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EDITORIAL NOTICE.

The next MPCs will be published on or about 1993 Feb. 6. No MPCs will be issued in January.

Further to the note on MPC 20541-20542, we inform subscribers that the Computer Service (CS) can now be accessed on CFAPS1 by internet (in addition to SPAN or modem). The Extended Computer Service (ECS) is also now available for an additional monthly charge of $22.50. As was also noted, the ECS is intended to replace the diskettes. No new subscribers will therefore be accepted for the diskettes; diskettes will be sent to existing diskette subscribers (and at the ECS rate) for the foreseeable future, but migration to the ECS will be actively encouraged. The CS and ECS are also available on CFAPS2, except for the part of the ECS that involves astrometric observations of specific objects.

* * * * *

ERRATA.

MPC	Line	
19274	-28	The orbit for 4882 T-1 is to be deleted.
20839	24	For foumdation read foundation
20871	4	For PPM read SAOC
21119	-20	Delete (E-P)
21128	-15	For sugggestion read suggestion
21130	-12	For Michael-Alain read Michel-Alain
21134	8	For (5242) Kenreimon read (5242) Kenreimonin
21136	-21 to -11	The ephemeris is not from the elements shown.

* * * * *

CORRECTED OBSERVATIONS.

The following observations correct those previously published.

Object		Date	UT	R. A. (2000)	Decl.	Reference	Mag.	N	Obs.
1986 SX	*	1986 09	30.30903	01 14 34.00	+33 26 51.4	MPC 11317	16.2		675
1986 SX		1986 09	30.37847	01 14 30.92	+33 26 08.8	MPC 11317			675
1992 OM		1992 08	03.36215	22 30 57.53	-07 06 27.6	MPC 20718			675
1992 OM		1992 08	06.41632	22 30 04.48	-05 43 46.4	MPC 20718			675
1992 OM		1992 08	06.46146	22 30 03.15	-05 42 34.0	MPC 20718			675
(4)		1986 10	30.10805	00 33 04.25	-08 37 02.0	MPC 13386		1	491
(4)		1986 10	30.11497	00 33 03.94	-08 37 02.6	MPC 13386		1	491

```
  (704)     1985 11 28.80625  00 57 29.96 +30 01 17.7  MPC 12669       1  975
  (704)     1985 11 28.81319  00 57 30.00 +30 01 13.1  MPC 12669       1  975
Note 1: observations originally interchanged.
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* * * * *

DELETED OBSERVATIONS.

The following observations are to be deleted.

Object		Date	UT	R. A. (2000)	Decl.	Reference	Obs.
1930 DV	*	1930 02 22.97606		11 37.6	+03 40	BZ 12	024
1937 WF		1937 11 25.89830		03 31 28.02	+18 48 59.6	MPC 3232	020

* * * * *

IDENTIFICATION CHANGES.

Continuation to MPC 20960.

Object		Date	UT	R. A. (2000)	Decl.	Old desig.	Mag.	Obs.
1955 YK	*	1955 12 19.712		04 45.6	+20 16	1955 XC1	14.0	210
1978 WS21	*	1978 11 30.31702		04 06 44.21	+21 13 32.6	1989 WV1	18.2V	675
1978 WS21		1978 12 01.33472		04 05 34.35	+21 13 55.3	1989 WV1		675
1983 AQ6	*	1983 01 06.80273		04 43 53.58	+16 37 45.4	1982 YU2	17.0	095
1992 SK16	*	1992 09 26.88837		00 43 29.03	-02 50 06.4	1992 SP15		046

* * * * *

IDENTIFICATION.

The following identification with a numbered minor planet, by G. V. Williams, continues the list on MPC 20961:

1990 RQ16= (2462)

* * * * *

OBSERVATIONS OF COMETS.

Observations are published here for the following observatory codes:

012 Uccle. 0.4-m f/5 double astrograph. Observers T. Pauwels and E. W. Elst.

040 Lohrmann Observatory, Dresden. 0.30-m astrograph. Observers Bohme, Wachter. Communicated by K.-G. Steinert.

049 Kristaberg. Schmidt. Observer T. Oja. Measured by A. Erikson. Communicated by C.-I. Lagerkvist.

071 Bulgarian National Observatory. 0.50-m Schmidt telescope. Observers V. Radeva, Z. Donchev, V. Velkov. Measured by Radeva and Donchev.

098 Cima Ekar. 0.4-m f/2.5 Schmidt. Observer R. Haver. Measured by A. Boattini and M. Tombelli. Communicated by G. Forti.

105 Sternberg Astronomical Institute, Moscow. 0.2-m f/15 refractor. Observer S. V. Zhuiko. Measured by N. M. Evstigneeva.

107 Cavezzo. 0.40-m f/2.23 reflector + CCD. Observers R. Calanca, F. Calzolari, M. Facchini, G. L. Tusini and M. Nicolini.

108 Montelupo. 0.20-m f/10 reflector + CCD. Observer M. Tombelli. Measured by S. Bortolini.

362 Ray Observatory. 0.22-m f/2.8 Schmidt. Observer M. Saitoh. Long. and Parallax 140.6550, 0.73673, +0.67398 (see MPC 19348).
364 JCPM Kagoshima Station. 0.25-m f/4.2 Wright-Schmidt. Observer M. Mukai. Measured by M. Takeishi.
372 Geisei. 0.60-m f/3.5 reflector. Observer T. Seki. In part from Orient. Astron. Assoc. Comet Bull.
400 Kitami. 0.25-m f/2.6 Schmidt camera. Observer K. Endate. Measured by K. Watanabe.
402 Dynic Astronomical Observatory. 0.25-m f/3.4 Schmidt. Observer A. Sugie.
410 Sengamine. 0.20-m f/4.8 reflector + CCD. Observer K. Ito.
411 Oizumi. 0.16-m f/6.3 reflector + CCD. Observer T. Kobayashi.
413 Siding Spring. 1.2-m U.K. Schmidt and 1.0-m reflector + CCD. Observers R. H. McNaught and K. S. Russell. Measured by McNaught.
493 Calar Alto. 0.8-m Schmidt. Observer L. Kohoutek.
540 Linz. 0.30-m f/5.2 Schmidt Cassegrain. Observer E. Meyer. Measured by E. Meyer and H. Raab.
557 Ondrejov. 0.18-m f/5.6 Maksutov + CCD. Observer P. Pravec.
589 Santa Lucia Stroncone. 0.50-m f/2.8 Ritchey-Chretien + CCD. Observers A. Vagnozzi, V. Risoldi and G. Bernabei.
595 Farra d'Isonzo. 0.4-m f/4.5 reflector. Observers G. Lombardi, E. Pettarin and W. Boschin. Measured by F. Piani and E. Pettarin.
596 Colleverde di Guidonia. 0.31-m f/2.8 Baker-Schmidt + CCD. Observer V. S. Casulli.
657 Climenhaga Observatory, Victoria. 0.25-m Schmidt telescope. Observer D. D. Tatum.
670 Camarillo. 0.25-m Schmidt-Cassegrain + CCD. Observer J. E. Rogers.
674 Ford Observatory, Wrightwood. 0.45-m reflector. Observer R. Royer. Measured by K. Lawrence. Communicated by J. B. Child.
675 Palomar. 0.46-m Schmidt. Observers R. Bambery, E. F. Helin, K. J. Lawrence and P. Rose.
691 Kitt Peak. 0.91-m Spacewatch telescope. Observer J. V. Scotti.
801 Oak Ridge. 1.5-m reflector + CCD. Observers R. E. McCrosky and C.-Y. Shao.
877 Okutama. 0.30-m f/3.8 hyperboloid astrocamera. Observer T. Hioki. Measured by S. Hayakawa and T. Hioki.
892 YGCO Nagano Station. 0.13-m f/4.8 reflector. Observer S. Hayakawa.
894 Otomo. 0.25-m f/3.4 reflector. Observer S. Otomo.
896 Yatsugatake South Base Observatory. 0.25-m f/3.4 reflector. Observers Y. Kushida and O. Muramatsu. Measurer O. Muramatsu.
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.
		Periodic Comet Schwassmann-Wachmann 1				
/1989 XV	1992	11 21.43212	05 45 47.65	+31 54 27.4		675
/1989 XV	1992	11 21.45503	05 45 47.13	+31 54 25.6		675
		Periodic Comet Van Biesbroeck				
/1989h 1	1992	10 23.32087	02 11 38.40	+05 15 12.3	17.9 T	691
/1989h 1	1992	10 23.34241	02 11 37.62	+05 15 08.0		691
/1989h 1	1992	10 23.37816	02 11 36.24	+05 15 00.4		691
		Comet Levy (1990 XX)				
/1990 XX	1990	08 15.9875	21 59 21.10	+17 17 58.4		071
/1990 XX	1990	08 16.0235	21 59 00.18	+17 14 46.0		071
/1990 XX	1990	08 17.0666	21 48 54.20	+15 39 12.8		071

Comet Shoemaker-Levy (1991d)

/1991d	1992	07	09.76586	20	44	08.57	+39	32 29.6	897
/1991d	1992	08	25.66493	19	57	52.39	+24	20 07.7	13 T 897
/1991d	1992	08	25.67500	19	57	52.19	+24	19 53.6	897
/1991d	1992	09	27.43799	19	50	54.69	+12	16 46.2	411
/1991d	1992	09	27.44155	19	50	54.74	+12	16 42.7	411
/1991d	1992	09	27.44332	19	50	54.76	+12	16 40.8	411
/1991d	1992	10	10.42799	19	53	51.99	+08	23 54.1	411
/1991d	1992	10	10.42979	19	53	51.98	+08	23 54.0	411
/1991d	1992	10	10.43289	19	53	52.02	+08	23 52.1	411
/1991d	1992	10	21.51169	19	58	20.22	+05	35 11.8	14.5 T 897
/1991d	1992	10	21.52037	19	58	20.56	+05	34 58.7	897
/1991d	1992	11	01.40602	20	04	09.93	+03	15 15.1	411
/1991d	1992	11	01.40797	20	04	09.97	+03	15 13.5	411
/1991d	1992	11	01.40965	20	04	10.11	+03	15 12.1	411
/1991d	1992	11	11.37778	20	10	29.82	+01	28 11.4	411
/1991d	1992	11	11.38142	20	10	29.97	+01	28 09.2	411
/1991d	1992	11	11.38906	20	10	30.23	+01	28 05.4	411
/1991d	1992	11	22.35637	20	18	19.76	-00	08 49.0	411
/1991d	1992	11	22.36065	20	18	20.06	-00	08 52.3	411
/1991d	1992	11	22.36346	20	18	20.26	-00	08 50.6	411
/1991d	1992	11	27.93259	20	22	35.43	-00	50 28.4	801
/1991d	1992	11	27.94568	20	22	36.07	-00	50 32.5	801
/1991d	1992	11	28.93453	20	23	22.43	-00	57 26.3	801
/1991d	1992	11	28.94431	20	23	22.89	-00	57 30.8	801

Comet Helin-Lawrence (1991l)

/1991l	1991	06	11.8625	11	39	32.72	+04	23 55.7	071
/1991l	1991	06	11.8958	11	39	32.21	+04	23 47.2	071
/1991l	1991	06	14.8354	11	37	43.61	+03	59 03.2	071
/1991l	1991	06	14.8495	11	37	43.24	+03	58 56.9	071
/1991l	1991	06	14.8680	11	37	42.53	+03	58 45.9	071

Comet Helin-Alu (1991r)

/1991r	1992	11	27.93567	19	26	25.45	+18	22 01.2	801
/1991r	1992	11	27.94914	19	26	26.11	+18	22 02.1	801
/1991r	1992	11	28.93692	19	27	16.34	+18	22 38.7	801

Comet McNaught-Russell (1991v)

/1991v	1992	10	09.76182	08	34	16.09	-43	51 33.3	413
/1991v	1992	10	09.76436	08	34	16.23	-43	51 34.3	413

Comet Shoemaker-Levy (1991a1)

/1991a 1	1992	07	18.48640	11	37	55.20	+43	52 11.6	897
/1991a 1	1992	07	18.48773	11	37	55.38	+43	52 00.3	897
/1991a 1	1992	07	18.49155	11	37	56.19	+43	51 25.5	897
/1991a 1	1992	07	18.50174	11	37	58.25	+43	49 59.3	897
/1991a 1	1992	07	19.46753	11	41	02.42	+41	30 13.2	897
/1991a 1	1992	07	19.46852	11	41	02.74	+41	30 04.8	897
/1991a 1	1992	07	19.47187	11	41	03.23	+41	29 36.2	897
/1991a 1	1992	07	19.47263	11	41	03.35	+41	29 28.8	897
/1991a 1	1992	07	19.50069	11	41	08.57	+41	25 27.0	411
/1991a 1	1992	07	19.50132	11	41	08.68	+41	25 22.0	411
/1991a 1	1992	07	19.50257	11	41	08.89	+41	25 11.0	411
/1991a 1	1992	07	19.50463	11	41	09.12	+41	24 52.3	897
/1991a 1	1992	07	19.50694	11	41	09.51	+41	24 32.8	897
/1991a 1	1992	07	20.46668	11	43	53.28	+39	07 49.7	411
/1991a 1	1992	07	20.46726	11	43	53.51	+39	07 45.5	411
/1991a 1	1992	07	20.46785	11	43	53.56	+39	07 40.6	411

/1991a 1	1992 08 09.45515	12 07 38.12	+03 52 11.7			897
/1991a 1	1992 08 09.45579	12 07 38.39	+03 52 10.3			897

Comet Tanaka-Machholz (1992d)

/1992d	1992 11 28.50420	09 29 33.73	+29 33 02.5	21.4	N 1	691
/1992d	1992 11 28.51519	09 29 33.10	+29 33 01.0	18.2	T	691
/1992d	1992 11 28.52613	09 29 32.51	+29 32 59.5			691
/1992d	1992 11 30.46707	09 27 41.09	+29 28 39.8			691
/1992d	1992 11 30.47539	09 27 40.62	+29 28 38.6			691
/1992d	1992 11 30.48412	09 27 40.07	+29 28 37.8			691

Periodic Comet Giclas

/1992l	1992 10 30.65937	04 26 31.87	+09 04 18.2	15.5	T	897
/1992l	1992 10 30.72031	04 26 30.49	+09 04 19.3			897
/1992l	1992 11 19.37187	04 15 34.67	+09 26 52.8	15.0	T	675
/1992l	1992 11 19.39792	04 15 33.33	+09 26 57.3			675
/1992l	1992 11 20.32382	04 14 53.00	+09 29 22.3			657
/1992l	1992 11 20.32609	04 14 52.92	+09 29 22.6			657
/1992l	1992 11 20.32855	04 14 52.86	+09 29 23.1			657
/1992l	1992 11 21.60486	04 13 56.77	+09 32 57.2			411
/1992l	1992 11 21.61354	04 13 56.35	+09 32 59.4			411
/1992l	1992 11 21.61696	04 13 56.20	+09 33 00.9			411
/1992l	1992 11 22.57477	04 13 14.02	+09 35 49.0			411
/1992l	1992 11 22.57797	04 13 13.90	+09 35 50.5			411
/1992l	1992 11 22.59329	04 13 13.20	+09 35 52.2			411
/1992l	1992 11 23.50144	04 12 33.25	+09 38 40.6			411
/1992l	1992 11 23.50451	04 12 33.08	+09 38 41.5			411
/1992l	1992 11 25.40084	04 11 08.86	+09 44 56.2			657
/1992l	1992 11 25.40295	04 11 08.80	+09 44 56.3			657
/1992l	1992 11 25.40505	04 11 08.69	+09 44 56.6			657
/1992l	1992 11 29.19821	04 08 23.78	+09 59 05.9			801
/1992l	1992 11 29.21491	04 08 23.02	+09 59 09.9			801
/1992l	1992 12 01.18282	04 07 00.54	+10 07 27.6	19.0	N 2	691
/1992l	1992 12 01.21234	04 06 59.28	+10 07 35.7	15.0	T	691
/1992l	1992 12 01.24820	04 06 57.81	+10 07 45.1			691

Periodic Comet Schuster

/1992n	1992 09 05.74962	05 42 35.51	+21 35 51.7			411
/1992n	1992 09 05.75194	05 42 36.02	+21 35 55.5			411
/1992n	1992 09 05.75746	05 42 36.89	+21 36 01.0			411
/1992n	1992 10 30.79080	08 02 39.33	+35 11 12.9			411
/1992n	1992 10 30.79583	08 02 39.89	+35 11 18.7			411
/1992n	1992 11 21.67795	08 39 01.16	+41 15 11.5			411
/1992n	1992 11 21.68108	08 39 01.27	+41 15 14.4			411
/1992n	1992 12 01.37924	08 48 18.47	+44 10 04.7	21.0	N 3	691
/1992n	1992 12 01.38928	08 48 18.83	+44 10 16.1	17.1	T	691
/1992n	1992 12 01.39931	08 48 19.26	+44 10 26.9			691

Periodic Comet Daniel

/1992o	1992 10 30.82395	10 09 53.57	+26 03 44.8			411
/1992o	1992 10 30.82633	10 09 53.73	+26 03 42.8			411
/1992o	1992 10 30.83212	10 09 54.71	+26 03 41.4			411

Periodic Comet Brewington

/1992p	1992 09 05.73406	07 35 57.96	+36 33 07.0			411
/1992p	1992 09 05.73666	07 35 58.37	+36 33 06.0			411
/1992p	1992 09 05.74164	07 35 59.07	+36 33 05.5			411
/1992p	1992 09 27.78856	08 27 50.46	+35 08 27.0			411
/1992p	1992 09 27.79105	08 27 50.65	+35 08 28.6			411

/1992p	1992	09	27.79459	08 27 50.99	+35 08 29.6					411
/1992p	1992	10	30.67442	09 22 03.5	+33 03 14		16	T	F	897
/1992p	1992	10	30.70527	09 22 06.0	+33 03 17				F	897
/1992p	1992	10	30.81591	09 22 14.20	+33 02 58.6					411
/1992p	1992	10	30.81806	09 22 14.51	+33 02 56.4					411
/1992p	1992	10	30.82009	09 22 14.45	+33 02 57.1					411
/1992p	1992	11	21.67049	09 40 57.08	+32 31 35.6					411
/1992p	1992	11	21.67367	09 40 56.97	+32 31 36.1					411

Comet Helin-Lawrence (1992q)

/1992q	1992	09	05.67323	01 59 12.51	-16 13 17.9					411
/1992q	1992	09	05.68682	01 59 11.85	-16 13 46.4					411
/1992q	1992	09	05.68924	01 59 11.71	-16 13 50.4					411
/1992q	1992	11	14.47466	23 46 40.00	-50 07 17.1				4	413
/1992q	1992	11	14.51980	23 46 34.62	-50 07 43.8				4	413

Periodic Comet Swift-Tuttle (1992t)

/1992t	1992	01	03.07847	10 00 08.38	+42 59 08.0		17.5	T	5	098
/1992t	1992	01	03.09184	10 00 07.84	+42 59 16.0				5	098
/1992t	1992	01	07.08767	09 56 32.45	+43 56 49.2		18	T	6	493
/1992t	1992	10	13.76528	13 59 01.27	+57 43 40.1					595
/1992t	1992	10	13.82222	13 59 32.20	+57 42 28.8					595
/1992t	1992	10	13.83507	13 59 38.96	+57 42 13.1					595
/1992t	1992	10	14.78542	14 08 15.36	+57 21 50.3					108
/1992t	1992	10	14.78680	14 08 16.07	+57 21 48.2					108
/1992t	1992	10	14.78819	14 08 16.84	+57 21 45.4					108
/1992t	1992	10	14.78958	14 08 17.77	+57 21 43.3					108
/1992t	1992	10	14.79097	14 08 18.76	+57 21 41.5					108
/1992t	1992	10	14.79236	14 08 19.26	+57 21 39.6					108
/1992t	1992	10	14.80694	14 08 27.41	+57 21 21.9					108
/1992t	1992	10	15.40342	14 13 53.15	+57 07 16.4					411
/1992t	1992	10	15.40442	14 13 53.53	+57 07 15.1					411
/1992t	1992	10	15.41038	14 13 56.63	+57 07 04.8					411
/1992t	1992	10	16.40139	14 23 00.79	+56 41 31.8		9	T		362
/1992t	1992	10	18.09583	14 38 33.62	+55 51 24.7					691
/1992t	1992	10	18.11859	14 38 46.05	+55 50 39.5					691
/1992t	1992	10	18.40486	14 41 23.98	+55 41 18.5		8	T		362
/1992t	1992	10	18.42153	14 41 32.84	+55 40 46.2					362
/1992t	1992	10	18.74436	14 44 30.18	+55 29 56.1				7	107
/1992t	1992	10	18.77442	14 44 47.83	+55 28 55.8					108
/1992t	1992	10	18.77708	14 44 49.19	+55 28 49.5					108
/1992t	1992	10	19.09654	14 47 44.18	+55 17 48.3					691
/1992t	1992	10	20.08375	14 56 45.27	+54 41 40.5					691
/1992t	1992	10	21.09394	15 05 55.28	+54 01 35.0					691
/1992t	1992	10	21.12697	15 06 13.22	+54 00 12.0					691
/1992t	1992	10	21.40184	15 08 41.86	+53 48 42.0					411
/1992t	1992	10	21.40249	15 08 42.30	+53 48 40.8					411
/1992t	1992	10	21.40763	15 08 44.95	+53 48 27.7					411
/1992t	1992	10	22.09870	15 14 58.12	+53 18 34.0					691
/1992t	1992	10	22.40824	15 17 43.96	+53 04 39.5					411
/1992t	1992	10	22.74444	15 20 44.03	+52 49 14.0					595
/1992t	1992	10	22.75948	15 20 51.65	+52 48 31.4					107
/1992t	1992	10	23.12944	15 24 08.94	+52 31 08.1					691
/1992t	1992	10	23.74273	15 29 32.99	+52 01 27.7				7	107
/1992t	1992	10	24.73440	15 38 11.18	+51 10 42.8					107
/1992t	1992	10	25.11701	15 41 30.26	+50 50 25.7		8.5	T		105
/1992t	1992	10	25.73865	15 46 47.99	+50 16 18.3				7	107
/1992t	1992	10	26.08411	15 49 44.04	+49 56 55.8					691
/1992t	1992	10	26.38669	15 52 17.09	+49 39 37.5		6.0	T		896

/1992t	1992	10	26.40252	15	52	24.49	+49	38	42.0	411
/1992t	1992	10	26.41708	15	52	31.79	+49	37	51.3	411
/1992t	1992	10	26.43530	15	52	41.46	+49	36	47.0	896
/1992t	1992	10	26.71751	15	55	02.78	+49	20	23.7	107
/1992t	1992	10	26.74742	15	55	17.92	+49	18	36.6	108
/1992t	1992	10	26.75012	15	55	19.50	+49	18	24.4	108
/1992t	1992	10	26.76439	15	55	26.17	+49	17	38.0	7 107
/1992t	1992	10	27.38733	16	00	35.84	+48	40	29.6	897
/1992t	1992	10	27.38837	16	00	36.40	+48	40	26.6	897
/1992t	1992	10	27.38892	16	00	36.54	+48	40	24.4	897
/1992t	1992	10	27.39635	16	00	40.39	+48	39	57.7	896
/1992t	1992	10	27.42396	16	00	53.87	+48	38	16.6	897
/1992t	1992	10	27.42471	16	00	54.06	+48	38	14.1	897
/1992t	1992	10	27.44774	16	01	05.72	+48	36	48.5	896
/1992t	1992	10	28.39959	16	08	50.06	+47	37	45.5	411
/1992t	1992	10	28.40278	16	08	51.51	+47	37	33.3	411
/1992t	1992	10	28.40405	16	08	52.13	+47	37	26.7	411
/1992t	1992	10	28.41667	16	08	58.33	+47	36	39.3	7.5 T 362
/1992t	1992	10	28.42917	16	09	04.60	+47	35	48.6	362
/1992t	1992	10	29.75443	16	19	33.96	+46	09	17.5	107
/1992t	1992	10	29.82674	16	20	08.22	+46	04	24.8	540
/1992t	1992	10	29.83021	16	20	09.37	+46	04	13.2	540
/1992t	1992	10	29.83333	16	20	10.79	+46	03	59.0	540
/1992t	1992	10	30.71217	16	26	56.88	+45	03	53.2	049
/1992t	1992	10	30.72361	16	27	02.01	+45	03	05.8	049
/1992t	1992	11	01.36895	16	39	16.27	+43	05	26.3	411
/1992t	1992	11	01.36981	16	39	16.64	+43	05	22.3	411
/1992t	1992	11	01.39312	16	39	26.79	+43	03	38.7	411
/1992t	1992	11	01.43171	16	39	43.87	+43	00	49.1	897
/1992t	1992	11	01.43322	16	39	44.68	+43	00	41.5	897
/1992t	1992	11	01.45139	16	39	52.36	+42	59	21.1	897
/1992t	1992	11	01.45205	16	39	52.66	+42	59	18.7	897
/1992t	1992	11	01.78414	16	42	16.43	+42	34	46.4	5.9 T 040
/1992t	1992	11	01.78831	16	42	18.29	+42	34	26.6	040
/1992t	1992	11	01.79248	16	42	20.21	+42	34	06.7	040
/1992t	1992	11	02.38052	16	46	31.61	+41	50	09.4	6.0 T 892
/1992t	1992	11	02.44054	16	46	57.29	+41	45	33.9	896
/1992t	1992	11	02.44510	16	46	59.22	+41	45	14.0	892
/1992t	1992	11	03.72820	16	55	52.66	+40	06	36.1	589
/1992t	1992	11	03.73776	16	55	56.73	+40	05	51.3	589
/1992t	1992	11	03.74752	16	56	00.86	+40	05	04.7	589
/1992t	1992	11	04.42106	17	00	32.61	+39	12	04.9	411
/1992t	1992	11	04.42526	17	00	34.25	+39	11	44.0	411
/1992t	1992	11	04.72141	17	02	32.46	+38	48	14.7	107
/1992t	1992	11	04.72632	17	02	34.37	+38	47	50.5	108
/1992t	1992	11	04.73150	17	02	36.48	+38	47	24.7	108
/1992t	1992	11	04.73375	17	02	37.40	+38	47	12.3	108
/1992t	1992	11	04.73597	17	02	38.48	+38	47	02.6	108
/1992t	1992	11	04.73790	17	02	38.95	+38	46	53.7	108
/1992t	1992	11	04.74328	17	02	41.24	+38	46	29.1	108
/1992t	1992	11	04.75061	17	02	43.86	+38	45	52.6	107
/1992t	1992	11	05.17882	17	05	32.37	+38	11	32.1	674
/1992t	1992	11	06.72424	17	15	22.59	+36	05	41.5	108
/1992t	1992	11	06.72764	17	15	23.37	+36	05	29.5	108
/1992t	1992	11	06.72999	17	15	24.43	+36	05	21.4	108
/1992t	1992	11	06.73353	17	15	25.48	+36	04	57.5	108
/1992t	1992	11	06.75323	17	15	32.61	+36	03	25.1	108
/1992t	1992	11	07.08099	17	17	34.11	+35	36	18.3	7.0 T 670
/1992t	1992	11	07.08866	17	17	36.92	+35	35	40.8	670

/1992t	1992 11 07.09448	17 17 39.19	+35 35 08.7			670
/1992t	1992 11 07.10182	17 17 41.77	+35 34 35.1			670
/1992t	1992 11 07.10880	17 17 44.32	+35 33 59.0			670
/1992t	1992 11 07.11571	17 17 46.80	+35 33 26.2			670
/1992t	1992 11 07.12266	17 17 49.29	+35 32 51.8			670
/1992t	1992 11 07.12996	17 17 52.06	+35 32 14.8			670
/1992t	1992 11 07.13655	17 17 54.52	+35 31 41.3			670
/1992t	1992 11 07.14349	17 17 57.05	+35 31 06.8			670
/1992t	1992 11 07.15063	17 17 59.70	+35 30 32.1			670
/1992t	1992 11 07.15738	17 18 02.00	+35 29 57.2			670
/1992t	1992 11 07.16438	17 18 04.59	+35 29 23.0			670
/1992t	1992 11 07.17115	17 18 07.22	+35 28 48.9			670
/1992t	1992 11 08.09766	17 23 42.70	+34 11 39.9		7.2 T	670
/1992t	1992 11 08.10182	17 23 44.01	+34 11 20.6			670
/1992t	1992 11 08.10877	17 23 46.51	+34 10 42.8			670
/1992t	1992 11 09.12335	17 29 42.56	+32 45 23.9			670
/1992t	1992 11 09.71271	17 33 04.47	+31 55 25.7			557
/1992t	1992 11 09.71556	17 33 05.32	+31 55 09.3			557
/1992t	1992 11 09.71690	17 33 05.67	+31 55 05.1			557
/1992t	1992 11 09.71966	17 33 06.65	+31 54 48.3			557
/1992t	1992 11 09.72153	17 33 07.37	+31 54 40.8			557
/1992t	1992 11 09.74163	17 33 13.89	+31 52 57.3			557
/1992t	1992 11 09.74297	17 33 14.62	+31 52 48.4			557
/1992t	1992 11 09.74791	17 33 16.32	+31 52 24.3			557
/1992t	1992 11 09.75900	17 33 20.05	+31 51 30.1			557
/1992t	1992 11 09.76019	17 33 20.35	+31 51 24.2			557
/1992t	1992 11 09.76251	17 33 21.10	+31 51 10.1			557
/1992t	1992 11 09.76509	17 33 21.96	+31 50 57.3			557
/1992t	1992 11 09.76669	17 33 22.57	+31 50 49.5			557
/1992t	1992 11 09.76811	17 33 23.23	+31 50 40.7			557
/1992t	1992 11 09.77089	17 33 24.11	+31 50 27.8			557
/1992t	1992 11 10.06918	17 35 04.47	+31 25 11.0		6.6 T	670
/1992t	1992 11 10.08307	17 35 08.97	+31 24 00.9			670
/1992t	1992 11 10.09696	17 35 13.64	+31 22 49.0			670
/1992t	1992 11 10.38416	17 36 49.51	+30 58 24.0		6.0 T	372
/1992t	1992 11 10.40503	17 36 56.40	+30 56 38.1			372
/1992t	1992 11 10.42202	17 37 01.60	+30 55 11.1			411
/1992t	1992 11 11.07613	17 40 36.49	+29 59 25.5			670
/1992t	1992 11 11.08665	17 40 39.82	+29 58 33.0			670
/1992t	1992 11 11.09905	17 40 43.80	+29 57 28.3			670
/1992t	1992 11 11.11432	17 40 48.78	+29 56 08.9			670
/1992t	1992 11 11.35997	17 42 07.95	+29 35 14.3			411
/1992t	1992 11 11.37400	17 42 12.49	+29 34 01.6			411
/1992t	1992 11 11.37743	17 42 13.83	+29 33 41.8			892
/1992t	1992 11 11.38750	17 42 16.92	+29 32 50.0			892
/1992t	1992 11 11.39276	17 42 18.44	+29 32 24.8			411
/1992t	1992 11 11.40313	17 42 22.12	+29 31 31.5			364
/1992t	1992 11 12.09974	17 46 03.12	+28 31 58.3			670
/1992t	1992 11 12.10738	17 46 05.53	+28 31 22.2			670
/1992t	1992 11 12.11988	17 46 09.46	+28 30 16.9			670
/1992t	1992 11 12.13238	17 46 13.31	+28 29 11.6			670
/1992t	1992 11 12.35256	17 47 22.15	+28 10 23.5			411
/1992t	1992 11 12.35355	17 47 22.47	+28 10 17.9			411
/1992t	1992 11 12.35879	17 47 24.10	+28 09 51.9			411
/1992t	1992 11 12.38206	17 47 31.50	+28 07 52.4		6.0 T	372
/1992t	1992 11 12.38339	17 47 31.88	+28 07 45.4			372
/1992t	1992 11 12.40631	17 47 38.95	+28 05 47.6			372
/1992t	1992 11 12.40984	17 47 39.95	+28 05 29.4			364
/1992t	1992 11 12.41198	17 47 40.65	+28 05 19.7			364

/1992t	1992	11	12.70098	17 49 09.91	+27 40 38.3					107
/1992t	1992	11	12.72254	17 49 16.74	+27 38 46.7					589
/1992t	1992	11	12.72396	17 49 17.00	+27 38 42.5					108
/1992t	1992	11	12.72530	17 49 17.55	+27 38 30.6					108
/1992t	1992	11	12.72877	17 49 18.80	+27 38 16.0					108
/1992t	1992	11	12.72914	17 49 18.64	+27 38 11.6					107
/1992t	1992	11	12.73434	17 49 20.09	+27 37 42.7					108
/1992t	1992	11	12.73896	17 49 21.80	+27 37 21.1					108
/1992t	1992	11	12.74347	17 49 23.22	+27 36 59.3					108
/1992t	1992	11	12.75772	17 49 27.57	+27 35 46.8					107
/1992t	1992	11	12.76049	17 49 28.32	+27 35 31.7					589
/1992t	1992	11	12.79680	17 49 39.46	+27 32 25.0					589
/1992t	1992	11	13.07476	17 51 04.37	+27 08 44.8					670
/1992t	1992	11	13.08516	17 51 07.55	+27 07 51.1					670
/1992t	1992	11	13.10043	17 51 12.21	+27 06 32.2					670
/1992t	1992	11	13.12057	17 51 18.32	+27 04 47.0					670
/1992t	1992	11	13.41667	17 52 48.11	+26 39 28.7	6	T			362
/1992t	1992	11	13.43056	17 52 52.21	+26 38 18.9					362
/1992t	1992	11	14.08856	17 56 07.91	+25 42 15.0					670
/1992t	1992	11	14.10627	17 56 13.18	+25 40 44.6					670
/1992t	1992	11	14.12398	17 56 18.40	+25 39 13.8					670
/1992t	1992	11	14.14484	17 56 24.40	+25 37 28.6					670
/1992t	1992	11	14.38429	17 57 34.6	+25 17 04					896
/1992t	1992	11	14.38889	17 57 36.10	+25 16 41.2	5.5	T			362
/1992t	1992	11	14.39757	17 57 38.67	+25 15 54.7					362
/1992t	1992	11	14.43333	17 57 48.76	+25 12 51.5	5.5	T			410
/1992t	1992	11	14.43611	17 57 49.88	+25 12 36.1					410
/1992t	1992	11	14.44097	17 57 51.15	+25 12 15.1					410
/1992t	1992	11	15.07050	18 00 52.75	+24 18 48.7					670
/1992t	1992	11	15.09620	18 00 59.99	+24 16 38.9					670
/1992t	1992	11	15.11842	18 01 06.49	+24 14 44.7					670
/1992t	1992	11	15.14832	18 01 14.76	+24 12 12.6					670
/1992t	1992	11	16.10042	18 05 42.12	+22 51 51.5					670
/1992t	1992	11	16.12057	18 05 47.56	+22 50 06.1					670
/1992t	1992	11	16.36672	18 06 55.48	+22 29 28.0	5.5	T			372
/1992t	1992	11	17.08594	18 10 10.38	+21 29 14.0			8		691
/1992t	1992	11	17.12403	18 10 20.36	+21 26 01.4					670
/1992t	1992	11	17.14139	18 10 25.01	+21 24 35.7					670
/1992t	1992	11	17.75069	18 13 06.57	+20 33 52.1					012
/1992t	1992	11	17.75417	18 13 07.56	+20 33 35.8					012
/1992t	1992	11	18.12678	18 14 44.56	+20 02 45.7					670
/1992t	1992	11	18.13854	18 14 47.56	+20 01 47.3					670
/1992t	1992	11	18.15174	18 14 50.93	+20 00 42.7					670
/1992t	1992	11	18.69928	18 17 11.95	+19 15 40.1					107
/1992t	1992	11	18.72397	18 17 18.17	+19 13 38.7					107
/1992t	1992	11	18.74657	18 17 23.82	+19 11 48.3					107
/1992t	1992	11	19.07749	18 18 47.73	+18 44 44.0					670
/1992t	1992	11	19.10388	18 18 54.28	+18 42 33.5					670
/1992t	1992	11	19.12471	18 18 59.51	+18 40 52.0					670
/1992t	1992	11	19.71201	18 21 26.17	+17 53 04.7					107
/1992t	1992	11	20.10104	18 23 01.50	+17 21 39.3					670
/1992t	1992	11	20.12188	18 23 06.51	+17 19 57.7					670
/1992t	1992	11	20.13370	18 23 09.39	+17 18 59.4					670
/1992t	1992	11	20.76953	18 25 42.99	+16 28 00.9					107
/1992t	1992	11	20.96146	18 26 28.81	+16 12 44.2					801
/1992t	1992	11	20.96275	18 26 29.11	+16 12 38.4					801
/1992t	1992	11	21.07604	18 26 56.05	+16 03 36.6					670
/1992t	1992	11	21.10527	18 27 02.85	+16 01 16.4					670
/1992t	1992	11	21.12604	18 27 07.79	+15 59 36.9					670

/1992t	1992	11	21.14688	18 27 12.58	+15 57 58.1			670
/1992t	1992	11	21.42572	18 28 18.21	+15 35 52.7			411
/1992t	1992	11	21.42653	18 28 18.41	+15 35 49.6			411
/1992t	1992	11	21.43452	18 28 20.23	+15 35 10.6			411
/1992t	1992	11	21.71054	18 29 24.89	+15 13 28.3			107
/1992t	1992	11	21.76145	18 29 36.87	+15 09 24.6			107
/1992t	1992	11	22.34621	18 31 51.34	+14 23 41.1			411
/1992t	1992	11	22.34818	18 31 51.80	+14 23 31.6			411
/1992t	1992	11	22.37017	18 31 56.83	+14 21 48.0			411
/1992t	1992	11	22.70454	18 33 12.83	+13 55 48.2			107
/1992t	1992	11	23.34933	18 35 36.86	+13 06 07.8			411
/1992t	1992	11	23.35555	18 35 38.36	+13 05 38.7			411
/1992t	1992	11	23.36369	18 35 39.99	+13 05 02.9			411
/1992t	1992	11	23.36807	18 35 41.22	+13 04 42.7	5.4	T	372
/1992t	1992	11	23.40712	18 35 49.74	+13 01 42.3			364
/1992t	1992	11	23.41007	18 35 50.34	+13 01 27.0			364
/1992t	1992	11	23.41707	18 35 51.92	+13 00 57.5			372
/1992t	1992	11	23.75179	18 37 08.72	+12 35 16.0			107
/1992t	1992	11	24.42031	18 39 30.53	+11 44 57.7			364
/1992t	1992	11	24.42396	18 39 31.03	+11 44 40.5			364
/1992t	1992	11	26.75625	18 47 35.83	+08 53 14.4			012
/1992t	1992	11	26.77674	18 47 39.90	+08 51 49.6	5.0	T	012
/1992t	1992	11	27.91968	18 51 26.30	+07 30 40.0			801
/1992t	1992	11	27.92219	18 51 26.78	+07 30 29.5			801

Periodic Comet Schaumasse

/1992x	1992	10	30.73748	04 39 02.19	+11 42 19.1			411
/1992x	1992	11	02.69546	04 38 28.15	+11 48 33.6			411
/1992x	1992	11	17.55764	04 30 32.66	+12 42 23.2	17.0	T	402
/1992x	1992	11	17.57153	04 30 32.08	+12 42 28.9			402
/1992x	1992	11	18.58611	04 29 40.39	+12 47 53.1			402
/1992x	1992	11	18.60347	04 29 39.47	+12 47 57.5			402
/1992x	1992	11	18.61111	04 29 39.22	+12 47 58.2	15	T	400
/1992x	1992	11	18.62569	04 29 38.26	+12 48 01.0			400
/1992x	1992	11	21.53958	04 26 57.09	+13 05 02.1	15	T	400
/1992x	1992	11	21.55347	04 26 56.27	+13 05 10.6			400
/1992x	1992	11	21.62818	04 26 51.42	+13 05 38.7			411
/1992x	1992	11	21.63264	04 26 51.23	+13 05 39.9			411
/1992x	1992	11	21.63750	04 26 50.94	+13 05 43.0			411
/1992x	1992	11	22.58409	04 25 54.36	+13 11 45.1			411
/1992x	1992	11	22.58713	04 25 54.20	+13 11 45.4			411
/1992x	1992	11	22.59012	04 25 53.98	+13 11 47.1			411
/1992x	1992	11	23.60527	04 24 50.60	+13 18 31.6	16.5	T	894
/1992x	1992	11	23.61910	04 24 49.86	+13 18 39.8			894
/1992x	1992	11	24.63229	04 23 44.84	+13 25 44.4			894
/1992x	1992	11	24.64618	04 23 43.86	+13 25 49.1			894

Comet Shoemaker (1992y)

/1992y	1992	10	30.65185	04 16 48.86	+27 28 29.2	14.5	T	897
/1992y	1992	10	30.68981	04 16 45.64	+27 29 12.2			897
/1992y	1992	10	31.70174	04 15 15.47	+27 49 35.6	15.0	T	877
/1992y	1992	10	31.74653	04 15 11.65	+27 50 26.1			877
/1992y	1992	11	02.67917	04 12 11.23	+28 29 42.1			411
/1992y	1992	11	02.68362	04 12 10.80	+28 29 48.1			411
/1992y	1992	11	02.68713	04 12 10.50	+28 29 52.2			411
/1992y	1992	11	02.69444	04 12 09.80	+28 30 04.2	15	T	402
/1992y	1992	11	02.70903	04 12 08.42	+28 30 20.9			402
/1992y	1992	11	02.75278	04 12 04.15	+28 31 12.1			877
/1992y	1992	11	02.78750	04 12 00.60	+28 31 53.9			877

/1992y	1992 11 06.92292	04 04 59.71	+29 56 48.2		589
/1992y	1992 11 06.92639	04 04 59.43	+29 56 54.3		589
/1992y	1992 11 06.93149	04 04 58.71	+29 56 59.1		589
/1992y	1992 11 06.93799	04 04 57.93	+29 57 08.8		589
/1992y	1992 11 14.52152	03 50 07.27	+32 33 10.5	14.6 T	410
/1992y	1992 11 14.52916	03 50 06.26	+32 33 18.2		410
/1992y	1992 11 14.54097	03 50 04.86	+32 33 31.7		410
/1992y	1992 11 14.72119	03 49 41.86	+32 37 12.1		596
/1992y	1992 11 14.73702	03 49 39.94	+32 37 31.3		596
/1992y	1992 11 14.74907	03 49 38.35	+32 37 44.8		596
/1992y	1992 11 17.50277	03 43 38.74	+33 33 19.6	14.4 T	410
/1992y	1992 11 17.51388	03 43 37.22	+33 33 33.2		410
/1992y	1992 11 17.52569	03 43 35.67	+33 33 45.6		410
/1992y	1992 11 18.80125	03 40 44.11	+33 59 06.9		107
/1992y	1992 11 20.34429	03 37 11.22	+34 29 24.0		657
/1992y	1992 11 20.35056	03 37 10.30	+34 29 30.9		657
/1992y	1992 11 21.54526	03 34 23.24	+34 52 37.4		411
/1992y	1992 11 21.55355	03 34 22.04	+34 52 47.1		411
/1992y	1992 11 21.55799	03 34 21.36	+34 52 52.7		411
/1992y	1992 11 22.55238	03 32 00.38	+35 11 51.0		411
/1992y	1992 11 22.56522	03 31 58.50	+35 12 06.0		411
/1992y	1992 11 22.57020	03 31 57.84	+35 12 11.1		411
/1992y	1992 11 23.45880	03 29 50.74	+35 28 57.1		411
/1992y	1992 11 23.46175	03 29 50.38	+35 28 59.6		411
/1992y	1992 11 23.49618	03 29 45.37	+35 29 39.3		411
/1992y	1992 11 23.79679	03 29 02.13	+35 35 13.3		107
/1992y	1992 11 29.18069	03 15 49.55	+37 11 43.5		801
/1992y	1992 11 29.18961	03 15 48.20	+37 11 52.5		801
/1992y	1992 11 29.45694	03 15 08.50	+37 16 25.4	14.3 T	410
/1992y	1992 11 29.47152	03 15 06.41	+37 16 41.9		410
/1992y	1992 11 29.48194	03 15 04.51	+37 16 53.3		410

Note 1: coma diameter 20"; tail curves through p.a. 344 0′.8 from the nucleus to at least 2′.3 in p.a. 1 . 2: coma diameter 35"; tail > 2′.5 in length curves from p.a. 297 to 267 . 3: coma diameter 19"; tail > 10′ long in p.a. 278 . 4: comet strongly condensed, 4′ tail in p.a. 45 . 5: very weak images; stellar appearance. 6: close to plate limit; cirrus-cloud interference. 7: correction to MPC 20965-20966. 8: coma diameter 15′. A dust tail extends 16′.5 toward p.a. 22 . The main ion tail extends off the frame at least 25′.4 away in p.a. 45 . Fainter streamers bracketing the main ion tail extend 10′.3 in p.a. 65 , 14′.7 in p.a. 62 , 19′.2 in p.a. 36 and 13′.6 in p.a. 29 . A pinwheel jet structure is visible consisting of two main jets; the brighter extends more than 7" in p.a. 231 before hooking toward lower position angles, while the second extends more than 10" in p.a. 296 before bending gradually toward lower position angles.

* * * * *

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.
010 Caussols						
E. W. Elst, Royal Observatory, B-1180 Brussels, Belgium						
Observers E. W. Elst, J. B. Emond						
Measurer E. W. Elst						
0.9-m Schmidt telescope						
1975 TQ3	1992 10	23.00139	02 10 02.85	+11 46 41.6	17.8	010
1975 TQ3	1992 10	23.02222	02 10 01.34	+11 46 43.8		010
1975 TQ3	1992 11	02.97465	01 57 47.34	+12 05 51.2	18.0	010
1975 TQ3	1992 11	02.98507	01 57 46.64	+12 05 52.6		010
1975 TQ3	1992 11	02.99618	01 57 45.91	+12 05 53.7		010
1975 TQ3	1992 11	03.02014	01 57 44.41	+12 05 57.0		010
1975 TQ3	1992 11	03.03056	01 57 43.70	+12 05 58.6		010
1975 TQ3	1992 11	03.04097	01 57 42.99	+12 05 59.7		010
1976 YP1	1992 11	02.97465	02 00 18.48	+13 25 42.7	18.3	010
1976 YP1	1992 11	02.98507	02 00 17.93	+13 25 40.8		010
1976 YP1	1992 11	02.99618	02 00 17.40	+13 25 38.9		010
1979 TS2	1992 11	02.97465	02 13 07.01	+09 36 47.5	18.1	010
1979 TS2	1992 11	02.98507	02 13 06.41	+09 36 43.5		010
1979 TS2	1992 11	02.99618	02 13 05.82	+09 36 39.7		010
1981 SL	1992 10	23.00139	02 07 20.19	+08 53 34.3	18.3	010
1981 SL	1992 10	23.02222	02 07 19.08	+08 53 21.8		010
1986 CS1	1992 10	23.00139	02 05 15.25	+08 49 53.8	18.5	010
1986 CS1	1992 10	23.02222	02 05 14.03	+08 49 44.1		010
1986 PW4	1992 10	23.00139	02 07 52.44	+12 15 24.8	18.5	010
1986 PW4	1992 10	23.02222	02 07 51.33	+12 15 19.4		010
1986 PW4	1992 11	02.97465	01 59 10.56	+11 25 35.5	18.5	010
1986 PW4	1992 11	02.98507	01 59 10.09	+11 25 33.1		010

1986	PW4		1992	11	02.99618	01	59	09.55	+11 25 30.3	010
1986	PW4		1992	11	03.02014	01	59	08.56	+11 25 25.5	010
1986	PW4		1992	11	03.03056	01	59	07.99	+11 25 22.5	010
1986	PW4		1992	11	03.04097	01	59	07.51	+11 25 18.7	010
1989	YU5		1992	07	27.02934	21	20	09.49	-12 44 15.5 18.5	010
1989	YU5		1992	07	27.03976	21	20	08.91	-12 44 18.2	010
1989	YU5		1992	07	27.05017	21	20	08.43	-12 44 19.9	010
1991	PO2		1992	11	02.97465	02	12	58.58	+10 56 22.9 18.8	010
1991	PO2		1992	11	02.98507	02	12	58.11	+10 56 21.0	010
1991	PO2		1992	11	02.99618	02	12	57.57	+10 56 17.5	010
1992	UT7	*	1992	10	23.00139	02	06	29.28	+10 15 28.7 18.5	010
1992	UT7		1992	10	23.02222	02	06	28.16	+10 15 23.2	010
1992	UT7		1992	11	02.97465	01	57	04.34	+09 25 08.6 18.7	010
1992	UT7		1992	11	02.98507	01	57	03.78	+09 25 06.3	010
1992	UT7		1992	11	02.99618	01	57	03.20	+09 25 02.6	010
1992	UU7	*	1992	10	23.00139	02	07	13.67	+11 20 32.7 18.6	010
1992	UU7		1992	10	23.02222	02	07	12.50	+11 20 20.9	010
1992	UU7		1992	11	02.97465	01	57	49.94	+09 48 34.9 18.8	010
1992	UU7		1992	11	02.98507	01	57	49.30	+09 48 28.4	010
1992	UU7		1992	11	02.99618	01	57	48.73	+09 48 23.9	010
1992	UU7		1992	11	03.02014	01	57	47.63	+09 48 14.2	010
1992	UU7		1992	11	03.03056	01	57	47.11	+09 48 10.1	010
1992	UU7		1992	11	03.04097	01	57	46.67	+09 48 03.1	010
1992	UV7	*	1992	10	23.00139	02	07	19.56	+10 44 36.1 18.5	010
1992	UV7		1992	10	23.02222	02	07	18.06	+10 44 30.1	010
1992	UV7		1992	11	02.97465	01	55	36.71	+10 04 41.8 19.0	010
1992	UV7		1992	11	02.98507	01	55	35.95	+10 04 40.5	010
1992	UV7		1992	11	02.99618	01	55	35.32	+10 04 37.7	010
1992	UV7		1992	11	03.02014	01	55	33.79	+10 04 33.7	010
1992	UV7		1992	11	03.03056	01	55	33.02	+10 04 32.0	010
1992	UV7		1992	11	03.04097	01	55	32.35	+10 04 30.2	010
1992	UW7	*	1992	10	23.00139	02	08	03.18	+11 45 15.4 18.6	010
1992	UW7		1992	10	23.02222	02	08	01.95	+11 45 10.4	010
1992	UW7		1992	11	02.97465	01	59	35.99	+10 56 38.7 18.7	010
1992	UW7		1992	11	02.98507	01	59	35.46	+10 56 35.8	010
1992	UW7		1992	11	02.99618	01	59	34.87	+10 56 31.3	010
1992	UX7	*	1992	10	23.00139	02	08	13.88	+12 31 58.4 18.7	010
1992	UX7		1992	10	23.02222	02	08	12.73	+12 31 52.6	010
1992	UX7		1992	11	02.97465	01	59	37.60	+11 40 24.9 18.7	010
1992	UX7		1992	11	02.98507	01	59	37.04	+11 40 21.7	010
1992	UX7		1992	11	02.99618	01	59	36.52	+11 40 18.2	010
1992	UX7		1992	11	03.02014	01	59	35.64	+11 40 14.1	010
1992	UX7		1992	11	03.03056	01	59	35.01	+11 40 09.4	010
1992	UX7		1992	11	03.04097	01	59	34.51	+11 40 04.8	010
1992	UY7	*	1992	10	23.00139	02	08	17.25	+11 02 00.5 18.7	010
1992	UY7		1992	10	23.02222	02	08	15.99	+11 01 53.5	010
1992	UY7		1992	11	02.97465	01	58	44.58	+10 03 29.7 19.3	010
1992	UY7		1992	11	02.98507	01	58	44.00	+10 03 27.8	010
1992	UY7		1992	11	02.99618	01	58	43.51	+10 03 23.3	010
1992	UY7		1992	11	03.02014	01	58	42.31	+10 03 19.0	010
1992	UY7		1992	11	03.03056	01	58	41.70	+10 03 18.1	010
1992	UY7		1992	11	03.04097	01	58	41.20	+10 03 14.4	010
1992	UZ7	*	1992	10	23.00139	02	09	43.72	+10 35 38.4 18.4	010
1992	UZ7		1992	10	23.02222	02	09	42.55	+10 35 32.6	010
1992	UZ7		1992	11	02.97465	02	00	15.14	+09 42 19.5 19.0	010
1992	UZ7		1992	11	02.98507	02	00	14.48	+09 42 16.0	010
1992	UZ7		1992	11	02.99618	02	00	13.93	+09 42 12.1	010
1992	UZ7		1992	11	03.02014	02	00	12.91	+09 42 08.1	010
1992	UZ7		1992	11	03.03056	02	00	12.25	+09 42 04.4	010

1992 UZ7		1992 11 03.04097	02 00 11.81	+09 41 59.6			010
1992 UA8		1992 10 23.00139	01 54 42.42	+10 19 57.7	19.5		010
1992 UA8		1992 10 23.02222	01 54 41.05	+10 19 53.5			010
1992 UB8		1992 10 23.00139	01 58 19.31	+10 34 10.1	18.6		010
1992 UB8		1992 10 23.02222	01 58 17.92	+10 34 05.9			010
1992 UC8	*	1992 10 23.00139	01 56 17.90	+12 42 32.6	19.0		010
1992 UC8		1992 10 23.02222	01 56 16.86	+12 42 23.4			010
1992 UD8	*	1992 10 23.00139	01 59 58.91	+12 35 31.6	19.5		010
1992 UD8		1992 10 23.02222	01 59 57.27	+12 35 32.1			010
1992 UE8	*	1992 10 23.00139	02 05 39.09	+12 28 36.0	19.5		010
1992 UE8		1992 10 23.02222	02 05 37.99	+12 28 32.0			010
1992 UF8	*	1992 10 23.00139	02 08 30.33	+12 33 25.3	19.0		010
1992 UF8		1992 10 23.02222	02 08 29.09	+12 33 17.7			010
1992 UG8		1992 11 02.97465	02 10 24.28	+11 04 50.4	18.8		010
1992 UG8		1992 11 02.98507	02 10 23.87	+11 04 44.1			010
1992 UG8		1992 11 02.99618	02 10 23.30	+11 04 38.3			010
1992 UH8		1992 11 02.97465	02 02 02.20	+12 28 42.9	19.3		010
1992 UH8		1992 11 02.98507	02 02 01.59	+12 28 41.4			010
1992 UH8		1992 11 02.99618	02 02 01.01	+12 28 39.1			010
(103)		1992 07 27.02934	21 01 20.91	-15 49 24.8	15.0		010
(103)		1992 07 27.03976	21 01 20.23	-15 49 28.4			010
(103)		1992 07 27.05017	21 01 19.76	-15 49 31.1			010
(118)		1992 11 03.02014	01 51 46.10	+07 54 59.5	14.0		010
(118)		1992 11 03.03056	01 51 45.33	+07 54 59.8			010
(118)		1992 11 03.04097	01 51 44.69	+07 55 00.4			010
(124)		1992 11 02.97465	02 02 29.23	+10 16 04.2	14.0		010
(124)		1992 11 02.98507	02 02 28.92	+10 16 02.2			010
(124)		1992 11 02.99618	02 02 28.32	+10 15 58.8			010
(124)		1992 11 03.02014	02 02 27.31	+10 15 52.1			010
(124)		1992 11 03.03056	02 02 26.63	+10 15 48.6			010
(124)		1992 11 03.04097	02 02 26.09	+10 15 45.1			010
(292)		1992 11 02.97465	02 12 47.51	+10 11 41.5	16.0		010
(292)		1992 11 02.98507	02 12 46.73	+10 11 42.1			010
(292)		1992 11 02.99618	02 12 46.01	+10 11 43.5			010
(299)		1992 07 27.02934	21 06 08.87	-13 55 51.6	17.8		010
(299)		1992 07 27.03976	21 06 08.22	-13 55 54.0			010
(299)		1992 07 27.05017	21 06 07.61	-13 55 54.9			010
(798)		1992 10 23.00139	02 02 25.59	+13 08 31.0	17.5		010
(798)		1992 10 23.02222	02 02 24.44	+13 08 22.5			010
(798)		1992 11 02.97465	01 54 13.20	+11 54 20.9	17.0		010
(798)		1992 11 02.98507	01 54 12.73	+11 54 17.3			010
(798)		1992 11 02.99618	01 54 12.20	+11 54 13.5			010
(798)		1992 11 03.02014	01 54 11.19	+11 54 05.8			010
(798)		1992 11 03.03056	01 54 10.66	+11 54 01.2			010
(798)		1992 11 03.04097	01 54 10.20	+11 53 57.2			010
(1782)		1992 11 02.97465	02 06 32.84	+10 50 55.7	18.3		010
(1782)		1992 11 02.98507	02 06 32.29	+10 50 53.4			010
(1782)		1992 11 02.99618	02 06 31.76	+10 50 50.3			010
(1822)		1992 10 23.00139	01 49 55.23	+11 40 02.2	18.3		010
(1822)		1992 10 23.02222	01 49 53.84	+11 39 53.9			010
(2069)		1992 10 23.00139	02 06 41.09	+08 45 49.8	18.2		010
(2069)		1992 10 23.02222	02 06 39.96	+08 45 48.0			010
(2069)		1992 11 03.02014	01 57 14.41	+08 27 03.3			010
(2069)		1992 11 03.03056	01 57 13.82	+08 27 02.8			010
(2069)		1992 11 03.04097	01 57 13.29	+08 27 02.1			010
(2276)		1992 11 02.97465	01 57 07.99	+12 00 28.6	18.3		010
(2276)		1992 11 02.98507	01 57 07.46	+12 00 25.2			010
(2276)		1992 11 02.99618	01 57 06.82	+12 00 22.6			010
(2276)		1992 11 03.02014	01 57 05.53	+12 00 14.8			010

(2276)	1992 11 03.03056	01 57 04.92	+12 00 11.1			010
(2276)	1992 11 03.04097	01 57 04.31	+12 00 07.3			010
(2354)	1992 11 03.02014	02 03 36.90	+08 54 59.1			010
(2354)	1992 11 03.03056	02 03 36.33	+08 54 55.5			010
(2354)	1992 11 03.04097	02 03 35.75	+08 54 51.8			010
(2405)	1992 11 02.97465	02 11 05.82	+09 46 54.7	18.2		010
(2405)	1992 11 02.98507	02 11 05.27	+09 46 52.2			010
(2405)	1992 11 02.99618	02 11 04.78	+09 46 50.0			010
(2505)	1992 10 23.00139	01 59 22.91	+10 40 31.4	18.2		010
(2505)	1992 10 23.02222	01 59 21.88	+10 40 27.6			010
(2505)	1992 11 03.02014	01 50 54.96	+09 59 45.5	18.5		010
(2505)	1992 11 03.03056	01 50 54.39	+09 59 43.4			010
(2505)	1992 11 03.04097	01 50 53.96	+09 59 40.6			010
(2533)	1992 10 23.00139	01 55 27.93	+11 26 26.3	17.8		010
(2533)	1992 10 23.02222	01 55 26.85	+11 26 20.6			010
(2533)	1992 11 03.02014	01 47 01.72	+10 32 24.5	18.4		010
(2533)	1992 11 03.03056	01 47 01.24	+10 32 21.5			010
(2533)	1992 11 03.04097	01 47 00.78	+10 32 18.6			010
(2587)	1992 11 02.97465	02 11 31.47	+10 08 03.1	18.3		010
(2587)	1992 11 02.98507	02 11 30.96	+10 08 00.9			010
(2587)	1992 11 02.99618	02 11 30.42	+10 07 58.9			010
(2742)	1992 07 27.02934	21 18 31.38	-16 31 22.7	18.6		010
(2742)	1992 07 27.03976	21 18 30.92	-16 31 26.2			010
(2742)	1992 07 27.05017	21 18 30.54	-16 31 30.9			010
(2863)	1992 07 27.02934	21 16 26.28	-16 28 42.5	18.5		010
(2863)	1992 07 27.03976	21 16 25.71	-16 28 47.0			010
(2863)	1992 07 27.05017	21 16 25.26	-16 28 51.7			010
(3302)	1992 07 27.02934	21 11 11.05	-13 36 52.6	18.0		010
(3302)	1992 07 27.03976	21 11 10.47	-13 36 55.3			010
(3302)	1992 07 27.05017	21 11 09.98	-13 36 58.4			010
(3543)	1992 10 23.00139	01 52 44.25	+10 24 47.4	18.2		010
(3543)	1992 10 23.02222	01 52 43.22	+10 24 42.3			010
(3543)	1992 11 03.02014	01 44 34.25	+09 37 59.7	18.6		010
(3543)	1992 11 03.03056	01 44 33.80	+09 37 58.4			010
(3543)	1992 11 03.04097	01 44 33.37	+09 37 54.6			010
(3639)	1992 07 27.02934	21 10 15.66	-12 21 11.6	18.5		010
(3639)	1992 07 27.03976	21 10 14.96	-12 21 13.4			010
(3639)	1992 07 27.05017	21 10 14.39	-12 21 16.4			010
(3993)	1992 10 23.00139	02 01 49.13	+11 53 41.0	18.1		010
(3993)	1992 10 23.02222	02 01 47.90	+11 53 33.5			010
(3993)	1992 11 03.02014	01 52 10.83	+10 45 21.8	18.5		010
(3993)	1992 11 03.03056	01 52 10.20	+10 45 17.9			010
(3993)	1992 11 03.04097	01 52 09.60	+10 45 13.4			010
(4306)	1992 07 27.02934	21 04 33.35	-15 32 07.3	18.6		010
(4306)	1992 07 27.03976	21 04 32.82	-15 32 09.8			010
(4306)	1992 07 27.05017	21 04 32.40	-15 32 12.8			010
(4376)	1992 10 23.00139	02 04 27.76	+12 59 48.1	18.2		010
(4376)	1992 10 23.02222	02 04 26.42	+12 59 41.4			010
(4376)	1992 11 02.97465	01 54 16.05	+11 55 56.1	18.0		010
(4376)	1992 11 02.98507	01 54 15.44	+11 55 52.6			010
(4376)	1992 11 02.99618	01 54 14.81	+11 55 49.6			010
(4376)	1992 11 03.02014	01 54 13.48	+11 55 43.3			010
(4376)	1992 11 03.03056	01 54 12.90	+11 55 39.3			010
(4376)	1992 11 03.04097	01 54 12.27	+11 55 35.3			010
(4422)	1992 07 27.02934	21 03 21.94	-13 06 54.8	18.0		010
(4422)	1992 07 27.03976	21 03 21.32	-13 06 58.5			010
(4422)	1992 07 27.05017	21 03 20.79	-13 07 02.7			010
(4933)	1992 07 27.02934	21 19 24.30	-14 25 39.1	18.5		010

(4933)	1992 07 27.03976	21 19 23.70	-14 25 43.2				010
(4933)	1992 07 27.05017	21 19 23.08	-14 25 47.0				010

033 Tautenburg
F. Borngen, Thuringer Landessternwarte, Dorfstrasse 73,
O-6901 Tautenburg, Federal Republic of Germany
L. D. Schmadel, Astronomisches Rechen-Institut, W-6900 Heidelberg,
Federal Republic of Germany
Observers F. Borngen, L. D. Schmadel
1.3-m Schmidt telescope
PPM

1989 AF7	1992 09 21.88958	00 08 32.14	+00 34 23.7				033
1989 AF7	1992 09 21.93333	00 08 30.22	+00 34 12.2				033
1989 AF7	1992 09 22.99931	00 07 44.66	+00 29 07.9				033
1989 AF7	1992 09 24.95000	00 06 21.22	+00 19 52.3	19.1			033
1989 AF7	1992 09 24.99236	00 06 19.34	+00 19 39.2				033
1989 AF7	1992 09 26.92569	00 04 56.56	+00 10 25.3			V	033
1989 AF7	1992 09 27.92361	00 04 14.10	+00 05 44.6				033
1989 AF7	1992 09 28.89444	00 03 32.70	+00 01 09.8				033
1992 RT	1992 10 31.83194	23 52 36.58	-04 57 18.1	18.6			033
1992 RT	1992 10 31.87465	23 52 35.94	-04 57 19.6				033
1992 RV	1992 10 24.81215	23 52 11.72	-02 07 36.4				033
1992 RV	1992 10 24.86424	23 52 10.03	-02 07 29.9				033
1992 RV	1992 10 31.85243	23 49 27.74	-01 48 34.4	18.0			033
1992 RV	1992 10 31.89618	23 49 26.89	-01 48 25.5				033
1992 RV	1992 11 01.92396	23 49 10.43	-01 45 02.8				033
1992 RY	1992 09 21.88958	00 03 03.73	+01 34 23.4				033
1992 RY	1992 09 21.93333	00 03 01.42	+01 34 18.4				033
1992 RY	1992 09 24.95000	00 00 26.07	+01 29 01.4	18.3			033
1992 RY	1992 09 24.99236	00 00 23.84	+01 28 56.0				033
1992 RY	1992 09 26.92569	23 58 44.49	+01 25 29.9				033
1992 RZ	1992 09 24.95000	00 05 24.68	+02 09 47.3	17.2			033
1992 RZ	1992 09 24.99236	00 05 22.60	+02 09 34.2				033
1992 RZ	1992 09 26.92569	00 03 51.33	+01 59 42.4				033
1992 RZ	1992 09 27.92361	00 03 04.32	+01 54 36.9				033
1992 RZ	1992 09 28.89444	00 02 18.80	+01 49 39.8				033
1992 RB1	1992 09 21.88958	00 13 20.78	+01 18 15.1				033
1992 RB1	1992 09 21.93333	00 13 18.36	+01 18 06.5				033
1992 RB1	1992 09 22.99931	00 12 21.35	+01 14 48.5				033
1992 RB1	1992 09 24.95000	00 10 36.94	+01 08 41.9	18.2			033
1992 RB1	1992 09 24.99236	00 10 34.56	+01 08 33.1				033
1992 RB1	1992 09 26.92569	00 08 51.06	+01 02 28.6				033
1992 RB1	1992 09 27.92361	00 07 57.76	+00 59 21.2				033
1992 RB1	1992 09 28.89444	00 07 06.27	+00 56 20.6				033
1992 RC1	1992 09 24.95000	00 12 51.74	+01 57 01.4	17.6			033
1992 RC1	1992 09 24.99236	00 12 49.43	+01 56 53.3				033
1992 RC1	1992 09 26.92569	00 11 09.06	+01 50 53.3				033
1992 RC1	1992 09 27.92361	00 10 17.40	+01 47 46.9				033
1992 RC1	1992 09 28.89444	00 09 27.58	+01 44 46.9				033
1992 RD1	1992 09 21.88958	00 14 04.49	+02 41 57.3				033
1992 RD1	1992 09 21.93333	00 14 01.96	+02 41 56.4				033
1992 RD1	1992 09 22.99931	00 13 01.74	+02 41 28.7				033
1992 RD1	1992 09 24.95000	00 11 11.50	+02 40 32.0	17.4			033
1992 RD1	1992 09 24.99236	00 11 09.05	+02 40 30.3				033
1992 RD1	1992 09 26.92569	00 09 19.77	+02 39 28.8				033
1992 RD1	1992 09 27.92361	00 08 23.41	+02 38 54.8				033
1992 RD1	1992 09 28.89444	00 07 28.88	+02 38 22.6				033
1992 SM16	1992 09 21.88958	00 02 33.84	+01 02 15.4				033
1992 SM16	1992 09 21.93333	00 02 31.73	+01 01 50.3				033

1992	SM16		1992	09	22.99931	00	01	42.25	+00	52	07.1				033
1992	SM16	*	1992	09	24.95000	00	00	12.02	+00	34	14.3		17.7		033
1992	SM16		1992	09	24.99236	00	00	09.92	+00	33	50.4				033
1992	SM16		1992	09	26.92569	23	58	40.88	+00	16	08.9				033
1992	SN16		1992	09	21.88958	00	03	11.92	+01	32	12.0				033
1992	SN16		1992	09	21.93333	00	03	09.56	+01	31	57.8			V	033
1992	SN16		1992	09	22.99931	00	02	14.69	+01	25	57.4				033
1992	SN16	*	1992	09	24.95000	00	00	34.45	+01	14	52.3		18.8		033
1992	SN16		1992	09	24.99236	00	00	32.11	+01	14	37.8				033
1992	SN16		1992	09	26.92569	23	58	53.04	+01	03	33.6				033
1992	SN16		1992	09	27.92361	23	58	02.04	+00	57	51.2				033
1992	SO16		1992	09	21.88958	00	03	27.18	+01	45	12.9			V	033
1992	SO16		1992	09	21.93333	00	03	24.58	+01	45	03.3				033
1992	SO16		1992	09	22.99931	00	02	25.11	+01	40	55.7				033
1992	SO16	*	1992	09	24.95000	00	00	36.46	+01	33	19.2		18.9		033
1992	SO16		1992	09	24.99236	00	00	34.04	+01	33	09.2				033
1992	SO16		1992	09	26.92569	23	58	47.02	+01	25	32.3				033
1992	SP16		1992	09	21.88958	00	03	12.64	+01	33	22.7				033
1992	SP16		1992	09	21.93333	00	03	10.34	+01	33	14.2				033
1992	SP16		1992	09	22.99931	00	02	16.05	+01	29	45.2				033
1992	SP16	*	1992	09	24.95000	00	00	36.97	+01	23	19.4		17.9		033
1992	SP16		1992	09	24.99236	00	00	34.72	+01	23	10.6				033
1992	SP16		1992	09	26.92569	23	58	57.17	+01	16	45.8				033
1992	SP16		1992	09	27.92361	23	58	07.15	+01	13	27.9				033
1992	SP16		1992	09	28.89444	23	57	18.94	+01	10	17.1				033
1992	SQ16		1992	09	21.88958	00	04	15.66	+02	23	41.3				033
1992	SQ16		1992	09	21.93333	00	04	12.67	+02	23	46.7				033
1992	SQ16		1992	09	22.99931	00	03	03.26	+02	25	35.6				033
1992	SQ16	*	1992	09	24.95000	00	00	56.37	+02	28	50.8		18.1		033
1992	SQ16		1992	09	24.99236	00	00	53.52	+02	28	54.2				033
1992	SQ16		1992	09	26.92569	23	58	48.22	+02	31	59.0				033
1992	SR16		1992	09	21.88958	00	03	41.59	+01	13	24.4			V	033
1992	SR16		1992	09	21.93333	00	03	39.62	+01	12	55.2			V	033
1992	SR16		1992	09	22.99931	00	02	51.99	+01	01	20.1				033
1992	SR16	*	1992	09	24.95000	00	01	25.07	+00	40	03.7		18.7		033
1992	SR16		1992	09	24.99236	00	01	23.04	+00	39	36.2				033
1992	SR16		1992	09	26.92569	23	59	57.41	+00	18	33.2				033
1992	SR16		1992	09	27.92361	23	59	13.37	+00	07	44.5				033
1992	SR16		1992	09	28.89444	23	58	30.97	-00	02	43.3				033
1992	SS16		1992	09	21.88958	00	04	22.63	+01	04	13.5				033
1992	SS16		1992	09	21.93333	00	04	20.01	+01	03	56.4				033
1992	SS16		1992	09	22.99931	00	03	18.16	+00	56	48.6				033
1992	SS16	*	1992	09	24.95000	00	01	25.42	+00	43	43.9		18.5		033
1992	SS16		1992	09	24.99236	00	01	22.83	+00	43	26.5				033
1992	SS16		1992	09	26.92569	23	59	31.92	+00	30	31.7				033
1992	SS16		1992	09	27.92361	23	58	35.03	+00	23	54.1				033
1992	SS16		1992	09	28.89444	23	57	40.33	+00	17	30.5				033
1992	ST16		1992	09	21.88958	00	04	56.41	+02	44	11.8			V	033
1992	ST16		1992	09	21.93333	00	04	54.02	+02	44	03.9				033
1992	ST16		1992	09	22.99931	00	03	57.66	+02	40	19.9				033
1992	ST16	*	1992	09	24.95000	00	02	14.80	+02	33	24.3		18.8		033
1992	ST16		1992	09	24.99236	00	02	12.44	+02	33	14.7				033
1992	ST16		1992	09	26.92569	00	00	30.94	+02	26	14.7				033
1992	ST16		1992	09	27.92361	23	59	38.91	+02	22	35.8				033
1992	ST16		1992	09	28.89444	23	58	48.68	+02	19	03.9				033
1992	SU16	*	1992	09	24.95000	00	02	35.05	-00	08	53.0		19.2		033
1992	SU16		1992	09	24.99236	00	02	32.53	-00	09	00.9				033
1992	SU16		1992	09	26.92569	00	00	43.38	-00	15	40.1				033
1992	SU16		1992	09	27.92361	23	59	47.43	-00	19	03.8				033

1992	SV16	*	1992	09	24.95000	00	02	58.06	+02	21	49.6	18.9		033
1992	SV16		1992	09	24.99236	00	02	56.31	+02	21	41.6			033
1992	SV16		1992	09	26.92569	00	01	43.69	+02	15	55.8			033
1992	SV16		1992	09	27.92361	00	01	06.20	+02	12	56.1			033
1992	SV16		1992	09	28.89444	00	00	29.87	+02	10	01.9			033
1992	SW16		1992	09	21.93333	00	05	48.35	+02	06	21.2		V	033
1992	SW16		1992	09	22.99931	00	04	52.84	+01	59	54.6			033
1992	SW16	*	1992	09	24.95000	00	03	12.10	+01	48	05.0	18.6		033
1992	SW16		1992	09	24.99236	00	03	09.83	+01	47	49.6			033
1992	SW16		1992	09	26.92569	00	01	30.77	+01	36	07.4			033
1992	SW16		1992	09	27.92361	00	00	40.09	+01	30	06.5			033
1992	SW16		1992	09	28.89444	23	59	51.20	+01	24	18.4			033
1992	SX16	*	1992	09	24.95000	00	03	21.00	+02	09	26.3	18.4		033
1992	SX16		1992	09	24.99236	00	03	19.41	+02	08	53.6			033
1992	SX16		1992	09	26.92569	00	02	14.42	+01	44	30.2			033
1992	SX16		1992	09	27.92361	00	01	40.94	+01	31	55.2			033
1992	SX16		1992	09	28.89444	00	01	08.72	+01	19	40.1			033
1992	SY16		1992	09	21.88958	00	07	14.07	+00	31	51.7			033
1992	SY16		1992	09	21.93333	00	07	11.37	+00	31	49.3			033
1992	SY16		1992	09	22.99931	00	06	07.21	+00	30	02.8			033
1992	SY16	*	1992	09	24.95000	00	04	09.58	+00	26	50.4	18.6		033
1992	SY16		1992	09	24.99236	00	04	06.90	+00	26	46.3			033
1992	SY16		1992	09	26.92569	00	02	10.22	+00	23	34.4			033
1992	SY16		1992	09	27.92361	00	01	10.12	+00	21	56.7			033
1992	SY16		1992	09	28.89444	00	00	11.91	+00	20	23.5			033
1992	SZ16	*	1992	09	24.95000	00	04	38.80	+01	41	58.4	19.0		033
1992	SZ16		1992	09	24.99236	00	04	36.14	+01	41	44.4			033
1992	SZ16		1992	09	26.92569	00	02	38.46	+01	32	09.6			033
