	920212	303	0.6-	0.3-
730929	675	0.1+	0.2-	731004	675	0.9-	2.7+	920213	303	0.3+	0.4-
730929	675	1.3+	1.8-	731004	675	0.1+	0.5-				
730929	675	0.3-	0.7-	731004	675	1.9-	1.6+				

4234 T-2 = 1990 RX13
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 169.00784 (2000.0) P Q
n 0.17311819 Peri. 259.85126 +0.33749401 +0.94020858
a 3.1884107 Node 29.99949 -0.82372984 +0.31857379
e 0.1309199 Incl. 5.26575 -0.45559516 +0.12049299
P 5.69 H 12.5 G 0.15

Residuals in seconds of arc

710324	675	0.4-	0.1+	730924	675	0.9+	1.1-	730930	675	0.7+	0.3-
710325	675	0.6+	0.2-	730924	675	0.0	0.1-	731004	675	0.9-	1.3+
710325	675	0.2-	0.1+	730924	675	0.7+	1.2-	731004	675	0.4-	0.8+
730919	675	0.2+	0.5+	730924	675	0.1-	0.3-	731005	675	0.1+	0.1-
730919	675	0.1+	1.5+	730925	675	0.7-	0.4-	731005	675	1.6-	0.7-
730919	675	0.2-	1.5+	730925	675	0.8+	0.3-	900914	809	0.3+	0.1-
730919	675	0.0	0.0	730929	675	0.4+	1.5-	900914	809	0.3-	0.2-
730920	675	0.1+	2.1+	730929	675	0.1-	2.2-	900914	809	0.2+	0.1-
730920	675	0.8-	0.2+	730930	675	0.5+	0.8+				

4253 T-2 = 1991 RY23

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	82.16948	(2000.0)	P	Q	
n	0.27276301	Peri.	189.29617	+0.94749671	+0.31598911
a	2.3547550	Node	152.12976	-0.28623245	+0.90642990
e	0.2270896	Incl.	6.01659	-0.14255164	+0.28024224
P	3.61	H	16.0	G 0.15	

Residuals in seconds of arc

730919	675	1.0+	0.4+	730925	675	0.7-	0.4+	730930	675	1.0-	0.7+
730919	675	0.1+	1.2-	730925	675	0.8+	0.1-	910911	675	0.9-	0.3-
730920	675	1.0-	0.3-	730929	675	0.7+	1.6-	910911	675	0.3+	0.8+
730924	675	0.1+	1.2+	730929	675	1.0+	1.1-	910912	675	0.2-	0.5-
730924	675	0.7-	0.7+	730930	675	0.4-	1.0+	910912	675	0.7+	0.1+

4293 T-2 = 1978 VE13

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	319.18722	(2000.0)	P	Q	
n	0.20408431	Peri.	271.61760	+0.99573550	-0.07235614
a	2.8571276	Node	92.53438	+0.08913977	+0.91443275
e	0.0929446	Incl.	3.28411	-0.02376777	+0.39821771
P	4.83	H	13.0	G 0.15	

Residuals in seconds of arc

710324	675	0.9-	0.1-	730925	675	0.3-	0.1-	731004	675	0.7+	0.5-
710325	675	0.4+	0.1-	730925	675	0.5-	1.0+	731005	675	1.1-	0.8+
710325	675	0.5+	0.0	730929	675	1.6-	0.6-	731005	675	0.5-	0.1+
730919	675	1.6+	0.3-	730929	675	1.6-	0.4-	781102	095	0.0	0.1-
730919	675	2.0+	0.2+	730930	675	0.2+	0.1-				
730920	675	0.2+	0.0	731004	675	0.8+	0.1-				

4391 T-3 = 1991 RQ24

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell

M	91.47673	(2000.0)	P	Q	
n	0.28071601	Peri.	240.50611	+0.91764906	+0.38744102
a	2.3100671	Node	96.57796	-0.32681215	+0.86228797
e	0.2855137	Incl.	5.10366	-0.22608411	+0.32611181
P	3.51	H	15.9	G 0.15	

Residuals in seconds of arc

771011	675	0.7-	1.2+	771017	675	0.4-	0.5-	771022	675	(0.4+	3.0-)
771011	675	0.9-	1.5+	771017	675	0.7+	0.0	771022	675	0.0	0.3+
771012	675	0.0	0.8-	771017	675	0.0	0.5-	771022	675	0.8-	1.3-
771012	675	1.0+	1.3-	771017	675	0.9+	0.4-	910912	675	0.7-	0.3+
771016	675	0.9-	0.8+	771021	675	0.5-	0.7+	910917	675	0.3+	0.1-
771016	675	1.7+	1.1-	771021	675	(0.5+	2.5-)	910917	675	0.4+	0.3-
771016	675	1.3-	0.3+	771021	675	0.2-	1.2+				
771016	675	1.3+	0.2-	771021	675	(1.4+	3.0-)				

5170 T-3 = 1992 CC
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 12.92691 (2000.0) P Q
n 0.23082939 Peri. 24.95095 -0.99617826 -0.02109665
a 2.6319359 Node 153.41926 +0.00057609 -0.97195755
e 0.1790259 Incl. 10.91890 +0.08734152 -0.23420812
P 4.27 H 13.3 G 0.15
Residuals in seconds of arc

771012 675	1.2-	0.4-	771017 675	0.7-	0.8-	920208 877	0.5-	0.9+
771012 675	0.8-	0.5+	771021 675	1.0-	2.6+	920208 877	0.3-	0.4+
771016 675	2.2+	1.5-	771021 675	1.5-	2.4+	920226 877	0.9+	1.3-
771016 675	2.1+	2.2-	920204 877	0.7+	0.3+	920226 877	0.9+	0.5-
771017 675	1.0+	0.9-	920204 877	1.7-	0.1+			

* * * * *

EPHEMERIDES.

1991 WB a,e,i = 2.75, 0.33, 36 Elements MPC 20030

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 04 08	06 08.84	+46 36.8	2.509	2.441	74.5	23.3	17.5
1992 04 18	06 28.16	+46 34.4	2.654	2.477	68.9	22.2	17.7
1992 04 28	06 48.45	+46 23.6	2.793	2.513	63.6	21.0	17.8
1992 05 08	07 09.43	+46 04.1	2.927	2.549	58.5	19.7	17.9
1992 05 18	07 30.82	+45 35.8	3.052	2.584	53.6	18.4	17.9
1992 05 28	07 52.39	+44 58.8	3.170	2.620	49.0	17.0	18.0
1992 06 07	08 13.96	+44 13.5	3.280	2.655	44.6	15.6	18.1
1992 06 17	08 35.37	+43 20.7	3.380	2.690	40.5	14.2	18.1
1992 06 27	08 56.49	+42 21.0	3.472	2.725	36.7	12.9	18.1
1992 07 07	09 17.25	+41 15.4	3.553	2.759	33.2	11.6	18.2
1992 07 17	09 37.58	+40 04.9	3.624	2.793	30.2	10.5	18.2

1992 FE a,e,i = 0.93, 0.41, 5 Elements MPC 20036

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 04 08	09 20.92	-00 00.2	0.321	1.206	122.8	44.2	17.6
1992 04 18	09 35.82	+00 42.5	0.402	1.240	117.0	46.2	18.2
1992 04 28	09 51.23	+00 51.9	0.486	1.266	111.2	47.9	18.7
1992 05 08	10 07.36	+00 36.5	0.570	1.286	105.6	49.1	19.2
1992 05 18	10 24.18	+00 01.3	0.653	1.298	100.3	50.1	19.5
1992 05 28	10 41.61	-00 49.7	0.733	1.303	95.1	50.8	19.8
1992 06 07	10 59.67	-01 54.2	0.810	1.301	90.2	51.3	20.0
1992 06 17	11 18.34	-03 09.8	0.881	1.292	85.6	51.6	20.2
1992 06 27	11 37.59	-04 34.7	0.946	1.276	81.0	51.9	20.3

1991 JW a,e,i = 1.04, 0.12, 9 Elements MPC 20023

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 04 08	09 27.56	+40 20.6	0.331	1.159	110.5	54.0	19.4
1992 04 18	09 37.60	+34 34.2	0.359	1.155	105.9	56.7	19.6
1992 04 28	09 50.90	+28 57.0	0.386	1.148	101.5	59.2	19.9
1992 05 08	10 06.40	+23 28.1	0.414	1.139	97.4	61.5	20.1
1992 05 18	10 23.42	+18 06.6	0.439	1.128	93.6	63.6	20.2
1992 05 28	10 41.48	+12 51.3	0.462	1.114	90.0	65.5	20.4
1992 06 07	11 00.43	+07 40.1	0.482	1.098	86.7	67.3	20.5

1992 DC a,e,i = 2.48, 0.46, 10 Elements MPC 20033

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 04 08	10 15.03	+04 59.5	0.544	1.439	135.1	29.5	18.3
1992 04 18	10 27.04	+01 32.6	0.621	1.477	129.2	31.8	18.7
1992 04 28	10 41.04	-01 26.1	0.709	1.520	123.8	33.4	19.1

1992 05 08	10 56.53	-04 03.6	0.808	1.567	118.7	34.4	19.4
1992 05 18	11 13.09	-06 25.4	0.916	1.617	113.9	34.9	19.8
1992 05 28	11 30.38	-08 35.5	1.033	1.668	109.3	35.0	20.1
1992 06 07	11 48.21	-10 37.1	1.158	1.722	104.7	34.8	20.4

1992 EB1 a,e,i = 3.36, 0.57, 22 Elements MPC 20035

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 04 08	10 21.79	-31 05.3	0.565	1.454	134.4	29.4	17.4
1992 04 18	10 16.91	-34 04.0	0.598	1.447	127.3	33.5	17.6
1992 04 28	10 19.00	-36 23.0	0.637	1.447	121.6	36.3	17.8
1992 05 08	10 27.95	-38 15.3	0.682	1.455	117.4	38.0	18.0
1992 05 18	10 43.16	-39 49.9	0.731	1.471	114.2	38.8	18.2
1992 05 28	11 03.79	-41 10.1	0.784	1.494	111.8	39.0	18.4
1992 06 07	11 29.04	-42 16.3	0.843	1.525	110.0	38.7	18.6
1992 06 17	11 57.97	-43 07.5	0.908	1.561	108.3	38.2	18.8
1992 06 27	12 29.52	-43 41.5	0.982	1.603	106.7	37.4	19.0
1992 07 07	13 02.70	-43 57.3	1.065	1.650	104.9	36.6	19.2
1992 07 17	13 36.52	-43 55.5	1.158	1.701	102.7	35.6	19.4
1992 07 27	14 10.14	-43 37.4	1.263	1.755	100.2	34.7	19.7
1992 08 06	14 42.97	-43 05.3	1.378	1.812	97.3	33.7	19.9

1990 TR a,e,i = 2.14, 0.44, 8 Elements MPC 20020

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 04 08	10 49.71	+12 07.0	2.241	3.080	140.5	11.9	19.4
1992 04 18	10 44.08	+12 13.8	2.341	3.078	129.4	14.6	19.6
1992 04 28	10 40.82	+12 06.7	2.457	3.075	119.0	16.6	19.8
1992 05 08	10 39.91	+11 46.9	2.585	3.070	109.3	18.1	19.9
1992 05 18	10 41.18	+11 16.0	2.720	3.064	100.1	19.0	20.1
1992 05 28	10 44.38	+10 35.3	2.857	3.057	91.5	19.4	20.2
1992 06 07	10 49.27	+09 46.1	2.993	3.048	83.4	19.3	20.3

1991 TB1 a,e,i = 1.45, 0.35, 23 Elements MPC 20028

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 04 08	10 55.27	-07 27.8	0.255	1.223	147.0	26.5	15.7
1992 04 18	10 47.78	-15 02.8	0.345	1.277	136.6	32.7	16.6
1992 04 28	10 48.87	-19 23.8	0.444	1.330	128.7	36.2	17.3
1992 05 08	10 55.37	-22 10.9	0.549	1.383	122.3	38.1	17.9
1992 05 18	11 05.58	-24 11.4	0.660	1.435	116.7	39.0	18.4
1992 05 28	11 18.40	-25 47.7	0.775	1.485	111.6	39.4	18.9
1992 06 07	11 33.24	-27 11.8	0.892	1.533	106.8	39.3	19.2
1992 06 17	11 49.68	-28 30.4	1.012	1.579	102.2	39.0	19.6
1992 06 27	12 07.40	-29 46.3	1.134	1.623	97.8	38.4	19.9
1992 07 07	12 26.26	-31 01.1	1.257	1.664	93.5	37.6	20.1
1992 07 17	12 46.11	-32 15.5	1.380	1.703	89.2	36.6	20.3

(5189) 1990 UQ a,e,i = 1.55, 0.48, 4 Elements MPC 20004

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 04 08	13 19.29	+07 31.6	0.277	1.271	165.0	11.8	15.9
1992 04 13	13 10.83	+10 42.7	0.243	1.233	159.8	16.3	15.8
1992 04 18	12 59.80	+14 32.3	0.212	1.196	152.2	23.1	15.6
1992 04 23	12 45.48	+19 07.7	0.185	1.158	142.9	31.6	15.5
1992 04 28	12 26.62	+24 37.3	0.161	1.121	131.9	41.9	15.4
1992 05 03	12 01.02	+31 08.1	0.141	1.084	119.3	54.2	15.4
1992 05 08	11 24.45	+38 39.3	0.124	1.048	104.6	68.8	15.5
1992 05 13	10 28.94	+46 38.1	0.112	1.012	87.8	85.8	15.8
1992 05 18	09 03.72	+53 06.3	0.107	0.978	69.0	105.2	16.5
1992 05 23	07 14.49	+54 38.5	0.108	0.946	49.8	125.2	17.8
1992 05 28	05 39.27	+50 25.5	0.119	0.916	32.8	143.2	20.0

