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
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EDITORIAL NOTICE.

The next MPCs will be published on or about July 2. No MPCs will be issued in June.

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ERRATA.

MPC	Line	
9438	16	Add the names J. Garcia, C. Cabanas and F. Sanchez.
9448	19	For f/5 read f/3.5
9581	- 9	Add mean residual 1".0.
9583	24	Add The double designation 1948 RD = 1948 RE1 is by O. Kippes (MPC 702).

* * * * *

CORRECTED OBSERVATION.

The following observation corrects that previously published.

Object	Date	UT	R. A. (1950)	Decl.	Reference	Mag.	N Obs.
1984 WV1 *	1984 11	21.33611	03 37 24.07	+34 02 46.4	MPC 9450	16	1 675

Note 1: time originally given as 19 min later.

* * * * *

IDENTIFICATION CHANGE.

Continuation to MPC 9514.

Object	Date	UT	R. A. (1950)	Decl.	Old desig.	Obs.
A908 TF *	1908 10	01.02038	23 57 43.84	+05 49 47.9	A908 SD	024

* * * * *

OBSERVATIONS OF COMETS.

Observations are published here for the following observatory codes:

046 Klet. Observers W. Landgraf, A. Mrkos and Z. Vavrova. 0.6-m f/5 reflector used for comet 1982i on Mar. 12, otherwise 0.6-m f/3 Maksutov.
057 Belgrade. 0.12-m f/8 astrograph. Observer V. Protitch-Benishek.
095 Crimean Astrophysical Observatory. Observers N. S. Chernykh and V. D. D'yakonova. Measured by D'yakonova.

188 Shokin Majdanak. Observers Novikov and Bugayenko. Long. and Parallax 67.50, -333, -265 (see MPC 7759). 1-m reflector.
286 Yunnan. 1.0-m reflector using CCD.
330 Purple Mountain Observatory. Observer S.-L. Wei.
372 Geisei. Observer T. Seki. From Orient. Astron. Assoc. Comet Bull. No. 271.
381 Kiso. Observer H. Kosai. IHW Star Catalogue used.
493 German-Spanish Astronomical Center, Calar Alto. 2.2-m reflector. Observers U. Graser, E. Grun and A. Quetsch.
494 Stakenbridge. Observer B. Manning.
675 Palomar. 1.5-m reflector and CCD. Observer J. Gibson. Reduced using a Schmidt field plate and the AGK3.
688 Lowell Observatory, Anderson Mesa Station. Observers S. J. Bus, T. J. Kreidl and B. A. Skiff. 1.8-m reflector and CCD for comet 1984e on Apr. 20, otherwise 0.33-m photographic telescope.
691 University of Arizona, Kitt Peak. 0.91-m reflector, CCD in scanning mode. Observer T. Gehrels. Reductions by J. V. Scotti.
695 Kitt Peak. No. 1 0.91-m reflector. Observers N. Mateo, G. Jacoby and H. Ford. Reduced by M. J. S. Belton.
707 Chamberlin Observatory field station. 0.40-m f/5.5 reflector. Observers E. Everhart and J. Briggs. Measured by E. and L. Everhart.
711 McDonald. 2.7-m reflector. Observers A. Cochran and E. Barker. Semi-accurate positions referred to two SAO stars.
801 Oak Ridge Observatory. Observers R. E. McCrosky, G. Schwartz, C.-Y. Shao (assisted by C. M. Bardwell, D. W. E. Green and B. G. Marsden).
978 Conder Brow. Observer D. Greenwood. 0.47-m reflector. Long. and Parallax 357.25, -249, -345 (see MPC 7759). Measured by D. Buczynski.
984 Eastfield. Observer H. B. Ridley. Measured by D. Buczynski.
993 Woolston. Observer H. B. Ridley. Measured by D. Buczynski.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
		Periodic Comet Churyumov-Gerasimenko					
/1982 VIII	1982	11 07.94450	06 08 24.38	+26 29 41.1			057
/1982 VIII	1982	11 15.94659	06 27 49.07	+29 09 40.9			057
/1982 VIII	1982	11 25.95839	06 47 37.82	+32 22 57.0			057
		Periodic Comet Halley					
/1982i	1984	10 01.18815	06 46 23.21	+12 52 05.9			493
/1982i	1984	11 16.78811	06 29 50.86	+12 02 25.6			286
/1982i	1984	11 16.83875	06 29 48.56	+12 02 22.5			286
/1982i	1984	11 16.87969	06 29 46.91	+12 02 19.1			286
/1982i	1984	11 20.80938	06 26 51.61	+11 59 58.2			286
/1982i	1984	11 20.83958	06 26 50.31	+11 59 57.4			286
/1982i	1984	11 20.86319	06 26 49.19	+11 59 57.3			286
/1982i	1984	11 20.88681	06 26 48.01	+11 59 55.7			286
/1982i	1984	11 22.78681	06 25 18.37	+11 58 54.2			286
/1982i	1984	11 22.81493	06 25 16.95	+11 58 53.9			286
/1982i	1984	11 22.84769	06 25 15.29	+11 58 53.7			286
/1982i	1984	11 22.87361	06 25 14.04	+11 58 51.7			286
/1982i	1984	11 22.90347	06 25 12.61	+11 58 50.5			286
/1982i	1984	11 24.89945	06 23 34.44	+11 57 52.2			188
/1982i	1985	01 20.79668	05 24 05.14	+12 22 40.2			188
/1982i	1985	01 20.69524	05 24 11.28	+12 22 32.1			188
/1982i	1985	03 12.80894	04 52 30.43	+14 03 23.0		1	046
/1982i	1985	03 12.83382	04 52 30.06	+14 03 24.8			046
/1982i	1985	03 12.85188	04 52 29.96	+14 03 26.8	19 T		046
/1982i	1985	03 16.81316	04 51 48.28	+14 13 16.7	18.8T	2	046
/1982i	1985	03 24.46944	04 51 08.11	+14 32 37.4	19 T		372