1992	SZ16		1992	09	27.92361	00	01	38.07	+01	27	13.3			033
1992	SZ16		1992	09	28.89444	00	00	39.64	+01	22	26.5		V	033
1992	SA17		1992	09	21.88958	00	07	39.90	+01	43	15.5			033
1992	SA17		1992	09	21.93333	00	07	37.34	+01	42	56.9		V	033
1992	SA17		1992	09	22.99931	00	06	36.54	+01	36	07.5			033
1992	SA17	*	1992	09	24.95000	00	04	45.28	+01	23	33.6	18.7		033
1992	SA17		1992	09	24.99236	00	04	42.75	+01	23	17.0			033
1992	SA17		1992	09	26.92569	00	02	52.58	+01	10	44.7			033
1992	SA17		1992	09	27.92361	00	01	55.81	+01	04	16.8			033
1992	SA17		1992	09	28.89444	00	01	00.85	+00	58	00.9			033
1992	SB17		1992	09	21.88958	00	08	33.77	+01	59	20.1			033
1992	SB17		1992	09	21.93333	00	08	31.26	+01	59	08.6			033
1992	SB17		1992	09	22.99931	00	07	33.21	+01	54	40.1			033
1992	SB17	*	1992	09	24.95000	00	05	46.61	+01	46	21.5	18.5		033
1992	SB17		1992	09	24.99236	00	05	44.16	+01	46	10.3			033
1992	SB17		1992	09	26.92569	00	03	58.17	+01	37	49.4			033
1992	SB17		1992	09	27.92361	00	03	03.47	+01	33	29.8			033
1992	SB17		1992	09	28.89444	00	02	10.50	+01	29	17.6			033
1992	SC17	*	1992	09	24.95000	00	06	22.27	+01	43	49.5	19.3		033
1992	SC17		1992	09	24.99236	00	06	20.06	+01	43	33.0			033
1992	SC17		1992	09	26.92569	00	04	44.87	+01	30	29.6			033
1992	SC17		1992	09	27.92361	00	03	56.06	+01	23	46.3			033
1992	SD17		1992	09	21.88958	00	08	46.63	+02	05	55.9			033
1992	SD17		1992	09	21.93333	00	08	44.71	+02	05	24.7			033
1992	SD17		1992	09	22.99931	00	07	59.10	+01	53	12.8			033
1992	SD17	*	1992	09	24.95000	00	06	36.04	+01	30	53.0	18.2		033
1992	SD17		1992	09	24.99236	00	06	34.14	+01	30	23.1			033
1992	SD17		1992	09	26.92569	00	05	12.44	+01	08	20.2			033
1992	SD17		1992	09	27.92361	00	04	30.54	+00	57	00.9			033
1992	SD17		1992	09	28.89444	00	03	50.20	+00	46	02.8			033
1992	SE17	*	1992	09	24.95000	00	06	51.30	+01	55	34.7	18.3		033

1992	SE17		1992	09	24.99236	00	06	48.86	+01	55	30.8			033
1992	SE17		1992	09	26.92569	00	05	04.22	+01	52	43.3			033
1992	SE17		1992	09	27.92361	00	04	10.45	+01	51	16.4			033
1992	SE17		1992	09	28.89444	00	03	18.51	+01	49	52.3			033
1992	SF17		1992	09	22.99931	00	08	40.98	+03	06	45.3			033
1992	SF17	*	1992	09	24.95000	00	07	09.03	+02	53	22.5	18.6		033
1992	SF17		1992	09	24.99236	00	07	06.90	+02	53	05.1			033
1992	SF17		1992	09	26.92569	00	05	35.47	+02	39	36.5			033
1992	SF17		1992	09	27.92361	00	04	48.29	+02	32	37.0			033
1992	SF17		1992	09	28.89444	00	04	02.58	+02	25	47.9			033
1992	SG17		1992	09	21.88958	00	09	51.12	+02	07	34.8			033
1992	SG17		1992	09	21.93333	00	09	48.78	+02	07	13.5			033
1992	SG17		1992	09	22.99931	00	08	53.64	+01	58	39.1			033
1992	SG17	*	1992	09	24.95000	00	07	12.78	+01	42	51.1	17.1		033
1992	SG17		1992	09	24.99236	00	07	10.45	+01	42	30.7			033
1992	SG17		1992	09	26.92569	00	05	30.55	+01	26	46.2			033
1992	SG17		1992	09	27.92361	00	04	39.15	+01	18	39.2			033
1992	SG17		1992	09	28.89444	00	03	49.50	+01	10	47.7			033
1992	SH17		1992	09	21.88958	00	12	03.34	+01	14	30.8			033
1992	SH17		1992	09	21.93333	00	12	00.26	+01	14	26.5			033
1992	SH17		1992	09	22.99931	00	10	51.88	+01	12	22.4			033
1992	SH17	*	1992	09	24.95000	00	08	47.20	+01	08	35.9	18.4		033
1992	SH17		1992	09	24.99236	00	08	44.43	+01	08	30.0			033
1992	SH17		1992	09	26.92569	00	06	41.42	+01	04	44.4			033
1992	SH17		1992	09	27.92361	00	05	38.30	+01	02	48.8			033
1992	SH17		1992	09	28.89444	00	04	37.30	+01	00	57.4			033
1992	SJ17		1992	09	21.88958	00	10	58.14	+01	18	31.2			033
1992	SJ17		1992	09	21.93333	00	10	56.35	+01	18	06.9			033
1992	SJ17		1992	09	22.99931	00	10	15.50	+01	07	51.5			033
1992	SJ17	*	1992	09	24.95000	00	09	00.96	+00	49	07.4	18.8		033
1992	SJ17		1992	09	24.99236	00	08	59.17	+00	48	43.3			033
1992	SJ17		1992	09	26.92569	00	07	45.54	+00	30	12.7			033
1992	SJ17		1992	09	27.92361	00	07	07.68	+00	20	44.1			033
1992	SJ17		1992	09	28.89444	00	06	31.15	+00	11	31.3			033
1992	SK17	*	1992	09	24.95000	00	09	30.22	+01	47	44.5	19.1		033
1992	SK17		1992	09	24.99236	00	09	28.22	+01	47	29.6			033
1992	SK17		1992	09	26.92569	00	07	59.08	+01	36	41.1			033
1992	SK17		1992	09	27.92361	00	07	13.16	+01	31	06.1			033
1992	SK17		1992	09	28.89444	00	06	28.67	+01	25	42.2		V	033
1992	SL17		1992	09	21.93333	00	12	52.97	+00	29	18.1		V	033
1992	SL17		1992	09	22.99931	00	11	56.81	+00	21	59.3			033
1992	SL17	*	1992	09	24.95000	00	10	14.11	+00	08	34.2	19.0		033
1992	SL17		1992	09	24.99236	00	10	11.73	+00	08	17.6			033
1992	SL17		1992	09	26.92569	00	08	30.04	-00	04	55.2			033
1992	SL17		1992	09	27.92361	00	07	37.78	-00	11	39.6			033
1992	SL17		1992	09	28.89444	00	06	47.37	-00	18	10.2			033
1992	SM17	*	1992	09	24.95000	00	10	20.86	+02	54	04.6	17.5		033
1992	SM17		1992	09	24.99236	00	10	19.24	+02	53	33.4			033
1992	SM17		1992	09	26.92569	00	09	08.09	+02	29	48.3			033
1992	SM17		1992	09	27.92361	00	08	31.41	+02	17	33.0			033
1992	SM17		1992	09	28.89444	00	07	56.02	+02	05	39.1			033
1992	SN17		1992	09	22.99931	00	12	01.96	+01	09	28.8			033
1992	SN17	*	1992	09	24.95000	00	10	22.36	+00	57	57.1	18.9		033
1992	SN17		1992	09	24.99236	00	10	20.04	+00	57	42.0			033
1992	SN17		1992	09	26.92569	00	08	42.06	+00	46	22.0			033
1992	SN17		1992	09	27.92361	00	07	51.86	+00	40	34.3			033
1992	SN17		1992	09	28.89444	00	07	03.54	+00	35	00.9			033
1992	SO17		1992	09	21.88958	00	12	43.90	+01	48	30.2			033
1992	SO17		1992	09	21.93333	00	12	41.73	+01	48	15.4		V	033

1992	SO17		1992	09	22.99931	00	11	52.89	+01	40	24.5		V	033
1992	SO17	*	1992	09	24.95000	00	10	23.33	+01	26	02.7	18.8		033
1992	SO17		1992	09	24.99236	00	10	21.25	+01	25	44.4			033
1992	SO17		1992	09	26.92569	00	08	52.13	+01	11	25.0			033
1992	SO17		1992	09	27.92361	00	08	06.07	+01	04	01.3			033
1992	SO17		1992	09	28.89444	00	07	21.29	+00	56	49.6			033
1992	SP17	*	1992	09	24.95000	00	10	39.67	+03	01	50.7	19.0		033
1992	SP17		1992	09	24.99236	00	10	37.19	+03	01	37.8			033
1992	SP17		1992	09	27.92361	00	07	52.57	+02	47	32.3			033
1992	SP17		1992	09	28.89444	00	06	58.74	+02	42	52.9		V	033
1992	SQ17		1992	09	21.93333	00	13	07.35	+03	10	19.0		V	033
1992	SQ17		1992	09	22.99931	00	12	18.06	+03	03	09.1			033
1992	SQ17	*	1992	09	24.95000	00	10	48.15	+02	49	56.6	19.2		033
1992	SQ17		1992	09	24.99236	00	10	46.11	+02	49	39.3			033
1992	SQ17		1992	09	26.92569	00	09	16.91	+02	36	26.9			033
1992	SQ17		1992	09	27.92361	00	08	30.91	+02	29	36.7			033
1992	SQ17		1992	09	28.89444	00	07	46.49	+02	22	58.7			033
1992	SR17		1992	09	21.93333	00	13	24.12	+01	09	41.7		V	033
1992	SR17		1992	09	22.99931	00	12	32.14	+01	04	48.9		V	033
1992	SR17	*	1992	09	24.95000	00	10	56.76	+00	55	50.2	19.0		033
1992	SR17		1992	09	24.99236	00	10	54.60	+00	55	37.7			033
1992	SR17		1992	09	26.92569	00	09	19.93	+00	46	43.0			033
1992	SR17		1992	09	27.92361	00	08	31.05	+00	42	07.3			033
1992	SR17		1992	09	28.89444	00	07	43.68	+00	37	40.3		V	033
1992	SS17		1992	09	21.93333	00	13	35.72	+01	41	51.0		V	033
1992	SS17		1992	09	22.99931	00	12	47.13	+01	35	57.9		V	033
1992	SS17	*	1992	09	24.95000	00	11	18.18	+01	25	11.7	18.9		033
1992	SS17		1992	09	24.99236	00	11	16.16	+01	24	57.1			033
1992	SS17		1992	09	26.92569	00	09	47.84	+01	14	12.8			033
1992	SS17		1992	09	27.92361	00	09	02.27	+01	08	40.9			033
1992	SS17		1992	09	28.89444	00	08	18.04	+01	03	19.3			033
1992	ST17		1992	09	21.88958	00	14	10.00	+00	54	15.1			033
1992	ST17		1992	09	21.93333	00	14	07.61	+00	53	50.4			033
1992	ST17		1992	09	22.99931	00	13	12.96	+00	44	37.8		I	033
1992	ST17	*	1992	09	24.95000	00	11	32.58	+00	27	43.0	17.8		033
1992	ST17		1992	09	24.99236	00	11	30.34	+00	27	19.9			033
1992	ST17		1992	09	26.92569	00	09	50.59	+00	10	33.2			033
1992	ST17		1992	09	27.92361	00	08	59.13	+00	01	54.4			033
1992	ST17		1992	09	28.89444	00	08	09.19	-00	06	28.0			033
1992	SU17		1992	09	21.88958	00	14	01.24	+00	40	46.6			033
1992	SU17		1992	09	21.93333	00	13	59.08	+00	40	37.6			033
1992	SU17		1992	09	22.99931	00	13	08.30	+00	36	57.0			033
1992	SU17	*	1992	09	24.95000	00	11	35.30	+00	30	10.8	18.9		033
1992	SU17		1992	09	24.99236	00	11	33.22	+00	30	00.9			033
1992	SU17		1992	09	26.92569	00	10	01.00	+00	23	20.3			033
1992	SU17		1992	09	27.92361	00	09	13.44	+00	19	53.6			033
1992	SU17		1992	09	28.89444	00	08	27.41	+00	16	34.0			033
1992	SV17		1992	09	21.93333	00	14	58.97	+01	41	18.9		V	033
1992	SV17		1992	09	22.99931	00	14	05.41	+01	35	07.8		V	033
1992	SV17	*	1992	09	24.95000	00	12	26.90	+01	23	43.3	19.1		033
1992	SV17		1992	09	24.99236	00	12	24.72	+01	23	27.4			033
1992	SV17		1992	09	26.92569	00	10	46.66	+01	12	04.6			033
1992	SV17		1992	09	27.92361	00	09	56.05	+01	06	11.0			033
1992	SA18	*	1992	09	21.88958	00	03	25.93	+00	17	58.3			033
1992	SA18		1992	09	21.93333	00	03	23.23	+00	17	49.8			033
1992	SA18		1992	09	22.99931	00	02	19.52	+00	13	44.7			033
1992	SB18	*	1992	09	21.88958	00	04	07.22	+01	14	31.4			033
1992	SB18		1992	09	21.93333	00	04	04.25	+01	14	33.4			033
1992	SB18		1992	09	22.99931	00	02	53.38	+01	15	33.2			033

1992 SC18	*	1992	09	21.88958	00	05	04.22	+02 47 32.0		033
1992 SC18		1992	09	21.93333	00	05	02.61	+02 46 59.9		033
1992 SC18		1992	09	22.99931	00	04	26.70	+02 33 48.1		033
1992 SD18	*	1992	09	21.93333	00	07	37.02	+01 55 56.1	V	033
1992 SD18		1992	09	22.99931	00	06	33.39	+01 52 12.6	V	033
1992 SE18	*	1992	09	21.93333	00	08	38.94	+01 02 21.6	V	033
1992 SE18		1992	09	22.99931	00	07	36.42	+00 59 35.7	V	033
1992 SF18	*	1992	09	21.93333	00	11	45.16	+02 04 08.8	V	033
1992 SF18		1992	09	22.99931	00	11	00.25	+01 58 35.6	V	033
1992 UW6	*	1992	10	31.83194	23	40	18.62	-06 52 05.0	17.0	033
1992 UW6		1992	10	31.87465	23	40	20.53	-06 51 59.3		033
1992 UW6		1992	11	01.90174	23	41	08.71	-06 50 05.6		033
1992 UX6	*	1992	10	31.83194	23	48	49.70	-05 57 12.4	18.9	033
1992 UX6		1992	10	31.87465	23	48	50.04	-05 57 08.1		033
1992 UX6		1992	11	01.90174	23	48	57.62	-05 55 45.2		033
(268)		1992	10	24.83646	23	46	03.50	-04 39 09.1		033
(268)		1992	10	31.83194	23	43	30.74	-04 52 20.6	14.8	033
(268)		1992	10	31.87465	23	43	29.98	-04 52 24.4		033
(268)		1992	11	01.90174	23	43	11.97	-04 53 48.4		033
(757)		1992	10	24.83646	23	45	39.08	-04 41 24.5		033
(757)		1992	10	31.83194	23	42	36.64	-04 22 17.1	14.7	033
(757)		1992	10	31.85243	23	42	36.25	-04 22 13.7	14.7	033
(757)		1992	10	31.87465	23	42	35.78	-04 22 09.2		033
(757)		1992	10	31.89618	23	42	35.28	-04 22 05.1		033
(757)		1992	11	01.92396	23	42	16.53	-04 18 32.6		033
(1043)		1992	10	24.83646	23	49	50.20	-07 15 40.6		033
(1043)		1992	10	31.83194	23	47	51.49	-07 34 05.7	17.1	033
(1043)		1992	10	31.87465	23	47	50.97	-07 34 11.6		033
(1043)		1992	11	01.90174	23	47	38.60	-07 36 08.5		033
(1439)		1992	10	24.81215	23	50	47.48	-04 01 44.3		033
(1439)		1992	10	24.86424	23	50	46.07	-04 01 48.8		033
(1439)		1992	10	31.85243	23	48	16.92	-04 10 44.6	18.1	033
(1439)		1992	10	31.89618	23	48	16.01	-04 10 47.6		033
(1439)		1992	11	01.92396	23	47	57.43	-04 11 42.9		033
(2246)		1992	10	24.83646	23	42	44.57	-05 42 27.5		033
(2246)		1992	10	31.83194	23	40	40.52	-05 56 52.7	18.1	033
(2246)		1992	10	31.87465	23	40	39.98	-05 56 56.4		033
(2246)		1992	11	01.90174	23	40	25.04	-05 58 37.6		033
(2489)		1992	10	24.81215	23	45	05.93	-03 43 35.0	17.8	033
(2489)		1992	10	24.86424	23	45	04.72	-03 43 38.8		033
(2489)		1992	10	31.85243	23	43	03.83	-03 50 05.8		033
(2489)		1992	10	31.89618	23	43	03.10	-03 50 07.1		033
(2489)		1992	11	01.92396	23	42	50.88	-03 50 27.2		033
(2551)		1992	09	21.88958	00	14	30.72	+01 23 32.5		033
(2551)		1992	09	21.93333	00	14	28.65	+01 23 20.3		033
(2551)		1992	09	22.99931	00	13	40.85	+01 18 28.8		033
(2551)		1992	09	24.95000	00	12	13.01	+01 09 31.7	16.4	033
(2551)		1992	09	24.99236	00	12	11.02	+01 09 19.5		033
(2551)		1992	09	26.92569	00	10	43.60	+01 00 24.4		033
(2551)		1992	09	27.92361	00	09	58.38	+00 55 48.4		033
(2551)		1992	09	28.89444	00	09	14.52	+00 51 20.3		033
(2984)		1992	10	31.83194	23	40	27.71	-06 41 10.2	18.4	033
(2984)		1992	10	31.87465	23	40	26.93	-06 41 09.7		033
(2984)		1992	11	01.90174	23	40	08.32	-06 41 21.0		033
(4112)		1992	10	24.83646	23	45	34.91	-06 04 23.7		033
(4112)		1992	10	31.83194	23	43	58.67	-06 41 07.0	17.1	033
(4112)		1992	10	31.87465	23	43	58.26	-06 41 18.0		033
(4112)		1992	11	01.90174	23	43	49.24	-06 45 52.8		033
(4143)		1992	10	24.83646	23	50	21.40	-04 26 28.7		033

(4143)	1992 10 31.83194	23 48 46.09	-04 30 02.7	17.2		033
(4143)	1992 10 31.85243	23 48 45.96	-04 30 01.6			033
(4143)	1992 10 31.87465	23 48 45.75	-04 30 01.6			033
(4143)	1992 10 31.89618	23 48 45.41	-04 30 01.4			033
(4143)	1992 11 01.90174	23 48 37.90	-04 29 49.3			033
(4143)	1992 11 01.92396	23 48 37.76	-04 29 48.1			033
(4144)	1992 10 31.83194	23 49 15.38	-05 00 50.7	17.5		033
(4144)	1992 10 31.87465	23 49 14.89	-05 00 57.9			033
(4144)	1992 11 01.90174	23 49 01.81	-05 04 02.2			033

046 Klet
J. Ticha, Hvezdarna Klet, CS-37001 Ceske Budejovice, Czechoslovakia
Observers Z. Moravec, J. Ticha, M. Tichy, Z. Vavrova
Measurers Z. Moravec, M. Tichy, Z. Vavrova
0.63-m Maksutov reflector, 0.57-m f/5 reflector

1991 FT	1992 09 26.96285	00 44 53.42	+05 48 14.6			046
1991 FT	1992 09 26.97708	00 44 52.49	+05 48 12.9			046
1992 PT2	1992 08 25.92628	22 15 23.75	-02 35 05.9	16.5		046
1992 PT2	1992 08 25.94052	22 15 22.98	-02 35 13.4			046

098 Cima Ekar
G. Forti, Osservatorio Astrofisico di Arcetri, Largo E. Fermi 5
I-50125 Florence, Italy
Observer A. Boattini
Measurers A. Boattini, M. Tombelli
0.40-m f/2.5 Schmidt

(487)	1992 01 04.07882	10 48 04.05	+14 03 17.0			098

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

1990 BU	1992 10 18.83264	22 03 52.60	-01 35 23.7			104
1990 BU	1992 10 18.85069	22 03 52.83	-01 35 20.1			104
(4905)	1992 09 28.94097	01 29 28.00	+10 32 25.3			104
(4905)	1992 09 28.95556	01 29 27.44	+10 32 14.4			104
(4905)	1992 10 18.88056	01 16 11.66	+06 22 48.8			104
(4905)	1992 10 18.89375	01 16 11.14	+06 22 38.8			104
(4905)	1992 10 24.84167	01 12 18.12	+05 09 44.2			104
(4905)	1992 10 24.85486	01 12 17.61	+05 09 35.6			104
(5176)	1992 10 24.88056	03 33 23.88	+06 53 05.7			104
(5176)	1992 10 24.89375	03 33 23.28	+06 53 05.3			104

107 Cavezzo
R. Calanca, Osservatorio Astronomico G. Montanari, Via Concordia 200,
I-41032 Cavezzo, Modena, Italy
Observers R. Calanca, F. Calzolari
0.40-m f/2.23 reflector + CCD
GSC

(455)	1992 10 24.96671	05 43 59.04	+19 48 56.8			107

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

1990 BU	1992 08 30.25972	22 31 36.16	-03 23 05.9			293
1990 BU	1992 08 30.27083	22 31 35.43	-03 23 07.2			293

7063 P-L		1992 08 30.23056	22 27 09.53	+00 15 14.0			293
(204)		1992 08 30.23056	22 28 12.52	+01 20 16.3			293
(204)		1992 08 30.24306	22 28 11.86	+01 20 11.8			293
(517)		1992 08 30.25972	22 34 20.36	-04 14 46.1			293
(517)		1992 08 30.27083	22 34 19.66	-04 14 48.7			293
(1365)		1992 08 30.23056	22 31 41.59	+00 21 33.5			293
(1365)		1992 08 30.24306	22 31 40.68	+00 21 30.8			293
(3689)		1992 08 30.23056	22 26 33.05	+01 34 06.9			293
(3689)		1992 08 30.24306	22 26 32.37	+01 34 03.9			293
(3932)		1992 08 30.25972	22 28 16.11	-03 12 02.7			293
(3932)		1992 08 30.27083	22 28 15.43	-03 12 00.5			293
(5326)		1992 08 30.25972	22 26 20.61	-02 46 21.0			293
(5326)		1992 08 30.27083	22 26 20.02	-02 46 29.9			293

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 SL		1992 10 25.51632	02 05 13.08	+08 27 50.8	17.0		364
1981 SL		1992 10 25.53021	02 05 12.25	+08 27 42.0			364
1981 UB1		1992 11 23.54826	03 02 46.71	+15 23 54.2			364
1981 UB1		1992 11 23.56215	03 02 45.99	+15 23 52.7			364
1981 UB1		1992 11 24.56910	03 02 00.09	+15 20 55.7			364
1981 UB1		1992 11 24.58299	03 01 59.42	+15 20 51.4			364
1982 VA1		1992 11 01.61354	03 33 30.45	+16 12 03.0	16		364
1982 VA1		1992 11 01.62743	03 33 29.42	+16 12 02.9			364
1988 VP		1992 11 01.58646	03 22 30.01	+15 04 58.3	17		364
1988 VP		1992 11 01.60035	03 22 29.00	+15 05 03.0			364
1988 VB5		1992 10 26.56424	02 52 18.29	+16 00 49.3			364
1988 VB5		1992 10 26.57813	02 52 17.58	+16 00 39.3			364
1992 UU5		1992 11 01.58646	03 24 19.78	+15 25 10.8	16		364
1992 UU5		1992 11 01.60035	03 24 19.04	+15 25 08.3			364
1992 UU5		1992 11 23.54826	03 04 01.29	+15 16 55.7	16.5		364
1992 UU5		1992 11 23.56215	03 04 00.53	+15 16 54.1			364
1992 UU5		1992 11 24.56910	03 03 09.43	+15 17 09.2			364
1992 UU5		1992 11 24.58299	03 03 08.71	+15 17 08.3			364
1992 UP6	*	1992 10 31.60521	03 10 23.28	+15 18 44.2	16		364
1992 UP6		1992 10 31.61910	03 10 22.69	+15 18 38.3			364
1992 UP6		1992 11 01.55868	03 09 39.60	+15 10 01.9			364
1992 UP6		1992 11 01.57257	03 09 38.87	+15 09 55.2			364
1992 UP6		1992 11 21.59826	02 54 15.25	+12 13 13.7			364
1992 UP6		1992 11 21.61215	02 54 14.80	+12 13 06.3			364
1992 UP6		1992 11 23.48229	02 52 58.91	+11 58 18.1	16.5		364
1992 UP6		1992 11 23.49618	02 52 58.07	+11 58 11.4			364
1992 UP6		1992 11 24.53785	02 52 16.89	+11 50 09.2			364
1992 UP6		1992 11 24.55174	02 52 16.40	+11 50 03.0			364
(1350)		1992 10 21.55382	02 18 58.13	+09 05 54.0			364
(1350)		1992 10 21.56771	02 18 57.44	+09 05 49.1			364
(1350)		1992 10 25.54410	02 15 40.53	+08 46 54.5			364
(1350)		1992 10 25.55799	02 15 39.80	+08 46 51.0			364
(1480)		1992 10 31.60521	03 06 40.49	+14 18 08.5			364
(1480)		1992 10 31.61910	03 06 39.60	+14 18 07.1			364
(1502)		1992 11 23.54826	03 08 39.06	+14 23 37.4			364
(1502)		1992 11 23.56215	03 08 38.35	+14 23 33.7			364
(1502)		1992 11 24.56910	03 07 47.63	+14 18 56.6			364
(1502)		1992 11 24.58299	03 07 46.97	+14 18 55.3			364
(1616)		1992 10 26.56424	02 48 58.77	+14 18 29.1			364

(1616)	1992 10 26.57813	02 48 58.04	+14 18 28.3				364
(1667)	1992 11 01.58646	03 19 57.33	+13 43 44.1				364
(1667)	1992 11 01.60035	03 19 56.50	+13 43 42.3				364
(2069)	1992 10 21.52604	02 07 56.67	+08 48 34.4				364
(2069)	1992 10 21.53993	02 07 55.95	+08 48 33.3				364
(2069)	1992 10 25.51632	02 04 31.81	+08 41 13.7				364
(2069)	1992 10 25.53021	02 04 31.03	+08 41 12.6				364
(2543)	1992 10 26.56424	02 51 53.67	+16 19 15.0				364
(2543)	1992 10 26.57813	02 51 52.83	+16 19 16.6				364
(2853)	1992 10 26.56424	02 51 53.03	+14 18 47.1				364
(2853)	1992 10 26.57813	02 51 52.25	+14 18 40.5				364
(3112)	1992 10 21.55382	02 16 32.00	+09 00 32.1				364
(3112)	1992 10 21.56771	02 16 31.04	+09 00 30.1				364
(3386)	1992 11 01.58646	03 20 17.94	+15 21 12.6				364
(3386)	1992 11 01.60035	03 20 17.33	+15 21 07.5				364
(3386)	1992 11 23.54826	03 01 26.47	+13 57 06.6				364
(3386)	1992 11 23.56215	03 01 25.66	+13 57 03.2				364
(3499)	1992 10 19.61076	02 31 44.69	+11 34 50.4				364
(3499)	1992 10 19.62465	02 31 44.04	+11 34 48.3				364
(3499)	1992 10 20.56771	02 31 00.50	+11 30 43.8				364
(3499)	1992 10 20.58160	02 30 59.82	+11 30 39.4				364
(3610)	1992 11 01.61354	03 28 04.98	+15 14 20.9		17		364
(3610)	1992 11 01.62743	03 28 04.18	+15 14 18.7				364
(3776)	1992 10 20.56771	02 38 30.16	+13 26 59.1				364
(3776)	1992 10 20.58160	02 38 29.37	+13 27 01.6				364
(4091)	1992 10 31.60521	02 59 42.27	+15 16 14.2				364
(4091)	1992 10 31.61910	02 59 41.54	+15 16 10.8				364
(4139)	1992 10 31.60521	03 03 44.74	+14 50 57.6				364
(4139)	1992 10 31.61910	03 03 44.02	+14 50 54.5				364
(4359)	1992 10 31.60521	02 58 13.04	+15 01 12.4				364
(4359)	1992 10 31.61910	02 58 12.07	+15 01 05.1				364
(5055)	1992 10 20.62674	03 00 02.38	+12 36 29.9				364
(5055)	1992 10 20.64063	03 00 01.77	+12 36 33.8				364

365 Uto Observatory
Observer F. Uto
Measurer O. Muramatsu
0.20-m f/4.0 reflector
PPM
Long. and Parallax 135.9579, 0.82597, +0.56196 (see MPC 19348)

1992 VF	* 1992 11 02.69960	04 20 24.37	+18 14 51.9		17.0		365
1992 VF	1992 11 02.76372	04 20 21.61	+18 14 32.8				365
1992 VF	1992 11 04.71210	04 18 57.38	+18 05 10.6				365
1992 VF	1992 11 04.74126	04 18 55.92	+18 05 01.6				365

366 Miyasaka Observatory
S. Miyasaka, 3-8-501, 4 Chome, Nagayama, Tama, Tokyo 206, Japan
Observers S. Miyasaka, A. Takahashi
Measurer S. Miyasaka
0.25-m reflector
PPM

1992 VC	1992 11 21.63162	03 00 41.19	+15 41 12.1		16		366
1992 VC	1992 11 21.65341	03 00 39.79	+15 41 13.2				366
(21)	1991 03 17.64857	10 59 56.40	+11 28 34.3				366
(21)	1991 03 17.66952	10 59 55.25	+11 28 40.4				366
(24)	1992 02 05.72516	12 54 52.92	-05 11 17.6				366
(24)	1992 02 05.76317	12 54 53.17	-05 11 19.3				366
(24)	1992 02 05.77054	12 54 53.21	-05 11 20.5				366
(24)	1992 02 08.72530	12 55 08.56	-05 12 52.5				366

(24)		1992 02 08.75462	12 55 08.60	-05 12 52.8				366
(368)		1991 10 13.71975	02 39 51.30	+18 17 00.3				366
(368)		1991 10 13.74252	02 39 50.30	+18 16 52.9				366
(900)		1991 03 17.72459	12 02 15.56	-01 25 58.4				366
(900)		1991 03 17.74640	12 02 14.40	-01 25 45.5				366
(1050)		1991 03 17.68171	11 23 26.54	-00 02 53.6				366
(1050)		1991 03 17.70948	11 23 24.78	-00 02 47.0				366
(1352)		1991 03 17.72459	12 05 02.51	-01 15 05.4				366
(1352)		1991 03 17.74640	12 05 01.37	-01 14 56.9				366
(2162)		1991 10 13.61242	01 35 58.55	+03 43 32.7				366
(2162)		1991 10 13.63474	01 35 57.31	+03 43 22.6				366
(3028)		1991 03 17.68171	11 26 49.90	-00 44 35.3				366
(3028)		1991 03 17.70948	11 26 48.64	-00 44 21.3				366
(5199)		1992 02 05.60491	08 10 00.05	+16 55 34.1				366
(5199)		1992 02 05.62965	08 09 58.64	+16 55 36.2				366
(5199)		1992 02 08.61225	08 07 08.90	+16 55 46.0				366
(5199)		1992 02 08.63352	08 07 07.64	+16 55 46.3				366

372 Geisei
T. Seki, Kamimachi 2-9-35, Kochi, Japan
0.60-m f/3.5 reflector
ACRS

1981 UQ11		1992 10 21.60451	01 21 20.66	+02 35 37.5		17		372
1981 UQ11		1992 10 21.61597	01 21 20.19	+02 35 35.9				372
1981 UQ11		1992 10 25.57431	01 17 40.03	+02 21 25.0				372
1991 GY		1992 10 25.53854	00 39 01.15	+05 06 13.6		18		372
1991 GY		1992 10 25.55035	00 39 00.61	+05 06 13.2				372
1991 LC1		1992 11 27.55833	03 59 11.07	+12 35 25.2		17.5		372
1991 LC1		1992 11 27.56806	03 59 10.43	+12 35 20.7				372
1992 BB5		1991 10 20.79514	09 17 36.88	+17 30 08.3		19		372
1992 UK2		1992 10 27.56076	02 34 23.23	+18 22 43.0		17		372
1992 UK2		1992 10 27.57309	02 34 22.33	+18 22 47.5				372
1992 UK2		1992 11 01.59583	02 28 05.88	+18 55 35.1		16		372
1992 UK2		1992 11 01.60660	02 28 05.10	+18 55 40.5				372
1992 UO3		1992 10 27.67202	03 00 38.62	+22 02 30.4		17		372
1992 UO3		1992 10 27.68403	03 00 37.59	+22 02 31.7				372
1992 UO3		1992 11 01.63819	02 54 55.45	+22 10 03.6		16		372
1992 UO3		1992 11 01.64931	02 54 54.70	+22 10 04.3				372
1992 UR3		1992 11 01.61736	02 33 43.79	+17 33 49.2		16.5		372
1992 UR3		1992 11 01.62777	02 33 43.41	+17 33 43.2				372
1992 UT3		1992 10 27.69688	03 35 07.69	+16 29 49.0		17		372
1992 UT3		1992 10 27.70800	03 35 07.10	+16 29 49.9				372
1992 UU4		1992 11 23.54792	03 28 56.19	+18 42 37.2		15.5		372
1992 UU4		1992 11 23.55972	03 28 55.45	+18 42 30.3				372
1992 UY4		1992 11 23.46910	03 34 36.58	+28 29 15.9		17		372
1992 UY4		1992 11 23.48785	03 34 35.92	+28 29 07.0				372
1992 UY4		1992 11 25.50139	03 33 26.23	+28 04 01.2		17		372
1992 UY4		1992 11 25.51285	03 33 25.77	+28 03 54.4				372
1992 UZ4	*	1992 10 21.60451	01 16 27.72	+02 43 46.5		18		372
1992 UZ4		1992 10 21.61597	01 16 27.04	+02 43 45.4				372
1992 UZ4		1992 10 25.55625	01 14 25.16	+02 32 08.5		18		372
1992 UZ4		1992 10 25.57431	01 14 24.84	+02 32 04.3				372
1992 UA5	*	1992 10 21.60451	01 18 31.40	+02 23 36.0		17.5		372
1992 UA5		1992 10 21.61597	01 18 30.67	+02 23 36.5				372
1992 UA5		1992 10 25.55625	01 14 42.36	+02 20 36.9		17.5		372
1992 UA5		1992 10 25.57431	01 14 41.38	+02 20 37.9				372
1992 UB5	*	1992 10 21.60451	01 19 17.04	+02 28 25.0		17.5		372
1992 UB5		1992 10 21.61597	01 19 16.50	+02 28 20.0				372
1992 UB5		1992 10 25.55625	01 16 14.16	+02 09 03.9		17.5		372

1992	UB5		1992	10	25.57431	01 16 13.82	+02	09	02.5	372
1992	UC5	*	1992	10	21.62709	01 51 57.17	+10	12	51.9	17.5 372
1992	UC5		1992	10	21.63819	01 51 56.50	+10	12	57.8	372
1992	UC5		1992	10	24.60868	01 49 51.24	+10	39	47.9	17 372
1992	UC5		1992	10	24.62050	01 49 50.21	+10	39	53.5	372
1992	UD5	*	1992	10	21.67396	02 37 33.18	+10	22	13.7	18 372
1992	UD5		1992	10	21.68646	02 37 32.15	+10	22	09.6	372
1992	UD5		1992	10	25.61146	02 33 57.52	+09	59	11.4	18 372
1992	UD5		1992	10	25.62258	02 33 56.96	+09	59	06.5	372
1992	UE5	*	1992	10	21.67396	02 39 02.55	+09	46	31.5	18 372
1992	UE5		1992	10	21.68646	02 39 02.02	+09	46	30.4	372
1992	UE5		1992	10	24.55625	02 36 34.52	+09	40	52.2	18 372
1992	UE5		1992	10	24.56771	02 36 34.16	+09	40	54.0	372
1992	UE5		1992	10	25.61146	02 35 38.57	+09	38	56.5	18 372
1992	UE5		1992	10	25.62258	02 35 37.80	+09	38	56.1	372
1992	UF5	*	1992	10	21.67396	02 40 43.43	+10	28	29.6	17.5 372
1992	UF5		1992	10	21.68646	02 40 42.84	+10	28	25.8	372
1992	UF5		1992	10	25.61146	02 37 31.45	+09	57	36.9	17 372
1992	UF5		1992	10	25.62258	02 37 30.85	+09	57	33.7	372
1992	UG5	*	1992	10	21.69826	03 05 16.43	+17	44	25.0	18 372
1992	UG5		1992	10	21.70988	03 05 15.76	+17	44	23.8	372
1992	UG5		1992	10	25.63507	03 01 44.90	+17	19	09.4	18 372
1992	UG5		1992	10	25.64688	03 01 44.44	+17	19	09.3	372
1992	UH5	*	1992	10	21.69826	03 07 12.25	+17	53	01.8	17 372
1992	UH5		1992	10	21.70988	03 07 11.54	+17	53	01.2	372
1992	UH5		1992	10	25.63507	03 04 42.44	+17	45	43.9	17 372
1992	UH5		1992	10	25.64688	03 04 41.76	+17	45	42.9	372
1992	UN6		1992	11	01.66111	03 01 04.16	+22	08	48.9	16.5 372
1992	UN6		1992	11	01.67153	03 01 03.54	+22	08	49.0	372
1992	WQ		1992	11	23.54792	03 25 38.48	+18	07	11.1	17 372
1992	WQ		1992	11	23.55972	03 25 37.76	+18	07	10.3	372
1992	WT1		1992	11	25.61632	04 19 31.36	+16	48	52.9	16 372
1992	WT1		1992	11	25.62708	04 19 30.35	+16	48	54.4	372
1992	WT1		1992	11	27.49861	04 17 35.18	+16	52	52.6	16 372
1992	WT1		1992	11	27.50764	04 17 34.56	+16	52	56.0	372
1992	WJ3	*	1992	11	21.60521	04 05 43.02	+11	52	43.1	17 372
1992	WJ3		1992	11	21.61632	04 05 42.36	+11	52	39.5	372
1992	WJ3		1992	11	23.52361	04 03 42.92	+11	44	52.3	16.5 372
1992	WJ3		1992	11	23.53472	04 03 42.32	+11	44	50.1	372
1992	WJ3		1992	11	25.63785	04 01 29.87	+11	36	39.6	16.5 372
1992	WJ3		1992	11	25.64826	04 01 29.24	+11	36	38.0	372
1992	WK3	*	1992	11	21.62777	04 08 38.64	+18	18	56.8	17 372
1992	WK3		1992	11	21.63888	04 08 37.82	+18	18	56.5	372
1992	WK3		1992	11	23.50000	04 06 48.40	+18	22	45.2	16.5 372
1992	WK3		1992	11	23.51042	04 06 47.86	+18	22	45.7	372
1992	WK3		1992	11	25.52396	04 04 48.72	+18	26	54.4	16.5 372
1992	WK3		1992	11	25.53438	04 04 48.17	+18	26	54.9	372
1992	WQ3	*	1992	11	23.46910	03 34 12.31	+28	45	50.5	17 372
1992	WQ3		1992	11	23.48785	03 34 11.66	+28	45	47.7	372
1992	WQ3		1992	11	25.50139	03 32 29.67	+28	33	09.7	17 372
1992	WQ3		1992	11	25.51285	03 32 29.04	+28	33	07.8	372
1992	WT3	*	1992	11	21.60521	04 05 48.45	+12	08	51.9	17 372
1992	WT3		1992	11	21.61632	04 05 47.58	+12	08	52.1	372
1992	WT3		1992	11	23.52361	04 03 52.78	+12	13	46.6	17 372
1992	WT3		1992	11	23.53472	04 03 52.18	+12	13	48.9	372
1992	WT3		1992	11	25.66076	04 01 42.68	+12	19	53.0	372
1992	WT3		1992	11	25.67188	04 01 41.98	+12	19	54.9	372
1992	WT3		1992	11	27.55833	03 59 48.30	+12	25	49.1	17 372
1992	WT3		1992	11	27.56806	03 59 47.80	+12	25	50.9	372

1992 WY3	*	1992 11 25.66076	04 01 21.51	+12 18 47.8	18			372
1992 WY3		1992 11 25.67188	04 01 21.02	+12 18 48.4				372
1992 WY3		1992 11 27.55833	03 59 24.09	+12 20 26.1	18			372
1992 WY3		1992 11 27.56806	03 59 23.50	+12 20 26.5				372
1992 WG4		1992 11 23.50000	04 07 46.00	+17 50 32.4	17			372
1992 WG4		1992 11 23.51042	04 07 45.41	+17 50 35.2				372
1992 WL4	*	1992 11 25.57222	04 38 47.46	+17 29 21.7	17			372
1992 WL4		1992 11 25.58234	04 38 46.63	+17 29 23.5				372
1992 WL4		1992 11 27.53836	04 36 47.18	+17 29 34.8	17			372
1992 WL4		1992 11 27.54826	04 36 46.30	+17 29 35.4				372
1992 WM4	*	1992 11 25.57222	04 41 52.33	+17 30 52.6	16.5			372
1992 WM4		1992 11 25.58234	04 41 51.86	+17 30 51.5				372
1992 WM4		1992 11 27.53836	04 39 57.93	+17 21 05.8	16.5			372
1992 WM4		1992 11 27.54826	04 39 57.48	+17 21 05.4				372
1992 WN4	*	1992 11 25.61632	04 16 31.54	+15 57 16.2	17			372
1992 WN4		1992 11 25.62708	04 16 30.84	+15 57 16.2				372
1992 WN4		1992 11 27.51771	04 14 34.51	+15 55 30.3	17			372
1992 WN4		1992 11 27.52813	04 14 34.12	+15 55 30.2				372
(2844)		1992 11 25.57222	04 39 35.12	+17 56 14.6	17.5			372
(2844)		1992 11 25.58234	04 39 34.28	+17 56 13.1				372
(3917)		1992 10 25.65938	03 09 15.99	+13 21 20.6	17.5			372
(3917)		1992 10 25.67015	03 09 15.53	+13 21 18.5				372
(3917)		1992 10 27.58610	03 07 31.19	+13 12 51.5	17			372
(3917)		1992 10 27.59722	03 07 30.67	+13 12 47.7				372
(5319)		1992 10 25.65938	03 08 44.37	+13 40 46.7	17.5			372
(5319)		1992 10 25.67015	03 08 43.49	+13 40 42.0				372
(5319)		1992 10 27.58610	03 06 52.67	+13 27 02.7	17			372
(5319)		1992 10 27.59722	03 06 52.00	+13 26 59.2				372

376 Uenohara
N. Kawasato, 3-11-10, Hana-Koganei, Kodaira, Tokyo 187, Japan
0.30-m reflector + CCD
GSC

1982 UD2		1992 10 27.56493	02 47 44.90	+15 58 08.1				376
1982 UD2		1992 10 27.59132	02 47 43.54	+15 58 04.2				376
1983 RT4		1992 10 27.53021	02 24 03.31	+09 47 28.1				376
1983 RT4		1992 10 27.54896	02 24 02.40	+09 47 19.6				376
1986 JQ		1992 10 27.56493	02 49 20.40	+16 33 08.8				376
1988 SH1		1992 10 25.61146	02 56 22.89	+14 27 10.7				376
1988 SH1		1992 10 25.63090	02 56 21.70	+14 27 01.6				376
1988 VS2		1992 10 31.69688	02 49 58.99	+11 58 44.0				376
1988 VS2		1992 10 31.72188	02 49 57.70	+11 58 25.4				376
1988 VB5		1992 10 27.56493	02 51 29.34	+15 48 53.3				376
1988 VB5		1992 10 27.59132	02 51 27.96	+15 48 33.3				376
1989 AG		1992 11 21.73229	04 31 13.42	+10 54 03.1				376
1989 AG		1992 11 22.67188	04 30 17.22	+10 55 39.2				376
1992 UN2		1992 10 31.61493	02 56 19.56	+15 51 47.8				376
1992 UN2		1992 10 31.64271	02 56 17.92	+15 51 44.1				376
1992 UN2		1992 11 14.39780	02 43 00.27	+15 31 06.9			P	376
1992 UN2		1992 11 14.40955	02 42 59.63	+15 31 04.9			P	376
1992 UX2		1992 11 14.41898	02 38 41.57	+12 13 28.2				376
1992 UX2		1992 11 14.45139	02 38 39.76	+12 13 14.3				376
1992 UY2		1992 11 14.46528	02 46 47.90	+12 27 48.1				376
1992 UY2		1992 11 14.47679	02 46 47.18	+12 27 43.6				376
1992 UZ2		1992 10 31.61493	03 00 33.61	+14 47 34.3				376
1992 UZ2		1992 10 31.64271	03 00 32.03	+14 47 30.7				376
1992 UZ2		1992 11 18.47830	02 44 58.45	+14 00 15.7				376
1992 UZ2		1992 11 18.48993	02 44 57.79	+14 00 13.3				376
1992 UG4		1992 10 31.69688	02 46 49.87	+12 07 02.4				376

1992 UG4		1992	10	31.72188	02	46	48.52	+12	07	01.9	376
1992 UY4		1992	11	29.64745	03	31	33.45	+27	16	12.0	376
1992 UY4		1992	11	29.65648	03	31	33.13	+27	16	06.7	376
1992 UU5		1992	11	02.62951	03	23	26.45	+15	24	39.4	17	376
1992 UU5		1992	11	02.65590	03	23	24.90	+15	24	37.8	376
1992 UG6	*	1992	10	31.73472	03	25	15.5	+16	24	37	N	376
1992 UG6		1992	10	31.76076	03	25	14.0	+16	24	46	N	376
1992 UG6		1992	11	02.62951	03	23	35.73	+16	34	05.5	16	376
1992 UG6		1992	11	02.65590	03	23	34.14	+16	34	12.2	376
1992 UH6	*	1992	10	31.74757	03	40	30.98	+15	37	13.5	16.5	376
1992 UH6		1992	10	31.77431	03	40	29.30	+15	37	14.8	376
1992 UH6		1992	11	02.66979	03	38	29.21	+15	39	28.1	376
1992 UH6		1992	11	02.69618	03	38	27.41	+15	39	30.6	376
1992 UH6		1992	11	18.59861	03	20	06.55	+15	57	05.5	376
1992 UH6		1992	11	18.60972	03	20	05.67	+15	57	07.6	376
1992 UJ6	*	1992	10	31.74757	03	41	26.83	+14	26	18.2	16.5	376
1992 UJ6		1992	10	31.77431	03	41	25.58	+14	26	03.1	376
1992 UJ6		1992	11	02.66979	03	40	01.21	+14	08	31.1	376
1992 UJ6		1992	11	02.69618	03	39	59.90	+14	08	18.7	376
1992 UJ6		1992	11	18.62118	03	26	21.50	+11	46	05.8	376
1992 UJ6		1992	11	18.62836	03	26	21.10	+11	46	03.2	376
1992 VC		1992	10	31.73472	03	23	48.4	+15	18	28	376
1992 VC		1992	10	31.76076	03	23	46.7	+15	18	30	376
1992 VC	*	1992	11	02.62951	03	21	44.86	+15	20	43.3	17	376
1992 VC		1992	11	02.64271	03	21	43.94	+15	20	43.7	376
1992 VC		1992	11	02.65590	03	21	43.12	+15	20	43.7	376
1992 VC		1992	11	18.54878	03	03	58.30	+15	37	48.0	376
1992 VC		1992	11	18.56007	03	03	57.48	+15	37	49.8	376
1992 VD		1992	10	31.73472	03	28	36.7	+15	50	37	376
1992 VD		1992	10	31.76076	03	28	35.1	+15	50	33	376
1992 VD		1992	11	02.61632	03	26	54.47	+15	46	20.7	376
1992 VD	*	1992	11	02.62951	03	26	53.80	+15	46	18.8	17.5	376
1992 VD		1992	11	02.64271	03	26	52.98	+15	46	17.6	376
1992 VD		1992	11	02.65590	03	26	52.23	+15	46	15.3	376
1992 VD		1992	11	18.57118	03	11	35.67	+15	09	23.2	376
1992 VD		1992	11	18.58397	03	11	34.84	+15	09	23.9	376
1992 VH	*	1992	11	02.62951	03	17	23.71	+17	09	37.4	17.5	376
1992 VH		1992	11	02.65590	03	17	22.28	+17	09	31.6	376
1992 VH		1992	11	18.52604	03	02	32.69	+16	12	52.5	376
1992 VH		1992	11	18.53542	03	02	32.19	+16	12	49.1	376
1992 VJ	*	1992	11	14.53368	02	49	29.28	+14	11	17.9	17.5	P	376
1992 VJ		1992	11	14.54456	02	49	28.83	+14	11	12.4	P	376
1992 VJ		1992	11	18.50035	02	46	32.08	+13	43	34.6	376
1992 VJ		1992	11	18.51221	02	46	31.30	+13	43	32.8	376
1992 WX		1992	11	21.71840	04	20	32.06	+11	39	20.4	16.5	376
1992 WX		1992	11	21.74549	04	20	30.09	+11	39	18.8	376
1992 WX		1992	11	22.65799	04	19	30.02	+11	37	58.8	376
1992 WX		1992	11	22.68576	04	19	28.35	+11	37	56.3	376
1992 WT1		1992	11	22.72847	04	22	28.80	+16	42	55.2	16.5	376
1992 WT1		1992	11	22.75556	04	22	26.99	+16	42	56.4	376
1992 WT2		1992	11	22.71493	04	23	41.6	+15	24	55	17	N	376
1992 WT2		1992	11	22.74201	04	23	39.7	+15	24	52	N	376
1992 WL3	*	1992	11	21.71840	04	17	42.75	+11	14	10.7	17	376
1992 WL3		1992	11	21.74549	04	17	41.47	+11	14	02.2	376
1992 WL3		1992	11	22.65799	04	16	58.60	+11	09	37.5	376
1992 WL3		1992	11	22.68576	04	16	57.13	+11	09	29.3	376
(1502)		1992	11	02.62951	03	27	02.87	+16	06	22.5	16	376
(1502)		1992	11	02.65590	03	27	01.47	+16	06	13.8	376

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

1990 DX		1992 11 18.62245	04 46 05.37	+27 39 07.1	17.5		385
1990 DX		1992 11 18.63472	04 46 04.61	+27 39 04.8			385
1992 UX		1992 11 18.60694	02 10 38.33	+07 20 21.7	16.8		385
1992 UX		1992 11 18.61528	02 10 38.05	+07 20 20.9			385
1992 UY		1992 11 14.44097	02 24 11.82	+04 32 32.9	16.8		385
1992 UY		1992 11 14.45451	02 24 11.32	+04 32 27.0			385
1992 UZ		1992 11 18.60694	02 15 41.63	+06 29 25.4	16.5		385
1992 UZ		1992 11 18.61528	02 15 41.34	+06 29 30.0			385
1992 UO2		1992 11 14.46146	02 21 55.46	+26 28 55.8	15.5		385
1992 UO2		1992 11 14.46563	02 21 55.12	+26 28 55.8			385
1992 UT3		1992 11 14.47141	03 16 47.78	+16 40 36.4	16.3		385
1992 UT3		1992 11 14.47917	03 16 47.25	+16 40 36.8			385
1992 WM3	*	1992 11 23.58576	05 37 07.99	+23 09 59.4	16.5		385
1992 WM3		1992 11 23.60139	05 37 07.15	+23 10 01.1			385
1992 WN3	*	1992 11 23.58576	05 37 41.63	+24 15 19.5	16.5		385
1992 WN3		1992 11 23.60139	05 37 40.93	+24 15 25.3			385
1992 WO3	*	1992 11 23.69167	05 52 17.08	-00 42 27.3	16.5		385
1992 WO3		1992 11 23.70694	05 52 16.55	-00 42 49.5			385
1992 WO3		1992 11 24.61528	05 51 50.16	-01 05 55.9	16.3		385
1992 WO3		1992 11 24.62155	05 51 49.90	-01 06 06.2			385

399 Kushiro
H. Kaneda, Taiyo MS 2-H, 2 chome 2-15, Kawazoe 8 jo, Minami-ku,
Sapporo 005, Japan
Observer S. Ueda
Measurer H. Kaneda
0.25-m f/3.4 hyperboloid astrocamera
GSC

1981 VF		1992 10 28.66250	03 37 21.85	+21 48 36.5	16		399
1981 VF		1992 10 28.67708	03 37 20.91	+21 48 38.0			399
1986 TB5		1992 11 16.49306	03 21 55.16	+18 56 58.5	16.5		399
1986 TB5		1992 11 16.50764	03 21 54.41	+18 56 56.0			399
1988 BZ1		1992 11 18.60116	04 00 40.36	+19 38 35.9	16.7		399
1988 BZ1		1992 11 18.61632	04 00 39.61	+19 38 34.3			399
1988 BZ1		1992 11 21.52986	03 58 11.29	+19 31 00.5	16.8		399
1988 BZ1		1992 11 21.54444	03 58 10.62	+19 30 56.6			399
1988 PK		1992 10 28.51493	02 17 08.38	+07 01 41.5	16.7		399
1988 PK		1992 10 28.52957	02 17 07.47	+07 01 37.0			399
1988 TD		1992 10 28.66250	03 39 30.71	+21 50 35.6	16.8		399
1988 TD		1992 10 28.67708	03 39 30.10	+21 50 34.0			399
1988 TD		1992 11 02.63218	03 34 57.10	+21 34 10.4	16.8		399
1988 TD		1992 11 02.64653	03 34 56.27	+21 34 08.9			399
1988 TD		1992 11 16.49306	03 20 48.38	+20 36 14.6	16.5		399
1988 TD		1992 11 16.50764	03 20 47.45	+20 36 11.8			399
1988 TD		1992 11 18.50150	03 18 45.73	+20 27 01.1	17		399
1988 TD		1992 11 18.51597	03 18 44.80	+20 26 55.8			399
1989 AN1		1992 10 28.62014	03 19 02.20	+18 18 31.5	16.7		399
1989 AN1		1992 10 28.63507	03 19 01.38	+18 18 27.2			399
1989 AN1		1992 11 02.59931	03 14 41.71	+18 05 44.0	16.3		399
1989 AN1		1992 11 02.61389	03 14 40.95	+18 05 42.8			399
1989 EQ		1992 09 28.55781	23 49 31.21	+09 22 53.3	16.5		399
1989 EQ		1992 09 28.57274	23 49 30.49	+09 22 50.9			399
1989 YA3		1990 01 23.50417	08 34 52.21	+14 39 27.4	16.7		399
1989 YA3		1990 01 23.51898	08 34 51.17	+14 39 28.0			399
1990 CZ	*	1990 02 14.50556	08 32 02.73	+14 56 13.5	16.5		399

1990 CZ		1990	02	14.52083	08	32	01.88	+14 56 15.1		399
1990 DD1		1990	02	16.60162	10	26	35.42	+10 13 51.2	16.5	399
1990 DD1		1990	02	16.61597	10	26	34.57	+10 13 58.0		399
1991 PE5		1992	10	28.62014	03	14	37.05	+18 39 54.2	17	399
1991 PE5		1992	10	28.63507	03	14	36.27	+18 39 50.5		399
1991 PE5		1992	11	02.59931	03	10	28.31	+18 21 59.0	16.8	399
1991 PE5		1992	11	02.61389	03	10	27.63	+18 21 58.1		399
1992 BB5	*	1992	01	28.60602	09	45	57.77	+19 44 08.5	17	399
1992 BB5		1992	01	28.62118	09	45	56.85	+19 44 15.5		399
1992 BB5		1992	01	29.59381	09	45	13.35	+19 50 08.7	17	399
1992 BB5		1992	02	05.55417	09	39	44.91	+20 31 36.2	17	399
1992 BB5		1992	02	05.56947	09	39	44.01	+20 31 41.3		399
1992 BB5		1992	02	08.63264	09	37	14.06	+20 49 08.9	17	399
1992 BB5		1992	02	08.64757	09	37	13.30	+20 49 12.1		399
1992 BB5		1992	02	21.45833	09	26	59.79	+21 53 10.9	17	399
1992 BB5		1992	02	21.47326	09	26	59.11	+21 53 15.3		399
1992 BB5		1992	02	22.46042	09	26	14.74	+21 57 26.7	17	399
1992 SR1		1990	01	23.50417	08	39	02.31	+15 12 26.9	16.5	399
1992 SR1		1990	01	23.51898	08	39	01.20	+15 12 28.0		399
1992 SX12		1992	10	28.48194	00	48	08.91	+00 28 18.4	16	399
1992 SX12		1992	10	28.49653	00	48	08.28	+00 28 13.3		399
1992 SL16	*	1992	09	28.66683	01	19	26.28	+00 01 19.0	17	399
1992 SL16		1992	09	28.68270	01	19	25.38	+00 01 12.7		399
1992 SL16		1992	10	22.55486	00	56	25.49	-02 04 33.9	17	399
1992 SL16		1992	10	22.56944	00	56	24.63	-02 04 37.0		399
1992 SL16		1992	10	28.48194	00	51	20.48	-02 24 01.4	17.2	399
1992 SL16		1992	10	28.49653	00	51	19.70	-02 24 03.0		399
1992 UH		1992	10	28.44954	01	21	40.33	+12 25 49.5	16.8	399
1992 UH		1992	10	28.46400	01	21	39.70	+12 25 46.6		399
1992 UJ		1992	10	28.44954	01	22	57.43	+13 30 36.7	17	399
1992 UJ		1992	10	28.46400	01	22	56.64	+13 30 34.3		399
1992 UL		1992	10	28.44954	01	27	59.00	+14 51 14.4	17	399
1992 UL		1992	10	28.46400	01	27	57.95	+14 51 10.2		399
1992 UM		1992	10	28.44954	01	30	15.93	+12 48 09.0	16.7	399
1992 UM		1992	10	28.46400	01	30	15.11	+12 48 09.4		399
1992 UN		1992	11	16.45347	01	27	47.96	+07 40 35.6	17	399
1992 UN		1992	11	16.47431	01	27	47.45	+07 40 33.7		399
1992 UN		1992	11	18.45839	01	26	58.17	+07 35 47.7	17.3	399
1992 UN		1992	11	18.48125	01	26	57.57	+07 35 44.8		399
1992 UO		1992	11	16.45347	01	28	46.56	+07 53 05.5	17.3	399
1992 UO		1992	11	16.47431	01	28	45.80	+07 53 02.8		399
1992 UO		1992	11	18.45839	01	27	42.78	+07 49 04.1	17.2	399
1992 UO		1992	11	18.48125	01	27	41.98	+07 49 00.2		399
1992 UP		1992	11	16.45347	01	31	14.05	+07 20 58.8	17.2	399
1992 UP		1992	11	16.47431	01	31	13.26	+07 20 56.3		399
1992 UP		1992	11	18.45839	01	30	12.30	+07 16 33.7	17.3	399
1992 UP		1992	11	18.48125	01	30	11.73	+07 16 31.5		399
1992 UA1		1992	11	02.56458	01	24	47.16	+19 55 10.6	16	399
1992 UA1		1992	11	02.57917	01	24	46.15	+19 55 10.7		399
1992 UB1		1992	11	16.41458	01	20	39.55	+14 27 08.7	16.5	399
1992 UB1		1992	11	16.43542	01	20	38.89	+14 26 58.1		399
1992 UB1		1992	11	18.41736	01	19	46.20	+14 12 49.1	16.7	399
1992 UB1		1992	11	18.43958	01	19	45.43	+14 12 38.3		399
1992 UJ1		1992	10	28.44954	01	33	01.27	+11 49 58.7	17.2	399
1992 UJ1		1992	10	28.46400	01	33	00.75	+11 49 44.7		399
1992 UK1		1992	11	02.56458	01	23	10.07	+19 56 29.3	16.7	399
1992 UK1		1992	11	02.57917	01	23	09.39	+19 56 22.8		399
1992 US1		1992	11	16.45347	01	30	14.13	+07 04 17.2	17.2	399
1992 US1		1992	11	16.47431	01	30	13.20	+07 04 19.7		399

1992	US1		1992	11	18.45839	01	29	05.37	+07 10 34.2	17	399
1992	US1		1992	11	18.48125	01	29	04.68	+07 10 39.7		399
1992	UW2		1992	11	16.45347	01	36	24.27	+06 57 27.8	17	399
1992	UW2		1992	11	16.47431	01	36	23.47	+06 57 30.5		399
1992	UW2		1992	11	18.45839	01	35	22.30	+07 02 50.7	17	399
1992	UW2		1992	11	18.48125	01	35	21.52	+07 02 52.9		399
1992	UE3		1992	10	28.51493	02	12	28.01	+09 07 18.9	17	399
1992	UE3		1992	10	28.52957	02	12	27.26	+09 07 14.6		399
1992	UH3		1992	11	16.41458	01	17	40.87	+13 23 26.7	17	399
1992	UH3		1992	11	16.43542	01	17	40.19	+13 23 26.0		399
1992	UH3		1992	11	18.41736	01	16	37.10	+13 22 15.2	16.8	399
1992	UH3		1992	11	18.43958	01	16	36.45	+13 22 14.7		399
1992	UT3		1992	11	16.49306	03	14	31.36	+16 41 35.6	16	399
1992	UT3		1992	11	16.50764	03	14	30.35	+16 41 35.6		399
1992	US5	*	1992	10	28.55046	03	24	14.55	+33 27 11.5	16.5	399
1992	US5		1992	10	28.56505	03	24	13.68	+33 27 12.3		399
1992	US5		1992	11	02.68125	03	19	39.44	+33 24 05.6	16.5	399
1992	US5		1992	11	02.69583	03	19	38.71	+33 24 04.2		399
1992	UT5		1992	10	28.62014	03	20	24.90	+17 34 01.3	17	399
1992	UT5		1992	10	28.63507	03	20	24.18	+17 33 58.2		399
1992	UU5		1992	11	02.59931	03	23	27.83	+15 24 38.2	16.5	399
1992	UU5		1992	11	02.61389	03	23	27.23	+15 24 37.6		399
1992	UV5	*	1992	10	28.62014	03	23	00.93	+16 15 23.1	16.7	399
1992	UV5		1992	10	28.63507	03	23	00.40	+16 15 14.9		399
1992	UV5		1992	11	02.59931	03	20	47.15	+15 30 24.7	16.5	399
1992	UV5		1992	11	02.61389	03	20	46.59	+15 30 17.5		399
1992	UA6	*	1992	10	28.66250	03	39	57.52	+23 46 07.4	16.7	399
1992	UA6		1992	10	28.67708	03	39	56.75	+23 46 05.4		399
1992	UA6		1992	11	02.63218	03	35	33.57	+23 30 06.4	16.7	399
1992	UA6		1992	11	02.64653	03	35	32.79	+23 30 04.6		399
1992	UA6		1992	11	18.53588	03	19	25.59	+22 17 57.5	17.2	399
1992	UA6		1992	11	18.55058	03	19	24.74	+22 17 52.3		399
1992	UA6		1992	11	21.46528	03	16	28.05	+22 02 20.5	17	399
1992	UA6		1992	11	21.47986	03	16	27.22	+22 02 17.0		399
1992	UB6	*	1992	10	28.66250	03	40	38.08	+25 02 48.2	16.7	399
1992	UB6		1992	10	28.67708	03	40	37.41	+25 02 48.4		399
1992	UB6		1992	11	02.63218	03	35	54.89	+25 03 43.8	16.7	399
1992	UB6		1992	11	02.64653	03	35	53.97	+25 03 44.0		399
1992	UC6	*	1992	10	28.66250	03	43	18.49	+22 45 50.0	16.7	399
1992	UC6		1992	10	28.67708	03	43	17.67	+22 45 43.2		399
1992	UC6		1992	11	02.63218	03	39	08.58	+22 10 57.7	16.8	399
1992	UC6		1992	11	02.64653	03	39	07.73	+22 10 51.9		399
1992	UC6		1992	11	16.49306	03	25	39.40	+20 17 41.1	16.5	399
1992	UC6		1992	11	16.50764	03	25	38.48	+20 17 32.4		399
1992	UC6		1992	11	18.50150	03	23	39.02	+20 00 10.2	17.2	399
1992	UC6		1992	11	18.51597	03	23	38.16	+20 00 02.6		399
1992	UE6		1992	11	21.49792	03	47	41.15	+18 29 35.6	16	399
1992	UE6		1992	11	21.51262	03	47	39.92	+18 29 38.7		399
1992	UG6		1992	11	02.59931	03	23	37.31	+16 33 54.8	15.5	399
1992	UG6		1992	11	02.61389	03	23	36.54	+16 33 59.1		399
1992	UQ6	*	1992	10	28.55046	03	30	23.46	+31 40 27.5	16.5	399
1992	UQ6		1992	10	28.56505	03	30	22.77	+31 40 29.6		399
1992	UQ6		1992	11	02.68125	03	25	26.11	+31 45 01.1	16.5	399
1992	UQ6		1992	11	02.69583	03	25	25.38	+31 45 00.3		399
1992	VA		1992	10	28.62014	03	14	48.12	+16 56 21.1	17	399
1992	VA		1992	10	28.63507	03	14	47.30	+16 56 18.2		399
1992	VA	*	1992	11	02.59931	03	09	48.26	+16 38 15.3	16.7	399
1992	VA		1992	11	02.61389	03	09	47.51	+16 38 14.2		399
1992	VB		1992	10	28.62014	03	26	33.37	+17 31 32.2	17.2	399

1992	VB		1992	10	28.63507	03 26 32.61	+17 31 29.2			399
1992	VB	*	1992	11	02.59931	03 22 08.77	+17 10 56.4		17	399
1992	VB		1992	11	02.61389	03 22 07.82	+17 10 51.1			399
1992	VC		1992	11	02.59931	03 21 46.72	+15 20 38.6		16.8	399
1992	VC		1992	11	02.61389	03 21 45.70	+15 20 38.7			399
1992	VE		1992	10	28.66250	03 43 03.35	+24 33 29.5		16.8	399
1992	VE		1992	10	28.67708	03 43 02.53	+24 33 29.0			399
1992	VE	*	1992	11	02.63218	03 38 20.67	+24 33 53.7		16.7	399
1992	VE		1992	11	02.64653	03 38 19.74	+24 33 52.8			399
1992	VE		1992	11	18.53588	03 20 25.84	+24 10 17.4		16.3	399
1992	VE		1992	11	18.55058	03 20 24.85	+24 10 16.3			399
1992	VE		1992	11	21.46528	03 17 03.46	+24 02 26.7		16	399
1992	VE		1992	11	21.47986	03 17 02.50	+24 02 25.5			399
1992	VF		1992	11	21.56215	04 03 09.87	+16 40 09.5		16.3	399
1992	VF		1992	11	21.57708	04 03 08.84	+16 40 04.3			399
1992	VH		1992	11	02.59931	03 17 25.29	+17 09 45.2		16.8	399
1992	VH		1992	11	02.61389	03 17 24.51	+17 09 41.6			399
1992	WB		1992	10	28.44954	01 33 46.67	+12 09 19.4		16.3	399
1992	WB		1992	10	28.46400	01 33 45.64	+12 09 17.4			399
1992	WB	*	1992	11	16.41458	01 18 37.61	+12 00 45.9		16.5	399
1992	WB		1992	11	16.43542	01 18 36.67	+12 00 44.7			399
1992	WB		1992	11	18.41736	01 17 31.34	+12 01 13.7		17	399
1992	WB		1992	11	18.43958	01 17 30.48	+12 01 16.0			399
1992	WC	*	1992	11	16.41458	01 18 46.04	+15 50 47.5		17	399
1992	WC		1992	11	16.43542	01 18 45.30	+15 50 46.4			399
1992	WC		1992	11	18.41736	01 17 32.44	+15 49 13.1		17	399
1992	WC		1992	11	18.43958	01 17 31.69	+15 49 10.8			399
1992	WD	*	1992	11	16.41458	01 25 02.22	+13 03 05.5		16	399
1992	WD		1992	11	16.43542	01 25 01.44	+13 03 04.3			399
1992	WD		1992	11	18.41736	01 23 58.38	+13 03 01.2		16.2	399
1992	WD		1992	11	18.43958	01 23 57.66	+13 03 00.1			399
1992	WE	*	1992	11	16.41458	01 26 24.50	+14 49 09.3		17	399
1992	WE		1992	11	16.43542	01 26 23.95	+14 49 01.4			399
1992	WE		1992	11	18.41736	01 25 29.60	+14 35 54.6		17.2	399
1992	WE		1992	11	18.43958	01 25 29.12	+14 35 45.5			399
1992	WF	*	1992	11	16.41458	01 27 44.04	+14 00 39.0		16.5	399
1992	WF		1992	11	16.43542	01 27 43.37	+14 00 38.8			399
1992	WF		1992	11	18.41736	01 26 43.12	+13 59 52.2		16.7	399
1992	WF		1992	11	18.43958	01 26 42.55	+13 59 52.8			399
1992	WG	*	1992	11	16.49306	03 17 30.86	+17 45 24.4		16.2	399
1992	WG		1992	11	16.50764	03 17 30.04	+17 45 26.8			399
1992	WG		1992	11	18.50150	03 15 31.62	+17 48 32.7		17	399
1992	WG		1992	11	18.51597	03 15 30.73	+17 48 33.3			399
1992	WH	*	1992	11	16.49306	03 19 46.70	+18 32 30.4		16.5	399
1992	WH		1992	11	16.50764	03 19 45.74	+18 32 23.4			399
1992	WH		1992	11	18.50150	03 17 43.24	+18 19 34.2		17	399
1992	WH		1992	11	18.51597	03 17 42.30	+18 19 29.5			399
1992	WJ	*	1992	11	16.49306	03 20 03.07	+20 36 10.5		17	399
1992	WJ		1992	11	16.50764	03 20 02.29	+20 36 05.7			399
1992	WJ		1992	11	18.50150	03 17 53.50	+20 30 52.7		17	399
1992	WJ		1992	11	18.51597	03 17 52.57	+20 30 49.9			399
1992	WK	*	1992	11	16.49306	03 20 29.92	+17 31 14.3		17.2	399
1992	WK		1992	11	16.50764	03 20 29.02	+17 31 06.3			399
1992	WK		1992	11	18.50150	03 18 41.59	+17 22 29.6		17.3	399
1992	WK		1992	11	18.51597	03 18 40.70	+17 22 23.6			399
1992	WL	*	1992	11	16.49306	03 22 45.60	+20 38 12.6		16.5	399
1992	WL		1992	11	16.50764	03 22 44.75	+20 38 12.2			399
1992	WL		1992	11	18.50150	03 20 50.79	+20 37 46.7		16.5	399
1992	WL		1992	11	18.51597	03 20 49.91	+20 37 47.2			399

1992	WM	*	1992 11	16.49306	03 26 42.32	+19 37 31.5	16.5		399
1992	WM		1992 11	16.50764	03 26 41.30	+19 37 32.7			399
1992	WM		1992 11	18.50150	03 24 18.73	+19 38 05.0	16.8		399
1992	WM		1992 11	18.51597	03 24 17.85	+19 38 06.8			399
1992	WN	*	1992 11	16.49306	03 29 19.82	+19 53 26.6	17		399
1992	WN		1992 11	16.50764	03 29 18.95	+19 53 18.4			399
1992	WN		1992 11	18.50150	03 27 24.44	+19 36 47.4	17.2		399
1992	WN		1992 11	18.51597	03 27 23.55	+19 36 42.4			399
1992	WO		1992 11	18.50150	03 27 56.98	+17 09 33.2	16.2		399
1992	WO		1992 11	18.51597	03 27 56.02	+17 09 32.0			399
1992	WS		1992 11	18.56944	03 40 07.79	+19 19 04.9	16.2		399
1992	WS		1992 11	18.58403	03 40 06.91	+19 19 00.5			399
1992	WS		1992 11	21.49792	03 37 00.32	+18 59 13.0	16.5		399
1992	WS		1992 11	21.51262	03 36 59.44	+18 59 07.5			399
1992	WT		1992 11	18.56944	03 40 36.45	+19 13 40.7	16.5		399
1992	WT		1992 11	18.58403	03 40 35.44	+19 13 37.7			399
1992	WT		1992 11	21.49792	03 37 08.29	+19 10 39.3	16.5		399
1992	WT		1992 11	21.51262	03 37 07.14	+19 10 38.2			399
1992	WU		1992 11	18.56944	03 44 25.39	+18 55 59.2	16.5		399
1992	WU		1992 11	18.58403	03 44 24.51	+18 55 54.2			399
1992	WU		1992 11	21.49792	03 41 35.09	+18 33 10.4	16.5		399
1992	WU		1992 11	21.51262	03 41 34.25	+18 33 05.6			399
1992	WY		1992 11	18.60116	03 57 54.38	+19 33 58.7	17		399
1992	WY		1992 11	18.61632	03 57 53.40	+19 33 52.0			399
1992	WY		1992 11	21.52986	03 54 40.90	+19 13 33.9	17.2		399
1992	WY		1992 11	21.54444	03 54 39.91	+19 13 28.2			399
1992	WZ		1992 11	18.60116	03 58 41.00	+20 39 57.2	16		399
1992	WZ		1992 11	18.61632	03 58 39.96	+20 39 57.4			399
1992	WZ		1992 11	21.52986	03 55 19.22	+20 43 53.8	16		399
1992	WZ		1992 11	21.54444	03 55 18.14	+20 43 55.5			399
1992	WA1		1992 11	18.60116	04 03 48.77	+21 41 21.0	17		399
1992	WA1		1992 11	18.61632	04 03 47.78	+21 41 21.0			399
1992	WB1		1992 11	18.60116	04 07 00.92	+22 04 22.9	16.5		399
1992	WB1		1992 11	18.61632	04 06 59.89	+22 04 27.8			399
1992	WB1		1992 11	21.52986	04 04 17.48	+22 14 28.3	16.3		399
1992	WB1		1992 11	21.54444	04 04 16.69	+22 14 31.9			399
1992	WJ1		1992 11	21.56215	03 59 20.93	+15 21 13.6	16.3		399
1992	WJ1		1992 11	21.57708	03 59 19.97	+15 21 17.0			399
1992	WJ1		1992 11	27.50370	03 52 40.87	+15 48 30.4	16.5		399
1992	WJ1		1992 11	27.51806	03 52 39.87	+15 48 33.1			399
1992	WM1		1992 11	21.59375	04 14 15.69	+14 50 36.6	16.5		399
1992	WM1		1992 11	21.60833	04 14 14.60	+14 50 38.0			399
1992	WM1		1992 11	27.56944	04 07 43.13	+14 57 01.6	16.5		399
1992	WM1		1992 11	27.58403	04 07 42.11	+14 57 04.9			399
1992	WV1	*	1992 11	16.49306	03 26 24.33	+18 12 15.5	16.8		399
1992	WV1		1992 11	16.50764	03 26 23.31	+18 12 16.2			399
1992	WV1		1992 11	18.50150	03 24 19.46	+18 11 00.1	17		399
1992	WV1		1992 11	18.51597	03 24 18.55	+18 10 57.6			399
1992	WW1	*	1992 11	18.53588	03 13 58.81	+23 58 21.6	17		399
1992	WW1		1992 11	18.55058	03 13 57.97	+23 58 13.0			399
1992	WW1		1992 11	21.46528	03 11 08.96	+23 32 20.5	17		399
1992	WW1		1992 11	21.47986	03 11 07.95	+23 32 12.7			399
1992	WX1		1992 10	28.66250	03 37 08.63	+24 53 32.1	17.3		399
1992	WX1		1992 10	28.67708	03 37 07.69	+24 53 29.2			399
1992	WX1		1992 11	02.63218	03 32 35.17	+24 36 40.4	17.2		399
1992	WX1		1992 11	02.64653	03 32 34.45	+24 36 38.8			399
1992	WX1	*	1992 11	18.53588	03 15 48.07	+23 15 32.3	17		399
1992	WX1		1992 11	18.55058	03 15 47.31	+23 15 26.2			399
1992	WX1		1992 11	21.46528	03 12 46.32	+22 57 35.4	17		399

1992	WX1		1992	11	21.47986	03 12 45.25	+22 57 29.4		399
1992	WY1		1992	10	28.66250	03 41 20.46	+24 03 43.9	17.3	399
1992	WY1		1992	10	28.67708	03 41 19.59	+24 03 41.7		399
1992	WY1		1992	11	02.63218	03 36 45.31	+24 00 07.3	17.2	399
1992	WY1		1992	11	02.64653	03 36 44.45	+24 00 05.7		399
1992	WY1	*	1992	11	18.53588	03 19 32.75	+23 26 35.3	17	399
1992	WY1		1992	11	18.55058	03 19 31.76	+23 26 32.7		399
1992	WY1		1992	11	21.46528	03 16 18.33	+23 17 28.8	17	399
1992	WY1		1992	11	21.47986	03 16 17.14	+23 17 26.8		399
1992	WZ1		1992	10	28.66250	03 40 53.98	+23 28 54.2	17	399
1992	WZ1		1992	10	28.67708	03 40 53.10	+23 28 55.5		399
1992	WZ1		1992	11	02.63218	03 36 35.76	+23 36 11.7	17	399
1992	WZ1		1992	11	02.64653	03 36 35.06	+23 36 11.6		399
1992	WZ1	*	1992	11	18.53588	03 21 13.12	+23 45 15.0	16.8	399
