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

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TWX 710-320-6842 ASTROGRAM CAM ** Brian G. Marsden, Director
Telephone 617-495-7244/7440/7444 ** Conrad M. Bardwell, Associate Director

EDITORIAL NOTICE.

The next MPCs will be published on or about Aug. 27. No MPCs will be issued in July.

* * * * *

ERRATA.

13050	- 2	For	T. Urata (MPC 7613)	read	T. Furuta (JAM 1238)			
13105	-25 to -22	For	MPC 12856	read	MPC 12285			
13160	22	For	G 0.00	read	G 0.25			
13163	11	For	0.0 0.0 0.7+	read	809 0.0 0.7+			

* * * * *

IDENTIFICATION CHANGES.

Continuation to MPC 13106.

Object	Date	UT	R. A. (1950)	Decl.	Old desig.	Mag.	Obs.
1935 TK *	1935 10	03.79026	23 29.5	-01 12	1935 SN	14.0	094
1982 DV6 *	1982 02	27.97367	10 52 45.55	+06 41 04.9	1982 DE5		010
1985 VU5 *	1985 11	11.79021	02 12 07.18	+02 19 16.0	1985 VG2	16.5	095
1988 DJ2 *	1988 02	17.10556	07 41 51.56	+22 05 48.3	1988 CP7	19.5	809
1988 DJ2	1988 02	17.11597	07 41 51.10	+22 05 48.2	1988 CP7		809
1988 DJ2	1988 02	17.12639	07 41 50.68	+22 05 49.0	1988 CP7		809
1988 DQ2 *	1988 02	17.10556	07 47 45.53	+23 36 39.2	1988 CR7	19.5	809
1988 DQ2	1988 02	17.11597	07 47 45.09	+23 36 40.5	1988 CR7		809
1988 DQ2	1988 02	17.12639	07 47 44.71	+23 36 40.5	1988 CR7		809

* * * * *

OBSERVATIONS OF COMETS.

Observations are published here for the following observatory codes:

046 Klet. Observer A. Mrkos.
061 Uzhgorod. 0.42-m astrograph. Observers I. I. Goroshchak, T. Yu. Galas, S. I. Vorinka, S. I. Ignatovich and M. M. Osipenko. From Kiev Komet. Tsirk.
372 Geisei. Observer T. Seki.
385 Nihondaira Observatory, Oohira Station. 0.13-m hyperboloid astrocamera. Observers W. Kakkei, M. Kizawa and T. Urata.
397 Sapporo Science Center. 0.60-m f/3.5 reflector. Observer K. Watanabe.
399 Kushiro. Observer S. Ueda. Measurer H. Kaneda.
400 Kitami. Observers K. Endate and T. Fujii. Measured by K. Watanabe

and M. Yanai.
415 Kambah, near Canberra. Observer D. Herald.
494 Stakenbridge. Observer B. Manning.
503 Cambridge. Observer J. D. Shanklin.
657 Victoria. Observers J. B. Tatum and D. D. Balam.
675 Palomar. 1.5-m reflector and 0.46-m Schmidt. Observers J. Alu, J. Gibson, E. Helin, H. Holt, E. Majkowski, B. Roman, C. Shoemaker and E. Shoemaker. Measured by J. Alu, J. Gibson and C. Shoemaker.
688 Lowell Observatory, Anderson Mesa Station. 1.1-m reflector and 0.33-cm photographic telescope. Observers B. A. Skiff, S. J. Bus and T. J. Kreidl. Measured by B. A. Skiff and S. J. Bus. Communicated by E. Bowell.
801 Oak Ridge Observatory. Observers R. E. McCrosky, G. Schwartz and C.-Y. Shao.
892 YGCO Nagano and Chiyoda Stations. Observers S. Hayakawa and T. Kojima.
978 Conder Brow. 0.53-m reflector. Observer D. Buczynski. Communicated by G. M. Hurst.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
		Periodic Comet Giacobini-Zinner					
/1985 XIII	1985	08 25.05486	04 26 57.27	+46 10 46.2			061
/1985 XIII	1985	08 25.05746	04 26 58.21	+46 10 35.3			061
/1985 XIII	1985	08 25.05938	04 26 59.13	+46 10 28.5			061
/1985 XIII	1985	08 26.05903	04 33 19.98	+45 02 41.8			061
/1985 XIII	1985	08 26.06076	04 33 20.54	+45 02 35.9			061
/1985 XIII	1985	08 26.06215	04 33 21.17	+45 02 31.0			061
/1985 XIII	1985	09 16.08576	06 09 35.13	+16 46 40.4			061
/1985 XIII	1985	09 16.09097	06 09 36.05	+16 46 13.0			061
/1985 XIII	1985	09 19.10289	06 18 57.65	+12 42 13.0			061
/1985 XIII	1985	09 19.10486	06 18 57.85	+12 42 05.9			061
/1985 XIII	1985	09 19.10729	06 18 58.36	+12 41 55.2			061
/1985 XIII	1985	09 19.10938	06 18 58.69	+12 41 43.6			061
/1985 XIII	1985	09 19.11134	06 18 58.97	+12 41 35.0			061
/1985 XIII	1985	09 19.11331	06 18 59.29	+12 41 22.0			061
/1985 XIII	1985	09 19.11528	06 18 59.69	+12 41 14.6			061
/1985 XIII	1985	09 19.11713	06 19 00.05	+12 41 05.5			061
/1985 XIII	1985	09 20.08831	06 21 50.65	+11 24 14.1			061
/1985 XIII	1985	09 21.07014	06 24 38.15	+10 07 22.2			061
/1985 XIII	1985	09 21.07193	06 24 38.37	+10 07 15.4			061
/1985 XIII	1985	09 21.07384	06 24 38.80	+10 07 08.9			061
/1985 XIII	1985	09 21.08125	06 24 40.13	+10 06 32.5			061
/1985 XIII	1985	09 21.08299	06 24 40.19	+10 06 24.9			061
/1985 XIII	1985	09 21.08490	06 24 40.43	+10 06 14.3			061
		Comet Shoemaker (1986 XIV)					
/1986 XIV	1988	05 12.29063	14 44 46.12	+36 29 32.4			675
/1986 XIV	1988	05 12.32430	14 44 44.02	+36 29 39.1			675
		Comet Wilson (1986l)					
/1986l	1986	09 19.76562	20 50 20.09	+14 36 03.0			061
/1986l	1986	09 19.76736	20 50 19.91	+14 36 00.7			061
/1986l	1986	09 22.76944	20 44 42.01	+13 30 39.5			061
/1986l	1986	09 22.77465	20 44 41.54	+13 30 33.0			061
/1986l	1986	09 22.77882	20 44 40.81	+13 30 26.7			061
/1986l	1986	09 25.78125	20 39 17.66	+12 24 05.1			061
/1986l	1986	09 25.78646	20 39 17.21	+12 23 56.4			061
/1986l	1986	09 25.79410	20 39 16.58	+12 23 48.4			061

Periodic Comet Tempel 2

/1987g	1988	05	09.64653	16	05	04.33	+03	03	44.5	14	T 400
/1987g	1988	05	09.66111	16	05	03.54	+03	03	51.3		400
/1987g	1988	05	11.89435	16	03	26.13	+03	15	55.5		046
/1987g	1988	05	11.90569	16	03	25.63	+03	15	58.9		046
/1987g	1988	05	12.97572	16	02	35.93	+03	21	22.1		046
/1987g	1988	05	12.98712	16	02	35.27	+03	21	27.6		046
/1987g	1988	05	15.93635	16	00	10.37	+03	34	37.8		046
/1987g	1988	05	15.95059	16	00	09.35	+03	34	42.4		046
/1987g	1988	06	04.51042	15	41	16.31	+03	43	04.9		385
/1987g	1988	06	04.53438	15	41	15.36	+03	42	57.4		385
/1987g	1988	06	04.55972	15	41	13.48	+03	42	54.8		385
/1987g	1988	06	05.51667	15	40	17.53	+03	39	04.0		892
/1987g	1988	06	05.52361	15	40	17.16	+03	39	01.4		892
/1987g	1988	06	05.53819	15	40	16.01	+03	38	56.9		892
/1987g	1988	06	09.28653	15	36	44.27	+03	19	46.7		657
/1987g	1988	06	09.32750	15	36	41.89	+03	19	33.8		657

Comet Furuyama (1987f1)

/1987f1	1988	06	11.71976	02	50	26.35	-55	15	11.3		415

Comet Liller (1988a)

/1988a	1988	04	23.86970	01	48	10.92	+58	45	07.8		494
/1988a	1988	04	23.87549	01	48	12.70	+58	45	31.8		494
/1988a	1988	05	02.82301	02	56	56.95	+68	48	37.9		046
/1988a	1988	05	02.82370	02	56	57.48	+68	48	40.9		046
/1988a	1988	05	05.89448	03	38	17.24	+71	45	17.2		046
/1988a	1988	05	05.89517	03	38	17.88	+71	45	18.5		046
/1988a	1988	05	06.85073	03	53	57.33	+72	32	52.3		046
/1988a	1988	05	06.85142	03	53	58.23	+72	32	53.7		046
/1988a	1988	05	07.85141	04	11	56.21	+73	17	39.5		046
/1988a	1988	05	07.85211	04	11	56.90	+73	17	41.6		046
/1988a	1988	05	09.84655	04	52	31.49	+74	28	00.5		046
/1988a	1988	05	10.88280	05	15	49.66	+74	52	42.1		503
/1988a	1988	05	11.01096	05	18	48.26	+74	55	03.9		046
/1988a	1988	05	11.01154	05	18	49.12	+74	55	04.9		046
/1988a	1988	05	12.85957	06	02	57.02	+75	13	47.7		046
/1988a	1988	05	12.86015	06	02	57.72	+75	13	47.6		046
/1988a	1988	05	12.88825	06	03	38.50	+75	13	50.1		503
/1988a	1988	05	14.56170	06	44	02.82	+75	02	54.7		397
/1988a	1988	05	14.57302	06	44	19.19	+75	02	45.3		397
/1988a	1988	05	14.72431	06	47	54.97	+75	00	27.9		400
/1988a	1988	05	14.72917	06	48	01.43	+75	00	24.6		400
/1988a	1988	05	15.90049	07	15	01.51	+74	36	05.1		503
/1988a	1988	05	19.91182	08	33	06.68	+71	55	43.2		503
/1988a	1988	06	02.93605	10	39	32.86	+56	28	11.4		503
/1988a	1988	06	04.47674	10	46	27.35	+54	42	38.9		385
/1988a	1988	06	04.54826	10	46	45.37	+54	37	43.0		892
/1988a	1988	06	04.58507	10	46	53.66	+54	35	29.2		385
/1988a	1988	06	09.30076	11	04	18.57	+49	23	24.5		657

Comet Shoemaker (1988b)

/1988b	1988	05	09.17500	09	13	51.45	+26	14	56.3		675
/1988b	1988	05	10.20972	09	13	51.80	+26	07	29.0		675

Comet Levy (1988e)

/1988e	1988	05	14.44288	22	29	53.29	+41	40	54.4		675
/1988e	1988	05	14.47638	22	29	54.36	+41	41	44.0		675
/1988e	1988	05	27.43138	22	35	48.13	+46	58	28.3		675

/1988e	1988	05	27.43539	22	35	48.20	+46	58	34.3			675
/1988e	1988	05	27.43907	22	35	48.27	+46	58	39.3			675
/1988e	1988	05	28.44833	22	36	05.82	+47	22	32.4			675
/1988e	1988	05	28.45307	22	36	05.89	+47	22	39.2			675
/1988e	1988	05	28.45760	22	36	05.96	+47	22	45.6			675
/1988e	1988	06	05.45758	22	37	27.28	+50	27	17.2			688
/1988e	1988	06	05.46181	22	37	27.32	+50	27	23.1			688

Comet Shoemaker-Holt (1988g)

/1988g	1988	05	17.70556	22	18	50.87	+26	49	18.8	13	T	372
/1988g	1988	05	17.72013	22	18	51.3	+26	49	54	13	T	372
/1988g	1988	05	17.74236	22	18	51.68	+26	50	46.8			372
/1988g	1988	05	19.48229	22	19	22.51	+27	59	19.6	17.0	T	675
/1988g	1988	05	20.46788	22	19	37.64	+28	37	55.7			675
/1988g	1988	05	21.03097	22	19	45.52	+28	59	48.0		1	978
/1988g	1988	05	21.03774	22	19	45.84	+29	00	11.9		1	978
/1988g	1988	05	21.40606	22	19	50.86	+29	14	21.6			688
/1988g	1988	05	21.41922	22	19	51.03	+29	14	50.3			688
/1988g	1988	05	21.69387	22	19	54.54	+29	25	36.2	13	T	399
/1988g	1988	05	21.70211	22	19	54.59	+29	25	53.8			399
/1988g	1988	05	21.71053	22	19	54.74	+29	26	13.9			399
/1988g	1988	05	22.73229	22	20	06.45	+30	05	52.2	13	T	372
/1988g	1988	05	24.63900	22	20	23.36	+31	19	06.2	13	T	399
/1988g	1988	05	24.70671	22	20	23.92	+31	21	44.1			399
/1988g	1988	05	24.71412	22	20	23.98	+31	21	59.7			399
/1988g	1988	05	25.41311	22	20	28.10	+31	48	38.6			688
/1988g	1988	05	25.42797	22	20	28.49	+31	49	10.4			688
/1988g	1988	05	26.73125	22	20	34.20	+32	38	39.1	14	T	372
/1988g	1988	06	02.42992	22	20	09.39	+36	46	36.8			675
/1988g	1988	06	02.43439	22	20	09.33	+36	46	46.5			675
/1988g	1988	06	02.43862	22	20	09.27	+36	46	55.8			675
/1988g	1988	06	03.42110	22	19	57.58	+37	22	19.8			675
/1988g	1988	06	03.42863	22	19	57.48	+37	22	36.0			675
/1988g	1988	06	03.43125	22	19	57.44	+37	22	41.7			675
/1988g	1988	06	04.36543	22	19	44.26	+37	56	03.9			688
/1988g	1988	06	04.37248	22	19	44.14	+37	56	19.1			688
/1988g	1988	06	04.37845	22	19	44.04	+37	56	31.9			688
/1988g	1988	06	05.44869	22	19	26.38	+38	34	31.2			688
/1988g	1988	06	05.45278	22	19	26.30	+38	34	39.9			688
/1988g	1988	06	09.39035	22	17	58.22	+40	51	18.0			657
/1988g	1988	06	12.24741	22	16	29.94	+42	27	23.7			801

Note 1: at plate limit; difficult to measure.

* * * * *

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
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 outside reference star set
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. (1950)	Decl.	Mag.	N	Obs.
033 Tautenburg								
S. Marx, Karl Schwarzschild Observatorium, DDR-6901 Tautenburg, Democratic Republic of Germany								
Observers F. Borngen, K.-H. Mau and C. Hogner								
Measurer F. Borngen								
1.3-m Schmidt telescope								
SAOC								
1988 FU	*	1988 03	17.99167	12 43 26.31	+09 48 04.6	19.2		033
1988 FU		1988 03	18.04028	12 43 24.43	+09 48 32.6			033
1988 FU		1988 03	18.98472	12 42 48.85	+09 57 42.6			033
1988 FU		1988 03	19.03333	12 42 47.02	+09 58 10.5			033
1988 FV	*	1988 03	17.99167	12 43 34.52	+12 00 52.3	19.3		033
1988 FV		1988 03	18.04028	12 43 32.46	+12 01 11.3			033
1988 FV		1988 03	18.98472	12 42 53.16	+12 07 26.4			033
1988 FV		1988 03	19.03333	12 42 51.00	+12 07 45.3			033
1988 FW	*	1988 03	17.99167	12 44 20.70	+09 52 16.6	19.5		033
1988 FW		1988 03	18.04028	12 44 18.07	+09 52 35.9			033
1988 FW		1988 03	18.98472	12 43 27.40	+09 58 59.2			033
1988 FW		1988 03	19.03333	12 43 24.64	+09 59 18.3			033
1988 FX	*	1988 03	17.99167	12 44 22.38	+11 48 03.2	19.9		033
1988 FX		1988 03	18.04028	12 44 20.04	+11 48 14.4			033
1988 FX		1988 03	18.98472	12 43 34.85	+11 52 10.0			033
1988 FX		1988 03	19.03333	12 43 32.59	+11 52 20.9			033
1988 FY	*	1988 03	17.99167	12 44 26.24	+11 17 57.9	18.3		033
1988 FY		1988 03	18.04028	12 44 24.06	+11 18 31.7			033
1988 FY		1988 03	18.98472	12 43 43.13	+11 29 30.5			033
1988 FY		1988 03	19.03333	12 43 40.94	+11 30 04.0			033
1988 FZ	*	1988 03	17.99167	12 44 52.88	+10 04 01.3	18.4		033
1988 FZ		1988 03	18.04028	12 44 50.65	+10 04 29.5			033
1988 FZ		1988 03	18.98472	12 44 07.59	+10 13 44.0			033

1988	FZ		1988	03	19.03333	12	44	05.30	+10	14	12.5		033
1988	FA1	*	1988	03	17.99167	12	52	35.04	+10	58	04.2	20.2	033
1988	FA1		1988	03	18.04028	12	52	33.01	+10	58	25.0		033
1988	FA1		1988	03	18.98472	12	51	54.85	+11	05	17.1		033
1988	FA1		1988	03	19.03333	12	51	52.80	+11	05	38.3		033
1988	FB1	*	1988	03	17.99167	12	52	47.50	+11	23	20.7	19.0	033
1988	FB1		1988	03	18.04028	12	52	45.75	+11	23	59.4		033
1988	FB1		1988	03	18.98472	12	52	12.72	+11	36	34.6		033
1988	FB1		1988	03	19.03333	12	52	10.97	+11	37	13.2		033
1988	FC1	*	1988	03	17.99167	12	53	32.58	+10	47	06.1	19.6	033
1988	FC1		1988	03	18.04028	12	53	30.27	+10	47	12.8		033
1988	FC1		1988	03	18.98472	12	52	45.28	+10	49	52.8		033
1988	FC1		1988	03	19.03333	12	52	42.92	+10	50	00.3		033
1988	FD1	*	1988	03	17.99167	12	55	58.79	+11	08	18.2	18.8	033
1988	FD1		1988	03	18.04028	12	55	56.73	+11	08	36.5		033
1988	FD1		1988	03	19.00729	12	55	17.43	+11	14	41.5	19.1	033
1988	FD1		1988	03	19.06146	12	55	15.18	+11	15	01.4		033
1988	JR	*	1988	05	12.93125	15	00	25.28	-17	50	10.0	17.2	033
1988	JR		1988	05	12.98681	15	00	22.06	-17	49	55.8		033
1988	JR		1988	05	13.97708	14	59	27.70	-17	45	40.4		033
1988	JS	*	1988	05	12.93125	15	02	33.40	-15	53	21.3	16.4	033
1988	JS		1988	05	12.98681	15	02	29.90	-15	52	55.0		033
1988	JS		1988	05	13.97708	15	01	30.80	-15	45	04.0		033
1988	JT	*	1988	05	12.93125	15	10	31.03	-16	16	05.3	18.3	033
1988	JT		1988	05	12.98681	15	10	27.46	-16	16	07.4		033
1988	JT		1988	05	13.97708	15	09	26.29	-16	17	04.3	V	033
229			1988	05	12.93125	15	02	48.04	-18	22	42.7	14.2	033
229			1988	05	12.98681	15	02	45.42	-18	22	33.4		033
229			1988	05	13.97708	15	02	00.24	-18	19	52.7		033
487			1988	03	17.99167	12	43	57.82	+11	01	09.3	12.9	033
487			1988	03	18.04028	12	43	55.53	+11	01	30.6		033
487			1988	03	18.98472	12	43	11.74	+11	08	24.7		033
487			1988	03	19.03333	12	43	09.42	+11	08	46.0		033
740			1988	03	17.99167	12	44	20.38	+12	11	07.9	12.8	033
740			1988	03	18.04028	12	44	18.37	+12	11	29.4		033
1039			1988	05	12.93125	15	05	05.48	-16	16	28.7	14.4	033
1039			1988	05	12.98681	15	05	02.48	-16	16	10.7		033
1039			1988	05	13.97708	15	04	11.54	-16	10	44.1		033
1495			1988	05	05.88924	10	40	12.46	+13	06	32.2		033
1495			1988	05	06.86701	10	40	20.11	+13	00	33.2		033
1495			1988	05	06.87674	10	40	20.18	+13	00	29.9		033
1495			1988	05	06.88889	10	40	20.26	+13	00	25.7		033
1495			1988	05	07.85590	10	40	29.23	+12	54	24.7		033
1495			1988	05	07.86528	10	40	29.28	+12	54	20.3		033
1495			1988	05	07.87396	10	40	29.37	+12	54	17.2	17.2	033
1495			1988	05	10.88160	10	41	05.71	+12	34	57.6		033
1495			1988	05	11.86597	10	41	20.39	+12	28	25.6		033
1495			1988	05	11.91806	10	41	21.05	+12	28	06.0		033
1669			1988	05	12.93125	14	59	34.34	-17	48	08.0	14.4	033
1669			1988	05	12.98681	14	59	31.53	-17	47	57.4		033
1669			1988	05	13.97708	14	58	44.07	-17	44	54.3		033
1726			1988	05	12.93125	15	05	42.16	-17	32	09.9	15.4	033
1726			1988	05	12.98681	15	05	39.13	-17	31	54.2		033
1726			1988	05	13.97708	15	04	48.59	-17	27	08.6		033
1822			1988	05	12.93125	15	05	45.44	-17	05	04.7	14.5	033
1822			1988	05	12.98681	15	05	42.08	-17	04	48.7		033
1822			1988	05	13.97708	15	04	46.01	-17	00	03.3		033
2211			1988	03	17.99167	12	54	13.60	+11	02	17.0	18.7	033

2211		1988	03	18.04028	12	54	11.81	+11	02	40.4	033
2211		1988	03	18.98472	12	53	37.54	+11	10	28.5	033
2211		1988	03	19.00729	12	53	36.75	+11	10	39.1	19.0 033
2211		1988	03	19.03333	12	53	35.71	+11	10	51.6	033
2211		1988	03	19.06146	12	53	34.61	+11	11	06.8	033
2667		1988	05	12.93125	15	08	47.13	-17	02	48.2	16.8 033
2667		1988	05	12.98681	15	08	44.38	-17	02	39.1	033
2667		1988	05	13.97708	15	07	57.77	-16	59	59.7	033
2886		1988	03	17.80625	08	37	46.13	+19	51	39.8	033
2886		1988	03	17.85417	08	37	46.27	+19	51	38.8	16.8 033
3500		1988	03	17.80625	08	32	57.15	+17	54	27.7	033
3500		1988	03	17.85417	08	32	56.30	+17	54	27.1	17.7 033
3642		1988	05	13.04861	17	23	32.83	-05	39	23.0	16.1 033
3642		1988	05	14.04722	17	22	55.93	-05	37	30.7	033

046 Klet
A. Mrkos, Dept. of Astronomy and Astrophysics, Charles University,
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Observers A. Mrkos, Z. Vavrova
0.6-m Maksutov reflector

1987	DS		1988	05	09.94279	15	24	02.28	-15	10	53.7 046
1987	DS		1988	05	09.95703	15	24	01.53	-15	10	51.1 046
1988	JX	*	1988	05	07.91484	14	37	28.52	-15	10	01.3 16.8 046
1988	JX		1988	05	07.92907	14	37	27.92	-15	09	57.4 046
1988	JX		1988	05	09.90616	14	35	50.48	-15	00	33.0 046
1988	JX		1988	05	09.92091	14	35	49.44	-15	00	27.7 046
1988	JX		1988	05	12.90442	14	33	26.06	-14	46	34.1 046
1988	JX		1988	05	12.91860	14	33	25.53	-14	46	28.8 046
1988	JY	*	1988	05	09.94279	15	22	44.72	-14	49	15.5 16.6 046
1988	JY		1988	05	09.95703	15	22	43.91	-14	49	09.5 046
1988	JY		1988	05	12.94157	15	19	55.43	-14	37	25.1 046
1988	JY		1988	05	12.95581	15	19	54.73	-14	37	21.5 046
1988	JZ	*	1988	05	09.94279	15	25	01.46	-14	40	07.9 16.5 046
1988	JZ		1988	05	09.95703	15	25	00.59	-14	40	01.5 046
1988	JZ		1988	05	12.94157	15	22	29.63	-14	13	42.6 046
1988	JZ		1988	05	12.95581	15	22	29.02	-14	13	38.5 046
216			1988	05	10.95431	15	15	21.50	-13	06	01.2 046
216			1988	05	10.96837	15	15	20.85	-13	05	56.5 046
1302			1988	05	12.94157	15	15	19.39	-15	42	50.1 046
1302			1988	05	12.95581	15	15	18.77	-15	42	47.4 046
1355			1988	05	09.94279	15	20	27.36	-13	10	26.7 046
1355			1988	05	09.95703	15	20	26.45	-13	10	02.1 046
1355			1988	05	10.95431	15	19	24.19	-12	42	30.2 046
1355			1988	05	10.96837	15	19	23.25	-12	42	08.1 046
1609			1988	05	11.90569	15	56	12.99	+04	21	27.9 046
1609			1988	05	12.97572	15	55	10.74	+04	22	14.3 046
1609			1988	05	12.98712	15	55	10.09	+04	22	13.9 046
2410			1988	05	09.94279	15	29	08.32	-14	22	32.4 046
2410			1988	05	09.95703	15	29	07.33	-14	22	28.3 046
2410			1988	05	12.94157	15	26	03.60	-14	12	05.8 046
2410			1988	05	12.95581	15	26	02.93	-14	12	04.2 046
2779			1988	05	10.95431	15	12	22.98	-13	57	40.7 046
3123			1988	05	12.94157	15	28	08.76	-15	41	11.3 046
3123			1988	05	12.95581	15	28	08.09	-15	41	08.0 046
3385			1988	05	09.94279	15	30	19.23	-11	36	34.2 046
3385			1988	05	09.95703	15	30	18.51	-11	36	28.8 046
3599			1988	05	12.94157	15	20	40.07	-15	56	33.3 046
3599			1988	05	12.95581	15	20	39.34	-15	56	28.5 046

054 Brorfelde
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Measurer P. Jensen
0.45-m Schmidt
Observations in part in association with INAS

1925	VF		1988	04	09.91134	12	14	41.69	+01	22	22.3		054
1925	VF		1988	04	13.93343	12	11	25.82	+01	35	57.5		054
1972	RT3		1988	04	09.91134	12	18	49.90	+03	09	51.7		054
1972	RT3		1988	04	13.91086	12	15	51.09	+03	27	56.1	18 v	054
1972	RT3		1988	04	14.85634	12	15	10.47	+03	31	56.0		054
1977	EM1		1988	04	13.93343	12	01	53.54	-00	10	20.1		054
1982	OK		1988	04	09.90440	12	24	54.45	+02	46	12.5		054
1982	OK		1988	04	09.92176	12	24	53.42	+02	46	19.3		054
1982	OK		1988	04	15.93916	12	19	29.21	+03	25	20.3		054
1984	HR1		1988	04	13.91086	12	02	27.81	+03	25	48.6		054
1984	HR1		1988	04	14.85634	12	01	44.30	+03	27	40.8		054
1986	XF		1988	04	13.93343	12	08	11.55	+00	26	44.0	17.5	054
1988	EA		1988	04	13.89575	11	41	03.66	-06	24	44.4	18 v	054
1988	EM1		1988	04	09.90440	12	19	30.12	+03	43	09.6	16.0	054
1988	EM1		1988	04	09.92176	12	19	29.41	+03	43	18.8		054
1988	EM1		1988	04	14.85634	12	16	47.22	+04	29	27.7		054
1988	EM1		1988	04	15.93916	12	16	15.06	+04	38	47.3		054
1988	EY1		1988	04	13.93343	12	02	07.42	-00	35	20.8	17.5	054
1988	EZ1		1988	04	13.93343	12	11	10.71	-01	06	52.5	17.0	054
1988	EA2		1988	04	09.91134	12	14	25.89	+02	39	34.6		054
1988	EA2		1988	04	13.91086	12	11	28.17	+03	03	57.3	17.5	054
1988	EA2		1988	04	14.85634	12	10	49.13	+03	09	15.1		054
1988	EB2	*	1988	03	13.03914	12	27	43.31	-03	06	33.6	17.5	054
1988	EB2		1988	03	14.98296	12	26	05.15	-02	50	24.5		054
1988	EB2		1988	03	18.96860	12	22	36.51	-02	16	22.8		054
1988	GU	*	1988	04	09.90440	12	27	10.06	+03	30	13.1	16.5	054
1988	GU		1988	04	09.92176	12	27	09.20	+03	30	14.5		054
1988	GU		1988	04	15.93916	12	22	48.35	+03	39	47.6		054
1988	GU		1988	04	15.96167	12	22	47.39	+03	39	49.8		054
1988	GV	*	1988	04	09.90440	12	28	18.96	+04	08	09.0	17.5	054
1988	GV		1988	04	15.93916	12	23	30.34	+04	32	37.3		054
1988	GW	*	1988	04	09.90440	12	28	56.06	+04	29	28.0	17.0	054
1988	GW		1988	04	09.92176	12	28	55.25	+04	29	30.4		054
1988	GW		1988	04	15.93916	12	24	33.42	+04	46	27.8		054
1988	GX	*	1988	04	09.90440	12	29	17.00	+04	05	23.3	16.5	054
1988	GX		1988	04	09.92176	12	29	16.10	+04	05	28.4		054
1988	GX		1988	04	15.93916	12	24	51.14	+04	35	12.5		054
1988	GY	*	1988	04	09.90440	12	27	06.55	+03	07	56.1	16.0	054
1988	GY		1988	04	09.92176	12	27	05.34	+03	07	53.2		054
1988	GY		1988	04	15.93916	12	20	56.77	+02	49	35.8		054
1988	GY		1988	04	15.96167	12	20	55.43	+02	49	31.1		054
1988	GZ	*	1988	04	09.91134	12	27	58.17	-00	06	34.5		054
1988	GZ		1988	04	15.96167	12	23	30.28	+00	10	56.4		054
1988	GA1	*	1988	04	09.91134	12	15	29.18	+02	12	44.8	17.0	054
1988	GA1		1988	04	13.91086	12	12	09.15	+02	14	23.4		054
1988	GA1		1988	04	13.93343	12	12	08.02	+02	14	23.7	17.0	054
1988	GA1		1988	04	14.85634	12	11	24.50	+02	14	29.9		054
1988	GB1	*	1988	04	09.91134	12	16	34.02	+00	57	24.1	17.5	054
1988	GB1		1988	04	13.93343	12	13	50.86	+01	50	14.6	17.5	054
1988	GB1		1988	04	14.85634	12	13	15.60	+02	01	54.8	17.5	054
1988	GC1	*	1988	04	09.91134	12	31	35.31	+01	02	13.4	17.5	054
1988	GC1		1988	04	15.96167	12	27	16.31	+01	36	48.1	17.5	054

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1988 GD1 * 1988 04 09.91134  12 32 41.60  +01 48 11.8           17.5    054
1988 GD1   1988 04 15.96167  12 28 29.86  +01 51 49.4           17.5    054
  65       1988 04 09.91134  12 28 51.46  +00 02 51.8                   054
  65       1988 04 15.96167  12 25 04.70  +00 30 12.1                   054
 205       1988 04 13.89575  11 49 45.33  -05 52 39.1                   054
 289       1988 03 18.96860  12 16 22.45  -01 37 47.6                   054
 492       1988 04 13.93343  12 13 43.58  -00 00 22.0                   054
 877       1988 04 15.93916  12 29 09.84  +03 39 00.5                   054
 877       1988 04 15.96167  12 29 08.80  +03 39 07.5                   054
1089       1988 04 13.91086  12 03 43.48  +05 36 48.9                   054
1089       1988 04 14.85634  12 02 59.94  +05 39 21.3                   054
1226       1988 04 09.90440  12 18 35.05  +00 00 48.0                   054
1226       1988 04 09.92176  12 18 34.05  +00 00 47.1                   054
1285       1988 04 13.89575  11 46 41.16  -05 15 22.5                   054
1668       1988 04 09.91134  12 16 24.42  +01 33 28.9                   054
1668       1988 04 13.93343  12 13 36.88  +01 54 02.2                   054
1668       1988 04 14.85634  12 12 59.89  +01 58 30.8                   054
1785       1988 04 13.89575  11 39 54.12  -05 19 36.9                   054
1798       1988 04 13.91086  12 06 13.60  +05 42 03.4                   054
1798       1988 04 14.85634  12 05 25.99  +05 43 35.9                   054
2030       1988 04 13.93343  12 06 31.53  +01 16 59.6                   054
2342       1988 03 18.96860  12 18 14.58  -02 03 59.0                   054
2385       1988 04 15.96167  12 35 59.18  +00 57 11.3           18    v 054
2391       1988 04 09.90440  12 18 30.37  +00 28 08.4                   054
2391       1988 04 09.92176  12 18 29.50  +00 28 13.9                   054
2391       1988 04 13.93343  12 15 26.59  +00 51 13.1                   054
2864       1988 04 13.91086  12 02 44.43  +04 15 35.8                   054
2864       1988 04 14.85634  12 02 12.11  +04 19 04.0                   054
3185       1988 04 09.91134  12 32 50.66  +02 12 12.5                   054
3434       1988 04 09.91134  12 30 46.59  +01 58 59.0                   054
3440       1988 04 13.91086  12 07 02.62  +02 55 13.9                   054
3440       1988 04 13.93343  12 07 01.80  +02 55 23.0                   054
3440       1988 04 14.85634  12 06 27.68  +03 00 44.9                   054
3617       1988 04 09.90440  12 30 42.05  +01 53 12.9                   054
3617       1988 04 09.92176  12 30 41.32  +01 53 24.0                   054
3617       1988 04 15.93916  12 26 54.68  +03 00 08.1                   054
3617       1988 04 15.96167  12 26 53.86  +03 00 22.3                   054

062 Turku
L. Oterma, Sirkkalank 31, SF-20700 Turku, Finland
Observer L. Oterma
Measurer A. Niemi
1941 HC    1941 04 03.94921  13 51 44.50  +05 19 51.2                   062

293 Burlington remote site
T. Handley, 13 Linden Avenue, Burlington, NJ 08016, U.S.A.
0.20-m f/4.0 astrograph
SAOC
1985 CL    1988 04 10.15000  12 34 30.27  -19 22 01.9                   293
1985 CL    1988 04 10.15972  12 34 29.68  -19 21 59.1                   293
 775       1988 04 10.15000  12 37 13.31  -18 54 37.6                   293
 775       1988 04 10.15972  12 37 12.83  -18 54 35.2                   293

372 Geisei
T. Seki, Kamimachi 2-9-35, Kochi, Japan
0.60-m reflector
1986 UZ    1988 02 21.76076  14 52 48.61  -20 14 43.7           18.5    372
1986 UZ    1988 02 21.77361  14 52 49.36  -20 14 47.3                   372
1986 UZ    1988 05 05.57986  14 23 12.32  -21 40 33.2           18      372
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1986 UZ		1988 05 07.59062	14 21 00.32	-21 31 53.6			18		372
1986 UZ		1988 05 07.61389	14 20 58.94	-21 31 46.0					372
1986 UZ		1988 05 08.59444	14 19 55.25	-21 27 28.9			18		372
1986 UZ		1988 05 12.60590	14 15 44.40	-21 09 06.5			18		372
1986 UZ		1988 05 18.62257	14 10 00.9	-20 40 38			18		372
1986 UZ		1988 05 22.63090	14 06 42.12	-20 22 06.9			18.5		372
1986 UZ		1988 06 04.52361	13 59 12.99	-19 29 55.4			18.5		372
1986 UZ		1988 06 05.55694	13 58 50.31	-19 26 28.0			18.5		372
1986 UZ		1988 06 06.52986	13 58 31.52	-19 23 15.7			18.5		372
1986 UZ		1988 06 06.55625	13 58 30.84	-19 23 12.9					372
1988 JM	*	1988 05 07.63229	15 01 41.32	-26 17 54.5			17		372
1988 JM		1988 05 07.64549	15 01 40.51	-26 17 47.8					372
1988 JM		1988 05 08.60868	15 00 52.41	-26 13 03.5			18		372
1988 JM		1988 05 08.62049	15 00 51.94	-26 13 00.3					372
1988 JM		1988 05 12.62257	14 57 31.16	-25 52 22.5			17.5		372
1988 JM		1988 05 12.63368	14 57 30.55	-25 52 19.2					372
1988 JM		1988 05 18.64097	14 52 35.86	-25 18 56.1			17.5		372
1988 JM		1988 05 18.65208	14 52 35.43	-25 18 52.0					372
1988 JM		1988 05 22.65104	14 49 29.02	-24 55 34.0			17.5		372
1988 JM		1988 05 22.66354	14 49 28.29	-24 55 28.8					372

376 Uenohara
N. Kawasato, 3-51, Hana-Koganei, Kodaira, Tokyo 187, Japan
Observer N. Kawasato
0.2-m f/4 hyperboloid astrocamera

1972 KM		1988 05 13.49132	14 24 15.70	+01 30 15.6						376
1972 KM		1988 05 13.54132	14 24 12.87	+01 30 18.2						376

385 Nihondaira Observatory, Oohira Station
M. Kizawa, 1458-10, Minami Numagami, Shizuoka 420, Japan
Observers W. Kakkei, M. Kizawa, T. Urata
0.13-m hyperboloid astrocamera

A910 FA		1988 05 13.61736	16 18 02.67	-14 35 20.9			16			385
A910 FA		1988 05 13.67222	16 17 59.36	-14 35 00.7						385

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

1986 PM4		1988 01 21.84201	05 29 37.81	+26 08 23.7			17		C	511
1986 PM4		1988 01 21.86510	05 29 37.04	+26 08 17.6					C	511
1986 PM4		1988 01 22.86148	05 29 07.21	+26 05 07.9			17.0			511
1986 PM4		1988 01 22.89514	05 29 06.20	+26 05 00.6						511
1988 AK		1988 01 22.86148	05 23 58.46	+24 37 45.3			17			511
1988 AK		1988 01 22.89514	05 23 57.57	+24 37 50.1						511
1988 BB1		1988 01 22.86148	05 34 22.06	+27 23 12.6			18.0			511
1988 BB1		1988 01 22.89514	05 34 21.01	+27 23 07.1						511
1988 BC1		1988 01 22.86148	05 36 37.52	+27 27 17.1			18.5			511
1988 BC1		1988 01 22.89514	05 36 36.50	+27 27 13.9						511
1988 BG3	*	1988 01 21.84201	05 23 47.64	+25 08 33.0			18.5			511
1988 BG3		1988 01 21.86510	05 23 46.74	+25 08 35.6						511
1988 BG3		1988 01 22.86148	05 23 14.84	+25 08 46.6			18.5			511
1988 BG3		1988 01 22.89514	05 23 13.92	+25 08 49.8						511
1988 BH3	*	1988 01 21.84201	05 27 06.43	+26 21 53.8			17			511
1988 BH3		1988 01 21.86510	05 27 06.24	+26 21 53.3						511
1988 BH3		1988 01 22.86148	05 26 47.60	+26 22 49.5			17			511
1988 BH3		1988 01 22.89514	05 26 46.88	+26 22 53.0						511
1988 BJ3	*	1988 01 21.84201	05 37 07.99	+23 59 03.2			16.5			511

1988 BJ3	1988 01 21.86510	05 37 07.33	+23 59 04.2			511
1988 BJ3	1988 01 22.86148	05 36 39.63	+23 59 26.2		16.5	511
1988 BJ3	1988 01 22.89514	05 36 38.69	+23 59 25.9			511
1729	1988 01 22.86148	05 30 55.05	+27 01 22.6		18.0	511
1729	1988 01 22.89514	05 30 53.83	+27 01 16.9			511
2762	1988 01 22.86148	05 23 39.57	+26 28 32.4		16.8	511
2762	1988 01 22.89514	05 23 38.90	+26 28 24.5			511

552 San Vittore
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Measurers C. Vacchi, V. Goretti, E. Colombini
AGK3, SAOC

1975 ED	1988 02 14.88403	07 29 48.18	+19 26 01.5			17.0		552
1975 ED	1988 02 14.90278	07 29 47.26	+19 26 02.2					552
1988 GE	1988 05 06.86597	13 59 44.65	-06 51 02.0			16.5		552
1988 GE	1988 05 06.88750	13 59 43.71	-06 50 49.3					552
1988 GE	1988 05 17.86667	13 52 36.94	-05 12 17.9			16.8		552
1988 GE	1988 05 17.88958	13 52 36.14	-05 12 06.4					552
1988 GE	1988 05 22.89653	13 50 09.34	-04 35 06.2			16.9		552
1988 GE	1988 05 22.91528	13 50 08.75	-04 34 58.3					552
1988 GE	1988 06 02.87153	13 46 57.31	-03 34 11.3			17.1		552
1988 GE	1988 06 02.89097	13 46 57.09	-03 34 05.3					552

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

22	1987 10 22.53306	11 02 10.95	+18 21 52.3					657
22	1987 10 22.54937	11 02 12.33	+18 21 45.5					657
135	1988 04 19.26465	13 44 48.89	-13 45 10.0					657
135	1988 04 19.31674	13 44 45.70	-13 44 54.8					657
135	1988 04 20.26118	13 43 49.50	-13 40 26.3					657
135	1988 04 21.30285	13 42 47.20	-13 35 27.8					657
135	1988 04 21.33062	13 42 45.46	-13 35 19.4					657
275	1987 12 13.23420	00 55 55.98	-00 02 27.3					657
431	1988 02 28.23532	10 33 03.82	+10 50 07.9					657
466	1988 04 09.22413	09 33 32.34	-06 32 34.7					657
1128	1987 11 17.19347	02 12 19.82	+12 49 46.7					657
1317	1988 03 15.25389	09 38 37.90	+33 24 41.1				N	657
1317	1988 03 15.31708	09 38 35.17	+33 24 23.6				N	657
1363	1988 04 10.32431	13 17 34.04	-08 37 19.1					657
1363	1988 04 12.36951	13 15 57.18	-08 26 55.0					657
1648	1988 05 08.31493	14 44 42.47	-05 29 00.6					657

675 Palomar
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Observers J. Alu (2, S), R. Coker (2, S), T. Gehrels (4, L), J. Gibson (1, C), E. Helin (2, S), H. E. Holt (3, S), H. R. Holt (3, S), C. Kowal (6, L), E. Majkowski (2, S), C. Mikolajczak (2, S), T. Rodriquez (3, S), B. Roman (2, S), C. Shoemaker (3, S), E. Shoemaker (3, S), J. Yee (2, S)

Measurers J. Alu (2), S. J. Bus (6), J. Gibson (1), E. Majkowski (2),
B. Roman (2), T. Rodriquez (3), C. Shoemaker (3), C. J. van Houten (4),
I. van Houten-Groeneveld (4)
1.5-m reflector + CCD (C), 1.2-m (L) and 0.46-m (S) Schmidt telescopes

1975 SH	*	1975	09	30.31267	01	09	03.23	+05	00	35.8	18.0 6 675
1975 SH		1975	10	01.31736	01	08	11.82	+04	59	01.9	6 675
1975 SH		1975	10	02.39462	01	07	16.02	+04	57	17.9	6 675
1975 SJ	*	1975	09	30.31267	01	09	14.62	+05	23	22.8	17.0 6 675
1975 SJ		1975	10	01.31736	01	08	25.11	+05	19	50.8	6 675
1975 SJ		1975	10	02.39462	01	07	31.26	+05	16	00.1	6 675
1975 SK	*	1975	09	30.31267	01	10	09.29	+03	53	31.1	17.2 6 675
1975 SK		1975	10	01.31736	01	09	26.37	+03	49	28.4	6 675
1975 SK		1975	10	02.39462	01	08	39.50	+03	45	05.5	6 675
1975 SL	*	1975	09	30.31267	01	10	28.39	+08	25	55.8	17.0 6 675
1975 SL		1975	10	01.31736	01	09	35.57	+08	25	11.5	6 675
1975 SL		1975	10	02.39462	01	08	38.20	+08	24	19.4	6 675
1975 SM	*	1975	09	30.31267	01	10	44.79	+03	59	22.1	18.5 6 675
1975 SM		1975	10	01.31736	01	10	02.05	+03	52	03.0	6 675
1975 SM		1975	10	02.39462	01	09	15.30	+03	44	07.4	6 675
1975 SN	*	1975	09	30.31267	01	11	38.98	+09	32	43.7	17.8 6 675
1975 SN		1975	10	01.31736	01	11	12.99	+09	16	51.1	6 675
1975 SN		1975	10	02.39462	01	10	43.99	+08	59	37.8	6 675
1975 SN		1975	10	15.44861	01	04	14.02	+05	21	25.1	6 675
1975 SN		1975	10	16.48299	01	03	42.89	+05	04	04.5	6 675
1975 SO	*	1975	09	30.31267	01	12	20.98	+09	08	22.4	17.2 6 675
1975 SO		1975	10	01.31736	01	11	34.92	+09	06	18.0	6 675
1975 SO		1975	10	02.39462	01	10	44.16	+09	03	55.6	6 675
1975 SP	*	1975	09	30.31267	01	12	40.18	+09	42	05.5	17.2 6 675
1975 SP		1975	10	01.31736	01	11	38.10	+09	48	54.8	6 675
1975 SQ	*	1975	09	30.31267	01	13	55.27	+05	26	28.1	18.5 6 675
1975 SQ		1975	10	01.31736	01	13	04.59	+05	26	05.7	6 675
1975 SQ		1975	10	02.39462	01	12	08.82	+05	25	36.6	6 675
1975 SR	*	1975	09	30.31267	01	14	29.07	+07	37	33.2	16.8 6 675
1975 SR		1975	10	01.31736	01	13	48.67	+07	30	46.7	6 675
1975 SR		1975	10	02.39462	01	13	04.00	+07	23	23.3	6 675
1975 SR		1975	10	15.44861	01	03	28.12	+05	50	27.3	6 675
1975 SR		1975	10	16.48299	01	02	43.28	+05	43	18.1	6 675
1975 SS	*	1975	09	30.31267	01	14	30.52	+07	50	14.2	17.0 6 675
1975 SS		1975	10	01.31736	01	13	50.40	+07	42	57.8	6 675
1975 SS		1975	10	02.39462	01	13	06.72	+07	35	05.1	6 675
1975 SS		1975	10	15.44861	01	03	53.96	+05	56	16.0	6 675
1975 SS		1975	10	16.48299	01	03	09.94	+05	48	25.8	6 675
1975 ST	*	1975	09	30.31267	01	14	43.35	+05	31	24.2	17.2 6 675
1975 ST		1975	10	01.31736	01	13	56.73	+05	21	31.2	6 675
1975 ST		1975	10	02.39462	01	13	05.95	+05	10	51.4	6 675
1975 ST		1975	10	15.44861	01	02	38.21	+03	03	23.4	6 675
1975 ST		1975	10	16.48299	01	01	49.50	+02	53	47.2	6 675
1975 SU	*	1975	09	30.31267	01	14	49.59	+05	29	03.6	17.0 6 675
1975 SU		1975	10	01.31736	01	14	11.22	+05	21	50.7	6 675
1975 SU		1975	10	02.39462	01	13	29.43	+05	14	03.4	6 675
1975 SU		1975	10	15.44861	01	04	42.52	+03	38	27.3	6 675
1975 SU		1975	10	16.48299	01	04	00.45	+03	30	58.8	6 675
1975 SV	*	1975	09	30.31267	01	15	19.74	+04	49	56.0	16.2 6 675
1975 SV		1975	10	01.31736	01	14	17.45	+04	47	03.1	6 675
1975 SV		1975	10	02.39462	01	13	09.44	+04	43	55.0	6 675
1975 SW	*	1975	09	30.31267	01	15	36.73	+07	37	17.6	16.8 6 675
1975 SW		1975	10	01.31736	01	14	49.56	+07	38	40.6	6 675
1975 SW		1975	10	02.39462	01	13	57.53	+07	40	03.2	6 675
1975 SW		1975	10	15.44861	01	02	39.30	+07	51	39.3	6 675

1975	SW		1975	10	16.48299	01	01	45.61	+07	52	25.8	6 675
1975	SX	*	1975	09	30.31267	01	16	02.41	+08	15	20.5	18.0 6 675
1975	SX		1975	10	01.31736	01	15	22.17	+08	10	46.0	6 675
1975	SX		1975	10	02.39462	01	14	38.31	+08	05	46.9	6 675
1975	SX		1975	10	15.44861	01	05	21.97	+07	01	56.5	6 675
1975	SX		1975	10	16.48299	01	04	37.89	+06	56	50.6	6 675
1975	SY	*	1975	09	30.31267	01	16	28.25	+05	35	55.8	16.5 6 675
1975	SY		1975	10	01.31736	01	15	35.93	+05	33	07.5	6 675
1975	SY		1975	10	02.39462	01	14	38.60	+05	30	02.3	6 675
1975	SY		1975	10	15.44861	01	02	35.20	+04	51	50.8	6 675
1975	SY		1975	10	16.48299	01	01	39.06	+04	49	02.5	6 675
1975	SZ	*	1975	09	30.31267	01	16	40.99	+08	12	18.4	16.8 6 675
1975	SZ		1975	10	01.31736	01	15	53.30	+08	02	55.3	6 675
1975	SZ		1975	10	15.44861	01	04	00.48	+05	46	28.0	6 675
1975	SZ		1975	10	16.48299	01	03	09.19	+05	36	43.2	6 675
1975	SA1	*	1975	09	30.31267	01	17	34.54	+05	09	07.5	17.5 6 675
1975	SA1		1975	10	01.31736	01	16	45.51	+05	07	01.3	6 675
1975	SA1		1975	10	02.39462	01	15	52.12	+05	04	43.9	6 675
1975	SA1		1975	10	15.44861	01	04	42.51	+04	36	14.8	6 675
1975	SA1		1975	10	16.48299	01	03	49.30	+04	34	04.3	6 675
1975	SB1	*	1975	09	30.31267	01	17	41.63	+03	35	05.3	17.2 6 675
1975	SB1		1975	10	01.31736	01	16	55.35	+03	32	44.4	6 675
1975	SB1		1975	10	02.39462	01	16	05.26	+03	30	15.4	6 675
1975	SB1		1975	10	15.44861	01	05	29.66	+03	00	19.4	6 675
1975	SB1		1975	10	16.48299	01	04	38.76	+02	58	06.1	6 675
1975	SC1	*	1975	09	30.31267	01	18	18.99	+04	16	15.2	17.0 6 675
1975	SC1		1975	10	01.31736	01	17	31.64	+04	08	48.2	6 675
1975	SC1		1975	10	02.39462	01	16	39.67	+04	00	47.9	6 675
1975	SD1	*	1975	09	30.31267	01	19	01.48	+06	00	17.8	18.5 6 675
1975	SD1		1975	10	01.31736	01	18	24.59	+05	51	37.2	6 675
1975	SD1		1975	10	15.44861	01	09	08.78	+03	46	53.3	6 675
1975	SD1		1975	10	16.48299	01	08	27.60	+03	37	56.9	6 675
1975	SE1	*	1975	09	30.31267	01	19	34.53	+04	12	15.5	17.0 6 675
1975	SE1		1975	10	01.31736	01	18	29.53	+04	14	23.3	6 675
1975	SE1		1975	10	02.39462	01	17	18.82	+04	16	38.7	6 675
1975	SE1		1975	10	15.44861	01	02	35.69	+04	43	30.8	6 675
1975	SE1		1975	10	16.45174	01	01	29.58	+04	45	46.3	6 675
1975	SF1	*	1975	09	30.31267	01	21	13.48	+04	52	19.5	17.0 6 675
1975	SF1		1975	10	01.31736	01	20	17.54	+04	49	52.2	6 675
1975	SF1		1975	10	02.39462	01	19	16.79	+04	47	12.0	6 675
1975	SF1		1975	10	15.44861	01	06	32.69	+04	14	41.6	6 675
1975	SF1		1975	10	16.48299	01	05	32.34	+04	12	17.7	6 675
1975	SG1	*	1975	09	30.31267	01	21	22.94	+05	17	45.7	17.5 6 675
1975	SG1		1975	10	01.31736	01	20	27.40	+05	16	42.1	6 675
1975	SG1		1975	10	02.39462	01	19	26.91	+05	15	30.8	6 675
1975	SG1		1975	10	15.44861	01	06	25.61	+05	00	03.5	6 675
1975	SG1		1975	10	16.48299	01	05	22.71	+04	58	53.3	6 675
1975	SH1	*	1975	09	30.31267	01	21	34.47	+04	47	51.3	18.5 6 675
1975	SH1		1975	10	01.31736	01	20	49.02	+04	43	51.2	6 675
1975	SH1		1975	10	02.39462	01	19	59.55	+04	39	32.6	6 675
1975	SH1		1975	10	15.44861	01	09	26.82	+03	47	01.2	6 675
1975	SH1		1975	10	16.48299	01	08	36.30	+03	43	03.5	6 675
1975	SJ1	*	1975	09	30.31267	01	21	50.29	+09	44	53.8	17.5 6 675
1975	SJ1		1975	10	01.31736	01	21	12.07	+09	37	51.0	6 675
1975	SJ1		1975	10	02.39462	01	20	30.53	+09	30	13.0	6 675
1975	SJ1		1975	10	15.44861	01	11	43.55	+07	53	38.8	6 675
1975	SJ1		1975	10	16.48299	01	11	01.37	+07	45	51.1	6 675
1975	SK1	*	1975	09	30.31267	01	22	08.02	+09	43	50.7	17.5 6 675
1975	SK1		1975	10	01.31736	01	21	14.31	+09	39	48.5	6 675

1975	SK1		1975	10	02.39462	01	20	15.72	+09	35	22.2		6 675
1975	SK1		1975	10	15.44861	01	07	41.73	+08	35	06.7		6 675
1975	SK1		1975	10	16.48299	01	06	41.02	+08	30	03.7		6 675
1975	SL1	*	1975	09	30.31267	01	22	44.00	+05	11	34.9	18.0	6 675
1975	SL1		1975	10	01.31736	01	22	06.90	+05	01	48.0		6 675
1975	SL1		1975	10	02.39462	01	21	25.95	+04	51	14.7		6 675
1975	SM1	*	1975	09	30.31267	01	22	58.79	+04	34	28.0	17.8	6 675
1975	SM1		1975	10	02.39462	01	21	36.55	+04	20	15.2		6 675
1975	SM1		1975	10	15.44861	01	11	55.50	+02	50	52.9		6 675
1975	SM1		1975	10	16.48299	01	11	08.48	+02	44	14.4		6 675
1975	SN1	*	1975	09	30.31267	01	24	11.13	+05	04	38.4	18.0	6 675
1975	SN1		1975	10	01.31736	01	23	26.28	+05	00	38.3		6 675
1975	SN1		1975	10	02.39462	01	22	37.34	+04	56	20.8		6 675
1975	SN1		1975	10	15.44861	01	12	10.88	+04	03	29.1		6 675
1975	SN1		1975	10	16.48299	01	11	20.72	+03	59	28.4		6 675
1975	SO1	*	1975	09	30.31267	01	24	43.41	+05	56	46.4	18.5	6 675
1975	SO1		1975	10	01.31736	01	24	01.58	+05	51	50.8		6 675
1975	SO1		1975	10	02.39462	01	23	15.97	+05	46	32.9		6 675
1975	SO1		1975	10	15.44861	01	13	29.14	+04	40	15.5		6 675
1975	SO1		1975	10	16.48299	01	12	41.91	+04	35	05.2		6 675
1975	SP1	*	1975	09	30.31267	01	24	44.28	+09	12	18.6	18.5	6 675
1975	SP1		1975	10	01.31736	01	24	04.45	+09	01	53.3		6 675
1975	SP1		1975	10	02.39462	01	23	20.70	+08	50	37.1		6 675
1975	SP1		1975	10	16.48299	01	13	02.83	+06	17	41.3		6 675
1975	SQ1	*	1975	09	30.31267	01	24	46.15	+04	17	45.6	16.8	6 675
1975	SQ1		1975	10	01.31736	01	24	13.90	+04	11	35.7		6 675
1975	SQ1		1975	10	02.39462	01	23	37.42	+04	04	54.9		6 675
1975	SR1	*	1975	09	30.31267	01	24	51.80	+09	20	10.0	17.8	6 675
1975	SR1		1975	10	01.31736	01	24	03.24	+09	07	20.4		6 675
1975	SR1		1975	10	02.39462	01	23	10.49	+08	53	29.8		6 675
1975	SS1	*	1975	09	30.31267	01	25	13.26	+06	13	20.5	18.5	6 675
1975	SS1		1975	10	01.31736	01	24	23.50	+06	12	08.3		6 675
1975	SS1		1975	10	02.39462	01	23	29.42	+06	10	49.1		6 675
1975	ST1	*	1975	09	30.31267	01	25	32.79	+06	18	54.9	17.5	6 675
1975	ST1		1975	10	01.31736	01	24	54.22	+06	10	27.7		6 675
1975	ST1		1975	10	02.39462	01	24	11.98	+06	01	21.7		6 675
1975	ST1		1975	10	15.44861	01	15	04.93	+04	09	01.0		6 675
1975	ST1		1975	10	16.48299	01	14	20.85	+04	00	15.8		6 675
1975	SU1	*	1975	09	30.31267	01	25	37.34	+08	07	23.6	18.0	6 675
1975	SU1		1975	10	01.31736	01	24	58.15	+08	03	09.7		6 675
1975	SU1		1975	10	02.39462	01	24	15.58	+07	58	34.5		6 675
1975	SU1		1975	10	15.44861	01	15	09.88	+07	00	01.6		6 675
1975	SU1		1975	10	16.48299	01	14	25.78	+06	55	18.0		6 675
1975	SV1	*	1975	09	30.31267	01	25	43.44	+05	15	19.1	18.8	6 675
1975	SV1		1975	10	01.31736	01	24	58.43	+05	13	02.8		6 675
1975	SV1		1975	10	02.39462	01	24	09.19	+05	10	37.5		6 675
1975	SV1		1975	10	15.44861	01	13	29.17	+04	39	52.5		6 675
1975	SV1		1975	10	16.48299	01	12	37.33	+04	37	33.9		6 675
1975	SW1	*	1975	09	30.31267	01	25	50.76	+08	11	58.6	18.5	6 675
1975	SW1		1975	10	01.31736	01	25	08.23	+08	06	54.3		6 675
1975	SW1		1975	10	02.39462	01	24	21.61	+08	01	22.4		6 675
1975	SX1	*	1975	09	30.31267	01	26	35.98	+09	33	50.8	18.2	6 675
1975	SX1		1975	10	01.31736	01	25	56.61	+09	27	09.3		6 675
1975	SX1		1975	10	02.39462	01	25	13.66	+09	19	53.3		6 675
1975	SX1		1975	10	15.44861	01	15	57.66	+07	46	47.8		6 675
1975	SX1		1975	10	16.48299	01	15	12.53	+07	39	12.9		6 675
1975	SY1	*	1975	09	30.31267	01	27	12.63	+04	21	15.7	17.8	6 675
1975	SY1		1975	10	01.31736	01	26	13.96	+04	24	10.1		6 675
1975	SY1		1975	10	02.39462	01	25	09.22	+04	27	16.6		6 675

1975	SY1		1975	10	15.44861	01	10	40.74	+05	06	01.6		6 675
1975	SY1		1975	10	16.48299	01	09	28.99	+05	09	25.3		6 675
1975	SZ1	*	1975	09	30.31267	01	27	38.34	+06	53	31.3	17.8	6 675
1975	SZ1		1975	10	01.31736	01	26	55.67	+06	46	30.0		6 675
1975	SZ1		1975	10	02.39462	01	26	08.27	+06	38	51.4		6 675
1975	SZ1		1975	10	15.44861	01	15	17.71	+05	00	00.9		6 675
1975	SZ1		1975	10	16.48299	01	14	23.33	+04	52	04.2		6 675
1975	SA2	*	1975	09	30.31267	01	27	52.36	+06	55	53.9	19.0	6 675
1975	SA2		1975	10	01.31736	01	27	08.68	+06	53	16.6		6 675
1975	SA2		1975	10	02.39462	01	26	20.99	+06	50	26.0		6 675
1975	SA2		1975	10	15.44861	01	16	08.94	+06	13	38.4		6 675
1975	SA2		1975	10	16.48299	01	15	19.47	+06	10	45.4		6 675
1975	SB2	*	1975	09	30.31267	01	28	49.71	+07	51	22.4	17.5	6 675
1975	SB2		1975	10	01.31736	01	28	09.65	+07	40	30.5		6 675
1975	SB2		1975	10	02.39462	01	27	25.22	+07	28	42.4		6 675
1975	SB2		1975	10	15.44861	01	17	22.71	+04	59	46.1		6 675
1975	SB2		1975	10	16.48299	01	16	33.18	+04	48	00.6		6 675
1975	SC2	*	1975	09	30.31267	01	30	28.16	+07	31	40.9	17.8	6 675
1975	SC2		1975	10	01.31736	01	29	52.84	+07	25	36.1		6 675
1975	SC2		1975	10	02.39462	01	29	14.22	+07	19	01.2		6 675
1975	SC2		1975	10	15.44861	01	20	51.84	+05	56	13.3		6 675
1975	SC2		1975	10	16.48299	01	20	10.70	+05	49	34.5		6 675
1975	SD2	*	1975	09	30.31267	01	32	02.84	+06	38	04.7	17.2	6 675
1975	SD2		1975	10	01.31736	01	31	31.69	+06	29	00.1		6 675
1975	SD2		1975	10	15.44861	01	22	34.22	+04	14	14.3		6 675
1975	SD2		1975	10	16.48299	01	21	51.48	+04	04	25.8		6 675
1975	SE2	*	1975	09	30.31267	01	32	42.15	+03	44	43.4	17.8	6 675
1975	SE2		1975	10	01.31736	01	31	49.46	+03	43	17.5		6 675
1975	SE2		1975	10	02.39462	01	30	51.90	+03	41	37.2		6 675
1975	SE2		1975	10	15.44861	01	18	03.59	+03	23	10.8		6 675
1975	SE2		1975	10	16.48299	01	17	00.60	+03	22	02.6		6 675
1975	TM2		1975	10	15.44861	01	21	41.28	+06	09	30.4	15.8	6 675
1975	TM2		1975	10	16.48299	01	20	45.62	+06	02	19.6		6 675
1975	TA4		1975	10	15.44861	01	17	48.25	+04	10	06.0	16.5	6 675
1975	TA4		1975	10	16.48299	01	16	51.02	+04	08	12.9		6 675
1975	TC6		1975	09	30.31267	01	24	47.97	+06	56	31.4	17.0	6 675
1975	TC6		1975	10	01.31736	01	23	52.28	+06	53	59.4		6 675
1975	TC6		1975	10	02.39462	01	22	51.59	+06	51	12.5		6 675
1975	TC6		1975	10	16.48299	01	08	45.46	+06	11	24.8		6 675
1975	TD7	*	1975	10	15.44861	01	03	36.21	+04	45	32.3	18.2	6 675
1975	TD7		1975	10	16.48299	01	02	41.39	+04	36	57.5		6 675
1975	UY		1975	09	30.31267	01	18	16.82	+03	53	22.2	16.5	6 675
1975	UY		1975	10	01.31736	01	17	41.27	+03	41	49.6		6 675
1975	UY		1975	10	02.39462	01	17	02.08	+03	29	27.8		6 675
1975	UA1		1975	10	01.31736	01	20	17.35	+06	21	16.7	16.8	6 675
1975	UA1		1975	10	02.39462	01	19	38.77	+06	06	30.4		6 675
1975	UA1		1975	10	15.44861	01	11	01.51	+03	03	21.3		6 675
1975	UA1		1975	10	16.48299	01	10	19.46	+02	49	05.3		6 675
1975	VP		1975	09	30.31267	01	27	26.06	+03	38	57.1	16.5	6 675
1975	VP		1975	10	01.31736	01	26	40.06	+03	31	29.9		6 675
1975	VP		1975	10	02.39462	01	25	49.27	+03	23	22.1		6 675
1981	EP26		1975	09	30.31267	01	29	12.65	+04	51	20.6	18.0	6 675
1981	EP26		1975	10	01.31736	01	28	24.50	+04	43	42.1		6 675
1981	EP26		1975	10	02.39462	01	27	31.88	+04	35	29.0		6 675
1981	EP26		1975	10	15.44861	01	16	11.19	+02	54	57.0		6 675
1981	EP26		1975	10	16.48299	01	15	16.13	+02	47	13.4		6 675
1981	ED37		1975	09	30.31267	01	21	53.11	+06	20	42.1	17.2	6 675
1981	ED37		1975	10	01.31736	01	20	54.69	+06	18	07.3		6 675
1981	ED37		1975	10	02.39462	01	19	51.31	+06	15	14.9		6 675

1981	JH		1975	09	30.31267	01	22	22.47	+04	25	01.6	16.5	6 675
1981	JH		1975	10	01.31736	01	21	21.25	+04	20	55.5		6 675
1981	JH		1975	10	02.39462	01	20	14.53	+04	16	29.1		6 675
1981	JH		1975	10	15.44861	01	06	19.20	+03	24	13.6		6 675
1981	JH		1975	10	16.48299	01	05	14.26	+03	20	29.1		6 675
1983	CS		1975	09	30.31267	01	24	03.45	+05	40	08.0	17.2	6 675
1983	CS		1975	10	01.31736	01	23	22.48	+05	36	04.2		6 675
1983	CS		1975	10	02.39462	01	22	37.78	+05	31	42.1		6 675
1983	CS		1975	10	15.44861	01	13	03.41	+04	36	57.5		6 675
1983	CS		1975	10	16.48299	01	12	17.08	+04	32	40.5		6 675
1984	FO		1988	05	12.44688	19	58	57.98	+12	32	13.4	16.5	3 675
1984	FO		1988	05	13.47778	20	00	05.68	+12	47	39.3		3 675
1984	SW3		1987	06	21.31284	17	21	12.46	-30	54	19.0		3 675
1984	SW3		1987	06	22.35416	17	19	59.60	-30	50	03.9		3 675
1984	SW3		1987	06	23.36163	17	18	49.92	-30	45	44.7		3 675
1986	PA		1988	05	25.39774	17	57	22.72	+09	25	31.1		1 675
1986	PA		1988	05	25.40436	17	57	21.67	+09	25	33.4		1 675
1986	PA		1988	05	25.40831	17	57	20.96	+09	25	35.3		1 675
1986	PA		1988	05	26.30839	17	54	59.98	+09	31	20.7		1 675
1986	PA		1988	05	26.31424	17	54	58.90	+09	31	22.8		1 675
1986	PA		1988	05	26.31877	17	54	58.23	+09	31	24.6		1 675
1987	DE		1988	05	14.43420	20	52	12.92	+01	11	45.8		3 675
1987	DE		1988	05	15.41163	20	52	43.91	+01	15	18.0		3 675
1987	EA		1975	09	30.31267	01	07	43.15	+05	11	56.7	17.5	6 675
1987	KD1		1987	06	20.21806	16	23	20.23	+09	46	55.2	16.8	3 675
1987	KD1		1987	06	21.20243	16	22	46.71	+09	41	18.5		3 675
1987	KD1		1987	06	23.29688	16	21	39.63	+09	28	00.6		3 675
1987	SL		1988	02	06.22569	01	52	29.81	+31	46	08.7		1 675
1987	SL		1988	02	06.23062	01	52	30.24	+31	46	09.0		1 675
1987	SL		1988	02	06.23487	01	52	30.67	+31	46	10.8		1 675
1987	SL		1988	02	07.21542	01	54	07.09	+31	49	39.5		1 675
1987	SL		1988	02	07.22015	01	54	07.52	+31	49	40.5		1 675
1987	SL		1988	02	07.22690	01	54	08.17	+31	49	42.2		1 675
1987	SL		1988	03	06.21167	02	41	36.51	+33	37	45.5		1 675
1987	SL		1988	03	06.21632	02	41	37.00	+33	37	45.9		1 675
1987	SL		1988	03	06.22105	02	41	37.47	+33	37	48.4		1 675
1987	SL		1988	03	06.22601	02	41	38.10	+33	37	48.7		1 675
1988	EH		1988	05	17.31354	11	19	42.59	+12	48	21.6	17.2	2 675
1988	EH		1988	05	20.29288	11	21	07.11	+12	49	51.8		2 675
1988	FK		1988	05	09.19652	11	44	10.69	+30	04	02.5	17.6	3 675
1988	FK		1988	05	10.24305	11	44	46.98	+29	59	45.3		3 675
1988	FN		1988	05	09.18402	09	58	04.96	-09	06	03.5	18.2	3 675
1988	FN		1988	05	10.21892	09	59	00.32	-09	15	37.4		3 675
1988	GB		1988	05	09.20954	12	08	42.25	-22	11	24.0	17.5	3 675
1988	GB		1988	05	10.23506	12	07	15.93	-22	45	21.4		3 675
1988	GB		1988	05	13.17447	12	03	35.47	-24	20	08.3	17.7	3 675
1988	GF		1988	05	19.21337	12	31	42.49	-10	06	10.2	17.0	2 675
1988	GF		1988	05	19.23524	12	31	42.45	-10	05	57.9		2 675
1988	GG		1988	05	13.20243	12	43	28.32	-12	17	39.6	16.5	3 675
1988	GG		1988	05	13.23663	12	43	26.49	-12	18	07.1		3 675
1988	JL	*	1988	05	11.33854	15	12	42.53	+10	06	33.0	17.5	3 675
1988	JL		1988	05	13.31111	15	09	46.74	+09	50	01.9		3 675
1988	JL		1988	05	14.32344	15	08	16.66	+09	40	54.0		3 675
1988	JN	*	1988	05	11.34427	15	22	54.59	+16	09	49.1	17.0	3 675
1988	JN		1988	05	13.33681	15	21	28.62	+16	16	59.1		3 675
1988	JN		1988	05	14.32986	15	20	45.90	+16	20	05.9		3 675
1988	JO	*	1988	05	11.40556	16	35	50.31	+05	35	31.5	16.5	3 675
1988	JO		1988	05	12.35955	16	34	53.58	+05	32	49.3		3 675
1988	JO		1988	05	14.38351	16	32	48.59	+05	26	09.0		3 675

1988	JP	*	1988	05	12.23993	14	17	04.08	+19	53	01.0	17.5	3 675
1988	JP		1988	05	14.23802	14	14	57.93	+19	44	09.6		3 675
1988	JQ	*	1988	05	12.44063	17	46	02.81	+18	04	36.1	15.5	3 675
1988	JQ		1988	05	15.36822	17	45	13.27	+18	19	18.2		3 675
1988	JQ		1988	06	16.26181	17	22	21.01	+16	19	00.8	15.5	2 675
1988	JQ		1988	06	16.29149	17	22	19.19	+16	18	40.2		2 675
1988	JQ		1988	06	19.32899	17	19	38.91	+15	36	39.7	15.5	2 675
1988	JQ		1988	06	19.35764	17	19	37.26	+15	36	13.1		2 675
1988	JU	*	1988	05	09.27760	13	03	42.93	+07	53	43.2	16.5	3 675
1988	JU		1988	05	11.19271	13	03	07.50	+08	16	31.2		3 675
1988	JV	*	1988	05	09.38924	15	57	38.38	-07	02	20.7	16.5	3 675
1988	JV		1988	05	14.39514	15	53	01.35	-07	00	20.4		3 675
1988	JW	*	1988	05	09.19305	11	17	18.08	+25	13	36.6	17.6	3 675
1988	JW		1988	05	10.22708	11	17	44.40	+25	04	23.9		3 675
1988	JW		1988	05	13.20920	11	19	11.12	+24	36	37.6		3 675
1988	JA1	*	1988	05	12.44063	17	38	03.46	+16	19	39.9	16.0	3 675
1988	JA1		1988	05	12.47014	17	38	02.68	+16	19	41.9		3 675
1988	JA1		1988	06	08.35069	17	17	46.03	+13	51	02.3	15	3 675
1988	JA1		1988	06	09.39531	17	16	44.24	+13	37	07.0		3 675
1988	JA1		1988	06	11.40920	17	14	45.05	+13	08	27.2		3 675
1988	JA1		1988	06	16.26181	17	10	01.48	+11	50	17.9	15.5	2 675
1988	JA1		1988	06	16.29149	17	09	59.61	+11	49	41.4		2 675
1988	JA1		1988	06	19.32899	17	07	08.45	+10	54	37.7	15.5	2 675
1988	JA1		1988	06	19.35764	17	07	06.56	+10	53	59.9		2 675
1988	KB		1988	05	14.42622	18	01	10.18	-06	29	20.1	16.0	3 675
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1988	KB	*	1988	05	19.44878	17	58	19.36	-07	52	44.8	16.0	2 675
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1988	KC	*	1988	05	19.39931	16	41	58.69	-16	32	03.9	16.5	2 675
1988	KC		1988	05	19.42014	16	41	57.84	-16	31	50.4		2 675
1988	KC		1988	05	20.32344	16	41	14.18	-16	23	57.1		2 675
1988	KC		1988	05	20.34497	16	41	13.01	-16	23	47.2		2 675
1988	KD	*	1988	05	19.42865	17	16	14.41	-16	08	17.0	16.0	2 675
1988	KD		1988	05	20.35347	17	15	31.60	-16	11	59.6		2 675
1988	KE	*	1988	05	17.32865	15	28	20.11	-06	56	48.5	16.2	2 675
1988	KE		1988	05	20.33628	15	25	11.86	-06	47	26.5		2 675
1988	KF	*	1988	05	19.31215	15	54	30.14	-07	30	58.9	17.3	2 675
1988	KF		1988	05	21.33941	15	52	35.80	-07	31	57.0		2 675
1988	KG	*	1988	05	19.31215	15	56	42.36	-09	22	35.3	16.5	2 675
1988	KG		1988	05	21.33941	15	55	05.65	-09	12	43.7		2 675
1988	KH	*	1988	05	19.31215	16	00	54.40	-10	55	17.9	16.5	2 675
1988	KH		1988	05	21.33941	15	59	21.81	-10	43	06.2		2 675
1988	KJ	*	1988	05	19.31215	16	15	04.06	-09	52	18.8	16.5	2 675
1988	KJ		1988	05	21.33941	16	13	21.35	-09	52	36.7		2 675
1988	KK	*	1988	05	19.43767	17	51	29.33	-20	45	51.8	17.0	2 675
1988	KK		1988	05	21.35104	17	50	43.61	-20	51	04.5		2 675
1988	KL	*	1988	05	17.28455	10	54	11.70	+05	09	45.4	17.5	2 675
1988	KL		1988	05	20.28056	10	55	57.04	+05	04	10.8		2 675
2678	P-L	*	1960	09	24.46184	00	43	00.88	+01	06	37.9	19.6	4 675
2678	P-L		1960	09	26.37988	00	41	19.56	+00	54	48.3		4 675
2678	P-L		1960	09	28.43822	00	39	28.73	+00	42	02.1		4 675
2678	P-L		1960	09	29.39514	00	38	36.97	+00	36	08.1		4 675
2678	P-L		1960	10	17.31529	00	22	43.13	-01	06	43.5		4 675
2678	P-L		1960	10	25.30351	00	16	45.63	-01	41	38.9		4 675
6647	P-L	*	1960	09	26.28543	00	12	11.63	-02	24	12.7	16.9	4 675
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6647	P-L		1960	09	28.33822	00	10	24.30	-02	29	50.3		4 675
6647	P-L		1960	10	17.28198	23	56	46.99	-02	56	19.3		4 675
6647	P-L		1960	10	22.23406	23	54	40.65	-02	53	14.7		4 675