/1982i	1985	03	24.81405	04	51	07.29	+14	33	28.2			1	046
/1982i	1985	03	25.80005	04	51	06.25	+14	36	01.9	18.5T			046
/1982i	1985	04	08.45501	04	52	06.75	+15	11	18.1	19	N	3	381
/1982i	1985	04	09.46036	04	52	16.57	+15	13	52.2	19.5N		3	381
			Periodic Comet Bowell-Skiff										
/1983 II	1983	02	08.65469	09	26	59.85	+18	39	56.4				330
/1983 II	1983	02	18.62474	09	22	31.28	+18	25	44.5				330
			Periodic Comet Wild 2										
/1983s	1985	04	17.44671	20	12	29.3	-17	51	37	17.5T		4	711
/1983s	1985	04	17.45224	20	12	29.6	-17	51	38			4	711
			Periodic Comet Giacobini-Zinner										
/1984e	1985	04	14.37847	19	25	28.50	+12	29	48.9				707
/1984e	1985	04	14.42365	19	25	33.26	+12	30	40.7				691
/1984e	1985	04	14.43762	19	25	34.65	+12	30	58.1				691
/1984e	1985	04	14.45200	19	25	36.06	+12	31	15.2				691
/1984e	1985	04	17.47113	19	30	37.05	+13	33	26.3	16.5T			695
/1984e	1985	04	17.47473	19	30	37.39	+13	33	30.8				695
/1984e	1985	04	17.36169	19	30	26.05	+13	31	09.4				801
/1984e	1985	04	19.4852	19	33	58.50	+14	16	13.4				695
/1984e	1985	04	19.4867	19	33	58.61	+14	16	15.1				695
/1984e	1985	04	19.4884	19	33	58.84	+14	16	18.1				695
/1984e	1985	04	20.43993	19	35	34.14	+14	36	48.8				688
/1984e	1985	04	20.45833	19	35	35.92	+14	37	13.2				688
/1984e	1985	04	23.47263	19	40	38.83	+15	43	55.2				691
/1984e	1985	04	23.48580	19	40	40.11	+15	44	12.6				691
/1984e	1985	04	24.40208	19	42	12.45	+16	04	54.5	18	T	5	707
/1984e	1985	04	25.26412	19	43	39.50	+16	24	36.6				801
/1984e	1985	04	25.28364	19	43	41.42	+16	25	03.1				801
/1984e	1985	04	26.35522	19	45	29.76	+16	49	48.8				801
/1984e	1985	04	26.36458	19	45	30.70	+16	50	02.7			6	801
			Comet Shoemaker (1984f)										
/1984f	1985	03	19.40186	15	49	05.70	-29	13	30.6				801
			Periodic Comet Wolf-Harrington										
/1984g	1985	03	20.11603	09	26	01.74	-16	39	45.1				801
			Periodic Comet Faye										
/1984h	1984	06	09.46713	02	49	07.90	+15	39	34.2			7	675
/1984h	1984	06	09.47257	02	49	08.97	+15	39	36.9				675
/1984h	1984	06	10.47384	02	52	09.35	+15	48	50.0				675
/1984h	1984	06	10.47812	02	52	10.12	+15	48	52.9				675
/1984h	1984	06	11.47164	02	55	09.51	+15	57	51.6				675
/1984h	1984	06	11.47500	02	55	10.14	+15	57	53.7				675
/1984h	1985	03	20.13717	08	28	29.20	+08	38	57.9				801
/1984h	1985	03	26.08478	08	29	26.12	+09	05	00.5				801
			Periodic Comet Takamizawa										
/1984j	1984	09	24.77083	21	15	26.81	-24	40	24.6				095
/1984j	1984	09	24.79167	21	15	27.50	-24	40	22.7				095
/1984j	1984	09	25.76389	21	16	07.31	-24	38	53.2				095
/1984j	1984	09	25.78472	21	16	07.81	-24	38	54.8				095
/1984j	1984	09	26.77431	21	16	48.81	-24	37	09.8				095
/1984j	1984	09	26.78681	21	16	49.81	-24	37	04.4				095
/1984j	1984	09	29.79687	21	19	03.19	-24	30	37.6				095
/1984j	1984	09	29.81458	21	19	03.94	-24	30	29.8				095

Periodic Comet Arend-Rigaux

/1984k	1985	03	19.19280	09	13	17.06	+34	33	41.9			801
/1984k	1985	03	24.13171	09	17	32.62	+34	27	02.4	17.2T		688
/1984k	1985	03	24.20723	09	17	36.52	+34	26	53.4			688
/1984k	1985	03	25.15393	09	18	28.96	+34	24	43.8			801

Periodic Comet Schaumasse

/1984m	1985	03	25.37327	16	26	39.30	-08	09	50.5		8	801
/1984m	1985	04	11.31458	16	19	17.90	-08	32	21.7			707

Periodic Comet Tsuchinshan 1

/1984p	1985	02	17.02778	10	36	10.08	+32	05	08.2			984
/1984p	1985	02	23.93924	10	35	13.08	+32	47	03.5			993
/1984p	1985	03	12.86351	10	33	35.65	+32	43	22.1			046
/1984p	1985	03	12.87740	10	33	35.85	+32	43	20.9			046
/1984p	1985	03	15.84767	10	33	46.22	+32	28	40.0			046
/1984p	1985	03	15.86185	10	33	46.27	+32	28	35.4			046
/1984p	1985	03	16.85917	10	33	52.49	+32	22	57.2			046
/1984p	1985	03	16.87392	10	33	52.27	+32	22	50.0			046
/1984p	1985	03	20.02431	10	34	19.83	+32	02	06.3			978
/1984p	1985	03	24.27031	10	35	20.11	+31	28	41.9			688
/1984p	1985	03	24.30741	10	35	20.77	+31	28	22.6			688
/1984p	1985	03	25.21736	10	35	37.15	+31	20	27.0			801
/1984p	1985	03	25.83858	10	35	49.21	+31	14	52.5			046
/1984p	1985	03	25.85287	10	35	49.63	+31	14	44.6			046
/1984p	1985	03	26.22183	10	35	56.59	+31	11	24.3			801
/1984p	1985	03	26.81821	10	36	09.22	+31	05	51.2			046
/1984p	1985	03	26.83279	10	36	09.46	+31	05	43.9			046

Periodic Comet Shoemaker 1

/1984q	1985	02	19.98999	01	22	35.47	+33	31	22.0		9	801

Comet Shoemaker (1984r)

/1984r	1985	02	16.00780	01	45	24.10	+10	37	01.8			801

Comet Shoemaker (1984s)

/1984s	1985	03	19.10116	08	04	27.34	-05	03	53.9			801
/1984s	1985	03	23.02437	08	13	47.60	-04	16	37.2			801
/1984s	1985	04	11.20833	08	55	23.27	-01	28	39.4			707

Comet Levy-Rudenko (1984t)

/1984t	1985	02	07.73707	14	32	04.46	+74	47	33.6			046
/1984t	1985	02	07.74054	14	31	58.06	+74	47	42.0			046
/1984t	1985	03	17.86875	08	16	05.86	+33	01	09.9	16 T	A	494
/1984t	1985	03	19.14830	08	15	39.12	+31	59	59.3			801
/1984t	1985	03	19.89931	08	15	27.20	+31	25	14.0	15.5T	B	494
/1984t	1985	03	23.06569	08	14	57.94	+29	08	26.7			801
/1984t	1985	04	13.12148	08	21	17.77	+18	36	41.6			691
/1984t	1985	04	13.13590	08	21	18.25	+18	36	22.6			691
/1984t	1985	04	13.15029	08	21	18.70	+18	36	03.9			691