1992 FL1 a,e,i = 2.55, 0.42, 5 Elements MPC 20036

Date	TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 04	08	13 44.24	-26 18.4	0.498	1.478	159.1	14.0	16.6
1992 04	18	13 41.61	-26 57.2	0.497	1.488	163.9	10.8	16.5
1992 04	28	13 39.19	-26 57.2	0.511	1.504	163.7	10.8	16.6
1992 05	08	13 38.70	-26 29.4	0.540	1.525	158.7	13.9	16.9
1992 05	18	13 41.35	-25 48.7	0.583	1.551	151.9	17.9	17.2
1992 05	28	13 47.38	-25 07.8	0.641	1.581	144.7	21.7	17.6
1992 06	07	13 56.59	-24 34.9	0.712	1.614	137.8	25.0	18.0
1992 06	17	14 08.54	-24 14.1	0.795	1.652	131.2	27.6	18.3
1992 06	27	14 22.63	-24 05.2	0.890	1.692	125.0	29.5	18.7
1992 07	07	14 38.40	-24 06.9	0.995	1.734	119.1	30.8	19.0
1992 07	17	14 55.47	-24 16.7	1.110	1.779	113.5	31.6	19.3
1992 07	27	15 13.50	-24 31.6	1.234	1.825	108.1	31.9	19.6
1992 08	06	15 32.28	-24 49.2	1.366	1.873	102.8	31.9	19.9
1992 08	16	15 51.63	-25 07.2	1.505	1.922	97.6	31.5	20.1
1992 08	26	16 11.38	-25 23.4	1.650	1.971	92.5	30.8	20.4

Periodic Comet Shoemaker-Levy 8 (1992f) Elements MPC 19980

Date	TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 04	08	15 12.43	-16 56.3	1.833	2.735	148.2	11.1	16.2
1992 04	18	15 08.36	-16 13.3	1.769	2.731	159.1	7.5	16.1
1992 04	28	15 02.76	-15 23.1	1.730	2.727	170.3	3.6	16.0
1992 05	08	14 56.38	-14 29.7	1.717	2.725	177.1	1.1	16.0
1992 05	18	14 50.14	-13 38.4	1.730	2.724	166.6	5.0	16.0
1992 05	28	14 44.87	-12 53.8	1.769	2.725	155.6	8.8	16.1
1992 06	07	14 41.23	-12 20.0	1.832	2.726	145.0	12.3	16.2

1986 RA a,e,i = 3.35, 0.63, 19 Elements MPC 20013

Date	TT	R. A. (2000)	Decl.	Delta	r	Variation		V
1992 04	08	16 57.35	-00 16.4	1.719	2.410	-1.61	+0.3	19.6
1992 04	18	17 00.16	+01 57.7	1.561	2.335	-1.80	+0.0	19.3
1992 04	28	17 00.37	+04 26.5	1.419	2.260	-2.02	-0.6	19.0
1992 05	08	16 57.69	+07 04.4	1.296	2.184	-2.23	-1.5	18.6
1992 05	18	16 52.12	+09 42.2	1.193	2.108	-2.44	-2.9	18.4
1992 05	28	16 43.95	+12 07.5	1.111	2.032	-2.60	-4.7	18.1
1992 06	07	16 33.96	+14 05.9	1.050	1.955	-2.70	-7.0	18.0
1992 06	17	16 23.44	+15 24.5	1.006	1.879	-2.71	-9.3	17.9
1992 06	27	16 13.87	+15 55.6	0.978	1.803	-2.65	-11.4	17.9
1992 07	07	16 06.72	+15 36.9	0.961	1.729	-2.52	-12.8	17.9
1992 07	17	16 03.12	+14 32.4	0.951	1.656	-2.37	-13.4	17.9
1992 07	27	16 03.69	+12 48.4	0.945	1.585	-2.24	-13.1	17.9
1992 08	06	16 08.77	+10 31.3	0.940	1.517	-2.13	-12.0	17.9
1992 08	16	16 18.43	+07 47.6	0.934	1.454	-2.08	-10.2	17.9
1992 08	26	16 32.63	+04 41.9	0.926	1.396	-2.08	-7.8	17.8
1992 09	05	16 51.41	+01 18.6	0.916	1.345	-2.15	-4.7	17.8
1992 09	15	17 14.79	-02 17.0	0.906	1.302	-2.28	-1.3	17.7
1992 09	25	17 42.78	-05 58.6	0.898	1.269	-2.48	+2.4	17.7
1992 10	05	18 15.42	-09 36.6	0.894	1.246	-2.75	+5.9	17.7
1992 10	15	18 52.42	-12 57.9	0.899	1.235	-3.05	+8.7	17.7
1992 10	25	19 33.15	-15 47.3	0.914	1.236	-3.35	+10.2	17.7
1992 11	04	20 16.48	-17 49.9	0.944	1.249	-3.59	+10.1	17.8
1992 11	14	21 00.84	-18 56.4	0.988	1.274	-3.72	+8.7	17.9
1992 11	24	21 44.53	-19 04.9	1.049	1.310	-3.70	+6.4	18.0

(4953) 1990 MU a,e,i = 1.62, 0.66, 24 Elements MPC 18797

Date	TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 04	08	22 14.15	+11 47.5	0.503	0.722	43.1	108.4	16.2
1992 04	18	22 01.14	+03 05.1	0.518	0.834	56.1	92.9	15.8

1992 04 28	21 56.90	-04 48.3	0.532	0.952	68.6	80.1	15.6
1992 05 08	21 54.96	-12 14.4	0.539	1.068	81.1	69.0	15.5
1992 05 18	21 51.13	-19 41.9	0.542	1.181	94.1	58.6	15.4
1992 05 28	21 42.30	-27 25.4	0.546	1.290	107.9	48.4	15.4
1992 06 07	21 25.59	-35 14.5	0.558	1.394	122.0	38.1	15.3
1992 06 17	20 59.07	-42 26.5	0.587	1.492	135.5	28.5	15.3
1992 06 27	20 23.39	-48 02.4	0.637	1.585	145.9	21.1	15.4
1992 07 07	19 43.66	-51 22.7	0.713	1.673	150.3	17.5	15.6
1992 07 17	19 07.88	-52 34.4	0.812	1.757	147.7	18.0	16.0
1992 07 27	18 41.43	-52 19.1	0.932	1.836	141.0	20.4	16.5
1992 08 06	18 25.34	-51 18.9	1.069	1.911	133.0	22.8	16.9
1992 08 16	18 18.06	-50 02.0	1.220	1.981	124.9	24.8	17.4
1992 08 26	18 17.47	-48 42.4	1.381	2.047	116.9	26.1	17.7
1992 09 05	18 21.80	-47 25.6	1.550	2.110	109.3	26.8	18.1
1992 09 15	18 29.72	-46 13.3	1.723	2.169	102.0	27.0	18.4
1992 09 25	18 40.24	-45 04.9	1.900	2.224	95.0	26.7	18.6
1992 10 05	18 52.71	-43 59.2	2.077	2.275	88.1	26.1	18.9
1992 10 15	19 06.58	-42 55.0	2.252	2.324	81.5	25.1	19.1
1992 10 25	19 21.50	-41 51.0	2.423	2.369	75.0	23.9	19.2

Comet Tanaka-Machholz (1992d) Elements MPC 19880

Date TT	R. A. (2000) Decl.	Delta	r	Elong.	Phase	m1
1992 04 08	22 27.63 +25 33.4	1.829	1.282	42.4	31.8	8.9
1992 04 18	22 57.32 +35 26.5	1.751	1.264	45.2	34.3	8.7
1992 04 28	23 36.29 +45 30.0	1.717	1.265	46.9	35.6	8.7
1992 05 08	00 30.00 +54 42.4	1.730	1.284	47.4	35.4	8.8
1992 05 18	01 44.45 +61 42.7	1.789	1.320	46.7	33.9	9.0
1992 05 28	03 17.57 +65 16.7	1.887	1.372	45.0	31.5	9.3
1992 06 07	04 50.10 +65 14.1	2.011	1.437	42.5	28.5	9.6

Comet Helin-Lawrence (1991l) Elements MPC 19654

Date TT	R. A. (2000) Decl.	Delta	r	Elong.	Phase	m1
1992 05 18	02 05.39 -03 33.5	2.984	2.204	32.9	14.4	11.3
1992 05 28	02 09.61 -01 07.8	2.991	2.297	39.2	16.2	11.5
1992 06 07	02 12.81 +01 06.7	2.976	2.391	46.4	17.9	11.7
1992 06 17	02 14.79 +03 12.0	2.941	2.487	54.2	19.4	11.8
1992 06 27	02 15.30 +05 09.5	2.888	2.584	62.6	20.5	11.9
1992 07 07	02 14.05 +07 00.4	2.821	2.681	71.7	21.1	12.0
1992 07 17	02 10.71 +08 45.1	2.745	2.780	81.3	21.2	12.1
1992 07 27	02 04.94 +10 23.9	2.664	2.878	91.6	20.7	12.2
1992 08 06	01 56.40 +11 55.8	2.586	2.977	102.6	19.4	12.3
1992 08 16	01 44.92 +13 18.9	2.517	3.075	114.3	17.5	12.4
1992 08 26	01 30.49 +14 30.3	2.465	3.174	126.7	14.8	12.5
1992 09 05	01 13.47 +15 26.5	2.440	3.273	139.5	11.5	12.6
1992 09 15	00 54.69 +16 04.6	2.449	3.371	152.1	8.0	12.7
1992 09 25	00 35.28 +16 23.4	2.497	3.469	163.2	4.8	12.9
1992 10 05	00 16.57 +16 24.9	2.587	3.567	166.5	3.8	13.1
1992 10 15	23 59.71 +16 13.6	2.718	3.665	158.7	5.7	13.3
1992 10 25	23 45.46 +15 55.4	2.886	3.762	147.4	8.2	13.6
1992 11 04	23 34.17 +15 36.0	3.085	3.858	135.8	10.3	13.8
1992 11 14	23 25.82 +15 20.0	3.309	3.955	124.5	11.9	14.1
1992 11 24	23 20.18 +15 10.1	3.551	4.051	113.7	12.9	14.3
1992 12 04	23 16.92 +15 08.1	3.806	4.146	103.4	13.4	14.6
1992 12 14	23 15.68 +15 14.6	4.065	4.241	93.5	13.4	14.8
1992 12 24	23 16.10 +15 29.6	4.326	4.335	84.0	13.0	15.1
1993 01 03	23 17.87 +15 53.0	4.581	4.429	75.0	12.4	15.3
1993 01 13	23 20.72 +16 24.1	4.828	4.523	66.2	11.5	15.5
1993 01 23	23 24.40 +17 02.2	5.063	4.616	57.9	10.4	15.7

1993 02 02	23 28.73	+17 46.9	5.283	4.708	49.9	9.2	15.8
1993 02 12	23 33.51	+18 37.4	5.484	4.800	42.3	8.0	16.0

Periodic Comet Van Biesbroeck (1989h1) Elements MPC 16205

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m2
1992 05 18	01 31.48	+05 22.5	4.568	3.777	34.5	8.7	20.3
1992 05 28	01 41.81	+06 11.5	4.528	3.826	41.3	10.1	20.3
1992 06 07	01 51.51	+06 54.5	4.475	3.876	48.4	11.3	20.4
1992 06 17	02 00.49	+07 31.2	4.408	3.925	55.6	12.3	20.4
1992 06 27	02 08.67	+08 01.3	4.330	3.974	63.0	13.2	20.4
1992 07 07	02 15.91	+08 24.3	4.242	4.023	70.7	13.8	20.5
1992 07 17	02 22.10	+08 40.0	4.147	4.071	78.7	14.2	20.4
1992 07 27	02 27.12	+08 48.1	4.046	4.120	87.0	14.3	20.4
1992 08 06	02 30.82	+08 48.4	3.944	4.168	95.7	14.0	20.4
1992 08 16	02 33.10	+08 41.0	3.844	4.217	104.7	13.4	20.3
1992 08 26	02 33.88	+08 25.9	3.750	4.265	114.1	12.5	20.3
1992 09 05	02 33.10	+08 03.5	3.667	4.312	124.0	11.2	20.2
1992 09 15	02 30.81	+07 34.8	3.598	4.360	134.3	9.5	20.1
1992 09 25	02 27.14	+07 01.0	3.549	4.407	144.9	7.5	20.0
1992 10 05	02 22.31	+06 23.9	3.525	4.455	155.6	5.3	19.9
1992 10 15	02 16.69	+05 46.0	3.528	4.502	166.0	3.1	19.8
1992 10 25	02 10.68	+05 09.6	3.561	4.548	172.4	1.6	19.8
1992 11 04	02 04.75	+04 37.4	3.625	4.595	166.5	2.9	19.9
1992 11 14	01 59.35	+04 11.6	3.719	4.641	156.1	4.9	20.1
1992 11 24	01 54.82	+03 53.7	3.841	4.687	145.3	6.9	20.3
1992 12 04	01 51.44	+03 44.6	3.988	4.732	134.6	8.5	20.5
1992 12 14	01 49.36	+03 44.5	4.156	4.778	124.1	9.8	20.6
1992 12 24	01 48.64	+03 53.0	4.340	4.823	113.9	10.7	20.8

Periodic Comet Encke Elements IAUC 5085

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m2
1992 06 07	23 38.10	-01 05.8	4.101	4.086	82.1	14.2	21.4
1992 06 17	23 40.08	-00 43.5	3.941	4.087	91.0	14.4	21.3
1992 06 27	23 40.66	-00 29.3	3.780	4.087	100.3	14.2	21.2
1992 07 07	23 39.69	-00 24.5	3.623	4.085	110.1	13.5	21.1
1992 07 17	23 37.04	-00 29.9	3.474	4.082	120.2	12.4	21.0
1992 07 27	23 32.64	-00 46.0	3.339	4.077	130.9	10.9	20.9
1992 08 06	23 26.52	-01 13.1	3.223	4.070	142.0	8.8	20.7
1992 08 16	23 18.85	-01 50.2	3.131	4.062	153.6	6.4	20.5
1992 08 26	23 09.95	-02 35.6	3.067	4.053	165.4	3.6	20.3
1992 09 05	23 00.29	-03 26.7	3.035	4.042	176.6	0.9	20.1
1992 09 15	22 50.49	-04 19.7	3.036	4.029	169.4	2.6	20.2
1992 09 25	22 41.17	-05 10.9	3.071	4.015	157.4	5.5	20.4
1992 10 05	22 32.92	-05 57.0	3.136	3.999	145.4	8.2	20.6
1992 10 15	22 26.17	-06 35.1	3.227	3.982	133.8	10.4	20.7
1992 10 25	22 21.19	-07 03.8	3.339	3.963	122.6	12.2	20.8