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6647 P-L   1960 10 25.25350  23 53 46.59  -02 49 02.4                  4 675
6647 P-L   1960 10 26.31531  23 53 31.72  -02 47 08.2                  4 675
4327 T-3   1977 10 11.30000  01 36 10.29  +01 11 30.9                  4 675
4327 T-3   1977 10 11.36771  01 36 06.38  +01 11 18.0                  4 675
4327 T-3   1977 10 12.29826  01 35 14.49  +01 08 16.6                  4 675
4327 T-3   1977 10 12.36441  01 35 10.77  +01 08 02.9                  4 675
4327 T-3 * 1977 10 16.28368  01 31 29.56  +00 55 59.5           19.0   4 675
4327 T-3   1977 10 16.34931  01 31 25.71  +00 55 49.6                  4 675
4327 T-3   1977 10 17.28628  01 30 32.75  +00 53 03.9                  4 675
4327 T-3   1977 10 17.35313  01 30 28.72  +00 52 51.9                  4 675
4327 T-3   1977 10 21.38698  01 26 40.82  +00 41 56.7                  4 675
4327 T-3   1977 10 21.44705  01 26 37.36  +00 41 48.5                  4 675
4327 T-3   1977 10 22.38542  01 25 44.95  +00 39 29.0                  4 675
4327 T-3   1977 10 22.44878  01 25 41.29  +00 39 23.0                  4 675
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  60       1975 10 01.31736  01 14 32.15  +07 32 56.0                  6 675
  60       1975 10 02.39462  01 13 38.79  +07 25 18.1                  6 675
  60       1975 10 15.44861  01 02 02.99  +05 46 22.3                  6 675
  60       1975 10 16.48299  01 01 06.65  +05 38 22.8                  6 675
 365       1975 09 30.31267  01 32 12.52  +05 09 13.7                  6 675
 365       1975 10 01.31736  01 31 37.84  +04 58 19.2                  6 675
 365       1975 10 02.39462  01 30 59.59  +04 46 31.5                  6 675
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1536       1975 09 30.31267  01 08 35.81  +07 31 37.0                  6 675
1536       1975 10 01.31736  01 07 50.72  +07 25 15.5                  6 675
1536       1975 10 02.39462  01 07 01.11  +07 18 19.9                  6 675
2045       1975 09 30.31267  01 10 32.57  +08 10 46.3                  6 675
2045       1975 10 01.31736  01 09 33.81  +08 08 00.3                  6 675
2045       1975 10 02.39462  01 08 30.00  +08 04 56.9                  6 675
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2319       1975 10 01.31736  01 23 09.38  +03 40 57.0                  6 675
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3293       1975 09 30.31267  01 07 38.15  +07 28 30.4                  6 675
3797       1975 10 15.44861  01 04 11.61  +06 28 01.0                  6 675
3797       1975 10 16.48299  01 03 25.01  +06 22 57.1                  6 675

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1.8-m reflector + CCD (1) and 0.33-m photographic telescope
PDS scanning microdensitometer
AGK3 and Perth 70 secondary nets, global solutions
See also MPC 9533
1962 RN    1988 05 14.22361  14 51 50.76  -11 10 52.2           16.8    688
1962 RN    1988 05 14.35903  14 51 43.63  -11 10 00.9                   688
1972 RQ    1988 05 13.26111  15 50 46.58  -01 11 11.9           16.5    688
1972 RQ    1988 05 13.36111  15 50 41.32  -01 10 38.5                   688
1983 AV    1988 05 13.26111  15 48 15.11  -05 01 19.7           16.8    688
1983 AV    1988 05 13.36111  15 48 08.86  -05 01 29.6                   688
1984 CD1   1988 05 14.22361  14 39 35.37  -15 27 20.2           16.5    688
1984 CD1   1988 05 14.35903  14 39 27.67  -15 27 07.1                   688
1986 LA    1988 05 20.44029  20 42 57.92  -02 26 43.6                 1 688
1986 LA    1988 05 20.44838  20 42 59.83  -02 26 19.7                 1 688
1987 QA    1988 05 20.15098  13 24 27.78  +43 19 46.8                 1 688
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1987	QA		1988	05	20.15849	13	24	27.59	+43	19	42.7	1 688
1988	EG		1988	05	20.21215	11	32	06.47	+05	50	07.8	1 688
1988	EG		1988	05	20.22255	11	32	07.22	+05	50	03.4	1 688
725			1988	05	14.35903	14	35	35.32	-12	51	49.5	688
1684			1988	05	14.22361	14	48	29.90	-11	02	02.0	16.8 688
1684			1988	05	14.35903	14	48	23.37	-11	01	41.4	688
1725			1988	05	14.35903	14	39	46.25	-10	47	32.5	688
2127			1988	05	13.26111	15	57	33.85	-05	10	07.3	16.5 688
2127			1988	05	13.36111	15	57	28.94	-05	10	01.8	688
3752			1988	05	20.45707	19	41	01.64	+57	50	31.1	1 688
3752			1988	05	20.46154	19	41	01.36	+57	50	33.8	1 688

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AC

1931	UE		1988	03	18.12331	08	05	32.16	+19	22	11.3	801
1962	RN		1988	04	14.30212	15	15	00.02	-14	27	06.7	801
1972	KM		1988	05	15.23273	14	22	43.99	+01	30	11.8	801
1972	RQ		1988	04	14.32447	16	08	55.69	-04	34	05.4	801
1972	RQ		1988	05	13.27998	15	50	45.58	-01	11	03.0	801
1976	QX		1987	11	19.42802	07	36	54.81	+23	26	55.1	801
1976	QX		1988	02	17.06623	06	39	27.03	+24	45	12.2	801
1977	CD		1988	04	18.27483	13	50	23.18	+07	55	04.2	801
1978	SJ3		1988	04	13.30689	15	37	39.83	-07	48	12.5	801
1978	SJ3		1988	05	13.25707	15	15	07.11	-03	39	19.6	S 801
1981	WG1		1988	04	18.22538	13	14	00.35	+04	18	28.8	801
1981	WG1		1988	05	15.18384	12	58	13.16	+05	34	45.7	U 801
1982	TL1		1987	11	23.05711	00	16	55.52	+03	47	49.4	801
1983	AV		1988	04	14.34881	16	10	39.79	-05	10	35.7	801
1984	CD1		1985	09	12.19283	23	01	02.57	-11	17	35.6	801
1984	CD1		1988	04	20.27950	15	01	20.80	-16	04	02.8	S 801
1984	FO		1987	02	25.15169	07	54	40.31	-01	42	59.6	801
1987	OV1	*	1987	07	29.30547	21	48	03.04	-07	56	07.2	17.5 801
1987	QG9	*	1987	08	22.19266	21	25	09.84	-10	28	20.1	17.5 801
3108	P-L		1988	05	15.11604	10	15	51.77	-04	02	05.9	i 801
1685			1988	06	11.30953	21	25	59.15	-11	59	54.6	801
1685			1988	06	14.29653	21	31	13.13	-10	45	06.6	801

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Measurers H. Debehogne, J. Dumoulin, E. W. Elst, W. Landgraf
0.4-m GPO astrograph and 1.0-m Schmidt telescope

1941	HD		1987	02	24.35104	11	04	49.39	+06	36	01.8	16.8 3 809
1941	HD		1987	02	24.35590	11	04	49.18	+06	36	05.2	3 809
1941	HD		1987	02	24.36076	11	04	48.96	+06	36	08.4	3 809
1941	HD		1987	02	25.33090	11	04	06.80	+06	47	13.5	3 809
1941	HD		1987	02	25.33576	11	04	06.59	+06	47	16.8	3 809
1941	HD		1987	02	25.34062	11	04	06.38	+06	47	19.9	3 809
1941	HD		1987	02	26.25590	11	03	26.17	+06	57	52.8	3 809
1941	HD		1987	02	26.26076	11	03	25.95	+06	57	56.1	3 809

1941	HD	1987	02	26.26563	11	03	25.74	+06	57	59.4	3 809
1941	HD	1987	02	27.23993	11	02	42.36	+07	09	15.6	3 809
1941	HD	1987	02	27.24479	11	02	42.15	+07	09	19.3	3 809
1941	HD	1987	02	27.24965	11	02	41.88	+07	09	22.7	3 809
1941	HD	1987	02	27.32118	11	02	38.54	+07	10	11.5	3 809
1941	HD	1987	02	27.32604	11	02	38.32	+07	10	14.7	3 809
1941	HD	1987	02	27.33090	11	02	38.06	+07	10	18.0	3 809
1941	HD	1987	03	01.27951	11	01	09.60	+07	33	03.3	3 809
1941	HD	1987	03	01.28472	11	01	09.37	+07	33	06.9	3 809
1941	HD	1987	03	01.28993	11	01	09.15	+07	33	10.5	3 809
1941	HD	1987	03	01.33229	11	01	07.13	+07	33	40.3	3 809
1941	HD	1987	03	01.33715	11	01	06.91	+07	33	43.4	3 809
1941	HD	1987	03	01.34201	11	01	06.70	+07	33	47.2	3 809
1941	HD	1987	03	03.33299	10	59	34.67	+07	57	10.0	3 809
1941	HD	1987	03	03.33785	10	59	34.44	+07	57	13.5	3 809
1941	HD	1987	03	03.34271	10	59	34.21	+07	57	16.9	3 809
1941	HD	1987	03	04.32396	10	58	48.53	+08	08	50.4	3 809
1941	HD	1987	03	04.32882	10	58	48.31	+08	08	54.3	3 809
1941	HD	1987	03	04.33368	10	58	48.11	+08	08	57.5	3 809
1941	HD	1987	03	05.31285	10	58	02.31	+08	20	29.5	3 809
1941	HD	1987	03	05.31771	10	58	02.09	+08	20	33.3	3 809
1941	HD	1987	03	05.32257	10	58	01.86	+08	20	37.2	3 809
1941	HD	1987	03	08.29826	10	55	42.41	+08	55	35.4	3 809
1941	HD	1987	03	08.30312	10	55	42.19	+08	55	38.3	3 809
1941	HD	1987	03	08.30799	10	55	41.93	+08	55	41.9	3 809
1941	HD	1987	03	11.26042	10	53	24.56	+09	30	02.4	3 809
1941	HD	1987	03	11.26458	10	53	24.37	+09	30	05.1	3 809
1941	HD	1987	03	11.26875	10	53	24.18	+09	30	08.0	3 809
1968	OA1	1988	02	21.21250	10	06	33.83	+02	02	02.3	19.5 4 809
1968	OA1	1988	02	21.22118	10	06	33.29	+02	02	07.0	4 809
1968	OA1	1988	02	21.22812	10	06	32.89	+02	02	09.5	4 809
1976	SN3	1987	02	26.34896	11	49	45.24	+02	48	28.4	16.8 3 809
1976	SN3	1987	02	26.35382	11	49	45.07	+02	48	29.9	3 809
1976	SN3	1987	02	26.35868	11	49	44.90	+02	48	31.3	3 809
1976	YF5	1988	02	16.16181	07	39	57.76	+23	15	15.5	17.5 4 809
1976	YF5	1988	02	16.17222	07	39	57.37	+23	15	16.9	4 809
1976	YF5	1988	02	16.18264	07	39	56.90	+23	15	16.4	4 809
1976	YF5	1988	02	21.12535	07	37	11.37	+23	14	52.1	18.5 4 809
1976	YF5	1988	02	21.14271	07	37	10.77	+23	14	51.3	4 809
1976	YF5	1988	02	21.16007	07	37	10.20	+23	14	51.7	4 809
1976	YF5	1988	02	23.11493	07	36	18.77	+23	14	06.3	18.3 4 809
1976	YF5	1988	02	23.13229	07	36	18.29	+23	14	05.1	4 809
1976	YF5	1988	02	23.14965	07	36	17.73	+23	14	04.9	4 809
1979	HE5	1988	02	16.16181	07	37	09.81	+24	11	04.6	17.5 4 809
1979	HE5	1988	02	16.17222	07	37	09.37	+24	11	06.5	4 809
1979	HE5	1988	02	16.18264	07	37	08.90	+24	11	08.6	4 809
1979	HE5	1988	02	21.12535	07	34	19.65	+24	24	57.1	17.3 4 809
1979	HE5	1988	02	21.14271	07	34	19.12	+24	24	59.0	4 809
1979	HE5	1988	02	21.16007	07	34	18.57	+24	25	01.3	4 809
1979	HE5	1988	02	23.11493	07	33	26.86	+24	29	35.8	18.0 4 809
1979	HE5	1988	02	23.13229	07	33	26.32	+24	29	37.7	4 809
1979	HE5	1988	02	23.14965	07	33	25.90	+24	29	40.0	4 809
1981	ER5	1988	02	21.21250	10	11	28.93	+01	08	06.2	19.5 4 809
1981	ER5	1988	02	21.22118	10	11	28.37	+01	08	07.9	4 809
1981	ER5	1988	02	21.22812	10	11	28.03	+01	08	09.9	4 809
1981	EY31	1988	02	16.16181	07	38	07.45	+20	06	06.3	19.6 4 809
1981	EY31	1988	02	16.17222	07	38	06.91	+20	06	07.8	4 809
1981	EY31	1988	02	16.18264	07	38	06.41	+20	06	08.9	4 809
1981	EY31	1988	02	21.12535	07	34	51.98	+20	13	16.7	19.6 4 809

1981	EY31	1988	02	21.14271	07	34	51.31	+20	13	18.3		4 809
1981	EY31	1988	02	21.16007	07	34	50.69	+20	13	20.3		4 809
1981	EY31	1988	02	23.11493	07	33	45.38	+20	15	45.0	20.0	4 809
1981	EY31	1988	02	23.13229	07	33	44.73	+20	15	45.2		4 809
1981	EY31	1988	02	23.14965	07	33	44.05	+20	15	47.8		4 809
1983	RM3	1988	02	16.16181	07	42	10.34	+22	56	37.0	16.8	4 809
1983	RM3	1988	02	16.17222	07	42	09.95	+22	56	35.0		4 809
1983	RM3	1988	02	16.18264	07	42	09.51	+22	56	32.7		4 809
1983	RM3	1988	02	23.11493	07	39	18.34	+22	26	55.8	17.0	4 809
1983	RM3	1988	02	23.13229	07	39	17.91	+22	26	51.3		4 809
1983	RM3	1988	02	23.14965	07	39	17.55	+22	26	46.3		4 809
1985	HG1	1988	02	16.16181	07	50	04.60	+23	23	29.8	16.9	4 809
1985	HG1	1988	02	16.17222	07	50	04.14	+23	23	32.1		4 809
1985	HG1	1988	02	16.18264	07	50	03.63	+23	23	34.1		4 809
1985	HG1	1988	02	23.11493	07	46	38.92	+23	41	25.6	17.0	4 809
1985	HG1	1988	02	23.13229	07	46	38.47	+23	41	28.7		4 809
1985	HG1	1988	02	23.14965	07	46	37.99	+23	41	30.4		4 809
1985	JK1	1988	02	16.16181	07	40	32.17	+22	21	47.7	18.0	4 809
1985	JK1	1988	02	16.17222	07	40	31.71	+22	21	49.8		4 809
1985	JK1	1988	02	16.18264	07	40	31.17	+22	21	51.3		4 809
1985	JK1	1988	02	21.12535	07	37	15.76	+22	34	10.9	18.8	4 809
1985	JK1	1988	02	21.14271	07	37	15.14	+22	34	12.9		4 809
1985	JK1	1988	02	21.16007	07	37	14.34	+22	34	15.6		4 809
1985	JK1	1988	02	23.11493	07	36	09.21	+22	38	29.5	18.6	4 809
1985	JK1	1988	02	23.13229	07	36	08.60	+22	38	31.5		4 809
1985	JK1	1988	02	23.14965	07	36	08.00	+22	38	33.3		4 809
1985	QX	1988	02	21.21250	10	01	59.09	+02	25	36.3	17.8	4 809
1985	QX	1988	02	21.22118	10	01	58.71	+02	25	39.1		4 809
1985	QX	1988	02	21.22812	10	01	58.40	+02	25	42.1		4 809
1985	RK	1987	02	23.30729	10	52	17.22	+07	04	29.2	17.0	3 809
1985	RK	1987	02	23.31215	10	52	16.88	+07	04	30.4		3 809
1985	RK	1987	02	23.31701	10	52	16.58	+07	04	31.6		3 809
1986	XO2	1987	03	02.06632	09	36	22.44	+10	48	18.1	15.0	3 809
1986	XO2	1987	03	02.07118	09	36	22.24	+10	48	25.1		3 809
1986	XO2	1987	03	02.07604	09	36	22.03	+10	48	32.1		3 809
1986	XO2	1987	03	02.08507	09	36	21.62	+10	48	45.1		3 809
1986	XO2	1987	03	02.09063	09	36	21.36	+10	48	53.0		3 809
1986	XO2	1987	03	02.09618	09	36	21.13	+10	49	01.0		3 809
1986	XO2	1987	03	03.10382	09	35	39.90	+11	13	03.4		3 809
1986	XO2	1987	03	03.10868	09	35	39.70	+11	13	10.3		3 809
1986	XO2	1987	03	03.11354	09	35	39.52	+11	13	17.2		3 809
1986	XO2	1987	03	04.06285	09	35	02.08	+11	35	47.5		3 809
1986	XO2	1987	03	04.06771	09	35	01.87	+11	35	54.5		3 809
1986	XO2	1987	03	04.07257	09	35	01.66	+11	36	01.4		3 809
1986	XO2	1987	03	05.06111	09	34	23.71	+11	59	19.5		3 809
1986	XO2	1987	03	05.06806	09	34	23.44	+11	59	29.3		3 809
1986	XO2	1987	03	05.07500	09	34	23.17	+11	59	39.1		3 809
1986	XO2	1987	03	06.06458	09	33	46.66	+12	22	49.5		3 809
1986	XO2	1987	03	06.07153	09	33	46.42	+12	22	59.1		3 809
1986	XO2	1987	03	06.07847	09	33	46.15	+12	23	08.8		3 809
1986	XO2	1987	03	07.09097	09	33	10.20	+12	46	37.9		3 809
1986	XO2	1987	03	07.09792	09	33	09.94	+12	46	47.4		3 809
1986	XO2	1987	03	07.10486	09	33	09.70	+12	46	57.0		3 809
1986	XO2	1987	03	08.01875	09	32	38.92	+13	07	57.4		3 809
1986	XO2	1987	03	08.02153	09	32	38.82	+13	08	01.3		3 809
1986	XO2	1987	03	08.02430	09	32	38.74	+13	08	05.3		3 809
1986	XO2	1987	03	08.22986	09	32	31.31	+13	12	46.5		3 809
1986	XO2	1987	03	08.23680	09	32	31.07	+13	12	56.2		3 809
1986	XO2	1987	03	08.24375	09	32	30.81	+13	13	05.9		3 809

1986	XO2	1987	03	09.01528	09	32	06.67	+13	30	38.4		3 809
1986	XO2	1987	03	09.01806	09	32	06.59	+13	30	42.3		3 809
1986	XO2	1987	03	09.02083	09	32	06.51	+13	30	46.3		3 809
1986	XO2	1987	03	09.07639	09	32	04.53	+13	32	01.9		3 809
1986	XO2	1987	03	09.08056	09	32	04.42	+13	32	07.6		3 809
1986	XO2	1987	03	09.08472	09	32	04.29	+13	32	13.5		3 809
1986	XO2	1987	03	10.14792	09	31	31.59	+13	56	08.5		3 809
1986	XO2	1987	03	10.15208	09	31	31.46	+13	56	14.1		3 809
1986	XO2	1987	03	10.15625	09	31	31.31	+13	56	19.7		3 809
1986	XO2	1987	03	11.09236	09	31	04.63	+14	17	06.7		3 809
1986	XO2	1987	03	11.09931	09	31	04.43	+14	17	16.0		3 809
1986	XO2	1987	03	11.10625	09	31	04.22	+14	17	25.2		3 809
1986	XO2	1987	03	11.28194	09	30	58.78	+14	21	17.4		3 809
1986	XO2	1987	03	11.28611	09	30	58.67	+14	21	23.0		3 809
1986	XO2	1987	03	11.29028	09	30	58.56	+14	21	28.8		3 809
1987	CJ	1987	02	24.35104	11	05	23.78	+07	29	40.6	16.2	3 809
1987	CJ	1987	02	24.35590	11	05	23.58	+07	29	42.9		3 809
1987	CJ	1987	02	24.36076	11	05	23.38	+07	29	45.3		3 809
1987	CJ	1987	02	25.33090	11	04	43.26	+07	37	38.0		3 809
1987	CJ	1987	02	25.33576	11	04	43.05	+07	37	40.3		3 809
1987	CJ	1987	02	25.34062	11	04	42.84	+07	37	42.5		3 809
1987	CJ	1987	02	26.25590	11	04	04.71	+07	45	10.1		3 809
1987	CJ	1987	02	26.26076	11	04	04.50	+07	45	12.1		3 809
1987	CJ	1987	02	26.26563	11	04	04.30	+07	45	14.4		3 809
1987	CJ	1987	02	27.23993	11	03	23.24	+07	53	11.6		3 809
1987	CJ	1987	02	27.24479	11	03	23.04	+07	53	14.0		3 809
1987	CJ	1987	02	27.24965	11	03	22.84	+07	53	16.1		3 809
1987	CJ	1987	02	27.32118	11	03	19.70	+07	53	51.4		3 809
1987	CJ	1987	02	27.32604	11	03	19.49	+07	53	53.8		3 809
1987	CJ	1987	02	27.33090	11	03	19.27	+07	53	56.1		3 809
1987	CJ	1987	03	01.27951	11	01	56.11	+08	09	54.4		3 809
1987	CJ	1987	03	01.28472	11	01	55.90	+08	09	56.9		3 809
1987	CJ	1987	03	01.28993	11	01	55.69	+08	09	59.5		3 809
1987	CJ	1987	03	01.33229	11	01	53.79	+08	10	20.4		3 809
1987	CJ	1987	03	01.33715	11	01	53.58	+08	10	22.9		3 809
1987	CJ	1987	03	01.34201	11	01	53.37	+08	10	25.5		3 809
1987	CJ	1987	03	03.33299	11	00	27.46	+08	26	43.8		3 809
1987	CJ	1987	03	03.33785	11	00	27.25	+08	26	46.2		3 809
1987	CJ	1987	03	03.34271	11	00	27.02	+08	26	48.6		3 809
1987	CJ	1987	03	04.32396	10	59	44.56	+08	34	49.8		3 809
1987	CJ	1987	03	04.32882	10	59	44.35	+08	34	52.2		3 809
1987	CJ	1987	03	04.33368	10	59	44.12	+08	34	55.0		3 809
1987	CJ	1987	03	05.31285	10	59	01.66	+08	42	53.9		3 809
1987	CJ	1987	03	05.31771	10	59	01.42	+08	42	56.2		3 809
1987	CJ	1987	03	05.32257	10	59	01.20	+08	42	58.6		3 809
1987	CJ	1987	03	06.30660	10	58	18.50	+08	50	57.9		3 809
1987	CJ	1987	03	06.31250	10	58	18.24	+08	51	00.9		3 809
1987	CJ	1987	03	06.31840	10	58	18.00	+08	51	04.0		3 809
1987	CJ	1987	03	08.29826	10	56	52.31	+09	07	03.0		3 809
1987	CJ	1987	03	08.30312	10	56	52.10	+09	07	05.3		3 809
1987	CJ	1987	03	08.30799	10	56	51.89	+09	07	07.7		3 809
1987	DF	1987	02	23.22535	10	36	06.53	+06	07	01.2	16.0	3 809
1987	DF	1987	02	23.23021	10	36	06.28	+06	07	06.2		3 809
1987	DF	1987	02	23.23507	10	36	06.04	+06	07	11.3		3 809
1987	DF	1987	02	24.24132	10	35	15.05	+06	25	05.1		3 809
1987	DF	1987	02	24.24618	10	35	14.79	+06	25	10.2		3 809
1987	DF	1987	02	24.25104	10	35	14.55	+06	25	15.3		3 809
1987	DF	1987	02	25.25087	10	34	23.38	+06	43	11.6		3 809
1987	DF	1987	02	25.25625	10	34	23.10	+06	43	17.4		3 809

1987	DF	1987	02	25.26163	10	34	22.81	+06	43	23.1		3 809
1987	DF	1987	02	26.07674	10	33	41.26	+06	58	06.0		3 809
1987	DF	1987	02	26.08160	10	33	41.02	+06	58	11.6		3 809
1987	DF	1987	02	26.08646	10	33	40.78	+06	58	17.2		3 809
1987	DF	1987	02	27.12813	10	32	46.71	+07	17	11.5		3 809
1987	DF	1987	02	27.13310	10	32	46.43	+07	17	16.9		3 809
1987	DF	1987	02	27.13808	10	32	46.17	+07	17	22.2		3 809
1987	DF	1987	02	28.11076	10	31	55.52	+07	35	07.9		3 809
1987	DF	1987	02	28.11562	10	31	55.28	+07	35	13.3		3 809
1987	DF	1987	02	28.12049	10	31	55.03	+07	35	18.3		3 809
1987	DF	1987	03	01.15243	10	31	01.00	+07	54	13.6		3 809
1987	DF	1987	03	01.15729	10	31	00.75	+07	54	18.9		3 809
1987	DF	1987	03	01.16215	10	31	00.49	+07	54	24.4		3 809
1987	DF	1987	03	02.13021	10	30	09.89	+08	12	12.9		3 809
1987	DF	1987	03	02.13507	10	30	09.64	+08	12	18.7		3 809
1987	DF	1987	03	02.13993	10	30	09.38	+08	12	23.8		3 809
1987	DF	1987	03	03.12257	10	29	18.02	+08	30	30.4		3 809
1987	DF	1987	03	03.12743	10	29	17.77	+08	30	35.7		3 809
1987	DF	1987	03	03.13229	10	29	17.50	+08	30	41.0		3 809
1987	DF	1987	03	04.10104	10	28	26.94	+08	48	33.2		3 809
1987	DF	1987	03	04.10590	10	28	26.69	+08	48	39.2		3 809
1987	DF	1987	03	04.11076	10	28	26.41	+08	48	44.6		3 809
1987	DF	1987	03	05.12639	10	27	33.49	+09	07	29.5		3 809
1987	DF	1987	03	05.13194	10	27	33.21	+09	07	35.9		3 809
1987	DF	1987	03	05.13750	10	27	32.90	+09	07	42.0		3 809
1987	DF	1987	03	05.15590	10	27	31.89	+09	08	02.5		3 809
1987	DF	1987	03	05.15937	10	27	31.71	+09	08	06.1		3 809
1987	DF	1987	03	05.16285	10	27	31.53	+09	08	09.7		3 809
1987	DF	1987	03	06.25278	10	26	34.85	+09	28	16.7		3 809
1987	DF	1987	03	06.25556	10	26	34.70	+09	28	19.7		3 809
1987	DF	1987	03	06.25833	10	26	34.54	+09	28	22.8		3 809
1987	DF	1987	03	07.12430	10	25	50.34	+09	44	19.4		3 809
1987	DF	1987	03	07.13125	10	25	49.97	+09	44	27.4		3 809
1987	DF	1987	03	07.13819	10	25	49.60	+09	44	35.4		3 809
1987	DF	1987	03	07.33194	10	25	39.23	+09	48	08.3		3 809
1987	DF	1987	03	07.33472	10	25	39.09	+09	48	11.6		3 809
1987	DF	1987	03	07.33750	10	25	38.93	+09	48	14.4		3 809
1987	DF	1987	03	08.25521	10	24	52.26	+10	05	05.4		3 809
1987	DF	1987	03	08.26146	10	24	51.92	+10	05	12.5		3 809
1987	DF	1987	03	08.26771	10	24	51.59	+10	05	19.4		3 809
1987	DF	1987	03	09.26146	10	24	01.48	+10	23	30.3		3 809
1987	DF	1987	03	09.26771	10	24	01.16	+10	23	37.0		3 809
1987	DF	1987	03	09.27396	10	24	00.84	+10	23	43.7		3 809
1987	DF	1987	03	11.13403	10	22	28.92	+10	57	32.3		3 809
1987	DF	1987	03	11.13958	10	22	28.65	+10	57	38.3		3 809
1987	DF	1987	03	11.14514	10	22	28.37	+10	57	44.3		3 809
1987	DG	1987	02	24.30174	10	43	44.16	+05	49	30.0	16.4	3 809
1987	DG	1987	02	24.30660	10	43	43.88	+05	49	32.5		3 809
1987	DG	1987	02	24.31146	10	43	43.62	+05	49	34.3		3 809
1987	DG	1987	02	25.27153	10	42	52.39	+05	57	01.9		3 809
1987	DG	1987	02	25.27674	10	42	52.09	+05	57	04.5		3 809
1987	DG	1987	02	25.28194	10	42	51.81	+05	57	07.3		3 809
1987	DG	1987	02	26.14479	10	42	05.79	+06	03	53.6		3 809
1987	DG	1987	02	26.15035	10	42	05.48	+06	03	55.9		3 809
1987	DG	1987	02	26.15521	10	42	05.22	+06	03	58.0		3 809
1987	DG	1987	02	27.19688	10	41	08.59	+06	12	13.2		3 809
1987	DG	1987	02	27.20174	10	41	08.33	+06	12	15.5		3 809
1987	DG	1987	02	27.20660	10	41	08.04	+06	12	17.9		3 809
1987	DG	1987	02	28.16215	10	40	16.17	+06	19	55.3		3 809

1987	DG	1987	02	28.16701	10	40	15.91	+06	19	57.3		3 809
1987	DG	1987	02	28.17188	10	40	15.65	+06	19	59.6		3 809
1987	DG	1987	03	01.21007	10	39	18.89	+06	28	19.3		3 809
1987	DG	1987	03	01.21493	10	39	18.62	+06	28	22.0		3 809
1987	DG	1987	03	01.21979	10	39	18.34	+06	28	24.3		3 809
1987	DG	1987	03	02.20868	10	38	24.43	+06	36	21.4		3 809
1987	DG	1987	03	02.21354	10	38	24.17	+06	36	23.9		3 809
1987	DG	1987	03	02.21840	10	38	23.91	+06	36	26.2		3 809
1987	DG	1987	03	03.20104	10	37	30.47	+06	44	22.0		3 809
1987	DG	1987	03	03.20590	10	37	30.22	+06	44	24.1		3 809
1987	DG	1987	03	03.21076	10	37	29.96	+06	44	26.6		3 809
1987	DG	1987	03	04.18333	10	36	37.43	+06	52	16.0		3 809
1987	DG	1987	03	04.18854	10	36	37.12	+06	52	18.6		3 809
1987	DG	1987	03	04.19375	10	36	36.82	+06	52	21.5		3 809
1987	DG	1987	03	05.22153	10	35	41.40	+07	00	37.2		3 809
1987	DG	1987	03	05.22847	10	35	41.02	+07	00	40.6		3 809
1987	DG	1987	03	05.23542	10	35	40.63	+07	00	44.1		3 809
1987	DG	1987	03	06.21528	10	34	48.51	+07	08	35.4		3 809
1987	DG	1987	03	06.22222	10	34	48.12	+07	08	38.8		3 809
1987	DG	1987	03	06.22917	10	34	47.70	+07	08	42.4		3 809
1987	DG	1987	03	07.26042	10	33	53.24	+07	16	55.6		3 809
1987	DG	1987	03	07.26736	10	33	52.89	+07	16	58.9		3 809
1987	DG	1987	03	07.27431	10	33	52.54	+07	17	02.4		3 809
1987	DG	1987	03	10.29306	10	31	18.05	+07	40	44.5		3 809
1987	DG	1987	03	10.29861	10	31	17.75	+07	40	47.1		3 809
1987	DG	1987	03	10.30417	10	31	17.44	+07	40	49.7		3 809
1987	DN	1987	02	23.18576	09	42	16.88	+11	46	50.7	16.8	3 809
1987	DN	1987	02	23.19063	09	42	16.61	+11	46	51.4		3 809
1987	DN	1987	02	23.19549	09	42	16.39	+11	46	52.2		3 809
1987	DN	1987	02	24.20451	09	41	27.54	+11	49	25.4		3 809
1987	DN	1987	02	24.20937	09	41	27.31	+11	49	26.0		3 809
1987	DN	1987	02	24.21424	09	41	27.07	+11	49	26.8		3 809
1987	DN	1987	02	25.23021	09	40	38.36	+11	51	59.2		3 809
1987	DN	1987	02	25.23507	09	40	38.13	+11	52	00.1		3 809
1987	DN	1987	02	25.23993	09	40	37.90	+11	52	00.5		3 809
1987	DN	1987	02	27.07899	09	39	11.29	+11	56	32.9		3 809
1987	DN	1987	02	27.08420	09	39	11.04	+11	56	33.5		3 809
1987	DN	1987	02	27.08941	09	39	10.79	+11	56	34.1		3 809
1987	DN	1987	02	28.06910	09	38	25.39	+11	58	55.8		3 809
1987	DN	1987	02	28.07396	09	38	25.14	+11	58	57.0		3 809
1987	DN	1987	02	28.07882	09	38	24.92	+11	58	57.7		3 809
1987	DN	1987	03	02.08507	09	36	53.88	+12	03	39.5		3 809
1987	DN	1987	03	02.09063	09	36	53.63	+12	03	40.2		3 809
1987	DN	1987	03	02.09618	09	36	53.37	+12	03	41.2		3 809
1987	DN	1987	03	03.10382	09	36	08.84	+12	05	58.4		3 809
1987	DN	1987	03	03.10868	09	36	08.63	+12	05	59.2		3 809
1987	DN	1987	03	03.11354	09	36	08.43	+12	05	59.8		3 809
1987	DN	1987	03	04.06285	09	35	27.28	+12	08	06.0		3 809
1987	DN	1987	03	04.06771	09	35	27.07	+12	08	06.6		3 809
1987	DN	1987	03	04.07257	09	35	26.85	+12	08	06.9		3 809
1987	DP	1987	03	02.29201	11	15	24.38	+02	14	34.8	16.1	3 809
1987	DP	1987	03	02.29688	11	15	24.16	+02	14	36.6		3 809
1987	DP	1987	03	02.30174	11	15	23.95	+02	14	38.6		3 809
1987	DP	1987	03	03.28507	11	14	40.62	+02	21	35.2		3 809
1987	DP	1987	03	03.28993	11	14	40.40	+02	21	37.3		3 809
1987	DP	1987	03	03.29479	11	14	40.18	+02	21	39.4		3 809
1987	DP	1987	03	04.27604	11	13	56.61	+02	28	37.8		3 809
1987	DP	1987	03	04.28090	11	13	56.40	+02	28	39.9		3 809
1987	DP	1987	03	04.28576	11	13	56.18	+02	28	42.0		3 809

1987	DP		1987	03	05.27674	11	13	11.99	+02	35	47.1	3 809
1987	DP		1987	03	05.28229	11	13	11.74	+02	35	49.1	3 809
1987	DP		1987	03	05.28785	11	13	11.48	+02	35	51.5	3 809
1987	DP		1987	03	06.32674	11	12	24.90	+02	43	19.9	3 809
1987	DP		1987	03	06.33160	11	12	24.68	+02	43	22.1	3 809
1987	DP		1987	03	06.33785	11	12	24.37	+02	43	24.8	3 809
1987	DP		1987	03	08.31701	11	10	55.23	+02	57	44.5	3 809
1987	DP		1987	03	08.32187	11	10	55.02	+02	57	46.6	3 809
1987	DP		1987	03	08.32674	11	10	54.80	+02	57	48.8	3 809
1987	DF1		1987	02	24.12153	11	11	28.25	+07	00	18.7	16.8 3 809
1987	DF1		1987	02	24.12708	11	11	27.98	+07	00	22.3	3 809
1987	DF1		1987	02	24.13264	11	11	27.73	+07	00	26.3	3 809
1987	DF1		1987	02	26.25590	11	09	53.84	+07	23	07.9	3 809
1987	DF1		1987	02	26.26076	11	09	53.63	+07	23	11.3	3 809
1987	DF1		1987	02	26.26563	11	09	53.41	+07	23	14.3	3 809
1987	DF1		1987	02	27.32118	11	09	05.62	+07	34	38.7	3 809
1987	DF1		1987	02	27.32604	11	09	05.39	+07	34	41.9	3 809
1987	DF1		1987	02	27.33090	11	09	05.14	+07	34	45.0	3 809
1987	DF1		1987	03	01.27951	11	07	35.59	+07	55	57.6	3 809
1987	DF1		1987	03	01.28472	11	07	35.35	+07	56	01.3	3 809
1987	DF1		1987	03	01.28993	11	07	35.12	+07	56	04.8	3 809
1987	DF1		1987	03	01.33229	11	07	33.01	+07	56	32.2	3 809
1987	DF1		1987	03	01.33715	11	07	32.78	+07	56	35.4	3 809
1987	DF1		1987	03	01.34201	11	07	32.56	+07	56	38.9	3 809
1987	DF1		1987	03	03.33299	11	05	59.06	+08	18	27.8	3 809
1987	DF1		1987	03	03.33785	11	05	58.83	+08	18	30.7	3 809
1987	DF1		1987	03	03.34271	11	05	58.58	+08	18	33.9	3 809
1987	DF1		1987	03	04.32396	11	05	12.00	+08	29	20.0	3 809
1987	DF1		1987	03	04.32882	11	05	11.76	+08	29	23.2	3 809
1987	DF1		1987	03	04.33368	11	05	11.53	+08	29	26.3	3 809
1987	DF1		1987	03	05.31285	11	04	24.79	+08	40	12.8	3 809
1987	DF1		1987	03	05.31771	11	04	24.55	+08	40	15.9	3 809
1987	DF1		1987	03	05.32257	11	04	24.32	+08	40	19.0	3 809
1987	DF1		1987	03	06.30660	11	03	37.20	+08	51	07.6	3 809
1987	DF1		1987	03	06.31250	11	03	36.92	+08	51	11.3	3 809
1987	DF1		1987	03	06.31840	11	03	36.61	+08	51	15.0	3 809
1987	DF1		1987	03	08.29826	11	02	01.35	+09	12	56.0	3 809
1987	DF1		1987	03	08.30312	11	02	01.13	+09	12	59.3	3 809
1987	DF1		1987	03	08.30799	11	02	00.89	+09	13	02.4	3 809
1987	DF1		1987	03	11.26042	10	59	39.09	+09	45	04.2	3 809
1987	DF1		1987	03	11.26458	10	59	38.89	+09	45	06.5	3 809
1987	DF1		1987	03	11.26875	10	59	38.69	+09	45	09.2	3 809
1987	DU5	*	1987	02	19.09097	08	47	12.28	+13	37	06.8	17.0 3 809
1987	DU5		1987	02	19.09479	08	47	12.08	+13	37	07.3	3 809
1987	DU5		1987	02	19.11181	08	47	11.13	+13	37	11.1	3 809
1987	DU5		1987	02	20.05313	08	46	21.77	+13	40	25.9	3 809
1987	DU5		1987	02	20.05799	08	46	21.51	+13	40	27.0	3 809
1987	DU5		1987	02	20.06285	08	46	21.25	+13	40	28.0	3 809
1987	DU5		1987	02	22.06632	08	44	40.06	+13	47	18.8	3 809
1987	DU5		1987	02	22.07118	08	44	39.79	+13	47	19.9	3 809
1987	DU5		1987	02	22.07604	08	44	39.55	+13	47	20.9	3 809
1987	DU5		1987	02	23.10590	08	43	49.84	+13	50	48.7	3 809
1987	DU5		1987	02	23.11076	08	43	49.60	+13	50	49.3	3 809
1987	DU5		1987	02	23.11562	08	43	49.36	+13	50	50.3	3 809
1987	DV5	*	1987	02	19.09097	08	47	50.59	+13	51	04.3	17.0 3 809
1987	DV5		1987	02	19.09479	08	47	50.37	+13	51	04.4	3 809
1987	DV5		1987	02	19.11181	08	47	49.44	+13	51	04.9	3 809
1987	DW5	*	1987	02	21.07882	09	38	34.05	+12	25	59.3	16.0 3 809
1987	DW5		1987	02	21.08368	09	38	33.83	+12	26	01.3	3 809

1987	DW5		1987	02	21.08854	09	38	33.59	+12	26	03.4	3 809
1987	DW5		1987	02	22.08646	09	37	46.56	+12	32	35.5	3 809
1987	DW5		1987	02	22.09132	09	37	46.33	+12	32	37.5	3 809
1987	DW5		1987	02	22.09618	09	37	46.10	+12	32	39.7	3 809
1987	DW5		1987	02	23.14687	09	36	57.08	+12	39	29.2	3 809
1987	DW5		1987	02	23.15174	09	36	56.86	+12	39	31.1	3 809
1987	DW5		1987	02	23.15660	09	36	56.63	+12	39	32.6	3 809
1987	DW5		1987	02	25.08924	09	35	28.77	+12	51	57.4	3 809
1987	DW5		1987	02	25.09410	09	35	28.55	+12	51	59.2	3 809
1987	DW5		1987	02	25.09896	09	35	28.31	+12	52	01.0	3 809
1987	DW5		1987	02	27.03993	09	34	03.04	+13	04	13.0	3 809
1987	DW5		1987	02	27.04479	09	34	02.81	+13	04	15.0	3 809
1987	DW5		1987	02	27.04965	09	34	02.60	+13	04	16.7	3 809
1987	DW5		1987	03	01.06528	09	32	37.47	+13	16	37.4	3 809
1987	DW5		1987	03	01.07222	09	32	37.17	+13	16	39.8	3 809
1987	DW5		1987	03	01.07917	09	32	36.87	+13	16	42.6	3 809
1987	DW5		1987	03	02.05035	09	31	57.47	+13	22	30.7	3 809
1987	DW5		1987	03	02.05555	09	31	57.27	+13	22	32.6	3 809
1987	DW5		1987	03	02.06076	09	31	57.05	+13	22	34.3	3 809
1987	DW5		1987	03	03.03437	09	31	18.59	+13	28	18.0	3 809
1987	DW5		1987	03	03.03924	09	31	18.40	+13	28	19.3	3 809
1987	DW5		1987	03	03.04410	09	31	18.22	+13	28	21.0	3 809
1987	DW5		1987	03	04.02986	09	30	40.30	+13	34	03.0	3 809
1987	DW5		1987	03	04.03403	09	30	40.15	+13	34	04.4	3 809
1987	DW5		1987	03	04.03819	09	30	39.97	+13	34	05.7	3 809
1987	DW5		1987	03	05.02153	09	30	03.44	+13	39	39.9	3 809
1987	DW5		1987	03	05.02569	09	30	03.28	+13	39	41.2	3 809
1987	DW5		1987	03	05.02986	09	30	03.13	+13	39	42.6	3 809
1987	DW5		1987	03	06.02083	09	29	27.56	+13	45	12.2	3 809
1987	DW5		1987	03	06.02500	09	29	27.41	+13	45	13.9	3 809
1987	DW5		1987	03	06.02917	09	29	27.27	+13	45	15.0	3 809
1987	DX5	*	1987	02	21.09618	09	37	23.07	+10	03	24.9	17.3 3 809
1987	DX5		1987	02	21.10104	09	37	22.83	+10	03	25.5	3 809
1987	DX5		1987	02	21.10590	09	37	22.60	+10	03	26.2	3 809
1987	DX5		1987	02	22.11250	09	36	31.87	+10	05	37.2	3 809
1987	DX5		1987	02	22.11805	09	36	31.58	+10	05	38.0	3 809
1987	DX5		1987	02	22.12361	09	36	31.30	+10	05	38.7	3 809
1987	DX5		1987	02	23.14687	09	35	40.14	+10	07	51.2	3 809
1987	DX5		1987	02	23.15174	09	35	39.90	+10	07	51.8	3 809
1987	DX5		1987	02	23.15660	09	35	39.65	+10	07	52.4	3 809
1987	DX5		1987	02	25.11632	09	34	03.43	+10	12	04.6	3 809
1987	DX5		1987	02	25.12118	09	34	03.21	+10	12	05.1	3 809
1987	DX5		1987	02	25.12604	09	34	02.99	+10	12	05.5	3 809
1987	DX5		1987	02	27.05729	09	32	30.28	+10	16	09.3	3 809
1987	DX5		1987	02	27.06215	09	32	30.07	+10	16	10.0	3 809
1987	DX5		1987	02	27.06701	09	32	29.83	+10	16	10.4	3 809
1987	DX5		1987	03	01.08646	09	30	55.63	+10	20	20.8	3 809
1987	DX5		1987	03	01.09132	09	30	55.40	+10	20	21.1	3 809
1987	DX5		1987	03	01.09618	09	30	55.16	+10	20	21.7	3 809
1987	DX5		1987	03	02.06632	09	30	10.99	+10	22	20.2	3 809
1987	DX5		1987	03	02.07118	09	30	10.77	+10	22	20.7	3 809
1987	DX5		1987	03	02.07604	09	30	10.54	+10	22	21.3	3 809
1987	DX5		1987	03	05.03750	09	28	00.69	+10	28	06.7	3 809
1987	DX5		1987	03	05.04444	09	28	00.38	+10	28	07.6	3 809
1987	DX5		1987	03	05.05139	09	28	00.07	+10	28	08.3	3 809
1987	DX5		1987	03	06.03819	09	27	18.58	+10	29	59.0	3 809
1987	DX5		1987	03	06.04514	09	27	18.29	+10	29	59.8	3 809
1987	DX5		1987	03	06.05208	09	27	18.01	+10	30	00.6	3 809
1987	DY5	*	1987	02	21.09618	09	41	01.40	+10	04	22.3	16.2 3 809

1987	DY5	1987	02	21.10104	09	41	01.19	+10	04	24.5	3 809
1987	DY5	1987	02	21.10590	09	41	00.97	+10	04	26.8	3 809
1987	DY5	1987	02	22.11250	09	40	15.95	+10	12	06.7	3 809
1987	DY5	1987	02	22.11805	09	40	15.72	+10	12	09.1	3 809
1987	DY5	1987	02	22.12361	09	40	15.46	+10	12	12.1	3 809
1987	DY5	1987	02	23.14687	09	39	30.17	+10	19	57.4	3 809
1987	DY5	1987	02	23.15174	09	39	29.95	+10	19	59.5	3 809
1987	DY5	1987	02	23.15660	09	39	29.72	+10	20	01.7	3 809
1987	DY5	1987	02	24.20451	09	38	43.87	+10	27	58.0	3 809
1987	DY5	1987	02	24.20937	09	38	43.65	+10	28	00.0	3 809
1987	DY5	1987	02	24.21424	09	38	43.44	+10	28	02.0	3 809
1987	DY5	1987	02	25.11632	09	38	04.59	+10	34	49.4	3 809
1987	DY5	1987	02	25.12118	09	38	04.39	+10	34	51.6	3 809
1987	DY5	1987	02	25.12604	09	38	04.18	+10	34	53.4	3 809
1987	DY5	1987	02	25.23021	09	37	59.51	+10	35	40.5	3 809
1987	DY5	1987	02	25.23507	09	37	59.31	+10	35	42.8	3 809
1987	DY5	1987	02	25.23993	09	37	59.10	+10	35	45.1	3 809
1987	DY5	1987	02	26.03576	09	37	25.41	+10	41	43.0	3 809
1987	DY5	1987	02	26.04062	09	37	25.21	+10	41	45.2	3 809
1987	DY5	1987	02	26.04549	09	37	25.02	+10	41	47.4	3 809
1987	DY5	1987	02	27.05729	09	36	42.47	+10	49	18.9	3 809
1987	DY5	1987	02	27.06215	09	36	42.27	+10	49	21.3	3 809
1987	DY5	1987	02	27.06701	09	36	42.06	+10	49	23.4	3 809
1987	DY5	1987	02	27.07899	09	36	41.49	+10	49	28.8	3 809
1987	DY5	1987	02	27.08420	09	36	41.27	+10	49	31.4	3 809
1987	DY5	1987	02	27.08941	09	36	41.07	+10	49	33.8	3 809
1987	DY5	1987	02	28.06910	09	36	00.53	+10	56	48.7	3 809
1987	DY5	1987	02	28.07396	09	36	00.34	+10	56	50.7	3 809
1987	DY5	1987	02	28.07882	09	36	00.17	+10	56	52.7	3 809
1987	DY5	1987	03	01.08646	09	35	19.21	+11	04	16.2	3 809
1987	DY5	1987	03	01.09132	09	35	19.02	+11	04	18.3	3 809
1987	DY5	1987	03	01.09618	09	35	18.83	+11	04	20.4	3 809
1987	DY5	1987	03	02.06632	09	34	40.16	+11	11	23.6	3 809
1987	DY5	1987	03	02.07118	09	34	39.97	+11	11	25.9	3 809
1987	DY5	1987	03	02.07604	09	34	39.78	+11	11	28.0	3 809
1987	DY5	1987	03	02.08507	09	34	39.43	+11	11	31.7	3 809
1987	DY5	1987	03	02.09063	09	34	39.19	+11	11	34.5	3 809
1987	DY5	1987	03	02.09618	09	34	38.97	+11	11	36.9	3 809
1987	DY5	1987	03	03.10382	09	33	59.60	+11	18	52.8	3 809
1987	DY5	1987	03	03.10868	09	33	59.41	+11	18	55.0	3 809
1987	DY5	1987	03	03.11354	09	33	59.24	+11	18	56.7	3 809
1987	DY5	1987	03	04.06285	09	33	23.11	+11	25	42.9	3 809
1987	DY5	1987	03	04.06771	09	33	22.92	+11	25	45.0	3 809
1987	DY5	1987	03	04.07257	09	33	22.73	+11	25	46.9	3 809
1987	DY5	1987	03	05.03750	09	32	46.85	+11	32	35.0	3 809
1987	DY5	1987	03	05.04444	09	32	46.59	+11	32	37.9	3 809
1987	DY5	1987	03	05.05139	09	32	46.33	+11	32	40.9	3 809
1987	DY5	1987	03	05.06111	09	32	45.91	+11	32	44.8	3 809
1987	DY5	1987	03	05.06806	09	32	45.65	+11	32	47.8	3 809
1987	DY5	1987	03	05.07500	09	32	45.39	+11	32	50.7	3 809
1987	DY5	1987	03	06.03819	09	32	10.54	+11	39	33.9	3 809
1987	DY5	1987	03	06.04514	09	32	10.29	+11	39	37.0	3 809
1987	DY5	1987	03	06.05208	09	32	10.03	+11	39	40.0	3 809
1987	DY5	1987	03	06.06458	09	32	09.52	+11	39	44.9	3 809
1987	DY5	1987	03	06.07153	09	32	09.27	+11	39	47.9	3 809
1987	DY5	1987	03	06.07847	09	32	09.02	+11	39	51.1	3 809
1987	DY5	1987	03	07.09097	09	31	33.31	+11	46	48.2	3 809
1987	DY5	1987	03	07.09792	09	31	33.07	+11	46	51.5	3 809
1987	DY5	1987	03	07.10486	09	31	32.86	+11	46	54.1	3 809

1987	DY5		1987	03	08.18611	09	30	55.79	+11	54	14.0	3 809
1987	DY5		1987	03	08.19306	09	30	55.55	+11	54	16.9	3 809
1987	DY5		1987	03	08.20000	09	30	55.32	+11	54	19.7	3 809
1987	DZ5	*	1987	02	22.14826	11	24	29.99	+02	35	39.8	17.5 3 809
1987	DZ5		1987	02	22.15312	11	24	29.68	+02	35	40.7	3 809
1987	DZ5		1987	02	22.15799	11	24	29.38	+02	35	41.6	3 809
1987	DA6	*	1987	02	22.23438	09	47	59.86	+10	58	54.6	15.8 3 809
1987	DA6		1987	02	22.23924	09	47	59.55	+10	58	55.4	3 809
1987	DA6		1987	02	22.24410	09	47	59.19	+10	58	56.1	3 809
1987	DA6		1987	02	23.18576	09	46	57.89	+11	01	35.5	3 809
1987	DA6		1987	02	23.19063	09	46	57.58	+11	01	36.3	3 809
1987	DA6		1987	02	23.19549	09	46	57.26	+11	01	37.1	3 809
1987	DA6		1987	02	24.20451	09	45	51.96	+11	04	25.3	3 809
1987	DA6		1987	02	24.20937	09	45	51.65	+11	04	26.2	3 809
1987	DA6		1987	02	24.21424	09	45	51.31	+11	04	27.1	3 809
1987	DA6		1987	02	25.23021	09	44	46.23	+11	07	15.5	3 809
1987	DA6		1987	02	25.23507	09	44	45.92	+11	07	16.4	3 809
1987	DA6		1987	02	25.23993	09	44	45.61	+11	07	16.8	3 809
1987	DA6		1987	02	26.03576	09	43	55.86	+11	09	26.1	3 809
1987	DA6		1987	02	26.04062	09	43	55.54	+11	09	27.0	3 809
1987	DA6		1987	02	26.04549	09	43	55.23	+11	09	27.8	3 809
1987	DA6		1987	02	27.07899	09	42	50.60	+11	12	14.5	3 809
1987	DA6		1987	02	27.08420	09	42	50.27	+11	12	15.6	3 809
1987	DA6		1987	02	27.08941	09	42	49.93	+11	12	16.3	3 809
1987	DA6		1987	02	28.06910	09	41	49.83	+11	14	50.7	3 809
1987	DA6		1987	02	28.07396	09	41	49.52	+11	14	51.0	3 809
1987	DA6		1987	02	28.07882	09	41	49.22	+11	14	51.9	3 809
1987	DA6		1987	03	01.10243	09	40	47.46	+11	17	29.7	3 809
1987	DA6		1987	03	01.10729	09	40	47.16	+11	17	30.4	3 809
1987	DA6		1987	03	01.11215	09	40	46.86	+11	17	31.1	3 809
1987	DA6		1987	03	02.08507	09	39	49.36	+11	19	56.6	3 809
1987	DA6		1987	03	02.09063	09	39	49.02	+11	19	57.4	3 809
1987	DA6		1987	03	02.09618	09	39	48.70	+11	19	58.2	3 809
1987	DA6		1987	03	03.10382	09	38	50.31	+11	22	24.8	3 809
1987	DA6		1987	03	03.10868	09	38	50.03	+11	22	25.8	3 809
1987	DA6		1987	03	03.11354	09	38	49.75	+11	22	26.5	3 809
1987	DA6		1987	03	04.06285	09	37	56.20	+11	24	40.8	3 809
1987	DA6		1987	03	04.06771	09	37	55.91	+11	24	41.1	3 809
1987	DA6		1987	03	04.07257	09	37	55.61	+11	24	41.9	3 809
1987	DA6		1987	03	05.06111	09	37	01.12	+11	26	56.2	3 809
1987	DA6		1987	03	05.06806	09	37	00.74	+11	26	57.2	3 809
1987	DA6		1987	03	05.07500	09	37	00.35	+11	26	58.5	3 809
1987	DA6		1987	03	06.06458	09	36	07.28	+11	29	07.4	3 809
1987	DA6		1987	03	06.07153	09	36	06.91	+11	29	08.2	3 809
1987	DA6		1987	03	06.07847	09	36	06.54	+11	29	09.3	3 809
1987	DA6		1987	03	07.09097	09	35	13.73	+11	31	16.2	3 809
1987	DA6		1987	03	07.09792	09	35	13.35	+11	31	17.1	3 809
1987	DA6		1987	03	07.10486	09	35	12.98	+11	31	18.0	3 809
1987	DB6	*	1987	02	22.29618	10	36	02.90	+09	40	27.1	17.0 3 809
1987	DB6		1987	02	22.30104	10	36	02.66	+09	40	29.6	3 809
1987	DB6		1987	02	22.30590	10	36	02.41	+09	40	32.0	3 809
1987	DB6		1987	02	23.20729	10	35	18.91	+09	48	10.6	3 809
1987	DB6		1987	02	23.21215	10	35	18.68	+09	48	13.1	3 809
1987	DB6		1987	02	23.21701	10	35	18.43	+09	48	15.9	3 809
1987	DB6		1987	02	24.22465	10	34	29.45	+09	56	47.2	3 809
1987	DB6		1987	02	24.22951	10	34	29.18	+09	56	49.6	3 809
1987	DB6		1987	02	24.23438	10	34	28.95	+09	56	52.0	3 809
1987	DB6		1987	02	26.05868	10	33	00.40	+10	12	15.0	3 809
1987	DB6		1987	02	26.06354	10	33	00.16	+10	12	17.6	3 809

1987	DB6		1987	02	26.06840	10	32	59.92	+10	12	20.0	3 809
1987	DB6		1987	02	27.11076	10	32	09.21	+10	21	03.4	3 809
1987	DB6		1987	02	27.11562	10	32	08.97	+10	21	05.4	3 809
1987	DB6		1987	02	27.12049	10	32	08.75	+10	21	07.8	3 809
1987	DB6		1987	02	28.08819	10	31	21.86	+10	29	11.6	3 809
1987	DB6		1987	02	28.09340	10	31	21.61	+10	29	14.2	3 809
1987	DB6		1987	02	28.09861	10	31	21.36	+10	29	16.5	3 809
1987	DB6		1987	03	01.11979	10	30	32.04	+10	37	44.0	3 809
1987	DB6		1987	03	01.12465	10	30	31.81	+10	37	46.5	3 809
1987	DB6		1987	03	01.12951	10	30	31.58	+10	37	48.9	3 809
1987	DB6		1987	03	02.11146	10	29	44.48	+10	45	51.4	3 809
1987	DB6		1987	03	02.11632	10	29	44.26	+10	45	53.9	3 809
1987	DB6		1987	03	02.12118	10	29	44.03	+10	45	56.3	3 809
1987	DB6		1987	03	03.08021	10	28	58.36	+10	53	44.5	3 809
1987	DB6		1987	03	03.08507	10	28	58.13	+10	53	46.6	3 809
1987	DB6		1987	03	03.08993	10	28	57.87	+10	53	49.0	3 809
1987	DB6		1987	03	04.08160	10	28	11.12	+11	01	47.4	3 809
1987	DB6		1987	03	04.08646	10	28	10.88	+11	01	49.8	3 809
1987	DB6		1987	03	04.09132	10	28	10.65	+11	01	52.2	3 809
1987	DB6		1987	03	05.08646	10	27	24.13	+11	09	47.3	3 809
1987	DB6		1987	03	05.09271	10	27	23.80	+11	09	50.3	3 809
1987	DB6		1987	03	05.09896	10	27	23.51	+11	09	53.2	3 809
1987	DB6		1987	03	06.09132	10	26	37.69	+11	17	42.0	3 809
1987	DB6		1987	03	06.09757	10	26	37.40	+11	17	44.7	3 809
1987	DB6		1987	03	06.10382	10	26	37.14	+11	17	47.4	3 809
1987	DB6		1987	03	09.26146	10	24	15.27	+11	41	53.6	17.5 3 809
1987	DB6		1987	03	09.26771	10	24	15.02	+11	41	54.9	3 809
1987	DB6		1987	03	09.27396	10	24	14.76	+11	41	55.8	3 809
1987	DC6	*	1987	02	22.29618	10	37	41.02	+08	30	46.3	16.7 3 809
1987	DC6		1987	02	22.30104	10	37	40.80	+08	30	48.2	3 809
1987	DC6		1987	02	22.30590	10	37	40.62	+08	30	50.2	3 809
1987	DC6		1987	02	23.20729	10	37	01.02	+08	36	51.2	3 809
1987	DC6		1987	02	23.21215	10	37	00.79	+08	36	52.8	3 809
1987	DC6		1987	02	23.21701	10	37	00.56	+08	36	54.8	3 809
1987	DC6		1987	02	24.22465	10	36	15.96	+08	43	39.9	3 809
1987	DC6		1987	02	24.22951	10	36	15.75	+08	43	41.9	3 809
1987	DC6		1987	02	24.23438	10	36	15.54	+08	43	43.9	3 809
1987	DC6		1987	02	26.05868	10	34	54.86	+08	55	54.8	3 809
1987	DC6		1987	02	26.06354	10	34	54.66	+08	55	56.7	3 809
1987	DC6		1987	02	26.06840	10	34	54.45	+08	55	58.7	3 809
1987	DC6		1987	02	27.11076	10	34	08.06	+09	02	56.2	3 809
1987	DC6		1987	02	27.11562	10	34	07.84	+09	02	58.2	3 809
1987	DC6		1987	02	27.12049	10	34	07.63	+09	03	00.1	3 809
1987	DC6		1987	02	28.08819	10	33	24.69	+09	09	27.5	3 809
1987	DC6		1987	02	28.09340	10	33	24.47	+09	09	29.4	3 809
1987	DC6		1987	02	28.09861	10	33	24.25	+09	09	31.2	3 809
1987	DC6		1987	03	01.11979	10	32	39.02	+09	16	18.0	3 809
1987	DC6		1987	03	01.12465	10	32	38.80	+09	16	20.3	3 809
1987	DC6		1987	03	01.12951	10	32	38.58	+09	16	22.1	3 809
1987	DC6		1987	03	03.08021	10	31	12.78	+09	29	12.9	3 809
1987	DC6		1987	03	03.08507	10	31	12.58	+09	29	15.0	3 809
1987	DC6		1987	03	03.08993	10	31	12.35	+09	29	17.0	3 809
1987	DC6		1987	03	04.08160	10	30	29.07	+09	35	45.7	3 809
1987	DC6		1987	03	04.08646	10	30	28.84	+09	35	47.9	3 809
1987	DC6		1987	03	04.09132	10	30	28.63	+09	35	49.9	3 809
1987	DC6		1987	03	05.08646	10	29	45.47	+09	42	17.0	3 809
1987	DC6		1987	03	05.09271	10	29	45.20	+09	42	19.4	3 809
1987	DC6		1987	03	05.09896	10	29	44.92	+09	42	21.7	3 809
1987	DC6		1987	03	06.09132	10	29	02.35	+09	48	45.1	3 809

1987	DC6		1987	03	06.09757	10	29	02.07	+09	48	47.4	3 809
1987	DC6		1987	03	06.10382	10	29	01.80	+09	48	49.8	3 809
1987	DC6		1987	03	07.12430	10	28	18.36	+09	55	19.8	3 809
1987	DC6		1987	03	07.13125	10	28	18.07	+09	55	22.3	3 809
1987	DC6		1987	03	07.13819	10	28	17.75	+09	55	25.0	3 809
1987	DC6		1987	03	08.25521	10	27	30.61	+10	02	28.0	3 809
1987	DC6		1987	03	08.26146	10	27	30.33	+10	02	29.9	3 809
1987	DC6		1987	03	08.26771	10	27	30.08	+10	02	32.3	3 809
1987	DC6		1987	03	09.26146	10	26	48.90	+10	08	43.8	3 809
1987	DC6		1987	03	09.26771	10	26	48.65	+10	08	46.1	3 809
1987	DC6		1987	03	09.27396	10	26	48.39	+10	08	48.5	3 809
1987	DC6		1987	03	11.29965	10	25	26.15	+10	21	11.0	3 809
1987	DC6		1987	03	11.30590	10	25	25.89	+10	21	13.2	3 809
1987	DC6		1987	03	11.31215	10	25	25.66	+10	21	15.4	3 809
1987	DD6	*	1987	02	22.29618	10	41	34.01	+08	27	55.5	17.3 3 809
1987	DD6		1987	02	22.30104	10	41	33.76	+08	27	57.9	3 809
1987	DD6		1987	02	22.30590	10	41	33.50	+08	28	00.7	3 809
1987	DD6		1987	02	23.20729	10	40	45.62	+08	35	23.7	3 809
1987	DD6		1987	02	23.21215	10	40	45.36	+08	35	25.9	3 809
1987	DD6		1987	02	23.21701	10	40	45.08	+08	35	28.2	3 809
1987	DD6		1987	02	24.22465	10	39	50.80	+08	43	46.0	3 809
1987	DD6		1987	02	24.22951	10	39	50.51	+08	43	48.4	3 809
1987	DD6		1987	02	24.23438	10	39	50.22	+08	43	51.0	3 809
1987	DD6		1987	02	27.11076	10	37	13.39	+09	07	42.8	3 809
1987	DD6		1987	02	27.11562	10	37	13.12	+09	07	45.3	3 809
1987	DD6		1987	02	27.12049	10	37	12.84	+09	07	47.6	3 809
1987	DD6		1987	02	28.08819	10	36	19.59	+09	15	50.4	3 809
1987	DD6		1987	02	28.09340	10	36	19.30	+09	15	53.0	3 809
1987	DD6		1987	02	28.09861	10	36	19.01	+09	15	55.7	3 809
1987	DD6		1987	03	01.11979	10	35	22.63	+09	24	24.8	3 809
1987	DD6		1987	03	01.12465	10	35	22.36	+09	24	27.2	3 809
1987	DD6		1987	03	01.12951	10	35	22.08	+09	24	29.8	3 809
1987	DD6		1987	03	02.11146	10	34	28.04	+09	32	37.5	3 809
1987	DD6		1987	03	02.11632	10	34	27.74	+09	32	40.1	3 809
1987	DD6		1987	03	02.12118	10	34	27.47	+09	32	42.5	3 809
1987	DD6		1987	03	03.08021	10	33	34.89	+09	40	36.8	3 809
1987	DD6		1987	03	03.08507	10	33	34.63	+09	40	39.3	3 809
1987	DD6		1987	03	03.08993	10	33	34.32	+09	40	41.8	3 809
1987	DD6		1987	03	04.08160	10	32	40.12	+09	48	49.3	3 809
1987	DD6		1987	03	04.08646	10	32	39.85	+09	48	51.7	3 809
1987	DD6		1987	03	04.09132	10	32	39.55	+09	48	54.0	3 809
1987	DD6		1987	03	05.08646	10	31	45.50	+09	57	00.3	3 809
1987	DD6		1987	03	05.09271	10	31	45.15	+09	57	03.3	3 809
1987	DD6		1987	03	05.09896	10	31	44.81	+09	57	06.5	3 809
1987	DD6		1987	03	06.09132	10	30	51.36	+10	05	06.2	3 809
1987	DD6		1987	03	06.09757	10	30	51.03	+10	05	09.2	3 809
1987	DD6		1987	03	06.10382	10	30	50.66	+10	05	12.5	3 809
1987	DD6		1987	03	07.12430	10	29	56.20	+10	13	21.4	3 809
1987	DD6		1987	03	07.13125	10	29	55.83	+10	13	24.6	3 809
1987	DD6		1987	03	07.13819	10	29	55.45	+10	13	28.0	3 809
1987	DE6	*	1987	02	23.18576	09	43	13.63	+11	38	00.1	17.0 3 809
1987	DE6		1987	02	23.19063	09	43	13.41	+11	38	01.0	3 809
1987	DE6		1987	02	23.19549	09	43	13.19	+11	38	02.2	3 809
1987	DE6		1987	02	24.20451	09	42	25.41	+11	40	52.6	3 809
1987	DE6		1987	02	24.20937	09	42	25.17	+11	40	53.8	3 809
1987	DE6		1987	02	24.21424	09	42	24.94	+11	40	54.7	3 809
1987	DE6		1987	02	25.23021	09	41	37.31	+11	43	45.2	3 809
1987	DE6		1987	02	25.23507	09	41	37.08	+11	43	46.3	3 809
1987	DE6		1987	02	25.23993	09	41	36.84	+11	43	47.1	3 809

1987	DE6		1987	02	26.03576	09	41	00.15	+11	45	59.0	3 809
1987	DE6		1987	02	26.04062	09	40	59.91	+11	45	59.8	3 809
1987	DE6		1987	02	26.04549	09	40	59.68	+11	46	00.4	3 809
1987	DE6		1987	02	27.07899	09	40	12.19	+11	48	50.4	3 809
1987	DE6		1987	02	27.08420	09	40	11.95	+11	48	51.3	3 809
1987	DE6		1987	02	27.08941	09	40	11.71	+11	48	52.2	3 809
1987	DE6		1987	03	02.08507	09	37	57.86	+11	56	49.5	3 809
1987	DE6		1987	03	02.09063	09	37	57.61	+11	56	50.2	3 809
1987	DE6		1987	03	02.09618	09	37	57.38	+11	56	51.1	3 809
1987	DE6		1987	03	05.06111	09	35	51.06	+12	04	18.9	3 809
1987	DE6		1987	03	05.06806	09	35	50.77	+12	04	19.9	3 809
1987	DE6		1987	03	05.07500	09	35	50.46	+12	04	21.3	3 809
1987	DE6		1987	03	06.06458	09	35	09.84	+12	06	43.7	3 809
1987	DE6		1987	03	06.07153	09	35	09.55	+12	06	44.9	3 809
1987	DE6		1987	03	06.07847	09	35	09.26	+12	06	46.1	3 809
1987	DE6		1987	03	07.09097	09	34	28.50	+12	09	09.1	3 809
1987	DE6		1987	03	07.09792	09	34	28.21	+12	09	10.4	3 809
1987	DE6		1987	03	07.10486	09	34	27.95	+12	09	11.3	3 809
1987	DF6	*	1987	02	23.22535	10	37	01.16	+06	00	23.4	16.8 3 809
1987	DF6		1987	02	23.23021	10	37	00.84	+06	00	23.8	3 809
1987	DF6		1987	02	23.23507	10	37	00.52	+06	00	24.0	3 809
1987	DF6		1987	02	24.24132	10	35	57.39	+06	00	29.0	3 809
1987	DF6		1987	02	24.24618	10	35	57.05	+06	00	29.2	3 809
1987	DF6		1987	02	24.25104	10	35	56.74	+06	00	29.5	3 809
1987	DF6		1987	02	25.25087	10	34	53.69	+06	00	38.2	3 809
1987	DF6		1987	02	25.25625	10	34	53.35	+06	00	38.7	3 809
1987	DF6		1987	02	25.26163	10	34	53.01	+06	00	39.1	3 809
1987	DF6		1987	02	27.14687	10	32	53.71	+06	00	59.8	3 809
1987	DF6		1987	02	27.15174	10	32	53.40	+06	01	00.2	3 809
1987	DF6		1987	02	27.15660	10	32	53.10	+06	01	00.3	3 809
1987	DF6		1987	02	28.14271	10	31	50.50	+06	01	12.4	3 809
1987	DF6		1987	02	28.14757	10	31	50.21	+06	01	12.5	3 809
1987	DF6		1987	02	28.15243	10	31	49.90	+06	01	12.5	3 809
1987	DF6		1987	03	02.14687	10	29	43.31	+06	01	43.2	3 809
1987	DF6		1987	03	02.15174	10	29	43.00	+06	01	43.3	3 809
1987	DF6		1987	03	02.15660	10	29	42.69	+06	01	43.4	3 809
1987	DF6		1987	03	03.13924	10	28	40.52	+06	01	59.1	3 809
1987	DF6		1987	03	03.14410	10	28	40.24	+06	01	59.2	3 809
1987	DF6		1987	03	03.14896	10	28	39.93	+06	01	59.4	3 809
1987	DF6		1987	03	04.11701	10	27	39.03	+06	02	15.0	3 809
1987	DF6		1987	03	04.12188	10	27	38.73	+06	02	15.2	3 809
1987	DF6		1987	03	04.12674	10	27	38.41	+06	02	15.3	3 809
1987	DF6		1987	03	05.10694	10	26	36.97	+06	02	31.5	3 809
1987	DF6		1987	03	05.11181	10	26	36.67	+06	02	31.6	3 809
1987	DF6		1987	03	05.11667	10	26	36.34	+06	02	32.1	3 809
1987	DF6		1987	03	06.12222	10	25	33.74	+06	02	47.9	3 809
1987	DF6		1987	03	06.12778	10	25	33.39	+06	02	48.1	3 809
1987	DF6		1987	03	06.13333	10	25	33.03	+06	02	48.1	3 809
1987	DF6		1987	03	07.23680	10	24	24.69	+06	03	05.7	3 809
1987	DF6		1987	03	07.24375	10	24	24.25	+06	03	05.8	3 809
1987	DF6		1987	03	07.25069	10	24	23.81	+06	03	05.9	3 809
1987	DG6	*	1987	02	23.22535	10	37	28.87	+07	27	18.9	17.2 3 809
1987	DG6		1987	02	23.23021	10	37	28.61	+07	27	20.0	3 809
1987	DG6		1987	02	23.23507	10	37	28.38	+07	27	21.7	3 809
1987	DG6		1987	02	24.24132	10	36	34.67	+07	32	17.5	3 809
1987	DG6		1987	02	24.24618	10	36	34.43	+07	32	18.9	3 809
1987	DG6		1987	02	24.25104	10	36	34.19	+07	32	20.4	3 809
1987	DG6		1987	02	25.25087	10	35	40.51	+07	37	15.7	3 809
1987	DG6		1987	02	25.25625	10	35	40.22	+07	37	17.3	3 809

1987	DG6		1987	02	25.26163	10	35	39.94	+07	37	19.3	3 809
1987	DG6		1987	02	26.07674	10	34	56.41	+07	41	21.0	3 809
1987	DG6		1987	02	26.08160	10	34	56.15	+07	41	22.1	3 809
1987	DG6		1987	02	26.08646	10	34	55.91	+07	41	23.8	3 809
1987	DG6		1987	02	27.12813	10	33	59.55	+07	46	34.5	3 809
1987	DG6		1987	02	27.13310	10	33	59.30	+07	46	35.6	3 809
1987	DG6		1987	02	27.13808	10	33	59.03	+07	46	37.0	3 809
1987	DG6		1987	02	28.11076	10	33	06.38	+07	51	28.5	3 809
1987	DG6		1987	02	28.11562	10	33	06.12	+07	51	29.6	3 809
1987	DG6		1987	02	28.12049	10	33	05.88	+07	51	31.0	3 809
1987	DG6		1987	03	01.15243	10	32	09.95	+07	56	40.3	3 809
1987	DG6		1987	03	01.15729	10	32	09.70	+07	56	41.7	3 809
1987	DG6		1987	03	01.16215	10	32	09.44	+07	56	43.5	3 809
1987	DG6		1987	03	03.12257	10	30	23.48	+08	06	30.3	3 809
1987	DG6		1987	03	03.12743	10	30	23.22	+08	06	31.2	3 809
1987	DG6		1987	03	03.13229	10	30	22.94	+08	06	32.5	3 809
1987	DG6		1987	03	04.10104	10	29	30.75	+08	11	21.0	3 809
1987	DG6		1987	03	04.10590	10	29	30.50	+08	11	22.5	3 809
1987	DG6		1987	03	04.11076	10	29	30.23	+08	11	23.9	3 809
1987	DG6		1987	03	05.12639	10	28	35.73	+08	16	26.4	3 809
1987	DG6		1987	03	05.13194	10	28	35.41	+08	16	28.0	3 809
1987	DG6		1987	03	05.13750	10	28	35.08	+08	16	29.6	3 809
1987	DG6		1987	03	06.13958	10	27	41.56	+08	21	24.8	3 809
1987	DG6		1987	03	06.14514	10	27	41.26	+08	21	26.4	3 809
1987	DG6		1987	03	06.15069	10	27	40.95	+08	21	28.0	3 809
1987	DG6		1987	03	07.17812	10	26	46.45	+08	26	30.5	3 809
1987	DG6		1987	03	07.18437	10	26	46.10	+08	26	32.2	3 809
1987	DG6		1987	03	07.19062	10	26	45.74	+08	26	33.6	3 809
1987	DH6	*	1987	02	23.22535	10	38	00.24	+06	20	41.4	16.7 3 809
1987	DH6		1987	02	23.23021	10	38	00.01	+06	20	42.9	3 809
1987	DH6		1987	02	23.23507	10	37	59.76	+06	20	44.0	3 809
1987	DH6		1987	02	24.24132	10	37	07.28	+06	25	38.9	3 809
1987	DH6		1987	02	24.24618	10	37	07.02	+06	25	40.4	3 809
1987	DH6		1987	02	24.25104	10	37	06.77	+06	25	41.9	3 809
1987	DH6		1987	02	25.25087	10	36	14.43	+06	30	38.4	3 809
1987	DH6		1987	02	25.25625	10	36	14.15	+06	30	40.0	3 809
1987	DH6		1987	02	25.26163	10	36	13.85	+06	30	41.6	3 809
1987	DH6		1987	02	26.07674	10	35	31.30	+06	34	45.5	3 809
1987	DH6		1987	02	26.08160	10	35	31.05	+06	34	46.8	3 809
1987	DH6		1987	02	26.08646	10	35	30.79	+06	34	48.1	3 809
1987	DH6		1987	02	27.12813	10	34	35.79	+06	40	01.4	3 809
1987	DH6		1987	02	27.13310	10	34	35.53	+06	40	02.5	3 809
1987	DH6		1987	02	27.13808	10	34	35.26	+06	40	04.0	3 809
1987	DH6		1987	02	28.11076	10	33	43.88	+06	44	56.8	3 809
1987	DH6		1987	02	28.11562	10	33	43.62	+06	44	58.3	3 809
1987	DH6		1987	02	28.12049	10	33	43.36	+06	44	59.7	3 809
1987	DH6		1987	03	01.15243	10	32	48.80	+06	50	12.6	3 809
1987	DH6		1987	03	01.15729	10	32	48.54	+06	50	14.0	3 809
1987	DH6		1987	03	01.16215	10	32	48.28	+06	50	15.1	3 809
1987	DH6		1987	03	02.13021	10	31	57.17	+06	55	09.6	3 809
1987	DH6		1987	03	02.13507	10	31	56.90	+06	55	11.5	3 809
1987	DH6		1987	03	02.13993	10	31	56.63	+06	55	13.0	3 809
1987	DH6		1987	03	03.12257	10	31	04.96	+07	00	10.4	3 809
1987	DH6		1987	03	03.12743	10	31	04.70	+07	00	11.9	3 809
1987	DH6		1987	03	03.13229	10	31	04.45	+07	00	13.3	3 809
1987	DH6		1987	03	04.10104	10	30	13.59	+07	05	06.8	3 809
1987	DH6		1987	03	04.10590	10	30	13.33	+07	05	08.3	3 809
1987	DH6		1987	03	04.11076	10	30	13.06	+07	05	09.8	3 809
1987	DH6		1987	03	05.12639	10	29	19.95	+07	10	18.9	3 809