Periodic Comet Russell 1

/1985b	1985	04	09.23887	10	22	19.04	-25	10	36.3	19.5N	C	675
/1985b	1985	04	09.25234	10	22	19.04	-25	10	19.8		C	675
/1985b	1985	04	10.21347	10	22	25.02	-24	51	02.3		C	675
/1985b	1985	04	10.22153	10	22	25.03	-24	50	52.4		C	675

Note 1: weak image, measurement uncertain. 2: interference from star, measurement uncertain. 3: stellar image, no coma. 4: fuzzy image 5"-10"

in diameter, interference from clouds. 5: almost circular image 8" in diameter. 6: weak image. 7: altitude < 6 . 8: very weak image. 9: very weak image, inkdot measured. A: diameter 10", possible spike 20" long in p.a. 80 . B: very diffuse, diameter 20"-30". C: well condensed, tenuous coma 8"-10" in diameter, hint of tail 20" long in p.a. 70 .

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OBSERVATIONS MADE AT KLET BY A. MRKOS, Z. VAVROVA AND PRUSOVA.
Plates with the 0.6-m Maksutov reflector. Contact: A. Mrkos, Department of Astronomy and Astrophysics, Charles University, Svedska 8, C-15000 Prague 5, Czechoslovakia.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N Obs.
39	1985 03	15.92797	10 57 56.92	+09 20 25.4		046
39	1985 03	15.94215	10 57 56.26	+09 20 31.6		046
39	1985 03	20.96212	10 54 20.95	+09 55 44.7		046
39	1985 03	20.97630	10 54 20.35	+09 55 50.1		046
39	1985 03	24.91410	10 51 43.67	+10 21 27.9		046
39	1985 03	24.92822	10 51 43.03	+10 21 32.2		046
39	1985 03	25.87486	10 51 07.26	+10 27 24.1		046
39	1985 03	25.88904	10 51 06.67	+10 27 29.5		046
39	1985 03	26.92723	10 50 28.52	+10 33 46.3		046
39	1985 03	26.94147	10 50 27.93	+10 33 51.8		046
82	1985 03	26.92723	11 00 35.76	+09 13 53.5		046
82	1985 03	26.94147	11 00 35.27	+09 13 55.0		046
224	1985 03	15.92797	11 03 08.27	+06 52 52.9		046
224	1985 03	15.94215	11 03 07.48	+06 52 55.1		046
224	1985 03	24.91410	10 55 27.81	+07 18 46.0		046
224	1985 03	24.92822	10 55 27.09	+07 18 49.0		046
224	1985 03	25.87486	10 54 42.68	+07 21 08.6		046
224	1985 03	25.88904	10 54 41.99	+07 21 10.4		046
224	1985 03	26.92723	10 53 54.34	+07 23 34.4		046
224	1985 03	26.94147	10 53 53.73	+07 23 36.1		046
415	1985 03	21.03266	13 09 14.99	+04 03 41.2		046
415	1985 03	21.04696	13 09 14.55	+04 03 44.9		046
415	1985 03	26.99431	13 04 35.86	+04 42 57.0		046
415	1985 03	27.00848	13 04 35.21	+04 43 03.0		046
435	1985 03	21.06976	13 07 02.90	-06 33 10.2		046
435	1985 03	21.08465	13 07 02.36	-06 33 08.3		046
461	1985 03	21.06976	13 07 29.74	-05 52 00.4		046
461	1985 03	21.08465	13 07 29.11	-05 51 58.3		046
461	1985 03	24.98846	13 04 46.14	-05 33 18.0		046
461	1985 03	25.00258	13 04 45.44	-05 33 13.7		046
547	1985 03	26.96080	12 44 52.89	-05 54 12.1		046
547	1985 03	26.97492	12 44 52.30	-05 54 05.2		046
609	1985 03	15.92797	11 05 17.36	+06 10 22.4		046
609	1985 03	15.94215	11 05 16.74	+06 10 27.3		046
609	1985 03	24.91410	10 59 11.59	+06 58 53.7		046
609	1985 03	24.92822	10 59 11.00	+06 58 58.5		046
609	1985 03	25.87486	10 58 35.51	+07 03 45.3		046
609	1985 03	25.88904	10 58 34.90	+07 03 49.4		046
609	1985 03	26.92723	10 57 57.16	+07 08 54.0		046
609	1985 03	26.94147	10 57 56.62	+07 09 00.4		046
633	1985 03	21.03266	13 06 06.84	+04 22 32.6		046
633	1985 03	21.04696	13 06 06.36	+04 22 39.1		046
633	1985 03	26.99431	13 02 11.29	+05 05 20.0		046
633	1985 03	27.00848	13 02 10.68	+05 05 26.6		046
769	1985 03	20.99632	11 43 37.97	+09 39 51.8		046
769	1985 03	21.01050	11 43 37.30	+09 39 54.7		046