1992 04 08	13 30.41	+12 14.5	1.812	2.773	159.7	7.2	16.8
- 9.14 -0.11	+ 27.8 - 9.6	1990 WN2	20022	- 7.75 +0.77	- 14.6 -10.9		
1992 04 28	13 12.64	+12 29.0	1.892	2.798	148.2	10.9	17.1

1992 04 08	13 37.25	+01 16.1	1.123	2.114	168.8	5.3	16.5
- 9.34 -0.40	+ 49.8 - 5.7	1990 UP3	20021	- 8.14 +0.95	+ 14.1 -11.5		
1992 04 28	13 18.43	+02 25.8	1.154	2.117	157.0	10.7	16.8

1992 04 08	13 41.99	+18 50.1	2.430	3.351	152.6	7.9	18.1
-10.53 -0.27	+6.8 - 9.9	1989 TS	15565	- 9.95 +0.55	- 35.7 -10.8		
1992 04 28	13 20.69	+18 22.1	2.456	3.324	144.0	10.3	18.2

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1992 04 08    13 45.24   +04 10.5    1.545    2.526   165.3     5.8    15.8
- 8.87 -0.39  + 55.8 - 5.9   1990 WY3    20022   - 8.27 +0.66  + 21.5 -10.7
1992 04 28    13 27.04   +05 32.7    1.575    2.528   155.9     9.4    16.0

1992 04 08    13 55.66   -31 33.1    1.000    1.947   153.3    13.4    16.2
- 7.36 -1.06    +7.2 +18.5   1988 DD5    20015   - 8.30 +0.64  + 75.7 +14.0
1992 04 28    13 38.31   -30 05.6    0.934    1.915   161.1     9.8    15.9

1992 04 28    15 48.74   -09 53.5    2.190    3.149   158.6     6.7    19.1
- 7.39 -0.72  + 34.0 - 0.7   1989 XD2    20017   - 8.28 +0.44  + 16.4 - 4.9
1992 05 28    15 23.07   -08 30.0    2.137    3.113   161.0     6.1    19.0

1992 04 28    16 12.49   -12 56.0    1.094    2.044   153.3    12.8    16.5
- 5.26 -1.60  + 67.1 + 3.4   1979 OB     18415   -10.05 +0.27  + 56.1 - 7.8
1992 05 28    15 46.06   -09 30.5    0.945    1.943   165.4     7.6    15.9

1992 04 28    16 16.17   -21 45.0    1.320    2.259   152.1    12.1    16.6
- 6.47 -1.53  + 45.0 + 6.5   1986 UU     18427   -10.86 +0.30  + 70.0 + 0.1
1992 05 28    15 46.79   -18 40.7    1.164    2.171   171.5     3.9    15.9

1992 04 28    16 18.18   +29 26.6    1.193    1.980   128.2    23.5    16.5
- 7.23 -1.60  +120.9 -21.1   1989 CJ1    17207   -10.69 +0.59  - 44.7 -29.7
1992 05 28    15 47.24   +31 36.6    1.178    1.957   126.3    24.7    16.5

1992 04 28    16 16.51   -20 36.2    1.663    2.597   152.2    10.4    17.5
- 6.86 -1.27    +9.3 + 3.0   1989 VQ     16585   -10.39 +0.25  + 21.5 + 0.2
1992 05 28    15 47.81   -19 45.0    1.522    2.530   172.1     3.2    16.9

1992 04 28    16 14.60   -28 01.3    1.534    2.461   150.6    11.6    15.1
- 6.55 -1.22  + 51.4 + 8.0   1990 XK     17649   - 8.80 +0.52  + 83.7 + 1.1
1992 05 28    15 48.36   -24 25.9    1.485    2.493   172.0     3.3    14.7

1992 04 28    16 08.24   -20 56.4    4.115    5.039   154.0     5.0    16.9
- 4.95 -0.47  - 11.5 + 1.1    (4946)     18795   - 6.04 +0.12    -6.8 + 0.4
1992 05 28    15 50.68   -21 22.6    4.028    5.035   173.0     1.4    16.6

1992 04 28    16 15.83   -04 16.2    1.516    2.443   150.4    11.7    17.1
- 7.24 -1.06  + 67.3 - 4.2   1978 RR8    17625   - 8.89 +0.53  + 19.3 -10.5
1992 05 28    15 48.71   -01 54.8    1.547    2.519   158.9     8.3    17.0

1992 04 28    16 13.93   -22 56.8    1.347    2.287   152.3    11.8    16.7
- 5.29 -1.36  + 11.6 + 4.6   1987 DG6    17018   - 8.67 +0.38  + 31.1 + 0.8
1992 05 28    15 49.77   -21 45.9    1.255    2.264   172.8     3.2    16.1

1992 04 28    16 12.28   -12 02.7    2.018    2.953   153.3     8.8    16.1
- 5.62 -0.90  + 23.6 - 0.5   1989 YK8    18295   - 7.72 +0.26    +9.5 - 4.1
1992 05 28    15 50.12   -11 06.3    1.940    2.937   167.3     4.4    15.8

1992 04 28    16 17.93   -34 44.5    1.400    2.310   146.9    13.8    16.3
- 5.73 -1.51  + 23.1 +10.9   1988 LB     13470   - 9.47 +0.44  + 87.5 + 7.8
1992 05 28    15 51.50   -31 52.9    1.280    2.281   167.7     5.4    15.8

1992 04 28    16 19.22   -30 01.4    1.948    2.857   148.9    10.5    16.9
- 6.57 -1.22  - 49.8 + 3.8   1981 KJ     16425   -10.09 +0.19  - 17.2 + 6.0
1992 05 28    15 51.63   -31 46.1    1.822    2.821   167.8     4.3    16.4

1992 04 28    16 19.88   -30 17.8    2.380    3.282   148.6     9.2    18.5
- 7.17 -0.95    -7.7 + 4.9   1980 VX1    16022   - 9.37 +0.28  + 22.3 + 4.0
1992 05 28    15 52.79   -29 54.5    2.306    3.308   169.5     3.2    18.1
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1992 04 28    16 19.75   -25 49.9    2.299    3.213   150.3     8.9    18.4
- 5.98 -0.89  + 10.5 + 3.9   2064 P-L    16033   - 8.07 +0.25  + 29.5 + 1.7
1992 05 28    15 56.57   -24 45.9    2.232    3.241   173.5     2.0    18.0

1992 04 28    16 20.39   +10 45.8    2.359    3.210   141.6    11.2    17.3
- 6.61 -0.79  + 71.1 - 7.3    (4931)     18788   - 8.31 +0.26    +8.9 -12.0
1992 05 28    15 56.08   +12 54.3    2.360    3.243   145.1    10.3    17.3

1992 04 28    16 23.38   -23 39.6    1.534    2.458   150.0    11.8    17.6
- 6.33 -1.41  + 12.5 + 4.6   1982 TF2    11053   -10.48 +0.22  + 35.7 + 1.9
1992 05 28    15 55.17   -22 22.6    1.391    2.402   174.0     2.5    16.9

1992 04 28    16 26.11   -25 15.2    1.670    2.586   149.0    11.6    16.4
- 6.59 -1.38  - 32.7 + 2.8   1989 UL1    19303   -10.79 +0.17    -9.6 + 4.0
1992 05 28    15 57.19   -26 21.1    1.541    2.550   172.7     2.9    15.8

1992 04 28    16 24.34   -24 22.3    1.959    2.874   149.7    10.2    18.4
- 6.85 -1.06  + 14.5 + 4.0   1987 DN6    17820   - 9.32 +0.31  + 33.0 + 1.3
1992 05 28    15 57.53   -23 06.1    1.904    2.914   174.4     2.0    18.0

1992 04 28    16 15.42   +11 42.2    4.453    5.282   141.9     6.8    17.5
- 4.28 -0.40  + 24.0 - 4.5    (5126)     19843   - 5.24 +0.09    -9.7 - 6.3
1992 05 28    16 00.23   +12 06.9    4.417    5.288   146.0     6.1    17.4

1992 04 28    16 26.29   -27 39.1    1.234    2.156   148.3    14.2    16.4
- 5.93 -1.71  - 42.7 + 4.4   1988 ER1    13161   -11.02 +0.29    -4.9 + 6.6
1992 05 28    15 57.16   -28 54.8    1.135    2.142   170.9     4.3    15.8

1992 04 28    16 22.37   -19 23.5    2.158    3.077   151.0     9.1    18.0
- 5.80 -0.95  + 20.6 + 2.1   1986 EQ2    11143   - 8.35 +0.18  + 26.0 - 0.8
1992 05 28    15 59.05   -18 08.2    2.050    3.060   173.9     2.0    17.5

1992 04 28    16 22.90   -22 07.4    2.005    2.923   150.4     9.8    17.0
- 5.19 -1.04    +6.8 + 2.7   1987 QW2    14197   - 8.19 +0.15  + 18.9 + 0.7
1992 05 28    16 00.64   -21 25.1    1.875    2.886   175.3     1.6    16.4

1992 04 28    16 23.23   -07 27.1    2.391    3.300   149.7     8.9    15.7
- 5.63 -0.83  + 27.7 - 1.7   1988 SO1    18114   - 7.90 +0.14    +6.0 - 5.2
1992 05 28    16 01.15   -06 30.3    2.291    3.278   164.3     4.8    15.4

1992 04 28    16 18.93   -08 02.0    4.714    5.615   150.9     5.0    16.9
- 4.56 -0.41    -1.5 - 1.2    (5027)     19490   - 5.62 +0.07  - 12.2 - 2.2
1992 05 28    16 02.80   -08 20.8    4.627    5.617   166.2     2.5    16.7

1992 04 28    16 24.53   -18 50.5    2.366    3.280   150.5     8.7    16.6
- 5.78 -0.85  + 15.4 + 1.5   1991 DS     19028   - 7.92 +0.19  + 18.2 - 0.9
1992 05 28    16 02.06   -17 55.7    2.303    3.313   174.3     1.7    16.2

1992 04 28    16 28.55   -01 22.4    1.909    2.803   146.4    11.5    18.0
- 7.03 -1.01  + 25.1 - 5.0    (4783)     18094   - 9.40 +0.28  - 17.8 - 8.3
1992 05 28    16 01.52   -01 05.2    1.886    2.855   159.1     7.3    17.9

1992 04 28    16 30.68   -27 47.4    1.535    2.444   147.3    12.8    18.4
- 6.39 -1.55  - 18.8 + 4.5   1982 RW1    16231   -11.49 +0.10  + 15.7 + 5.6
1992 05 28    16 00.81   -27 54.1    1.377    2.385   172.1     3.3    17.7

1992 04 28    16 29.65   -30 28.5    1.853    2.751   146.6    11.6    16.3
- 6.57 -1.27  - 30.7 + 4.9    (4702)     17614   -10.05 +0.24    +5.3 + 5.8
1992 05 28    16 01.93   -31 08.4    1.777    2.780   169.5     3.8    15.9
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1992 04 28    16 26.28   -20 55.4    2.580    3.487   149.9     8.3    18.3
- 5.65 -0.86    +8.5 + 1.9   3197 T-3    15908   - 8.17 +0.09  + 16.4 + 0.3
1992 05 28    16 03.80   -20 15.1    2.438    3.449   175.8     1.2    17.8

1992 04 28    16 26.07   -21 38.7    2.117    3.030   149.8     9.6    16.7
- 5.07 -1.01  + 10.4 + 2.5   1987 RY     13607   - 8.12 +0.10  + 21.1 + 0.5
1992 05 28    16 04.24   -20 47.8    1.973    2.985   176.1     1.3    16.0

1992 04 28    16 31.58   -22 58.2    1.910    2.817   148.3    10.8    18.3
- 6.62 -1.20  + 17.8 + 3.6   1982 UH      7470   -10.12 +0.16  + 34.8 + 1.2
1992 05 28    16 03.96   -21 34.9    1.785    2.797   176.1     1.4    17.7

1992 04 28    16 32.30   -23 04.5    1.510    2.424   148.1    12.7    17.0
- 6.44 -1.40  + 31.0 + 4.7    (4693)     17610   -10.22 +0.28  + 49.9 + 0.4
1992 05 28    16 04.20   -20 55.2    1.428    2.440   176.1     1.6    16.3

1992 04 28    16 27.92   -17 57.0    2.106    3.019   149.7     9.7    16.4
- 5.65 -0.97    +3.6 + 0.9   1991 CE     17969   - 8.25 +0.18    +4.3 - 0.9
1992 05 28    16 04.96   -17 41.7    2.039    3.049   174.7     1.8    15.9

1992 04 28    16 32.60   -13 32.0    1.631    2.545   148.5    11.9    16.7
- 6.63 -1.30  + 26.6 + 0.1    (4720)     17621   -10.43 +0.18  + 15.0 - 4.1
1992 05 28    16 04.29   -12 21.9    1.530    2.534   170.1     4.0    16.2

1992 04 28    16 35.40   -27 08.3    1.440    2.346   146.5    13.7    17.9
- 6.35 -1.60    -5.6 + 5.1   4068 P-L    12797   -11.27 +0.18  + 28.4 + 4.7
1992 05 28    16 05.69   -26 33.4    1.324    2.334   173.9     2.7    17.2

1992 04 28    16 31.51   -07 30.3    1.818    2.723   147.7    11.4    14.9
- 5.91 -1.08    -4.0 - 3.5   1990 XB1    17649   - 8.81 +0.20  - 32.0 - 5.2
1992 05 28    16 07.06   -08 21.1    1.771    2.766   166.5     4.9    14.6

1992 04 28    16 37.49   -26 32.2    1.637    2.536   146.2    12.7    17.7
- 7.00 -1.49  - 13.0 + 4.1   1991 AN     17831   -11.65 +0.14  + 16.2 + 4.4
1992 05 28    16 06.50   -26 28.2    1.515    2.525   174.0     2.4    17.1

1992 04 28    16 35.50   -26 29.6    1.575    2.479   146.7    12.9    18.7
- 5.89 -1.53    +2.4 + 4.8   1989 TD     15565   -11.30 -0.01  + 34.5 + 4.5
1992 05 28    16 06.91   -25 33.9    1.387    2.398   174.8     2.2    17.9