1987	DH6		1987	03	05.13194	10	29	19.65	+07	10	20.6	3 809
1987	DH6		1987	03	05.13750	10	29	19.36	+07	10	22.4	3 809
1987	DH6		1987	03	06.13958	10	28	27.28	+07	15	24.6	3 809
1987	DH6		1987	03	06.14514	10	28	27.00	+07	15	25.9	3 809
1987	DH6		1987	03	06.15069	10	28	26.70	+07	15	27.6	3 809
1987	DH6		1987	03	07.17812	10	27	33.63	+07	20	36.1	3 809
1987	DH6		1987	03	07.18437	10	27	33.31	+07	20	38.8	3 809
1987	DH6		1987	03	07.19062	10	27	33.01	+07	20	40.4	3 809
1987	DJ6	*	1987	02	23.22535	10	38	10.95	+07	41	18.8	17.5 3 809
1987	DJ6		1987	02	23.23021	10	38	10.65	+07	41	20.1	3 809
1987	DJ6		1987	02	23.23507	10	38	10.34	+07	41	21.8	3 809
1987	DJ6		1987	02	24.24132	10	37	09.18	+07	45	48.1	3 809
1987	DJ6		1987	02	24.24618	10	37	08.91	+07	45	49.4	3 809
1987	DJ6		1987	02	24.25104	10	37	08.62	+07	45	50.9	3 809
1987	DJ6		1987	02	25.25087	10	36	07.60	+07	50	16.9	3 809
1987	DJ6		1987	02	25.25625	10	36	07.27	+07	50	18.0	3 809
1987	DJ6		1987	02	25.26163	10	36	06.95	+07	50	19.9	3 809
1987	DJ6		1987	02	26.07674	10	35	17.42	+07	53	56.9	3 809
1987	DJ6		1987	02	26.08160	10	35	17.11	+07	53	58.0	3 809
1987	DJ6		1987	02	26.08646	10	35	16.81	+07	53	59.3	3 809
1987	DJ6		1987	02	27.12813	10	34	13.09	+07	58	36.9	3 809
1987	DJ6		1987	02	27.13310	10	34	12.77	+07	58	38.3	3 809
1987	DJ6		1987	02	27.13808	10	34	12.46	+07	58	40.0	3 809
1987	DJ6		1987	02	28.11076	10	33	13.07	+08	02	59.1	3 809
1987	DJ6		1987	02	28.11562	10	33	12.78	+08	03	00.3	3 809
1987	DJ6		1987	02	28.12049	10	33	12.48	+08	03	01.6	3 809
1987	DJ6		1987	03	01.15243	10	32	09.38	+08	07	36.3	3 809
1987	DJ6		1987	03	01.15729	10	32	09.07	+08	07	37.6	3 809
1987	DJ6		1987	03	01.16215	10	32	08.78	+08	07	38.9	3 809
1987	DJ6		1987	03	03.12257	10	30	09.52	+08	16	17.8	3 809
1987	DJ6		1987	03	03.12743	10	30	09.24	+08	16	18.9	3 809
1987	DJ6		1987	03	03.13229	10	30	08.91	+08	16	20.6	3 809
1987	DJ6		1987	03	04.10104	10	29	10.34	+08	20	34.9	3 809
1987	DJ6		1987	03	04.10590	10	29	10.04	+08	20	36.1	3 809
1987	DJ6		1987	03	04.11076	10	29	09.74	+08	20	37.4	3 809
1987	DJ6		1987	03	05.12639	10	28	08.54	+08	25	02.6	3 809
1987	DJ6		1987	03	05.13194	10	28	08.20	+08	25	03.9	3 809
1987	DJ6		1987	03	05.13750	10	28	07.88	+08	25	05.4	3 809
1987	DJ6		1987	03	06.13958	10	27	07.86	+08	29	25.3	3 809
1987	DJ6		1987	03	06.14514	10	27	07.54	+08	29	26.7	3 809
1987	DJ6		1987	03	06.15069	10	27	07.18	+08	29	28.2	3 809
1987	DJ6		1987	03	07.17812	10	26	06.08	+08	33	50.8	3 809
1987	DJ6		1987	03	07.18437	10	26	05.71	+08	33	52.5	3 809
1987	DJ6		1987	03	07.19062	10	26	05.34	+08	33	54.5	3 809
1987	DK6	*	1987	02	23.22535	10	40	09.34	+07	30	53.5	17.3 3 809
1987	DK6		1987	02	23.23021	10	40	09.03	+07	30	55.0	3 809
1987	DK6		1987	02	23.23507	10	40	08.74	+07	30	56.4	3 809
1987	DK6		1987	02	24.24132	10	39	02.95	+07	35	51.8	3 809
1987	DK6		1987	02	24.24618	10	39	02.65	+07	35	53.2	3 809
1987	DK6		1987	02	24.25104	10	39	02.31	+07	35	54.6	3 809
1987	DK6		1987	02	25.25087	10	37	56.45	+07	40	52.2	3 809
1987	DK6		1987	02	25.25625	10	37	56.09	+07	40	53.6	3 809
1987	DK6		1987	02	25.26163	10	37	55.72	+07	40	55.2	3 809
1987	DK6		1987	02	26.07674	10	37	02.13	+07	44	58.6	3 809
1987	DK6		1987	02	26.08160	10	37	01.80	+07	45	00.0	3 809
1987	DK6		1987	02	26.08646	10	37	01.48	+07	45	01.8	3 809
1987	DK6		1987	02	27.12813	10	35	52.03	+07	50	14.9	3 809
1987	DK6		1987	02	27.13310	10	35	51.71	+07	50	17.0	3 809
1987	DK6		1987	02	27.13808	10	35	51.32	+07	50	18.5	3 809

1987	DK6		1987	02	28.11076	10	34	46.26	+07	55	12.2	3 809
1987	DK6		1987	02	28.11562	10	34	45.91	+07	55	13.8	3 809
1987	DK6		1987	02	28.12049	10	34	45.57	+07	55	15.0	3 809
1987	DK6		1987	03	01.15243	10	33	36.28	+08	00	27.6	3 809
1987	DK6		1987	03	01.15729	10	33	35.97	+08	00	29.4	3 809
1987	DK6		1987	03	01.16215	10	33	35.65	+08	00	30.8	3 809
1987	DK6		1987	03	02.13021	10	32	30.66	+08	05	24.6	3 809
1987	DK6		1987	03	02.13507	10	32	30.34	+08	05	26.1	3 809
1987	DK6		1987	03	02.13993	10	32	30.00	+08	05	27.4	3 809
1987	DK6		1987	03	03.12257	10	31	23.97	+08	10	25.1	3 809
1987	DK6		1987	03	03.12743	10	31	23.65	+08	10	26.8	3 809
1987	DK6		1987	03	03.13229	10	31	23.32	+08	10	28.4	3 809
1987	DK6		1987	03	04.10104	10	30	18.40	+08	15	20.5	3 809
1987	DK6		1987	03	04.10590	10	30	18.07	+08	15	22.0	3 809
1987	DK6		1987	03	04.11076	10	30	17.74	+08	15	23.6	3 809
1987	DK6		1987	03	05.12639	10	29	09.77	+08	20	28.9	3 809
1987	DK6		1987	03	05.13194	10	29	09.41	+08	20	30.4	3 809
1987	DK6		1987	03	05.13750	10	29	09.00	+08	20	31.9	3 809
1987	DK6		1987	03	06.13958	10	28	02.31	+08	25	31.6	3 809
1987	DK6		1987	03	06.14514	10	28	01.94	+08	25	33.3	3 809
1987	DK6		1987	03	06.15069	10	28	01.54	+08	25	35.0	3 809
1987	DL6	*	1987	02	23.26701	10	42	26.77	+12	25	53.0	17.0 3 809
1987	DL6		1987	02	23.27188	10	42	26.45	+12	25	53.1	3 809
1987	DL6		1987	02	23.27674	10	42	26.14	+12	25	53.4	3 809
1987	DL6		1987	02	24.25868	10	41	21.16	+12	26	53.8	3 809
1987	DL6		1987	02	24.26354	10	41	20.84	+12	26	54.1	3 809
1987	DL6		1987	02	24.26840	10	41	20.53	+12	26	54.4	3 809
1987	DL6		1987	02	26.09549	10	39	18.98	+12	28	37.3	3 809
1987	DL6		1987	02	26.10035	10	39	18.65	+12	28	37.6	3 809
1987	DL6		1987	02	26.10521	10	39	18.34	+12	28	37.8	3 809
1987	DL6		1987	02	27.16493	10	38	06.95	+12	29	31.8	3 809
1987	DL6		1987	02	27.16979	10	38	06.62	+12	29	32.1	3 809
1987	DL6		1987	02	27.17465	10	38	06.31	+12	29	32.2	3 809
1987	DL6		1987	03	02.16424	10	34	45.19	+12	31	34.2	3 809
1987	DL6		1987	03	02.16910	10	34	44.83	+12	31	34.4	3 809
1987	DL6		1987	03	02.17396	10	34	44.52	+12	31	34.7	3 809
1987	DL6		1987	03	03.15660	10	33	38.72	+12	32	03.8	3 809
1987	DL6		1987	03	03.16146	10	33	38.39	+12	32	04.0	3 809
1987	DL6		1987	03	03.16632	10	33	38.09	+12	32	04.1	3 809
1987	DL6		1987	03	04.13507	10	32	33.60	+12	32	28.1	3 809
1987	DL6		1987	03	04.13993	10	32	33.29	+12	32	28.2	3 809
1987	DL6		1987	03	04.14479	10	32	32.95	+12	32	28.3	3 809
1987	DL6		1987	03	05.18715	10	31	23.93	+12	32	46.0	3 809
1987	DL6		1987	03	05.19201	10	31	23.58	+12	32	46.1	3 809
1987	DL6		1987	03	05.19688	10	31	23.25	+12	32	46.4	3 809
1987	DL6		1987	03	06.17465	10	30	19.23	+12	32	57.0	3 809
1987	DL6		1987	03	06.18090	10	30	18.77	+12	32	57.0	3 809
1987	DL6		1987	03	06.18715	10	30	18.36	+12	32	57.1	3 809
1987	DL6		1987	03	07.21493	10	29	11.64	+12	33	00.6	3 809
1987	DL6		1987	03	07.22118	10	29	11.24	+12	33	00.6	3 809
1987	DL6		1987	03	07.22743	10	29	10.81	+12	33	00.7	3 809
1987	DM6	*	1987	02	23.28507	10	41	49.96	+03	34	49.1	17.3 3 809
1987	DM6		1987	02	23.28993	10	41	49.70	+03	34	51.4	3 809
1987	DM6		1987	02	23.29549	10	41	49.40	+03	34	54.0	3 809
1987	DM6		1987	02	24.28472	10	40	56.51	+03	42	35.1	3 809
1987	DM6		1987	02	24.28993	10	40	56.23	+03	42	37.5	3 809
1987	DM6		1987	02	24.29514	10	40	55.97	+03	42	40.0	3 809
1987	DM6		1987	02	27.18021	10	38	20.81	+04	05	38.4	3 809
1987	DM6		1987	02	27.18542	10	38	20.52	+04	05	40.6	3 809

1987	DM6		1987	02	27.19063	10	38	20.23	+04	05	43.2	3 809
1987	DM6		1987	03	01.18993	10	36	32.34	+04	21	58.4	3 809
1987	DM6		1987	03	01.19514	10	36	32.06	+04	22	00.5	3 809
1987	DM6		1987	03	01.20035	10	36	31.78	+04	22	03.4	3 809
1987	DM6		1987	03	02.18021	10	35	39.21	+04	30	04.2	3 809
1987	DM6		1987	03	02.18507	10	35	38.97	+04	30	06.0	3 809
1987	DM6		1987	03	02.18993	10	35	38.72	+04	30	08.9	3 809
1987	DM6		1987	03	03.17188	10	34	46.36	+04	38	13.1	3 809
1987	DM6		1987	03	03.17708	10	34	46.06	+04	38	15.9	3 809
1987	DM6		1987	03	03.18229	10	34	45.80	+04	38	18.3	3 809
1987	DM6		1987	03	04.15174	10	33	54.48	+04	46	16.6	3 809
1987	DM6		1987	03	04.15660	10	33	54.23	+04	46	19.3	3 809
1987	DM6		1987	03	04.16146	10	33	53.98	+04	46	21.4	3 809
1987	DM6		1987	03	05.20243	10	32	59.26	+04	54	55.1	3 809
1987	DM6		1987	03	05.20729	10	32	59.00	+04	54	57.7	3 809
1987	DM6		1987	03	05.21215	10	32	58.74	+04	55	00.1	3 809
1987	DM6		1987	03	06.12222	10	32	11.77	+05	02	29.1	3 809
1987	DM6		1987	03	06.12778	10	32	11.48	+05	02	31.8	3 809
1987	DM6		1987	03	06.13333	10	32	11.20	+05	02	34.5	3 809
1987	DM6		1987	03	06.19410	10	32	07.90	+05	03	04.2	3 809
1987	DM6		1987	03	06.20069	10	32	07.56	+05	03	07.3	3 809
1987	DM6		1987	03	06.20729	10	32	07.22	+05	03	10.6	3 809
1987	DM6		1987	03	07.23680	10	31	14.48	+05	11	36.4	3 809
1987	DM6		1987	03	07.24375	10	31	14.11	+05	11	39.9	3 809
1987	DM6		1987	03	07.25069	10	31	13.78	+05	11	43.4	3 809
1987	DN6	*	1987	02	23.28507	10	42	19.57	+04	42	17.2	17.4 3 809
1987	DN6		1987	02	23.28993	10	42	19.30	+04	42	18.5	3 809
1987	DN6		1987	02	23.29549	10	42	19.03	+04	42	19.6	3 809
1987	DN6		1987	02	24.30174	10	41	24.61	+04	46	46.3	3 809
1987	DN6		1987	02	24.30660	10	41	24.36	+04	46	47.3	3 809
1987	DN6		1987	02	24.31146	10	41	24.10	+04	46	48.6	3 809
1987	DN6		1987	02	25.27153	10	40	32.09	+04	51	05.4	3 809
1987	DN6		1987	02	25.27674	10	40	31.79	+04	51	06.7	3 809
1987	DN6		1987	02	25.28194	10	40	31.51	+04	51	08.0	3 809
1987	DN6		1987	02	26.14479	10	39	44.91	+04	55	02.2	3 809
1987	DN6		1987	02	26.15035	10	39	44.61	+04	55	03.7	3 809
1987	DN6		1987	02	26.15521	10	39	44.35	+04	55	05.1	3 809
1987	DN6		1987	02	27.19688	10	38	47.52	+04	59	49.4	3 809
1987	DN6		1987	02	27.20174	10	38	47.25	+04	59	50.6	3 809
1987	DN6		1987	02	27.20660	10	38	46.98	+04	59	51.9	3 809
1987	DN6		1987	02	28.16215	10	37	55.02	+05	04	16.2	3 809
1987	DN6		1987	02	28.16701	10	37	54.76	+05	04	17.6	3 809
1987	DN6		1987	02	28.17188	10	37	54.49	+05	04	19.0	3 809
1987	DN6		1987	03	01.21007	10	36	58.03	+05	09	07.4	3 809
1987	DN6		1987	03	01.21493	10	36	57.76	+05	09	08.4	3 809
1987	DN6		1987	03	01.21979	10	36	57.49	+05	09	09.9	3 809
1987	DN6		1987	03	03.20104	10	35	10.51	+05	18	23.6	3 809
1987	DN6		1987	03	03.20590	10	35	10.24	+05	18	24.9	3 809
1987	DN6		1987	03	03.21076	10	35	10.01	+05	18	26.3	3 809
1987	DN6		1987	03	04.18333	10	34	18.06	+05	22	58.1	3 809
1987	DN6		1987	03	04.18854	10	34	17.78	+05	22	59.5	3 809
1987	DN6		1987	03	04.19375	10	34	17.47	+05	23	01.0	3 809
1987	DN6		1987	03	05.22153	10	33	22.84	+05	27	49.0	3 809
1987	DN6		1987	03	05.22847	10	33	22.47	+05	27	51.0	3 809
1987	DN6		1987	03	05.23542	10	33	22.09	+05	27	53.0	3 809
1987	DO6	*	1987	02	23.28507	10	48	39.89	+05	09	10.6	17.3 3 809
1987	DO6		1987	02	23.28993	10	48	39.67	+05	09	11.7	3 809
1987	DO6		1987	02	23.29549	10	48	39.43	+05	09	12.5	3 809
1987	DO6		1987	02	24.30174	10	47	50.70	+05	12	03.5	3 809

1987	DO6		1987	02	24.30660	10	47	50.46	+05	12	04.1	3 809
1987	DO6		1987	02	24.31146	10	47	50.22	+05	12	05.0	3 809
1987	DO6		1987	02	25.27153	10	47	03.48	+05	14	49.2	3 809
1987	DO6		1987	02	25.27674	10	47	03.21	+05	14	50.0	3 809
1987	DO6		1987	02	25.28194	10	47	02.97	+05	14	51.3	3 809
1987	DO6		1987	02	26.14479	10	46	21.00	+05	17	20.8	3 809
1987	DO6		1987	02	26.15035	10	46	20.72	+05	17	21.3	3 809
1987	DO6		1987	02	26.15521	10	46	20.49	+05	17	22.1	3 809
1987	DO6		1987	02	27.19688	10	45	29.41	+05	20	24.1	3 809
1987	DO6		1987	02	27.20174	10	45	29.14	+05	20	25.0	3 809
1987	DO6		1987	02	27.20660	10	45	28.89	+05	20	25.8	3 809
1987	DO6		1987	03	01.21007	10	43	50.48	+05	26	19.2	3 809
1987	DO6		1987	03	01.21493	10	43	50.28	+05	26	20.4	3 809
1987	DO6		1987	03	01.21979	10	43	49.97	+05	26	21.2	3 809
1987	DO6		1987	03	02.20868	10	43	01.45	+05	29	18.2	3 809
1987	DO6		1987	03	02.21354	10	43	01.21	+05	29	18.7	3 809
1987	DO6		1987	03	02.21840	10	43	00.98	+05	29	19.6	3 809
1987	DO6		1987	03	03.20104	10	42	12.77	+05	32	14.8	3 809
1987	DO6		1987	03	03.20590	10	42	12.53	+05	32	15.7	3 809
1987	DO6		1987	03	03.21076	10	42	12.30	+05	32	16.6	3 809
1987	DO6		1987	03	04.18333	10	41	24.72	+05	35	09.8	3 809
1987	DO6		1987	03	04.18854	10	41	24.45	+05	35	10.9	3 809
1987	DO6		1987	03	04.19375	10	41	24.19	+05	35	11.9	3 809
1987	DO6		1987	03	05.22153	10	40	33.99	+05	38	16.5	3 809
1987	DO6		1987	03	05.22847	10	40	33.64	+05	38	17.6	3 809
1987	DO6		1987	03	05.23542	10	40	33.29	+05	38	18.6	3 809
1987	DO6		1987	03	06.21528	10	39	45.62	+05	41	14.2	3 809
1987	DO6		1987	03	06.22222	10	39	45.31	+05	41	15.5	3 809
1987	DO6		1987	03	06.22917	10	39	44.99	+05	41	16.8	3 809
1987	DO6		1987	03	07.26042	10	38	55.04	+05	44	20.9	3 809
1987	DO6		1987	03	07.26736	10	38	54.69	+05	44	22.1	3 809
1987	DO6		1987	03	07.27431	10	38	54.36	+05	44	23.3	3 809
1987	DP6	*	1987	02	23.33055	11	23	19.20	+07	24	21.3	16.8 3 809
1987	DP6		1987	02	23.33611	11	23	18.97	+07	24	23.6	3 809
1987	DP6		1987	02	23.34167	11	23	18.75	+07	24	25.9	3 809
1987	DP6		1987	02	26.20035	11	21	20.83	+07	44	17.0	3 809
1987	DP6		1987	02	26.20521	11	21	20.63	+07	44	19.1	3 809
1987	DP6		1987	02	26.21007	11	21	20.42	+07	44	21.0	3 809
1987	DP6		1987	02	27.28993	11	20	34.25	+07	51	55.5	3 809
1987	DP6		1987	02	27.29479	11	20	34.04	+07	51	57.6	3 809
1987	DP6		1987	02	27.29965	11	20	33.83	+07	52	00.0	3 809
1987	DP6		1987	03	01.29757	11	19	07.29	+08	06	02.0	3 809
1987	DP6		1987	03	01.30243	11	19	07.07	+08	06	04.2	3 809
1987	DP6		1987	03	01.30729	11	19	06.86	+08	06	06.6	3 809
1987	DP6		1987	03	02.30764	11	18	22.76	+08	13	09.6	3 809
1987	DP6		1987	03	02.31285	11	18	22.53	+08	13	11.8	3 809
1987	DP6		1987	03	02.31806	11	18	22.30	+08	13	13.8	3 809
1987	DP6		1987	03	03.30035	11	17	38.75	+08	20	08.9	3 809
1987	DP6		1987	03	03.30521	11	17	38.52	+08	20	10.8	3 809
1987	DP6		1987	03	03.31007	11	17	38.30	+08	20	12.8	3 809
1987	DP6		1987	03	04.29132	11	16	54.52	+08	27	06.7	3 809
1987	DP6		1987	03	04.29618	11	16	54.30	+08	27	08.7	3 809
1987	DP6		1987	03	04.30104	11	16	54.08	+08	27	10.8	3 809
1987	DP6		1987	03	05.29479	11	16	09.52	+08	34	07.1	3 809
1987	DP6		1987	03	05.29965	11	16	09.29	+08	34	09.1	3 809
1987	DP6		1987	03	05.30451	11	16	09.07	+08	34	11.0	3 809
1987	DP6		1987	03	06.35243	11	15	21.79	+08	41	30.6	3 809
1987	DP6		1987	03	06.35729	11	15	21.58	+08	41	33.0	3 809
1987	DP6		1987	03	06.36215	11	15	21.38	+08	41	35.0	3 809

1987	DP6		1987	03	10.33715	11	12	21.69	+09	08	52.8	3 809
1987	DP6		1987	03	10.34340	11	12	21.41	+09	08	55.4	3 809
1987	DP6		1987	03	10.34965	11	12	21.13	+09	08	58.2	3 809
1987	DQ6	*	1987	02	24.10313	11	06	08.32	+10	51	21.0	16.6 3 809
1987	DQ6		1987	02	24.10799	11	06	08.07	+10	51	21.5	3 809
1987	DQ6		1987	02	24.11285	11	06	07.81	+10	51	22.0	3 809
1987	DQ6		1987	02	25.36493	11	05	02.66	+10	53	30.4	3 809
1987	DQ6		1987	02	25.36979	11	05	02.41	+10	53	30.9	3 809
1987	DQ6		1987	02	25.37465	11	05	02.17	+10	53	31.3	3 809
1987	DQ6		1987	02	27.30694	11	03	21.06	+10	56	46.8	3 809
1987	DQ6		1987	02	27.31111	11	03	20.85	+10	56	46.9	3 809
1987	DQ6		1987	02	27.31528	11	03	20.63	+10	56	47.3	3 809
1987	DQ6		1987	03	01.31528	11	01	34.91	+11	00	03.4	3 809
1987	DQ6		1987	03	01.32049	11	01	34.63	+11	00	04.1	3 809
1987	DQ6		1987	03	01.32569	11	01	34.35	+11	00	04.6	3 809
1987	DQ6		1987	03	03.31632	10	59	48.45	+11	03	12.3	3 809
1987	DQ6		1987	03	03.32118	10	59	48.19	+11	03	12.8	3 809
1987	DQ6		1987	03	03.32604	10	59	47.94	+11	03	13.5	3 809
1987	DQ6		1987	03	04.30868	10	58	55.52	+11	04	42.9	3 809
1987	DQ6		1987	03	04.31354	10	58	55.27	+11	04	43.7	3 809
1987	DQ6		1987	03	04.31840	10	58	55.01	+11	04	44.1	3 809
1987	DQ6		1987	03	05.31285	10	58	01.93	+11	06	12.0	3 809
1987	DQ6		1987	03	05.31771	10	58	01.67	+11	06	12.4	3 809
1987	DQ6		1987	03	05.32257	10	58	01.41	+11	06	12.9	3 809
1987	DQ6		1987	03	06.28646	10	57	10.06	+11	07	35.9	3 809
1987	DQ6		1987	03	06.29132	10	57	09.80	+11	07	36.0	3 809
1987	DQ6		1987	03	06.29722	10	57	09.47	+11	07	36.6	3 809
1987	DQ6		1987	03	08.27882	10	55	24.13	+11	10	17.5	3 809
1987	DQ6		1987	03	08.28368	10	55	23.89	+11	10	17.5	3 809
1987	DQ6		1987	03	08.28854	10	55	23.64	+11	10	18.0	3 809
1987	DR6	*	1987	02	24.30174	10	43	26.68	+06	15	54.5	16.7 3 809
1987	DR6		1987	02	24.30660	10	43	26.46	+06	15	55.7	3 809
1987	DR6		1987	02	24.31146	10	43	26.23	+06	15	57.1	3 809
1987	DR6		1987	02	25.27153	10	42	43.06	+06	20	12.4	3 809
1987	DR6		1987	02	25.27674	10	42	42.83	+06	20	14.0	3 809
1987	DR6		1987	02	25.28194	10	42	42.60	+06	20	15.2	3 809
1987	DR6		1987	02	26.14479	10	42	03.94	+06	24	05.5	3 809
1987	DR6		1987	02	26.15035	10	42	03.70	+06	24	07.2	3 809
1987	DR6		1987	02	26.15521	10	42	03.49	+06	24	08.2	3 809
1987	DR6		1987	02	27.19688	10	41	16.27	+06	28	47.9	3 809
1987	DR6		1987	02	27.20174	10	41	16.08	+06	28	49.6	3 809
1987	DR6		1987	02	27.20660	10	41	15.88	+06	28	50.9	3 809
1987	DR6		1987	02	28.16215	10	40	32.72	+06	33	07.4	3 809
1987	DR6		1987	02	28.16701	10	40	32.50	+06	33	08.7	3 809
1987	DR6		1987	02	28.17188	10	40	32.25	+06	33	10.0	3 809
1987	DR6		1987	03	01.21007	10	39	45.32	+06	37	50.6	3 809
1987	DR6		1987	03	01.21493	10	39	45.11	+06	37	51.9	3 809
1987	DR6		1987	03	01.21979	10	39	44.91	+06	37	53.2	3 809
1987	DR6		1987	03	02.20868	10	39	00.20	+06	42	19.6	3 809
1987	DR6		1987	03	02.21354	10	38	59.99	+06	42	20.9	3 809
1987	DR6		1987	03	02.21840	10	38	59.77	+06	42	22.2	3 809
1987	DR6		1987	03	03.20104	10	38	15.55	+06	46	47.0	3 809
1987	DR6		1987	03	03.20590	10	38	15.33	+06	46	48.4	3 809
1987	DR6		1987	03	03.21076	10	38	15.11	+06	46	49.8	3 809
1987	DR6		1987	03	04.18333	10	37	31.44	+06	51	11.1	3 809
1987	DR6		1987	03	04.18854	10	37	31.20	+06	51	12.3	3 809
1987	DR6		1987	03	04.19375	10	37	30.95	+06	51	14.1	3 809
1987	DR6		1987	03	05.22153	10	36	44.94	+06	55	49.8	3 809
1987	DR6		1987	03	05.22847	10	36	44.63	+06	55	51.7	3 809

1987	DR6		1987	03	05.23542	10	36	44.32	+06	55	53.5	3 809
1987	DR6		1987	03	06.21528	10	36	00.77	+07	00	15.1	3 809
1987	DR6		1987	03	06.22222	10	36	00.47	+07	00	17.0	3 809
1987	DR6		1987	03	06.22917	10	36	00.15	+07	00	18.9	3 809
1987	DR6		1987	03	07.26042	10	35	14.51	+07	04	53.8	3 809
1987	DR6		1987	03	07.26736	10	35	14.20	+07	04	55.6	3 809
1987	DR6		1987	03	07.27431	10	35	13.88	+07	04	57.3	3 809
1987	DR6		1987	03	10.29306	10	33	02.62	+07	18	11.3	3 809
1987	DR6		1987	03	10.29861	10	33	02.38	+07	18	12.6	3 809
1987	DR6		1987	03	10.30417	10	33	02.13	+07	18	14.1	3 809
1987	DS6	*	1987	02	24.31840	10	50	57.71	+02	49	02.5	16.9 3 809
1987	DS6		1987	02	24.32326	10	50	57.52	+02	49	04.9	3 809
1987	DS6		1987	02	24.32813	10	50	57.35	+02	49	07.0	3 809
1987	DS6		1987	02	25.29201	10	50	16.87	+02	55	37.8	3 809
1987	DS6		1987	02	25.29688	10	50	16.69	+02	55	39.7	3 809
1987	DS6		1987	02	25.30174	10	50	16.48	+02	55	42.0	3 809
1987	DS6		1987	02	26.16285	10	49	40.36	+03	01	35.0	3 809
1987	DS6		1987	02	26.16771	10	49	40.16	+03	01	37.1	3 809
1987	DS6		1987	02	26.17257	10	49	39.96	+03	01	39.0	3 809
1987	DS6		1987	02	27.21285	10	48	55.71	+03	08	49.1	3 809
1987	DS6		1987	02	27.21771	10	48	55.50	+03	08	51.4	3 809
1987	DS6		1987	02	27.22257	10	48	55.29	+03	08	53.2	3 809
1987	DS6		1987	02	28.18229	10	48	14.50	+03	15	33.9	3 809
1987	DS6		1987	02	28.18715	10	48	14.29	+03	15	35.9	3 809
1987	DS6		1987	02	28.19201	10	48	14.08	+03	15	37.8	3 809
1987	DS6		1987	03	01.22743	10	47	29.86	+03	22	51.9	3 809
1987	DS6		1987	03	01.23229	10	47	29.62	+03	22	53.8	3 809
1987	DS6		1987	03	01.23715	10	47	29.42	+03	22	55.8	3 809
1987	DS6		1987	03	02.22465	10	46	47.19	+03	29	52.4	3 809
1987	DS6		1987	03	02.22951	10	46	46.99	+03	29	54.3	3 809
1987	DS6		1987	03	02.23438	10	46	46.79	+03	29	56.1	3 809
1987	DS6		1987	03	03.21771	10	46	04.81	+03	36	54.1	3 809
1987	DS6		1987	03	03.22257	10	46	04.61	+03	36	56.1	3 809
1987	DS6		1987	03	03.22743	10	46	04.41	+03	36	58.2	3 809
1987	DS6		1987	03	04.20139	10	45	22.90	+03	43	51.9	3 809
1987	DS6		1987	03	04.20555	10	45	22.71	+03	43	53.8	3 809
1987	DS6		1987	03	04.20972	10	45	22.52	+03	43	55.6	3 809
1987	DS6		1987	03	06.23680	10	43	56.45	+03	58	21.1	3 809
1987	DS6		1987	03	06.24097	10	43	56.25	+03	58	22.9	3 809
1987	DS6		1987	03	06.24514	10	43	56.08	+03	58	24.5	3 809
1987	DS6		1987	03	07.28125	10	43	12.33	+04	05	48.3	3 809
1987	DS6		1987	03	07.28542	10	43	12.13	+04	05	49.8	3 809
1987	DS6		1987	03	07.28958	10	43	11.97	+04	05	51.8	3 809
1987	DS6		1987	03	08.12326	10	42	37.26	+04	11	48.1	3 809
1987	DS6		1987	03	08.12812	10	42	37.04	+04	11	50.4	3 809
1987	DS6		1987	03	08.13299	10	42	36.85	+04	11	52.5	3 809
1987	DS6		1987	03	10.16597	10	41	12.44	+04	26	20.0	3 809
1987	DS6		1987	03	10.17014	10	41	12.27	+04	26	21.8	3 809
1987	DS6		1987	03	10.17430	10	41	12.10	+04	26	23.6	3 809
1987	DT6	*	1987	02	24.31840	10	55	56.36	+02	48	11.9	17.6 3 809
1987	DT6		1987	02	24.32326	10	55	56.06	+02	48	14.3	3 809
1987	DT6		1987	02	24.32813	10	55	55.77	+02	48	16.7	3 809
1987	DU6	*	1987	02	24.33438	10	56	55.58	+00	23	31.4	17.2 3 809
1987	DU6		1987	02	24.33924	10	56	55.25	+00	23	32.9	3 809
1987	DU6		1987	02	24.34410	10	56	54.96	+00	23	34.3	3 809
1987	DU6		1987	02	26.18229	10	55	03.95	+00	32	07.1	3 809
1987	DU6		1987	02	26.18715	10	55	03.66	+00	32	08.5	3 809
1987	DU6		1987	02	26.19201	10	55	03.37	+00	32	10.0	3 809
1987	DU6		1987	02	28.19965	10	52	59.54	+00	41	59.6	3 809

1987	DU6		1987	02	28.20451	10	52	59.24	+00	42	00.7	3 809
1987	DU6		1987	02	28.20937	10	52	58.97	+00	42	02.2	3 809
1987	DU6		1987	03	01.25937	10	51	53.39	+00	47	21.2	3 809
1987	DU6		1987	03	01.26424	10	51	53.08	+00	47	22.7	3 809
1987	DU6		1987	03	01.26910	10	51	52.77	+00	47	24.2	3 809
1987	DU6		1987	03	02.24201	10	50	51.91	+00	52	26.7	3 809
1987	DU6		1987	03	02.24687	10	50	51.60	+00	52	28.2	3 809
1987	DU6		1987	03	02.25174	10	50	51.30	+00	52	29.7	3 809
1987	DU6		1987	03	03.23507	10	49	49.51	+00	57	39.4	3 809
1987	DU6		1987	03	03.23993	10	49	49.16	+00	57	41.0	3 809
1987	DU6		1987	03	03.24479	10	49	48.85	+00	57	42.8	3 809
1987	DU6		1987	03	04.21632	10	48	47.67	+01	02	54.3	3 809
1987	DU6		1987	03	04.22257	10	48	47.29	+01	02	56.4	3 809
1987	DU6		1987	03	04.22882	10	48	46.89	+01	02	58.5	3 809
1987	DU6		1987	03	05.25868	10	47	41.81	+01	08	34.4	3 809
1987	DU6		1987	03	05.26354	10	47	41.50	+01	08	36.1	3 809
1987	DU6		1987	03	05.26840	10	47	41.18	+01	08	37.5	3 809
1987	DU6		1987	03	08.14410	10	44	40.51	+01	24	39.8	3 809
1987	DU6		1987	03	08.14896	10	44	40.21	+01	24	41.1	3 809
1987	DU6		1987	03	08.15382	10	44	39.92	+01	24	42.9	3 809
1987	DU6		1987	03	10.31840	10	42	24.73	+01	37	02.8	3 809
1987	DU6		1987	03	10.32326	10	42	24.41	+01	37	04.4	3 809
1987	DU6		1987	03	10.32812	10	42	24.13	+01	37	06.0	3 809
1987	DV6	*	1987	02	26.30729	11	42	30.02	+03	04	08.8	17.4 3 809
1987	DV6		1987	02	26.31215	11	42	29.73	+03	04	09.4	3 809
1987	DV6		1987	02	26.31701	11	42	29.44	+03	04	09.9	3 809
1987	DW6	*	1987	02	26.30729	11	45	39.95	+02	57	56.0	16.6 3 809
1987	DW6		1987	02	26.31215	11	45	39.76	+02	57	57.1	3 809
1987	DW6		1987	02	26.31701	11	45	39.58	+02	57	58.3	3 809
1987	DW6		1987	02	26.34896	11	45	38.30	+02	58	04.8	3 809
1987	DW6		1987	02	26.35382	11	45	38.11	+02	58	05.8	3 809
1987	DW6		1987	02	26.35868	11	45	37.91	+02	58	06.9	3 809
1987	DW6		1987	02	27.36215	11	44	59.11	+03	02	00.2	3 809
1987	DW6		1987	02	27.36701	11	44	58.92	+03	02	01.4	3 809
1987	DW6		1987	02	27.37187	11	44	58.73	+03	02	03.0	3 809
1987	DW6		1987	02	28.31840	11	44	21.41	+03	05	47.0	3 809
1987	DW6		1987	02	28.32326	11	44	21.22	+03	05	48.5	3 809
1987	DW6		1987	02	28.32813	11	44	21.02	+03	05	49.5	3 809
1987	DW6		1987	03	02.36493	11	42	57.98	+03	14	03.9	3 809
1987	DW6		1987	03	02.36979	11	42	57.78	+03	14	05.1	3 809
1987	DW6		1987	03	02.37465	11	42	57.57	+03	14	06.3	3 809
1987	DW6		1987	03	03.37187	11	42	15.76	+03	18	14.4	3 809
1987	DW6		1987	03	03.37674	11	42	15.56	+03	18	16.0	3 809
1987	DW6		1987	03	03.38160	11	42	15.36	+03	18	17.2	3 809
1987	DW6		1987	03	04.35938	11	41	33.74	+03	22	24.4	3 809
1987	DW6		1987	03	04.36424	11	41	33.54	+03	22	25.6	3 809
1987	DW6		1987	03	04.36910	11	41	33.33	+03	22	26.9	3 809
1987	DW6		1987	03	05.36771	11	40	50.25	+03	26	41.1	3 809
1987	DW6		1987	03	05.37257	11	40	50.05	+03	26	42.6	3 809
1987	DW6		1987	03	05.37743	11	40	49.84	+03	26	43.8	3 809
1987	DW6		1987	03	06.37465	11	40	06.22	+03	30	59.8	3 809
1987	DW6		1987	03	06.38090	11	40	05.97	+03	31	01.4	3 809
1987	DW6		1987	03	06.38715	11	40	05.69	+03	31	03.3	3 809
1987	DW6		1987	03	08.37430	11	38	37.28	+03	39	42.3	3 809
1987	DW6		1987	03	08.38021	11	38	37.01	+03	39	43.8	3 809
1987	DW6		1987	03	08.38681	11	38	36.71	+03	39	45.3	3 809
1987	DW6		1987	03	11.38125	11	36	20.67	+03	52	56.8	3 809
1987	DW6		1987	03	11.38681	11	36	20.39	+03	52	58.2	3 809
1987	DW6		1987	03	11.39236	11	36	20.14	+03	52	59.6	3 809

1987	DX6	*	1987	02	26.33090	11	44	52.64	+00	46	20.6	17.3	3 809
1987	DX6		1987	02	26.33576	11	44	52.48	+00	46	22.0		3 809
1987	DX6		1987	02	26.34062	11	44	52.32	+00	46	23.1		3 809
1987	DY6	*	1987	02	26.34896	11	47	04.23	+03	56	52.9	17.1	3 809
1987	DY6		1987	02	26.35382	11	47	04.03	+03	56	55.3		3 809
1987	DY6		1987	02	26.35868	11	47	03.81	+03	56	58.0		3 809
1987	DY6		1987	02	27.36215	11	46	23.10	+04	05	19.7		3 809
1987	DY6		1987	02	27.36701	11	46	22.88	+04	05	22.2		3 809
1987	DY6		1987	02	27.37187	11	46	22.68	+04	05	24.6		3 809
1987	DY6		1987	02	28.31840	11	45	43.62	+04	13	23.1		3 809
1987	DY6		1987	02	28.32326	11	45	43.42	+04	13	25.5		3 809
1987	DY6		1987	02	28.32813	11	45	43.21	+04	13	28.0		3 809
1987	DY6		1987	03	02.36493	11	44	16.77	+04	30	49.3		3 809
1987	DY6		1987	03	02.36979	11	44	16.57	+04	30	51.9		3 809
1987	DY6		1987	03	02.37465	11	44	16.38	+04	30	54.3		3 809
1987	DY6		1987	03	04.35938	11	42	49.67	+04	48	02.4		3 809
1987	DY6		1987	03	04.36424	11	42	49.43	+04	48	05.1		3 809
1987	DY6		1987	03	04.36910	11	42	49.23	+04	48	07.7		3 809
1987	DY6		1987	03	05.36771	11	42	04.75	+04	56	48.8		3 809
1987	DY6		1987	03	05.37257	11	42	04.53	+04	56	51.4		3 809
1987	DY6		1987	03	05.37743	11	42	04.32	+04	56	54.1		3 809
1987	DY6		1987	03	06.37465	11	41	19.40	+05	05	36.7		3 809
1987	DY6		1987	03	06.38090	11	41	19.12	+05	05	40.0		3 809
1987	DY6		1987	03	06.38715	11	41	18.83	+05	05	43.3		3 809
1987	DZ6	*	1987	02	27.14687	10	29	31.96	+05	08	24.7	17.4	3 809
1987	DZ6		1987	02	27.15174	10	29	31.73	+05	08	26.2		3 809
1987	DZ6		1987	02	27.15660	10	29	31.49	+05	08	27.8		3 809
1987	DA7	*	1987	02	28.19965	10	52	59.25	-00	37	04.8	16.0	3 809
1987	DA7		1987	02	28.20451	10	52	59.05	-00	37	06.1		3 809
1987	DA7		1987	02	28.20937	10	52	58.85	-00	37	07.6		3 809
1987	DA7		1987	03	01.25937	10	52	17.60	-00	43	00.5		3 809
1987	DA7		1987	03	01.26424	10	52	17.38	-00	43	02.2		3 809
1987	DA7		1987	03	01.26910	10	52	17.15	-00	43	03.8		3 809
1987	DA7		1987	03	02.25729	10	51	38.52	-00	48	22.4		3 809
1987	DA7		1987	03	02.26215	10	51	38.30	-00	48	24.1		3 809
1987	DA7		1987	03	02.26701	10	51	38.08	-00	48	25.7		3 809
1987	DA7		1987	03	03.25035	10	50	59.46	-00	53	28.3		3 809
1987	DA7		1987	03	03.25521	10	50	59.27	-00	53	29.9		3 809
1987	DA7		1987	03	03.26007	10	50	59.07	-00	53	31.4		3 809
1987	DA7		1987	03	04.24028	10	50	20.64	-00	58	21.4		3 809
1987	DA7		1987	03	04.24444	10	50	20.44	-00	58	22.6		3 809
1987	DA7		1987	03	04.24861	10	50	20.24	-00	58	23.9		3 809
1987	DA7		1987	03	07.31528	10	48	20.84	-01	12	14.2		3 809
1987	DA7		1987	03	07.31944	10	48	20.67	-01	12	15.3		3 809
1987	DA7		1987	03	07.32361	10	48	20.51	-01	12	16.5		3 809
1987	DA7		1987	03	09.05347	10	47	17.46	-01	19	16.1		3 809
1987	DA7		1987	03	09.05764	10	47	17.30	-01	19	17.4		3 809
1987	DA7		1987	03	09.06181	10	47	17.13	-01	19	18.4		3 809
1987	DA7		1987	03	10.23819	10	46	33.29	-01	23	45.7		3 809
1987	DA7		1987	03	10.24236	10	46	33.11	-01	23	46.9		3 809
1987	DA7		1987	03	10.24653	10	46	32.92	-01	23	47.8		3 809
1987	DA7		1987	03	11.22639	10	45	58.64	-01	27	20.1		3 809
1987	DA7		1987	03	11.23194	10	45	58.36	-01	27	21.0		3 809
1987	DA7		1987	03	11.23750	10	45	58.14	-01	27	22.0		3 809
1987	EH		1987	02	23.28507	10	42	15.39	+04	50	49.9	17.2	3 809
1987	EH		1987	02	23.28993	10	42	15.20	+04	50	52.2		3 809
1987	EH		1987	02	23.29549	10	42	14.96	+04	50	54.9		3 809
1987	EH		1987	02	24.30174	10	41	31.56	+04	58	37.4		3 809
1987	EH		1987	02	24.30660	10	41	31.35	+04	58	39.6		3 809

1987	EH	1987	02	24.31146	10	41	31.14	+04	58	41.9	3 809
1987	EH	1987	02	25.27153	10	40	49.53	+05	06	06.2	3 809
1987	EH	1987	02	25.27674	10	40	49.31	+05	06	08.6	3 809
1987	EH	1987	02	25.28194	10	40	49.09	+05	06	11.1	3 809
1987	EH	1987	02	26.14479	10	40	11.79	+05	12	53.0	3 809
1987	EH	1987	02	26.15035	10	40	11.53	+05	12	55.5	3 809
1987	EH	1987	02	26.15521	10	40	11.31	+05	12	58.2	3 809
1987	EH	1987	02	27.19688	10	39	25.84	+05	21	04.6	3 809
1987	EH	1987	02	27.20174	10	39	25.60	+05	21	06.4	3 809
1987	EH	1987	02	27.20660	10	39	25.37	+05	21	08.7	3 809
1987	EH	1987	02	28.16215	10	38	43.76	+05	28	39.1	3 809
1987	EH	1987	02	28.16701	10	38	43.55	+05	28	41.4	3 809
1987	EH	1987	02	28.17188	10	38	43.33	+05	28	43.3	3 809
1987	EH	1987	03	01.21007	10	37	57.93	+05	36	51.2	3 809
1987	EH	1987	03	01.21493	10	37	57.72	+05	36	53.7	3 809
1987	EH	1987	03	01.21979	10	37	57.49	+05	36	56.0	3 809
1987	EH	1987	03	02.20868	10	37	14.36	+05	44	42.2	3 809
1987	EH	1987	03	02.21354	10	37	14.18	+05	44	44.8	3 809
1987	EH	1987	03	02.21840	10	37	13.99	+05	44	47.3	3 809
1987	EH	1987	03	03.20104	10	36	31.26	+05	52	30.6	3 809
1987	EH	1987	03	03.20590	10	36	31.07	+05	52	32.6	3 809
1987	EH	1987	03	03.21076	10	36	30.86	+05	52	34.9	3 809
1987	EH	1987	03	04.18333	10	35	48.74	+06	00	14.6	3 809
1987	EH	1987	03	04.18854	10	35	48.52	+06	00	17.1	3 809
1987	EH	1987	03	04.19375	10	35	48.29	+06	00	19.8	3 809
1987	EH	1987	03	05.22153	10	35	03.93	+06	08	24.5	3 809
1987	EH	1987	03	05.22847	10	35	03.62	+06	08	27.7	3 809
1987	EH	1987	03	05.23542	10	35	03.32	+06	08	31.0	3 809
1987	EH	1987	03	06.21528	10	34	21.38	+06	16	12.9	3 809
1987	EH	1987	03	06.22222	10	34	21.07	+06	16	16.2	3 809
1987	EH	1987	03	06.22917	10	34	20.78	+06	16	19.5	3 809
1987	EH	1987	03	07.26042	10	33	36.90	+06	24	23.9	3 809
1987	EH	1987	03	07.26736	10	33	36.59	+06	24	27.1	3 809
1987	EH	1987	03	07.27431	10	33	36.30	+06	24	30.7	3 809
1987	EH	1987	03	10.29306	10	31	30.46	+06	47	56.1	3 809
1987	EH	1987	03	10.29861	10	31	30.23	+06	47	58.7	3 809
1987	EH	1987	03	10.30417	10	31	30.00	+06	48	01.4	3 809
1987	EH	1987	03	11.32222	10	30	48.62	+06	55	50.2	3 809
1987	EH	1987	03	11.32778	10	30	48.40	+06	55	52.7	3 809
1987	EH	1987	03	11.33333	10	30	48.17	+06	55	55.3	3 809
1987	EP	1987	02	24.36701	10	59	38.32	+05	08	53.6	17.3 3 809
1987	EP	1987	02	24.37187	10	59	38.04	+05	08	54.0	3 809
1987	EP	1987	02	24.37674	10	59	37.75	+05	08	54.5	3 809
1987	EP	1987	02	25.34757	10	58	41.29	+05	10	33.4	3 809
1987	EP	1987	02	25.35243	10	58	41.01	+05	10	33.9	3 809
1987	EP	1987	02	25.35729	10	58	40.72	+05	10	34.4	3 809
1987	EP	1987	02	27.25590	10	56	49.24	+05	13	53.6	3 809
1987	EP	1987	02	27.26076	10	56	48.96	+05	13	54.1	3 809
1987	EP	1987	02	27.26563	10	56	48.67	+05	13	54.6	3 809
1987	EP	1987	02	28.21771	10	55	52.36	+05	15	37.2	3 809
1987	EP	1987	02	28.22257	10	55	52.06	+05	15	37.9	3 809
1987	EP	1987	02	28.22743	10	55	51.75	+05	15	38.4	3 809
1987	EP	1987	03	02.27465	10	53	49.99	+05	19	22.0	3 809
1987	EP	1987	03	02.27951	10	53	49.69	+05	19	22.7	3 809
1987	EP	1987	03	02.28438	10	53	49.40	+05	19	23.2	3 809
1987	EP	1987	03	03.26771	10	52	50.79	+05	21	12.3	3 809
1987	EP	1987	03	03.27257	10	52	50.50	+05	21	13.0	3 809
1987	EP	1987	03	03.27743	10	52	50.21	+05	21	13.8	3 809
1987	EP	1987	03	05.16979	10	50	57.53	+05	24	45.2	3 809

1987	EP	1987	03	05.17465	10	50	57.25	+05	24	45.8		3 809
1987	EP	1987	03	05.17951	10	50	56.96	+05	24	46.3		3 809
1987	EP	1987	03	06.26597	10	49	52.18	+05	26	48.3		3 809
1987	EP	1987	03	06.27153	10	49	51.84	+05	26	48.8		3 809
1987	EP	1987	03	06.27708	10	49	51.49	+05	26	49.5		3 809
1987	EP	1987	03	07.34653	10	48	47.98	+05	28	48.4		3 809
1987	EP	1987	03	07.35208	10	48	47.67	+05	28	49.7		3 809
1987	EP	1987	03	07.35764	10	48	47.37	+05	28	50.3		3 809
1987	EP	1987	03	10.25347	10	45	57.23	+05	34	11.8		3 809
1987	EP	1987	03	10.25903	10	45	56.88	+05	34	12.0		3 809
1987	EP	1987	03	10.26458	10	45	56.57	+05	34	12.6		3 809
1987	EQ	1987	02	24.36701	11	06	00.42	+04	42	57.3	17.2	3 809
1987	EQ	1987	02	24.37187	11	06	00.13	+04	42	58.5		3 809
1987	EQ	1987	02	24.37674	11	05	59.83	+04	42	59.8		3 809
1987	EQ	1987	02	25.34757	11	05	02.11	+04	47	15.8		3 809
1987	EQ	1987	02	25.35243	11	05	01.82	+04	47	17.0		3 809
1987	EQ	1987	02	25.35729	11	05	01.53	+04	47	18.3		3 809
1987	EQ	1987	02	28.21771	11	02	07.73	+05	00	21.0		3 809
1987	EQ	1987	02	28.22257	11	02	07.43	+05	00	23.1		3 809
1987	EQ	1987	02	28.22743	11	02	07.14	+05	00	23.9		3 809
1987	EQ	1987	03	02.27465	10	59	59.46	+05	10	02.3		3 809
1987	EQ	1987	03	02.27951	10	59	59.15	+05	10	03.7		3 809
1987	EQ	1987	03	02.28438	10	59	58.85	+05	10	05.3		3 809
1987	EQ	1987	03	03.26771	10	58	57.10	+05	14	46.8		3 809
1987	EQ	1987	03	03.27257	10	58	56.80	+05	14	48.2		3 809
1987	EQ	1987	03	03.27743	10	58	56.51	+05	14	49.6		3 809
1987	EQ	1987	03	04.25868	10	57	54.62	+05	19	31.9		3 809
1987	EQ	1987	03	04.26354	10	57	54.32	+05	19	33.1		3 809
1987	EQ	1987	03	04.26840	10	57	54.02	+05	19	34.8		3 809
1987	EQ	1987	03	05.16979	10	56	57.33	+05	23	56.1		3 809
1987	EQ	1987	03	05.17465	10	56	57.01	+05	23	57.4		3 809
1987	EQ	1987	03	05.17951	10	56	56.69	+05	23	58.9		3 809
1987	EQ	1987	03	06.26597	10	55	47.82	+05	29	14.2		3 809
1987	EQ	1987	03	06.27153	10	55	47.45	+05	29	15.8		3 809
1987	EQ	1987	03	06.27708	10	55	47.10	+05	29	17.4		3 809
1987	EQ	1987	03	07.34653	10	54	39.41	+05	34	27.7		3 809
1987	EQ	1987	03	07.35208	10	54	39.06	+05	34	29.5		3 809
1987	EQ	1987	03	07.35764	10	54	38.72	+05	34	31.6		3 809
1987	EQ	1987	03	10.25347	10	51	37.57	+05	48	28.3		3 809
1987	EQ	1987	03	10.25903	10	51	37.20	+05	48	29.9		3 809
1987	EQ	1987	03	10.26458	10	51	36.84	+05	48	31.5		3 809
1987	EV	1987	02	26.23611	11	43	42.03	-03	31	15.3	16.5	3 809
1987	EV	1987	02	26.24167	11	43	41.76	-03	31	14.6		3 809
1987	EV	1987	02	26.24722	11	43	41.48	-03	31	14.4		3 809
1987	EV	1987	02	27.37847	11	42	46.21	-03	29	15.7		3 809
1987	EV	1987	02	27.38299	11	42	45.98	-03	29	15.1		3 809
1987	EV	1987	02	27.38750	11	42	45.75	-03	29	14.2		3 809
1987	EV	1987	03	01.35625	11	41	06.13	-03	25	13.0		3 809
1987	EV	1987	03	01.36042	11	41	05.92	-03	25	12.5		3 809
1987	EV	1987	03	01.36458	11	41	05.71	-03	25	12.0		3 809
1987	EV	1987	03	03.35035	11	39	20.38	-03	20	25.4		3 809
1987	EV	1987	03	03.35521	11	39	20.13	-03	20	24.5		3 809
1987	EV	1987	03	03.36007	11	39	19.85	-03	20	23.8		3 809
1987	EV	1987	03	04.34201	11	38	26.23	-03	17	47.1		3 809
1987	EV	1987	03	04.34688	11	38	25.96	-03	17	46.1		3 809
1987	EV	1987	03	04.35174	11	38	25.69	-03	17	45.2		3 809
1987	EV	1987	03	05.34896	11	37	30.22	-03	14	55.4		3 809
1987	EV	1987	03	05.35382	11	37	29.95	-03	14	54.6		3 809
1987	EV	1987	03	05.35868	11	37	29.68	-03	14	53.9		3 809

1987	EV		1987	03	07.36701	11	35	35.34	-03	08	44.5	3 809
1987	EV		1987	03	07.37187	11	35	35.09	-03	08	43.6	3 809
1987	EV		1987	03	07.37674	11	35	34.81	-03	08	42.4	3 809
1987	EV		1987	03	08.35451	11	34	38.12	-03	05	29.3	3 809
1987	EV		1987	03	08.35937	11	34	37.83	-03	05	28.5	3 809
1987	EV		1987	03	08.36424	11	34	37.55	-03	05	27.4	3 809
1987	EV		1987	03	10.36285	11	32	39.81	-02	58	27.7	3 809
1987	EV		1987	03	10.36771	11	32	39.52	-02	58	26.9	3 809
1987	EV		1987	03	10.37257	11	32	39.24	-02	58	25.6	3 809
1987	EW		1987	02	26.34896	11	50	53.10	+04	13	43.0	17.1 3 809
1987	EW		1987	02	26.35382	11	50	52.91	+04	13	44.8	3 809
1987	EW		1987	02	26.35868	11	50	52.72	+04	13	46.4	3 809
1987	EW		1987	03	02.36493	11	48	18.34	+04	34	54.5	3 809
1987	EW		1987	03	02.36979	11	48	18.16	+04	34	56.1	3 809
1987	EW		1987	03	02.37465	11	48	17.97	+04	34	57.8	3 809
1987	EW		1987	03	03.37187	11	47	37.81	+04	40	20.6	3 809
1987	EW		1987	03	03.37674	11	47	37.62	+04	40	22.2	3 809
1987	EW		1987	03	03.38160	11	47	37.42	+04	40	23.7	3 809
1987	EW		1987	03	04.35938	11	46	57.53	+04	45	42.6	3 809
1987	EW		1987	03	04.36424	11	46	57.33	+04	45	43.8	3 809
1987	EW		1987	03	04.36910	11	46	57.15	+04	45	45.2	3 809
1987	EW		1987	03	05.36771	11	46	15.76	+04	51	12.6	3 809
1987	EW		1987	03	05.37257	11	46	15.55	+04	51	14.2	3 809
1987	EW		1987	03	05.37743	11	46	15.34	+04	51	15.8	3 809
1987	EW		1987	03	06.37465	11	45	33.55	+04	56	44.0	3 809
1987	EW		1987	03	06.38090	11	45	33.28	+04	56	45.9	3 809
1987	EW		1987	03	06.38715	11	45	33.02	+04	56	48.0	3 809
1987	EW		1987	03	08.37430	11	44	08.53	+05	07	43.8	3 809
1987	EW		1987	03	08.38021	11	44	08.28	+05	07	46.0	3 809
1987	EW		1987	03	08.38681	11	44	08.00	+05	07	48.2	3 809
1987	EW		1987	03	10.38160	11	42	41.73	+05	18	47.6	3 809
1987	EW		1987	03	10.38785	11	42	41.46	+05	18	49.8	3 809
1987	EW		1987	03	10.39410	11	42	41.21	+05	18	52.1	3 809
1987	EW		1987	03	11.36250	11	41	59.04	+05	24	11.6	3 809
1987	EW		1987	03	11.36806	11	41	58.77	+05	24	13.1	3 809
1987	EW		1987	03	11.37361	11	41	58.55	+05	24	15.3	3 809
1987	ED1	*	1987	03	01.15243	10	29	44.38	+08	00	56.0	17.5 3 809
1987	ED1		1987	03	01.15729	10	29	44.13	+08	00	56.5	3 809
1987	ED1		1987	03	01.16215	10	29	43.89	+08	00	57.1	3 809
1987	ED1		1987	03	02.13021	10	28	55.88	+08	03	00.4	3 809
1987	ED1		1987	03	02.13507	10	28	55.64	+08	03	01.0	3 809
1987	ED1		1987	03	02.13993	10	28	55.38	+08	03	01.5	3 809
1987	ED1		1987	03	03.12257	10	28	06.93	+08	05	05.9	3 809
1987	ED1		1987	03	03.12743	10	28	06.67	+08	05	06.6	3 809
1987	ED1		1987	03	03.13229	10	28	06.42	+08	05	07.0	3 809
1987	ED1		1987	03	04.10104	10	27	18.84	+08	07	09.8	3 809
1987	ED1		1987	03	04.10590	10	27	18.60	+08	07	10.4	3 809
1987	ED1		1987	03	04.11076	10	27	18.36	+08	07	11.2	3 809
1987	ED1		1987	03	05.12639	10	26	28.78	+08	09	17.5	3 809
1987	ED1		1987	03	05.13194	10	26	28.51	+08	09	18.2	3 809
1987	ED1		1987	03	05.13750	10	26	28.24	+08	09	18.9	3 809
1987	ED1		1987	03	07.17812	10	24	49.89	+08	13	28.5	3 809
1987	ED1		1987	03	07.18437	10	24	49.59	+08	13	29.0	3 809
1987	ED1		1987	03	07.19062	10	24	49.29	+08	13	29.8	3 809
1987	EE1	*	1987	03	05.12639	10	32	43.30	+07	42	10.1	17.5 3 809
1987	EE1		1987	03	05.13194	10	32	43.03	+07	42	10.9	3 809
1987	EE1		1987	03	05.13750	10	32	42.75	+07	42	11.9	3 809
1987	EE1		1987	03	06.13958	10	31	52.29	+07	44	45.2	3 809
1987	EE1		1987	03	06.14514	10	31	52.01	+07	44	46.0	3 809

1987	EE1	1987	03	06.15069	10	31	51.71	+07	44	46.8	3 809
1987	EE1	1987	03	07.17812	10	31	00.30	+07	47	24.9	3 809
1987	EE1	1987	03	07.18437	10	31	00.01	+07	47	25.8	3 809
1987	EE1	1987	03	07.19062	10	30	59.70	+07	47	26.7	3 809
1987	FA	1987	02	22.14826	11	25	32.53	+02	19	47.2	16.5 3 809
1987	FA	1987	02	22.15312	11	25	32.27	+02	19	48.8	3 809
1987	FA	1987	02	22.15799	11	25	32.02	+02	19	50.5	3 809
1987	FA	1987	02	23.35590	11	24	26.33	+02	26	51.4	3 809
1987	FA	1987	02	23.36076	11	24	26.06	+02	26	53.1	3 809
1987	FA	1987	02	23.36563	11	24	25.77	+02	26	54.5	3 809
1987	FA	1987	02	24.14340	11	23	43.17	+02	31	32.1	3 809
1987	FA	1987	02	24.14896	11	23	42.85	+02	31	34.2	3 809
1987	FA	1987	02	24.15451	11	23	42.52	+02	31	36.1	3 809
1987	FA	1987	02	25.13993	11	22	47.17	+02	37	34.7	3 809
1987	FA	1987	02	25.14479	11	22	46.87	+02	37	36.5	3 809
1987	FA	1987	02	25.14965	11	22	46.60	+02	37	38.2	3 809
1987	FA	1987	02	27.27326	11	20	44.22	+02	50	51.0	3 809
1987	FA	1987	02	27.27812	11	20	43.94	+02	50	52.9	3 809
1987	FA	1987	02	27.28299	11	20	43.66	+02	50	54.8	3 809
1987	FA	1987	02	28.24479	11	19	47.43	+02	57	01.2	3 809
1987	FA	1987	02	28.24965	11	19	47.15	+02	57	03.0	3 809
1987	FA	1987	02	28.25451	11	19	46.86	+02	57	05.0	3 809
1987	FA	1987	03	02.29201	11	17	45.77	+03	10	15.2	3 809
1987	FA	1987	03	02.29688	11	17	45.48	+03	10	17.1	3 809
1987	FA	1987	03	02.30174	11	17	45.20	+03	10	19.0	3 809
1987	FA	1987	03	03.28507	11	16	46.18	+03	16	45.9	3 809
1987	FA	1987	03	03.28993	11	16	45.86	+03	16	47.8	3 809
1987	FA	1987	03	03.29479	11	16	45.57	+03	16	49.7	3 809
1987	FA	1987	03	04.27604	11	15	46.29	+03	23	19.1	3 809
1987	FA	1987	03	04.28090	11	15	46.01	+03	23	21.0	3 809
1987	FA	1987	03	04.28576	11	15	45.73	+03	23	22.7	3 809
1987	FA	1987	03	05.27674	11	14	45.71	+03	29	56.9	3 809
1987	FA	1987	03	05.28229	11	14	45.37	+03	29	59.2	3 809
1987	FA	1987	03	05.28785	11	14	45.05	+03	30	01.4	3 809
1987	FA	1987	03	06.32674	11	13	41.82	+03	36	57.0	3 809
1987	FA	1987	03	06.33160	11	13	41.49	+03	36	59.0	3 809
1987	FA	1987	03	06.33785	11	13	41.11	+03	37	01.5	3 809
1987	FA	1987	03	08.31701	11	11	40.83	+03	50	14.6	3 809
1987	FA	1987	03	08.32187	11	11	40.54	+03	50	16.7	3 809
1987	FA	1987	03	08.32674	11	11	40.25	+03	50	18.6	3 809
1987	GK	1987	02	24.31840	10	54	09.97	+03	51	37.9	16.9 3 809
1987	GK	1987	02	24.32326	10	54	09.75	+03	51	41.6	3 809
1987	GK	1987	02	24.32813	10	54	09.55	+03	51	45.1	3 809
1987	GK	1987	02	25.29201	10	53	28.91	+04	02	59.4	3 809
1987	GK	1987	02	25.29688	10	53	28.71	+04	03	02.7	3 809
1987	GK	1987	02	25.30174	10	53	28.50	+04	03	05.9	3 809
1987	GK	1987	02	26.16285	10	52	52.12	+04	13	14.0	3 809
1987	GK	1987	02	26.16771	10	52	51.93	+04	13	17.4	3 809
1987	GK	1987	02	26.17257	10	52	51.72	+04	13	21.2	3 809
1987	GK	1987	02	27.21285	10	52	06.70	+04	25	43.1	3 809
1987	GK	1987	02	27.21771	10	52	06.47	+04	25	46.7	3 809
1987	GK	1987	02	27.22257	10	52	06.27	+04	25	50.2	3 809
1987	GK	1987	02	28.18229	10	51	24.53	+04	37	20.4	3 809
1987	GK	1987	02	28.18715	10	51	24.32	+04	37	23.9	3 809
1987	GK	1987	02	28.19201	10	51	24.11	+04	37	27.3	3 809
1987	GK	1987	03	01.22743	10	50	38.59	+04	49	58.1	3 809
1987	GK	1987	03	01.23229	10	50	38.39	+04	50	01.6	3 809
1987	GK	1987	03	01.23715	10	50	38.16	+04	50	05.0	3 809
1987	GK	1987	03	02.22465	10	49	54.66	+05	02	05.4	3 809

1987	GK	1987	03	02.22951	10	49	54.43	+05	02	09.0		3 809
1987	GK	1987	03	02.23438	10	49	54.21	+05	02	12.4		3 809
1987	GK	1987	03	03.21771	10	49	10.69	+05	14	12.7		3 809
1987	GK	1987	03	03.22257	10	49	10.49	+05	14	16.5		3 809
1987	GK	1987	03	03.22743	10	49	10.28	+05	14	20.2		3 809
1987	GK	1987	03	04.20139	10	48	27.17	+05	26	17.6		3 809
1987	GK	1987	03	04.20555	10	48	26.94	+05	26	20.6		3 809
1987	GK	1987	03	04.20972	10	48	26.74	+05	26	23.7		3 809
1987	GK	1987	03	05.24236	10	47	40.88	+05	39	06.1		3 809
1987	GK	1987	03	05.24653	10	47	40.69	+05	39	09.3		3 809
1987	GK	1987	03	05.25069	10	47	40.52	+05	39	12.1		3 809
1987	GK	1987	03	06.23680	10	46	56.83	+05	51	21.4		3 809
1987	GK	1987	03	06.24097	10	46	56.63	+05	51	24.3		3 809
1987	GK	1987	03	06.24514	10	46	56.46	+05	51	27.3		3 809
1987	GK	1987	03	07.28125	10	46	10.76	+06	04	14.0		3 809
1987	GK	1987	03	07.28542	10	46	10.58	+06	04	17.0		3 809
1987	GK	1987	03	07.28958	10	46	10.39	+06	04	20.1		3 809
1987	GK	1987	03	08.12326	10	45	34.19	+06	14	36.7		3 809
1987	GK	1987	03	08.12812	10	45	33.96	+06	14	40.6		3 809
1987	GK	1987	03	08.13299	10	45	33.73	+06	14	43.9		3 809
1987	GK	1987	03	09.18819	10	44	47.68	+06	27	43.4		3 809
1987	GK	1987	03	09.19236	10	44	47.49	+06	27	46.8		3 809
1987	GK	1987	03	09.19653	10	44	47.30	+06	27	49.5		3 809
1987	GK	1987	03	10.20903	10	44	03.57	+06	40	15.4		3 809
1987	GK	1987	03	10.21319	10	44	03.39	+06	40	18.4		3 809
1987	GK	1987	03	10.21736	10	44	03.20	+06	40	21.4		3 809
1988	AW1	1988	02	16.16181	07	44	30.25	+23	31	43.0	17.2	4 809
1988	AW1	1988	02	16.17222	07	44	29.71	+23	31	42.3		4 809
1988	AW1	1988	02	16.18264	07	44	29.24	+23	31	41.1		4 809
1988	AW1	1988	02	23.11493	07	40	05.83	+23	12	50.4	17.7	4 809
1988	AW1	1988	02	23.13229	07	40	05.25	+23	12	47.9		4 809
1988	AW1	1988	02	23.14965	07	40	04.59	+23	12	45.2		4 809
1988	AX1	1988	02	16.16181	07	46	09.71	+20	43	53.3	16.9	4 809
1988	AX1	1988	02	16.17222	07	46	09.20	+20	43	49.9		4 809
1988	AX1	1988	02	16.18264	07	46	08.66	+20	43	46.3		4 809
1988	AX1	1988	02	23.11493	07	42	23.83	+20	04	55.9	17.0	4 809
1988	AX1	1988	02	23.13229	07	42	23.35	+20	04	50.5		4 809
1988	AX1	1988	02	23.14965	07	42	22.74	+20	04	44.8		4 809
1988	BJ	1988	02	16.16181	07	44	46.41	+19	59	23.0	17.5	4 809
1988	BJ	1988	02	16.17222	07	44	45.65	+19	59	13.8		4 809
1988	BJ	1988	02	16.18264	07	44	44.83	+19	59	05.0		4 809
1988	BU	1988	02	16.16181	07	37	34.03	+23	17	27.5	16.9	4 809
1988	BU	1988	02	16.17222	07	37	33.73	+23	17	28.5		4 809
1988	BU	1988	02	16.18264	07	37	33.34	+23	17	29.7		4 809
1988	BU	1988	02	23.11493	07	34	50.36	+23	27	11.7	17.5	4 809
1988	BU	1988	02	23.13229	07	34	49.94	+23	27	12.9		4 809
1988	BU	1988	02	23.14965	07	34	49.61	+23	27	13.8		4 809
1988	CR	1988	02	21.21250	10	11	25.97	+00	48	32.8	17.7	4 809
1988	CR	1988	02	21.22118	10	11	25.44	+00	48	44.0		4 809
1988	CR	1988	02	21.22812	10	11	24.96	+00	48	54.4		4 809
1988	CO1	1988	02	16.16181	07	33	48.80	+21	49	41.2	17.7	4 809
1988	CO1	1988	02	16.17222	07	33	48.48	+21	49	43.3		4 809
1988	CO1	1988	02	16.18264	07	33	48.13	+21	49	44.8		4 809
1988	CO1	1988	02	23.11493	07	31	45.74	+22	10	03.4	17.5	4 809
1988	CO1	1988	02	23.13229	07	31	45.52	+22	10	04.6		4 809
1988	CO1	1988	02	23.14965	07	31	45.29	+22	10	07.1		4 809
1988	CP1	1988	02	16.16181	07	35	05.23	+20	46	37.6	18.0	4 809
1988	CP1	1988	02	16.17222	07	35	04.83	+20	46	38.1		4 809
1988	CP1	1988	02	16.18264	07	35	04.48	+20	46	40.6		4 809

1988	CP1	1988	02	23.11493	07	32	09.84	+21	01	21.1	18.0	4 809
1988	CP1	1988	02	23.13229	07	32	09.37	+21	01	23.0		4 809
1988	CP1	1988	02	23.14965	07	32	08.93	+21	01	24.9		4 809
1988	CQ1	1988	02	15.10764	07	35	57.43	+22	32	38.5	17.8	4 809
1988	CQ1	1988	02	16.16181	07	35	27.08	+22	37	49.8	17.6	4 809
1988	CQ1	1988	02	16.17222	07	35	26.79	+22	37	52.1		4 809
1988	CQ1	1988	02	16.18264	07	35	26.41	+22	37	55.7		4 809
1988	CQ1	1988	02	23.11493	07	33	09.25	+23	08	02.9	18.2	4 809
1988	CQ1	1988	02	23.13229	07	33	08.92	+23	08	06.7		4 809
1988	CQ1	1988	02	23.14965	07	33	08.67	+23	08	10.8		4 809
1988	CR1	1988	02	16.16181	07	36	13.09	+22	06	23.6	18.0	4 809
1988	CR1	1988	02	16.17222	07	36	12.74	+22	06	24.8		4 809
1988	CR1	1988	02	16.18264	07	36	12.28	+22	06	25.7		4 809
1988	CR1	1988	02	23.11493	07	32	51.19	+22	17	35.2	17.7	4 809
1988	CR1	1988	02	23.13229	07	32	50.71	+22	17	36.6		4 809
1988	CR1	1988	02	23.14965	07	32	50.23	+22	17	37.6		4 809
1988	CU1	1988	02	21.12535	07	36	57.24	+22	57	11.5	19.0	4 809
1988	CU1	1988	02	21.14271	07	36	56.73	+22	57	10.8		4 809
1988	CU1	1988	02	21.16007	07	36	56.13	+22	57	10.8		4 809
1988	CU1	1988	02	23.11493	07	36	07.40	+22	56	41.7	18.7	4 809
1988	CU1	1988	02	23.13229	07	36	06.94	+22	56	41.7		4 809
1988	CU1	1988	02	23.14965	07	36	06.46	+22	56	41.0		4 809
1988	CW1	1988	02	16.16181	07	40	01.83	+21	13	47.4	20.5	4 809
1988	CW1	1988	02	16.17222	07	40	01.35	+21	13	46.5		4 809
1988	CW1	1988	02	16.18264	07	40	00.95	+21	13	45.2		4 809
1988	CW1	1988	02	23.11493	07	36	35.20	+20	58	44.6	20.0	4 809
1988	CW1	1988	02	23.13229	07	36	34.62	+20	58	41.4		4 809
1988	CW1	1988	02	23.14965	07	36	34.09	+20	58	38.2		4 809
1988	CX1	1988	02	16.16181	07	39	27.35	+20	34	03.2	18.2	4 809
1988	CX1	1988	02	16.17222	07	39	26.79	+20	34	03.6		4 809
1988	CX1	1988	02	16.18264	07	39	26.25	+20	34	04.5		4 809
1988	CX1	1988	02	23.11493	07	35	13.41	+20	38	04.9	18.0	4 809
1988	CX1	1988	02	23.13229	07	35	12.79	+20	38	05.2		4 809
1988	CX1	1988	02	23.14965	07	35	12.17	+20	38	05.3		4 809
1988	CY1	1988	02	16.16181	07	39	36.79	+21	25	09.6	18.8	4 809
1988	CY1	1988	02	16.17222	07	39	36.36	+21	25	10.8		4 809
1988	CY1	1988	02	16.18264	07	39	35.73	+21	25	12.6		4 809
1988	CY1	1988	02	23.11493	07	35	22.91	+21	35	21.8	19.5	4 809
1988	CY1	1988	02	23.13229	07	35	22.25	+21	35	21.5		4 809
1988	CY1	1988	02	23.14965	07	35	21.67	+21	35	23.5		4 809
1988	CZ1	1988	02	16.16181	07	40	25.51	+22	22	45.7	20.5	4 809
1988	CZ1	1988	02	16.17222	07	40	25.09	+22	22	49.5		4 809
1988	CZ1	1988	02	16.18264	07	40	24.55	+22	22	52.3		4 809
1988	CA2	1988	02	23.11493	07	37	43.83	+22	41	08.6	18.7	4 809
1988	CA2	1988	02	23.13229	07	37	43.33	+22	41	13.1		4 809
1988	CA2	1988	02	23.14965	07	37	43.02	+22	41	17.1		4 809
1988	CC2	1988	02	16.16181	07	40	55.75	+22	24	48.3	17.5	4 809
1988	CC2	1988	02	16.17222	07	40	55.28	+22	24	47.6		4 809
1988	CC2	1988	02	16.18264	07	40	54.91	+22	24	47.2		4 809
1988	CC2	1988	02	23.11493	07	37	45.48	+22	15	48.1	17.6	4 809
1988	CC2	1988	02	23.13229	07	37	45.02	+22	15	46.8		4 809
1988	CC2	1988	02	23.14965	07	37	44.58	+22	15	45.3		4 809
1988	CD2	1988	02	16.16181	07	41	18.13	+20	32	03.4	18.6	4 809
1988	CD2	1988	02	16.17222	07	41	17.76	+20	32	05.3		4 809
1988	CD2	1988	02	16.18264	07	41	17.43	+20	32	06.9		4 809
1988	CE2	1988	02	16.16181	07	40	38.51	+21	36	25.5	18.0	4 809
1988	CE2	1988	02	16.17222	07	40	38.06	+21	36	24.8		4 809
1988	CE2	1988	02	16.18264	07	40	37.52	+21	36	24.8		4 809
1988	CE2	1988	02	23.11493	07	36	39.53	+21	27	13.1	18.5	4 809