794		1985	03	15.92797	10	58	18.68	+07	26	10.4			046
794		1985	03	15.94215	10	58	18.03	+07	26	14.1			046
794		1985	03	20.96212	10	54	45.79	+07	53	35.8			046
794		1985	03	20.97630	10	54	45.27	+07	53	44.8			046
794		1985	03	26.92723	10	50	49.64	+08	23	57.6			046
794		1985	03	26.94147	10	50	49.12	+08	24	03.3			046
1128		1985	03	26.96080	12	33	36.24	-02	17	14.0			046
1128		1985	03	26.97492	12	33	35.60	-02	17	10.3			046
1394		1985	03	21.06976	13	04	39.43	-05	54	38.9			046
1394		1985	03	21.08465	13	04	38.78	-05	54	34.9			046
1394		1985	03	24.98846	13	01	34.67	-05	30	11.5			046
1394		1985	03	25.00258	13	01	34.09	-05	30	07.4			046
1435		1985	03	24.98846	13	04	17.52	-06	30	15.8			046
1435		1985	03	25.00258	13	04	16.83	-06	30	08.4			046
1735		1985	03	15.96456	11	48	51.96	+07	36	50.0			046
1735		1985	03	15.97948	11	48	51.21	+07	36	51.5			046
1735		1985	03	20.99632	11	44	27.26	+07	44	47.5			046
1735		1985	03	21.01050	11	44	26.59	+07	44	48.7			046
1905		1985	03	26.96080	12	32	32.95	-04	47	07.7			046
1905		1985	03	26.97492	12	32	32.06	-04	47	02.2			046
2230		1985	03	15.92797	10	59	41.05	+07	24	47.1			046
2230		1985	03	15.94215	10	59	40.54	+07	24	52.5			046
2230		1985	03	20.96212	10	55	59.08	+07	51	13.3			046
2230		1985	03	20.97630	10	55	58.61	+07	51	16.9			046
2230		1985	03	26.92723	10	52	00.57	+08	19	24.1			046
2230		1985	03	26.94147	10	52	00.03	+08	19	28.5			046
2384		1985	02	15.95764	10	59	09.52	+20	34	19.5	16.0		046
2384		1985	02	15.97222	10	59	08.60	+20	34	21.6			046
2524		1985	03	26.96080	12	36	47.90	-04	24	49.1			046
2524		1985	03	26.97492	12	36	47.33	-04	24	46.2			046
3007		1985	03	21.03266	13	05	45.30	+05	45	29.3	16.6		046
3007		1985	03	21.04696	13	05	44.42	+05	45	32.8			046
3007		1985	03	26.99431	13	00	21.09	+06	17	29.7			046
3007		1985	03	27.00848	13	00	20.09	+06	17	33.9			046
1985	CL1 *	1985	02	15.84722	09	11	00.77	+17	09	23.4	16.9		046
1985	CL1	1985	02	15.86157	09	10	59.80	+17	09	22.9			046
1985	DQ1 *	1985	02	16.93958	10	20	06.47	+13	05	26.2	16.6	1	046
1985	DQ1	1985	02	16.95382	10	20	07.20	+13	05	30.7			046
1985	ED *	1985	03	15.92797	11	00	56.15	+09	14	45.8	17.0		046
1985	ED	1985	03	15.94215	11	00	55.53	+09	14	53.4			046
1985	EE *	1985	03	15.96456	11	43	09.49	+06	25	36.1	17.0		046
1985	EE	1985	03	15.97948	11	43	08.61	+06	25	47.2			046
1985	EF *	1985	03	15.96456	11	43	49.46	+08	52	52.8	16.7		046
1985	EF	1985	03	15.97948	11	43	48.63	+08	53	02.2			046
1985	EF	1985	03	20.99632	11	39	24.35	+09	33	37.7			046
1985	EF	1985	03	21.01050	11	39	23.81	+09	33	42.7			046
1985	EG *	1985	03	15.96456	11	44	12.38	+05	41	36.3	16.8	1	046
1985	EG	1985	03	15.97948	11	44	12.81	+05	41	38.8			046
1985	EH *	1985	03	15.96456	11	45	01.01	+07	16	15.4	17.0		046
1985	EH	1985	03	15.97948	11	45	00.50	+07	16	19.1			046
1985	EJ *	1985	03	15.92797	10	57	28.08	+08	22	26.9			046
1985	EJ	1985	03	15.94215	10	57	27.64	+08	22	34.5			046
1985	FH	1985	03	15.92797	10	55	20.29	+08	39	50.9			046
1985	FH	1985	03	15.94215	10	55	19.56	+08	40	00.4			046
1985	FH *	1985	03	20.96212	10	51	51.82	+09	31	41.5	16.8		046
1985	FH	1985	03	20.97630	10	51	51.15	+09	31	50.6			046
1985	FH	1985	03	24.91410	10	49	27.15	+10	09	19.8			046
1985	FH	1985	03	25.87486	10	48	55.05	+10	17	57.5			046
1985	FH	1985	03	25.88904	10	48	54.28	+10	18	06.6			046

1985 FH		1985	03	26.92723	10	48	21.04	+10	27	17.6		046
1985 FH		1985	03	26.94147	10	48	20.68	+10	27	24.5		046
1985 FJ		1985	03	15.92797	10	57	42.88	+07	49	21.3		046
1985 FJ		1985	03	15.94215	10	57	42.32	+07	49	24.5		046
1985 FJ	*	1985	03	20.96212	10	52	33.20	+08	05	59.7	17.0	046
1985 FJ		1985	03	20.97630	10	52	32.32	+08	06	03.9		046
1985 FK		1985	03	15.92797	11	07	18.49	+08	37	43.9		046
1985 FK		1985	03	15.94215	11	07	17.44	+08	37	51.0		046
1985 FK	*	1985	03	20.96212	11	02	11.94	+08	53	17.4	17.0	046
1985 FK		1985	03	20.97630	11	02	11.25	+08	53	22.7		046
1985 FL		1985	03	15.92797	11	07	15.16	+07	15	12.6		046
1985 FL		1985	03	15.94215	11	07	14.36	+07	15	14.6		046
1985 FL	*	1985	03	20.96212	11	02	18.83	+07	37	39.5	16.8	046
1985 FL		1985	03	20.97630	11	02	18.22	+07	37	45.7		046
1985 FL		1985	03	25.87486	10	57	48.63	+07	57	21.5		046
1985 FL		1985	03	25.88904	10	57	47.94	+07	57	26.8		046
1985 FL		1985	03	26.92723	10	56	54.11	+08	01	07.4		046
1985 FL		1985	03	26.94147	10	56	53.39	+08	01	10.3		046
1985 FM	*	1985	03	20.99632	11	38	21.69	+07	06	20.6	17.0	046
1985 FM		1985	03	21.01050	11	38	20.28	+07	06	25.2		046
1985 FN	*	1985	03	20.99632	11	45	35.96	+06	18	03.6	17.0	046
1985 FN		1985	03	21.01050	11	45	35.32	+06	18	08.5		046
1985 FO	*	1985	03	21.03266	13	08	14.43	+04	52	47.8		046
1985 FO		1985	03	21.04696	13	08	13.98	+04	52	47.2		046
1985 FP	*	1985	03	24.98846	12	59	37.81	-05	33	44.0	16.5	046
1985 FP		1985	03	25.00258	12	59	37.04	-05	33	35.3		046
1985 FQ	*	1985	03	24.98846	13	02	56.18	-02	46	17.5	16.6	046
1985 FQ		1985	03	25.00258	13	02	55.72	-02	46	14.1		046
1985 FR	*	1985	03	26.96080	12	44	45.74	-04	53	11.9	17.0	046
1985 FR		1985	03	26.97492	12	44	45.04	-04	53	08.8		046
1985 FN2	*	1985	03	24.98846	13	00	34.45	-05	05	03.2	17.0	046
1985 FN2		1985	03	25.00258	13	00	33.50	-05	04	58.6		046

Note 1: motion direct.

OBSERVATIONS MADE AT KLET BY W. LANDGRAF.

Plates taken with the 0.6-m Maksutov reflector. Contact: W. Landgraf, Max-Planck-Institut fur Aeronomie, Postfach 20, D-3411 Katlenburg-Lindau 3, Federal Republic of Germany.