1992	WZ1		1992	11	18.55058	03 21 12.28	+23 45 14.8		399
1992	WZ1		1992	11	21.46528	03 18 21.62	+23 44 51.8	16.8	399
1992	WZ1		1992	11	21.47986	03 18 20.80	+23 44 52.3		399
1992	WA2	*	1992	11	18.53588	03 26 12.07	+24 00 49.2	16.5	399
1992	WA2		1992	11	18.55058	03 26 11.13	+24 00 44.2		399
1992	WA2		1992	11	21.46528	03 23 05.90	+23 42 43.6	16.8	399
1992	WA2		1992	11	21.47986	03 23 04.90	+23 42 37.4		399
1992	WB2	*	1992	11	18.56944	03 37 51.65	+22 16 49.0	17	399
1992	WB2		1992	11	18.58403	03 37 50.80	+22 16 48.7		399
1992	WB2		1992	11	21.49792	03 34 50.02	+22 06 35.5	17	399
1992	WB2		1992	11	21.51262	03 34 49.16	+22 06 33.1		399
1992	WC2	*	1992	11	18.56944	03 39 07.95	+19 18 00.1	17.2	399
1992	WC2		1992	11	18.58403	03 39 07.12	+19 18 00.0		399
1992	WC2		1992	11	21.49792	03 36 36.68	+19 10 01.3	17	399
1992	WC2		1992	11	21.51262	03 36 35.80	+19 10 00.1		399
1992	WD2	*	1992	11	18.56944	03 40 56.71	+21 19 46.6	17	399
1992	WD2		1992	11	18.58403	03 40 55.57	+21 19 53.1		399
1992	WD2		1992	11	21.49792	03 36 09.96	+21 47 38.7	17	399
1992	WD2		1992	11	21.51262	03 36 08.37	+21 47 48.2		399
1992	WE2	*	1992	11	18.56944	03 42 42.31	+21 54 01.9	16.3	399
1992	WE2		1992	11	18.58403	03 42 41.29	+21 54 03.0		399
1992	WE2		1992	11	21.49792	03 39 32.25	+21 56 33.5	16.7	399
1992	WE2		1992	11	21.51262	03 39 31.28	+21 56 34.7		399
1992	WF2	*	1992	11	18.56944	03 44 12.79	+22 05 41.7	17	399
1992	WF2		1992	11	18.58403	03 44 11.94	+22 05 37.5		399
1992	WF2		1992	11	21.49792	03 41 27.69	+21 58 32.5	17	399
1992	WF2		1992	11	21.51262	03 41 26.81	+21 58 29.4		399
1992	WG2	*	1992	11	18.56944	03 45 49.78	+21 03 00.8	16	399
1992	WG2		1992	11	18.58403	03 45 48.93	+21 02 57.9		399
1992	WG2		1992	11	21.49792	03 42 52.18	+20 51 55.2	16	399
1992	WG2		1992	11	21.51262	03 42 51.22	+20 51 51.8		399
1992	WH2	*	1992	11	18.56944	03 48 08.96	+20 40 04.8	16.7	399
1992	WH2		1992	11	18.58403	03 48 08.22	+20 40 01.4		399
1992	WH2		1992	11	21.49792	03 45 38.62	+20 23 10.4	16.5	399
1992	WH2		1992	11	21.51262	03 45 37.90	+20 23 04.9		399
1992	WJ2	*	1992	11	18.56944	03 48 27.12	+21 31 37.3	16.5	399
1992	WJ2		1992	11	18.58403	03 48 26.10	+21 31 37.9		399
1992	WJ2		1992	11	21.49792	03 44 56.84	+21 31 27.6	16.8	399
1992	WJ2		1992	11	21.51262	03 44 55.89	+21 31 28.4		399
1992	WK2	*	1992	11	18.56944	03 49 19.01	+21 07 49.5	17.2	399
1992	WK2		1992	11	18.58403	03 49 18.20	+21 07 46.1		399
1992	WK2		1992	11	21.49792	03 46 11.54	+20 53 38.8	17.2	399
1992	WK2		1992	11	21.51262	03 46 10.41	+20 53 34.0		399
1992	WL2	*	1992	11	18.56944	03 50 58.35	+21 00 18.8	17	399
1992	WL2		1992	11	18.58403	03 50 57.39	+21 00 18.9		399

1992	WL2		1992	11	21.49792	03 47 48.08	+21 03 49.6	17		399
1992	WL2		1992	11	21.51262	03 47 47.24	+21 03 51.0			399
1992	WM2	*	1992	11	18.56944	03 51 59.77	+21 00 43.6	17.2		399
1992	WM2		1992	11	18.58403	03 51 58.87	+21 00 39.0			399
1992	WM2		1992	11	21.49792	03 49 25.09	+20 54 42.4	17.2		399
1992	WM2		1992	11	21.51262	03 49 24.28	+20 54 38.4			399
1992	WN2	*	1992	11	18.60116	03 53 25.18	+19 40 49.8	17		399
1992	WN2		1992	11	18.61632	03 53 24.18	+19 40 50.9			399
1992	WN2		1992	11	21.52986	03 50 26.94	+19 45 28.0	17		399
1992	WN2		1992	11	21.54444	03 50 25.86	+19 45 29.1			399
1992	WO2	*	1992	11	18.60116	03 54 54.08	+20 12 40.3	16.7		399
1992	WO2		1992	11	18.61632	03 54 53.06	+20 12 33.4			399
1992	WO2		1992	11	21.52986	03 51 31.35	+19 53 38.7	16.7		399
1992	WO2		1992	11	21.54444	03 51 30.31	+19 53 34.3			399
1992	WP2	*	1992	11	18.60116	03 58 42.48	+20 19 06.2	17.2		399
1992	WP2		1992	11	18.61632	03 58 41.60	+20 19 06.0			399
1992	WP2		1992	11	21.52986	03 55 22.17	+20 21 55.9	16.7		399
1992	WP2		1992	11	21.54444	03 55 21.04	+20 21 56.7			399
1992	WQ2	*	1992	11	18.60116	03 58 57.74	+20 44 22.5	16.8		399
1992	WQ2		1992	11	18.61632	03 58 56.69	+20 44 15.0			399
1992	WQ2		1992	11	21.52986	03 55 45.43	+20 22 54.8	17		399
1992	WQ2		1992	11	21.54444	03 55 44.32	+20 22 46.2			399
1992	WR2	*	1992	11	18.60116	04 05 04.22	+20 17 25.6	17		399
1992	WR2		1992	11	18.61632	04 05 03.35	+20 17 24.3			399
1992	WR2		1992	11	21.52986	04 02 19.92	+20 12 38.6	16.8		399
1992	WR2		1992	11	21.54444	04 02 19.14	+20 12 36.7			399
1992	WS2	*	1992	11	18.60116	04 07 17.90	+21 55 11.4	17		399
1992	WS2		1992	11	18.61632	04 07 17.11	+21 55 11.5			399
1992	WS2		1992	11	21.52986	04 04 45.16	+21 49 01.0	17		399
1992	WS2		1992	11	21.54444	04 04 44.28	+21 49 01.0			399
1992	WZ2	*	1992	11	18.56944	03 49 26.73	+21 28 17.1	17		399
1992	WZ2		1992	11	18.58403	03 49 25.64	+21 28 19.0			399
1992	WZ2		1992	11	21.49792	03 45 59.66	+21 39 27.4	17.2		399
1992	WZ2		1992	11	21.51262	03 45 58.53	+21 39 31.2			399
1992	WA3	*	1992	11	18.60116	03 57 33.99	+23 19 28.3	16.8		399
1992	WA3		1992	11	18.61632	03 57 33.13	+23 19 26.5			399
1992	WA3		1992	11	21.52986	03 54 32.04	+23 15 58.6	17		399
1992	WA3		1992	11	21.54444	03 54 31.15	+23 15 56.6			399
1992	WB3	*	1992	11	18.60116	03 57 49.80	+22 18 43.5	17.3		399
1992	WB3		1992	11	18.61632	03 57 48.86	+22 18 40.2			399
1992	WB3		1992	11	21.52986	03 55 09.54	+22 11 16.8	17.3		399
1992	WB3		1992	11	21.54444	03 55 08.74	+22 11 14.1			399
1992	WE3	*	1992	11	18.60116	04 00 43.15	+20 55 09.6	17		399
1992	WE3		1992	11	18.61632	04 00 42.21	+20 55 02.9			399
1992	WE3		1992	11	21.52986	03 57 33.47	+20 37 45.9	17.2		399
1992	WE3		1992	11	21.54444	03 57 32.59	+20 37 39.3			399
1992	WF3	*	1992	11	18.60116	04 02 19.15	+20 58 19.1	16.8		399
1992	WF3		1992	11	18.61632	04 02 18.15	+20 58 17.2			399
1992	WF3		1992	11	21.52986	03 59 10.85	+20 52 29.2	17		399
1992	WF3		1992	11	21.54444	03 59 09.80	+20 52 27.6			399
1992	WG3	*	1992	11	18.60116	04 05 59.06	+19 14 51.3	17.2		399
1992	WG3		1992	11	18.61632	04 05 58.05	+19 14 45.9			399
1992	WG3		1992	11	21.52986	04 03 07.15	+19 03 45.6	17		399
1992	WG3		1992	11	21.54444	04 03 06.05	+19 03 41.5			399
1992	WH3		1992	11	21.56215	03 55 32.83	+17 34 36.5	17.2		399
1992	WH3		1992	11	21.57708	03 55 31.90	+17 34 35.7			399
1992	WK3		1992	11	21.59375	04 08 40.43	+18 18 48.9	17		399
1992	WK3		1992	11	21.60833	04 08 39.49	+18 18 50.9			399
1992	WK3		1992	11	27.56944	04 02 47.91	+18 31 06.6	17		399

1992 WK3		1992 11 27.58403	04 02 47.00	+18 31 09.2				399
1992 WZ3	*	1992 11 21.56215	03 52 17.93	+14 45 32.0		17		399
1992 WZ3		1992 11 21.57708	03 52 16.98	+14 45 22.9				399
1992 WZ3		1992 11 27.50370	03 46 48.69	+13 52 16.5		17.2		399
1992 WZ3		1992 11 27.51806	03 46 47.82	+13 52 07.5				399
1992 WA4	*	1992 11 21.56215	03 53 17.27	+17 52 10.4		17.2		399
1992 WA4		1992 11 21.57708	03 53 16.39	+17 52 09.5				399
1992 WA4		1992 11 27.50370	03 47 59.93	+17 50 27.3		17.2		399
1992 WA4		1992 11 27.51806	03 47 59.08	+17 50 26.6				399
1992 WB4	*	1992 11 21.56215	03 53 29.60	+15 29 52.8		17.2		399
1992 WB4		1992 11 21.57708	03 53 28.68	+15 29 50.9				399
1992 WB4		1992 11 27.50370	03 47 50.45	+15 27 09.6		17		399
1992 WB4		1992 11 27.51806	03 47 49.53	+15 27 07.7				399
1992 WC4	*	1992 11 21.56215	03 55 37.75	+15 41 53.3		16.8		399
1992 WC4		1992 11 21.57708	03 55 36.74	+15 41 49.4				399
1992 WC4		1992 11 27.50370	03 49 42.35	+15 11 08.5		17.2		399
1992 WC4		1992 11 27.51806	03 49 41.48	+15 11 03.4				399
1992 WD4	*	1992 11 21.56215	03 57 47.34	+17 02 56.4		17		399
1992 WD4		1992 11 21.57708	03 57 46.50	+17 02 50.3				399
1992 WD4		1992 11 27.50370	03 52 04.50	+16 50 58.1		17.2		399
1992 WD4		1992 11 27.51806	03 52 03.56	+16 50 55.5				399
1992 WE4	*	1992 11 21.56215	04 02 07.10	+16 31 12.7		16.5		399
1992 WE4		1992 11 21.57708	04 02 06.24	+16 31 18.3				399
1992 WE4		1992 11 27.50370	03 54 45.97	+17 12 41.8		16.5		399
1992 WE4		1992 11 27.51806	03 54 44.82	+17 12 46.6				399
1992 WF4	*	1992 11 21.59375	04 07 23.43	+17 19 04.9		17		399
1992 WF4		1992 11 21.60833	04 07 22.56	+17 18 58.4				399
1992 WF4		1992 11 27.56944	04 00 26.10	+16 55 45.8		16.5		399
1992 WF4		1992 11 27.58403	04 00 25.16	+16 55 38.3				399
1992 WG4	*	1992 11 21.59375	04 09 51.87	+17 53 05.8		17		399
1992 WG4		1992 11 21.60833	04 09 50.92	+17 53 04.1				399
1992 WG4		1992 11 27.56944	04 03 16.85	+17 45 24.8		17.2		399
1992 WG4		1992 11 27.58403	04 03 15.97	+17 45 20.9				399
1992 WH4	*	1992 11 21.59375	04 14 00.89	+15 56 14.6		17		399
1992 WH4		1992 11 21.60833	04 14 00.04	+15 56 09.8				399
1992 WH4		1992 11 27.56944	04 08 19.55	+15 17 43.8		17.2		399
1992 WH4		1992 11 27.58403	04 08 18.67	+15 17 37.9				399
1992 WJ4	*	1992 11 21.59375	04 16 00.89	+17 57 24.1		17		399
1992 WJ4		1992 11 21.60833	04 15 59.87	+17 57 23.0				399
1992 WJ4		1992 11 27.56944	04 10 45.94	+17 47 47.5		17		399
1992 WJ4		1992 11 27.58403	04 10 45.22	+17 47 46.1				399
1992 WK4	*	1992 11 21.59375	04 18 45.51	+14 50 53.7		16.7		399
1992 WK4		1992 11 21.60833	04 18 44.60	+14 50 56.3				399
1992 WK4		1992 11 27.56944	04 13 16.20	+15 16 44.0		16.7		399
1992 WK4		1992 11 27.58403	04 13 15.36	+15 16 48.5				399
2140 P-L		1992 09 28.50065	22 46 19.84	-09 05 24.5		16		399
2140 P-L		1992 09 28.53686	22 46 18.28	-09 05 16.1				399

400 Kitami
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Atsubetsu-ku, Sapporo 004, Japan
Observers K. Endate, M. Yanai
Measurer K. Watanabe
0.25-m f/2.6 Schmidt, 0.25-m f/3.4 hyperboloid astrocamera
GSC

1975 VB1		1992 11 16.53264	03 38 36.48	+14 53 13.0		16.5		400
1975 VB1		1992 11 16.54653	03 38 35.65	+14 53 12.5				400
1975 VB1		1992 11 17.52500	03 37 44.41	+14 52 18.5		16.5		400
1975 VB1		1992 11 17.53889	03 37 43.66	+14 52 16.9				400

1978	SA7	1992	10	19.51424	00 32 01.26	+10 56 55.3	16.0		400
1978	SA7	1992	10	19.52812	00 32 00.62	+10 56 55.2			400
1978	VU7	1992	11	02.51111	01 55 30.11	+13 44 01.8	17		400
1978	VU7	1992	11	02.52569	01 55 29.33	+13 43 57.1			400
1982	RK	1992	10	26.48958	01 18 34.33	-02 19 40.7	16.5		400
1982	RK	1992	10	26.50486	01 18 33.54	-02 19 44.0			400
1986	QA4	1992	11	16.53264	03 31 56.81	+15 58 20.7	17		400
1986	QA4	1992	11	16.54653	03 31 56.05	+15 58 19.1			400
1986	QA4	1992	11	17.52500	03 31 05.55	+15 55 30.7	17		400
1986	QA4	1992	11	17.53889	03 31 04.84	+15 55 28.1			400
1991	EE1	1992	09	20.45104	22 26 50.83	-19 51 43.9	16.0		400
1991	EE1	1992	09	20.46528	22 26 50.17	-19 51 40.7			400
1991	EE1	1992	10	02.50052	22 18 50.85	-18 52 45.5	16.0		400
1991	EE1	1992	10	02.51215	22 18 50.40	-18 52 43.3			400
1991	PH8	1992	10	28.55486	03 27 20.60	+15 23 22.3	17		400
1991	PH8	1992	10	28.56944	03 27 19.82	+15 23 19.6			400
1991	PH8	1992	11	02.51944	03 23 13.65	+15 10 31.3	17		400
1991	PH8	1992	11	02.53403	03 23 12.76	+15 10 30.9			400
1992	HE	1992	10	19.57292	02 07 07.24	+19 03 54.0	15.5		400
1992	HE	1992	10	19.58472	02 07 05.19	+19 04 07.2			400
1992	HE	1992	10	19.58542	02 07 04.89	+19 04 08.1			400
1992	HE	1992	10	19.59722	02 07 02.83	+19 04 18.1			400
1992	SE	1992	10	20.48438	00 12 03.25	-03 28 28.5	16.5		400
1992	SE	1992	10	20.50000	00 12 02.95	-03 28 38.8			400
1992	SC1	1992	10	26.48958	01 04 39.82	-02 00 35.6	17		400
1992	SC1	1992	10	26.50486	01 04 39.25	-02 00 39.0			400
1992	SD1	1992	10	26.48958	01 04 05.32	-01 03 17.3	16.5		400
1992	SD1	1992	10	26.50486	01 04 04.53	-01 03 18.7			400
1992	SE1	1992	10	26.48958	01 06 22.98	-02 53 14.2	17		400
1992	SE1	1992	10	26.50486	01 06 22.27	-02 53 12.8			400
1992	SF1	1992	10	20.48438	00 22 18.01	-03 50 06.9	16.0		400
1992	SF1	1992	10	20.50000	00 22 17.45	-03 50 09.6			400
1992	SH1	1992	10	28.46458	00 28 15.90	-05 47 44.8	17		400
1992	SH1	1992	10	28.47847	00 28 15.53	-05 47 37.3			400
1992	SM12	1992	10	26.48958	01 05 16.74	-02 15 17.9	17		400
1992	SM12	1992	10	26.50486	01 05 16.01	-02 15 22.7			400
1992	SW12	1992	10	19.48854	00 39 15.12	+03 04 08.6	16.5		400
1992	SW12	1992	10	19.50312	00 39 14.56	+03 04 10.0			400
1992	SY12	1992	10	28.50625	00 33 34.82	+11 01 23.1	16.0		400
1992	SY12	1992	10	28.52083	00 33 34.13	+11 01 25.5			400
1992	TY	1992	10	26.48958	01 13 15.00	-01 53 16.3	16.5		400
1992	TY	1992	10	26.50486	01 13 14.18	-01 53 20.0			400
1992	UE1	1992	11	02.51111	01 54 59.37	+12 30 44.9	17		400
1992	UE1	1992	11	02.52569	01 54 58.74	+12 30 39.5			400
1992	UF1	1992	10	26.52361	02 15 41.02	+14 43 32.3	16.0		400
1992	UF1	1992	10	26.53750	02 15 40.20	+14 43 33.7			400
1992	UF1	1992	11	15.43125	01 56 07.45	+15 25 20.8	16.0		400
1992	UF1	1992	11	15.44653	01 56 06.51	+15 25 21.6			400
1992	UG1	1992	10	26.52361	02 23 58.51	+14 24 19.7	16.0		400
1992	UG1	1992	10	26.53750	02 23 57.59	+14 24 15.8			400
1992	UH1	1992	10	26.52361	02 24 47.75	+18 58 41.2	16.5		400
1992	UH1	1992	10	26.53750	02 24 46.90	+18 58 40.1			400
1992	UE2	1992	11	15.43125	02 02 08.90	+10 54 46.5	17.5		400
1992	UE2	1992	11	15.44653	02 02 08.40	+10 54 45.9			400
1992	UG2	1992	11	15.43125	01 58 26.43	+14 19 29.3	17		400
1992	UG2	1992	11	15.44653	01 58 25.51	+14 19 25.6			400
1992	UH2	1992	11	15.43125	02 10 50.54	+13 09 22.4	17		400
1992	UH2	1992	11	15.44653	02 10 49.75	+13 09 15.6			400
1992	UJ2	1992	11	15.43125	02 12 31.60	+14 48 41.6	17.5		400

1992	UJ2		1992	11	15.44653	02	12	31.03	+14 48 39.3	400
1992	UT2		1992	11	01.49271	01	13	01.36	-02 24 59.4 17	400
1992	UT2		1992	11	01.50764	01	13	00.28	-02 24 57.6	400
1992	UU2		1992	11	01.49271	01	13	49.74	-02 12 32.3 16.5	400
1992	UU2		1992	11	01.50764	01	13	48.95	-02 12 27.0	400
1992	UM3		1992	11	16.47361	02	37	29.05	+18 38 00.8 16.5	400
1992	UM3		1992	11	16.48750	02	37	28.41	+18 37 54.8	400
1992	UN3		1992	11	01.49132	02	55	13.99	+20 47 01.9 17	400
1992	UN3		1992	11	01.50556	02	55	13.07	+20 46 57.1	400
1992	UN3		1992	11	16.47361	02	42	21.49	+18 26 07.1 16.5	400
1992	UN3		1992	11	16.48750	02	42	20.84	+18 25 58.0	400
1992	UP3		1992	11	16.47361	02	42	30.79	+18 27 20.1 17	400
1992	UP3		1992	11	16.48750	02	42	30.19	+18 27 15.1	400
1992	UY3		1992	11	16.47361	02	40	42.78	+19 09 11.0 17	400
1992	UY3		1992	11	16.48750	02	40	42.17	+19 09 10.4	400
1992	UZ3		1992	11	16.47361	02	48	39.13	+18 43 06.6 17	400
1992	UZ3		1992	11	16.48750	02	48	38.17	+18 43 03.4	400
1992	UL5	*	1992	10	26.61875	02	44	44.05	+12 38 02.1 17	400
1992	UL5		1992	10	26.63333	02	44	43.44	+12 37 59.5	400
1992	UL5		1992	10	28.58681	02	42	46.29	+12 31 02.8 17	400
1992	UL5		1992	10	28.60139	02	42	45.78	+12 31 00.5	400
1992	UM5	*	1992	10	26.61875	02	52	54.23	+13 40 51.0 16.5	400
1992	UM5		1992	10	26.63333	02	52	53.63	+13 40 47.8	400
1992	UM5		1992	10	28.58681	02	51	23.03	+13 27 18.1 16.5	400
1992	UM5		1992	10	28.60139	02	51	22.30	+13 27 12.0	400
1992	UN5	*	1992	10	26.65000	02	47	36.58	+06 49 51.0 17	400
1992	UN5		1992	10	26.66458	02	47	35.83	+06 49 52.4	400
1992	UN5		1992	10	28.61736	02	45	58.29	+06 52 47.0 17	400
1992	UN5		1992	10	28.63125	02	45	57.57	+06 52 49.2	400
1992	UO5	*	1992	10	26.65000	03	00	02.33	+07 07 16.5 17	400
1992	UO5		1992	10	26.66458	03	00	01.64	+07 07 13.9	400
1992	UO5		1992	10	28.61736	02	58	15.58	+07 04 31.7 17	400
1992	UO5		1992	10	28.63125	02	58	14.74	+07 04 30.8	400
1992	UP5	*	1992	10	26.65000	03	01	16.27	+05 31 29.2 17	400
1992	UP5		1992	10	26.66458	03	01	15.59	+05 31 21.7	400
1992	UP5		1992	10	28.61736	02	59	47.47	+05 18 17.2 17	400
1992	UP5		1992	10	28.63125	02	59	46.81	+05 18 11.8	400
1992	UQ5		1992	10	28.55486	03	31	24.64	+16 23 01.9 16.5	400
1992	UQ5		1992	10	28.56944	03	31	23.86	+16 23 00.6	400
1992	UQ5		1992	11	02.51944	03	26	18.65	+16 14 39.4 16.5	400
1992	UQ5		1992	11	02.53403	03	26	17.64	+16 14 35.6	400
1992	UT5	*	1992	10	28.55486	03	20	28.06	+17 34 14.1 17	400
1992	UT5		1992	10	28.56944	03	20	27.38	+17 34 13.8	400
1992	UT5		1992	11	02.51944	03	16	23.34	+17 15 57.0 17	400
1992	UT5		1992	11	02.53403	03	16	22.68	+17 15 54.6	400
1992	UU5	*	1992	10	28.55486	03	27	30.83	+15 27 05.8 16.5	400
1992	UU5		1992	10	28.56944	03	27	30.15	+15 27 06.3	400
1992	UU5		1992	11	02.51944	03	23	32.36	+15 24 39.2 16.5	400
1992	UU5		1992	11	02.53403	03	23	31.53	+15 24 40.9	400
1992	UV5		1992	10	28.55486	03	23	02.73	+16 15 57.2 16.5	400
1992	UV5		1992	10	28.56944	03	23	02.30	+16 15 46.9	400
1992	UW5	*	1992	10	28.64722	03	19	00.21	+10 59 42.0 16.5	400
1992	UW5		1992	10	28.66181	03	18	59.52	+10 59 42.3	400
1992	UW5		1992	11	02.55069	03	14	19.83	+10 56 49.2 16.5	400
1992	UW5		1992	11	02.56597	03	14	19.16	+10 56 51.3	400
1992	UX5	*	1992	10	28.64722	03	20	20.45	+09 35 09.2 16.5	400
1992	UX5		1992	10	28.66181	03	20	19.55	+09 35 02.2	400
1992	UX5		1992	11	02.55069	03	15	50.34	+09 05 09.4 16.5	400
1992	UX5		1992	11	02.56597	03	15	49.25	+09 05 02.2	400

1992 UY5	*	1992	10	28.64722	03	21	34.92	+04 29 50.4	17	400
1992 UY5		1992	10	28.66181	03	21	34.37	+04 29 45.7		400
1992 UY5		1992	11	02.58264	03	17	58.06	+03 58 56.0	16.5	400
1992 UY5		1992	11	02.59722	03	17	57.34	+03 58 50.0		400
1992 UY5		1992	11	17.49444	03	06	23.64	+02 42 43.9	17	400
1992 UY5		1992	11	17.50833	03	06	22.85	+02 42 42.1		400
1992 UZ5	*	1992	10	28.64722	03	23	41.03	+10 27 10.2	17	400
1992 UZ5		1992	10	28.66181	03	23	40.25	+10 27 09.1		400
1992 UZ5		1992	11	02.55069	03	19	27.05	+10 30 08.5	16.5	400
1992 UZ5		1992	11	02.56597	03	19	26.33	+10 30 08.9		400
1992 UG6		1992	10	28.55486	03	27	53.13	+16 08 34.1	16.0	400
1992 UG6		1992	10	28.56944	03	27	52.46	+16 08 36.5		400
1992 UG6		1992	11	02.51944	03	23	41.99	+16 33 29.3	16.0	400
1992 UG6		1992	11	02.53403	03	23	41.15	+16 33 34.1		400
1992 UL6	*	1992	10	28.55486	03	22	10.49	+12 48 28.9	17	400
1992 UL6		1992	10	28.56944	03	22	09.88	+12 48 26.4		400
1992 UL6		1992	11	02.51944	03	17	53.95	+12 43 36.3	17	400
1992 UL6		1992	11	02.53403	03	17	53.15	+12 43 31.8		400
1992 UM6	*	1992	10	28.56771	02	54	59.21	+24 22 40.7	16.5	400
1992 UM6		1992	10	28.58163	02	54	58.29	+24 22 35.9		400
1992 UM6		1992	11	01.44271	02	51	17.71	+24 09 24.0	16.5	400
1992 UM6		1992	11	01.47188	02	51	16.48	+24 09 18.4		400
1992 UM6		1992	11	16.47361	02	36	33.64	+22 54 38.1	16.5	400
1992 UM6		1992	11	16.48750	02	36	32.95	+22 54 30.6		400
1992 UN6	*	1992	10	28.56771	03	05	37.62	+22 16 10.8	17	400
1992 UN6		1992	10	28.58163	03	05	36.57	+22 16 10.8		400
1992 UN6		1992	11	01.49132	03	01	15.95	+22 09 07.7	17	400
1992 UN6		1992	11	01.50556	03	01	15.03	+22 09 06.0		400
1992 UN6		1992	11	16.47361	02	44	32.19	+21 28 16.2	17	400
1992 UN6		1992	11	16.48750	02	44	31.28	+21 28 13.7		400
1992 UO6	*	1992	10	28.64722	03	22	24.87	+05 22 51.5	17	400
1992 UO6		1992	10	28.66181	03	22	24.13	+05 22 49.4		400
1992 UO6		1992	11	02.55069	03	18	10.37	+05 18 23.0	17	400
1992 UO6		1992	11	02.56597	03	18	09.55	+05 18 21.1		400
1992 UO6		1992	11	17.49444	03	04	29.44	+05 25 23.0	16.5	400
1992 UO6		1992	11	17.50833	03	04	28.71	+05 25 24.5		400
1992 UV6		1992	11	16.53264	03	32	34.34	+15 59 35.8	16.5	400
1992 UV6		1992	11	16.54653	03	32	33.65	+15 59 34.2		400
1992 UV6		1992	11	17.53889	03	31	34.83	+15 59 04.3	16.5	400
1992 UZ6	*	1992	10	28.56771	02	59	56.90	+22 45 58.7	16.5	400
1992 UZ6		1992	10	28.58163	02	59	56.14	+22 45 53.5		400
1992 UZ6		1992	11	01.49132	02	56	28.71	+22 26 50.2	16.5	400
1992 UZ6		1992	11	01.50556	02	56	28.09	+22 26 44.2		400
1992 UZ6		1992	11	16.47361	02	43	00.03	+20 58 01.5	17	400
1992 UZ6		1992	11	16.48750	02	42	59.02	+20 57 56.1		400
1992 UK8	*	1992	10	19.59028	02	22	23.24	+17 56 44.6	17	400
1992 UK8		1992	10	19.60417	02	22	22.45	+17 56 40.8		400
1992 UK8		1992	10	26.52361	02	16	31.65	+17 09 42.1	16.0	400
1992 UK8		1992	10	26.53750	02	16	30.96	+17 09 35.7		400
1992 UK8		1992	11	15.43125	02	00	03.07	+14 33 41.5	17	400
1992 UK8		1992	11	15.44653	02	00	02.58	+14 33 35.3		400
1992 VA		1992	10	28.55486	03	14	52.12	+16 56 34.9	17	400
1992 VA		1992	10	28.56944	03	14	51.01	+16 56 33.6		400
1992 VB		1992	10	28.55486	03	26	36.93	+17 31 48.4	17	400
1992 VB		1992	10	28.56944	03	26	36.12	+17 31 45.8		400
1992 VC		1992	10	28.55486	03	27	10.28	+15 14 35.8	17	400
1992 VC		1992	10	28.56944	03	27	09.49	+15 14 34.1		400
1992 VG		1992	11	16.53264	03	39	01.17	+12 45 43.0	16.5	400
1992 VG		1992	11	16.54653	03	39	00.37	+12 45 41.4		400

1992 VG		1992 11 17.52500	03 38 07.92	+12 43 42.2	16.5	400
1992 VG		1992 11 17.53889	03 38 07.13	+12 43 40.7		400
1992 VL	*	1992 11 02.58264	03 15 20.97	+02 01 58.2	16.0	400
1992 VL		1992 11 02.59722	03 15 20.14	+02 01 57.7		400
1992 VL		1992 11 17.49444	03 02 54.02	+02 04 36.0	16.5	400
1992 VL		1992 11 17.50833	03 02 53.30	+02 04 35.2		400
1992 VN	*	1992 11 01.44271	02 51 18.86	+25 46 42.3	16.5	400
1992 VN		1992 11 01.47188	02 51 17.08	+25 46 28.7		400
1992 VN		1992 11 16.47361	02 37 02.06	+23 23 48.5	16.5	400
1992 VN		1992 11 16.48750	02 37 01.38	+23 23 39.3		400
1992 WO	*	1992 11 16.53264	03 29 51.95	+17 13 13.1	16.0	400
1992 WO		1992 11 16.54653	03 29 51.26	+17 13 10.3		400
1992 WO		1992 11 17.52500	03 28 53.91	+17 11 22.2	16.0	400
1992 WO		1992 11 17.53889	03 28 53.22	+17 11 20.5		400
1992 WP	*	1992 11 16.53264	03 31 41.13	+18 03 13.1	16.5	400
1992 WP		1992 11 16.54653	03 31 40.30	+18 03 16.3		400
1992 WP		1992 11 17.52500	03 30 30.90	+18 08 14.0	16.5	400
1992 WP		1992 11 17.53889	03 30 29.84	+18 08 16.0		400
1992 WQ	*	1992 11 16.53264	03 32 42.05	+18 10 57.0	16.0	400
1992 WQ		1992 11 16.54653	03 32 41.13	+18 10 55.3		400
1992 WQ		1992 11 17.52500	03 31 41.47	+18 10 20.1	16.0	400
1992 WQ		1992 11 17.53889	03 31 40.56	+18 10 20.8		400
1992 WR	*	1992 11 16.53264	03 34 30.12	+19 04 53.7	16.5	400
1992 WR		1992 11 16.54653	03 34 29.13	+19 04 51.9		400
1992 WR		1992 11 17.52500	03 33 22.67	+19 05 11.0	16.5	400
1992 WR		1992 11 17.53889	03 33 21.56	+19 05 09.1		400
1992 WS	*	1992 11 16.53264	03 42 20.20	+19 32 57.0	16.0	400
1992 WS		1992 11 16.54653	03 42 19.36	+19 32 51.7		400
1992 WS		1992 11 17.52500	03 41 15.76	+19 26 10.0	16.0	400
1992 WS		1992 11 17.53889	03 41 14.83	+19 26 05.9		400
1992 WT	*	1992 11 16.53264	03 43 01.60	+19 15 35.3	16.5	400
1992 WT		1992 11 16.54653	03 43 00.81	+19 15 35.8		400
1992 WT		1992 11 17.52500	03 41 51.00	+19 14 38.4	16.5	400
1992 WT		1992 11 17.53889	03 41 50.00	+19 14 38.4		400
1992 WU	*	1992 11 16.53264	03 46 24.72	+19 11 56.4	16.5	400
1992 WU		1992 11 16.54653	03 46 23.65	+19 11 48.7		400
1992 WU		1992 11 17.52500	03 45 26.82	+19 04 09.1	16.5	400
1992 WU		1992 11 17.53889	03 45 25.90	+19 04 00.6		400
1992 WV	*	1992 11 16.53264	03 47 23.83	+18 31 06.0	16.5	400
1992 WV		1992 11 16.54653	03 47 23.15	+18 30 58.4		400
1992 WV		1992 11 17.52500	03 46 28.09	+18 23 52.5	16.5	400
1992 WV		1992 11 17.53889	03 46 27.38	+18 23 46.8		400
1992 WC1	*	1992 11 16.50035	03 59 04.15	+24 44 27.6	16.5	400
1992 WC1		1992 11 16.51424	03 59 03.29	+24 44 22.1		400
1992 WC1		1992 11 17.49271	03 57 56.10	+24 38 19.9	16.5	400
1992 WC1		1992 11 17.50660	03 57 54.93	+24 38 15.1		400
1992 WD1	*	1992 11 16.53264	03 43 40.15	+15 05 42.1	17	400
1992 WD1		1992 11 16.54653	03 43 39.39	+15 05 41.2		400
1992 WD1		1992 11 17.52500	03 42 41.28	+15 04 24.7	17	400
1992 WD1		1992 11 17.53889	03 42 40.34	+15 04 22.0		400
1992 WE1	*	1992 11 16.53264	03 45 08.08	+14 22 01.6	16.5	400
1992 WE1		1992 11 16.54653	03 45 07.10	+14 22 00.8		400
1992 WE1		1992 11 17.52500	03 44 01.00	+14 21 39.3	16.5	400
1992 WE1		1992 11 17.53889	03 43 59.79	+14 21 39.8		400
1992 WF1	*	1992 11 16.56007	03 31 33.10	+05 45 12.2	16.5	400
1992 WF1		1992 11 16.57326	03 31 32.42	+05 45 12.4		400
1992 WF1		1992 11 17.55486	03 30 40.72	+05 45 00.3	16.0	400
1992 WF1		1992 11 17.58368	03 30 39.21	+05 45 01.5		400
1992 WG1	*	1992 11 16.56007	03 37 47.31	+08 48 02.1	16.5	400

1992	WG1		1992	11	16.57326	03	37	46.43	+08 48 04.6	400
1992	WG1		1992	11	17.55486	03	36	40.61	+08 48 43.5	16.5 400
1992	WG1		1992	11	17.58368	03	36	38.74	+08 48 46.7	400
1992	WH1	*	1992	11	16.56007	03	46	03.12	+07 13 55.6	15.5 400
1992	WH1		1992	11	16.57326	03	46	02.34	+07 13 54.8	400
1992	WH1		1992	11	17.55486	03	45	02.85	+07 12 16.2	15.5 400
1992	WH1		1992	11	17.58368	03	45	01.26	+07 12 14.9	400
1992	WJ1	*	1992	11	17.59792	04	03	49.19	+15 03 34.3	16.5 400
1992	WJ1		1992	11	17.61146	04	03	48.17	+15 03 39.3	400
1992	WJ1		1992	11	18.52083	04	02	47.09	+15 07 39.0	16.5 400
1992	WJ1		1992	11	18.53472	04	02	46.26	+15 07 42.8	400
1992	WK1	*	1992	11	17.59792	04	11	49.96	+12 15 48.3	15.5 400
1992	WK1		1992	11	17.61146	04	11	49.14	+12 15 52.8	400
1992	WK1		1992	11	18.52083	04	10	54.61	+12 20 30.9	15.5 400
1992	WK1		1992	11	18.53472	04	10	53.66	+12 20 36.1	400
1992	WL1	*	1992	11	17.59792	04	16	30.14	+13 15 11.0	17 400
1992	WL1		1992	11	17.61146	04	16	29.32	+13 15 08.6	400
1992	WL1		1992	11	18.52083	04	15	37.39	+13 11 07.8	17 400
1992	WL1		1992	11	18.53472	04	15	36.69	+13 11 04.0	400
1992	WM1	*	1992	11	17.59792	04	18	34.23	+14 47 18.5	17 400
1992	WM1		1992	11	17.61146	04	18	33.57	+14 47 17.8	400
1992	WM1		1992	11	18.52083	04	17	35.45	+14 47 59.3	16.5 400
1992	WM1		1992	11	18.53472	04	17	34.62	+14 48 00.8	400
1992	WN1	*	1992	11	17.59792	04	18	49.36	+12 36 21.9	17 400
1992	WN1		1992	11	17.61146	04	18	48.86	+12 36 20.5	400
1992	WN1		1992	11	18.52083	04	18	02.35	+12 34 29.7	17 400
1992	WN1		1992	11	18.53472	04	18	01.70	+12 34 30.7	400
1992	WO1	*	1992	11	17.62604	04	05	47.12	+05 13 20.1	16.0 400
1992	WO1		1992	11	17.63924	04	05	46.36	+05 13 15.0	400
1992	WO1		1992	11	18.55000	04	05	00.25	+05 07 01.3	16.0 400
1992	WO1		1992	11	18.56389	04	04	59.51	+05 06 55.3	400
1992	WP1	*	1992	11	17.62604	04	08	32.77	+08 33 05.4	16.5 400
1992	WP1		1992	11	17.63924	04	08	32.11	+08 33 06.2	400
1992	WP1		1992	11	18.55000	04	07	43.23	+08 33 59.4	16.5 400
1992	WP1		1992	11	18.56389	04	07	42.38	+08 34 01.2	400
1992	WR1		1992	11	18.61111	04	33	31.51	+13 56 07.2	17 400
1992	WR1		1992	11	18.62569	04	33	30.25	+13 56 07.6	400
1992	WR1		1992	11	21.53958	04	30	06.14	+13 57 37.5	16.5 400
1992	WR1		1992	11	21.55347	04	30	05.17	+13 57 40.9	400
1992	WT1		1992	11	18.61111	04	26	37.82	+16 34 47.9	16.0 400
1992	WT1		1992	11	18.62569	04	26	36.82	+16 34 49.9	400
1992	WT1		1992	11	21.53958	04	23	41.76	+16 40 30.1	16.0 400
1992	WT1		1992	11	21.55347	04	23	41.14	+16 40 30.9	400
1992	WT2	*	1992	11	18.61111	04	28	09.66	+15 30 24.1	16.0 400
1992	WT2		1992	11	18.62569	04	28	08.66	+15 30 19.7	400
1992	WT2		1992	11	21.53958	04	24	59.61	+15 26 23.9	16.5 400
1992	WT2		1992	11	21.55347	04	24	58.86	+15 26 23.1	400
1992	WU2	*	1992	11	18.61111	04	44	21.93	+16 09 43.9	17 400
1992	WU2		1992	11	18.62569	04	44	21.18	+16 09 37.4	400
1992	WU2		1992	11	21.53958	04	41	51.89	+15 54 50.0	17 400
1992	WU2		1992	11	21.55347	04	41	51.35	+15 54 46.0	400
1992	WW2	*	1992	11	16.53264	03	33	19.05	+16 28 52.6	17 400
1992	WW2		1992	11	17.52500	03	32	23.93	+16 26 42.9	17 400
1992	WW2		1992	11	17.53889	03	32	23.29	+16 26 40.8	400
1992	WX2	*	1992	11	16.53264	03	35	55.05	+16 35 26.9	17 400
1992	WX2		1992	11	16.54653	03	35	54.33	+16 35 26.3	400
1992	WX2		1992	11	17.52500	03	34	58.47	+16 30 54.5	17 400
1992	WX2		1992	11	17.53889	03	34	57.68	+16 30 50.0	400

(489)	1992 10 28.46458	00 27 31.82	-05 35 06.6	14.0			400
(489)	1992 10 28.47847	00 27 31.37	-05 35 11.4				400

402 Dynic Astronomical Observatory
A. Sugie, Dynic Astronomical Observatory, Taga 270, Taga-Cho, Inukami-Gun, Shiga-Ken, 522-03, Japan
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GSC

1992 SP	1992 10 21.53403	01 12 00.43	+15 28 47.9	16.0			402
1992 SP	1992 10 21.54653	01 11 59.37	+15 28 44.0				402
1992 SR1	1992 10 21.58333	01 34 02.90	+22 07 13.3	17.0			402
1992 SR1	1992 10 21.59722	01 34 01.77	+22 07 05.3				402
1992 UG	1992 11 17.50972	02 50 52.04	+08 31 30.0	15.5			402
1992 UG	1992 11 17.52222	02 50 51.41	+08 31 32.3				402
1992 US4	1992 10 30.66042	03 25 17.16	+21 11 37.8	16.5			402
1992 US4	1992 11 02.64097	03 22 46.77	+21 01 37.5	16.0			402
1992 US4	1992 11 02.65417	03 22 46.03	+21 01 35.1				402
1992 US4	1992 11 17.53264	03 08 51.79	+19 58 30.4	16.0			402
1992 US4	1992 11 17.54722	03 08 50.93	+19 58 27.0				402
1992 US4	1992 11 18.51667	03 07 56.78	+19 53 52.6				402
1992 US4	1992 11 18.52847	03 07 56.16	+19 53 49.0				402
1992 UT4	1992 10 30.66042	03 27 37.06	+20 32 57.4	16.0			402
1992 UT4	1992 11 02.64097	03 24 26.69	+20 39 10.0	16.0			402
1992 UT4	1992 11 02.65417	03 24 25.78	+20 39 12.4				402
1992 UX4	1992 11 17.60417	03 48 34.27	+21 25 24.1	15.5			402
1992 UX4	1992 11 17.61736	03 48 33.68	+21 25 11.9				402
1992 UX4	1992 11 18.53840	03 47 54.89	+21 09 04.0				402
1992 UX4	1992 11 18.55153	03 47 54.24	+21 08 50.2				402
1992 UY4	1992 11 17.58125	03 38 52.61	+29 49 13.4	17.0			402
1992 UY4	1992 11 17.59514	03 38 51.96	+29 49 02.5				402
1992 UY4	1992 11 18.56319	03 38 04.68	+29 35 14.3				402
1992 UY4	1992 11 18.57569	03 38 04.15	+29 35 06.4				402
1992 UE6	1992 11 17.60417	03 52 16.20	+18 17 29.9	16.5			402
1992 UE6	1992 11 17.61736	03 52 15.28	+18 17 32.9				402
1992 UE6	1992 11 18.53840	03 51 10.71	+18 20 24.4				402
1992 UE6	1992 11 18.55153	03 51 09.69	+18 20 26.2				402
1992 WJ	1992 11 17.53264	03 18 55.96	+20 33 28.5	17.5			402
1992 WJ	1992 11 17.54722	03 18 55.22	+20 33 27.7				402
1992 WJ	1992 11 18.51667	03 17 52.67	+20 30 49.8				402
1992 WJ	1992 11 18.52847	03 17 51.95	+20 30 50.0				402
1992 WL	1992 11 17.53264	03 21 46.04	+20 38 00.0	17.0			402
1992 WL	1992 11 17.54722	03 21 45.33	+20 38 00.8				402
1992 WL	1992 11 18.51667	03 20 50.02	+20 37 47.6				402
1992 WL	1992 11 18.52847	03 20 49.36	+20 37 49.5				402
1992 WW *	1992 11 17.53264	03 09 39.52	+19 48 30.6	17.5			402
1992 WW	1992 11 17.54722	03 09 38.74	+19 48 26.0				402
1992 WW	1992 11 18.51667	03 08 44.47	+19 43 39.7				402
1992 WW	1992 11 18.52847	03 08 43.74	+19 43 38.0				402
1992 WX *	1992 11 17.55764	04 25 03.17	+11 46 24.9	17.0			402
1992 WX	1992 11 17.57153	04 25 02.13	+11 46 24.8				402
1992 WX	1992 11 18.58611	04 23 56.99	+11 44 29.1				402
1992 WX	1992 11 18.60347	04 23 56.01	+11 44 29.0				402
1992 WY *	1992 11 17.60417	03 59 00.84	+19 40 58.5	17.0			402
1992 WY	1992 11 17.61736	03 58 59.74	+19 40 54.0				402
1992 WY	1992 11 18.53840	03 57 59.04	+19 34 25.7				402
1992 WY	1992 11 18.55153	03 57 57.87	+19 34 19.7				402
1992 WZ *	1992 11 17.60417	03 59 49.18	+20 38 30.3	16.5			402
1992 WZ	1992 11 17.61736	03 59 48.35	+20 38 31.2				402
1992 WZ	1992 11 18.53840	03 58 45.60	+20 39 49.8				402

1992 WZ		1992 11 18.55153	03 58 44.79	+20 39 53.0			402
1992 WA1	*	1992 11 17.60417	04 04 55.73	+21 40 27.3	17.0		402
1992 WA1		1992 11 17.61736	04 04 54.69	+21 40 27.9			402
1992 WA1		1992 11 18.53840	04 03 53.24	+21 41 16.5			402
1992 WA1		1992 11 18.55153	04 03 52.27	+21 41 16.1			402
1992 WB1	*	1992 11 17.60417	04 07 55.65	+22 00 51.4	17.0		402
1992 WB1		1992 11 17.61736	04 07 54.84	+22 00 52.8			402
1992 WB1		1992 11 18.53840	04 07 04.96	+22 04 12.1			402
1992 WB1		1992 11 18.55153	04 07 04.05	+22 04 12.1			402
1992 WR1	*	1992 11 17.55764	04 34 44.03	+13 55 43.4	17.5		402
1992 WR1		1992 11 17.57153	04 34 43.07	+13 55 44.3			402
1992 WR1		1992 11 18.58611	04 33 33.27	+13 56 09.4			402
1992 WR1		1992 11 18.60347	04 33 31.98	+13 56 09.5			402
1992 WS1	*	1992 11 18.63542	04 26 28.52	+19 27 25.1	17.5		402
1992 WS1		1992 11 18.65069	04 26 27.97	+19 27 25.9			402
1992 WS1		1992 11 21.65903	04 23 49.65	+19 28 15.6			402
1992 WS1		1992 11 21.67222	04 23 48.98	+19 28 17.5			402
1992 WT1	*	1992 11 18.63542	04 26 36.42	+16 34 51.5	16.0		402
1992 WT1		1992 11 18.65069	04 26 35.42	+16 34 52.5			402
1992 WT1		1992 11 21.65903	04 23 34.41	+16 40 45.8			402
1992 WT1		1992 11 21.67222	04 23 33.52	+16 40 46.8			402
1992 WU1	*	1992 11 18.63542	04 32 41.46	+19 39 50.1	16.5		402
1992 WU1		1992 11 18.65069	04 32 40.57	+19 39 44.4			402
1992 WU1		1992 11 21.65903	04 30 26.87	+19 16 18.1			402
1992 WU1		1992 11 21.67222	04 30 26.17	+19 16 12.8			402
1992 WY2	*	1992 11 17.62639	04 35 05.60	+27 07 12.6	16.5		402
1992 WY2		1992 11 17.63681	04 35 05.03	+27 07 05.8			402
1992 WY2		1992 11 18.61667	04 34 20.04	+26 57 30.3			402
1992 WY2		1992 11 18.62569	04 34 19.41	+26 57 23.6			402
1992 WC3	*	1992 11 18.63542	04 32 54.41	+18 33 32.0	17.0		402
1992 WC3		1992 11 18.65069	04 32 53.32	+18 33 33.1			402
1992 WC3		1992 11 21.67222	04 29 22.85	+18 36 40.1			402
1992 WD3	*	1992 11 18.68681	05 06 03.79	+12 16 03.4	17.0		402
1992 WD3		1992 11 18.70347	05 06 02.82	+12 16 02.7			402
1992 WD3		1992 11 21.70764	05 03 30.57	+12 08 15.2			402
1992 WD3		1992 11 21.72014	05 03 29.89	+12 08 15.3			402
1992 WP3	*	1992 11 17.58125	03 38 54.74	+29 59 28.6	16.5		402
1992 WP3		1992 11 17.59514	03 38 53.94	+29 59 24.1			402
1992 WP3		1992 11 18.56319	03 38 00.65	+29 54 06.6			402
1992 WP3		1992 11 18.57569	03 37 59.88	+29 54 03.1			402

403 Kani
T. Furuta, Mitsuike 17-2, Kakiya-Cho, Tokai, Aichi-Ken 477, Japan
Observers Y. Mizuno, T. Furuta
Measurer T. Furuta
0.20-m f/4.0 hyperboloid astrocamera
GSC

1975 TS3		1992 11 17.58044	04 26 25.6	+27 36 47	16.0		403
1992 UL2		1992 11 01.57639	01 49 58.71	+18 09 45.1			403
1992 UL2		1992 11 01.59745	01 49 57.45	+18 09 39.0			403
1992 WS		1992 11 17.54340	03 41 14.46	+19 26 04.7	15.5		403
1992 WS		1992 11 17.56655	03 41 12.97	+19 25 55.5			403
1992 WS3	*	1992 11 17.53194	04 15 39.20	+25 30 58.2	16.0		403
1992 WS3		1992 11 17.54340	04 15 38.41	+25 30 56.8			403
1992 WS3		1992 11 21.55602	04 11 32.60	+25 21 16.5			403
1992 WS3		1992 11 21.56678	04 11 31.82	+25 21 14.9			403
2141 T-3		1992 10 26.54931	02 24 12.4	+20 16 21			403
2141 T-3		1992 10 26.56273	02 24 11.6	+20 16 16			403

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

1975 VB1		1992 11 02.65383	03 50 12.13	+15 07 18.6	17.5		408
1975 VB1		1992 11 02.66288	03 50 11.82	+15 07 18.8			408
1992 UK5	*	1992 10 25.65972	03 36 18.56	+18 11 51.1	17.5		408
1992 UK5		1992 10 25.68611	03 36 17.00	+18 11 51.2			408
1992 UK5		1992 10 26.71250	03 35 13.13	+18 10 39.0	17.5		408
1992 UK5		1992 10 26.73056	03 35 11.92	+18 10 38.9			408
1992 UK5		1992 10 27.72153	03 34 09.09	+18 09 26.8	17.5		408
1992 UK5		1992 10 27.73542	03 34 08.08	+18 09 25.9			408
1992 UK5		1992 11 18.50556	03 08 56.21	+17 30 25.3	16.5		408
1992 UK5		1992 11 18.52847	03 08 54.69	+17 30 22.7			408
1992 UQ5	*	1992 10 26.71250	03 33 09.94	+16 25 50.9	16.5		408
1992 UQ5		1992 10 26.72153	03 33 09.38	+16 25 46.5			408
1992 UV5		1992 10 26.71250	03 23 42.66	+16 31 58.8	16.5		408
1992 UV5		1992 10 26.72153	03 23 42.39	+16 31 54.7			408
1992 UR6	*	1992 10 27.62361	03 44 13.95	+15 34 44.3	17		408
1992 UR6		1992 10 27.64167	03 44 12.97	+15 34 39.2			408
1992 UR6		1992 11 02.65383	03 39 33.15	+15 19 32.1	17.5		408
1992 UR6		1992 11 02.67501	03 39 32.18	+15 19 27.1			408
1992 US6	*	1992 10 27.66250	03 49 12.07	+19 27 57.1	17.5		408
1992 US6		1992 10 27.68403	03 49 11.01	+19 27 45.4			408
1992 US6		1992 11 02.69804	03 44 15.74	+18 41 25.8	17.5		408
1992 US6		1992 11 02.71650	03 44 14.71	+18 41 18.4			408
1992 UV6	*	1992 10 27.62361	03 51 00.80	+16 08 42.3	17.5		408
1992 UV6		1992 10 27.64167	03 50 59.90	+16 08 41.4			408
1992 UV6		1992 11 02.65383	03 45 51.52	+16 06 29.9	17.5		408
1992 UV6		1992 11 02.66288	03 45 50.95	+16 06 30.3			408
1992 VG	*	1992 11 02.61737	03 50 44.15	+13 18 35.8	16.5		408
1992 VG		1992 11 02.63543	03 50 43.53	+13 18 34.5			408

410 Sengamine
K. Ito, 4-13-7, Sakuragaoka Higashi Mati, Nishi-ku, Kobe 651-22, Japan
0.20-m f/4.8 reflector + CCD
GSC

1988 RA2		1992 10 25.49791	00 56 51.89	+03 23 39.1	16.1 V		410
1988 RA2		1992 10 25.51111	00 56 51.14	+03 23 31.8			410
1988 RA2		1992 10 27.48604	00 55 38.38	+03 13 51.0	16.2 V		410
1988 RA2		1992 10 27.49991	00 55 37.73	+03 13 48.1			410
1989 EV		1992 11 22.60208	07 40 03.21	+32 02 22.2	16.6 V		410
1989 EV		1992 11 22.62361	07 40 03.15	+32 02 30.1			410
1992 SR12		1992 10 21.54541	00 52 11.99	+03 16 17.1	16.2 V		410
1992 SR12		1992 10 21.56866	00 52 10.93	+03 16 12.5			410
1992 SR12		1992 10 21.59226	00 52 09.83	+03 16 07.9			410

413 Siding Spring
R. H. McNaught, Siding Spring Observatory, Coonabarabran, N.S.W. 2357, Australia
Observers G. Da Costa, M. J. Drinkwater, M. Hartley, R. H. McNaught, A. Savage, K. Taylor, S. B. Tritton
Measurer R. H. McNaught
Uppsala Southern Schmidt, U.K. Schmidt, 3.9-m AAT + CCD

1948 AF		1992 10 12.47674	21 30 04.90	-44 59 13.7			413
1948 AF		1992 10 12.47921	21 30 04.99	-44 59 12.7			413

1980	PB3		1992	10	12.50890	22	26	12.70	-36	44	13.1	413
1980	PB3		1992	10	12.51096	22	26	12.64	-36	44	12.6	413
1980	VO		1992	10	12.50082	21	53	19.97	-26	20	39.2	413
1980	VO		1992	10	12.50265	21	53	20.00	-26	20	37.9	413
1988	JA1		1992	10	12.51293	22	17	14.89	-35	19	48.5	413
1988	JA1		1992	10	12.51466	22	17	14.90	-35	19	48.2	413
1991	FF		1992	10	12.43299	18	16	39.26	-36	18	00.6 I	413
1991	HO		1992	10	13.67269	23	48	25.37	-30	30	58.9	413
1991	HO		1992	10	13.67471	23	48	25.28	-30	30	58.2	413
1992	AX		1978	11	26.48860	02	53	10.16	-01	40	43.4	413
1992	AX		1978	11	26.53721	02	53	06.96	-01	40	40.5	413
1992	HE		1992	10	09.74934	02	41	24.55	+15	15	13.9	413
1992	HE		1992	10	09.75113	02	41	24.17	+15	15	16.7	413
1992	JE		1992	10	12.45189	20	21	45.45	-14	41	57.8	413
1992	JE		1992	10	12.45376	20	21	45.90	-14	41	57.6	413
1992	LR		1992	10	13.64421	23	17	24.05	+00	24	39.5	413
1992	LR		1992	10	13.64618	23	17	24.18	+00	24	38.8	413
1992	ON		1992	10	12.48782	21	40	44.81	-04	34	16.6	413
1992	ON		1992	10	12.49009	21	40	44.81	-04	34	14.1	413
1992	QC		1992	10	13.65244	23	23	47.18	-28	17	31.1	413
1992	QC		1992	10	13.65431	23	23	47.11	-28	17	27.2	413
1992	TC		1992	10	22.57842	01	58	25.01	-34	17	26.9	413
1992	TC		1992	10	22.57979	01	58	25.03	-34	17	23.0 15.7 V	413
1992	TC		1992	10	22.58118	01	58	25.03	-34	17	18.4	413
1992	TC		1992	10	27.42674	02	01	03.98	-29	58	26.7	413
1992	TC		1992	11	03.49498	02	04	24.91	-23	25	12.6 F	413
1992	TC		1992	11	22.51190	02	15	13.87	-06	39	02.2	413
1992	UB		1992	09	05.67206	02	04	01.14	-47	10	51.5 F	413
1992	UB		1992	09	05.73456	02	04	07.85	-47	10	40.8 V	413
1992	UB		1992	10	23.53218	02	29	58.98	-29	34	29.5	413
1992	UB		1992	10	25.62188	02	28	50.75	-28	02	11.9	413
1992	UB		1992	10	26.49213	02	28	23.50	-27	22	51.5	413
1992	UB		1992	10	27.43889	02	27	53.01	-26	39	29.7	413
1992	UB		1992	11	22.51190	02	19	51.99	-05	49	18.6	413
1992	UJ8	*	1992	10	22.59700	03	05	49.96	-51	37	03.5 18 V V	413
1992	UJ8		1992	10	22.64214	03	05	53.67	-51	38	05.4 F	413
1992	UJ8		1992	11	02.61157	03	23	51.42	-54	57	29.8	413
1992	VM	*	1992	11	03.49498	02	20	04.40	-22	37	28.9	413
1992	VM		1992	11	03.55748	02	20	06.24	-22	37	38.3	413
1992	VM		1992	11	07.59003	02	22	45.13	-22	39	02.1 15.3 V	413
1992	VM		1992	11	24.61497	02	35	54.92	-20	11	22.5	413
1992	VM		1992	11	25.44612	02	36	41.46	-19	58	25.9	413
1992	VM		1992	11	28.50421	02	39	35.55	-19	07	01.1	413
1992	VM		1992	11	30.58756	02	41	40.43	-18	28	43.4	413
(1)			1992	10	27.41739	20	22	26.49	-29	16	01.7	413
(1)			1992	10	27.41878	20	22	26.54	-29	16	01.1	413
(1)			1992	10	27.42017	20	22	26.60	-29	16	00.8	413
(1459)			1992	10	12.43603	18	24	58.60	-39	18	08.6	413
(1459)			1992	10	12.43793	18	24	58.76	-39	18	08.1	413
(1796)			1992	10	12.49295	21	34	08.61	+00	12	28.5	413
(1796)			1992	10	12.49497	21	34	08.61	+00	12	27.6	413
(1954)			1992	10	12.44189	19	15	55.37	-11	23	32.1	413
(1954)			1992	10	12.44370	19	15	55.51	-11	23	31.6	413
(2335)			1992	10	12.45737	21	01	15.61	-54	50	55.4	413
(2335)			1992	10	12.45940	21	01	15.61	-54	50	53.1	413
(4764)			1992	10	13.65637	23	35	41.75	-38	38	30.8	413
(4764)			1992	10	13.65819	23	35	41.70	-38	38	30.8	413
(5131)			1992	10	09.76824	05	23	32.32	-24	34	46.8	413
(5131)			1992	10	09.77098	05	23	32.19	-24	34	48.6	413

(5325)	1992 10 13.66060	22 37 31.79	-30 36 55.0				413
(5325)	1992 10 13.66244	22 37 31.79	-30 36 55.0				413
(5380)	1992 10 10.59455	23 12 58.81	+08 24 40.6			V	413
(5380)	1992 10 10.59611	23 12 58.77	+08 24 40.4			V	413
(5380)	1992 10 10.59778	23 12 58.79	+08 24 39.0			V	413
(5382)	1992 10 15.42241	22 20 19.79	-10 04 45.7				413
(5382)	1992 10 15.42547	22 20 19.78	-10 04 46.5				413

494 Stakenbridge
B. Manning, Moonrakers, Stakenbridge, Churchill, Kidderminster, Worcs. DY10 3LS, England

1992 WT1	1992 11 17.96960	04 27 15.67	+16 33 34.0				494
1992 WT1	1992 11 19.95154	04 25 17.91	+16 37 23.2	16.0	V		494
1992 WT1	1992 11 19.97391	04 25 16.49	+16 37 25.8	16.0	V		494
1992 WT2	1992 11 27.97756	04 17 49.59	+15 18 57.4				494
(4026)	1992 11 17.96960	04 31 36.69	+16 30 06.5				494
(4026)	1992 11 19.95154	04 29 41.90	+16 25 27.2	16.5	V		494
(4026)	1992 11 19.97391	04 29 40.75	+16 25 24.8	16.5	V		494
(4026)	1992 11 27.97756	04 21 29.92	+16 07 30.6				494
(4459)	1992 11 19.95154	04 26 18.18	+16 10 04.3	16.7	V		494
(4459)	1992 11 19.97391	04 26 16.83	+16 09 59.6	16.7	V		494
(4459)	1992 11 27.97756	04 17 55.09	+15 46 37.0				494

565 Bassano Bresciano
U. Quadri, Osservatorio di Bassano Bresciano, Via S. Michele 4, I-25020 Bassano Bresciano (Brescia), Italy
Observers U. Quadri, L. Strabla
0.3-0.4-m f/3.3 Schmidt
AGK3, SAOC

1986 AK	1992 11 18.87597	03 58 16.74	+22 49 49.3	15.0			565
1986 AK	1992 11 19.83520	03 56 45.89	+22 59 08.9				565
1986 AK	1992 11 19.85987	03 56 43.46	+22 59 23.4				565
1991 XU	1992 01 30.80825	06 53 15.95	+21 21 15.1				565
1991 XU	1992 01 30.82650	06 53 15.04	+21 21 10.9				565
1991 YE	1992 01 30.80825	06 56 24.75	+23 51 55.6				565
1991 YE	1992 01 30.82650	06 56 23.99	+23 51 58.0				565
1992 UK6 *	1992 10 26.85712	02 05 50.15	+18 56 23.8	16.0			565
1992 UK6	1992 10 26.88076	02 05 48.75	+18 56 17.0				565
1992 UK6	1992 11 14.86686	01 47 17.47	+17 02 18.7				565
1992 UK6	1992 11 14.88296	01 47 16.64	+17 02 13.4				565
(156)	1992 11 14.86686	01 35 58.51	+16 36 21.5				565
(156)	1992 11 14.88296	01 35 57.91	+16 36 15.3				565
(2692)	1992 11 14.86686	01 48 26.31	+15 51 25.1				565
(2692)	1992 11 14.88296	01 48 25.76	+15 51 21.1				565
(5058)	1992 01 27.81182	06 57 11.59	+23 29 53.0				565
(5058)	1992 01 27.83028	06 57 10.51	+23 29 58.2				565
(5058)	1992 01 30.80825	06 54 39.49	+23 41 41.7				565
(5058)	1992 01 30.82650	06 54 38.68	+23 41 46.7				565

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

1992 UK6	1992 11 14.78821	01 47 21.51	+17 02 47.2				587
1992 UK6	1992 11 14.82014	01 47 19.83	+17 02 37.2				587
1992 UK6	1992 11 21.93576	01 42 15.72	+16 21 45.4				587
1992 UK6	1992 11 21.96285	01 42 14.70	+16 21 36.2				587

589 Santa Lucia Stroncone
A. Vagnozzi, Via Santa Lucia 68, I-05039 Stroncone (Terni), Italy
Observers A. Vagnozzi, V. Risoldi, G. Bernabei
0.50-m f/2.8 Ritchey-Chretien + CCD
GSC

1973 AT3	1992 11 14.78018	22 49 04.31	-02 47 41.3		589
1973 AT3	1992 11 14.79943	22 49 04.67	-02 47 39.7		589
1973 AT3	1992 11 14.85587	22 49 05.54	-02 47 35.3		589
1975 TM2	1992 11 14.91244	01 18 49.77	+05 15 20.5		589
1975 TM2	1992 11 14.92804	01 18 49.39	+05 15 18.6		589
1975 TM2	1992 11 14.93867	01 18 49.07	+05 15 17.4		589
1975 TM2	1992 11 14.94278	01 18 49.03	+05 15 16.4		589
1992 UK6	1992 11 05.82947	01 55 29.37	+17 57 55.3		589
1992 UK6	1992 11 05.83584	01 55 28.95	+17 57 52.4		589
1992 UK6	1992 11 05.85651	01 55 27.69	+17 57 45.2		589
1992 UK6	1992 11 05.88839	01 55 25.73	+17 57 33.2		589
1992 UK6	1992 11 06.85832	01 54 28.68	+17 51 34.1		589
1992 UK6	1992 11 06.86385	01 54 28.37	+17 51 32.1		589
1992 UK6	1992 11 06.86842	01 54 28.07	+17 51 30.4		589
1992 UK6	1992 11 06.88494	01 54 27.08	+17 51 24.6		589
1992 UK6	1992 11 12.81549	01 49 00.11	+17 14 47.5		589
1992 UK6	1992 11 12.82167	01 48 59.79	+17 14 46.1		589
1992 UK6	1992 11 12.85445	01 48 58.06	+17 14 34.6		589
1992 UK6	1992 11 14.86917	01 47 17.31	+17 02 20.8		589
1992 UK6	1992 11 14.87698	01 47 16.96	+17 02 17.4		589
1992 UK6	1992 11 14.88627	01 47 16.48	+17 02 14.1		589

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

(2078)	1992 09 25.81806	20 57 34.73	+26 23 48.5		595
(2078)	1992 09 25.86806	20 57 33.71	+26 23 49.6		595
(2078)	1992 10 22.87014	21 11 38.20	+25 37 21.2		595
(2078)	1992 10 22.89965	21 11 40.40	+25 37 18.1		595
(2078)	1992 10 26.82639	21 17 02.40	+25 27 01.9		595
(2078)	1992 10 26.87569	21 17 06.50	+25 26 53.5		595

596 Colleverde di Guidonia
V. S. Casulli, Via M. Rosa 1, I-00010 Colleverde di Guidonia (RM), Italy
0.31-m f/2.8 Baker-Schmidt + CCD
GSC

1949 QC1	1992 10 20.83705	00 59 46.41	+18 23 05.3		596
1949 QC1	1992 10 20.84755	00 59 45.80	+18 23 03.5		596
1957 VA	1992 10 17.93483	03 28 35.10	+08 16 52.3		596
1957 VA	1992 10 17.95429	03 28 33.65	+08 17 03.9		596
1975 TM2	1992 10 26.76521	01 31 02.41	+06 38 37.7		596
1975 TM2	1992 10 26.79673	01 31 00.56	+06 38 31.7		596
1975 TM2	1992 10 26.81594	01 30 59.68	+06 38 22.2		596
1975 TM2	1992 10 26.84243	01 30 58.23	+06 38 12.0		596
1979 KO	1992 11 23.90685	04 45 56.89	+02 55 22.2		596
1979 KO	1992 11 23.92101	04 45 56.02	+02 55 25.3		596
1981 UB10	1992 11 23.80337	03 22 57.52	+21 31 56.5		596
1981 UB10	1992 11 23.81792	03 22 56.59	+21 31 57.2		596
1981 UB10	1992 11 23.85080	03 22 54.24	+21 31 59.6		596
1982 VA1	1992 11 19.80202	03 12 01.70	+16 10 28.1		596
1982 VA1	1992 11 19.81009	03 12 01.20	+16 10 27.9		596
1982 VA1	1992 11 19.81723	03 12 00.65	+16 10 26.2		596

1982 YL1	1992 11 14.83533	03 40 51.35	+24 13 16.8				596
1982 YL1	1992 11 14.85591	03 40 50.17	+24 13 18.3				596
1982 YL1	1992 11 14.87240	03 40 49.21	+24 13 19.3				596
1986 AK	1992 11 23.86906	03 50 12.10	+23 37 57.5				596
1986 AK	1992 11 23.87328	03 50 11.72	+23 37 59.5				596
1986 AK	1992 11 25.81583	03 46 57.49	+23 56 22.5				596
1986 AK	1992 11 25.82143	03 46 56.85	+23 56 26.6				596
1986 AK	1992 11 25.82775	03 46 56.22	+23 56 30.1				596
1986 AK	1992 11 25.84592	03 46 54.39	+23 56 40.5				596
1988 TD	1992 11 22.80771	03 14 32.26	+20 07 00.5				596
1988 TD	1992 11 22.84119	03 14 30.15	+20 06 52.3				596
1989 BD	1992 11 21.80389	04 21 15.10	+29 34 46.0				596
1989 BD	1992 11 21.81790	04 21 13.99	+29 34 50.0				596
1989 BD	1992 11 21.83936	04 21 12.62	+29 34 48.1				596
1989 CL3	1992 11 20.82869	02 56 56.22	+19 00 09.4				596
1989 CL3	1992 11 20.84290	02 56 55.60	+19 00 03.5				596
1989 CL3	1992 11 20.84837	02 56 55.29	+18 59 59.7				596
1992 UK6	1992 10 31.75733	02 00 40.09	+18 28 38.8	15.5			596
1992 UK6	1992 10 31.77416	02 00 39.16	+18 28 29.6				596
1992 UK6	1992 10 31.78501	02 00 38.34	+18 28 24.3				596
1992 UK6	1992 10 31.79252	02 00 37.96	+18 28 21.8				596
1992 UK6	1992 11 03.77962	01 57 33.00	+18 10 27.2	15.5			596
1992 UK6	1992 11 03.79462	01 57 32.09	+18 10 22.2				596
1992 UK6	1992 11 03.81518	01 57 30.65	+18 10 14.4				596
1992 UK6	1992 11 03.82903	01 57 29.94	+18 10 09.4				596
1992 UK6	1992 11 12.72380	01 49 05.09	+17 15 19.9	16.4	V	F	596
1992 UK6	1992 11 12.73874	01 49 04.27	+17 15 16.4	16.4	V	F	596
1992 UK6	1992 11 12.74698	01 49 03.71	+17 15 13.0	16.4	V	F	596
1992 UK6	1992 11 12.76160	01 49 03.25	+17 15 06.8	16.4	V	F	596
1992 UK6	1992 11 14.76500	01 47 22.50	+17 02 57.0				596
1992 UK6	1992 11 14.77760	01 47 21.92	+17 02 52.9				596
1992 UK6	1992 11 14.78524	01 47 21.49	+17 02 50.5				596
1992 UK6	1992 11 14.81038	01 47 20.31	+17 02 40.0				596
1992 UK6	1992 11 14.81656	01 47 19.79	+17 02 39.0				596
2141 T-3	1992 10 20.89292	02 29 03.47	+20 50 40.3				596
2141 T-3	1992 10 20.90396	02 29 02.92	+20 50 36.9				596
(753)	1992 10 24.86165	01 49 02.23	+01 24 15.0				596
(753)	1992 10 24.87306	01 49 01.47	+01 24 13.7				596
(753)	1992 10 24.88368	01 49 00.81	+01 24 12.8				596
(753)	1992 10 24.88980	01 49 00.38	+01 24 12.0				596
(4342)	1992 10 24.86165	01 49 07.80	+01 17 40.6				596
(4342)	1992 10 24.87306	01 49 07.21	+01 17 38.6				596
(4342)	1992 10 24.88368	01 49 06.72	+01 17 35.6				596
(4342)	1992 10 24.88980	01 49 06.33	+01 17 33.6				596
(5364)	1992 10 24.92052	03 55 59.26	+24 57 49.8				596
(5364)	1992 10 24.94012	03 55 58.43	+24 57 46.7				596
(5364)	1992 11 18.84946	03 32 37.47	+23 21 55.8				596
(5364)	1992 11 18.86126	03 32 36.59	+23 21 51.2				596
(5364)	1992 11 18.87069	03 32 35.92	+23 21 49.8				596

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

(90)	1992 02 23.89633	10 02 11.29	+15 14 16.4				597
(90)	1992 02 23.90778	10 02 10.73	+15 14 18.8				597
(138)	1992 03 06.86115	10 51 47.80	+12 23 10.7				597
(138)	1992 03 06.86534	10 51 47.49	+12 23 12.1				597
(159)	1992 03 06.86115	10 50 49.28	+12 01 40.3				597
(159)	1992 03 06.86991	10 50 48.87	+12 01 43.3				597
(290)	1992 10 19.89378	00 51 06.81	+14 07 42.6				597

(290)	1992 10 19.90293	00 51 06.02	+14 07 44.0			597
(762)	1992 10 19.81991	01 28 19.20	+29 24 23.0			597
(762)	1992 10 19.83756	01 28 18.28	+29 24 18.8			597
(787)	1992 10 19.91126	01 51 15.68	+01 08 42.9			597
(787)	1992 10 19.93003	01 51 14.73	+01 08 30.6			597
(978)	1992 10 19.85584	01 52 04.26	+16 22 09.9			597
(978)	1992 10 19.86906	01 52 03.70	+16 21 58.5			597
(1029)	1992 02 23.90025	10 00 05.90	+15 42 35.3			597
(1029)	1992 02 23.90778	10 00 05.50	+15 42 37.2			597

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

1985 TP3	1992 11 20.35981	03 29 24.02	+25 25 51.8			657
1985 TP3	1992 11 20.36457	03 29 23.74	+25 25 49.9			657
1985 TP3	1992 11 20.36730	03 29 23.56	+25 25 48.6			657
1985 TP3	1992 11 24.22811	03 25 31.78	+24 59 11.6			657
1985 TP3	1992 11 24.23069	03 25 31.66	+24 59 10.4			657
1985 TP3	1992 11 24.23377	03 25 31.44	+24 59 09.0			657
1992 SL	1992 11 03.32354	01 19 48.92	+37 44 10.1			657
1992 SL	1992 11 03.33587	01 19 48.76	+37 44 11.0			657
1992 SL	1992 11 03.33791	01 19 48.75	+37 44 10.8			657
1992 SL	1992 11 20.25622	01 26 53.99	+36 58 28.9			657
1992 SL	1992 11 20.25860	01 26 54.07	+36 58 28.2			657
1992 SL	1992 11 20.26069	01 26 54.13	+36 58 28.1			657
1992 SL	1992 11 20.26281	01 26 54.24	+36 58 27.0			657
1992 SL	1992 11 24.16580	01 30 19.70	+36 36 45.5			657
1992 SL	1992 11 24.17043	01 30 20.02	+36 36 43.1			657
1992 SL	1992 11 24.17472	01 30 20.17	+36 36 42.8			657
1992 TC	1992 11 20.27260	02 13 40.09	-08 27 45.4			657
1992 TC	1992 11 20.27472	02 13 40.13	-08 27 38.7			657
1992 TC	1992 11 20.27682	02 13 40.14	-08 27 33.5			657
1992 UB	1992 11 20.28160	02 19 49.99	-07 30 32.1			657
1992 UB	1992 11 20.29568	02 19 49.91	-07 29 54.4			657
1992 UB	1992 11 24.21436	02 20 00.13	-04 34 31.4			657
1992 UB	1992 11 24.21648	02 20 00.16	-04 34 25.7			657
1992 UB	1992 11 24.21868	02 20 00.14	-04 34 20.4			657

670 Camarillo
J. E. Rogers, 441 Rowland Avenue, Camarillo, CA 93010
0.25-m Schmidt-Cassegrain + CCD
GSC

1992 HE	1992 09 27.40542	03 21 56.66	+09 11 40.5	15.9		670
1992 HE	1992 09 27.41583	03 21 54.76	+09 11 58.4			670
1992 HE	1992 09 27.42692	03 21 52.84	+09 12 17.5			670
1992 HE	1992 11 01.28692	01 28 39.02	+22 14 41.0	15.4		670
1992 HE	1992 11 01.29741	01 28 37.52	+22 14 49.5			670
1992 HE	1992 11 01.30702	01 28 35.83	+22 14 56.1			670
1992 LR	1992 09 27.30029	22 56 33.59	+01 17 18.3	15.5		670
1992 LR	1992 09 27.31512	22 56 34.68	+01 17 13.0			670
1992 LR	1992 09 27.33958	22 56 36.40	+01 17 03.9			670
1992 OM	1992 09 29.14108	22 14 23.67	+05 41 28.2	16.7		670
1992 OM	1992 09 29.16063	22 14 24.07	+05 41 35.1			670
1992 OM	1992 09 29.18108	22 14 24.50	+05 41 35.5			670
1992 OM	1992 09 30.15431	22 14 50.98	+05 44 08.5			670
1992 OM	1992 09 30.17091	22 14 51.55	+05 44 09.9			670
1992 OM	1992 09 30.19661	22 14 52.11	+05 44 12.8			670

1992 OM	1992 09 30.22363	22 14 52.52	+05 44 19.3			670
1992 SL	1992 10 05.37668	01 35 18.75	+27 47 36.7	14.7		670
1992 SL	1992 10 05.39266	01 35 17.50	+27 48 27.0			670
1992 SL	1992 11 01.20538	01 19 55.99	+37 39 34.2	16.8		670
1992 SL	1992 11 01.21698	01 19 56.06	+37 39 34.7			670
1992 SL	1992 11 01.22810	01 19 55.50	+37 39 37.3			670
1992 TC	1992 11 01.32115	02 03 22.25	-25 27 54.2	16.7		670
1992 TC	1992 11 01.33019	02 03 22.25	-25 27 19.6			670
1992 TC	1992 11 01.34061	02 03 22.37	-25 26 46.8			670