1992 04 28    16 37.15   -11 08.0    1.497    2.405   147.1    13.1    17.6
- 6.99 -1.33    +3.1 - 2.2   1975 XH     17624   -10.43 +0.30  - 17.8 - 4.4
1992 05 28    16 07.99   -11 26.2    1.471    2.474   169.5     4.3    17.3

1992 04 28    16 32.44   -19 08.7    2.309    3.212   148.6     9.4    18.3
- 5.45 -0.95  + 18.8 + 1.7   1978 RD10   18803   - 8.32 +0.08  + 23.1 - 0.7
1992 05 28    16 09.88   -18 01.5    2.183    3.195   175.7     1.4    17.7

1992 04 28    16 27.05   -13 19.4    4.544    5.438   149.8     5.3    16.9
- 4.21 -0.44    +1.4 - 0.4    (4836)     18274   - 5.47 +0.04    -3.7 - 1.3
1992 05 28    16 11.63   -13 21.2    4.454    5.458   171.6     1.6    16.6

1992 04 28    16 32.53   -06 49.0    2.597    3.487   147.3     9.0    17.9
- 5.55 -0.78  + 53.2 - 1.3    (4725)     17803   - 7.71 +0.11  + 31.5 - 5.6
1992 05 28    16 11.00   -04 34.2    2.529    3.511   162.9     4.9    17.7

1992 04 28    16 39.99   -26 06.8    1.685    2.581   145.8    12.7    17.6
- 6.43 -1.44    -0.6 + 4.2    (5169)     19996   -11.06 +0.09  + 26.6 + 3.7
1992 05 28    16 10.95   -25 27.0    1.553    2.564   175.4     1.8    16.9
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1992 04 28	16 42.31	+17 45.1	1.316	2.134	133.0	20.2	17.7
- 6.86 -1.64	+ 80.2 -13.5	1986 AH	13170	-11.94 +0.17	- 42.3 -24.3		
1992 05 28	16 10.77	+19 01.9	1.240	2.115	139.4	18.2	17.5
1992 04 28	16 34.64	-31 23.4	1.508	2.406	145.3	13.8	17.6
- 4.17 -1.50	-1.1 + 6.8	3097 P-L	15423	- 9.22 +0.05	+ 44.8 + 6.9		
1992 05 28	16 11.70	-30 18.2	1.351	2.358	170.9	3.9	16.9
1992 04 28	16 35.41	-03 45.8	1.821	2.713	145.7	12.1	17.2
- 5.47 -1.08	+ 72.1 - 2.8	1989 RH	16235	- 8.48 +0.16	+ 32.6 - 9.6		
1992 05 28	16 12.21	-00 56.3	1.771	2.742	159.3	7.5	17.0
1992 04 28	16 41.52	-29 20.6	1.797	2.682	144.6	12.6	17.9
- 6.43 -1.44	-8.7 + 4.8	1930 UX	19008	-11.31 +0.02	+ 26.6 + 5.7		
1992 05 28	16 12.21	-28 55.4	1.637	2.645	172.3	2.9	17.2
1992 04 28	16 35.87	-00 10.2	1.687	2.572	144.2	13.2	15.0
- 4.85 -1.21	+ 57.5 - 4.1	1941 HA	17814	- 8.89 +0.01	+7.6 -11.6		
1992 05 28	16 13.00	+01 41.3	1.557	2.520	156.7	9.1	14.6
1992 04 28	16 37.13	-24 49.6	1.238	2.152	146.7	14.9	17.0
- 3.97 -1.70	+2.6 + 4.6	1989 UM	15566	-10.27 -0.08	+ 31.4 + 3.6		
1992 05 28	16 12.77	-23 57.0	1.070	2.083	176.9	1.5	15.9
1992 04 28	16 41.30	-29 22.0	1.515	2.407	144.6	14.0	18.0
- 5.55 -1.67	- 25.8 + 4.2	(4776)	18091	-11.88 -0.13	+ 12.0 + 7.2		
1992 05 28	16 12.32	-29 48.3	1.323	2.331	171.5	3.7	17.2
1992 04 28	16 39.88	-19 04.0	1.938	2.835	146.9	11.2	18.1
- 6.32 -1.19	+ 21.3 + 2.0	(4817)	18267	-10.07 +0.08	+ 26.8 - 0.7		
1992 05 28	16 12.95	-17 46.8	1.814	2.826	175.9	1.5	17.4
1992 04 28	16 38.23	-20 19.4	2.204	3.098	147.2	10.2	17.0
- 5.38 -1.04	+7.0 + 1.7	1989 XC	15726	- 8.77 +0.02	+ 13.7 + 0.1		
1992 05 28	16 15.03	-19 45.7	2.065	3.078	177.8	0.7	16.3
1992 04 28	16 41.78	-01 57.3	1.982	2.856	143.6	12.1	16.3
- 5.68 -1.06	+ 38.9 - 4.0	(4874)	18409	- 8.93 +0.08	-1.4 - 8.6		
1992 05 28	16 17.76	-00 52.6	1.907	2.877	159.4	7.1	16.0
1992 04 28	16 43.91	-10 02.2	2.691	3.565	145.3	9.3	17.5
- 5.59 -0.90	+ 21.6 - 0.9	1990 BT1	16240	- 8.77 -0.07	+7.9 - 3.6		
1992 05 28	16 20.85	-09 12.9	2.502	3.499	167.7	3.5	17.0
1992 05 28	16 21.33	-22 43.7	1.893	2.906	178.7	0.4	15.8
- 8.97 -0.04	+ 12.4 + 1.6	(4981)	19275	- 5.32 +1.11	+ 10.7 - 2.2		
1992 06 27	15 57.77	-22 02.0	1.982	2.882	146.1	11.3	16.5
1992 05 28	16 22.12	-11 28.7	0.913	1.919	170.0	5.3	16.0
- 9.30 -0.14	+ 26.2 - 7.0	(4884)	18608	- 3.60 +1.73	- 26.7 - 8.9		
1992 06 27	15 59.33	-11 26.0	0.969	1.886	143.4	18.7	16.6
1992 05 28	16 22.08	-25 39.0	1.298	2.310	175.8	1.8	16.6
-10.74 -0.04	+5.8 + 4.0	(4888)	18610	- 5.32 +1.57	+ 13.1 - 1.8		
1992 06 27	15 55.03	-24 59.6	1.398	2.311	145.9	14.3	17.4
1992 05 28	16 24.54	-24 59.6	2.465	3.477	176.4	1.1	16.8
- 8.15 -0.06	+ 24.3 + 2.2	1982 SE1	14017	- 5.38 +0.88	+ 26.8 - 1.5		
1992 06 27	16 02.52	-23 36.1	2.539	3.439	147.4	9.2	17.3

1992 05 28	16 25.13	-25 03.1	1.243	2.255	176.3	1.7	16.4
-10.03 -0.02	+ 16.8 + 3.5	1980 EB	12714	- 4.62 +1.54		+ 19.3 - 2.7	
1992 06 27	16 00.29	-23 57.4	1.354	2.274	147.0	14.1	17.2
1992 05 28	16 25.71	-12 10.0	1.271	2.277	170.6	4.2	17.8
-10.15 +0.02	+ 30.6 - 5.2	1298 T-2	18832	- 5.02 +1.43		-9.1 - 7.0	
1992 06 27	16 00.35	-11 34.5	1.399	2.299	143.7	15.2	18.5
1992 05 28	16 26.59	-12 04.8	1.342	2.347	170.5	4.1	16.4
- 9.37 -0.15	+ 67.1 - 4.0	1985 RL1	13159	- 5.20 +1.35		+ 23.6 - 9.2	
1992 06 27	16 01.98	-09 39.1	1.395	2.292	143.3	15.4	16.9
1992 05 28	16 29.42	-26 48.0	0.983	1.994	174.3	2.9	15.8
-10.95 -0.26	+4.0 + 5.6	1986 QX1	12960	- 5.12 +1.86		+ 18.0 - 1.6	
1992 06 27	16 01.39	-26 01.2	1.042	1.976	147.4	16.1	16.4
1992 05 28	16 29.42	-12 47.3	1.837	2.842	171.1	3.2	16.9
- 7.99 -0.09	+ 46.1 - 3.1	1981 EX13	10771	- 4.85 +1.01		+ 15.8 - 6.2	
1992 06 27	16 08.14	-11 08.8	1.921	2.816	145.3	11.9	17.4
1992 05 28	16 31.46	-43 16.8	1.418	2.389	158.1	9.1	16.2
-11.17 -0.13	+ 20.9 +14.0	1987 DF6	18286	- 5.36 +1.71		+ 76.8 + 3.0	
1992 06 27	16 03.27	-40 29.6	1.501	2.410	145.7	13.7	16.5
1992 05 28	16 31.29	-17 32.5	2.392	3.403	175.3	1.4	16.7
- 8.25 -0.15	+ 13.0 - 0.6	1977 TS3	14012	- 5.95 +0.83		+2.6 - 2.8	
1992 06 27	16 08.19	-17 05.1	2.438	3.340	147.4	9.4	17.2
1992 05 28	16 31.57	-21 06.5	4.123	5.136	177.5	0.5	17.9
- 5.41 -0.05	+ 12.4 + 0.3	4523 P-L	18130	- 4.02 +0.47		+9.8 - 1.1	
1992 06 27	16 16.48	-20 30.6	4.219	5.126	150.2	5.7	18.3
1992 05 28	16 32.88	-25 11.6	1.576	2.588	175.4	1.8	16.8
-10.21 -0.16	+ 18.9 + 3.3	1978 VK5	18415	- 6.20 +1.31		+ 23.9 - 1.9	
1992 06 27	16 05.56	-23 57.7	1.657	2.578	148.2	12.0	17.4
1992 05 28	16 33.44	-17 15.8	1.832	2.843	174.8	1.8	16.3
- 9.17 -0.14	+ 13.8 - 1.0	1985 XR	15556	- 5.96 +1.07		-0.5 - 3.5	
1992 06 27	16 08.53	-16 51.3	1.920	2.831	147.4	11.1	16.9
1992 05 28	16 34.03	-39 02.3	1.608	2.592	162.2	6.9	16.8
-11.69 -0.41	- 19.2 +10.5	1980 TG4	15702	- 7.72 +1.53		+ 31.7 + 4.5	
1992 06 27	16 01.31	-38 32.3	1.629	2.536	146.0	13.0	17.0
1992 05 28	16 34.12	-19 28.0	2.452	3.464	176.3	1.1	17.5
- 7.97 -0.05	+ 15.4 - 0.1	4600 P-L	15570	- 5.35 +0.83		+8.0 - 2.3	
1992 06 27	16 12.52	-18 48.8	2.590	3.500	148.9	8.6	18.1
1992 05 28	16 34.17	-26 48.5	2.514	3.523	173.9	1.8	19.5
- 8.69 -0.09	+ 22.6 + 2.8	(4886)	18609	- 6.02 +0.87		+ 29.2 - 0.9	
1992 06 27	16 10.35	-25 23.9	2.613	3.526	149.4	8.4	19.9
1992 05 28	16 36.58	-23 52.1	1.802	2.813	175.6	1.6	15.8
- 8.92 -0.17	+7.6 + 2.1	(4803)	18101	- 5.67 +1.10		+ 10.2 - 1.4	
1992 06 27	16 12.36	-23 19.0	1.893	2.817	149.7	10.5	16.4
1992 05 28	16 41.63	-67 22.9	1.375	2.203	134.0	19.3	18.3
-21.32 -1.48	- 31.7 +27.7	1981 EZ28	15409	-10.73 +3.87		+115.4 +15.7	
1992 06 27	15 43.54	-64 54.5	1.345	2.153	130.9	20.9	18.2

1992 05 28	16 38.25	+05 35.9	1.595	2.538	152.6	10.6	14.7	
- 9.08 -0.05	+139.1 -15.3	1980 TL13	15552	- 5.36 +1.12	+ 38.0 -15.7			
1992 06 27	16 14.43	+10 02.0	1.767	2.578	133.9	16.5	15.2	
1992 05 28	16 39.44	-02 53.0	1.954	2.930	+1.08	-3.5	16.8	
- 8.74 -0.12	+ 12.1 - 7.6	1991 BV	18436	- 5.91 +0.95	- 33.3 - 6.7			
1992 06 27	16 15.50	-03 26.6	2.070	2.946	+1.01	-3.2	17.2	
1992 05 28	16 40.56	-20 09.1	1.734	2.745	175.2	1.8	16.1	
- 8.13 -0.21	+9.8 + 0.1	2548 P-L	12689	- 5.21 +1.05	+2.3 - 2.6			
1992 06 27	16 18.23	-19 46.0	1.813	2.743	150.4	10.5	16.7	
1992 05 28	16 42.04	-16 50.3	1.301	2.310	173.2	3.0	16.3	
- 9.82 -0.46	+ 21.0 - 1.4	1985 UH3	15710	- 6.76 +1.34	+0.3 - 5.2			
1992 06 27	16 13.83	-16 11.2	1.304	2.235	148.4	13.8	16.7	
1992 05 28	16 41.89	-25 53.7	2.021	3.030	173.5	2.2	16.7	
- 9.33 -0.22	+7.2 + 2.9	1975 SJ	18280	- 6.57 +1.02	+ 15.7 - 0.5			
1992 06 27	16 15.75	-25 12.7	2.095	3.022	150.6	9.5	17.1	
1992 05 28	16 44.73	-37 37.5	1.197	2.186	163.1	7.8	15.8	
-11.94 -0.50	+ 30.1 +13.1	1989 NR	17961	- 7.08 +1.80	+ 81.9 + 2.0			
1992 06 27	16 11.95	-34 28.6	1.221	2.157	149.0	14.0	16.1	
1992 05 28	16 45.45	-25 40.5	1.448	2.457	173.0	2.9	17.1	
-10.79 -0.38	+ 32.8 + 4.3	(4788)	18096	- 7.29 +1.36	+ 40.5 - 2.2			
1992 06 27	16 15.11	-23 38.2	1.488	2.424	150.3	12.0	17.5	
1992 05 28	16 45.18	-03 30.8	1.956	2.934	161.1	6.4	17.3	
- 8.66 -0.18	+ 33.3 - 7.2	1991 DX	18128	- 6.11 +0.92	- 14.0 - 7.5			
1992 06 27	16 21.00	-03 01.3	2.058	2.940	143.8	11.8	17.6	
1992 05 28	16 45.93	-30 46.0	2.417	3.418	169.1	3.2	17.4	
- 8.82 -0.25	-7.1 + 4.2	1976 QL2	14185	- 6.69 +0.88	+ 12.0 + 1.5			
1992 06 27	16 20.59	-30 33.7	2.476	3.404	151.5	8.2	17.7	
1992 05 28	16 48.02	-37 43.0	1.121	2.110	162.7	8.2	15.2	
-11.36 -0.35	+ 15.1 +12.8	(4718)	17620	- 5.89 +1.79	+ 64.3 + 1.9			
1992 06 27	16 18.18	-35 23.5	1.217	2.158	150.0	13.6	15.7	
1992 05 28	16 48.06	-27 35.4	0.916	1.924	171.3	4.6	15.6	
-10.16 -0.64	+ 27.9 + 6.9	1964 UP	11241	- 5.83 +1.81	+ 45.5 - 2.1			
1992 06 27	16 19.55	-25 28.3	0.933	1.890	151.5	14.9	16.1	
1992 05 28	16 46.67	-06 16.1	1.836	2.822	163.5	5.8	16.9	
- 7.72 -0.21	+ 30.1 - 6.4	(4854)	18402	- 5.29 +0.92	- 13.1 - 7.1			
1992 06 27	16 25.07	-05 49.4	1.924	2.827	146.3	11.5	17.3	
1992 05 28	16 47.23	-20 19.5	2.126	3.136	173.7	2.0	16.6	
- 8.22 -0.19	+9.4 + 0.2	1991 DT	19308	- 5.81 +0.89	+4.4 - 1.9			
1992 06 27	16 24.22	-19 54.7	2.236	3.168	151.8	8.7	17.0	
1992 05 28	16 49.26	-25 30.5	0.986	1.995	172.3	3.9	15.8	
- 9.39 -0.65	-7.9 + 3.8	1985 SR	14021	- 5.77 +1.65	+5.2 - 0.5			
1992 06 27	16 22.27	-25 26.5	1.003	1.960	152.1	14.1	16.3	
1992 05 28	16 49.66	-24 32.9	1.867	2.875	172.7	2.6	17.8	
- 9.76 -0.33	+ 16.3 + 2.7	1989 TL15	19026	- 7.21 +1.06	+ 21.9 - 1.2			
1992 06 27	16 21.66	-23 28.4	1.918	2.854	151.8	9.7	18.2	