Object		Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
1132		1985	03 12.90234	10 35 45.89	+17 30 10.9	16.0		046
1132		1985	03 12.91738	10 35 45.25	+17 30 13.5			046
1132		1985	03 15.88987	10 33 10.18	+17 38 49.6	16.0		046
1132		1985	03 15.90625	10 33 09.48	+17 38 48.9			046
1132		1985	03 24.94928	10 25 59.19	+17 57 11.0	16.0		046
1132		1985	03 24.96367	10 25 58.58	+17 57 10.7			046
1982 GG		1985	03 15.88987	10 35 31.56	+15 59 51.8	17.9		046
1982 GG		1985	03 15.90625	10 35 31.20	+15 59 51.6			046
1985 DQ		1985	03 12.90234	10 38 10.10	+18 02 07.9	15.5		046
1985 DQ		1985	03 12.91738	10 38 09.46	+18 02 15.3			046
1985 DQ		1985	03 15.88987	10 35 56.52	+18 29 11.1	15.5		046
1985 DQ		1985	03 15.90625	10 35 55.63	+18 29 18.6			046
1985 DQ		1985	03 24.94928	10 30 03.20	+19 38 54.6	16.0		046
1985 DQ		1985	03 24.96367	10 30 02.76	+19 38 59.6			046
1985 DR1	*	1985	02 20.94464	10 26 53.59	+17 06 17.8	16.5	1	046
1985 DR1		1985	02 20.95888	10 26 52.73	+17 06 21.2		1	046
1985 EB	*	1985	03 12.90234	10 45 36.88	+16 02 19.3	17.5		046
1985 EB		1985	03 12.91738	10 45 36.15	+16 02 27.0			046
1985 EC	*	1985	03 15.88987	10 34 30.88	+15 56 32.4	17.2		046
1985 EC		1985	03 15.90625	10 34 29.49	+15 56 43.6			046

1985 EK	*	1985 03 12.90234	10 39 28.15	+14 43 01.6			17.5		046
1985 EK		1985 03 12.91738	10 39 27.24	+14 42 55.1					046
1985 EL	*	1985 03 15.88987	10 38 50.04	+18 06 05.7			18.5		046
1985 EL		1985 03 15.90625	10 38 48.95	+18 06 01.3					046
1985 EM	*	1985 03 15.88987	10 40 30.70	+16 33 57.4			18.0		046
1985 EM		1985 03 15.90625	10 40 28.60	+16 33 58.3				2	046
1985 EN	*	1985 03 15.88987	10 31 24.44	+17 17 38.9			18.5		046
1985 EN		1985 03 15.90625	10 31 23.93	+17 17 46.3					046
1985 FO2	*	1985 03 21.10745	15 36 28.11	+13 12 20.3			17.0	3	046
1985 FO2		1985 03 21.12206	15 36 28.32	+13 12 25.8				3	046
1985 FP2	*	1985 03 21.10745	15 44 23.10	+12 15 43.3			17.6	3	046
1985 FP2		1985 03 21.12206	15 44 23.41	+12 15 46.8				3	046
1985 FQ2	*	1985 03 21.10745	15 45 30.90	+11 31 50.1			18.2	3	046
1985 FQ2		1985 03 21.12206	15 45 32.10	+11 31 54.7				3	046
1985 FS2	*	1985 03 24.94928	10 30 06.36	+17 12 20.5			17.5		046
1985 FS2		1985 03 24.96367	10 30 05.09	+17 12 18.7					046

Note 1: plate taken by A. Mrkos. 2: diffuse. 3: times to be interchanged?

OBSERVATIONS MADE AT BRORFELDE BY K. AUGUSTESEN AND P. JENSEN.

Contact: P. Jensen, Copenhagen University Observatory, Brorfelde, DK-4340 Tollose, Denmark.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
1984 SJ7	1984 09 22.90972		00 16 54.66	+17 03 10.8	16.7	054
1984 SJ7	1984 09 24.95278		00 14 52.57	+16 58 33.4		054
1985 HB *	1985 04 23.98192		14 01 48.78	+05 59 27.4	15.0	054
1985 HB	1985 04 25.96272		13 59 44.57	+06 13 20.2		054

OBSERVATIONS MADE AT THE BURLINGTON REMOTE SITE BY T. HANDLEY.

Films taken with a 0.20-m f/4 astrograph. Contact: T. Handley, 13 Linden Avenue, Burlington, NJ 08016, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
1109	1984 12 26.35486		05 45 22.23	+23 22 57.5	293
2724	1984 12 26.39306		06 38 22.41	+18 26 40.8	293
1980 TX5	1984 12 26.39306		06 41 07.82	+18 40 11.7	293
1984 YZ	1984 12 26.39306		06 41 05.69	+18 39 14.2	293

OBSERVATIONS MADE AT THE PURPLE MOUNTAIN OBSERVATORY BY J.-X. YANG, S.-L. WEI, Q. WANG, Y.-L. GE AND T.-W. LU.

Plates taken with the 0.40-m f/7.5 double astrograph. Comparison stars from the SAO Catalog. Assistance with identifications from D. W. E. Green and C. M. Bardwell. Contact: J.-x. Zhang, Purple Mountain Observatory, Academia Sinica, Nanking, People’s Republic of China.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
4	1983 11 27.66235		05 36 08.31	+18 13 57.2	330
15	1983 03 05.68434		12 00 58.55	-17 06 54.1	330
20	1983 10 10.61941		01 36 43.62	+10 10 31.8	330
21	1983 02 08.60746		08 44 52.95	+21 52 16.4	330
31	1983 10 28.53475		01 47 31.10	+11 13 24.6	330
33	1983 02 18.74627		11 30 20.54	+04 14 20.5	330
35	1983 12 30.68574		07 12 52.30	+33 45 24.5	330
59	1983 02 10.61440		10 45 15.81	+04 12 40.4	330
59	1983 03 06.53816		10 26 36.96	+07 04 23.5	330
63	1983 01 08.62714		08 52 26.45	+23 06 21.2	330
63	1983 02 10.51926		08 17 20.75	+24 16 06.0	330
71	1983 02 14.57756		09 02 14.38	+15 31 04.6	330
71	1983 02 17.53378		08 58 44.77	+15 19 19.2	330
74	1983 12 02.66162		05 39 34.11	+17 23 19.4	330
74	1983 12 08.66922		05 33 47.97	+17 12 12.4	330
80	1983 10 28.63127		02 08 31.29	+14 18 36.0	330