674 Ford Observatory, Wrightwood
J. B. Child, World Space Foundation, P.O. Box Y, South Pasadena CA 91031, U.S.A.
Observers J. B. Child, G. Fisch

1992 SQ2	1992 10 18.32031	02 59 56.95	+18 08 51.0			674
1992 SQ2	1992 10 18.46157	02 59 50.26	+18 08 09.6			674
1992 SQ2	1992 10 18.47558	02 59 49.62	+18 08 05.7			674
1992 SQ2	1992 10 18.48403	02 59 49.23	+18 08 02.9			674
1992 SQ2	1992 11 28.29618	02 25 44.02	+14 17 12.8			674
1992 SQ2	1992 11 28.30503	02 25 43.67	+14 17 10.8			674
1992 SQ2	1992 11 28.36250	02 25 41.66	+14 16 53.9			674

675 Palomar
J. Gibson, OAO Corporation and Jet Propulsion Laboratory, MS 238-332, Pasadena, CA 91109, U.S.A. (1)
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)
9 = 3 + 6
Observers J. Alu (2, S), M. A. Dahm (3,S), T. Gehrels (4, L), E. Helin (2, S), H. E. Holt (3, S), C. T. Kowal (6, L), K. Lawrence (2, S), G. J. Leonard (3, S), D. H. Levy (3, S), P. Rose (2, S), C. S. Shoemaker (3, S), E. M. Shoemaker (3, S)
Measurers J. Alu (2), K. Lawrence (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

1970 OB	1991 12 01.26024	03 48 18.85	+17 10 44.9	17.5	9	675
1970 OB	1991 12 01.29844	03 48 16.37	+17 10 42.5		9	675
1972 RF2	1971 03 24.38924	12 16 07.71	-02 07 53.2	20.0	4	675
1972 RF2	1971 03 26.26771	12 14 22.23	-01 53 56.4	19.5	4	675
1973 SR3	1992 08 06.42865	22 51 57.83	-11 36 08.2		9	675
1973 SR3	1992 08 06.47378	22 51 56.37	-11 36 15.6		9	675
1973 SR6	1971 04 16.21476	12 31 15.77	+00 51 26.1	18.0	4	675
1973 SR6	1971 04 16.27708	12 31 12.55	+00 51 30.9		4	675
1974 SK1	1991 12 01.26024	03 48 33.82	+16 21 30.2	16.8	9	675
1974 SK1	1991 12 01.29844	03 48 31.63	+16 21 24.0		9	675
1974 SK1	1991 12 03.30260	03 46 42.00	+16 15 49.6		9	675
1974 SK1	1991 12 03.33455	03 46 40.26	+16 15 44.0		9	675
1974 XW	1991 12 01.29844	03 43 45.87	+17 10 08.0	16.8	9	675
1974 XW	1991 12 03.30260	03 41 50.07	+17 09 35.0		9	675
1974 XW	1991 12 03.33455	03 41 48.05	+17 09 35.4		9	675
1975 VK2	1991 12 01.26024	03 51 46.54	+18 28 30.1	17.2	9	675
1975 VK2	1991 12 01.29844	03 51 44.45	+18 28 26.3		9	675
1975 VK2	1991 12 03.30260	03 50 00.63	+18 25 17.4		9	675
1975 VK2	1991 12 03.33455	03 49 58.98	+18 25 14.6		9	675

1977	RR6	1992	08	03.36962	22	45	30.59	-12	38	29.9		9	675
1977	RR6	1992	08	03.40608	22	45	29.38	-12	38	33.6		9	675
1977	RR6	1992	08	06.42865	22	43	42.82	-12	43	54.9		9	675
1977	RR6	1992	08	06.47378	22	43	40.99	-12	43	59.8		9	675
1978	RL1	1990	11	11.28663	02	59	25.13	+14	13	48.9	17.9	3	675
1978	RL1	1990	11	11.31892	02	59	23.64	+14	13	41.9		3	675
1978	RL1	1990	11	14.30139	02	56	59.67	+14	03	25.9		3	675
1979	MA4	1992	08	03.36215	22	26	58.42	-05	16	10.3		9	675
1979	MA4	1992	08	03.39754	22	26	57.24	-05	16	17.2	17.0	9	675
1979	MA4	1992	08	06.41632	22	25	24.11	-05	26	53.9	17.0	9	675
1979	MA4	1992	08	06.46146	22	25	22.58	-05	27	03.5		9	675
1981	RJ5	1992	08	03.36962	22	31	29.15	-10	24	23.0	17.8	9	675
1981	RJ5	1992	08	03.40608	22	31	27.95	-10	24	33.8		9	675
1981	RJ5	1992	08	06.42865	22	29	49.42	-10	37	08.5		9	675
1981	RJ5	1992	08	06.47378	22	29	47.90	-10	37	17.3		9	675
1982	RK	1992	10	01.35938	01	40	45.48	-00	12	34.7	16.5	3	675
1982	RK	1992	10	01.39792	01	40	43.86	-00	12	48.7		3	675
1982	TB2	1992	08	03.36215	22	28	39.91	-02	13	21.7		9	675
1982	TB2	1992	08	03.39754	22	28	38.22	-02	13	24.5	17.0	9	675
1982	TB2	1992	08	06.41632	22	26	26.56	-02	17	48.7	17.3	9	675
1982	TB2	1992	08	06.46146	22	26	24.36	-02	17	52.6		9	675
1983	HB1	1991	11	07.34531	04	27	48.67	+07	08	47.9	17.2	9	675
1983	HB1	1991	11	07.37882	04	27	47.18	+07	08	43.7		9	675
1983	HB1	1991	11	09.40278	04	26	19.21	+07	05	30.2		9	675
1983	HB1	1991	11	09.43576	04	26	17.66	+07	05	27.8		9	675
1983	PY	1991	11	07.34531	04	35	20.33	+12	14	52.4	17.5	9	675
1983	PY	1991	11	07.37882	04	35	18.43	+12	14	40.9		9	675
1983	PY	1991	11	09.40278	04	33	28.25	+12	03	08.0		9	675
1983	PY	1991	11	09.43576	04	33	26.30	+12	02	57.4		9	675
1983	RT1	1971	04	16.22812	12	34	34.17	-06	48	07.9	19.0	4	675
1983	RT1	1971	04	16.30139	12	34	29.93	-06	47	53.5		4	675
1983	RQ4	1949	11	30.49271	09	17	58.10	+06	25	50.3		6	675
1983	RQ4	1949	11	30.51997	09	17	58.61	+06	25	43.1		6	675
1984	SA1	1971	04	16.22812	12	26	34.03	-06	08	40.9	18.0	4	675
1984	SA1	1971	04	16.30139	12	26	30.06	-06	08	24.2		4	675
1984	SA1	1971	05	14.19427	12	10	31.85	-04	56	22.6	19.0	4	675
1984	SA1	1971	05	14.24549	12	10	31.07	-04	56	20.3		4	675
1984	SA1	1971	05	16.27535	12	10	04.09	-04	54	41.5	19.0	4	675
1984	UX1	1971	04	16.21476	12	26	22.98	+03	15	40.3	18.5	4	675
1984	UX1	1971	04	16.27708	12	26	19.75	+03	15	45.8		4	675
1985	CJ1	1991	12	01.26024	03	38	18.34	+19	48	29.3	16.5	9	675
1985	CJ1	1991	12	01.29844	03	38	15.91	+19	48	27.0		9	675
1985	CJ1	1991	12	03.30260	03	36	12.87	+19	46	07.9		9	675
1985	CJ1	1991	12	03.33455	03	36	10.83	+19	46	06.5		9	675
1985	FH	1991	11	07.34531	04	18	05.36	+07	13	38.7	18.2	9	675
1985	FH	1991	11	07.37882	04	18	03.65	+07	13	27.0		9	675
1985	FH	1991	11	09.40278	04	16	24.22	+07	02	59.6		9	675
1985	FH	1991	11	09.43576	04	16	22.32	+07	02	51.1		9	675
1985	TD3	1991	11	07.34531	04	31	22.62	+09	21	08.3	16.8	9	675
1985	TD3	1991	11	07.37882	04	31	21.21	+09	20	41.6		9	675
1985	TD3	1991	11	09.40278	04	30	00.94	+08	54	11.1		9	675
1985	TD3	1991	11	09.43576	04	29	59.56	+08	53	46.1		9	675
1985	UQ	1992	08	03.36962	22	41	12.97	-16	12	34.6		9	675
1985	UQ	1992	08	03.40608	22	41	11.98	-16	12	49.3		9	675
1985	UQ	1992	08	06.42865	22	39	48.45	-16	34	01.4		9	675
1985	UQ	1992	08	06.47378	22	39	46.99	-16	34	20.0		9	675
1985	UQ4	1991	12	01.26024	03	54	22.83	+16	36	55.6	17.5	9	675
1985	UQ4	1991	12	01.29844	03	54	20.87	+16	36	50.2		9	675
1985	UQ4	1991	12	03.30260	03	52	44.12	+16	33	22.7		9	675

1985	UQ4	1991	12	03.33455	03 52 42.45	+16 33 19.5		9	675
1986	AK	1992	10	22.43645	04 28 31.45	+18 36 29.2		3	675
1986	AK	1992	10	22.46961	04 28 30.33	+18 36 44.2	16.5	3	675
1986	AK	1992	10	24.50034	04 27 17.13	+18 53 37.3		3	675
1986	AK	1992	10	24.53211	04 27 15.77	+18 53 53.1		3	675
1986	TR6	1991	04	20.23455	12 18 07.70	-17 52 06.5	17.9	3	675
1986	WB1	1992	08	03.36215	22 19 33.32	-04 09 50.1		9	675
1986	WB1	1992	08	03.39754	22 19 31.49	-04 09 57.6		9	675
1986	WB1	1992	08	06.41632	22 17 02.90	-04 19 44.5	18.2	9	675
1986	WB1	1992	08	06.46146	22 17 00.52	-04 19 53.1		9	675
1987	UF5	1991	07	14.38177	21 23 08.79	-24 32 07.9		9	675
1987	UF5	1991	07	14.42170	21 23 07.33	-24 32 17.0	18.0	9	675
1988	AF1	1991	12	01.26024	03 43 29.54	+21 10 50.9	16.5	9	675
1988	AF1	1991	12	01.29844	03 43 27.38	+21 10 51.3		9	675
1988	AF1	1991	12	03.30260	03 41 46.97	+21 11 46.7		9	675
1988	AF1	1991	12	03.33455	03 41 45.28	+21 11 48.3		9	675
1988	JL	1991	06	06.40938	19 38 49.30	-31 17 41.5	17	3	675
1988	JL	1991	06	06.44028	19 38 48.87	-31 18 24.3		3	675
1988	JL	1991	06	08.39566	19 38 17.71	-32 06 11.0		3	675
1988	JL	1991	06	08.43194	19 38 16.58	-32 07 04.3		3	675
1988	MB	1992	11	21.47274	06 01 12.50	+50 00 46.0	15.5	2	675
1988	MB	1992	11	21.49792	06 01 10.63	+50 00 34.0		2	675
1988	MB	1992	11	22.40069	06 00 01.41	+49 52 13.0		2	675
1988	RF1	1989	09	28.42708	01 41 36.05	+23 24 03.7	18.5	3	675
1988	RF1	1989	09	28.47031	01 41 34.57	+23 24 09.3		3	675
1988	RF1	1989	09	29.42795	01 41 00.79	+23 24 53.6		3	675
1988	RF1	1989	09	29.46372	01 40 59.70	+23 24 57.3		3	675
1988	RK11	1992	08	06.41632	22 36 48.79	-03 36 52.7		9	675
1988	RK11	1992	08	06.46146	22 36 47.41	-03 37 05.6	17.8	9	675
1988	RB12	1992	08	03.36962	22 24 21.44	-15 53 02.5	17.0	9	675
1988	RB12	1992	08	03.40608	22 24 20.06	-15 53 02.0		9	675
1988	RB12	1992	08	06.42865	22 22 23.86	-15 54 02.2		9	675
1988	RB12	1992	08	06.47378	22 22 21.87	-15 54 00.7		9	675
1989	AF1	1991	11	07.34531	04 19 45.98	+12 23 44.9	16.8	9	675
1989	AF1	1991	11	07.37882	04 19 44.16	+12 23 38.6		9	675
1989	AF1	1991	11	09.40278	04 17 57.53	+12 18 33.6		9	675
1989	AF1	1991	11	09.43576	04 17 55.63	+12 18 29.9		9	675
1989	AN1	1991	08	10.29236	21 40 03.71	-17 18 54.4	17.5	9	675
1989	AN1	1991	08	10.32517	21 40 02.04	-17 19 03.2		9	675
1989	DJ	1988	01	20.40347	08 01 45.32	+34 28 39.3	17.2	3	675
1989	DJ	1988	01	20.45121	08 01 43.37	+34 28 37.7		3	675
1989	DJ	1988	02	18.14844	07 44 19.22	+33 49 09.7	17.5	3	675
1989	DJ	1988	02	18.20052	07 44 17.83	+33 49 02.7		3	675
1989	DJ	1988	02	18.24513	07 44 16.46	+33 48 57.4		3	675
1989	DJ	1988	02	22.17152	07 42 33.05	+33 39 06.3		3	675
1989	DJ	1988	02	22.32239	07 42 29.27	+33 38 41.6		3	675
1989	SL1	1992	08	06.42865	22 50 37.42	-11 17 50.3		9	675
1989	SL1	1992	08	06.47378	22 50 35.57	-11 18 11.3		9	675
1989	TU5	1990	11	11.28663	02 59 36.30	+14 54 02.3	18.5	3	675
1989	TU5	1990	11	11.31892	02 59 35.32	+14 53 56.3		3	675
1989	TU5	1990	11	14.30139	02 58 03.67	+14 47 47.1		3	675
1989	US	1992	08	03.36962	22 33 21.09	-18 18 37.7	16.8	9	675
1989	US	1992	08	03.40608	22 33 19.56	-18 18 50.0		9	675
1989	UO1	1992	08	03.36215	22 09 02.75	-03 12 06.0		9	675
1989	UO1	1992	08	03.39754	22 09 01.51	-03 12 12.0		9	675
1989	UO1	1992	08	06.41632	22 07 33.29	-03 23 20.0		9	675
1989	UO1	1992	08	06.46146	22 07 31.66	-03 23 30.1		9	675
1989	YR	1992	08	06.42865	22 42 35.00	-11 17 39.1		9	675
1989	YR	1992	08	06.47378	22 42 33.23	-11 17 54.5		9	675

1990 BG1	1992	08	03.36962	22	30	05.26	-18 03 24.8	18.5	9 675
1990 BG1	1992	08	03.40608	22	30	03.74	-18 03 37.0		9 675
1990 DM	1992	08	03.36962	22	27	52.80	-15 42 34.7	17.0	9 675
1990 DM	1992	08	03.40608	22	27	51.51	-15 42 50.4		9 675
1990 DM	1992	08	06.42865	22	26	02.13	-16 03 16.4		9 675
1990 DM	1992	08	06.47378	22	26	00.40	-16 03 34.6		9 675
1990 MX	1991	12	01.26024	04	00	19.48	+18 51 04.8	17.8	9 675
1990 MX	1991	12	01.29844	04	00	16.73	+18 51 03.2		9 675
1990 MX	1991	12	03.30260	03	58	02.49	+18 49 18.7		9 675
1990 MX	1991	12	03.33455	03	58	00.29	+18 49 16.1		9 675
1990 QB4	1991	11	07.34531	04	11	58.17	+11 24 13.7	17.8	9 675
1990 QB4	1991	11	07.37882	04	11	56.69	+11 24 04.0		9 675
1990 QB4	1991	11	09.40278	04	10	30.52	+11 17 13.1		9 675
1990 QB4	1991	11	09.43576	04	10	28.91	+11 17 07.3		9 675
1990 VA	1991	11	07.34531	04	24	45.50	+06 34 09.8	18.5	9 675
1990 VA	1991	11	07.37882	04	24	38.23	+06 32 22.4		9 675
1991 JZ1	1992	08	03.36962	22	25	30.34	-14 12 26.6	17.0	9 675
1991 JZ1	1992	08	03.40608	22	25	29.06	-14 12 44.3		9 675
1991 JZ1	1992	08	06.42865	22	23	43.17	-14 35 39.7		9 675
1991 JZ1	1992	08	06.47378	22	23	41.41	-14 35 59.8		9 675
1991 PH11	1949	11	30.49271	09	24	21.37	+08 13 44.6		6 675
1991 PH11	1949	11	30.51997	09	24	21.86	+08 13 37.3		6 675
1991 VZ1	1991	12	01.26024	03	37	23.62	+17 06 50.2		9 675
1991 VZ1	1991	12	01.29844	03	37	21.34	+17 06 52.4		9 675
1991 VZ1	1991	12	03.30260	03	35	26.52	+17 08 52.2		9 675
1991 VZ1	1991	12	03.33455	03	35	24.67	+17 08 53.8		9 675
1991 VD2	1991	12	01.26024	03	43	29.13	+16 23 17.4	16.8	9 675
1991 VD2	1991	12	01.29844	03	43	27.21	+16 23 14.1		9 675
1991 VD2	1991	12	03.30260	03	41	50.31	+16 20 40.1		9 675
1991 VD2	1991	12	03.33455	03	41	48.71	+16 20 38.1		9 675
1991 VH2	1991	12	01.26024	03	44	55.01	+15 22 26.9	18.0	9 675
1991 VH2	1991	12	01.29844	03	44	52.76	+15 22 26.9		9 675
1991 VH2	1991	12	03.30260	03	42	54.29	+15 21 22.0		9 675
1991 VH2	1991	12	03.33455	03	42	52.35	+15 21 21.5		9 675
1991 VK2	1991	12	03.33455	03	47	21.71	+15 15 03.7		9 675
1991 VR3	1991	11	07.34531	04	09	37.84	+10 59 32.4	16.2	9 675
1991 VR3	1991	11	07.37882	04	09	36.16	+10 59 29.0		9 675
1991 VR3	1991	11	09.40278	04	08	02.17	+10 57 42.3		9 675
1991 VR3	1991	11	09.43576	04	08	00.43	+10 57 41.6		9 675
1991 VT3	1991	12	01.26024	03	51	02.79	+18 07 26.5	16.8	9 675
1991 VT3	1991	12	01.29844	03	51	00.69	+18 07 05.3		9 675
1991 VT3	1991	12	03.30260	03	49	12.89	+17 49 09.2		9 675
1991 VT3	1991	12	03.33455	03	49	11.10	+17 48 52.0		9 675
1991 VV3	1991	12	01.26024	03	53	31.72	+22 02 50.5	16.8	9 675
1991 VV3	1991	12	01.29844	03	53	29.33	+22 02 48.7		9 675
1991 VV3	1991	12	03.30260	03	51	31.53	+22 01 53.5		9 675
1991 VV3	1991	12	03.33455	03	51	29.61	+22 01 52.5		9 675
1991 VW3	1991	12	01.26024	03	53	25.45	+20 04 13.8	16.8	9 675
1991 VW3	1991	12	01.29844	03	53	22.83	+20 04 05.1		9 675
1991 VW3	1991	12	03.30260	03	51	12.03	+19 55 58.6		9 675
1991 VW3	1991	12	03.33455	03	51	09.77	+19 55 51.7		9 675
1991 VX3	1991	12	01.26024	03	55	33.08	+21 02 27.3	16.8	9 675
1991 VX3	1991	12	01.29844	03	55	30.56	+21 02 24.0		9 675
1991 VX3	1991	12	03.30260	03	53	17.20	+20 57 58.1		9 675
1991 VX3	1991	12	03.33455	03	53	15.12	+20 57 53.3		9 675
1991 VH6	1991	11	07.34531	04	08	23.81	+08 34 47.0	17.8	9 675
1991 VH6	1991	11	07.37882	04	08	21.89	+08 34 33.9		9 675
1991 VH6	1991	11	09.40278	04	06	37.95	+08 22 23.4		9 675
1991 VJ6	1991	11	07.34531	04	14	47.78	+09 45 07.4	18.0	9 675

1991	VJ6		1991	11	07.37882	04	14	46.35	+09	44	54.6			9	675
1991	VJ6		1991	11	09.40278	04	13	15.06	+09	30	38.5			9	675
1991	VJ6		1991	11	09.43576	04	13	13.48	+09	30	25.5			9	675
1991	VL6		1991	11	07.34531	04	23	12.21	+09	20	11.8		17.8	9	675
1991	VL6		1991	11	07.37882	04	23	10.66	+09	19	48.1			9	675
1991	VL6		1991	11	09.40278	04	21	46.75	+08	57	15.7			9	675
1991	VL6		1991	11	09.43576	04	21	45.30	+08	56	54.7			9	675
1991	VM6		1991	11	07.34531	04	25	11.67	+08	48	38.4		18.0	9	675
1991	VM6		1991	11	07.37882	04	25	09.89	+08	48	37.8			9	675
1991	VM6		1991	11	09.40278	04	23	24.94	+08	49	26.6			9	675
1991	VM6		1991	11	09.43576	04	23	23.21	+08	49	27.2			9	675
1991	VF7		1991	12	01.26024	03	46	54.51	+20	12	04.0			9	675
1991	VF7		1991	12	01.29844	03	46	52.45	+20	11	52.0			9	675
1991	VF7		1991	12	03.30260	03	44	54.99	+20	00	51.4			9	675
1991	VF7		1991	12	03.33455	03	44	53.10	+20	00	40.8			9	675
1991	VY12		1991	12	01.26024	03	54	41.78	+19	45	34.4		16.8	9	675
1991	VY12		1991	12	01.29844	03	54	39.55	+19	45	23.7			9	675
1991	VY12		1991	12	03.30260	03	52	53.94	+19	35	39.5			9	675
1991	VY12		1991	12	03.33455	03	52	52.19	+19	35	30.5			9	675
1991	VZ12		1991	11	07.34531	04	08	17.45	+11	13	19.8		18.2	9	675
1991	VZ12		1991	11	07.37882	04	08	15.80	+11	12	58.2			9	675
1991	XB		1991	12	03.30260	03	45	32.46	+23	14	22.9			9	675
1991	XS		1991	12	01.26024	03	40	17.33	+18	19	24.2		17.5	9	675
1991	XS		1991	12	01.29844	03	40	15.40	+18	19	10.4			9	675
1991	XS		1991	12	03.30260	03	38	38.96	+18	06	53.3			9	675
1991	XS		1991	12	03.33455	03	38	37.39	+18	06	41.0			9	675
1992	HE		1992	10	20.34600	02	04	31.22	+19	18	51.6		15.5	3	675
1992	HE		1992	10	20.37813	02	04	24.66	+19	19	29.5			3	675
1992	HE		1992	10	22.30190	01	58	02.91	+19	54	40.8			3	675
1992	HE		1992	10	22.33420	01	57	56.46	+19	55	14.7			3	675
1992	LR		1992	10	04.21024	23	05	37.82	+00	46	03.3		17.8	3	675
1992	LR		1992	10	04.24791	23	05	40.44	+00	45	55.3			3	675
1992	NA		1992	10	22.42084	05	09	47.75	+57	09	26.7		16.6	3	675
1992	NA		1992	10	22.45625	05	09	46.07	+57	09	44.3			3	675
1992	NA		1992	10	24.50607	05	08	32.78	+57	24	23.6			3	675
1992	NA		1992	10	24.53767	05	08	30.96	+57	24	32.8			3	675
1992	PQ2		1992	08	03.36215	22	22	14.67	-00	35	23.1			9	675
1992	PQ2		1992	08	03.39754	22	22	13.03	-00	35	19.7		17.8	9	675
1992	PQ2		1992	08	06.41632	22	20	04.46	-00	33	28.2			9	675
1992	PQ2		1992	08	06.46146	22	20	02.33	-00	33	24.5		17.5	9	675
1992	PR2		1992	08	03.36215	22	23	25.77	-00	42	05.2			9	675
1992	PR2		1992	08	03.39754	22	23	24.61	-00	42	14.8		18.0	9	675
1992	PR2		1992	08	06.41632	22	21	53.30	-00	57	12.0		17.5	9	675
1992	PR2		1992	08	06.46146	22	21	51.77	-00	57	25.9			9	675
1992	PT2		1992	08	06.41632	22	31	10.79	-01	26	07.4		17.5	9	675
1992	PT2		1992	08	06.46146	22	31	08.91	-01	26	10.5			9	675
1992	PL4		1992	08	03.36215	22	17	26.62	-08	16	20.5			9	675
1992	PL4		1992	08	03.39754	22	17	25.13	-08	16	26.6		17.5	9	675
1992	PL4		1992	08	06.41632	22	15	26.94	-08	24	38.3		17.2	9	675
1992	PL4		1992	08	06.46146	22	15	24.94	-08	24	47.0			9	675
1992	PM4		1992	08	03.36215	22	17	36.73	-07	19	08.3			9	675
1992	PM4		1992	08	03.39754	22	17	35.34	-07	19	12.4		17.8	9	675
1992	PM4		1992	08	06.41632	22	15	43.16	-07	25	47.1		17.8	9	675
1992	PM4		1992	08	06.46146	22	15	41.36	-07	25	52.3			9	675
1992	PT4		1992	08	03.36962	22	24	11.08	-12	31	23.8		17.0	9	675
1992	PT4		1992	08	03.40608	22	24	09.80	-12	31	50.1			9	675
1992	PT4		1992	08	06.42865	22	22	25.30	-13	05	10.7			9	675
1992	PT4		1992	08	06.47378	22	22	23.51	-13	05	39.0			9	675
1992	PB5	*	1992	08	03.36215	22	12	22.82	-06	46	19.0			9	675

1992	PB5		1992	08	03.39754	22	12	21.25	-06	46	20.7	17.5	9	675
1992	PB5		1992	08	06.41632	22	10	17.99	-06	49	38.8	17.8	9	675
1992	PB5		1992	08	06.46146	22	10	15.89	-06	49	42.6		9	675
1992	PC5	*	1992	08	03.36215	22	21	55.20	-02	57	59.4		9	675
1992	PC5		1992	08	03.39754	22	21	54.12	-02	58	14.4	16.2	9	675
1992	PC5		1992	08	06.41632	22	20	30.47	-03	20	23.6	16.5	9	675
1992	PC5		1992	08	06.46146	22	20	28.97	-03	20	43.8		9	675
1992	PD5	*	1992	08	03.36215	22	24	45.23	-03	32	22.1		9	675
1992	PD5		1992	08	03.39754	22	24	43.82	-03	32	17.8	16.5	9	675
1992	PD5		1992	08	06.41632	22	22	52.43	-03	27	53.0	16.5	9	675
1992	PD5		1992	08	06.46146	22	22	50.49	-03	27	49.5		9	675
1992	PE5	*	1992	08	03.36215	22	26	26.18	-06	38	14.2		9	675
1992	PE5		1992	08	03.39754	22	26	24.64	-06	38	21.7	17.5	9	675
1992	PE5		1992	08	06.41632	22	24	25.92	-06	50	15.7		9	675
1992	PE5		1992	08	06.46146	22	24	24.01	-06	50	28.0		9	675
1992	PF5	*	1992	08	03.36215	22	32	20.82	-05	22	50.2		9	675
1992	PF5		1992	08	03.39754	22	32	19.54	-05	22	51.4	17.2	9	675
1992	PF5		1992	08	06.41632	22	30	36.11	-05	26	13.8	17.0	9	675
1992	PF5		1992	08	06.46146	22	30	34.30	-05	26	17.0		9	675
1992	PG5	*	1992	08	03.36962	22	25	55.88	-14	37	12.5	17.8	9	675
1992	PG5		1992	08	03.40608	22	25	54.26	-14	37	20.8		9	675
1992	PG5		1992	08	06.42865	22	23	48.13	-14	50	34.8		9	675
1992	PG5		1992	08	06.47378	22	23	45.97	-14	50	46.7		9	675
1992	PH5	*	1992	08	03.36962	22	28	12.57	-16	23	08.1	17.8	9	675
1992	PH5		1992	08	03.40608	22	28	11.10	-16	23	15.9		9	675
1992	PH5		1992	08	06.42865	22	26	14.77	-16	33	20.4		9	675
1992	PH5		1992	08	06.47378	22	26	12.82	-16	33	28.8		9	675
1992	PJ5	*	1992	08	03.36962	22	28	39.99	-15	15	20.1	17.8	9	675
1992	PJ5		1992	08	03.40608	22	28	38.65	-15	15	34.2		9	675
1992	PJ5		1992	08	06.42865	22	26	47.38	-15	33	34.5		9	675
1992	PJ5		1992	08	06.47378	22	26	45.55	-15	33	49.1		9	675
1992	PK5	*	1992	08	03.36962	22	28	51.34	-13	37	19.1	18.0	9	675
1992	PK5		1992	08	03.40608	22	28	50.17	-13	37	32.2		9	675
1992	PK5		1992	08	06.42865	22	27	17.32	-13	55	18.4		9	675
1992	PK5		1992	08	06.47378	22	27	15.56	-13	55	33.0		9	675
1992	PL5	*	1992	08	03.36962	22	29	33.07	-14	01	38.0	16.8	9	675
1992	PL5		1992	08	03.40608	22	29	32.05	-14	01	52.1		9	675
1992	PL5		1992	08	06.42865	22	28	06.20	-14	21	33.1		9	675
1992	PL5		1992	08	06.47378	22	28	04.69	-14	21	50.0		9	675
1992	PM5	*	1992	08	03.36962	22	31	07.18	-14	13	31.7		9	675
1992	PM5		1992	08	03.40608	22	31	05.69	-14	13	40.6		9	675
1992	PM5		1992	08	06.42865	22	29	08.10	-14	27	15.9		9	675
1992	PM5		1992	08	06.47378	22	29	06.17	-14	27	27.9		9	675
1992	PN5	*	1992	08	03.36962	22	35	45.40	-16	56	29.6	18.0	9	675
1992	PN5		1992	08	03.40608	22	35	44.37	-16	56	42.8		9	675
1992	PN5		1992	08	06.42865	22	34	15.53	-17	14	57.3		9	675
1992	PN5		1992	08	06.47378	22	34	13.91	-17	15	13.1		9	675
1992	PO5	*	1992	08	03.36962	22	37	49.54	-17	12	13.9	17.5	9	675
1992	PO5		1992	08	03.40608	22	37	47.89	-17	12	15.7		9	675
1992	PO5		1992	08	06.42865	22	35	31.25	-17	15	50.4		9	675
1992	PO5		1992	08	06.47378	22	35	28.85	-17	15	52.3		9	675
1992	PP5	*	1992	08	03.36962	22	38	34.48	-10	17	34.8	17.5	9	675
1992	PP5		1992	08	03.40608	22	38	33.20	-10	17	49.7		9	675
1992	PP5		1992	08	06.42865	22	36	45.11	-10	38	07.6		9	675
1992	PP5		1992	08	06.47378	22	36	43.27	-10	38	25.5		9	675
1992	PQ5	*	1992	08	03.36962	22	38	42.20	-15	45	08.1	17.8	9	675
1992	PQ5		1992	08	03.40608	22	38	40.66	-15	45	15.0		9	675
1992	PQ5		1992	08	06.42865	22	36	30.99	-15	54	37.8		9	675
1992	PQ5		1992	08	06.47378	22	36	28.85	-15	54	44.6		9	675

1992	PR5	*	1992	08	03.36962	22	38	54.02	-11	43	59.5	17.5	9	675
1992	PR5		1992	08	03.40608	22	38	52.53	-11	44	06.8		9	675
1992	PR5		1992	08	06.42865	22	36	46.30	-11	53	02.6		9	675
1992	PR5		1992	08	06.47378	22	36	44.20	-11	53	09.6		9	675
1992	PS5	*	1992	08	03.36962	22	39	12.20	-12	43	43.6	17.8	9	675
1992	PS5		1992	08	03.40608	22	39	10.76	-12	43	59.2		9	675
1992	PS5		1992	08	06.47378	22	37	11.42	-13	05	34.5		9	675
1992	PT5	*	1992	08	03.36962	22	40	12.74	-13	09	08.9	17.5	9	675
1992	PT5		1992	08	03.40608	22	40	11.80	-13	09	24.0		9	675
1992	PT5		1992	08	06.42865	22	38	52.65	-13	30	43.5		9	675
1992	PT5		1992	08	06.47378	22	38	51.22	-13	31	02.6		9	675
1992	PU5	*	1992	08	03.36962	22	41	15.11	-15	52	55.3	17.0	9	675
1992	PU5		1992	08	03.40608	22	41	13.60	-15	53	03.1		9	675
1992	PU5		1992	08	06.42865	22	39	06.75	-16	04	10.1		9	675
1992	PU5		1992	08	06.47378	22	39	04.63	-16	04	20.1		9	675
1992	PV5	*	1992	08	03.36962	22	42	46.72	-11	01	04.3	18.2	9	675
1992	PV5		1992	08	03.40608	22	42	45.54	-11	01	03.8		9	675
1992	PV5		1992	08	06.42865	22	41	07.53	-10	59	06.3		9	675
1992	PV5		1992	08	06.47378	22	41	05.79	-10	59	04.3		9	675
1992	PW5	*	1992	08	03.36962	22	42	58.83	-13	07	10.8	18.2	9	675
1992	PW5		1992	08	03.40608	22	42	57.02	-13	07	15.8		9	675
1992	PW5		1992	08	06.42865	22	40	31.20	-13	14	49.3		9	675
1992	PW5		1992	08	06.47378	22	40	28.77	-13	14	54.6		9	675
1992	PX5	*	1992	08	03.36962	22	45	11.79	-15	29	37.0	18.0	9	675
1992	PX5		1992	08	03.40608	22	45	10.55	-15	29	46.1		9	675
1992	PX5		1992	08	06.42865	22	43	24.62	-15	42	53.0		9	675
1992	PX5		1992	08	06.47378	22	43	22.79	-15	43	04.6		9	675
1992	PY5	*	1992	08	03.36962	22	45	49.10	-12	42	24.3	17.8	9	675
1992	PY5		1992	08	03.40608	22	45	47.85	-12	42	36.1		9	675
1992	PY5		1992	08	06.42865	22	44	03.14	-12	57	02.1		9	675
1992	PY5		1992	08	06.47378	22	44	01.38	-12	57	13.1		9	675
1992	PZ5	*	1992	08	03.36962	22	49	54.21	-16	47	21.1	17.5	9	675
1992	PZ5		1992	08	03.40608	22	49	53.04	-16	46	57.1		9	675
1992	PZ5		1992	08	06.42865	22	48	26.31	-16	12	45.6		9	675
1992	PZ5		1992	08	06.47378	22	48	24.55	-16	12	14.7		9	675
1992	PA6	*	1992	08	03.36962	22	51	02.63	-15	01	46.2	17.8	9	675
1992	PA6		1992	08	03.40608	22	51	01.48	-15	02	06.4		9	675
1992	PA6		1992	08	06.42865	22	49	24.43	-15	28	59.7		9	675
1992	PA6		1992	08	06.47378	22	49	22.74	-15	29	24.4		9	675
1992	QS1	*	1992	08	24.41372	00	48	44.01	-11	31	50.4		3	675
1992	QS1		1992	08	24.44063	00	48	43.64	-11	32	02.1		3	675
1992	QS1		1992	08	25.48646	00	48	29.53	-11	39	00.1	17.2	3	675
1992	QS1		1992	08	27.42361	00	47	57.82	-11	52	08.4		3	675
1992	QS1		1992	08	27.46250	00	47	56.94	-11	52	24.9		3	675
1992	QT1	*	1992	08	25.45278	00	39	03.72	-14	03	49.5		3	675
1992	QT1		1992	08	25.48646	00	39	02.53	-14	03	51.3		3	675
1992	QT1		1992	08	27.42361	00	37	53.50	-14	05	43.6		3	675
1992	QT1		1992	08	27.46250	00	37	51.94	-14	05	45.6		3	675
1992	SK		1992	10	20.19722	00	20	27.54	+12	56	38.6	18	3	675
1992	SK		1992	10	20.23003	00	20	23.02	+12	56	43.3		3	675
1992	SL		1992	10	20.32552	01	24	21.56	+35	48	05.7	17.0	3	675
1992	SL		1992	10	20.35902	01	24	19.78	+35	48	38.4		3	675
1992	SR		1992	10	22.35989	02	52	31.43	+24	56	59.4	16.5	3	675
1992	SR		1992	10	22.39253	02	52	27.94	+24	57	27.3		3	675
1992	SR		1992	10	24.44340	02	48	51.54	+25	27	16.7		3	675
1992	SR		1992	10	24.47795	02	48	47.62	+25	27	46.2		3	675
1992	SW17	*	1992	09	29.44253	01	32	27.58	+34	09	51.3		3	675
1992	SW17		1992	09	29.50191	01	32	24.83	+34	09	50.1		3	675
1992	SW17		1992	10	01.42760	01	30	57.24	+34	08	43.9	17.0	3	675

1992	SW17		1992	10	01.46424	01	30	55.45	+34 08 41.4		3 675
1992	SX17	*	1992	09	30.28854	00	41	35.14	+18 49 26.5	16.0	3 675
1992	SX17		1992	09	30.32614	00	41	32.81	+18 49 30.5		3 675
1992	SX17		1992	10	20.18733	00	21	49.41	+18 52 27.9	16.0	3 675
1992	SX17		1992	10	20.22153	00	21	47.54	+18 52 25.8		3 675
1992	SX17		1992	10	25.19722	00	17	31.73	+18 46 30.1		3 675
1992	SX17		1992	10	25.22847	00	17	30.14	+18 46 28.0		3 675
1992	SY17	*	1992	09	30.28854	00	45	07.34	+19 21 59.4	17.0	3 675
1992	SY17		1992	09	30.32614	00	45	05.32	+19 21 34.2		3 675
1992	SY17		1992	10	25.21233	00	27	49.94	+14 12 50.6		3 675
1992	SY17		1992	10	25.24219	00	27	49.01	+14 12 29.2		3 675
1992	SY17		1992	10	26.16420	00	27	26.37	+14 00 57.2		3 675
1992	SY17		1992	10	26.20122	00	27	25.43	+14 00 27.9		3 675
1992	SZ17	*	1992	09	29.34826	01	33	04.46	+19 42 41.5		3 675
1992	SZ17		1992	09	29.38594	01	33	02.77	+19 42 39.1		3 675
1992	SZ17		1992	10	01.35122	01	31	33.26	+19 40 17.2	17.2	3 675
1992	SZ17		1992	10	01.39132	01	31	31.19	+19 40 13.8		3 675
1992	SZ17		1992	10	03.33993	01	29	58.47	+19 36 59.2		3 675
1992	SZ17		1992	10	03.37552	01	29	56.63	+19 36 55.5		3 675
1992	TH1		1992	10	20.28281	01	50	09.57	-14 38 29.2		3 675
1992	TH1		1992	10	20.31840	01	50	07.87	-14 38 46.2		3 675
1992	TH1		1992	10	25.28663	01	46	19.58	-15 12 17.5		3 675
1992	TH1		1992	10	25.32135	01	46	17.92	-15 12 28.8		3 675
1992	TL1	*	1992	10	02.35538	01	40	16.57	-11 24 40.0	17.4	3 675
1992	TL1		1992	10	02.39740	01	40	14.74	-11 25 10.9		3 675
1992	TL1		1992	10	04.37760	01	38	54.82	-11 49 30.9		3 675
1992	TL1		1992	10	04.40677	01	38	53.60	-11 49 51.2		3 675
1992	TM1	*	1992	10	03.33420	00	35	26.71	+23 35 46.1	17.2	3 675
1992	TM1		1992	10	03.36875	00	35	24.78	+23 35 34.4		3 675
1992	TM1		1992	10	20.18733	00	21	14.51	+21 36 16.5	17.0	3 675
1992	TM1		1992	10	20.22153	00	21	12.94	+21 36 00.0		3 675
1992	TM1		1992	10	25.19722	00	17	41.95	+20 54 26.1		3 675
1992	TM1		1992	10	25.22847	00	17	40.69	+20 54 09.4		3 675
1992	UQ2		1992	10	04.38351	01	54	45.11	-14 51 49.6	16.4	3 675
1992	UQ2		1992	10	04.41424	01	54	42.45	-14 51 35.2		3 675
1992	UW4	*	1992	10	20.34010	01	57	31.36	+28 38 53.8	17.5	3 675
1992	UW4		1992	10	20.37170	01	57	29.38	+28 38 04.0		3 675
1992	UW4		1992	10	21.34219	01	56	32.09	+28 12 26.8		3 675
1992	UW4		1992	10	21.37378	01	56	30.15	+28 11 36.9		3 675
1992	UX4	*	1992	10	21.43506	04	01	36.76	+28 10 49.9	16	3 675
1992	UX4		1992	10	21.46475	04	01	36.53	+28 10 29.6		3 675
1992	UX4		1992	10	22.41302	04	01	30.33	+27 59 46.7		3 675
1992	UX4		1992	10	26.44791	04	00	41.83	+27 10 54.4		3 675
1992	UX4		1992	10	26.49930	04	00	40.84	+27 10 15.1		3 675
1992	UY4	*	1992	10	25.48541	04	04	09.60	+36 16 18.6	17.2	3 675
1992	UY4		1992	10	25.52152	04	04	06.49	+36 15 35.2		3 675
1992	UY4		1992	10	26.44166	04	03	02.60	+35 58 26.7		3 675
1992	UY4		1992	10	26.49305	04	02	58.19	+35 57 24.9		3 675
1992	UT6	*	1992	10	20.27587	01	36	31.91	-07 56 29.9	17.0	3 675
1992	UT6		1992	10	20.31111	01	36	30.51	-07 56 43.2		3 675
1992	UT6		1992	10	24.36198	01	34	04.77	-08 19 07.1		3 675
1992	UU6	*	1992	10	20.27587	01	40	21.84	-07 36 06.2	16.5	3 675
1992	UU6		1992	10	20.31111	01	40	20.15	-07 36 24.9		3 675
1992	UU6		1992	10	24.36198	01	37	13.44	-08 12 06.9		3 675
1992	UY6	*	1992	10	25.21233	00	29	15.87	+13 01 01.4		3 675
1992	UY6		1992	10	25.24219	00	29	14.72	+13 00 52.5		3 675
1992	UY6		1992	10	26.16420	00	28	41.66	+12 55 59.7		3 675
1992	UY6		1992	10	26.20122	00	28	40.28	+12 55 46.1		3 675
1992	WP4	*	1992	11	21.47274	05	45	21.87	+46 38 09.2	15.5	2 675

1992	WP4		1992	11	21.49792	05	45	20.50	+46	38	12.2			2	675
1992	WP4		1992	11	22.40069	05	44	28.67	+46	39	55.2			2	675
1992	WQ4	*	1992	11	19.26372	02	27	29.06	+17	53	44.6		16.5	2	675
1992	WQ4		1992	11	19.28958	02	27	28.14	+17	53	08.1			2	675
1992	WQ4		1992	11	21.25000	02	26	36.01	+17	07	15.3			2	675
1992	WQ4		1992	11	21.27205	02	26	35.31	+17	06	47.9			2	675
1992	WR4	*	1992	11	19.36580	04	29	58.75	+17	36	32.5		16	2	675
1992	WR4		1992	11	21.34531	04	30	26.75	+17	02	06.1			2	675
1992	WR4		1992	11	21.36858	04	30	26.80	+17	01	41.4			2	675
1992	WR4		1992	11	22.31319	04	30	38.62	+16	45	15.0			2	675
2103	P-L		1991	12	01.26024	03	49	59.71	+18	12	28.5		18.5	9	675
2103	P-L		1991	12	01.29844	03	49	57.50	+18	12	19.4			9	675
2103	P-L		1991	12	03.30260	03	48	07.10	+18	05	13.6			9	675
2103	P-L		1991	12	03.33455	03	48	05.29	+18	05	06.3			9	675
2651	P-L	*	1960	09	24.46184	00	40	22.58	+06	14	47.6		18.7	4	675
2651	P-L		1960	09	25.42780	00	39	31.22	+06	13	41.1			4	675
2651	P-L		1960	09	26.30558	00	38	44.31	+06	12	36.6			4	675
2651	P-L		1960	09	28.36808	00	36	51.88	+06	09	52.0			4	675
2651	P-L		1960	10	17.30420	00	20	38.96	+05	39	34.5			4	675
2651	P-L		1960	10	22.22293	00	17	26.86	+05	33	51.8			4	675
2651	P-L		1960	10	22.27920	00	17	24.80	+05	33	49.6			4	675
2651	P-L		1960	10	25.37570	00	15	44.67	+05	31	27.2			4	675
2651	P-L		1960	10	26.32573	00	15	17.56	+05	30	56.2			4	675
2651	P-L		1960	10	26.36840	00	15	16.30	+05	30	55.0			4	675
4598	P-L		1971	05	14.19427	12	21	33.78	-03	00	11.8		19.0	4	675
4598	P-L		1971	05	14.24549	12	21	33.10	-03	00	10.6		18.5	4	675
4598	P-L		1971	05	16.27535	12	21	16.59	-02	59	41.8		19.0	4	675
4882	P-L		1971	04	16.16458	11	49	47.34	+05	14	58.2		19.5	4	675
4882	P-L		1971	04	16.25069	11	49	43.53	+05	14	51.3			4	675
6573	P-L		1971	04	16.21476	12	32	19.20	+02	35	37.7		18.0	4	675
6573	P-L		1971	04	16.27708	12	32	16.47	+02	35	52.5			4	675
2054	T-1		1971	03	24.37118	12	01	07.64	-00	14	17.1			4	675
2054	T-1		1971	03	25.24340	12	00	29.56	-00	09	54.5			4	675
2054	T-1	*	1971	03	25.28715	12	00	27.63	-00	09	42.4		17.8	4	675
2054	T-1		1971	03	26.25208	11	59	45.56	-00	04	55.9			4	675
2054	T-1		1971	03	27.31181	11	58	59.50	+00	00	18.7			4	675
2218	T-1		1971	03	24.37118	12	15	06.77	+04	02	03.7			4	675
2218	T-1		1971	03	25.24340	12	14	13.96	+04	07	16.5			4	675
2218	T-1	*	1971	03	25.28715	12	14	11.36	+04	07	32.6		18.4	4	675
2218	T-1		1971	03	26.25208	12	13	12.75	+04	13	15.0			4	675
2218	T-1		1971	03	27.31181	12	12	08.23	+04	19	24.7			4	675
2218	T-1		1971	04	02.41285	12	06	04.03	+04	52	46.3			4	675
3212	T-1		1971	03	24.42015	12	35	42.10	-03	53	56.7			4	675
3212	T-1		1971	03	25.33090	12	34	44.80	-03	49	50.5			4	675
3212	T-1		1971	03	26.29653	12	33	43.70	-03	45	24.2			4	675
3212	T-1	*	1971	03	26.33611	12	33	41.09	-03	45	14.2		17.5	4	675
3212	T-1		1971	03	27.33854	12	32	37.40	-03	40	37.3			4	675
3212	T-1		1971	04	16.18087	12	13	05.52	-02	15	39.9			4	675
3212	T-1		1971	04	16.22812	12	13	03.09	-02	15	27.2			4	675
3212	T-1		1971	04	16.26458	12	13	01.21	-02	15	22.7			4	675
3212	T-1		1971	04	16.30139	12	12	59.33	-02	15	14.3			4	675
4835	T-1	*	1971	05	13.20278	12	12	40.16	-00	30	12.7		17.5	4	675
4835	T-1		1971	05	14.23246	12	12	08.12	-00	39	04.3		17.5	4	675
4835	T-1		1971	05	16.29774	12	11	11.45	-00	57	14.8		17.5	4	675
3262	T-2		1991	12	01.26024	03	51	13.92	+22	06	07.9		17.2	9	675
3262	T-2		1991	12	01.29844	03	51	11.28	+22	06	03.4			9	675
3262	T-2		1991	12	03.30260	03	48	57.44	+22	01	10.9			9	675
3262	T-2		1991	12	03.33455	03	48	55.30	+22	01	04.6			9	675
2318	T-3		1991	12	01.26024	03	34	56.91	+18	04	07.4		18.2	9	675

2318 T-3	1991	12	03.30260	03	33	13.04	+17 56 57.4		9 675
2318 T-3	1991	12	03.33455	03	33	11.29	+17 56 50.8	18.5	9 675
4019 T-3	1971	04	16.21476	12	31	13.26	+00 12 00.9	19.5	4 675
4019 T-3	1971	04	16.27708	12	31	10.44	+00 12 21.8		4 675
(78)	1992	08	03.36962	22	24	19.19	-11 43 10.1		9 675
(78)	1992	08	03.40608	22	24	17.48	-11 43 15.7		9 675
(157)	1991	12	01.26024	03	59	30.15	+21 41 48.3		9 675
(157)	1991	12	01.29844	03	59	27.37	+21 41 58.3		9 675
(157)	1991	12	03.30260	03	57	07.76	+21 50 35.0		9 675
(157)	1991	12	03.33455	03	57	05.47	+21 50 42.9		9 675
(412)	1991	11	07.34531	04	28	00.95	+06 13 54.1		9 675
(412)	1991	11	07.37882	04	27	59.36	+06 13 51.4		9 675
(412)	1991	11	09.40278	04	26	24.55	+06 11 14.1		9 675
(412)	1991	11	09.43576	04	26	22.94	+06 11 12.2		9 675
(419)	1992	08	03.36215	22	28	34.16	-01 49 49.9		9 675
(419)	1992	08	03.39754	22	28	32.64	-01 49 55.5		9 675
(419)	1992	08	06.41632	22	26	33.47	-01 58 25.9		9 675
(419)	1992	08	06.46146	22	26	31.50	-01 58 34.1		9 675
(485)	1991	11	07.34531	04	22	35.08	+05 34 38.0		9 675
(485)	1991	11	07.37882	04	22	33.72	+05 34 18.4		9 675
(485)	1991	11	09.40278	04	21	14.37	+05 14 31.3		9 675
(485)	1991	11	09.43576	04	21	12.95	+05 14 12.0		9 675
(490)	1949	11	30.49271	09	29	41.25	+05 45 58.1		6 675
(490)	1949	11	30.51997	09	29	41.63	+05 45 54.1		6 675
(537)	1991	11	07.34531	04	06	59.20	+07 46 13.2		9 675
(537)	1991	11	07.37882	04	06	57.54	+07 46 08.2		9 675
(556)	1992	08	03.36215	22	12	54.13	-05 32 27.6		9 675
(556)	1992	08	03.39754	22	12	52.28	-05 32 31.8		9 675
(556)	1992	08	06.41632	22	10	26.20	-05 38 45.7		9 675
(556)	1992	08	06.46146	22	10	23.88	-05 38 51.7		9 675
(797)	1991	12	01.26024	03	45	29.83	+19 24 27.7		9 675
(797)	1991	12	01.29844	03	45	27.59	+19 24 17.9		9 675
(797)	1991	12	03.30260	03	43	34.75	+19 15 01.5		9 675
(797)	1991	12	03.33455	03	43	32.91	+19 14 52.8		9 675
(888)	1992	08	03.36962	22	52	41.16	-16 39 31.9		9 675
(888)	1992	08	03.40608	22	52	40.18	-16 39 53.8		9 675
(888)	1992	08	06.42865	22	51	16.12	-17 10 04.2		9 675
(888)	1992	08	06.47378	22	51	14.67	-17 10 31.8		9 675
(983)	1991	12	01.26024	03	40	47.46	+23 19 24.8		9 675
(983)	1991	12	01.29844	03	40	45.61	+23 19 11.1		9 675
(983)	1991	12	03.30260	03	39	11.92	+23 07 17.1		9 675
(983)	1991	12	03.33455	03	39	10.38	+23 07 06.4		9 675
(1081)	1992	08	06.42865	22	54	55.93	-12 54 13.0		9 675
(1081)	1992	08	06.47378	22	54	54.44	-12 54 21.6		9 675
(1242)	1992	08	03.36962	22	44	56.38	-15 01 48.1		9 675
(1242)	1992	08	03.40608	22	44	54.89	-15 01 50.8		9 675
(1242)	1992	08	06.42865	22	42	48.72	-15 05 56.6		9 675
(1242)	1992	08	06.47378	22	42	46.63	-15 06 00.4		9 675
(1248)	1991	12	01.26024	03	46	48.15	+15 22 53.2		9 675
(1248)	1991	12	01.29844	03	46	45.84	+15 22 54.8		9 675
(1248)	1991	12	03.30260	03	44	51.62	+15 24 12.4		9 675
(1248)	1991	12	03.33455	03	44	49.74	+15 24 13.8		9 675
(1314)	1992	08	03.36215	22	19	22.52	-01 45 58.4		9 675
(1314)	1992	08	03.39754	22	19	20.86	-01 45 58.2		9 675
(1314)	1992	08	06.41632	22	17	06.07	-01 47 26.7		9 675
(1314)	1992	08	06.46146	22	17	03.86	-01 47 27.8		9 675
(1319)	1992	08	03.36215	22	24	30.70	-05 53 26.2		9 675
(1319)	1992	08	03.39754	22	24	29.17	-05 53 33.0		9 675
(1319)	1992	08	06.41632	22	22	26.52	-06 03 07.8		9 675

(1319)	1992	08	06.46146	22	22	24.61	-06	03	16.7	9	675
(1400)	1991	11	07.34531	04	24	50.25	+10	40	03.0	9	675
(1400)	1991	11	07.37882	04	24	48.58	+10	39	49.1	9	675
(1400)	1991	11	09.40278	04	23	19.00	+10	26	02.6	9	675
(1400)	1991	11	09.43576	04	23	17.46	+10	25	49.1	9	675
(1434)	1991	11	07.34531	04	36	02.24	+06	32	52.9	9	675
(1434)	1991	11	07.37882	04	36	00.85	+06	32	45.1	9	675
(1434)	1991	11	09.40278	04	34	39.18	+06	25	11.1	9	675
(1434)	1991	11	09.43576	04	34	37.74	+06	25	04.7	9	675
(1454)	1992	08	03.36962	22	40	03.75	-12	04	56.6	9	675
(1454)	1992	08	03.40608	22	40	02.13	-12	05	03.9	9	675
(1454)	1992	08	06.42865	22	37	43.38	-12	15	39.2	9	675
(1454)	1992	08	06.47378	22	37	41.18	-12	15	47.6	9	675
(1487)	1992	08	03.36962	22	35	06.37	-11	48	41.7	9	675
(1487)	1992	08	03.40608	22	35	05.08	-11	48	52.6	9	675
(1487)	1992	08	06.42865	22	33	16.61	-12	01	44.9	9	675
(1487)	1992	08	06.47378	22	33	14.85	-12	01	55.3	9	675
(1503)	1992	08	03.36215	22	13	49.32	-08	10	31.8	9	675
(1503)	1992	08	03.39754	22	13	47.39	-08	10	32.6	9	675
(1528)	1991	11	09.40278	04	41	13.48	+09	12	14.2	9	675
(1528)	1991	11	09.43576	04	41	11.93	+09	12	08.7	9	675
(1585)	1992	08	03.36215	22	20	42.13	-06	23	59.9	9	675
(1585)	1992	08	03.39754	22	20	40.86	-06	24	28.0	9	675
(1585)	1992	08	06.41632	22	19	00.98	-07	02	54.0	9	675
(1585)	1992	08	06.46146	22	18	59.34	-07	03	29.7	9	675
(1605)	1991	11	07.34531	04	22	46.17	+07	07	58.9	9	675
(1605)	1991	11	07.37882	04	22	44.75	+07	07	48.3	9	675
(1605)	1991	11	09.40278	04	21	22.27	+06	57	04.8	9	675
(1605)	1991	11	09.43576	04	21	20.84	+06	56	54.9	9	675
(1671)	1992	08	03.36215	22	25	01.74	-06	17	13.9	9	675
(1671)	1992	08	03.39754	22	25	00.25	-06	17	24.1	9	675
(1671)	1992	08	06.41632	22	23	02.27	-06	30	52.7	9	675
(1671)	1992	08	06.46146	22	23	00.35	-06	31	05.8	9	675
(1856)	1992	08	03.36215	22	14	29.47	-04	45	53.1	9	675
(1856)	1992	08	03.39754	22	14	27.64	-04	46	04.6	9	675
(1856)	1992	08	06.41632	22	12	06.07	-05	02	49.5	9	675
(1856)	1992	08	06.46146	22	12	03.78	-05	03	04.9	9	675
(1985)	1992	08	03.36215	22	18	33.72	-00	13	50.4	9	675
(1985)	1992	08	03.39754	22	18	32.06	-00	13	48.2	9	675
(1985)	1992	08	06.41632	22	16	20.96	-00	12	38.2	9	675
(1985)	1992	08	06.46146	22	16	18.89	-00	12	37.2	9	675
(2007)	1992	08	03.36962	22	45	24.20	-11	54	42.1	9	675
(2007)	1992	08	03.40608	22	45	22.61	-11	54	51.3	9	675
(2007)	1992	08	06.42865	22	43	09.10	-12	07	48.9	9	675
(2007)	1992	08	06.47378	22	43	06.96	-12	08	00.1	9	675
(2058)	1991	12	01.26024	03	43	52.81	+17	41	46.9	9	675
(2058)	1991	12	01.29844	03	43	50.95	+17	41	42.9	9	675
(2058)	1991	12	03.30260	03	42	15.79	+17	37	43.7	9	675
(2058)	1991	12	03.33455	03	42	14.19	+17	37	39.1	9	675
(2072)	1992	08	03.36962	22	36	47.97	-16	11	11.1	9	675
(2072)	1992	08	03.40608	22	36	46.46	-16	11	21.0	9	675
(2072)	1992	08	06.42865	22	34	37.43	-16	25	10.8	9	675
(2072)	1992	08	06.47378	22	34	35.28	-16	25	23.0	9	675
(2332)	1991	12	01.26024	03	53	58.11	+20	49	50.9	9	675
(2332)	1991	12	01.29844	03	53	55.94	+20	49	53.4	9	675
(2332)	1991	12	03.30260	03	52	04.21	+20	51	47.8	9	675
(2332)	1991	12	03.33455	03	52	02.40	+20	51	49.7	9	675
(2346)	1991	12	01.26024	04	00	30.27	+20	37	25.1	9	675
(2346)	1991	12	01.29844	04	00	27.80	+20	37	10.3	9	675

(2346)	1991	12	03.30260	03 58 26.32	+20 24 30.3			9	675
(2346)	1991	12	03.33455	03 58 24.31	+20 24 18.6			9	675
(2395)	1991	12	01.29844	03 49 47.90	+19 48 46.9			9	675
(2395)	1991	12	03.30260	03 48 08.49	+19 43 50.8			9	675
(2395)	1991	12	03.33455	03 48 07.05	+19 43 42.3			9	675
(2417)	1991	12	01.26024	03 40 14.03	+17 32 40.9			9	675
(2417)	1991	12	01.29844	03 40 12.04	+17 32 37.9			9	675
(2417)	1991	12	03.30260	03 38 32.40	+17 29 48.0			9	675
(2417)	1991	12	03.33455	03 38 30.85	+17 29 44.5			9	675
(2433)	1991	11	07.34531	04 07 15.30	+09 37 48.2			9	675
(2433)	1991	11	07.37882	04 07 13.45	+09 37 36.9			9	675
(2433)	1991	11	09.40278	04 05 32.59	+09 27 04.5			9	675
(2433)	1991	11	09.43576	04 05 30.97	+09 26 56.1			9	675
(2571)	1991	12	01.26024	03 30 43.66	+18 28 08.9			9	675
(2571)	1991	12	01.29844	03 30 41.26	+18 28 05.9			9	675
(2571)	1991	12	03.30260	03 28 44.93	+18 25 41.0			9	675
(2571)	1991	12	03.33455	03 28 43.03	+18 25 38.9			9	675
(2755)	1992	08	03.36215	22 13 03.56	-02 44 24.0			9	675
(2755)	1992	08	03.39754	22 13 02.19	-02 44 26.0		17.0	9	675
(2755)	1992	08	06.41632	22 11 11.92	-02 49 42.1			9	675
(2755)	1992	08	06.46146	22 11 10.09	-02 49 46.1			9	675
(2766)	1988	09	13.39340	23 57 43.60	+04 48 28.2			9	675
(2766)	1988	09	13.41736	23 57 42.24	+04 48 23.4		17.0	9	675
(2766)	1988	09	14.33507	23 56 52.06	+04 45 24.8		17.2	9	675
(2766)	1988	09	14.36910	23 56 50.12	+04 45 18.2			9	675
(2860)	1992	08	03.36962	22 43 36.33	-16 10 40.6			9	675
(2860)	1992	08	03.40608	22 43 33.95	-16 10 28.6			9	675
(2860)	1992	08	06.42865	22 40 11.37	-15 53 53.7			9	675
(2860)	1992	08	06.47378	22 40 08.07	-15 53 38.2			9	675
(2957)	1949	11	30.49271	09 21 58.56	+06 57 46.6			6	675
(2957)	1949	11	30.51997	09 21 58.76	+06 57 41.0			6	675
(2974)	1949	11	30.49271	09 20 37.95	+07 13 25.4			6	675
(2974)	1949	11	30.51997	09 20 38.43	+07 13 18.0			6	675
(3087)	1992	08	03.36962	22 37 34.51	-15 08 12.6			9	675
(3087)	1992	08	03.40608	22 37 32.79	-15 08 13.5			9	675
(3087)	1992	08	06.42865	22 35 08.38	-15 07 35.5			9	675
(3087)	1992	08	06.47378	22 35 06.08	-15 07 35.0			9	675
(3119)	1992	08	03.36962	22 21 10.91	-14 24 41.7			9	675
(3119)	1992	08	03.40608	22 21 09.53	-14 24 54.1			9	675
(3172)	1992	08	03.36962	22 38 44.61	-15 21 46.3			9	675
(3172)	1992	08	03.40608	22 38 43.65	-15 21 59.3			9	675
(3172)	1992	08	06.42865	22 37 25.53	-15 40 06.7			9	675
(3172)	1992	08	06.47378	22 37 24.10	-15 40 22.7			9	675
(3178)	1992	08	03.39754	22 23 12.17	-00 06 34.6			9	675
(3178)	1992	08	06.41632	22 21 08.08	-00 14 07.6			9	675
(3178)	1992	08	06.46146	22 21 06.14	-00 14 14.5			9	675
(3201)	1991	12	01.26024	03 37 10.92	+15 23 26.1			9	675
(3336)	1992	08	03.36215	22 27 45.45	-07 51 55.5			9	675
(3336)	1992	08	03.39754	22 27 44.09	-07 52 01.0			9	675
(3336)	1992	08	06.41632	22 26 00.06	-08 00 18.6			9	675
(3336)	1992	08	06.46146	22 25 58.26	-08 00 26.9			9	675
(3467)	1992	08	03.36962	22 48 16.43	-12 21 10.5			9	675
(3467)	1992	08	03.40608	22 48 15.06	-12 21 23.4			9	675
(3467)	1992	08	06.42865	22 46 22.99	-12 39 27.5			9	675
(3467)	1992	08	06.47378	22 46 21.15	-12 39 42.7			9	675
(3573)	1992	08	03.36215	22 21 46.98	-06 04 30.9			9	675
(3573)	1992	08	03.39754	22 21 45.16	-06 04 37.4			9	675
(3573)	1992	08	06.41632	22 19 18.64	-06 13 58.1			9	675
(3573)	1992	08	06.46146	22 19 16.27	-06 14 07.0			9	675

(3577)	1992	08	03.36215	22 31 39.10	-05 17 29.7		9	675
(3577)	1992	08	03.39754	22 31 38.02	-05 17 36.9	17.2	9	675
(3577)	1992	08	06.41632	22 30 07.57	-05 24 08.3	17.5	9	675
(3577)	1992	08	06.46146	22 30 06.21	-05 24 14.6		9	675
(3754)	1991	11	07.34531	04 32 50.33	+12 47 42.0		9	675
(3754)	1991	11	07.37882	04 32 48.91	+12 47 38.6		9	675
(3754)	1991	11	09.40278	04 31 26.70	+12 44 37.4		9	675
(3754)	1991	11	09.43576	04 31 25.29	+12 44 34.4		9	675
(3839)	1991	12	01.29844	03 56 21.22	+20 12 28.1		9	675
(3839)	1991	12	03.30260	03 54 20.57	+20 04 50.1		9	675
(3839)	1991	12	03.33455	03 54 18.66	+20 04 41.5		9	675
(3847)	1991	12	01.26024	03 43 38.76	+19 13 01.1		9	675
(3847)	1991	12	01.29844	03 43 36.81	+19 12 57.8		9	675
(3847)	1991	12	03.30260	03 41 57.48	+19 09 55.7		9	675
(3847)	1991	12	03.33455	03 41 55.87	+19 09 52.2		9	675
(4127)	1991	12	01.26024	03 51 58.25	+16 37 45.4		9	675
(4127)	1991	12	01.29844	03 51 56.19	+16 37 40.1		9	675
(4127)	1991	12	03.30260	03 50 11.95	+16 32 51.0		9	675
(4127)	1991	12	03.33455	03 50 10.26	+16 32 45.5		9	675
(4163)	1991	11	07.34531	04 16 34.40	+05 37 07.0		9	675
(4163)	1991	11	07.37882	04 16 32.84	+05 37 01.0		9	675
(4163)	1991	11	09.40278	04 15 04.63	+05 31 12.8		9	675
(4163)	1991	11	09.43576	04 15 03.16	+05 31 06.6		9	675
(4404)	1992	08	03.36962	22 47 43.67	-11 05 39.6		9	675
(4404)	1992	08	03.40608	22 47 42.22	-11 06 08.7		9	675
(4404)	1992	08	06.42865	22 45 43.56	-11 47 56.6		9	675
(4404)	1992	08	06.47378	22 45 41.57	-11 48 35.1		9	675
(4407)	1992	08	03.36215	22 33 16.20	-01 30 52.5		9	675
(4407)	1992	08	03.39754	22 33 14.77	-01 30 54.2		9	675
(4407)	1992	08	06.46146	22 31 19.90	-01 35 33.4		9	675
(4449)	1992	08	03.36215	22 11 10.25	-07 54 42.0		9	675
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(4452)	1992	08	06.41632	22 34 20.88	-06 22 11.6	17.5	9	675
(4452)	1992	08	06.46146	22 34 18.65	-06 22 09.8		9	675
(4512)	1992	08	03.36962	22 41 56.76	-15 50 09.1		9	675
(4512)	1992	08	03.40608	22 41 55.47	-15 50 24.7		9	675
(4512)	1992	08	06.42865	22 40 06.96	-16 11 25.6		9	675
(4512)	1992	08	06.47378	22 40 05.17	-16 11 44.2		9	675
(4546)	1949	11	30.49271	09 24 15.80	+07 03 48.6		6	675
(4546)	1949	11	30.51997	09 24 16.64	+07 03 40.4		6	675
(4579)	1991	12	01.26024	03 55 20.86	+17 44 28.8		9	675
(4579)	1991	12	01.29844	03 55 18.29	+17 44 23.0		9	675
(4579)	1991	12	03.30260	03 53 15.95	+17 39 37.4		9	675
(4579)	1991	12	03.33455	03 53 14.03	+17 39 31.5		9	675
(4642)	1991	12	01.26024	03 34 19.26	+17 48 06.9		9	675
(4642)	1991	12	01.29844	03 34 17.49	+17 48 00.9		9	675
(4642)	1991	12	03.30260	03 32 46.63	+17 43 00.1		9	675
(4642)	1991	12	03.33455	03 32 45.15	+17 42 55.1		9	675
(4653)	1991	11	07.34531	04 15 19.94	+12 17 12.2		9	675
(4653)	1991	11	07.37882	04 15 18.36	+12 16 59.8		9	675
(4653)	1991	11	09.40278	04 13 41.48	+12 05 48.3		9	675
(4653)	1991	11	09.43576	04 13 39.86	+12 05 38.2		9	675
(4774)	1992	08	03.36215	22 34 42.10	-04 43 15.7		9	675
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(4869)	1992	08	03.36962	22 53 25.09	-12 59 53.5		9	675
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(4869)	1992	08	06.42865	22 52 09.56	-13 19 27.4		9	675

(4869)	1992 08 06.47378	22 52 08.20	-13 19 43.6		9	675
(4881)	1992 08 03.36962	22 35 01.56	-10 07 57.0		9	675
(4881)	1992 08 06.42865	22 33 01.60	-10 32 20.6		9	675
(4881)	1992 08 06.47378	22 32 59.64	-10 32 41.0		9	675
(4906)	1992 08 03.36962	22 37 57.11	-10 11 39.4		9	675
(4906)	1992 08 03.40608	22 37 56.20	-10 11 49.4		9	675
(4906)	1992 08 06.42865	22 36 45.71	-10 25 56.0		9	675
(4906)	1992 08 06.47378	22 36 44.33	-10 26 08.5		9	675
(5043)	1991 12 03.30260	03 59 05.11	+21 12 20.7		9	675
(5043)	1991 12 03.33455	03 59 03.29	+21 12 18.1		9	675
(5091)	1991 12 01.26024	03 40 55.56	+22 01 32.4		9	675
(5091)	1991 12 01.29844	03 40 53.50	+22 01 22.7		9	675
(5091)	1991 12 03.30260	03 39 07.58	+21 53 13.2		9	675
(5091)	1991 12 03.33455	03 39 05.87	+21 53 07.1		9	675
(5143)	1992 08 03.36215	22 19 50.91	-06 19 21.5		9	675
(5143)	1992 08 06.41632	22 13 25.06	-06 44 28.1		9	675
(5143)	1992 08 06.46146	22 13 19.28	-06 44 50.8		9	675
(5154)	1991 12 01.26024	03 42 59.10	+18 51 16.4		9	675
(5154)	1991 12 01.29844	03 42 57.13	+18 51 11.9		9	675
(5154)	1991 12 03.30260	03 41 18.84	+18 47 24.0		9	675
(5154)	1991 12 03.33455	03 41 17.24	+18 47 20.1		9	675
(5303)	1992 08 03.36962	22 31 56.26	-13 40 28.1	17.8	9	675
(5303)	1992 08 03.40608	22 31 54.89	-13 40 36.9		9	675
(5303)	1992 08 06.42865	22 29 56.28	-13 53 45.1		9	675
(5303)	1992 08 06.47378	22 29 54.40	-13 53 56.5		9	675
(5334)	1949 11 30.49271	09 21 53.53	+07 18 33.2		6	675
(5334)	1949 11 30.51997	09 21 54.27	+07 18 26.5		6	675
(5346)	1992 08 03.36962	22 24 17.25	-14 00 54.2	17.0	9	675
(5346)	1992 08 03.40608	22 24 16.05	-14 01 04.0		9	675
(5346)	1992 08 06.42865	22 22 29.25	-14 14 04.7		9	675
(5346)	1992 08 06.47378	22 22 27.53	-14 14 15.8		9	675
(5352)	1992 08 06.41632	22 33 37.29	-01 47 16.1		9	675
(5352)	1992 08 06.46146	22 33 35.44	-01 47 21.3	17.2	9	675
(5378)	1992 10 25.19131	23 56 21.49	+30 46 04.5	17.2	3	675
(5378)	1992 10 25.22361	23 56 20.44	+30 45 25.1		3	675
(5378)	1992 10 26.21354	23 55 53.66	+30 25 22.8		3	675
(5383)	1992 08 03.36962	22 23 45.45	-14 24 58.0	17.5	9	675
(5383)	1992 08 03.40608	22 23 44.14	-14 25 10.4		9	675
(5383)	1992 08 06.42865	22 21 47.75	-14 40 46.4		9	675
(5383)	1992 08 06.47378	22 21 45.96	-14 40 59.4		9	675

688 Lowell Observatory, Anderson Mesa Station
E. Bowell, Lowell Observatory, 1400 West Mars Hill Road, Flagstaff AZ 86001, U.S.A.
Observer B. A. Skiff
Measurer B. A. Skiff
1.1-m f/8 Hall reflector + CCD

1987 SO	1992 01 02.20590	05 42 45.41	+25 51 43.9	688
1987 SO	1992 01 02.21007	05 42 45.08	+25 51 43.1	688
1990 SB	1992 01 02.17951	05 35 25.48	-00 23 10.2	688
1990 SB	1992 01 02.18785	05 35 24.99	-00 23 10.3	688

689 U.S. Naval Observatory, Flagstaff Station
J. A. DeYoung, U.S. Naval Observatory, 3450 Massachusetts Avenue NW, Washington, DC 20392-5420, U.S.A.
Observer A. K. B. Monet
Measurer J. A. DeYoung
l.55-m astrometric reflector + CCD
GSC

1992 VK	*	1992 11 15.13914	23 55 58.37	-00 19 46.8	20			689
1992 VK		1992 11 15.15248	23 55 58.42	-00 19 46.6				689
1992 VK		1992 11 15.16522	23 55 58.47	-00 19 46.6				689
1992 VK		1992 11 15.17785	23 55 58.51	-00 19 46.5				689
1992 VK		1992 11 16.14365	23 56 05.09	-00 19 24.6				689
1992 VK		1992 11 16.15680	23 56 05.15	-00 19 24.3				689
1992 VK		1992 11 16.17571	23 56 05.25	-00 19 23.9				689
1992 VK		1992 11 16.18824	23 56 05.32	-00 19 23.3				689

691 Kitt Peak, Steward Observatory
T. Gehrels, Space Sciences Building, University of Arizona,
Tucson, AZ 85721, U.S.A.
Observers T. Gehrels, D. L. Rabinowitz, J. V. Scotti
0.91-m SPACEWATCH telescope
GSC

1972 RF2		1992 03 25.37083	12 47 39.54	-04 48 02.7	19.5 V			691
1972 RF2		1992 03 25.39114	12 47 38.40	-04 47 54.1	19.6 V			691
1975 TQ3		1992 10 25.31343	02 07 25.37	+11 50 50.9				691
1975 TQ3		1992 10 25.34452	02 07 23.16	+11 50 54.1	14.8 V			691
1975 TQ3		1992 10 25.37882	02 07 20.72	+11 50 57.5				691
1978 SU5		1992 10 25.20199	01 30 32.16	+12 40 33.1	15.9 V			691
1978 SU5		1992 10 25.23342	01 30 30.39	+12 40 17.3				691
1978 SU5		1992 10 25.25568	01 30 29.11	+12 40 06.5				691
1981 EA26		1992 10 18.34987	01 18 34.39	+09 10 49.2	19.5 V			691
1981 EA26		1992 10 18.37629	01 18 33.00	+09 10 40.1				691
1981 TW1		1991 11 11.42458	03 39 07.50	+20 35 50.2	16.9 V			691
1981 TW1		1991 11 11.44620	03 39 05.98	+20 35 39.9				691
1981 TW1		1991 11 11.46807	03 39 04.44	+20 35 28.8				691
1986 PW4		1992 10 25.31246	02 06 00.70	+12 04 49.2	16.9 V			691
1986 PW4		1992 10 25.34355	02 05 59.13	+12 04 41.4				691
1986 PW4		1992 10 25.37786	02 05 57.43	+12 04 31.7				691
1988 JL		1992 09 29.48017	08 48 44.54	+26 01 22.1	19.0 V			691
1988 JL		1992 09 29.48833	08 48 45.53	+26 01 22.5				691
1988 JL		1992 09 29.49692	08 48 46.58	+26 01 23.6				691
1990 VA		1992 11 23.31782	04 51 59.26	-06 05 09.4	18.3 V			691
1990 VA		1992 11 23.32377	04 51 58.05	-06 05 23.2	18.2 V			691
1992 SY		1992 11 16.10564	23 19 16.72	-00 17 33.3				691
1992 SY		1992 11 16.12055	23 19 16.34	-00 17 31.3	20.6 V			691
1992 SY		1992 11 16.13540	23 19 16.07	-00 17 28.6				691
1992 SZ		1992 11 29.15560	00 13 40.02	+12 34 09.2	22.7 V			691
1992 SZ		1992 11 29.16783	00 13 41.11	+12 34 16.8	22.5 V			691
1992 SC13		1992 10 18.27703	01 23 22.63	+09 47 27.4	16.5 V			691
1992 SC13		1992 10 18.29865	01 23 21.30	+09 47 26.3				691
1992 SY16		1992 10 01.20600	23 57 54.47	+00 16 48.3				691
1992 SY16		1992 10 01.23139	23 57 52.93	+00 16 45.8	17.9 V			691
1992 SY16		1992 10 01.25889	23 57 51.24	+00 16 43.5				691
1992 SM17		1992 10 04.27333	00 04 44.75	+01 00 27.8	16.4 V			691
1992 SM17		1992 10 04.28354	00 04 44.37	+01 00 20.4				691
1992 SM17		1992 10 04.29335	00 04 44.01	+01 00 13.3				691
1992 SP17		1992 09 29.21909	00 06 40.79	+02 41 23.2	18.9 V			691
1992 SP17		1992 09 29.24307	00 06 39.42	+02 41 16.7				691
1992 SP17		1992 09 29.26597	00 06 38.09	+02 41 09.7				691
1992 TF1		1992 10 21.14816	01 02 19.93	+10 51 53.2				691
1992 TF1		1992 10 21.18328	01 02 18.14	+10 51 49.2	16.5 V			691
1992 TF1		1992 10 21.20628	01 02 17.00	+10 51 46.2				691
1992 UM		1992 10 25.20359	01 33 23.46	+12 52 09.5	16.5 V			691
1992 UM		1992 10 25.23501	01 33 21.56	+12 52 06.8				691
1992 UM		1992 10 25.25726	01 33 20.18	+12 52 05.3				691
1992 UJ1		1992 10 25.20485	01 35 12.58	+12 28 58.2	17.2 V			691

1992	UJ1		1992	10	25.23627	01 35 11.16	+12 28 35.0			691
1992	UJ1		1992	10	25.25853	01 35 10.14	+12 28 18.9			691
1992	UA7	*	1992	10	18.28412	01 33 36.72	+09 36 55.5	18.7	V	691
1992	UA7		1992	10	18.30574	01 33 35.60	+09 36 50.4			691
1992	UA7		1992	10	21.37584	01 31 02.89	+09 24 53.8			691
1992	UA7		1992	10	21.38326	01 31 02.53	+09 24 51.7	19.4	V	691
1992	UB7	*	1992	10	18.28433	01 33 55.13	+09 37 56.9	20.1	V	691
1992	UB7		1992	10	18.30596	01 33 54.09	+09 37 50.4			691
1992	UB7		1992	10	21.35415	01 31 32.11	+09 22 41.7			691
1992	UB7		1992	10	21.37602	01 31 31.04	+09 22 34.9	20.7	V	691
1992	UB7		1992	10	21.38344	01 31 30.66	+09 22 32.5			691
1992	UC7	*	1992	10	18.28466	01 34 23.00	+09 39 26.8	19.8	V	691
1992	UC7		1992	10	18.30628	01 34 21.74	+09 39 17.3			691
1992	UC7		1992	10	21.35409	01 31 24.75	+09 17 30.3	20.0	V	691
1992	UC7		1992	10	21.37595	01 31 23.40	+09 17 21.3			691
1992	UC7		1992	10	21.38338	01 31 22.94	+09 17 18.0			691
1992	UD7	*	1992	10	18.28514	01 35 05.25	+09 28 49.6			691
1992	UD7		1992	10	18.30677	01 35 04.13	+09 28 41.2	20.2	V	691
1992	UD7		1992	10	21.35476	01 32 24.93	+09 08 45.8			691
1992	UD7		1992	10	21.37663	01 32 23.79	+09 08 37.0	20.5	V	691
1992	UD7		1992	10	21.38405	01 32 23.38	+09 08 34.3			691
1992	UE7	*	1992	10	18.28532	01 35 20.43	+09 36 34.4	19.6	V	691
1992	UE7		1992	10	18.30694	01 35 19.41	+09 36 28.9			691
1992	UE7		1992	10	21.35513	01 32 56.46	+09 23 35.5			691
1992	UE7		1992	10	21.37700	01 32 55.42	+09 23 30.3	19.8	V	691
1992	UE7		1992	10	21.38441	01 32 55.07	+09 23 28.5			691
1992	UF7	*	1992	10	18.28539	01 35 26.17	+09 44 10.8	18.4	V	691
1992	UF7		1992	10	18.30701	01 35 25.17	+09 44 04.0			691
1992	UF7		1992	10	21.35520	01 33 03.14	+09 30 51.8	18.7	V	691
1992	UF7		1992	10	21.37707	01 33 02.12	+09 30 46.2			691
1992	UF7		1992	10	21.38449	01 33 01.78	+09 30 44.3			691
1992	UG7	*	1992	10	18.28628	01 36 44.07	+09 41 33.2	18.3	V	691
1992	UG7		1992	10	18.30790	01 36 42.73	+09 41 27.5			691
1992	UG7		1992	10	21.35567	01 33 43.77	+09 27 18.7			691
1992	UG7		1992	10	21.37754	01 33 42.46	+09 27 12.6	19.3	V	691
1992	UG7		1992	10	21.38495	01 33 42.03	+09 27 10.2			691
1992	UG7		1992	10	22.31665	01 32 48.25	+09 22 53.9			691
1992	UG7		1992	10	22.32465	01 32 47.79	+09 22 51.6	18.8	V	691
1992	UG7		1992	10	22.33600	01 32 47.13	+09 22 48.5			691
1992	UH7	*	1992	10	18.28635	01 36 49.73	+09 23 16.7	16.8	V	691
1992	UH7		1992	10	18.30797	01 36 48.26	+09 23 20.1			691
1992	UH7		1992	10	21.35567	01 33 43.73	+09 25 26.0	16.7	V	691
1992	UH7		1992	10	21.37754	01 33 42.39	+09 25 26.9			691
1992	UH7		1992	10	21.38495	01 33 41.95	+09 25 27.0			691
1992	UJ7	*	1992	10	18.28702	01 37 47.88	+09 22 03.6	20.1	V	691
1992	UJ7		1992	10	18.30864	01 37 46.61	+09 21 59.7			691
1992	UJ7		1992	10	21.35659	01 35 03.34	+09 11 24.9			691
1992	UJ7		1992	10	21.37846	01 35 02.14	+09 11 19.6	20.8	V	691
1992	UJ7		1992	10	21.38587	01 35 01.73	+09 11 18.3			691
1992	UK7	*	1992	10	18.28707	01 37 52.21	+09 35 23.0			691
1992	UK7		1992	10	18.30869	01 37 51.04	+09 35 19.9	20.9	V	691
1992	UK7		1992	10	21.35676	01 35 17.91	+09 27 09.7	20.8	V	691
1992	UK7		1992	10	21.37863	01 35 16.81	+09 27 06.0			691
1992	UK7		1992	10	21.38604	01 35 16.36	+09 27 05.0			691
1992	UL7	*	1992	10	18.28730	01 38 12.38	+09 22 47.2			691
1992	UL7		1992	10	18.30892	01 38 11.17	+09 22 41.1	19.1	V	691
1992	UL7		1992	10	21.35685	01 35 25.77	+09 08 09.4	19.2	V	691
1992	UL7		1992	10	21.37872	01 35 24.56	+09 08 03.4			691
1992	UL7		1992	10	21.38613	01 35 24.13	+09 08 00.7			691

1992 UM7	*	1992	10	18.28839	01	39	46.30	+09 40 39.1	19.4 V	691
1992 UM7		1992	10	18.31001	01	39	45.03	+09 40 25.5		691
1992 UM7		1992	10	21.35797	01	37	02.74	+09 07 50.7		691
1992 UM7		1992	10	21.37984	01	37	01.53	+09 07 36.2		691
1992 UM7		1992	10	21.38725	01	37	01.07	+09 07 32.2	19.2 V	691
1992 UN7	*	1992	10	18.28842	01	39	48.89	+09 42 03.1	18.1 V	691
1992 UN7		1992	10	18.31004	01	39	47.60	+09 41 55.5		691
1992 UN7		1992	10	21.35788	01	36	55.28	+09 23 07.0		691
1992 UN7		1992	10	21.37975	01	36	53.97	+09 22 59.1	18.2 V	691
1992 UN7		1992	10	21.38716	01	36	53.55	+09 22 56.6		691
1992 UO7	*	1992	10	18.28873	01	40	16.18	+09 43 10.8	17.7 V	691
1992 UO7		1992	10	18.31035	01	40	15.08	+09 43 05.4		691
1992 UO7		1992	10	21.35848	01	37	46.51	+09 29 51.6	18.0 V	691
1992 UO7		1992	10	21.38034	01	37	45.43	+09 29 46.2		691
1992 UO7		1992	10	21.38776	01	37	45.05	+09 29 44.0		691
1992 UP7	*	1992	10	21.16461	01	26	05.30	+11 06 01.3	18.4 V	691
1992 UP7		1992	10	21.19973	01	26	03.01	+11 06 01.5		691
1992 UP7		1992	10	21.22272	01	26	01.50	+11 06 01.9		691
1992 UP7		1992	10	22.23919	01	24	56.55	+11 06 02.3	18.8 V	691
1992 UP7		1992	10	22.27158	01	24	54.43	+11 06 02.9		691
1992 UP7		1992	10	22.29347	01	24	52.98	+11 06 02.0		691
1992 UQ7	*	1992	10	21.16513	01	26	50.09	+11 12 34.9	19.9 V	691
1992 UQ7		1992	10	21.20025	01	26	47.93	+11 12 36.9		691
1992 UQ7		1992	10	21.22324	01	26	46.50	+11 12 39.0		691
1992 UQ7		1992	10	22.23954	01	25	45.44	+11 13 28.3	20.2 V	691
1992 UQ7		1992	10	22.27193	01	25	43.48	+11 13 31.2		691
1992 UQ7		1992	10	22.29381	01	25	42.08	+11 13 31.0		691
1992 UR7	*	1992	10	23.41715	03	00	30.65	+03 17 55.5	20.1 V	691
1992 UR7		1992	10	23.43882	03	00	29.25	+03 17 48.3		691
1992 UR7		1992	10	23.46115	03	00	27.76	+03 17 41.5		691
1992 UR7		1992	10	26.26105	02	57	27.55	+03 02 44.2		691
1992 UR7		1992	10	26.26912	02	57	26.98	+03 02 41.7		691
1992 UR7		1992	10	26.28221	02	57	26.07	+03 02 37.1	20.5 V	691
1992 UR7		1992	11	16.18229	02	34	49.32	+01 47 13.8	20.8 V	691
1992 UR7		1992	11	16.19446	02	34	48.62	+01 47 12.3		691
1992 US7	*	1992	10	23.42039	03	05	11.50	+03 25 01.1	18.8 V	691
1992 US7		1992	10	23.44206	03	05	10.36	+03 24 58.4		691
1992 US7		1992	10	23.46440	03	05	09.18	+03 24 55.6		691
1992 US7		1992	10	26.26472	03	02	45.68	+03 19 28.6	19.2 V	691
1992 US7		1992	10	26.27279	03	02	45.21	+03 19 27.9		691
1992 US7		1992	10	26.28589	03	02	44.49	+03 19 26.5		691
1992 UA8	*	1992	10	20.37337	01	57	30.79	+10 26 11.7	18.2 V	691
1992 UA8		1992	10	20.42821	01	57	27.19	+10 26 03.6		691
1992 UA8		1992	10	20.44981	01	57	25.77	+10 26 00.3		691
1992 UB8	*	1992	10	20.37573	02	00	55.32	+10 43 22.0		691
1992 UB8		1992	10	20.43058	02	00	51.97	+10 43 10.2	17.7 V	691
1992 UB8		1992	10	20.45217	02	00	50.66	+10 43 05.7		691
1992 UC8		1992	10	25.21831	01	54	38.40	+12 28 38.6		691
1992 UC8		1992	10	25.24973	01	54	36.93	+12 28 27.1	18.1 V	691
1992 UC8		1992	10	25.27198	01	54	35.87	+12 28 18.7		691
1992 UD8		1992	10	25.22021	01	57	22.77	+12 36 57.0	18.2 V	691
1992 UD8		1992	10	25.27386	01	57	18.81	+12 37 00.8		691
1992 UE8		1992	10	25.31094	02	03	49.30	+12 19 52.2		691
1992 UE8		1992	10	25.34203	02	03	47.77	+12 19 46.2	18.2 V	691
1992 UE8		1992	10	25.37635	02	03	46.08	+12 19 37.6		691
1992 UF8		1992	10	25.31277	02	06	27.74	+12 19 35.0	17.6 V	691
1992 UF8		1992	10	25.34386	02	06	25.96	+12 19 23.8		691
1992 UF8		1992	10	25.37817	02	06	24.07	+12 19 11.5		691
1992 UG8	*	1992	10	25.32009	02	17	01.75	+12 17 51.1		691

1992 UG8		1992 10 25.35118	02 17 00.34	+12 17 35.3	17.9 V				691
1992 UG8		1992 10 25.38549	02 16 58.63	+12 17 17.7					691
1992 UH8	*	1992 10 25.41572	02 09 59.31	+12 55 02.6					691
1992 UH8		1992 10 25.44873	02 09 57.36	+12 54 56.2	17.3 V				691
1992 UH8		1992 10 25.47120	02 09 56.05	+12 54 51.8					691
1992 WA	*	1992 11 19.46060	05 08 21.92	+13 13 59.4	19.2 V				691
1992 WA		1992 11 19.48657	05 08 18.81	+13 14 02.2	19.3 V				691
1992 WA		1992 11 19.51301	05 08 15.63	+13 14 05.2	19.2 V				691
1992 WA		1992 11 20.39413	05 06 33.70	+13 16 05.0	19.4 V				691
1992 WA		1992 11 20.40260	05 06 32.65	+13 16 06.3					691
1992 WA		1992 11 20.41157	05 06 31.53	+13 16 07.5					691
1992 WA		1992 11 20.42679	05 06 29.62	+13 16 09.0	19.8 V				691
1992 WA		1992 11 20.44319	05 06 27.58	+13 16 11.4	19.8 V				691
1992 WA		1992 11 21.24159	05 04 54.07	+13 18 04.6					691
1992 WA		1992 11 21.24946	05 04 53.07	+13 18 05.5					691
1992 WA		1992 11 24.24468	04 58 43.61	+13 26 04.1	19.1 V				691
1992 WA		1992 11 24.25093	04 58 42.75	+13 26 05.6	19.2 V				691
1992 WA		1992 11 24.25495	04 58 42.23	+13 26 06.4	19.1 V				691
1992 WA		1992 11 29.36383	04 47 39.50	+13 42 52.0	19.3 V				691
1992 WA		1992 11 29.39130	04 47 35.69	+13 42 57.3	19.4 V				691
3196 T-3		1992 09 24.35036	00 23 26.72	-02 11 02.4					691
3196 T-3		1992 09 24.35813	00 23 26.17	-02 11 04.9	16.8 V				691
3196 T-3		1992 09 24.36553	00 23 25.72	-02 11 07.2					691
(2107)		1992 10 26.18770	01 46 44.06	+13 58 19.0	14.4 V				691
(2107)		1992 10 26.23661	01 46 41.58	+13 57 52.4					691
(2107)		1992 10 26.25161	01 46 40.79	+13 57 44.4					691
(2276)		1992 10 25.41252	02 05 21.82	+12 53 31.7					691
(2276)		1992 10 25.44552	02 05 19.83	+12 53 19.2	16.0 V				691
(2276)		1992 10 25.46800	02 05 18.50	+12 53 10.7					691
(2533)		1992 10 23.24283	01 55 16.76	+11 25 15.3	15.1 V				691
(2533)		1992 10 23.26945	01 55 15.45	+11 25 07.6					691
(2533)		1992 10 23.29844	01 55 14.05	+11 24 59.0					691
(3067)		1992 10 26.12436	01 21 09.84	+14 18 23.2					691
(3067)		1992 10 26.14661	01 21 08.45	+14 18 17.9					691
(3067)		1992 10 26.16731	01 21 07.11	+14 18 13.4	15.2 V				691
(4015)		1992 11 30.43426	08 07 09.33	+20 14 06.4					691
(4015)		1992 11 30.44242	08 07 08.81	+20 14 06.2					691
(4015)		1992 11 30.45032	08 07 08.30	+20 14 06.1	18.1 V				691
(4891)		1992 10 25.20582	01 36 36.28	+12 44 18.3	16.9 V				691
(4891)		1992 10 25.23724	01 36 34.73	+12 44 10.3					691
(4891)		1992 10 25.25949	01 36 33.72	+12 44 05.1					691