1988	CE2	1988	02	23.13229	07	36	38.90	+21	27	11.1		4 809
1988	CE2	1988	02	23.14965	07	36	38.30	+21	27	09.9		4 809
1988	CG2	1988	02	16.16181	07	41	39.67	+21	47	46.2	17.5	4 809
1988	CG2	1988	02	16.17222	07	41	39.27	+21	47	50.2		4 809
1988	CG2	1988	02	16.18264	07	41	38.81	+21	47	56.3		4 809
1988	CG2	1988	02	23.11493	07	38	11.39	+22	38	54.6	17.8	4 809
1988	CG2	1988	02	23.13229	07	38	10.93	+22	39	01.8		4 809
1988	CG2	1988	02	23.14965	07	38	10.44	+22	39	09.1		4 809
1988	CH2	1988	02	16.16181	07	42	24.03	+20	10	45.4	17.5	4 809
1988	CH2	1988	02	16.17222	07	42	23.57	+20	10	48.2		4 809
1988	CH2	1988	02	16.18264	07	42	23.03	+20	10	51.9		4 809
1988	CH2	1988	02	23.11493	07	38	53.06	+20	42	19.7	17.8	4 809
1988	CH2	1988	02	23.13229	07	38	52.50	+20	42	23.9		4 809
1988	CH2	1988	02	23.14965	07	38	51.98	+20	42	28.8		4 809
1988	CJ2	1988	02	16.16181	07	43	16.51	+24	39	31.7	17.2	4 809
1988	CJ2	1988	02	16.17222	07	43	16.11	+24	39	34.9		4 809
1988	CJ2	1988	02	16.18264	07	43	15.67	+24	39	38.7		4 809
1988	CK2	1988	02	16.16181	07	43	15.00	+19	29	29.0	18.2	4 809
1988	CK2	1988	02	16.17222	07	43	14.52	+19	29	30.0		4 809
1988	CK2	1988	02	16.18264	07	43	13.99	+19	29	30.7		4 809
1988	CK2	1988	02	21.12535	07	40	27.85	+19	32	24.5	19.0	4 809
1988	CK2	1988	02	21.14271	07	40	27.24	+19	32	25.6		4 809
1988	CK2	1988	02	21.16007	07	40	26.64	+19	32	25.9		4 809
1988	CK2	1988	02	23.11493	07	39	31.32	+19	33	15.7	19.2	4 809
1988	CK2	1988	02	23.13229	07	39	30.71	+19	33	16.4		4 809
1988	CK2	1988	02	23.14965	07	39	30.15	+19	33	16.1		4 809
1988	CL2	1988	02	16.16181	07	43	42.83	+21	30	55.4	19.0	4 809
1988	CL2	1988	02	16.17222	07	43	42.41	+21	30	58.1		4 809
1988	CL2	1988	02	16.18264	07	43	41.92	+21	31	00.3		4 809
1988	CL2	1988	02	23.11493	07	40	05.17	+21	53	02.8	19.0	4 809
1988	CL2	1988	02	23.13229	07	40	04.55	+21	53	06.7		4 809
1988	CL2	1988	02	23.14965	07	40	04.05	+21	53	09.8		4 809
1988	CM2	1988	02	16.16181	07	44	19.12	+20	27	56.0	17.3	4 809
1988	CM2	1988	02	16.17222	07	44	18.68	+20	27	57.2		4 809
1988	CM2	1988	02	16.18264	07	44	18.27	+20	27	59.5		4 809
1988	CM2	1988	02	23.11493	07	40	56.76	+20	43	54.5	17.4	4 809
1988	CM2	1988	02	23.13229	07	40	56.19	+20	43	56.8		4 809
1988	CM2	1988	02	23.14965	07	40	55.69	+20	43	59.0		4 809
1988	CN2	1988	02	16.16181	07	44	43.67	+20	16	51.6	17.2	4 809
1988	CN2	1988	02	16.17222	07	44	43.27	+20	16	52.6		4 809
1988	CN2	1988	02	16.18264	07	44	42.83	+20	16	54.3		4 809
1988	CN2	1988	02	23.11493	07	41	41.94	+20	27	21.4	17.6	4 809
1988	CN2	1988	02	23.13229	07	41	41.44	+20	27	23.0		4 809
1988	CN2	1988	02	23.14965	07	41	40.99	+20	27	24.7		4 809
1988	CP2	1988	02	16.16181	07	46	09.08	+20	50	46.6	17.8	4 809
1988	CP2	1988	02	16.16181	07	46	09.06	+20	50	46.4	18.0	4 809
1988	CP2	1988	02	16.17222	07	46	08.65	+20	50	48.1		4 809
1988	CP2	1988	02	16.17222	07	46	08.64	+20	50	48.5		4 809
1988	CP2	1988	02	16.18264	07	46	08.16	+20	50	49.9		4 809
1988	CP2	1988	02	16.18264	07	46	08.15	+20	50	49.9		4 809
1988	CP2	1988	02	23.11493	07	42	26.99	+21	06	09.1	17.7	4 809
1988	CP2	1988	02	23.13229	07	42	26.44	+21	06	10.8		4 809
1988	CP2	1988	02	23.14965	07	42	25.81	+21	06	13.0		4 809
1988	CQ2	1988	02	16.16181	07	47	46.33	+20	36	08.7	18.0	4 809
1988	CQ2	1988	02	16.17222	07	47	45.93	+20	36	10.5		4 809
1988	CQ2	1988	02	16.18264	07	47	45.58	+20	36	13.5		4 809
1988	CQ2	1988	02	23.11493	07	45	23.45	+20	54	46.0	18.0	4 809
1988	CQ2	1988	02	23.13229	07	45	23.14	+20	54	48.2		4 809
1988	CQ2	1988	02	23.14965	07	45	22.73	+20	54	51.0		4 809

1988	CR2	1988	02	16.16181	07	47	50.37	+23	18	01.4	19.5	4 809
1988	CR2	1988	02	16.17222	07	47	49.92	+23	18	03.1		4 809
1988	CR2	1988	02	16.18264	07	47	49.44	+23	18	05.8		4 809
1988	CR2	1988	02	23.11493	07	43	54.80	+23	40	35.3	19.5	4 809
1988	CR2	1988	02	23.13229	07	43	54.22	+23	40	38.6		4 809
1988	CR2	1988	02	23.14965	07	43	53.66	+23	40	41.8		4 809
1988	CS2	1988	02	16.16181	07	48	00.24	+20	55	07.9	18.5	4 809
1988	CS2	1988	02	16.17222	07	47	59.75	+20	55	08.9		4 809
1988	CS2	1988	02	16.18264	07	47	59.22	+20	55	08.5		4 809
1988	CS2	1988	02	23.11493	07	43	51.89	+20	54	14.0	17.6	4 809
1988	CS2	1988	02	23.13229	07	43	51.27	+20	54	13.8		4 809
1988	CS2	1988	02	23.14965	07	43	50.67	+20	54	13.8		4 809
1988	CT2	1988	02	16.16181	07	48	50.71	+21	28	34.7	19.0	4 809
1988	CT2	1988	02	16.17222	07	48	50.24	+21	28	36.5		4 809
1988	CT2	1988	02	16.18264	07	48	49.68	+21	28	39.3		4 809
1988	CT2	1988	02	23.11493	07	44	30.48	+21	45	56.2	19.0	4 809
1988	CT2	1988	02	23.13229	07	44	29.86	+21	45	59.8		4 809
1988	CT2	1988	02	23.14965	07	44	29.38	+21	46	03.5		4 809
1988	CV2	1988	02	16.16181	07	50	24.04	+23	19	25.1	18.3	4 809
1988	CV2	1988	02	16.17222	07	50	23.67	+23	19	27.7		4 809
1988	CV2	1988	02	16.18264	07	50	23.29	+23	19	29.7		4 809
1988	CV2	1988	02	23.11493	07	47	37.43	+23	40	00.6	19.0	4 809
1988	CV2	1988	02	23.13229	07	47	37.07	+23	40	03.0		4 809
1988	CV2	1988	02	23.14965	07	47	36.69	+23	40	06.5		4 809
1988	CW2	1988	02	16.16181	07	50	21.07	+22	06	53.0	18.5	4 809
1988	CW2	1988	02	16.17222	07	50	20.64	+22	06	53.9		4 809
1988	CW2	1988	02	16.18264	07	50	20.20	+22	06	55.8		4 809
1988	CW2	1988	02	23.11493	07	47	03.31	+22	16	20.2	19.0	4 809
1988	CW2	1988	02	23.11493	07	47	03.37	+22	16	19.9	18.7	4 809
1988	CW2	1988	02	23.13229	07	47	02.93	+22	16	21.3		4 809
1988	CW2	1988	02	23.13229	07	47	02.90	+22	16	21.4		4 809
1988	CW2	1988	02	23.14965	07	47	02.42	+22	16	23.6		4 809
1988	CW2	1988	02	23.14965	07	47	02.42	+22	16	24.0		4 809
1988	CY2	1988	02	16.16181	07	49	30.87	+22	45	02.2	19.8	4 809
1988	CY2	1988	02	16.17222	07	49	30.26	+22	45	02.8		4 809
1988	CY2	1988	02	16.18264	07	49	29.71	+22	45	03.1		4 809
1988	CY2	1988	02	23.11493	07	44	49.24	+22	44	42.5	20.0	4 809
1988	CY2	1988	02	23.13229	07	44	48.57	+22	44	42.9		4 809
1988	CY2	1988	02	23.14965	07	44	48.01	+22	44	43.4		4 809
1988	CZ2	1988	02	16.16181	07	53	02.01	+21	22	25.9	19.3	4 809
1988	CZ2	1988	02	16.17222	07	53	01.45	+21	22	28.8		4 809
1988	CZ2	1988	02	16.18264	07	53	01.03	+21	22	31.2		4 809
1988	CZ2	1988	02	23.11493	07	49	36.89	+21	50	08.1	19.6	4 809
1988	CZ2	1988	02	23.13229	07	49	36.36	+21	50	12.8		4 809
1988	CZ2	1988	02	23.14965	07	49	35.81	+21	50	16.5		4 809
1988	CB3	1988	02	15.10764	07	53	06.73	+20	04	38.7	18.8	4 809
1988	CB3	1988	02	16.16181	07	52	13.50	+20	03	55.2	18.0	4 809
1988	CB3	1988	02	16.17222	07	52	12.91	+20	03	56.1		4 809
1988	CB3	1988	02	16.18264	07	52	12.31	+20	03	56.1		4 809
1988	CD3	1988	02	21.12535	07	52	14.02	+23	01	46.4	18.5	4 809
1988	CD3	1988	02	21.14271	07	52	13.40	+23	01	47.1		4 809
1988	CD3	1988	02	21.16007	07	52	12.78	+23	01	47.9		4 809
1988	CD3	1988	02	23.11493	07	51	13.63	+23	03	29.1		4 809
1988	CD3	1988	02	23.13229	07	51	13.02	+23	03	30.7		4 809
1988	CD3	1988	02	23.14965	07	51	12.42	+23	03	32.5		4 809
1988	CF3	1988	02	21.12535	07	51	33.34	+23	03	41.2	19.0	4 809
1988	CF3	1988	02	21.14271	07	51	32.65	+23	03	40.6		4 809
1988	CF3	1988	02	21.16007	07	51	31.97	+23	03	41.5		4 809
1988	CF3	1988	02	23.11493	07	50	24.64	+23	03	20.3	18.5	4 809

1988	CF3	1988	02	23.13229	07	50	24.02	+23	03	20.9		4 809
1988	CF3	1988	02	23.14965	07	50	23.32	+23	03	21.2		4 809
1988	CT3	1988	02	21.21250	09	56	53.53	+00	16	56.5	17.3	4 809
1988	CT3	1988	02	21.22118	09	56	53.16	+00	16	59.8		4 809
1988	CT3	1988	02	21.22812	09	56	52.85	+00	17	02.3		4 809
1988	CU3	1988	02	21.21250	09	56	46.69	+01	45	16.4	17.5	4 809
1988	CU3	1988	02	21.22118	09	56	46.23	+01	45	17.8		4 809
1988	CU3	1988	02	21.22812	09	56	45.85	+01	45	18.6		4 809
1988	CV3	1988	02	21.21250	09	58	06.46	-00	33	23.7	18.0	4 809
1988	CV3	1988	02	21.22118	09	58	06.05	-00	33	19.9		4 809
1988	CV3	1988	02	21.22812	09	58	05.69	-00	33	17.1		4 809
1988	CX3	1988	02	21.21250	09	58	03.37	+02	12	48.5	17.8	4 809
1988	CX3	1988	02	21.22118	09	58	02.83	+02	12	51.1		4 809
1988	CX3	1988	02	21.22812	09	58	02.44	+02	12	53.4		4 809
1988	CY3	1988	02	21.21250	09	59	18.56	-00	54	40.5	19.0	4 809
1988	CY3	1988	02	21.22118	09	59	18.12	-00	54	38.1		4 809
1988	CY3	1988	02	21.22812	09	59	17.70	-00	54	35.8		4 809
1988	CZ3	1988	02	21.21250	10	00	10.88	+02	52	21.0	18.0	4 809
1988	CZ3	1988	02	21.22118	10	00	10.48	+02	52	25.6		4 809
1988	CZ3	1988	02	21.22812	10	00	10.05	+02	52	30.7		4 809
1988	CB4	1988	02	21.21250	09	58	06.99	+01	58	35.1	18.0	4 809
1988	CB4	1988	02	21.22118	09	58	06.42	+01	58	37.5		4 809
1988	CB4	1988	02	21.22812	09	58	05.97	+01	58	38.9		4 809
1988	CC4	1988	02	21.21250	10	00	55.41	-00	20	47.8	19.0	4 809
1988	CC4	1988	02	21.22118	10	00	54.96	-00	20	46.0		4 809
1988	CC4	1988	02	21.22812	10	00	54.47	-00	20	42.9		4 809
1988	CD4	1988	02	21.21250	10	01	11.15	-00	21	48.9	17.6	4 809
1988	CD4	1988	02	21.22118	10	01	10.74	-00	21	46.9		4 809
1988	CD4	1988	02	21.22812	10	01	10.39	-00	21	45.2		4 809
1988	CG4	1988	02	21.21250	10	00	34.99	+01	30	26.6	18.5	4 809
1988	CG4	1988	02	21.22118	10	00	34.50	+01	30	30.1		4 809
1988	CG4	1988	02	21.22812	10	00	34.09	+01	30	31.9		4 809
1988	CK4	1988	02	21.21250	10	02	00.55	-01	01	01.6	18.5	4 809
1988	CK4	1988	02	21.22118	10	02	00.01	-01	00	59.7		4 809
1988	CK4	1988	02	21.22812	10	01	59.59	-01	00	59.8		4 809
1988	CL4	1988	02	21.21250	10	03	08.55	-01	37	14.2	18.0	4 809
1988	CL4	1988	02	21.22118	10	03	08.07	-01	37	11.4		4 809
1988	CL4	1988	02	21.22812	10	03	07.71	-01	37	09.7		4 809
1988	CN4	1988	02	21.21250	10	03	22.81	+02	13	15.5	17.0	4 809
1988	CN4	1988	02	21.22118	10	03	22.33	+02	13	18.8		4 809
1988	CN4	1988	02	21.22812	10	03	21.97	+02	13	21.4		4 809
1988	CO4	1988	02	21.21250	10	02	56.55	-01	01	28.5	18.0	4 809
1988	CO4	1988	02	21.22118	10	02	56.02	-01	01	26.9		4 809
1988	CO4	1988	02	21.22812	10	02	55.57	-01	01	25.1		4 809
1988	CQ4	1988	02	21.21250	10	03	48.15	+02	30	12.4	18.0	4 809
1988	CQ4	1988	02	21.22118	10	03	47.62	+02	30	14.9		4 809
1988	CQ4	1988	02	21.22812	10	03	47.19	+02	30	16.9		4 809
1988	CR4	1988	02	21.21250	10	06	09.30	+01	57	40.9	17.0	4 809
1988	CR4	1988	02	21.22118	10	06	08.93	+01	57	47.3		4 809
1988	CR4	1988	02	21.22812	10	06	08.61	+01	57	52.7		4 809
1988	CS4	1988	02	21.21250	10	05	41.92	-00	15	53.9	18.2	4 809
1988	CS4	1988	02	21.22118	10	05	41.45	-00	15	49.0		4 809
1988	CS4	1988	02	21.22812	10	05	41.14	-00	15	43.6		4 809
1988	CT4	1988	02	21.21250	10	06	00.60	+01	07	39.0	17.7	4 809
1988	CT4	1988	02	21.22118	10	06	00.23	+01	07	42.5		4 809
1988	CT4	1988	02	21.22812	10	05	59.88	+01	07	44.9		4 809
1988	CU4	1988	02	21.21250	10	06	04.43	+00	48	45.7	18.0	4 809
1988	CU4	1988	02	21.22118	10	06	04.01	+00	48	48.1		4 809
1988	CU4	1988	02	21.22812	10	06	03.66	+00	48	49.9		4 809

1988	CV4	1988	02	21.21250	10	06	57.95	-01	17	20.9	19.7	4 809
1988	CV4	1988	02	21.22118	10	06	57.53	-01	17	16.6		4 809
1988	CV4	1988	02	21.22812	10	06	57.26	-01	17	14.4		4 809
1988	CW4	1988	02	21.21250	10	06	12.40	+00	34	27.2	18.2	4 809
1988	CW4	1988	02	21.22118	10	06	11.94	+00	34	30.0		4 809
1988	CW4	1988	02	21.22812	10	06	11.60	+00	34	31.7		4 809
1988	CX4	1988	02	21.21250	10	06	30.00	+02	10	39.2	19.5	4 809
1988	CX4	1988	02	21.22118	10	06	29.54	+02	10	42.4		4 809
1988	CX4	1988	02	21.22812	10	06	29.25	+02	10	46.1		4 809
1988	CY4	1988	02	21.21250	10	05	30.85	+00	53	05.0	20.0	4 809
1988	CY4	1988	02	21.22118	10	05	30.35	+00	53	07.8		4 809
1988	CY4	1988	02	21.22812	10	05	29.86	+00	53	10.7		4 809
1988	CY4	1988	02	23.17708	10	03	36.89	+01	03	19.3	20.0	4 809
1988	CY4	1988	02	23.18750	10	03	36.40	+01	03	22.2		4 809
1988	CY4	1988	02	23.19792	10	03	35.84	+01	03	25.9		4 809
1988	CZ4	1988	02	21.21250	10	06	02.80	+00	57	43.0	18.7	4 809
1988	CZ4	1988	02	21.22118	10	06	02.34	+00	57	46.7		4 809
1988	CZ4	1988	02	21.22812	10	06	01.90	+00	57	49.4		4 809
1988	CA5	1988	02	21.21250	10	07	05.80	+02	24	12.7	20.0	4 809
1988	CA5	1988	02	21.22118	10	07	05.45	+02	24	18.1		4 809
1988	CA5	1988	02	21.22812	10	07	05.15	+02	24	20.8		4 809
1988	CD5	1988	02	21.21250	10	07	37.87	-01	41	51.9	20.0	4 809
1988	CD5	1988	02	21.22118	10	07	37.42	-01	41	50.3		4 809
1988	CD5	1988	02	21.22812	10	07	36.98	-01	41	48.5		4 809
1988	CF5	1988	02	21.21250	10	09	19.51	+03	15	42.7	18.3	4 809
1988	CF5	1988	02	21.22118	10	09	19.09	+03	15	46.4		4 809
1988	CF5	1988	02	21.22812	10	09	18.72	+03	15	48.9		4 809
1988	CH5	1988	02	21.21250	10	09	20.41	+02	09	50.3	18.5	4 809
1988	CH5	1988	02	21.22118	10	09	19.93	+02	09	52.4		4 809
1988	CH5	1988	02	21.22812	10	09	19.52	+02	09	54.5		4 809
1988	CJ5	1988	02	21.21250	10	10	29.14	+02	07	08.1	17.4	4 809
1988	CJ5	1988	02	21.22118	10	10	28.71	+02	07	12.8		4 809
1988	CJ5	1988	02	21.22812	10	10	28.37	+02	07	16.3		4 809
1988	CK5	1988	02	21.21250	10	10	48.94	+00	19	51.0	20.0	4 809
1988	CK5	1988	02	21.22118	10	10	48.53	+00	19	52.3		4 809
1988	CK5	1988	02	21.22812	10	10	48.20	+00	19	53.9		4 809
1988	CM5	1988	02	21.21250	10	11	42.63	+00	21	33.9	17.2	4 809
1988	CM5	1988	02	21.22118	10	11	42.20	+00	21	39.9		4 809
1988	CM5	1988	02	21.22812	10	11	41.84	+00	21	43.9		4 809
1988	CN5	1988	02	21.21250	10	12	59.86	+02	14	57.5	17.5	4 809
1988	CN5	1988	02	21.22118	10	12	59.44	+02	15	04.0		4 809
1988	CN5	1988	02	21.22812	10	12	59.15	+02	15	09.0		4 809
1988	CP5	1988	02	21.21250	10	13	05.03	-00	30	33.3	19.2	4 809
1988	CP5	1988	02	21.22118	10	13	04.58	-00	30	31.5		4 809
1988	CP5	1988	02	21.22812	10	13	04.22	-00	30	28.6		4 809
1988	CQ5	1988	02	21.21250	10	12	25.99	+00	19	05.4	18.0	4 809
1988	CQ5	1988	02	21.22118	10	12	25.48	+00	19	08.9		4 809
1988	CQ5	1988	02	21.22812	10	12	25.09	+00	19	11.1		4 809
1988	CR5	1988	02	21.21250	10	12	02.04	+01	14	41.3	18.0	4 809
1988	CR5	1988	02	21.22118	10	12	01.40	+01	14	42.8		4 809
1988	CR5	1988	02	21.22812	10	12	00.94	+01	14	43.3		4 809
1988	CS5	1988	02	21.21250	10	14	21.04	+01	31	40.2	19.0	4 809
1988	CS5	1988	02	21.22118	10	14	20.50	+01	31	41.7		4 809
1988	CS5	1988	02	21.22812	10	14	20.10	+01	31	43.4		4 809
1988	CF7	1988	02	21.21250	10	01	30.48	-00	15	10.1	18.6	4 809
1988	CF7	1988	02	21.22118	10	01	30.01	-00	15	07.4		4 809
1988	CF7	1988	02	21.22812	10	01	29.63	-00	15	05.1		4 809
1988	CG7	1988	02	21.21250	10	08	39.80	-01	32	58.1	20.0	4 809
1988	CG7	1988	02	21.22118	10	08	39.28	-01	32	55.0		4 809

1988	CG7	1988	02	21.22812	10	08	38.93	-01	32	53.4		4 809
1988	CH7	1988	02	21.21250	10	10	06.54	+02	54	49.3	19.0	4 809
1988	CH7	1988	02	21.22118	10	10	06.11	+02	54	51.2		4 809
1988	CH7	1988	02	21.22812	10	10	05.74	+02	54	52.2		4 809
1988	CL7	1988	02	16.16181	07	38	21.77	+21	55	15.2	18.8	4 809
1988	CL7	1988	02	16.17222	07	38	21.36	+21	55	15.0		4 809
1988	CL7	1988	02	16.18264	07	38	20.97	+21	55	16.9		4 809
1988	CL7	1988	02	23.11493	07	35	23.46	+22	01	53.8	20.0	4 809
1988	CL7	1988	02	23.13229	07	35	23.02	+22	01	54.6		4 809
1988	CL7	1988	02	23.14965	07	35	22.59	+22	01	56.0		4 809
1988	CO7	1988	02	16.16181	07	42	28.70	+22	31	58.1	20.2	4 809
1988	CO7	1988	02	16.17222	07	42	28.26	+22	31	58.6		4 809
1988	CO7	1988	02	16.18264	07	42	27.71	+22	31	59.9		4 809
1988	CO7	1988	02	21.12535	07	39	39.99	+22	38	56.4	19.6	4 809
1988	CO7	1988	02	21.14271	07	39	39.36	+22	38	56.9		4 809
1988	CO7	1988	02	21.16007	07	39	38.70	+22	38	58.4		4 809
1988	CO7	1988	02	23.11493	07	38	47.85	+22	40	57.1	20.0	4 809
1988	CO7	1988	02	23.13229	07	38	47.39	+22	40	57.6		4 809
1988	CO7	1988	02	23.14965	07	38	46.94	+22	40	58.6		4 809
1988	CP7	1988	02	21.12535	07	40	36.85	+22	16	32.8	19.7	4 809
1988	CP7	1988	02	21.14271	07	40	36.34	+22	16	36.2		4 809
1988	CP7	1988	02	21.16007	07	40	35.85	+22	16	38.4		4 809
1988	CP7	1988	02	23.11493	07	39	56.11	+22	20	07.5	20.0	4 809
1988	CP7	1988	02	23.13229	07	39	55.71	+22	20	08.5		4 809
1988	CP7	1988	02	23.14965	07	39	55.26	+22	20	11.0		4 809
1988	CQ7	1988	02	16.16181	07	46	15.49	+23	48	57.8	19.0	4 809
1988	CQ7	1988	02	16.17222	07	46	14.99	+23	48	58.5		4 809
1988	CQ7	1988	02	16.18264	07	46	14.46	+23	49	00.9		4 809
1988	CQ7	1988	02	23.11493	07	41	49.94	+23	55	29.6	19.6	4 809
1988	CQ7	1988	02	23.13229	07	41	49.34	+23	55	30.4		4 809
1988	CQ7	1988	02	23.14965	07	41	48.77	+23	55	31.1		4 809
1988	CR7	1988	02	21.12535	07	44	46.06	+23	48	58.0	19.0	4 809
1988	CR7	1988	02	21.14271	07	44	45.37	+23	48	59.7		4 809
1988	CR7	1988	02	21.16007	07	44	44.73	+23	49	02.6		4 809
1988	CR7	1988	02	23.11493	07	43	39.49	+23	52	00.3	20.0	4 809
1988	CR7	1988	02	23.13229	07	43	38.84	+23	52	02.0		4 809
1988	CR7	1988	02	23.14965	07	43	38.20	+23	52	03.1		4 809
1988	CS7	1988	02	16.16181	07	52	50.32	+20	11	25.6	18.7	4 809
1988	CS7	1988	02	16.17222	07	52	49.87	+20	11	28.1		4 809
1988	CS7	1988	02	16.18264	07	52	49.44	+20	11	30.2		4 809
1988	CS7	1988	02	23.11493	07	49	54.14	+20	29	21.6	20.0	4 809
1988	CS7	1988	02	23.13229	07	49	53.71	+20	29	24.5		4 809
1988	CS7	1988	02	23.14965	07	49	53.13	+20	29	28.1		4 809
1988	DM	1988	02	21.21250	10	15	01.15	-00	12	15.3	18.5	4 809
1988	DM	1988	02	21.22118	10	15	00.67	-00	12	13.4		4 809
1988	DM	1988	02	21.22812	10	15	00.31	-00	12	11.5		4 809
1988	DN	1988	02	21.21250	10	15	00.81	-00	36	08.0	17.3	4 809
1988	DN	1988	02	21.22118	10	15	00.34	-00	36	04.8		4 809
1988	DN	1988	02	21.22812	10	14	59.98	-00	36	02.6		4 809
1988	DT1	1988	02	21.21250	09	58	17.28	+02	13	26.8	19.5	4 809
1988	DT1	1988	02	21.22118	09	58	16.83	+02	13	29.1		4 809
1988	DT1	1988	02	21.22812	09	58	16.39	+02	13	30.5		4 809
1988	DU1	1988	02	21.21250	10	02	23.15	+00	27	50.6	19.5	4 809
1988	DU1	1988	02	21.22118	10	02	22.68	+00	27	50.7		4 809
1988	DU1	1988	02	21.22812	10	02	22.30	+00	27	51.6		4 809
1988	DW1	1988	02	21.21250	10	03	53.49	-01	20	18.6	20.2	4 809
1988	DW1	1988	02	21.22118	10	03	52.98	-01	20	18.2		4 809
1988	DW1	1988	02	21.22812	10	03	52.60	-01	20	18.2		4 809
1988	DX1	1988	02	21.21250	10	06	34.09	-00	11	28.5	19.5	4 809

1988	DX1		1988	02	21.22118	10	06	33.43	-00	11	25.3		4 809
1988	DX1		1988	02	21.22812	10	06	33.08	-00	11	25.1		4 809
1988	DY1		1988	02	21.21250	10	07	06.15	+01	11	24.6	20.0	4 809
1988	DY1		1988	02	21.22118	10	07	05.62	+01	11	26.7		4 809
1988	DY1		1988	02	21.22812	10	07	05.20	+01	11	29.4		4 809
1988	DA2		1988	02	21.21250	10	12	23.33	+00	22	36.7	19.5	4 809
1988	DA2		1988	02	21.22118	10	12	22.95	+00	22	39.2		4 809
1988	DA2		1988	02	21.22812	10	12	22.62	+00	22	41.9		4 809
1988	DD2		1988	02	23.11493	07	33	51.04	+20	03	35.6	18.5	4 809
1988	DD2		1988	02	23.13229	07	33	50.60	+20	03	41.0		4 809
1988	DD2		1988	02	23.14965	07	33	50.14	+20	03	47.5		4 809
1988	DE2		1988	02	16.16181	07	42	15.54	+24	36	25.5	17.0	4 809
1988	DE2		1988	02	16.17222	07	42	15.25	+24	36	26.5		4 809
1988	DE2		1988	02	16.18264	07	42	14.88	+24	36	27.7		4 809
1988	DF2		1988	02	16.16181	07	43	30.10	+24	34	01.6	18.0	4 809
1988	DF2		1988	02	16.17222	07	43	29.74	+24	34	01.8		4 809
1988	DF2		1988	02	16.18264	07	43	29.34	+24	34	01.3		4 809
1988	DF2		1988	02	23.11493	07	40	01.64	+24	30	18.5	19.0	4 809
1988	DF2		1988	02	23.13229	07	40	01.21	+24	30	18.1		4 809
1988	DF2		1988	02	23.14965	07	40	00.73	+24	30	16.5		4 809
1988	DG2		1988	02	16.16181	07	43	42.52	+20	00	36.3	19.5	4 809
1988	DG2		1988	02	16.17222	07	43	42.10	+20	00	40.2		4 809
1988	DG2		1988	02	16.18264	07	43	41.69	+20	00	44.2		4 809
1988	DH2		1988	02	23.11493	07	41	53.03	+21	13	47.4	20.0	4 809
1988	DH2		1988	02	23.13229	07	41	52.56	+21	13	48.6		4 809
1988	DH2		1988	02	23.14965	07	41	52.08	+21	13	50.9		4 809
1988	DJ2		1988	02	16.16181	07	42	26.71	+22	05	01.5	19.7	4 809
1988	DJ2		1988	02	16.17222	07	42	26.28	+22	05	02.2		4 809
1988	DJ2		1988	02	16.18264	07	42	25.77	+22	05	04.6		4 809
1988	DJ2		1988	02	21.12535	07	39	40.75	+22	08	13.0	19.7	4 809
1988	DJ2		1988	02	21.14271	07	39	40.12	+22	08	13.9		4 809
1988	DJ2		1988	02	21.16007	07	39	39.47	+22	08	14.6		4 809
1988	DJ2		1988	02	23.11493	07	38	47.58	+22	08	56.5	20.0	4 809
1988	DJ2		1988	02	23.13229	07	38	47.10	+22	08	57.2		4 809
1988	DJ2		1988	02	23.14965	07	38	46.58	+22	08	57.0		4 809
1988	DK2	*	1988	02	16.20278	10	08	47.81	-01	32	47.7	19.0	4 809
1988	DK2		1988	02	16.21319	10	08	47.27	-01	32	43.7		4 809
1988	DK2		1988	02	16.22361	10	08	46.67	-01	32	42.2		4 809
1988	DK2		1988	02	21.21250	10	04	15.68	-01	06	01.1	20.0	4 809
1988	DK2		1988	02	21.22118	10	04	15.22	-01	05	59.2		4 809
1988	DK2		1988	02	21.22812	10	04	14.72	-01	05	57.0		4 809
1988	DL2	*	1988	02	21.12535	07	34	30.40	+20	28	49.1	19.5	4 809
1988	DL2		1988	02	21.14271	07	34	29.82	+20	28	49.8		4 809
1988	DL2		1988	02	21.16007	07	34	29.32	+20	28	51.1		4 809
1988	DL2		1988	02	23.11493	07	33	43.57	+20	32	16.6	19.8	4 809
1988	DL2		1988	02	23.13229	07	33	42.99	+20	32	17.4		4 809
1988	DL2		1988	02	23.14965	07	33	42.58	+20	32	20.5		4 809
1988	DM2	*	1988	02	21.12535	07	35	42.88	+24	24	05.7	19.5	4 809
1988	DM2		1988	02	21.14271	07	35	42.39	+24	24	06.2		4 809
1988	DM2		1988	02	21.16007	07	35	41.84	+24	24	05.8		4 809
1988	DM2		1988	02	23.11493	07	34	51.59	+24	24	13.2	19.5	4 809
1988	DM2		1988	02	23.13229	07	34	51.10	+24	24	12.8		4 809
1988	DM2		1988	02	23.14965	07	34	50.66	+24	24	13.2		4 809
1988	DN2	*	1988	02	21.12535	07	35	44.07	+24	25	17.9	18.8	4 809
1988	DN2		1988	02	21.14271	07	35	43.51	+24	25	17.2		4 809
1988	DN2		1988	02	21.16007	07	35	43.01	+24	25	15.4		4 809
1988	DN2		1988	02	23.11493	07	34	48.30	+24	22	32.1	18.8	4 809
1988	DN2		1988	02	23.13229	07	34	47.71	+24	22	31.1		4 809
1988	DN2		1988	02	23.14965	07	34	47.20	+24	22	28.5		4 809

1988	DO2		1988	02	16.16181	07	43	44.97	+19	29	08.6	17.5	4	809
1988	DO2		1988	02	16.17222	07	43	44.64	+19	29	11.2		4	809
1988	DO2		1988	02	16.18264	07	43	44.30	+19	29	14.6		4	809
1988	DO2	*	1988	02	21.12535	07	42	14.65	+19	47	31.6	17.5	4	809
1988	DO2		1988	02	21.14271	07	42	14.31	+19	47	35.1		4	809
1988	DO2		1988	02	21.16007	07	42	13.95	+19	47	39.4		4	809
1988	DO2		1988	02	23.11493	07	41	53.01	+19	54	06.4	17.2	4	809
1988	DO2		1988	02	23.13229	07	41	52.71	+19	54	09.4		4	809
1988	DO2		1988	02	23.14965	07	41	52.39	+19	54	14.0		4	809
1988	DP2	*	1988	02	21.12535	07	43	44.15	+22	58	14.5	19.5	4	809
1988	DP2		1988	02	21.14271	07	43	43.47	+22	58	14.7		4	809
1988	DP2		1988	02	21.16007	07	43	42.80	+22	58	16.6		4	809
1988	DP2		1988	02	23.11493	07	42	38.91	+22	59	51.3	20.0	4	809
1988	DP2		1988	02	23.13229	07	42	38.65	+22	59	51.6		4	809
1988	DP2		1988	02	23.14965	07	42	38.31	+22	59	52.2		4	809
1988	DR2	*	1988	02	21.12535	07	48	41.30	+21	39	26.7	19.6	4	809
1988	DR2		1988	02	21.14271	07	48	40.69	+21	39	26.4		4	809
1988	DR2		1988	02	21.16007	07	48	40.18	+21	39	26.9		4	809
1988	DR2		1988	02	23.11493	07	47	55.30	+21	38	46.2	20.0	4	809
1988	DR2		1988	02	23.13229	07	47	54.80	+21	38	46.8		4	809
1988	DR2		1988	02	23.14965	07	47	54.39	+21	38	46.2		4	809
1988	DS2	*	1988	02	21.12535	07	49	31.87	+23	54	17.8	19.7	4	809
1988	DS2		1988	02	21.14271	07	49	31.22	+23	54	19.1		4	809
1988	DS2		1988	02	21.16007	07	49	30.59	+23	54	18.4		4	809
1988	DS2		1988	02	23.11493	07	48	29.64	+23	55	02.1	20.0	4	809
1988	DS2		1988	02	23.13229	07	48	28.99	+23	55	02.3		4	809
1988	DS2		1988	02	23.14965	07	48	28.54	+23	55	04.5		4	809
1988	DT2	*	1988	02	21.21250	09	56	31.81	+00	39	54.7	19.3	4	809
1988	DT2		1988	02	21.22118	09	56	31.29	+00	39	57.9		4	809
1988	DT2		1988	02	21.22812	09	56	30.89	+00	39	59.5		4	809
1988	DT2		1988	02	23.17708	09	54	49.28	+00	48	43.1	19.0	4	809
1988	DT2		1988	02	23.18750	09	54	48.71	+00	48	46.1		4	809
1988	DT2		1988	02	23.19792	09	54	48.16	+00	48	48.4		4	809
1988	DU2	*	1988	02	21.21250	10	00	37.20	+02	05	53.1	20.0	4	809
1988	DU2		1988	02	21.22118	10	00	36.69	+02	05	58.3		4	809
1988	DU2		1988	02	21.22812	10	00	36.26	+02	06	01.4		4	809
1988	DU2		1988	02	23.17708	09	58	45.43	+02	18	56.9	20.0	4	809
1988	DU2		1988	02	23.18750	09	58	45.00	+02	19	02.6		4	809
1988	DU2		1988	02	23.19792	09	58	44.53	+02	19	07.3		4	809
1988	DV2	*	1988	02	21.21250	10	01	03.73	-00	46	15.5	20.5	4	809
1988	DV2		1988	02	21.22118	10	01	03.19	-00	46	14.7		4	809
1988	DV2		1988	02	21.22812	10	01	02.79	-00	46	14.2		4	809
1988	DV2		1988	02	23.17708	09	59	08.97	-00	44	11.3	20.0	4	809
1988	DV2		1988	02	23.18750	09	59	08.33	-00	44	11.5		4	809
1988	DV2		1988	02	23.19792	09	59	07.76	-00	44	11.7		4	809
1988	DW2	*	1988	02	21.21250	10	09	23.34	-01	45	33.4	20.0	4	809
1988	DW2		1988	02	21.22118	10	09	22.89	-01	45	30.8		4	809
1988	DW2		1988	02	21.22812	10	09	22.54	-01	45	29.3		4	809
1988	DW2		1988	02	23.17708	10	07	54.43	-01	34	28.9	19.5	4	809
1988	DW2		1988	02	23.18750	10	07	53.91	-01	34	25.5		4	809
1988	DW2		1988	02	23.19792	10	07	53.50	-01	34	23.2		4	809
1988	DX2	*	1988	02	21.21250	10	15	43.46	-00	57	37.9	19.8	4	809
1988	DX2		1988	02	21.22118	10	15	43.00	-00	57	34.9		4	809
1988	DX2		1988	02	21.22812	10	15	42.60	-00	57	33.1		4	809
1988	DX2		1988	02	23.17708	10	13	52.01	-00	46	46.3	19.5	4	809
1988	DX2		1988	02	23.18750	10	13	51.42	-00	46	43.4		4	809
1988	DX2		1988	02	23.19792	10	13	50.81	-00	46	41.3		4	809
1988	DY2	*	1988	02	21.21250	10	16	21.09	+00	39	32.4	20.0	4	809
1988	DY2		1988	02	21.22118	10	16	20.52	+00	39	35.6		4	809

1988	DY2		1988	02	21.22812	10	16	20.11	+00	39	37.6	4 809
1988	DY2		1988	02	23.17708	10	14	17.65	+00	49	32.0	19.0 4 809
1988	DY2		1988	02	23.18750	10	14	17.03	+00	49	35.6	4 809
1988	DY2		1988	02	23.19792	10	14	16.39	+00	49	37.3	4 809
1988	DZ2	*	1988	02	16.16181	07	39	39.13	+23	04	51.2	20.0 4 809
1988	DZ2		1988	02	16.17222	07	39	38.74	+23	04	51.4	4 809
1988	DZ2		1988	02	16.18264	07	39	38.22	+23	04	52.9	4 809
1988	DZ2		1988	02	23.11493	07	35	34.48	+23	12	21.6	20.0 4 809
1988	DZ2		1988	02	23.13229	07	35	33.90	+23	12	23.6	4 809
1988	DZ2		1988	02	23.14965	07	35	33.38	+23	12	23.5	4 809
1988	DA3	*	1988	02	16.20278	10	12	12.92	+00	28	36.9	19.5 4 809
1988	DA3		1988	02	16.21319	10	12	12.29	+00	28	39.6	4 809
1988	DA3		1988	02	16.22361	10	12	11.67	+00	28	42.3	4 809
1988	DA3		1988	02	23.17708	10	05	04.93	+01	00	37.4	19.8 4 809
1988	DA3		1988	02	23.18750	10	05	04.37	+01	00	39.1	4 809
1988	DA3		1988	02	23.19792	10	05	03.83	+01	00	40.4	4 809
1988	DB3	*	1988	02	16.20278	10	14	05.89	-01	58	55.3	19.0 4 809
1988	DB3		1988	02	16.21319	10	14	05.26	-01	58	54.3	4 809
1988	DB3		1988	02	16.22361	10	14	04.73	-01	58	53.0	4 809
1988	DB3		1988	02	21.21250	10	10	24.29	-01	46	36.0	20.0 4 809
1988	DB3		1988	02	21.22118	10	10	23.74	-01	46	35.6	4 809
1988	DB3		1988	02	21.22812	10	10	23.29	-01	46	35.8	4 809
1988	DC3	*	1988	02	21.21250	10	12	55.97	+02	02	39.9	20.0 4 809
1988	DC3		1988	02	21.22118	10	12	55.41	+02	02	43.3	4 809
1988	DC3		1988	02	21.22812	10	12	55.00	+02	02	44.7	4 809
1988	DC3		1988	02	23.17708	10	11	00.11	+02	11	30.4	19.7 4 809
1988	DC3		1988	02	23.18750	10	10	59.47	+02	11	34.0	4 809
1988	DC3		1988	02	23.19792	10	10	58.80	+02	11	35.6	4 809
1988	KA		1988	05	22.32222	20	49	22.49	-19	02	16.2	15 2 809
1988	KA		1988	05	22.33611	20	49	23.49	-19	02	14.2	2 809
1988	KA		1988	05	23.23717	20	50	37.59	-19	00	28.2	15 2 809
1120	T-3		1988	02	16.16181	07	40	51.80	+19	54	51.5	18.5 4 809
1120	T-3		1988	02	16.17222	07	40	51.51	+19	54	51.9	4 809
1120	T-3		1988	02	16.18264	07	40	51.10	+19	54	51.3	4 809
1120	T-3		1988	02	21.12535	07	38	18.19	+19	50	01.8	19.5 4 809
1120	T-3		1988	02	21.14271	07	38	17.70	+19	50	00.3	4 809
1120	T-3		1988	02	21.16007	07	38	17.05	+19	49	58.6	4 809
1120	T-3		1988	02	23.11493	07	37	28.56	+19	47	48.7	19.0 4 809
1120	T-3		1988	02	23.13229	07	37	28.04	+19	47	47.9	4 809
1120	T-3		1988	02	23.14965	07	37	27.50	+19	47	46.7	4 809
16			1987	02	23.30729	10	52	23.28	+07	57	10.6	3 809
16			1987	02	23.31215	10	52	23.05	+07	57	12.0	3 809
16			1987	02	23.31701	10	52	22.83	+07	57	13.4	3 809
47			1987	02	27.16493	10	33	16.52	+12	36	53.5	3 809
47			1987	02	27.16979	10	33	16.28	+12	36	54.3	3 809
47			1987	02	27.17465	10	33	16.04	+12	36	55.5	3 809
47			1987	03	02.16424	10	30	43.95	+12	48	02.9	3 809
47			1987	03	02.16910	10	30	43.72	+12	48	04.0	3 809
47			1987	03	02.17396	10	30	43.49	+12	48	05.0	3 809
47			1987	03	03.15660	10	29	53.72	+12	51	39.6	3 809
47			1987	03	03.16146	10	29	53.46	+12	51	40.3	3 809
47			1987	03	03.16632	10	29	53.19	+12	51	41.1	3 809
47			1987	03	04.13507	10	29	04.36	+12	55	09.2	3 809
47			1987	03	04.13993	10	29	04.14	+12	55	10.3	3 809
47			1987	03	04.14479	10	29	03.87	+12	55	11.2	3 809
47			1987	03	05.18715	10	28	11.50	+12	58	50.2	3 809
47			1987	03	05.19201	10	28	11.23	+12	58	51.3	3 809
47			1987	03	05.19688	10	28	10.96	+12	58	52.3	3 809
47			1987	03	06.17465	10	27	22.27	+13	02	14.3	3 809

47	1987	03	06.18090	10	27	21.97	+13	02	15.3	3 809
47	1987	03	06.18715	10	27	21.68	+13	02	16.3	3 809
47	1987	03	07.21493	10	26	30.71	+13	05	44.1	3 809
47	1987	03	07.22118	10	26	30.42	+13	05	45.2	3 809
47	1987	03	07.22743	10	26	30.11	+13	05	46.4	3 809
63	1987	02	22.29618	10	37	20.50	+09	04	37.8	3 809
63	1987	02	22.30104	10	37	20.22	+09	04	39.0	3 809
63	1987	02	22.30590	10	37	19.94	+09	04	39.7	3 809
63	1987	02	23.20729	10	36	24.62	+09	07	48.8	3 809
63	1987	02	23.21215	10	36	24.31	+09	07	49.5	3 809
63	1987	02	23.21701	10	36	24.00	+09	07	50.7	3 809
63	1987	02	24.22465	10	35	21.57	+09	11	23.7	3 809
63	1987	02	24.22951	10	35	21.28	+09	11	24.7	3 809
63	1987	02	24.23438	10	35	20.98	+09	11	25.8	3 809
63	1987	02	26.05868	10	33	27.48	+09	17	49.6	3 809
63	1987	02	26.06354	10	33	27.20	+09	17	50.6	3 809
63	1987	02	26.06840	10	33	26.93	+09	17	51.6	3 809
63	1987	02	27.11076	10	32	21.51	+09	21	31.6	3 809
63	1987	02	27.11562	10	32	21.21	+09	21	33.0	3 809
63	1987	02	27.12049	10	32	20.91	+09	21	34.1	3 809
63	1987	02	28.08819	10	31	20.20	+09	24	57.4	3 809
63	1987	02	28.09340	10	31	19.87	+09	24	58.6	3 809
63	1987	02	28.09861	10	31	19.53	+09	24	59.6	3 809
63	1987	03	01.11979	10	30	15.48	+09	28	32.8	3 809
63	1987	03	01.12465	10	30	15.20	+09	28	33.8	3 809
63	1987	03	01.12951	10	30	14.89	+09	28	34.6	3 809
63	1987	03	02.11146	10	29	13.36	+09	31	58.0	3 809
63	1987	03	02.11632	10	29	13.05	+09	31	59.3	3 809
63	1987	03	02.12118	10	29	12.76	+09	32	00.0	3 809
63	1987	03	04.08160	10	27	10.60	+09	38	41.0	3 809
63	1987	03	04.08646	10	27	10.31	+09	38	42.2	3 809
63	1987	03	04.09132	10	27	10.00	+09	38	42.9	3 809
63	1987	03	05.08646	10	26	08.40	+09	42	02.7	3 809
63	1987	03	05.09271	10	26	08.04	+09	42	03.9	3 809
63	1987	03	05.09896	10	26	07.65	+09	42	05.0	3 809
63	1987	03	05.15590	10	26	03.96	+09	42	16.2	3 809
63	1987	03	05.15937	10	26	03.74	+09	42	16.9	3 809
63	1987	03	05.16285	10	26	03.52	+09	42	17.8	3 809
63	1987	03	06.25278	10	24	56.37	+09	45	52.5	3 809
63	1987	03	06.25556	10	24	56.23	+09	45	53.2	3 809
63	1987	03	06.25833	10	24	56.05	+09	45	54.0	3 809
63	1987	03	07.33194	10	23	50.57	+09	49	21.7	3 809
63	1987	03	07.33472	10	23	50.39	+09	49	21.9	3 809
63	1987	03	07.33750	10	23	50.20	+09	49	22.2	3 809
63	1987	03	08.25521	10	22	54.97	+09	52	17.4	3 809
63	1987	03	08.26146	10	22	54.60	+09	52	18.5	3 809
63	1987	03	08.26771	10	22	54.24	+09	52	19.5	3 809
63	1987	03	09.26146	10	21	54.94	+09	55	23.9	3 809
63	1987	03	09.26771	10	21	54.57	+09	55	25.1	3 809
63	1987	03	09.27396	10	21	54.21	+09	55	26.2	3 809
63	1987	03	11.13403	10	20	05.34	+10	01	01.8	3 809
63	1987	03	11.13958	10	20	05.01	+10	01	02.8	3 809
63	1987	03	11.14514	10	20	04.68	+10	01	03.5	3 809
75	1987	02	24.12153	11	17	03.53	+06	37	04.8	3 809
75	1987	02	24.12708	11	17	03.26	+06	37	06.3	3 809
75	1987	02	24.13264	11	17	03.00	+06	37	07.8	3 809
84	1987	03	09.07639	09	32	48.65	+13	55	16.7	3 809
84	1987	03	09.08056	09	32	48.44	+13	55	16.9	3 809
84	1987	03	09.08472	09	32	48.22	+13	55	17.2	3 809

84		1987	03	10.14792	09	31	55.64	+13	56	55.5		3 809
84		1987	03	10.15208	09	31	55.43	+13	56	56.0		3 809
84		1987	03	10.15625	09	31	55.23	+13	56	56.5		3 809
84		1987	03	11.28194	09	31	01.05	+13	58	31.3		3 809
84		1987	03	11.28611	09	31	00.87	+13	58	31.7		3 809
84		1987	03	11.29028	09	31	00.66	+13	58	32.2		3 809
101		1987	02	26.33090	11	42	04.14	+00	05	31.2		3 809
101		1987	02	26.33576	11	42	03.91	+00	05	31.7		3 809
101		1987	02	26.34062	11	42	03.65	+00	05	32.3		3 809
166		1988	02	16.16181	07	43	08.48	+20	18	57.1	16.0	4 809
166		1988	02	16.17222	07	43	08.01	+20	19	01.5		4 809
166		1988	02	16.18264	07	43	07.54	+20	19	05.6		4 809
166		1988	02	23.11493	07	40	02.86	+20	58	32.2	15.0	4 809
166		1988	02	23.13229	07	40	02.35	+20	58	37.4		4 809
166		1988	02	23.14965	07	40	01.87	+20	58	43.9		4 809
169		1987	02	26.30729	11	43	09.92	+02	50	36.5		3 809
169		1987	02	26.31215	11	43	09.65	+02	50	37.9		3 809
169		1987	02	26.31701	11	43	09.38	+02	50	39.1		3 809
169		1987	02	27.36215	11	42	14.41	+02	54	32.3		3 809
169		1987	02	27.36701	11	42	14.15	+02	54	33.7		3 809
169		1987	02	27.37187	11	42	13.88	+02	54	34.7		3 809
169		1987	02	28.31840	11	41	23.18	+02	58	12.4		3 809
169		1987	02	28.32326	11	41	22.92	+02	58	13.5		3 809
169		1987	02	28.32813	11	41	22.64	+02	58	14.4		3 809
192		1987	02	24.35104	10	59	18.18	+07	00	11.0		3 809
192		1987	02	24.35590	10	59	17.87	+07	00	12.3		3 809
192		1987	02	24.36076	10	59	17.57	+07	00	13.8		3 809
201		1987	02	23.30729	10	49	46.84	+07	45	37.1		3 809
201		1987	02	23.31215	10	49	46.60	+07	45	38.8		3 809
201		1987	02	23.31701	10	49	46.37	+07	45	40.3		3 809
271		1988	02	16.16181	07	49	28.39	+23	41	18.0	16.0	4 809
271		1988	02	16.17222	07	49	27.90	+23	41	18.3		4 809
271		1988	02	16.18264	07	49	27.52	+23	41	18.7		4 809
271		1988	02	23.11493	07	45	46.41	+23	40	37.7	16.5	4 809
271		1988	02	23.13229	07	45	45.85	+23	40	37.3		4 809
271		1988	02	23.14965	07	45	45.26	+23	40	37.3		4 809
315		1987	02	21.07882	09	36	19.74	+13	10	01.0		3 809
315		1987	02	21.08368	09	36	19.45	+13	10	02.8		3 809
315		1987	02	21.08854	09	36	19.16	+13	10	04.4		3 809
315		1987	02	22.08646	09	35	19.31	+13	15	59.2		3 809
315		1987	02	22.09132	09	35	19.02	+13	16	00.7		3 809
315		1987	02	22.09618	09	35	18.71	+13	16	02.3		3 809
315		1987	02	25.08924	09	32	23.08	+13	33	23.4		3 809
315		1987	02	25.09410	09	32	22.83	+13	33	25.2		3 809
315		1987	02	25.09896	09	32	22.59	+13	33	27.0		3 809
315		1987	02	27.03993	09	30	32.41	+13	44	22.0		3 809
315		1987	02	27.04479	09	30	32.13	+13	44	23.5		3 809
315		1987	02	27.04965	09	30	31.84	+13	44	25.4		3 809
315		1987	03	01.06528	09	28	41.02	+13	55	25.4		3 809
315		1987	03	01.07222	09	28	40.65	+13	55	27.8		3 809
315		1987	03	01.07917	09	28	40.26	+13	55	30.1		3 809
315		1987	03	02.05035	09	27	48.38	+14	00	38.3		3 809
315		1987	03	02.05555	09	27	48.11	+14	00	40.0		3 809
315		1987	03	02.06076	09	27	47.84	+14	00	41.8		3 809
315		1987	03	03.03437	09	26	56.90	+14	05	46.9		3 809
315		1987	03	03.03924	09	26	56.64	+14	05	48.3		3 809
315		1987	03	03.04410	09	26	56.39	+14	05	49.9		3 809
315		1987	03	04.02986	09	26	05.83	+14	10	52.2		3 809
315		1987	03	04.03403	09	26	05.61	+14	10	53.5		3 809

315	1987	03	04.03819	09	26	05.38	+14	10	54.8		3	809
315	1987	03	05.02153	09	25	16.28	+14	15	49.9		3	809
315	1987	03	05.02569	09	25	16.04	+14	15	51.4		3	809
315	1987	03	05.02986	09	25	15.82	+14	15	52.8		3	809
315	1987	03	06.02083	09	24	27.47	+14	20	43.2		3	809
315	1987	03	06.02500	09	24	27.31	+14	20	44.5		3	809
315	1987	03	06.02917	09	24	27.13	+14	20	45.6		3	809
426	1988	02	16.16181	07	48	50.03	+23	57	27.5	15.0	4	809
426	1988	02	16.17222	07	48	49.46	+23	57	23.2		4	809
426	1988	02	16.18264	07	48	48.88	+23	57	20.0		4	809
426	1988	02	23.11493	07	43	58.57	+23	16	04.6	15.0	4	809
426	1988	02	23.13229	07	43	57.87	+23	15	58.4		4	809
426	1988	02	23.14965	07	43	57.09	+23	15	52.1		4	809
435	1988	02	16.16181	07	43	02.71	+24	02	12.7	16.0	4	809
435	1988	02	16.17222	07	43	02.27	+24	02	12.9		4	809
435	1988	02	16.18264	07	43	01.80	+24	02	13.5		4	809
435	1988	02	23.11493	07	39	07.41	+24	05	22.7	16.0	4	809
435	1988	02	23.13229	07	39	06.81	+24	05	22.5		4	809
435	1988	02	23.14965	07	39	06.27	+24	05	23.0		4	809
500	1988	02	21.21250	10	05	10.96	+01	04	33.2	15.5	4	809
500	1988	02	21.22118	10	05	10.45	+01	04	35.1		4	809
500	1988	02	21.22812	10	05	10.02	+01	04	36.3		4	809
606	1987	02	21.07882	09	37	34.91	+12	23	19.7		3	809
606	1987	02	21.08368	09	37	34.62	+12	23	20.2		3	809
606	1987	02	21.08854	09	37	34.33	+12	23	21.2		3	809
606	1987	02	22.08646	09	36	36.27	+12	25	39.7		3	809
606	1987	02	22.09132	09	36	36.00	+12	25	40.4		3	809
606	1987	02	22.09618	09	36	35.69	+12	25	40.8		3	809
606	1987	02	25.08924	09	33	45.47	+12	32	21.7		3	809
606	1987	02	25.09410	09	33	45.21	+12	32	22.2		3	809
606	1987	02	25.09896	09	33	44.96	+12	32	22.8		3	809
606	1987	02	27.03993	09	31	58.14	+12	36	29.8		3	809
606	1987	02	27.04479	09	31	57.87	+12	36	30.5		3	809
606	1987	02	27.04965	09	31	57.61	+12	36	31.1		3	809
606	1987	03	01.06528	09	30	10.16	+12	40	34.1		3	809
606	1987	03	01.07222	09	30	09.80	+12	40	34.8		3	809
606	1987	03	01.07917	09	30	09.44	+12	40	35.5		3	809
606	1987	03	02.05035	09	29	19.10	+12	42	29.5		3	809
606	1987	03	02.05555	09	29	18.84	+12	42	30.0		3	809
606	1987	03	02.06076	09	29	18.55	+12	42	30.6		3	809
606	1987	03	03.03437	09	28	29.18	+12	44	18.3		3	809
606	1987	03	03.03924	09	28	28.93	+12	44	18.9		3	809
606	1987	03	03.04410	09	28	28.66	+12	44	19.6		3	809
606	1987	03	04.02986	09	27	39.62	+12	46	05.6		3	809
606	1987	03	04.03403	09	27	39.41	+12	46	05.9		3	809
606	1987	03	04.03819	09	27	39.19	+12	46	06.8		3	809
606	1987	03	05.02153	09	26	51.40	+12	47	49.0		3	809
606	1987	03	05.02569	09	26	51.20	+12	47	49.8		3	809
606	1987	03	05.02986	09	26	50.99	+12	47	50.1		3	809
606	1987	03	06.02083	09	26	03.89	+12	49	29.6		3	809
606	1987	03	06.02500	09	26	03.72	+12	49	29.9		3	809
606	1987	03	06.02917	09	26	03.55	+12	49	30.2		3	809
606	1987	03	08.20903	09	24	23.94	+12	52	51.9		3	809
606	1987	03	08.21319	09	24	23.77	+12	52	52.2		3	809
606	1987	03	08.21736	09	24	23.58	+12	52	52.6		3	809
761	1988	02	16.16181	07	49	38.52	+24	06	36.6	16.5	4	809
761	1988	02	16.17222	07	49	38.12	+24	06	37.4		4	809
761	1988	02	16.18264	07	49	37.64	+24	06	38.7		4	809
761	1988	02	23.11493	07	45	42.20	+24	11	03.1	16.2	4	809

761	1988	02	23.13229	07	45	41.60	+24	11	03.9		4	809
761	1988	02	23.14965	07	45	41.02	+24	11	04.8		4	809
831	1987	02	26.33090	11	48	11.89	-00	04	07.7		3	809
831	1987	02	26.33576	11	48	11.63	-00	04	05.7		3	809
831	1987	02	26.34062	11	48	11.36	-00	04	03.6		3	809
847	1987	02	20.05313	08	44	01.62	+15	20	43.6		3	809
847	1987	02	20.05799	08	44	01.41	+15	20	44.3		3	809
847	1987	02	20.06285	08	44	01.17	+15	20	45.1		3	809
847	1987	02	22.06632	08	42	32.74	+15	26	16.0		3	809
847	1987	02	22.07118	08	42	32.54	+15	26	16.9		3	809
847	1987	02	22.07604	08	42	32.31	+15	26	17.6		3	809
847	1987	02	23.10590	08	41	48.57	+15	29	02.2		3	809
847	1987	02	23.11076	08	41	48.34	+15	29	02.9		3	809
847	1987	02	23.11562	08	41	48.12	+15	29	03.9		3	809
850	1988	02	16.16181	07	46	53.46	+22	17	16.9	16.0	4	809
850	1988	02	16.17222	07	46	52.98	+22	17	20.7		4	809
850	1988	02	16.18264	07	46	52.52	+22	17	23.8		4	809
850	1988	02	23.11493	07	43	02.46	+22	50	15.7	16.0	4	809
850	1988	02	23.13229	07	43	01.91	+22	50	21.2		4	809
850	1988	02	23.14965	07	43	01.31	+22	50	25.9		4	809
869	1987	02	19.09097	08	50	27.67	+14	01	10.5		3	809
869	1987	02	19.09479	08	50	27.49	+14	01	11.9		3	809
869	1987	02	19.11181	08	50	26.66	+14	01	18.0		3	809
985	1987	03	03.35035	11	39	40.57	-03	36	27.5		3	809
985	1987	03	03.35521	11	39	40.30	-03	36	26.4		3	809
985	1987	03	03.36007	11	39	40.07	-03	36	25.4		3	809
985	1987	03	04.34201	11	38	46.45	-03	31	49.8		3	809
985	1987	03	04.34688	11	38	46.19	-03	31	48.8		3	809
985	1987	03	04.35174	11	38	45.92	-03	31	47.4		3	809
985	1987	03	05.34896	11	37	50.72	-03	27	00.7		3	809
985	1987	03	05.35382	11	37	50.47	-03	26	59.5		3	809
985	1987	03	05.35868	11	37	50.21	-03	26	58.2		3	809
1070	1987	02	24.36701	11	05	10.38	+04	40	00.4		3	809
1070	1987	02	24.37187	11	05	10.19	+04	40	02.6		3	809
1070	1987	02	24.37674	11	05	10.00	+04	40	04.7		3	809
1070	1987	02	25.34757	11	04	32.71	+04	47	33.0		3	809
1070	1987	02	25.35243	11	04	32.49	+04	47	35.4		3	809
1070	1987	02	25.35729	11	04	32.30	+04	47	37.7		3	809
1070	1987	02	28.21771	11	02	40.99	+05	09	54.4		3	809
1070	1987	02	28.22257	11	02	40.80	+05	09	56.7		3	809
1070	1987	02	28.22743	11	02	40.61	+05	09	59.4		3	809
1070	1987	03	02.27465	11	01	19.43	+05	26	06.4		3	809
1070	1987	03	02.27951	11	01	19.23	+05	26	08.7		3	809
1070	1987	03	02.28438	11	01	19.04	+05	26	11.0		3	809
1070	1987	03	03.26771	11	00	39.85	+05	33	58.5		3	809
1070	1987	03	03.27257	11	00	39.65	+05	34	00.8		3	809
1070	1987	03	03.27743	11	00	39.44	+05	34	02.9		3	809
1070	1987	03	04.25868	11	00	00.37	+05	41	49.8		3	809
1070	1987	03	04.26354	11	00	00.18	+05	41	51.7		3	809
1070	1987	03	04.26840	10	59	59.98	+05	41	54.0		3	809
1097	1987	02	24.35104	11	04	00.08	+07	06	18.9		3	809
1097	1987	02	24.35590	11	03	59.83	+07	06	20.5		3	809
1097	1987	02	24.36076	11	03	59.58	+07	06	21.7		3	809
1097	1987	02	25.33090	11	03	11.44	+07	11	44.7		3	809
1097	1987	02	25.33576	11	03	11.20	+07	11	46.7		3	809
1097	1987	02	25.34062	11	03	10.95	+07	11	48.4		3	809
1097	1987	02	27.23993	11	01	35.86	+07	22	27.0		3	809
1097	1987	02	27.24479	11	01	35.62	+07	22	28.8		3	809
1097	1987	02	27.24965	11	01	35.38	+07	22	30.8		3	809

1097	1987	03	01.27951	10	59	51.79	+07	33	58.6	3 809
1097	1987	03	01.28472	10	59	51.52	+07	34	00.4	3 809
1097	1987	03	01.28993	10	59	51.24	+07	34	01.8	3 809
1152	1987	02	22.29618	10	38	03.59	+07	57	28.7	3 809
1152	1987	02	22.30104	10	38	03.31	+07	57	29.7	3 809
1152	1987	02	22.30590	10	38	03.01	+07	57	30.6	3 809
1152	1987	02	23.20729	10	37	08.97	+08	00	21.9	3 809
1152	1987	02	23.21215	10	37	08.68	+08	00	22.5	3 809
1152	1987	02	23.21701	10	37	08.38	+08	00	23.8	3 809
1152	1987	02	26.07674	10	34	14.94	+08	09	33.5	3 809
1152	1987	02	26.08160	10	34	14.64	+08	09	34.8	3 809
1152	1987	02	26.08646	10	34	14.35	+08	09	35.8	3 809
1152	1987	02	27.12813	10	33	10.65	+08	12	57.9	3 809
1152	1987	02	27.13310	10	33	10.35	+08	12	58.7	3 809
1152	1987	02	27.13808	10	33	10.05	+08	12	59.5	3 809
1152	1987	02	28.11076	10	32	10.69	+08	16	07.6	3 809
1152	1987	02	28.11562	10	32	10.38	+08	16	08.6	3 809
1152	1987	02	28.12049	10	32	10.08	+08	16	09.8	3 809
1152	1987	03	01.15243	10	31	07.08	+08	19	29.5	3 809
1152	1987	03	01.15729	10	31	06.77	+08	19	30.3	3 809
1152	1987	03	01.16215	10	31	06.47	+08	19	31.5	3 809
1152	1987	03	02.13021	10	30	07.69	+08	22	37.3	3 809
1152	1987	03	02.13507	10	30	07.41	+08	22	38.4	3 809
1152	1987	03	02.13993	10	30	07.11	+08	22	39.1	3 809
1152	1987	03	03.12257	10	29	07.65	+08	25	46.9	3 809
1152	1987	03	03.12743	10	29	07.35	+08	25	47.7	3 809
1152	1987	03	03.13229	10	29	07.06	+08	25	48.9	3 809
1152	1987	03	04.10104	10	28	08.74	+08	28	51.6	3 809
1152	1987	03	04.10590	10	28	08.43	+08	28	52.4	3 809
1152	1987	03	04.11076	10	28	08.14	+08	28	53.4	3 809
1152	1987	03	05.12639	10	27	07.31	+08	32	03.3	3 809
1152	1987	03	05.13194	10	27	06.98	+08	32	04.4	3 809
1152	1987	03	05.13750	10	27	06.65	+08	32	05.4	3 809
1152	1987	03	06.13958	10	26	07.14	+08	35	10.5	3 809
1152	1987	03	06.14514	10	26	06.84	+08	35	11.3	3 809
1152	1987	03	06.15069	10	26	06.54	+08	35	12.1	3 809
1152	1987	03	07.17812	10	25	06.06	+08	38	18.4	3 809
1152	1987	03	07.18437	10	25	05.73	+08	38	19.5	3 809
1152	1987	03	07.19062	10	25	05.39	+08	38	20.6	3 809
1152	1987	03	09.28090	10	23	04.80	+08	44	29.6	3 809
1152	1987	03	09.28715	10	23	04.47	+08	44	30.7	3 809
1152	1987	03	09.29340	10	23	04.13	+08	44	31.9	3 809
1223	1987	02	23.26701	10	43	26.94	+11	51	13.7	3 809
1223	1987	02	23.27188	10	43	26.70	+11	51	14.9	3 809
1223	1987	02	23.27674	10	43	26.45	+11	51	16.2	3 809
1223	1987	02	24.25868	10	42	37.20	+11	55	54.6	3 809
1223	1987	02	24.26354	10	42	36.95	+11	55	56.2	3 809
1223	1987	02	24.26840	10	42	36.71	+11	55	57.2	3 809
1223	1987	02	26.09549	10	41	04.63	+12	04	30.1	3 809
1223	1987	02	26.10035	10	41	04.41	+12	04	31.5	3 809
1223	1987	02	26.10521	10	41	04.18	+12	04	33.0	3 809
1223	1987	02	27.16493	10	40	10.45	+12	09	27.8	3 809
1223	1987	02	27.16979	10	40	10.20	+12	09	28.9	3 809
1223	1987	02	27.17465	10	40	09.97	+12	09	30.3	3 809
1223	1987	03	02.16424	10	37	38.42	+12	23	04.4	3 809
1223	1987	03	02.16910	10	37	38.19	+12	23	05.9	3 809
1223	1987	03	02.17396	10	37	37.92	+12	23	07.2	3 809
1223	1987	03	03.15660	10	36	48.38	+12	27	27.4	3 809
1223	1987	03	03.16146	10	36	48.12	+12	27	28.7	3 809

1223	1987	03	03.16632	10	36	47.86	+12	27	30.0		3 809
1223	1987	03	04.13507	10	35	59.25	+12	31	42.7		3 809
1223	1987	03	04.13993	10	35	59.01	+12	31	44.0		3 809
1223	1987	03	04.14479	10	35	58.77	+12	31	45.6		3 809
1223	1987	03	05.18715	10	35	06.60	+12	36	14.1		3 809
1223	1987	03	05.19201	10	35	06.35	+12	36	15.5		3 809
1223	1987	03	05.19688	10	35	06.11	+12	36	16.4		3 809
1223	1987	03	06.17465	10	34	17.58	+12	40	23.6		3 809
1223	1987	03	06.18090	10	34	17.29	+12	40	25.0		3 809
1223	1987	03	06.18715	10	34	17.00	+12	40	26.6		3 809
1223	1987	03	07.21493	10	33	26.16	+12	44	41.0		3 809
1223	1987	03	07.22118	10	33	25.84	+12	44	42.6		3 809
1223	1987	03	07.22743	10	33	25.52	+12	44	44.2		3 809
1269	1988	02	16.16181	07	49	42.67	+20	21	49.0	16.0	4 809
1269	1988	02	16.17222	07	49	42.23	+20	21	51.0		4 809
1269	1988	02	16.18264	07	49	41.82	+20	21	52.9		4 809
1269	1988	02	23.11493	07	46	34.12	+20	34	45.7	15.5	4 809
1269	1988	02	23.13229	07	46	33.59	+20	34	47.8		4 809
1269	1988	02	23.14965	07	46	33.01	+20	34	50.1		4 809
1287	1988	02	21.21250	10	11	15.43	-00	48	33.5	16.0	4 809
1287	1988	02	21.22118	10	11	15.05	-00	48	30.2		4 809
1287	1988	02	21.22812	10	11	14.68	-00	48	27.2		4 809
1302	1987	02	23.26701	10	45	48.86	+11	46	17.2		3 809
1302	1987	02	23.27188	10	45	48.64	+11	46	19.0		3 809
1302	1987	02	23.27674	10	45	48.40	+11	46	20.4		3 809
1302	1987	02	24.25868	10	45	02.17	+11	51	23.6		3 809
1302	1987	02	24.26354	10	45	01.96	+11	51	25.1		3 809
1302	1987	02	24.26840	10	45	01.72	+11	51	26.2		3 809
1302	1987	02	26.09549	10	43	35.38	+12	00	46.0		3 809
1302	1987	02	26.10035	10	43	35.15	+12	00	47.4		3 809
1302	1987	02	26.10521	10	43	34.92	+12	00	48.8		3 809
1358	1988	02	16.16181	07	49	28.83	+24	09	32.9	17.0	4 809
1358	1988	02	16.17222	07	49	28.30	+24	09	33.6		4 809
1358	1988	02	16.18264	07	49	27.83	+24	09	34.3		4 809
1358	1988	02	23.11493	07	44	57.09	+24	14	50.2	16.9	4 809
1358	1988	02	23.13229	07	44	56.41	+24	14	51.0		4 809
1358	1988	02	23.14965	07	44	55.76	+24	14	51.8		4 809
1361	1987	02	24.36701	11	02	07.83	+04	37	19.5		3 809
1361	1987	02	24.37187	11	02	07.63	+04	37	22.2		3 809
1361	1987	02	24.37674	11	02	07.46	+04	37	24.8		3 809
1361	1987	02	25.34757	11	01	28.91	+04	45	54.8		3 809
1361	1987	02	25.35243	11	01	28.71	+04	45	57.4		3 809
1361	1987	02	25.35729	11	01	28.52	+04	46	00.0		3 809
1361	1987	02	28.21771	10	59	33.35	+05	11	24.6		3 809
1361	1987	02	28.22257	10	59	33.14	+05	11	27.1		3 809
1361	1987	02	28.22743	10	59	32.94	+05	11	29.9		3 809
1361	1987	03	02.27465	10	58	09.19	+05	29	51.6		3 809
1361	1987	03	02.27951	10	58	09.02	+05	29	54.1		3 809
1361	1987	03	02.28438	10	58	08.81	+05	29	56.6		3 809
1361	1987	03	03.26771	10	57	28.27	+05	38	48.5		3 809
1361	1987	03	03.27257	10	57	28.07	+05	38	51.2		3 809
1361	1987	03	03.27743	10	57	27.89	+05	38	53.4		3 809
1361	1987	03	04.25868	10	56	47.51	+05	47	44.0		3 809
1361	1987	03	04.26354	10	56	47.32	+05	47	47.0		3 809
1361	1987	03	04.26840	10	56	47.12	+05	47	49.5		3 809
1361	1987	03	05.16979	10	56	10.02	+05	55	56.5		3 809
1361	1987	03	05.17465	10	56	09.82	+05	55	59.0		3 809
1361	1987	03	05.17951	10	56	09.62	+05	56	01.6		3 809
1361	1987	03	07.34653	10	54	40.15	+06	15	35.0		3 809