80		1983	11	01.56671	02	05	22.15	+13 29 59.7	330
80		1983	11	05.51598	02	02	21.80	+12 42 14.2	330
80		1983	11	25.46965	01	52	30.97	+09 26 10.3	330
82		1983	10	10.61941	01	21	28.82	+08 08 47.6	330
92		1983	12	27.60659	06	48	17.20	+22 24 26.6	330
100		1983	11	26.49638	01	40	43.45	+01 00 33.5	330
102		1983	02	11.66301	09	45	49.61	+06 16 09.2	330
106		1983	01	08.62714	08	37	57.98	+24 23 40.2	330
106		1983	02	10.51926	08	09	55.69	+26 11 59.9	330
108		1983	01	08.53270	04	46	22.89	+28 21 25.3	330
110		1983	03	13.66725	12	50	10.86	+02 15 21.3	330
121		1983	11	01.61393	02	57	13.02	+10 46 00.4	330
121		1983	11	25.51722	02	38	52.37	+10 19 27.7	330
121		1983	12	01.53662	02	35	08.64	+10 19 13.9	330
121		1983	12	04.51372	02	33	31.55	+10 20 19.2	330
122		1983	11	01.70630	04	11	30.49	+19 07 35.3	330
122		1983	11	05.65973	04	08	54.03	+18 58 39.3	330
122		1983	11	28.57832	03	50	48.58	+17 59 12.1	330
122		1983	12	01.58975	03	48	22.10	+17 51 17.3	330
122		1983	12	04.55955	03	46	01.46	+17 43 44.8	330
122		1983	12	09.50117	03	42	18.62	+17 31 49.0	330
123		1983	10	10.52149	00	01	22.58	+10 13 53.0	330
125		1983	01	08.57784	05	18	18.26	+16 27 56.5	330
128		1983	01	08.62714	08	51	46.78	+24 33 39.6	330
128		1983	02	10.51926	08	21	21.91	+27 05 39.2	330
130		1983	03	05.53920	09	36	59.94	+15 43 46.7	330
130		1983	03	13.57766	09	32	24.99	+16 42 39.8	330
140		1983	11	28.63179	05	41	18.23	+21 14 44.0	330
140		1983	12	04.60538	05	35	49.39	+21 14 52.2	330
140		1983	12	09.55047	05	31	01.90	+21 14 48.5	330
143		1983	11	26.54291	02	04	48.17	+29 45 00.0	330
154		1983	11	24.53389	02	23	42.88	+19 28 11.8	330
167		1983	11	01.70630	04	04	36.50	+17 43 01.1	330
167		1983	11	05.65973	04	01	39.14	+17 31 44.0	330
167		1983	11	28.57832	03	41	44.33	+16 22 23.0	330
167		1983	12	01.58975	03	39	08.49	+16 13 51.4	330
167		1983	12	04.55955	03	36	40.52	+16 05 56.1	330
167		1983	12	09.50117	03	32	49.72	+15 53 56.0	330
168		1983	12	30.63852	07	36	12.28	+15 09 02.5	330
169		1983	02	11.56926	09	06	25.82	+22 16 20.0	330
177		1983	10	28.53475	01	39	33.78	+12 16 01.0	330
178		1983	02	11.56926	09	07	21.84	+19 46 14.9	330
181		1983	02	14.57756	09	19	23.43	+13 49 09.2	330
181		1983	02	17.53378	09	17	16.72	+14 23 39.8	330
181		1983	03	05.60310	09	07	51.34	+17 13 59.2	330
181		1983	03	13.54294	09	05	06.80	+18 22 30.3	330
181		1983	03	17.57207	09	04	18.93	+18 52 42.5	330
184		1983	10	10.56767	00	57	28.70	+07 21 22.6	330
188		1983	03	05.68434	12	08	19.87	-16 59 55.2	330
190		1983	02	18.74627	11	11	27.77	+03 06 59.3	330
192		1983	02	08.65469	09	23	32.73	+20 14 32.3	330
192		1983	02	18.65252	09	12	36.14	+20 35 59.9	330
196		1983	02	14.62339	10	35	20.79	+19 57 44.3	330
199		1983	12	01.63870	06	03	32.74	+21 54 46.1	330
199		1983	12	04.62274	06	01	16.37	+22 02 24.8	330
208		1983	12	02.69079	06	57	00.16	+25 20 40.2	330
208		1983	12	08.71575	06	53	04.31	+25 29 05.3	330
213		1983	12	02.66162	05	24	04.73	+16 14 33.4	330
213		1983	12	08.66922	05	18	29.90	+16 14 41.2	330