711 McDonald Observatory
A. L. Whipple, McDonald Observatory, University of Texas, Austin, TX 78712, U.S.A.
Observers P.J. Shelus, A.L. Whipple
Measurers L. Eakins, R. Whited
2.1-m Struve reflector
ACRS

(1863)		1992 10 18.09277	19 50 23.31	-24 05 17.9					711
(1863)		1992 10 19.07332	19 54 16.61	-23 37 09.7					711
(1865)		1992 07 07.40476	20 09 36.06	+75 27 45.0					711
(1865)		1992 07 29.23037	18 58 07.83	+48 02 51.3					711
(1865)		1992 07 30.19951	18 57 26.61	+46 57 15.2					711
(1865)		1992 07 31.25445	18 56 46.04	+45 46 37.1				t	711
(1866)		1992 07 08.14972	12 27 07.47	+30 59 36.3					711
(1866)		1992 07 09.14276	12 27 43.81	+30 43 16.9					711
(1869)		1991 02 06.48840	12 43 03.90	-01 22 53.4					711
(1870)		1991 02 06.08208	04 05 22.34	+13 53 04.6					711

(1871)	1990 12 23.19844	02 59 10.16	+06 41 39.1			711
(1871)	1991 02 04.09682	02 59 47.42	+07 56 42.2			711
(1917)	1992 06 10.26021	17 49 55.74	+18 32 40.8			711
(1917)	1992 07 09.17754	17 12 19.85	+20 51 41.3			711
(1917)	1992 07 30.15429	16 53 51.62	+18 14 53.6			711
(1943)	1992 07 29.40994	01 06 06.70	+22 23 06.3			711
(1943)	1992 10 16.23306	00 03 57.17	+17 07 47.3			711
(1943)	1992 10 18.28752	00 01 42.43	+16 30 28.8			711
(2148)	1991 03 21.37111	13 11 32.53	-03 48 32.4			711
(2148)	1991 04 19.33397	12 58 35.38	-02 01 06.7		B	711
(2329)	1991 04 18.45246	14 46 15.70	+25 00 31.1		G	711
(2329)	1991 12 10.23439	04 22 38.29	-24 42 52.0		S	711
(2329)	1991 12 31.20853	04 05 01.23	-19 13 59.5			711
(2329)	1992 01 02.21157	04 04 16.83	-18 39 23.7			711
(3040)	1992 03 24.42559	17 59 50.18	+33 09 29.5			711
(3040)	1992 03 25.44264	18 00 49.27	+33 26 24.7			711
(3040)	1992 03 26.43268	18 01 45.13	+33 42 52.7			711
(3551)	1992 06 11.27320	18 24 54.55	-01 25 52.8			711
(3551)	1992 07 08.20407	17 50 43.90	+01 11 37.3			711
(3551)	1992 10 19.10963	19 49 18.21	-24 55 36.8		V	711
(3553)	1992 10 17.23886	22 49 28.07	+40 40 10.4		B	711
(3553)	1992 10 18.22675	22 48 53.43	+40 13 33.7		B	711
(3873)	1991 12 31.05607	21 22 06.60	+04 03 41.0			711
(4179)	1992 10 17.06599	18 54 05.15	-24 01 33.8			711
(4179)	1992 10 18.06057	18 54 52.58	-24 02 11.2			711
(4197)	1992 07 08.39987	23 13 12.98	-16 00 52.1		F	711
(4341)	1992 06 10.20606	15 21 17.18	+01 34 43.4			711
(5143)	1992 07 29.32951	22 30 16.22	-05 39 39.2			711
(5143)	1992 07 30.34392	22 28 11.83	-05 47 25.3			711
(5143)	1992 07 31.38693	22 26 02.89	-05 55 32.8			711
(5143)	1992 10 17.16425	20 59 13.13	-12 12 53.1			711

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1941 UN	1992 11 28.39763	09 59 51.30	+22 04 06.7			801
1941 UN	1992 11 28.42398	09 59 52.73	+22 04 03.5			801
1941 UN	1992 11 29.41465	10 00 47.03	+22 02 05.4			801
1941 UN	1992 11 29.43198	10 00 47.94	+22 02 03.4			801
1943 DL	1992 11 28.37774	08 45 28.43	+35 40 38.0			801
1943 DL	1992 11 28.44186	08 45 29.85	+35 40 51.0		t	801
1943 DL	1992 11 29.36405	08 45 51.31	+35 44 06.3			801
1943 DL	1992 11 29.39847	08 45 52.00	+35 44 13.7			801
1957 VA	1992 11 21.16058	02 28 10.22	+15 18 58.0			801
1957 VA	1992 11 21.17001	02 28 09.17	+15 19 05.9			801
1957 VA	1992 11 29.14574	02 14 57.77	+17 00 19.1			801
1957 VA	1992 11 29.15545	02 14 56.87	+17 00 26.3			801
1962 SR	1992 11 29.32682	07 11 08.46	+25 16 58.4			801
1962 SR	1992 11 29.35138	07 11 07.52	+25 16 57.0			801
1967 DA	1992 11 28.34178	08 30 17.54	+15 17 19.2			801
1967 DA	1992 11 28.36457	08 30 18.18	+15 17 16.8			801
1967 DA	1992 11 29.35912	08 30 47.51	+15 15 42.9			801
1967 DA	1992 11 29.38409	08 30 48.16	+15 15 40.9			801
1969 TX5	1992 11 21.06786	00 53 28.96	+07 13 55.7			801
1969 TX5	1992 11 21.08867	00 53 28.40	+07 13 58.3			801
1974 OE	1992 11 21.03363	00 09 01.56	+02 33 54.0			801

1974	OE	1992	11	21.07510	00	09	01.80	+02	34	02.7	801
1974	OE	1992	11	28.04575	00	10	36.67	+03	01	47.8	801
1975	SK	1992	11	21.16830	02	46	56.07	+14	41	45.2	801
1975	SK	1992	11	21.18381	02	46	55.36	+14	41	43.1	801
1975	SK	1992	11	29.16175	02	41	33.65	+14	27	30.0	801
1975	SK	1992	11	29.18447	02	41	32.80	+14	27	28.0	801
1975	TQ3	1992	11	21.10927	01	41	45.07	+12	43	22.3	801
1975	TQ3	1992	11	21.12662	01	41	44.36	+12	43	24.9	801
1975	TQ3	1992	11	29.11691	01	37	32.15	+13	06	10.9	801
1975	TQ3	1992	11	29.14263	01	37	31.49	+13	06	15.9	801
1975	TH6	1992	11	21.13492	01	42	57.32	-02	26	27.2	801
1975	TH6	1992	11	21.15800	01	42	56.48	-02	26	22.1	801
1975	VS5	1992	11	29.28128	06	19	47.93	+11	15	49.1	801
1975	VS5	1992	11	29.30226	06	19	47.01	+11	15	45.9	801
1976	AH	1992	11	28.33433	07	36	26.21	+12	46	22.5	801
1976	AH	1992	11	28.35954	07	36	25.79	+12	46	11.5	801
1976	AH	1992	11	29.33366	07	36	10.10	+12	39	09.0	801
1976	AH	1992	11	29.35715	07	36	09.66	+12	38	58.8	801
1976	YP1	1992	11	21.12862	01	48	13.38	+12	28	47.2	801
1976	YP1	1992	11	21.15450	01	48	12.57	+12	28	43.5	801
1976	YP1	1992	11	29.12193	01	45	01.36	+12	13	19.3	801
1976	YP1	1992	11	29.15756	01	45	00.67	+12	13	16.2	801
1977	EC2	1992	11	28.32678	07	11	47.74	+22	53	14.3	I 801
1977	EC2	1992	11	28.36199	07	11	46.91	+22	53	15.1	801
1977	EC2	1992	11	29.31774	07	11	24.14	+22	54	05.0	801
1977	EC2	1992	11	29.34969	07	11	23.31	+22	54	06.6	801
1977	EG7	1992	10	29.09546	00	32	27.31	-00	39	27.4	801
1977	EG7	1992	10	29.12303	00	32	26.58	-00	39	36.5	801
1977	RW6	1992	11	21.17516	02	48	30.71	+17	42	35.2	801
1977	RW6	1992	11	21.18608	02	48	30.17	+17	42	33.3	801
1977	RW6	1992	11	29.16464	02	42	31.21	+17	19	24.1	801
1977	RW6	1992	11	29.18682	02	42	30.28	+17	19	20.2	801
1979	KO	1992	11	29.24404	04	41	05.23	+03	15	06.2	801
1979	KO	1992	11	29.25824	04	41	04.43	+03	15	09.6	801
1979	QK6	1992	10	29.13181	00	58	49.59	-02	17	11.5	801
1979	QK6	1992	10	29.16023	00	58	48.39	-02	17	14.6	801
1981	EU8	1992	11	21.00789	22	31	00.10	-01	50	06.4	w 801
1981	EU8	1992	11	21.04034	22	31	01.59	-01	49	57.8	w 801
1981	QT	1992	11	28.28969	06	13	13.71	+24	51	47.8	801
1981	QT	1992	11	28.30649	06	13	12.83	+24	51	47.2	801
1981	QT	1992	11	29.27666	06	12	23.10	+24	51	36.1	801
1981	QT	1992	11	29.29542	06	12	22.09	+24	51	36.9	801
1981	QG1	1992	11	28.34441	08	40	52.75	-04	08	27.3	801
1981	QG1	1992	11	28.36666	08	40	53.16	-04	08	35.6	801
1981	YO1	1992	11	28.37977	08	56	45.98	+27	40	56.2	801
1981	YO1	1992	11	28.38895	08	56	46.42	+27	41	05.6	801
1981	YO1	1992	11	29.36609	08	57	36.35	+27	57	58.3	801
1981	YO1	1992	11	29.37650	08	57	36.87	+27	58	09.1	801
1982	RM1	1992	11	21.13228	01	48	54.41	+20	13	20.2	801
1982	RM1	1992	11	21.14699	01	48	53.75	+20	13	14.8	801
1982	RM1	1992	11	29.11932	01	44	03.43	+19	27	08.7	801
1982	RM1	1992	11	29.13916	01	44	02.77	+19	27	02.5	801
1982	UD2	1992	11	21.16250	02	27	00.40	+14	49	18.7	801
1982	UD2	1992	11	21.18125	02	26	59.56	+14	49	15.9	801
1982	UD2	1992	11	29.15017	02	21	56.70	+14	32	39.1	801
1982	UD2	1992	11	29.17116	02	21	56.00	+14	32	36.9	801
1982	VA1	1992	11	29.17748	03	02	16.42	+16	12	11.7	801
1982	VA1	1992	11	29.19266	03	02	15.56	+16	12	12.1	801
1985	DD	1992	11	28.30378	06	35	21.68	+17	53	57.8	801

1985 DD	1992 11 28.31677	06 35 21.05	+17 54 11.0				801
1985 RE2	1992 11 29.12438	01 52 18.41	+15 54 58.7				801
1985 RE2	1992 11 29.15361	01 52 17.81	+15 54 53.6				801
1985 TW1	1992 11 28.30069	06 30 52.64	+34 33 24.5				801
1985 TW1	1992 11 28.31988	06 30 51.59	+34 33 24.2				801
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1986 ET	1992 11 28.39113	09 38 29.26	+20 19 00.4				801
1986 ET	1992 11 28.40541	09 38 29.99	+20 18 58.5				801
1986 PW4	1992 10 29.20846	02 02 53.62	+11 46 58.6				801
1987 QY10	1992 09 25.10545	22 19 51.59	-17 15 33.6				801
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1987 UF5	1992 11 29.29154	06 48 42.45	+27 46 31.9				801
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1988 RP1	1992 11 29.37889	09 36 06.04	+22 34 45.4				801
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1988 TN2	1992 11 21.05716	00 15 24.73	-03 01 48.0				801
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1988 VH	1992 11 29.07661	01 20 38.55	+16 08 29.4				801
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1988 VL	1992 11 21.05973	00 17 29.03	-02 13 11.5				801
1988 VL	1992 11 21.08414	00 17 29.56	-02 13 14.0				801
1988 VL	1992 11 29.04497	00 21 23.75	-02 18 40.0				801
1988 VL	1992 11 29.06343	00 21 24.38	-02 18 39.8				801
1988 VR	1992 11 28.33222	07 12 18.69	+28 51 23.9				801
1988 VR	1992 11 28.35760	07 12 17.94	+28 51 33.9				801
1988 VR	1992 11 29.32462	07 11 50.92	+28 57 57.6				801
1988 VR	1992 11 29.34804	07 11 50.18	+28 58 06.8				801
1988 VB1	1992 11 21.10000	01 28 32.48	+25 41 22.9				801
1988 VB1	1992 11 21.12439	01 28 31.54	+25 41 20.5				801
1988 VS2	1992 11 21.16536	02 34 40.57	+08 08 30.6				801
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1988 VS2	1992 11 29.14777	02 30 36.42	+07 02 39.0				801
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1988 XZ	1992 11 29.33817	08 25 20.70	+15 34 45.6				801
1988 XZ	1992 11 29.37022	08 25 20.93	+15 34 38.4				801
1989 AD	1992 11 28.38297	09 09 12.83	+25 28 55.8				801
1989 AD	1992 11 28.40317	09 09 13.61	+25 28 55.9				801
1989 AD	1992 11 29.36789	09 09 52.03	+25 29 00.2				801
1989 AD	1992 11 29.39478	09 09 53.01	+25 29 00.7				801
1989 CL3	1992 11 21.17724	02 56 40.86	+18 57 27.2				801
1989 CL3	1992 11 21.18815	02 56 40.37	+18 57 22.2				801
1989 CL3	1992 11 29.17512	02 51 30.87	+17 57 49.8				801
1989 CL3	1992 11 29.19491	02 51 30.16	+17 57 41.3				801
1989 YK	1992 11 21.06153	00 17 49.78	+02 23 00.9				801
1989 YK	1992 11 21.08613	00 17 50.33	+02 23 01.6				801
1989 YK	1992 11 29.04153	00 22 07.34	+02 34 36.6				801
1989 YK	1992 11 29.06050	00 22 08.05	+02 34 39.3				801
1990 BF2	1992 11 29.25252	05 21 35.13	+22 38 21.3				801
1990 BF2	1992 11 29.26781	05 21 34.10	+22 38 22.5				801
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1990 RW	1992 11 29.31538	06 58 40.76	+24 17 27.7				801

1990	RW	1992	11	29.34470	06	58	39.89	+24	17	29.3	801
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1991	GN	1992	11	29.24259	04	25	24.73	-08	59	53.4	801
1991	PQ	1992	11	21.05182	00	16	18.60	+28	56	30.9	801
1991	PQ	1992	11	21.07784	00	16	18.34	+28	56	21.3	801
1991	PQ	1992	11	29.03818	00	15	52.48	+28	08	45.0	801
1991	PQ	1992	11	29.06631	00	15	52.51	+28	08	35.3	801
1991	PM8	1992	11	28.29248	06	18	56.24	+22	09	55.0	801
1991	PM8	1992	11	28.30971	06	18	55.55	+22	09	55.0	801
1991	PM8	1992	11	29.27863	06	18	18.42	+22	10	05.3	801
1991	PM8	1992	11	29.30002	06	18	17.53	+22	10	05.8	801
1991	PH11	1992	11	29.24917	05	20	57.84	+19	53	10.1	801
1991	PH11	1992	11	29.26392	05	20	57.00	+19	53	07.6	801
1991	PH12	1992	11	28.29774	06	33	24.26	+30	45	09.4	801
1991	PH12	1992	11	28.32221	06	33	23.26	+30	45	06.8	801
1991	PH12	1992	11	29.28550	06	32	44.46	+30	43	28.5	801
1991	PH12	1992	11	29.30635	06	32	43.57	+30	43	26.4	801
1992	HE	1992	11	21.09825	00	53	16.40	+24	31	09.1	801
1992	HE	1992	11	21.11417	00	53	15.35	+24	31	13.6	801
1992	HE	1992	11	29.06895	00	47	01.71	+25	03	11.5	801
1992	HE	1992	11	29.08848	00	47	01.05	+25	03	15.9	801
1992	OE	1992	11	27.95588	22	25	46.71	+13	35	38.3	801
1992	OE	1992	11	27.97013	22	25	47.48	+13	35	42.4	801
1992	OK	1992	11	21.00363	22	17	15.14	-01	45	38.0	801
1992	OK	1992	11	21.01081	22	17	15.93	-01	45	36.0	801
1992	OK	1992	11	27.95998	22	30	29.39	-01	08	48.0	801
1992	OK	1992	11	27.96709	22	30	30.25	-01	08	45.2	801
1992	QM	1992	11	21.00024	22	33	43.50	-05	07	08.4	801
1992	QM	1992	11	21.01352	22	33	44.31	-05	07	03.3	801
1992	SF	1992	11	21.02840	00	02	24.42	+04	55	04.8	801
1992	SF	1992	11	21.04711	00	02	24.95	+04	55	10.9	801
1992	SF	1992	11	28.00984	00	06	48.97	+05	36	52.7	801
1992	SF	1992	11	28.02413	00	06	49.59	+05	36	58.2	801
1992	SL	1992	11	21.10375	01	27	35.45	+36	53	57.9	I 801
1992	SL	1992	11	21.12196	01	27	36.10	+36	53	52.2	801
1992	SL	1992	11	29.07970	01	35	27.03	+36	07	58.9	801
1992	SL	1992	11	29.09584	01	35	27.98	+36	07	52.8	801
1992	ST	1992	11	21.09571	01	02	35.23	+11	02	22.6	801
1992	ST	1992	11	21.11247	01	02	35.38	+11	02	35.2	801
1992	ST	1992	11	29.07238	01	05	44.83	+12	42	50.9	801
1992	ST	1992	11	29.08630	01	05	45.26	+12	43	01.2	801
1992	SB1	1992	11	21.04948	00	14	17.70	+11	29	37.2	801
1992	SB1	1992	11	21.09328	00	14	17.39	+11	29	42.0	801
1992	SR2	1992	11	21.06510	00	47	16.33	+08	39	48.9	801
1992	SR2	1992	11	21.09131	00	47	15.73	+08	39	49.1	801
1992	SR2	1992	11	29.05192	00	45	11.09	+08	47	05.8	801
1992	SR2	1992	11	29.10650	00	45	10.52	+08	47	10.2	801
1992	TC	1992	11	21.14462	02	14	15.63	-07	45	14.1	801
1992	TC	1992	11	21.15221	02	14	15.88	-07	44	52.0	801
1992	TC	1992	11	29.13242	02	20	30.58	-01	42	16.2	801
1992	TC	1992	11	29.13675	02	20	30.76	-01	42	05.4	801
1992	UB	1992	11	29.13005	02	20	55.96	-01	07	28.7	801
1992	UB	1992	11	29.13451	02	20	56.02	-01	07	18.1	801
3034	P-L	1991	10	11.00434	21	37	31.74	-00	53	27.9	801
3034	P-L	1991	10	11.03256	21	37	31.91	-00	53	35.6	801
3034	P-L	1992	10	23.33278	05	44	14.97	+20	42	22.8	801
3034	P-L	1992	10	23.38292	05	44	14.73	+20	42	12.7	801
3227	T-1	1992	11	29.26128	05	33	49.22	-02	14	02.9	801
3227	T-1	1992	11	29.27421	05	33	48.56	-02	14	07.8	801

(3200)		1992 11 21.10666	01 43 28.92	+35 57 47.3			801
(3200)		1992 11 21.11698	01 43 27.70	+35 57 34.9			801
(3200)		1992 11 29.08330	01 30 16.39	+33 25 08.1			801
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(3893)		1992 11 29.03456	23 59 12.90	-04 08 59.5			801
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(4015)		1992 11 28.33716	08 09 08.33	+20 14 16.8			801
(4015)		1992 11 28.35140	08 09 07.52	+20 14 16.7			801
(4015)		1992 11 29.33571	08 08 13.51	+20 14 05.7			801
(4015)		1992 11 29.35450	08 08 12.35	+20 14 05.8			801
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(5324)		1992 11 27.97731	22 45 09.93	+09 16 46.9			801
(5324)		1992 11 27.98308	22 45 10.72	+09 16 54.4			801

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(234)		1990 10 12.13722	00 01 34.28	-22 14 46.1			808

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1975 XH		1992 06 01.24583	16 03 32.19	-11 34 30.3			809
1975 XH		1992 06 01.25903	16 03 31.30	-11 34 31.3			809
1975 XH		1992 06 01.27222	16 03 30.52	-11 34 34.1			809
1975 XH		1992 06 03.13889	16 01 37.11	-11 38 43.4		18.5	809
1975 XH		1992 06 03.15208	16 01 36.31	-11 38 45.7			809
1975 XH		1992 06 03.16528	16 01 35.42	-11 38 46.9			809
1977 TS3		1992 06 03.18542	16 25 58.86	-17 24 13.5		18.5	809
1977 TS3		1992 06 03.19861	16 25 58.16	-17 24 12.7			809
1977 TS3		1992 06 03.21181	16 25 57.45	-17 24 12.1			809
1989 GR8	*	1989 04 02.00556	07 46 47.60	-02 50 35.3		18.5	809
1991 VZ12	*	1991 11 06.16458	04 09 10.45	+11 23 58.2		18.7	809
1991 VZ12		1991 11 06.17778	04 09 09.91	+11 23 51.5			809
1991 VZ12		1991 11 06.19097	04 09 09.38	+11 23 44.3			809
1991 VZ12		1991 11 12.20347	04 04 25.21	+10 29 54.8		18.7	809
1991 VZ12		1991 11 12.21667	04 04 24.48	+10 29 47.6			809
1991 VZ12		1991 11 12.22986	04 04 23.70	+10 29 39.5			809
1992 JN1		1992 06 01.24583	16 13 46.86	-11 11 16.7			809
1992 JN1		1992 06 01.25903	16 13 45.99	-11 11 19.4			809
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1992 JN1		1992 06 03.13889	16 11 49.98	-11 19 16.0		18.0	809
1992 JN1		1992 06 03.15208	16 11 49.13	-11 19 19.5			809
1992 JN1		1992 06 03.16528	16 11 48.24	-11 19 22.9			809
1992 KJ		1992 06 03.18542	16 29 15.65	-16 32 05.4		18.1	809
1992 KJ		1992 06 03.19861	16 29 14.83	-16 32 02.7			809
1992 KJ		1992 06 03.21181	16 29 14.09	-16 32 00.1			809
1992 KJ		1992 06 09.22153	16 23 53.82	-16 12 36.0			809
1992 KJ		1992 06 09.23472	16 23 53.00	-16 12 32.6			809
1992 KJ		1992 06 09.24792	16 23 52.25	-16 12 30.9			809

1992 LV	*	1992 06 01.24583	16 00 42.33	-15 37 28.4			809
1992 LV		1992 06 01.25903	16 00 41.67	-15 37 29.9			809
1992 LV		1992 06 01.27222	16 00 40.88	-15 37 32.0			809
1992 LV		1992 06 03.13889	15 58 57.36	-15 40 54.6		19.4	809
1992 LV		1992 06 03.15208	15 58 56.49	-15 40 55.3			809
1992 LV		1992 06 03.16528	15 58 55.69	-15 40 58.7			809
1992 LW	*	1992 06 01.24583	16 02 19.34	-12 36 07.4			809
1992 LW		1992 06 01.25903	16 02 18.46	-12 36 02.0			809
1992 LW		1992 06 01.27222	16 02 17.53	-12 35 57.2			809
1992 LW		1992 06 03.13889	16 00 21.91	-12 27 50.5		19.2	809
1992 LW		1992 06 03.15208	16 00 21.03	-12 27 46.8			809
1992 LW		1992 06 03.16528	16 00 20.11	-12 27 44.9			809
1992 LX	*	1992 06 01.24583	16 05 09.47	-15 17 01.5			809
1992 LX		1992 06 01.25903	16 05 08.75	-15 17 00.4			809
1992 LX		1992 06 01.27222	16 05 07.94	-15 17 01.0			809
1992 LX		1992 06 03.13889	16 03 19.03	-15 15 46.2		19.1	809
1992 LX		1992 06 03.15208	16 03 18.18	-15 15 46.2			809
1992 LX		1992 06 03.16528	16 03 17.38	-15 15 44.9			809
1992 LY	*	1992 06 01.24583	16 05 53.43	-14 07 32.8			809
1992 LY		1992 06 01.25903	16 05 52.64	-14 07 32.1			809
1992 LY		1992 06 01.27222	16 05 52.00	-14 07 29.8			809
1992 LY		1992 06 03.13889	16 04 18.08	-14 03 59.5		18.6	809
1992 LY		1992 06 03.15208	16 04 17.35	-14 03 57.4			809
1992 LY		1992 06 03.16528	16 04 16.58	-14 03 57.4			809
1992 LZ	*	1992 06 01.24583	16 07 08.23	-13 22 24.8			809
1992 LZ		1992 06 01.25903	16 07 07.64	-13 22 24.2			809
1992 LZ		1992 06 01.27222	16 07 07.02	-13 22 24.0			809
1992 LZ		1992 06 03.13889	16 05 40.53	-13 21 21.9		18.7	809
1992 LZ		1992 06 03.15208	16 05 39.88	-13 21 21.9			809
1992 LZ		1992 06 03.16528	16 05 39.20	-13 21 21.2			809
1992 LA1	*	1992 06 01.24583	16 11 21.17	-14 03 48.9			809
1992 LA1		1992 06 01.25903	16 11 20.34	-14 03 48.5			809
1992 LA1		1992 06 01.27222	16 11 19.60	-14 03 47.9			809
1992 LA1		1992 06 03.13889	16 09 34.86	-14 04 19.2		18.7	809
1992 LA1		1992 06 03.15208	16 09 34.08	-14 04 19.5			809
1992 LA1		1992 06 03.16528	16 09 33.36	-14 04 20.7			809
1992 LB1	*	1992 06 01.24583	16 12 39.92	-16 01 54.3			809
1992 LB1		1992 06 01.25903	16 12 39.13	-16 01 51.0			809
1992 LB1		1992 06 01.27222	16 12 38.07	-16 01 48.2			809
1992 LB1		1992 06 03.13889	16 10 51.34	-15 57 43.4		18.8	809
1992 LB1		1992 06 03.15208	16 10 50.47	-15 57 41.2			809
1992 LB1		1992 06 03.16528	16 10 49.69	-15 57 39.2			809
1992 LC1	*	1992 06 01.24583	16 14 45.52	-12 23 38.9			809
1992 LC1		1992 06 01.25903	16 14 44.80	-12 23 35.5			809
1992 LC1		1992 06 01.27222	16 14 44.05	-12 23 32.1			809
1992 LC1		1992 06 03.13889	16 13 04.52	-12 16 32.5		18.5	809
1992 LC1		1992 06 03.15208	16 13 03.82	-12 16 29.8			809
1992 LC1		1992 06 03.16528	16 13 03.02	-12 16 27.7			809
1992 LD1	*	1992 06 01.24583	16 15 58.31	-15 55 29.2		19.0	809
1992 LD1		1992 06 01.25903	16 15 57.38	-15 55 26.0			809
1992 LD1		1992 06 01.27222	16 15 56.55	-15 55 23.2			809
1992 LD1		1992 06 03.13889	16 14 17.06	-15 47 00.8		18.8	809
1992 LD1		1992 06 03.15208	16 14 16.25	-15 46 56.8			809
1992 LD1		1992 06 03.16528	16 14 15.45	-15 46 54.3			809
1992 LE1	*	1992 06 01.24583	16 17 10.55	-15 27 10.7		18.6	809
1992 LE1		1992 06 01.25903	16 17 09.77	-15 27 09.3			809
1992 LE1		1992 06 01.27222	16 17 08.98	-15 27 09.2			809
1992 LE1		1992 06 03.13889	16 15 28.71	-15 26 15.7		18.6	809
1992 LE1		1992 06 03.15208	16 15 27.83	-15 26 16.3			809

1992	LE1		1992	06	03.16528	16	15	27.05	-15 26 16.5	809
1992	LF1	*	1992	06	01.24583	16	19	06.94	-14 56 13.7	809
1992	LF1		1992	06	01.25903	16	19	06.15	-14 56 11.3	809
1992	LF1		1992	06	01.27222	16	19	05.25	-14 56 07.4	809
1992	LF1		1992	06	03.13889	16	17	18.69	-14 50 31.0 19.0	809
1992	LF1		1992	06	03.15208	16	17	17.85	-14 50 29.1	809
1992	LF1		1992	06	03.16528	16	17	17.10	-14 50 28.1	809
1992	LG1	*	1992	06	01.24583	16	19	13.36	-13 17 24.6	809
1992	LG1		1992	06	01.25903	16	19	12.54	-13 17 19.8	809
1992	LG1		1992	06	01.27222	16	19	11.67	-13 17 14.3	809
1992	LG1		1992	06	03.13889	16	17	25.85	-13 06 45.4 19.2	809
1992	LG1		1992	06	03.15208	16	17	25.05	-13 06 40.9	809
1992	LG1		1992	06	03.16528	16	17	24.28	-13 06 36.5	809
1992	LH1	*	1992	06	01.24583	16	19	48.67	-14 56 30.7	809
1992	LH1		1992	06	01.25903	16	19	47.88	-14 56 30.4	809
1992	LH1		1992	06	01.27222	16	19	47.07	-14 56 30.2	809
1992	LH1		1992	06	03.13889	16	17	54.86	-14 55 13.7 18.7	809
1992	LH1		1992	06	03.15208	16	17	54.02	-14 55 14.0	809
1992	LH1		1992	06	03.16528	16	17	53.19	-14 55 13.3	809
1992	LJ1	*	1992	06	03.18542	16	11	11.09	-19 37 30.6 18.0	809
1992	LJ1		1992	06	03.19861	16	11	10.21	-19 37 28.3	809
1992	LJ1		1992	06	03.21181	16	11	09.30	-19 37 25.4	809
1992	LJ1		1992	06	09.22153	16	05	37.16	-19 13 41.6	809
1992	LJ1		1992	06	09.23472	16	05	36.59	-19 13 37.6	809
1992	LJ1		1992	06	09.24792	16	05	36.11	-19 13 35.8	809
1992	LK1	*	1992	06	03.18542	16	17	12.49	-16 41 53.0 18.5	809
1992	LK1		1992	06	03.19861	16	17	11.73	-16 41 48.1	809
1992	LK1		1992	06	03.21181	16	17	11.05	-16 41 43.6	809
1992	LK1		1992	06	09.22153	16	12	16.42	-16 11 47.5	809
1992	LK1		1992	06	09.23472	16	12	15.75	-16 11 44.6	809
1992	LK1		1992	06	09.24792	16	12	15.15	-16 11 40.7	809
1992	LL1	*	1992	06	03.18542	16	17	31.18	-18 50 38.2 17.9	809
1992	LL1		1992	06	03.19861	16	17	30.28	-18 50 36.4	809
1992	LL1		1992	06	03.21181	16	17	29.47	-18 50 34.3	809
1992	LL1		1992	06	09.22153	16	11	43.83	-18 35 12.0	809
1992	LL1		1992	06	09.23472	16	11	42.83	-18 35 09.6	809
1992	LL1		1992	06	09.24792	16	11	42.16	-18 35 08.5	809
1992	LM1	*	1992	06	03.18542	16	24	47.75	-19 16 55.3 18.0	809
1992	LM1		1992	06	03.19861	16	24	46.94	-19 16 50.9	809
1992	LM1		1992	06	03.21181	16	24	46.17	-19 16 46.5	809
1992	LM1		1992	06	09.22153	16	19	15.23	-18 44 05.9	809
1992	LM1		1992	06	09.23472	16	19	14.47	-18 44 02.3	809
1992	LM1		1992	06	09.24792	16	19	13.63	-18 43 57.6	809
1992	LN1	*	1992	06	03.18542	16	25	32.32	-17 02 10.8 18.2	809
1992	LN1		1992	06	03.19861	16	25	31.51	-17 02 10.0	809
1992	LN1		1992	06	03.21181	16	25	30.78	-17 02 09.1	809
1992	LN1		1992	06	09.22153	16	20	02.30	-16 55 08.1	809
1992	LN1		1992	06	09.23472	16	20	01.37	-16 55 05.5	809
1992	LN1		1992	06	09.24792	16	20	00.46	-16 55 03.8	809
1992	LO1	*	1992	06	03.13889	16	11	22.52	-16 23 07.2 18.0	809
1992	LO1		1992	06	03.15208	16	11	21.75	-16 23 00.5	809
1992	LO1		1992	06	03.16528	16	11	20.99	-16 22 53.9	809
1992	LO1		1992	06	09.22153	16	06	20.76	-15 32 29.3	809
1992	LO1		1992	06	09.23472	16	06	20.08	-15 32 21.6	809
1992	LO1		1992	06	09.24792	16	06	19.45	-15 32 15.8	809
4600	P-L		1992	06	03.18542	16	28	57.78	-19 18 02.4 18.8	809
4600	P-L		1992	06	03.19861	16	28	57.14	-19 18 01.2	809
4600	P-L		1992	06	03.21181	16	28	56.46	-19 17 59.0	809
4262	T-2		1992	09	02.18403	00	05	03.76	-06 19 58.9 19.2	809

4262 T-2	1992 09 02.19444	00 05 03.15	-06 20 03.5			809
4262 T-2	1992 09 02.20486	00 05 02.59	-06 20 07.8			809
(380)	1992 06 03.18542	16 26 06.10	-17 15 06.1		14.0	809
(380)	1992 06 03.19861	16 26 05.29	-17 15 06.1			809
(380)	1992 06 03.21181	16 26 04.45	-17 15 06.1			809
(380)	1992 06 09.22153	16 20 25.57	-17 16 35.2			809
(380)	1992 06 09.23472	16 20 24.74	-17 16 35.8			809
(380)	1992 06 09.24792	16 20 23.88	-17 16 36.2			809
(686)	1992 06 03.18542	16 33 29.78	-18 17 46.8		12.0	809
(686)	1992 06 03.19861	16 33 28.91	-18 17 38.0			809
(686)	1992 06 03.21181	16 33 28.07	-18 17 29.4			809
(1309)	1992 06 01.24583	16 13 59.82	-11 55 49.2			809
(1309)	1992 06 01.25903	16 13 59.19	-11 55 46.0			809
(1309)	1992 06 01.27222	16 13 58.59	-11 55 44.1			809
(1309)	1992 06 03.13889	16 12 36.99	-11 50 01.6		17.8	809
(1309)	1992 06 03.15208	16 12 36.32	-11 49 59.4			809
(1309)	1992 06 03.16528	16 12 35.71	-11 49 57.0			809
(1771)	1992 06 01.24583	16 04 20.54	-14 45 28.9			809
(1771)	1992 06 01.25903	16 04 19.81	-14 45 28.4			809
(1771)	1992 06 01.27222	16 04 19.17	-14 45 28.6			809
(1771)	1992 06 03.13889	16 02 50.46	-14 45 29.3		17.9	809
(1771)	1992 06 03.15208	16 02 49.73	-14 45 29.1			809
(1771)	1992 06 03.16528	16 02 49.06	-14 45 29.3			809
(2436)	1992 06 03.18542	16 17 38.85	-19 52 28.0		18.3	809
(2436)	1992 06 03.19861	16 17 38.19	-19 52 25.9			809
(2436)	1992 06 03.21181	16 17 37.52	-19 52 23.4			809
(3123)	1992 06 03.18542	16 31 42.08	-19 10 01.4		18.2	809
(3123)	1992 06 03.19861	16 31 41.19	-19 10 00.3			809
(3123)	1992 06 03.21181	16 31 40.30	-19 09 58.9			809
(3911)	1992 06 01.24583	16 05 29.30	-11 40 59.1			809
(3911)	1992 06 01.25903	16 05 28.64	-11 40 55.4			809
(3911)	1992 06 01.27222	16 05 27.94	-11 40 52.8			809
(3911)	1992 06 03.13889	16 04 02.03	-11 33 02.0		18.0	809
(3911)	1992 06 03.15208	16 04 01.28	-11 32 58.8			809
(3911)	1992 06 03.16528	16 04 00.68	-11 32 55.6			809
(4265)	1992 06 01.24583	16 12 04.62	-14 51 20.8			809
(4265)	1992 06 01.25903	16 12 03.78	-14 51 19.1			809
(4265)	1992 06 01.27222	16 12 02.87	-14 51 17.7			809
(4265)	1992 06 03.13889	16 10 10.15	-14 48 11.0		18.3	809
(4265)	1992 06 03.15208	16 10 09.28	-14 48 10.1			809
(4265)	1992 06 03.16528	16 10 08.43	-14 48 08.8			809
(4286)	1992 06 03.18542	16 25 43.10	-17 41 22.4		18.2	809
(4286)	1992 06 03.19861	16 25 42.41	-17 41 21.2			809
(4286)	1992 06 03.21181	16 25 41.65	-17 41 20.2			809
(4286)	1992 06 09.22153	16 20 39.02	-17 32 44.8			809
(4286)	1992 06 09.23472	16 20 38.15	-17 32 42.9			809
(4286)	1992 06 09.24792	16 20 37.25	-17 32 41.4			809
(4352)	1992 06 03.18542	16 15 46.42	-20 59 57.4		18.1	809
(4352)	1992 06 03.19861	16 15 45.67	-20 59 58.4			809
(4352)	1992 06 03.21181	16 15 44.83	-20 59 57.7			809
(4720)	1992 06 01.24583	15 59 49.01	-12 16 07.8			809
(4720)	1992 06 01.25903	15 59 48.11	-12 16 06.8			809
(4720)	1992 06 01.27222	15 59 47.27	-12 16 06.4			809
(4720)	1992 06 03.13889	15 57 52.59	-12 14 06.4		18.4	809
(4720)	1992 06 03.15208	15 57 51.68	-12 14 05.7			809
(4720)	1992 06 03.16528	15 57 50.89	-12 14 04.6			809
(4836)	1992 06 01.24583	16 09 17.99	-13 23 01.8			809
(4836)	1992 06 01.25903	16 09 17.49	-13 23 01.2			809
(4836)	1992 06 01.27222	16 09 17.04	-13 23 01.9			809

(4836)		1992 06 03.13889	16 08 16.33	-13 23 59.7	18.3			809
(4836)		1992 06 03.15208	16 08 15.77	-13 24 00.3				809
(4836)		1992 06 03.16528	16 08 15.33	-13 24 00.8				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 UA3		1992 10 30.68177	03 08 59.69	+17 40 04.0				877
1992 UA3		1992 11 18.54965	02 50 52.47	+17 02 09.0				877
1992 UA3		1992 11 18.56840	02 50 51.75	+17 02 05.9				877
1992 UB3		1992 10 30.70000	03 19 49.43	+19 23 53.8				877
1992 UB3		1992 10 30.72153	03 19 47.89	+19 23 56.2				877
1992 UB3		1992 11 17.73316	02 59 46.50	+19 59 54.0				877
1992 UB3		1992 11 17.75365	02 59 45.03	+19 59 55.3				877
1992 UB3		1992 11 18.58576	02 58 50.91	+20 01 13.5				877
1992 UB3		1992 11 18.60365	02 58 49.61	+20 01 15.2				877
1992 UJ5	*	1992 10 25.62604	03 11 03.73	+18 04 42.1	16.5			877
1992 UJ5		1992 10 25.64340	03 11 02.90	+18 04 38.4				877
1992 UJ5		1992 10 27.60521	03 09 32.17	+17 57 44.3				877
1992 UJ5		1992 10 27.62604	03 09 31.26	+17 57 39.5				877
1992 UJ5		1992 10 30.65877	03 07 00.27	+17 46 10.6				877
1992 UJ5		1992 10 30.68177	03 06 59.06	+17 46 03.6				877
1992 UE6	*	1992 10 31.65764	04 09 27.07	+17 23 34.9	16.0			877
1992 UE6		1992 10 31.68542	04 09 25.73	+17 23 41.3				877
1992 UE6		1992 11 02.62986	04 07 50.15	+17 29 55.6				877
1992 UE6		1992 11 02.65556	04 07 48.77	+17 30 01.9				877
1992 UE6		1992 11 03.75625	04 06 50.87	+17 33 32.9				877
1992 UE6		1992 11 03.77500	04 06 49.90	+17 33 37.1				877
1992 WQ1	*	1992 11 18.62535	04 27 02.17	+22 25 40.9	16.5			877
1992 WQ1		1992 11 18.64549	04 27 00.99	+22 25 26.4				877
1992 WQ1		1992 11 21.69236	04 23 55.94	+21 48 06.8				877
1992 WQ1		1992 11 21.71250	04 23 54.62	+21 47 51.3				877
1992 WV2		1992 11 23.64340	04 24 37.23	+17 43 03.3	15.5			877
1992 WV2		1992 11 23.66701	04 24 35.90	+17 43 06.8				877
1992 WV2		1992 11 25.68721	04 22 39.10	+17 46 23.8				877
1992 WV2		1992 11 25.73194	04 22 36.34	+17 46 28.2				877
1992 WC3		1992 11 23.64340	04 27 02.83	+18 38 43.0	16.0			877
1992 WC3		1992 11 23.66701	04 27 01.12	+18 38 44.5				877
1992 WC3		1992 11 25.68721	04 24 36.24	+18 40 50.3				877
1992 WC3		1992 11 25.73194	04 24 32.99	+18 40 52.8				877
(2454)		1992 11 18.62535	04 26 59.23	+22 24 23.6	16.5			877
(2454)		1992 11 18.64549	04 26 57.83	+22 24 18.6				877
(2454)		1992 11 21.69236	04 23 24.74	+22 08 32.5				877
(2454)		1992 11 21.71250	04 23 23.33	+22 08 26.6				877

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T. Urata, 6-1, Muramatsuhara 1 Chome, Shimizu, Shizuoka-Ken 424, Japan
Observers K. Suzuki, T. Urata
Measurer T. Urata
0.31-m f/5.7 reflector
GSC

1988 VH		1992 10 20.53368	01 39 38.0	+23 24 09			P	881
1988 VH		1992 10 20.54479	01 39 37.3	+23 24 01			P	881
1988 VH		1992 10 27.52882	01 33 58.89	+22 04 47.1				881
1988 VH		1992 10 27.53993	01 33 58.34	+22 04 38.3				881

1988 VH		1992 11 17.53993	01 22 09.17	+17 59 43.9	16.8	881
1988 VH		1992 11 17.55104	01 22 08.94	+17 59 36.3		881

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T. Urata, 6-1, Muramatsuhara 1 Chome, Shimizu, Shizuoka-Ken 424, Japan
Observers A. Natori, T. Urata
Measurer T. Urata
0.25-m f/3.4 hyperboloid astrocamera
GSC

1985 TP3		1992 10 31.65833	03 49 16.03	+27 10 24.6	16.5	885
1985 TP3		1992 10 31.66458	03 49 15.78	+27 10 22.5		885
1985 TP3		1992 11 01.58090	03 48 28.17	+27 07 07.1	16.5	885
1985 TP3		1992 11 01.59340	03 48 27.57	+27 07 06.3		885
1992 SR		1992 10 31.63854	02 35 22.90	+27 01 38.9	15	885
1992 SR		1992 10 31.64410	02 35 22.25	+27 01 42.2		885
1992 UD2		1992 11 22.40938	01 58 45.48	+14 02 21.8	16.5	885
1992 UD2		1992 11 22.41319	01 58 45.10	+14 02 25.9		885
1992 UD2		1992 11 22.41701	01 58 44.82	+14 02 30.3		885
1992 UF6	*	1992 10 31.65833	03 51 33.72	+27 57 31.5	16	885
1992 UF6		1992 10 31.66458	03 51 33.49	+27 57 30.4		885
1992 UF6		1992 11 01.58090	03 50 47.88	+27 54 54.4	16	885
1992 UF6		1992 11 01.59340	03 50 47.17	+27 54 52.1		885
1992 WP		1992 10 31.69028	03 49 11.62	+16 41 16.0	17	885
1992 WP		1992 10 31.70278	03 49 10.81	+16 41 19.5		885
1992 WW2		1992 10 31.69028	03 47 18.85	+17 02 35.1	17	885
1992 WW2		1992 10 31.70278	03 47 18.19	+17 02 32.2		885
1992 WM3		1992 11 24.66771	05 36 08.96	+23 11 42.9	16.8	885
1992 WM3		1992 11 24.67813	05 36 08.32	+23 11 44.2		885
1992 WM3		1992 11 26.68750	05 34 13.24	+23 14 50.0	16.5	885
1992 WM3		1992 11 26.74722	05 34 09.51	+23 14 55.0		885
1992 WN3		1992 11 24.66771	05 36 48.47	+24 21 23.9	16.5	885
1992 WN3		1992 11 24.67813	05 36 47.83	+24 21 27.6		885
1992 WN3		1992 11 26.74722	05 35 01.19	+24 33 02.2	16.5	885
1992 WN3		1992 11 26.75347	05 35 00.79	+24 33 03.5		885
1992 WO3		1992 11 26.77639	05 50 39.19	-02 00 17.5	16.3	885
1992 WX3	*	1992 11 24.71319	05 17 28.90	+33 36 36.3	16.5	885
1992 WX3		1992 11 24.72431	05 17 28.10	+33 36 37.6		885
1992 WX3		1992 11 26.65208	05 15 10.06	+33 43 10.7	16.5	885
1992 WX3		1992 11 26.65799	05 15 09.49	+33 43 13.3		885

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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

1975 VW2		1992 10 27.68715	02 36 36.14	+06 40 17.9	17.0	894
1975 VW2		1992 10 27.70035	02 36 35.33	+06 40 13.7		894
1981 EU22		1992 10 26.56944	02 07 22.11	+15 50 01.3	17.2	894
1981 EU22		1992 10 26.58194	02 07 21.22	+15 49 58.9		894
1981 EU22		1992 10 27.63368	02 06 11.93	+15 44 38.0		894
1981 EU22		1992 10 27.64688	02 06 11.17	+15 44 34.1		894
1982 UD2		1992 10 25.74378	02 49 18.12	+16 02 58.0	16.5	894
1982 UD2		1992 10 25.75764	02 49 17.39	+16 02 54.0		894
1982 UD2		1992 10 26.69416	02 48 29.73	+16 00 28.8		894
1982 UD2		1992 10 26.70729	02 48 28.85	+16 00 24.6		894
1982 UT5		1992 10 25.74378	02 37 52.56	+16 12 37.4	16.8	894
1982 UT5		1992 10 25.75764	02 37 51.71	+16 12 33.0		894
1982 UT5		1992 10 26.69416	02 36 58.17	+16 06 06.5		894
1982 UT5		1992 10 26.70729	02 36 57.37	+16 06 00.7		894

1985	RE2		1992	10	25.68715	02	20	17.71	+18 30 51.4	16.3	894
1985	RE2		1992	10	25.70035	02	20	16.84	+18 30 47.1		894
1986	JQ		1992	10	25.74378	02	51	14.41	+17 09 51.3	16.0	894
1986	JQ		1992	10	25.75764	02	51	13.56	+17 09 32.0		894
1986	JQ		1992	10	26.69416	02	50	15.01	+16 50 43.0		894
1986	JQ		1992	10	26.70729	02	50	14.14	+16 50 25.6		894
1988	VB5		1992	10	25.74378	02	52	57.28	+16 10 34.8	16.0	894
1988	VB5		1992	10	25.75764	02	52	56.65	+16 10 24.8		894
1988	VB5		1992	10	26.69416	02	52	11.55	+15 59 15.6		894
1988	VB5		1992	10	26.70729	02	52	10.81	+15 59 05.7		894
1991	PB13		1992	11	24.68825	04	54	21.98	+20 42 55.9	16.5	894
1991	PB13		1992	11	24.70417	04	54	21.10	+20 42 56.7		894
1991	PB13		1992	11	29.61285	04	50	09.16	+20 39 12.8	16.3	894
1991	PB13		1992	11	29.62674	04	50	08.36	+20 39 13.1		894
1992	TD1		1992	10	25.56852	01	54	52.34	+05 46 08.7	16.5	894
1992	TD1		1992	10	25.58160	01	54	51.74	+05 45 59.6		894
1992	UG		1992	10	31.64907	03	05	54.65	+08 02 47.3	16.0	894
1992	UG		1992	10	31.67535	03	05	53.15	+08 02 48.3		894
1992	UG		1992	11	01.64375	03	05	01.91	+08 03 29.2		894
1992	UG		1992	11	01.65764	03	05	01.21	+08 03 29.9		894
1992	UQ		1992	10	30.62917	01	45	11.38	+06 09 55.6	17.0	894
1992	UQ		1992	10	30.64167	01	45	10.66	+06 09 52.5		894
1992	UQ		1992	10	31.56646	01	44	24.35	+06 04 34.1		894
1992	UQ		1992	10	31.57951	01	44	23.77	+06 04 30.7		894
1992	UR		1992	10	30.62917	01	46	43.88	+07 14 38.8	16.8	894
1992	UR		1992	10	30.64167	01	46	42.94	+07 14 43.4		894
1992	UR		1992	10	31.56646	01	45	37.55	+07 20 07.6		894
1992	UR		1992	10	31.57951	01	45	36.56	+07 20 12.5		894
1992	UU		1992	10	26.56944	02	06	32.52	+15 55 31.8	16.5	894
1992	UU		1992	10	26.58194	02	06	31.60	+15 55 32.4		894
1992	UU		1992	10	27.63368	02	05	21.59	+15 55 31.5		894
1992	UU		1992	10	27.64688	02	05	20.60	+15 55 30.6		894
1992	UU		1992	10	30.57847	02	02	06.85	+15 55 08.0	16.7	894
1992	UU		1992	10	30.59097	02	02	06.11	+15 55 08.8		894
1992	UV		1992	10	26.56944	02	08	23.76	+17 04 34.6	16.0	894
1992	UV		1992	10	26.58194	02	08	23.14	+17 04 28.6		894
1992	UV		1992	10	27.63368	02	07	33.83	+16 56 57.0	16.3	894
1992	UV		1992	10	27.64688	02	07	33.17	+16 56 52.0		894
1992	UV		1992	10	30.57847	02	05	16.72	+16 35 38.7	16.5	894
1992	UV		1992	10	30.59097	02	05	16.11	+16 35 31.6		894
1992	UW		1992	10	26.56944	02	10	05.86	+16 26 39.4	16.0	894
1992	UW		1992	10	26.58194	02	10	05.18	+16 26 37.0		894
1992	UW		1992	10	27.63368	02	09	07.57	+16 23 57.4	16.3	894
1992	UW		1992	10	27.64688	02	09	06.78	+16 23 55.5		894
1992	UW		1992	10	30.57847	02	06	28.00	+16 16 11.8	16.0	894
1992	UW		1992	10	30.59097	02	06	27.23	+16 16 09.6		894
1992	US1		1992	10	30.62917	01	44	27.10	+06 32 52.8	17.0	894
1992	US1		1992	10	30.64167	01	44	26.50	+06 32 52.6		894
1992	US1		1992	10	31.56646	01	43	29.33	+06 33 41.5		894
1992	US1		1992	10	31.57951	01	43	28.54	+06 33 42.4		894
1992	UW2		1992	10	30.62917	01	49	49.57	+06 35 15.9	16.8	894
1992	UW2		1992	10	30.64167	01	49	48.66	+06 35 16.2		894
1992	UW2		1992	10	31.56646	01	48	53.76	+06 35 29.3		894
1992	UW2		1992	10	31.57951	01	48	52.93	+06 35 30.8		894
1992	UD3		1992	10	30.60353	02	34	40.27	+18 16 59.9	16.5	894
1992	UD3		1992	10	30.61597	02	34	39.59	+18 16 54.8		894
1992	UT3		1992	10	31.75729	03	31	26.32	+16 32 57.7	16.7	894
1992	UT3		1992	10	31.77118	03	31	25.42	+16 32 58.0		894
1992	UD6	*	1992	10	30.75972	03	31	29.99	+14 23 10.0	17.0	894

1992 UD6		1992 10 30.77361	03 31 29.10	+14 23 05.6			894
1992 UD6		1992 10 31.72951	03 30 35.89	+14 21 30.7			894
1992 UD6		1992 10 31.74410	03 30 35.08	+14 21 29.0			894
1992 UE6		1992 11 21.55521	03 47 37.00	+18 29 43.1		16.5	894
1992 UE6		1992 11 21.56840	03 47 36.21	+18 29 48.6			894
1992 UE6		1992 11 22.70608	03 46 14.72	+18 33 18.1			894
1992 WT1		1992 11 21.64236	04 23 35.47	+16 40 43.3		16.0	894
1992 WT1		1992 11 21.65694	04 23 34.54	+16 40 45.3			894
1992 WT1		1992 11 22.71958	04 22 29.41	+16 42 54.0			894
1992 WV2	*	1992 11 21.64236	04 26 31.85	+17 39 49.9		16.0	894
1992 WV2		1992 11 21.65694	04 26 30.91	+17 39 50.3			894
1992 WV2		1992 11 22.69201	04 25 31.73	+17 41 29.4			894
1992 WV2		1992 11 22.71958	04 25 30.10	+17 41 33.0			894
1992 WC3		1992 11 21.64236	04 29 24.95	+18 36 39.1		16.5	894
1992 WC3		1992 11 21.65694	04 29 23.98	+18 36 39.9			894
1992 WC3		1992 11 22.69201	04 28 10.39	+18 37 44.9			894
1992 WC3		1992 11 22.71958	04 28 08.47	+18 37 44.1			894
1992 WH3	*	1992 11 21.55521	03 55 33.42	+17 34 35.8		17.0	894
1992 WH3		1992 11 21.56840	03 55 32.70	+17 34 34.4			894
1992 WH3		1992 11 22.70608	03 54 31.59	+17 36 39.1			894
1992 WL3		1992 11 23.63304	04 16 12.26	+11 05 03.5		16.7	894
1992 WL3		1992 11 23.64688	04 16 11.70	+11 04 57.5			894
1992 WL3		1992 11 24.60521	04 15 26.03	+11 00 31.2		17.0	894
1992 WL3		1992 11 24.61910	04 15 25.32	+11 00 27.0			894
1992 WR3	*	1992 11 23.68902	04 44 39.23	+12 14 59.2		16.8	894
1992 WR3		1992 11 23.70348	04 44 38.29	+12 15 01.0			894
1992 WR3		1992 11 24.65938	04 43 41.01	+12 17 46.4			894
1992 WR3		1992 11 24.67465	04 43 40.15	+12 17 48.5			894
1992 WO4		1992 11 24.68825	04 56 46.31	+21 11 01.9		17.0	894
1992 WO4		1992 11 24.70417	04 56 45.16	+21 11 02.2			894
1992 WO4	*	1992 11 29.61285	04 51 41.21	+21 16 48.9		16.5	894
1992 WO4		1992 11 29.62674	04 51 40.16	+21 16 49.4			894
2141 T-3		1992 10 26.64167	02 24 07.21	+20 15 43.3		16.7	894
2141 T-3		1992 10 26.65417	02 24 06.47	+20 15 38.8			894
(1502)		1992 10 31.75729	03 28 34.88	+16 15 21.1			894
(1502)		1992 10 31.77118	03 28 34.08	+16 15 16.8			894
(2525)		1992 10 30.62917	01 46 07.74	+06 56 43.9			894
(2525)		1992 10 30.64167	01 46 07.16	+06 56 41.3			894
(2525)		1992 10 31.56646	01 45 25.90	+06 53 52.7			894
(2525)		1992 10 31.57951	01 45 25.36	+06 53 49.9			894
(2543)		1992 10 25.74378	02 52 44.63	+16 17 42.2			894
(2543)		1992 10 25.75764	02 52 43.75	+16 17 42.4			894
(2543)		1992 10 26.69416	02 51 45.24	+16 19 28.3			894
(2543)		1992 10 26.70729	02 51 44.43	+16 19 29.8			894
(2574)		1992 10 25.74378	02 48 46.41	+17 17 42.8			894
(2574)		1992 10 25.75764	02 48 45.70	+17 17 41.3			894
(2590)		1992 11 21.64236	04 27 17.39	+17 43 42.4			894
(2590)		1992 11 21.65694	04 27 16.38	+17 43 35.6			894
(2590)		1992 11 22.69201	04 26 13.21	+17 37 01.8		15.5	894
(2590)		1992 11 22.71958	04 26 11.44	+17 36 50.2			894
(4018)		1992 10 25.68715	02 19 34.74	+17 56 42.4			894
(4018)		1992 10 25.70035	02 19 33.94	+17 56 35.8			894
(4959)		1992 11 23.63304	04 21 53.18	+09 27 48.6		16.3	894
(4959)		1992 11 23.64688	04 21 52.51	+09 27 47.5			894
(4959)		1992 11 24.60521	04 21 05.01	+09 26 36.5			894
(4959)		1992 11 24.61910	04 21 04.41	+09 26 36.8			894

896 Yatsugatake South Base Observatory
O. Muramatsu, 119-1, 2-8 Sakurazutsumi, Musashino, Tokyo 180, Japan

Observers Y. Kushida, O. Muramatsu
Measurer O. Muramatsu
0.25-m f/3.4 reflector
PPM

1992 UZ1		1992 10 31.67465	02 08 19.23	+24 07 18.1					896
1992 UZ1		1992 10 31.69974	02 08 17.78	+24 07 11.1					896
1992 UZ1		1992 11 21.61580	01 51 50.83	+22 00 48.7				W	896
1992 UA2		1992 10 31.68785	02 13 52.0	+27 03 28				W	896
1992 UA2		1992 10 31.71163	02 13 50.68	+27 03 28.6					896
1992 UA2		1992 11 21.65353	01 57 48.68	+26 25 05.6					896
1992 UA2		1992 11 21.68252	01 57 47.63	+26 24 59.9					896
1992 UL8	*	1992 10 31.74254	03 13 25.64	+31 13 08.4		16.5			896
1992 UL8		1992 10 31.77379	03 13 23.8	+31 12 52				W	896
1992 UL8		1992 11 21.70556	02 55 35.9	+27 39 24				W	896
1992 UL8		1992 11 21.73403	02 55 34.8	+27 39 05				W	896
1992 UL8		1992 11 23.61632	02 54 11.46	+27 16 53.4					896
1992 UL8		1992 11 23.64045	02 54 10.3	+27 16 35				W	896
1992 VF		1992 11 21.72031	04 02 59.62	+16 39 23.4					896
1992 VF		1992 11 21.74722	04 02 57.83	+16 39 14.4					896
1992 VF		1992 11 23.65556	04 00 59.78	+16 30 00.6					896
1992 VF		1992 11 23.68194	04 00 58.3	+16 29 53				W	896
1992 WU3	*	1992 11 23.69757	04 44 37.40	+25 52 03.2		16.0			896
1992 WU3		1992 11 23.73021	04 44 35.3	+25 52 01				W	896
1992 WU3		1992 11 26.64184	04 41 33.7	+25 47 03		15.5		W	896
1992 WU3		1992 11 26.67674	04 41 31.41	+25 46 59.5					896
1992 WV3	*	1992 11 24.64618	04 49 15.43	+30 56 24.4		16.5		s	896
1992 WV3		1992 11 24.67951	04 49 12.72	+30 56 26.6				s	896
1992 WV3		1992 11 26.65382	04 46 53.3	+30 57 51				s	896
1992 WW3	*	1992 11 24.64618	04 49 22.34	+31 28 00.3		16.5			896
1992 WW3		1992 11 24.67951	04 49 20.50	+31 28 02.9					896
1992 WW3		1992 11 26.65382	04 47 31.3	+31 28 05				W	896
1992 WW3		1992 11 26.68802	04 47 29.4	+31 28 06				W	896

906 Cobram
P. Camilleri, R.M.B. 2013, Cottons Road, Cobram, Vic. 3644, Australia
Observer P. J. Camilleri
Measurer P. M. Kilmartin
0.20-m f/7.2 reflector
Long. and Parallax 145.667, 0.8113, -0.5837 (see MPC 19348)

(63)		1992 10 28.53391	23 59 43.12	+06 00 38.4					906
(356)		1992 10 27.47299	23 47 54.93	+03 04 08.0					906
(356)		1992 10 27.52881	23 47 53.18	+03 04 06.2					906
(791)		1992 10 27.51159	00 29 50.25	-20 26 44.6					906
(791)		1992 10 28.50815	00 29 26.24	-20 26 03.8					906

* * * * *

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)
Epoch 1992 Apr. 8.0 TT = JDT 2448720.5
T 1992 Apr. 22.68818 TT Marsden

q 1.2614831	(2000.0)	P		Q
z +0.0032614	Peri.	65.47278	+0.35636846	-0.39539394
+/-0.0000198	Node	300.50762	-0.60499844	+0.59280981
e 0.9958858	Incl.	79.29256	+0.71202416	+0.70159829

From 140 observations 1992 Apr. 1-Nov. 30, mean residual 0".84.

Periodic Comet Swift-Tuttle
Epoch 1992 Dec. 4.0 TT = JDT 2448960.5
T 1992 Dec. 12.32426 TT Marsden

q 0.9582163	(2000.0)	P		Q
n 0.00730051	Peri.	153.00160	+0.79432130	+0.11458348
a 26.3168407	Node	139.44415	-0.57140578	-0.19253270
e 0.9635892	Incl.	113.42662	+0.20627435	-0.97457775

P 135.01
From 383 observations 1862-1992, mean residual 1".34. Nongravitational parameters A1 = -0.00079 +/- 0.00002, A2 = -0.00266 +/- 0.00007. Observations in 1862 October omitted (and showing systematic O-C residuals more negative than -10" in both R.A. and Decl.). 1737 perihelion time represented to 0.5 day.

Comet Helin-Lawrence (1992q)
Epoch 1993 Apr. 3.0 TT = JDT 2449080.5
T 1993 Mar. 15.12203 TT Marsden

q 2.0383860	(2000.0)	P		Q
z +0.0170678	Peri.	268.85724	+0.09265307	-0.96576204
+/-0.0009159	Node	194.66608	+0.12808966	-0.22978411
e 0.9652092	Incl.	106.84615	-0.98742516	-0.12042815

From 45 observations 1992 Aug. 29-Nov. 14, mean residual 0".82.

Periodic Comet Schaumasse (1992x)
Epoch 1993 Feb. 22.0 TT = JDT 2449040.5
T 1993 Mar. 3.96080 TT Nakano

		(2000.0)	P	Q
q 1.2021580	Peri.	57.48198	-0.73162086	-0.65085374
n 0.11990222	Node	81.05299	+0.53610643	-0.73305302
a 4.0730328	Incl.	11.84584	+0.42109478	-0.19754160
e 0.7048494				
P 8.22				

From 60 observations 1960-1992, mean residual 1".19. Nongravitational parameters A1 = +0.49 +/- 0.06, A2 = -0.0555 +/- 0.0003.

Comet Shoemaker (1992y)
T 1993 Mar. 25.66312 TT Marsden

		(2000.0)	P	Q
q 2.3138396	Peri.	54.85855	+0.05416643	-0.65803748
	Node	55.30015	+0.31079103	-0.70366863
e 1.0	Incl.	65.99436	+0.94893358	+0.26802449

From 50 observations 1992 Oct. 25-Nov. 29.

One-opposition minor planets

Planet	H	Epoch	M	Peri.	Node	Incl.	e	a	Arc	O	N	C
1978 WZ	16.5	781128	22.29	332.37	63.71	4.26	0.1307	2.2106	2	4	F	W
1990 DD1	12.8	900310	165.23	203.25	149.10	5.70	0.0102	2.2222	8	5	E	N
1991 VK2	15.0	911120	17.30	291.60	94.20	4.24	0.3012	2.4098	24	7		W
1991 VH6	14.0	911031	39.91	188.89	172.05	7.83	0.1344	2.4554	6	0		W
1991 VJ6	14.0	911031	30.79	179.07	193.91	10.28	0.1532	2.8006	6	0		W
1991 VL6	14.0	911031	2.45	204.66	206.25	13.47	0.1574	2.5717	6	0		W
1991 VM6	13.0	911031	242.28	95.57	88.80	16.22	0.1141	2.6168	6	0		W
1991 VZ12	14.0	911031	288.88	290.41	211.46	14.51	0.1433	2.6699	6	8		W
1991 YE	13.5	911230	324.53	46.28	106.76	4.93	0.1607	2.6757	31	0		W
1992 KJ	14.5	920518	0.04	45.71	198.31	2.99	0.1566	2.2046	12	0		M
1992 PQ2	14.4	920806	354.70	61.20	271.53	5.99	0.1212	2.3637	4	8		E
1992 PR2	12.9	920806	336.35	181.26	179.72	10.65	0.1648	3.1639	4	8		E
1992 PL4	14.8	920806	1.12	63.86	257.19	1.16	0.1756	2.2680	4	8		E
1992 PM4	14.2	920806	331.26	103.62	266.11	2.09	0.2254	2.7956	4	8		E
1992 QC	14.5	920915	5.39	305.10	29.64	22.64	0.3361	2.3718	53	0		W
1992 QS1	14.0	920826	11.37	252.83	81.71	8.42	0.1524	2.3459	3	5		W
1992 RV	13.5	920915	347.37	0.94	16.31	8.68	0.1691	2.7417	61	0		M
1992 RY	12.5	920915	264.17	111.61	357.46	13.72	0.1227	3.1217	23	9		M
1992 RB1	15.0	920915	359.90	356.14	2.57	2.81	0.1924	2.3942	25	0		M
1992 RC1	15.5	920915	8.63	347.38	357.20	2.34	0.2258	2.3489	25	9		W
1992 RD1	13.0	920915	21.35	335.07	359.62	13.66	0.1032	2.9943	25	0		M
1992 SE	14.2	921005	339.81	219.97	185.03	12.77	0.2817	2.5559	29	0		N
1992 SF	14.0	921025	358.50	16.59	3.25	5.85	0.1877	2.2630	68	0		W
1992 SB1	11.5	921005	17.96	346.80	2.05	17.06	0.1679	3.1700	59	0		W
1992 SC1	13.5	921005	13.16	209.90	145.21	5.09	0.2089	2.5188	33	0		N
1992 SE1	12.3	921025	81.53	234.31	46.53	13.63	0.1557	2.6810	33	8		N
1992 SH1	14.3	921005	357.09	322.01	53.23	7.40	0.2884	2.5495	35	8		N
1992 SQ2	12.5	921025	23.80	141.87	228.88	3.25	0.1047	2.4853	69	0		M
1992 SF11	14.5	921005	270.93	291.47	176.85	1.46	0.1135	3.2018	4	0		E
1992 SM12	13.1	921025	65.53	151.29	149.89	6.21	0.1391	2.3847	33	8		N
1992 SW12	14.5	921005	351.77	359.35	24.77	4.90	0.1552	2.1368	21	9		N
1992 SY12	13.5	921005	350.56	24.00	5.29	9.86	0.2105	2.3235	30	8		N
1992 SC13	13.5	921005	22.67	320.55	19.57	6.18	0.2629	2.5989	21	9		W
1992 SM16	14.0	920915	313.06	229.50	183.16	8.15	0.0811	2.5880	5	6	E	M
1992 SN16	17.0	920915	336.73	135.14	257.18	0.49	0.2050	2.1722	6	7	E	M
1992 SO16	17.0	920915	350.22	27.08	344.01	2.03	0.1662	2.1724	5	6	E	M
1992 SP16	15.5	920915	353.39	19.91	348.25	2.68	0.2139	2.5727	7	8		M
1992 SQ16	16.0	920915	347.54	21.48	354.73	8.00	0.1936	2.2541	5	6		M

1992	SR16	15.0	920915	346.82	190.94	182.64	11.37	0.0661	2.5659	7	8			M
1992	SS16	16.0	920915	42.40	105.18	206.72	0.65	0.0473	2.1766	7	8	E		M
1992	ST16	17.0	920915	350.55	36.00	336.06	2.22	0.1994	2.2975	7	8			M
1992	SU16	14.5	920915	106.16	225.99	2.82	8.57	0.2473	2.5945	3	4	E	W	
1992	SV16	12.0	920915	244.53	142.73	350.62	7.41	0.1838	3.9229	4	5	E	W	
1992	SW16	15.5	920915	54.28	60.27	227.45	1.09	0.1640	2.5827	7	7			M
1992	SX16	15.5	920915	348.56	193.17	185.96	12.37	0.2752	2.9747	4	5	E	W	
1992	SY16	15.5	920915	307.59	63.30	1.60	9.02	0.1360	2.5734	9	0			M
1992	SZ16	15.0	920915	138.21	213.31	353.71	4.83	0.2395	2.2507	4	5	E	W	
1992	SA17	15.5	920915	287.68	212.94	226.93	0.62	0.0772	2.2535	7	8			M
1992	SB17	16.5	920915	330.20	56.65	345.96	1.84	0.2019	2.3417	7	8			M
1992	SC17	17.5	920915	0.62	155.40	201.54	1.29	0.1768	2.2027	3	4			W
1992	SD17	15.0	920915	27.40	135.12	184.39	10.26	0.1836	2.5987	7	8			M
1992	SF17	16.5	920915	336.14	188.68	207.35	2.26	0.2212	2.4478	6	6			M
1992	SG17	15.0	920915	346.78	184.27	191.21	2.59	0.1283	2.1604	7	8			M
1992	SH17	16.5	920915	22.95	326.72	1.43	5.29	0.1383	2.1732	7	8	E		M
1992	SJ17	15.0	920915	16.96	150.28	181.85	10.24	0.2296	3.1204	7	8			M
1992	SK17	14.0	920915	153.46	5.51	193.98	2.51	0.1987	2.8119	4	5	E	W	
1992	SL17	16.5	920915	12.06	178.37	164.70	1.46	0.1250	2.2731	7	7	E	M	
1992	SM17	13.0	920915	17.19	150.72	185.89	20.04	0.1614	3.2078	9	8		W	
1992	SN17	17.5	920915	18.04	158.53	171.51	0.33	0.2105	2.1946	6	6	E	M	
1992	SO17	14.0	920915	253.39	303.15	184.07	7.93	0.1955	2.7847	7	8			M
1992	SP17	16.5	920915	20.34	357.06	335.80	1.91	0.1317	2.3064	4	7	E	W	
1992	SQ17	16.5	920915	2.51	155.21	200.81	2.69	0.1747	2.6368	7	7			M
1992	SR17	15.0	920915	314.25	44.84	7.62	1.69	0.0724	2.8391	7	7			M
1992	SS17	14.5	920915	336.71	199.96	187.17	1.52	0.0654	2.9467	7	7	E	M	
1992	ST17	15.5	920915	339.40	207.85	176.81	3.54	0.1136	2.1979	7	8	E	M	
1992	SU17	14.5	920915	14.68	334.80	8.29	4.51	0.0841	3.0850	7	8	E	M	
1992	SV17	17.5	920915	347.55	190.50	186.10	0.34	0.1834	2.1874	6	6	E	M	
1992	SY17	14.5	921005	30.56	91.96	237.65	8.78	0.1904	2.2023	26	6		W	
1992	SZ17	14.0	920915	9.88	48.76	309.01	5.43	0.2168	2.6665	4	6		W	
1992	TF1	15.0	921005	10.57	2.20	355.24	3.74	0.2724	2.4489	19	8		W	
1992	TM1	12.5	921005	230.09	243.68	269.34	12.22	0.0993	2.6186	22	6		W	
1992	UG	12.9	921025	7.43	301.87	83.51	6.50	0.2827	2.5944	27	0		N	
1992	UH	14.3	921025	19.32	24.17	329.89	2.00	0.2718	2.5235	9	6		N	
1992	UJ	14.0	921025	352.71	90.14	308.83	2.39	0.1821	2.5560	9	6		N	
1992	UL	13.2	921025	111.97	298.34	327.90	3.38	0.1077	2.1817	9	6		N	
1992	UM	13.5	921005	6.78	356.79	15.80	6.76	0.1664	2.5411	9	8		W	
1992	UN	12.6	921025	355.83	231.14	163.66	1.19	0.1685	3.1084	30	8		N	
1992	UO	11.9	921114	149.63	188.61	51.02	3.02	0.0606	2.9114	30	8	E	N	
1992	UR	13.8	921025	25.10	313.44	39.22	14.77	0.1984	2.4041	10	0		N	
1992	UW	13.7	921025	7.27	19.26	2.78	2.93	0.2362	2.5645	9	0		N	
1992	UX	13.6	921025	17.99	304.79	67.09	7.60	0.1282	2.3373	28	0		U	
1992	UY	14.1	921025	6.42	206.68	179.81	6.51	0.1823	2.3086	24	0		U	
1992	UZ	13.1	921025	30.37	281.52	59.99	13.48	0.2879	2.5958	28	0		U	
1992	UA1	13.0	921025	328.95	63.93	10.89	15.06	0.1768	2.6191	14	6		N	
1992	UF1	13.8	921025	9.47	347.68	31.46	8.27	0.2231	2.4353	27	8		N	
1992	UH1	14.0	921025	343.33	58.55	0.58	3.56	0.1588	2.2338	7	6		N	
1992	UJ1	15.2	921025	16.92	144.97	218.14	7.28	0.2129	2.2654	9	9		N	
1992	UK1	12.4	921025	57.60	47.72	265.69	8.12	0.1729	2.8181	14	6		N	
1992	US1	14.0	921025	18.83	318.12	46.96	7.79	0.1345	2.2826	28	0		N	
1992	UZ1	13.4	921025	9.41	74.23	308.79	5.50	0.1548	2.4433	31	6		N	
1992	UD2	14.1	921025	6.82	336.51	45.92	26.17	0.2605	2.3486	28	0		U	
1992	UE2	13.3	921025	5.28	213.16	174.22	1.18	0.1551	2.8210	27	6		N	
1992	UG2	12.1	921025	119.18	230.52	33.33	12.25	0.1374	2.5801	27	6		N	
1992	UJ2	12.4	921025	48.32	110.13	227.90	8.88	0.1162	2.9904	27	6		N	
1992	UK2	13.7	921025	350.02	20.65	32.78	15.94	0.2149	2.6042	13	9		N	
1992	UN2	14.3	921025	353.69	358.91	50.30	3.08	0.1977	2.3959	20	8		N	
1992	UQ2	13.5	921005	4.31	322.58	44.34	24.65	0.2195	2.4655	21	7		W	

1992	UT2	13.9	921025	35.51	259.93	71.53	6.94	0.2117	2.2776	13	6	N
1992	UW2	14.2	921025	33.96	285.13	54.11	5.93	0.2145	2.2782	28	0	N
1992	UX2	14.3	921025	41.51	125.84	211.30	5.85	0.2195	2.2384	20	6	N
1992	UY2	13.8	921025	348.58	208.92	205.17	4.87	0.0785	2.2875	20	8	N
1992	UZ2	12.5	921025	356.03	336.61	70.30	3.12	0.0742	2.9005	24	0	N
1992	UA3	12.5	921025	7.46	349.30	44.63	3.93	0.1021	2.6574	24	7	N
1992	UB3	12.2	921025	39.16	312.04	44.00	13.25	0.1212	2.6538	24	0	N
1992	UD3	12.7	921114	336.20	206.51	228.73	10.92	0.1310	2.5347	4	6 E	N
1992	UM3	11.3	921025	322.18	203.80	240.25	8.74	0.0566	3.0182	21	6	N
1992	UN3	12.2	921025	291.58	238.45	233.96	14.69	0.0141	2.6968	21	0	N
1992	UP3	14.3	921025	2.15	8.10	28.72	3.54	0.2052	2.3928	21	8	N
1992	UG4	11.4	921025	65.68	255.55	60.67	7.55	0.1615	3.0069	5	5	N
1992	US4	13.3	921025	348.01	140.35	281.19	1.50	0.1865	2.4177	22	0	N
1992	UU4	12.7	921025	355.16	177.72	237.30	13.77	0.1838	2.6629	24	7	N
1992	UE5	16.0	921005	1.94	300.84	81.60	3.16	0.2308	2.2435	4	5 E	W
1992	UJ5	13.4	921114	332.95	217.27	234.85	0.64	0.2339	2.5010	5	6 E	N
1992	UK5	13.6	921025	61.81	258.94	53.61	4.64	0.2729	2.3456	24	8	N
1992	UU5	14.3	921025	349.60	347.82	71.17	3.30	0.2277	2.3355	27	0	N
1992	UA6	13.6	921025	16.33	103.97	282.51	2.80	0.1048	2.3696	24	8	N
1992	UC6	13.8	921025	13.32	149.63	240.65	7.25	0.0990	2.2984	21	8	N
1992	UE6	13.7	921114	356.11	357.29	64.12	8.16	0.1375	2.2591	22	0	N
1992	UG6	14.0	921025	6.74	335.17	52.81	6.86	0.3113	2.4745	5	0	N
1992	UH6	13.4	921025	39.79	289.87	63.24	7.71	0.1486	2.2790	18	6 E	N
1992	UJ6	14.0	921025	9.65	183.91	205.62	6.56	0.1992	2.2870	18	6	N
1992	UO6	13.4	921025	17.69	274.78	97.06	8.65	0.2484	2.7973	20	6	N
1992	UV6	11.9	921025	138.42	197.07	65.31	11.02	0.1469	2.7156	21	7	N
1992	UZ6	13.6	921025	5.03	120.71	273.23	3.77	0.1803	2.5339	19	6	N
1992	UG7	16.0	921005	49.96	275.54	32.53	1.62	0.2263	2.4688	4	8 E	W
1992	UR7	17.0	921025	98.61	147.61	124.11	7.90	0.2721	2.1811	24	8	W
1992	UK8	14.4	921025	332.71	196.46	241.03	3.49	0.2255	2.2566	27	6	N
1992	UL8	13.1	921114	7.74	137.10	262.04	12.07	0.2036	2.6723	23	6	N
1992	VC	12.3	921025	78.01	249.90	55.29	13.98	0.1933	2.5854	24	0	N
1992	VD	13.5	921025	37.65	278.31	80.52	3.26	0.1177	2.6460	18	8	N
1992	VF	14.3	921114	25.76	178.37	200.71	2.88	0.2005	2.2110	21	0	N
1992	WB	12.4	921114	23.37	343.51	22.33	9.81	0.1037	2.6806	21	6	N
1992	WJ	15.5	921114	328.42	97.61	12.35	1.42	0.3029	2.2594	2	7 E	W
1992	WL	12.3	921204	6.77	4.16	45.61	8.90	0.0950	3.0364	2	8 E	N
1992	WP	13.5	921114	10.79	341.79	56.93	14.29	0.1640	2.5930	17	6	N
1992	WQ	13.1	921204	15.24	338.98	60.87	5.00	0.1459	2.6065	7	6 E	N
1992	WS	14.0	921204	44.96	123.94	235.13	3.56	0.1976	2.1595	5	0 E	N
1992	WT	13.7	921114	45.05	306.36	59.38	4.39	0.0551	2.1773	5	8 E	N
1992	WU	13.7	921114	30.20	139.42	233.63	6.65	0.1783	2.4300	5	8 E	N
1992	WX	13.8	921114	46.86	219.74	133.39	5.35	0.2012	2.2926	5	8	N
1992	WY	15.0	921114	35.94	120.58	232.66	3.78	0.2998	2.2211	4	8 E	W
1992	WZ	11.6	921114	262.98	126.00	59.64	15.28	0.2827	2.5712	4	8 E	N
1992	WB1	15.5	921114	9.40	345.68	53.27	4.18	0.2988	2.2892	4	8 E	W
1992	WJ1	13.1	921114	33.53	294.29	72.38	13.44	0.2172	2.6684	10	8	N
1992	WM1	13.1	921114	49.01	265.62	89.56	7.70	0.1590	2.4675	10	8	N
1992	WR1	14.3	921114	42.41	242.69	107.75	5.52	0.2797	2.2730	4	8	N
1992	WT1	13.0	921114	26.36	292.38	84.23	7.53	0.2571	2.7469	10	0	N
1992	WX1	14.5	921025	13.80	101.11	286.04	3.11	0.1268	2.1790	24	8	N
1992	WZ1	12.2	921025	28.89	337.61	36.94	10.61	0.1022	3.0307	24	8	N
1992	WT2	13.0	921114	82.39	218.66	112.93	4.61	0.0661	2.2838	9	7	W
1992	WV2	11.7	921204	31.34	298.99	80.41	8.83	0.2211	3.0508	4	8 E	N
1992	WC3	14.1	921114	36.98	278.08	84.20	4.33	0.2426	2.2239	7	0	N
1992	WJ3	13.2	921204	301.76	318.11	170.04	5.23	0.0530	2.2990	4	6	N
1992	WK3	12.1	921204	17.30	336.60	68.93	14.57	0.0492	3.0348	6	0 E	N
1992	WL3	13.5	921114	356.40	239.22	187.27	6.79	0.2661	3.0392	3	8	N
1992	WM3	14.2	921204	30.71	314.38	74.31	2.11	0.2288	2.1949	3	6	U

1992 WN3	12.8	921204	13.92	345.46	71.85	10.06	0.1951	2.7478	3	6	U
1992 WO3	13.9	921204	351.02	234.24	221.19	20.63	0.2579	2.2963	3	5	U
1992 WT3	15.0	921204	358.84	331.61	96.16	6.78	0.2211	2.3497	6	8	N
1992 WG4	14.7	921204	28.10	288.91	100.10	2.44	0.1462	2.2226	6	6	N

1978 WZ = 1978 WS21 (C. M. Bardwell)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(1290) Albertine Obs. 46 M 79.86912 Peri. 78.00466
H 12.5 G 0.15 Opp. 10 n 0.27080143 Node 307.80372
rms res. 0".86 (M-C) 1933-1991 e 0.1531811 Incl. 5.59959

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
(1752) van Herk Obs. 22 M 216.04670 Peri. 98.15578
H 13.2 G 0.15 Opp. 10 n 0.29416388 Node 237.24458
rms res. 1".23 (M-C) 1930-1987 e 0.2002403 Incl. 3.49999

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(1886) Lowell Obs. 30 M 60.81154 Peri. 216.82202
H 11.9 G 0.15 Opp. 8 n 0.23167409 Node 82.63343
rms res. 0".80 (M-C) 1949-1992 e 0.1599143 Incl. 14.91974

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
(2078) Nanking Obs. 27 M 14.59836 Peri. 98.53260
H 12.1 G 0.15 Opp. 5 n 0.27030599 Node 287.63330
rms res. 1".03 (M-C) 1975-1992 e 0.3750382 Incl. 20.13721

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(2277) Moreau Obs. 28 M 65.15429 Peri. 67.71114
H 12.2 G 0.15 Opp. 8 n 0.23511851 Node 105.60675
rms res. 0".96 (M-C) 1950-1992 e 0.1255129 Incl. 11.56501

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(2369) Chekhov Obs. 39 M 132.37509 Peri. 242.75536
H 11.8 G 0.15 Opp. 10 n 0.21238199 Node 48.21642
rms res. 1".04 (M-C) 1972-1991 e 0.0483362 Incl. 2.63934

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(2427) Kobzar Obs. 15 M 234.28087 Peri. 171.07261
H 12.8 G 0.15 Opp. 5 n 0.21741645 Node 227.94194
rms res. 0".84 (M-C) 1953-1992 e 0.1655929 Incl. 4.14742

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
(2462) Nehalennia Obs. 24 M 86.05244 Peri. 52.66419
H 14.8 G 0.15 Opp. 5 n 0.26356750 Node 99.90415
rms res. 0".93 (M-C) 1960-1990 e 0.1395948 Incl. 2.98909

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(2957) Tatsuo Obs. 22 M 249.62734 Peri. 58.04482
H 10.2 G 0.15 Opp. 10 n 0.18719569 Node 250.00099
rms res. 0".98 (M-C) 1934-1990 e 0.0844628 Incl. 8.70039

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(3087) Beatrice Tinsley Obs. 24 M 311.78509 Peri. 79.18871
H 12.8 G 0.15 Opp. 4 n 0.18268617 Node 339.01861
rms res. 0".79 (M-C) 1981-1992 e 0.1176787 Incl. 19.82062

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(3463) 1981 XJ2 Obs. 28 M 307.32654 Peri. 48.97133
H 13.2 G 0.15 Opp. 6 n 0.25744684 Node 50.96962
rms res. 0".77 (M-C) 1979-1992 e 0.1326198 Incl. 3.03325

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
(3499) Hoppe Obs. 30 M 54.92556 Peri. 190.77954
H 12.4 G 0.15 Opp. 5 n 0.18053430 Node 148.77831
rms res. 0".83 (M-C) 1979-1992 e 0.1797169 Incl. 2.22491

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(3632) Grachevka Obs. 35 M 153.97197 Peri. 237.65518
H 12.5 G 0.15 Opp. 6 n 0.21424311 Node 201.72960
rms res. 0".96 (M-C) 1976-1992 e 0.3098108 Incl. 6.45694

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(3815) Konig Obs. 27 M 67.00083 Peri. 9.26285
H 12.2 G 0.15 Opp. 7 n 0.23899081 Node 197.54430
rms res. 0".96 (M-C) 1955-1992 e 0.1014161 Incl. 8.60481

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(3863) 1978 SJ3 Obs. 16 M 38.97948 Peri. 145.72703
H 13.1 G 0.15 Opp. 7 n 0.27801973 Node 176.99262
rms res. 1".04 (M-C) 1971-1992 e 0.1493685 Incl. 9.73622

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(3994) Ayashi Obs. 23 M 34.74731 Peri. 296.69706
H 12.6 G 0.15 Opp. 7 n 0.22804493 Node 52.43555
rms res. 0".68 (M-C) 1936-1992 e 0.2428911 Incl. 3.68572

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(4376) Shigemori Obs. 67 M 7.32745 Peri. 192.32676
H 13.5 G 0.15 Opp. 7 n 0.29563882 Node 222.66675
rms res. 0".72 (M-C) 1975-1992 e 0.1578092 Incl. 0.86784

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(4496) Kamimachi Obs. 34 M 264.13201 Peri. 323.24573
H 12.7 G 0.15 Opp. 5 n 0.20882684 Node 163.43046
rms res. 0".93 (M-C) 1976-1992 e 0.0547700 Incl. 4.78420

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(4653) 1976 GJ2 Obs. 21 M 249.35146 Peri. 53.05636
H 13.0 G 0.15 Opp. 4 n 0.22426532 Node 205.32896
rms res. 0".82 (M-C) 1976-1991 e 0.1754588 Incl. 11.28484

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(4869) 1989 UE8 Obs. 24 M 55.48046 Peri. 217.42298
H 13.3 G 0.15 Opp. 6 n 0.29499718 Node 96.41509
rms res. 0".75 (M-C) 1955-1992 e 0.1740954 Incl. 3.54640

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
(4950) House Obs. 26 M 328.98356 Peri. 249.67282
H 11.3 G 0.15 Opp. 4 n 0.21635753 Node 190.43937
rms res. 0".69 (M-C) 1988-1992 e 0.1818609 Incl. 12.71232

(5384)* 1957 VA = 1991 GT1
Discovered 1957 Nov. 11 by C.-H. Chang at the Purple Mountain Observatory.
Id. G. V. Williams (MPC 18279)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	302.84896	(2000.0)	P	Q
n	0.36602080	Peri. 89.01141	-0.66041002	-0.66763645
a	1.9355254	Node 48.99363	+0.36667412	-0.68614145
e	0.1035547	Incl. 27.09277	+0.65529283	-0.28891432
P	2.69	H 13.5	G 0.15	

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

571111	330	(4.3-	2.9+)	841121	010	1.2-	0.2+	910510	675	(1.7+	5.4-)
571112	330	0.2+	0.7+	910410	675	1.4-	0.2-	910513	675	0.7+	1.5-
571114	330	1.6+	0.9-	910410	675	0.4-	0.1-	921017	596	0.6-	1.7-
571116	330	0.0	0.8-	910412	675	0.7-	0.4+	921017	596	1.0+	2.4-
571118	330	1.6-	1.8+	910412	675	0.8-	1.5+	921022	801	0.1-	0.5+
571120	330	0.0	0.9+	910420	675	0.9+	0.1+	921022	801	0.1-	0.5+
571215	330	1.4-	1.3-	910420	675	0.2+	0.6+	921029	801	0.5+	1.6+
571219	330	0.3+	0.4+	910505	372	(3.1-	3.7-)	921029	801	0.6+	1.7+
571224	330	(0.18+	0.10-)	910505	372	(2.7-	2.0-)	921121	801	0.0	0.9-
580109	330	(4.8-	3.8+)	910507	675	(3.4+	6.1-)	921121	801	0.1-	0.3-
750608	413	0.1-	0.1+	910507	675	(0.8+	3.3-)	921129	801	0.4-	0.6+
750608	413	1.1+	0.7+	910509	675	2.0+	1.9-	921129	801	0.4-	0.5+
750707	413	0.3-	0.5+	910509	675	0.4-	1.8+				

(5385)* 1975 TS3 = 1975 UG = 1986 TY1

Discovered 1975 Oct. 3 by L. I. Chernykh at the Crimean Astrophysical Observatory.

Id. C. M. Bardwell (d, MPC 4576), E. Bowell (MPC 11430)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Marsden

M	64.42937	(2000.0)	P	Q
n	0.17753565	Peri. 302.51699	+0.95402497	+0.27739003
a	3.1352992	Node 41.69123	-0.18394808	+0.84094677
e	0.2411325	Incl. 9.82885	-0.23664204	+0.46461091
P	5.55	H 12.2	G 0.15	

Residuals in seconds of arc

550322	675	1.0+	0.4-	861007	688	1.4+	0.3-	910714	675	0.1-	0.6+	
751003	095	1.0+	0.0	861105	688	1.8+	0.4-	910714	675	0.2-	0.3+	
751013	095	0.8-	1.9+	861105	688	0.7+	0.1-	910717	675	0.3-	1.0-	
751027	026	1.3+	1.0-	861130	688	0.8+	0.5+	910717	675	0.7-	0.2+	
751028	026	0.3-	0.9-	861130	688	0.8+	0.1-	921023	801	0.5+	0.6-	
751029	026	1.7-	1.1-	900422	675	0.5+	0.2-	921023	801	0.3+	0.3-	
751101	095	(3.5+	5.5+)	900422	675	1.1-	0.0	921029	801	1.3-	0.3+	
751106	095	1.5-	0.0	900525	675	0.0	2.0-	921029	801	0.6+	0.9-	
861007	688	0.2-	0.1-	900525	675	1.1-	2.1-	921117	403	1.5-	0.1-	Y

(5386)* 1975 TH6 = 1988 KD

Discovered 1975 Oct. 1 at El Leoncito.

Id. C. M. Bardwell (MPC 13463)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bardwell

M	107.81562	(2000.0)	P	Q
n	0.29358537	Peri. 198.54808	+0.33075637	+0.92929206
a	2.2420559	Node 91.02953	-0.84371114	+0.36921575
e	0.1385513	Incl. 9.46200	-0.42279043	-0.00979723
P	3.36	H 13.1	G 0.15	

Residuals in seconds of arc

751001	808	0.0	1.9+	880615	675	0.4+	0.0	910313	801	0.1-	0.1-
751004	808	0.7+	0.4+	880616	675	0.0	0.7-	910317	801	0.2+	0.1+
751004	808	0.3-	0.5-	880617	675	1.2-	1.5-	910317	801	0.2+	0.3+
751008	808	0.4-	0.3-	880619	675	2.4+	0.4+	921029	801	0.0	0.5-
751008	808	0.5-	0.4-	910209	801	0.1+	0.0	921029	801	0.3+	0.6-
880519	675	0.9-	0.0	910209	801	0.0	0.1+	921121	801	0.0	0.2+
880520	675	1.0-	1.2+	910313	801	0.1-	0.2-	921121	801	0.2+	0.0

(5387)* 1980 NB = 1977 UJ2 = 1988 RU4

Discovered 1980 July 11 at Cerro El Roble.

Id. D. W. E. Green (MPC 14186)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	110.00406	(2000.0)	P	Q
n	0.25869381	Peri. 29.82663	-0.01541323	+0.99959207
a	2.4393757	Node 239.29981	-0.92281676	-0.02347879
e	0.1711317	Incl. 1.60240	-0.38493073	+0.01626183
P	3.81	H 14.2	G 0.15	

Residuals in seconds of arc

771022	801	0.7-	2.3+	880906	809	0.5+	0.0	880918	809	0.5+	0.0
800711	805	0.5-	0.4+	880906	809	0.6+	0.2-	880920	809	2.0+	0.3+
800712	805	0.2+	0.7+	880906	809	0.6+	0.3-	880920	809	1.9+	0.2+
800712	805	1.4+	1.2+	880908	809	0.1+	0.2-	880920	809	1.6+	0.2+
800712	805	1.4-	0.5-	880908	809	0.3+	0.3-	910414	801	0.1-	0.0
800712	805	0.8+	0.0	880908	809	0.3+	0.3-	910414	801	0.1-	0.1+
800713	805	0.1-	0.1+	880910	809	1.1-	1.0-	910614	801	0.1-	0.3-
800713	805	0.4-	0.0	880910	809	1.2-	1.0-	910614	801	0.0	1.1-
880901	809	0.9-	0.8+	880910	809	1.4-	1.0-	921001	801	0.1+	0.2-
880901	809	1.0-	0.9+	880914	809	0.7-	1.0-	921001	801	0.2+	0.1-
880901	809	0.8-	0.5+	880914	809	0.7-	0.7-	921024	801	0.1-	0.2+
880903	809	0.2+	0.1-	880914	809	0.7-	0.5-	921024	801	0.0	0.0
880903	809	0.3+	0.2-	880918	809	0.0	1.5+	921028	801	0.1-	0.2-
880903	809	0.3+	0.3-	880918	809	0.1+	0.1+	921028	801	0.1+	0.1-

(5388)* 1981 ED1 = 1979 VB1 = 1983 RG9

Discovered 1981 Mar. 5 by H. Debehogne and G. DeSanctis at the European Southern Observatory.

Id. K. Hurukawa (JAM 1901), L. D. Schmadel (MPC 14187), D. W. E. Green (ibid.)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	339.69442	(2000.0)	P	Q
n	0.22401825	Peri. 67.22452	+0.38875400	-0.92134151
a	2.6850174	Node 359.89598	+0.74503200	+0.31461394
e	0.1445706	Incl. 12.58807	+0.54203104	+0.22835914
P	4.40	H 13.6	G 0.15	

Residuals in seconds of arc

791114	095	0.1-	0.3+	810308	809	1.1+	0.6-	810408	413	0.4+	0.9-
810202	413	0.4-	0.3-	810308	809	1.4+	0.9-	810411	413	(2.7-	0.0)
810213	413	0.7+	0.8-	810309	809	(3.9+	1.7-)	810411	413	1.3+	1.4-
810305	809	0.0	0.5+	810309	809	(4.1+	1.4-)	810430	413	0.2+	0.0
810305	809	0.2+	0.8+	810309	809	(3.9+	1.7-)	810502	413	0.6+	0.1-
810305	809	0.0	1.1+	810309	809	(3.9+	1.7-)	830911	095	0.6-	0.7+
810306	809	0.5-	0.8+	810311	413	1.8-	0.9+	920925	801	0.3+	0.4+
810306	809	0.4-	0.5+	810311	413	0.3+	0.2-	920925	801	0.1+	0.4+
810306	809	0.2-	0.6+	810315	809	0.2-	0.2+	921001	801	0.2-	0.6-
810307	809	1.2-	1.1-	810315	809	0.0	1.2+	921001	801	0.5-	0.5-
810307	809	0.8-	1.0-	810315	809	0.0	2.1+	921024	801	0.4-	0.6+
810307	809	0.7-	0.6-	810316	413	(4.7+	0.9-)	921024	801	0.2+	0.5-
810307	413	0.4-	0.7+	810329	413	1.6-	0.0	921028	801	0.5+	0.0
810307	413	0.8+	0.3+	810329	413	1.0+	0.3-	921028	801	0.0	0.1+
810308	809	0.8+	0.8-	810407	413	0.3+	0.0				

(5389)* 1981 UB10 = 1970 WG1 = 1988 SS1

Discovered 1981 Oct. 29 at the Purple Mountain Observatory.

Id. S. J. Bus (k, MPC 15410), B. G. Marsden (ibid.)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Marsden

M	58.20059	(2000.0)	P	Q
n	0.26863481	Peri. 311.98423	+0.99426690	+0.03184820
a	2.3788179	Node 46.46760	+0.02152090	+0.87547347
e	0.1565405	Incl. 8.09380	-0.10473861	+0.48221561
P	3.67	H 13.0	G 0.15	

Residuals in seconds of arc

701123 033	0.8-	0.5+	880916 807	0.7+	0.5-	921028 877	0.4-	0.7-
811024 095	(4.6+	1.5+)	880918 807	1.7+	0.9-	921028 877	0.8+	1.6-
811024 095	(3.9+	4.8+)	881005 807	0.8-	0.7+	921123 596	0.6-	0.1+
811028 095	(5.7+	1.7-)	881006 807	0.9-	0.9+	921123 596	0.4+	0.1+
811029 330	0.4-	1.4+	881007 807	1.0-	0.2+	921123 596	0.5-	0.9+
811127 330	(8.8-	1.2+)	921027 877	0.2-	0.3-			
811201 330	1.6+	1.4-	921027 877	0.1+	0.7+			

(5390)* 1981 YO1 = 1989 WN7 = 1991 LO

Discovered 1981 Dec. 19 at the Purple Mountain Observatory.

Id. B. G. Marsden (MPC 18622)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Marsden

M	63.70285	(2000.0)	P	Q
n	0.36501806	Peri. 321.89515	+0.62089141	-0.67259964
a	1.9390685	Node 85.78463	+0.78102163	+0.48683585
e	0.0771367	Incl. 23.81050	+0.06707514	+0.55731552
P	2.70	H 13.1	G 0.15	

Residuals in seconds of arc

811219 330	0.6+	0.0	910606 809	(1.6-	2.2-)	910711 675	0.6+	0.4-
811222 330	(4.4+	1.7-)	910606 809	1.4-	1.0-	910711 675	1.2-	0.6+
811225 330	0.6+	1.2-	910608 809	1.0+	1.0+	921028 801	0.1+	0.4-
811229 330	(3.0+	0.2-)	910608 809	1.9+	1.1+	921028 801	0.3+	0.4-
820115 330	1.6-	1.5+	910608 809	0.4+	0.8+	921029 801	0.3+	0.4-
880512 675	0.1+	0.0	910613 675	1.3-	1.5-	921029 801	0.3+	0.3-
880513 675	1.0-	0.3-	910613 675	0.4+	1.3-	921128 801	0.1-	0.4-
880513 675	0.3-	0.3-	910615 675	0.3-	0.1+	921128 801	0.3-	0.4-
891125 675	0.2+	1.1-	910615 675	0.5-	0.5-	921129 801	0.2-	0.1-
891125 675	1.3+	1.0-	910710 675	0.1-	0.5-	921129 801	0.1+	0.2-
910606 809	1.7-	1.7-	910710 675	0.9+	0.2-			

(5391)* 1985 RE2 = 1934 RH = 1951 RF1 = 1975 VE3

Discovered 1985 Sept. 13 by E. F. Helin at Palomar.