1992 05 28	16 54.06	-56 37.0		2.037	2.921	144.3	11.7	17.1
-15.97 -0.91	- 26.3 +16.4	1989 RO2		18432	-12.24 +1.90		+ 65.6 +10.8	
1992 06 27	16 06.53	-55 27.4		2.011	2.857	139.0	13.5	17.1
1992 05 28	16 49.98	-20 19.8		1.981	2.990	173.1	2.3	17.6
- 9.36 -0.32	+4.1 + 0.4	1989 UG3		15896	- 7.14 +0.96		+0.7 - 1.8	
1992 06 27	16 22.89	-20 08.5		2.033	2.967	151.6	9.4	18.0
1992 05 28	16 53.22	-07 05.9		0.889	1.884	163.6	8.7	14.7
- 8.89 -0.81	- 65.4 -14.0	1988 LA		13470	- 6.37 +1.55		-131.5 - 6.2	
1992 06 27	16 25.95	-12 16.0		0.872	1.824	149.7	16.3	14.9
1992 05 28	16 54.24	-18 05.7		1.025	2.033	171.4	4.3	16.2
- 9.94 -0.51	-8.4 - 1.7	1985 GO		10029	- 6.14 +1.54		- 22.8 - 3.0	
1992 06 27	16 26.34	-18 50.2		1.098	2.052	152.0	13.4	16.7
1992 05 28	16 54.73	-17 07.3		1.537	2.542	170.9	3.6	17.8
-10.34 -0.46	+ 30.5 - 0.8	1953 TD1		19494	- 7.84 +1.17		+ 13.6 - 4.6	
1992 06 27	16 24.46	-15 54.0		1.568	2.505	150.8	11.4	18.2
1992 05 28	17 00.15	-22 58.0		1.033	2.040	170.8	4.6	16.5
-17.41 -0.73	-158.5 + 5.3	1985 XB		14475	-12.11 +2.11		- 97.9 +10.4	
1992 06 27	16 10.59	-29 31.8		1.176	2.116	149.4	14.1	17.3
1992 05 28	16 55.46	-22 54.9		1.295	2.303	171.8	3.6	18.2
-10.28 -0.61	+ 27.1 + 2.7	1981 ER10		10769	- 7.61 +1.35		+ 28.2 - 2.8	
1992 06 27	16 25.01	-21 21.7		1.300	2.251	152.3	12.1	18.6
1992 05 28	16 58.37	-39 28.7		1.554	2.531	160.3	7.8	16.2
-11.00 -0.79	- 33.1 + 9.9	1984 UX2		12202	- 8.90 +1.39		+ 24.7 + 6.8	
1992 06 27	16 24.48	-39 35.3		1.535	2.467	149.8	12.0	16.3
1992 05 28	16 59.30	-27 20.9		1.764	2.767	169.5	3.8	18.0
-10.54 -0.45	+4.6 + 4.1	1991 DC		17972	- 8.15 +1.12		+ 20.6 + 0.4	
1992 06 27	16 28.36	-26 36.3		1.815	2.762	153.5	9.5	18.3
1992 05 28	16 59.24	-21 41.5		1.384	2.390	171.1	3.8	17.6
- 9.74 -0.57	-3.3 + 1.0	1978 VP10		15551	- 7.36 +1.24		-3.4 - 1.4	
1992 06 27	16 30.26	-21 47.1		1.414	2.368	153.5	11.0	17.9
1992 05 28	17 08.71	-39 33.6		1.017	1.998	+3.14	-17.4	15.7
-16.65 -1.77	-156.4 +12.8	1990 XZ		18635	-14.98 +2.26		- 47.9 +16.3	
1992 06 27	16 13.72	-44 46.3		1.046	1.972	+2.91	-23.6	16.0
1992 05 28	17 01.70	-04 07.1		2.150	3.121	160.0	6.4	17.6
- 8.57 -0.39	+ 15.8 - 6.2	1989 YP		16031	- 7.34 +0.75		- 25.2 - 6.6	
1992 06 27	16 35.74	-04 20.5		2.163	3.070	147.5	10.2	17.8
1992 05 28	17 02.19	-13 35.0		1.702	2.700	167.4	4.7	17.1
- 9.23 -0.55	+0.0 - 3.2	1989 XF		16030	- 7.86 +0.95		- 22.8 - 4.1	
1992 06 27	16 33.79	-14 07.6		1.695	2.637	152.2	10.4	17.3
1992 05 28	17 03.92	-27 33.2		1.593	2.594	168.5	4.5	17.5
-10.08 -0.77	- 12.6 + 3.8	1984 SU3		9415	- 9.04 +1.09		+7.7 + 1.7	
1992 06 27	16 31.80	-27 36.9		1.538	2.492	154.2	10.2	17.6
1992 05 28	17 02.50	-18 11.2		1.874	2.877	169.7	3.6	17.2
- 8.23 -0.41	+ 21.0 - 0.6	1988 RQ5		16431	- 6.58 +0.88		+9.7 - 3.1	
1992 06 27	16 37.90	-17 20.4		1.911	2.861	154.3	8.9	17.5

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1992 05 28    17 03.35   -20 08.5    2.174    3.177   170.0     3.2    17.4
- 8.05 -0.31  + 10.4 + 0.1   1991 CS1    17971   - 6.35 +0.80    +5.7 - 1.8
1992 06 27    16 39.72   -19 40.8    2.262    3.214   155.3     7.6    17.8

1992 05 28    17 03.28   -30 31.7    2.533    3.527   166.9     3.7    16.6
- 7.36 -0.38    -3.4 + 3.6   1978 SO4    18414   - 6.26 +0.70  + 14.3 + 1.7
1992 06 27    16 40.88   -30 12.0    2.538    3.491   155.9     6.8    16.7

1992 05 28    17 05.83   -29 22.1    1.742    2.739   167.1     4.7    17.9
- 9.95 -0.59  - 25.3 + 4.4   1976 UR15   15551   - 8.26 +1.07    -0.4 + 2.7
1992 06 27    16 35.45   -29 57.4    1.771    2.726   154.7     9.2    18.1

1992 05 28    17 08.83   -24 44.0    1.416    2.418   168.5     4.8    16.3
-10.17 -0.67    -9.9 + 2.6   1991 BJ     17833   - 8.18 +1.21    +1.8 + 0.3
1992 06 27    16 37.83   -24 51.8    1.452    2.414   155.6    10.0    16.6

1992 05 28    17 07.26   -24 35.0    2.302    3.302   168.9     3.4    18.1
- 8.48 -0.43    +6.3 + 2.0    (4994)     19281   - 7.40 +0.75  + 13.3 - 0.1
1992 06 27    16 41.25   -24 01.7    2.305    3.261   156.3     7.2    18.3

1992 05 28    17 07.72   -13 40.4    2.194    3.188   166.4     4.3    16.7
- 8.42 -0.41  + 15.2 - 2.3   1989 WE     17209   - 7.29 +0.74    -3.4 - 3.7
1992 06 27    16 42.05   -13 20.1    2.218    3.162   153.7     8.2    16.9

1992 05 28    17 07.42   -25 51.0    1.859    2.859   168.5     4.1    14.9
- 8.30 -0.46  + 38.8 + 3.3   1991 FV     18301   - 6.69 +0.92  + 46.0 - 1.4
1992 06 27    16 42.40   -23 35.1    1.880    2.841   156.5     8.2    15.1

1992 05 28    17 09.09   +10 42.2    1.088    2.008   145.7    16.5    18.1
-10.09 -0.58  +113.9 -21.5   7072 P-L    14630   - 7.17 +1.35  - 23.0 -20.0
1992 06 27    16 39.65   +12 55.3    1.178    2.033   135.6    20.5    18.4

1992 05 28    17 09.58   -17 48.0    1.617    2.617   167.9     4.6    17.5
- 9.10 -0.60  + 33.0 - 0.4   1981 SN     10309   - 7.78 +0.98  + 19.4 - 4.1
1992 06 27    16 41.34   -16 22.6    1.613    2.569   154.7     9.7    17.7

1992 05 28    17 09.00   -24 00.7    2.633    3.632   168.6     3.2    17.2
- 7.78 -0.36    +5.9 + 1.5   1989 YZ1    16238   - 6.80 +0.64  + 10.7 - 0.2
1992 06 27    16 45.29   -23 32.6    2.661    3.620   157.2     6.2    17.4

1992 05 28    17 09.44   -24 07.3    1.841    2.841   168.5     4.1    15.5
- 7.81 -0.51    +4.8 + 1.8   1987 RC1    19298   - 6.58 +0.86  + 10.4 - 0.4
1992 06 27    16 45.31   -23 40.4    1.855    2.820   157.2     8.0    15.7

1992 05 28    17 12.64   -32 48.6    2.090    3.076   163.9     5.3    18.0
-10.66 -0.58    -6.9 + 5.7   1982 SO4    17957   - 9.32 +0.96  + 23.7 + 3.1
1992 06 27    16 39.83   -32 18.5    2.107    3.059   155.2     8.0    18.1

1992 05 28    17 06.45   -04 06.3    4.907    5.867   159.4     3.5    17.4
- 4.86 -0.14    +2.9 - 2.9    (4835)     18274   - 4.33 +0.30  - 15.4 - 3.0
1992 06 27    16 51.87   -04 25.1    5.002    5.909   150.7     4.8    17.6

1992 05 28    17 10.01   -20 37.7    2.161    3.160   168.5     3.7    18.2
- 7.76 -0.48    +8.3 + 0.3   1987 RZ     15887   - 6.98 +0.71    +5.8 - 1.4
1992 06 27    16 45.70   -20 13.3    2.139    3.100   156.8     7.4    18.3