1361	1987	03	07.35208	10	54	39.93	+06	15	37.9		3 809
1361	1987	03	07.35764	10	54	39.70	+06	15	40.8		3 809
1361	1987	03	10.25347	10	52	41.07	+06	41	43.6		3 809
1361	1987	03	10.25903	10	52	40.88	+06	41	46.6		3 809
1361	1987	03	10.26458	10	52	40.66	+06	41	49.7		3 809
1376	1987	02	24.36701	10	58	53.61	+06	13	09.7		3 809
1376	1987	02	24.37187	10	58	53.32	+06	13	11.7		3 809
1376	1987	02	24.37674	10	58	53.05	+06	13	13.8		3 809
1376	1987	02	25.34757	10	57	57.55	+06	20	11.5		3 809
1376	1987	02	25.35243	10	57	57.28	+06	20	13.6		3 809
1376	1987	02	25.35729	10	57	57.00	+06	20	15.7		3 809
1406	1987	02	26.23611	11	36	59.80	-03	23	49.2		3 809
1406	1987	02	26.24167	11	36	59.49	-03	23	48.9		3 809
1406	1987	02	26.24722	11	36	59.19	-03	23	48.5		3 809
1406	1987	02	27.37847	11	35	58.59	-03	23	08.0		3 809
1406	1987	02	27.38299	11	35	58.32	-03	23	07.4		3 809
1406	1987	02	27.38750	11	35	58.05	-03	23	07.0		3 809
1485	1988	02	16.16181	07	49	43.14	+19	32	49.8	17.5	4 809
1485	1988	02	16.17222	07	49	42.64	+19	32	49.9		4 809
1485	1988	02	16.18264	07	49	42.14	+19	32	51.0		4 809
1485	1988	02	23.11493	07	45	45.53	+19	31	33.3	17.5	4 809
1485	1988	02	23.13229	07	45	44.87	+19	31	33.3		4 809
1485	1988	02	23.14965	07	45	44.20	+19	31	33.6		4 809
1666	1987	02	21.09618	09	37	42.97	+10	01	24.8		3 809
1666	1987	02	21.10104	09	37	42.67	+10	01	26.4		3 809
1666	1987	02	21.10590	09	37	42.37	+10	01	27.8		3 809
1666	1987	02	22.11250	09	36	39.48	+10	06	39.4		3 809
1666	1987	02	22.11805	09	36	39.12	+10	06	41.0		3 809
1666	1987	02	22.12361	09	36	38.78	+10	06	42.5		3 809
1666	1987	02	23.14687	09	35	35.43	+10	11	53.8		3 809
1666	1987	02	23.15174	09	35	35.11	+10	11	55.4		3 809
1666	1987	02	23.15660	09	35	34.79	+10	11	56.9		3 809
1666	1987	02	25.11632	09	33	35.74	+10	21	52.2		3 809
1666	1987	02	25.12118	09	33	35.47	+10	21	53.6		3 809
1666	1987	02	25.12604	09	33	35.21	+10	21	55.0		3 809
1666	1987	02	27.05729	09	31	40.94	+10	31	32.8		3 809
1666	1987	02	27.06215	09	31	40.67	+10	31	34.2		3 809
1666	1987	02	27.06701	09	31	40.40	+10	31	35.5		3 809
1666	1987	03	01.08646	09	29	44.71	+10	41	26.4		3 809
1666	1987	03	01.09132	09	29	44.44	+10	41	27.6		3 809
1666	1987	03	01.09618	09	29	44.17	+10	41	28.9		3 809
1666	1987	03	02.06632	09	28	50.26	+10	46	08.2		3 809
1666	1987	03	02.07118	09	28	49.98	+10	46	09.5		3 809
1666	1987	03	02.07604	09	28	49.71	+10	46	11.1		3 809
1666	1987	03	05.03750	09	26	11.66	+10	59	57.2		3 809
1666	1987	03	05.04444	09	26	11.26	+10	59	59.2		3 809
1666	1987	03	05.05139	09	26	10.87	+11	00	01.2		3 809
1666	1987	03	06.03819	09	25	20.82	+11	04	27.9		3 809
1666	1987	03	06.04514	09	25	20.53	+11	04	29.6		3 809
1666	1987	03	06.05208	09	25	20.23	+11	04	31.4		3 809
1666	1987	03	08.18611	09	23	36.21	+11	13	50.3		3 809
1666	1987	03	08.19306	09	23	35.91	+11	13	52.0		3 809
1666	1987	03	08.20000	09	23	35.62	+11	13	53.6		3 809
1677	1987	02	23.30729	10	54	43.16	+06	10	07.6		3 809
1677	1987	02	23.31215	10	54	42.86	+06	10	07.9		3 809
1677	1987	02	23.31701	10	54	42.57	+06	10	08.1		3 809
1691	1987	02	23.30729	10	57	02.70	+06	19	50.6		3 809
1691	1987	02	23.31215	10	57	02.50	+06	19	52.0		3 809
1691	1987	02	23.31701	10	57	02.27	+06	19	53.1		3 809

1726	1987	02	19.09097	08	50	00.99	+12	21	36.4	3 809
1726	1987	02	19.09479	08	50	00.82	+12	21	37.3	3 809
1726	1987	02	19.11181	08	50	00.03	+12	21	41.2	3 809
1879	1987	02	22.06632	08	39	21.45	+15	25	07.9	3 809
1879	1987	02	22.07118	08	39	21.21	+15	25	08.9	3 809
1879	1987	02	22.07604	08	39	20.99	+15	25	09.7	3 809
1879	1987	02	23.10590	08	38	36.10	+15	28	27.9	3 809
1879	1987	02	23.11076	08	38	35.87	+15	28	28.9	3 809
1879	1987	02	23.11562	08	38	35.63	+15	28	29.9	3 809
1924	1987	02	23.30729	10	57	06.08	+07	51	59.5	3 809
1924	1987	02	23.31215	10	57	05.78	+07	52	00.8	3 809
1924	1987	02	23.31701	10	57	05.48	+07	52	02.1	3 809
1938	1987	02	19.09097	08	52	17.56	+14	20	13.9	3 809
1938	1987	02	19.09479	08	52	17.37	+14	20	15.4	3 809
1938	1987	02	19.11181	08	52	16.37	+14	20	21.5	3 809
1987	1987	02	22.06632	08	45	45.23	+15	28	39.5	3 809
1987	1987	02	22.07118	08	45	44.91	+15	28	38.6	3 809
1987	1987	02	22.07604	08	45	44.59	+15	28	37.8	3 809
1987	1987	02	23.10590	08	44	40.28	+15	26	00.2	3 809
1987	1987	02	23.11076	08	44	39.99	+15	25	59.5	3 809
1987	1987	02	23.11562	08	44	39.69	+15	25	58.8	3 809
2022	1987	02	23.33055	11	25	31.76	+06	37	03.5	3 809
2022	1987	02	23.33611	11	25	31.48	+06	37	04.5	3 809
2022	1987	02	23.34167	11	25	31.18	+06	37	05.8	3 809
2022	1987	02	26.20035	11	23	07.70	+06	48	00.3	3 809
2022	1987	02	26.20521	11	23	07.44	+06	48	01.5	3 809
2022	1987	02	26.21007	11	23	07.19	+06	48	02.8	3 809
2022	1987	02	27.28993	11	22	11.36	+06	52	14.5	3 809
2022	1987	02	27.29479	11	22	11.11	+06	52	15.5	3 809
2022	1987	02	27.29965	11	22	10.85	+06	52	16.8	3 809
2022	1987	03	01.29757	11	20	26.35	+07	00	05.1	3 809
2022	1987	03	01.30243	11	20	26.09	+07	00	06.4	3 809
2022	1987	03	01.30729	11	20	25.83	+07	00	07.7	3 809
2022	1987	03	02.30764	11	19	32.72	+07	04	03.8	3 809
2022	1987	03	02.31285	11	19	32.45	+07	04	04.9	3 809
2022	1987	03	02.31806	11	19	32.18	+07	04	06.1	3 809
2022	1987	03	03.30035	11	18	39.74	+07	07	56.8	3 809
2022	1987	03	03.30521	11	18	39.48	+07	07	58.3	3 809
2022	1987	03	03.31007	11	18	39.24	+07	07	59.4	3 809
2022	1987	03	04.29132	11	17	46.66	+07	11	49.8	3 809
2022	1987	03	04.29618	11	17	46.38	+07	11	50.9	3 809
2022	1987	03	04.30104	11	17	46.09	+07	11	51.8	3 809
2022	1987	03	05.29479	11	16	52.65	+07	15	45.8	3 809
2022	1987	03	05.29965	11	16	52.39	+07	15	47.2	3 809
2022	1987	03	05.30451	11	16	52.13	+07	15	48.5	3 809
2022	1987	03	06.35243	11	15	55.35	+07	19	54.1	3 809
2022	1987	03	06.35729	11	15	55.10	+07	19	55.1	3 809
2022	1987	03	06.36215	11	15	54.83	+07	19	56.0	3 809
2022	1987	03	10.33715	11	12	19.51	+07	35	08.4	3 809
2022	1987	03	10.34340	11	12	19.18	+07	35	09.7	3 809
2022	1987	03	10.34965	11	12	18.85	+07	35	11.3	3 809
2071	1987	02	23.28507	10	47	20.45	+03	50	48.6	3 809
2071	1987	02	23.28993	10	47	20.18	+03	50	50.0	3 809
2071	1987	02	23.29549	10	47	19.83	+03	50	51.4	3 809
2071	1987	02	24.28472	10	46	19.68	+03	55	24.3	3 809
2071	1987	02	24.28993	10	46	19.37	+03	55	25.9	3 809
2071	1987	02	24.29514	10	46	19.05	+03	55	27.4	3 809
2106	1987	02	23.33055	11	24	47.70	+06	38	08.2	3 809
2106	1987	02	23.33611	11	24	47.44	+06	38	10.9	3 809

2106	1987	02	23.34167	11	24	47.21	+06	38	13.4	3 809
2106	1987	02	26.20035	11	22	41.96	+07	00	14.8	3 809
2106	1987	02	26.20521	11	22	41.74	+07	00	17.1	3 809
2106	1987	02	26.21007	11	22	41.52	+07	00	19.7	3 809
2106	1987	02	27.28993	11	21	52.55	+07	08	42.9	3 809
2106	1987	02	27.29479	11	21	52.32	+07	08	45.1	3 809
2106	1987	02	27.29965	11	21	52.10	+07	08	47.1	3 809
2106	1987	03	01.29757	11	20	20.26	+07	24	25.7	3 809
2106	1987	03	01.30243	11	20	20.03	+07	24	27.7	3 809
2106	1987	03	01.30729	11	20	19.81	+07	24	30.0	3 809
2106	1987	03	02.30764	11	19	33.10	+07	32	21.8	3 809
2106	1987	03	02.31285	11	19	32.86	+07	32	24.2	3 809
2106	1987	03	02.31806	11	19	32.62	+07	32	26.5	3 809
2106	1987	03	03.30035	11	18	46.41	+07	40	08.3	3 809
2106	1987	03	03.30521	11	18	46.17	+07	40	10.5	3 809
2106	1987	03	03.31007	11	18	45.95	+07	40	12.6	3 809
2106	1987	03	04.29132	11	17	59.50	+07	47	54.8	3 809
2106	1987	03	04.29618	11	17	59.24	+07	47	56.6	3 809
2106	1987	03	04.30104	11	17	59.02	+07	47	59.0	3 809
2106	1987	03	05.29479	11	17	11.76	+07	55	46.4	3 809
2106	1987	03	05.29965	11	17	11.55	+07	55	48.8	3 809
2106	1987	03	05.30451	11	17	11.35	+07	55	50.8	3 809
2106	1987	03	06.35243	11	16	21.16	+08	04	02.0	3 809
2106	1987	03	06.35729	11	16	20.92	+08	04	04.4	3 809
2106	1987	03	06.36215	11	16	20.71	+08	04	06.8	3 809
2106	1987	03	10.33715	11	13	09.98	+08	34	49.6	3 809
2106	1987	03	10.34340	11	13	09.69	+08	34	52.2	3 809
2106	1987	03	10.34965	11	13	09.39	+08	34	55.0	3 809
2110	1987	02	26.30729	11	39	27.73	+03	07	57.2	3 809
2110	1987	02	26.31215	11	39	27.47	+03	07	59.1	3 809
2110	1987	02	26.31701	11	39	27.22	+03	08	01.0	3 809
2117	1987	02	24.10313	11	05	44.72	+10	24	29.9	3 809
2117	1987	02	24.10799	11	05	44.48	+10	24	31.3	3 809
2117	1987	02	24.11285	11	05	44.24	+10	24	32.9	3 809
2117	1987	02	27.30694	11	03	11.43	+10	40	35.5	3 809
2117	1987	02	27.31111	11	03	11.20	+10	40	36.7	3 809
2117	1987	02	27.31528	11	03	11.00	+10	40	38.2	3 809
2117	1987	03	01.31528	11	01	33.68	+10	50	37.5	3 809
2117	1987	03	01.32049	11	01	33.43	+10	50	39.1	3 809
2117	1987	03	01.32569	11	01	33.18	+10	50	40.6	3 809
2117	1987	03	03.31632	10	59	55.49	+11	00	31.2	3 809
2117	1987	03	03.32118	10	59	55.25	+11	00	32.2	3 809
2117	1987	03	03.32604	10	59	55.01	+11	00	33.6	3 809
2117	1987	03	04.30868	10	59	06.45	+11	05	22.0	3 809
2117	1987	03	04.31354	10	59	06.21	+11	05	23.5	3 809
2117	1987	03	04.31840	10	59	05.98	+11	05	25.0	3 809
2117	1987	03	05.31285	10	58	16.81	+11	10	13.9	3 809
2117	1987	03	05.31771	10	58	16.57	+11	10	15.1	3 809
2117	1987	03	05.32257	10	58	16.33	+11	10	16.5	3 809
2117	1987	03	06.28646	10	57	28.79	+11	14	54.3	3 809
2117	1987	03	06.29132	10	57	28.57	+11	14	55.7	3 809
2117	1987	03	06.29722	10	57	28.29	+11	14	57.0	3 809
2178	1987	02	23.26701	10	46	09.17	+10	54	34.7	3 809
2178	1987	02	23.27188	10	46	08.87	+10	54	36.2	3 809
2178	1987	02	23.27674	10	46	08.58	+10	54	37.8	3 809
2178	1987	02	24.25868	10	45	06.10	+10	59	55.2	3 809
2178	1987	02	24.26354	10	45	05.80	+10	59	56.7	3 809
2178	1987	02	24.26840	10	45	05.47	+10	59	57.8	3 809
2203	1987	02	24.35104	11	05	16.65	+08	09	48.3	3 809

2203	1987	02	24.35590	11	05	16.43	+08	09	49.6	3	809
2203	1987	02	24.36076	11	05	16.22	+08	09	51.2	3	809
2203	1987	02	25.33090	11	04	33.64	+08	14	16.8	3	809
2203	1987	02	25.33576	11	04	33.43	+08	14	18.0	3	809
2203	1987	02	25.34062	11	04	33.22	+08	14	19.6	3	809
2203	1987	02	27.23993	11	03	09.42	+08	22	55.8	3	809
2203	1987	02	27.24479	11	03	09.21	+08	22	57.0	3	809
2203	1987	02	27.24965	11	03	08.99	+08	22	58.1	3	809
2203	1987	02	27.32118	11	03	05.74	+08	23	17.6	3	809
2203	1987	02	27.32604	11	03	05.53	+08	23	19.0	3	809
2203	1987	02	27.33090	11	03	05.33	+08	23	20.4	3	809
2203	1987	03	01.27951	11	01	38.37	+08	32	11.2	3	809
2203	1987	03	01.28472	11	01	38.14	+08	32	12.4	3	809
2203	1987	03	01.28993	11	01	37.91	+08	32	13.8	3	809
2203	1987	03	01.33229	11	01	36.05	+08	32	26.3	3	809
2203	1987	03	01.33715	11	01	35.84	+08	32	27.6	3	809
2203	1987	03	01.34201	11	01	35.64	+08	32	29.2	3	809
2203	1987	03	03.33299	11	00	06.08	+08	41	30.3	3	809
2203	1987	03	03.33785	11	00	05.86	+08	41	31.5	3	809
2203	1987	03	03.34271	11	00	05.65	+08	41	32.6	3	809
2203	1987	03	04.32396	10	59	21.49	+08	45	56.8	3	809
2203	1987	03	04.32882	10	59	21.27	+08	45	58.1	3	809
2203	1987	03	04.33368	10	59	21.04	+08	45	59.2	3	809
2203	1987	03	06.30660	10	57	52.14	+08	54	48.0	3	809
2203	1987	03	06.31250	10	57	51.90	+08	54	49.5	3	809
2203	1987	03	06.31840	10	57	51.62	+08	54	51.4	3	809
2203	1987	03	08.29826	10	56	22.81	+09	03	36.6	3	809
2203	1987	03	08.30312	10	56	22.59	+09	03	37.9	3	809
2203	1987	03	08.30799	10	56	22.39	+09	03	39.2	3	809
2220	1988	02	16.16181	07	50	34.14	+22	48	40.4	17.5 4	809
2220	1988	02	16.17222	07	50	33.71	+22	48	41.6	4	809
2220	1988	02	16.18264	07	50	33.27	+22	48	43.0	4	809
2220	1988	02	23.11493	07	46	58.99	+22	58	45.1	18.0 4	809
2220	1988	02	23.13229	07	46	58.44	+22	58	47.1	4	809
2220	1988	02	23.14965	07	46	57.90	+22	58	48.2	4	809
2249	1987	02	25.33090	11	01	13.37	+07	46	21.1	3	809
2249	1987	02	25.33576	11	01	13.14	+07	46	22.6	3	809
2249	1987	02	25.34062	11	01	12.93	+07	46	24.2	3	809
2249	1987	02	27.23993	10	59	52.02	+07	57	05.2	3	809
2249	1987	02	27.24479	10	59	51.78	+07	57	07.0	3	809
2249	1987	02	27.24965	10	59	51.56	+07	57	08.7	3	809
2276	1987	02	23.28507	10	48	31.98	+03	52	59.5	3	809
2276	1987	02	23.28993	10	48	31.70	+03	53	01.5	3	809
2276	1987	02	23.29549	10	48	31.38	+03	53	03.6	3	809
2276	1987	02	24.28472	10	47	36.32	+03	58	54.6	3	809
2276	1987	02	24.28993	10	47	36.01	+03	58	56.7	3	809
2276	1987	02	24.29514	10	47	35.73	+03	58	58.7	3	809
2282	1987	02	27.37847	11	43	23.24	-04	15	08.1	3	809
2282	1987	02	27.38299	11	43	23.02	-04	15	06.0	3	809
2282	1987	02	27.38750	11	43	22.79	-04	15	04.0	3	809
2282	1987	03	01.35625	11	41	45.62	-04	01	51.1	3	809
2282	1987	03	01.36042	11	41	45.42	-04	01	49.2	3	809
2282	1987	03	01.36458	11	41	45.22	-04	01	47.1	3	809
2282	1987	03	03.35035	11	40	03.32	-03	47	41.4	3	809
2282	1987	03	03.35521	11	40	03.06	-03	47	39.8	3	809
2282	1987	03	03.36007	11	40	02.78	-03	47	38.0	3	809
2282	1987	03	04.34201	11	39	11.17	-03	40	23.9	3	809
2282	1987	03	04.34688	11	39	10.93	-03	40	21.9	3	809
2282	1987	03	04.35174	11	39	10.69	-03	40	20.0	3	809

2282	1987	03	05.34896	11	38	17.37	-03	32	47.1	3 809
2282	1987	03	05.35382	11	38	17.13	-03	32	45.0	3 809
2282	1987	03	05.35868	11	38	16.88	-03	32	43.0	3 809
2282	1987	03	07.36701	11	36	27.66	-03	17	05.0	3 809
2282	1987	03	07.37187	11	36	27.40	-03	17	02.8	3 809
2282	1987	03	07.37674	11	36	27.12	-03	17	00.2	3 809
2282	1987	03	08.35451	11	35	33.32	-03	09	10.4	3 809
2282	1987	03	08.35937	11	35	33.05	-03	09	07.9	3 809
2282	1987	03	08.36424	11	35	32.77	-03	09	05.5	3 809
2282	1987	03	10.36285	11	33	41.41	-02	52	44.0	3 809
2282	1987	03	10.36771	11	33	41.14	-02	52	41.2	3 809
2282	1987	03	10.37257	11	33	40.88	-02	52	38.5	3 809
2353	1987	02	25.36493	11	06	35.87	+10	58	45.5	3 809
2353	1987	02	25.36979	11	06	35.62	+10	58	46.9	3 809
2353	1987	02	25.37465	11	06	35.38	+10	58	48.2	3 809
2353	1987	02	27.30694	11	04	59.08	+11	07	26.9	3 809
2353	1987	02	27.31111	11	04	58.86	+11	07	28.0	3 809
2353	1987	02	27.31528	11	04	58.64	+11	07	29.3	3 809
2353	1987	03	01.31528	11	03	17.61	+11	16	19.3	3 809
2353	1987	03	01.32049	11	03	17.35	+11	16	20.7	3 809
2353	1987	03	01.32569	11	03	17.08	+11	16	22.1	3 809
2353	1987	03	03.31632	11	01	35.61	+11	25	03.0	3 809
2353	1987	03	03.32118	11	01	35.38	+11	25	04.4	3 809
2353	1987	03	03.32604	11	01	35.14	+11	25	05.4	3 809
2353	1987	03	04.30868	11	00	44.48	+11	29	20.7	3 809
2353	1987	03	04.31354	11	00	44.21	+11	29	22.3	3 809
2353	1987	03	04.31840	11	00	43.94	+11	29	23.7	3 809
2353	1987	03	05.31285	10	59	52.83	+11	33	37.6	3 809
2353	1987	03	05.31771	10	59	52.58	+11	33	38.8	3 809
2353	1987	03	05.32257	10	59	52.33	+11	33	40.0	3 809
2353	1987	03	06.28646	10	59	02.83	+11	37	43.5	3 809
2353	1987	03	06.29132	10	59	02.59	+11	37	44.8	3 809
2353	1987	03	06.29722	10	59	02.29	+11	37	46.4	3 809
2390	1987	02	23.28507	10	44	20.51	+04	11	31.2	3 809
2390	1987	02	23.28993	10	44	20.24	+04	11	31.8	3 809
2390	1987	02	23.29549	10	44	19.92	+04	11	32.4	3 809
2390	1987	02	24.28472	10	43	23.98	+04	13	59.2	3 809
2390	1987	02	24.28993	10	43	23.68	+04	14	00.3	3 809
2390	1987	02	24.29514	10	43	23.38	+04	14	01.1	3 809
2390	1987	02	24.30174	10	43	23.05	+04	14	01.1	3 809
2390	1987	02	24.30660	10	43	22.74	+04	14	01.7	3 809
2390	1987	02	24.31146	10	43	22.49	+04	14	02.8	3 809
2390	1987	02	25.27153	10	42	27.91	+04	16	28.1	3 809
2390	1987	02	25.27674	10	42	27.61	+04	16	28.9	3 809
2390	1987	02	25.28194	10	42	27.32	+04	16	30.1	3 809
2390	1987	02	27.18021	10	40	38.70	+04	21	26.9	3 809
2390	1987	02	27.18542	10	40	38.41	+04	21	27.6	3 809
2390	1987	02	27.19063	10	40	38.13	+04	21	28.3	3 809
2390	1987	03	01.18993	10	38	43.37	+04	26	47.9	3 809
2390	1987	03	01.19514	10	38	43.07	+04	26	48.6	3 809
2390	1987	03	01.20035	10	38	42.76	+04	26	49.5	3 809
2390	1987	03	02.18021	10	37	46.45	+04	29	28.8	3 809
2390	1987	03	02.18507	10	37	46.19	+04	29	29.8	3 809
2390	1987	03	02.18993	10	37	45.90	+04	29	30.3	3 809
2390	1987	03	03.17188	10	36	49.50	+04	32	11.2	3 809
2390	1987	03	03.17708	10	36	49.21	+04	32	12.0	3 809
2390	1987	03	03.18229	10	36	48.90	+04	32	13.2	3 809
2390	1987	03	04.15174	10	35	53.40	+04	34	53.9	3 809
2390	1987	03	04.15660	10	35	53.11	+04	34	54.6	3 809

2390	1987	03	04.16146	10	35	52.84	+04	34	55.5	3 809
2390	1987	03	05.20243	10	34	53.35	+04	37	48.1	3 809
2390	1987	03	05.20729	10	34	53.07	+04	37	48.9	3 809
2390	1987	03	05.21215	10	34	52.79	+04	37	49.7	3 809
2390	1987	03	06.19410	10	33	56.98	+04	40	33.4	3 809
2390	1987	03	06.20069	10	33	56.64	+04	40	34.9	3 809
2390	1987	03	06.20729	10	33	56.26	+04	40	36.0	3 809
2483	1987	02	28.19965	10	58	02.90	-00	03	27.2	3 809
2483	1987	02	28.20451	10	58	02.70	-00	03	26.0	3 809
2483	1987	02	28.20937	10	58	02.51	-00	03	24.6	3 809
2483	1987	03	01.25937	10	57	20.83	+00	00	45.4	3 809
2483	1987	03	01.26424	10	57	20.64	+00	00	46.4	3 809
2483	1987	03	01.26910	10	57	20.45	+00	00	47.3	3 809
2483	1987	03	02.24201	10	56	41.94	+00	04	41.8	3 809
2483	1987	03	02.24687	10	56	41.74	+00	04	43.0	3 809
2483	1987	03	02.25174	10	56	41.54	+00	04	44.1	3 809
2483	1987	03	03.23507	10	56	02.58	+00	08	44.4	3 809
2483	1987	03	03.23993	10	56	02.39	+00	08	45.2	3 809
2483	1987	03	03.24479	10	56	02.19	+00	08	46.7	3 809
2483	1987	03	04.21632	10	55	23.64	+00	12	46.5	3 809
2483	1987	03	04.22257	10	55	23.39	+00	12	48.1	3 809
2483	1987	03	04.22882	10	55	23.15	+00	12	49.4	3 809
2483	1987	03	05.25868	10	54	42.41	+00	17	06.3	3 809
2483	1987	03	05.26354	10	54	42.18	+00	17	07.8	3 809
2483	1987	03	05.26840	10	54	41.99	+00	17	09.4	3 809
2483	1987	03	07.29687	10	53	22.04	+00	25	40.3	3 809
2483	1987	03	07.30347	10	53	21.78	+00	25	42.0	3 809
2483	1987	03	07.31007	10	53	21.52	+00	25	43.7	3 809
2501	1987	03	01.33229	11	08	19.81	+08	38	59.9	3 809
2501	1987	03	01.33715	11	08	19.53	+08	39	01.2	3 809
2501	1987	03	01.34201	11	08	19.23	+08	39	02.5	3 809
2501	1987	03	03.33299	11	06	21.92	+08	48	09.7	3 809
2501	1987	03	03.33785	11	06	21.63	+08	48	11.2	3 809
2501	1987	03	03.34271	11	06	21.34	+08	48	12.7	3 809
2501	1987	03	04.32396	11	05	22.78	+08	52	41.5	3 809
2501	1987	03	04.32882	11	05	22.48	+08	52	42.8	3 809
2501	1987	03	04.33368	11	05	22.20	+08	52	44.4	3 809
2501	1987	03	06.30660	11	03	23.39	+09	01	40.7	3 809
2501	1987	03	06.31250	11	03	23.03	+09	01	42.3	3 809
2501	1987	03	06.31840	11	03	22.69	+09	01	43.9	3 809
2501	1987	03	08.29826	11	01	22.36	+09	10	35.4	3 809
2501	1987	03	08.30312	11	01	22.08	+09	10	36.8	3 809
2501	1987	03	08.30799	11	01	21.80	+09	10	37.9	3 809
2501	1987	03	11.26042	10	58	22.67	+09	23	25.8	3 809
2501	1987	03	11.26458	10	58	22.42	+09	23	26.5	3 809
2501	1987	03	11.26875	10	58	22.17	+09	23	27.7	3 809
2570	1987	02	22.23438	09	50	28.78	+10	59	34.2	3 809
2570	1987	02	22.23924	09	50	28.47	+10	59	34.0	3 809
2570	1987	02	22.24410	09	50	28.16	+10	59	34.0	3 809
2661	1987	02	27.14687	10	26	58.07	+05	15	40.4	3 809
2661	1987	02	27.15174	10	26	57.80	+05	15	41.5	3 809
2661	1987	02	27.15660	10	26	57.53	+05	15	42.4	3 809
2661	1987	02	28.14271	10	26	05.48	+05	17	43.5	3 809
2661	1987	02	28.14757	10	26	05.23	+05	17	44.3	3 809
2661	1987	02	28.15243	10	26	04.96	+05	17	44.7	3 809
2661	1987	03	02.14687	10	24	20.35	+05	21	53.4	3 809
2661	1987	03	02.15174	10	24	20.09	+05	21	54.1	3 809
2661	1987	03	02.15660	10	24	19.82	+05	21	54.3	3 809
2661	1987	03	03.13924	10	23	28.68	+05	23	59.3	3 809

2661	1987	03	03.14410	10	23	28.43	+05	24	00.0		3 809
2661	1987	03	03.14896	10	23	28.18	+05	24	00.8		3 809
2661	1987	03	04.11701	10	22	38.20	+05	26	00.5		3 809
2661	1987	03	04.12188	10	22	37.95	+05	26	01.1		3 809
2661	1987	03	04.12674	10	22	37.71	+05	26	01.7		3 809
2682	1988	02	16.16181	07	43	45.91	+21	06	26.6	18.0	4 809
2682	1988	02	16.17222	07	43	45.43	+21	06	28.5		4 809
2682	1988	02	16.18264	07	43	44.86	+21	06	31.5		4 809
2682	1988	02	23.11493	07	39	23.73	+21	29	37.7	17.9	4 809
2682	1988	02	23.13229	07	39	23.06	+21	29	40.2		4 809
2682	1988	02	23.14965	07	39	22.47	+21	29	43.8		4 809
2691	1987	02	21.07882	09	43	25.86	+12	46	12.2		3 809
2691	1987	02	21.08368	09	43	25.54	+12	46	13.1		3 809
2691	1987	02	21.08854	09	43	25.22	+12	46	14.1		3 809
2722	1987	02	24.35104	11	02	23.60	+07	24	01.2		3 809
2722	1987	02	24.35590	11	02	23.38	+07	24	03.1		3 809
2722	1987	02	24.36076	11	02	23.16	+07	24	04.4		3 809
2722	1987	02	25.33090	11	01	40.92	+07	28	58.4		3 809
2722	1987	02	25.33576	11	01	40.70	+07	28	59.9		3 809
2722	1987	02	25.34062	11	01	40.47	+07	29	01.7		3 809
2722	1987	02	27.23993	11	00	17.19	+07	38	40.0		3 809
2722	1987	02	27.24479	11	00	16.98	+07	38	41.6		3 809
2722	1987	02	27.24965	11	00	16.75	+07	38	42.9		3 809
2803	1987	02	26.30729	11	46	07.18	+02	33	36.9		3 809
2803	1987	02	26.31215	11	46	06.97	+02	33	38.1		3 809
2803	1987	02	26.31701	11	46	06.77	+02	33	39.4		3 809
2803	1987	02	26.34896	11	46	05.48	+02	33	46.7		3 809
2803	1987	02	26.35382	11	46	05.26	+02	33	47.9		3 809
2803	1987	02	26.35868	11	46	05.05	+02	33	49.0		3 809
2803	1987	02	27.36215	11	45	24.26	+02	38	02.7		3 809
2803	1987	02	27.36701	11	45	24.06	+02	38	03.6		3 809
2803	1987	02	27.37187	11	45	23.86	+02	38	04.5		3 809
2803	1987	03	08.37430	11	38	54.70	+03	17	57.4		3 809
2803	1987	03	08.38021	11	38	54.43	+03	17	59.0		3 809
2803	1987	03	08.38681	11	38	54.13	+03	18	00.8		3 809
2820	1987	02	19.09097	08	49	33.91	+12	45	53.9		3 809
2820	1987	02	19.09479	08	49	33.72	+12	45	55.0		3 809
2820	1987	02	19.11181	08	49	32.81	+12	46	00.0		3 809
2888	1987	02	23.26701	10	42	48.70	+12	06	19.7		3 809
2888	1987	02	23.27188	10	42	48.37	+12	06	20.2		3 809
2888	1987	02	23.27674	10	42	48.06	+12	06	20.8		3 809
2888	1987	02	24.25868	10	41	40.16	+12	08	40.2		3 809
2888	1987	02	24.26354	10	41	39.83	+12	08	40.7		3 809
2888	1987	02	24.26840	10	41	39.50	+12	08	41.3		3 809
2888	1987	02	26.09549	10	39	33.09	+12	12	50.6		3 809
2888	1987	02	26.10035	10	39	32.75	+12	12	51.0		3 809
2888	1987	02	26.10521	10	39	32.42	+12	12	51.6		3 809
2888	1987	02	27.16493	10	38	18.75	+12	15	11.3		3 809
2888	1987	02	27.16979	10	38	18.44	+12	15	11.9		3 809
2888	1987	02	27.17465	10	38	18.11	+12	15	12.7		3 809
2888	1987	03	02.16424	10	34	51.70	+12	21	18.0		3 809
2888	1987	03	02.16910	10	34	51.36	+12	21	18.3		3 809
2888	1987	03	02.17396	10	34	51.02	+12	21	18.9		3 809
2888	1987	03	03.15660	10	33	43.95	+12	23	08.6		3 809
2888	1987	03	03.16146	10	33	43.62	+12	23	09.1		3 809
2888	1987	03	03.16632	10	33	43.27	+12	23	09.6		3 809
2888	1987	03	04.13507	10	32	37.66	+12	24	52.1		3 809
2888	1987	03	04.13993	10	32	37.35	+12	24	52.4		3 809
2888	1987	03	04.14479	10	32	37.02	+12	24	52.7		3 809

2888	1987	03	05.18715	10	31	26.82	+12	26	37.3	3 809
2888	1987	03	05.19201	10	31	26.48	+12	26	37.9	3 809
2888	1987	03	05.19688	10	31	26.15	+12	26	38.3	3 809
2888	1987	03	06.17465	10	30	21.21	+12	28	10.0	3 809
2888	1987	03	06.18090	10	30	20.83	+12	28	10.3	3 809
2888	1987	03	06.18715	10	30	20.45	+12	28	10.6	3 809
2888	1987	03	07.21493	10	29	12.83	+12	29	40.7	3 809
2888	1987	03	07.22118	10	29	12.45	+12	29	41.2	3 809
2888	1987	03	07.22743	10	29	12.08	+12	29	41.6	3 809
2916	1987	02	24.31840	10	49	49.81	+03	56	30.8	3 809
2916	1987	02	24.32326	10	49	49.52	+03	56	31.8	3 809
2916	1987	02	24.32813	10	49	49.21	+03	56	32.7	3 809
2916	1987	02	25.29201	10	48	50.85	+03	59	49.9	3 809
2916	1987	02	25.29688	10	48	50.55	+03	59	50.6	3 809
2916	1987	02	25.30174	10	48	50.26	+03	59	51.5	3 809
2916	1987	02	26.16285	10	47	58.02	+04	02	53.1	3 809
2916	1987	02	26.16771	10	47	57.75	+04	02	54.2	3 809
2916	1987	02	26.17257	10	47	57.45	+04	02	55.3	3 809
2916	1987	02	27.21285	10	46	53.01	+04	06	36.9	3 809
2916	1987	02	27.21771	10	46	52.71	+04	06	37.8	3 809
2916	1987	02	27.22257	10	46	52.41	+04	06	38.9	3 809
2961	1987	02	28.19965	10	55	42.85	-00	26	27.9	3 809
2961	1987	02	28.20451	10	55	42.58	-00	26	25.8	3 809
2961	1987	02	28.20937	10	55	42.32	-00	26	23.7	3 809
2961	1987	03	01.25937	10	54	41.07	-00	18	59.3	3 809
2961	1987	03	01.26424	10	54	40.79	-00	18	57.4	3 809
2961	1987	03	01.26910	10	54	40.52	-00	18	55.5	3 809
2961	1987	03	02.24201	10	53	43.81	-00	11	57.5	3 809
2961	1987	03	02.24687	10	53	43.51	-00	11	55.5	3 809
2961	1987	03	02.25174	10	53	43.22	-00	11	53.4	3 809
2961	1987	03	03.23507	10	52	45.93	-00	04	45.8	3 809
2961	1987	03	03.23993	10	52	45.66	-00	04	44.0	3 809
2961	1987	03	03.24479	10	52	45.37	-00	04	41.8	3 809
2961	1987	03	04.21632	10	51	48.80	+00	02	25.4	3 809
2961	1987	03	04.22257	10	51	48.41	+00	02	28.2	3 809
2961	1987	03	04.22882	10	51	48.05	+00	02	30.8	3 809
2961	1987	03	05.25868	10	50	48.05	+00	10	08.8	3 809
2961	1987	03	05.26354	10	50	47.77	+00	10	11.0	3 809
2961	1987	03	05.26840	10	50	47.52	+00	10	13.0	3 809
2961	1987	03	07.29687	10	48	50.28	+00	25	26.1	3 809
2961	1987	03	07.30347	10	48	49.91	+00	25	29.0	3 809
2961	1987	03	07.31007	10	48	49.56	+00	25	32.0	3 809
2961	1987	03	08.14410	10	48	02.06	+00	31	49.6	3 809
2961	1987	03	08.14896	10	48	01.81	+00	31	51.9	3 809
2961	1987	03	08.15382	10	48	01.51	+00	31	54.4	3 809
3053	1987	02	26.34896	11	48	34.00	+03	30	50.0	3 809
3053	1987	02	26.35382	11	48	33.73	+03	30	51.2	3 809
3053	1987	02	26.35868	11	48	33.48	+03	30	52.3	3 809
3053	1987	03	05.36771	11	42	23.41	+04	02	37.3	3 809
3053	1987	03	05.37257	11	42	23.13	+04	02	38.6	3 809
3053	1987	03	05.37743	11	42	22.86	+04	02	40.0	3 809
3053	1987	03	06.37465	11	41	27.24	+04	07	23.4	3 809
3053	1987	03	06.38090	11	41	26.87	+04	07	25.2	3 809
3053	1987	03	06.38715	11	41	26.51	+04	07	27.0	3 809
3107	1987	02	23.28507	10	46	36.84	+05	13	52.2	3 809
3107	1987	02	23.28993	10	46	36.52	+05	13	54.0	3 809
3107	1987	02	23.29549	10	46	36.17	+05	13	55.7	3 809
3107	1987	02	27.19688	10	42	37.77	+05	36	34.1	3 809
3107	1987	02	27.20174	10	42	37.45	+05	36	35.9	3 809

3107	1987	02	27.20660	10	42	37.13	+05	36	37.6	3 809
3107	1987	02	28.16215	10	41	38.15	+05	42	14.8	3 809
3107	1987	02	28.16701	10	41	37.85	+05	42	16.5	3 809
3107	1987	02	28.17188	10	41	37.56	+05	42	18.2	3 809
3107	1987	03	01.21007	10	40	33.18	+05	48	28.9	3 809
3107	1987	03	01.21493	10	40	32.88	+05	48	30.6	3 809
3107	1987	03	01.21979	10	40	32.58	+05	48	32.3	3 809
3107	1987	03	02.20868	10	39	31.32	+05	54	26.3	3 809
3107	1987	03	02.21354	10	39	31.02	+05	54	28.1	3 809
3107	1987	03	02.21840	10	39	30.72	+05	54	29.7	3 809
3107	1987	03	03.20104	10	38	29.84	+06	00	21.9	3 809
3107	1987	03	03.20590	10	38	29.56	+06	00	23.5	3 809
3107	1987	03	03.21076	10	38	29.26	+06	00	25.2	3 809
3107	1987	03	04.18333	10	37	29.07	+06	06	14.7	3 809
3107	1987	03	04.18854	10	37	28.75	+06	06	16.5	3 809
3107	1987	03	04.19375	10	37	28.42	+06	06	18.3	3 809
3107	1987	03	05.22153	10	36	24.88	+06	12	28.0	3 809
3107	1987	03	05.22847	10	36	24.45	+06	12	30.4	3 809
3107	1987	03	05.23542	10	36	24.02	+06	12	32.9	3 809
3107	1987	03	06.21528	10	35	23.88	+06	18	24.3	3 809
3107	1987	03	06.22222	10	35	23.46	+06	18	26.8	3 809
3107	1987	03	06.22917	10	35	23.05	+06	18	29.3	3 809
3107	1987	03	07.26042	10	34	19.92	+06	24	39.4	3 809
3107	1987	03	07.26736	10	34	19.53	+06	24	41.5	3 809
3107	1987	03	07.27431	10	34	19.12	+06	24	43.9	3 809
3132	1987	02	24.10313	11	05	58.34	+10	47	36.2	3 809
3132	1987	02	24.10799	11	05	58.13	+10	47	37.8	3 809
3132	1987	02	24.11285	11	05	57.91	+10	47	39.4	3 809
3132	1987	02	25.36493	11	05	04.27	+10	54	21.0	3 809
3132	1987	02	25.36979	11	05	04.06	+10	54	22.5	3 809
3132	1987	02	25.37465	11	05	03.87	+10	54	24.0	3 809
3132	1987	02	27.30694	11	03	40.74	+11	04	44.3	3 809
3132	1987	02	27.31111	11	03	40.56	+11	04	45.4	3 809
3132	1987	02	27.31528	11	03	40.39	+11	04	46.9	3 809
3132	1987	03	01.31528	11	02	13.23	+11	15	23.9	3 809
3132	1987	03	01.32049	11	02	12.98	+11	15	25.6	3 809
3132	1987	03	01.32569	11	02	12.77	+11	15	27.0	3 809
3132	1987	03	04.30868	11	00	01.64	+11	31	03.1	3 809
3132	1987	03	04.31354	11	00	01.42	+11	31	04.6	3 809
3132	1987	03	04.31840	11	00	01.21	+11	31	06.1	3 809
3132	1987	03	05.31285	10	59	17.39	+11	36	13.1	3 809
3132	1987	03	05.31771	10	59	17.18	+11	36	14.8	3 809
3132	1987	03	05.32257	10	59	16.97	+11	36	15.9	3 809
3132	1987	03	06.28646	10	58	34.39	+11	41	11.5	3 809
3132	1987	03	06.29132	10	58	34.19	+11	41	12.9	3 809
3132	1987	03	06.29722	10	58	33.95	+11	41	14.8	3 809
3143	1987	02	23.26701	10	45	57.72	+12	45	57.4	3 809
3143	1987	02	23.27188	10	45	57.48	+12	45	58.7	3 809
3143	1987	02	23.27674	10	45	57.24	+12	46	00.1	3 809
3143	1987	02	24.25868	10	45	08.40	+12	51	15.6	3 809
3143	1987	02	24.26354	10	45	08.15	+12	51	17.2	3 809
3143	1987	02	24.26840	10	45	07.91	+12	51	18.5	3 809
3143	1987	02	26.09549	10	43	36.67	+13	00	55.4	3 809
3143	1987	02	26.10035	10	43	36.44	+13	00	57.0	3 809
3143	1987	02	26.10521	10	43	36.19	+13	00	58.4	3 809
3302	1987	02	26.25590	11	03	45.86	+06	45	42.6	3 809
3302	1987	02	26.26076	11	03	45.58	+06	45	44.6	3 809
3302	1987	02	26.26563	11	03	45.30	+06	45	46.6	3 809
3302	1987	02	27.23993	11	02	54.30	+06	52	25.1	3 809

3302	1987	02	27.24479	11	02	54.05	+06	52	27.4		3 809
3302	1987	02	27.24965	11	02	53.79	+06	52	29.4		3 809
3302	1987	02	27.32118	11	02	49.77	+06	52	54.8		3 809
3302	1987	02	27.32604	11	02	49.51	+06	52	56.7		3 809
3302	1987	02	27.33090	11	02	49.25	+06	52	58.8		3 809
3302	1987	03	01.27951	11	01	05.92	+07	06	22.7		3 809
3302	1987	03	01.28472	11	01	05.64	+07	06	24.6		3 809
3302	1987	03	01.28993	11	01	05.37	+07	06	26.4		3 809
3302	1987	03	01.33229	11	01	02.96	+07	06	42.5		3 809
3302	1987	03	01.33715	11	01	02.71	+07	06	44.6		3 809
3302	1987	03	01.34201	11	01	02.47	+07	06	46.6		3 809
3302	1987	03	03.33299	10	59	15.66	+07	20	28.1		3 809
3302	1987	03	03.33785	10	59	15.41	+07	20	30.1		3 809
3302	1987	03	03.34271	10	59	15.14	+07	20	32.0		3 809
3302	1987	03	04.32396	10	58	22.17	+07	27	15.6		3 809
3302	1987	03	04.32882	10	58	21.91	+07	27	17.6		3 809
3302	1987	03	04.33368	10	58	21.66	+07	27	19.5		3 809
3370	1987	02	23.33055	11	26	13.28	+07	59	43.6		3 809
3370	1987	02	23.33611	11	26	13.04	+07	59	47.0		3 809
3370	1987	02	23.34167	11	26	12.81	+07	59	50.5		3 809
3378	1987	02	23.30729	10	54	04.47	+06	11	22.5		3 809
3378	1987	02	23.31215	10	54	04.16	+06	11	23.1		3 809
3378	1987	02	23.31701	10	54	03.85	+06	11	23.5		3 809
3384	1987	02	26.34896	11	47	52.83	+03	38	56.1		3 809
3384	1987	02	26.35382	11	47	52.65	+03	38	58.0		3 809
3384	1987	02	26.35868	11	47	52.43	+03	39	00.0		3 809
3498	1988	02	21.21250	10	13	37.66	+00	17	18.4	17.5	4 809
3498	1988	02	21.22118	10	13	37.12	+00	17	21.3		4 809
3498	1988	02	21.22812	10	13	36.72	+00	17	23.6		4 809
3626	1988	02	16.16181	07	40	50.65	+19	36	25.6	18.0	4 809
3626	1988	02	16.17222	07	40	50.27	+19	36	26.2		4 809
3626	1988	02	16.18264	07	40	49.78	+19	36	27.2		4 809
3626	1988	02	23.11493	07	37	17.99	+19	42	33.0	18.6	4 809
3626	1988	02	23.13229	07	37	17.40	+19	42	34.3		4 809
3626	1988	02	23.14965	07	37	16.88	+19	42	34.1		4 809
3645	1988	02	21.21250	10	14	30.35	-00	08	53.9	17.0	4 809
3645	1988	02	21.22118	10	14	29.87	-00	08	51.4		4 809
3645	1988	02	21.22812	10	14	29.46	-00	08	49.5		4 809
3656	1987	02	22.29618	10	39	12.05	+07	56	39.7	16.2	3 809
3656	1987	02	22.30104	10	39	11.76	+07	56	41.0		3 809
3656	1987	02	22.30590	10	39	11.43	+07	56	42.6		3 809
3656	1987	02	23.20729	10	38	15.93	+08	01	47.4		3 809
3656	1987	02	23.21215	10	38	15.60	+08	01	49.2		3 809
3656	1987	02	23.21701	10	38	15.28	+08	01	51.0		3 809
3656	1987	02	26.07674	10	35	16.14	+08	18	12.4		3 809
3656	1987	02	26.08160	10	35	15.80	+08	18	14.1		3 809
3656	1987	02	26.08646	10	35	15.52	+08	18	15.8		3 809
3656	1987	02	27.12813	10	34	09.40	+08	24	16.4		3 809
3656	1987	02	27.13310	10	34	09.06	+08	24	18.2		3 809
3656	1987	02	27.13808	10	34	08.75	+08	24	19.9		3 809
3656	1987	02	28.11076	10	33	06.99	+08	29	56.7		3 809
3656	1987	02	28.11562	10	33	06.66	+08	29	58.5		3 809
3656	1987	02	28.12049	10	33	06.34	+08	30	00.2		3 809
3656	1987	03	01.15243	10	32	00.56	+08	35	58.4		3 809
3656	1987	03	01.15729	10	32	00.25	+08	35	59.9		3 809
3656	1987	03	01.16215	10	31	59.92	+08	36	01.2		3 809
3656	1987	03	02.13021	10	30	58.40	+08	41	37.1		3 809
3656	1987	03	02.13507	10	30	58.07	+08	41	38.9		3 809
3656	1987	03	02.13993	10	30	57.74	+08	41	40.3		3 809

3656	1987	03	03.12257	10	29	55.31	+08	47	20.1		3 809
3656	1987	03	03.12743	10	29	55.01	+08	47	21.6		3 809
3656	1987	03	03.13229	10	29	54.69	+08	47	23.5		3 809
3656	1987	03	04.10104	10	28	53.35	+08	52	56.3		3 809
3656	1987	03	04.10590	10	28	53.03	+08	52	58.2		3 809
3656	1987	03	04.11076	10	28	52.73	+08	52	59.8		3 809
3656	1987	03	05.12639	10	27	48.60	+08	58	47.3		3 809
3656	1987	03	05.13194	10	27	48.25	+08	58	49.4		3 809
3656	1987	03	05.13750	10	27	47.89	+08	58	51.1		3 809
3656	1987	03	05.15590	10	27	46.70	+08	58	57.3		3 809
3656	1987	03	05.15937	10	27	46.48	+08	58	58.5		3 809
3656	1987	03	05.16285	10	27	46.24	+08	58	59.6		3 809
3656	1987	03	06.13958	10	26	45.04	+09	04	30.5		3 809
3656	1987	03	06.14514	10	26	44.68	+09	04	32.5		3 809
3656	1987	03	06.15069	10	26	44.30	+09	04	34.3		3 809
3656	1987	03	06.25278	10	26	37.69	+09	05	09.1		3 809
3656	1987	03	06.25556	10	26	37.53	+09	05	10.0		3 809
3656	1987	03	06.25833	10	26	37.34	+09	05	11.0		3 809
3656	1987	03	07.17812	10	25	40.30	+09	10	20.2		3 809
3656	1987	03	07.18437	10	25	39.92	+09	10	22.2		3 809
3656	1987	03	07.19062	10	25	39.55	+09	10	24.5		3 809
3656	1987	03	07.33194	10	25	30.45	+09	11	11.2		3 809
3656	1987	03	07.33472	10	25	30.28	+09	11	12.2		3 809
3656	1987	03	07.33750	10	25	30.11	+09	11	13.0		3 809
3662	1987	03	03.33299	11	07	05.17	+08	13	18.3	17.6	3 809
3662	1987	03	03.33785	11	07	04.89	+08	13	18.9		3 809
3662	1987	03	03.34271	11	07	04.60	+08	13	19.9		3 809
3662	1987	03	04.32396	11	06	07.80	+08	15	42.3		3 809
3662	1987	03	04.32882	11	06	07.52	+08	15	43.2		3 809
3662	1987	03	04.33368	11	06	07.24	+08	15	43.9		3 809
3662	1987	03	05.31285	11	05	10.42	+08	18	05.8		3 809
3662	1987	03	05.31771	11	05	10.14	+08	18	06.5		3 809
3662	1987	03	05.32257	11	05	09.85	+08	18	07.3		3 809
3662	1987	03	06.30660	11	04	12.59	+08	20	28.0		3 809
3662	1987	03	06.31250	11	04	12.26	+08	20	29.1		3 809
3662	1987	03	06.31840	11	04	11.93	+08	20	29.7		3 809
3662	1987	03	08.29826	11	02	16.62	+08	25	10.4		3 809
3662	1987	03	08.30312	11	02	16.33	+08	25	11.1		3 809
3662	1987	03	08.30799	11	02	16.03	+08	25	11.9		3 809
3676	1987	02	24.12153	11	17	12.05	+06	26	24.6	17.0	3 809
3676	1987	02	24.12708	11	17	11.77	+06	26	26.2		3 809
3676	1987	02	24.13264	11	17	11.48	+06	26	27.7		3 809
3694	1987	02	27.14687	10	29	58.51	+06	24	24.2	16.8	3 809
3694	1987	02	27.15174	10	29	58.27	+06	24	25.0		3 809
3694	1987	02	27.15660	10	29	58.03	+06	24	26.0		3 809
3694	1987	02	28.14271	10	29	20.19	+06	27	29.5		3 809
3694	1987	02	28.14757	10	29	20.01	+06	27	30.5		3 809
3694	1987	02	28.15243	10	29	19.82	+06	27	31.4		3 809
3694	1987	03	02.14687	10	28	03.62	+06	33	42.8		3 809
3694	1987	03	02.15174	10	28	03.43	+06	33	43.9		3 809
3694	1987	03	02.15660	10	28	03.24	+06	33	45.0		3 809
3813	1988	02	16.16181	07	32	20.68	+23	27	42.7	17.0	4 809
3813	1988	02	16.17222	07	32	20.20	+23	27	41.8		4 809
3813	1988	02	16.18264	07	32	19.72	+23	27	41.6		4 809
3828	1988	02	21.21250	09	59	45.45	+03	09	31.4	17.0	4 809
3828	1988	02	21.22118	09	59	45.07	+03	09	33.9		4 809
3828	1988	02	21.22812	09	59	44.74	+03	09	35.9		4 809
3828	1988	02	23.17708	09	58	16.93	+03	18	59.3	16.8	4 809
3828	1988	02	23.18750	09	58	16.42	+03	19	02.4		4 809

3828	1988	02	23.19792	09	58	15.96	+03	19	05.2		4 809
3837	1988	02	21.21250	10	10	15.68	+02	53	11.1	16.9	4 809
3837	1988	02	21.22118	10	10	15.20	+02	53	14.9		4 809
3837	1988	02	21.22812	10	10	14.79	+02	53	16.6		4 809

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ORBITAL ELEMENTS OF ONE-OPPOSITION MINOR PLANETS.

The columns headed Arc and O give 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 other multiple) designations, E means that the value of the eccentricity was assumed, F means both; the designations are listed at the end.

The orbit computers (column C) are B = C. M. Bardwell, M = B. G. Marsden, N = S. Nakano.

Planet	H	Epoch	M	Peri.	Node	Incl.	e	a	Arc	O	N	C
1975 SH	13.5	750925	11.21	338.67	21.27	10.53	0.0550	2.9899	2	3	E	B
1975 SJ	13.5	750925	26.22	299.68	32.92	3.11	0.1968	2.8357	2	3	E	B
1975 SK	13.0	750925	330.60	352.03	66.45	2.54	0.2330	3.1945	2	3	E	B
1975 SL	13.0	750925	28.10	316.99	10.87	9.17	0.2358	3.0947	2	3		B
1975 SN	15.0	750925	351.68	189.67	196.45	14.40	0.2822	2.6906	16	5		B
1975 SO	15.0	750925	5.39	4.88	355.68	2.11	0.2531	2.3744	2	3	E	B
1975 SQ	17.0	750925	357.72	347.26	25.24	3.86	0.2186	2.1675	2	3	E	B
1975 SR	14.5	750925	9.10	164.69	189.83	2.39	0.2482	2.3855	16	5		B
1975 SS	12.0	750925	262.77	282.79	195.43	10.49	0.0566	3.0176	16	5		B
1975 ST	13.0	750925	66.55	94.53	187.43	11.35	0.2150	2.6446	16	5		B
1975 SU	11.0	750925	233.20	324.09	188.88	13.64	0.1357	3.1561	16	5		B
1975 SV	12.5	750925	252.16	109.17	26.28	7.65	0.1517	2.2038	2	3	E	B
1975 SW	14.5	750925	358.56	358.67	14.28	5.51	0.2896	2.5736	16	5		B
1975 SX	13.5	750925	11.04	157.05	200.82	1.36	0.1856	3.3378	16	5		B
1975 SA1	12.0	750925	181.13	168.78	24.89	12.09	0.0973	2.9593	16	5		B
1975 SB1	11.5	750925	257.04	101.99	30.62	11.32	0.1453	3.1686	16	5		B
1975 SC1	13.5	750925	335.29	234.80	165.01	4.40	0.0524	2.4321	2	3	E	B
1975 SD1	14.0	750925	7.01	176.34	188.99	12.37	0.1229	3.1759	16	4		B
1975 SE1	14.5	750925	25.55	305.52	23.56	10.47	0.2419	2.4599	16	5		B
1975 SF1	12.5	750925	91.40	239.78	29.19	8.76	0.1184	2.5783	16	5		B
1975 SG1	13.5	750925	309.63	48.08	25.22	10.01	0.1010	2.5993	16	5		B
1975 SH1	14.0	750925	18.03	290.06	61.28	3.06	0.1100	2.9310	16	5		B
1975 SJ1	11.5	750925	174.50	0.75	200.67	15.62	0.1261	3.1307	16	5		B
1975 SK1	13.5	750925	219.76	158.53	2.93	2.69	0.0929	2.3704	16	5		B
1975 SL1	15.0	750925	9.53	175.89	181.50	8.00	0.2144	2.6973	2	3		B
1975 SM1	15.5	750925	358.71	218.20	154.75	2.95	0.2217	2.4126	16	4		B
1975 SN1	13.5	750925	29.60	276.17	62.54	3.08	0.0990	2.9670	16	5		B
1975 SO1	13.0	750925	240.28	357.73	147.19	2.49	0.0984	2.9947	16	5		B
1975 SP1	15.0	750925	23.24	143.31	196.22	9.55	0.1883	2.5902	16	4		B
1975 SQ1	15.5	750925	356.60	232.29	143.00	2.27	0.2531	2.2075	2	3		B
1975 SR1	12.5	750925	126.14	30.14	198.07	32.90	0.3041	2.5059	2	3		B
1975 SS1	13.0	750925	173.77	177.99	23.25	17.04	0.1182	3.0151	2	3	E	B
1975 ST1	13.0	750925	21.79	160.65	187.78	10.61	0.1026	2.9666	16	5		B
1975 SU1	12.5	750925	41.44	162.98	168.79	1.17	0.0460	3.3635	16	5		B
1975 SV1	14.5	750925	353.71	346.48	36.74	5.98	0.1698	3.0812	16	5		B
1975 SW1	13.5	750925	292.57	288.06	184.07	2.21	0.2495	2.9619	2	3		B
1975 SX1	13.0	750925	289.09	250.13	199.69	9.00	0.0196	3.0061	16	5		B
1975 SY1	15.0	750925	335.27	24.43	25.23	11.05	0.2140	2.3974	16	5		B
1975 SA2	13.5	750925	228.92	121.79	29.47	7.29	0.0405	3.1503	16	5		B
1975 SB2	14.5	750925	359.44	183.70	189.80	7.82	0.1277	2.2504	16	5		B

1975	SC2	12.0	750925	275.26	283.18	191.21	9.91	0.1023	3.4123	16	5		B
1975	SD2	14.5	750925	350.18	207.56	181.13	5.78	0.2356	2.4728	16	4		B
1975	SE2	14.5	750925	359.03	333.73	40.39	6.74	0.1405	2.4097	16	5		B
1975	TM2	14.0	751015	13.18	193.06	170.57	2.20	0.1343	2.2610	29	5	D	B
1975	TA4	15.0	751015	12.15	310.60	50.32	3.28	0.2180	2.2327	3	3	E	B
1975	UY	14.5	751015	13.16	178.82	178.39	7.94	0.2322	2.4655	32	6		B
1975	UA1	14.0	751015	350.09	202.95	190.49	14.52	0.1696	2.5984	31	7		B
1987	DF	13.0	870306	296.80	88.14	159.56	23.02	0.2245	2.3588	59	0		B
1987	DG	15.0	870214	347.87	351.27	177.85	2.77	0.1385	2.1577	15	0		B
1987	DN	11.5	870214	72.15	116.56	314.50	5.96	0.0194	3.1108	9	0		B
1987	DP	12.0	870214	34.54	301.45	179.30	6.43	0.0947	2.9276	11	0		M
1987	DU5	13.5	870214	19.47	216.68	259.77	2.74	0.0350	2.2830	4	0	E	M
1987	DB6	13.0	870214	50.56	289.89	151.86	7.94	0.2029	2.7844	15	0		B
1987	DD6	14.5	870214	331.46	34.39	154.35	3.58	0.1187	2.2535	13	0		B
1987	DE6	11.5	870214	105.91	66.70	313.61	6.03	0.1906	3.1281	12	9	E	B
1987	DF6	13.0	870214	306.00	250.66	329.77	12.71	0.1192	2.6710	12	0		B
1987	DG6	12.5	870214	259.42	335.67	298.02	1.19	0.1732	2.6591	12	0		B
1987	DK6	14.0	870214	267.95	301.23	326.50	2.74	0.1964	2.1819	11	0		B
1987	DL6	14.5	870214	340.98	185.87	351.20	7.31	0.1368	2.2946	12	0		B
1987	DM6	14.5	870214	25.37	287.20	192.02	3.80	0.1521	2.2667	12	0		B
1987	DN6	14.0	870214	34.41	180.64	287.17	2.42	0.1621	2.6226	10	0		B
1987	DO6	11.5	870214	141.98	39.47	328.61	8.51	0.1267	3.0471	12	0		B
1987	DP6	12.0	870214	40.68	327.56	143.41	6.03	0.1160	2.9895	15	0		B
1987	DQ6	11.0	870214	162.25	1.73	352.02	16.56	0.0867	3.1018	12	0		B
1987	DU6	13.5	870214	240.49	12.82	278.28	3.88	0.1461	2.2057	14	0		B
1987	DA7	16.0	870306	1.96	211.56	308.98	4.16	0.3000	2.0241	11	0		B
1987	EH	12.5	870214	52.36	289.57	169.19	10.57	0.0514	3.0229	16	0		B
1987	EQ	14.0	870214	320.23	232.89	327.87	2.38	0.0506	2.1728	14	0		B
1987	EV	13.5	870214	315.91	270.29	307.54	4.08	0.1125	2.2732	12	0		B
1987	ED1	12.5	870214	75.00	95.69	331.92	9.92	0.1058	3.2355	6	6	E	B
1987	EE1	12.5	870306	198.98	348.98	332.96	8.74	0.0476	3.0154	2	9		B
1987	GK	13.5	870306	337.29	27.18	167.13	11.95	0.1683	2.5903	38	0		B
1987	KD1	13.5	870525	338.84	121.05	159.98	16.25	0.2555	2.5716	25	6		B
1988	AK	9.0	871231	348.00	17.45	86.23	17.91	0.1434	5.2104	8	6	E	M
1988	CQ1	14.0	880209	2.40	359.44	122.38	6.54	0.1161	2.3704	12	8		M
1988	CU1	15.0	880209	323.60	204.35	339.66	1.60	0.2563	2.6708	12	7		M
1988	CB3	14.0	880209	170.41	9.28	303.42	8.93	0.1521	2.2830	5	5	E	M
1988	CD3	12.5	880209	90.37	326.99	39.00	1.51	0.2508	3.0323	12	7	E	M
1988	CF3	14.0	880209	89.37	31.80	332.00	3.40	0.2975	2.3943	12	7		M
1988	CP4	14.5	880209	229.47	334.19	309.93	21.19	0.0166	3.1500	10	0	D	N
1988	CY4	15.5	880209	255.09	29.97	240.17	6.22	0.1508	2.4116	10	7		M
1988	CF7	13.0	880209	130.18	135.75	230.59	7.91	0.1749	2.6207	8	0		M
1988	CO7	15.5	880209	313.85	103.33	82.98	0.92	0.1511	2.2983	8	0	E	M
1988	CR7	14.5	880209	282.91	130.45	89.97	2.59	0.1580	2.4441	8	7		M
1988	DT1	15.0	880209	41.46	170.09	280.32	7.48	0.1807	2.8290	7	9		M
1988	DU1	14.0	880209	199.40	23.64	289.35	10.82	0.0540	2.9452	7	9		M
1988	DX1	14.5	880209	264.16	356.04	268.58	8.14	0.1639	2.8179	7	9		M
1988	DY1	15.0	880209	127.83	107.36	262.28	6.58	0.1587	2.4233	7	9		M
1988	DA2	14.0	880209	221.84	94.70	196.86	9.90	0.0314	2.9952	7	9		M
1988	DD2	14.5	880209	316.12	39.31	135.39	8.90	0.0733	2.3586	6	9		M
1988	DE2	13.5	880209	358.18	32.15	95.73	3.42	0.1090	2.3576	5	9	E	M
1988	DF2	13.5	880209	68.91	51.47	350.03	2.98	0.1184	2.6415	7	0		M
1988	DG2	14.5	880209	32.23	311.11	131.69	9.90	0.1402	2.6247	5	9		M
1988	DH2	14.5	880209	67.10	264.60	130.14	1.62	0.1903	2.9608	6	9		M
1988	DJ2	15.0	880209	91.96	48.13	327.87	1.22	0.1468	2.3526	7	0		M
1988	DO2	14.0	880209	35.81	283.95	143.95	3.88	0.2559	2.5374	7	9		M
1988	EA	15.0	880320	2.88	176.23	3.29	24.95	0.0366	1.9443	32	6		M
1988	EH	12.5	880409	80.16	254.30	172.65	23.29	0.2884	2.4058	70	0		B
1988	EM1	12.5	880320	26.51	329.08	175.68	11.74	0.1972	2.6531	34	8		M

1988 EY1	13.5	880229	25.59	137.56	8.94	12.53	0.1034	2.6830	32	3		M
1988 EZ1	13.5	880229	318.28	217.71	16.03	0.79	0.1562	2.5104	32	3		M
1988 EA2	14.0	880320	1.06	26.41	155.95	3.68	0.0639	2.2574	33	5		M
1988 EB2	13.5	880229	125.92	218.27	182.14	6.85	0.1479	2.2982	6	3		M
1988 FK	14.5	880409	341.93	54.19	152.02	22.60	0.0767	1.9301	52	6		B
1988 FN	14.5	880409	359.57	204.21	333.42	23.58	0.2414	2.4014	54	7		B
1988 GF	12.5	880429	305.14	49.81	226.71	13.38	0.1731	2.5888	39	6		B
1988 GG	13.5	880409	5.05	166.04	26.06	25.66	0.2189	2.3921	32	0		B
1988 JL	14.5	880429	248.17	257.38	81.60	22.65	0.0682	1.9047	3	3		M
1988 JM	12.0	880519	260.71	73.44	269.41	9.19	0.1159	3.0303	15	0		N
1988 JN	12.0	880429	31.86	23.25	154.76	22.95	0.1953	3.2301	3	3		B
1988 JO	13.5	880429	296.70	224.80	94.66	25.55	0.2108	2.3973	3	3		B
1988 JQ	12.5	880519	356.04	119.08	134.69	23.41	0.2191	2.3600	38	6		M
1988 JW	13.5	880429	319.31	133.92	110.30	13.68	0.2052	2.3816	4	3		B
1988 JX	14.5	880429	342.87	29.42	218.71	1.05	0.2206	2.5156	5	6	E	M
1988 JA1	12.5	880519	1.14	121.17	122.70	23.84	0.2249	2.3637	38	9		M
1988 KB	13.0	880429	2.01	150.25	88.22	26.51	0.2390	2.3928	6	4		B

1975 TM2 = 1975 VQ (H. Oishi, JAM 1265)
1988 CP4 = 1988 DW1 (S. Nakano)

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ORBITAL ELEMENTS BY E. GOFFIN, AGFA-GEVAERT N.V., MORTSEL, BELGIUM.

The elements are for Epoch 1988 Aug. 27.0 ET, equinox 1950.0.

(24) Themis		Obs. 352	M 158.58155	Peri.	110.52226
H 7.07	G 0.10	Opp. 37	n 0.17820071	Node	35.66667
rms res. 0".7	(M-N)	1908-1987	e 0.1346532	Incl.	0.75799
(31) Euphrosyne		Obs. 279	M 270.12844	Peri.	63.16478
H 6.53	G 0.15	Opp. 31	n 0.17679601	Node	30.66856
rms res. 0".6	(M-N)	1918-1986	e 0.2285783	Incl.	26.34664
(34) Circe		Obs. 108	M 142.13093	Peri.	328.68543
H 8.37	G 0.03	Opp. 31	n 0.22384829	Node	184.13199
rms res. 0".9	(M-N)	1914-1987	e 0.1072857	Incl.	5.48596
(41) Daphne		Obs. 191	M 249.23360	Peri.	46.12562
H 7.34	G 0.15	Opp. 32	n 0.21465932	Node	177.71011
rms res. 0".8	(M-N)	1916-1986	e 0.2740998	Incl.	15.77782
(45) Eugenia		Obs. 196	M 101.13367	Peri.	85.77431
H 7.27	G 0.15	Opp. 36	n 0.21978486	Node	147.48167
rms res. 0".7	(M-N)	1910-1987	e 0.0829974	Incl.	6.60164
(117) Lomia		Obs. 45	M 170.56527	Peri.	56.06214
H 8.18	G 0.48	Opp. 28	n 0.19044091	Node	348.55454
rms res. 1".1	(M-N)	1900-1988	e 0.0224655	Incl.	14.92419
(138) Tolosa		Obs. 80	M 246.55245	Peri.	258.58664
H 9.04	G 0.25	Opp. 28	n 0.25738741	Node	54.65622
rms res. 0".9	(M-N)	1906-1988	e 0.1641319	Incl.	3.20763
(171) Ophelia		Obs. 98	M 358.61107	Peri.	57.72346
H 8.39	G 0.24	Opp. 34	n 0.17734298	Node	100.13191
rms res. 0".9	(M-N)	1903-1986	e 0.1194455	Incl.	2.54455

(205) Martha	Obs. 52	M 190.98837	Peri.	172.80910
H 9.04 G 0.15	Opp. 24	n 0.21286966	Node	211.52846
rms res. 0".9 (M-N)	1907-1988	e 0.0340767	Incl.	10.68801
(654) Zelinda	Obs. 73	M 44.46774	Peri.	213.64785
H 8.43 G 0.05	Opp. 24	n 0.28301319	Node	277.98059
rms res. 0".9 (M-N)	1908-1988	e 0.2299842	Incl.	18.12687
(2281) 1971 UQ1	Obs. 32	M 141.38747	Peri.	108.87276
H 13.50 G 0.25	Opp. 7	n 0.30456485	Node	206.14841
rms res. 0".9 (M-N)	1971-1987	e 0.1452344	Incl.	1.48545

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ORBITAL ELEMENTS BY H. OISHI, NIIZA, JAPAN.

The identifications are by H. Oishi unless otherwise stated.

(3839)* 1971 OU = 1976 YN3 = 1979 SQ6 = 1979 SQ12

Discovered 1971 July 26 by N. S. Chernykh at the Crimean Astrophysical Observatory. The identification 1971 OU = 1976 YN3 is by T. Urata (NOC 1043).

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M 186.08982	(1950.0)	P	Q
n 0.25700118	Peri. 37.18363	+0.13078197	+0.99057726
a 2.4500746	Node 240.36438	-0.92043475	+0.10608063
e 0.1830230	Incl. 2.68085	-0.36836930	+0.08662326
P 3.84	H 12.9	G 0.25	

Residuals in seconds of arc

710726 095	0.2- 1.2+	761216 095	0.1+ 1.2+	871125 801	1.3- 0.9+
710727 095	0.9+ 1.7+	790923 095	1.0- 2.0+	871211 054	0.8+ 0.8+
710818 095	(4.7- 3.7-)	790928 095	1.4+ 3.0-		
710824 095	1.3- 1.5-	871022 801	0.3+ 1.1-		

(3840)* 1980 TN4 = 1928 DR = 1952 HW2 = 1979 FG4 = 1982 DD

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

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M 280.18037	(1950.0)	P	Q
n 0.29217160	Peri. 167.66371	-0.86960275	+0.49164031
a 2.2492827	Node 41.88507	-0.45859644	-0.76999465
e 0.0821084	Incl. 3.91779	-0.18297639	-0.40669157
P 3.37	H 13.3	G 0.25	

Residuals in seconds of arc

280225 024	0.6+ 2.9+	820220 688	0.4+ 0.2-	871116 675	(18.7- 2.1+)
520426 711	(2.0- 8.5-)Y	820220 688	1.0- 0.9+	871119 688	0.4+ 1.2+
790331 095	1.5+ 2.5+	820228 688	1.3+ 1.9-	871119 688	3.9- 1.6-
801007 675	0.8+ 0.6+	820228 688	0.5- 1.5-	871120 675	(9.0- 4.1+)
801008 675	0.5- 0.2+	860504 675	0.0 0.0	871124 688	(5.9+ 1.1+)
801009 675	1.8+ 1.8+	860505 675	1.3- 0.4+		
801010 675	0.5- 1.1+	871024 801	0.2+ 0.2+		

(3841)* 1983 VG7 = 1973 YM2 = 1982 KA2

Discovered 1983 Nov. 4 by B. A. Skiff at the Anderson Mesa Station of the Lowell Observatory. The identifications are by T. Furuta (MPC 9825).

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M 139.84159		(1950.0)		P	Q
n 0.28738462	Peri.	359.14176	+0.70916592		-0.70202399
a 2.2741915	Node	45.68753	+0.64737276		+0.61176373
e 0.1600028	Incl.	5.22494	+0.27927085		+0.36456475
P 3.43	H 13.2		G 0.25		

Residuals in seconds of arc

731220 095	0.0	0.6-	831030 675	1.4-	0.4+	831107 688	0.2-	0.6-
820527 474	0.5-	1.0-	831101 330	0.3-	0.8-	831107 688	1.0+	0.3-
820527 474	0.2-	2.2-	831104 688	0.3+	1.3-	880117 801	0.2+	0.9+
820528 474	0.3+	2.0+	831104 675	0.9-	0.6+	880122 801	1.3+	0.2-
820528 474	0.1-	0.5-	831104 688	0.2+	0.9-	880215 801	0.5-	0.0
831028 330	0.5-	0.3+	831105 330	2.3+	1.4+	880318 801	1.0-	1.0-

(3842)* 1985 FC1 = 1952 BW = 1965 UG2 = 1974 EQ = 1976 UO3 = 1980 YE

Discovered 1985 Mar. 21 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory. The identifications 1985 FC1 = 1952 BW = 1974 EQ = 1976 UO3 = 1980 YE are by T. Furuta (MPC 9827).

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M 56.60129		(1950.0)		P	Q
n 0.27282538	Peri.	111.39425	-0.11294820		-0.99343374
a 2.3543961	Node	345.05643	+0.88338408		-0.09200646
e 0.1177941	Incl.	4.05251	+0.45483544		-0.06800154
P 3.61	H 13.2		G 0.25		

Residuals in seconds of arc

520123 711	(0.1-	7.2-)Y	801230 688	1.2-	0.2-	850414 688	0.3-	2.2-
520123 711	1.3+	2.2- Y	810109 688	0.7-	0.6+	871218 894	0.9+	1.3+
651020 330	0.0	0.4-	850321 688	0.1-	1.0+	871218 894	(1.7+	3.8+)
651024 330	0.3+	2.5-	850321 688	0.9-	0.1+	871220 894	0.1+	1.0-
740315 095	0.9-	2.2+	850324 688	2.6+	0.3+	871220 894	2.4+	1.5-
761026 095	0.7-	1.2+	850324 688	0.4+	0.0	871224 801	1.2-	2.8+
801230 688	0.7-	0.8-	850414 688	1.1-	2.1-	880221 801	1.0-	1.0+

(3843)* 1987 DM = 1976 SR4 = 1980 GK

Discovered 1987 Feb. 28 by Y. Oshima at Gekko.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M 147.10857		(1950.0)		P	Q
n 0.12284355	Peri.	26.86228	+0.56274544		-0.82596690
a 4.0077547	Node	28.92737	+0.74554388		+0.48983648
e 0.1296002	Incl.	3.92502	+0.35704607		+0.27899624
P 8.02	H 10.6		G 0.25		

Residuals in seconds of arc

760924 095	0.5+	1.0-	870303 888	(7.9-	1.5+)	880219 888	1.5-	0.6-
800412 046	0.3+	1.0-	870303 888	0.6+	1.3+	880310 888	0.7-	1.3-
800412 046	(3.9-	1.1+)	870304 888	0.9-	0.6-	880310 888	0.2-	0.5-
800413 046	0.4+	1.1+	870304 888	0.9-	0.9+	880312 888	1.9-	2.0+
800413 046	1.9+	1.2-	870320 888	0.3+	0.1+	880312 888	1.5-	1.1+
800414 046	0.1-	0.9+	870320 888	0.2+	0.5+	880410 888	2.0-	0.6-
800414 046	1.0+	0.2+	870324 888	1.4+	0.8-	880410 888	2.8-	0.1-
800415 046	0.3+	0.9+	870324 888	0.8-	0.0	880414 046	1.4+	0.1+
800415 046	1.9-	2.4+	870326 888	0.5+	0.8+	880414 046	2.5+	1.0+
800416 046	2.5+	1.1-	870326 888	1.3-	3.7-	880415 046	2.9+	3.0-
800416 046	2.2-	2.5+	870326 033	1.3-	0.3+	880415 046	2.5+	1.1-
870228 888	0.6+	1.4-	870326 033	1.0-	0.2-	880417 046	0.5-	0.9-
870228 888	1.9+	1.7-	870329 888	0.4-	0.3+	880417 046	0.1-	1.6-
870302 888	0.8+	2.8+	870329 888	0.2-	0.8-			
870302 888	0.1+	2.4+	880219 888	1.1-	0.2-			

1975 VS5 = 1975 XM4 = 1978 QG1 = 1978 RG4 = 1985 VU5

The double designation 1975 VS5 = 1975 XM4 is by B. G. Marsden (MPC 6880). The identifications 1975 VS5 = 1978 QG1 = 1978 RG4 are by T. Urata and L. D. Schmadel (MPC 7140), who found them independently.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (M-P)

M	288.28317		(1950.0)	P	Q
n	0.29101021	Peri.	245.20386	+0.61541342	-0.78779627
a	2.2552632	Node	166.72141	+0.75714305	+0.58191019
e	0.1560752	Incl.	6.34024	+0.21909070	+0.20188506
P	3.39	H	14.1	G 0.25	

Residuals in seconds of arc

751103	095	1.2- 1.0+	780905	095	0.9- 0.5+	830121	801	0.4+ 2.3+
751112	095	1.3+ 0.5-	830109	801	1.4+ 0.7+	830122	688	0.5+ 0.4+
751203	095	0.4- 1.1+	830120	372	1.7- 0.5-	830122	688	3.4+ 1.5-
780831	095	0.6+ 1.0+	830120	372	3.8- 1.0-	851111	095	0.5+ 2.3-

1984 HC2 = 1977 KJ = 1980 DA3

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	185.77528		(1950.0)	P	Q
n	0.27081659	Peri.	326.56196	+0.17769375	-0.98085827
a	2.3660290	Node	113.09176	+0.92075611	+0.13715174
e	0.0638917	Incl.	4.96649	+0.34732280	+0.13822613
P	3.64	H	13.0	G 0.25	

Residuals in seconds of arc

770523	095	0.1- 0.3-	840423	809	1.5- 0.3+	840430	809	1.0+ 0.2+
800220	095	0.1- 0.2-	840424	809	0.8+ 0.4-	840506	809	0.6- 0.1+
840329	095	(8.7+ 2.3-)	840424	809	0.3- 0.2+	840506	809	0.1+ 0.1+
840423	809	0.0 0.1-	840430	809	0.6+ 0.1+			

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ORBITAL ELEMENTS BY S. NAKANO, SMITHSONIAN ASTROPHYSICAL OBSERVATORY.