Id. S. Nakano (MPC 14193)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	72.42004	(2000.0)	P	Q
n	0.29010116	Peri. 344.29686	+0.77727256	+0.62892437
a	2.2599721	Node 336.70526	-0.57241658	+0.69544273
e	0.2428439	Incl. 2.51656	-0.26112569	+0.34758243
P	3.40	H 13.0	G 0.15	

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

340901 078	(18.9-	14.6+)X	891130 675	1.5-	0.1-	910313 809	0.1+	0.5+
510902 711	0.8+	0.7- Y	891130 675	0.2-	0.6+	910313 809	0.7+	0.5+
510902 094	(0.5+	62.9+)X	891201 675	1.5-	0.4+	910313 809	1.4+	0.6+
510906 094	(0.04+	0.03+)X	891201 675	1.2-	0.7-	910313 809	1.7+	0.5+
751102 095	(4.3-	9.8+)	910218 675	0.6-	1.3-	910313 809	2.1+	0.3+
751107 095	(1.7-	12.8+)	910218 675	0.8+	1.5-	910315 809	0.3-	1.2+
850815 095	1.1-	2.2+	910219 675	0.8+	0.6-	910315 809	0.1+	1.1+
850817 095	1.6-	1.5+	910311 809	1.0-	0.8+	910315 809	0.4+	1.1+
850819 095	1.7-	1.6+	910311 809	0.2-	0.6+	910316 809	0.3-	1.2+
850913 675	(7.4-	0.4+)	910311 809	0.2+	0.6+	910316 809	0.2+	1.0+
850914 675	0.2-	1.0-	910313 809	0.7-	0.6+	910316 809	0.9+	0.7+

910318 675 0.4- 0.1+ 921025 894 0.4- 1.1+ 921028 801 0.8+ 0.3+
910318 675 0.4+ 0.2+ 921025 894 0.4+ 0.5+ 921129 801 0.1+ 1.5+
921022 801 0.6+ 0.5+ 921028 801 0.6+ 0.4+ 921129 801 0.1+ 1.5+

(5392)* 1986 AK
Discovered 1986 Jan. 12 by C. S. Shoemaker at Palomar.
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bardwell
M 321.44865 (2000.0) P Q
n 0.27376436 Peri. 95.91375 -0.82697284 -0.46670364
a 2.3490095 Node 56.67250 +0.23731092 -0.79527922
e 0.3437742 Incl. 22.03949 +0.50970526 -0.38693497
P 3.60 H 12.3 G 0.15
Residuals in seconds of arc
860112 675 0.1- 0.4+ 900327 801 0.1- 0.3+ 921026 801 0.3+ 0.1+
860112 675 0.1- 0.1- 900327 801 0.7- 0.5- 921118 565 2.5+ 2.2-
860204 675 0.9+ 0.4+ 900329 801 0.8- 0.7- 921119 565 1.7+ 0.3-
860205 675 0.1- 0.6+ 900426 808 0.5+ 2.1- 921119 565 1.3+ 0.4-
860206 675 0.4+ 0.3- 900426 808 0.3- 1.1+ 921123 596 0.8- 0.3+
860207 675 0.3- 0.1+ 921022 801 0.4- 0.2+ 921123 596 0.1- 0.1-
860303 675 1.1- 0.7- 921022 801 0.5- 0.4+ 921125 596 0.3- 0.9-
860304 675 0.1+ 0.3- 921022 675 0.0 0.8+ 921125 596 1.2- 0.0
860604 801 (5.7+ 3.1+) 921022 675 1.0+ 0.5- 921125 596 1.0- 0.1-
860704 801 0.2+ 0.3- 921024 675 0.5+ 0.4+ 921125 596 0.5- 0.2-
870818 474 0.2+ 0.1+ 921024 675 0.5- 0.4+
870818 474 0.1- 0.5- 921026 801 0.5- 0.2+

(5393)* 1986 ET = 1988 VY3
Discovered 1986 Mar. 5 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.
Id. S. Nakano (MPC 14022), T. Kobayashi (ibid.)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 2.60289 (2000.0) P Q
n 0.27597073 Peri. 136.33462 -0.58023508 -0.81426154
a 2.3364726 Node 349.09319 +0.71958255 -0.50248144
e 0.1271879 Incl. 5.29935 +0.38148160 -0.29067258
P 3.57 H 13.5 G 0.15
Residuals in seconds of arc
860305 688 1.0- 0.7- 881114 400 0.9+ 2.6- 910906 801 0.8+ 0.0
860305 688 1.4+ 0.6- 910807 801 0.0 0.4+ 910908 801 0.2+ 0.0
860309 809 1.1- 0.5- 910807 801 0.0 0.7+ 910908 801 0.4+ 0.3-
860309 809 0.3+ 0.5- 910807 675 0.9+ 0.3- 910910 675 0.1- 0.3-
860314 809 0.8- 0.8- 910807 675 0.1- 2.1- 910910 675 0.2- 1.2-
860314 809 0.9- 0.8- 910807 675 0.3- 0.5- 910916 675 0.5+ 0.6-
881113 400 0.5+ 1.9+ 910807 675 0.4- 2.6- 910916 675 0.3+ 0.5-
881113 400 0.8- 0.8+ 910810 675 0.5+ 0.3- 921029 801 0.4- 0.2-
881113 400 2.5- 1.6+ 910811 801 0.1- 0.6+ 921029 801 0.3- 0.3-
881114 400 1.5+ 0.6+ 910811 801 0.0 0.6+ 921128 801 0.2+ 1.9-
881114 400 0.0 1.1- 910906 801 0.8+ 0.1- 921128 801 1.0- 0.6-

(5394)* 1986 EZ1 = 1975 EZ4 = 1982 BV8 = 1988 VO4
Discovered 1986 Mar. 6 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.
Id. S. Nakano (MPC 14022)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 348.58473 (2000.0) P Q
n 0.26905797 Peri. 187.05576 -0.53020444 -0.84742318
a 2.3763230 Node 294.96698 +0.77938097 -0.47434034
e 0.1658879 Incl. 1.73942 +0.33383912 -0.23848520
P 3.66 H 13.2 G 0.15

Residuals in seconds of arc

750315	095	(1.5-	3.7-)	881111	399	1.1-	1.0+	910808	675	1.1-	0.1+
820119	095	0.7-	1.6+	881111	399	1.4+	0.1-	910812	801	0.0	0.0
860306	688	1.5-	0.2+	881111	399	0.1-	0.2+	910812	801	0.7-	0.2-
860306	688	1.2-	0.5+	881114	399	(2.9-	3.3-)	910907	801	0.5+	0.0
860401	046	0.5+	1.7-	881114	399	0.4+	0.1-	910907	801	0.0	0.2-
860401	046	0.7+	0.6-	881114	399	0.2-	2.5-	910909	801	0.8-	0.6-
860402	046	1.6+	1.4-	910805	675	0.2+	0.0	910909	801	0.0	0.4-
860402	046	0.1+	0.6-	910805	675	0.1-	1.3-	921001	801	0.1-	1.0-
860408	046	0.0	0.7+	910806	675	0.7+	0.9+	921001	801	0.3-	0.5-
860408	046	0.0	1.0+	910806	675	0.8+	0.1+	921022	801	0.1+	0.3+
881108	399	(3.3+	0.8+)	910807	801	0.4-	0.1+	921022	801	0.3-	0.2+
881108	399	1.9+	1.5+	910807	801	0.1-	0.3+	921024	801	0.1-	0.0
881111	399	0.3-	0.3-	910808	675	0.0	0.4+	921024	801	0.3-	0.2-

(5395)* 1988 RK11 = 1976 UO20 = 1980 TK

Discovered 1988 Sept. 14 by S. J. Bus at Cerro Tololo.

Id. B. G. Marsden (MPC 15417)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Marsden

M	1.85996	(2000.0)	P	Q	
n	0.24404084	Peri.	220.53330	+0.86917189	-0.49397171
a	2.5360688	Node	168.99860	+0.47919211	+0.82981047
e	0.2746753	Incl.	6.94317	+0.12212755	+0.25962768
P	4.04	H	15.0	G 0.15	

Residuals in seconds of arc

761021	808	1.1+	0.6+	801005	046	(2.5+	0.7-)	920806	675	(1.0+	2.2-)
761021	808	1.3+	0.6+	880914	807	0.2+	0.0	920806	675	1.1-	0.2+
761024	808	1.3-	0.1+	880915	807	0.3+	0.1+	920904	372	1.6+	0.6-
761024	808	0.1+	0.5-	881006	807	0.2+	0.4+	920905	372	0.6-	0.7+
801003	046	1.1-	1.9-	881007	807	0.7-	0.8-	920905	372	(0.1-	2.6+)
801003	046	1.7-	0.7-	881104	807	0.6+	1.5+				
801005	046	1.7+	0.3-	881106	807	0.4-	1.7+				

(5396)* 1988 SH1 = 1981 WD9 = 1990 GC

Discovered 1988 Sept. 20 by H. Debehogne at the European Southern Observatory.

Id. S. Nakano (MPC 16582)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	3.70719	(2000.0)	P	Q	
n	0.26567865	Peri.	218.79810	+0.44114514	-0.89677466
a	2.3964311	Node	205.08098	+0.84230549	+0.42698374
e	0.1663401	Incl.	4.66030	+0.30969733	+0.11610378
P	3.71	H	14.0	G 0.15	

Residuals in seconds of arc

811125	095	0.1+	0.6-	881105	807	0.0	1.3-	900417	809	1.0-	0.7-
880914	807	1.2+	0.3-	900304	809	0.7-	0.7-	920930	801	0.1+	0.6-
880915	807	0.7+	0.5-	900304	809	1.5-	0.8-	920930	801	0.0	0.4-
880920	809	0.5-	0.6-	900304	809	1.8-	1.0-	921022	801	0.2-	0.1+
880920	809	0.3-	0.7-	900415	809	1.5+	0.4-	921022	801	0.4-	0.1+
880920	809	0.2-	1.1-	900416	809	0.6+	0.4-	921025	376	2.3+	1.6+
881005	807	0.4+	0.8-	900416	809	0.7-	1.8-	921025	376	0.8-	1.0+
881007	807	0.7+	0.9-	900416	809	2.1+	1.0-	921028	801	0.6-	0.5-
881103	807	0.3+	1.2-	900417	809	0.6-	0.6-	921028	801	0.5-	0.3-

(5397)* 1988 VB5 = 1964 WF = 1972 XV1 = 1980 UZ

Discovered 1988 Nov. 14 by Y. Oshima at the Gekko Observatory.

Id. S. Nakano (MPC 14201)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	48.31974	(2000.0)	P	Q
n	0.24508270	Peri. 139.13077	+0.98974725	+0.04749473
a	2.5288764	Node 218.78251	-0.07843173	+0.96890746
e	0.1867966	Incl. 12.41865	+0.11936850	+0.24282213
P	4.02	H 12.9	G 0.15	

Residuals in seconds of arc

641129	760	1.3+	0.7-	881114	888	1.8+	1.8-	920930	801	0.0	0.1-
641129	760	0.8-	0.7+	881201	888	1.1-	1.7+	920930	801	0.1-	0.2-
721201	095	(1.4-	4.9-)	881201	888	0.5-	1.0+	921022	801	0.9+	0.6+
801018	095	1.1+	2.1+	881203	888	0.9-	0.5-	921022	801	0.8+	0.5+
881104	046	0.2+	2.6-	881203	888	0.3-	0.2-	921025	894	0.5-	0.6+
881104	046	(0.3-	3.9-)	881207	888	0.5-	0.3+	921025	894	0.4+	0.6+
881105	046	2.1-	1.5-	881207	888	0.3-	0.5+	921026	364	0.7+	0.1-
881105	046	1.2-	1.1-	881214	888	0.3+	0.9+	921026	364	0.7+	0.2-
881110	888	(2.5+	4.2-)	881214	888	1.6-	1.4-	921026	894	0.3+	0.5-
881110	888	(1.9+	7.4-)	910511	801	0.0	0.4+	921026	894	0.7-	0.9-
881111	046	0.0	1.7-	910511	801	0.2-	0.5+	921027	376	0.5+	2.0+
881112	046	0.1+	0.4-	910514	801	0.6-	0.2-	921027	376	0.2+	0.9+
881112	046	0.1-	0.3+	910611	801	0.0	0.3-	921028	801	0.5+	0.9+
881113	071	(4.2+	3.2+)	910611	801	0.3+	0.5-	921028	801	0.4+	0.3+
881113	071	(3.9+	1.6+)	910614	801	0.4+	0.4-				
881114	888	(2.8+	3.5-)	910614	801	0.2+	0.1-				

(5398)* 1989 AK1 = 1971 QN1 = 1982 UD9 = 1982 VV9 = 1987 TC

Discovered 1989 Jan. 13 by S. Ueda and H. Kaneda at Kushiro.

Id. S. Nakano (MPC 14357), L. V. Zhuravleva (d, ibid.)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	335.93404	(2000.0)	P	Q
n	0.18916481	Peri. 104.36009	+0.59903954	-0.78980577
a	3.0054475	Node 308.06524	+0.65494532	+0.57796355
e	0.0211466	Incl. 9.63344	+0.46064982	+0.20534115
P	5.21	H 11.4	G 0.15	

Residuals in seconds of arc

710830	095	0.0	0.0	890115	399	(3.9+	1.7-)	920830	801	0.4+	0.6-
821021	095	0.2-	2.4+	890115	399	(3.1+	1.5-)	920830	801	0.0	0.3-
821111	095	(1.1-	9.5+)	890115	399	1.3-	0.2-	920928	399	0.7+	0.4-
870922	095	(1.2-	3.7-)	890115	399	1.2-	0.3-	920928	399	1.2-	0.3-
870925	095	0.3-	2.1-	890130	399	0.3-	1.3+	920930	801	0.3+	0.2+
870926	095	(0.6-	3.5-)	890130	399	1.1+	1.0+	920930	801	0.3+	0.1+
871002	054	0.1-	0.4+	890130	399	1.2+	0.8+	921024	801	0.0	0.4+
890113	399	0.1-	2.0-	890130	399	1.0-	0.5-	921024	801	0.0	0.3+
890113	399	0.5+	0.6-	920826	801	0.2+	0.0	921028	801	0.2+	0.2+
890113	399	0.8+	0.5-	920826	801	0.0	0.3-	921028	801	0.1+	0.1+

(5399)* 1989 BT = 1978 TP5 = 1987 SG18

Discovered 1989 Jan. 29 by M. Iwamoto and T. Furuta at Tokushima.

Id. S. Nakano (MPC 15419)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	335.67091	(2000.0)	P	Q
n	0.20956318	Peri. 175.45017	+0.05477527	-0.99638408
a	2.8071097	Node 271.40025	+0.91404242	+0.07621794
e	0.1841026	Incl. 3.72506	+0.40190313	-0.03754443
P	4.70	H 11.6	G 0.15	

Residuals in seconds of arc

781008	095	0.3-	0.0	890129	872	1.6-	0.0	890203	046	1.3-	1.2-
870916	095	1.1-	0.1-	890202	046	0.6-	0.4-	890204	872	1.8+	1.6+
870923	095	2.1+	0.3+	890202	046	1.4-	1.1-	890204	872	1.0+	1.2-
890129	872	0.2-	0.8+	890203	046	(3.2-	0.8-)	890205	872	1.1+	2.0-

890205	872	1.0+	0.1-	910712	809	0.7-	1.0-	910808	801	0.7+	0.3-
890207	046	1.2-	0.7-	910712	809	1.0-	1.1-	921009	376	0.9+	0.7-
890207	046	0.9-	1.4-	910712	809	0.8-	1.2-	921009	376	0.5-	0.1+
890210	872	(3.3+	0.4-)	910715	809	0.3+	0.4+	921019	399	0.0	1.0-
890210	872	0.6+	0.1+	910715	809	0.4+	0.3+	921019	399	1.4-	1.0-
910709	801	0.6-	1.9-	910715	809	0.6+	0.6+	921022	801	0.7+	0.6+
910709	801	0.6-	0.1+	910806	801	1.3+	1.8-	921022	801	0.2+	1.1+
910710	801	0.0	0.1-	910806	801	0.8+	0.4-	921029	801	0.3+	0.5-
910710	801	0.1-	0.2-	910808	801	0.7+	0.2+	921029	801	0.1+	0.5-

(5400)* 1989 CM = 1989 EG6 = 1976 SQ2 = 1982 VR12 = 1987 UZ3

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

Id. H. Kaneda (MPC 15562)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	333.12649	(2000.0)	P	Q
n	0.18199694	Peri. 22.02421	+0.65567260	-0.75503131
a	3.0838506	Node 27.00578	+0.69122053	+0.59778502
e	0.1582011	Incl. 0.58049	+0.30382170	+0.26940822
P	5.42	H 12.6	G 0.15	

Residuals in seconds of arc

760924	095	1.4-	0.5-	890205	399	(3.1+	0.6-)	920828	399	1.8-	0.4+
760929	095	2.0+	0.0	890211	399	1.0-	0.6-	920828	399	0.1+	0.7+
821113	095	(0.3-	4.1-)	890211	399	0.8-	0.2-	920902	809	1.0+	0.6+
871021	399	1.1-	1.1-	890211	399	1.2-	2.1+	920902	809	0.3+	0.5-
871021	399	0.3+	0.8-	890307	033	0.2+	0.2-	920902	809	0.0	0.6+
871021	399	0.5+	1.0-	890310	033	0.7+	1.1-	920903	809	1.4+	0.7+
890204	399	1.1+	0.9+	890310	033	0.0	0.3-	920920	399	1.2+	0.3+
890204	399	1.3+	0.4-	900422	675	0.6+	0.3+	920920	399	0.2-	1.7+
890204	399	2.0+	0.5+	900422	675	1.5-	0.1+	920928	399	1.1-	0.4+
890204	399	1.3-	1.8+	920826	399	1.5-	0.1+	920928	399	0.8-	0.5+
890205	399	(6.7+	4.1+)	920826	399	1.7+	1.0+				
890205	399	1.7+	1.9+	920826	399	2.2-	0.3+				

(5401)* 1989 EV = 1973 UH2 = 1973 YN = 1983 AH2 = 1984 DN1 = 1987 WO3

Discovered 1989 Mar. 6 by T. Nomura and N. Kawanishi at the Minami-Oda Observatory.

Id. S. Nakano (MPC 14479)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	35.63080	(2000.0)	P	Q
n	0.21077296	Peri. 12.65349	+0.50326466	-0.85451242
a	2.7963581	Node 47.29481	+0.77679914	+0.38218027
e	0.1493304	Incl. 10.07725	+0.37856015	+0.35177659
P	4.68	H 11.7	G 0.15	

Residuals in seconds of arc

731027	095	2.5-	1.5+	890310	374	(2.2-	5.4+)	910916	675	0.2+	0.5+
731220	095	1.4+	1.9-	890310	374	0.4-	2.7+	910916	675	0.2+	1.6+
830114	801	2.6-	2.6+	890315	871	(5.1-	1.7+)	921001	801	0.1+	0.7-
840226	095	1.9+	0.8-	890315	871	(0.0	3.4+)	921001	801	0.6+	0.3-
840305	095	1.1+	2.0-	890329	374	(11.2+	4.5+)	921022	801	0.3-	0.2-
871023	095	(0.2+	2.9+)	890329	374	(3.8+	2.3+)	921022	801	0.2-	0.2-
871123	033	0.3-	1.3+	900622	413	0.3-	0.7-	921024	801	0.2-	0.2-
871123	033	1.8+	0.5+	900622	413	0.9+	0.7-	921024	801	0.2-	0.4-
890306	374	1.5-	2.0+	910818	871	0.5-	0.2+	921122	410	0.5-	0.2-
890306	374	1.7+	1.5+	910910	871	0.5-	1.7-	921122	410	1.4-	0.9-

(5402)* 1989 UK2 = 1986 SX = 1986 WO5

Discovered 1989 Oct. 27 by E. F. Helin at Palomar.

Id. C. M. Bardwell (MPC 15718)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bardwell

M	57.89318	(2000.0)	P	Q
n	0.33680589	Peri. 132.79996	+0.95865846	-0.15035027
a	2.0458931	Node 237.24587	+0.09155017	+0.96683954
e	0.1371309	Incl. 16.69474	+0.26943001	+0.20643666
P	2.93	H 13.1	G 0.15	

Residuals in seconds of arc

860930	675	0.1+	2.5-	891122	675	0.3-	1.4-	920803	801	0.3-	0.2-
860930	675	0.1+	0.4+	891122	675	0.3-	1.1-	921001	801	1.0+	0.2+
861127	010	1.1+	2.8-	891130	675	1.3+	0.4+	921001	801	0.5+	0.2+
861127	010	1.0+	2.8+	891202	675	0.1+	0.0	921022	801	0.4+	0.2+
891027	675	1.2-	0.1-	891202	675	0.1+	0.3-	921022	801	0.4+	0.2+
891027	675	0.9-	1.1+	910317	675	0.1+	1.9-	921028	801	0.2+	0.2+
891029	675	0.5-	0.4+	910317	675	0.4-	0.8-	921028	801	0.2+	0.1+
891029	675	1.3-	0.5+	920803	801	0.2-	0.5-				

(5403)* 1990 DM = 1938 JC = 1974 CN = 1977 VC1

Discovered 1990 Feb. 20 by Y. Kushida and M. Inoue at the Yatsugatake South Base Observatory.

Id. S. Nakano (MPC 16241, unpublished)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	191.40904	(2000.0)	P	Q
n	0.18726860	Peri. 39.64260	-0.95051168	-0.27280027
a	3.0257015	Node 123.90969	+0.21959290	-0.92843693
e	0.0575133	Incl. 10.32070	+0.21978739	-0.25216041
P	5.26	H 11.5	G 0.15	

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

380505	024	(0.02+	0.04-)X	900227	403	0.0	0.2+	910617	896	0.3+	2.0+
740214	095	(2.8+	3.6+)	900227	403	0.9-	0.2+	910617	896	(1.1+	3.9+)
740218	095	(0.4+	5.3+)	900318	896	0.2+	1.4-	920803	675	0.1+	0.7-
771111	805	0.0	0.7+	900318	896	1.7-	1.9-	920803	675	0.7+	1.7-
771112	805	0.6-	0.9+	910313	801	0.3-	0.1-	920806	675	0.3+	0.7-
900220	896	0.1-	1.1+ Y	910313	801	0.1-	0.2-	920806	675	0.5+	0.5-
900221	896	0.9+	1.1+ Y	910414	801	0.1-	0.5+	920925	801	0.1-	0.0
900221	896	(4.0-	3.0+)	910414	801	0.1+	0.5+	920925	801	0.0	0.3-
900224	896	0.6+	0.0	910604	896	0.0	0.1-	920930	801	0.2-	0.1+
900224	403	0.4+	2.0- Y	910604	896	0.6+	0.3-	920930	801	0.5-	0.1-

(5404)* 1991 EE1 = 1948 QJ = 1955 SJ2 = 1979 VA2 = 1979 YB1 = 1982 SD11 = 1982 UA12

Discovered 1991 Mar. 15 by K. Endate and K. Watanabe at Kitami.

Id. H. Kaneda (MPC 18300), N. S. Chernykh (d, ibid.), G. V. Williams

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	33.73796	(2000.0)	P	Q
n	0.29109978	Peri. 327.69139	+0.95280796	+0.30028353
a	2.2548005	Node 15.02981	-0.22892008	+0.80714419
e	0.0662373	Incl. 9.89742	-0.19938050	+0.50827951
P	3.39	H 12.4	G 0.15	

Residuals in seconds of arc

480829	078	(3.2-	4.6+)X	910315	400	1.8+	1.3+	920831	596	(3.0-	0.2-)
550923	024	(6.1+	7.0-)	910315	400	(6.0+	2.0+)	920831	596	0.2-	0.6-
791114	095	(1.0-	4.6+)	910321	400	1.0+	1.8-	920831	596	1.5-	0.3+
791217	095	(4.2+	6.7+)	910321	400	1.9+	0.3-	920831	596	0.6-	0.6-
820927	095	0.1-	1.3-	910402	400	1.5+	2.1+	920920	400	0.4-	0.6-
821022	095	0.2+	1.5+	910402	400	(1.0+	4.2+)	920920	400	0.9+	0.5-
891025	400	1.1-	0.2-	910411	400	2.0-	1.5+	920925	801	0.1-	0.5+
891025	400	0.4+	1.0+	910411	400	1.6-	1.5+	920925	801	0.2-	0.1+

920930 801 0.4- 0.3+ 921002 400 0.2+ 0.4- 921028 801 0.2- 0.7+
920930 801 0.5- 0.9+ 921024 801 0.2+ 1.3+ 921028 801 0.2- 0.6+
921002 400 1.6+ 1.7+ 921024 801 0.3- 0.7+

(5405)* 1991 GY = 1969 EU1 = 1979 SE10
Discovered 1991 Apr. 11 by Y. Kushida and O. Muramatsu at the Yatsugatake South Base Observatory.
Id. S. Nakano (MPC 18302)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M 111.12595		(2000.0)	P	Q
n 0.22660861	Peri.	244.19092	-0.18594809	+0.98140165
a 2.6645167	Node	15.32037	-0.82443687	-0.12943608
e 0.2366927	Incl.	10.39815	-0.53453452	-0.14176426
P 4.35	H	13.1	G 0.15	

Residuals in seconds of arc
690313 095 0.4- 0.1+ 910411 896 2.3+ 0.8+ 910421 896 0.3+ 0.9+
690314 095 0.1+ 2.0- 910411 896 0.3+ 0.8- 910502 896 0.1- 2.2- Y
790928 095 0.9- 2.1- 910414 400 1.9+ 0.7+ 910502 896 1.6+ 0.0 Y
881008 675 0.8- 0.4+ 910414 400 2.3+ 0.9+ 921001 801 1.0+ 0.5+
881008 675 0.4- 0.6+ 910415 896 2.0- 2.2- Y 921001 801 0.9+ 0.5+
910408 809 0.8- 1.3+ 910415 896 0.9+ 0.6- Y 921025 372 0.7- 1.1-
910408 809 0.7- 1.7+ 910416 400 (0.5+ 7.5+) 921025 372 0.2- 0.2-
910408 809 0.8- 1.9+ 910419 809 2.1- 1.5- 921028 801 0.5+ 0.7+
910410 809 0.3+ 0.6+ 910419 809 2.0- 1.4- 921028 801 0.7+ 0.6+
910410 809 0.2+ 1.0+ 910419 809 2.4- 1.4-
910410 809 0.3+ 0.9+ 910421 896 0.6+ 0.7+

(5406)* 1991 PH11 = 1979 WH4 = 1986 NJ = 1987 SV22 = 1989 AY
Discovered 1991 Aug. 9 by H. E. Holt at Palomar.
Id. H. Kaneda (MPC 19311)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M 237.23647		(2000.0)	P	Q
n 0.22638300	Peri.	342.84078	-0.78074348	+0.61859518
a 2.6662867	Node	235.70260	-0.56003171	-0.75535162
e 0.1222084	Incl.	6.12894	-0.27713553	-0.21629594
P 4.35	H	12.1	G 0.15	

Residuals in seconds of arc
491130 675 1.3+ 0.8- 910809 675 0.8+ 0.1+ 910917 675 0.2+ 0.8-
491130 675 0.8- 0.5+ 910810 675 1.2+ 1.0- 920101 801 0.3- 0.8-
791117 095 0.7- 1.6+ 910906 511 1.2+ 0.2+ 920108 801 0.9- 0.2+
860707 010 1.7+ 0.4- 910907 511 0.3+ 1.7+ 921023 801 0.9+ 0.7+
860708 010 2.4- 0.2- 910908 511 0.6+ 1.1+ 921028 801 0.0 0.6+
870920 095 1.6- 1.2- 910914 675 0.0 0.3- 921028 801 0.7- 0.3+
890103 675 1.5+ 1.1- 910914 675 0.4- 0.4- 921129 801 0.3+ 0.3-
890105 675 2.0- 1.6- 910917 675 0.6- 0.4- 921129 801 0.3+ 0.2-

(5407)* 1992 AX = 1987 BH2
Discovered 1992 Jan. 4 by S. Ueda and H. Kaneda at Kushiro.
Id. G. V. Williams (MPC 20339)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M 67.38611		(2000.0)	P	Q
n 0.39550545	Peri.	108.48493	-0.67273341	+0.71903979
a 1.8380941	Node	117.94663	-0.73121195	-0.61013352
e 0.2774195	Incl.	11.38555	-0.11295506	-0.33274446
P 2.49	H	13.8	G 0.15	

Residuals in seconds of arc
511128 675 0.7+ 0.3- 550724 675 0.1- 0.6+ 870121 046 0.4+ 0.4-
511128 675 0.8- 0.1+ 781126 413 0.6- 0.7- 870121 046 0.4- 1.2+
550724 675 0.1- 0.1+ 781126 413 1.3+ 0.4+ 920104 399 1.6- 0.1+

920104 399 (3.8- 1.1+) 920125 399 (1.9+ 3.0-) 920304 801 0.5+ 0.2-
920106 400 (3.2+ 6.0+) 920125 399 0.3- 0.9+ 920304 801 0.5+ 0.1-
920106 400 (2.3+ 4.3+) 920202 399 1.0- 1.3+ 920401 801 0.5+ 0.2-
920111 303 1.4+ 0.2- 920202 399 2.8- 0.0 920401 801 0.4+ 0.1-
920112 303 2.1+ 0.4- 920204 675 0.6- 1.3+ 920429 801 0.6+ 0.1-
920114 399 0.5- 1.5- 920205 675 1.2+ 0.7- 920429 801 0.1+ 0.1-
920114 399 0.2- 0.5+ 920205 675 0.3+ 0.1- 920603 801 0.0 0.9-
920124 399 0.2+ 0.4- 920301 801 0.5+ 0.0 920603 801 0.1- 0.4+
920124 399 0.7- 0.1+ 920301 801 0.1+ 0.2-

(5408)* 1232 T-1 = 1954 EL = 1978 JA2 = 1986 UP2 = 1988 GA
Discovered 1971 Mar. 25 by C. J. van Houten and I. van Houten-Groeneveld on Palomar Schmidt plates taken by T. Gehrels.
Id. D. W. E. Green (MPC 19320), G. V. Williams

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5				Williams
M 145.73468		(2000.0)	P	Q
n 0.28985778	Peri.	341.10556	-0.98845047	+0.14795998
a 2.2612369	Node	207.46703	-0.12827788	-0.93201989
e 0.1386468	Incl.	4.07347	-0.08068732	-0.33082740
P 3.40	H	13.8	G 0.15	

Residuals in seconds of arc
540306 760 (9.2- 16.4-) 710416 675 0.6+ 1.1- 880420 413 0.5+ 1.3+
540306 760 0.1+ 0.9- 710513 675 1.0+ 0.9+ 880420 413 0.5- 0.5+
710324 675 1.4- 0.7+ 710514 675 0.3+ 0.5+ 920629 801 0.4+ 0.1+
710325 675 1.0- 0.1- 780506 095 0.4- 0.0 920701 801 0.3+ 0.2+
710325 675 0.9- 0.0 861027 010 (9.1- 6.7-) 920701 801 1.0+ 0.3-
710326 675 0.4+ 0.7+ 861027 010 (9.0- 5.7-) 920726 801 0.4- 0.1+
710327 675 1.2+ 1.9- 861027 010 (7.6- 5.8-) 920726 801 0.0 0.4-
710402 675 2.4- 0.7- 880408 675 1.8+ 1.6+ 920730 801 0.5- 0.3-
710416 675 1.0+ 1.9- 880410 675 0.1- 0.3+ 920730 801 0.3- 0.0

1972 RF2 = 1979 SN10 = 1979 UD4 = 1986 TM6
Id. H. Oishi (JAM 2029, unpublished), N. S. Chernykh (d, MPC 11438)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5				Williams
M 316.18691		(2000.0)	P	Q
n 0.28270548	Peri.	148.33495	+0.91044748	+0.41353758
a 2.2992167	Node	187.25310	-0.39214811	+0.85646604
e 0.2469194	Incl.	3.85499	-0.13154938	+0.30895401
P 3.49	H	15.5	G 0.15	

Residuals in seconds of arc
710324 675 1.0- 1.9- 721013 095 0.5+ 1.0+ 861013 054 (1.9+ 7.8+)
710326 675 0.9+ 2.0+ 790928 095 2.1- 0.5+ 920325 691 0.1- 0.3-
720911 095 (3.6- 4.1-) 791016 095 (3.1- 5.9+) 920325 691 0.0 0.4-
721005 095 0.8+ 2.0- 861005 095 1.0+ 0.2+

1975 VB1 = 1977 CR2
Id. E. Bowell (MPC 18281)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5				Nakano
M 38.13055		(2000.0)	P	Q
n 0.17371990	Peri.	294.18305	+0.94999243	-0.29343660
a 3.1810440	Node	83.02234	+0.31102849	+0.85862475
e 0.1533923	Incl.	6.17765	+0.02785053	+0.42030762
P 5.67	H	12.5	G 0.15	

Residuals in seconds of arc
751101 095 1.7+ 0.4+ 770212 675 0.2+ 0.2+ 921116 400 0.9- 1.5+
751107 095 0.8- 1.5- 921102 408 1.3- 0.4- 921117 400 0.4+ 0.2+
751202 095 0.1- 1.0- 921102 408 0.4+ 0.4+ 921117 400 0.4+ 0.7-
770211 675 0.2- 0.2- 921116 400 0.3+ 1.2+

1977 RC9 = 1991 EV3 = 1992 RM3
Id. A. Lowe (k), G. V. Williams
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	149.53422	(2000.0)	P	Q	
n	0.26339636	Peri.	254.63812	-0.82639451	+0.56285202
a	2.4102543	Node	319.61133	-0.50641803	-0.75565603
e	0.1475175	Incl.	1.45233	-0.24619684	-0.33493518
P	3.74	H	15.0	G 0.15	

Residuals in seconds of arc

770908	675	0.5-	1.2+	910311	809	0.5+	0.4+	920902	809	1.0+	0.6-
770909	675	0.6-	1.4+	910313	809	0.9-	0.4-	920902	809	0.8+	0.2-
910311	809	0.0	0.1-	910313	809	0.4-	0.2-	920902	809	0.0	0.9-
910311	809	0.4+	0.3+	910313	809	0.1+	0.2-	920903	809	0.6-	1.1-

1978 RL1 = 1977 LU
Id. E. Bowell (MPC 11051)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	181.69624	(2000.0)	P	Q	
n	0.17013355	Peri.	196.87643	+0.96999811	+0.24257654
a	3.2255918	Node	149.07060	-0.21926983	+0.90160029
e	0.1550024	Incl.	1.79875	-0.10499715	+0.35815295
P	5.79	H	13.0	G 0.15	

Residuals in seconds of arc

770612	675	0.0	0.5-	780928	095	0.6-	0.0	870403	675	2.3+	1.1-
770613	675	0.1-	0.6-	781004	095	1.0+	0.8-	870403	675	2.7+	1.7-
780901	095	1.0-	1.6-	781009	095	0.4-	0.3+	901111	675	1.1-	0.1+
780905	095	1.5+	1.8-	870401	675	3.8-	1.1-	901111	675	0.8+	0.1-
780907	095	1.4+	0.8-	870401	675	3.2-	1.6-	901114	675	0.4+	0.2-

1978 RV7 = 1992 TQ
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Kobayashi

M	145.31619	(2000.0)	P	Q	
n	0.21565413	Peri.	41.81545	-0.66332415	+0.74829783
a	2.7540016	Node	186.64203	-0.70197656	-0.62552626
e	0.1620901	Incl.	3.55472	-0.25928747	-0.22083308
P	4.57	H	15.2	G 0.15	

Residuals in seconds of arc

780902	809	0.1+	0.4-	780910	809	0.1-	1.1+	921002	691	0.1-	1.7-
780902	809	0.2+	0.0	780910	809	0.0	2.1-	921002	691	0.4-	1.4-
780902	809	1.0-	0.8+	780910	809	0.4-	0.0	921004	691	0.2+	2.1+
780902	809	0.8-	0.1-	780910	809	1.0+	1.5-	921004	691	0.1+	2.1+
780906	809	1.0+	2.1+	921002	691	0.2-	2.7-	921004	691	0.3+	1.6+

1978 RQ9 = 1978 RH16 = 1992 PW5
Id. H. Oishi (d, JAM 2043), E. Bowell
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell

M	142.06552	(2000.0)	P	Q	
n	0.28047212	Peri.	232.95448	-0.72980733	+0.68335435
a	2.3114061	Node	350.09559	-0.58402694	-0.63854357
e	0.0592287	Incl.	6.74475	-0.35537839	-0.35396177
P	3.51	H	14.2	G 0.15	

Residuals in seconds of arc

780902	809	0.2-	0.1+	780902	809	0.1-	1.1-	920803	675	0.5+	0.2+
780902	809	0.6-	0.5+	780906	809	0.3+	0.4+	920803	675	0.3-	0.5+
780902	809	0.0	0.3-	780910	809	0.8-	0.1+	920806	675	0.5+	1.0-
780902	809	0.4+	0.2+	780910	809	0.7+	0.1-	920806	675	0.4-	0.5+

1978 RA10 = 1992 RE5
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Kobayashi

M	331.28022	(2000.0)	P	Q
n	0.28210793	Peri. 74.76999	+0.28341415	-0.95899743
a	2.3024622	Node 358.76547	+0.86906403	+0.25709495
e	0.2110599	Incl. 1.56285	+0.40546779	+0.11927328
P	3.49	H 15.3	G 0.15	

Residuals in seconds of arc

780902	809	1.0+	0.6-	780906	809	0.4-	1.2-	920902	809	0.8+	1.1+
780902	809	0.1+	0.3+	780910	809	0.3-	1.8+	920902	809	0.1+	0.7+
780902	809	0.3-	0.6+	780910	809	0.0	1.3-	920902	809	1.1-	0.2-
780902	809	0.6-	0.1-	780910	809	1.3+	1.2+	920903	809	0.2+	1.6-
780902	809	0.1+	0.2+	780910	809	0.9-	0.8-				

1979 XJ = 1992 WG1
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	56.46523	(2000.0)	P	Q
n	0.30373890	Peri. 246.24327	+0.98842707	+0.11317634
a	2.1918076	Node 107.13390	-0.06871909	+0.92768781
e	0.2394314	Incl. 6.06757	-0.13523909	+0.35578988
P	3.24	H 14.1	G 0.15	

Residuals in seconds of arc

791215	809	0.5-	0.7+	791220	809	0.9+	0.8-	791223	809	0.2+	0.2-
791215	809	0.5-	0.2-	791220	809	0.2+	0.2+	791223	809	0.2-	0.1-
791215	809	0.7-	0.4+	791220	809	0.1+	0.3+	791223	809	0.2-	0.0
791216	809	0.5-	0.5+	791220	809	0.3+	0.3+	791223	809	0.6-	0.6-
791216	809	0.7+	0.1-	791220	809	0.3-	0.4-	791224	809	0.1+	0.5-
791216	809	2.1+	1.2-	791221	809	0.0	0.2-	791224	809	0.1+	0.3+
791216	809	0.2+	0.3-	791221	809	0.2-	0.1-	791224	809	0.0	1.2+
791216	809	0.1-	0.2+	791221	809	0.2-	0.3-	791224	809	0.4-	0.1+
791216	809	0.3-	0.0	791222	809	0.6-	0.1-	791224	809	0.3+	0.3+
791217	809	1.3-	0.3+	791222	809	0.5-	0.5-	791224	809	0.2+	0.3-
791217	809	0.5-	0.9+	791222	809	0.0	0.6-	791225	809	0.2+	0.5-
791217	809	0.2+	1.3+	791223	809	0.2+	0.6+	791225	809	0.5-	0.5-
791219	809	0.4+	0.3-	791223	809	0.1-	0.4+	921116	400	1.7-	1.3-
791219	809	0.5+	0.5+	791223	809	0.1+	0.2+	921116	400	1.0-	0.7+
791219	809	0.0	0.4-	791223	809	0.7+	0.7-	921117	400	0.3+	0.8-
791220	809	0.4+	0.1+	791223	809	0.0	0.4+	921117	400	2.5+	1.0+

1981 EC8 = 1989 YQ8 = 1992 WO2
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	73.01121	(2000.0)	P	Q
n	0.30215651	Peri. 99.67552	+0.92249365	+0.38114541
a	2.1994533	Node 237.94280	-0.37637533	+0.85297312
e	0.2274422	Incl. 4.13444	-0.08571508	+0.35660207
P	3.26	H 14.8	G 0.15	

Residuals in seconds of arc

810209	413	0.3+	0.2-	810315	413	0.5+	0.1-	891225	033	0.2-	0.8-
810213	413	1.8+	0.6-	810405	413	1.1-	0.7-	891226	033	0.1-	0.7-
810301	413	0.9-	0.8-	810405	413	2.7+	2.9-	921118	399	2.1-	0.7+
810307	413	0.0	0.3+	810406	413	1.3-	1.5+	921118	399	1.0-	0.3-
810307	413	1.4+	0.5-	810406	413	1.1+	0.3-	921121	399	1.5+	0.0
810311	413	1.0-	1.6+	810412	413	2.1-	2.4+	921121	399	1.5+	1.2+
810311	413	0.3+	0.3-	810412	413	(4.4+	3.0-)				
810315	413	0.4-	0.6+	810430	413	0.9-	1.3+				

1981 EU22 = 1989 YN8
Id. S. Otomo (1992 obs.), S. Nakano

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 246.86159 (2000.0) P Q
n 0.30701248 Peri. 196.68949 -0.99821262 -0.05863281
a 2.1761995 Node 339.93845 +0.05795822 -0.90257774
e 0.0682726 Incl. 1.93215 +0.01457440 -0.42651567
P 3.21 H 13.9 G 0.15
Residuals in seconds of arc

810209	413	0.0	0.8-	810311	413	0.3+	0.7+	810411	413	0.5+	0.5+
810213	413	0.5-	0.5-	810316	413	0.4+	1.0-	810426	413	1.7+	0.2-
810302	413	1.9-	0.4-	810316	413	0.1-	0.2+	810502	413	1.8-	0.2+
810302	413	1.1-	0.6-	810329	413	0.1-	0.9+	891225	033	0.1-	0.1+
810303	413	1.4-	0.0	810329	413	1.1+	0.8+	891225	033	0.0	0.1+
810303	413	1.3+	0.2-	810407	413	0.3-	0.1+	921026	894	0.0	0.1-
810307	413	0.9-	0.5+	810407	413	1.8+	0.1+	921026	894	0.6-	1.2+
810307	413	0.4+	0.2-	810408	413	0.5-	0.6+	921027	894	0.9-	0.0
810308	095	0.6+	0.7-	810408	413	0.8+	0.0	921027	894	1.1+	0.2+
810311	413	0.1+	0.5+	810411	413	0.1+	0.2+				

1981 EC27 = 1987 QN5 = 1992 UT7
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Marsden
M 26.27209 (2000.0) P Q
n 0.22041296 Peri. 252.78510 +0.92781051 -0.37253959
a 2.7142174 Node 129.08274 +0.35112236 +0.85437473
e 0.0924919 Incl. 1.44265 +0.12601887 +0.36229555
P 4.47 H 14.0 G 0.15
Residuals in seconds of arc

810209	413	1.0+	0.7-	810405	413	1.9-	0.1+	870825	809	1.2+	1.3-
810212	413	0.2+	0.6-	810406	413	1.6-	0.7+	870825	809	0.4+	0.9-
810213	413	0.3-	0.2-	810406	413	0.4+	0.6-	921023	010	0.3+	0.5-
810302	413	1.1+	2.3-	810410	413	(4.0+	1.1-)	921023	010	0.4+	0.1-
810306	413	1.7-	0.0	810426	413	(3.6+	1.4-)	921102	010	0.4+	0.7-
810311	413	0.7+	0.4-	810501	413	1.0+	0.1-	921102	010	0.0	0.3-
810315	413	0.8-	1.1-	870825	809	0.6-	0.7-	921102	010	0.2-	1.1-

1981 RQ1 = 1982 YU3 = 1991 RX14
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Ichikawa
M 104.10366 (2000.0) P Q
n 0.19968013 Peri. 194.99103 +0.98282013 +0.18357043
a 2.8989862 Node 154.40727 -0.16444909 +0.91806375
e 0.0959317 Incl. 2.54003 -0.08379192 +0.35136997
P 4.94 H 13.1 G 0.15
Residuals in seconds of arc

810901	809	2.3-	0.5-	810904	809	0.4-	1.5-	810906	809	0.5+	0.7+
810901	809	2.0-	0.2+	810904	809	0.3-	1.3-	810907	809	0.8+	0.6-
810901	809	1.5-	0.5+	810904	809	0.2-	1.2-	810907	809	1.4+	0.1-
810902	809	1.5-	0.5-	810905	809	0.4-	0.5+	810907	809	1.9+	0.4-
810902	809	1.3-	0.4-	810905	809	0.3-	0.2+	821223	095	0.0	0.6-
810902	809	1.2-	0.5-	810905	809	0.3+	1.0+	910907	399	1.8-	0.3+
810902	809	0.2-	0.4+	810905	095	(3.0-	4.8+)	910907	399	0.2+	0.7+
810902	809	0.1+	0.3+	810906	809	0.6+	0.4+	910911	675	1.3+	1.1+
810902	809	1.3+	0.2-	810906	809	0.5+	0.2+	910911	675	0.6-	0.4-
810903	809	1.0+	0.7-	810906	809	0.3-	0.3+	910915	675	0.4+	0.0
810903	809	1.1+	0.4-	810906	809	0.3+	0.6+	910915	675	0.4-	0.6+
810903	809	1.7+	0.1+	810906	809	1.3+	0.6+				

1981 RG5 = 1983 AM6 = 1992 WD
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 52.88506 (2000.0) P Q
n 0.27176598 Peri. 328.34077 +0.97875808 +0.20067421
a 2.3605108 Node 20.21028 -0.15339493 +0.85264928
e 0.1535906 Incl. 6.97996 -0.13602430 +0.48240964
P 3.63 H 12.8 G 0.15
Residuals in seconds of arc

810908	095	1.8-	0.6-	811026	095	1.2+ 0.3-	921116 399	0.4- 1.1-
810928	095	0.6-	0.6+	830115	095	0.4+ 0.9+	921118 399	0.4+ 0.9+
811005	095	0.8+	1.2+	921116	399	0.1+ 0.0	921118 399	0.3+ 0.4-

1981 RJ5 = 1978 EY9
Id. S. J. Bus (MPC 18108)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell
M 345.12500 (2000.0) P Q
n 0.17454137 Peri. 267.25347 +0.82336474 -0.56681009
a 3.1710551 Node 127.27294 +0.53376096 +0.75654073
e 0.2489654 Incl. 2.03289 +0.19279455 +0.32614788
P 5.65 H 13.0 G 0.15
Residuals in seconds of arc

780315	675	1.4+	0.1+	811005	095	(0.1+ 4.1+)	920803 675	0.2- 0.8+
780316	675	1.3-	0.1-	811022	095	0.1- 0.2+	920803 675	0.3- 1.3-
810908	095	0.1+	1.3+	811024	095	0.6+ 0.6-	920806 675	0.4- 1.4-
810928	095	1.0-	0.3+	811026	095	0.3+ 0.8-	920806 675	1.1+ 1.4+

1981 RF7 = 1981 QS1 = 1992 UA2
Id. S. Nakano (d, MPC 20606; unpublished)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 23.38632 (2000.0) P Q
n 0.18359539 Peri. 28.28449 +0.94308144 -0.33165518
a 3.0659251 Node 350.98143 +0.26792336 +0.80142309
e 0.3293522 Incl. 9.00691 +0.19701389 +0.49772067
P 5.37 H 13.4 G 0.15
Residuals in seconds of arc

810830	688	1.8+	2.4-	921021	896	0.4- 0.2+ Y	921031 896	1.7+ 0.2-
810903	675	0.8-	1.5+	921024	896	0.0 0.9-	921121 896	0.2+ 0.8+
810904	675	1.1-	1.0+	921024	896	0.0 0.6-	921121 896	1.4- 0.3+
921021	896	0.9-	1.7+ Y	921031	896	0.8+ 1.4- Y		

1981 WM = 1992 UD6
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 342.97873 (2000.0) P Q
n 0.26782729 Peri. 10.74494 +0.01501295 -0.99632249
a 2.3835970 Node 78.43372 +0.91087479 -0.02116982
e 0.0734566 Incl. 4.93960 +0.41240967 +0.08302615
P 3.68 H 13.8 G 0.15
Residuals in seconds of arc

811125	801	1.4-	1.0-	811220	801	0.3+ 0.6-	921030 894	0.4- 1.3-
811126	801	1.0+	1.1-	811221	801	0.4- 0.4+	921031 894	0.6- 0.1-
811129	801	0.4+	2.2+	921030	894	1.0+ 1.7+	921031 894	0.0 0.2-

1982 PR = 1985 DA4 = 1988 VG = 1990 DP5
Id. T. Kobayashi (MPC 13856), G. V. Williams

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	291.78025	(2000.0)	P	Q
n	0.17806837	Peri. 339.88557	+0.98319868	-0.18228449
a	3.1290430	Node 30.62226	+0.16995559	+0.89490257
e	0.2018544	Incl. 1.08317	+0.06659917	+0.40733495
P	5.53	H 12.0	G 0.15	

Residuals in seconds of arc

820814 095 0.9- 2.3+	881103 897 0.8+ 2.7+	881108 399 0.8- 2.8-
820816 095 0.4+ 0.5+	881106 399 0.8- 0.9+	881108 399 (1.1+ 3.5-)
820823 095 (5.7- 2.1-)	881106 399 0.7+ 0.4+	881108 399 2.0+ 2.9-
820913 095 1.3- 0.5+	881106 399 0.8+ 0.9+	900223 033 0.5- 0.7+
850220 675 1.7+ 1.5+	881106 399 (4.7+ 1.5+)	900223 033 0.3- 0.9+
850222 675 (1.6+ 19.2-)	881107 897 1.0+ 0.9+	920603 801 0.3- 1.1-
881103 897 1.8- 2.7-	881107 897 0.5- 0.5+	920603 801 0.3- 1.3-

1983 RT1 = 1987 UE4
Id. T. Kobayashi (MPC 14474)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	207.70874	(2000.0)	P	Q
n	0.26667192	Peri. 321.26996	+0.78397265	+0.62079498
a	2.3904767	Node 0.35797	-0.53885394	+0.68103931
e	0.1403051	Incl. 6.28364	-0.30825852	+0.38832852
P	3.70	H 14.0	G 0.15	

Residuals in seconds of arc

710416 675 0.0 1.3+	830906 688 0.3+ 0.7+	871028 399 0.0 1.6+
710416 675 0.4+ 0.6-	830906 095 1.6- 1.4+	871028 399 1.2+ 1.5+
830902 688 2.8+ 0.5-	871025 399 0.1- 0.2+	871028 399 0.3+ 0.4+
830902 688 0.1+ 0.4-	871025 399 0.4+ 2.1-	
830906 688 1.8- 0.9-	871025 399 2.1- 1.2-	

1983 RQ4 = 1987 SR
Id. T. A. Vinogradova (MPC 14018)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	102.35258	(2000.0)	P	Q
n	0.25392617	Peri. 204.90468	+0.79756978	-0.60265066
a	2.4698149	Node 192.26228	+0.57215580	+0.76960786
e	0.1473139	Incl. 7.12846	+0.19110257	+0.21098800
P	3.88	H 13.0	G 0.15	

Residuals in seconds of arc

491130 675 1.0+ 0.2-	870916 095 0.3- 1.4-	910916 675 0.2- 0.0
491130 675 0.9- 0.5+	870919 688 1.9- 2.4-	911002 403 0.0 0.9-
830904 095 0.9+ 1.0+	870919 688 0.2+ 0.1-	911003 403 0.3- 0.5+
830906 095 0.5- 0.2+	870926 688 1.7+ 0.4+	911003 403 0.7+ 0.4-
830909 095 1.2- 1.6+	870926 688 0.5+ 1.3-	911011 801 0.1+ 1.1+
830911 095 0.2+ 0.2+	910910 675 0.3- 0.3+	911011 801 0.1+ 1.2+
830915 095 (2.0- 3.7-)	910910 675 0.1- 0.1-	
870828 095 1.0+ 0.2+	910916 675 0.3- 0.4+	

1984 QQ = 1973 UT1 = 1988 VM7 = 1990 DZ8
Id. D. W. E. Green (MPC 14349), G. V. Williams
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	66.35642	(2000.0)	P	Q
n	0.26387675	Peri. 180.40620	+0.95307815	-0.30017614
a	2.4073282	Node 197.21860	+0.27811625	+0.91936756
e	0.1310713	Incl. 7.60892	+0.11955500	+0.25427853
P	3.74	H 13.0	G 0.15	

Residuals in seconds of arc

731026 095(13.0+ 4.8-)	840901 046 0.8- 0.1+	840902 046 1.6- 1.5-
840831 046 1.2- 1.8-	840901 046 0.3- 1.5-	840902 046 0.2- 1.2+

840902 046	0.7+	1.0+	840929 046	1.8+	0.2+	881103 033	0.5+	0.2+
840920 046	1.6-	1.3+	840930 046	0.1-	2.2+	881105 033	0.5-	0.2-
840920 046	0.4+	2.4+	840930 046	2.1-	2.6-	881106 033	0.0	0.1+
840927 046	1.8+	1.4-	841018 071	0.2+	0.1+	900225 809	0.8-	0.7-
840927 046	2.2+	2.9-	841018 071	0.9-	0.9-	900225 809	0.3-	0.8-
840929 046	2.2+	1.6+	881103 033	0.1-	0.3+	900225 809	0.4+	1.0-

1984 QU = 1991 RV26
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell

M 132.32525		(2000.0)	P	Q	
n 0.28665933	Peri.	26.34510	+0.94534090	-0.32587535	
a 2.2780259	Node	352.64465	+0.28080043	+0.83171197	
e 0.2489842	Incl.	5.22333	+0.16577605	+0.44951135	
P 3.44	H	15.3	G 0.15		

Residuals in seconds of arc

840824 801	0.9-	1.8+	840926 801	1.4+	1.3-	910914 675	1.6-	0.5+
840827 801	0.1+	0.0	910911 675	0.1+	0.2-	911002 896	1.0+	0.8+
840828 801	0.1+	1.3-	910911 675	0.6+	0.1-	911002 896	0.1-	1.1-
840829 801	0.1-	0.2-	910914 675	0.5-	1.1+			

1985 UQ = 1978 WX16
Id. E. Bowell (MPC 19018)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell

M 37.01209		(2000.0)	P	Q	
n 0.27286377	Peri.	244.94620	+0.89676806	+0.43553353	
a 2.3541753	Node	89.15194	-0.37255896	+0.83850923	
e 0.1856698	Incl.	4.48647	-0.23876111	+0.32743369	
P 3.61	H	14.3	G 0.15		

Residuals in seconds of arc

491121 675	0.5-	1.7+	851020 046	0.2+	0.6-	920803 675	0.4-	0.1-
491121 675	0.2-	0.3+	851021 046	0.0	0.6+	920803 675	0.1+	0.2+
781130 675	0.4+	0.0	851021 046	1.3+	0.5-	920806 675	0.2-	0.2-
781201 675	0.2-	0.9-	851024 046	0.7-	0.3+	920806 675	0.4+	0.4+
851020 046	0.1+	0.8-	851024 046	0.5-	0.2-			

1986 CS1 = 1988 RV3 = 1990 GH1
Id. S. Nakano (MPC 14022), G. V. Williams
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M 331.38902		(2000.0)	P	Q	
n 0.25955999	Peri.	284.91035	-0.08713705	-0.99615336	
a 2.4339457	Node	170.07476	+0.93338689	-0.08488547	
e 0.1413426	Incl.	3.07725	+0.34813224	-0.02174715	
P 3.80	H	15.0	G 0.15		

Residuals in seconds of arc

860206 809	1.9-	0.2+	860212 809	0.4-	0.0	860217 809	0.4-	0.2+
860206 809	1.6-	0.0	860212 809	1.2+	0.1+	860217 809	0.4-	0.2+
860206 809	1.5-	0.1+	860212 809	1.3+	0.1+	880908 033	0.0	0.4-
860208 809	0.3+	0.0	860212 809	1.5+	0.2+	880909 033	0.7+	0.1-
860208 809	0.5+	0.1+	860213 809	0.3+	0.7-	880909 033	1.0+	0.3+
860208 809	0.6+	0.1+	860213 809	0.3+	0.6-	880910 033	0.2-	0.7-
860209 809	0.3-	0.0	860213 809	0.4+	0.5-	880910 033	0.4-	1.1-
860209 809	0.1-	0.0	860214 809	0.2-	0.4+	880911 033	0.2-	0.1+
860209 809	0.2+	0.1+	860214 809	0.1-	0.2+	880915 675	0.4+	1.8-
860210 809	0.1-	0.6+	860214 809	0.1+	0.1+	880915 675	0.2+	0.2+
860210 809	0.1+	0.6+	860215 809	0.2+	0.5-	881004 807	0.6+	0.0
860210 809	0.2+	0.6+	860215 809	0.3+	0.4-	881005 807	0.9+	1.0-
860212 809	0.4-	0.0	860215 809	0.6+	0.4-	881008 807	0.7+	2.4-
860212 809	0.3-	0.0	860217 809	0.5-	0.1-	881104 807	0.1-	0.1+

881105	807	0.2-	1.0-	900317	033	1.4+	0.0	900404	809	3.1-	2.4-
881106	807	0.1+	0.2-	900404	809	0.8-	3.6-	921023	010	0.1+	1.1+
881107	807	0.3-	0.7-	900404	809	0.5-	2.5-	921023	010	0.4-	0.5-

1986 CV1 = 1989 YA3 = 1992 PP2
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	16.90711	(2000.0)	P	Q	
n	0.23718918	Peri.	59.46077	+0.97361036	+0.07079583
a	2.5846762	Node	295.70538	-0.16989065	+0.85960099
e	0.1272976	Incl.	13.93301	+0.15238119	+0.50603764
P	4.16	H	12.9	G 0.15	

Residuals in seconds of arc

860208	809	(3.5+	0.5-)	860212	809	0.5+	0.3-	891230	413	0.2-	0.2-
860208	809	(3.7+	0.5-)	860214	809	1.3-	1.1-	891231	413	0.4-	0.4-
860208	809	(3.8+	0.4-)	860214	809	1.3-	1.1-	891231	413	0.8-	0.7+
860210	809	0.4-	0.5-	860214	809	1.2-	1.1-	900123	399	1.6+	0.4+
860210	809	0.5-	0.6-	860215	809	0.2+	0.9-	900123	399	0.7+	1.5+
860210	809	0.4-	0.7-	860215	809	0.3+	1.0-	920802	675	0.4+	0.0
860211	809	0.5-	0.1-	860215	809	0.4+	1.0-	920802	675	0.2-	0.3+
860211	809	0.4-	0.0	860216	809	1.0+	2.5+	920806	675	0.6-	0.2+
860211	809	0.2-	0.0	860216	809	1.1+	2.6+	920806	675	0.6+	0.9-
860212	809	0.0	0.4-	860216	809	1.3+	2.4+				
860212	809	0.3+	0.2-	891230	413	0.6-	1.0-				

1987 JA = 1983 EM3 = 1992 UE1
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	332.46081	(2000.0)	P	Q	
n	0.27571074	Peri.	69.60059	-0.15764766	-0.98702799
a	2.3379412	Node	29.52077	+0.88146944	-0.15452308
e	0.1691617	Incl.	3.53486	+0.44515037	-0.04357019
P	3.57	H	13.8	G 0.15	

Residuals in seconds of arc

830314	095	0.0	0.0	870530	413	1.2-	0.7+	921022	400	0.3-	1.3+
870505	474	2.4+	1.1-	870530	413	1.4-	0.5-	921102	400	2.0-	0.5+
870505	474	0.8-	0.2-	921019	400	1.7-	2.0+	921102	400	2.4+	2.1-
870507	474	0.2-	1.1+	921019	400	2.2+	2.5-				
870507	474	1.1+	0.0	921022	400	0.5-	0.7+				

1987 UF5 = 1978 WV4
Id. S. Nakano (MPC 15250)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	67.16329	(2000.0)	P	Q	
n	0.21482550	Peri.	318.04268	+0.96967693	-0.23003968
a	2.7610790	Node	55.43823	+0.24228254	+0.86061703
e	0.1656138	Incl.	5.75047	+0.03202855	+0.45433476
P	4.59	H	13.0	G 0.15	

Residuals in seconds of arc

781129	675	0.6-	0.8+	871121	095	0.4-	0.5+	921022	801	0.1-	0.0
781130	675	0.1+	0.9+	910714	675	0.1-	2.1-	921129	801	0.2-	1.0-
871022	095	0.8+	2.3-	910714	675	0.2+	1.8+	921129	801	0.0	1.1-
871027	095	0.2-	1.2+	921022	801	0.3+	0.2+				

1988 BZ1 = 1982 BU10 = 2054 T-1
Id. S. Nakano (MPC 13450; unpublished)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	324.00570	(2000.0)	P	Q	
n	0.17090339	Peri.	294.60800	-0.47431525	-0.88035466
a	3.2158980	Node	183.70711	+0.81240380	-0.43733137
e	0.1371392	Incl.	0.75552	+0.33915351	-0.18362177
P	5.77	H	12.2	G 0.15	

Residuals in seconds of arc

710324 675	0.2+	0.5-	880125 809	1.1-	0.6-	880214 809	1.7-	1.6-
710325 675	0.3-	1.1+	880125 809	0.7-	0.6-	880214 809	1.0+	2.1-
710325 675	0.4+	0.1+	880125 399	2.0+	1.6+	880214 809	1.2+	1.2-
710326 675	0.0	0.8-	880125 399	0.5-	1.2+	880214 809	0.5+	1.4-
710327 675	0.4-	0.1-	880125 399	1.5+	1.3+	880216 809	0.4+	0.6+
820119 095	0.1-	0.3-	880127 809	0.6-	0.2-	880216 809	1.0+	0.3+
820120 095	(7.0-	1.7-)	880127 809	0.3-	0.8-	880217 809	0.2+	1.5-
880120 809	0.2-	0.3-	880129 809	0.1+	0.0	880217 809	1.4+	1.1-
880120 809	0.0	0.3-	880129 809	0.8+	0.5-	880218 399	0.3-	0.8+
880120 809	0.3+	0.0	880207 399	0.5+	1.0+	880218 399	0.4+	1.3-
880121 809	0.5+	1.4-	880207 399	(3.1-	0.8+)	880218 399	0.7-	0.6-
880121 809	0.3+	0.5-	880208 399	0.3-	1.5+	880219 399	0.1-	1.5+
880122 303	0.8+	1.4+	880208 399	0.4+	1.4+	880219 399	0.5+	0.4-
880122 303	0.4+	2.1+	880208 399	0.6+	1.0-	880223 399	1.3-	0.5-
880122 303	1.0+	1.8+	880211 399	2.5-	0.7+	880223 399	2.2-	0.0
880123 303	1.0+	1.7+	880211 399	2.8-	0.8+	921118 399	0.2+	1.7-
880123 809	0.9-	0.6-	880211 399	(2.4-	3.2+)	921118 399	0.8+	0.9-
880123 809	0.4-	0.8-	880213 809	(7.6-	0.1-)	921121 399	1.1-	1.8+
880123 303	(7.0+	6.2-)	880213 809	(7.7-	1.5+)	921121 399	0.2+	0.2+
880123 303	(7.2+	5.9-)	880214 809	(3.6-	0.2-)			

1988 JL = 1986 XA
Id. C. M. Bardwell (MPC 13469)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	165.85182	(2000.0)	P	Q	
n	0.36220842	Peri.	247.60559	+0.77798491	+0.48893391
a	1.9490831	Node	81.04474	-0.31943367	+0.84859883
e	0.0976535	Incl.	23.54293	-0.54101904	+0.20204865
P	2.72	H	14.0	G 0.15	

Residuals in seconds of arc

861202 010	2.0-	0.5+	880608 675	0.6+	0.1-	910608 675	1.7+	0.2+
861202 010	1.3+	2.5-	880611 675	0.6-	0.7-	910608 675	2.0-	0.8+
861203 010	1.7+	0.8+	880612 675	1.1-	0.1-	920929 691	0.1-	0.5+
861203 010	(13.2+	5.9-)	891128 675	0.6-	0.2+	920929 691	0.1-	0.5+
880511 675	0.7+	0.3+	891128 675	1.0+	2.6-	920929 691	0.1+	1.0+
880513 675	0.8-	0.2-	910606 675	(1.1-	4.0-)			
880514 675	0.0	0.7-	910606 675	0.2+	2.0-			

1988 RE6 = 1981 UD18 = 1992 WO
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	11.92566	(2000.0)	P	Q	
n	0.26917369	Peri.	340.02844	+0.50089143	-0.86490295
a	2.3756419	Node	79.90050	+0.79849615	+0.44733525
e	0.2044469	Incl.	1.88676	+0.33393364	+0.22767096
P	3.66	H	14.0	G 0.15	

Residuals in seconds of arc

811024 095	0.5+	1.7-	880907 809	1.2+	0.1+	880910 809	0.4-	0.1+
880905 809	0.3-	0.4-	880907 809	1.3+	0.2+	880910 809	1.2-	0.5+
880905 809	0.3-	1.2-	880907 809	1.3+	0.2+	880910 809	1.0-	0.4+
880905 809	0.3-	2.0-	880907 809	1.5+	0.3+	880910 809	0.9-	0.5+
880907 809	0.7+	0.0	880910 809	0.0	0.1-	880910 809	0.7-	0.7+
880907 809	0.8+	0.1+	880910 809	0.1+	0.1-	880910 809	0.5-	0.7+

880910	809	0.4- 0.7+	881103	807	0.6- 1.1-	921117	400	1.4+ 0.5+
880911	809	0.5- 0.2+	881105	807	0.7+ 0.4+	921118	399	0.4- 0.5+
880911	809	0.9- 0.1+	921116	400	0.7- 0.2+	921118	399	1.5- 0.8+
880911	809	0.9- 0.3+	921116	400	1.7+ 1.1-			
881008	807	1.3+ 0.6-	921117	400	1.0- 0.7+			

1988 RW12 = 1992 PB5
Id. B. A. Skiff
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bowell

M	45.75091	(2000.0)	P	Q	
n	0.24100702	Peri. 30.69662	+0.66428158	+0.74552453	
a	2.5573073	Node 280.98894	-0.69650028	+0.59109772	
e	0.2166664	Incl. 3.15723	-0.27132516	+0.30789066	
P	4.09	H 15.0	G 0.15		

Residuals in seconds of arc

880914	807	0.1- 0.3+	881103	807	0.6+ 0.4-	920803	675	1.0- 0.0
880915	807	0.3- 0.2+	881105	807	0.5- 0.2-	920806	675	0.8+ 0.1+
881005	807	0.2+ 0.0	920803	675	0.1+ 0.2-	920806	675	0.1+ 0.1-

1988 SD = 1980 KX = 1981 UK15 = 1992 UN6
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	95.02701	(2000.0)	P	Q	
n	0.26918467	Peri. 296.46363	+0.63987263	+0.76818152	
a	2.3755773	Node 13.38520	-0.66795032	+0.56975268	
e	0.1724322	Incl. 5.31688	-0.38000709	+0.29202574	
P	3.66	H 13.6	G 0.15		

Residuals in seconds of arc

800517	095	0.0 0.1-	880915	511	0.9+ 1.1+	921028	400	1.5- 0.9+
811023	095	0.9- 2.5+	880915	095	1.2- 1.1+	921101	400	0.5+ 1.0-
880909	026	(5.2- 1.1-)	880915	095	1.0+ 0.7+	921101	400	1.4+ 1.1-
880912	511	1.4+ 0.2+	880916	511	0.8+ 1.4-	921101	372	0.3+ 0.6-
880913	511	(5.1+ 2.6+)	880916	511	(3.2+ 1.0+)	921101	372	1.9+ 0.9+
880913	511	(6.0+ 3.9+)	880917	511	1.2- 2.2-	921116	400	0.8- 0.7-
880915	511	1.3- 0.1+	880917	511	0.2+ 0.9+	921116	400	1.0- 0.6-
880915	511	0.5- 0.6-	921028	400	0.1+ 0.4-			

1988 TN = 1992 UB6
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	36.72310	(2000.0)	P	Q	
n	0.26006536	Peri. 17.08680	+0.86676814	-0.49828763	
a	2.4307915	Node 12.86006	+0.44608836	+0.75622378	
e	0.0606589	Incl. 5.29845	+0.22297569	+0.42406960	
P	3.79	H 12.8	G 0.15		

Residuals in seconds of arc

880908	033	0.2- 0.2-	881013	399	2.3+ 1.0+	881019	399	1.0+ 0.3-
880908	033	0.2- 0.4-	881013	399	2.1- 0.3+	881031	399	1.5+ 0.6-
880909	033	0.2+ 0.1+	881013	399	0.8+ 0.3-	881031	399	0.2+ 2.5-
880910	033	0.1+ 0.6-	881016	399	1.8- 0.4+	921028	399	0.7- 0.3-
880911	033	0.2+ 0.2+	881016	399	1.3- 1.5+	921028	399	1.3+ 0.6-
881005	399	0.6- 0.4+	881016	399	2.0+ 0.2+	921102	399	0.2- 0.4+
881005	399	1.5- 0.7+	881016	399	1.4- 1.0+	921102	399	0.5- 0.8+
881005	399	1.3+ 1.1-	881016	399	0.3- 0.3-			

1988 TB1 = 1991 KH2 = 1992 WC4
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 65.07760 (2000.0) P Q
n 0.26008917 Peri. 144.43678 +0.99233325 +0.11624703
a 2.4306432 Node 208.97313 -0.12358363 +0.93699975
e 0.1507690 Incl. 4.97034 +0.00134186 +0.32942084
P 3.79 H 13.7 G 0.15
Residuals in seconds of arc

881013	399	1.0-	0.1+	881031	399	(2.0+ 3.2+)	881104 033	0.2- 0.2+
881013	399	2.6+	0.4+	881031	399	(3.8+ 1.1+)	910517 809	0.9+ 0.0
881013	399	1.7+	0.2+	881031	399	0.0 0.7-	910517 809	0.6- 0.3+
881016	399	0.5-	0.2+	881102	399	1.6+ 1.1-	910517 809	0.3- 0.3+
881016	399	0.2-	1.2+	881102	399	0.6+ 0.1+	921121 399	0.1- 1.2+
881019	399	1.6-	0.3-	881102	399	1.9+ 2.4+	921121 399	1.1- 2.1+
881019	399	2.3-	2.2-	881103	033	0.9- 0.1-	921127 399	0.6+ 0.8-
881019	399	0.9-	0.4-	881103	033	0.6- 0.3-	921127 399	0.6+ 1.7-

1988 VJ2 = 1992 UV5
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 15.94443 (2000.0) P Q
n 0.24517059 Peri. 196.15995 +0.66214691 -0.74774129
a 2.5282721 Node 212.42483 +0.69734224 +0.63898468
e 0.3323930 Incl. 5.29064 +0.27436341 +0.18050357
P 4.02 H 14.1 G 0.15
Residuals in seconds of arc

881107	877	1.7-	1.7-	881130	877	0.8+ 2.2+	921028 400	0.2+ 1.2+
881107	877	0.1-	0.2+	881207	877	0.2+ 0.2+	921028 400	0.3- 1.5-
881109	877	0.7+	3.1-	881207	877	0.6+ 1.2+	921028 399	0.1- 1.1+
881109	877	(23.6+	21.1+)	881209	871	2.9- 0.7-	921028 399	1.9- 0.8+
881112	877	(5.4-	12.1-)Y	881209	871	0.0 1.4-	921102 399	0.1+ 0.3-
881112	877	(6.3-	12.9-)Y	921026	408	1.6+ 0.0	921102 399	0.8- 0.5+
881130	877	2.6+	0.8+	921026	408	0.9+ 0.6+		

1988 VK2 = 1984 XB = 1992 UW5
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 35.88865 (2000.0) P Q
n 0.24182690 Peri. 304.85291 +0.92957874 -0.34634328
a 2.5515239 Node 75.69929 +0.36619257 +0.82837558
e 0.1361320 Incl. 7.48398 +0.04226552 +0.44027290
P 4.08 H 13.1 G 0.15
Residuals in seconds of arc

841201	046	2.2+	0.0	881112	877	1.9+ 1.2+ Y	921028 400	0.6- 0.2-
841201	046	1.2-	1.7-	881206	877	2.8- 1.3+	921028 400	1.5+ 0.6+
881107	877	2.0+	0.6-	881206	877	2.0- 1.4+	921102 400	2.4- 0.7-
881107	877	1.9+	3.4-	881207	877	2.3- 1.2-	921102 400	1.4+ 1.8+
881112	877	2.6+	0.9+ Y	881207	877	2.7- 0.2+		

1988 VS2 = 1992 SH13
Id. G. V. Williams (MPC 21107)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 41.90826 (2000.0) P Q
n 0.23858284 Peri. 153.99758 +0.98899641 -0.08708777
a 2.5746009 Node 211.71149 +0.06056658 +0.97587300
e 0.1913409 Incl. 13.15067 +0.13497329 +0.20021891
P 4.13 H 13.0 G 0.15
Residuals in seconds of arc

881112	675	0.7+	0.3-	881206	675	0.4- 0.7+	920923 675	0.5- 0.9+
881113	675	1.2-	0.2-	881207	675	0.9+ 0.0	920923 675	0.5- 0.3+

920925 675 0.9+ 1.9- 921031 376 0.5- 1.1+ 921129 801 0.4+ 0.2-
920925 675 0.7+ 0.2+ 921121 801 0.2- 0.6- 921129 801 0.2+ 0.1-
921031 376 0.2- 0.9+ 921121 801 0.2- 0.7-

1988 XQ = 1992 WY2
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 14.57829 (2000.0) P Q
n 0.24414379 Peri. 163.98560 +0.47714758 -0.86351734
a 2.5353559 Node 257.26721 +0.78681772 +0.50252724
e 0.2694535 Incl. 9.63787 +0.39146911 +0.04247557
P 4.04 H 14.0 G 0.15
Residuals in seconds of arc
881203 400 (6.2- 2.7+) 881207 399 1.1- 0.6+ 881230 400 0.1- 0.2+
881203 400 (4.4- 2.2+) 881207 399 (3.6- 2.4-) 881230 400 0.2- 0.3-
881203 400 (4.2- 4.1+) 881210 400 1.4+ 0.2- 921117 402 0.5- 0.1-
881206 400 0.1- 0.0 881210 400 1.0+ 1.3- 921117 402 1.2- 0.9-
881206 400 0.8+ 0.4+ 881211 364 0.8+ 0.6+ 921118 402 2.0+ 1.3+
881206 400 1.4+ 0.3+ 881211 364 0.2- 0.3- 921118 402 0.3- 0.0
881207 399 1.6- 1.8- 881216 400 0.9+ 1.8+
881207 399 2.6- 0.1- 881216 400 0.6- 0.0

1988 XE1 = 1955 YK = 1971 BO2
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bardwell
M 329.66010 (2000.0) P Q
n 0.26792750 Peri. 255.24095 -0.79006303 -0.60503574
a 2.3830026 Node 247.43069 +0.59548966 -0.71924473
e 0.0680979 Incl. 6.13281 +0.14557633 -0.34149489
P 3.68 H 12.5 G 0.15
Residuals in seconds of arc
551219 210(30.0- 48.7-)X 881210 400 2.0- 0.1+ 910812 801 0.0 0.1-
710127 805 0.1- 0.4- 881210 400 0.5- 1.6+ 910814 657 1.2- 0.3-
880910 033 0.5+ 0.5- 910805 657 0.9+ 0.6+ 910814 657 1.0- 0.7+
880910 033 0.1- 1.1- 910805 657 1.6+ 1.2+ 910906 801 0.5- 0.3-
881115 400 2.8+ 1.1- 910805 657 2.5+ 1.4+ 910906 801 0.5- 0.2-
881115 400 (4.4+ 2.1+) 910806 657 0.4- 0.4+ 910912 801 0.2- 1.7-
881116 400 0.7+ 2.5+ 910806 657 0.4+ 0.2+ 910912 801 0.1+ 0.5-
881116 400 (4.1+ 2.0+) 910806 657 0.6- 0.6+ 911005 801 0.0 0.3-
881116 400 2.5- 0.4+ 910806 675 0.3- 1.5- 911005 801 0.1- 0.1+
881203 400 (2.1+ 4.0+) 910806 675 (0.6- 4.1-) 911007 801 0.2- 0.1-
881203 400 0.6+ 2.0- 910811 801 0.0 0.0 911008 801 0.5- 0.1+
881203 400 1.6+ 0.0 910811 801 0.1- 0.0
881210 400 1.3- 0.1- 910812 801 0.0 0.2-

1989 AG = 1979 XN1
Id. T. Kobayashi (MPC 14205)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 317.11672 (2000.0) P Q
n 0.22628521 Peri. 37.78251 -0.66598394 -0.71251623
a 2.6670548 Node 95.15330 +0.61891496 -0.69306791
e 0.1385931 Incl. 12.81313 +0.41642487 -0.10944175
P 4.36 H 12.7 G 0.15
Residuals in seconds of arc
791214 095 (1.2+ 10.2-) 890103 877 1.6+ 1.3+ 890104 877 0.5+ 0.9+
791218 095 0.3- 0.8+ 890104 400 0.1- 1.5- 890106 400 2.3+ 0.5+
890102 877 1.0- 1.1+ Y 890104 400 0.5+ 1.1- 890106 400 1.2+ 2.3-
890102 877 0.1+ 0.8+ Y 890104 400 0.7+ 0.4- 890106 400 0.7+ 1.0-
890103 877 2.0+ 2.0+ 890104 877 2.0- 0.9- 890112 372 1.0- 0.4-

890112 372 0.9- 0.0 890201 033 0.9- 0.2+ 890202 033 0.7- 0.6+
890115 372 0.8+ 0.7- 890201 033 0.8- 0.4+ 921121 376 0.9+ 0.2+
890115 372 2.0- 0.6- 890202 033 1.0- 0.6+ 921122 376 0.7- 0.6-

1989 AN1 = 1976 GD6 = 1980 BW5
Id. T. Kobayashi (MPC 14358)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 294.35922 (2000.0) P Q
n 0.21677304 Peri. 92.81354 -0.75494697 -0.65524773
a 2.7445167 Node 46.24984 +0.58611902 -0.69235894
e 0.0929553 Incl. 2.10722 +0.29414209 -0.30214154
P 4.55 H 12.5 G 0.15
Residuals in seconds of arc
760402 095 4.3+ 3.1+ 890106 399 0.5- 1.4+ 910810 675 1.3- 1.2-
800123 095 2.8- 0.1+ 890106 399 1.1+ 0.1+ 910810 675 0.5- 1.5-
881231 400 0.4- 1.7+ 890106 399 0.9+ 0.4- 921028 399 0.5+ 2.5+
881231 400 0.4- 1.4- 890113 399 2.1- 3.1- 921028 399 0.1- 0.4+
881231 400 1.5+ 0.5- 890113 399 0.5- 2.7- 921102 399 0.3+ 1.4+
890106 399 1.1+ 0.7+ 890113 399 2.3- 0.2+ 921102 399 1.0+ 2.5+

1989 TU5
Id. C. S. Shoemaker (1990 obs.)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 223.02706 (2000.0) P Q
n 0.08382035 Peri. 138.91297 -0.39616646 +0.91762354
a 5.1709428 Node 107.72634 -0.85093177 -0.35386824
e 0.0971140 Incl. 1.92067 -0.34491630 -0.18095387
P 11.76 H 10.5 G 0.15
Residuals in seconds of arc
891002 807 0.2- 0.2+ 900128 688 0.1+ 0.5- 901111 675 0.5+ 0.7-
891006 807 0.1+ 0.1+ 900128 688 0.3+ 0.4- 901114 675 0.6- 0.3-
891028 807 0.2- 0.3+ 901111 675 0.0 1.3+

1989 WO7 = 1962 WQ1 = 1974 HZ2 = 1984 HC1 = 1991 JA4 = 1992 SL16
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 229.57307 (2000.0) P Q
n 0.29148675 Peri. 84.67113 -0.99578840 -0.04128123
a 2.2528045 Node 92.94506 +0.00585428 -0.91970153
e 0.0900994 Incl. 4.70180 +0.09149420 -0.39044199
P 3.38 H 13.4 G 0.15
Residuals in seconds of arc
621130 760 0.2- 0.7- 891129 399 2.5- 0.5+ 910517 809 0.1- 0.2+
621130 760 1.5+ 1.8- 891129 399 0.3+ 0.9+ 910517 809 0.1- 0.2-
740425 805 0.0 1.8+ 891129 399 1.6- 0.6+ 920928 399 0.2+ 0.9-
840419 046 0.2+ 0.2+ 891201 399 0.9+ 0.0 920928 399 0.1+ 1.4-
840419 046 0.9- 0.4+ 891201 399 0.5+ 0.3- 921022 399 0.3+ 1.2-
840427 046 0.6+ 0.8- 891201 399 0.2- 0.4- 921022 399 0.3- 0.9-
840427 046 1.6- 1.6- 910512 809 0.1+ 1.1- 921028 399 0.3+ 0.7+
891125 399 1.4+ 1.5- 910512 809 0.4+ 1.9- 921028 399 0.4- 1.5+
891125 399 2.9+ 1.6- 910512 809 0.1- 2.4-
891125 399 1.2- 0.2+ 910517 809 0.1- 0.0

1989 YG = 1992 PU5
Id. G. V. Williams, E. Bowell

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	339.56151		(2000.0)		P		Q				
n	0.27228975	Peri.	35.40707		+0.68177060		-0.73130724				
a	2.3574828	Node	11.65338		+0.64704271		+0.59037695				
e	0.1564946	Incl.	5.52770		+0.34135698		+0.34153299				
P	3.62	H	13.5	G	0.15						

Residuals in seconds of arc

891219	403	1.2-	0.1+	891231	403	1.7+	0.0	920803	675	0.7-	0.5+
891219	403	0.2-	0.9+	891231	403	0.9+	1.1+	920806	675	0.9+	0.4-
891227	403	(3.7-	1.2-)Y	900104	403	1.8-	0.9-	920806	675	0.8+	0.4-
891227	403	0.7+	1.2-	920803	675	1.0-	0.4+				

1990 EO4 = 1988 YK = 1992 WL1

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	56.62998		(2000.0)		P		Q				
n	0.24256754	Peri.	181.87330		+0.99746674		-0.07104427				
a	2.5463275	Node	182.21023		+0.06641231		+0.94810420				
e	0.1536004	Incl.	5.32682		+0.02548553		+0.30992118				
P	4.06	H	13.6	G	0.15						

Residuals in seconds of arc

881217	372	0.5-	0.8-	900304	809	0.4+	1.2+	900417	809	0.3+	1.1+
881217	372	0.8+	1.4-	900304	809	0.4+	1.0-	900417	809	1.3-	1.9+
900302	809	0.4+	0.1-	900415	809	0.1+	1.0-	921117	400	0.4+	0.9+
900302	809	0.3+	0.2-	900416	809	0.6-	0.5-	921117	400	0.1+	2.0+
900302	809	0.6+	0.6-	900416	809	0.4-	0.8-	921118	400	1.3-	0.2-
900304	809	0.3-	1.0+	900416	809	0.3+	0.2-	921118	400	0.4+	0.5-

1990 QJ = 1952 CD = 1970 AV = 1985 OT

Id. S. Nakano (MPC 17212; unpublished)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bardwell

M	337.43877		(2000.0)		P		Q				
n	0.21668803	Peri.	238.89470		-0.91991161		+0.00625468				
a	2.7452344	Node	298.72416		+0.23022671		-0.80077853				
e	0.2767975	Incl.	26.55737		-0.31742447		-0.59892789				
P	4.55	H	11.0	G	0.15						

Residuals in seconds of arc

520201	711	1.2+	1.3+ Y	900924	675	0.4+	0.3+	910910	801	0.0	0.3+
700105	095	(27.8+	3.5+)	900924	675	0.3+	0.4+	910910	801	0.1-	0.0
850719	033	0.4-	1.3+	901015	801	0.3-	0.1+	910913	801	0.2+	0.0
850721	033	0.3-	0.3-	901015	801	0.2-	0.2+	910913	801	0.1-	1.8+
900818	675	1.1-	0.9-	901016	801	0.2-	0.2+	911008	801	0.2+	0.7+
900818	675	0.3-	0.7-	901016	801	0.2-	0.1+	911008	801	0.3+	0.4+
900821	675	0.3-	0.1+	901017	801	0.1-	0.5+	911009	801	0.7+	0.6+
900821	675	0.6+	0.2+	901018	801	0.0	0.2+	911009	801	0.5+	0.7+
900922	675	0.1-	0.2-	901020	801	0.6+	0.6-	911208	675	1.2-	2.4-
900922	675	0.1-	1.2+	901021	801	0.6+	0.6-	911208	675	0.0	1.9-

1991 GG5 = 1969 TG5 = 1979 VZ2 = 1982 SH7 = 1992 UG1

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Ichikawa

M	50.88557		(2000.0)		P		Q				
n	0.30079473	Peri.	137.08268		+0.99658947		+0.08160113				
a	2.2060866	Node	218.24184		-0.08006076		+0.92010212				
e	0.1975461	Incl.	1.13630		-0.01999235		+0.38308398				
P	3.28	H	14.7	G	0.15						

Residuals in seconds of arc

691014	095	1.3+	3.9+	820917	095	0.8-	1.2-	910410	809	0.1+	0.3+
691015	095	(7.0-	0.0)	910408	809	0.9+	0.1-	910410	809	1.3+	1.0-
691017	095	1.6-	0.4+	910408	809	0.5+	0.2-	910410	809	2.2+	1.4-
791114	095	1.9-	0.7+	910408	809	0.2-	1.2-	910410	809	1.5+	1.5+

910410	809	0.1-	1.3+	910419	809	1.1-	0.3-	921024	894	1.4-	0.2+
910410	809	1.7+	0.1+	910419	809	0.3-	1.2-	921024	894	1.3-	1.3-
910419	809	2.4-	1.2+	921019	400	1.7+	0.3-	921025	894	0.7+	0.3-
910419	809	2.5-	2.0+	921019	400	1.8+	0.7+	921025	894	0.5+	1.4-
910419	809	1.0-	0.1-	921022	400	0.3-	0.5-	921026	400	1.6+	0.8-
910419	809	0.2-	1.4-	921022	400	1.2-	0.6-	921026	400	0.5+	0.2+

1991 NU = 1992 US6

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5				Nakano	
M 123.67690		(2000.0)		P	Q
n 0.23601993	Peri.	62.98735	+0.35504382	+0.91588933	
a 2.5932055	Node	229.10195	-0.92126830	+0.30875760	
e 0.1244260	Incl.	14.34885	-0.15877217	+0.25654529	
P 4.18	H	12.3	G 0.15		

Residuals in seconds of arc

910708	675	0.5-	0.3-	910815	675	0.3-	0.0	921027	408	0.4+	0.7+
910708	675	0.2-	0.1+	910815	675	0.1-	0.7+	921027	408	0.0	1.4-
910710	675	0.3+	0.0	910816	675	0.4+	0.4-	921102	408	0.1+	0.4-
910710	675	0.6+	0.2+	910816	675	0.1-	0.2-	921102	408	0.5-	1.0+

1991 NV3 = 1991 NV7 = 1982 SL11 = 1989 AU5 = 1992 WW2

Id. S. Nakano (d, MPC 19983; unpublished)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5				Nakano	
M 64.38955		(2000.0)		P	Q
n 0.20559392	Peri.	268.04604	+0.99290790	+0.10490199	
a 2.8431245	Node	85.92935	-0.07389670	+0.91317887	
e 0.0851209	Incl.	3.21502	-0.09312994	+0.39382727	
P 4.79	H	12.4	G 0.15		

Residuals in seconds of arc

820927	095	0.5-	1.2+	910706	809	1.1+	2.0+	910716	809	1.1-	0.3-
890104	413	0.6-	0.6-	910708	809	0.6+	0.6-	910716	809	0.8-	0.2-
890104	413	0.7+	0.3+	910708	809	0.7+	0.2-	921031	885	0.3+	0.0
890110	413	0.8-	0.3-	910715	809	0.3-	1.9-	921031	885	0.3-	1.4-
890110	413	0.5+	0.5-	910715	809	0.1+	2.1-	921116	400	1.0-	0.3+
910706	809	0.8+	1.8+	910715	809	0.3+	1.8-	921117	400	0.4-	0.0
910706	809	0.9+	1.7+	910716	809	1.7-	0.4-	921117	400	1.8+	0.3-

1991 NZ6 = 1992 VG

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5				Nakano	
M 21.14632		(2000.0)		P	Q
n 0.20049987	Peri.	283.61974	+0.74410107	-0.66464773	
a 2.8910792	Node	118.08229	+0.63871006	+0.67813690	
e 0.1566218	Incl.	4.38818	+0.19586490	+0.31364590	
P 4.92	H	12.6	G 0.15		

Residuals in seconds of arc

910712	809	2.5-	0.8-	910713	809	1.9+	0.1-	910716	809	0.4+	0.2+
910712	809	2.2-	0.7-	910713	809	2.2+	0.4-	921102	408	1.4-	1.2-
910712	809	2.0-	0.8-	910715	809	0.6-	0.5+	921102	408	2.1+	0.2+
910712	809	0.3+	0.1-	910715	809	0.3-	0.7+	921116	400	1.1+	0.1-
910712	809	0.5+	0.0	910715	809	0.1-	0.6+	921116	400	0.6+	0.0
910712	809	0.8+	0.1+	910716	809	0.1+	0.4+	921117	400	1.1-	0.5+
910713	809	1.5+	0.1+	910716	809	0.1+	0.3+	921117	400	1.4-	0.6+

1991 OH1 = 1972 TW10 = 1992 UR6
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	66.86166		(2000.0)		P		Q				
n	0.20026418	Peri.	244.01091		+0.98494143		+0.16431869				
a	2.8933471	Node	106.49304		-0.13168846		+0.91450242				
e	0.0782357	Incl.	3.21386		-0.11202021		+0.36970894				
P	4.92	H	13.2	G	0.15						

Residuals in seconds of arc

721009	033	0.7-	0.8+	910718	809	0.2-	0.8+	921027	408	1.4+	0.9+
721009	033	0.4+	1.0+	910719	809	0.1-	0.5+	921027	408	1.0-	1.6-
721009	033	0.2-	0.4+	910719	809	0.2+	0.3+	921102	408	0.6-	0.3-
721009	033	0.8-	0.8+	910805	809	0.7+	1.5-	921102	408	1.0+	2.0-
910718	809	0.3-	0.6+	910805	809	0.1+	1.8-				
910718	809	0.3-	0.5+	910805	809	0.0	1.1-				

1991 OL1 = 1986 TK13 = 1992 WJ4
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	52.67788		(2000.0)		P		Q				
n	0.17184971	Peri.	247.52656		+0.99882307		-0.01942356				
a	3.2040812	Node	113.56279		+0.03486595		+0.92452374				
e	0.1964687	Incl.	2.77912		-0.03371706		+0.38062919				
P	5.74	H	12.7	G	0.15						

Residuals in seconds of arc

861005	095	0.1+	0.3-	910719	809	0.8+	0.6+	921121	399	2.5-	0.4+
910718	809	0.5+	0.5+	910805	809	0.5-	0.6-	921127	399	0.2+	0.1+
910718	809	0.3+	0.6+	910805	809	1.0-	0.8-	921127	399	1.2+	0.1+
910718	809	0.6+	0.9+	910805	809	1.2-	1.3-				
910719	809	0.5+	0.5+	921121	399	0.9+	0.0				

1991 PE5 = 1980 GB1
Id. G. V. Williams (MPC 18829)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	262.80847		(2000.0)		P		Q				
n	0.20202073	Peri.	273.73108		-0.93456865		-0.35525787				
a	2.8765511	Node	245.46049		+0.33427528		-0.85818202				
e	0.0063554	Incl.	1.21701		+0.12182563		-0.37056102				
P	4.88	H	12.7	G	0.15						

Residuals in seconds of arc

800414	805	1.8+	1.0+	910805	809	0.5+	0.6-	910906	809	1.3+	0.7+
800415	805	1.0-	0.4+	910805	675	0.4+	0.9-	910906	809	0.8-	1.1+
800416	805	0.6+	2.3+	910807	675	0.9+	2.0-	910906	809	0.7-	2.2+
910803	809	1.3+	0.0	910807	675	0.3+	2.2-	910907	809	3.1-	0.2+
910803	809	0.9+	0.3+	910904	809	0.1-	1.5+	910907	809	2.1-	0.8+
910803	809	1.1+	0.2+	910904	809	0.1-	0.9+	921028	399	1.1-	2.0+
910804	809	0.8+	0.4-	910904	809	0.8+	0.7+	921028	399	1.6-	1.4+
910805	809	1.5+	0.9-	910905	809	0.4-	0.9+	921102	399	0.4+	1.7-
910805	809	0.9+	0.9-	910905	809	1.6-	1.3+	921102	399	1.7+	0.6+
910805	675	0.4-	1.6-	910905	809	2.1-	1.0+				

1991 PB13 = 1980 TG9 = 1982 BO14 = 1986 WX3
Id. S. J. Bus (MPC 20151), S. Nakano
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	14.96720		(2000.0)		P		Q				
n	0.17126639	Peri.	320.68857		+0.47326057		-0.87999364				
a	3.2113523	Node	101.03092		+0.81825935		+0.42212671				
e	0.1393306	Incl.	2.36150		+0.32630671		+0.21776189				
P	5.75	H	11.8	G	0.15						

Residuals in seconds of arc

801013	095	0.0	3.6-	861125	010	1.8+	1.0+	910912	675	0.4+	0.2+
820130	675	0.1-	0.1-	910805	675	1.0+	0.7-	910912	675	0.3-	0.5+
820131	675	0.3+	0.2+	910808	675	0.5+	0.4-	921124	894	0.4+	0.7-
861125	010	(5.5-	2.0+)	910808	675	0.4-	0.2-	921124	894	0.4-	0.9+
861125	010	1.0-	1.8+	910907	399	0.1+	1.1+	921129	894	0.3-	1.0-
861125	010	0.7+	0.8+	910907	399	1.7-	1.2+	921129	894	1.0-	0.1-

1991 SK = 1980 TU12 = 1986 UF4 = 1992 WW3

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	89.13880	(2000.0)	P	Q
n	0.17019629	Peri.	329.31424	+0.94440349	+0.32780394
a	3.2247990	Node	11.63415	-0.27022640	+0.81792331
e	0.0839067	Incl.	7.24408	-0.18729586	+0.47280656
P	5.79	H	11.8	G	0.15

Residuals in seconds of arc

801010	095	1.1-	1.4+	910915	675	0.7+	0.3-	910929	413	0.7+	0.0
861031	675	1.0+	1.5-	910915	675	0.6+	0.2-	910930	413	0.1-	0.6-
861031	675	1.2+	2.3-	910916	675	0.2-	0.7-	921124	896	1.6-	0.6-
861105	675	(24.9-	0.1+)	910916	675	0.8-	0.7-	921124	896	1.1-	1.8+
861105	675	(24.9-	0.1-)	910917	675	0.2+	1.5+	921126	896	0.5+	0.1+ Y
910911	675	0.6-	2.0+	910917	675	0.5+	0.6-	921126	896	1.3+	1.3+ Y
910911	675	0.9-	0.6+	910917	675	0.1-	0.8-				

1992 BB5

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	118.40451	(2000.0)	P	Q
n	0.17204480	Peri.	316.34623	+0.52325831	-0.84410190
a	3.2016585	Node	101.77638	+0.81100246	+0.45109523
e	0.1961137	Incl.	6.86509	+0.26167872	+0.28983629
P	5.73	H	12.0	G	0.15

From 11 observations 1991 Oct. 20-1992 Feb. 22, mean residual 1".34.