1992 05 28    17 14.43   -20 40.2    1.353    2.353   167.5     5.4    16.5
-10.49 -0.92    -8.6 + 0.1   1986 TZ1    11427   - 9.72 +1.14  - 10.0 - 1.2
1992 06 27    16 40.29   -21 05.6    1.317    2.283   155.7    10.5    16.6
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1992 05 28	17 12.69	-06 08.1	1.798	2.773	160.2	7.1	16.5
- 8.48 -0.58	+0.2 - 6.7	1979 KG	13447	- 7.75 +0.79	- 42.1 - 6.5		
1992 06 27	16 45.81	-07 11.3	1.780	2.716	151.3	10.4	16.6
1992 05 28	17 16.29	-16 59.6	1.602	2.597	166.2	5.4	17.0
- 9.84 -0.69	+ 12.7 - 1.3	(4822)	18270	- 8.82 +0.98	-1.1 - 3.3		
1992 06 27	16 45.22	-16 38.5	1.601	2.562	155.7	9.4	17.2
1992 05 28	17 18.32	-40 22.3	1.562	2.528	157.5	8.8	17.1
-10.02 -0.93	+8.0 +10.9	1988 PG1	18289	- 8.92 +1.23	+ 68.4 + 6.7		
1992 06 27	16 45.92	-38 19.7	1.511	2.466	154.1	10.4	17.0
1992 05 28	17 18.26	-26 41.8	1.246	2.243	165.9	6.3	17.2
- 9.46 -1.04	-7.4 + 3.6	1985 RS1	11151	- 8.98 +1.19	+ 12.7 + 1.6		
1992 06 27	16 46.47	-26 30.0	1.195	2.169	157.5	10.3	17.2
1992 05 28	17 16.99	-16 31.2	1.905	2.898	165.8	4.9	17.2
- 8.42 -0.56	+ 10.5 - 1.5	1984 SO5	15709	- 7.64 +0.78	-2.9 - 3.0		
1992 06 27	16 50.42	-16 17.0	1.907	2.869	156.7	8.0	17.4
1992 05 28	17 21.36	-24 33.9	1.160	2.157	165.7	6.6	16.0
- 9.34 -1.05	+ 14.3 + 3.2	1989 SC1	15564	- 8.76 +1.22	+ 25.5 - 0.7		
1992 06 27	16 49.98	-23 27.0	1.121	2.100	158.3	10.3	16.0
1992 05 28	17 18.94	-10 11.8	1.282	2.268	162.1	7.9	16.6
- 7.13 -0.81	+ 58.2 - 4.5	1983 PX	14017	- 6.67 +0.94	+ 12.5 - 9.6		
1992 06 27	16 55.00	-08 16.5	1.242	2.200	153.7	11.8	16.6
1992 05 28	17 38.79	-64 58.2	1.162	2.008	134.7	21.0	15.9
-20.62 -2.98	- 53.2 +27.7	1989 EC	17207	-16.34 +3.76	+121.3 +21.5		
1992 06 27	16 30.57	-63 04.1	1.149	2.008	135.9	20.6	15.8
1992 05 28	17 22.83	-29 41.7	0.949	1.943	163.8	8.4	16.4
- 8.93 -1.35	- 10.2 + 6.2	1989 SB	15421	- 8.76 +1.43	+ 27.0 + 3.7		
1992 06 27	16 51.14	-29 11.8	0.893	1.876	158.2	11.6	16.3
1992 05 28	17 26.64	-21 26.4	2.595	3.583	164.7	4.3	18.2
- 7.39 -0.50	+8.7 + 0.5	1971 UN1	14011	- 7.30 +0.52	+8.9 - 0.7		
1992 06 27	17 02.73	-20 57.8	2.563	3.539	160.9	5.4	18.2
1992 05 28	17 30.52	-33 15.1	0.875	1.861	160.6	10.4	17.7
- 9.04 -1.34	- 29.3 + 9.0	1262 T-2	15078	- 7.94 +1.58	+ 25.7 + 6.2		
1992 06 27	16 59.63	-33 15.3	0.899	1.884	158.8	11.2	17.8
1992 05 28	17 31.25	-44 32.2	1.719	2.661	152.8	10.0	17.5
- 9.88 -1.17	- 44.1 + 9.9	3020 T-2	15083	-10.38 +1.06	+ 25.5 +10.6		
1992 06 27	16 56.72	-45 01.4	1.653	2.594	151.8	10.7	17.3
1992 05 28	17 32.86	-37 32.2	1.995	2.958	157.6	7.5	17.3
-10.21 -0.92	- 42.1 + 6.5	1931 VS	19008	-10.47 +0.85	+4.1 + 7.0		
1992 06 27	16 58.56	-38 30.1	1.968	2.927	156.2	8.1	17.3
1992 05 28	17 32.64	-36 50.6	2.276	3.239	158.1	6.7	16.8
- 8.88 -0.70	- 22.3 + 5.8	1978 SP4	18104	- 8.71 +0.74	+ 14.7 + 5.1		
1992 06 27	17 03.60	-37 00.7	2.282	3.246	157.8	6.8	16.9
1992 05 28	17 30.84	-03 16.4	1.920	2.871	155.1	8.6	16.8
- 7.95 -0.57	+9.3 - 7.5	1982 BA	17957	- 7.52 +0.68	- 37.0 - 7.0		
1992 06 27	17 05.33	-03 59.0	1.954	2.896	152.8	9.2	16.9

1992 05 28	17 35.63	-32 55.2	1.648	2.623	159.9	7.6	18.2
-10.46 -1.01	- 30.2 + 5.6	1979 TY1	13056	-10.56 +0.98		+9.0 + 5.5	
1992 06 27	17 00.41	-33 26.7	1.633	2.607	158.9	8.1	18.2
1992 05 28	17 29.97	-06 19.5	2.104	3.065	157.4	7.3	18.1
- 6.91 -0.56	+ 31.1 - 5.2	4118 T-3	15425	- 6.89 +0.56		-6.8 - 6.7	
1992 06 27	17 07.19	-05 40.1	2.085	3.033	154.3	8.4	18.1
1992 05 28	17 32.17	-24 10.4	1.978	2.963	163.3	5.6	18.3
- 7.87 -0.65	+6.5 + 1.6	1269 T-2	18831	- 7.67 +0.70		+ 13.0 + 0.1	
1992 06 27	17 06.37	-23 38.4	1.979	2.963	162.0	6.1	18.3
1992 05 28	17 35.06	-16 20.6	1.954	2.933	161.7	6.2	16.3
- 8.76 -0.69	- 24.0 - 2.3	(4766)	17948	- 8.74 +0.68		- 34.1 - 1.2	
1992 06 27	17 06.28	-17 49.9	1.965	2.944	160.8	6.5	16.3
1992 05 28	17 35.47	-23 23.8	1.897	2.881	162.6	6.0	17.2
- 8.68 -0.70	+ 37.5 + 2.1	1981 XM2	17956	- 8.45 +0.75		+ 41.2 - 1.4	
1992 06 27	17 07.11	-21 19.4	1.891	2.874	161.9	6.3	17.2
1992 05 28	17 36.59	-13 35.0	1.212	2.193	160.3	9.0	17.2
- 9.06 -0.90	+ 18.4 - 4.5	1988 CG	18429	- 8.32 +1.06		- 13.3 - 5.4	
1992 06 27	17 06.90	-13 25.6	1.261	2.240	159.1	9.3	17.4
1992 05 28	17 36.09	-17 23.2	1.236	2.221	161.8	8.2	17.7
- 8.42 -1.08	+ 46.7 - 0.5	(4878)	18606	- 8.92 +0.94		+ 28.9 - 5.4	
1992 06 27	17 06.33	-15 20.5	1.185	2.168	159.9	9.3	17.6
1992 05 28	17 34.94	-11 56.5	2.243	3.213	159.9	6.2	16.3
- 6.97 -0.53	+ 48.3 - 2.6	1991 GY9	18637	- 6.84 +0.55		+ 23.6 - 5.2	
1992 06 27	17 12.24	-10 03.9	2.256	3.222	158.2	6.7	16.3
1992 05 28	17 42.23	-40 01.6	1.104	2.066	154.6	12.1	17.7
- 9.45 -1.41	- 23.4 +11.8	2055 P-L	9297	- 9.30 +1.40		+ 50.7 + 9.2	
1992 06 27	17 08.88	-39 15.7	1.115	2.090	157.3	10.8	17.7
1992 05 28	17 40.96	-25 19.2	1.745	2.725	161.2	6.9	18.5
- 9.07 -0.98	-7.4 + 1.9	1985 RJ5	16697	-10.07 +0.70		+6.0 + 1.6	
1992 06 27	17 09.13	-25 20.8	1.670	2.657	162.7	6.6	18.3
1992 05 28	17 43.01	-31 38.2	1.870	2.840	159.1	7.3	17.7
- 8.36 -0.87	- 17.2 + 4.3	4614 P-L	19318	- 8.82 +0.73		+ 11.7 + 4.1	
1992 06 27	17 14.28	-31 46.1	1.855	2.840	162.3	6.3	17.6
1992 05 28	17 44.63	-25 06.9	1.750	2.726	160.4	7.2	17.9
- 8.84 -0.97	- 11.9 + 1.6	1985 PG2	15412	- 9.80 +0.69		+0.6 + 1.7	
1992 06 27	17 13.62	-25 24.1	1.695	2.686	163.7	6.1	17.8
1992 05 28	17 44.64	-24 06.9	1.813	2.789	160.5	7.0	17.5
- 9.18 -0.90	+2.9 + 1.6	(4807)	18103	- 9.82 +0.70		+ 12.2 + 0.7	
1992 06 27	17 13.17	-23 42.5	1.776	2.766	163.6	6.0	17.4
1992 05 28	17 44.42	-20 14.3	1.619	2.596	160.4	7.5	15.3
- 8.31 -0.96	- 56.0 - 2.1	(4748)	17811	- 9.22 +0.70		- 55.9 + 1.6	
1992 06 27	17 15.06	-23 09.1	1.601	2.594	164.0	6.2	15.2
1992 05 28	17 43.33	-28 15.2	2.572	3.542	160.1	5.6	18.0
- 7.37 -0.66	-5.7 + 2.3	1976 SZ9	9957	- 8.05 +0.45		+9.2 + 2.1	
1992 06 27	17 18.15	-28 09.6	2.506	3.495	164.2	4.5	17.9

1992 05 28	17 42.80	-10 27.2	1.596	2.562	157.5	8.7	16.9
- 6.30 -0.88	+ 39.5 - 4.1	2532 P-L	16033	- 7.36 +0.57	+3.5 - 7.2		
1992 06 27	17 19.65	-09 16.9	1.519	2.495	159.0	8.4	16.7
1992 05 28	17 45.70	-25 02.1	2.311	3.283	160.2	6.0	17.9
- 7.34 -0.63	-3.0 + 1.4	1985 CV1	19295	- 7.63 +0.53	+5.2 + 0.9		
1992 06 27	17 21.10	-24 57.9	2.326	3.320	165.4	4.4	17.8
1992 05 28	17 48.46	-25 50.2	1.494	2.469	159.5	8.3	18.2
- 7.75 -1.14	-1.5 + 2.1	1984 SN4	18109	- 9.42 +0.68	+ 13.3 + 1.8		
1992 06 27	17 19.35	-25 31.9	1.404	2.400	164.9	6.3	17.9
1992 05 28	17 47.42	-24 46.2	2.074	3.046	159.8	6.6	18.0
- 7.52 -0.77	+2.3 + 1.4	1981 EL24	18419	- 8.23 +0.55	+ 10.8 + 0.8		
1992 06 27	17 21.35	-24 25.4	2.038	3.033	165.5	4.8	17.9
1992 05 28	17 47.03	-23 05.0	2.725	3.693	160.0	5.4	18.0
- 7.03 -0.58	-2.1 + 0.6	1990 BK	16239	- 7.60 +0.40	+1.7 + 0.4		
1992 06 27	17 23.28	-23 05.2	2.691	3.685	165.9	3.9	17.8
1992 05 28	17 49.91	-09 31.4	1.804	2.758	155.5	8.8	16.1
- 7.83 -0.88	- 16.3 - 5.9	1989 WL7	18295	- 9.04 +0.53	- 49.8 - 4.6		
1992 06 27	17 22.02	-11 12.8	1.746	2.727	160.8	7.1	15.9
1992 05 28	17 50.85	-12 01.2	1.281	2.247	156.5	10.4	17.5
- 7.90 -1.07	+ 30.7 - 4.9	1981 ET24	11739	- 8.74 +0.80	-6.9 - 6.8		
1992 06 27	17 22.41	-11 22.3	1.274	2.260	160.9	8.4	17.4
1992 05 28	17 53.28	-32 57.3	1.473	2.436	156.5	9.5	17.4
- 8.96 -1.28	-7.8 + 5.8	1978 PD3	15403	-10.58 +0.82	+ 32.9 + 5.7		
1992 06 27	17 20.09	-32 19.6	1.407	2.398	163.1	7.1	17.2
1992 05 28	17 51.42	-21 09.9	0.794	1.778	158.9	11.8	16.5
- 4.97 -1.54	+107.8 + 5.2	1981 EY38	10515	- 7.01 +0.96	+100.0 - 8.6		
1992 06 27	17 28.80	-15 32.5	0.738	1.739	164.7	8.9	16.1
1992 05 28	17 59.61	-28 09.8	1.415	2.380	156.7	9.7	17.0
- 9.19 -1.26	+8.5 + 3.9	(4750)	17812	-10.73 +0.81	+ 32.8 + 2.6		
1992 06 27	17 25.87	-27 05.5	1.375	2.375	166.1	5.9	16.7
1992 05 28	17 59.83	-38 22.5	1.976	2.915	152.8	9.1	17.9
- 9.40 -1.19	- 41.2 + 5.7	1985 TM1	15412	-11.47 +0.60	+6.8 + 8.4		
1992 06 27	17 25.21	-39 18.9	1.901	2.876	159.6	7.1	17.7
1992 05 28	17 58.87	-25 52.8	1.732	2.695	157.2	8.4	16.4
- 8.33 -1.09	-1.3 + 1.9	(4797)	18099	-10.20 +0.56	+ 13.3 + 2.0		
1992 06 27	17 28.03	-25 35.1	1.649	2.650	166.9	5.0	16.1
1992 05 28	17 58.63	-18 22.3	1.776	2.736	156.8	8.4	16.8
- 7.97 -0.97	-0.7 - 1.5	1991 CM3	18127	- 9.47 +0.53	-9.0 - 1.4		
1992 06 27	17 29.71	-18 37.1	1.724	2.722	166.3	5.1	16.6
1992 05 28	17 57.00	-22 00.9	1.892	2.856	157.7	7.7	15.6
- 6.73 -0.85	-6.1 - 0.2	9546 P-L	18132	- 7.85 +0.50	-5.1 + 0.1		
1992 06 27	17 32.64	-22 18.2	1.873	2.875	167.9	4.2	15.4
1992 05 28	17 59.75	-30 11.9	1.984	2.940	156.2	8.0	16.5
- 7.79 -1.03	- 24.0 + 2.6	1929 VS	18617	- 9.78 +0.46	-0.2 + 4.3		
1992 06 27	17 30.65	-30 51.4	1.889	2.886	165.8	5.0	16.2