215	1983	10	28.53475	01	53	45.57	+12	01	23.4	330
218	1983	02	11.66301	09	45	22.07	+02	28	26.7	330
220	1983	12	30.73400	07	52	22.15	+14	27	58.7	330
223	1983	10	28.63127	02	09	58.59	+12	23	06.0	330
223	1983	11	01.56671	02	06	44.56	+12	08	39.3	330
223	1983	11	05.51598	02	03	32.29	+11	54	19.0	330
223	1983	11	25.46965	01	49	56.05	+10	54	30.4	330
223	1983	11	29.50957	01	48	01.14	+10	46	44.4	330
223	1983	12	02.49912	01	46	49.89	+10	42	14.0	330
227	1983	10	10.52149	00	06	05.84	+09	41	36.6	330
243	1983	02	08.74913	10	26	24.60	+09	35	58.0	330
248	1983	10	10.52149	00	02	58.92	+06	27	21.2	330
250	1983	03	13.66725	12	48	00.22	+01	53	21.2	330
254	1983	01	08.62714	08	36	49.94	+26	20	06.2	330
254	1983	02	10.49148	07	58	48.25	+28	10	17.7	330
259	1983	11	28.63179	05	59	08.60	+22	21	03.9	330
259	1983	12	01.63870	05	56	55.22	+22	27	03.6	330
259	1983	12	04.60538	05	54	35.62	+22	33	00.4	330
259	1983	12	04.65052	05	54	33.40	+22	33	06.8	330
259	1983	12	09.55047	05	50	29.74	+22	42	52.1	330
259	1983	12	09.59631	05	50	27.32	+22	42	56.8	330
260	1983	11	29.60400	04	41	19.57	+13	12	46.6	330
269	1983	02	08.74913	10	05	52.03	+10	08	30.0	330
271	1983	02	08.65469	09	22	08.18	+17	04	36.4	330
271	1983	02	18.65252	09	13	35.94	+17	32	39.9	330
277	1983	10	28.63127	02	03	33.19	+13	09	02.7	330
277	1983	11	01.56671	02	00	17.93	+12	49	45.1	330
277	1983	11	05.51598	01	57	07.69	+12	30	40.5	330
277	1983	11	25.46965	01	44	37.33	+11	10	49.7	330
277	1983	11	29.50957	01	43	06.10	+11	00	05.7	330
277	1983	12	02.49912	01	42	14.10	+10	53	37.3	330
289	1983	03	06.62219	11	51	48.99	-00	26	05.0	330
299	1983	02	08.74913	10	10	23.53	+08	29	05.0	330
317	1983	02	14.57756	08	58	56.28	+16	24	36.4	330
333	1983	02	08.70191	09	47	33.02	+16	17	53.0	330
333	1983	02	18.60391	09	39	25.13	+16	50	50.7	330
333	1983	03	05.53920	09	28	14.08	+17	29	41.0	330
333	1983	03	13.57766	09	23	25.06	+17	42	52.2	330
359	1983	02	11.71023	11	13	38.04	+09	50	27.1	330
368	1983	02	11.66301	09	45	49.44	+02	23	25.4	330
376	1983	10	10.52149	00	03	31.82	+09	44	56.7	330
384	1983	10	28.63127	02	09	33.28	+10	38	55.7	330
384	1983	11	01.56671	02	05	45.07	+10	30	41.5	330
384	1983	11	05.51598	02	01	59.57	+10	22	59.4	330
384	1983	11	25.46965	01	46	38.18	+10	03	43.3	330
384	1983	11	29.50957	01	44	41.07	+10	05	33.2	330
384	1983	12	02.49912	01	43	32.79	+10	08	24.6	330
386	1983	03	13.66725	12	35	35.55	+04	45	17.6	330
401	1983	10	10.56767	01	08	46.51	+04	17	02.2	330
409	1983	01	08.57784	05	19	50.03	+15	11	29.6	330
416	1983	01	08.53270	04	56	25.48	+30	42	12.8	330
441	1983	12	30.73400	07	53	39.84	+13	00	41.0	330
446	1983	10	29.64030	03	13	09.65	+18	58	17.0	330
450	1983	11	01.66046	03	30	08.73	+28	29	02.6	330
450	1983	11	29.55678	03	03	09.91	+28	11	50.6	330
450	1983	12	02.59356	03	00	35.40	+28	05	17.2	330
450	1983	12	08.57895	02	56	04.24	+27	51	12.3	330
460	1983	02	18.70044	11	14	59.00	-00	06	36.9	330
461	1983	12	01.63870	06	11	56.39	+21	16	59.1	330

461	1983	12	04.65052	06	09	49.06	+21	16	53.8	330
461	1983	12	09.59631	06	05	58.41	+21	16	59.2	330
462	1983	11	01.61393	03	08	10.36	+13	04	52.1	330
462	1983	11	25.51722	02	47	51.48	+11	57	40.2	330
462	1983	12	01.53662	02	43	38.85	+11	47	10.9	330
462	1983	12	04.51372	02	41	49.38	+11	43	21.5	330
465	1983	02	08.74913	10	22	19.14	+06	27	43.9	330
468	1983	12	01.63870	06	16	19.57	+23	57	49.3	330
486	1983	11	27.67971	05	33	10.98	+18	02	16.7	330
487	1983	02	10.51926	08	06	30.84	+23	42	48.4	330
512	1983	02	10.66093	11	24	56.06	+14	57	06.4	330
512	1983	02	14.66853	11	21	48.54	+15	32	13.7	330
514	1983	10	10.52149	23	50	16.68	+05	13	12.1	330
528	1983	12	27.55797	06	01	28.04	+35	20	51.3	330
550	1983	11	25.56514	03	13	06.72	+27	20	25.7	330
550	1983	11	29.55678	03	09	28.45	+26	48	10.6	330
550	1983	12	02.59356	03	06	55.35	+26	23	29.8	330
550	1983	12	08.57895	03	02	32.10	+25	35	29.4	330
558	1983	12	30.63852	07	34	31.30	+14	02	56.4	330
565	1983	11	05.61459	03	41	03.36	+17	51	34.8	330
576	1983	12	02.59356	02	55	57.22	+30	50	52.6	330
576	1983	12	08.57895	02	51	59.09	+30	10	38.5	330
584	1983	02	11.61509	09	13	28.50	+05	00	47.6	330
590	1983	01	08.57784	05	22	12.36	+18	28	33.0	330
595	1983	11	29.55678	02	56	25.53	+30	36	28.8	330
595	1983	12	02.59356	02	53	47.80	+30	32	13.9	330
595	1983	12	08.57895	02	49	05.53	+30	22	18.5	330
600	1983	02	14.57756	09	12	36.33	+16	07	27.8	330
600	1983	02	17.53378	09	10	05.79	+16	29	47.8	330
603	1983	02	08.60746	08	37	44.99	+26	34	44.7	330
606	1983	03	06.53816	10	23	12.60	+05	13	58.5	330
614	1983	02	11.61509	09	16	20.38	+04	19	29.4	330
615	1983	10	29.64030	02	58	03.53	+19	05	55.2	330
615	1983	11	28.53041	02	31	05.71	+17	23	16.3	330
615	1983	12	02.54634	02	28	19.06	+17	10	45.5	330
615	1983	12	08.52409	02	24	51.70	+16	54	30.9	330
621	1983	11	01.61393	02	57	51.01	+15	24	43.0	330
621	1983	11	25.51722	02	38	18.92	+14	17	34.2	330
621	1983	12	01.53662	02	34	17.35	+14	04	36.6	330
629	1983	11	28.63179	05	53	59.18	+21	40	07.9	330
629	1983	12	04.60538	05	49	22.36	+21	59	13.7	330
629	1983	12	09.55047	05	45	05.64	+22	15	25.2	330
635	1983	02	10.56648	08	39	23.38	+05	46	26.1	330
674	1983	10	29.56877	01	52	08.49	+00	18	17.7	330
674	1983	11	26.49638	01	30	17.61	+01	20	12.6	330
680	1983	10	28.63127	02	20	03.75	+12	03	40.8	330
680	1983	11	01.56671	02	16	20.74	+12	01	39.9	330
680	1983	11	05.51598	02	12	40.47	+11	59	43.9	330
680	1983	11	25.46965	01	56	39.70	+11	57	30.0	330
680	1983	11	29.50957	01	54	12.17	+11	59	33.4	330
680	1983	12	02.49912	01	52	35.50	+12	01	49.1	330
687	1983	03	06.53816	10	22	47.25	+08	41	13.9	330
688	1983	03	06.62219	11	56	38.44	+01	21	25.8	330
688	1983	03	06.68469	11	56	35.92	+01	21	56.0	330
716	1983	11	29.60400	04	25	50.90	+09	00	36.1	330
725	1983	02	11.68245	11	08	33.03	+11	42	16.2	330
728	1983	02	08.60746	08	46	00.59	+24	28	55.6	330
745	1983	02	08.65469	09	42	43.46	+19	08	40.8	330
745	1983	02	18.65252	09	35	14.75	+20	22	14.4	330