1992 HE

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	60.47331	(2000.0)	P	Q
n	0.29382095	Peri.	262.59547	+0.24720985	+0.92805357
a	2.2408573	Node	27.32019	-0.45725762	+0.36520680
e	0.5717805	Incl.	37.37045	-0.85428494	+0.07307912
P	3.35	H	14.0	G	0.15

From 87 observations 1992 Apr. 25-Nov. 29, mean residual 0".69.

1992 LR

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	68.25018	(2000.0)	P	Q
n	0.39777388	Peri.	67.73882	+0.51428066	+0.85715542
a	1.8310992	Node	233.24145	-0.79927788	+0.46707710
e	0.4090880	Incl.	2.02317	-0.31091844	+0.21707963
P	2.48	H	18.0	G	0.15

From 139 observations 1992 May 21-Oct. 13, mean residual 0".66.

1992 OE

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	34.09693	(2000.0)	P	Q
n	0.21702296	Peri.	7.03845	+0.91802024	+0.32709427
a	2.7424092	Node	330.57757	-0.38241881	+0.58082264
e	0.2043386	Incl.	27.14940	-0.10485554	+0.74542230
P	4.54	H	13.5	G	0.15

From 26 observations 1992 July 27-Nov. 27, mean residual 0".46.

1992 OK
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 18.95542 (2000.0) P Q
n 0.21549426 Peri. 103.39613 +0.98230724 +0.14341440
a 2.7553635 Node 248.46341 -0.17725903 +0.91951278
e 0.3545965 Incl. 7.43928 +0.06042953 +0.36596250
P 4.57 H 14.5 G 0.15
From 35 observations 1992 July 29-Nov. 27, mean residual 0".67.

1992 ON
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 94.42568 (2000.0) P Q
n 0.36623625 Peri. 288.52073 +0.03646102 +0.99010843
a 1.9347662 Node 341.88074 -0.67056005 -0.07628195
e 0.2031293 Incl. 25.82637 -0.74095871 +0.11775554
P 2.69 H 16.5 G 0.15
From 21 observations 1992 July 28-Oct. 12, mean residual 0".56.

1992 PT2 = 1954 US2 = 1982 VV11 = 1991 GU5
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 1.84731 (2000.0) P Q
n 0.28300223 Peri. 144.12130 +0.91685215 -0.39484490
a 2.2976091 Node 239.23747 +0.34841534 +0.86351371
e 0.1434109 Incl. 3.93631 +0.19490738 +0.31375401
P 3.48 H 14.0 G 0.15
Residuals in seconds of arc

541028 760	2.5-	0.4-	910410 809	1.2-	0.4+	920806 675	0.4+	0.2+
541028 760	3.1+	2.1-	910410 809	1.2-	0.6-	920806 675	0.9+	0.2+
821113 095	0.1+	0.5+	920802 675	0.1+	0.1+	920807 675	1.4+	0.5+
910408 809	1.1+	0.7-	920805 675	0.7-	0.1+	920807 675	0.4+	0.9+
910408 809	0.8+	0.9-	920805 675	1.6-	1.4-	920825 046	1.0-	1.8+
910408 809	0.5-	1.2-	920806 675	1.0+	1.0-	920825 046	0.4-	1.3-
910410 809	0.1+	0.2+	920806 675	0.2-	0.5-			

1992 QM
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 49.46161 (2000.0) P Q
n 0.20296289 Peri. 333.65623 +0.44904365 +0.89207181
a 2.8676421 Node 322.96537 -0.80421271 +0.37880295
e 0.2881816 Incl. 4.82610 -0.38936065 +0.24640660
P 4.86 H 12.5 G 0.15
From 15 observations 1992 Aug. 25-Nov. 21, mean residual 0".77.

1992 RT = 1982 QN = 1987 SL22
Id. B. G. Marsden (MPC 21114), K. Ichikawa (ibid.)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 4.17176 (2000.0) P Q
n 0.20150474 Peri. 256.50618 +0.91814952 -0.39409829
a 2.8814597 Node 126.68825 +0.38047007 +0.84791283
e 0.0745468 Incl. 2.93683 +0.11065254 +0.35458478
P 4.89 H 13.0 G 0.15
Residuals in seconds of arc

820816 801	0.2-	0.7+	920907 033	0.9-	0.0	920926 033	0.1+	0.1-
820817 801	0.2-	0.4+	920921 033	0.2+	0.4-	920927 033	1.1+	0.3+
870920 095	0.3+	0.6-	920922 033	0.1-	0.7-	920927 033	0.1+	0.8+
920902 033	0.8-	0.2-	920923 033	0.6-	0.5-	920928 033	0.3-	0.2-
920904 033	1.1-	0.3-	920924 033	0.5+	0.5-	920928 033	0.4-	0.8+
920904 033	1.7+	1.0-	920926 033	0.8+	0.4+	921031 033	1.0-	0.4+
920906 033	0.2+	0.3-	920926 033	0.6+	0.1-	921031 033	0.1+	1.3+

1992 RZ = 1978 WF5
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 308.73755 (2000.0) P Q
n 0.20151624 Peri. 158.62597 +0.18697746 -0.98222905
a 2.8813500 Node 280.59472 +0.89888118 +0.17775592
e 0.0327000 Incl. 0.94988 +0.39629793 +0.06024064
P 4.89 H 13.0 G 0.15
Residuals in seconds of arc

781129	675	0.4-	0.1+	920907	033	0.2+	0.0	920926	033	0.3+	0.2-
781130	675	0.4+	0.1-	920907	033	0.3+	0.2+	920927	033	0.1+	0.3-
920904	033	0.4+	0.5+	920924	033	0.1+	0.5+	920928	033	0.3-	0.5-
920906	033	1.0-	0.7-	920924	033	0.2-	0.4+				

1992 SH = 1987 MB1
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Ichikawa
M 76.32295 (2000.0) P Q
n 0.22277043 Peri. 106.97248 +0.43139918 +0.90157515
a 2.6950346 Node 188.79645 -0.88730162 +0.41750422
e 0.1773971 Incl. 12.27463 -0.16306620 +0.11336871
P 4.42 H 12.8 G 0.15
Residuals in seconds of arc

870628	675	0.3+	0.9+	920923	400	0.9+	0.3-	920930	400	0.8+	0.2+
870630	675	0.3-	0.9-	920923	400	1.5-	0.1-	920930	400	1.6+	1.1-
920921	400	1.4+	1.1+	920928	400	0.1-	0.1+	921001	400	0.7-	1.9+
920921	400	0.3-	0.7-	920928	400	1.6-	0.6+	921001	400	0.5-	1.8-

1992 SL
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 60.81379 (2000.0) P Q
n 0.46870579 Peri. 344.47918 +0.96853513 +0.24885962
a 1.6413549 Node 1.12336 -0.20944689 +0.82139624
e 0.3343121 Incl. 8.60237 -0.13443106 +0.51320280
P 2.10 H 17.5 G 0.15
From 51 observations 1992 Sept. 24-Nov. 29, mean residual 0".82.

1992 SP = 1931 FN = 1954 EO = 1974 FV = 1979 WT2 = 1982 TD = 1984 HO2 = 1989 YU9
Id. S. Nakano, K. Ichikawa
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 253.47855 (2000.0) P Q
n 0.29765433 Peri. 205.91048 -0.97504651 -0.21567964
a 2.2215763 Node 321.51656 +0.21553461 -0.86292665
e 0.1449487 Incl. 4.84867 +0.05318961 -0.45699003
P 3.31 H 12.4 G 0.15
Residuals in seconds of arc

310321	690	(7.0+	13.9-)X	840427	095	0.4+	0.6-	920926	402	0.3-	0.0
310323	690	(60.7+	39.8-)X	891221	071	1.8-	0.5+	920927	402	2.5+	1.0-
540307	760	1.3-	1.9-	891221	071	0.7-	1.3+	920927	402	0.5+	0.3-
540307	760	1.2+	0.4-	891222	071	0.5-	0.2+	921002	402	0.8+	0.5+
740320	095	1.3-	0.1-	891222	071	0.2+	0.5-	921002	402	0.9+	1.0+
791116	095	2.1+	0.3-	891223	071	1.1-	0.2+	921021	402	(3.6+	0.4+)
821011	688	1.6-	2.9-	891223	071	0.5+	0.7+	921021	402	0.0	0.8+
821011	688	1.4-	2.2-	920926	402	1.1+	0.2+				

1992 ST
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 11.51213 (2000.0) P Q
n 0.24153347 Peri. 15.24733 +0.69042410 -0.71959784
a 2.5535900 Node 31.19989 +0.64784510 +0.56946571
e 0.3944757 Incl. 8.22601 +0.32188707 +0.39735091
P 4.08 H 14.0 G 0.15
From 12 observations 1992 Sept. 23-Nov. 29, mean residual 0".55.

1992 SY = 1980 FC12
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 341.39336 (2000.0) P Q
n 0.30013779 Peri. 115.02410 -0.51926478 -0.85447486
a 2.2093046 Node 6.32449 +0.72509453 -0.45002768
e 0.5501821 Incl. 8.02997 +0.45232954 -0.25951455
P 3.28 H 18.0 G 0.15
Residuals in seconds of arc

800319	805	0.8-	0.9-	920928	691	0.4-	0.1-	921004 691 0.3+ 0.5+
800320	805	0.9+	1.2+	920928	691	0.1-	0.3-	921004 691 0.3- 0.5+
920927	691	0.2-	0.2-	920929	691	0.0	0.0	921018 691 1.3- 0.6+
920927	691	0.0	0.6-	920929	691	0.3-	0.1-	921018 691 1.1- 0.4-
920927	691	1.3+	0.0	920929	691	0.6-	0.3-	921018 691 0.3- 0.4-
920928	691	0.4+	0.0	921002	691	1.0+	1.6+	921116 691 0.9+ 0.2+
920928	691	0.9+	0.2-	921002	691	0.0	0.0	921116 691 0.1- 0.3-
920928	691	0.3-	0.5-	921002	691	0.1+	0.0	921116 691 0.5+ 0.0
920928	691	0.4-	0.2-	921004	691	0.0	1.0+	

1992 SZ
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 47.34767 (2000.0) P Q
n 0.30685907 Peri. 314.67113 +0.75522143 +0.65535106
a 2.1769247 Node 4.43656 -0.54649253 +0.64005307
e 0.4598675 Incl. 9.27945 -0.36192059 +0.40105742
P 3.21 H 20.0 G 0.15
From 24 observations 1992 Sept. 28-Nov. 29, mean residual 0".53.

1992 SD1 = 1976 UA5 = 1980 UQ
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Ichikawa
M 51.54910 (2000.0) P Q
n 0.24342733 Peri. 294.71398 +0.94619306 +0.29791732
a 2.5403282 Node 48.22381 -0.19995070 +0.84522991
e 0.0973395 Incl. 9.75434 -0.25443743 +0.44365716
P 4.05 H 13.1 G 0.15
Residuals in seconds of arc

761030	095	1.5+	1.6-	920928	400	0.4-	0.3-	921026 400 1.3- 0.7+
801017	095	1.7-	1.5+	920928	400	1.4+	2.1-	921026 400 0.6- 1.4-
920923	400	0.7+	1.3+	921019	400	0.3+	0.4+	
920923	400	0.5+	0.6-	921019	400	0.4-	2.0+	

1992 SF1 = 1992 SK16 = 1937 WF = 1976 YT6 = 1979 SM4 = 1989 WV1
Id. K. Ichikawa, S. Nakano (d); 1989 WV1 = 1978 WZ (MPC 15725) is invalid
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Ichikawa
M 14.99510 (2000.0) P Q
n 0.30363984 Peri. 329.67280 +0.85836356 -0.50948535
a 2.1922843 Node 61.07637 +0.48346180 +0.76393057
e 0.1550538 Incl. 3.95075 +0.17168774 +0.39602369
P 3.25 H 13.9 G 0.15

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

371125 020	1.4-	2.6+	891201 400	1.1+	2.7-	920927 046	1.7-	0.7-
371125 020	0.3+	1.8+	891206 400	(3.2-	0.0)	920928 400	1.4-	0.3-
371129 020	(31.2-	2.4+)	891206 400	(3.0-	0.4-)	920928 400	0.2+	0.2+
371129 020	(0.02+	0.10+)	920923 400	2.8+	0.7+	921001 400	0.6-	1.4-
761220 095	2.2-	1.2-	920923 400	1.9+	1.3+	921001 400	0.3+	0.8-
790924 095	0.9+	0.1-	920925 046	0.3-	2.0-	921020 400	0.4-	1.2+
891129 400	0.4-	0.3+	920925 046	0.2+	0.3+	921020 400	1.9+	1.3-
891129 400	0.4+	0.7-	920926 046	2.1-	2.0+			
891201 400	1.5+	0.3+	920926 046	1.3-	0.1+			

1992 SR1 = 1985 SE2 = 1989 YN3

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M 347.00869		(2000.0)	P	Q	
n 0.28522551	Peri.	146.99118	+0.21906354	-0.97079222	
a 2.2856539	Node	290.19113	+0.87108827	+0.23976531	
e 0.1412833	Incl.	5.98405	+0.43956386	+0.00866411	
P 3.46	H	14.0	G 0.15		

Residuals in seconds of arc

850919 095	1.4+	1.6-	900123 399	0.0	1.1-	921021 402	2.1+	2.5+
850921 095	1.0-	0.8+	900123 399	0.9-	0.2-	921021 402	1.3-	0.6-
891230 413	0.6-	0.8-	920926 402	0.7-	1.0-	921022 399	0.3+	0.8-
891230 413	0.6+	0.8+	920926 402	0.1+	1.3-	921022 399	0.2+	0.3-
891231 413	0.7+	0.2-	920927 402	0.2+	2.1+			
891231 413	0.2+	1.2+	920927 402	1.2-	0.2-			

1992 SX12 = 1952 VF = 1982 SC7 = 1988 PE3

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M 36.69453		(2000.0)	P	Q	
n 0.29535460	Peri.	198.65936	+0.99705054	-0.07522163	
a 2.2330934	Node	165.62913	+0.07588114	+0.93645120	
e 0.1539530	Incl.	3.51787	+0.01150131	+0.34263808	
P 3.34	H	13.5	G 0.15		

Residuals in seconds of arc

521114 760	0.8+	0.7-	920927 374	0.2-	1.8+	921002 374	0.1+	0.9+
521114 760	0.1+	1.7-	920927 374	0.3-	0.9+	921002 374	0.9-	1.2-
820916 095	0.6+	2.1+	920928 400	1.8+	1.7-	921028 399	0.1-	0.2-
820928 095	1.1-	1.7-	920928 400	0.6+	0.7+	921028 399	1.9-	1.4-
880804 413	0.1+	1.6-	920930 400	0.0	0.1-			
880804 413	0.6-	0.6-	920930 400	0.7+	1.3+			

1992 SX17 = 1948 TD2 = 1953 SO = 1983 HB2 = 1990 EG

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M 353.63403		(2000.0)	P	Q	
n 0.17809146	Peri.	58.81951	+0.66812357	-0.74108955	
a 3.1287725	Node	348.50544	+0.51746171	+0.52684759	
e 0.1314308	Incl.	19.43654	+0.53464407	+0.41619453	
P 5.53	H	11.5	G 0.15		

Residuals in seconds of arc

481012 094	(18.0+	28.8+)X	900304 413	0.2+	0.1+	921020 675	1.2-	0.4-
530917 675	0.3+	0.0	900307 413	0.3-	0.8-	921020 675	0.7-	0.5-
530917 675	0.3-	0.1-	900307 413	0.3-	0.0	921025 675	0.5+	0.5-
830416 033	0.4-	0.2+	920930 675	0.7+	0.3+	921025 675	0.2+	0.1-
830416 033	0.2+	0.6-	920930 675	1.1+	0.7+			

1992 TC
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 53.64207 (2000.0) P Q
n 0.50214613 Peri. 275.34217 +0.98979645 -0.07097172
a 1.5676507 Node 88.76862 +0.11486590 +0.91053072
e 0.2932567 Incl. 7.09900 -0.08431379 +0.40730435
P 1.96 H 17.5 G 0.15
From 38 observations 1992 Oct. 1-Nov. 22, mean residual 0".57.

1992 TH1 = 1949 CD = 1953 AM = 1955 OD = 1959 NO = 1982 DP4
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 20.45572 (2000.0) P Q
n 0.24261527 Peri. 240.28922 +0.89234157 -0.42365084
a 2.5459935 Node 144.11755 +0.44769699 +0.87462700
e 0.1540357 Incl. 15.40648 -0.05739271 +0.23568533
P 4.06 H 11.5 G 0.15
Residuals in seconds of arc
490201 012 0.7+ 1.4+ 590712 760(52.6- 72.4-)X 921004 675 0.8+ 0.6-
490203 012 1.8+ 3.0- 820220 033 0.0 1.2- 921020 675 0.3+ 0.1+
530109 675 1.4- 0.2+ 820220 033 0.6- 0.9- 921020 675 0.8+ 0.5-
530109 675 1.1- 0.0 921001 675 0.0 0.0 921025 675 0.5- 0.1-
550728 760 0.3+ 0.8- 921001 675 0.2+ 0.4+ 921025 675 0.4- 0.7+
550728 760 0.3- 1.3- 921004 675 0.5- 1.2-

1992 UB
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams
M 19.85974 (2000.0) P Q
n 0.18350077 Peri. 290.72111 +0.96138492 -0.07565027
a 3.0669789 Node 74.37144 +0.19256275 +0.87182384
e 0.5826495 Incl. 15.94795 -0.19661797 +0.48394238
P 5.37 H 16.0 G 0.15
From 15 observations 1992 Sept. 5-Nov. 29, mean residual 0".57.

1992 UP = 1976 YJ2 = 1984 GD = 1986 TD15 = 1989 AJ3 = 1991 PV13
Id. S. Nakano, A. Lowe
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 157.23493 (2000.0) P Q
n 0.17424397 Peri. 167.79900 -0.53872676 +0.84148527
a 3.1746624 Node 69.59113 -0.77658653 -0.47716421
e 0.1358427 Incl. 2.50354 -0.32662951 -0.25341046
P 5.66 H 11.6 G 0.15
Residuals in seconds of arc
761216 095 0.1- 2.6- 890110 413 2.5+ 1.3- 921022 399 1.2+ 0.8+
840405 046 1.1- 0.2- 910806 675 1.0+ 1.0- 921022 399 0.5- 0.7+
840405 046 0.1+ 0.6+ 910806 675 0.6- 0.6- 921116 399 0.0 0.1-
861006 095 1.7+ 0.2+ 910810 675 0.9+ 1.6- 921116 399 1.6- 0.3+
890104 413 1.7- 0.0 910810 675 0.5+ 0.6- 921118 399 0.6- 0.2-
890104 413 1.5+ 0.0 921019 399 1.0- 0.1- 921118 399 1.4+ 0.5+
890110 413 1.1- 1.2- 921019 399 2.2- 0.1-

1992 UQ = 1980 TB13 = 1987 KN5
Id. S. Nakano, K. Ichikawa
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 105.10256 (2000.0) P Q
n 0.24481990 Peri. 112.18131 +0.28844636 +0.95746612
a 2.5306858 Node 174.56685 -0.90530749 +0.27529084
e 0.1517716 Incl. 4.58630 -0.31179649 +0.08644987
P 4.03 H 12.9 G 0.15

Residuals in seconds of arc

801010 095	0.1+	1.0-	921019 399	0.6-	1.2-	921027 894	1.9+	1.3+
801017 095	0.3+	0.5-	921019 399	0.8+	0.8+	921030 894	0.5+	0.8-
870518 399	0.7+	2.1-	921022 399	1.2+	1.1-	921030 894	0.5-	0.5+
870518 399	0.7-	0.2+	921022 399	0.2+	2.3+	921031 894	1.7-	0.5-
870518 399	0.1-	1.7+	921027 894	1.9-	0.7-	921031 894	0.2-	0.5+

1992 UU = 1975 GQ = 1982 BA6

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Ichikawa

M 28.87578		(2000.0)		P	Q
n 0.25352938	Peri.	358.88597	+0.91740255	-0.39197763	
a 2.4723912	Node	24.54873	+0.36638937	+0.76449340	
e 0.0984306	Incl.	9.52445	+0.15534283	+0.51176496	
P 3.89	H	13.2	G	0.15	

Residuals in seconds of arc

750415 805	1.8+	3.1+	921021 894	1.4-	0.0	921027 894	0.1+	1.1+
820126 381	0.0	0.1-	921024 894	0.3+	1.0-	921027 894	1.1-	0.2+
820126 381	0.9+	0.6-	921024 894	0.8+	1.7+	921030 894	0.8-	0.7-
820128 381	1.1-	0.4+	921026 894	0.0	0.6+	921030 894	0.8+	0.2+
921021 894	0.7+	0.4-	921026 894	0.9-	1.2+			

1992 UV = 1950 QF = 1950 SN = 1979 FO = 1982 VN12 = 1982 YU2 = 1987 UP8 = 1987 WL4

Id. K. Ichikawa, S. Nakano (d)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Ichikawa

M 28.82520		(2000.0)		P	Q
n 0.18955918	Peri.	144.33560	+0.95118229	-0.28879824	
a 3.0012776	Node	232.81401	+0.24188145	+0.91661833	
e 0.1138386	Incl.	7.85271	+0.19169145	+0.27641712	
P 5.20	H	11.7	G	0.15	

Residuals in seconds of arc

500822 024	0.2+	0.5-	871023 095	4.3-	2.7+	921026 894	0.5-	0.7-
500918 760(20.6+	78.8-)X		871126 046	1.8-	0.8+	921026 565	1.5+	1.4-
790321 414	0.1+	1.0-	871126 046	0.8-	0.2+	921026 565	1.6+	0.7-
790321 414	0.9-	0.3+	921021 894	0.6+	0.9-	921027 894	0.5+	0.4-
790329 808	0.2-	0.6-	921021 894	0.0	0.1-	921027 894	0.3+	0.3+
790329 808	0.3-	0.9-	921024 894	1.0+	0.8-	921030 894	0.2-	1.4+
821113 095	1.4+	1.5-	921024 894	0.6-	0.4-	921030 894	0.4-	0.2-
821222 095	2.7+	0.7+	921026 894	0.3-	0.0			

1992 UB1 = 1974 RE1 = 1974 SG5 = 1978 WP16 = 1988 NM

Id. S. Nakano, N. S. Chernykh (d)

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M 103.90010		(2000.0)		P	Q
n 0.27614939	Peri.	45.87462	+0.38505694	+0.91673559	
a 2.3354648	Node	247.04794	-0.87631064	+0.32700753	
e 0.1332666	Incl.	6.63700	-0.28950096	+0.22948189	
P 3.57	H	12.7	G	0.15	

Residuals in seconds of arc

740912 095	0.3+	2.2+	880715 675	0.4-	0.2+	921116 399	0.8+	0.8+
740922 095	0.9-	0.3-	921019 399	0.1+	0.4-	921116 399	0.3+	0.7-
781130 675	0.3+	0.0	921019 399	0.4-	0.2-	921118 399	0.7+	0.2+
781201 675	0.4-	0.0	921022 399	0.5+	0.3-	921118 399	1.9-	1.3-
880714 675	0.7+	1.1-	921022 399	0.1+	0.1+			

1992 UH2 = 1991 LN2
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	24.46114	(2000.0)	P	Q
n	0.25850068	Peri. 167.53266	+0.85671660	-0.51140666
a	2.4405906	Node 223.43869	+0.46445306	+0.82146135
e	0.1457961	Incl. 5.59878	+0.22432126	+0.25231822
P	3.81	H 13.8	G 0.15	

Residuals in seconds of arc

910606	809	0.1+	0.2-	910608	809	0.5+	0.0	921026	400	0.1-	0.3+
910606	809	1.5-	0.7+	910608	809	1.4+	0.8-	921026	400	2.0-	1.6-
910606	809	1.1-	1.3+	921019	400	0.8+	1.0+	921115	400	1.2+	0.0
910608	809	0.5+	1.1-	921019	400	1.0+	0.3+	921115	400	0.9-	0.0

1992 UL2 = 1979 SA11 = 1979 WO5
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Ichikawa

M	31.55255	(2000.0)	P	Q
n	0.30368596	Peri. 66.23441	+0.92419453	-0.38022809
a	2.1920624	Node 316.09015	+0.32883443	+0.84005101
e	0.1747607	Incl. 2.96982	+0.19424827	+0.38696370
P	3.25	H 14.1	G 0.15	

Residuals in seconds of arc

790924	095	0.3+	0.5-	921026	403	0.9+	0.7+	921101	403	0.3+	0.8-
791117	095	0.1+	0.3-	921026	403	1.2+	1.1+	921101	403	0.3-	0.3-
921021	403	1.2-	0.2+ Y	921026	565	0.1-	0.4-				
921021	403	0.5-	1.3+ Y	921026	565	0.5-	1.0-				

1992 UO2 = 1943 UF = 1974 FQ1 = 1988 VD9 = 1988 XO3
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Urata

M	62.30706	(2000.0)	P	Q
n	0.24163792	Peri. 323.45862	+0.95566029	+0.27838414
a	2.5528541	Node 21.00420	-0.16369831	+0.77322163
e	0.1538936	Incl. 15.53489	-0.24477799	+0.56976362
P	4.08	H 11.7	G 0.15	

Residuals in seconds of arc

431030	024	0.1-	0.2+	921026	885	0.7-	0.3-	921031	885	0.9+	0.4-
740321	095	0.1+	0.1+	921026	885	0.5-	0.1-	921114	385	0.6+	0.1+
881103	054	0.5-	0.2+	921027	885	1.4-	0.3+	921114	385	0.0	0.0
881103	054	0.5+	0.2+	921027	885	0.0	0.2+				
881201	054	0.1+	0.2-	921031	885	1.2+	0.2-				

1992 UU2 = 1975 UN
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	14.24123	(2000.0)	P	Q
n	0.28925917	Peri. 324.29534	+0.78209457	-0.61416816
a	2.2643556	Node 73.93928	+0.59418989	+0.68396719
e	0.1857018	Incl. 6.30159	+0.18779366	+0.39368306
P	3.41	H 13.7	G 0.15	

Residuals in seconds of arc

751030	033	0.5+	0.3+	921019	400	0.8-	0.1-	921101	400	0.5+	1.2-
751031	033	0.5-	0.2-	921026	400	0.2+	1.2-	921101	400	0.7-	2.0+
921019	400	0.4+	1.0+	921026	400	0.4+	0.5-				

1992 UE3 = 1983 YY
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Ichikawa

M	1.01103	(2000.0)	P	Q
n	0.20452907	Peri. 323.42643	+0.62318134	-0.78021884
a	2.8529841	Node 87.96126	+0.72971597	+0.55528982
e	0.0710551	Incl. 3.09083	+0.28135318	+0.28794405
P	4.82	H 12.9	G 0.15	

Residuals in seconds of arc

831230	675	0.2-	0.8-	921026	400	2.1-	2.0-	921028 399	0.0	0.5+
840108	675	0.2+	0.8+	921026	400	0.4+	0.1-	921028 399	0.4+	0.6-
921022	399	0.1-	1.2-	921027	402	1.3+	1.3+	921028 402	1.0+	1.3+
921022	399	2.0-	0.7-	921027	402	0.2+	0.2+	921028 402	0.9+	1.3+

1992 UH3 = 1979 TE1 = 1979 XZ1
Id. S. Nakano, B. G. Marsden (d)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	4.92090	(2000.0)	P	Q	
n	0.30476876	Peri.	41.19497	+0.58507006	-0.81064000
a	2.1868672	Node	13.05448	+0.71403984	+0.50113171
e	0.1105687	Incl.	5.99109	+0.38449985	+0.30286928
P	3.23	H	13.9	G 0.15	

Residuals in seconds of arc

791014	095	0.4+	0.1+	921022	399	0.3+	2.3+	921116 399	0.2+	0.2+
791213	809	0.5-	0.0	921028	399	0.5-	0.9-	921118 399	0.9+	0.6+
791215	809	0.2+	0.7-	921028	399	0.1+	0.0	921118 399	1.8+	0.6+
921022	399	1.7-	2.4-	921116	399	1.0-	0.1+			

1992 UO3 = 1984 YT1 = 1988 VC6
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Ichikawa

M	76.71620	(2000.0)	P	Q	
n	0.23805736	Peri.	294.88147	+0.80931511	+0.57721142
a	2.5783882	Node	30.21445	-0.42996614	+0.70836724
e	0.1841912	Incl.	12.48517	-0.40017267	+0.40625463
P	4.14	H	12.7	G 0.15	

Residuals in seconds of arc

841220	095	0.1+	0.2-	921026	400	1.6+	0.3-	921028 399	1.0-	0.6+
881103	033	0.2-	0.1+	921027	372	1.0+	2.4-	921028 399	1.0-	2.1+
881104	033	0.0	0.3+	921027	372	1.6-	2.4-	921101 372	0.0	0.1+
881104	033	0.1-	0.0	921028	400	0.1-	0.5+	921101 372	0.8+	0.0
921026	400	2.0+	0.5+	921028	400	1.4-	1.1+			

1992 UR3 = 1978 WZ18 = 1980 FT5
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Ichikawa

M	49.69435	(2000.0)	P	Q	
n	0.28007807	Peri.	120.92619	+0.99446990	+0.08110175
a	2.3135736	Node	234.50283	-0.09954614	+0.93039722
e	0.2161913	Incl.	4.70103	+0.03346927	+0.35746819
P	3.52	H	13.7	G 0.15	

Residuals in seconds of arc

781130	675	0.2-	0.3+	921027	372	1.0-	0.6+	921101 372	2.7+	0.8-
781201	675	0.1+	0.0	921030	372	1.0-	0.1+			
800323	809	0.1-	0.2-	921101	372	0.6-	0.2-			

1992 UT3 = 1985 UO4
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	358.47992	(2000.0)	P	Q	
n	0.28251307	Peri.	17.37044	+0.24449854	-0.96525106
a	2.3002605	Node	58.56558	+0.87630289	+0.17922847
e	0.1355800	Incl.	6.20710	+0.41510687	+0.19017765
P	3.49	H	13.7	G 0.15	

Residuals in seconds of arc

851022	095	0.0	1.2+	921027	372	(5.9-	1.5+)	921031 894	0.8-	1.4-
851109	095	2.4-	2.1+	921027	372	(5.7-	1.9+)	921114 385	0.6+	0.1-
851111	095	1.9+	1.8-	921030	885	0.3+	0.1-	921114 385	0.8+	0.0
921027	385	1.3+	0.5+	921030	885	1.0-	1.1-	921116 399	0.9-	1.0+
921027	385	0.8+	0.4+	921031	894	0.2+	1.2-	921116 399	0.8-	0.5+

1992 UY3 = 1975 VM3 = 1981 JF4 = 1985 QK = 1991 HU3

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5				Nakano
M 65.11911		(2000.0)	P	Q
n 0.29069094	Peri.	312.86240	+0.95033477	+0.30810103
a 2.2569142	Node	29.27409	-0.25281021	+0.84668245
e 0.1857397	Incl.	5.16466	-0.18152360	+0.43382323
P 3.39	H	14.0	G 0.15	

Residuals in seconds of arc

751102	095	0.3-	1.0+	850912	688	2.6-	0.2-	921028	400	0.8-	0.1+
751107	095	1.3-	2.5+	910419	809	0.0	1.7+	921028	399	0.7-	0.5+
810508	675	0.6+	1.1+	910419	809	0.3+	1.2+	921028	399	0.0	0.3+
810509	675	(4.1+	1.5-)	910419	809	1.8+	1.8+	921116	400	0.3-	1.2-
850822	688	1.8+	1.0+	921026	400	0.8+	0.3+	921116	400	(3.8+	0.4-)
850822	688	0.8-	0.6+	921026	400	0.0	1.2+				
850912	688	1.2+	0.6-	921028	400	1.0+	0.4-				

1992 UZ3 = 1971 TR = 1976 SB1

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5				Nakano
M 34.87323		(2000.0)	P	Q
n 0.18900993	Peri.	0.07251	+0.97969489	-0.20032975
a 3.0070892	Node	11.49341	+0.18392929	+0.88189908
e 0.2199816	Incl.	2.33506	+0.07979931	+0.42675756
P 5.21	H	13.1	G 0.15	

Residuals in seconds of arc

711010	095	1.0+	2.2-	921026	400	0.9+	0.5+	921028	399	0.4-	0.4+
760924	095	0.3-	0.5+	921028	400	0.4-	0.9+	921116	400	1.7+	0.1+
760925	095	0.2-	0.5+	921028	400	0.2-	0.6-	921116	400	1.8-	0.7-
921026	400	0.5+	0.3+	921028	399	0.7-	0.7+				

1992 UT4 = 1933 UK = 1977 TA6 = 1981 UY15 = 1988 SV3

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5				Ichikawa
M 28.70979		(2000.0)	P	Q
n 0.26756486	Peri.	355.26303	+0.80273651	-0.58698160
a 2.3851553	Node	41.27771	+0.55223039	+0.66512965
e 0.0869893	Incl.	9.17565	+0.22506821	+0.46157897
P 3.68	H	12.2	G 0.15	

Residuals in seconds of arc

331020	012	(0.10+	0.05+)X	811024	095	2.7+	0.2-	921027	402	0.1+	0.8+
331021	012	(12.8+	0.8+)	811025	095	1.5-	2.3-	921028	402	1.1+	0.1+
331023	754	0.4+	0.2-	811028	095	1.5+	0.9-	921030	402	1.5-	0.7-
331023	754	1.0-	0.8+	880916	095	0.5-	1.3-	921102	402	0.4-	0.8-
331023	012	1.8-	3.2+	880916	095	1.0+	1.0-	921102	402	0.5-	0.0
771008	095	0.5+	1.8+	921027	402	0.0	0.1-				

1992 UX4 = 1987 WH1

Epoch 1993 Jan. 13.0 TT = JDT 2449000.5				Nakano
M 14.05383		(2000.0)	P	Q
n 0.20363399	Peri.	172.15754	+0.61087946	-0.75405423
a 2.8613383	Node	239.84934	+0.71040517	+0.65660127
e 0.3340051	Incl.	16.20415	+0.34950076	-0.01664289
P 4.84	H	12.9	G 0.15	

Residuals in seconds of arc

871117	675	3.6-	0.9+	921022	675	1.7-	0.1-	921117	402	0.2+	0.7+
871119	675	3.5+	0.4-	921026	675	1.2+	1.0-	921118	402	0.4+	0.5+
921021	675	0.9-	0.3+	921026	675	1.3+	0.4-	921118	402	0.3-	0.4+
921021	675	0.5-	0.0	921117	402	0.0	0.9-				

1992 UY4
Epoch 1992 Oct. 25.0 TT = JDT 2448920.5 Nakano
M 10.52700 (2000.0) P Q
n 0.22878643 Peri. 37.30326 +0.97215958 +0.23118109
a 2.6475807 Node 309.28588 -0.22512837 +0.87627448
e 0.6189333 Incl. 2.83070 -0.06498437 +0.42272725
P 4.31 H 17.2 G 0.15
From 14 observations 1992 Oct. 25-Nov. 29.

1992 UY5 = 1979 FU3 = 1986 QH5 = 1989 AC8
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 32.29154 (2000.0) P Q
n 0.18768245 Peri. 213.23273 +0.92206726 -0.38551268
a 3.0212520 Node 169.27794 +0.38294049 +0.89592538
e 0.1042930 Incl. 10.60324 +0.05611189 +0.22067554
P 5.25 H 12.3 G 0.15
Residuals in seconds of arc

790331 095	0.5-	2.6-	921028 400	0.8-	0.0	921117 400	2.0+	1.5-
860829 095	0.7+	4.1-	921028 400	0.6+	1.0+	921117 400	0.0	0.0
890111 033	0.3-	1.0-	921102 400	0.4-	0.3-			
890111 033	0.6-	2.2-	921102 400	1.0-	1.0-			

1992 UK6 = 1985 TR2 = 1989 YM6
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Marsden
M 309.17673 (2000.0) P Q
n 0.29051861 Peri. 181.09148 -0.50680141 -0.86066365
a 2.2578066 Node 299.36128 +0.79135341 -0.44188769
e 0.1062102 Incl. 3.22929 +0.34192413 -0.25296907
P 3.39 H 13.5 G 0.15
Residuals in seconds of arc

851014 010	1.0+	0.2-	921103 596	1.0+	0.2-	921112 589	0.5+	1.3+
851015 010	1.0-	0.2+	921105 589	0.4-	0.6+	921114 596	1.6-	0.3-
891231 511	2.0-	0.4+	921105 589	0.8-	0.1+	921114 596	0.9-	0.1+
891231 511	1.5-	0.1-	921105 589	0.7-	0.4+	921114 596	1.5-	0.4+
900102 511	1.4+	0.5+	921105 589	0.6-	0.1+	921114 587	0.9+	1.4-
900102 511	2.1+	0.6-	921106 589	0.2-	0.1+	921114 596	0.2-	1.2-
921026 565	(2.5-	1.0-)	921106 589	0.2+	0.1+	921114 596	(3.2-	0.0)
921026 565	0.4-	0.3-	921106 589	0.1-	0.1+	921114 587	0.1-	0.0
921031 596	(0.8-	4.3+)	921106 589	0.1+	0.4+	921114 565	0.0	1.9-
921031 596	1.3+	0.9+	921112 596	1.5+	0.6-	921114 589	0.5-	0.7+
921031 596	0.5-	0.6-	921112 596	1.0+	1.3+	921114 589	0.2+	0.2+
921031 596	0.9+	0.5-	921112 596	0.7-	0.8+	921114 565	0.3-	1.4-
921103 596	0.4+	0.1-	921112 596	(3.8+	0.1-)	921114 589	0.1+	0.2+
921103 596	0.8+	0.3+	921112 589	0.1-	0.1+	921121 587	0.9+	0.2-
921103 596	1.3-	0.2-	921112 589	0.1+	0.9+	921121 587	1.2+	0.5-

1992 UM6 = 1979 BZ2 = 1981 SY5 = 1988 QJ
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano
M 358.39080 (2000.0) P Q
n 0.27591109 Peri. 131.25792 +0.26199036 -0.96354901
a 2.3368093 Node 303.47528 +0.86488171 +0.25932557
e 0.1827434 Incl. 3.72352 +0.42818301 +0.06575368
P 3.57 H 13.8 G 0.15
Residuals in seconds of arc

790127 675	0.3-	0.1+	880820 413	3.4-	0.7-	921101 400	1.6+	1.0+
790129 675	0.3+	0.1+	921028 400	0.3+	1.5+	921116 400	1.1-	0.5+
810928 095	0.1-	0.1+	921028 400	1.2-	0.9-	921116 400	0.5+	2.2-
880819 413	3.5+	0.6+	921101 400	(5.6-	0.3+)			

1992 UP6 = 1982 VB13 = 1982 YE2 = 1987 UB9
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	37.23059	(2000.0)	P	Q
n	0.19248556	Peri. 154.34948	+0.96691793	-0.21373582
a	2.9707808	Node 218.82109	+0.17853343	+0.95689589
e	0.1643054	Incl. 12.83276	+0.18219640	+0.19663990
P	5.12	H 12.2	G 0.15	

Residuals in seconds of arc

821114	095	2.1-	1.0+	921101	364	0.8+	2.1-	921123	364	0.5-	0.6+
821221	095	1.6+	1.3-	921101	364	0.1-	1.3-	921124	364	0.1-	0.3-
871023	095	1.2+	0.8+	921121	364	(3.0-	2.5+)	921124	364	1.1+	0.2-
921031	364	1.1-	0.4-	921121	364	0.7-	1.8+				
921031	364	0.0	1.2+	921123	364	(3.4+	0.9+)				

1992 VM
Epoch 1992 Nov. 14.0 TT = JDT 2448940.5 Williams

M	0.44557	(2000.0)	P	Q
n	0.21461071	Peri. 253.85435	+0.71496392	-0.69221644
a	2.7629209	Node 149.73814	+0.69253458	+0.68184097
e	0.5085597	Incl. 11.24817	+0.09603352	+0.23649373
P	4.59	H 15.0	G 0.15	

From 7 observations 1992 Nov. 3-30.

1992 WA
Epoch 1992 Nov. 14.0 TT = JDT 2448940.5 Williams

M	120.29500	(2000.0)	P	Q
n	0.68639824	Peri. 182.97140	+0.29781031	+0.95172226
a	1.2727759	Node 104.36363	-0.87426038	+0.30320462
e	0.1373106	Incl. 4.40406	-0.38337685	+0.04787172
P	1.44	H 19.5	G 0.15	

From 15 observations 1992 Nov. 19-29.

1992 WY1 = 1990 DC4
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	340.51742	(2000.0)	P	Q
n	0.28060781	Peri. 95.55551	-0.10835742	-0.99411178
a	2.3106609	Node 0.66623	+0.88784893	-0.09707680
e	0.0857948	Incl. 3.29039	+0.44719453	-0.04814426
P	3.51	H 13.8	G 0.15	

Residuals in seconds of arc

900227	809	0.6-	0.6+	900301	809	0.5+	0.4-	921102	399	0.4-	1.0+
900227	809	0.0	0.6+	900301	809	0.8+	0.4-	921118	399	2.8+	0.5-
900227	809	0.5+	0.6+	900301	809	1.3+	0.4-	921118	399	3.2+	0.5-
900228	809	1.1-	0.2-	921028	399	0.1-	0.4+	921121	399	0.4-	0.6-
900228	809	0.8-	0.2-	921028	399	1.3-	1.4-	921121	399	3.2-	0.1+
900228	809	0.6-	0.1-	921102	399	0.6-	1.6+				

1992 WR4
Epoch 1992 Nov. 14.0 TT = JDT 2448940.5 Williams

M	353.32947	(2000.0)	P	Q
n	0.40577201	Peri. 200.13863	+0.36539867	-0.92878132
a	1.8069577	Node 228.48380	+0.86498550	+0.36341385
e	0.2984717	Incl. 4.75282	+0.34392425	+0.07277112
P	2.43	H 17.0	G 0.15	

From 4 observations 1992 Nov. 19-22.

2651 P-L = 1992 SE17
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M	30.50835		(2000.0)		P		Q				
n	0.24626513	Peri.	0.77131		+0.99845657		+0.05522699				
a	2.5207751	Node	356.04843		-0.05140040		+0.87886485				
e	0.2222083	Incl.	4.88618		-0.02103506		+0.47386344				
P	4.00	H	16.0	G	0.15						

Residuals in seconds of arc

600924	675	0.2+	0.2-	601022	675	1.3-	0.4-	920924	033	0.1+	0.5+
600925	675	1.1+	0.5-	601022	675	0.1-	0.5+	920924	033	0.5-	0.3+
600926	675	0.3+	0.7-	601025	675	0.9+	0.5+	920926	033	0.4+	0.2+
600928	675	0.3-	0.2+	601026	675	0.0	0.2-	920927	033	0.2+	0.1+
601017	675	0.7-	0.2-	601026	675	0.3+	0.0	920928	033	0.7-	0.0

3034 P-L = 1986 RR9
Id. T. Kobayashi (MPC 15423); 3034 P-L = 1984 FH2 (ibid.) is invalid
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Bardwell

M	82.23636		(2000.0)		P		Q				
n	0.18914338	Peri.	112.34933		+0.97312559		+0.18473758				
a	3.0056746	Node	237.25548		-0.21950624		+0.92460748				
e	0.1221149	Incl.	9.40693		+0.06959600		+0.33312616				
P	5.21	H	13.0	G	0.15						

Residuals in seconds of arc

600924	675	0.8+	0.8+	600926	675	0.3-	0.2-	860908	095	0.7+	0.1+
600924	675	0.8+	0.4+	600927	675	0.3-	0.4+	860911	095	0.2+	2.7-
600924	675	0.7-	0.8-	600927	675	0.7+	0.5+	911011	801	0.1-	0.2-
600925	675	0.5-	1.0+	600928	675	0.4-	0.7+	911011	801	0.2+	0.1-
600925	675	1.0-	0.8-	600928	675	0.0	0.4+	921023	801	0.0	0.5-
600925	675	0.7+	0.2+	600928	675	0.4+	0.3-	921023	801	0.1-	0.5-
600926	675	0.2-	0.8+	600929	675	0.3-	0.2+				
600926	675	0.7+	0.4-	600929	675	1.4-	0.0				

2218 T-1 = 1992 UQ5
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	66.44292		(2000.0)		P		Q				
n	0.30002674	Peri.	280.84839		+0.98117089		+0.18497299				
a	2.2098497	Node	68.51028		-0.14549939		+0.89711905				
e	0.1382676	Incl.	3.42420		-0.12701816		+0.40120121				
P	3.29	H	13.7	G	0.15						

Residuals in seconds of arc

710324	675	0.9-	0.7-	710327	675	0.7-	0.4+	921028	400	1.4-	0.9+
710325	675	1.5-	0.2-	710402	675	2.4+	0.7-	921028	400	0.2+	0.8+
710325	675	0.6+	0.2+	921026	408	0.8+	1.2+	921102	400	0.3+	0.9+
710326	675	0.3+	1.0+	921026	408	0.3+	2.4-	921102	400	0.3-	1.4-

3212 T-1 = 1992 VE
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Nakano

M	3.45374		(2000.0)		P		Q				
n	0.30342527	Peri.	64.81923		+0.32291542		-0.94639974				
a	2.1933177	Node	6.35462		+0.84288988		+0.28407639				
e	0.0843795	Incl.	3.77750		+0.43042106		+0.15371450				
P	3.25	H	13.7	G	0.15						

Residuals in seconds of arc

710324	675	0.1+	1.6+	710416	675	0.2+	2.2+	921102	399	0.9-	0.3-
710325	675	0.5-	0.6-	710416	675	0.4+	0.9-	921118	399	0.7+	0.1-
710326	675	0.4-	0.3+	710416	675	0.8+	0.2-	921118	399	1.7+	1.0+
710326	675	0.4-	0.6-	921028	399	0.7+	0.2+	921121	399	1.5-	0.8-
710327	675	0.1+	0.9-	921028	399	0.6+	0.7-	921121	399	0.6-	0.4+
710416	675	0.1-	0.7-	921102	399	0.7-	0.3+				

4835 T-1 = 1953 CP = 1992 SR
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Urata

M 71.20988	(2000.0)	P	Q	
n 0.39033319	Peri. 324.04461	+0.97341209	+0.17828045	
a 1.8542960	Node 26.79433	-0.04642663	+0.76840359	
e 0.1013996	Incl. 18.60528	-0.22430666	+0.61463160	
P 2.53	H 13.5	G 0.15		

Residuals in seconds of arc

530214	675	0.8-	4.0+	Y	920923	675	(6.3- | 0.5+)	921026	885	0.1+	0.0
530214	675	1.0-	1.6-	Y	920925	675	(1.8- | 5.2+)	921026	885	0.2+	0.2+
530214	675	2.2+	1.8-	Y	920925	675	1.1-	2.1-	921027	885	1.9-	1.4+
710513	675	0.6-	1.4-		921022	675	0.9+	0.5-	921027	885	0.2+	0.2-
710514	675	0.7-	0.4-		921022	675	1.3+	1.6-	921031	885	0.2+	0.6+
710516	675	2.7-	2.1-		921024	675	1.4+	0.9-	921031	885	0.4+	0.1-
920923	675	(3.6- | 0.5-)		921024	675	0.2+	0.3-				

4019 T-3 = 1990 SL14
Id. H. Kaneda (MPC 17978)
Epoch 1993 Jan. 13.0 TT = JDT 2449000.5 Williams

M 197.82244	(2000.0)	P	Q	
n 0.22372093	Peri. 176.23500	+0.95303693	+0.30217566	
a 2.6873958	Node 166.12525	-0.28002338	+0.90469952	
e 0.1118848	Incl. 4.84656	-0.11535819	+0.30034754	
P 4.41	H 14.0	G 0.15		

Residuals in seconds of arc

710416	675	0.3+	0.1-		771016	675	1.8-	0.2+	900924	809	0.1+	0.2+
710416	675	0.3-	0.0		771016	675	1.1-	0.1+	900924	809	0.6+	0.2+
771011	675	1.0+	0.2-		771017	675	0.7-	0.2-	900924	809	1.2+	0.3+
771011	675	0.2+	0.2+		771017	675	0.1+	0.5+	900925	809	0.6-	0.0
771012	675	0.3+	1.0-		771021	675	1.3+	0.2+	900925	809	0.6-	0.2-
771012	675	0.9-	1.7-		771021	675	1.7+	1.8+	900925	809	0.6-	0.5-

* * * * *

EPHEMERIDES.