1992 05 28	18 00.67	-12 36.0	1.325	2.282	154.6	11.0	18.1
- 7.12 -1.28	+ 20.6 - 4.4	1975 XF	15699	- 9.88 +0.51		- 13.8 - 6.4	
1992 06 27	17 31.85	-12 22.2	1.219	2.212	163.3	7.6	17.7
1992 05 28	18 01.91	-24 56.2	1.620	2.581	156.5	9.0	18.1
- 7.97 -1.20	-4.7 + 1.2	1985 RG	15555	-10.43 +0.51		+7.2 + 1.8	
1992 06 27	17 31.16	-24 53.6	1.515	2.517	167.7	5.0	17.7
1992 05 28	17 58.29	-24 25.2	2.588	3.545	157.4	6.3	17.9
- 6.95 -0.66	-1.3 + 0.9	(5149)	19852	- 7.82 +0.38		+5.1 + 0.8	
1992 06 27	17 34.22	-24 19.5	2.566	3.568	168.4	3.3	17.7
1992 05 28	17 58.69	-11 04.8	2.366	3.309	154.4	7.6	17.0
- 6.39 -0.68	+ 30.0 - 3.0	1988 TA1	18429	- 7.50 +0.34		+6.5 - 4.5	
1992 06 27	17 35.97	-10 07.2	2.307	3.291	162.4	5.4	16.8
1992 05 28	18 01.90	-10 53.1	1.034	1.993	153.6	13.1	17.5
- 5.69 -1.45	+ 58.9 - 4.5	1981 EP40	15705	- 8.89 +0.57		+ 10.0 -10.7	
1992 06 27	17 36.30	-08 58.1	0.937	1.929	161.5	9.6	17.1
1992 05 28	18 22.21	-52 33.6	1.321	2.204	141.2	16.8	16.7
-13.58 -2.40	- 10.3 +16.4	(4736)	17807	-16.77 +1.53		+115.5 +19.3	
1992 06 27	17 29.32	-50 01.4	1.235	2.181	151.2	13.0	16.4
1992 05 28	18 06.73	-19 12.8	1.095	2.059	155.1	12.0	16.2
- 7.49 -1.47	- 18.2 - 3.0	(4780)	18093	-10.02 +0.75		- 28.2 - 0.6	
1992 06 27	17 36.35	-20 27.0	1.065	2.071	168.4	5.7	15.9
1992 05 28	18 08.47	-23 19.8	2.343	3.290	155.1	7.5	17.0
- 7.66 -0.87	- 31.8 - 0.3	1989 UL3	15719	- 9.53 +0.31		- 26.4 + 1.8	
1992 06 27	17 40.49	-24 51.0	2.271	3.277	169.8	3.2	16.7
1992 05 28	18 12.97	-32 09.6	1.695	2.638	152.9	10.1	16.1
- 8.91 -1.12	+ 16.2 + 5.0	1990 XF	17648	-10.27 +0.69		+ 46.8 + 3.6	
1992 06 27	17 40.84	-30 32.5	1.696	2.698	167.8	4.6	15.9
1992 05 28	18 11.07	-22 04.8	1.548	2.501	154.4	10.1	17.7
- 7.70 -1.12	- 17.4 - 0.6	7639 P-L	18131	- 9.46 +0.59		- 14.4 + 1.0	
1992 06 27	17 42.17	-22 55.6	1.552	2.560	170.2	3.9	17.5
1992 05 28	18 09.27	-25 59.7	2.022	2.971	154.8	8.3	18.0
- 6.86 -0.95	-5.6 + 1.2	1981 EH34	15410	- 8.73 +0.39		+5.7 + 1.9	
1992 06 27	17 43.43	-26 00.7	1.962	2.969	170.2	3.3	17.7
1992 05 28	18 07.50	-21 04.4	2.043	2.993	155.2	8.2	17.5
- 6.39 -0.85	+0.4 - 0.5	1980 GO	18106	- 7.89 +0.39		-1.5 - 0.3	
1992 06 27	17 43.79	-21 06.5	2.015	3.021	170.2	3.3	17.2
1992 05 28	18 11.97	-16 56.7	1.631	2.577	153.4	10.1	17.0
- 7.81 -1.15	-6.4 - 2.8	(4859)	18404	-10.24 +0.44		- 20.4 - 1.8	
1992 06 27	17 41.95	-17 38.6	1.565	2.569	168.5	4.5	16.6
1992 05 28	18 10.96	-24 03.2	2.437	3.380	154.5	7.4	16.8
- 6.68 -0.77	-1.9 + 0.5	1978 VG5	18282	- 8.13 +0.32		+3.6 + 0.9	
1992 06 27	17 46.73	-24 01.3	2.401	3.409	171.2	2.6	16.5
1992 05 28	18 14.28	-17 16.1	1.433	2.380	152.9	11.2	17.4
- 6.83 -1.30	+ 33.4 - 1.3	1982 VB1	15410	- 9.98 +0.39		+ 18.7 - 3.7	
1992 06 27	17 45.95	-15 53.7	1.329	2.334	168.2	5.1	16.9

1992 05 28	18 16.68	-33 36.4	1.822	2.756	151.7	10.0	17.0
- 7.83 -1.28	- 50.5 + 2.9	1989 UA	15896	-10.97 +0.39	- 15.7 + 7.3		
1992 06 27	17 45.41	-35 24.1	1.743	2.738	165.2	5.4	16.6
1992 05 28	18 17.88	-14 50.4	1.497	2.436	151.5	11.5	16.7
- 7.46 -1.23	+ 14.7 - 3.5	(4806)	18102	-10.15 +0.44	-8.2 - 3.9		
1992 06 27	17 48.38	-14 39.8	1.440	2.443	167.8	5.0	16.4
1992 05 28	18 17.73	-10 54.4	1.250	2.187	150.1	13.4	17.0
- 7.04 -1.33	+8.7 - 6.7	1979 QJ1	13598	- 9.74 +0.54	- 32.8 - 6.1		
1992 06 27	17 49.09	-11 31.7	1.224	2.223	165.5	6.6	16.7
1992 05 28	18 22.10	-33 40.4	1.560	2.494	150.6	11.5	17.7
- 8.26 -1.50	- 44.9 + 3.4	4283 T-1	19327	-11.96 +0.46	-4.5 + 8.3		
1992 06 27	17 48.13	-35 03.5	1.487	2.485	165.8	5.8	17.3
1992 05 28	18 17.58	-14 05.8	1.966	2.896	151.3	9.7	16.1
- 6.91 -0.96	- 22.1 - 4.0	1991 BQ2	17969	- 9.12 +0.30	- 41.4 - 2.1		
1992 06 27	17 51.19	-15 44.7	1.911	2.915	169.0	3.8	15.8
1992 05 28	18 19.20	-23 17.0	1.603	2.546	152.6	10.6	17.2
- 6.81 -1.28	-9.3 - 0.4	1989 VV	15721	-10.23 +0.30	-4.9 + 1.3		
1992 06 27	17 50.71	-23 41.4	1.491	2.502	172.2	3.2	16.7
1992 05 28	18 17.86	-23 59.6	2.017	2.956	152.9	9.0	17.8
- 6.35 -0.99	-1.0 + 0.3	(4887)	18609	- 8.70 +0.29	+4.6 + 1.1		
1992 06 27	17 52.92	-23 55.6	1.937	2.948	172.7	2.5	17.4
1992 05 28	18 19.27	-17 13.6	2.271	3.200	151.8	8.6	16.9
- 6.12 -0.87	- 11.2 - 2.3	1978 TA7	15876	- 8.32 +0.21	- 22.0 - 1.2		
1992 06 27	17 55.64	-18 05.4	2.185	3.194	171.4	2.7	16.5
1992 05 28	18 26.44	-31 31.0	1.301	2.238	150.3	13.0	16.4
- 7.66 -1.61	- 29.5 + 3.4	(4743)	17809	-11.30 +0.57	+7.2 + 7.0		
1992 06 27	17 53.95	-32 11.2	1.267	2.273	168.8	5.0	16.0
1992 05 28	18 28.67	-43 57.9	1.602	2.502	145.3	13.3	16.9
- 8.21 -1.65	- 27.0 + 8.4	1967 HA	17953	-11.93 +0.59	+ 42.3 +12.0		
1992 06 27	17 54.31	-43 41.9	1.542	2.516	158.7	8.5	16.6
1992 05 28	18 27.86	-31 18.9	1.527	2.457	150.0	11.9	17.8
- 7.48 -1.55	- 24.6 + 2.5	1986 UY	18111	-11.96 +0.29	+7.5 + 6.8		
1992 06 27	17 55.30	-31 52.6	1.406	2.413	169.2	4.5	17.2
1992 05 28	18 37.40	-40 06.4	1.171	2.087	145.6	15.9	16.5
- 9.55 -2.21	+ 20.6 +10.7	(4690)	17609	-15.04 +0.72	+105.3 +13.1		
1992 06 27	17 55.07	-37 02.3	1.060	2.058	164.9	7.4	15.9
1992 05 28	18 24.74	-27 58.0	1.909	2.839	151.2	9.9	17.1
- 6.40 -1.09	-6.5 + 1.6	1181 T-1	19877	- 9.00 +0.31	+9.4 + 2.9		
1992 06 27	17 59.07	-27 56.1	1.854	2.865	172.6	2.6	16.7
1992 05 28	18 24.19	-18 01.9	1.003	1.951	150.8	14.7	16.6
- 4.99 -1.67	+ 66.9 - 0.2	1969 QR	15400	- 9.49 +0.40	+ 48.6 - 6.2		
1992 06 27	17 58.63	-14 57.6	0.919	1.928	169.6	5.5	16.0
1992 05 28	18 31.14	-33 09.3	1.914	2.831	148.9	10.6	17.8
- 7.91 -1.31	- 31.4 + 2.8	(4762)	17947	-11.45 +0.28	+0.9 + 6.6		
1992 06 27	17 59.17	-34 02.2	1.826	2.828	167.9	4.3	17.4

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1992 05 28    18 26.04   -23 23.0    2.309    3.233   151.0     8.7    18.4
- 6.78 -0.90  + 11.2 + 0.4   1986 CG     15556   - 8.96 +0.24  + 15.3 + 0.5
1992 06 27    18 00.32   -22 43.5    2.241    3.255   174.3     1.8    17.9

1992 05 28    18 31.17   -30 13.5    2.111    3.028   149.5     9.8    17.7
- 7.22 -1.15  - 11.1 + 2.1   1989 SK     15421   -10.49 +0.19  + 11.0 + 4.4
1992 06 27    18 02.12   -30 18.0    1.992    3.001   171.4     2.9    17.2

1992 05 28    18 27.23   -23 06.4    1.964    2.891   150.8     9.9    16.8
- 5.74 -1.08    -8.9 - 0.6   1988 TP1    16029   - 8.89 +0.15    -6.8 + 1.0
1992 06 27    18 03.00   -23 32.9    1.846    2.860   175.0     1.8    16.2

1992 05 28    18 31.80   -30 24.3    2.212    3.127   149.4     9.5    18.3
- 7.12 -1.12  - 18.4 + 1.8   4018 P-L    15570   -10.39 +0.15    +2.8 + 4.5
1992 06 27    18 03.18   -30 52.8    2.088    3.096   171.0     2.9    17.9

1992 05 28    18 30.99   -16 36.7    1.776    2.695   148.9    11.2    17.2
- 6.20 -1.16  + 17.4 - 2.3    (4882)     18607   - 9.58 +0.17    +2.1 - 2.7
1992 06 27    18 04.86   -16 06.7    1.667    2.676   171.4     3.3    16.7

1992 05 28    18 29.82   -24 22.5    2.755    3.669   150.2     7.9    17.8
- 5.86 -0.82    -9.8   0.0   1977 UO5    19290   - 8.28 +0.09    -5.2 + 1.3
1992 06 27    18 06.94   -24 47.5    2.629    3.643   175.7     1.2    17.3

1992 05 28    18 29.03   -13 39.9    2.324    3.232   148.5     9.4    18.5
- 5.48 -0.88  + 31.6 - 2.2   2268 T-3    18446   - 8.05 +0.10  + 13.8 - 3.6
1992 06 27    18 06.94   -12 29.1    2.195    3.197   168.4     3.7    18.1

1992 05 28    18 36.32   -46 48.6    2.344    3.210   142.7    11.0    18.1
- 7.37 -1.29  - 30.7 + 6.5   1991 FF     18301   -10.75 +0.29  + 23.9 +10.1
1992 06 27    18 06.23   -47 05.5    2.272    3.227   155.9     7.4    17.9

1992 05 28    18 32.45   -24 58.9    1.664    2.590   149.6    11.4    16.9
- 5.52 -1.28    -8.4   0.0   1988 RS4    19301   - 9.32 +0.17    -0.8 + 2.1
1992 06 27    18 07.53   -25 16.5    1.560    2.575   175.6     1.7    16.2

1992 05 28    18 36.44   -35 15.6    2.186    3.088   147.3    10.2    17.8
- 7.08 -1.25  - 55.2 + 2.0   1989 WM3    15726   -11.09 +0.09  - 23.9 + 7.5
1992 06 27    18 06.72   -37 24.3    2.069    3.064   165.4     4.8    17.4

1992 05 28    18 37.80   -20 03.6    1.681    2.596   148.0    11.9    17.4
- 5.87 -1.35  - 18.1 - 2.8   1964 BF     19010   -10.58 -0.02  - 27.3 - 0.1
1992 06 27    18 10.67   -21 16.7    1.520    2.536   176.1     1.5    16.6

1992 05 28    18 34.80   -29 41.6    2.705    3.610   148.8     8.4    18.5
- 5.92 -0.90  - 18.7 + 1.1   2558 P-L    12690   - 8.66 +0.07    -4.0 + 3.3
1992 06 27    18 11.14   -30 19.7    2.580    3.590   172.4     2.2    18.1

1992 05 28    18 39.33   -24 27.4    1.287    2.213   148.1    14.0    18.3
- 5.33 -1.69  + 20.7 + 1.2   1981 EA7    15241   -11.35 -0.01  + 32.5 + 1.9
1992 06 27    18 11.21   -23 09.2    1.120    2.136   176.9     1.5    17.3

1992 05 28    18 34.15   -21 57.3    1.937    2.854   149.1    10.5    16.4
- 4.74 -1.09    -0.1 - 0.9   1975 RP     13584   - 8.17 +0.07    -2.0 + 0.2
1992 06 27    18 12.64   -22 02.7    1.810    2.825   176.9     1.1    15.7