The identifications are by S. Nakano unless otherwise stated.

(3844)* 1966 BZ = 1933 XH = 1964 VC1 = 1975 BW = 1977 RW3 = 1977 SP
= 1980 FY10 = 1982 VJ9 = 1985 HD1 = 1985 JV = 1985 KK
= 1986 PU = 1986 QA = 1987 YQ

Discovered 1966 Jan. 30 at the Purple Mountain Observatory. The double designations 1985 HD1 = 1985 JV and 1985 HD1 = 1985 KK are by F. N. Bowman and C. M. Bardwell, respectively (MPC 10151). The double designation 1986 PU = 1986 QA was also suggested by F. N. Bowman and B. G. Marsden. The identification 1985 HD1 = 1986 QA was suggested by A. C. Gilmore.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	124.74997		(1950.0)	P	Q
n	0.21842457	Peri.	227.96094	+0.99399961	-0.09972331
a	2.7306648	Node	137.70436	+0.10917717	+0.92973564
e	0.1051045	Incl.	3.82947	-0.00671706	+0.35446707
P	4.51	H	11.8	G 0.25	

Residuals in seconds of arc

331215	024	0.4+ 1.3-	821110	095	1.5+ 1.7-	860806	675	(25.8- 0.3-)
641110	760	(22.0+ 35.0+)X	850421	046	0.2- 2.4-	860830	474	1.8+ 1.1-
660130	330	2.0+ 0.2+	850422	046	0.5- 4.0-	860830	474	3.1+ 0.1-
660214	330	0.8+ 1.3-	850511	675	1.0- 1.5+	871222	046	0.9+ 0.2+
660224	330	(39.0+ 16.9-)	850513	675	1.9- 0.1-	871222	046	0.6+ 0.7-
750118	095	2.6- 0.5+	850524	046	(83.1- 46.9+)	871223	688	1.0- 0.5-
770907	095	3.9- 1.2-	850524	046	(80.8- 53.1+)	871223	688	1.0- 0.8-
770918	095	1.8- 0.8-	860802	675	2.0+ 1.7-	880115	688	0.4+ 1.3-
800316	095	1.2+ 1.2-	860804	675	(8.8- 1.9-)	880115	688	1.2- 1.0-

(3845)* 1979 SA10 = 1985 RM

Discovered 1979 Sept. 22 by N. S. Chernykh at the Crimean Astrophysical Observatory. The identification was found independently by E. Bowell.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	102.48685	(1950.0)		P	Q
n	0.15718458	Peri.	253.93863	+0.11606153	-0.99309817
a	3.4003954	Node	189.44491	+0.94608598	+0.11571693
e	0.1851679	Incl.	5.91251	+0.30240872	+0.01912088
P	6.27	H	11.6	G 0.25	

Residuals in seconds of arc

790922	095	2.4+	1.6+	850914	688	0.3-	0.2+	870228	801	0.3-	0.1-
790928	095	0.5-	0.5-	850914	688	1.3-	1.2-	880310	372	0.5-	0.4-
791016	095	0.5-	0.7+	850918	688	0.8+	2.1+	880310	372	0.8-	1.7+
791111	095	2.2-	1.8+	850918	688	0.1-	0.4-	880418	801	1.8+	0.5+
850815	688	1.4+	0.1-	870129	801	0.4+	1.3-				
850815	688	0.1+	2.8-	870225	801	0.0	0.8-				

(3846)* 1980 TK5 = 1955 UD1 = 1978 GH3 = 1978 JM3 = 1983 HH

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

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	75.29866	(1950.0)		P	Q
n	0.19574656	Peri.	284.35021	-0.83851289	-0.53410949
a	2.9376945	Node	223.50881	+0.54049000	-0.79024002
e	0.0884132	Incl.	9.00936	+0.06904124	-0.30041265
P	5.04	H	12.1	G 0.25	

Residuals in seconds of arc

551020	760(63.7+	7.4+)X		801010	095	1.5-	1.1+	870130	801	0.1+	0.5+
780411	095	1.1-	4.7+	801015	095	0.8+	2.9+	870227	801	0.0	0.7+
780505	095	0.3+	0.3-	830418	688	0.7+	0.3+	880317	675	1.1+	0.8+
801008	675	2.5-	1.4-	830418	688	1.1+	0.9-	880320	675	2.0-	0.1-
801009	675	0.9+	0.3+	830506	688	0.3+	0.9-	880419	801	0.2-	0.5+
801010	675	1.2+	1.3+	830506	688	0.7+	0.1+				

(3847)* 1982 DY1 = 1937 AU = 1974 TJ1 = 1977 FJ1 = 1980 WF2

Discovered 1982 Feb. 16 by A. Mrkos at Klet.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	178.52391	(1950.0)		P	Q
n	0.17701224	Peri.	319.40760	+0.89590815	-0.44083425
a	3.1414768	Node	66.82907	+0.42145924	+0.80438761
e	0.0881493	Incl.	3.42343	+0.14043040	+0.39827847
P	5.57	H	11.4	G 0.25	

Residuals in seconds of arc

370109	020	0.5-	7.3-	820121	095	(1.0+	6.5+)	880316	399	1.6+	2.8-
741012	808	0.3-	0.5-	820216	046	2.1+	2.7-	880316	399	0.4-	1.8+
741012	808	0.0	0.7+	820216	046	1.2+	2.1-	880317	399	0.9+	1.9-
770325	095	0.1+	1.2+	820220	046	1.0-	0.7+	880317	399	1.4-	1.1-
801130	095	0.2-	3.1+	820220	046	0.8+	0.6+	880317	399	2.0+	0.3+
801210	095	0.8-	3.4+	820221	046	2.1-	0.6+	880318	801	0.4-	2.8+
820120	095	0.2+	4.0+	820221	046	1.3-	0.6+	880418	801	0.4-	3.1+

(3848)* 1982 FH3 = 1980 XJ3 = 1986 GA

Discovered 1982 Mar. 21 by H. Debehogne at the European Southern Observatory. The identifications are by T. Urata (NOC 1558).

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	188.89016	(1950.0)		P	Q
n	0.25610645	Peri.	61.18588	-0.40289266	+0.91523150
a	2.4557776	Node	185.06394	-0.85945604	-0.38034296
e	0.0922551	Incl.	3.48611	-0.31466302	-0.13300579
P	3.85	H	13.3	G 0.25	

Residuals in seconds of arc

801210 095	0.2+	0.6+	820330 809	0.1-	0.7+	820401 809	0.1+	0.1+
820321 809	0.1+	1.0-	820331 809	0.8-	0.4+	860313 809	0.1+	1.6-
820321 809	0.1+	0.7-	820331 809	0.4-	0.2+	860313 809	0.8+	0.7-
820321 809	0.0	0.2-	820331 809	0.3-	0.0	860407 889	0.6-	1.6+
820326 809	(4.0-	1.7+)	820331 809	0.0	1.0-	860407 889	2.3+	1.0+
820326 809	(4.4-	1.7+)	820331 809	0.3+	1.0-	860412 386	(1.3+	5.7+)
820326 809	(4.5-	1.6+)	820331 809	0.5+	1.1-	860412 386	(2.5+	4.2+)
820329 809	0.9+	0.1+	820401 809	0.5-	0.6+	860413 801	2.8+	0.3+
820329 809	0.7+	0.2+	820401 809	0.7-	0.7+	860429 675	1.5-	0.1+
820329 809	0.5+	0.7+	820401 809	0.1-	0.6+	860429 675	2.9-	1.2+
820330 809	0.1-	0.3+	820401 809	0.2+	0.1+	870825 801	1.9+	0.3-
820330 809	0.3-	0.4+	820401 809	0.1-	0.2+	871123 801	3.7-	3.3+

(3849)* 1984 FC = 1976 GH = 1980 FA11 = 1986 WM1

Discovered 1984 Mar. 31 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	131.74319		(1950.0)		P		Q	
n	0.25309057	Peri.	76.27939		-0.20596738		-0.97758604	
a	2.4752481	Node	25.73174		+0.85445130		-0.20139462	
e	0.0472623	Incl.	5.76667		+0.47695955		-0.06136567	
P	3.89	H	13.1	G	0.25			

Residuals in seconds of arc

760401 095	(3.2-	13.3+)	840427 809	1.5-	0.4+	861129 046	2.3+	1.8-
760404 095	(7.6-	16.3+)	840428 809	0.9-	0.4+	861204 046	(3.9+	0.4-)
781028 675	0.3-	0.5+	840428 809	0.2-	0.4+	861204 046	(4.8+	0.4-)
781029 675	0.1-	0.3+	840501 809	0.2-	0.2-	861207 046	0.0	0.3+
800316 095	0.8+	0.4-	840501 809	0.4-	0.8+	861207 046	0.7+	0.6-
840330 675	(7.0+	0.8-)	840504 688	0.5-	1.2-	861209 046	(6.9+	0.5-)
840331 688	0.9+	0.8-	840504 688	1.1-	1.2-	861209 046	(6.0+	1.6-)
840331 688	(4.8+	0.3-)	840504 809	0.3-	0.1+	861228 801	1.4-	2.2+
840331 675	2.6+	0.5+	840505 809	0.6-	0.5-	870128 801	2.1-	1.7+
840403 688	0.3-	0.3+	861125 046	(3.0-	3.1-)	880408 364	2.3+	0.2-
840403 688	(3.1+	3.8-)	861125 046	(5.4-	2.2-)	880408 364	0.9-	1.2+
840427 809	0.6-	0.1-	861129 046	0.2-	2.6-			

(3850)* 1986 TK2 = 1949 PC = 1969 OC1 = 1979 OX13 = 1982 OW

Discovered 1986 Oct. 7 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	240.11388		(1950.0)		P		Q	
n	0.29504836	Peri.	206.49417		+0.86593228		+0.49428565	
a	2.2346384	Node	123.67544		-0.44102021		+0.82666192	
e	0.1615017	Incl.	5.27022		-0.23592894		+0.26890848	
P	3.34	H	13.6	G	0.25			

Residuals in seconds of arc

490815 078	(30.5-	7.1+)Y	861007 688	0.2+	0.3-	880213 054	1.0-	1.8+
690717 095	1.2+	3.4+	861105 688	1.3-	0.8+	880213 054	1.5-	1.8+
690808 095	1.3-	2.8-	861105 688	0.0	0.6-	880214 033	1.1-	0.6+
790719 095	0.2+	1.0-	861107 010	(4.3-	0.8-)	880214 033	0.9+	1.1-
820717 413	(13.7+	15.0-)	861107 010	0.5+	0.2+	880215 033	0.0	0.9-
820717 413	(12.9-	13.6+)	861202 688	0.7-	0.2-	880215 033	0.7+	0.7-
861007 688	0.5+	0.4-	861202 688	0.7+	0.6+	880216 033	1.7+	2.4-

(3851)* 1986 UZ = 1950 MC = 1960 RA = 1965 CD = 1973 ST2 = 1973 SE4

Discovered 1986 Oct. 30 by T. Seki at Geisei. The identifications 1986 UZ = 1950 MC = 1965 CD = 1973 ST2 = 1973 SE4 and 1986 UZ = 1960 RA are by T. Urata (NOC 1577) and by T. Kobayashi (MPC 11440), respectively.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	171.23573	(1950.0)	P	Q
n	0.30730217	Peri. 97.09638	+0.14923252	-0.98856027
a	2.1748316	Node 344.27036	+0.87233557	+0.14203644
e	0.0638870	Incl. 4.62696	+0.46557524	+0.05073701
P	3.21	H 13.8	G 0.25	

Residuals in seconds of arc

500625 839 1.9- 1.4-	861030 372 (4.6+ 1.9-)	880221 372 (1.4+ 13.0-)	
500713 839 1.3+ 1.8-	861030 372 (4.3+ 1.4-)	880505 372 0.8- 0.6+	
600912 024 1.8+ 1.6+	861102 372 1.6+ 0.3+	880507 372 0.3+ 0.8-	
650205 760(52.8+ 64.5+)X	861103 372 1.7- 0.7+	880507 372 3.0+ 0.7+	
730922 095 2.5- 1.1+	861104 372 0.3+ 2.1-	880508 372 1.3- 3.0-	
730926 095 0.4- 0.9+	861105 688 0.0 0.4-	880512 372 2.9+ 1.1-	
861009 092 0.3- 0.2-	861105 688 0.0 0.2-	880518 372 (8.1- 10.9+)Y	
861009 092 0.7- 0.4+	861107 372 (4.2- 0.3-)	880522 372 (0.1+ 8.5+)	
861011 092 0.1- 0.5-	861126 372 0.1+ 1.5-	880604 372 0.9- 1.5+	
861011 092 0.5+ 0.2-	861126 372 1.6+ 1.0+	880605 372 3.6- 0.3+	
861012 092 0.3+ 0.2+	861130 372 2.1- 1.4+	880606 372 1.6+ 3.4+	
861012 092 1.1+ 0.6-	880221 372 (2.0- 14.0-)	880606 372 0.2- 1.1+	

(3852)* 1987 DR6 = 1935 SJ = 1935 TK = 1973 QL1 = 1977 HX = 1979 VT
= 1979 WN5 = 1984 OF

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

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	223.74347	(1950.0)	P	Q
n	0.17900046	Peri. 121.47178	+0.94956338	-0.31287661
a	3.1181711	Node 256.76797	+0.27990102	+0.87577907
e	0.1820329	Incl. 1.23136	+0.14136761	+0.36758569
P	5.51	H 12.0	G 0.25	

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

350919 094(66.8- 1.6+)X	870224 809 0.4- 1.1+	870303 809 0.5+ 0.5-	
350923 094(29.8- 7.7+)X	870225 809 0.6- 0.4+	870303 809 0.6+ 0.5-	
351003 094(0.03+ 0.00-)X	870225 809 0.5- 0.6+	870303 809 0.6+ 0.4-	
730829 095 0.3- 2.1+	870225 809 0.3- 0.4+	870304 809 0.1- 0.7-	
730902 095 1.8+ 3.1-	870226 809 1.0+ 0.3-	870304 809 0.1- 0.9-	
770424 675 0.1+ 1.4+	870226 809 1.2+ 0.1-	870304 809 0.3- 0.5-	
770425 675 0.5- 1.9+	870226 809 1.5+ 0.4-	870305 809 0.9- 0.6-	
791111 095 0.5- 0.8-	870227 809 0.1- 0.5-	870305 809 0.7- 0.6-	
791117 095 (1.0+ 7.4-)	870227 809 0.4+ 0.1-	870305 809 0.6- 0.6-	
840731 046 0.1+ 1.6-	870227 809 0.8+ 0.1-	870306 809 0.8- 1.0-	
840731 046 0.2- 0.1-	870228 809 0.5+ 0.9-	870306 809 0.6- 0.9-	
840801 046 1.1+ 1.1-	870228 809 0.6+ 0.9-	870306 809 0.6- 0.9-	
840801 046 0.4+ 1.2-	870228 809 0.2+ 0.9-	870307 809 1.3- 0.3-	
840802 046 1.5+ 0.7-	870301 809 0.8+ 0.2-	870307 809 1.3- 0.4-	
840802 046 3.2+ 2.0+	870301 809 1.1+ 0.2-	870307 809 1.3- 0.5-	
840803 046 2.2- 1.5-	870301 809 1.4+ 0.2-	870310 809 1.2- 0.4+	
840803 046 1.8- 2.0-	870302 809 0.1+ 0.5-	870310 809 1.1- 0.3+	
870224 809 0.4- 1.1+	870302 809 0.3+ 0.5-	870310 809 1.2- 0.4+	
870224 809 0.3- 1.0+	870302 809 0.4+ 0.5-		

1975 SZ1 = 1982 XF3

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	242.67410	(1950.0)	P	Q
n	0.28763394	Peri. 247.86189	+0.48818948	-0.87271464
a	2.2728817	Node 172.90656	+0.81841374	+0.45526691
e	0.1717344	Incl. 2.94290	+0.30310061	+0.17635533
P	3.43	H 16.0	G 0.25	

Residuals in seconds of arc

750930	675	0.0	0.3+	751015	675	0.2+	1.3+	821214	381	0.7+	0.6+
751001	675	0.1-	0.3-	751016	675	0.2-	1.6-	821214	381	0.5-	0.5-
751002	675	0.1+	0.3+	821213	381	0.2-	0.1-				

1980 FH2 = 1978 VF2 = 1987 DJ6
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	354.50216	(1950.0)	P	Q	
n	0.27576648	Peri.	348.77877	+0.72788102	+0.68491155
a	2.3376308	Node	327.91365	-0.62419015	+0.64192941
e	0.0725600	Incl.	3.55581	-0.28385888	+0.34470685
P	3.57	H	14.0	G 0.25	

Residuals in seconds of arc

781030	010	0.6-	0.1+	870224	809	0.8-	0.1+	870301	809	1.5+	0.5+
781101	010	1.0+	0.5+	870224	809	0.3-	0.1+	870303	809	(3.5+	0.7-)
781101	010	0.8+	0.5+	870224	809	0.1-	0.3+	870303	809	(3.9+	0.9-)
781102	010	1.7-	1.4-	870225	809	2.0-	1.2+	870303	809	(3.5+	0.5-)
781102	010	0.5+	0.3+	870225	809	1.8-	0.9+	870304	809	(4.1+	1.2-)
800316	809	0.4-	1.0+	870225	809	1.5-	1.3+	870304	809	(4.1+	1.3-)
800316	809	0.2+	0.1+	870226	809	(3.2-	1.6+)	870304	809	(4.2+	1.3-)
800316	809	0.5-	0.2-	870226	809	(3.3-	1.4+)	870305	809	(3.7+	1.6-)
800316	809	0.2+	0.4-	870226	809	(3.2-	1.4+)	870305	809	(3.8+	1.7-)
800317	809	0.4+	0.1+	870227	809	1.9-	1.1+	870305	809	(4.2+	1.7-)
800317	809	0.2+	0.4-	870227	809	2.0-	1.1+	870306	809	2.1+	1.3-
800317	809	0.0	0.2-	870227	809	2.0-	1.5+	870306	809	2.4+	1.3-
800317	809	0.1+	0.2-	870228	809	0.4-	1.1+	870306	809	2.2+	1.3-
800323	809	0.0	0.4+	870228	809	0.2-	1.0+	870307	809	0.7-	1.9-
870223	809	1.2+	1.3-	870228	809	0.0	1.0+	870307	809	0.5-	1.8-
870223	809	1.3+	1.3-	870301	809	1.3+	0.5+	870307	809	0.3-	1.4-
870223	809	1.2+	0.8-	870301	809	1.3+	0.5+				

1981 SN1 = 1988 DL2
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	108.57532	(1950.0)	P	Q	
n	0.18565490	Peri.	228.07252	+0.97278977	-0.23051401
a	3.0432150	Node	145.23606	+0.22282258	+0.90324614
e	0.3188448	Incl.	2.34293	+0.06348355	+0.36195262
P	5.31	H	13.5	G 0.25	

Residuals in seconds of arc

810926	688	0.7+	1.0-	811027	095	0.6+	0.1+	880221	809	0.4+	0.7-
810926	688	0.7+	1.8-	811102	688	0.8+	2.9-	880221	809	0.2-	1.2-
811006	095	2.6-	3.2+	811102	688	1.8+	3.9-	880223	809	0.9+	0.7+
811006	095	1.0+	1.1+	811102	095	0.4+	1.8+	880223	809	1.6-	0.2-
811026	095	3.2-	3.1+	880221	809	2.1+	0.5+	880223	809	1.6-	1.2+

1983 TD2 = 1929 WZ = 1979 SO6
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	54.22023	(1950.0)	P	Q	
n	0.25433955	Peri.	238.52298	+0.47655104	-0.87911925
a	2.4671430	Node	183.04211	+0.84451020	+0.45996183
e	0.2003458	Incl.	7.53590	+0.24433916	+0.12483770
P	3.88	H	13.0	G 0.25	

Residuals in seconds of arc

291128	690	0.2+	1.9-	Y	830914	688	2.2-	3.6-	831012	688	3.9+	4.0+
291204	690	(22.3+ | 19.8-)	Y	831005	688	2.6-	1.1-	831012	688	1.4+	2.2+
790923	095	0.7+	3.0-		831009	688	1.6-	1.3+				
830912	688	1.7-	3.3-		831009	688	2.0+	4.1+				

1984 ED = 1942 CL = 1986 PW2
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	327.71081	(1950.0)		P	Q
n	0.18814730	Peri.	4.08214	-0.71316186	-0.68633368
a	3.0162796	Node	131.49042	+0.63760897	-0.71965682
e	0.0516359	Incl.	10.97753	+0.29129876	-0.10507205
P	5.24	H	11.5	G 0.25	

Residuals in seconds of arc

420212 053	1.2+	6.9+ X	840309 688	1.2+	0.9+	860801 675	5.4+	2.7+
840301 688	0.1+	1.0-	840309 688	0.2+	1.1-	860802 675	5.7-	0.0
840301 688	1.0-	1.0-	840331 688	0.8-	0.0	860802 675	3.9-	1.1+
840306 688	0.3-	1.1-	840331 688	0.4-	1.7+			
840306 688	0.3+	0.7-	860801 675	3.5+	0.9+			

1984 SC5 = 1959 PE = 1979 EK = 1982 BN11
Epoch 1984 Oct. 27.0 ET = JDE 2446000.5 (J-P)

M	67.01380	(1950.0)		P	Q
n	0.24003658	Peri.	326.46882	+0.36376838	+0.91989627
a	2.5642004	Node	324.23041	-0.79000417	+0.22134526
e	0.1676109	Incl.	14.51519	-0.49352404	+0.32372384
P	4.11	H	12.0	G 0.25	

Residuals in seconds of arc

590810 760	1.5-	0.6+	820120 095	0.3+	0.6+	841022 675	1.8+	0.1-
590810 760	1.2+	0.0	840927 675	0.8-	0.3+	841023 675	1.2-	0.4-
790305 809	0.2-	0.3-	840928 675	0.6+	0.3-	841024 675 (7.5+	3.1+)	

1987 DX5 = 1954 YE = 1974 SN2 = 1979 QZ7 = 1979 SK1 = 1985 VP5
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	221.30540	(1950.0)		P	Q
n	0.18802194	Peri.	68.89201	+0.94298197	-0.30844060
a	3.0176201	Node	308.85403	+0.21303345	+0.84807299
e	0.1148740	Incl.	9.24402	+0.25573765	+0.43085566
P	5.24	H	12.0	G 0.25	

Residuals in seconds of arc

541224 760	0.4+	1.8+	870222 809	0.3+	0.5+	870301 809	0.1+	0.4-
541224 760(10.8+	1.9+)		870222 809	0.4+	0.4+	870301 809	0.1-	0.4-
740920 095	0.5+	1.0+	870223 809	0.5-	0.2+	870302 809	0.7-	0.7+
740922 095	0.8-	0.2-	870223 809	0.4-	0.2+	870302 809	0.6-	0.6+
790826 095	0.8-	2.5+	870223 809	0.4-	0.2+	870302 809	0.7-	0.6+
790921 808	0.1+	0.2-	870225 809	0.0	0.4+	870305 809	0.1+	0.3-
790921 808	0.3-	0.8-	870225 809	0.3+	0.3+	870305 809	0.0	0.2-
851111 095	0.3+	1.9-	870225 809	0.6+	0.1+	870305 809	0.1-	0.3-
870221 809	0.5+	0.3+	870227 809	0.9-	0.4-	870306 809	0.5+	0.4-
870221 809	0.7+	0.3+	870227 809	0.5-	0.4-	870306 809	0.6+	0.4-
870221 809	1.0+	0.4+	870227 809	0.5-	0.6-	870306 809	0.8+	0.4-
870222 809	0.4+	0.4+	870301 809	0.1+	0.1-			

1987 EP = 1980 RB4 = 1980 RG5
The double designation 1980 RB4 = 1980 RG5 is by A. Lowe (MPC 9824).
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	292.67568	(1950.0)		P	Q
n	0.23082943	Peri.	13.94161	+0.98698718	+0.13013831
a	2.6319409	Node	337.90442	-0.16075459	+0.78477180
e	0.1450619	Incl.	14.54191	-0.00377771	+0.60596802
P	4.27	H	12.0	G 0.25	

Residuals in seconds of arc

800904	323	2.3+	1.0-		870227	809	0.5+	0.0	870305	809	0.2-	0.6-
800907	095	1.6-	0.5+		870228	809	0.1+	0.1+	870305	809	0.1+	0.5-
800908	323	1.2-	0.7+		870228	809	0.1+	0.2+	870305	809	0.2+	0.6-
800908	323	0.3+	0.1+		870228	809	0.2-	0.2+	870306	809	0.1-	0.3-
870224	809	1.4-	1.2+		870302	809	0.6+	0.7-	870306	809	0.1-	0.4-
870224	809	1.3-	1.1+		870302	809	0.5+	0.5-	870306	809	0.3-	0.3-
870224	809	1.3-	1.1+		870302	809	0.6+	0.6-	870307	809	0.4-	0.9-
870225	809	0.0	0.7+		870303	688	(13.5- | 19.4-)	870307	809	0.0	0.2-
870225	809	0.1+	0.7+		870303	809	0.4+	0.7-	870307	809	0.5+	0.2-
870225	809	0.1+	0.7+		870303	809	0.5+	0.6-	870310	809	0.0	0.8+
870227	809	0.2+	0.1+		870303	809	0.6+	0.3-	870310	809	0.2-	0.4+
870227	809	0.5+	0.0		870303	688	(1.7- | 3.7+)	870310	809	0.1+	0.4+

1988 KA = 1982 VE2 = 1985 QL

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	9.75637		(1950.0)	P	Q
n	0.31491416	Peri.	222.22131	+0.61293953	+0.78735215
a	2.1396469	Node	85.68830	-0.70598909	+0.58336186
e	0.1891473	Incl.	3.80624	-0.35480210	+0.19941298
P	3.13	H	13.0	G 0.25	

Residuals in seconds of arc

821114	381	0.9+	0.9+		880514	809	1.3-	0.0	880522	809	1.6+	0.2-
821114	381	1.4-	1.1+		880515	809	1.6+	1.1-	880522	809	0.0	0.3+
850822	688	2.0+	0.9+		880516	809	2.1-	1.2+	880523	809	0.7+	0.2+
850822	688	0.0	1.4-		880518	809	1.7+	0.5-				
850912	688	1.6-	1.2-		880519	809	2.3-	2.1+				

2678 P-L = 1988 CP7

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	35.28739		(1950.0)	P	Q
n	0.26335282	Peri.	31.55421	-0.85013208	-0.52550934
a	2.4105248	Node	116.70740	+0.47497653	-0.79267257
e	0.1264987	Incl.	2.14255	+0.22731640	-0.30904714
P	3.74	H	16.0	G 0.25	

Residuals in seconds of arc

600924	675	1.0-	0.2+		601025	675	0.3+	0.7-	880223	809	0.7+	0.3+
600926	675	0.1+	0.5+		880215	809	0.3+	0.3+	880223	809	0.2+	0.4-
600928	675	0.2-	0.8-		880221	809	0.8+	1.3-	880223	809	1.0-	0.4+
600929	675	1.4+	0.9+		880221	809	0.1-	0.2+				
601017	675	0.6-	0.1-		880221	809	0.9-	0.5+				

9507 P-L = 1984 SV6 = 1988 AW2

The identification 9507 P-L = 1984 SV6 is by O. Kippes (MPC 9761).

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	112.33430		(1950.0)	P	Q
n	0.08207072	Peri.	334.01852	+0.98892885	-0.14010302
a	5.2441858	Node	34.14630	+0.14674387	+0.87438555
e	0.0846539	Incl.	4.99747	+0.02204470	+0.46456544
P	12.01	H	10.5	G 0.25	

Residuals in seconds of arc

601017	675	0.6-	0.0		840928	809	0.1-	0.5-	840930	809	0.1+	0.5+
601022	675	1.1-	0.0		840928	809	0.0	0.3-	840930	809	0.3-	0.3+
601024	675	1.0+	0.2-		840929	809	0.4+	0.2-	840930	809	0.2-	0.1+
601026	675	0.9+	0.1-		840929	809	0.1+	0.2+	880111	033	0.3+	0.1-
840928	809	0.1-	0.6-		840929	809	0.0	0.6+	880111	033	0.3-	0.0

4327 T-3 = 1988 JT
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	54.53525	(1950.0)	P	Q
n	0.23848629	Peri. 138.80251	-0.96120232	+0.24157615
a	2.5753008	Node 55.65775	-0.27581764	-0.83499432
e	0.1082759	Incl. 9.28063	-0.00383780	-0.49439402
P	4.13	H 14.5	G 0.25	

Residuals in seconds of arc

771011	675	0.5+	0.5+	771016	675	1.0-	1.7+	771022	675	1.1+	0.8-
771011	675	0.1+	0.8+	771017	675	0.2+	0.2-	771022	675	0.4+	2.5+
771012	675	0.3-	0.5-	771017	675	1.7-	0.7-	880512	033	0.2+	0.7-
771012	675	1.1+	1.5-	771021	675	0.3+	1.4-	880512	033	0.2-	0.4+
771016	675	0.7-	0.0	771021	675	0.1+	0.5-	880513	033	0.0	0.3+

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ORBITAL ELEMENTS BY B. G. MARSDEN, SMITHSONIAN ASTROPHYSICAL OBSERVATORY.

The identifications are by B. G. Marsden unless otherwise stated.

Comet Levy (1988e)
Epoch 1987 Nov. 21.0 ET = JDE 2447120.5
T 1987 Nov. 29.95088 ET

q	1.1741402	(1950.0)	P	Q
z	+0.0018282	Peri. 326.52130	+0.01894385	+0.53345356
	+/-0.0002213	Node 288.06334	-0.60400815	-0.66788378
e	0.9978535	Incl. 62.80479	-0.79675296	+0.51899765

From 13 observations 1988 Mar. 22-June 5, mean residual 0".8.

Comet Shoemaker-Holt (1988g)
Epoch 1988 Feb. 9.0 ET = JDE 2447200.5
T 1988 Feb. 14.20214 ET

q	1.1736201	(1950.0)	P	Q
z	+0.0025797	Peri. 326.47214	+0.01806316	+0.53346534
	+/-0.0013654	Node 288.04195	-0.60349150	-0.66850853
e	0.9969724	Incl. 62.79278	-0.79716481	+0.51818054

From 35 observations 1988 May 13-June 12, mean residual 1".2.

(3853)* 1981 WG1 = 1985 RW1

Discovered 1981 Nov. 24 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory. The identification is by E. Bowell (MPC 10160).
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	150.63994	(1950.0)	P	Q
n	0.20919837	Peri. 282.16000	+0.41821002	-0.90329718
a	2.8103723	Node 142.64934	+0.88260442	+0.37919531
e	0.1349810	Incl. 9.07383	+0.21473194	+0.20066171
P	4.71	H 12.5	G 0.25	

Residuals in seconds of arc

811027	095	0.2-	1.2+	811202	688	0.1+	0.2-	870225	801	0.4+	0.7+
811124	688	2.3+	1.2-	850912	688	1.5+	1.7+	870402	801	1.2-	1.3+
811124	688	0.6-	0.4-	850912	688	1.5-	1.2-	880418	801	0.4-	0.7-
811202	688	1.1-	1.9-	870130	801	0.2+	0.7+	880515	801	0.1-	1.1-

(3854)* 1983 EA

Discovered 1983 Mar. 13 by C. Shoemaker at Palomar.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	93.31274	(1950.0)		P	Q
n	0.37859776	Peri.	87.33643	-0.07896501	-0.99528920
a	1.8924192	Node	7.88546	+0.67086925	-0.09479235
e	0.1339452	Incl.	24.20468	+0.73735946	-0.02034252
P	2.60	H	14.4	G 0.25	

Residuals in seconds of arc

830313	675	0.2+	0.1+	830503	675	0.7-	0.3-	860514	474	0.6-	0.0
830313	675	0.5+	1.0+	830519	675	0.5-	1.0-	871126	675	0.9-	0.6+
830315	675	0.0	0.0	840821	675	0.0	0.2+	871126	675	0.3+	0.6-
830315	675	1.1-	0.2+	840906	675	0.5+	0.6-	880119	675	0.5+	0.3+
830401	675	0.7+	1.1-	860514	474	0.5+	0.5+	880120	675	0.0	0.6-

(3855)* 1986 NF1 = 1936 RM = 1946 QE = 1963 UO = 1963 WA = 1979 HQ5 = 1985 DR

Discovered 1986 July 4 by E. Helin at Palomar. The identifications are by S. Nakano (MPC 11348). The double designation 1963 UO = 1963 WA was found by R. Mitrinovic (MPC 2505).

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	194.52079	(1950.0)		P	Q
n	0.29457876	Peri.	233.02409	+0.92563896	+0.36055376
a	2.2370126	Node	105.58754	-0.29807866	+0.88173317
e	0.2091597	Incl.	6.84875	-0.23311291	+0.30421638
P	3.35	H	13.1	G 0.25	

Residuals in seconds of arc

360915	078	(0.4-	9.7+)X	790425	095	2.0+	1.1+	860706	413	0.4+	0.8+
460827	078	1.1+	0.4-	790430	095	2.3-	1.2-	860712	413	2.6+	0.3+
631022	760	0.5+	1.8-	850216	046	1.5-	0.1-	880210	675	4.2+	0.7+
631022	760	0.8-	1.9-	850216	046	2.8-	1.7-	880212	675	0.8+	0.1+
631119	760	1.4-	2.2+	860704	675	0.8-	0.2+				
631119	760	(2.3-	4.4+)	860706	413	2.1-	1.2-				

1931 TR1 = 1987 BR3 = 1988 GE

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	333.94204	(1950.0)		P	Q
n	0.23770815	Peri.	82.42122	+0.26584872	+0.96004402
a	2.5809179	Node	203.56675	-0.94801031	+0.24390529
e	0.1576067	Incl.	12.62781	-0.17493119	+0.13720675
P	4.15	H	12.5	G 0.25	

Residuals in seconds of arc

311009	024	2.1+	6.0-	880414	552	1.4-	0.5+	880517	552	0.8+	0.8+
311017	024	3.8+	8.3+	880414	552	1.3-	0.6+	880517	552	0.7+	1.4+
311020	024	2.0-	7.6+	880415	552	0.5-	1.9+	880522	552	3.3+	1.1-
311103	024	6.2-	0.0	880415	552	0.1+	1.8+	880522	552	2.2+	0.9-
870130	010	1.3-	0.4-	880416	552	0.3-	2.7+	880602	552	0.1-	1.8-
870130	010	0.3+	0.7+	880416	552	0.4-	4.4+	880602	552	0.3-	0.8-
870131	010	1.4+	1.1+	880506	552	1.5-	0.2-				
880414	552	1.0+	0.0	880506	552	0.8-	0.2-				

1975 TC6 = 1958 GF = 1977 DD11

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	8.02412	(1950.0)		P	Q
n	0.25803082	Peri.	134.99102	-0.92681582	-0.36998709
a	2.4435573	Node	23.52064	+0.28304996	-0.80066629
e	0.1745946	Incl.	9.25781	+0.24676945	-0.47121443
P	3.82	H	13.0	G 0.25	

Residuals in seconds of arc

580408	760	0.4-	0.8+		751002	675	0.4+	0.1-		770219	033	0.5-	0.1+
580408	760	1.1+	0.3+		751009	711	0.0	0.6+		770219	033	0.3+	0.4-
750930	675	0.2+	0.1-		751009	711	0.5-	0.5+					
751001	675	0.3-	0.1-		751016	675	0.4-	0.4+					

1986 TU = 1986 WC8 = 1977 RV4 = 1988 GB1

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	107.29864		(1950.0)	P	Q
n	0.21503767	Peri.	244.98883	+0.33602048	-0.94013411
a	2.7592680	Node	186.25799	+0.93541202	+0.32605771
e	0.3599832	Incl.	31.46863	-0.10997544	-0.09916772
P	4.58	H	13.0	G 0.25	

Residuals in seconds of arc

770909	095	0.2+	1.2+		861006	675	1.2-	1.9-		861201	381	0.1-	0.2+
861004	675	3.3+	0.7-		861006	675	0.7-	0.4+		861201	381	3.1-	1.8-
861004	675	2.8+	2.0+		861129	381	2.8+	3.4+		880409	054	0.2+	0.2+
861005	675	2.7-	1.5-		861130	381	1.1+	2.0-		880413	054	0.3-	0.7+
861005	675	2.1-	1.0+		861130	381	0.4+	1.4+		880414	054	0.1-	0.8+

1987 DW5 = 1959 EP = 1971 SO3 = 1976 YN4 = 1978 EE3 = 1982 BX8

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	125.05885		(1950.0)	P	Q
n	0.21045258	Peri.	336.67789	-0.69954586	-0.71391443
a	2.7992009	Node	157.67245	+0.66777732	-0.66855423
e	0.1525744	Incl.	4.68246	+0.25437972	-0.20823409
P	4.68	H	12.5	G 0.25	

Residuals in seconds of arc

590306	690	1.1-	2.9- Y		870222	809	1.1-	0.7+		870302	809	0.9+	0.0
590309	690	(3.9+	11.3+)Y		870223	809	0.8-	0.3-		870302	809	0.8+	0.2-
710926	805	0.5+	0.9+		870223	809	0.6-	0.3-		870303	809	0.8+	0.2+
710927	805	0.1-	0.9+		870223	809	0.5-	0.7-		870303	809	0.9+	0.2-
761218	095	1.3-	2.1-		870225	809	0.2+	0.5-		870303	809	1.2+	0.3-
761220	095	0.6-	1.0-		870225	809	0.3+	0.5-		870304	809	0.2-	0.4+
780306	095	0.7+	1.0+		870225	809	0.1+	0.6-		870304	809	0.0	0.3+
820119	095	2.0+	0.5+		870227	809	1.2+	0.4-		870304	809	0.2-	0.2+
820123	095	0.6+	1.5+		870227	809	1.0+	0.3-		870305	809	0.1-	0.4+
870221	809	2.0-	0.8+		870227	809	1.2+	0.4-		870305	809	0.1-	0.3+
870221	809	1.7-	0.8+		870301	809	0.4+	0.0		870305	809	0.0	0.3+
870221	809	1.7-	1.0+		870301	809	0.4+	0.1-		870306	809	0.2+	0.2+
870222	809	1.3-	0.3+		870301	809	0.4+	0.1+		870306	809	0.2+	0.5+
870222	809	1.2-	0.4+		870302	809	0.6+	0.0		870306	809	0.4+	0.2+

1987 DA6 = 1978 NE8 = 1979 VW1 = 1982 UO8 = 1982 VW6 = 1984 GF1 = 1985 SW

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	132.53237		(1950.0)	P	Q
n	0.30315075	Peri.	236.44824	-0.98435003	+0.16803553
a	2.1946460	Node	313.16322	-0.12765633	-0.88763108
e	0.0838730	Incl.	4.17436	-0.12148612	-0.42880664
P	3.25	H	13.5	G 0.25	

Residuals in seconds of arc

780707	675	0.8-	1.3-		870224	809	0.6-	0.0		870302	809	1.3+	0.6-
780708	675	0.1-	1.5-		870225	809	0.9-	0.2+		870302	809	1.6+	0.6-
780709	675	1.3+	0.1-		870225	809	0.7-	0.3+		870303	809	0.7+	0.8-
791114	095	2.2+	2.1-		870225	809	0.5-	0.1-		870303	809	0.8+	0.5-
821021	095	1.0-	1.4-		870226	809	0.0	0.4-		870303	809	1.0+	0.5-
821109	095	3.0-	1.7+		870226	809	0.1-	0.4-		870304	809	0.5+	0.1+
840405	095	(22.0+	10.2-)		870226	809	0.0	0.4-		870304	809	0.4+	0.3-
850919	046	(0.8-	13.5-)		870227	809	0.2-	0.1-		870304	809	0.1+	0.2-
850919	046	3.2+	2.0-		870227	809	0.1-	0.2+		870305	809	0.6-	0.5-
870222	809	1.3-	1.1+		870227	809	0.1-	0.0		870305	809	0.3-	0.5-
870222	809	0.9-	1.0+		870228	809	0.5+	0.1+		870305	809	0.3-	0.1-
870222	809	1.3-	0.9+		870228	809	0.5+	0.4-		870306	809	1.4-	0.7-
870223	809	1.4-	0.8+		870228	809	0.6+	0.2-		870306	809	1.2-	0.9-
870223	809	1.1-	0.8+		870301	809	1.6+	0.1-		870306	809	1.0-	0.7-
870223	809	0.9-	0.8+		870301	809	1.7+	0.2-		870307	809	(3.4-	0.7-)
870224	809	0.7-	0.2-		870301	809	1.7+	0.2-		870307	809	(3.5-	0.7-)
870224	809	0.5-	0.1-		870302	809	1.3+	0.5-		870307	809	(3.4-	0.6-)

1987 DC6 = 1937 CC = 1959 CG = 1976 GM
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	157.59375		(1950.0)	P	Q
n	0.17752042	Peri.	285.08312	+0.13754970	-0.98933639
a	3.1354848	Node	156.84725	+0.94908215	+0.11780974
e	0.1352447	Incl.	6.99624	+0.28341338	+0.08564098
P	5.55	H	12.0	G 0.25	

Residuals in seconds of arc

370210	008	0.08-	0.01+	X	870226	809	0.5+	0.5+		870305	809	0.7-	0.2-
370211	008	0.08-	0.02+	X	870226	809	0.7+	0.5+		870305	809	0.8-	0.3-
370219	008	0.07-	0.04+	X	870227	809	0.0	0.2+		870306	809	0.0	0.1-
370304	008	0.07-	0.03+	X	870227	809	0.1+	0.3+		870306	809	0.1-	0.2-
370315	008	0.03+	0.01-	X	870227	809	0.3+	0.2+		870306	809	0.0	0.2-
590208	024	2.9-	2.2-		870228	809	0.4-	0.9+		870307	809	0.0	0.6-
760401	095	0.6+	0.4-		870228	809	0.2-	0.7+		870307	809	0.2+	0.7-
760404	095	3.1-	1.0-		870228	809	0.1+	0.4+		870307	809	0.0	0.7-
870222	809	0.4-	0.9+		870301	809	0.2+	0.3+		870308	809	0.1-	0.2-
870222	809	0.4-	0.8+		870301	809	0.2+	0.7+		870308	809	0.3-	0.6-
870222	809	0.2+	0.9+		870301	809	0.2+	0.5+		870308	809	0.0	0.6-
870223	809	0.2-	0.7+		870303	809	0.1-	0.3-		870309	809	0.5+	0.6-
870223	809	0.3-	0.4+		870303	809	0.2+	0.2-		870309	809	0.7+	0.6-
870223	809	0.4-	0.4+		870303	809	0.1+	0.1-		870309	809	0.8+	0.5-
870224	809	0.6-	1.3+		870304	809	0.1-	0.2-		870311	809	1.1+	0.9-
870224	809	0.4-	1.4+		870304	809	0.3-	0.0		870311	809	1.0+	0.9-
870224	809	0.2-	1.4+		870304	809	0.1-	0.1+		870311	809	1.4+	0.9-
870226	809	0.2+	0.5+		870305	809	0.9-	0.2-					

1987 DH6 = 1952 FC = 1982 BD9 = 1985 YD2
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	20.60963		(1950.0)	P	Q
n	0.22423539	Peri.	7.73179	+0.04690570	+0.99858206
a	2.6832891	Node	264.95915	-0.91777461	+0.03313416
e	0.1208864	Incl.	1.44810	-0.39432172	+0.04166522
P	4.40	H	12.0	G 0.25	

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

520322	020	(0.15-	0.06+)	X	870223	809	1.1-	1.6+		870224	809	0.8-	0.1+
820119	095	0.6+	4.7+		870223	809	0.4-	1.3+		870225	809	0.1+	0.0
851217	010	4.5+	2.5-		870223	809	0.6-	1.6+		870225	809	0.2+	0.0
851217	010	1.1+	4.5-		870224	809	0.6-	0.3+		870225	809	0.0	0.0
851219	010	5.2-	3.2+		870224	809	0.8-	0.2+		870226	809	0.4+	0.2+

870226	809	0.3+	0.4+	870301	809	0.2-	0.3-	870305	809	0.2+	0.4+
870226	809	0.2+	0.6+	870302	809	1.0-	0.4+	870305	809	0.1+	0.3+
870227	809	0.3+	0.1+	870302	809	1.0-	0.4+	870305	809	0.1+	0.3+
870227	809	0.1+	0.5+	870302	809	0.9-	0.0	870306	809	0.7+	0.5-
870227	809	0.2+	0.1+	870303	809	0.1+	0.5-	870306	809	0.8+	0.5-
870228	809	0.4-	0.7-	870303	809	0.1+	0.5-	870306	809	0.5+	0.1-
870228	809	0.5-	0.6-	870303	809	0.3+	0.6-	870307	809	1.7+	0.5-
870228	809	0.5-	0.6-	870304	809	0.2-	1.1-	870307	809	1.2+	0.2-
870301	809	0.0	0.8-	870304	809	0.1-	1.1-	870307	809	1.0+	1.1-
870301	809	0.1-	0.4-	870304	809	0.2-	1.1-				

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ORBITAL ELEMENTS BY C. M. BARDWELL, SMITHSONIAN ASTROPHYSICAL OBSERVATORY.

The identifications are by C. M. Bardwell unless otherwise stated.

(3856)* 1976 QX = 1976 SY = 1974 EB = 1981 SB4 = 1986 RD3

Discovered 1976 Aug. 26 by N. S. Chernykh at the Crimean Astrophysical Observatory. The double designation 1976 QX = 1976 SY is by J. G. Williams (MPC 5638).

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	101.11615	(1950.0)		P	Q
n	0.20212142	Peri.	57.48936	+0.69722297	-0.71683590
a	2.8755957	Node	348.30163	+0.64887111	+0.63413282
e	0.0575665	Incl.	1.45250	+0.30470708	+0.28986522
P	4.88	H	12.1	G 0.25	

Residuals in seconds of arc

740313	095	0.5-	1.6-	810925	095	1.5+	2.1-	861005	688	0.8-	1.4-
760826	095	0.3-	0.2+	860906	688	0.2+	1.0-	861005	688	1.6-	0.0
760828	675	0.4-	1.3+	860906	688	2.2+	0.2+	861031	801	0.9+	1.9+
760830	675	0.5+	0.0	860912	688	0.1+	0.4-	871119	801	0.4+	0.7+
760924	095	1.3-	1.2+	860912	688	0.1-	0.6-	880217	801	0.5-	0.2+

(3857)* 1984 CD1 = 1951 JA1 = 1958 DV = 1962 JK = 1978 TD6 = 1980 BQ5

Discovered 1984 Feb. 8 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	29.14547	(1950.0)		P	Q
n	0.26644128	Peri.	177.42771	-0.69450662	+0.71834294
a	2.3918561	Node	48.58045	-0.66104509	-0.61483268
e	0.1634487	Incl.	3.09947	-0.28404215	-0.32552141
P	3.70	H	13.5	G 0.25	

Residuals in seconds of arc

510505	711	0.6-	1.3- Y	800123	095	2.4-	2.2+	840331	688	2.8+	1.5-
580224	760	2.4+	0.6+	840206	688	0.3+	0.6-	840331	688	1.1-	0.4-
580224	760	1.0+	0.7+	840208	688	0.4-	0.5-	850912	801	1.0+	0.5-
620505	760	0.7-	0.7+	840208	688	0.3-	1.4-	880420	801	0.3+	3.0+
620505	760	0.8-	0.3+	840301	688	0.3-	0.4-	880514	688	0.5+	0.8-
781004	675	0.8-	0.6-	840301	688	1.9-	0.2-	880514	688	0.1+	0.6-
781005	675	0.8-	1.0-	840306	688	0.6+	0.5-				
781007	095	2.0+	0.1+	840306	688	1.2-	0.6-				

(3858)* 1986 TG = 1973 TB = 1985 DZ3

Discovered 1986 Oct. 3 by P. Jensen at Brorfelde.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	238.08626		(1950.0)	P	Q
n	0.30424732	Peri.	334.59331	+0.79053545	+0.61173602
a	2.1893652	Node	347.56438	-0.53649610	+0.66904102
e	0.2428665	Incl.	7.70114	-0.29533986	+0.42209377
P	3.24	H	13.7	G 0.25	

Residuals in seconds of arc

731001	095	2.2+	3.9-	860930	046	1.9+	0.7+	861030	552	0.6-	0.1-
850220	675	0.2+	0.5+	861001	046	0.9+	0.8-	861030	552	0.2+	0.5-
850222	675	0.2+	0.1-	861001	046	2.3+	0.8-	861031	054	0.6-	0.9+
860903	026	1.5-	0.1-	861001	026	0.1+	0.4+	861103	026	0.1+	0.1+
860907	026	0.9-	0.3-	861003	054	1.8-	0.8+	861104	552	2.3-	0.5+
860910	026	2.4+	0.9-	861004	026	0.4+	0.1+	861104	054	0.1+	1.7+
860911	026	3.0-	0.2+	861004	054	1.1-	1.0+	861104	552	2.6-	0.2+
860927	026	0.3-	0.6+	861006	026	1.9-	0.5+	861107	552	1.0+	0.7-
860929	046	0.6+	0.8+	861008	026	1.7-	0.2-	861107	552	0.0	0.5-
860929	046	1.8+	0.1-	861008	054	0.1-	0.2-	861107	026	0.5-	1.5+
860929	046	2.6+	2.5-	861008	054	0.9-	0.3+	880213	054	3.5-	1.3-
860929	046	3.1+	2.8-	861023	026	0.4-	0.6+	880312	054	1.9+	1.6-
860929	026	0.6+	0.1+	861024	552	0.5-	0.1-	880318	054	0.5-	1.2-
860930	046	0.4-	2.1+	861024	552	0.9-	0.2-				

(3859)* 1987 EW = 1949 QF = 1952 BZ1 = 1958 DW = 1978 SD4 = 1982 JS1 = 1985 YB1

Discovered 1987 Mar. 4 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	135.32144		(1950.0)	P	Q
n	0.17167636	Peri.	351.60090	-0.45958037	-0.88719512
a	3.2062377	Node	125.74942	+0.81770803	-0.44064895
e	0.1296160	Incl.	2.88685	+0.34661141	-0.13679664
P	5.74	H	12.0	G 0.25	

Residuals in seconds of arc

490821	024	1.9+	4.1+	870226	809	0.3+	0.2+	870305	809	0.6+	0.8-
490822	024	3.9+	2.2+	870226	809	0.2+	0.5+	870305	809	0.6+	0.8-
520129	711	0.2-	2.9+ Y	870226	809	0.2+	0.6+	870306	809	0.2+	0.5-
520129	711	5.2-	0.5+ Y	870302	809	0.4+	0.8-	870306	809	0.2+	0.6-
580224	760	0.8+	0.9+	870302	809	0.7+	0.8-	870306	809	0.3+	0.6-
580224	760	2.7+	1.2+	870302	809	0.8+	0.7-	870308	809	0.2+	0.5-
780928	095	2.1-	1.5-	870303	809	0.6+	0.8-	870308	809	0.3+	0.3-
820515	675	1.1-	1.0-	870303	809	0.8+	0.8-	870308	809	0.5+	0.3-
820516	675	4.3-	0.4-	870303	809	0.8+	0.8-	870310	809	1.0-	0.1+
820516	675	2.4-	0.2+	870304	688	0.4-	3.1+	870310	809	0.9-	0.3+
820517	675	1.1-	0.4-	870304	688	0.3-	2.1+	870310	809	0.5-	0.5+
820518	675	1.4-	1.0+	870304	809	1.2+	0.6-	870311	809	0.3-	0.6+
851217	010	1.3-	2.5-	870304	809	1.2+	1.0-	870311	809	0.6-	0.3+
851217	010	2.6+	2.7-	870304	809	1.6+	1.1-	870311	809	0.2-	0.7+
851219	010	2.2-	1.0+	870305	809	0.7+	0.8-				

1975 VP = 1975 VH10 = 1978 PZ1 = 1980 DE5 = 1981 NS = 1983 CQ4 = 1985 YR

The double designation 1975 VP = 1975 VH10 is by H. Oishi (JAM 1207).

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	342.64421		(1950.0)	P	Q
n	0.30727125	Peri.	262.22050	+0.68191859	-0.73064550
a	2.1749818	Node	144.70878	+0.69200659	+0.62949766
e	0.1249804	Incl.	3.35655	+0.23688374	+0.26436690
P	3.21	H	14.0	G 0.25	

Residuals in seconds of arc

750930	675	0.5+	0.0	751106	095	0.9-	0.6-	830214	381	0.9+	0.8+
751001	675	1.1-	2.2+	751107	095	3.5-	0.1+	851214	675	(33.3+	1.2-)
751002	675	0.0	0.3+	780808	095	2.3-	0.1-	851214	675	(38.0+	0.8-)
751101	095	2.3-	5.5-	800221	095	1.3-	0.8-	851218	688	1.0-	0.5+
751102	095	4.5+	4.1+	810702	805	1.4+	2.0-	851218	688	0.6+	1.3-
751105	095	3.9+	0.9-	810702	805	0.6+	0.5+				

1977 FN1 = 1982 DB1 = 1988 GU

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	47.31278		(1950.0)	P	Q
n	0.17601461	Peri.	120.58035	-0.94706682	-0.30937076
a	3.1533423	Node	41.56884	+0.23200256	-0.84417900
e	0.0958966	Incl.	7.42596	+0.22189921	-0.43778025
P	5.60	H	12.0	G 0.25	

Residuals in seconds of arc

770326	095	0.4+	0.3+	820221	688	2.1+	1.8-	880409	054	0.2+	0.3-
770515	095	1.0+	1.0-	820221	688	2.1-	1.3-	880415	054	0.6+	0.5-
770518	095	0.9-	0.4+	880409	054	1.0+	0.3+	880415	054	0.5+	0.1+

1979 ML5 = 1979 OR11 = 1975 SM

The identification 1979 ML5 = 1975 SM is by S. J. Bus. The double designation 1979 ML5 = 1979 OR11 is by H. Oishi (JAM 2066).

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	286.93935		(1950.0)	P	Q
n	0.21520434	Peri.	211.35278	+0.92360985	-0.38308285
a	2.7578432	Node	171.13886	+0.36768850	+0.87510221
e	0.1312637	Incl.	5.16592	+0.10839746	+0.29570871
P	4.58	H	16.0	G 0.25	

Residuals in seconds of arc

750930	675	0.1-	1.2-	790624	413	0.7-	1.1-	790724	413	0.8+	0.7+
751001	675	0.1+	0.6+	790625	413	1.1-	0.7+	790728	413	0.3-	0.6+
751002	675	0.5-	0.2+	790629	413	0.3+	0.0				

1980 PQ2 = 1980 RF3 = 1978 EM4 = 1987 DY6

The double designation 1980 PQ2 = 1980 RF3 is by K. Hurukawa (JAM 1820) and W. Landgraf (MPC 9458) who found it independently.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	307.17954		(1950.0)	P	Q
n	0.23158677	Peri.	186.74373	+0.98209608	+0.17541793
a	2.6261998	Node	162.68871	-0.16024698	+0.96958464
e	0.1704413	Incl.	13.34307	-0.09903634	+0.17068738
P	4.26	H	12.0	G 0.25	

Residuals in seconds of arc

780306	095	0.0	0.3-	870227	809	0.2+	0.4+	870304	809	0.5+	0.8-
800814	323	0.8-	0.3+	870227	809	0.0	0.5+	870304	809	0.2+	0.6-
800815	323	1.0-	1.4-	870227	809	0.1+	0.4+	870304	809	0.5+	0.6-
800818	323	1.2+	0.0	870228	809	0.6+	0.2+	870305	809	0.3-	0.6-
800904	095	2.4-	0.2+	870228	809	0.7+	0.1+	870305	809	0.3-	0.5-
800908	323	2.8+	1.4+	870228	809	0.7+	0.1+	870305	809	0.1-	0.4-
870226	809	0.5-	1.5+	870302	809	0.7+	0.6-	870306	809	1.3-	0.2-
870226	809	0.5-	1.5+	870302	809	0.9+	0.5-	870306	809	1.2-	0.1-
870226	809	0.8-	1.8+	870302	809	1.3+	0.6-	870306	809	1.2-	0.1-

1981 EP26

The 1975 observations were found by S. J. Bus.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	332.54531		(1950.0)		P		Q				
n	0.26675592	Peri.	45.96379		-0.79461674		+0.60689554				
a	2.3899797	Node	171.35777		-0.58324983		-0.75571255				
e	0.0867477	Incl.	6.18425		-0.16853445		-0.24612261				
P	3.69	H	14.0	G	0.25						

Residuals in seconds of arc

750930	675	1.5+	0.2-	810302	413	0.4-	0.5+	810405	413	3.7+	2.4-
751001	675	0.9+	1.0-	810306	413	1.0-	0.6+	810406	413	1.9-	1.5+
751002	675	1.1+	0.0	810306	413	1.4+	0.1-	810406	413	0.3-	0.1-
751015	675	0.7+	0.5+	810311	413	0.4-	0.6-	810407	413	1.3-	0.2-
751016	675	0.3+	0.6+	810311	413	1.0+	1.2-	810407	413	0.1+	0.5-
810209	413	1.8+	0.8+	810315	413	1.0-	0.1+	810426	413	1.0-	1.6-
810212	413	1.6+	0.1-	810315	413	1.0+	1.3-	810501	413	3.4-	1.6+
810213	413	0.9+	0.5+	810405	413	1.8-	1.6+				

1981 ED37

The 1975 observations were found by S. J. Bus.

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	273.93479		(1950.0)		P		Q				
n	0.27940923	Peri.	290.56675		+0.75463087		+0.65527289				
a	2.3172688	Node	28.52501		-0.57242809		+0.68272235				
e	0.2152427	Incl.	4.07161		-0.32071536		+0.32327639				
P	3.53	H	16.0	G	0.25						

Residuals in seconds of arc

750930	675	0.3-	0.5-	810311	413	0.3+	0.5-	810408	413	0.3+	0.7+
751001	675	2.3-	0.7+	810316	413	2.2-	0.3-	810411	413	1.7-	1.0+
751002	675	2.8+	0.2-	810316	413	0.1-	0.5+	810411	413	1.6+	1.0-
810209	413	0.1-	1.1+	810329	413	1.4-	0.2+	810502	413	1.2-	0.5-
810213	413	0.9-	0.7+	810329	413	2.6+	1.0-	810503	413	0.7+	0.7+
810311	413	2.3+	1.4-	810408	413	0.7-	0.0				

1982 SQ2 = 1982 UG = 1961 TL = 1975 SZ = 1978 NZ3

The key identification 1982 SQ2 = 1975 SZ is by E. Bowell. The double designation 1982 SQ2 = 1982 UG is by F. N. Bowman (MPC 7656).

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	285.43167		(1950.0)		P		Q				
n	0.28184779	Peri.	129.27183		+0.79997010		+0.59956384				
a	2.3038788	Node	193.94332		-0.57652089		+0.75696446				
e	0.1731082	Incl.	5.69144		-0.16634751		+0.25986154				
P	3.50	H	14.5	G	0.25						

Residuals in seconds of arc

611007	760	0.9+	1.2-	751016	675	2.4-	0.7+	821017	688	1.4-	3.8-
611007	760	1.8+	4.1-	780710	095	0.3+	1.2-	821017	688	0.5+	3.2-
750930	675	0.3-	0.7+	820918	809	0.2-	5.2+	821024	688	3.4+	0.3+
751001	675	0.1-	1.1+	820918	809	0.1+	2.8+	821024	688	1.0-	0.1-
751015	675	1.7-	0.1-	820918	809	0.3+	0.9+				

1983 AA3 = 1988 GA1

Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	85.99921		(1950.0)		P		Q				
n	0.22549833	Peri.	97.40564		-0.49629395		-0.86585837				
a	2.6732610	Node	22.69011		+0.71790814		-0.45018703				
e	0.1412601	Incl.	9.41466		+0.48816003		-0.21822217				
P	4.37	H	13.0	G	0.25						

Residuals in seconds of arc

830106	095	0.8-	0.2+	880409	054	0.1+	0.4-	880414	054	0.1+	0.3+
830109	095	0.7+	0.1-	880413	054	0.2-	0.2+				
830114	095	0.6-	1.8+	880413	054	0.5-	0.2+				

1983 CS = 1978 GY1 = 1981 UW14 = 1984 HX1
The key identification 1983 CS = 1984 HX1 is by A. Lowe (MPC 10957).
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	354.27908	(1950.0)	P	Q
n	0.17250949	Peri. 53.10004	-0.61062286	-0.79087962
a	3.1959128	Node 74.58404	+0.71247703	-0.57102934
e	0.1016287	Incl. 2.41432	+0.34571116	-0.22007936
P	5.71	H 12.0	G 0.25	

Residuals in seconds of arc

750930	675	0.0	0.1-	780407	095	(0.7+	10.0+)	830219	688	0.4-	0.6-
751001	675	0.5+	0.6-	811023	095	0.9+	2.5-	840423	809	0.9-	1.3-
751002	675	0.7+	0.8+	830215	688	0.3-	0.2+	840423	809	0.4+	0.2-
751015	675	1.6-	0.9-	830215	688	0.8+	0.7-	840424	809	0.5-	1.6-
751016	675	1.0+	0.7-	830219	688	0.4-	0.5+	840424	809	0.2-	0.7-

1987 CJ
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	120.77016	(1950.0)	P	Q
n	0.18840031	Peri. 346.58051	-0.79278822	-0.60488379
a	3.0135725	Node 155.71673	+0.57463716	-0.78272371
e	0.0477764	Incl. 10.48659	+0.20317225	-0.14648956
P	5.23	H 12.0	G 0.25	

From 56 observations 1987 Feb.2-Apr. 29, mean residual 0".7.

1987 DY5 = 1951 EL = 1979 QZ5 = 1982 DE5 = 1982 DJ6
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	155.10976	(1950.0)	P	Q
n	0.19065861	Peri. 289.95146	+0.00304835	-0.99798694
a	2.9897346	Node 159.56184	+0.97184242	-0.01196873
e	0.0777043	Incl. 10.45168	+0.23561200	+0.06228008
P	5.17	H 12.0	G 0.25	

Residuals in seconds of arc

510313	024	0.4+	1.6+	870226	809	0.9-	0.6+	870303	809	0.1+	0.1-
790830	809	0.3+	2.6-	870226	809	0.7-	0.6+	870304	809	0.0	0.0
790830	809	0.5+	2.5-	870226	809	0.4-	0.6+	870304	809	0.0	0.0
820222	010	0.4+	1.1-	870227	809	0.2+	0.1-	870304	809	0.0	0.2-
820227	010	1.2-	1.6-	870227	809	0.3+	0.1+	870305	809	0.2+	0.5-
870221	809	0.6-	0.4-	870227	809	0.3+	0.0	870305	809	0.2+	0.5-
870221	809	0.4-	0.4-	870227	809	0.5-	0.0	870305	809	0.3+	0.5-
870221	809	0.3-	0.4-	870227	809	0.4-	0.3+	870305	809	0.4-	0.7-
870222	809	1.2-	0.0	870227	809	0.0	0.4+	870305	809	0.3-	0.6-
870222	809	0.9-	0.1-	870228	809	0.5-	0.6+	870305	809	0.2-	0.7-
870222	809	0.9-	0.4+	870228	809	0.3-	0.4+	870306	809	0.5+	0.2-
870223	809	0.8-	0.2-	870228	809	0.3+	0.2+	870306	809	0.6+	0.0
870223	809	0.8-	0.4-	870301	809	0.3+	0.0	870306	809	0.6+	0.1+
870223	809	0.9-	0.4-	870301	809	0.5+	0.0	870306	809	0.1-	0.3-
870224	809	0.1+	0.6+	870301	809	0.7+	0.1-	870306	809	0.0	0.2-
870224	809	0.1+	0.4+	870302	809	0.1-	0.3-	870306	809	0.2+	0.1+
870224	809	0.2+	0.2+	870302	809	0.0	0.1-	870307	809	0.3+	0.7-
870225	809	0.2-	0.2+	870302	809	0.2+	0.1-	870307	809	0.5+	0.3-
870225	809	0.0	0.2+	870302	809	0.5+	0.4-	870307	809	1.1+	0.5-
870225	809	0.1+	0.2-	870302	809	0.3+	0.0	870308	809	1.0+	0.5-
870225	809	0.2-	0.0	870302	809	0.4+	0.0	870308	809	1.1+	0.4-
870225	809	0.1+	0.1+	870303	809	0.4-	0.2+	870308	809	1.3+	0.4-
870225	809	0.1+	0.2+	870303	809	0.3-	0.3+				

1987 DS6 = 1976 GE1 = 1985 VY2
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	155.35996		(1950.0)		P		Q				
n	0.17732803	Peri.	276.48761		-0.08462811		-0.99640231				
a	3.1377522	Node	178.34659		+0.96494545		-0.08308831				
e	0.0721320	Incl.	9.03389		+0.24843181		-0.01669653				
P	5.56	H	12.0	G	0.25						

Residuals in seconds of arc

760401	095	2.1+	0.2+	870227	809	0.3+	0.4-	870304	809	0.1+	0.2-
760402	095	3.8-	0.4-	870228	809	0.5+	0.2+	870306	809	0.5+	0.1-
760404	095	1.8+	0.8+	870228	809	0.5+	0.2+	870306	809	0.2+	0.1-
851110	095	0.0	0.1+	870228	809	0.6+	0.1+	870306	809	0.4+	0.2-
870224	809	0.9-	0.4+	870301	809	0.9+	0.3-	870307	809	0.0	0.5+
870224	809	0.6-	0.9+	870301	809	0.6+	0.4-	870307	809	0.3-	0.2+
870224	809	0.0	1.0+	870301	809	0.8+	0.4-	870307	809	0.0	0.5+
870225	809	0.5-	0.2-	870302	809	0.2-	0.5-	870308	809	0.4-	0.3+
870225	809	0.1-	0.3-	870302	809	0.0	0.7-	870308	809	0.5-	0.5+
870225	809	0.0	0.0	870302	809	0.2+	0.9-	870308	809	0.2-	0.5+
870226	809	0.6+	0.3-	870303	809	0.1+	0.3+	870310	809	2.0-	0.2+
870226	809	0.7+	0.2-	870303	809	0.3+	0.2+	870310	809	1.9-	0.2+
870226	809	0.9+	0.3-	870303	809	0.5+	0.2+	870310	809	1.8-	0.3+
870227	809	0.2+	0.5-	870304	809	0.3+	0.4-				
870227	809	0.3+	0.2-	870304	809	0.2+	0.3-				

1987 DW6 = 1976 GG6 = 1982 KS
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	69.95846		(1950.0)		P		Q				
n	0.17614842	Peri.	182.83243		-0.90972475		+0.41509066				
a	3.1517451	Node	21.70115		-0.38039534		-0.82351534				
e	0.1507263	Incl.	1.55448		-0.16643394		-0.38668105				
P	5.60	H	12.0	G	0.25						

Residuals in seconds of arc

760402	095	0.6-	1.3-	870228	809	0.1-	0.9+	870305	809	0.0	0.3-
820521	688	0.9-	0.9+	870228	809	0.1+	1.3+	870305	809	0.3+	0.0
820521	688	1.1+	0.8+	870228	809	0.2+	1.1+	870305	809	0.4+	0.0
870226	809	0.9-	1.5+	870302	809	0.3+	0.1-	870306	809	0.3+	1.2-
870226	809	0.8-	1.5+	870302	809	0.4+	0.1-	870306	809	0.8+	1.3-
870226	809	0.6-	1.6+	870302	809	0.4+	0.1-	870306	809	0.8+	1.0-
870226	809	0.8-	0.8+	870303	809	0.3-	0.3-	870308	809	0.2+	0.8-
870226	809	0.7-	0.7+	870303	809	0.2-	0.0	870308	809	0.3+	0.9-
870226	809	0.8-	0.7+	870303	809	0.0	0.0	870308	809	0.3+	1.1-
870227	809	0.6-	0.8+	870304	809	0.7-	0.4+	870311	809	0.5+	1.9-
870227	809	0.5-	0.8+	870304	809	0.4-	0.4+	870311	809	0.2+	2.0-
870227	809	0.4-	1.3+	870304	809	0.4-	0.5+	870311	809	0.4+	2.0-

1987 PA
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	92.24948		(1950.0)		P		Q
n	0.21775849	Peri.	337.08705		+0.27905544		+0.93529759
a	2.7362303	Node	308.40226		-0.83238012		+0.12261078
e	0.5568087	Incl.	16.12052		-0.47882293		+0.33194130
P	4.53	H	18.5	G	0.25		

From 25 observations 1987 Aug. 1-Oct. 26, mean residual 1".1.

1987 SL
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5

M	77.34127	(1950.0)	P	Q
n	0.19253831	Peri. 319.90038	+0.68101493	+0.73104310
a	2.9702382	Node 352.65943	-0.55762869	+0.48023220
e	0.6116826	Incl. 19.36393	-0.47462501	+0.48471953
P	5.12	H 15.5	G 0.25	

From 39 observations 1987 Sept. 19-1988 Mar. 6, mean residual 1".0.

6647 P-L = 1975 SY
The identification is by E. Bowell.
Epoch 1988 Aug. 27.0 ET = JDE 2447400.5 (J-P)

M	184.83576	(1950.0)	P	Q
n	0.26390769	Peri. 305.15783	+0.93592671	+0.35093949
a	2.4071448	Node 34.32497	-0.30355171	+0.84656388
e	0.2257769	Incl. 3.02017	-0.17859886	+0.40021379
P	3.73	H 15.0	G 0.25	

Residuals in seconds of arc

600926	675	0.2-	0.2+	601022	675	0.0	0.5+	751001 675	0.2+ 0.3-
600927	675	0.0	0.1+	601025	675	0.4+	0.4+	751002 675	0.6+ 0.0
600928	675	0.5+	0.0	601026	675	0.3+	0.4+	751015 675	1.1+ 0.9+
601017	675	0.4+	1.0+	750930	675	0.3-	1.8-	751016 675	1.4- 1.0-

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EPHEMERIDES.