Comet Helin-Lawrence (1992q) Elements MPC 21235

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 12 04	23 17.09	-52 11.8	2.362	2.356	77.6	24.1	14.1
1992 12 14	23 08.90	-52 38.1	2.460	2.301	69.1	23.6	14.1
1992 12 24	23 05.01	-52 54.3	2.543	2.250	61.7	22.6	14.0
1993 01 03	23 04.91	-53 08.1	2.606	2.203	55.5	21.6	14.0
1993 01 13	23 08.11	-53 25.3	2.646	2.162	50.7	20.6	14.0
1993 01 23	23 14.25	-53 49.8	2.662	2.126	47.6	20.0	13.9
1993 02 02	23 23.17	-54 25.2	2.652	2.095	46.3	19.9	13.8
1993 02 12	23 34.86	-55 14.6	2.617	2.071	46.8	20.3	13.8
1993 02 22	23 49.58	-56 20.9	2.559	2.054	49.2	21.4	13.7
1993 03 04	00 07.92	-57 47.2	2.479	2.043	53.0	22.8	13.6
1993 03 14	00 30.96	-59 35.3	2.383	2.038	58.0	24.4	13.5
1993 03 24	01 00.63	-61 45.1	2.275	2.041	63.8	26.0	13.4
1993 04 03	01 40.04	-64 11.1	2.163	2.051	70.1	27.3	13.3
1993 04 13	02 33.84	-66 34.9	2.054	2.067	76.6	28.2	13.2
1993 04 23	03 46.59	-68 15.9	1.961	2.089	82.9	28.5	13.2
1993 05 03	05 15.44	-68 10.9	1.893	2.118	88.3	28.4	13.1
1993 05 13	06 43.96	-65 34.2	1.861	2.153	92.3	28.0	13.2
1993 05 23	07 56.30	-60 45.4	1.874	2.193	94.1	27.4	13.3
1993 06 02	08 50.22	-54 47.8	1.934	2.239	93.6	26.9	13.4
1993 06 12	09 30.39	-48 40.7	2.039	2.289	90.7	26.3	13.6
1993 06 22	10 01.49	-43 01.5	2.181	2.343	86.1	25.6	13.9

1993 07 02	10 26.67	-38 07.6	2.352	2.401	80.3	24.7	14.2
1993 07 12	10 47.88	-34 02.6	2.543	2.462	73.8	23.4	14.4
1993 07 22	11 06.36	-30 43.0	2.746	2.527	66.9	21.7	14.7
1993 08 01	11 22.88	-28 02.8	2.951	2.594	59.8	19.8	15.0
1993 08 11	11 37.93	-25 55.3	3.155	2.664	52.6	17.6	15.2
1993 08 21	11 51.85	-24 14.3	3.350	2.736	45.4	15.3	15.5
1993 08 31	12 04.86	-22 54.5	3.533	2.809	38.1	12.8	15.7
1993 09 10	12 17.11	-21 51.5	3.700	2.885	31.0	10.4	15.9

Periodic Comet Kojima — Elements MPC 18256

Date	TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 12 04		02 02.09	+11 18.1	2.797	3.609	140.1	10.1	20.8
1992 12 14		01 58.74	+11 01.8	2.869	3.573	129.1	12.3	20.8
1992 12 24		01 57.27	+10 55.8	2.959	3.537	118.6	14.1	20.8
1993 01 03		01 57.77	+11 00.8	3.061	3.500	108.5	15.4	20.9
1993 01 13		02 00.18	+11 16.1	3.171	3.463	99.0	16.3	20.9
1993 01 23		02 04.41	+11 40.9	3.283	3.426	89.9	16.7	20.9
1993 02 02		02 10.30	+12 14.1	3.396	3.389	81.3	16.7	21.0
1993 02 12		02 17.70	+12 54.1	3.504	3.352	73.1	16.4	21.0
1993 02 22		02 26.46	+13 39.6	3.605	3.316	65.3	15.7	21.0
1993 03 04		02 36.44	+14 29.2	3.698	3.279	57.8	14.8	21.0
1993 03 14		02 47.50	+15 21.5	3.781	3.242	50.6	13.7	21.0
1993 03 24		02 59.55	+16 15.3	3.851	3.205	43.7	12.4	21.0
1993 04 03		03 12.50	+17 09.3	3.909	3.168	37.0	11.0	21.0
1993 04 13		03 26.24	+18 02.4	3.953	3.132	30.6	9.4	20.9

1992 UB — a,e,i = 3.07, 0.58, 16 — Elements MPC 21271

Date	TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 12 04		02 22.66	+02 02.3	0.597	1.495	140.4	24.8	16.9
1992 12 14		02 28.53	+07 42.4	0.695	1.553	134.6	26.8	17.4
1992 12 24		02 37.17	+12 22.0	0.809	1.615	128.2	28.6	17.8
1993 01 03		02 48.23	+16 11.3	0.939	1.679	121.8	29.8	18.3
1993 01 13		03 01.25	+19 20.1	1.081	1.746	115.5	30.6	18.7
1993 01 23		03 15.87	+21 56.8	1.234	1.815	109.3	30.8	19.1
1993 02 02		03 31.81	+24 07.6	1.396	1.884	103.2	30.6	19.4
1993 02 12		03 48.78	+25 57.1	1.566	1.954	97.3	30.1	19.7
1993 02 22		04 06.57	+27 28.2	1.742	2.025	91.4	29.2	20.0

1992 TC — a,e,i = 1.57, 0.29, 7 — Elements MPC 21271

Date	TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 12 04		02 25.08	+01 34.9	0.315	1.246	140.7	30.1	16.8
1992 12 14		02 36.22	+07 23.2	0.377	1.283	136.2	32.1	17.3
1992 12 24		02 49.59	+12 04.9	0.450	1.323	131.0	34.2	17.8
1993 01 03		03 05.07	+15 52.9	0.533	1.364	125.6	35.9	18.3
1993 01 13		03 22.37	+18 58.0	0.625	1.406	120.2	37.2	18.7
1993 01 23		03 41.17	+21 28.4	0.725	1.448	114.9	38.1	19.1
1993 02 02		04 01.29	+23 30.4	0.833	1.490	109.7	38.5	19.5
1993 02 12		04 22.47	+25 08.0	0.948	1.531	104.6	38.6	19.9
1993 02 22		04 44.47	+26 23.9	1.068	1.572	99.6	38.4	20.2

1992 VM — a,e,i = 2.76, 0.51, 11 — Elements MPC 21277

Date	TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 12 04		02 45.30	-17 21.0	0.512	1.377	131.1	32.6	15.6
1992 12 14		02 57.24	-13 33.3	0.557	1.399	128.1	33.6	15.9
1992 12 24		03 11.07	-09 18.8	0.612	1.427	125.2	34.3	16.1
1993 01 03		03 26.67	-04 56.1	0.679	1.462	122.0	34.8	16.4
1993 01 13		03 43.79	-00 40.9	0.759	1.502	118.5	35.1	16.7
1993 01 23		04 02.14	+03 16.3	0.850	1.547	114.8	35.3	17.0
1993 02 02		04 21.54	+06 49.1	0.954	1.596	110.7	35.3	17.4

1993 02 12	04 41.74	+09 54.1	1.069	1.648	106.5	35.1	17.7
1993 02 22	05 02.52	+12 30.7	1.195	1.703	102.1	34.6	18.0
1993 03 04	05 23.73	+14 39.6	1.330	1.760	97.5	34.0	18.3
1993 03 14	05 45.17	+16 22.2	1.474	1.819	92.9	33.1	18.5
1993 03 24	06 06.69	+17 40.5	1.624	1.878	88.2	32.0	18.8
1993 04 03	06 28.17	+18 36.5	1.781	1.939	83.4	30.8	19.0
1993 04 13	06 49.46	+19 12.5	1.941	2.000	78.5	29.4	19.2
1993 04 23	07 10.47	+19 30.6	2.104	2.061	73.7	27.9	19.4

Comet Shoemaker (1992y) Elements MPC 21236

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 12 04	03 03.79	+38 30.3	1.711	2.629	153.3	9.7	13.9
1992 12 14	02 39.45	+40 47.8	1.739	2.579	140.9	13.9	13.8
1992 12 24	02 17.89	+42 33.6	1.799	2.532	128.6	17.7	13.8
1993 01 03	02 00.76	+43 57.7	1.882	2.489	117.1	20.6	13.8
1993 01 13	01 48.65	+45 12.4	1.979	2.450	106.7	22.6	13.9
1993 01 23	01 41.45	+46 27.5	2.083	2.416	97.4	23.8	13.9
1993 02 02	01 38.75	+47 50.1	2.189	2.386	89.1	24.4	14.0
1993 02 12	01 40.02	+49 24.2	2.290	2.361	81.8	24.4	14.0
1993 02 22	01 44.86	+51 11.5	2.385	2.341	75.5	24.1	14.1
1993 03 04	01 53.04	+53 12.8	2.471	2.327	70.0	23.6	14.1
1993 03 14	02 04.51	+55 27.6	2.546	2.318	65.5	23.0	14.2
1993 03 24	02 19.48	+57 54.5	2.611	2.314	61.8	22.3	14.2
1993 04 03	02 38.49	+60 31.6	2.666	2.316	59.0	21.7	14.3
1993 04 13	03 02.42	+63 15.1	2.713	2.323	57.0	21.2	14.3
1993 04 23	03 32.75	+65 59.4	2.751	2.336	55.6	20.8	14.4
1993 05 03	04 11.52	+68 35.5	2.785	2.354	54.9	20.5	14.4
1993 05 13	05 01.0	+70 49.2	2.815	2.377	54.6	20.3	14.5
1993 05 23	06 02.6	+72 20.6	2.845	2.405	54.6	20.1	14.6
1993 06 02	07 13.2	+72 47.7	2.877	2.438	54.9	19.9	14.7
1993 06 12	08 24.7	+71 57.5	2.912	2.476	55.1	19.7	14.8
1993 06 22	09 28.55	+69 55.0	2.954	2.517	55.2	19.4	14.9
1993 07 02	10 21.11	+66 58.0	3.004	2.563	55.2	19.0	15.0

1992 UY4 a,e,i = 2.65, 0.62, 3 Elements MPC 21276

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 12 04	03 30.36	+26 31.7	0.509	1.480	163.0	11.2	17.3
1992 12 14	03 30.37	+25 10.8	0.619	1.563	153.5	16.3	18.0
1992 12 24	03 33.80	+24 16.9	0.745	1.646	144.2	20.5	18.7
1993 01 03	03 40.13	+23 45.1	0.885	1.729	135.4	23.5	19.2
1993 01 13	03 48.80	+23 30.3	1.039	1.812	127.2	25.6	19.7
1993 01 23	03 59.31	+23 27.4	1.205	1.893	119.4	26.9	20.2
1993 02 02	04 11.30	+23 32.3	1.381	1.974	112.0	27.6	20.6
1993 02 12	04 24.44	+23 41.6	1.566	2.053	104.8	27.7	21.0
1993 02 22	04 38.47	+23 52.7	1.756	2.131	97.9	27.4	21.3

Periodic Comet Schaumasse (1992x) Elements MPC 21236

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m2
1992 12 04	04 12.30	+14 46.2	0.672	1.651	169.6	6.2	16.2
1992 12 14	03 58.44	+16 44.3	0.615	1.573	158.3	13.4	16.2
1992 12 24	03 45.24	+19 15.7	0.579	1.498	145.9	21.6	16.2
1993 01 03	03 35.48	+22 17.5	0.558	1.429	134.1	29.6	16.3
1993 01 13	03 31.40	+25 45.6	0.548	1.365	123.7	36.8	16.4
1993 01 23	03 34.48	+29 35.0	0.544	1.310	114.9	43.0	16.4
1993 02 02	03 45.81	+33 39.9	0.544	1.265	108.0	47.8	16.5
1993 02 12	04 06.24	+37 50.3	0.546	1.230	102.9	51.4	16.5
1993 02 22	04 36.78	+41 48.8	0.550	1.209	99.6	53.8	16.6
1993 03 04	05 18.38	+45 08.1	0.556	1.202	98.0	54.8	16.6
1993 03 14	06 10.44	+47 11.2	0.568	1.209	97.7	54.6	16.7

1993 03 24	07 09.43	+47 21.8	0.589	1.231	98.5	53.2	16.8
1993 04 03	08 08.95	+45 24.9	0.621	1.265	100.0	51.1	16.9
1993 04 13	09 02.96	+41 38.7	0.667	1.310	101.5	48.6	17.0
1993 04 23	09 48.82	+36 42.1	0.730	1.366	102.7	45.9	17.2
1993 05 03	10 26.93	+31 15.6	0.809	1.429	103.2	43.4	17.5
1993 05 13	10 58.79	+25 48.9	0.906	1.499	102.8	41.1	17.8
1993 05 23	11 26.04	+20 38.9	1.019	1.573	101.5	39.1	18.1
1993 06 02	11 50.01	+15 53.1	1.148	1.651	99.4	37.3	18.4
1993 06 12	12 11.63	+11 33.5	1.289	1.732	96.7	35.6	18.7
1993 06 22	12 31.60	+07 39.1	1.443	1.815	93.5	34.0	19.0
1993 07 02	12 50.41	+04 07.5	1.608	1.898	89.7	32.4	19.3
1993 07 12	13 08.37	+00 56.3	1.781	1.983	85.7	30.7	19.6
1993 07 22	13 25.75	-01 56.9	1.961	2.067	81.3	29.1	19.8
1993 08 01	13 42.71	-04 34.3	2.146	2.152	76.7	27.3	20.0
1993 08 11	13 59.38	-06 57.6	2.334	2.236	71.9	25.5	20.3
1993 08 21	14 15.85	-09 08.2	2.524	2.320	66.8	23.6	20.5
1993 08 31	14 32.19	-11 07.3	2.713	2.403	61.6	21.7	20.6
1993 09 10	14 48.43	-12 55.7	2.900	2.486	56.3	19.7	20.8
1993 09 20	15 04.60	-14 34.3	3.082	2.567	50.8	17.6	20.9
1993 09 30	15 20.71	-16 03.4	3.258	2.648	45.1	15.5	21.0

1992 WR4 a,e,i = 1.81, 0.30, 5 Elements MPC 21277

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 12 04	04 32.03	+13 32.9	0.285	1.268	170.9	7.0	15.3
1992 12 14	04 33.67	+11 25.9	0.299	1.273	162.7	13.3	15.7
1992 12 24	04 37.52	+10 10.1	0.324	1.283	154.1	19.6	16.1
1993 01 03	04 44.67	+09 45.9	0.360	1.298	146.2	25.0	16.5
1993 01 13	04 55.32	+10 02.2	0.406	1.318	139.1	29.2	16.9
1993 01 23	05 09.11	+10 44.9	0.461	1.342	132.9	32.5	17.3
1993 02 02	05 25.60	+11 40.8	0.526	1.369	127.3	34.9	17.7
1993 02 12	05 44.22	+12 38.7	0.599	1.400	122.1	36.7	18.1
1993 02 22	06 04.40	+13 31.2	0.681	1.434	117.2	37.9	18.5

1992 WA a,e,i = 1.27, 0.14, 4 Elements MPC 21277

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 12 04	04 37.55	+14 01.3	0.423	1.405	171.7	5.8	18.8
1992 12 14	04 17.59	+14 50.1	0.448	1.417	161.7	12.6	19.3
1992 12 24	04 02.89	+15 49.6	0.490	1.426	149.0	20.8	19.7
1993 01 03	03 55.12	+16 58.3	0.547	1.434	137.4	27.6	20.2
1993 01 13	03 54.15	+18 13.8	0.613	1.441	127.3	32.9	20.6

Periodic Comet Schuster (1992n) Elements MPC 20602

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 12 04	08 49.93	+44 57.9	1.034	1.793	125.3	26.7	16.6
1992 12 14	08 52.42	+47 57.1	1.032	1.846	132.6	23.1	16.7
1992 12 24	08 48.75	+50 40.5	1.045	1.901	139.2	19.8	16.9
1993 01 03	08 39.42	+52 50.6	1.076	1.959	144.0	17.1	17.1
1993 01 13	08 26.33	+54 12.7	1.127	2.019	146.1	15.8	17.3
1993 01 23	08 12.30	+54 40.5	1.197	2.080	144.7	15.9	17.6
1993 02 02	08 00.32	+54 17.9	1.287	2.142	140.6	17.0	17.9
1993 02 12	07 52.35	+53 16.6	1.396	2.206	134.8	18.5	18.2
1993 02 22	07 48.98	+51 49.6	1.521	2.270	128.2	20.0	18.5
1993 03 04	07 49.97	+50 07.6	1.661	2.334	121.2	21.3	18.8
1993 03 14	07 54.60	+48 18.4	1.813	2.399	114.3	22.2	19.1
1993 03 24	08 02.04	+46 26.3	1.975	2.464	107.4	22.7	19.4
1993 04 03	08 11.63	+44 33.6	2.144	2.529	100.7	22.9	19.7
1993 04 13	08 22.74	+42 41.7	2.320	2.593	94.2	22.7	20.0
1993 04 23	08 34.93	+40 50.8	2.499	2.658	87.8	22.2	20.2
1993 05 03	08 47.86	+39 01.1	2.681	2.722	81.5	21.5	20.5

1993 05 13	09 01.25	+37 12.6	2.862	2.785	75.4	20.6	20.7
1993 05 23	09 14.91	+35 25.1	3.042	2.848	69.4	19.4	21.0

Comet Tanaka-Machholz (1992d) Elements MPC 21235

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 12 04	09 24.02	+29 21.3	2.696	3.267	117.2	15.6	13.8
1992 12 14	09 11.81	+29 01.1	2.658	3.371	129.6	13.0	13.9
1992 12 24	08 57.18	+28 39.3	2.643	3.476	142.5	9.9	14.0
1993 01 03	08 40.90	+28 11.7	2.660	3.579	155.6	6.5	14.2
1993 01 13	08 24.04	+27 35.5	2.714	3.682	168.1	3.2	14.3
1993 01 23	08 07.75	+26 50.5	2.807	3.784	172.0	2.1	14.5
1993 02 02	07 53.07	+25 58.3	2.938	3.885	161.4	4.6	14.7
1993 02 12	07 40.71	+25 02.1	3.106	3.986	149.2	7.3	15.0
1993 02 22	07 31.00	+24 05.0	3.304	4.086	137.2	9.5	15.2
1993 03 04	07 23.98	+23 09.2	3.528	4.185	125.7	11.1	15.5
1993 03 14	07 19.48	+22 16.1	3.770	4.284	114.8	12.2	15.7
1993 03 24	07 17.19	+21 26.2	4.025	4.381	104.5	12.7	15.9
1993 04 03	07 16.82	+20 39.3	4.287	4.479	94.6	12.9	16.2
1993 04 13	07 18.04	+19 55.1	4.550	4.575	85.1	12.6	16.4
1993 04 23	07 20.56	+19 12.7	4.810	4.671	76.1	12.1	16.6
1993 05 03	07 24.14	+18 31.6	5.064	4.767	67.3	11.3	16.8
1993 05 13	07 28.53	+17 51.1	5.307	4.862	58.8	10.2	17.0
1993 05 23	07 33.57	+17 10.8	5.537	4.956	50.5	9.1	17.2
1993 06 02	07 39.08	+16 30.2	5.751	5.049	42.4	7.8	17.3
1993 06 12	07 44.91	+15 48.9	5.947	5.142	34.5	6.4	17.5

1991 PM5 a,e,i = 1.72, 0.26, 14 Elements MPC 20639

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1993 01 13	11 15.83	+09 00.6	1.173	1.928	126.5	24.2	20.4
1993 01 23	11 18.24	+10 46.1	1.061	1.901	136.6	20.8	20.1
1993 02 02	11 16.99	+13 13.2	0.965	1.873	147.5	16.4	19.7
1993 02 12	11 11.80	+16 18.5	0.889	1.843	158.4	11.4	19.3
1993 02 22	11 02.84	+19 48.8	0.837	1.813	166.2	7.5	18.9
1993 03 04	10 51.17	+23 20.2	0.809	1.781	163.0	9.4	18.9
1993 03 14	10 38.74	+26 25.5	0.806	1.749	152.5	15.2	19.1
1993 03 24	10 27.83	+28 44.5	0.823	1.716	140.8	21.6	19.3
1993 04 03	10 20.46	+30 09.4	0.856	1.682	129.8	27.2	19.5
1993 04 13	10 17.75	+30 43.9	0.900	1.648	119.9	31.8	19.7
1993 04 23	10 19.87	+30 35.4	0.948	1.613	111.3	35.5	19.9
1993 05 03	10 26.50	+29 51.5	0.999	1.579	103.7	38.3	20.0
1993 05 13	10 36.99	+28 38.4	1.049	1.544	97.2	40.5	20.1

Periodic Comet Tempel 2 Elements MPC 18257

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m2
1993 01 23	13 15.57	+04 59.2	3.086	3.505	107.2	15.6	21.0
1993 02 02	13 17.94	+05 32.5	2.905	3.461	116.7	14.7	20.8
1993 02 12	13 18.49	+06 19.2	2.735	3.416	126.5	13.4	20.6
1993 02 22	13 17.03	+07 18.6	2.582	3.370	136.6	11.6	20.4
1993 03 04	13 13.49	+08 28.4	2.450	3.323	146.7	9.4	20.2
1993 03 14	13 07.98	+09 44.6	2.342	3.276	156.1	7.1	19.9
1993 03 24	13 00.79	+11 02.0	2.261	3.227	162.8	5.3	19.7
1993 04 03	12 52.46	+12 13.7	2.210	3.178	162.5	5.4	19.7
1993 04 13	12 43.74	+13 13.2	2.188	3.128	155.4	7.7	19.7
1993 04 23	12 35.44	+13 55.6	2.192	3.077	145.8	10.6	19.8
1993 05 03	12 28.31	+14 17.8	2.221	3.025	135.6	13.5	19.9
1993 05 13	12 22.96	+14 19.0	2.268	2.972	125.6	16.1	20.0
1993 05 23	12 19.71	+14 00.6	2.330	2.918	115.9	18.2	20.1
1993 06 02	12 18.74	+13 24.4	2.402	2.864	106.7	19.8	20.2
1993 06 12	12 20.02	+12 33.1	2.479	2.809	98.1	21.0	20.2

1993 06 22	12 23.42	+11 28.9	2.558	2.753	90.0	21.7	20.3
1993 07 02	12 28.80	+10 13.8	2.635	2.697	82.4	21.9	20.3
1993 07 12	12 35.96	+08 49.6	2.708	2.640	75.3	21.9	20.3
1993 07 22	12 44.73	+07 17.7	2.775	2.582	68.5	21.5	20.3
1993 08 01	12 54.99	+05 39.3	2.834	2.524	62.1	20.8	20.3
1993 08 11	13 06.59	+03 55.4	2.884	2.465	56.0	19.9	20.3
1993 08 21	13 19.47	+02 06.9	2.924	2.405	50.2	18.8	20.2
1993 08 31	13 33.55	+00 14.7	2.954	2.346	44.6	17.6	20.1
1993 09 10	13 48.81	-01 40.1	2.974	2.286	39.3	16.2	20.0
1993 09 20	14 05.23	-03 36.8	2.984	2.226	34.2	14.7	19.9

1990 OA a,e,i = 2.16, 0.42, 8 Elements MPC 17211

Date TT	R. A. (2000)	Decl.	Delta	r	Variation		V
1993 02 02	12 49.04	+02 38.3	1.446	2.146	-1.76	+9.2	20.6
1993 02 12	12 52.83	+03 26.7	1.302	2.095	-2.00	+10.5	20.3
1993 02 22	12 53.71	+04 42.3	1.172	2.044	-2.27	+11.7	19.9
1993 03 04	12 51.25	+06 25.0	1.060	1.992	-2.55	+12.7	19.5
1993 03 14	12 45.35	+08 30.2	0.969	1.939	-2.83	+13.3	19.1
1993 03 24	12 36.31	+10 47.6	0.901	1.885	-3.04	+13.1	18.8
1993 04 03	12 25.21	+13 00.3	0.857	1.831	-3.16	+11.9	18.7
1993 04 13	12 13.78	+14 50.0	0.835	1.777	-3.14	+10.0	18.8
1993 04 23	12 03.91	+16 02.2	0.832	1.722	-3.01	+7.7	19.0
1993 05 03	11 57.29	+16 30.2	0.843	1.668	-2.80	+5.8	19.1
1993 05 13	11 54.83	+16 15.0	0.863	1.614	-2.58	+4.5	19.2
1993 05 23	11 56.82	+15 20.9	0.887	1.562	-2.36	+3.9	19.3
1993 06 02	12 03.11	+13 53.0	0.913	1.511	-2.19	+3.9	19.4
1993 06 12	12 13.30	+11 56.3	0.938	1.463	-2.06	+4.3	19.5
1993 06 22	12 26.97	+09 34.1	0.960	1.417	-1.98	+5.2	19.5
1993 07 02	12 43.78	+06 49.4	0.978	1.376	-1.94	+6.3	19.5

Periodic Comet Giclas (1992l) Elements MPC 14594

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1993 02 12	04 24.14	+18 25.8	1.807	2.257	103.9	25.1	18.8
1993 02 22	04 36.31	+19 31.2	1.966	2.303	96.8	25.2	19.1
1993 03 04	04 49.91	+20 30.0	2.130	2.351	90.1	24.9	19.4
1993 03 14	05 04.65	+21 21.3	2.297	2.399	83.6	24.3	19.6
1993 03 24	05 20.27	+22 04.3	2.465	2.448	77.3	23.4	19.8
1993 04 03	05 36.58	+22 38.7	2.633	2.498	71.3	22.3	20.1
1993 04 13	05 53.37	+23 04.2	2.798	2.548	65.3	21.0	20.3
1993 04 23	06 10.50	+23 20.7	2.961	2.598	59.5	19.5	20.5
1993 05 03	06 27.82	+23 28.3	3.118	2.649	53.7	17.9	20.7
1993 05 13	06 45.20	+23 27.2	3.270	2.700	48.0	16.2	20.9

Periodic Comet Swift-Tuttle (1992t) Elements MPC 21235

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1993 02 12	21 24.70	-39 17.4	2.221	1.400	25.9	17.9	8.4
1993 02 22	21 45.06	-43 08.6	2.233	1.515	33.9	21.3	9.0
1993 03 04	22 07.58	-47 02.1	2.229	1.634	42.0	24.0	9.4
1993 03 14	22 33.09	-51 01.8	2.214	1.754	50.2	25.8	9.9
1993 03 24	23 02.80	-55 08.3	2.195	1.874	58.3	26.9	10.3
1993 04 03	23 38.47	-59 18.2	2.179	1.995	66.1	27.3	10.7
1993 04 13	00 22.65	-63 20.6	2.172	2.116	73.4	27.0	11.1
1993 04 23	01 18.48	-66 56.2	2.181	2.235	79.8	26.3	11.4
1993 05 03	02 27.95	-69 36.3	2.212	2.354	85.3	25.3	11.8
1993 05 13	03 47.8	-70 51.9	2.267	2.472	89.4	24.1	12.2
1993 05 23	05 07.4	-70 33.6	2.348	2.588	91.9	23.0	12.5
1993 06 02	06 16.42	-69 02.4	2.456	2.703	92.9	22.0	12.9
1993 06 12	07 11.56	-66 53.0	2.586	2.817	92.4	21.1	13.3
1993 06 22	07 54.92	-64 34.3	2.737	2.930	90.6	20.3	13.7

1993 07 02	08 29.62	-62 24.3	2.903	3.042	88.0	19.5	14.1
1993 07 12	08 58.18	-60 31.9	3.080	3.152	84.6	18.7	14.4
1993 07 22	09 22.39	-59 00.6	3.264	3.261	80.9	17.9	14.8
1993 08 01	09 43.43	-57 51.4	3.452	3.369	76.9	17.1	15.1
1993 08 11	10 02.06	-57 03.2	3.638	3.476	72.8	16.2	15.4
1993 08 21	10 18.81	-56 34.5	3.821	3.582	68.8	15.3	15.7
1993 08 31	10 34.02	-56 23.8	3.996	3.686	65.1	14.4	16.0
1993 09 10	10 47.90	-56 29.0	4.162	3.790	61.7	13.5	16.3
1993 09 20	11 00.58	-56 48.6	4.317	3.892	58.8	12.7	16.5
1993 09 30	11 12.11	-57 21.1	4.458	3.994	56.5	12.1	16.8
1993 10 10	11 22.49	-58 05.0	4.585	4.094	55.0	11.5	17.0
1993 10 20	11 31.66	-58 59.0	4.697	4.194	54.3	11.1	17.2

Periodic Comet Neujmin 3 Elements MPC 16381

Date TT	R. A. (2000) Decl.	Delta	r	Variation		m1
1993 02 22	15 17.89 -14 05.3	2.651	3.026	-0.98	+3.7	20.9
1993 03 04	15 24.14 -14 10.6	2.464	2.970	-1.08	+3.9	20.7
1993 03 14	15 28.69 -14 07.4	2.286	2.913	-1.18	+4.1	20.4
1993 03 24	15 31.26 -13 55.3	2.119	2.858	-1.28	+4.4	20.2
1993 04 03	15 31.63 -13 34.6	1.969	2.802	-1.39	+4.7	19.9
1993 04 13	15 29.73 -13 06.1	1.837	2.747	-1.49	+5.1	19.7
1993 04 23	15 25.63 -12 31.2	1.727	2.693	-1.58	+5.4	19.5
1993 05 03	15 19.70 -11 52.6	1.641	2.640	-1.65	+5.7	19.3
1993 05 13	15 12.61 -11 13.9	1.582	2.587	-1.68	+6.0	19.1
1993 05 23	15 05.22 -10 39.6	1.548	2.535	-1.68	+6.0	19.0
1993 06 02	14 58.56 -10 14.5	1.539	2.485	-1.65	+6.0	18.9
1993 06 12	14 53.52 -10 02.3	1.551	2.436	-1.60	+5.9	18.8
1993 06 22	14 50.77 -10 05.0	1.582	2.388	-1.53	+5.7	18.8
1993 07 02	14 50.74 -10 23.5	1.628	2.342	-1.46	+5.5	18.8
1993 07 12	14 53.56 -10 56.8	1.684	2.298	-1.41	+5.3	18.7
1993 07 22	14 59.19 -11 43.0	1.748	2.256	-1.36	+5.1	18.7
1993 08 01	15 07.52 -12 39.8	1.817	2.217	-1.33	+4.9	18.8
1993 08 11	15 18.35 -13 44.3	1.888	2.180	-1.31	+4.7	18.8
1993 08 21	15 31.50 -14 53.9	1.961	2.146	-1.30	+4.5	18.8
1993 08 31	15 46.79 -16 05.5	2.034	2.115	-1.30	+4.2	18.8
1993 09 10	16 04.01 -17 16.3	2.107	2.087	-1.31	+3.9	18.8
1993 09 20	16 23.03 -18 23.5	2.179	2.063	-1.33	+3.5	18.8
1993 09 30	16 43.66 -19 24.3	2.251	2.043	-1.35	+3.0	18.9
1993 10 10	17 05.71 -20 15.9	2.322	2.026	-1.36	+2.4	18.9
1993 10 20	17 29.00 -20 56.2	2.392	2.014	-1.37	+1.8	18.9
1993 10 30	17 53.31 -21 22.9	2.462	2.006	-1.38	+1.1	19.0
1993 11 09	18 18.39 -21 34.5	2.531	2.002	-1.38	+0.3	19.0
1993 11 19	18 44.02 -21 29.9	2.600	2.002	-1.37	-0.4	19.1
1993 11 29	19 09.94 -21 08.6	2.668	2.007	-1.35	-1.2	19.2
1993 12 09	19 35.90 -20 30.8	2.737	2.016	-1.33	-1.9	19.2
1993 12 19	20 01.69 -19 37.2	2.804	2.029	-1.29	-2.6	19.3

1992 11 24	04 10.31	+12 48.6	1.321	2.302	171.8	3.5	16.4
- 9.52 +0.02	- 38.2 + 4.7	1990 EO4	21263	- 4.31 +1.46		+2.1 + 7.5	
1992 12 24	03 46.93	+11 49.2	1.480	2.347	143.9	14.3	17.1
1992 11 24	04 13.90	+17 53.5	1.840	2.826	175.7	1.5	16.5
- 8.61 -0.04	- 15.8 + 0.7	1991 OL1	21265	- 4.81 +1.14		-1.6 + 3.7	
1992 12 24	03 51.60	+17 21.7	2.004	2.879	146.9	10.8	17.2
1992 11 24	04 28.95	+10 58.1	1.514	2.489	168.1	4.7	16.0
- 9.93 -0.43	+ 19.2 + 5.1	1989 AG	21261	- 7.01 +1.28		+ 50.3 + 4.7	
1992 12 24	04 00.38	+12 43.1	1.563	2.449	147.3	12.5	16.4

1992 11 24	04 29.90	+26 01.6	0.871	1.853	171.2	4.7	15.4
- 8.23 -0.43	-106.2 - 6.7	1988 XQ	21261	- 3.06 +1.78	- 93.1	+ 9.9
1992 12 24	04 08.90	+20 31.6	0.946	1.870	151.6	14.5	16.1
1992 11 24	04 49.97	+31 27.9	2.241	3.203	164.4	4.8	16.5
- 8.93 -0.44	+2.0 - 5.1	1991 SK	21266	- 7.21 +0.94	- 21.9	- 1.9
1992 12 24	04 23.20	+30 52.0	2.309	3.227	155.0	7.4	16.7
1992 11 24	04 54.94	+20 43.5	1.796	2.768	167.1	4.6	15.7
- 8.10 -0.55	-7.0 - 0.6	1991 PB13	21265	- 6.64 +0.96	-3.9	+ 1.9
1992 12 24	04 30.04	+20 22.4	1.847	2.776	156.4	8.2	15.9
1992 11 24	05 29.94	+18 45.9	1.998	2.940	158.7	7.0	17.4
- 7.74 -0.74	- 38.4 + 0.1	3034 P-L	21278	- 7.89 +0.68	- 28.6	+ 3.2
1992 12 24	05 03.87	+16 59.5	2.022	2.976	163.0	5.5	17.3
1992 12 24	06 58.50	+19 40.7	2.003	2.973	168.4	3.8	17.3
- 8.82 -0.43	+ 14.7 + 1.1	1981 RQ1	21253	- 6.98 +0.96	+ 15.2	- 0.6
1993 01 23	06 32.24	+20 28.6	2.082	3.000	154.3	8.2	17.6
1992 12 24	06 56.96	+22 31.8	4.597	5.567	169.4	1.9	17.8
- 5.40 -0.19	+9.0 0.0	1989 TU5	21262	- 4.80 +0.38	+6.6	- 0.6
1993 01 23	06 40.60	+22 56.3	4.639	5.554	156.2	4.1	17.9
1992 12 24	07 19.11	+16 04.7	1.298	2.255	162.4	7.6	15.4
- 9.43 -0.95	- 19.1 + 3.8	1988 XE1	21261	- 8.54 +1.21	+0.4	+ 2.6
1993 01 23	06 48.16	+15 38.9	1.301	2.242	157.4	9.7	15.5
1993 01 23	09 54.60	-05 52.4	1.183	2.073	145.8	15.5	13.8
-10.17 -1.59	-171.8 + 7.4	1990 QJ	21263	-13.12 +0.84	- 87.4	+17.7
1993 02 22	09 15.16	-12 40.9	1.101	2.027	151.8	13.3	13.5
1993 02 22	10 44.23	+49 45.0	1.283	2.139	140.2	17.2	17.1
-14.10 -0.51	+ 83.9 -27.7	1988 JL	21258	- 7.31 +2.24	- 68.0	-19.0
1993 03 24	10 07.02	+49 52.2	1.432	2.136	122.1	23.3	17.5
1993 02 22	11 17.14	-01 06.9	1.692	2.651	162.1	6.6	16.8
- 7.84 -0.59	+ 66.9 + 6.8	1983 RQ4	21255	- 6.90 +0.85	+ 74.4	- 4.4
1993 03 24	10 52.38	+02 45.8	1.731	2.688	159.5	7.5	16.9
1993 02 22	12 16.14	-08 59.4	1.779	2.655	145.6	12.1	18.6
- 6.46 -1.20	+3.1 + 8.9	5482 T-2	15259	-10.12 +0.16	+ 46.5	+ 3.9
1993 03 24	11 48.76	-07 35.9	1.621	2.611	171.4	3.3	18.0
1993 02 22	12 17.08	+02 08.0	1.859	2.762	150.2	10.3	17.3
- 7.27 -1.05	+ 11.6 + 4.1	1978 SC7	19291	- 9.69 +0.34	+ 17.0	- 2.5
1993 03 24	11 49.07	+03 03.2	1.819	2.811	172.6	2.6	16.9
1993 02 22	12 13.79	+15 53.4	1.734	2.649	152.1	10.1	15.6
- 5.93 -1.10	+ 62.4 - 0.5	1991 VZ1	19519	- 8.53 +0.33	+ 25.5	-10.7
1993 03 24	11 49.45	+18 24.1	1.708	2.665	159.4	7.6	15.4
1993 02 22	12 14.84	-17 39.8	2.458	3.282	140.5	11.1	18.2
- 5.49 -0.88	+7.0 + 9.4	1981 RA2	17199	- 8.12 +0.11	+ 58.9	+ 6.5
1993 03 24	11 52.61	-15 55.7	2.277	3.249	164.6	4.7	17.7
1993 02 22	12 18.90	-10 58.3	1.782	2.646	143.9	12.7	17.1
- 5.62 -1.15	+ 18.9 +10.3	(5111)	19837	- 9.05 +0.16	+ 68.0	+ 4.2
1993 03 24	11 54.49	-08 36.8	1.647	2.637	171.5	3.2	16.5

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1993 02 22    12 15.97   +10 22.8    2.292    3.198   151.9     8.4    17.2
- 4.90 -0.83  + 72.4 + 2.0   1990 QV4    17214   - 7.09 +0.18  + 56.6 - 6.9
1993 03 24    11 56.12   +13 52.6    2.253    3.224   164.2     4.8    17.0

1993 02 22    12 20.69   -03 30.1    1.870    2.755   147.3    11.2    18.3
- 5.88 -1.10  + 29.4 + 7.3   1987 UV1    16428   - 9.09 +0.16  + 53.8 - 0.2
1993 03 24    11 55.91   -01 11.5    1.756    2.751   175.8     1.5    17.6

1993 02 22    12 18.91   -08 41.4    1.830    2.702   145.2    12.1    17.2
- 5.09 -1.12  + 14.0 + 9.0   1982 UU5    14784   - 8.62 +0.10  + 55.6 + 3.4
1993 03 24    11 56.10   -06 46.7    1.673    2.665   173.2     2.5    16.5

1993 02 22    12 16.68   -01 25.0    2.790    3.675   149.1     8.0    18.5
- 5.11 -0.71  + 32.8 + 4.5   1990 SH28   20927   - 7.09 +0.11  + 45.0 - 0.9
1993 03 24    11 56.88   +00 41.7    2.687    3.682   175.5     1.2    18.1

1993 02 22    12 21.65   -16 46.0    2.139    2.965   139.9    12.4    17.1
- 6.07 -1.06  - 21.2 + 9.1   1988 AW1    16873   - 9.38 +0.09  + 32.8 + 7.4
1993 03 24    11 56.35   -16 25.5    1.982    2.954   164.4     5.2    16.6

1993 02 22    12 21.12   +11 30.1    1.377    2.291   150.6    12.2    15.8
- 4.55 -1.38  + 68.2 + 3.1   1991 VH2    19520   - 8.75 +0.19  + 43.9 -10.9
1993 03 24    11 58.27   +14 44.3    1.291    2.265   163.5     7.2    15.5

1993 02 22    12 20.70   -00 05.4    1.977    2.868   148.6    10.3    16.9
- 4.63 -0.99  + 42.4 + 6.0   1990 QS2    17825   - 7.57 +0.12  + 56.0 - 2.1
1993 03 24    12 00.36   +02 37.2    1.875    2.870   175.0     1.8    16.4

1993 02 22    12 24.61   -09 53.5    1.809    2.669   143.4    12.8    16.6
- 5.55 -1.14    -2.5 + 8.8   1984 DE     15708   - 8.91 +0.15  + 39.6 + 3.9
1993 03 24    12 00.54   -08 49.0    1.709    2.700   172.0     3.0    16.0

1993 02 22    12 21.80   +06 33.2    2.217    3.114   150.1     9.1    16.8
- 5.17 -0.88  + 72.2 + 3.4   1991 VN2    19520   - 7.56 +0.16  + 64.7 - 5.8
1993 03 24    12 00.77   +10 15.6    2.181    3.163   168.0     3.8    16.5

1993 02 22    12 22.16   -00 55.7    1.804    2.695   148.0    11.2    16.2
- 3.97 -1.06  + 32.2 + 6.6   1932 CY     18617   - 7.31 +0.08  + 50.0 - 1.5
1993 03 24    12 03.13   +01 22.5    1.687    2.683   176.4     1.4    15.6

1993 02 22    12 23.11   +01 33.7    2.772    3.652   148.6     8.1    17.3
- 4.76 -0.73  + 38.9 + 3.8   1992 AK1    19687   - 6.89 +0.08  + 44.9 - 2.1
1993 03 24    12 04.14   +03 50.2    2.685    3.678   174.4     1.5    16.9

1993 02 22    12 28.09   -09 13.7    1.636    2.498   143.0    13.8    17.6
- 5.39 -1.25  + 31.0 +10.6   1991 RT3    19313   - 9.17 +0.15  + 76.1 + 2.6
1993 03 24    12 03.68   -06 18.3    1.537    2.532   174.6     2.1    17.0

1993 02 22    12 27.91   -07 59.6    1.935    2.794   143.7    12.1    18.1
- 5.08 -1.08  + 35.9 + 9.0   1983 TE1    15411   - 8.44 +0.09  + 72.4 + 1.8
1993 03 24    12 05.49   -05 04.0    1.819    2.815   175.9     1.5    17.4

1993 02 22    12 32.38   +05 33.0    1.689    2.578   147.3    12.0    18.2
- 6.06 -1.25  + 41.2 + 4.2   1969 TM1    21096   - 9.83 +0.15  + 37.3 - 5.6
1993 03 24    12 05.95   +07 48.6    1.619    2.607   170.7     3.6    17.8

1993 02 22    12 28.74   -15 23.7    1.789    2.621    +1.23    -3.6  17.0
- 5.03 -1.16  + 28.2 +12.0   1991 VC4    20643   - 8.51 +0.14  + 87.3 + 5.6
1993 03 24    12 06.04   -12 18.7    1.688    2.674    +1.33    -4.9  16.4
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1993 02 22	12 28.23	-11 51.5	2.483	3.316	141.6	10.7	17.7	
- 5.33 -0.88	+ 10.8 + 7.5	1983 CQ3	19673	- 8.03 +0.07	+ 47.2 + 3.6			
1993 03 24	12 06.46	-10 17.3	2.362	3.350	171.0	2.7	17.2	
1993 02 22	12 33.59	-05 15.3	1.386	2.261	143.7	15.0	15.9	
- 5.87 -1.48	+4.3 + 8.9	(5080)	19825	-10.45 +0.17	+ 39.9 + 1.4			
1993 03 24	12 06.06	-03 55.2	1.306	2.302	177.0	1.3	15.2	
1993 02 22	12 31.14	-06 49.3	1.703	2.566	143.5	13.3	17.5	
- 5.29 -1.22	+ 24.8 + 9.0	1991 UK	19510	- 9.10 +0.11	+ 60.5 + 1.5			
1993 03 24	12 07.11	-04 27.6	1.605	2.601	176.6	1.3	16.8	
1993 02 22	12 31.31	+02 21.8	2.064	2.942	146.8	10.6	17.7	
- 5.71 -1.06	+ 50.1 + 5.2	1991 WC	19683	- 9.06 +0.07	+ 56.9 - 3.4			
1993 03 24	12 07.08	+05 18.2	1.959	2.951	173.2	2.3	17.2	
1993 02 22	12 32.19	+03 30.6	2.222	3.099	146.9	10.0	17.8	
- 5.38 -0.99	+ 45.2 + 4.3	1987 YK	14620	- 8.54 +0.04	+ 48.8 - 3.5			
1993 03 24	12 09.42	+06 06.0	2.115	3.106	172.5	2.4	17.4	
1993 02 22	12 36.55	-03 14.8	1.385	2.261	143.8	15.0	17.8	
- 5.40 -1.48	+ 14.1 + 8.3	6568 P-L	20515	-10.14 +0.12	+ 42.5 - 0.2			
1993 03 24	12 10.28	-01 34.3	1.305	2.302	179.4	0.3	17.0	
1993 02 22	12 35.56	-05 55.9	1.645	2.506	142.9	13.8	17.4	
- 5.18 -1.29	+8.2 + 8.1	6048 P-L	12699	- 9.46 +0.05	+ 41.9 + 1.8			
1993 03 24	12 11.12	-04 29.1	1.538	2.534	176.9	1.2	16.6	
1993 02 22	12 37.64	-03 02.8	1.687	2.552	143.6	13.3	18.2	
- 5.73 -1.30	+ 11.5 + 6.9	1980 TT3	19857	-10.05 +0.05	+ 35.6 + 0.1			
1993 03 24	12 11.48	-01 39.6	1.580	2.577	179.6	0.2	17.4	
1993 02 22	12 31.97	-05 31.2	2.628	3.477	143.9	9.6	18.1	
- 4.82 -0.83	+ 43.7 + 6.4	1988 CF5	16698	- 7.53 +0.01	+ 66.7 + 0.5			
1993 03 24	12 11.90	-02 34.7	2.496	3.492	178.8	0.3	17.5	
1993 02 22	12 34.47	+18 53.5	2.609	3.479	146.8	9.0	17.9	
- 5.48 -0.92	+ 56.6 - 0.6	1990 VY6	17646	- 8.51 +0.01	+ 27.4 - 8.5			
1993 03 24	12 11.77	+21 14.1	2.509	3.451	157.4	6.4	17.7	
1993 02 22	12 36.79	+04 07.7	1.645	2.526	145.9	12.7	18.3	
- 5.06 -1.35	+ 56.6 + 6.4	1971 RA	12142	-10.03 -0.08	+ 63.8 - 4.9			
1993 03 24	12 11.82	+07 29.3	1.493	2.483	171.1	3.5	17.7	
1993 03 24	12 12.68	+05 55.1	1.963	2.955	172.7	2.5	17.1	
- 8.92 +0.11	+ 42.0 - 4.0	1978 UV	12949	- 4.99 +1.04	+4.3 - 7.4			
1993 04 23	11 50.11	+07 10.7	2.168	3.021	141.6	11.9	17.8	
1993 03 24	12 14.33	+05 13.9	1.431	2.424	173.4	2.7	17.3	
- 9.50 +0.07	+ 67.3 - 4.8	1981 UO11	19673	- 4.70 +1.30	+ 15.8 -10.4			
1993 04 23	11 50.77	+07 28.7	1.593	2.461	141.6	14.7	18.1	
1993 03 24	12 14.69	-06 59.6	1.665	2.659	174.4	2.1	16.2	
- 8.08 -0.06	+ 52.1 + 3.4	1988 CJ	17634	- 4.46 +1.11	+ 43.5 - 5.7			
1993 04 23	11 53.74	-04 19.3	1.751	2.652	147.1	11.9	16.8	
1993 03 24	12 15.00	-03 14.7	2.118	3.114	178.0	0.6	17.2	
- 8.48 0.00	+ 24.5 + 0.8	1990 RE7	19305	- 5.25 +0.95	+ 12.3 - 4.4			
1993 04 23	11 52.67	-02 10.0	2.256	3.141	146.1	10.3	17.9	

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1993 03 24    12 16.03   -08 25.3    1.756    2.748   172.9     2.6    17.7
- 9.99 -0.06  + 51.8 + 4.1   1991 UW3    19515   - 6.15 +1.17  + 47.2 - 5.1
1993 04 23    11 49.57   -05 39.8    1.855    2.750   146.4    11.7    18.3

1993 03 24    12 19.23   -04 22.1    1.544    2.540   176.6     1.3    17.2
- 9.56 -0.04  + 51.7 + 1.8   1989 BS1    15562   - 5.40 +1.23  + 33.5 - 6.8
1993 04 23    11 54.47   -01 58.5    1.670    2.569   146.5    12.5    17.9

1993 03 24    12 19.13   +02 52.7    1.756    2.751   175.5     1.6    16.8
- 7.73 -0.13  + 78.3 - 1.5   1988 BP3    17206   - 4.66 +1.03  + 41.7 - 9.4
1993 04 23    11 58.43   +06 07.4    1.832    2.710   143.9    12.6    17.4

1993 03 24    12 20.47   +05 31.5    1.713    2.705   172.8     2.6    16.4
- 7.77 -0.12  + 85.6 - 3.2   1980 DX     17627   - 4.59 +1.05  + 39.3 -10.6
1993 04 23    11 59.77   +08 52.4    1.809    2.679   142.7    13.2    17.0

1993 03 24    12 21.06   -04 51.8    1.236    2.232    +1.91   -14.4  17.9
-10.07 -0.10  + 43.2 + 2.6   1991 RA5    20509   - 5.27 +1.44  + 25.9 - 7.2
1993 04 23    11 55.22   -02 50.0    1.344    2.255    +1.71   -13.3  18.7

1993 03 24    12 22.75   -06 28.5    2.076    3.069   174.3     1.8    16.7
- 9.36 -0.16  + 21.7 + 2.6   1977 QF1    16868   - 6.62 +0.97  + 18.5 - 3.5
1993 04 23    11 56.70   -05 16.8    2.142    3.042   148.0    10.1    17.2

1993 03 24    12 23.15   +01 11.1    2.151    3.147   176.3     1.2    16.8
- 7.37 -0.14  + 45.7 - 0.6   1989 SO8    20505   - 4.99 +0.85  + 22.5 - 6.4
1993 04 23    12 02.79   +03 04.0    2.217    3.105   146.3    10.3    17.3

1993 03 24    12 24.00   -01 35.1    2.920    3.916   177.2     0.7    17.9
- 6.90 -0.05  + 50.1 + 0.1   1990 QN4    17214   - 4.90 +0.65  + 35.0 - 4.7
1993 04 23    12 05.00   +00 41.4    3.054    3.942   147.9     7.8    18.5

1993 03 24    12 25.13   +04 44.0    2.294    3.286   173.1     2.1    18.1
- 7.89 -0.09  + 49.4 - 2.5   1990 OK2    18633   - 5.37 +0.83  + 18.2 - 7.0
1993 04 23    12 03.55   +06 33.6    2.423    3.296   144.7    10.1    18.7

1993 03 24    12 24.76   +01 49.3    1.987    2.982   175.6     1.5    16.2
- 6.74 -0.06  + 75.8 - 1.8    (5071)     19671   - 3.95 +0.87  + 41.8 - 8.3
1993 04 23    12 07.01   +04 57.7    2.143    3.031   146.3    10.6    16.8

1993 03 24    12 25.74   -08 08.9    1.630    2.622   172.5     2.8    16.2
- 9.36 -0.16  + 48.1 + 4.2    (5110)     19837   - 5.88 +1.15  + 43.4 - 5.3
1993 04 23    12 00.47   -05 34.0    1.721    2.634   149.0    11.3    16.8

1993 03 24    12 26.62   -13 14.2    2.107    3.089   167.6     4.0    16.7
- 9.33 -0.16  + 22.8 + 5.6    (5152)     19990   - 6.61 +0.96  + 35.1 - 1.7
1993 04 23    12 00.64   -11 33.8    2.181    3.094   150.1     9.3    17.1

1993 03 24    12 26.39   -22 19.7    2.142    3.093   158.8     6.7    17.6
- 8.94 -0.15  + 32.5 + 9.4   1988 BG4    19501   - 6.11 +0.97  + 63.9 + 0.4
1993 04 23    12 01.74   -19 38.3    2.207    3.119   150.1     9.3    17.8

1993 03 24    12 26.72   -05 26.1    1.400    2.394   174.6     2.2    16.1
- 9.23 -0.33  + 43.6 + 3.6   1990 QY3    17214   - 6.02 +1.26  + 33.6 - 6.4
1993 04 23    12 00.92   -03 11.8    1.424    2.341   148.4    13.0    16.6

1993 03 24    12 28.06   -13 01.1    1.879    2.861   167.8     4.2    15.0
- 9.14 -0.28  - 11.8 + 5.6   1976 QE1    11638   - 6.65 +1.01    +5.6 - 0.4
1993 04 23    12 01.98   -12 59.5    1.907    2.826   150.5    10.1    15.3
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1993 03 24    12 29.06   -07 57.1    1.961    2.952   172.3     2.6    18.1
- 8.31 -0.21  + 48.8 + 3.8   4024 P-L    17651   - 5.84 +0.94  + 46.1 - 4.4
1993 04 23    12 05.73   -05 19.7    2.013    2.928   150.2     9.8    18.5

1993 03 24    12 29.87   -12 43.7    1.324    2.308   167.9     5.2    16.4
- 9.42 -0.39  + 49.7 + 8.8   1983 LL     18423   - 6.15 +1.33  + 64.6 - 4.2
1993 04 23    12 03.34   -09 28.0    1.336    2.266   150.5    12.6    16.7

1993 03 24    12 29.73   -06 16.0    1.961    2.954   173.5     2.2    16.1
- 6.82 -0.22  + 71.0 + 3.5   1978 SS2    13463   - 4.68 +0.86  + 62.9 - 5.8
1993 04 23    12 10.48   -02 38.1    1.988    2.906   150.5     9.8    16.4

1993 03 24    12 30.79   -12 25.5    1.469    2.453   168.1     4.8    16.7
- 9.11 -0.35  + 63.1 + 8.2   1989 EY2    15069   - 6.12 +1.21  + 74.3 - 4.7
1993 04 23    12 05.08   -08 35.5    1.486    2.414   150.8    11.7    17.0

1993 03 24    12 31.26   -02 26.4    1.882    2.877   175.2     1.6    17.9
- 8.82 -0.17  + 64.0 + 0.9   1976 SJ     13584   - 6.02 +0.99  + 42.9 - 7.0
1993 04 23    12 06.87   +00 28.4    1.986    2.891   148.4    10.5    18.5

1993 03 24    12 32.79   -07 03.1    1.951    2.943   172.4     2.6    18.1
- 8.86 -0.25  + 51.4 + 3.4   1979 TA      8402   - 6.46 +0.95  + 46.2 - 4.8
1993 04 23    12 07.60   -04 21.3    2.005    2.922   150.4     9.8    18.5

1993 03 24    12 33.46   -03 28.2    1.553    2.547   174.4     2.2    18.1
- 8.83 -0.36  + 57.8 + 2.5   1982 MA     17200   - 6.26 +1.11  + 41.3 - 7.3
1993 04 23    12 08.12   -00 41.7    1.576    2.494   149.2    11.9    18.6

1993 03 24    12 33.65   -06 30.3    1.885    2.876   172.7     2.5    16.7
- 8.38 -0.22  + 37.8 + 2.9   1986 UV     17958   - 5.84 +0.95  + 31.5 - 4.6
1993 04 23    12 10.18   -04 32.7    1.965    2.887   151.0     9.7    17.2

1993 03 24    12 34.32   -06 00.1    1.378    2.370   172.9     3.0    16.1
- 9.57 -0.45  + 31.8 + 3.8   1974 FO     17424   - 6.79 +1.25  + 25.6 - 5.7
1993 04 23    12 06.65   -04 16.4    1.390    2.317   150.1    12.5    16.5

1993 03 24    12 34.53   -06 33.9    1.607    2.599   172.5     2.9    17.9
- 8.72 -0.30  + 79.2 + 4.2   1987 SN3    14476   - 6.00 +1.08  + 67.9 - 7.3
1993 04 23    12 09.91   -02 32.1    1.657    2.579   150.3    11.1    18.3

1993 03 24    12 34.81   -07 46.3    1.690    2.680   171.6     3.1    18.1
- 8.74 -0.29  + 33.5 + 3.9   4004 P-L    17461   - 6.11 +1.04  + 31.6 - 4.4
1993 04 23    12 10.08   -05 53.3    1.747    2.673   151.4    10.4    18.5

1993 03 24    12 34.86   +00 34.6    1.694    2.688   174.1     2.2    17.2
- 8.00 -0.26  +102.7 - 0.1   1983 RB2    19294   - 5.43 +1.00  + 66.9 -10.3
1993 04 23    12 12.40   +05 07.9    1.775    2.677   147.4    11.7    17.8

1993 03 24    12 35.25   -04 15.5    1.997    2.990   173.7     2.1    18.1
- 8.12 -0.23  + 59.8 + 2.0   1978 SS5    13674   - 5.89 +0.89  + 46.2 - 5.9
1993 04 23    12 12.17   -01 21.8    2.065    2.981   150.4     9.6    18.6

1993 03 24    12 36.89   -07 29.7    1.320    2.311   171.4     3.7    16.4
- 9.20 -0.29  + 67.6 + 4.5   1991 RC4    19313   - 5.68 +1.27  + 55.6 - 7.6
1993 04 23    12 11.71   -04 02.4    1.412    2.344   151.2    11.9    16.9

1993 03 24    12 37.59   -13 45.8    2.185    3.162   166.2     4.3    16.6
- 9.02 -0.28  + 20.0 + 5.7   1977 QY     17197   - 7.00 +0.87  + 34.6 - 1.2
1993 04 23    12 11.46   -12 11.2    2.228    3.156   152.8     8.4    16.8
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1993 03 24	12 39.16	-04 52.4	1.703	2.695	172.5	2.8	17.2	
- 9.15 -0.25	+ 48.7 + 2.1	1987 SL1	19299	- 6.33 +1.05	+ 34.9 - 6.0			
1993 04 23	12 13.56	-02 31.8	1.807	2.731	151.2	10.2	17.7	
1993 03 24	12 40.06	-09 40.2	1.656	2.642	169.3	4.0	16.6	
- 9.30 -0.34	+ 48.6 + 5.3	1991 VK4	20029	- 6.75 +1.07	+ 50.5 - 4.6			
1993 04 23	12 13.38	-06 53.3	1.710	2.642	152.4	10.1	16.9	
1993 03 24	12 40.85	-01 09.4	1.425	2.418	173.0	2.9	17.5	
- 9.31 -0.30	+ 65.4 + 0.1	9521 P-L	14480	- 6.14 +1.18	+ 34.6 - 9.0			
1993 04 23	12 14.93	+01 37.3	1.530	2.451	149.7	11.9	18.1	
1993 03 24	12 41.63	-17 19.6	0.942	1.916	162.5	9.0	14.8	
- 9.27 -0.87	+8.9 +13.8	1937 NN	19009	- 6.75 +1.61	+ 58.6 + 0.2			
1993 04 23	12 13.01	-15 13.1	0.897	1.850	153.2	14.2	14.8	
1993 03 24	12 41.57	-04 52.9	1.356	2.348	172.0	3.4	16.8	
- 9.13 -0.56	+ 26.6 + 3.1	1989 GB3	14795	- 6.95 +1.19	+ 17.5 - 5.9			
1993 04 23	12 14.24	-03 30.3	1.351	2.286	151.7	12.1	17.2	
1993 03 24	12 41.44	+09 47.1	1.308	2.290	166.7	5.7	15.9	
- 9.03 -0.33	+ 64.0 - 7.3	1989 AL1	17635	- 5.69 +1.24	-3.0 -12.5			
1993 04 23	12 16.46	+11 28.1	1.422	2.314	144.3	14.7	16.5	
1993 03 24	12 39.92	+03 25.6	2.282	3.272	171.7	2.5	18.0	
- 6.72 -0.23	+ 69.6 - 1.3	1992 CQ2	20341	- 5.08 +0.72	+ 39.9 - 7.6			
1993 04 23	12 20.46	+06 21.6	2.357	3.256	148.3	9.3	18.4	
1993 03 24	12 42.56	-03 05.3	1.283	2.275	172.3	3.3	17.7	
- 8.95 -0.46	+ 66.1 + 2.4	9538 P-L	17976	- 6.18 +1.24	+ 42.6 - 9.0			
1993 04 23	12 16.74	-00 01.1	1.331	2.263	150.9	12.5	18.1	
1993 03 24	12 44.18	-11 32.8	1.389	2.371	167.2	5.4	15.5	
- 9.85 -0.55	- 10.9 + 6.3	1984 EC	17630	- 7.49 +1.22	+6.6 - 1.2			
1993 04 23	12 14.89	-11 25.6	1.408	2.352	153.6	11.0	15.8	
1993 03 24	12 43.85	-11 23.9	1.715	2.696	167.3	4.6	17.4	
- 9.77 -0.42	+ 39.5 + 6.2	(5052)	19664	- 7.56 +1.05	+ 48.8 - 3.3			
1993 04 23	12 15.14	-08 54.0	1.747	2.684	153.3	9.7	17.7	
1993 03 24	12 43.59	+00 51.9	1.522	2.513	172.0	3.2	16.9	
- 9.28 -0.32	+ 63.0 - 1.0	1991 TE2	19316	- 6.43 +1.12	+ 28.4 - 9.1			
1993 04 23	12 17.37	+03 23.9	1.626	2.544	149.3	11.6	17.5	
1993 03 24	12 43.35	-09 09.5	1.241	2.228	169.1	4.9	16.6	
- 8.94 -0.38	+ 59.4 + 5.9	1984 UC1	16578	- 5.67 +1.28	+ 54.6 - 6.8			
1993 04 23	12 18.38	-05 55.1	1.325	2.269	153.4	11.4	17.1	
1993 03 24	12 42.32	-00 24.2	1.750	2.741	172.5	2.7	17.5	
- 7.14 -0.32	+ 48.8 + 0.1	4393 T-1	21124	- 5.16 +0.89	+ 25.1 - 7.2			
1993 04 23	12 21.63	+01 40.1	1.807	2.732	151.1	10.2	17.9	
1993 03 24	12 45.08	-01 21.9	2.150	3.140	171.9	2.6	17.1	
- 8.51 -0.32	+ 28.9 + 0.4	1990 SO28	20928	- 6.85 +0.80	+ 13.4 - 5.1			
1993 04 23	12 19.99	-00 08.5	2.203	3.124	151.6	8.8	17.5	
1993 03 24	12 45.89	-01 02.5	1.405	2.396	171.7	3.4	16.5	
- 7.87 -0.44	+ 56.4 + 0.7	1976 GO3	19855	- 5.60 +1.08	+ 29.1 - 8.6			
1993 04 23	12 22.88	+01 22.9	1.457	2.390	151.6	11.6	16.9	

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1993 03 24    12 47.48   -04 58.8    1.429    2.418   170.6     3.9    17.3
- 9.65 -0.45  + 51.7 + 3.0   1991 UM     19511   - 7.07 +1.17  + 37.6 - 7.0
1993 04 23    12 19.41   -02 26.5    1.492    2.429   152.5    11.0    17.8

1993 03 24    12 47.63   +00 37.9    1.616    2.606   171.0     3.4    15.5
- 8.76 -0.28  + 32.4 - 1.1   1988 EB     13054   - 6.08 +1.03   +5.1 - 6.9
1993 04 23    12 22.95   +01 44.7    1.750    2.676   151.4    10.4    16.0

1993 03 24    12 49.81   -07 31.4    1.446    2.432   168.9     4.5    16.6
- 8.21 -0.60  + 59.7 + 5.6   1990 RC3    19305   - 6.72 +1.04  + 58.4 - 6.0
1993 04 23    12 24.39   -04 12.6    1.426    2.373   154.3    10.6    16.8

1993 03 24    12 50.48   -02 16.3    1.959    2.947   170.5     3.2    18.1
- 7.56 -0.38  + 64.2 + 1.4   4019 T-3    21279   - 6.13 +0.79  + 46.4 - 6.7
1993 04 23    12 27.78   +00 44.6    1.998    2.929   152.9     9.0    18.4

1993 03 24    12 51.63   -18 12.0    1.293    2.258   160.7     8.4    16.7
- 8.33 -0.71  + 34.2 +12.2   3083 P-L    15902   - 6.76 +1.17  + 75.2 - 0.2
1993 04 23    12 25.51   -15 04.9    1.256    2.214   156.2    10.6    16.7

1993 03 24    12 51.26   -13 49.2    2.027    2.999   164.3     5.2    17.3
- 7.54 -0.34  + 72.8 + 6.5    (5093)     19830   - 5.92 +0.80  + 81.9 - 3.6
1993 04 23    12 28.98   -09 38.4    2.078    3.028   156.8     7.5    17.5

1993 03 24    12 50.73   -08 46.5    2.578    3.560   168.0     3.3    16.6
- 6.95 -0.26  + 74.6 + 3.4   1990 OB     17445   - 5.68 +0.63  + 71.3 - 4.3
1993 04 23    12 30.16   -04 53.7    2.645    3.586   155.9     6.6    16.9

1993 03 24    12 50.29   -09 21.6    1.339    2.322   167.7     5.2    14.6
- 6.49 -0.50  +116.1 + 7.7    (5104)     19834   - 4.63 +1.02  +110.0 - 9.2
1993 04 23    12 30.80   -03 11.0    1.362    2.315   155.4    10.4    14.9

1993 03 24    12 53.06   -03 43.6    1.627    2.614   169.6     3.9    16.6
- 8.41 -0.47  + 53.2 + 2.2    (5099)     19833   - 6.68 +0.96  + 37.5 - 6.8
1993 04 23    12 27.80   -01 11.2    1.673    2.613   153.9     9.8    16.9

1993 03 24    12 50.85   -04 03.0    2.640    3.626   170.1     2.7    16.6
- 5.97 -0.27  + 66.5 + 1.7   1989 RS     17824   - 4.98 +0.56  + 55.8 - 4.9
1993 04 23    12 32.90   -00 47.4    2.684    3.620   154.8     6.8    16.8

1993 03 24    12 52.47   -01 04.7    1.572    2.560   170.1     3.9    16.2
- 7.79 -0.47  + 43.9 + 0.5   1990 SP7    18123   - 6.07 +0.95  + 20.9 - 7.3
1993 04 23    12 29.05   +00 47.0    1.620    2.558   153.2    10.2    16.5

1993 03 24    12 52.66   -13 36.5    2.346    3.316   164.3     4.7    16.8
- 7.90 -0.35  + 19.7 + 5.1   1990 RM17   20926   - 6.69 +0.71  + 33.5 - 0.9
1993 04 23    12 28.82   -12 05.5    2.375    3.324   157.0     6.8    16.9

1993 03 24    12 53.78   +04 34.2    2.286    3.269   168.1     3.6    17.4
- 7.83 -0.33  + 71.1 - 1.9    (5090)     19829   - 6.52 +0.71  + 38.2 - 8.1
1993 04 23    12 30.36   +07 29.6    2.368    3.274   149.5     9.0    17.8

1993 03 24    12 55.97   -04 05.0    1.416    2.402   168.9     4.6    16.6
- 9.69 -0.68  + 40.3 + 2.9   1984 SQ3    14192   - 8.23 +1.10  + 27.7 - 6.7
1993 04 23    12 25.80   -02 05.5    1.417    2.361   153.8    10.8    16.8

1993 03 24    12 53.59   -17 44.9    2.301    3.259   160.8     5.8    18.3
- 7.22 -0.36  + 40.6 + 7.1   1979 MA5    20141   - 6.05 +0.70  + 62.3 - 0.5
1993 04 23    12 31.74   -14 56.6    2.315    3.268   157.7     6.7    18.4
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1993 03 24	12 58.01	-07 32.2	1.206	2.189	167.1	5.8	17.1
-10.03 -0.62	+ 24.2 + 4.7	1986 CD2	19296	- 7.52 +1.29		+ 22.2 - 5.1	
1993 04 23	12 28.15	-06 04.5	1.274	2.230	155.8	10.7	17.4
1993 03 24	12 56.27	-08 34.9	1.790	2.770	167.0	4.7	17.9
- 8.62 -0.55	+ 51.6 + 5.0	1968 QE	11145	- 7.56 +0.86		+ 54.1 - 4.3	
1993 04 23	12 29.40	-05 39.1	1.776	2.725	155.9	8.7	18.0
1993 03 24	12 57.06	+03 03.0	1.047	2.033	168.1	5.8	15.6
- 8.40 -0.76	+ 80.8 - 1.5	1991 VM1	19518	- 6.45 +1.29		+ 27.6 -13.9	
1993 04 23	12 31.00	+06 08.6	1.077	2.014	150.5	14.2	16.0
1993 03 24	12 57.99	-08 04.8	1.581	2.562	166.9	5.1	17.7
- 8.56 -0.49	+ 55.3 + 4.5	1991 UC2	19512	- 6.77 +0.98		+ 50.9 - 5.6	
1993 04 23	12 32.28	-05 06.9	1.645	2.598	156.4	8.9	18.0
1993 03 24	12 59.23	-09 24.4	1.412	2.391	165.9	5.8	17.1
- 8.55 -0.76	+ 39.6 + 6.4	1990 QP1	17213	- 7.72 +1.00		+ 47.7 - 4.2	
1993 04 23	12 31.57	-06 53.7	1.371	2.330	156.8	9.8	17.2
1993 03 24	12 59.58	-10 02.0	1.342	2.321	165.5	6.2	17.1
- 8.70 -0.61	+ 56.2 + 6.5	1982 BP2	16695	- 6.85 +1.11		+ 58.6 - 5.6	
1993 04 23	12 33.09	-06 47.3	1.388	2.348	157.1	9.6	17.4
1993 03 24	13 00.58	+03 52.1	1.175	2.158	166.9	6.0	16.0
- 8.78 -0.79	+ 54.4 - 2.2	1990 MX	16881	- 7.34 +1.18		+6.6 -11.8	
1993 04 23	12 32.76	+05 41.4	1.189	2.126	151.1	13.2	16.3
1993 03 24	13 00.24	-12 38.4	2.178	3.147	163.7	5.1	17.1
- 7.82 -0.43	+ 43.3 + 5.5	1986 TR4	19861	- 6.85 +0.71		+ 54.2 - 2.2	
1993 04 23	12 36.14	-09 58.0	2.195	3.152	158.6	6.7	17.2
1993 03 24	13 02.29	-17 50.7	1.423	2.383	159.5	8.4	15.4
- 8.56 -0.61	+ 45.5 +10.6	1991 SG1	19681	- 6.86 +1.07		+ 75.1 - 1.7	
1993 04 23	12 36.07	-14 26.9	1.462	2.427	158.8	8.6	15.5
1993 03 24	13 03.88	+04 28.2	1.571	2.549	165.9	5.5	16.8
- 9.24 -0.57	+ 55.7 - 2.6	1991 UY	19511	- 7.75 +0.98		+ 13.8 - 9.8	
1993 04 23	12 35.51	+06 25.9	1.636	2.563	151.2	10.9	17.1
1993 03 24	13 02.49	-17 47.5	1.950	2.905	159.5	6.9	18.3
- 7.43 -0.50	+ 57.0 + 8.7	3016 P-L	15902	- 6.52 +0.76		+ 82.3 - 1.1	
1993 04 23	12 39.23	-14 00.4	1.944	2.908	159.6	6.9	18.3
1993 03 24	13 04.24	-12 53.1	1.405	2.376	162.8	7.1	16.9
- 8.92 -0.68	+ 17.7 + 7.4	1977 DU	19495	- 7.54 +1.06		+ 36.1 - 2.0	
1993 04 23	12 36.32	-11 15.0	1.434	2.399	158.8	8.7	17.1
1993 03 24	13 10.77	-29 54.0	1.228	2.142	148.3	14.2	17.9
-13.66 -1.38	- 64.8 +17.3	1983 RL	19017	-13.23 +1.52		+ 36.6 +11.6	
1993 04 23	12 25.04	-30 25.8	1.194	2.131	151.1	13.2	17.8
1993 03 24	13 03.17	-18 00.1	2.076	3.029	159.3	6.7	17.0
- 7.58 -0.50	+ 59.9 + 8.6	1990 OE	17446	- 6.80 +0.72		+ 85.6 - 0.8	
1993 04 23	12 39.35	-14 04.4	2.055	3.018	159.6	6.7	17.0
1993 03 24	13 04.17	-17 22.7	1.296	2.258	159.6	8.9	16.4
- 7.84 -0.81	+ 44.8 +11.8	1979 MX6	16868	- 7.01 +1.05		+ 82.1 - 1.0	
1993 04 23	12 38.45	-13 48.5	1.263	2.233	159.4	9.1	16.4

1993 03 24	13 06.64	-15 06.5	1.553	2.517	160.9	7.5	17.7
- 9.28 -0.63	+ 41.1 + 8.5	1991 RE11	20152	- 7.90 +1.00		+ 62.2	- 2.2
1993 04 23	12 37.85	-12 11.8	1.590	2.556	159.2	8.0	17.8
1993 03 24	13 02.92	-10 02.5	1.434	2.410	164.8	6.2	16.2
- 6.31 -0.64	+ 99.1 + 8.1	1989 KK	15070	- 5.48 +0.88		+102.5	- 7.1
1993 04 23	12 42.42	-04 32.0	1.421	2.386	158.6	8.9	16.3
1993 03 24	13 04.73	-05 58.4	1.193	2.174	166.2	6.3	17.6
- 7.60 -0.83	+ 74.5 + 5.8	2155 T-2	15728	- 6.77 +1.06		+ 65.0	- 8.6
1993 04 23	12 39.67	-02 02.4	1.179	2.140	156.9	10.6	17.7
1993 03 24	13 07.61	-06 38.8	1.473	2.451	165.3	5.9	16.9
- 9.63 -0.73	+ 38.2 + 4.1	1991 VR	19517	- 8.57 +1.01		+ 34.1	- 5.3
1993 04 23	12 37.08	-04 32.8	1.491	2.450	157.4	9.1	17.0
1993 03 24	13 07.46	-04 28.3	1.411	2.390	166.0	5.8	17.9
- 9.16 -0.74	+ 61.0 + 3.4	2127 T-1	21122	- 8.12 +1.02		+ 46.5	- 7.7
1993 04 23	12 38.29	-01 26.5	1.429	2.384	156.3	9.8	18.1
1993 03 24	13 06.46	+10 30.7	1.211	2.182	162.1	8.1	16.7
- 8.02 -0.87	+ 79.0 - 5.7	1986 JD	16871	- 7.31 +1.07		+ 6.0	-15.9
1993 04 23	12 39.88	+12 57.2	1.211	2.127	147.3	14.8	16.9
1993 03 24	13 08.91	-06 22.5	1.024	2.004	165.1	7.3	15.3
- 9.38 -1.00	+ 6.6 + 4.1	(5073)	19823	- 8.23 +1.30		+ 3.8	- 5.1
1993 04 23	12 38.25	-05 49.9	1.035	2.003	158.1	10.8	15.5
1993 03 24	13 05.54	-10 20.7	2.367	3.337	164.1	4.7	17.0
- 6.50 -0.41	+ 61.4 + 4.4	(5101)	19833	- 5.92 +0.58		+ 65.3	- 3.3
1993 04 23	12 45.08	-06 56.5	2.377	3.340	160.0	5.9	17.1
1993 03 24	13 05.89	-00 51.4	2.242	3.221	166.7	4.1	16.0
- 6.57 -0.39	+ 61.1 + 0.3	(5057)	19665	- 5.77 +0.61		+ 41.1	- 6.4
1993 04 23	12 45.52	+01 54.3	2.314	3.258	156.0	7.2	16.2
1993 03 24	13 11.15	+23 11.0	1.655	2.577	151.6	10.6	15.8
-10.32 -0.61	+ 16.2 -12.8	1988 BK2	19501	- 8.63 +1.05		- 69.2	-13.1
1993 04 23	12 39.67	+21 51.7	1.738	2.590	140.0	14.4	16.1
1993 03 24	13 08.48	-07 52.8	1.965	2.939	164.7	5.1	16.7
- 7.39 -0.52	+ 39.1 + 3.6	1990 QP2	20926	- 6.75 +0.70		+ 38.7	- 3.8
1993 04 23	12 45.00	-05 42.4	1.986	2.950	159.6	6.8	16.8
1993 03 24	13 09.87	+06 01.8	1.799	2.770	163.9	5.7	17.9
- 8.07 -0.66	+ 82.4 - 1.6	1990 MN	16881	- 7.79 +0.74		+ 41.1	-10.8
1993 04 23	12 43.50	+09 24.0	1.793	2.714	150.5	10.5	18.1
1993 03 24	13 11.11	-20 27.1	1.565	2.509	156.2	9.2	17.1
- 9.18 -0.81	+ 22.4 +11.2	1984 SJ7	14350	- 8.69 +0.95		+ 66.8	+ 1.8
1993 04 23	12 41.04	-17 55.9	1.534	2.501	159.5	8.1	17.0
1993 03 24	13 10.16	+07 02.3	1.293	2.267	163.4	7.2	15.9
- 8.10 -0.70	+ 59.4 - 4.8	1991 VS	19518	- 6.80 +1.03		+ 1.8	-12.2
1993 04 23	12 44.60	+08 47.7	1.364	2.297	151.2	12.2	16.2
1993 03 24	13 12.39	-02 21.6	1.417	2.394	165.1	6.2	16.9
- 9.45 -0.69	+ 49.6 + 1.3	1988 XD1	19301	- 8.13 +1.03		+ 27.2	- 7.8
1993 04 23	12 42.83	-00 09.5	1.482	2.438	156.6	9.4	17.2

1993 03 24	13 07.96	-08 14.9	2.114	3.087	164.6	4.9	16.1
- 6.20 -0.42	+ 86.5 + 3.8	1976 GK3	17815	- 5.42 +0.63		+ 79.7 - 5.7	
1993 04 23	12 48.61	-03 48.1	2.179	3.141	159.7	6.4	16.3
1993 03 24	13 09.37	-05 04.4	1.803	2.779	165.4	5.2	16.4
- 6.69 -0.59	+ 41.1 + 2.8	4121 T-1	19326	- 6.33 +0.69		+ 33.6 - 5.1	
1993 04 23	12 47.46	-02 57.8	1.796	2.759	159.0	7.5	16.5
1993 03 24	13 12.68	+34 40.7	1.043	1.925	141.3	18.9	16.5
- 8.51 -1.10	+156.7 -25.7	1990 BW	16436	- 7.22 +1.40		- 21.3 -27.8	
1993 04 23	12 44.45	+38 07.2	1.133	1.907	126.2	25.2	16.8
1993 03 24	13 11.49	-15 10.8	1.937	2.894	160.0	6.8	17.8
- 7.76 -0.51	+ 71.4 + 7.3	1975 YD	14779	- 6.84 +0.75		+ 85.1 - 3.1	
1993 04 23	12 47.25	-10 56.7	1.983	2.953	161.4	6.2	17.8
1993 03 24	13 12.11	-09 50.0	1.502	2.473	163.0	6.8	16.2
- 8.02 -0.70	+ 72.3 + 6.4	1991 UK2	19512	- 7.27 +0.90		+ 74.3 - 5.8	
1993 04 23	12 46.23	-05 47.4	1.522	2.490	159.9	8.0	16.3
1993 03 24	13 10.17	-11 55.2	2.445	3.408	162.3	5.1	17.4
- 6.42 -0.44	+ 61.0 + 5.0	1990 TU	17218	- 6.05 +0.54		+ 68.8 - 2.6	
1993 04 23	12 49.67	-08 26.6	2.443	3.412	161.5	5.4	17.4
1993 03 24	13 13.37	-09 12.5	1.160	2.133	163.0	7.9	16.3
- 8.33 -0.86	+ 51.1 + 6.6	1988 XT	19301	- 7.34 +1.11		+ 52.4 - 6.2	
1993 04 23	12 46.22	-06 13.4	1.190	2.163	160.1	9.1	16.5
1993 03 24	13 13.40	-10 32.4	1.525	2.494	162.4	7.0	18.2
- 8.21 -0.84	+ 58.5 + 7.4	1987 RV3	18288	- 8.25 +0.83		+ 70.5 - 4.1	
1993 04 23	12 45.63	-06 57.7	1.473	2.443	160.2	8.0	18.1
1993 03 24	13 11.29	-03 54.8	2.226	3.200	165.1	4.6	17.3
- 6.96 -0.50	+ 39.2 + 1.8	1990 VS6	18434	- 6.69 +0.58		+ 30.3 - 4.5	
1993 04 23	12 48.82	-01 58.8	2.225	3.183	158.8	6.5	17.3
1993 03 24	13 15.29	-41 09.0	2.014	2.832	137.8	13.7	16.9
- 9.22 -0.89	- 20.7 +15.7	1986 RE2	19499	- 9.18 +0.90		+ 68.9 +11.4	
1993 04 23	12 44.37	-39 49.1	1.938	2.839	147.6	10.9	16.7
1993 03 24	13 14.57	-03 24.6	1.409	2.384	164.4	6.5	17.1
- 8.75 -0.75	+ 70.6 + 2.6	(5015)	19485	- 7.91 +0.97		+ 49.8 - 8.7	
1993 04 23	12 46.40	-00 03.1	1.448	2.407	157.3	9.3	17.3
1993 03 24	13 15.11	-20 27.5	2.002	2.939	155.6	8.1	18.2
- 8.76 -0.63	+4.3 + 8.6	5161 T-2	16038	- 8.30 +0.75		+ 40.0 + 2.2	
1993 04 23	12 46.97	-19 09.3	2.010	2.977	160.6	6.5	18.2
1993 03 24	13 13.32	-08 59.0	1.275	2.247	163.1	7.4	17.3
- 7.13 -0.86	+ 79.2 + 7.5	1989 CS2	14622	- 6.84 +0.93		+ 81.2 - 7.1	
1993 04 23	12 49.04	-04 31.2	1.258	2.230	160.1	8.8	17.3
1993 03 24	13 13.74	-07 51.6	1.797	2.768	163.5	5.9	17.0
- 6.99 -0.61	+ 54.4 + 4.3	1986 WO9	17633	- 6.63 +0.70		+ 52.9 - 4.8	
1993 04 23	12 50.88	-04 53.9	1.807	2.775	160.7	6.9	17.1
1993 03 24	13 16.74	-07 34.3	1.637	2.607	162.9	6.5	16.9
- 8.98 -0.72	+ 42.4 + 4.3	(5062)	19668	- 8.48 +0.85		+ 41.0 - 4.7	
1993 04 23	12 47.64	-05 12.6	1.656	2.623	160.0	7.5	17.0

1993 03 24	13 15.91	-12 49.2	2.097	3.056	160.6	6.2	17.5
- 7.67 -0.56	+ 31.4 + 5.4	1986 TB12	16873	- 7.30 +0.65	+ 44.1 - 1.6		
1993 04 23	12 51.23	-10 43.0	2.114	3.087	162.4	5.7	17.5
1993 03 24	13 19.04	-11 33.1	1.649	2.610	160.6	7.3	16.7
- 9.27 -0.80	+ 26.5 + 6.2	(5121)	19841	- 9.13 +0.84	+ 40.5 - 2.2		
1993 04 23	12 48.41	-09 37.2	1.638	2.611	161.5	7.0	16.7
1993 03 24	13 17.62	-05 05.5	1.857	2.826	163.4	5.8	18.1
- 8.50 -0.63	+ 47.0 + 2.6	1991 VV3	19521	- 8.05 +0.74	+ 38.1 - 5.3		
1993 04 23	12 50.25	-02 43.3	1.887	2.851	159.5	7.1	18.2
1993 03 24	13 17.11	-22 38.7	2.514	3.436	153.6	7.4	17.7
- 7.94 -0.52	+0.9 + 7.6	1990 QQ1	17447	- 7.66 +0.59	+ 34.8 + 2.7		
1993 04 23	12 51.68	-21 36.2	2.526	3.491	160.7	5.5	17.7
1993 03 24	13 18.14	-01 55.9	1.421	2.394	163.6	6.7	16.7
- 7.37 -0.89	+ 60.3 + 2.5	1986 QX3	14619	- 7.73 +0.79	+ 41.0 - 8.5		
1993 04 23	12 52.38	+00 56.5	1.380	2.342	157.9	9.3	16.7
1993 03 24	13 19.64	+14 10.8	1.931	2.877	157.3	7.7	16.8
- 7.47 -0.65	+ 80.1 - 5.8	1990 OE2	17023	- 7.39 +0.66	+ 19.3 -12.6		
1993 04 23	12 54.94	+16 52.4	1.969	2.860	146.2	11.3	17.0
1993 03 24	13 21.84	-05 21.2	1.461	2.430	162.3	7.2	17.2
- 8.45 -0.77	+ 54.6 + 3.2	1989 CD	19302	- 7.91 +0.89	+ 42.3 - 6.8		
1993 04 23	12 54.24	-02 37.3	1.510	2.480	160.3	7.8	17.3
1993 03 24	13 21.44	-18 32.1	1.942	2.882	155.9	8.1	18.5
- 8.05 -0.77	+ 30.2 + 8.7	1990 OL4	17211	- 8.54 +0.64	+ 64.3 + 1.3		
1993 04 23	12 53.96	-15 56.6	1.865	2.841	162.9	6.0	18.3
1993 03 24	13 21.25	-22 44.1	2.284	3.204	152.9	8.1	18.4
- 8.18 -0.67	+3.2 + 8.4	1990 TF	17451	- 8.49 +0.58	+ 42.3 + 3.4		
1993 04 23	12 53.93	-21 26.6	2.226	3.195	161.2	5.8	18.2
1993 03 24	13 19.90	+03 43.3	2.072	3.037	162.5	5.7	15.0
- 7.02 -0.61	+ 35.3 - 1.4	1990 UQ11	19680	- 7.12 +0.57	+7.2 - 7.2		
1993 04 23	12 56.52	+04 57.8	2.068	3.014	156.0	7.8	15.1
1993 03 24	13 23.76	-13 44.1	1.919	2.870	158.5	7.3	17.7
- 8.76 -0.83	+0.1 + 5.7	1986 TT11	17438	- 9.49 +0.63	+ 21.3 + 0.4		
1993 04 23	12 53.70	-13 02.3	1.848	2.825	163.1	5.9	17.6
1993 03 24	13 26.90	+32 34.5	1.628	2.490	141.8	14.3	17.2
-10.34 -1.10	+ 67.1 -15.6	1990 SL	17640	-10.82 +0.95	- 53.0 -20.8		
1993 04 23	12 51.36	+33 05.3	1.612	2.398	131.3	18.4	17.3
1993 03 24	13 24.44	-05 58.4	1.674	2.639	161.5	6.9	18.2
- 8.89 -0.82	+ 37.9 + 3.4	1984 SQ2	20012	- 9.08 +0.76	+ 33.5 - 4.9		
1993 04 23	12 54.56	-03 55.8	1.664	2.635	161.1	7.1	18.2
1993 03 24	13 19.86	-03 25.6	1.955	2.924	163.1	5.7	16.7
- 6.09 -0.60	+ 59.3 + 2.1	3137 T-2	14968	- 6.18 +0.57	+ 46.6 - 6.1		
1993 04 23	12 59.30	-00 31.6	1.956	2.922	160.2	6.7	16.8
1993 03 24	13 22.66	+05 33.9	1.741	2.704	161.2	6.8	17.4
- 7.88 -0.59	+ 64.8 - 3.3	1988 AV1	20145	- 7.18 +0.76	+ 20.7 - 9.9		
1993 04 23	12 57.58	+07 54.3	1.850	2.788	153.9	9.1	17.7

1993 03 24	13 22.96	-10 05.4	1.692	2.653	160.5	7.2	17.3
- 7.48 -0.77	+ 28.6 + 5.2	1990 QS1	17963	- 7.73 +0.69	+ 37.1	- 2.8	
1993 04 23	12 57.44	-08 12.3	1.674	2.653	163.3	6.2	17.2
1993 03 24	13 23.25	+10 43.8	1.884	2.836	158.7	7.3	18.2
- 7.67 -0.73	+ 90.7 - 3.7	1983 OD	12786	- 7.97 +0.63	+ 37.5	-12.4	
1993 04 23	12 57.29	+14 12.2	1.891	2.800	148.7	10.7	18.3
1993 03 24	13 25.77	+06 29.3	1.559	2.520	160.1	7.7	15.2
- 9.00 -0.75	+ 25.6 - 4.0	(5035)	19493	- 8.50 +0.86	- 18.1	- 9.0	
1993 04 23	12 56.53	+06 49.8	1.625	2.570	154.6	9.7	15.4
1993 03 24	13 25.85	-17 04.1	1.872	2.813	156.1	8.2	17.7
- 8.41 -0.73	+ 27.1 + 7.9	1991 VR1	19518	- 8.41 +0.71	+ 53.9	+ 0.1	
1993 04 23	12 57.97	-14 48.1	1.876	2.856	164.1	5.6	17.6
1993 03 24	13 22.62	+02 46.4	1.347	2.316	162.0	7.6	15.5
- 6.01 -0.77	+101.4 - 1.3	1988 CA	18629	- 5.81 +0.79	+ 52.5	-13.1	
1993 04 23	13 02.00	+06 59.0	1.412	2.364	155.3	10.2	15.8
1993 03 24	13 22.49	-04 41.6	2.193	3.158	162.3	5.5	16.6
- 6.00 -0.54	+ 65.0 + 2.4	(5107)	19836	- 6.08 +0.51	+ 55.3	- 5.4	
1993 04 23	13 02.44	-01 26.6	2.210	3.179	161.4	5.8	16.7
1993 03 24	13 26.00	-04 18.5	1.925	2.888	161.5	6.3	17.7
- 7.97 -0.71	+ 51.0 + 2.5	1991 XO1	20030	- 8.24 +0.62	+ 41.6	- 5.5	
1993 04 23	12 59.23	-01 44.9	1.917	2.886	160.9	6.5	17.7
1993 03 24	13 23.03	+15 57.4	1.887	2.824	155.5	8.4	16.2
- 5.71 -0.68	+ 95.4 - 6.0	1992 BX1	20340	- 6.10 +0.56	+ 29.8	-14.0	
1993 04 23	13 03.02	+19 19.9	1.904	2.788	144.9	12.0	16.3
1993 03 24	13 24.54	-05 12.0	2.027	2.990	161.7	6.0	18.4
- 6.63 -0.68	+ 78.1 + 3.9	4580 P-L	17219	- 7.18 +0.52	+ 72.6	- 5.7	
1993 04 23	13 01.61	-01 08.1	1.977	2.947	161.0	6.4	18.3
1993 03 24	13 25.65	-23 08.1	1.975	2.893	152.0	9.3	16.4
- 7.18 -0.76	+0.2 + 9.3	1991 YZ	19685	- 7.71 +0.60	+ 44.0	+ 3.8	
1993 04 23	13 00.80	-21 51.7	1.926	2.900	162.5	6.0	16.2
1993 03 24	13 32.38	+21 25.8	1.972	2.879	150.0	10.0	18.0
-10.59 -0.76	+ 38.2 - 9.9	1984 WA1	19497	-10.35 +0.80	- 37.5	-13.0	
1993 04 23	12 58.10	+21 32.5	2.031	2.894	142.4	12.2	18.2
1993 03 24	13 26.46	-08 05.0	1.742	2.702	160.4	7.1	17.2
- 5.96 -0.74	+ 45.0 + 4.4	3297 T-1	21124	- 6.49 +0.58	+ 46.3	- 4.2	
1993 04 23	13 05.35	-05 32.2	1.718	2.699	164.2	5.8	17.1
1993 03 24	13 26.82	-16 12.3	2.325	3.263	156.5	7.0	16.4
- 5.94 -0.61	+ 42.0 + 6.6	1990 VB4	17645	- 6.48 +0.44	+ 63.5	- 0.1	
1993 04 23	13 06.25	-13 21.6	2.261	3.246	166.2	4.2	16.2
1993 03 24	13 32.12	-06 45.8	1.589	2.547	159.5	7.9	17.2
- 8.40 -0.94	+ 45.0 + 4.3	(5049)	19663	- 9.24 +0.70	+ 43.5	- 5.0	
1993 04 23	13 02.62	-04 15.7	1.555	2.534	163.0	6.7	17.1
1993 03 24	13 27.46	-01 30.2	2.340	3.300	161.3	5.6	16.9
- 5.96 -0.57	+ 68.9 + 1.4	1990 UY	17456	- 6.39 +0.43	+ 53.9	- 6.1	
1993 04 23	13 07.09	+01 47.8	2.329	3.292	160.1	6.0	16.9

1993 03 24	13 31.00	+03 21.7	2.173	3.128	159.9	6.3	18.1
- 7.74 -0.69	+ 36.5 - 1.1	1977 TQ6	12578	- 8.36 +0.50	+ 10.5 - 7.0		
1993 04 23	13 04.65	+04 43.1	2.148	3.101	157.5	7.1	18.1
1993 03 24	13 34.72	-05 02.5	1.658	2.614	159.2	7.8	17.2
- 8.54 -0.91	+ 41.6 + 3.0	1951 WH	13049	- 9.28 +0.68	+ 34.1 - 5.5		
1993 04 23	13 05.07	-02 53.2	1.643	2.620	162.8	6.5	17.2
1993 03 24	13 34.92	-18 27.8	1.594	2.526	153.6	10.1	16.9
- 8.39 -1.00	+ 12.8 + 9.3	(5108)	19836	- 9.34 +0.72	+ 51.0 + 1.8		
1993 04 23	13 05.15	-16 38.3	1.555	2.541	165.4	5.7	16.6
1993 03 24	13 32.06	-11 33.1	1.611	2.562	157.8	8.4	18.2
- 6.73 -0.87	+ 40.4 + 6.4	4060 P-L	14960	- 7.54 +0.63	+ 53.4 - 2.7		
1993 04 23	13 07.88	-08 55.6	1.581	2.568	166.0	5.4	18.0
1993 03 24	13 36.13	-19 52.2	1.761	2.685	152.5	9.9	18.0
- 8.07 -1.02	+ 16.0 + 9.4	5148 T-2	15259	- 9.66 +0.57	+ 58.8 + 3.0		
1993 04 23	13 06.62	-17 48.3	1.656	2.642	165.4	5.5	17.7
1993 03 24	13 35.79	-03 59.9	1.482	2.440	159.1	8.4	16.9
- 7.70 -1.06	+ 50.9 + 3.5	1953 TS2	12784	- 9.23 +0.63	+ 41.2 - 6.8		
1993 04 23	13 07.25	-01 22.7	1.417	2.394	162.3	7.3	16.7
1993 03 24	13 34.53	-05 13.6	1.005	1.969	159.2	10.3	17.1
- 5.95 -1.21	+ 58.7 + 4.7	4206 T-1	19326	- 7.05 +0.87	+ 44.0 - 9.2		
1993 04 23	13 11.16	-02 13.7	1.006	1.991	163.6	8.2	17.1
1993 03 24	13 35.51	+00 13.6	1.843	2.797	159.2	7.3	17.6
- 6.88 -0.80	+ 96.6 + 1.8	1983 RR4	14018	- 7.81 +0.52	+ 72.2 - 9.3		
1993 04 23	13 11.03	+04 47.2	1.823	2.783	158.4	7.6	17.6
1993 03 24	13 37.17	-20 19.1	1.367	2.295	152.0	11.8	17.0
- 7.04 -1.10	+ 37.6 +12.2	5469 T-2	20517	- 8.25 +0.74	+ 85.0 + 1.5		
1993 04 23	13 10.82	-16 55.6	1.325	2.315	166.6	5.8	16.7
1993 03 24	13 34.34	-12 27.1	2.357	3.297	156.9	6.8	18.5
- 6.24 -0.61	+ 39.4 + 4.8	1992 CT2	20341	- 6.84 +0.42	+ 50.6 - 1.5		
1993 04 23	13 12.80	-10 00.3	2.335	3.324	167.5	3.8	18.3
1993 03 24	13 38.23	-15 47.9	1.355	2.295	154.5	10.8	17.8
- 6.85 -1.19	-9.8 + 7.9	1980 FF3	16022	- 8.89 +0.63	+ 24.4 + 1.9		
1993 04 23	13 11.25	-15 15.1	1.274	2.266	167.2	5.7	17.5
1993 03 24	13 39.73	-02 33.8	1.760	2.711	158.2	7.8	17.6
- 7.77 -0.85	+ 59.7 + 1.9	1991 UO2	19513	- 8.59 +0.59	+ 43.1 - 7.0		
1993 04 23	13 12.53	+00 16.9	1.764	2.738	162.1	6.5	17.6
1993 03 24	13 37.99	-25 02.5	2.934	3.821	148.6	7.8	18.2
- 7.27 -0.64	- 12.7 + 6.7	1981 EZ25	19859	- 8.29 +0.34	+ 23.0 + 4.2		
1993 04 23	13 12.85	-24 42.6	2.846	3.819	163.0	4.4	18.0
1993 03 24	13 37.57	-03 22.2	1.501	2.457	158.7	8.5	16.4
- 6.09 -1.02	+ 57.7 + 3.5	1989 LA	14958	- 7.85 +0.52	+ 46.7 - 7.2		
1993 04 23	13 13.81	-00 25.7	1.422	2.401	162.9	7.1	16.2
1993 03 24	13 39.95	-13 46.7	1.508	2.449	155.1	9.9	18.3
- 7.36 -0.98	+ 56.2 + 8.2	1989 CY2	19302	- 8.33 +0.68	+ 75.2 - 2.8		
1993 04 23	13 13.35	-10 09.2	1.496	2.487	167.6	5.0	18.1

1993 03 24	13 41.07	-22 16.1	2.115	3.020	150.0	9.5	17.7	
- 7.88 -0.80	+3.9 + 8.4	1988 CL	12946	- 8.76 +0.53	+ 43.1 + 3.3			
1993 04 23	13 13.64	-20 56.2	2.092	3.075	165.5	4.7	17.4	
1993 03 24	13 41.33	-06 17.0	1.830	2.777	157.4	7.9	17.6	
- 7.69 -0.97	+ 28.9 + 3.4	1971 UN	17196	- 9.51 +0.45	+ 28.9 - 3.7			
1993 04 23	13 12.91	-04 37.1	1.732	2.716	165.3	5.4	17.3	
1993 03 24	13 52.48	+19 11.4	1.181	2.094	148.0	14.6	15.8	
-13.37 -1.17	- 13.0 -14.2	1977 RL	13853	-12.45 +1.33	-104.5 -12.5			
1993 04 23	13 09.10	+16 11.8	1.276	2.196	148.4	13.9	16.0	
1993 03 24	13 38.71	+00 48.8	2.065	3.014	158.4	7.0	16.8	
- 6.35 -0.73	+ 87.7 + 1.2	1936 QE1	19854	- 7.35 +0.43	+ 64.7 - 8.3			
1993 04 23	13 16.01	+04 55.0	2.045	3.005	159.0	6.9	16.8	
1993 03 24	13 40.65	-03 52.4	1.514	2.466	157.9	8.8	17.3	
- 6.51 -0.99	+ 89.7 + 4.3	1987 SH2	17018	- 7.94 +0.57	+ 76.1 - 8.6			
1993 04 23	13 16.09	+00 40.3	1.480	2.457	162.4	7.1	17.1	
1993 03 24	13 39.31	-19 22.1	2.210	3.127	152.2	8.6	17.2	
- 5.87 -0.75	+ 36.3 + 7.9	1990 TR12	20336	- 7.13 +0.38	+ 68.4 + 1.7			
1993 04 23	13 17.73	-16 33.4	2.109	3.101	168.3	3.8	16.8	
1993 03 24	13 45.39	-26 12.7	1.201	2.107	146.6	15.1	16.2	
- 7.30 -1.60	- 71.2 +11.1	3535 P-L	17461	-11.10 +0.61	+7.6 +12.0			
1993 04 23	13 13.70	-27 50.1	1.087	2.063	160.8	9.2	15.7	
1993 03 24	13 43.88	-08 07.9	1.057	2.010	156.3	11.5	17.3	
- 6.68 -1.44	+6.4 + 5.0	4129 T-2	15085	- 9.33 +0.72	+ 12.2 - 3.8			
1993 04 23	13 15.86	-07 23.7	0.993	1.987	167.3	6.4	17.0	
1993 03 24	13 45.01	-13 08.4	1.487	2.425	154.3	10.3	16.4	
- 7.90 -1.13	+ 26.7 + 7.3	1981 UT	14347	- 9.61 +0.63	+ 48.4 - 1.2			
1993 04 23	13 15.49	-10 59.9	1.440	2.433	168.3	4.8	16.1	
1993 03 24	13 43.17	-07 32.7	1.826	2.769	156.6	8.2	17.1	
- 6.97 -0.82	+ 69.4 + 4.3	(5163)	19994	- 7.92 +0.53	+ 66.5 - 5.4			
1993 04 23	13 18.33	-03 50.9	1.827	2.813	166.0	5.0	17.0	
1993 03 24	13 43.17	-06 56.7	1.777	2.722	156.8	8.3	17.5	
- 6.59 -0.92	+ 65.1 + 4.9	1988 AX4	16874	- 8.21 +0.45	+ 65.7 - 5.0			
1993 04 23	13 18.44	-03 22.2	1.707	2.693	165.7	5.3	17.2	
1993 03 24	13 42.69	-16 50.5	1.969	2.893	153.0	9.0	15.4	
- 6.29 -0.84	+7.9 + 6.7	(5070)	19671	- 7.68 +0.43	+ 34.9 + 1.3			
1993 04 23	13 19.38	-15 36.5	1.911	2.904	169.0	3.8	15.1	
1993 03 24	13 41.70	-09 41.0	1.869	2.811	156.4	8.2	17.2	
- 5.86 -0.79	+ 37.8 + 4.5	2083 T-2	14964	- 6.92 +0.46	+ 43.2 - 3.0			
1993 04 23	13 20.22	-07 25.7	1.857	2.849	168.3	4.1	17.0	
1993 03 24	13 44.97	-18 49.9	2.239	3.151	151.4	8.7	17.8	
- 7.45 -0.84	-1.1 + 6.6	1990 RT2	19304	- 9.02 +0.38	+ 29.6 + 2.6			
1993 04 23	13 18.00	-17 59.9	2.148	3.138	167.8	3.9	17.5	
1993 03 24	13 45.59	-12 47.5	1.398	2.336	154.3	10.7	16.0	
- 6.34 -1.10	+ 62.6 + 8.5	1991 VO	19517	- 8.04 +0.60	+ 80.8 - 3.5			
1993 04 23	13 20.89	-08 50.0	1.361	2.356	169.0	4.7	15.7	

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1993 03 24    13 42.03   -01 07.1    2.584    3.526   157.7     6.2    16.5
- 5.41 -0.60  + 63.7 + 1.2    (5140)     19849   - 6.39 +0.30  + 50.2 - 5.5
1993 04 23    13 22.69   +01 56.1    2.552    3.523   162.4     4.9    16.4

1993 03 24    13 44.39   -21 05.7    1.451    2.368   150.2    12.1    16.4
- 5.56 -1.18  + 49.1 +13.1   1986 SC2    14790   - 8.12 +0.47  +107.6 + 3.7
1993 04 23    13 20.82   -16 53.3    1.314    2.309   168.9     4.8    15.8

1993 03 24    13 47.14   -11 32.5    1.987    2.919   154.5     8.5    18.4
- 7.13 -0.86  + 44.2 + 5.5   1987 UG     12943   - 8.52 +0.44  + 56.3 - 2.1
1993 04 23    13 21.27   -08 47.8    1.940    2.933   169.1     3.7    18.1

1993 03 24    13 45.43   -15 01.7    2.213    3.137   153.4     8.2    17.2
- 5.63 -0.73  + 47.9 + 6.3   1990 TJ2    20819   - 6.86 +0.36  + 66.7 - 0.7
1993 04 23    13 24.68   -11 56.8    2.160    3.156   170.6     3.0    16.9

1993 03 24    13 51.54   -13 56.5    1.566    2.494   152.5    10.6    18.1
- 7.88 -1.11  + 18.7 + 7.0   2272 T-3    19330   - 9.69 +0.57  + 41.7 - 0.4
1993 04 23    13 22.06   -12 12.2    1.533    2.530   170.0     4.0    17.8

1993 03 24    13 50.53   +00 25.1    1.768    2.707   155.5     8.8    17.9
- 7.27 -1.02  + 65.4 + 1.5    (5058)     19666   - 9.35 +0.41  + 43.9 - 8.3
1993 04 23    13 22.96   +03 27.1    1.699    2.670   161.2     7.0    17.7

1993 03 24    13 47.24   +03 42.5    2.433    3.367   155.8     7.0    16.8
- 6.16 -0.69  + 44.9 - 0.8    (5106)     19835   - 7.40 +0.31  + 20.9 - 6.7
1993 04 23    13 25.07   +05 32.2    2.396    3.358   159.7     6.0    16.7

1993 03 24    13 53.76   -11 52.0    1.440    2.371   152.8    11.1    16.8
- 7.69 -1.21  + 11.3 + 6.1    (5273)     20617   - 9.90 +0.57  + 29.0 - 1.1
1993 04 23    13 24.07   -10 38.2    1.400    2.398   170.3     4.1    16.4

1993 03 24    13 48.53   -06 46.1    1.964    2.901   155.5     8.2    17.4
- 5.95 -0.83  + 53.3 + 3.7   1990 RO1    17964   - 7.45 +0.38  + 51.6 - 4.4
1993 04 23    13 26.22   -03 53.9    1.923    2.913   167.5     4.3    17.1

1993 03 24    13 50.39   -16 27.5    2.013    2.929   151.6     9.3    17.0
- 6.21 -0.88  + 24.5 + 6.8   1990 SU10   17641   - 7.94 +0.36  + 50.3 + 0.8
1993 04 23    13 26.87   -14 24.1    1.941    2.938   171.0     3.1    16.6

1993 03 24    13 50.69   -17 05.7    2.200    3.112   151.2     8.9    17.9
- 6.25 -0.84  + 40.7 + 7.2   1988 CF7    18113   - 8.03 +0.31  + 68.2 + 0.9
1993 04 23    13 27.14   -14 10.5    2.093    3.090   171.1     2.9    17.5

1993 03 24    13 48.51   +00 26.8    2.584    3.519   156.0     6.6    16.8
- 5.54 -0.63  + 56.8 + 0.4   1990 WL     17647   - 6.66 +0.28  + 39.9 - 5.8
1993 04 23    13 28.56   +03 03.2    2.566    3.537   162.3     5.0    16.7

1993 03 24    13 50.78   +07 09.4    2.182    3.109   154.1     8.1    16.7
- 6.36 -0.80  + 56.4 - 1.9   1990 SW3    17450   - 7.95 +0.32  + 21.5 - 9.0
1993 04 23    13 27.24   +09 19.4    2.139    3.087   156.4     7.5    16.6

1993 03 24    13 52.25   +04 28.3    1.201    2.145   154.5    11.6    16.8
- 5.75 -1.41  + 74.5 + 0.6   1986 JC     18427   - 9.39 +0.41  + 31.4 -14.1
1993 04 23    13 26.19   +07 34.4    1.096    2.063   158.0    10.5    16.4

1993 03 24    13 51.94   -17 39.2    1.491    2.410   150.7    11.7    17.0
- 5.85 -1.20  + 25.3 + 9.5   1989 GU3    17443   - 8.64 +0.41  + 65.4 + 1.9
1993 04 23    13 27.24   -15 09.2    1.381    2.380   170.9     3.8    16.4
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