1992 05 28    18 38.18   -15 51.5    2.008    2.911   147.0    10.9    18.0
- 5.97 -1.09    +3.8 - 2.9   1989 UZ4    15720   - 9.46 +0.06  - 12.6 - 2.4
1992 06 27    18 12.92   -16 05.7    1.880    2.890   172.3     2.7    17.5
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1992 05 28	18 43.61	-30 26.5	1.370	2.286	146.8	14.0	18.3
- 6.11 -1.73	- 35.5 + 0.9	6531 P-L	14961	-11.93 +0.09	-8.0 + 7.2		
1992 06 27	18 13.17	-31 43.5	1.257	2.267	171.2	3.9	17.6
1992 05 28	18 41.97	-20 56.5	1.740	2.649	147.2	12.0	17.0
- 6.66 -1.26	- 22.9 - 2.1	1986 WE	11512	-10.31 +0.18	- 25.8 + 1.0		
1992 06 27	18 13.86	-22 15.3	1.683	2.699	177.3	1.0	16.4
1992 05 28	18 43.07	-31 33.1	2.200	3.098	146.8	10.3	16.4
- 6.72 -1.16	-1.9 + 2.4	(4808)	18264	-10.26 +0.11	+ 21.6 + 4.6		
1992 06 27	18 15.28	-31 07.6	2.079	3.089	171.9	2.7	15.9
1992 05 28	18 41.30	-15 33.2	1.364	2.277	146.2	14.3	17.9
- 4.94 -1.53	+ 20.6 - 3.4	1972 TF	16421	-10.53 -0.07	-3.8 - 4.4		
1992 06 27	18 15.42	-15 06.2	1.202	2.212	171.5	3.9	17.1
1992 05 28	18 38.15	-14 56.5	0.990	1.920	146.8	16.8	17.7
- 2.99 -1.76	+ 40.4 - 3.4	4119 P-L	15423	- 9.66 -0.10	+6.9 - 7.3		
1992 06 27	18 16.12	-13 38.2	0.842	1.852	170.1	5.4	16.8
1992 05 28	18 38.42	-03 12.0	1.609	2.487	141.9	14.6	16.6
- 4.91 -1.17	+ 58.2 - 7.2	(4767)	17949	- 8.39 +0.13	+0.2 -10.9		
1992 06 27	18 16.08	-01 37.5	1.541	2.513	158.2	8.6	16.3
1992 05 28	18 44.79	-24 17.1	1.746	2.653	146.8	12.1	17.6
- 6.49 -1.34	-2.0 - 0.2	1991 CL1	17970	-10.77 +0.09	+4.5 + 1.9		
1992 06 27	18 16.26	-24 17.3	1.635	2.651	177.8	0.8	16.8
1992 05 28	18 43.27	-14 43.1	1.590	2.493	145.6	13.3	17.3
- 5.22 -1.34	+ 35.7 - 2.6	1989 UH1	18118	- 9.91 -0.03	+ 13.6 - 4.6		
1992 06 27	18 18.15	-13 25.3	1.440	2.447	170.0	4.1	16.6
1992 05 28	18 45.79	-42 47.4	1.289	2.186	143.1	16.2	17.1
- 4.09 -2.03	- 90.6 + 4.0	1980 SD	7779	-11.63 -0.04	- 24.2 +16.4		
1992 06 27	18 18.54	-46 02.7	1.184	2.157	157.2	10.5	16.7
1992 05 28	18 41.41	-20 42.2	2.036	2.940	147.3	10.7	17.6
- 5.08 -1.10	-7.0 - 1.7	1978 RZ	14945	- 8.76 0.00	- 12.4 - 0.1		
1992 06 27	18 18.62	-21 14.3	1.900	2.916	177.5	0.9	16.9
1992 05 28	18 43.87	-09 05.4	2.505	3.373	143.5	10.3	18.3
- 5.59 -0.89	+ 45.9 - 2.9	1984 UT	18424	- 8.52 0.00	+ 20.8 - 5.2		
1992 06 27	18 21.08	-07 21.1	2.359	3.348	164.0	4.8	17.9
1992 05 28	18 53.31	-40 53.1	2.130	2.998	142.5	11.9	17.2
- 6.43 -1.40	- 35.8 + 4.0	(5089)	19829	-11.08 +0.04	+7.9 + 9.3		
1992 06 27	18 24.39	-41 44.8	2.025	3.007	161.6	6.1	16.9
1992 06 27	18 26.85	-25 16.1	1.515	2.531	178.0	0.8	17.0
-10.89 -0.21	- 19.4 + 2.2	1978 VE15	15405	- 6.65 +1.44	-5.0 + 1.7		
1992 07 27	17 57.50	-25 51.7	1.565	2.467	145.0	13.6	17.6
1992 06 27	18 27.17	-36 26.5	2.188	3.186	166.9	4.2	15.1
- 8.60 -0.05	+ 21.1 + 6.2	1977 PO1	16421	- 4.99 +1.11	+ 49.8 + 2.6		
1992 07 27	18 04.66	-34 33.2	2.256	3.143	145.1	10.7	15.4
1992 06 27	18 28.26	-25 22.6	1.605	2.622	177.8	0.9	17.8
-10.92 -0.24	- 39.1 + 2.0	1978 WC	16868	- 7.03 +1.38	- 21.8 + 2.7		
1992 07 27	17 58.34	-26 55.1	1.659	2.560	145.2	13.1	18.4

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1992 06 27    18 29.89   -28 03.3    1.587    2.601   175.1     1.9    17.3
-10.99 -0.13    -8.4 + 4.0   1975 XP3    19672   - 6.52 +1.42  + 12.0 + 1.9
1992 07 27    18 00.75   -27 54.1    1.673    2.576   145.6    12.9    17.9

1992 06 27    18 30.61   -25 36.4    1.574    2.590   177.4     1.0    17.7
-10.64 -0.20  - 14.9 + 2.4   1978 WB     18620   - 6.59 +1.38    -0.2 + 1.7
1992 07 27    18 01.84   -25 57.5    1.636    2.542   146.0    12.9    18.4

1992 06 27    18 30.62   -22 46.9    1.773    2.790   178.6     0.5    17.4
- 8.80 -0.09    -3.4 + 0.6    (4965)     19003   - 5.17 +1.16    +0.4 + 0.3
1992 07 27    18 07.36   -22 50.7    1.867    2.777   147.4    11.4    18.1

1992 06 27    18 30.45   -23 26.1    1.941    2.957   178.7     0.4    15.9
- 8.39 -0.03  - 14.3 + 0.9   1989 YO5    18119   - 4.87 +1.07    -7.4 + 1.0
1992 07 27    18 08.53   -23 58.6    2.080    2.987   147.6    10.5    16.6

1992 06 27    18 31.20   -30 27.2    1.122    2.134   172.7     3.5    16.0
-11.59 -0.07  - 25.4 + 6.9    (4733)     17806   - 5.25 +1.82  + 10.4 + 3.6
1992 07 27    18 02.45   -30 43.5    1.244    2.159   145.5    15.4    16.8

1992 06 27    18 32.32   -35 24.1    1.589    2.592   167.8     4.8    15.7
-10.41 -0.03  + 10.3 + 7.7   1991 DO     18128   - 5.38 +1.46  + 44.6 + 2.7
1992 07 27    18 05.91   -33 52.4    1.714    2.615   145.5    12.7    16.2

1992 06 27    18 35.35   -51 58.3    2.064    2.996   151.3     9.4    17.6
-15.31 -0.26    +4.2 +14.7   1989 RZ     15895   - 9.72 +1.81  + 78.4 + 7.7
1992 07 27    17 53.96   -49 41.2    2.103    2.928   137.0    13.7    17.7

1992 06 27    18 34.13   -08 30.9    2.173    3.166   165.0     4.8    16.1
- 7.77 -0.13  - 14.4 - 5.4    (4843)     18277   - 5.33 +0.87  - 40.1 - 2.8
1992 07 27    18 12.63   -09 57.5    2.232    3.129   146.4    10.4    16.4

1992 06 27    18 36.38   -23 19.2    1.973    2.989   177.4     0.9    17.0
- 9.57 -0.15    -3.8 + 1.0   1989 WC     18119   - 6.41 +1.08    +2.5 + 0.6
1992 07 27    18 10.13   -23 20.3    2.056    2.966   148.0    10.5    17.6

1992 06 27    18 36.95   -02 27.1    2.021    2.992   158.9     7.0    16.6
- 8.59 -0.15  - 11.5 - 8.3   1991 FF1    18301   - 5.93 +0.94  - 52.1 - 4.6
1992 07 27    18 13.16   -04 09.5    2.090    2.973   144.2    11.5    16.9

1992 06 27    18 36.57   +20 38.0    1.081    1.945   136.0    21.3    16.1
- 7.76 -0.16  + 12.6 -27.5    (4899)     18614   - 3.22 +1.46  -127.3 -16.1
1992 07 27    18 17.13   +17 24.6    1.141    1.967   131.5    22.7    16.2

1992 06 27    18 39.13   -10 41.4    1.028    2.031   166.9     6.5    15.6
- 8.72 -0.30  - 45.9 - 9.2   1985 PZ1    14019   - 4.33 +1.55  - 78.0 - 1.2
1992 07 27    18 16.16   -14 02.1    1.089    2.025   148.4    15.2    16.1

1992 06 27    18 40.49   -29 29.6    1.927    2.939   172.9     2.5    16.7
- 9.90 -0.23    +8.7 + 4.1   1989 YH     15899   - 6.74 +1.15  + 29.0 + 1.9
1992 07 27    18 13.01   -28 29.0    1.980    2.893   148.2    10.7    17.2

1992 06 27    18 41.03   -26 07.0    1.955    2.970   175.4     1.6    16.5
-11.80 -0.11  + 51.0 + 3.3   1991 CO3    18437   - 7.95 +1.22  + 58.3 - 1.1
1992 07 27    18 08.96   -23 14.8    2.050    2.959   147.7    10.6    17.1

1992 06 27    18 40.80   -19 48.3    1.814    2.828   174.9     1.8    16.8
- 8.62 -0.21  - 10.8 - 0.9   1981 EW24   15880   - 5.72 +1.06  - 12.7   0.0
1992 07 27    18 16.95   -20 25.1    1.882    2.805   149.5    10.6    17.3
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1992 06 27	18 43.01	-37 23.1	1.548	2.544	165.4	5.8	16.8
-11.86 -0.49	+6.2 + 9.5	(4652)	17413	- 8.15 +1.55	+ 57.5 + 5.5
1992 07 27	18 09.22	-35 39.9	1.535	2.441	145.6	13.6	17.1
1992 06 27	18 43.59	-22 13.0	1.242	2.257	175.5	2.0	16.9
-10.00 -0.49	- 27.5 - 0.3	1981 SE2	12325	- 6.61 +1.48	- 20.9 + 1.7
1992 07 27	18 15.02	-23 29.2	1.253	2.187	149.1	13.8	17.4
1992 06 27	18 45.82	-24 48.7	2.052	3.066	175.0	1.7	16.8
- 9.48 -0.20	- 15.8 + 1.6	(4801)	18101	- 6.69 +1.02	-3.9 + 1.7
1992 07 27	18 19.31	-25 18.3	2.153	3.074	150.0	9.5	17.3
1992 06 27	18 46.82	-24 34.6	1.809	2.823	174.8	1.9	16.8
- 8.49 -0.34	- 18.2 + 1.1	1987 SV12	13586	- 6.11 +1.05	-7.4 + 1.9
1992 07 27	18 22.35	-25 14.5	1.831	2.762	150.7	10.4	17.2
1992 06 27	18 47.65	-20 55.5	1.244	2.257	174.2	2.6	16.5
- 9.75 -0.52	- 27.1 - 1.2	1981 RF	8908	- 6.62 +1.43	- 24.9 + 1.3
1992 07 27	18 19.50	-22 18.1	1.256	2.196	150.2	13.3	17.0
1992 06 27	18 48.52	-14 05.1	1.232	2.239	169.2	4.9	17.4
-10.22 -0.56	+2.0 - 4.9	1989 TY10	17444	- 7.33 +1.40	- 23.2 - 3.1
1992 07 27	18 18.57	-14 40.3	1.225	2.161	149.1	14.0	17.7
1992 06 27	18 48.30	-14 47.7	1.994	3.000	169.8	3.4	18.1
- 8.24 -0.23	-5.1 - 3.0	1295 T-1	19878	- 5.93 +0.92	- 18.7 - 1.4
1992 07 27	18 24.93	-15 26.2	2.061	2.989	150.8	9.6	18.5
1992 06 27	18 50.51	-20 14.0	1.715	2.727	173.3	2.5	16.6
- 8.94 -0.29	- 29.6 - 0.9	1986 AA2	16579	- 6.22 +1.09	- 26.8 + 1.3
1992 07 27	18 25.23	-21 42.7	1.798	2.734	151.5	10.2	17.1
1992 06 27	18 53.97	-33 16.5	1.712	2.715	168.2	4.4	16.8
-11.17 -0.41	- 14.1 + 6.3	1989 SG	16434	- 8.04 +1.31	+ 23.0 + 4.6
1992 07 27	18 21.96	-32 59.8	1.773	2.694	149.0	11.2	17.2
1992 06 27	18 52.79	-00 00.3	1.201	2.168	155.7	11.1	16.3
- 8.27 -0.53	+ 62.0 -12.6	1971 US1	13589	- 5.82 +1.25	- 19.4 -12.2
1992 07 27	18 28.36	+01 02.8	1.189	2.101	144.6	16.3	16.4
1992 06 27	18 54.77	-19 22.6	1.279	2.290	172.0	3.5	15.9
- 9.94 -0.29	-8.3 - 1.5	1990 YT	17650	- 6.04 +1.38	- 11.4	0.0
1992 07 27	18 27.73	-19 54.8	1.397	2.342	152.0	11.7	16.5
1992 06 27	18 54.84	-15 00.1	1.139	2.146	169.1	5.1	14.6
- 8.41 -0.54	- 95.8 - 6.8	1983 GU	17957	- 5.58 +1.37	-103.1 + 3.8
1992 07 27	18 30.33	-20 18.1	1.184	2.137	152.7	12.6	15.0
1992 06 27	18 55.44	-12 36.2	0.840	1.845	167.1	7.1	15.7
- 8.53 -0.47	- 29.9 - 8.7	1988 BS3	17019	- 4.25 +1.63	- 59.1 - 0.8
1992 07 27	18 32.41	-15 04.4	0.921	1.881	152.4	14.5	16.2
1992 06 27	18 55.42	-03 39.6	1.877	2.850	159.0	7.3	18.2
- 7.76 -0.30	-2.4 - 8.3	1981 EP27	9962	- 5.83 +0.88	- 44.6 - 5.0
1992 07 27	18 32.85	-04 56.3	1.920	2.838	148.8	10.7	18.4
1992 06 27	18 57.54	-25 26.7	1.776	2.787	172.3	2.8	16.3
-10.01 -0.27	+ 16.5 + 2.2	1991 CY	18299	- 7.00 +1.13	+ 26.5 + 0.6
1992 07 27	18 29.44	-24 19.0	1.879	2.818	152.4	9.6	16.8