Comet Shoemaker-Holt (1988g) Elements MPC 13304

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	m1
1988	06 28	22 01.52	+50 18.8	2.014	2.293	92.4	26.3	11.6
1988	07 08	21 45.50	+54 15.6					
1988	07 18	21 24.71	+57 13.3	2.148	2.517	99.1	23.5	12.2
1988	07 28	21 00.64	+59 06.5					
1988	08 07	20 35.89	+59 55.7	2.323	2.740	103.2	21.1	12.7
1988	08 17	20 13.31	+59 48.1					
1988	08 27	19 55.06	+58 56.5	2.536	2.960	104.8	19.3	13.2
1988	09 06	19 42.04	+57 34.9					
1988	09 16	19 34.20	+55 56.1	2.783	3.178	103.9	17.9	13.7
1988	09 26	19 30.95	+54 10.4					
1988	10 06	19 31.52	+52 25.4	3.059	3.392	100.9	16.8	14.2
1988	10 16	19 35.17	+50 46.3					
1988	10 26	19 41.29	+49 17.0	3.358	3.604	96.2	15.9	14.7
1988	11 05	19 49.32	+47 59.6					
1988	11 15	19 58.88	+46 55.5	3.675	3.812	90.4	15.0	15.1
1988	11 25	20 09.59	+46 05.8					
1988	12 05	20 21.19	+45 30.5	4.002	4.017	83.8	14.1	15.6
1988	12 15	20 33.46	+45 09.6					
1988	12 25	20 46.19	+45 02.8	4.332	4.219	76.9	13.1	15.9
1989	01 04	20 59.24	+45 09.4					
1989	01 14	21 12.47	+45 28.7	4.655	4.418	70.1	12.1	16.3
1989	01 24	21 25.77	+45 59.9					
1989	02 03	21 39.05	+46 42.0	4.962	4.614	63.9	11.1	16.6

Comet Levy (1988e) Elements MPC 13304

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	m1
1988	06 28	22 30.04	+58 09.0	3.074	3.138	84.2	18.8	13.9
1988	07 08	22 20.29	+60 56.3					
1988	07 18	22 06.15	+63 12.8	3.171	3.354	91.4	17.6	14.3

1988 07 28	21 48.05	+64 52.7					
1988 08 07	21 27.27	+65 52.2	3.289	3.566	97.5	16.4	14.6
1988 08 17	21 05.86	+66 10.1					
1988 08 27	20 46.15	+65 49.7	3.435	3.775	101.9	15.2	14.9
1988 09 06	20 29.94	+64 57.8					
1988 09 16	20 18.12	+63 42.6	3.612	3.981	104.3	14.2	15.3
1988 09 26	20 10.84	+62 12.7					
1988 10 06	20 07.67	+60 35.7	3.824	4.183	104.2	13.4	15.6
1988 10 16	20 08.04	+58 57.4					
1988 10 26	20 11.33	+57 22.8	4.071	4.383	101.8	12.8	16.0
1988 11 05	20 16.96	+55 55.3					
1988 11 15	20 24.47	+54 37.4	4.349	4.580	97.2	12.4	16.3
1988 11 25	20 33.44	+53 30.9					
1988 12 05	20 43.55	+52 36.8	4.653	4.774	91.1	11.9	16.6
1988 12 15	20 54.53	+51 55.8					
1988 12 25	21 06.16	+51 27.9	4.971	4.966	84.0	11.4	16.9
1989 01 04	21 18.25	+51 13.0					
1989 01 14	21 30.65	+51 10.7	5.294	5.155	76.6	10.7	17.2
1989 01 24	21 43.23	+51 20.4					
1989 02 03	21 55.88	+51 41.2	5.609	5.341	69.4	9.9	17.5

Comet McNaught (1987b1) Elements MPC 12787

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	m1
1988 06 28	06 01.97	+57 36.0	3.905	3.122	34.6	10.6	14.4
1988 07 08	06 17.52	+57 05.6					
1988 07 18	06 31.45	+56 43.1	4.092	3.354	38.3	10.8	14.8
1988 07 28	06 43.81	+56 28.6					
1988 08 07	06 54.62	+56 22.6	4.196	3.581	46.9	11.9	15.2
1988 08 17	07 03.82	+56 25.3					
1988 08 27	07 11.26	+56 37.2	4.223	3.803	59.0	13.2	15.4
1988 09 06	07 16.77	+56 58.4					
1988 09 16	07 20.09	+57 28.7	4.188	4.021	73.6	13.9	15.7
1988 09 26	07 20.87	+58 07.7					
1988 10 06	07 18.74	+58 53.8	4.115	4.234	90.0	13.7	15.8
1988 10 16	07 13.24	+59 44.4					
1988 10 26	07 04.01	+60 35.3	4.041	4.443	107.6	12.3	16.0
1988 11 05	06 50.84	+61 20.7					
1988 11 15	06 33.90	+61 53.6	4.011	4.649	125.0	10.0	16.2
1988 11 25	06 13.97	+62 06.8					
1988 12 05	05 52.46	+61 54.7	4.067	4.851	138.7	7.7	16.4
1988 12 15	05 31.16	+61 15.6					
1988 12 25	05 11.79	+60 11.7	4.241	5.050	141.7	6.9	16.7
1989 01 04	04 55.51	+58 49.0					
1989 01 14	04 42.85	+57 14.7	4.538	5.245	131.9	8.0	17.0
1989 01 24	04 33.81	+55 36.2					
1989 02 03	04 28.06	+53 59.1	4.937	5.438	115.7	9.4	17.3

4327 T-3 a,e,i = 2.58, 0.11, 9 Elements MPC 13304

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 06 08	14 48.15	-16 50.3	1.438	2.360	147.8	13.3	17.8
1988 06 18	14 43.85	-17 13.5					
1988 06 28	14 42.57	-17 44.6	1.615	2.377	127.7	19.8	18.3
1988 07 08	14 44.24	-18 23.5					
1988 07 18	14 48.63	-19 09.3	1.843	2.395	110.4	23.4	18.7
1988 07 28	14 55.47	-20 00.8					
1988 08 07	15 04.44	-20 56.4	2.098	2.415	95.4	24.7	19.0
1988 08 17	15 15.28	-21 54.5					
1988 08 27	15 27.77	-22 53.4	2.363	2.435	81.9	24.2	19.3

1987 DC6 a,e,i = 3.14, 0.14, 7 Elements MPC 13307

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 06 08	14 58.05	-07 22.2	2.604	3.493	146.2	9.3	17.3
1988 06 18	14 53.73	-07 18.6					
1988 06 28	14 51.17	-07 25.7	2.808	3.505	126.2	13.5	17.7
1988 07 08	14 50.44	-07 42.7					
1988 07 18	14 51.51	-08 08.4	3.072	3.516	107.7	16.0	17.9
1988 07 28	14 54.31	-08 41.3					
1988 08 07	14 58.67	-09 20.1	3.363	3.526	90.8	16.7	18.2
1988 08 17	15 04.47	-10 03.2					
1988 08 27	15 11.55	-10 49.3	3.656	3.535	75.2	16.0	18.3

1987 DY5 a,e,i = 2.99, 0.08, 10 Elements MPC 13312

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 06 08	15 04.35	-02 42.1	2.289	3.174	144.9	10.6	16.9
1988 06 18	14 59.91	-02 47.3					
1988 06 28	14 57.36	-03 06.0	2.480	3.183	125.7	15.0	17.2
1988 07 08	14 56.80	-03 36.3					
1988 07 18	14 58.19	-04 16.4	2.728	3.190	107.9	17.6	17.5
1988 07 28	15 01.44	-05 03.9					
1988 08 07	15 06.38	-05 56.9	3.003	3.197	91.7	18.5	17.7
1988 08 17	15 12.86	-06 53.6					
1988 08 27	15 20.71	-07 52.5	3.282	3.203	76.7	17.9	17.9
1988 09 06	15 29.77	-08 51.9					
1988 09 16	15 39.91	-09 50.8	3.544	3.209	62.6	16.2	18.0

1987 DS6 a,e,i = 3.14, 0.07, 9 Elements MPC 13313

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 06 08	15 35.73	-07 46.6	2.377	3.320	154.2	7.6	17.0
1988 06 18	15 30.18	-07 35.7					
1988 06 28	15 26.27	-07 36.5	2.538	3.328	134.2	12.7	17.3
1988 07 08	15 24.23	-07 48.0					
1988 07 18	15 24.13	-08 09.2	2.771	3.334	115.3	16.0	17.6
1988 07 28	15 25.93	-08 38.6					
1988 08 07	15 29.51	-09 14.2	3.044	3.341	98.1	17.5	17.8
1988 08 17	15 34.73	-09 54.5					
1988 08 27	15 41.44	-10 37.9	3.329	3.346	82.3	17.4	18.0
1988 09 06	15 49.46	-11 22.9					
1988 09 16	15 58.65	-12 08.1	3.604	3.351	67.5	16.1	18.2

1984 HC2 a,e,i = 2.37, 0.06, 5 Elements MPC 13297

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 06 08	15 49.79	-13 56.2	1.532	2.512	160.5	7.7	16.4
1988 06 18	15 41.88	-13 56.2					
1988 06 28	15 36.36	-14 06.3	1.658	2.515	138.9	15.4	16.8
1988 07 08	15 33.58	-14 26.7					
1988 07 18	15 33.62	-14 56.4	1.855	2.517	119.6	20.6	17.2
1988 07 28	15 36.35	-15 34.0					
1988 08 07	15 41.54	-16 17.6	2.092	2.517	102.7	23.1	17.6
1988 08 17	15 48.94	-17 05.4					
1988 08 27	15 58.29	-17 55.4	2.345	2.517	87.8	23.7	17.8
1988 09 06	16 09.35	-18 45.8					
1988 09 16	16 21.92	-19 35.1	2.595	2.515	74.2	22.6	18.0

1987 EP a,e,i = 2.63, 0.15, 15 Elements MPC 13302

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 06 08	15 48.90	-43 37.1	1.708	2.659	154.2	9.6	15.8
1988 06 18	15 38.92	-42 41.1					

1988 06 28	15 31.87	-41 32.1	1.771	2.629	139.5	14.5	16.1
1988 07 08	15 28.24	-40 18.8					
1988 07 18	15 28.12	-39 08.0	1.909	2.598	122.2	19.3	16.3
1988 07 28	15 31.34	-38 04.3					
1988 08 07	15 37.54	-37 09.9	2.095	2.567	106.0	22.3	16.6
1988 08 17	15 46.37	-36 24.9					
1988 08 27	15 57.49	-35 48.4	2.304	2.536	91.2	23.5	16.8
1988 09 06	16 10.56	-35 18.6					
1988 09 16	16 25.34	-34 53.3	2.517	2.505	77.8	23.1	17.0
1988 09 26	16 41.58	-34 30.5					
1988 10 06	16 59.06	-34 07.8	2.720	2.475	65.3	21.5	17.1

(3859) 1987 EW a,e,i = 3.21, 0.13, 3 Elements MPC 13309

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 06 08	16 26.89	-18 20.3	2.454	3.459	170.4	2.8	16.9
1988 06 18	16 19.56	-18 09.7					
1988 06 28	16 13.45	-18 02.9	2.569	3.477	148.6	8.8	17.3
1988 07 08	16 08.99	-18 00.9					
1988 07 18	16 06.42	-18 04.3	2.775	3.494	128.0	13.3	17.6
1988 07 28	16 05.85	-18 13.4					
1988 08 07	16 07.23	-18 27.5	3.044	3.510	109.2	15.8	17.9
1988 08 17	16 10.45	-18 46.0					
1988 08 27	16 15.38	-19 07.9	3.343	3.525	92.0	16.6	18.1
1988 09 06	16 21.82	-19 32.2					
1988 09 16	16 29.63	-19 57.8	3.645	3.539	76.0	16.0	18.3
1988 09 26	16 38.64	-20 23.5					
1988 10 06	16 48.69	-20 48.5	3.928	3.552	61.0	14.2	18.4

1987 DW5 a,e,i = 2.80, 0.15, 5 Elements MPC 13306

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 06 08	17 13.32	-16 01.5	1.977	2.987	172.8	2.4	16.6
1988 06 18	17 04.50	-15 55.5					
1988 06 28	16 56.50	-15 54.8	2.047	3.013	157.7	7.4	16.9
1988 07 08	16 50.05	-15 59.7					
1988 07 18	16 45.61	-16 10.6	2.217	3.037	136.7	13.3	17.3
1988 07 28	16 43.46	-16 26.9					
1988 08 07	16 43.61	-16 47.9	2.459	3.061	117.4	17.1	17.7
1988 08 17	16 45.97	-17 12.6					
1988 08 27	16 50.39	-17 39.6	2.743	3.083	99.9	18.8	18.0
1988 09 06	16 56.64	-18 07.7					
1988 09 16	17 04.53	-18 35.7	3.042	3.103	84.0	18.8	18.2
1988 09 26	17 13.85	-19 02.3					
1988 10 06	17 24.40	-19 26.4	3.334	3.122	69.2	17.4	18.4

1980 PQ2 a,e,i = 2.63, 0.17, 13 Elements MPC 13310

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 06 08	17 23.13	-01 25.3	1.586	2.556	158.1	8.5	15.6
1988 06 18	17 14.19	-01 20.1					
1988 06 28	17 05.70	-01 36.6	1.582	2.519	150.8	11.3	15.6
1988 07 08	16 58.63	-02 13.6					
1988 07 18	16 53.71	-03 08.0	1.667	2.483	134.0	17.1	15.9
1988 07 28	16 51.39	-04 15.7					
1988 08 07	16 51.84	-05 32.1	1.816	2.447	116.8	21.7	16.2
1988 08 17	16 55.02	-06 53.3					
1988 08 27	17 00.79	-08 15.8	2.004	2.412	101.1	24.3	16.4
1988 09 06	17 08.91	-09 36.7					
1988 09 16	17 19.16	-10 53.7	2.208	2.378	87.0	25.0	16.6
1988 09 26	17 31.31	-12 04.8					
1988 10 06	17 45.14	-13 08.4	2.412	2.346	74.2	24.2	16.8

1988 10 16	18 00.44	-14 03.1					
1988 10 26	18 17.03	-14 47.7	2.604	2.315	62.3	22.3	16.8

1987 DW6 a,e,i = 3.15, 0.15, 2 Elements MPC 13313

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 06 08	19 09.55	-24 41.5	2.011	2.941	151.0	9.6	16.4
1988 06 18	19 02.60	-24 56.8					
1988 06 28	18 54.34	-25 10.9	1.957	2.969	173.3	2.3	16.0
1988 07 08	18 45.66	-25 21.7					
1988 07 18	18 37.48	-25 28.3	2.010	2.998	163.2	5.6	16.3
1988 07 28	18 30.67	-25 30.5					
1988 08 07	18 25.84	-25 29.1	2.166	3.027	141.6	12.0	16.7
1988 08 17	18 23.33	-25 25.0					
1988 08 27	18 23.28	-25 19.2	2.400	3.056	121.8	16.3	17.1
1988 09 06	18 25.57	-25 11.9					
1988 09 16	18 30.06	-25 03.1	2.685	3.086	104.0	18.4	17.4
1988 09 26	18 36.50	-24 52.5					
1988 10 06	18 44.64	-24 39.6	2.991	3.115	87.7	18.7	17.7
1988 10 16	18 54.23	-24 23.7					
1988 10 26	19 05.04	-24 04.2	3.296	3.145	72.6	17.6	17.9

1987 DH6 a,e,i = 2.68, 0.12, 1 Elements MPC 1307

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 06 08	19 24.29	-21 34.3	1.440	2.359	147.4	13.4	15.3
1988 06 18	19 18.32	-21 37.5					
1988 06 28	19 10.23	-21 43.7	1.355	2.362	169.7	4.4	14.9
1988 07 08	19 01.05	-21 50.6					
1988 07 18	18 52.04	-21 56.4	1.366	2.368	167.0	5.6	14.9
1988 07 28	18 44.46	-22 00.2					
1988 08 07	18 39.25	-22 01.8	1.473	2.375	144.9	14.2	15.4
1988 08 17	18 36.94	-22 01.6					
1988 08 27	18 37.71	-21 59.6	1.654	2.385	125.3	20.2	15.9
1988 09 06	18 41.43	-21 55.6					
1988 09 16	18 47.84	-21 48.7	1.884	2.398	108.3	23.5	16.2
1988 09 26	18 56.61	-21 38.1					
1988 10 06	19 07.36	-21 22.6	2.140	2.412	93.2	24.4	16.6
1988 10 16	19 19.79	-21 01.4					
1988 10 26	19 33.58	-20 33.4	2.403	2.429	79.6	23.7	16.8

1980 FH2 a,e,i = 2.34, 0.07, 4 Elements MPC 13301

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 06 08	20 34.74	-22 40.4	1.382	2.190	131.5	20.3	17.3
1988 06 18	20 33.42	-22 44.6					
1988 06 28	20 28.73	-22 56.4	1.233	2.182	151.9	12.7	16.8
1988 07 08	20 21.06	-23 12.5					
1988 07 18	20 11.27	-23 28.3	1.163	2.176	174.1	2.7	16.3
1988 07 28	20 00.74	-23 38.9					
1988 08 07	19 51.03	-23 41.2	1.188	2.172	160.9	8.8	16.6
1988 08 17	19 43.48	-23 34.2					
1988 08 27	19 39.06	-23 18.7	1.301	2.169	139.2	17.7	17.1
1988 09 06	19 38.12	-22 56.2					
1988 09 16	19 40.62	-22 27.6	1.479	2.168	120.3	23.6	17.5
1988 09 26	19 46.29	-21 53.3					
1988 10 06	19 54.67	-21 13.2	1.696	2.169	104.1	26.5	17.9
1988 10 16	20 05.36	-20 26.8					
1988 10 26	20 17.93	-19 33.4	1.931	2.172	90.0	27.2	18.2
1988 11 05	20 32.01	-18 32.6					
1988 11 15	20 47.29	-17 23.9	2.170	2.176	77.2	26.3	18.4

1988 KA a,e,i = 2.14, 0.19, 4 Elements MPC 13303

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	06 08	21 08.85	-18 46.2	0.986	1.757	122.8	29.1	15.3
1988	06 18	21 16.60	-18 57.8					
1988	06 28	21 20.86	-19 29.0	0.841	1.743	139.3	22.4	14.8
1988	07 08	21 21.32	-20 19.9					
1988	07 18	21 17.99	-21 26.7	0.748	1.736	159.1	12.1	14.2
1988	07 28	21 11.55	-22 40.5					
1988	08 07	21 03.39	-23 49.3	0.725	1.736	172.7	4.2	13.8
1988	08 17	20 55.35	-24 41.8					
1988	08 27	20 49.38	-25 10.5	0.780	1.744	153.6	14.9	14.4
1988	09 06	20 46.74	-25 14.2					
1988	09 16	20 47.99	-24 54.8	0.901	1.759	134.5	24.1	15.0
1988	09 26	20 53.08	-24 15.4					
1988	10 06	21 01.53	-23 19.2	1.071	1.780	118.5	29.6	15.5
1988	10 16	21 12.77	-22 08.4					
1988	10 26	21 26.21	-20 44.8	1.274	1.807	105.0	32.1	16.0
1988	11 05	21 41.31	-19 09.9					
1988	11 15	21 57.66	-17 25.0	1.498	1.840	93.2	32.5	16.4

1975 VS5 a,e,i = 2.26, 0.16, 6 Elements MPC 13297

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	06 08	21 34.61	-07 50.5	1.742	2.339	113.4	23.5	18.1
1988	06 18	21 38.21	-07 24.0					
1988	06 28	21 39.23	-07 13.2	1.506	2.304	131.0	19.4	17.7
1988	07 08	21 37.48	-07 20.8					
1988	07 18	21 32.90	-07 48.8	1.324	2.269	151.4	12.4	17.1
1988	07 28	21 25.83	-08 36.9					
1988	08 07	21 16.97	-09 41.8	1.224	2.234	172.7	3.3	16.6
1988	08 17	21 07.43	-10 57.6					
1988	08 27	20 58.59	-12 15.9	1.222	2.197	159.6	9.2	16.8
1988	09 06	20 51.69	-13 29.0					
1988	09 16	20 47.64	-14 30.9	1.311	2.161	137.5	18.3	17.2
1988	09 26	20 46.93	-15 17.9					
1988	10 06	20 49.60	-15 48.5	1.464	2.126	118.0	24.5	17.6
1988	10 16	20 55.45	-16 02.4					
1988	10 26	21 04.13	-15 59.7	1.652	2.091	101.5	27.8	17.9
1988	11 05	21 15.21	-15 41.3					
1988	11 15	21 28.34	-15 07.5	1.852	2.058	87.3	28.7	18.1

1987 DA6 a,e,i = 2.19, 0.08, 4 Elements MPC 13306

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	06 08	22 18.44	-11 10.5	1.788	2.266	104.5	25.7	17.6
1988	06 18	22 23.69	-10 25.3					
1988	06 28	22 26.30	-09 52.9	1.583	2.283	121.3	22.4	17.2
1988	07 08	22 26.01	-09 34.9					
1988	07 18	22 22.68	-09 32.4	1.417	2.299	141.1	16.1	16.8
1988	07 28	22 16.40	-09 44.9					
1988	08 07	22 07.69	-10 09.8	1.322	2.313	163.8	7.0	16.4
1988	08 17	21 57.41	-10 42.9					
1988	08 27	21 46.85	-11 18.0	1.323	2.327	171.5	3.7	16.2
1988	09 06	21 37.34	-11 49.5					
1988	09 16	21 29.97	-12 12.9	1.425	2.339	148.0	13.2	16.8
1988	09 26	21 25.46	-12 25.3					
1988	10 06	21 24.04	-12 25.8	1.608	2.349	127.0	19.9	17.3
1988	10 16	21 25.66	-12 14.2					
1988	10 26	21 30.03	-11 50.8	1.843	2.359	108.8	23.5	17.7
1988	11 05	21 36.79	-11 16.4					
1988	11 15	21 45.57	-10 31.4	2.102	2.366	92.8	24.7	18.0

1984 SC5 a,e,i = 2.56, 0.17, 15 Elements MPC 13302

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 06 28	23 47.57	+00 44.7	1.815	2.208	98.5	27.1	16.1
1988 07 08	23 53.56	+02 38.6					
1988 07 18	23 57.08	+04 24.4	1.619	2.233	113.9	24.6	15.8
1988 07 28	23 57.81	+06 00.0					
1988 08 07	23 55.55	+07 22.8	1.454	2.261	131.8	19.5	15.4
1988 08 17	23 50.24	+08 29.5					
1988 08 27	23 42.20	+09 17.2	1.349	2.291	151.9	12.0	15.1
1988 09 06	23 32.17	+09 44.2					
1988 09 16	23 21.29	+09 50.9	1.332	2.323	166.9	5.6	14.8
1988 09 26	23 10.94	+09 41.5					
1988 10 06	23 02.34	+09 22.1	1.417	2.356	154.0	10.7	15.2
1988 10 16	22 56.36	+09 00.0					
1988 10 26	22 53.41	+08 41.7	1.591	2.391	134.0	17.4	15.7
1988 11 05	22 53.50	+08 31.6					
1988 11 15	22 56.42	+08 32.5	1.830	2.427	115.6	21.6	16.2
1988 11 25	23 01.83	+08 45.7					
1988 12 05	23 09.36	+09 11.1	2.105	2.463	99.2	23.3	16.5

1975 VP a,e,i = 2.17, 0.12, 3 Elements MPC 13309

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 08 27	03 38.46	+15 40.4	1.508	1.919	97.4	31.5	17.5
1988 09 06	03 51.84	+15 59.1					
1988 09 16	04 02.99	+16 05.4	1.305	1.910	110.8	29.5	17.1
1988 09 26	04 11.38	+15 59.9					
1988 10 06	04 16.50	+15 43.6	1.126	1.905	127.2	24.7	16.7
1988 10 16	04 17.82	+15 17.7					
1988 10 26	04 15.17	+14 44.5	0.990	1.903	147.1	16.5	16.2
1988 11 05	04 08.78	+14 07.1					
1988 11 15	03 59.55	+13 30.1	0.925	1.906	169.2	5.6	15.6
1988 11 25	03 49.10	+12 59.4					
1988 12 05	03 39.29	+12 40.6	0.952	1.913	161.8	9.3	15.8
1988 12 15	03 31.79	+12 37.9					
1988 12 25	03 27.70	+12 52.9	1.066	1.923	139.6	19.4	16.4
1989 01 04	03 27.40	+13 24.3					
1989 01 14	03 30.81	+14 09.2	1.243	1.938	120.5	25.9	17.0
1989 01 24	03 37.60	+15 03.8					
1989 02 03	03 47.31	+16 04.4	1.458	1.955	104.6	29.2	17.4

1981 RG1 a,e,i = 2.27, 0.19, 6 Elements MPC 11729

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 08 27	03 51.27	+23 08.1	1.534	1.878	92.8	32.5	17.5
1988 09 06	04 05.18	+24 33.4					
1988 09 16	04 16.72	+25 52.9	1.361	1.901	105.9	30.6	17.2
1988 09 26	04 25.34	+27 07.2					
1988 10 06	04 30.42	+28 16.5	1.204	1.929	121.9	26.1	16.9
1988 10 16	04 31.37	+29 19.7					
1988 10 26	04 27.90	+30 13.6	1.084	1.962	141.4	18.4	16.5
1988 11 05	04 20.19	+30 53.3					
1988 11 15	04 09.18	+31 13.2	1.032	1.998	162.9	8.4	16.1
1988 11 25	03 56.68	+31 10.8					
1988 12 05	03 44.81	+30 48.5	1.071	2.037	164.2	7.5	16.2
1988 12 15	03 35.48	+30 14.0					
1988 12 25	03 29.88	+29 36.6	1.206	2.079	143.3	16.4	16.8
1989 01 04	03 28.36	+29 03.9					
1989 01 14	03 30.76	+28 40.2	1.413	2.122	123.6	22.7	17.3
1989 01 24	03 36.64	+28 26.5					
1989 02 03	03 45.45	+28 21.9	1.665	2.165	106.7	25.8	17.8

1981 EJ23 a,e,i = 2.72, 0.06, 4 Elements MPC 10541

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	08 27	04 04.12	+24 23.2	2.413	2.610	89.6	22.8	19.0
1988	09 06	04 13.36	+25 06.0					
1988	09 16	04 20.68	+25 44.0	2.150	2.599	105.1	21.9	18.7
1988	09 26	04 25.70	+26 17.2					
1988	10 06	04 28.07	+26 45.3	1.909	2.590	122.8	18.9	18.3
1988	10 16	04 27.48	+27 07.4					
1988	10 26	04 23.81	+27 21.8	1.716	2.582	143.2	13.3	17.9
1988	11 05	04 17.26	+27 26.6					
1988	11 15	04 08.42	+27 19.8	1.604	2.574	165.6	5.5	17.5
1988	11 25	03 58.37	+27 01.4					
1988	12 05	03 48.40	+26 33.5	1.598	2.567	166.6	5.1	17.4
1988	12 15	03 39.81	+26 00.4					
1988	12 25	03 33.62	+25 27.7	1.700	2.561	143.9	13.1	17.9
1989	01 04	03 30.37	+25 00.1					
1989	01 14	03 30.25	+24 40.9	1.886	2.557	122.9	18.9	18.3
1989	01 24	03 33.13	+24 31.2					
1989	02 03	03 38.75	+24 30.7	2.121	2.553	104.5	22.0	18.6

1981 EZ10 a,e,i = 2.79, 0.04, 3 Elements MPC 10615

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	04 24.11	+23 55.2	2.401	2.827	104.6	20.1	19.0
1988	09 26	04 27.87	+24 04.1					
1988	10 06	04 29.12	+24 06.6	2.163	2.835	123.0	17.2	18.7
1988	10 16	04 27.66	+24 02.3					
1988	10 26	04 23.50	+23 50.4	1.976	2.842	144.2	11.8	18.4
1988	11 05	04 16.89	+23 30.3					
1988	11 15	04 08.44	+23 02.2	1.874	2.848	167.7	4.3	18.0
1988	11 25	03 59.08	+22 27.6					
1988	12 05	03 49.89	+21 49.5	1.885	2.855	167.4	4.3	18.0
1988	12 15	03 41.90	+21 12.1					
1988	12 25	03 35.93	+20 39.4	2.008	2.861	143.7	11.7	18.4
1989	01 04	03 32.45	+20 14.7					
1989	01 14	03 31.62	+19 59.6	2.219	2.866	122.2	16.9	18.8
1989	01 24	03 33.39	+19 54.4					
1989	02 03	03 37.54	+19 58.2	2.481	2.872	103.2	19.5	19.1
1989	02 13	03 43.84	+20 09.6					
1989	02 23	03 52.02	+20 26.8	2.763	2.876	86.4	20.1	19.4

1981 SJ7 a,e,i = 2.27, 0.20, 5 Elements MPC 12453

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	04 25.28	+27 46.5	1.580	2.063	103.7	28.3	17.6
1988	09 26	04 32.29	+28 18.0					
1988	10 06	04 35.81	+28 40.8	1.415	2.108	120.7	24.1	17.3
1988	10 16	04 35.41	+28 53.8					
1988	10 26	04 30.98	+28 54.5	1.288	2.154	141.2	16.8	16.9
1988	11 05	04 22.86	+28 40.1					
1988	11 15	04 12.00	+28 08.7	1.232	2.201	164.5	6.9	16.5
1988	11 25	04 00.00	+27 21.6					
1988	12 05	03 48.62	+26 23.8	1.277	2.247	166.7	5.8	16.6
1988	12 15	03 39.42	+25 23.3					
1988	12 25	03 33.40	+24 28.1	1.424	2.292	143.7	14.7	17.2
1989	01 04	03 30.89	+23 43.7					
1989	01 14	03 31.82	+23 12.6	1.651	2.337	122.9	20.7	17.7
1989	01 24	03 35.86	+22 54.7					
1989	02 03	03 42.56	+22 48.2	1.926	2.380	105.0	23.6	18.2
1989	02 13	03 51.53	+22 50.8					
1989	02 23	04 02.39	+22 59.8	2.222	2.421	89.3	24.1	18.5

1980 YM a,e,i = 2.58, 0.17, 3 Elements MPC 13165

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	04 13.28	+23 40.0	1.631	2.153	107.1	26.5	17.3
1988	09 26	04 21.28	+23 54.5					
1988	10 06	04 26.32	+23 59.4	1.427	2.149	123.7	22.8	16.9
1988	10 16	04 27.99	+23 53.9					
1988	10 26	04 26.09	+23 37.8	1.266	2.149	143.6	15.9	16.4
1988	11 05	04 20.79	+23 10.3					
1988	11 15	04 12.77	+22 32.0	1.178	2.153	166.9	6.0	15.9
1988	11 25	04 03.31	+21 45.5					
1988	12 05	03 53.98	+20 55.8	1.187	2.161	168.2	5.3	15.9
1988	12 15	03 46.29	+20 09.4					
1988	12 25	03 41.38	+19 32.4	1.295	2.174	144.7	15.1	16.5
1989	01 04	03 39.75	+19 08.1					
1989	01 14	03 41.50	+18 57.7	1.480	2.190	124.2	21.8	17.0
1989	01 24	03 46.42	+19 00.0					
1989	02 03	03 54.12	+19 12.6	1.713	2.210	106.9	25.3	17.4
1989	02 13	04 04.25	+19 32.5					
1989	02 23	04 16.42	+19 56.6	1.969	2.233	91.9	26.3	17.8

1974 MG a,e,i = 2.23, 0.18, 5 Elements MPC 10295

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	04 33.82	+28 44.8	1.827	2.256	101.6	25.9	18.5
1988	09 26	04 39.69	+29 25.4					
1988	10 06	04 42.32	+30 00.3	1.640	2.297	119.0	22.4	18.2
1988	10 16	04 41.31	+30 28.2					
1988	10 26	04 36.49	+30 46.2	1.490	2.337	139.5	16.0	17.9
1988	11 05	04 28.14	+30 50.8					
1988	11 15	04 17.01	+30 38.6	1.414	2.375	162.1	7.4	17.5
1988	11 25	04 04.55	+30 08.7					
1988	12 05	03 52.40	+29 24.0	1.442	2.411	166.4	5.5	17.5
1988	12 15	03 42.13	+28 31.1					
1988	12 25	03 34.83	+27 37.9	1.578	2.445	144.3	13.6	18.0
1989	01 04	03 30.94	+26 50.9					
1989	01 14	03 30.51	+26 14.2	1.797	2.476	123.2	19.4	18.5
1989	01 24	03 33.26	+25 49.2					
1989	02 03	03 38.78	+25 35.3	2.067	2.506	104.7	22.4	18.9
1989	02 13	03 46.70	+25 30.7					
1989	02 23	03 56.62	+25 33.5	2.356	2.532	88.5	23.0	19.2

1986 JV a,e,i = 3.02, 0.09, 11 Elements MPC 11055

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	04 31.45	+19 23.2	2.612	3.012	103.6	18.9	16.8
1988	09 26	04 34.37	+19 46.9					
1988	10 06	04 34.94	+20 08.1	2.376	3.030	122.3	16.2	16.6
1988	10 16	04 32.99	+20 26.6					
1988	10 26	04 28.53	+20 42.4	2.191	3.049	143.6	11.2	16.2
1988	11 05	04 21.80	+20 54.9					
1988	11 15	04 13.32	+21 03.8	2.095	3.067	167.1	4.1	15.9
1988	11 25	04 03.91	+21 09.4					
1988	12 05	03 54.53	+21 12.5	2.113	3.084	168.4	3.7	15.9
1988	12 15	03 46.14	+21 15.0					
1988	12 25	03 39.54	+21 19.2	2.247	3.102	144.7	10.6	16.3
1989	01 04	03 35.20	+21 27.1					
1989	01 14	03 33.33	+21 40.0	2.473	3.119	123.0	15.3	16.7
1989	01 24	03 33.95	+21 58.5					
1989	02 03	03 36.89	+22 22.4	2.753	3.135	103.6	17.8	17.0
1989	02 13	03 41.93	+22 51.0					
1989	02 23	03 48.85	+23 23.2	3.056	3.151	86.3	18.3	17.2

1975 VA9 a,e,i = 2.65, 0.16, 13 Elements MPC 9477

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	04 16.59	+35 48.6	1.777	2.240	103.8	25.8	16.5
1988 09 26	04 25.16	+36 35.1					
1988 10 06	04 30.66	+37 11.7	1.565	2.234	119.5	22.9	16.2
1988 10 16	04 32.59	+37 35.7					
1988 10 26	04 30.67	+37 43.4	1.391	2.231	137.9	17.4	15.8
1988 11 05	04 25.02	+37 29.8					
1988 11 15	04 16.34	+36 50.4	1.285	2.232	157.7	9.7	15.3
1988 11 25	04 06.03	+35 43.7					
1988 12 05	03 55.83	+34 13.7	1.272	2.236	164.0	7.0	15.2
1988 12 15	03 47.42	+32 29.4					
1988 12 25	03 42.02	+30 42.6	1.361	2.244	145.9	14.2	15.6
1989 01 04	03 40.13	+29 03.3					
1989 01 14	03 41.80	+27 38.0	1.534	2.256	125.9	20.7	16.1
1989 01 24	03 46.73	+26 29.1					
1989 02 03	03 54.50	+25 36.1	1.762	2.271	108.2	24.3	16.5
1989 02 13	04 04.67	+24 56.5					
1989 02 23	04 16.84	+24 27.4	2.017	2.290	92.8	25.6	16.9

1986 EJ1 a,e,i = 2.61, 0.15, 16 Elements MPC 11855

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	04 39.46	+34 15.7	2.669	3.004	99.5	19.3	18.4
1988 09 26	04 43.09	+35 25.0					
1988 10 06	04 44.12	+36 33.4	2.416	3.006	117.1	17.2	18.1
1988 10 16	04 42.21	+37 38.8					
1988 10 26	04 37.18	+38 38.0	2.207	3.006	136.4	13.2	17.8
1988 11 05	04 29.14	+39 26.2					
1988 11 15	04 18.57	+39 58.4	2.079	3.004	154.9	8.0	17.5
1988 11 25	04 06.48	+40 10.6					
1988 12 05	03 54.15	+40 01.8	2.058	3.000	159.3	6.7	17.4
1988 12 15	03 42.98	+39 34.7					
1988 12 25	03 34.11	+38 55.3	2.149	2.995	143.1	11.4	17.7
1989 01 04	03 28.19	+38 10.4					
1989 01 14	03 25.51	+37 26.4	2.331	2.987	123.3	16.0	18.0
1989 01 24	03 25.98	+36 47.9					
1989 02 03	03 29.34	+36 17.1	2.569	2.977	104.8	18.7	18.3
1989 02 13	03 35.29	+35 54.9					
1989 02 23	03 43.47	+35 40.7	2.829	2.965	88.0	19.5	18.5

1979 ML a,e,i = 2.54, 0.25, 8 Elements MPC 12202

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	04 37.24	+12 21.5	2.412	2.816	103.1	20.3	18.5
1988 09 26	04 40.10	+11 53.1					
1988 10 06	04 40.49	+11 19.3	2.205	2.859	121.6	17.3	18.3
1988 10 16	04 38.24	+10 41.7					
1988 10 26	04 33.43	+10 02.3	2.047	2.899	142.4	12.1	18.0
1988 11 05	04 26.33	+09 23.9					
1988 11 15	04 17.53	+08 49.6	1.976	2.936	163.0	5.6	17.7
1988 11 25	04 07.88	+08 22.7					
1988 12 05	03 58.37	+08 06.1	2.019	2.972	162.0	5.9	17.8
1988 12 15	03 49.91	+08 01.6					
1988 12 25	03 43.27	+08 09.6	2.174	3.004	141.2	11.9	18.2
1989 01 04	03 38.86	+08 29.4					
1989 01 14	03 36.86	+08 59.5	2.416	3.034	120.3	16.3	18.6
1989 01 24	03 37.26	+09 37.9					
1989 02 03	03 39.87	+10 22.5	2.709	3.060	101.4	18.4	18.9
1989 02 13	03 44.48	+11 11.1					
1989 02 23	03 50.86	+12 02.1	3.019	3.085	84.4	18.6	19.2

1984 DA a,e,i = 1.92, 0.06, 23 Elements MPC 11996

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	04 23.88	-06 05.5	1.420	1.973	107.6	29.1	17.9
1988	09 26	04 32.32	-08 50.0					
1988	10 06	04 37.68	-11 49.3	1.259	1.960	120.0	26.2	17.5
1988	10 16	04 39.50	-14 55.3					
1988	10 26	04 37.50	-17 55.4	1.146	1.947	130.9	22.7	17.2
1988	11 05	04 31.77	-20 34.0					
1988	11 15	04 22.87	-22 34.1	1.093	1.933	136.3	20.7	17.0
1988	11 25	04 12.10	-23 41.1					
1988	12 05	04 01.10	-23 47.7	1.108	1.919	132.7	22.2	17.1
1988	12 15	03 51.60	-22 54.9					
1988	12 25	03 44.94	-21 11.2	1.184	1.904	122.7	25.7	17.3
1989	01 04	03 41.81	-18 49.0					
1989	01 14	03 42.37	-16 00.7	1.304	1.890	110.7	29.1	17.6
1989	01 24	03 46.47	-12 57.5					
1989	02 03	03 53.73	-09 47.9	1.453	1.877	98.8	31.3	17.9
1989	02 13	04 03.77	-06 38.5					
1989	02 23	04 16.22	-03 34.3	1.618	1.863	87.7	32.0	18.1

1987 QS7 a,e,i = 2.91, 0.04, 2 Elements MPC 12943

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	04 35.30	+19 51.1	2.644	3.028	102.7	18.9	17.9
1988	09 26	04 39.02	+19 49.8					
1988	10 06	04 40.49	+19 43.6	2.387	3.027	121.1	16.4	17.6
1988	10 16	04 39.51	+19 32.6					
1988	10 26	04 36.05	+19 17.2	2.179	3.025	142.0	11.7	17.2
1988	11 05	04 30.29	+18 57.6					
1988	11 15	04 22.68	+18 34.8	2.056	3.022	165.0	4.8	16.8
1988	11 25	04 13.96	+18 10.2					
1988	12 05	04 05.05	+17 46.1	2.045	3.019	169.7	3.3	16.7
1988	12 15	03 56.91	+17 25.2					
1988	12 25	03 50.37	+17 10.2	2.149	3.016	146.2	10.5	17.1
1989	01 04	03 45.97	+17 02.8					
1989	01 14	03 43.99	+17 04.0	2.345	3.012	124.3	15.6	17.5
1989	01 24	03 44.49	+17 13.6					
1989	02 03	03 47.34	+17 30.7	2.599	3.007	104.9	18.5	17.8
1989	02 13	03 52.35	+17 54.0					
1989	02 23	03 59.28	+18 21.9	2.875	3.002	87.7	19.2	18.0

1981 EA29 a,e,i = 2.72, 0.21, 8 Elements MPC 10772

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	04 22.08	+16 36.5	1.638	2.148	106.2	26.7	18.3
1988	09 26	04 30.56	+15 58.2					
1988	10 06	04 36.18	+15 07.6	1.444	2.153	122.5	23.0	17.9
1988	10 16	04 38.56	+14 06.4					
1988	10 26	04 37.58	+12 57.3	1.295	2.164	141.7	16.6	17.5
1988	11 05	04 33.38	+11 44.4					
1988	11 15	04 26.55	+10 33.3	1.218	2.181	162.0	8.0	17.1
1988	11 25	04 18.18	+09 30.8					
1988	12 05	04 09.63	+08 43.3	1.237	2.201	164.1	7.1	17.1
1988	12 15	04 02.25	+08 15.2					
1988	12 25	03 57.13	+08 08.1	1.354	2.227	144.2	15.0	17.6
1989	01 04	03 54.85	+08 20.5					
1989	01 14	03 55.60	+08 49.5	1.547	2.256	124.6	21.0	18.1
1989	01 24	03 59.29	+09 30.7					
1989	02 03	04 05.61	+10 20.2	1.790	2.289	107.5	24.2	18.6
1989	02 13	04 14.26	+11 14.4					
1989	02 23	04 24.89	+12 09.9	2.059	2.325	92.6	25.2	18.9

1978 TR2 a,e,i = 2.85, 0.09, 1 Elements MPC 8391

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	04 37.03	+23 06.4	2.255	2.651	101.8	21.8	17.8
1988 09 26	04 42.52	+23 18.8					
1988 10 06	04 45.47	+23 26.0	2.027	2.665	119.5	19.1	17.5
1988 10 16	04 45.62	+23 27.8					
1988 10 26	04 42.85	+23 24.0	1.842	2.680	139.9	13.8	17.2
1988 11 05	04 37.33	+23 13.8					
1988 11 15	04 29.53	+22 57.2	1.734	2.695	163.0	6.2	16.8
1988 11 25	04 20.34	+22 34.6					
1988 12 05	04 10.88	+22 08.1	1.732	2.712	172.3	2.8	16.6
1988 12 15	04 02.30	+21 41.0					
1988 12 25	03 55.60	+21 17.0	1.843	2.729	148.3	10.9	17.1
1989 01 04	03 51.38	+20 59.2					
1989 01 14	03 49.91	+20 49.5	2.045	2.747	126.6	16.7	17.5
1989 01 24	03 51.20	+20 48.5					
1989 02 03	03 55.04	+20 55.3	2.305	2.765	107.4	19.9	17.9
1989 02 13	04 01.18	+21 08.8					
1989 02 23	04 09.32	+21 27.0	2.592	2.784	90.6	20.8	18.2

1982 BP2 a,e,i = 2.37, 0.14, 3 Elements MPC 12308

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	04 31.75	+23 43.5	1.569	2.044	102.9	28.6	17.6
1988 09 26	04 41.58	+23 57.8					
1988 10 06	04 48.46	+24 03.4	1.374	2.051	118.7	25.3	17.3
1988 10 16	04 51.88	+24 00.6					
1988 10 26	04 51.49	+23 49.3	1.213	2.061	137.9	18.9	16.8
1988 11 05	04 47.27	+23 28.9					
1988 11 15	04 39.64	+22 59.1	1.116	2.075	160.7	9.1	16.4
1988 11 25	04 29.75	+22 21.2					
1988 12 05	04 19.20	+21 38.3	1.110	2.093	174.2	2.8	16.1
1988 12 15	04 09.74	+20 56.0					
1988 12 25	04 02.83	+20 20.3	1.204	2.113	149.8	13.5	16.7
1989 01 04	03 59.26	+19 55.3					
1989 01 14	03 59.28	+19 43.1	1.380	2.136	128.5	21.1	17.3
1989 01 24	04 02.75	+19 42.9					
1989 02 03	04 09.28	+19 52.6	1.609	2.161	110.5	25.3	17.7
1989 02 13	04 18.47	+20 09.5					
1989 02 23	04 29.89	+20 30.6	1.865	2.188	95.2	26.8	18.1

(3734) 9527 P-L a,e,i = 2.75, 0.05, 3 Elements MPC 12694

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	04 42.00	+19 06.3	2.292	2.675	101.2	21.6	17.6
1988 09 26	04 47.87	+18 59.6					
1988 10 06	04 51.38	+18 47.1	2.038	2.665	118.6	19.2	17.2
1988 10 16	04 52.21	+18 29.2					
1988 10 26	04 50.24	+18 06.7	1.827	2.656	138.7	14.3	16.8
1988 11 05	04 45.51	+17 40.4					
1988 11 15	04 38.38	+17 11.6	1.692	2.647	161.2	6.9	16.4
1988 11 25	04 29.61	+16 42.3					
1988 12 05	04 20.24	+16 15.1	1.660	2.639	171.7	3.1	16.2
1988 12 15	04 11.44	+15 53.1					
1988 12 25	04 04.27	+15 39.3	1.740	2.631	148.9	11.1	16.6
1989 01 04	03 59.46	+15 35.2					
1989 01 14	03 57.40	+15 41.4	1.911	2.625	127.1	17.4	17.0
1989 01 24	03 58.17	+15 57.4					
1989 02 03	04 01.64	+16 21.4	2.141	2.619	108.0	21.0	17.3
1989 02 13	04 07.56	+16 51.6					
1989 02 23	04 15.66	+17 25.8	2.396	2.613	91.3	22.2	17.6

1981 EY8 a,e,i = 2.76, 0.24, 6 Elements MPC 9424

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	04 34.52	+30 04.3	1.710	2.146	101.3	27.4	17.4
1988 09 26	04 44.10	+30 46.8					
1988 10 06	04 50.65	+31 22.2	1.526	2.171	117.0	24.2	17.1
1988 10 16	04 53.70	+31 49.7					
1988 10 26	04 52.96	+32 07.5	1.376	2.201	135.8	18.4	16.7
1988 11 05	04 48.44	+32 12.7					
1988 11 15	04 40.65	+32 01.8	1.290	2.235	157.2	9.9	16.4
1988 11 25	04 30.78	+31 32.9					
1988 12 05	04 20.39	+30 47.7	1.296	2.273	170.0	4.3	16.2
1988 12 15	04 11.14	+29 51.2					
1988 12 25	04 04.39	+28 51.3	1.406	2.314	150.8	12.0	16.7
1989 01 04	04 00.82	+27 55.1					
1989 01 14	04 00.64	+27 07.6	1.603	2.359	130.0	18.6	17.2
1989 01 24	04 03.70	+26 30.9					
1989 02 03	04 09.61	+26 04.9	1.860	2.405	111.6	22.4	17.7
1989 02 13	04 17.99	+25 48.0					
1989 02 23	04 28.42	+25 38.0	2.151	2.453	95.6	23.7	18.1

1982 XQ1 a,e,i = 3.21, 0.11, 2 Elements MPC 12000

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	04 48.75	+20 31.4	3.198	3.507	99.5	16.4	18.5
1988 09 26	04 52.00	+20 31.5					
1988 10 06	04 53.31	+20 28.1	2.915	3.497	118.0	14.6	18.3
1988 10 16	04 52.50	+20 21.3					
1988 10 26	04 49.55	+20 11.3	2.678	3.487	138.7	10.8	17.9
1988 11 05	04 44.58	+19 58.3					
1988 11 15	04 37.89	+19 42.5	2.523	3.475	161.5	5.2	17.6
1988 11 25	04 30.05	+19 24.8					
1988 12 05	04 21.77	+19 06.4	2.482	3.463	173.8	1.7	17.4
1988 12 15	04 13.84	+18 49.1					
1988 12 25	04 07.00	+18 35.0	2.561	3.450	150.4	8.1	17.7
1989 01 04	04 01.83	+18 25.8					
1989 01 14	03 58.67	+18 22.8	2.742	3.436	128.1	13.0	18.0
1989 01 24	03 57.70	+18 26.4					
1989 02 03	03 58.87	+18 36.3	2.989	3.422	107.8	15.9	18.3
1989 02 13	04 02.09	+18 51.8					
1989 02 23	04 07.17	+19 11.8	3.265	3.406	89.7	16.9	18.5

1977 RD7 a,e,i = 2.32, 0.03, 2 Elements MPC 12568

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	04 44.33	+24 32.4	1.988	2.378	100.0	24.6	17.9
1988 09 26	04 51.70	+24 51.8					
1988 10 06	04 56.41	+25 06.4	1.750	2.374	116.8	22.1	17.5
1988 10 16	04 58.04	+25 15.8					
1988 10 26	04 56.28	+25 19.6	1.548	2.370	136.6	16.8	17.1
1988 11 05	04 51.10	+25 16.4					
1988 11 15	04 42.80	+25 04.6	1.413	2.366	159.6	8.4	16.6
1988 11 25	04 32.31	+24 43.5					
1988 12 05	04 20.97	+24 14.1	1.378	2.361	174.3	2.4	16.3
1988 12 15	04 10.35	+23 40.0					
1988 12 25	04 01.86	+23 06.4	1.452	2.355	150.0	12.0	16.8
1989 01 04	03 56.38	+22 38.3					
1989 01 14	03 54.31	+22 19.1	1.614	2.350	127.9	19.3	17.3
1989 01 24	03 55.65	+22 10.1					
1989 02 03	04 00.13	+22 10.8	1.832	2.344	108.8	23.5	17.6
1989 02 13	04 07.39	+22 19.5					
1989 02 23	04 17.07	+22 33.9	2.075	2.338	92.6	25.0	17.9

1976 GP3 a,e,i = 2.32, 0.10, 7 Elements MPC 12695

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	04 50.16	+15 08.3	2.121	2.496	99.7	23.4	18.1
1988 09 26	04 56.12	+14 41.3					
1988 10 06	04 59.53	+14 07.4	1.892	2.508	116.9	20.8	17.8
1988 10 16	05 00.06	+13 28.0					
1988 10 26	04 57.57	+12 44.9	1.700	2.518	136.8	15.7	17.4
1988 11 05	04 52.10	+12 00.4					
1988 11 15	04 44.03	+11 17.6	1.581	2.527	158.4	8.3	17.0
1988 11 25	04 34.20	+10 40.4					
1988 12 05	04 23.74	+10 12.4	1.564	2.534	166.9	5.0	16.9
1988 12 15	04 13.89	+09 56.9					
1988 12 25	04 05.80	+09 55.7	1.658	2.540	146.9	12.2	17.3
1989 01 04	04 00.21	+10 08.5					
1989 01 14	03 57.50	+10 34.1	1.842	2.543	125.6	18.3	17.7
1989 01 24	03 57.73	+11 10.1					
1989 02 03	04 00.72	+11 53.9	2.080	2.545	106.7	21.8	18.0
1989 02 13	04 06.21	+12 42.9					
1989 02 23	04 13.90	+13 34.5	2.341	2.545	90.2	22.9	18.3

1981 QZ2 a,e,i = 3.21, 0.15, 2 Elements MPC 8384

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	04 54.50	+20 26.5	3.173	3.462	98.1	16.7	18.4
1988 09 26	04 57.75	+20 26.6					
1988 10 06	04 59.01	+20 23.5	2.918	3.483	116.7	14.9	18.2
1988 10 16	04 58.13	+20 17.5					
1988 10 26	04 55.09	+20 08.6	2.706	3.503	137.4	11.1	17.9
1988 11 05	04 50.03	+19 57.1					
1988 11 15	04 43.28	+19 43.3	2.576	3.523	160.2	5.5	17.6
1988 11 25	04 35.40	+19 27.8					
1988 12 05	04 27.11	+19 11.9	2.558	3.541	174.9	1.4	17.4
1988 12 15	04 19.16	+18 57.0					
1988 12 25	04 12.29	+18 45.0	2.662	3.558	151.6	7.5	17.8
1989 01 04	04 07.03	+18 37.5					
1989 01 14	04 03.73	+18 35.5	2.869	3.574	129.3	12.3	18.1
1989 01 24	04 02.51	+18 39.5					
1989 02 03	04 03.36	+18 49.3	3.146	3.589	108.9	15.1	18.4
1989 02 13	04 06.16	+19 04.1					
1989 02 23	04 10.74	+19 22.9	3.455	3.603	90.5	15.9	18.6

1983 NR a,e,i = 2.56, 0.13, 15 Elements MPC 8285

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 03.81	+39 39.3	2.366	2.633	93.9	22.4	17.9
1988 09 26	05 11.49	+40 34.2					
1988 10 06	05 16.37	+41 26.7	2.147	2.659	109.9	20.7	17.7
1988 10 16	05 17.98	+42 15.3					
1988 10 26	05 15.97	+42 57.0	1.956	2.684	127.9	17.0	17.4
1988 11 05	05 10.25	+43 27.2					
1988 11 15	05 01.11	+43 39.9	1.825	2.708	146.9	11.5	17.1
1988 11 25	04 49.47	+43 29.5					
1988 12 05	04 36.73	+42 53.2	1.786	2.731	159.4	7.3	16.9
1988 12 15	04 24.57	+41 52.8					
1988 12 25	04 14.50	+40 34.8	1.857	2.752	149.9	10.3	17.1
1989 01 04	04 07.44	+39 08.2					
1989 01 14	04 03.82	+37 41.4	2.027	2.772	130.9	15.6	17.5
1989 01 24	04 03.62	+36 21.0					
1989 02 03	04 06.49	+35 10.2	2.267	2.791	112.1	19.1	17.9
1989 02 13	04 12.08	+34 10.2					
1989 02 23	04 19.97	+33 20.4	2.545	2.809	94.9	20.5	18.2

1987 QW1 a,e,i = 2.96, 0.10, 2 Elements MPC 12950

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	04 58.11	+20 32.8	2.526	2.835	97.3	20.6	18.2
1988 09 26	05 03.81	+20 32.8					
1988 10 06	05 07.23	+20 28.7	2.287	2.854	114.8	18.5	17.9
1988 10 16	05 08.12	+20 21.1					
1988 10 26	05 06.35	+20 10.6	2.086	2.874	134.8	14.2	17.6
1988 11 05	05 01.98	+19 57.2					
1988 11 15	04 55.31	+19 41.5	1.956	2.894	157.4	7.6	17.2
1988 11 25	04 46.99	+19 24.2					
1988 12 05	04 37.90	+19 06.5	1.930	2.914	176.5	1.2	16.9
1988 12 15	04 29.08	+18 50.3					
1988 12 25	04 21.51	+18 37.9	2.020	2.934	153.7	8.5	17.4
1989 01 04	04 15.91	+18 31.1					
1989 01 14	04 12.71	+18 31.0	2.211	2.954	131.3	14.5	17.8
1989 01 24	04 12.05	+18 38.0					
1989 02 03	04 13.87	+18 51.4	2.470	2.974	111.4	18.0	18.2
1989 02 13	04 17.99	+19 10.1					
1989 02 23	04 24.15	+19 32.7	2.763	2.994	93.7	19.3	18.4

(3716) 1980 TG a,e,i = 2.40, 0.21, 3 Elements MPC 12567

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 06.67	+20 02.6	2.327	2.619	95.3	22.5	18.9
1988 09 26	05 12.43	+20 00.6					
1988 10 06	05 15.70	+19 54.8	2.105	2.657	112.8	20.3	18.6
1988 10 16	05 16.16	+19 45.9					
1988 10 26	05 13.66	+19 34.4	1.914	2.693	133.1	15.6	18.3
1988 11 05	05 08.22	+19 20.6					
1988 11 15	05 00.16	+19 04.8	1.792	2.726	156.2	8.4	18.0
1988 11 25	04 50.22	+18 47.6					
1988 12 05	04 39.42	+18 30.2	1.773	2.757	176.0	1.4	17.6
1988 12 15	04 28.96	+18 14.6					
1988 12 25	04 19.98	+18 03.3	1.872	2.785	153.2	9.2	18.1
1989 01 04	04 13.25	+17 58.1					
1989 01 14	04 09.22	+18 00.4	2.071	2.811	130.4	15.5	18.6
1989 01 24	04 08.00	+18 10.1					
1989 02 03	04 09.46	+18 26.7	2.337	2.833	110.3	19.0	19.0
1989 02 13	04 13.37	+18 48.8					
1989 02 23	04 19.44	+19 14.8	2.633	2.853	92.5	20.3	19.3

1982 UV10 a,e,i = 3.15, 0.15, 1 Elements MPC 12708

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 07.85	+23 25.9	3.197	3.430	94.8	17.0	18.0
1988 09 26	05 11.90	+23 34.2					
1988 10 06	05 13.97	+23 40.2	2.935	3.450	112.9	15.5	17.8
1988 10 16	05 13.86	+23 43.9					
1988 10 26	05 11.50	+23 45.1	2.711	3.469	133.3	12.0	17.5
1988 11 05	05 06.96	+23 43.5					
1988 11 15	05 00.49	+23 38.4	2.560	3.487	155.9	6.7	17.2
1988 11 25	04 52.61	+23 29.6					
1988 12 05	04 44.00	+23 17.4	2.518	3.503	179.0	0.3	16.8
1988 12 15	04 35.48	+23 02.8					
1988 12 25	04 27.86	+22 47.7	2.598	3.519	156.0	6.5	17.2
1989 01 04	04 21.77	+22 34.1					
1989 01 14	04 17.64	+22 23.8	2.786	3.533	133.2	11.7	17.6
1989 01 24	04 15.68	+22 18.1					
1989 02 03	04 15.89	+22 17.5	3.051	3.546	112.4	14.9	17.9
1989 02 13	04 18.19	+22 21.8					
1989 02 23	04 22.39	+22 30.5	3.354	3.558	93.8	16.1	18.1

1940 ED a,e,i = 2.33, 0.15, 4 Elements MPC 9684

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	05 06.13	+19 16.2	2.385	2.676	95.5	22.0	19.0
1988	09 26	05 12.36	+19 05.2					
1988	10 06	05 16.28	+18 49.5	2.125	2.675	112.7	20.2	18.7
1988	10 16	05 17.54	+18 29.6					
1988	10 26	05 15.92	+18 06.3	1.897	2.672	132.6	15.9	18.3
1988	11 05	05 11.37	+17 40.3					
1988	11 15	05 04.06	+17 12.6	1.736	2.666	155.1	9.0	17.9
1988	11 25	04 54.62	+16 44.5					
1988	12 05	04 44.00	+16 18.0	1.676	2.658	174.0	2.2	17.5
1988	12 15	04 33.41	+15 55.5					
1988	12 25	04 24.07	+15 39.9	1.731	2.647	153.3	9.6	17.9
1989	01 04	04 16.90	+15 32.9					
1989	01 14	04 12.49	+15 35.7	1.886	2.634	130.6	16.5	18.3
1989	01 24	04 11.04	+15 48.0					
1989	02 03	04 12.48	+16 08.5	2.106	2.619	110.5	20.6	18.6
1989	02 13	04 16.60	+16 35.4					
1989	02 23	04 23.11	+17 06.8	2.355	2.602	93.0	22.3	18.9

1982 KB1 a,e,i = 2.77, 0.22, 17 Elements MPC 11424

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	05 14.26	+23 22.0	2.313	2.575	93.3	22.9	17.3
1988	09 26	05 20.82	+24 18.3					
1988	10 06	05 24.89	+25 16.4	2.101	2.622	110.3	20.9	17.1
1988	10 16	05 26.11	+26 16.7					
1988	10 26	05 24.21	+27 18.8	1.919	2.670	130.1	16.5	16.8
1988	11 05	05 19.09	+28 20.8					
1988	11 15	05 10.94	+29 19.2	1.802	2.717	152.4	9.7	16.5
1988	11 25	05 00.43	+30 09.9					
1988	12 05	04 48.64	+30 49.1	1.786	2.764	171.4	3.0	16.2
1988	12 15	04 36.90	+31 15.4					
1988	12 25	04 26.57	+31 30.0	1.887	2.810	155.2	8.4	16.6
1989	01 04	04 18.64	+31 36.6					
1989	01 14	04 13.68	+31 39.2	2.091	2.855	133.1	14.6	17.1
1989	01 24	04 11.87	+31 41.6					
1989	02 03	04 13.04	+31 46.0	2.367	2.899	113.1	18.2	17.5
1989	02 13	04 16.95	+31 53.5					
1989	02 23	04 23.24	+32 04.0	2.678	2.942	95.4	19.6	17.8

1980 SG a,e,i = 2.45, 0.16, 7 Elements MPC 9296

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	05 00.13	+26 39.7	1.786	2.142	96.2	27.8	18.0
1988	09 26	05 10.43	+27 35.7					
1988	10 06	05 18.02	+28 30.4	1.590	2.167	111.6	25.4	17.7
1988	10 16	05 22.37	+29 24.5					
1988	10 26	05 23.03	+30 17.4	1.420	2.195	129.9	20.3	17.4
1988	11 05	05 19.74	+31 07.1					
1988	11 15	05 12.59	+31 49.2	1.307	2.225	151.2	12.4	17.0
1988	11 25	05 02.32	+32 18.7					
1988	12 05	04 50.31	+32 31.3	1.280	2.257	169.7	4.5	16.6
1988	12 15	04 38.37	+32 26.4					
1988	12 25	04 28.29	+32 07.8	1.359	2.290	155.4	10.3	17.0
1989	01 04	04 21.31	+31 41.9					
1989	01 14	04 18.01	+31 15.1	1.531	2.324	134.0	17.7	17.6
1989	01 24	04 18.47	+30 52.0					
1989	02 03	04 22.35	+30 34.5	1.767	2.359	115.0	22.3	18.0
1989	02 13	04 29.26	+30 22.9					
1989	02 23	04 38.71	+30 16.0	2.039	2.394	98.5	24.1	18.4

1976 SF a,e,i = 3.18, 0.15, 1 Elements MPC 9956

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 01.85	+21 06.4	2.427	2.727	96.4	21.5	17.1
1988 09 26	05 08.96	+21 10.3					
1988 10 06	05 13.84	+21 10.4	2.184	2.737	113.2	19.6	16.9
1988 10 16	05 16.20	+21 07.3					
1988 10 26	05 15.84	+21 01.5	1.977	2.748	132.5	15.5	16.5
1988 11 05	05 12.75	+20 53.4					
1988 11 15	05 07.12	+20 43.2	1.835	2.761	154.6	8.8	16.1
1988 11 25	04 59.54	+20 31.2					
1988 12 05	04 50.87	+20 18.2	1.792	2.776	177.5	0.9	15.7
1988 12 15	04 42.17	+20 05.5					
1988 12 25	04 34.53	+19 55.3	1.862	2.794	157.0	7.9	16.2
1989 01 04	04 28.79	+19 49.4					
1989 01 14	04 25.47	+19 49.3	2.034	2.812	134.5	14.4	16.6
1989 01 24	04 24.80	+19 55.4					
1989 02 03	04 26.74	+20 07.3	2.277	2.833	114.6	18.4	17.0
1989 02 13	04 31.11	+20 24.1					
1989 02 23	04 37.66	+20 44.4	2.560	2.855	97.0	20.1	17.3

(3693) Barringer a,e,i = 3.15, 0.20, 15 Elements MPC 12311

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 04.02	+08 48.5	2.344	2.658	96.9	22.1	16.6
1988 09 26	05 10.76	+07 46.7					
1988 10 06	05 15.23	+06 37.8	2.137	2.689	113.0	20.0	16.4
1988 10 16	05 17.19	+05 24.2					
1988 10 26	05 16.52	+04 09.3	1.966	2.722	130.8	16.0	16.1
1988 11 05	05 13.29	+02 57.3					
1988 11 15	05 07.76	+01 53.2	1.863	2.757	148.8	10.7	15.8
1988 11 25	05 00.53	+01 02.6					
1988 12 05	04 52.42	+00 29.5	1.855	2.794	158.1	7.6	15.7
1988 12 15	04 44.38	+00 16.8					
1988 12 25	04 37.35	+00 24.9	1.953	2.831	147.4	10.8	16.0
1989 01 04	04 32.03	+00 51.5					
1989 01 14	04 28.89	+01 33.5	2.144	2.870	129.3	15.4	16.4
1989 01 24	04 28.12	+02 26.7					
1989 02 03	04 29.68	+03 27.2	2.400	2.909	111.4	18.4	16.8
1989 02 13	04 33.42	+04 31.6					
1989 02 23	04 39.14	+05 37.0	2.694	2.949	95.0	19.5	17.1

1978 SC6 a,e,i = 2.20, 0.05, 1 Elements MPC 10630

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	04 57.27	+22 58.8	1.722	2.101	97.2	28.3	17.9
1988 09 26	05 08.19	+23 20.2					
1988 10 06	05 16.60	+23 37.1	1.499	2.095	112.3	26.2	17.5
1988 10 16	05 21.96	+23 50.4					
1988 10 26	05 23.79	+24 00.9	1.303	2.090	130.5	21.2	17.1
1988 11 05	05 21.74	+24 08.6					
1988 11 15	05 15.77	+24 12.3	1.159	2.086	152.4	12.7	16.6
1988 11 25	05 06.46	+24 10.5					
1988 12 05	04 55.04	+24 01.9	1.100	2.084	177.0	1.4	16.0
1988 12 15	04 43.27	+23 47.5					
1988 12 25	04 33.08	+23 30.5	1.142	2.084	157.2	10.5	16.5
1989 01 04	04 25.87	+23 15.5					
1989 01 14	04 22.44	+23 06.5	1.274	2.084	134.4	19.7	17.0
1989 01 24	04 22.97	+23 05.2					
1989 02 03	04 27.20	+23 11.5	1.467	2.086	115.2	25.3	17.5
1989 02 13	04 34.73	+23 23.9					
1989 02 23	04 45.10	+23 40.1	1.691	2.090	99.1	27.9	17.8

1976 SZ9 a,e,i = 3.19, 0.21, 4 Elements MPC 9957

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 02.79	+25 43.4	2.261	2.564	95.7	23.0	17.6
1988 09 26	05 11.15	+26 12.8					
1988 10 06	05 17.16	+26 39.5	2.034	2.580	112.0	21.1	17.3
1988 10 16	05 20.45	+27 04.0					
1988 10 26	05 20.78	+27 26.0	1.839	2.600	130.8	16.8	17.0
1988 11 05	05 18.04	+27 44.5					
1988 11 15	05 12.40	+27 57.7	1.706	2.623	152.4	10.1	16.6
1988 11 25	05 04.46	+28 03.6					
1988 12 05	04 55.20	+28 00.9	1.667	2.649	173.8	2.3	16.3
1988 12 15	04 45.84	+27 50.1					
1988 12 25	04 37.64	+27 33.6	1.739	2.677	158.2	7.8	16.6
1989 01 04	04 31.56	+27 14.8					
1989 01 14	04 28.20	+26 57.4	1.912	2.708	136.1	14.6	17.1
1989 01 24	04 27.75	+26 43.8					
1989 02 03	04 30.12	+26 35.2	2.158	2.741	116.3	18.8	17.5
1989 02 13	04 35.10	+26 31.7					
1989 02 23	04 42.36	+26 32.2	2.446	2.775	98.8	20.6	17.9

1981 EO15 a,e,i = 2.74, 0.07, 7 Elements MPC 10821

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 04.52	+21 01.2	2.233	2.539	95.7	23.2	18.7
1988 09 26	05 12.65	+20 44.0					
1988 10 06	05 18.47	+20 20.1	1.989	2.540	112.1	21.4	18.4
1988 10 16	05 21.63	+19 50.3					
1988 10 26	05 21.89	+19 15.4	1.775	2.542	131.2	17.1	18.1
1988 11 05	05 19.15	+18 36.3					
1988 11 15	05 13.58	+17 54.2	1.625	2.546	152.9	10.2	17.7
1988 11 25	05 05.75	+17 11.1					
1988 12 05	04 56.57	+16 29.4	1.569	2.550	173.5	2.5	17.3
1988 12 15	04 47.22	+15 52.5					
1988 12 25	04 38.93	+15 23.7	1.624	2.556	156.6	8.8	17.6
1989 01 04	04 32.67	+15 05.1					
1989 01 14	04 29.05	+14 57.7	1.778	2.563	134.3	16.0	18.1
1989 01 24	04 28.31	+15 01.1					
1989 02 03	04 30.39	+15 13.6	2.001	2.571	114.5	20.4	18.4
1989 02 13	04 35.09	+15 33.1					
1989 02 23	04 42.13	+15 57.1	2.260	2.581	97.3	22.4	18.8

1981 ET38 a,e,i = 2.78, 0.16, 10 Elements MPC 8908

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 04.45	+16 04.0	2.084	2.410	96.2	24.5	17.5
1988 09 26	05 12.85	+15 23.8					
1988 10 06	05 18.81	+14 35.6	1.871	2.432	112.2	22.4	17.2
1988 10 16	05 22.01	+13 41.1					
1988 10 26	05 22.22	+12 42.3	1.689	2.456	130.8	17.8	16.9
1988 11 05	05 19.43	+11 41.9					
1988 11 15	05 13.84	+10 43.6	1.569	2.483	151.4	11.0	16.6
1988 11 25	05 06.09	+09 51.6					
1988 12 05	04 57.12	+09 10.1	1.543	2.511	166.5	5.3	16.3
1988 12 15	04 48.11	+08 42.8					
1988 12 25	04 40.23	+08 31.5	1.623	2.541	153.4	10.0	16.6
1989 01 04	04 34.37	+08 36.1					
1989 01 14	04 31.06	+08 55.0	1.800	2.572	132.8	16.3	17.1
1989 01 24	04 30.51	+09 25.4					
1989 02 03	04 32.65	+10 04.0	2.044	2.604	113.9	20.2	17.5
1989 02 13	04 37.26	+10 47.7					
1989 02 23	04 44.07	+11 33.9	2.324	2.636	97.1	21.9	17.9

1985 JY a,e,i = 3.26, 0.09, 3 Elements MPC 11426

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	05 15.72	+23 23.3	3.317	3.515	93.0	16.6	18.6
1988	09 26	05 20.37	+23 34.1					
1988	10 06	05 23.16	+23 43.3	3.024	3.507	110.8	15.5	18.4
1988	10 16	05 23.90	+23 51.1					
1988	10 26	05 22.44	+23 57.5	2.766	3.498	130.8	12.4	18.1
1988	11 05	05 18.79	+24 02.0					
1988	11 15	05 13.09	+24 04.1	2.578	3.488	153.0	7.4	17.7
1988	11 25	05 05.76	+24 03.1					
1988	12 05	04 57.42	+23 58.7	2.494	3.478	176.5	1.0	17.3
1988	12 15	04 48.83	+23 51.4					
1988	12 25	04 40.87	+23 42.3	2.530	3.467	159.0	5.8	17.6
1989	01 04	04 34.24	+23 33.2					
1989	01 14	04 29.48	+23 26.0	2.679	3.455	136.0	11.4	17.9
1989	01 24	04 26.90	+23 22.1					
1989	02 03	04 26.59	+23 22.4	2.907	3.442	115.0	15.0	18.2
1989	02 13	04 28.49	+23 27.0					
1989	02 23	04 32.45	+23 35.6	3.178	3.429	96.2	16.7	18.5

1949 PQ a,e,i = 2.17, 0.14, 1 Elements MPC 9583

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	05 15.98	+22 48.1	2.110	2.383	92.9	24.9	19.0
1988	09 26	05 24.15	+22 57.8					
1988	10 06	05 29.80	+23 04.4	1.880	2.404	109.4	23.1	18.7
1988	10 16	05 32.53	+23 08.8					
1988	10 26	05 32.00	+23 11.3	1.674	2.423	128.7	18.7	18.4
1988	11 05	05 28.01	+23 11.6					
1988	11 15	05 20.66	+23 09.0	1.525	2.439	151.3	11.2	18.0
1988	11 25	05 10.53	+23 02.1					
1988	12 05	04 58.71	+22 50.3	1.468	2.452	176.6	1.4	17.4
1988	12 15	04 46.62	+22 34.7					
1988	12 25	04 35.83	+22 17.8	1.525	2.463	157.7	8.7	17.9
1989	01 04	04 27.47	+22 03.0					
1989	01 14	04 22.27	+21 53.5	1.683	2.471	134.2	16.6	18.4
1989	01 24	04 20.45	+21 51.1					
1989	02 03	04 21.87	+21 55.8	1.910	2.477	113.8	21.4	18.8
1989	02 13	04 26.25	+22 06.8					
1989	02 23	04 33.21	+22 22.6	2.169	2.479	96.2	23.4	19.1

(3767) 1986 LC a,e,i = 2.61, 0.14, 14 Elements MPC 12795

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	05 16.64	+09 28.0	2.613	2.860	93.7	20.5	17.1
1988	09 26	05 22.78	+09 04.4					
1988	10 06	05 26.91	+08 37.1	2.335	2.840	110.2	19.3	16.8
1988	10 16	05 28.73	+08 07.9					
1988	10 26	05 28.04	+07 39.1	2.088	2.818	128.7	16.0	16.4
1988	11 05	05 24.72	+07 13.4					
1988	11 15	05 18.85	+06 54.2	1.902	2.795	148.8	10.6	16.0
1988	11 25	05 10.84	+06 44.5					
1988	12 05	05 01.40	+06 47.2	1.810	2.771	163.9	5.6	15.7
1988	12 15	04 51.49	+07 04.1					
1988	12 25	04 42.24	+07 35.3	1.831	2.745	153.2	9.3	15.8
1989	01 04	04 34.58	+08 19.6					
1989	01 14	04 29.23	+09 14.8	1.955	2.719	132.5	15.5	16.2
1989	01 24	04 26.58	+10 18.1					
1989	02 03	04 26.68	+11 26.7	2.151	2.691	112.8	19.7	16.5
1989	02 13	04 29.47	+12 38.1					
1989	02 23	04 34.72	+13 50.1	2.383	2.663	95.3	21.7	16.7

6073 P-L a,e,i = 2.74, 0.05, 4 Elements MPC 7943

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 17.02	+27 11.7	2.624	2.849	92.4	20.6	19.3
1988 09 26	05 24.03	+27 33.4					
1988 10 06	05 28.84	+27 53.3	2.364	2.855	109.3	19.3	19.0
1988 10 16	05 31.13	+28 11.7					
1988 10 26	05 30.65	+28 28.1	2.133	2.860	128.5	15.8	18.7
1988 11 05	05 27.28	+28 41.3					
1988 11 15	05 21.11	+28 49.5	1.963	2.864	150.4	9.8	18.3
1988 11 25	05 12.64	+28 50.5					
1988 12 05	05 02.69	+28 42.7	1.889	2.868	172.4	2.6	17.9
1988 12 15	04 52.39	+28 26.2					
1988 12 25	04 42.94	+28 03.0	1.930	2.872	159.3	6.9	18.2
1989 01 04	04 35.36	+27 36.5					
1989 01 14	04 30.30	+27 10.6	2.079	2.874	136.6	13.6	18.6
1989 01 24	04 28.10	+26 48.4					
1989 02 03	04 28.73	+26 31.5	2.305	2.876	115.9	17.9	18.9
1989 02 13	04 32.03	+26 20.5					
1989 02 23	04 37.73	+26 14.9	2.572	2.877	97.8	19.9	19.2

(3689) Yeates a,e,i = 2.88, 0.08, 9 Elements MPC 12310

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 12.79	+17 01.3	2.458	2.722	94.1	21.6	17.4
1988 09 26	05 19.91	+16 28.5					
1988 10 06	05 24.84	+15 49.4	2.217	2.736	110.8	20.0	17.1
1988 10 16	05 27.30	+15 05.3					
1988 10 26	05 27.11	+14 17.6	2.006	2.750	129.7	16.1	16.8
1988 11 05	05 24.24	+13 28.2					
1988 11 15	05 18.85	+12 39.3	1.860	2.765	150.7	10.1	16.4
1988 11 25	05 11.46	+11 54.1					
1988 12 05	05 02.85	+11 15.6	1.809	2.781	168.1	4.2	16.1
1988 12 15	04 54.01	+10 46.7					
1988 12 25	04 46.00	+10 29.7	1.872	2.797	155.7	8.3	16.4
1989 01 04	04 39.65	+10 25.1					
1989 01 14	04 35.54	+10 32.7	2.036	2.814	134.4	14.5	16.8
1989 01 24	04 33.97	+10 50.7					
1989 02 03	04 34.92	+11 16.9	2.273	2.831	114.7	18.4	17.2
1989 02 13	04 38.28	+11 49.0					
1989 02 23	04 43.81	+12 24.5	2.549	2.848	97.2	20.2	17.5

1931 UB a,e,i = 2.43, 0.22, 1 Elements MPC 11855

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 10.77	+23 05.1	1.751	2.080	94.1	28.8	17.9
1988 09 26	05 21.51	+23 10.7					
1988 10 06	05 29.43	+23 10.9	1.572	2.125	109.4	26.3	17.7
1988 10 16	05 34.07	+23 07.1					
1988 10 26	05 35.08	+23 00.0	1.415	2.173	128.0	21.1	17.3
1988 11 05	05 32.30	+22 50.1					
1988 11 15	05 25.86	+22 36.9	1.308	2.221	150.2	12.8	17.0
1988 11 25	05 16.49	+22 20.0					
1988 12 05	05 05.41	+21 59.5	1.288	2.271	175.1	2.1	16.5
1988 12 15	04 54.19	+21 37.3					
1988 12 25	04 44.43	+21 16.4	1.374	2.321	159.5	8.5	17.0
1989 01 04	04 37.27	+21 00.0					
1989 01 14	04 33.31	+20 50.5	1.559	2.371	136.5	16.6	17.6
1989 01 24	04 32.70	+20 48.9					
1989 02 03	04 35.22	+20 54.3	1.812	2.421	116.7	21.3	18.1
1989 02 13	04 40.53	+21 05.5					
1989 02 23	04 48.24	+21 20.4	2.104	2.469	99.5	23.3	18.5

(3701) 1985 DW a,e,i = 2.80, 0.09, 5 Elements MPC 12316

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	05 10.98	+18 08.2	2.250	2.535	94.5	23.3	17.1
1988	09 26	05 19.37	+18 08.7					
1988	10 06	05 25.54	+18 05.6	2.006	2.536	110.5	21.7	16.8
1988	10 16	05 29.16	+18 00.4					
1988	10 26	05 29.95	+17 54.4	1.791	2.540	129.2	17.6	16.4
1988	11 05	05 27.75	+17 48.7					
1988	11 15	05 22.66	+17 44.3	1.635	2.544	150.8	10.9	16.0
1988	11 25	05 15.12	+17 42.0					
1988	12 05	05 05.97	+17 42.3	1.570	2.551	173.1	2.6	15.6
1988	12 15	04 56.36	+17 46.0					
1988	12 25	04 47.57	+17 54.1	1.615	2.559	159.4	7.8	15.9
1989	01 04	04 40.66	+18 07.2					
1989	01 14	04 36.33	+18 26.1	1.762	2.568	136.8	15.2	16.3
1989	01 24	04 34.94	+18 50.4					
1989	02 03	04 36.47	+19 19.3	1.982	2.580	116.7	20.0	16.7
1989	02 13	04 40.75	+19 51.6					
1989	02 23	04 47.51	+20 25.7	2.242	2.592	99.2	22.1	17.1

1987 SE a,e,i = 3.02, 0.08, 9 Elements MPC 12582

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	05 23.94	+32 50.1	3.022	3.193	90.5	18.4	17.8
1988	09 26	05 30.29	+33 18.7					
1988	10 06	05 34.55	+33 46.4	2.757	3.202	107.5	17.3	17.5
1988	10 16	05 36.39	+34 12.7					
1988	10 26	05 35.61	+34 36.6	2.518	3.211	126.5	14.4	17.3
1988	11 05	05 32.13	+34 56.1					
1988	11 15	05 26.04	+35 08.5	2.341	3.219	147.4	9.5	16.9
1988	11 25	05 17.80	+35 10.8					
1988	12 05	05 08.16	+35 00.7	2.260	3.226	166.3	4.2	16.6
1988	12 15	04 58.13	+34 37.9					
1988	12 25	04 48.80	+34 03.9	2.295	3.232	158.8	6.3	16.8
1989	01 04	04 41.10	+33 22.6					
1989	01 14	04 35.67	+32 38.5	2.442	3.238	137.7	11.8	17.1
1989	01 24	04 32.86	+31 55.5					
1989	02 03	04 32.68	+31 16.7	2.670	3.242	117.2	15.7	17.4
1989	02 13	04 35.01	+30 43.4					
1989	02 23	04 39.62	+30 16.1	2.946	3.246	98.7	17.5	17.7

1981 ES42 a,e,i = 2.66, 0.17, 2 Elements MPC 11046

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	09 16	05 02.07	+24 04.1	1.974	2.307	96.0	25.7	19.8
1988	09 26	05 12.78	+24 28.5					
1988	10 06	05 21.32	+24 49.3	1.723	2.283	111.2	24.1	19.5
1988	10 16	05 27.19	+25 07.5					
1988	10 26	05 29.99	+25 23.8	1.502	2.263	129.0	20.0	19.0
1988	11 05	05 29.39	+25 37.9					
1988	11 15	05 25.28	+25 48.9	1.334	2.246	150.0	12.7	18.5
1988	11 25	05 18.04	+25 55.0					
1988	12 05	05 08.58	+25 54.3	1.251	2.233	173.4	2.9	18.0
1988	12 15	04 58.31	+25 46.5					
1988	12 25	04 48.91	+25 33.2	1.270	2.223	160.9	8.3	18.3
1989	01 04	04 41.79	+25 18.1					
1989	01 14	04 37.89	+25 05.1	1.386	2.217	138.1	17.2	18.7
1989	01 24	04 37.61	+24 56.8					
1989	02 03	04 40.85	+24 54.2	1.569	2.216	118.5	23.0	19.2
1989	02 13	04 47.35	+24 56.8					
1989	02 23	04 56.70	+25 02.9	1.792	2.218	101.9	25.9	19.5

1981 EA22 a,e,i = 2.74, 0.02, 13 Elements MPC 10618

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 17.85	+10 06.9	2.517	2.765	93.4	21.3	19.1
1988 09 26	05 24.72	+09 19.6					
1988 10 06	05 29.52	+08 26.2	2.270	2.769	109.5	19.9	18.9
1988 10 16	05 31.96	+07 28.4					
1988 10 26	05 31.86	+06 28.9	2.053	2.774	127.6	16.5	18.6
1988 11 05	05 29.17	+05 30.7					
1988 11 15	05 23.98	+04 37.8	1.898	2.778	146.7	11.3	18.2
1988 11 25	05 16.76	+03 54.9					
1988 12 05	05 08.20	+03 26.0	1.834	2.782	160.3	6.9	18.0
1988 12 15	04 59.24	+03 14.1					
1988 12 25	04 50.92	+03 20.5	1.879	2.786	151.9	9.6	18.1
1989 01 04	04 44.12	+03 44.3					
1989 01 14	04 39.46	+04 22.9	2.024	2.789	133.0	15.0	18.5
1989 01 24	04 37.29	+05 12.9					
1989 02 03	04 37.68	+06 10.7	2.241	2.792	114.1	18.8	18.8
1989 02 13	04 40.52	+07 13.0					
1989 02 23	04 45.61	+08 16.9	2.496	2.795	97.0	20.6	19.1

1987 SB5 a,e,i = 3.03, 0.07, 9 Elements MPC 12968

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 23.59	+22 14.1	3.012	3.196	91.2	18.3	16.9
1988 09 26	05 29.34	+21 57.7					
1988 10 06	05 33.13	+21 37.4	2.739	3.202	108.7	17.2	16.7
1988 10 16	05 34.72	+21 13.4					
1988 10 26	05 33.95	+20 46.3	2.495	3.207	128.3	14.1	16.4
1988 11 05	05 30.82	+20 16.3					
1988 11 15	05 25.44	+19 43.7	2.316	3.212	150.3	8.8	16.1
1988 11 25	05 18.23	+19 09.5					
1988 12 05	05 09.84	+18 34.7	2.236	3.216	172.9	2.2	15.7
1988 12 15	05 01.10	+18 01.1					
1988 12 25	04 52.91	+17 30.9	2.276	3.220	160.5	5.9	15.9
1989 01 04	04 46.04	+17 06.2					
1989 01 14	04 41.09	+16 48.3	2.428	3.222	137.5	11.9	16.3
1989 01 24	04 38.37	+16 37.9					
1989 02 03	04 37.97	+16 34.8	2.661	3.224	116.6	15.9	16.6
1989 02 13	04 39.82	+16 38.0					
1989 02 23	04 43.77	+16 46.2	2.938	3.225	97.9	17.7	16.9

1985 JF a,e,i = 3.19, 0.08, 17 Elements MPC 10403

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 20.78	+10 56.6	3.003	3.210	92.6	18.2	18.0
1988 09 26	05 26.51	+10 00.4					
1988 10 06	05 30.43	+08 57.6	2.720	3.193	109.3	17.2	17.8
1988 10 16	05 32.31	+07 49.4					
1988 10 26	05 32.00	+06 37.9	2.472	3.177	127.6	14.4	17.5
1988 11 05	05 29.49	+05 25.7					
1988 11 15	05 24.87	+04 16.4	2.290	3.161	146.3	10.0	17.2
1988 11 25	05 18.51	+03 14.2					
1988 12 05	05 10.97	+02 23.1	2.204	3.144	159.1	6.4	16.9
1988 12 15	05 03.00	+01 46.9					
1988 12 25	04 55.44	+01 27.7	2.230	3.128	151.2	8.7	17.0
1989 01 04	04 49.04	+01 25.6					
1989 01 14	04 44.38	+01 39.6	2.358	3.112	132.8	13.4	17.3
1989 01 24	04 41.85	+02 06.8					
1989 02 03	04 41.55	+02 44.3	2.560	3.096	114.1	16.9	17.6
1989 02 13	04 43.47	+03 28.8					
1989 02 23	04 47.50	+04 17.2	2.802	3.080	96.8	18.6	17.8

1981 EC21 a,e,i = 2.65, 0.17, 5 Elements MPC 11045

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 06.25	+26 34.7	1.936	2.255	94.8	26.4	18.8
1988 09 26	05 17.91	+27 16.7					
1988 10 06	05 27.43	+27 56.8	1.694	2.237	109.6	24.9	18.4
1988 10 16	05 34.29	+28 35.9					
1988 10 26	05 38.02	+29 14.7	1.478	2.221	126.8	21.0	18.0
1988 11 05	05 38.22	+29 52.4					
1988 11 15	05 34.68	+30 26.9	1.313	2.210	147.1	14.1	17.5
1988 11 25	05 27.67	+30 54.4					
1988 12 05	05 18.05	+31 10.5	1.228	2.202	168.4	5.2	17.0
1988 12 15	05 07.27	+31 12.4					
1988 12 25	04 57.16	+31 00.7	1.243	2.199	161.6	8.1	17.2
1989 01 04	04 49.32	+30 39.4					
1989 01 14	04 44.83	+30 14.1	1.355	2.199	139.8	16.8	17.7
1989 01 24	04 44.14	+29 49.7					
1989 02 03	04 47.18	+29 29.1	1.537	2.204	120.3	22.7	18.1
1989 02 13	04 53.64	+29 13.0					
1989 02 23	05 03.07	+29 00.7	1.760	2.213	103.6	25.8	18.5

1981 EM30 a,e,i = 2.76, 0.25, 3 Elements MPC 11150

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 16.77	+20 00.8	1.868	2.167	93.0	27.6	18.1
1988 09 26	05 27.86	+20 00.9					
1988 10 06	05 36.42	+19 56.4	1.680	2.203	107.9	25.6	17.9
1988 10 16	05 42.03	+19 49.0					
1988 10 26	05 44.35	+19 40.3	1.512	2.244	125.9	21.0	17.6
1988 11 05	05 43.20	+19 31.8					
1988 11 15	05 38.62	+19 24.1	1.394	2.288	147.1	13.6	17.2
1988 11 25	05 31.10	+19 17.9					
1988 12 05	05 21.61	+19 13.3	1.358	2.335	170.7	3.9	16.8
1988 12 15	05 11.48	+19 10.8					
1988 12 25	05 02.18	+19 11.5	1.427	2.385	163.1	6.9	17.1
1989 01 04	04 54.90	+19 16.5					
1989 01 14	04 50.40	+19 26.6	1.597	2.436	140.2	15.0	17.7
1989 01 24	04 49.02	+19 41.8					
1989 02 03	04 50.65	+20 01.6	1.844	2.489	120.1	20.0	18.2
1989 02 13	04 55.08	+20 24.5					
1989 02 23	05 01.96	+20 49.0	2.135	2.542	102.6	22.3	18.6

1985 CX a,e,i = 2.85, 0.10, 16 Elements MPC 11425

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 34.50	+17 41.4	2.973	3.120	88.9	18.8	17.2
1988 09 26	05 40.49	+17 57.8					
1988 10 06	05 44.61	+18 14.7	2.687	3.115	106.0	18.0	16.9
1988 10 16	05 46.59	+18 33.1					
1988 10 26	05 46.20	+18 54.1	2.426	3.109	125.4	15.1	16.6
1988 11 05	05 43.31	+19 18.2					
1988 11 15	05 37.92	+19 45.6	2.223	3.102	147.3	9.9	16.3
1988 11 25	05 30.33	+20 15.6					
1988 12 05	05 21.09	+20 47.0	2.116	3.094	171.3	2.8	15.8
1988 12 15	05 11.06	+21 18.5					
1988 12 25	05 01.26	+21 49.4	2.129	3.085	163.5	5.2	16.0
1989 01 04	04 52.66	+22 19.3					
1989 01 14	04 46.04	+22 48.9	2.257	3.074	139.7	11.9	16.3
1989 01 24	04 41.88	+23 18.9					
1989 02 03	04 40.35	+23 49.8	2.471	3.063	118.2	16.5	16.7
1989 02 13	04 41.45	+24 21.9					
1989 02 23	04 45.00	+24 55.0	2.732	3.051	99.2	18.7	16.9

1984 UX1 a,e,i = 2.41, 0.12, 7 Elements MPC 10841

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 13.88	+24 21.9	1.823	2.132	93.3	28.1	17.5
1988 09 26	05 26.21	+25 08.8					
1988 10 06	05 36.35	+25 55.2	1.598	2.128	107.7	26.6	17.2
1988 10 16	05 43.77	+26 42.9					
1988 10 26	05 47.96	+27 33.1	1.396	2.126	124.8	22.6	16.8
1988 11 05	05 48.45	+28 25.9					
1988 11 15	05 44.95	+29 19.5	1.240	2.128	145.2	15.4	16.3
1988 11 25	05 37.64	+30 09.9					
1988 12 05	05 27.31	+30 51.2	1.161	2.133	167.1	5.9	15.9
1988 12 15	05 15.46	+31 18.7					
1988 12 25	05 04.08	+31 30.6	1.181	2.140	162.8	7.8	16.0
1989 01 04	04 54.95	+31 29.6					
1989 01 14	04 49.32	+31 21.0	1.298	2.151	140.7	16.8	16.5
1989 01 24	04 47.73	+31 09.9					
1989 02 03	04 50.10	+30 59.8	1.486	2.164	120.9	23.0	17.0
1989 02 13	04 56.10	+30 52.1					
1989 02 23	05 05.24	+30 46.4	1.715	2.180	104.2	26.1	17.4

4069 P-L a,e,i = 3.09, 0.04, 9 Elements MPC 9299

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 31.60	+16 53.7	2.977	3.136	89.6	18.7	19.3
1988 09 26	05 38.11	+16 25.5					
1988 10 06	05 42.80	+15 52.9	2.696	3.130	106.4	17.8	19.0
1988 10 16	05 45.40	+15 16.9					
1988 10 26	05 45.74	+14 38.6	2.442	3.123	125.3	15.1	18.7
1988 11 05	05 43.74	+13 59.5					
1988 11 15	05 39.46	+13 21.1	2.246	3.116	146.0	10.2	18.4
1988 11 25	05 33.19	+12 45.5					
1988 12 05	05 25.48	+12 14.6	2.143	3.109	165.9	4.4	18.1
1988 12 15	05 17.08	+11 50.6					
1988 12 25	05 08.91	+11 35.2	2.156	3.101	160.8	6.0	18.1
1989 01 04	05 01.79	+11 29.3					
1989 01 14	04 56.39	+11 32.9	2.279	3.094	139.6	11.9	18.5
1989 01 24	04 53.17	+11 45.4					
1989 02 03	04 52.27	+12 05.2	2.485	3.086	119.0	16.2	18.8
1989 02 13	04 53.71	+12 30.6					
1989 02 23	04 57.36	+12 59.6	2.740	3.079	100.6	18.4	19.1

1978 VB a,e,i = 2.86, 0.16, 14 Elements MPC 11836

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 23.87	+37 48.2	2.223	2.442	90.2	24.3	17.2
1988 09 26	05 35.58	+38 58.3					
1988 10 06	05 44.96	+40 08.5	2.008	2.461	104.7	23.1	16.9
1988 10 16	05 51.47	+41 18.8					
1988 10 26	05 54.59	+42 28.4	1.815	2.481	121.3	20.0	16.6
1988 11 05	05 53.92	+43 34.3					
1988 11 15	05 49.23	+44 31.5	1.670	2.504	139.3	14.9	16.3
1988 11 25	05 40.82	+45 12.7					
1988 12 05	05 29.62	+45 30.8	1.602	2.529	155.0	9.5	16.1
1988 12 15	05 17.16	+45 21.1					
1988 12 25	05 05.39	+44 44.2	1.633	2.556	154.7	9.5	16.2
1989 01 04	04 55.91	+43 45.7					
1989 01 14	04 49.80	+42 34.3	1.763	2.585	138.7	14.5	16.5
1989 01 24	04 47.47	+41 18.6					
1989 02 03	04 48.79	+40 05.0	1.972	2.615	120.5	18.9	16.9
1989 02 13	04 53.39	+38 56.8					
1989 02 23	05 00.81	+37 55.5	2.232	2.646	103.7	21.3	17.3

1981 ER6 a,e,i = 2.64, 0.19, 5 Elements MPC 10158

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 19.66	+26 17.3	2.283	2.524	91.9	23.5	19.3
1988 09 26	05 29.87	+26 23.7					
1988 10 06	05 38.11	+26 25.8	1.996	2.484	107.3	22.6	18.9
1988 10 16	05 43.94	+26 24.1					
1988 10 26	05 46.98	+26 18.8	1.733	2.444	125.1	19.4	18.5
1988 11 05	05 46.88	+26 09.8					
1988 11 15	05 43.46	+25 56.2	1.521	2.405	145.9	13.3	18.0
1988 11 25	05 36.90	+25 36.7					
1988 12 05	05 27.84	+25 10.1	1.392	2.368	169.6	4.3	17.4
1988 12 15	05 17.41	+24 36.4					
1988 12 25	05 07.14	+23 57.9	1.368	2.332	165.0	6.3	17.4
1989 01 04	04 58.48	+23 18.4					
1989 01 14	04 52.58	+22 42.4	1.447	2.298	141.2	15.5	17.9
1989 01 24	04 50.05	+22 13.2					
1989 02 03	04 51.03	+21 52.5	1.602	2.266	120.4	22.0	18.2
1989 02 13	04 55.38	+21 39.7					
1989 02 23	05 02.76	+21 33.4	1.798	2.238	102.9	25.5	18.6

(3699) Milbourn a,e,i = 2.40, 0.19, 6 Elements MPC 12315

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 34.68	+19 35.2	2.116	2.324	88.8	25.6	17.5
1988 09 26	05 44.24	+19 42.0					
1988 10 06	05 51.42	+19 47.1	1.910	2.366	104.4	24.2	17.3
1988 10 16	05 55.85	+19 52.0					
1988 10 26	05 57.18	+19 58.1	1.719	2.408	122.8	20.3	17.0
1988 11 05	05 55.20	+20 06.6					
1988 11 15	05 49.86	+20 17.5	1.575	2.449	144.6	13.5	16.6
1988 11 25	05 41.54	+20 30.3					
1988 12 05	05 31.05	+20 43.8	1.515	2.489	169.0	4.3	16.2
1988 12 15	05 19.60	+20 56.9					
1988 12 25	05 08.66	+21 09.5	1.565	2.528	165.1	5.8	16.4
1989 01 04	04 59.49	+21 22.2					
1989 01 14	04 52.99	+21 36.3	1.723	2.565	141.2	13.9	16.9
1989 01 24	04 49.61	+21 52.9					
1989 02 03	04 49.36	+22 12.2	1.962	2.600	120.1	19.1	17.4
1989 02 13	04 52.06	+22 34.1					
1989 02 23	04 57.39	+22 57.5	2.247	2.634	101.8	21.6	17.8

6568 P-L a,e,i = 2.28, 0.12, 4 Elements MPC 12583

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 09 16	05 11.97	+26 52.8	1.708	2.034	93.5	29.6	18.3
1988 09 26	05 25.98	+27 34.2					
1988 10 06	05 37.85	+28 12.7	1.485	2.021	107.2	28.2	18.0
1988 10 16	05 47.03	+28 49.8					
1988 10 26	05 52.93	+29 26.6	1.283	2.011	123.6	24.3	17.6
1988 11 05	05 55.02	+30 03.3					
1988 11 15	05 52.87	+30 38.2	1.123	2.005	143.2	17.2	17.1
1988 11 25	05 46.52	+31 07.3					
1988 12 05	05 36.70	+31 25.2	1.034	2.002	165.2	7.2	16.5
1988 12 15	05 24.92	+31 27.4					
1988 12 25	05 13.32	+31 12.8	1.037	2.003	164.7	7.4	16.6
1989 01 04	05 03.92	+30 45.5					
1989 01 14	04 58.15	+30 12.1	1.135	2.007	142.7	17.3	17.1
1989 01 24	04 56.65	+29 39.0					
1989 02 03	04 59.34	+29 10.0	1.302	2.015	122.9	24.3	17.6
1989 02 13	05 05.84	+28 46.0					
1989 02 23	05 15.61	+28 26.1	1.512	2.026	106.3	27.9	18.0

1984 SM a,e,i = 2.29, 0.14, 6 Elements MPC 10513

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	05 56.68	+26 29.2	1.902	2.341	103.1	24.6	17.3
1988	10 16	06 02.09	+26 21.5					
1988	10 26	06 04.29	+26 11.5	1.699	2.372	121.3	21.0	17.0
1988	11 05	06 03.00	+25 59.1					
1988	11 15	05 58.13	+25 43.6	1.539	2.402	142.7	14.5	16.7
1988	11 25	05 49.99	+25 23.4					
1988	12 05	05 39.37	+24 57.2	1.460	2.430	167.1	5.2	16.2
1988	12 15	05 27.54	+24 24.9					
1988	12 25	05 16.08	+23 48.7	1.489	2.457	167.1	5.1	16.3
1989	01 04	05 06.38	+23 12.1					
1989	01 14	04 59.44	+22 39.1	1.627	2.482	142.8	13.9	16.8
1989	01 24	04 55.76	+22 12.5					
1989	02 03	04 55.35	+21 53.6	1.846	2.506	121.4	19.6	17.3
1989	02 13	04 58.02	+21 42.0					
1989	02 23	05 03.41	+21 36.3	2.113	2.528	103.1	22.4	17.7
1989	03 05	05 11.13	+21 34.6					
1989	03 15	05 20.82	+21 35.0	2.397	2.547	87.1	23.0	18.0

(3741) 1981 EL19 a,e,i = 2.78, 0.15, 7 Elements MPC 12713

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	05 55.79	+16 09.6	2.435	2.837	103.3	20.1	18.3
1988	10 16	05 59.12	+15 39.1					
1988	10 26	05 59.94	+15 07.7	2.215	2.867	121.9	17.1	18.0
1988	11 05	05 58.15	+14 37.0					
1988	11 15	05 53.76	+14 08.4	2.046	2.897	142.8	11.9	17.7
1988	11 25	05 47.08	+13 43.6					
1988	12 05	05 38.69	+13 24.3	1.965	2.925	164.3	5.2	17.4
1988	12 15	05 29.43	+13 11.7					
1988	12 25	05 20.32	+13 07.0	1.995	2.953	163.9	5.3	17.4
1989	01 04	05 12.30	+13 10.4					
1989	01 14	05 06.12	+13 21.8	2.139	2.979	142.4	11.6	17.8
1989	01 24	05 02.25	+13 40.3					
1989	02 03	05 00.87	+14 04.6	2.370	3.005	121.5	16.2	18.2
1989	02 13	05 01.94	+14 33.0					
1989	02 23	05 05.30	+15 03.8	2.653	3.029	102.8	18.6	18.6
1989	03 05	05 10.70	+15 35.3					
1989	03 15	05 17.90	+16 06.2	2.955	3.052	86.0	19.0	18.8

1982 UR10 a,e,i = 3.18, 0.21, 2 Elements MPC 11055

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	05 54.35	+25 00.5	2.181	2.606	103.7	21.9	18.2
1988	10 16	05 59.92	+25 10.0					
1988	10 26	06 02.77	+25 19.4	1.969	2.630	121.6	18.8	17.9
1988	11 05	06 02.68	+25 29.0					
1988	11 15	05 59.57	+25 38.3	1.805	2.658	142.3	13.1	17.6
1988	11 25	05 53.70	+25 46.0					
1988	12 05	05 45.66	+25 50.3	1.722	2.687	165.6	5.2	17.2
1988	12 15	05 36.41	+25 50.1					
1988	12 25	05 27.18	+25 45.1	1.747	2.719	169.4	3.8	17.2
1989	01 04	05 19.11	+25 36.6					
1989	01 14	05 13.13	+25 26.8	1.882	2.753	146.1	11.5	17.7
1989	01 24	05 09.81	+25 17.9					
1989	02 03	05 09.29	+25 11.2	2.105	2.789	124.9	16.8	18.1
1989	02 13	05 11.53	+25 07.5					
1989	02 23	05 16.28	+25 06.4	2.384	2.826	106.3	19.6	18.5
1989	03 05	05 23.23	+25 06.9					
1989	03 15	05 32.07	+25 08.1	2.688	2.864	89.8	20.3	18.8

1981 RR3 a,e,i = 2.23, 0.21, 6 Elements MPC 10023

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 10 06	05 57.71	+16 07.1	1.509	1.987	102.9	29.4	18.0
1988 10 16	06 05.22	+15 26.3					
1988 10 26	06 09.28	+14 43.9	1.350	2.034	119.6	25.1	17.7
1988 11 05	06 09.59	+14 02.9					
1988 11 15	06 05.98	+13 26.5	1.227	2.083	139.8	17.9	17.4
1988 11 25	05 58.77	+12 57.7					
1988 12 05	05 48.76	+12 39.3	1.174	2.132	161.9	8.3	17.0
1988 12 15	05 37.30	+12 33.1					
1988 12 25	05 26.07	+12 39.9	1.218	2.182	164.6	6.9	17.1
1989 01 04	05 16.61	+12 58.9					
1989 01 14	05 09.99	+13 28.3	1.363	2.231	143.3	15.3	17.7
1989 01 24	05 06.77	+14 05.6					
1989 02 03	05 06.94	+14 47.9	1.586	2.279	123.1	21.2	18.2
1989 02 13	05 10.28	+15 32.6					
1989 02 23	05 16.40	+16 17.2	1.856	2.325	105.6	24.2	18.7
1989 03 05	05 24.87	+16 59.5					
1989 03 15	05 35.33	+17 37.9	2.147	2.370	90.3	24.8	19.0

1981 QH2 a,e,i = 2.21, 0.19, 4 Elements MPC 12122

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 10 06	05 59.50	+17 37.6	1.519	1.990	102.5	29.4	18.1
1988 10 16	06 07.35	+17 11.2					
1988 10 26	06 11.80	+16 44.1	1.354	2.034	119.2	25.3	17.8
1988 11 05	06 12.49	+16 19.0					
1988 11 15	06 09.22	+15 58.1	1.224	2.078	139.5	18.0	17.4
1988 11 25	06 02.23	+15 43.6					
1988 12 05	05 52.27	+15 36.6	1.162	2.123	162.6	8.0	17.1
1988 12 15	05 40.65	+15 37.8					
1988 12 25	05 29.12	+15 47.3	1.198	2.169	167.3	5.7	17.1
1989 01 04	05 19.28	+16 04.5					
1989 01 14	05 12.31	+16 28.8	1.336	2.213	144.7	14.9	17.7
1989 01 24	05 08.80	+16 58.8					
1989 02 03	05 08.81	+17 32.9	1.553	2.257	124.0	21.2	18.2
1989 02 13	05 12.08	+18 09.0					
1989 02 23	05 18.25	+18 45.2	1.818	2.300	106.2	24.4	18.7
1989 03 05	05 26.84	+19 19.7					
1989 03 15	05 37.49	+19 50.6	2.105	2.341	90.9	25.1	19.1

(3724) 1979 YN8 a,e,i = 2.76, 0.17, 8 Elements MPC 12691

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 10 06	05 59.81	+27 11.3	1.953	2.378	102.4	24.2	15.8
1988 10 16	06 06.68	+26 57.3					
1988 10 26	06 10.54	+26 40.2	1.746	2.401	119.8	21.0	15.5
1988 11 05	06 11.11	+26 20.2					
1988 11 15	06 08.27	+25 56.9	1.581	2.427	140.4	15.1	15.2
1988 11 25	06 02.22	+25 29.4					
1988 12 05	05 53.62	+24 57.0	1.492	2.454	163.9	6.4	14.7
1988 12 15	05 43.53	+24 19.5					
1988 12 25	05 33.37	+23 38.8	1.508	2.484	171.0	3.5	14.7
1989 01 04	05 24.48	+22 57.9					
1989 01 14	05 17.92	+22 20.3	1.633	2.515	147.0	12.3	15.2
1989 01 24	05 14.30	+21 48.7					
1989 02 03	05 13.74	+21 24.4	1.844	2.548	125.6	18.3	15.7
1989 02 13	05 16.14	+21 07.0					
1989 02 23	05 21.21	+20 55.4	2.111	2.581	107.1	21.5	16.1
1989 03 05	05 28.57	+20 47.6					
1989 03 15	05 37.88	+20 41.8	2.402	2.616	91.0	22.3	16.4

7571 P-L a,e,i = 2.48, 0.11, 7 Elements MPC 11522

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 10 06	05 59.62	+27 41.8	2.014	2.434	102.5	23.6	17.4
1988 10 16	06 06.87	+28 17.4					
1988 10 26	06 11.42	+28 56.1	1.759	2.410	119.6	21.0	17.0
1988 11 05	06 12.85	+29 38.2					
1988 11 15	06 10.77	+30 22.8	1.546	2.386	139.5	15.6	16.6
1988 11 25	06 05.11	+31 07.0					
1988 12 05	05 56.21	+31 46.2	1.408	2.363	161.4	7.6	16.1
1988 12 15	05 45.01	+32 15.0					
1988 12 25	05 33.05	+32 29.6	1.370	2.340	167.4	5.3	15.9
1989 01 04	05 22.07	+32 29.6					
1989 01 14	05 13.59	+32 18.2	1.438	2.318	145.7	13.8	16.3
1989 01 24	05 08.62	+32 00.6					
1989 02 03	05 07.50	+31 41.4	1.589	2.298	124.7	20.7	16.7
1989 02 13	05 10.18	+31 23.3					
1989 02 23	05 16.32	+31 07.4	1.789	2.279	106.6	24.6	17.1
1989 03 05	05 25.46	+30 53.3					
1989 03 15	05 37.17	+30 39.5	2.010	2.261	91.2	26.1	17.3

1984 SX5 a,e,i = 2.32, 0.11, 7 Elements MPC 12579

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 10 06	06 02.53	+15 15.9	1.626	2.074	101.7	28.2	17.7
1988 10 16	06 11.73	+14 35.2					
1988 10 26	06 18.04	+13 52.2	1.424	2.078	117.4	25.1	17.4
1988 11 05	06 21.08	+13 09.9					
1988 11 15	06 20.52	+12 31.9	1.257	2.086	136.1	19.2	16.9
1988 11 25	06 16.34	+12 01.9					
1988 12 05	06 08.94	+11 43.4	1.152	2.095	157.2	10.5	16.5
1988 12 15	05 59.24	+11 39.1					
1988 12 25	05 48.74	+11 50.2	1.138	2.108	167.1	6.0	16.3
1989 01 04	05 39.06	+12 15.8					
1989 01 14	05 31.63	+12 53.7	1.223	2.123	148.1	14.2	16.8
1989 01 24	05 27.39	+13 40.5					
1989 02 03	05 26.68	+14 32.5	1.389	2.140	127.7	21.4	17.3
1989 02 13	05 29.45	+15 26.4					
1989 02 23	05 35.41	+16 19.1	1.609	2.159	110.1	25.5	17.7
1989 03 05	05 44.13	+17 08.2					
1989 03 15	05 55.20	+17 51.6	1.854	2.179	95.0	27.0	18.1

1969 TT1 a,e,i = 2.41, 0.18, 2 Elements MPC 9291

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 10 06	06 07.73	+25 15.2	1.612	2.048	100.7	28.7	17.7
1988 10 16	06 17.51	+25 29.2					
1988 10 26	06 24.11	+25 44.2	1.430	2.077	116.8	25.3	17.4
1988 11 05	06 27.11	+26 01.5					
1988 11 15	06 26.14	+26 21.4	1.281	2.110	136.4	18.9	17.0
1988 11 25	06 21.16	+26 42.4					
1988 12 05	06 12.66	+27 01.3	1.195	2.146	159.4	9.3	16.6
1988 12 15	06 01.72	+27 14.2					
1988 12 25	05 50.05	+27 18.5	1.203	2.183	173.6	2.9	16.4
1989 01 04	05 39.46	+27 14.2					
1989 01 14	05 31.44	+27 04.3	1.315	2.223	150.2	12.7	17.0
1989 01 24	05 26.90	+26 52.1					
1989 02 03	05 26.05	+26 40.7	1.512	2.263	128.7	19.9	17.5
1989 02 13	05 28.73	+26 31.2					
1989 02 23	05 34.55	+26 23.6	1.764	2.304	110.5	23.7	18.0
1989 03 05	05 43.02	+26 16.9					
1989 03 15	05 53.70	+26 09.6	2.044	2.345	94.7	25.0	18.4

(3675) Kemstach a,e,i = 3.36, 0.11, 11 Elements MPC 12140

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 16.52	+35 24.6	2.940	3.247	98.8	17.7	16.8
1988	10 16	06 21.75	+35 55.4					
1988	10 26	06 24.66	+36 27.7	2.660	3.227	116.4	16.0	16.5
1988	11 05	06 24.99	+37 00.6					
1988	11 15	06 22.56	+37 32.3	2.423	3.207	135.8	12.4	16.2
1988	11 25	06 17.41	+37 59.6					
1988	12 05	06 09.85	+38 18.5	2.264	3.188	155.7	7.3	15.9
1988	12 15	06 00.55	+38 25.2					
1988	12 25	05 50.54	+38 17.3	2.211	3.169	164.4	4.8	15.7
1989	01 04	05 40.96	+37 54.7					
1989	01 14	05 32.87	+37 20.0	2.272	3.151	148.2	9.5	15.9
1989	01 24	05 27.09	+36 37.2					
1989	02 03	05 24.02	+35 50.9	2.430	3.133	127.8	14.4	16.2
1989	02 13	05 23.81	+35 04.4					
1989	02 23	05 26.32	+34 20.2	2.654	3.116	108.7	17.5	16.5
1989	03 05	05 31.30	+33 39.1					
1989	03 15	05 38.47	+33 01.1	2.909	3.100	91.6	18.7	16.7

(3680) Sasha a,e,i = 2.23, 0.06, 6 Elements MPC 12200

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 05.96	+27 43.2	1.711	2.141	101.1	27.3	16.7
1988	10 16	06 15.81	+28 17.8					
1988	10 26	06 22.84	+28 55.4	1.484	2.129	117.1	24.6	16.3
1988	11 05	06 26.51	+29 37.1					
1988	11 15	06 26.30	+30 22.9	1.292	2.119	136.1	18.9	15.8
1988	11 25	06 21.95	+31 10.1					
1988	12 05	06 13.65	+31 53.7	1.163	2.109	158.0	10.1	15.3
1988	12 15	06 02.27	+32 26.8					
1988	12 25	05 49.53	+32 43.7	1.127	2.101	169.4	4.9	15.0
1989	01 04	05 37.51	+32 42.8					
1989	01 14	05 28.12	+32 27.3	1.191	2.095	148.7	14.1	15.5
1989	01 24	05 22.61	+32 03.2					
1989	02 03	05 21.40	+31 36.3	1.336	2.089	127.6	21.9	16.0
1989	02 13	05 24.38	+31 10.0					
1989	02 23	05 31.11	+30 45.7	1.532	2.086	109.8	26.5	16.4
1989	03 05	05 41.03	+30 22.7					
1989	03 15	05 53.60	+29 59.4	1.752	2.084	94.7	28.4	16.7

1980 FY a,e,i = 2.16, 0.04, 2 Elements MPC 13152

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 13.45	+25 36.7	1.851	2.243	99.4	26.1	18.1
1988	10 16	06 21.88	+25 39.9					
1988	10 26	06 27.47	+25 43.6	1.619	2.241	116.0	23.5	17.8
1988	11 05	06 29.78	+25 48.8					
1988	11 15	06 28.38	+25 55.6	1.419	2.238	135.9	17.9	17.3
1988	11 25	06 23.17	+26 03.1					
1988	12 05	06 14.43	+26 08.6	1.286	2.234	159.1	9.0	16.8
1988	12 15	06 03.04	+26 09.0					
1988	12 25	05 50.55	+26 02.2	1.249	2.230	174.4	2.5	16.5
1989	01 04	05 38.75	+25 48.3					
1989	01 14	05 29.28	+25 30.2	1.319	2.225	149.7	12.9	17.0
1989	01 24	05 23.23	+25 11.7					
1989	02 03	05 21.00	+24 55.7	1.476	2.219	127.5	20.6	17.5
1989	02 13	05 22.57	+24 43.5					
1989	02 23	05 27.59	+24 35.1	1.685	2.212	108.8	25.0	17.9
1989	03 05	05 35.59	+24 29.0					
1989	03 15	05 46.15	+24 23.5	1.917	2.205	93.0	26.8	18.2

1979 GE a,e,i = 3.15, 0.11, 1 Elements MPC 10630

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 21.33	+23 41.9	3.084	3.365	97.5	17.1	18.9
1988	10 16	06 25.49	+23 43.3					
1988	10 26	06 27.60	+23 45.9	2.793	3.349	115.9	15.5	18.6
1988	11 05	06 27.48	+23 50.3					
1988	11 15	06 25.01	+23 56.3	2.545	3.333	136.6	11.8	18.3
1988	11 25	06 20.25	+24 03.3					
1988	12 05	06 13.49	+24 10.4	2.376	3.316	159.4	6.0	17.9
1988	12 15	06 05.24	+24 16.2					
1988	12 25	05 56.31	+24 19.7	2.317	3.299	176.2	1.1	17.6
1989	01 04	05 47.58	+24 20.7					
1989	01 14	05 39.94	+24 19.6	2.379	3.281	152.2	8.0	18.0
1989	01 24	05 34.10	+24 17.5					
1989	02 03	05 30.49	+24 15.6	2.544	3.262	129.7	13.4	18.3
1989	02 13	05 29.31	+24 14.8					
1989	02 23	05 30.55	+24 15.4	2.776	3.243	109.5	16.7	18.6
1989	03 05	05 34.07	+24 17.2					
1989	03 15	05 39.66	+24 19.7	3.040	3.224	91.5	18.0	18.8

1971 SN1 a,e,i = 3.09, 0.21, 16 Elements MPC 8785

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 23.51	+37 59.7	2.421	2.735	97.4	21.3	17.0
1988	10 16	06 30.70	+39 08.2					
1988	10 26	06 35.11	+40 20.9	2.215	2.773	114.1	19.1	16.8
1988	11 05	06 36.37	+41 36.4					
1988	11 15	06 34.14	+42 51.9	2.050	2.813	132.4	15.1	16.5
1988	11 25	06 28.39	+44 02.1					
1988	12 05	06 19.46	+45 00.1	1.956	2.853	150.1	9.9	16.3
1988	12 15	06 08.20	+45 39.1					
1988	12 25	05 56.02	+45 54.4	1.962	2.894	157.3	7.5	16.2
1989	01 04	05 44.49	+45 45.6					
1989	01 14	05 35.02	+45 16.3	2.075	2.935	145.0	11.1	16.5
1989	01 24	05 28.58	+44 32.9					
1989	02 03	05 25.50	+43 41.9	2.279	2.976	126.8	15.4	16.9
1989	02 13	05 25.79	+42 48.5					
1989	02 23	05 29.14	+41 56.2	2.546	3.017	109.0	18.1	17.2
1989	03 05	05 35.15	+41 06.6					
1989	03 15	05 43.41	+40 20.0	2.845	3.058	92.7	19.0	17.5

1969 TB6 a,e,i = 2.76, 0.07, 2 Elements MPC 12710

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 22.17	+22 37.0	2.593	2.895	97.3	20.0	17.8
1988	10 16	06 27.41	+22 26.8					
1988	10 26	06 30.31	+22 17.0	2.336	2.903	115.2	18.0	17.5
1988	11 05	06 30.63	+22 08.6					
1988	11 15	06 28.24	+22 01.7	2.119	2.911	135.7	13.7	17.1
1988	11 25	06 23.19	+21 56.4					
1988	12 05	06 15.81	+21 51.8	1.977	2.917	158.8	7.0	16.8
1988	12 15	06 06.75	+21 47.2					
1988	12 25	05 56.97	+21 42.1	1.942	2.923	176.0	1.3	16.4
1989	01 04	05 47.54	+21 36.6					
1989	01 14	05 39.49	+21 31.4	2.024	2.929	151.9	9.1	16.9
1989	01 24	05 33.58	+21 27.6					
1989	02 03	05 30.23	+21 26.1	2.206	2.933	129.5	15.0	17.3
1989	02 13	05 29.59	+21 27.3					
1989	02 23	05 31.56	+21 30.8	2.453	2.936	109.6	18.5	17.6
1989	03 05	05 35.92	+21 35.8					
1989	03 15	05 42.41	+21 41.4	2.730	2.939	92.1	19.8	17.9

1982 UV1 a,e,i = 3.10, 0.18, 3 Elements MPC 10758

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 20.39	+21 16.5	2.494	2.807	97.7	20.7	17.6
1988	10 16	06 25.94	+21 12.8					
1988	10 26	06 29.08	+21 10.7	2.268	2.840	115.5	18.4	17.4
1988	11 05	06 29.63	+21 10.9					
1988	11 15	06 27.44	+21 14.2	2.080	2.874	135.9	13.9	17.1
1988	11 25	06 22.63	+21 20.2					
1988	12 05	06 15.57	+21 28.4	1.968	2.908	158.8	7.0	16.7
1988	12 15	06 06.94	+21 37.5					
1988	12 25	05 57.69	+21 46.6	1.961	2.943	176.2	1.3	16.5
1989	01 04	05 48.89	+21 55.1					
1989	01 14	05 41.47	+22 03.1	2.071	2.978	152.4	8.8	17.0
1989	01 24	05 36.17	+22 11.3					
1989	02 03	05 33.33	+22 20.2	2.281	3.013	130.2	14.5	17.4
1989	02 13	05 33.08	+22 30.0					
1989	02 23	05 35.31	+22 40.6	2.557	3.048	110.5	17.7	17.8
1989	03 05	05 39.80	+22 51.3					
1989	03 15	05 46.28	+23 01.4	2.867	3.083	93.0	18.8	18.1

1971 BK a,e,i = 2.37, 0.18, 5 Elements MPC 11637

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 00.93	+16 55.3	1.668	2.117	102.1	27.5	16.8
1988	10 16	06 11.03	+16 23.2					
1988	10 26	06 18.60	+15 48.0	1.429	2.083	117.5	25.0	16.4
1988	11 05	06 23.19	+15 12.2					
1988	11 15	06 24.38	+14 38.9	1.224	2.052	135.7	19.7	15.9
1988	11 25	06 21.96	+14 11.7					
1988	12 05	06 16.07	+13 53.6	1.081	2.024	156.7	11.1	15.3
1988	12 15	06 07.39	+13 47.4					
1988	12 25	05 57.28	+13 54.7	1.024	2.000	169.8	5.0	14.9
1989	01 04	05 47.44	+14 15.2					
1989	01 14	05 39.55	+14 47.6	1.063	1.980	150.6	14.1	15.3
1989	01 24	05 34.90	+15 29.2					
1989	02 03	05 34.07	+16 16.6	1.182	1.965	129.8	22.7	15.8
1989	02 13	05 37.17	+17 06.7					
1989	02 23	05 43.93	+17 55.9	1.353	1.955	112.2	27.9	16.2
1989	03 05	05 53.90	+18 41.3					
1989	03 15	06 06.64	+19 20.3	1.550	1.951	97.7	30.3	16.6

1987 SV2 a,e,i = 2.93, 0.08, 1 Elements MPC 12449

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 29.12	+24 41.9	2.876	3.139	95.8	18.5	17.6
1988	10 16	06 34.01	+24 42.3					
1988	10 26	06 36.71	+24 44.3	2.609	3.146	113.9	16.8	17.4
1988	11 05	06 37.02	+24 48.1					
1988	11 15	06 34.79	+24 53.9	2.381	3.153	134.4	13.0	17.0
1988	11 25	06 30.06	+25 00.8					
1988	12 05	06 23.11	+25 07.5	2.227	3.159	157.2	6.9	16.7
1988	12 15	06 14.49	+25 12.3					
1988	12 25	06 05.06	+25 13.8	2.180	3.163	177.5	0.8	16.3
1989	01 04	05 55.79	+25 11.7					
1989	01 14	05 47.63	+25 06.6	2.254	3.167	153.9	7.9	16.8
1989	01 24	05 41.36	+24 59.7					
1989	02 03	05 37.42	+24 52.5	2.432	3.170	131.3	13.5	17.1
1989	02 13	05 36.02	+24 46.2					
1989	02 23	05 37.13	+24 41.3	2.680	3.172	111.0	16.9	17.4
1989	03 05	05 40.56	+24 37.7					
1989	03 15	05 46.10	+24 34.9	2.962	3.173	93.0	18.2	17.7

1979 ME9 a,e,i = 2.56, 0.13, 15 Elements MPC 11999

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 32.41	+36 56.7	2.333	2.626	95.6	22.3	17.4
1988	10 16	06 40.20	+38 03.3					
1988	10 26	06 45.25	+39 15.6	2.112	2.652	112.2	20.3	17.1
1988	11 05	06 47.11	+40 33.2					
1988	11 15	06 45.34	+41 53.5	1.927	2.678	130.6	16.3	16.8
1988	11 25	06 39.75	+43 11.4					
1988	12 05	06 30.53	+44 19.5	1.810	2.703	149.0	10.8	16.5
1988	12 15	06 18.42	+45 09.4					
1988	12 25	06 04.86	+45 34.5	1.790	2.726	157.8	7.8	16.4
1989	01 04	05 51.61	+45 32.6					
1989	01 14	05 40.39	+45 06.8	1.878	2.748	145.9	11.6	16.7
1989	01 24	05 32.40	+44 23.8					
1989	02 03	05 28.14	+43 31.3	2.058	2.769	127.3	16.4	17.1
1989	02 13	05 27.64	+42 35.5					
1989	02 23	05 30.58	+41 40.6	2.300	2.788	109.3	19.6	17.4
1989	03 05	05 36.50	+40 48.4					
1989	03 15	05 44.94	+39 59.3	2.572	2.806	93.0	20.7	17.7

1984 QE1 a,e,i = 2.33, 0.23, 8 Elements MPC 9590

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 17.24	+33 18.7	1.465	1.893	98.6	31.5	17.4
1988	10 16	06 30.27	+34 04.4					
1988	10 26	06 39.88	+34 51.3	1.307	1.931	113.4	28.2	17.1
1988	11 05	06 45.47	+35 40.4					
1988	11 15	06 46.44	+36 30.6	1.175	1.973	131.3	22.1	16.8
1988	11 25	06 42.51	+37 17.7					
1988	12 05	06 33.96	+37 54.0	1.096	2.019	151.8	13.3	16.4
1988	12 15	06 21.90	+38 10.8					
1988	12 25	06 08.36	+38 01.8	1.101	2.068	165.4	6.9	16.2
1989	01 04	05 55.70	+37 27.2					
1989	01 14	05 45.91	+36 33.5	1.204	2.118	150.9	13.0	16.7
1989	01 24	05 40.16	+35 30.0					
1989	02 03	05 38.68	+34 24.8	1.392	2.170	131.0	20.1	17.3
1989	02 13	05 41.19	+33 22.7					
1989	02 23	05 47.15	+32 25.6	1.639	2.222	113.1	24.2	17.8
1989	03 05	05 55.92	+31 33.3					
1989	03 15	06 06.98	+30 44.3	1.918	2.275	97.6	25.7	18.2

(3750) 1982 TD1 a,e,i = 3.02, 0.04, 10 Elements MPC 12783

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 31.02	+33 58.5	2.842	3.106	95.8	18.7	18.5
1988	10 16	06 37.11	+34 34.0					
1988	10 26	06 40.90	+35 12.9	2.571	3.100	113.2	17.1	18.2
1988	11 05	06 42.10	+35 54.9					
1988	11 15	06 40.45	+36 38.4	2.338	3.093	132.5	13.6	17.9
1988	11 25	06 35.89	+37 20.6					
1988	12 05	06 28.63	+37 57.1	2.177	3.086	152.7	8.4	17.5
1988	12 15	06 19.22	+38 23.3					
1988	12 25	06 08.66	+38 35.1	2.119	3.079	164.8	4.8	17.3
1989	01 04	05 58.13	+38 31.0					
1989	01 14	05 48.84	+38 12.0	2.175	3.072	150.8	9.0	17.6
1989	01 24	05 41.79	+37 41.9					
1989	02 03	05 37.50	+37 05.1	2.332	3.064	130.3	14.2	17.9
1989	02 13	05 36.21	+36 25.7					
1989	02 23	05 37.82	+35 46.4	2.558	3.056	111.1	17.6	18.2
1989	03 05	05 42.09	+35 08.9					
1989	03 15	05 48.71	+34 33.4	2.817	3.048	93.7	19.0	18.4

1981 DZ a,e,i = 2.68, 0.09, 9 Elements MPC 10819

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 28.25	+20 43.0	2.506	2.791	95.8	20.9	19.1
1988	10 16	06 34.49	+20 07.6					
1988	10 26	06 38.46	+19 30.2	2.230	2.775	113.1	19.2	18.8
1988	11 05	06 39.90	+18 52.0					
1988	11 15	06 38.58	+18 14.0	1.988	2.758	132.9	15.2	18.4
1988	11 25	06 34.49	+17 37.1					
1988	12 05	06 27.82	+17 02.4	1.816	2.741	155.1	8.7	18.0
1988	12 15	06 19.13	+16 30.8					
1988	12 25	06 09.35	+16 03.4	1.746	2.724	172.6	2.7	17.6
1989	01 04	05 59.58	+15 41.4					
1989	01 14	05 50.96	+15 26.0	1.790	2.706	153.4	9.4	18.0
1989	01 24	05 44.41	+15 17.5					
1989	02 03	05 40.49	+15 15.8	1.935	2.688	131.2	16.0	18.3
1989	02 13	05 39.44	+15 20.0					
1989	02 23	05 41.20	+15 28.4	2.144	2.670	111.4	20.2	18.7
1989	03 05	05 45.57	+15 39.4					
1989	03 15	05 52.28	+15 51.0	2.385	2.651	94.2	22.0	18.9

(3790) 1937 UE a,e,i = 3.15, 0.18, 0 Elements MPC 12955

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 21.16	+23 52.2	2.263	2.591	97.6	22.5	17.2
1988	10 16	06 28.89	+23 48.8					
1988	10 26	06 34.17	+23 46.0	2.028	2.602	114.4	20.4	16.9
1988	11 05	06 36.72	+23 45.0					
1988	11 15	06 36.32	+23 46.2	1.830	2.615	134.0	15.8	16.6
1988	11 25	06 32.96	+23 49.6					
1988	12 05	06 26.91	+23 54.0	1.699	2.632	156.4	8.6	16.2
1988	12 15	06 18.80	+23 58.0					
1988	12 25	06 09.67	+24 00.0	1.667	2.651	179.1	0.3	15.7
1989	01 04	06 00.71	+23 59.3					
1989	01 14	05 53.09	+23 56.5	1.748	2.672	155.2	8.9	16.3
1989	01 24	05 47.71	+23 52.8					
1989	02 03	05 45.05	+23 49.3	1.926	2.696	133.0	15.5	16.7
1989	02 13	05 45.27	+23 46.7					
1989	02 23	05 48.25	+23 45.2	2.172	2.722	113.5	19.5	17.1
1989	03 05	05 53.73	+23 44.1					
1989	03 15	06 01.41	+23 42.4	2.454	2.750	96.5	21.1	17.5

1940 WA a,e,i = 2.84, 0.14, 14 Elements MPC 12437

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 25.74	+23 49.1	2.145	2.468	96.5	23.7	16.0
1988	10 16	06 33.55	+22 56.8					
1988	10 26	06 38.74	+21 59.8	1.912	2.479	113.3	21.6	15.7
1988	11 05	06 41.00	+20 59.2					
1988	11 15	06 40.13	+19 56.1	1.713	2.493	132.8	16.9	15.3
1988	11 25	06 36.14	+18 51.4					
1988	12 05	06 29.34	+17 46.7	1.582	2.509	154.9	9.6	14.9
1988	12 15	06 20.44	+16 44.2					
1988	12 25	06 10.55	+15 46.3	1.550	2.528	172.3	3.0	14.6
1989	01 04	06 00.92	+14 56.0					
1989	01 14	05 52.76	+14 15.7	1.630	2.548	153.4	9.9	15.1
1989	01 24	05 46.95	+13 46.4					
1989	02 03	05 43.95	+13 27.8	1.807	2.570	131.7	16.7	15.5
1989	02 13	05 43.86	+13 18.2					
1989	02 23	05 46.56	+13 15.3	2.048	2.593	112.5	20.6	15.9
1989	03 05	05 51.74	+13 16.5					
1989	03 15	05 59.11	+13 19.5	2.322	2.618	95.8	22.2	16.3

(3681) 1974 QO2 a,e,i = 2.23, 0.18, 4 Elements MPC 12201

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 35.22	+19 16.2	2.155	2.439	94.1	24.1	18.4
1988	10 16	06 42.13	+19 01.6					
1988	10 26	06 46.44	+18 48.9	1.932	2.472	111.2	22.0	18.1
1988	11 05	06 47.82	+18 39.7					
1988	11 15	06 46.01	+18 35.6	1.736	2.501	131.2	17.3	17.8
1988	11 25	06 40.95	+18 37.2					
1988	12 05	06 32.90	+18 44.4	1.604	2.528	154.4	9.7	17.4
1988	12 15	06 22.51	+18 56.2					
1988	12 25	06 10.93	+19 11.0	1.571	2.553	175.8	1.6	17.0
1989	01 04	05 59.53	+19 27.5					
1989	01 14	05 49.61	+19 45.0	1.654	2.574	154.0	9.6	17.5
1989	01 24	05 42.21	+20 03.3					
1989	02 03	05 37.83	+20 22.5	1.836	2.593	131.1	16.6	18.0
1989	02 13	05 36.64	+20 42.6					
1989	02 23	05 38.48	+21 03.0	2.083	2.609	111.2	20.7	18.4
1989	03 05	05 43.04	+21 22.8					
1989	03 15	05 49.98	+21 41.1	2.360	2.621	93.8	22.2	18.7

1981 QA3 a,e,i = 3.22, 0.16, 2 Elements MPC 12323

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 22.96	+24 57.0	2.467	2.776	97.2	20.9	17.1
1988	10 16	06 30.28	+25 01.6					
1988	10 26	06 35.36	+25 07.5	2.198	2.760	114.2	19.2	16.8
1988	11 05	06 37.92	+25 15.7					
1988	11 15	06 37.71	+25 26.5	1.967	2.745	133.8	15.1	16.4
1988	11 25	06 34.66	+25 39.3					
1988	12 05	06 28.96	+25 52.7	1.804	2.734	155.9	8.5	16.0
1988	12 15	06 21.14	+26 04.7					
1988	12 25	06 12.13	+26 12.9	1.741	2.724	177.2	1.0	15.5
1989	01 04	06 03.07	+26 16.3					
1989	01 14	05 55.14	+26 14.9	1.791	2.717	155.5	8.6	16.0
1989	01 24	05 49.33	+26 10.2					
1989	02 03	05 46.19	+26 03.9	1.940	2.712	133.2	15.3	16.3
1989	02 13	05 45.97	+25 57.4					
1989	02 23	05 48.63	+25 51.2	2.158	2.710	113.6	19.5	16.7
1989	03 05	05 53.93	+25 45.3					
1989	03 15	06 01.58	+25 39.0	2.412	2.711	96.5	21.4	17.0

1982 KC1 a,e,i = 2.53, 0.13, 5 Elements MPC 10767

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 32.83	+19 08.9	2.540	2.804	94.6	20.8	18.2
1988	10 16	06 38.97	+18 40.1					
1988	10 26	06 42.90	+18 10.7	2.260	2.789	111.9	19.3	17.9
1988	11 05	06 44.33	+17 42.1					
1988	11 15	06 43.04	+17 15.6	2.014	2.772	131.7	15.4	17.5
1988	11 25	06 38.95	+16 52.2					
1988	12 05	06 32.25	+16 32.8	1.834	2.754	153.9	9.0	17.0
1988	12 15	06 23.43	+16 18.1					
1988	12 25	06 13.37	+16 08.4	1.756	2.734	172.7	2.6	16.7
1989	01 04	06 03.19	+16 04.0					
1989	01 14	05 54.05	+16 05.0	1.793	2.713	154.3	9.0	17.0
1989	01 24	05 46.92	+16 11.4					
1989	02 03	05 42.41	+16 22.5	1.931	2.690	131.8	15.9	17.3
1989	02 13	05 40.80	+16 37.7					
1989	02 23	05 42.09	+16 55.5	2.137	2.666	111.7	20.2	17.7
1989	03 05	05 46.06	+17 14.5					
1989	03 15	05 52.46	+17 33.0	2.373	2.641	94.3	22.1	17.9

(1026) Ingrid a,e,i = 2.26, 0.18, 5 Elements MPC 12936

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 36.56	+20 03.6	2.094	2.380	93.8	24.8	17.9
1988	10 16	06 44.00	+19 59.7					
1988	10 26	06 48.80	+19 58.7	1.878	2.416	110.8	22.6	17.6
1988	11 05	06 50.62	+20 02.6					
1988	11 15	06 49.17	+20 12.5	1.688	2.451	130.7	17.8	17.3
1988	11 25	06 44.36	+20 28.9					
1988	12 05	06 36.41	+20 50.9	1.560	2.483	153.9	10.0	16.9
1988	12 15	06 25.99	+21 16.2					
1988	12 25	06 14.25	+21 42.2	1.530	2.514	178.2	0.7	16.4
1989	01 04	06 02.62	+22 06.5					
1989	01 14	05 52.49	+22 28.2	1.616	2.541	155.0	9.4	17.0
1989	01 24	05 44.94	+22 47.7					
1989	02 03	05 40.50	+23 05.6	1.801	2.566	131.9	16.6	17.5
1989	02 13	05 39.33	+23 22.7					
1989	02 23	05 41.28	+23 39.0	2.051	2.589	111.9	20.8	17.9
1989	03 05	05 46.00	+23 54.3					
1989	03 15	05 53.15	+24 07.9	2.333	2.608	94.6	22.3	18.3

1982 VZ a,e,i = 3.18, 0.19, 2 Elements MPC 9360

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 23.05	+21 36.4	2.263	2.584	97.1	22.6	17.3
1988	10 16	06 30.99	+21 28.7					
1988	10 26	06 36.57	+21 21.8	2.024	2.589	113.7	20.6	17.0
1988	11 05	06 39.50	+21 17.2					
1988	11 15	06 39.55	+21 15.9	1.820	2.598	133.1	16.1	16.6
1988	11 25	06 36.69	+21 18.5					
1988	12 05	06 31.13	+21 24.6	1.682	2.610	155.2	9.1	16.2
1988	12 15	06 23.44	+21 33.1					
1988	12 25	06 14.62	+21 42.7	1.641	2.625	178.2	0.7	15.8
1989	01 04	06 05.81	+21 52.1					
1989	01 14	05 58.18	+22 01.1	1.712	2.642	156.3	8.6	16.3
1989	01 24	05 52.70	+22 09.9					
1989	02 03	05 49.87	+22 18.8	1.881	2.663	134.1	15.4	16.7
1989	02 13	05 49.91	+22 28.0					
1989	02 23	05 52.74	+22 37.2	2.120	2.686	114.5	19.6	17.1
1989	03 05	05 58.11	+22 45.7					
1989	03 15	06 05.73	+22 52.5	2.396	2.711	97.5	21.3	17.5

1987 RG a,e,i = 3.10, 0.18, 4 Elements MPC 12448

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 37.85	+20 45.5	3.026	3.245	93.6	17.9	18.3
1988	10 16	06 42.43	+20 39.3					
1988	10 26	06 44.94	+20 35.0	2.776	3.277	111.7	16.4	18.1
1988	11 05	06 45.22	+20 33.6					
1988	11 15	06 43.14	+20 35.5	2.561	3.307	132.2	12.8	17.8
1988	11 25	06 38.77	+20 40.7					
1988	12 05	06 32.37	+20 48.7	2.418	3.337	154.9	7.2	17.5
1988	12 15	06 24.41	+20 58.5					
1988	12 25	06 15.64	+21 09.0	2.382	3.365	177.6	0.7	17.1
1989	01 04	06 06.90	+21 19.4					
1989	01 14	05 59.03	+21 29.3	2.468	3.392	156.4	6.7	17.6
1989	01 24	05 52.75	+21 38.8					
1989	02 03	05 48.48	+21 48.3	2.662	3.419	133.7	12.0	17.9
1989	02 13	05 46.47	+21 58.0					
1989	02 23	05 46.72	+22 07.9	2.933	3.444	113.1	15.3	18.3
1989	03 05	05 49.12	+22 17.8					
1989	03 15	05 53.48	+22 27.2	3.242	3.467	94.7	16.6	18.5

1984 SF1 a,e,i = 2.23, 0.18, 3 Elements MPC 9292

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 10 06	06 42.76	+24 58.9	2.197	2.456	92.7	24.0	18.6
1988 10 16	06 50.32	+24 50.9					
1988 10 26	06 55.25	+24 44.8	1.970	2.488	109.7	22.1	18.4
1988 11 05	06 57.21	+24 41.7					
1988 11 15	06 55.89	+24 41.9	1.767	2.516	129.6	17.6	18.1
1988 11 25	06 51.18	+24 44.9					
1988 12 05	06 43.27	+24 48.9	1.626	2.542	152.7	10.3	17.7
1988 12 15	06 32.76	+24 51.5					
1988 12 25	06 20.80	+24 50.1	1.582	2.565	177.6	0.9	17.2
1989 01 04	06 08.81	+24 43.6					
1989 01 14	05 58.20	+24 32.8	1.655	2.586	156.3	8.8	17.7
1989 01 24	05 50.09	+24 19.8					
1989 02 03	05 45.08	+24 06.8	1.829	2.603	133.0	16.1	18.2
1989 02 13	05 43.35	+23 55.4					
1989 02 23	05 44.74	+23 46.3	2.071	2.618	112.7	20.4	18.6
1989 03 05	05 48.94	+23 38.9					
1989 03 15	05 55.59	+23 32.5	2.346	2.629	95.1	22.1	18.9

(3736) Rokoske a,e,i = 3.02, 0.08, 11 Elements MPC 12705

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 10 06	06 40.52	+12 17.8	3.023	3.222	92.3	18.1	16.8
1988 10 16	06 45.37	+11 50.7					
1988 10 26	06 48.29	+11 24.9	2.757	3.231	109.8	16.8	16.5
1988 11 05	06 49.09	+11 02.1					
1988 11 15	06 47.66	+10 44.3	2.522	3.239	129.2	13.7	16.3
1988 11 25	06 44.00	+10 33.2					
1988 12 05	06 38.31	+10 30.3	2.354	3.247	150.3	8.7	15.9
1988 12 15	06 31.00	+10 36.6					
1988 12 25	06 22.72	+10 52.4	2.287	3.253	167.2	3.8	15.7
1989 01 04	06 14.26	+11 17.1					
1989 01 14	06 06.46	+11 49.3	2.338	3.259	155.6	7.2	15.9
1989 01 24	06 00.06	+12 27.1					
1989 02 03	05 55.57	+13 08.5	2.498	3.264	134.4	12.5	16.2
1989 02 13	05 53.28	+13 51.8					
1989 02 23	05 53.28	+14 35.1	2.735	3.268	114.2	16.0	16.5
1989 03 05	05 55.48	+15 17.0					
1989 03 15	05 59.71	+15 56.3	3.013	3.271	96.0	17.6	16.8

1968 FJ a,e,i = 2.36, 0.13, 3 Elements MPC 10612

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 10 06	06 35.93	+19 36.5	2.285	2.556	93.9	23.0	17.8
1988 10 16	06 43.76	+19 17.7					
1988 10 26	06 49.36	+18 59.5	2.008	2.534	110.5	21.6	17.5
1988 11 05	06 52.37	+18 43.6					
1988 11 15	06 52.46	+18 31.6	1.760	2.510	129.7	17.6	17.0
1988 11 25	06 49.42	+18 24.8					
1988 12 05	06 43.29	+18 23.9	1.572	2.485	151.9	10.8	16.6
1988 12 15	06 34.46	+18 28.6					
1988 12 25	06 23.85	+18 38.1	1.477	2.458	174.5	2.2	16.0
1989 01 04	06 12.70	+18 51.0					
1989 01 14	06 02.47	+19 06.3	1.495	2.430	156.9	9.1	16.3
1989 01 24	05 54.42	+19 23.6					
1989 02 03	05 49.35	+19 42.6	1.612	2.402	133.8	17.2	16.7
1989 02 13	05 47.66	+20 02.9					
1989 02 23	05 49.33	+20 23.8	1.795	2.372	113.7	22.5	17.1
1989 03 05	05 54.12	+20 44.1					
1989 03 15	06 01.70	+21 02.5	2.010	2.342	96.6	24.9	17.4

1981 EL21 a,e,i = 2.72, 0.10, 2 Elements MPC 10308

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 39.84	+21 25.5	2.473	2.718	93.1	21.5	17.6
1988	10 16	06 46.74	+21 08.8					
1988	10 26	06 51.32	+20 53.2	2.230	2.738	110.3	19.9	17.3
1988	11 05	06 53.34	+20 39.9					
1988	11 15	06 52.56	+20 30.1	2.016	2.758	130.0	16.0	17.0
1988	11 25	06 48.93	+20 24.0					
1988	12 05	06 42.66	+20 21.5	1.866	2.777	152.4	9.5	16.6
1988	12 15	06 34.24	+20 21.8					
1988	12 25	06 24.55	+20 23.9	1.814	2.796	175.9	1.4	16.2
1989	01 04	06 14.71	+20 26.7					
1989	01 14	06 05.82	+20 30.2	1.878	2.814	157.9	7.6	16.6
1989	01 24	05 58.86	+20 34.4					
1989	02 03	05 54.39	+20 39.6	2.047	2.831	135.0	14.2	17.0
1989	02 13	05 52.68	+20 46.0					
1989	02 23	05 53.71	+20 53.2	2.289	2.848	114.7	18.4	17.4
1989	03 05	05 57.28	+21 00.7					
1989	03 15	06 03.11	+21 07.5	2.570	2.864	96.9	20.2	17.7

(3700) Geowilliams a,e,i = 2.42, 0.23, 12 Elements MPC 12316

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 12.06	+35 19.2	1.451	1.895	99.7	31.3	16.1
1988	10 16	06 27.53	+35 12.8					
1988	10 26	06 39.96	+34 57.9	1.249	1.880	113.4	29.0	15.7
1988	11 05	06 48.72	+34 35.1					
1988	11 15	06 53.15	+34 04.3	1.074	1.871	130.2	23.8	15.2
1988	11 25	06 52.84	+33 23.3					
1988	12 05	06 47.79	+32 28.7	0.947	1.871	150.9	14.9	14.7
1988	12 15	06 38.71	+31 16.7					
1988	12 25	06 27.30	+29 45.7	0.898	1.878	172.8	3.7	14.1
1989	01 04	06 15.77	+28 00.0					
1989	01 14	06 06.31	+26 08.5	0.944	1.892	158.0	11.2	14.6
1989	01 24	06 00.47	+24 21.4					
1989	02 03	05 58.78	+22 46.1	1.077	1.914	136.1	20.9	15.2
1989	02 13	06 01.20	+21 25.0					
1989	02 23	06 07.27	+20 17.2	1.271	1.941	117.9	26.8	15.7
1989	03 05	06 16.38	+19 19.6					
1989	03 15	06 27.97	+18 28.6	1.500	1.975	102.8	29.4	16.2

1977 NN a,e,i = 2.26, 0.18, 5 Elements MPC 9754

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 48.76	+27 40.4	2.196	2.438	91.6	24.2	18.6
1988	10 16	06 57.05	+27 40.2					
1988	10 26	07 02.70	+27 42.5	1.972	2.471	108.3	22.5	18.4
1988	11 05	07 05.37	+27 48.4					
1988	11 15	07 04.69	+27 58.0	1.770	2.501	127.8	18.2	18.1
1988	11 25	07 00.49	+28 10.1					
1988	12 05	06 52.91	+28 22.0	1.625	2.529	150.4	11.1	17.7
1988	12 15	06 42.49	+28 30.1					
1988	12 25	06 30.34	+28 30.5	1.575	2.555	173.5	2.5	17.3
1989	01 04	06 17.93	+28 21.4					
1989	01 14	06 06.75	+28 03.4	1.640	2.578	157.8	8.3	17.6
1989	01 24	05 58.06	+27 39.5					
1989	02 03	05 52.51	+27 13.3	1.809	2.598	134.6	15.7	18.1
1989	02 13	05 50.33	+26 47.5					
1989	02 23	05 51.39	+26 23.8	2.049	2.616	114.2	20.2	18.5
1989	03 05	05 55.33	+26 02.4					
1989	03 15	06 01.80	+25 42.6	2.324	2.630	96.6	22.1	18.9

1978 RM2 a,e,i = 2.75, 0.01, 5 Elements MPC 11142

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 10 06	06 41.32	+18 08.0	2.514	2.747	92.6	21.3	18.3
1988 10 16	06 48.44	+17 38.8					
1988 10 26	06 53.39	+17 09.8	2.254	2.748	109.3	20.0	18.0
1988 11 05	06 55.92	+16 42.5					
1988 11 15	06 55.78	+16 18.7	2.022	2.750	128.6	16.3	17.7
1988 11 25	06 52.89	+15 59.8					
1988 12 05	06 47.39	+15 46.8	1.852	2.752	150.2	10.2	17.3
1988 12 15	06 39.69	+15 40.3					
1988 12 25	06 30.58	+15 40.4	1.777	2.753	171.2	3.1	16.9
1989 01 04	06 21.08	+15 46.7					
1989 01 14	06 12.31	+15 58.3	1.816	2.755	158.5	7.5	17.2
1989 01 24	06 05.27	+16 14.3					
1989 02 03	06 00.61	+16 33.7	1.960	2.756	136.1	14.4	17.6
1989 02 13	05 58.66	+16 55.4					
1989 02 23	05 59.49	+17 17.9	2.178	2.758	115.9	18.8	17.9
1989 03 05	06 02.92	+17 40.0					
1989 03 15	06 08.72	+18 00.4	2.436	2.759	98.2	20.9	18.2

1981 EO8 a,e,i = 2.64, 0.17, 4 Elements MPC 10614

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 10 06	06 26.93	+25 55.9	1.861	2.208	96.4	26.7	18.1
1988 10 16	06 38.22	+25 43.8					
1988 10 26	06 46.96	+25 30.2	1.633	2.202	111.6	24.8	17.8
1988 11 05	06 52.76	+25 16.7					
1988 11 15	06 55.17	+25 04.6	1.433	2.201	129.8	20.2	17.4
1988 11 25	06 53.96	+24 54.1					
1988 12 05	06 49.18	+24 44.5	1.288	2.204	151.3	12.4	16.9
1988 12 15	06 41.29	+24 34.1					
1988 12 25	06 31.44	+24 20.9	1.229	2.211	175.6	2.0	16.4
1989 01 04	06 21.12	+24 03.9					
1989 01 14	06 11.98	+23 43.9	1.273	2.221	159.5	8.9	16.8
1989 01 24	06 05.39	+23 22.9					
1989 02 03	06 02.07	+23 03.2	1.412	2.235	136.9	17.5	17.3
1989 02 13	06 02.29	+22 45.8					
1989 02 23	06 05.88	+22 30.6	1.618	2.253	117.5	22.9	17.8
1989 03 05	06 12.47	+22 16.8					
1989 03 15	06 21.63	+22 02.7	1.862	2.274	101.2	25.4	18.2

1986 GC a,e,i = 2.36, 0.08, 7 Elements MPC 10840

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988 10 06	06 41.96	+25 59.5	2.259	2.518	93.0	23.4	18.7
1988 10 16	06 50.76	+26 20.3					
1988 10 26	06 57.28	+26 45.6	1.995	2.507	109.4	22.0	18.4
1988 11 05	07 01.12	+27 17.2					
1988 11 15	07 01.88	+27 55.9	1.757	2.496	128.4	18.1	18.0
1988 11 25	06 59.26	+28 40.9					
1988 12 05	06 53.21	+29 29.8	1.579	2.483	150.2	11.4	17.6
1988 12 15	06 44.03	+30 17.7					
1988 12 25	06 32.67	+30 58.9	1.492	2.469	171.2	3.5	17.1
1989 01 04	06 20.50	+31 28.4					
1989 01 14	06 09.17	+31 43.9	1.518	2.454	157.2	8.9	17.4
1989 01 24	06 00.15	+31 47.0					
1989 02 03	05 54.39	+31 41.0	1.643	2.439	134.6	16.7	17.8
1989 02 13	05 52.29	+31 29.7					
1989 02 23	05 53.83	+31 15.9	1.837	2.422	114.6	21.8	18.2
1989 03 05	05 58.68	+31 00.9					
1989 03 15	06 06.45	+30 44.8	2.064	2.405	97.5	24.2	18.5

(3677) Magnusson a,e,i = 2.27, 0.20, 4 Elements MPC 12142

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 48.34	+19 17.0	2.051	2.297	91.0	25.8	18.5
1988	10 16	06 56.88	+18 42.7					
1988	10 26	07 02.80	+18 09.0	1.846	2.342	107.3	23.9	18.3
1988	11 05	07 05.78	+17 37.8					
1988	11 15	07 05.50	+17 11.0	1.661	2.385	126.4	19.5	18.0
1988	11 25	07 01.85	+16 50.3					
1988	12 05	06 54.98	+16 36.4	1.529	2.426	148.7	12.2	17.6
1988	12 15	06 45.43	+16 29.6					
1988	12 25	06 34.24	+16 29.5	1.488	2.465	171.4	3.4	17.2
1989	01 04	06 22.76	+16 34.9					
1989	01 14	06 12.38	+16 45.0	1.560	2.502	158.7	8.2	17.6
1989	01 24	06 04.27	+16 58.9					
1989	02 03	05 59.06	+17 15.8	1.734	2.536	135.8	15.7	18.1
1989	02 13	05 57.02	+17 34.7					
1989	02 23	05 58.05	+17 54.3	1.980	2.568	115.6	20.3	18.5
1989	03 05	06 01.86	+18 13.4					
1989	03 15	06 08.11	+18 30.5	2.263	2.597	98.1	22.3	18.9

(3743) 1983 EW a,e,i = 2.20, 0.15, 3 Elements MPC 12713

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 45.39	+19 21.0	2.272	2.509	91.7	23.5	18.7
1988	10 16	06 53.53	+18 57.7					
1988	10 26	06 59.42	+18 35.1	2.002	2.497	108.1	22.2	18.3
1988	11 05	07 02.72	+18 15.0					
1988	11 15	07 03.06	+17 59.1	1.757	2.482	127.1	18.5	17.9
1988	11 25	07 00.22	+17 49.0					
1988	12 05	06 54.17	+17 45.3	1.566	2.465	149.2	11.8	17.5
1988	12 15	06 45.24	+17 48.3					
1988	12 25	06 34.30	+17 56.8	1.467	2.446	172.5	3.0	16.9
1989	01 04	06 22.58	+18 09.6					
1989	01 14	06 11.57	+18 25.4	1.480	2.424	158.9	8.4	17.2
1989	01 24	06 02.61	+18 43.3					
1989	02 03	05 56.59	+19 02.8	1.595	2.399	135.4	16.8	17.6
1989	02 13	05 53.97	+19 23.6					
1989	02 23	05 54.77	+19 44.8	1.780	2.373	114.9	22.2	18.0
1989	03 05	05 58.75	+20 05.4					
1989	03 15	06 05.58	+20 23.9	1.999	2.345	97.5	24.9	18.3

1981 EZ18 a,e,i = 2.69, 0.05, 2 Elements MPC 11045

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1988	10 06	06 45.69	+23 46.0	2.489	2.714	92.0	21.6	19.1
1988	10 16	06 53.28	+23 35.7					
1988	10 26	06 58.61	+23 26.8	2.235	2.723	108.8	20.2	18.8
1988	11 05	07 01.40	+23 20.7					
1988	11 15	07 01.38	+23 18.1	2.008	2.733	128.2	16.5	18.5
1988	11 25	06 58.43	+23 19.1					
1988	12 05	06 52.65	+23 22.8	1.841	2.742	150.5	10.2	18.1
1988	12 15	06 44.47	+23 27.6					
1988	12 25	06 34.74	+23 31.5	1.769	2.750	174.9	1.8	17.6
1989	01 04	06 24.54	+23 33.0					
1989	01 14	06 15.10	+23 31.7	1.813	2.758	160.2	6.9	17.9
1989	01 24	06 07.50	+23 28.2					
1989	02 03	06 02.42	+23 23.6	1.963	2.766	137.0	14.1	18.4
1989	02 13	06 00.20	+23 19.1					
1989	02 23	06 00.88	+23 14.9	2.188	2.774	116.4	18.6	18.8
1989	03 05	06 04.25	+23 11.1					
1989	03 15	06 10.03	+23 07.0	2.454	2.781	98.5	20.7	19.1