757	1983	02	10.66093	11	31	23.48	+13	30	44.6	330
757	1983	02	14.66853	11	28	15.94	+13	47	29.3	330
762	1983	02	11.66301	09	46	04.84	+06	28	42.3	330
774	1983	12	30.63852	07	39	35.81	+16	35	27.8	330
776	1983	12	30.68574	07	18	42.87	+34	01	18.0	330
779	1983	01	08.53270	04	55	45.84	+29	02	57.3	330
795	1983	11	26.54291	02	03	24.64	+27	11	44.4	330
797	1983	11	27.63179	04	27	03.49	+20	38	29.3	330
797	1983	12	08.62409	04	15	59.24	+19	54	45.0	330
800	1983	02	08.72135	10	26	41.24	+09	12	59.1	330
810	1983	12	01.63870	06	12	13.74	+19	02	27.5	330
810	1983	12	04.62274	06	09	10.20	+19	02	25.6	330
817	1983	02	14.62339	10	39	10.06	+17	09	52.1	330
850	1983	02	11.56926	09	01	07.53	+22	33	59.0	330
868	1983	02	08.70191	09	55	17.85	+17	06	29.6	330
868	1983	02	18.60391	09	46	28.14	+18	10	02.6	330
868	1983	03	05.53920	09	34	21.73	+19	26	54.9	330
868	1983	03	13.57766	09	29	22.03	+19	55	03.1	330
876	1983	02	14.57756	09	05	01.14	+12	49	36.6	330
885	1983	11	27.67971	05	21	18.82	+18	25	23.3	330
891	1983	12	02.66162	05	25	36.13	+13	10	44.0	330
894	1983	02	18.70044	11	21	20.53	-03	52	55.9	330
899	1983	11	01.51948	02	21	35.83	+26	18	22.6	330
899	1983	11	05.56668	02	18	22.84	+25	38	30.0	330
912	1983	11	01.66046	03	47	36.58	+29	23	34.5	330
912	1983	11	25.56514	03	21	56.10	+30	46	30.0	330
917	1983	01	08.62714	08	41	05.46	+24	00	00.1	330
917	1983	02	10.51926	08	05	23.18	+25	08	43.0	330
919	1983	11	29.63005	05	59	43.93	+16	47	25.1	330
920	1983	11	26.49638	01	34	49.73	+01	49	40.0	330
940	1983	11	28.63179	05	49	25.06	+25	13	52.1	330
940	1983	12	04.60538	05	44	41.58	+25	21	34.1	330
954	1983	11	05.61459	03	29	44.49	+17	23	49.2	330
955	1983	03	06.62219	11	56	51.74	-00	22	55.4	330
976	1983	12	30.73400	07	48	38.42	+13	10	20.0	330
981	1983	11	01.70630	04	25	17.57	+22	18	21.5	330
1007	1983	02	08.72135	10	14	32.89	+09	27	34.3	330
1008	1983	10	10.56767	01	04	49.18	+05	58	25.7	330
1034	1983	10	10.52149	23	52	22.28	+07	47	17.5	330
1048	1983	12	27.55797	05	54	10.86	+37	53	15.2	330
1063	1983	02	14.62339	10	28	18.89	+18	46	36.2	330
1071	1983	11	01.70630	04	20	18.71	+22	01	55.0	330
1072	1983	10	29.61877	02	40	45.42	+16	24	31.7	330
1072	1983	11	12.70968	02	27	58.43	+16	23	41.5	330
1072	1983	11	24.53389	02	18	31.12	+16	23	06.3	330
1072	1983	11	28.53041	02	15	55.27	+16	24	14.9	330
1072	1983	12	02.54634	02	13	42.60	+16	26	20.9	330
1072	1983	12	08.52409	02	11	14.32	+16	31	55.9	330
1082	1983	12	01.63870	06	10	25.54	+21	07	39.5	330
1082	1983	12	04.65052	06	08	06.79	+21	07	54.3	330
1089	1983	11	05.61459	03	22	26.99	+15	20	53.1	330
1091	1983	11	28.63179	05	57	08.59	+23	30	01.0	330
1091	1983	12	04.60538	05	52	50.70	+23	31	19.2	330
1094	1983	02	08.74913	10	16	01.24	+09	46	30.4	330
1095	1983	02	11.61509	08	58	19.66	+06	53	32.9	330
1098	1983	02	11.56926	09	01	09.98	+22	16	12.5	330
1100	1983	11	28.63179	05	41	35.52	+24	27	35.3	330
1100	1983	12	04.60538	05	36	21.98	+24	24	25.8	330
1121	1983	03	06.59510	11	55	11.54	+01	17	15.1	330

1122	1983	11	27.63179	04	35	33.19	+22	46	25.0	330
1122	1983	12	08.62409	04	24	13.02	+23	01	31.2	330
1147	1983	02	14.57756	09	02	06.28	+11	42	59.4	330
1152	1983	02	08.60746	08	27	37.35	+22	24	11.4	330
1153	1983	11	27.63179	04	30	17.22	+25	00	55.2	330
1162	1983	11	28.63179	05	48	30.95	+25	03	44.7	330
1162	1983	12	04.60538	05	44	37.35	+25	04	29.8	330
1171	1983	03	06.68469	12	12	07.28	+02	25	16.4	330
1176	1983	11	01.66046	03	47	27.61	+27	29	50.8	330
1180	1983	12	02.69079	06	51	07.90	+24	01	36.6	330
1180	1983	12	08.71575	06	47	51.15	+24	11	29.1	330
1183	1983	11	01.56671	01	59	17.38	+13	46	07.5	330
1184	1983	11	01.51948	02	11	17.73	+26	24	18.7	330
1184	1983	11	05.56668	02	07	02.14	+26	14	49.4	330
1184	1983	11	23.46307	01	50	56.89	+25	13	50.6	330
1184	1983	11	28.47867	01	47	43.01	+24	54	50.2	330
1184	1983	12	01.48870	01	46	05.61	+24	43	45.6	330
1207	1983	10	10.56767	01	10	09.89	+06	45	04.5	330
1211	1983	02	11.54148	09	10	47.13	+18	38	12.1	330
1219	1983	10	10.61941	01	37	49.88	+06	44	02.4	330
1225	1983	02	08.65469	09	22	32.09	+20	22	32.4	330
1227	1983	11	26.54291	02	08	20.45	+29	57	20.0	330
1238	1983	12	27.55797	06	02	42.30	+36	53	45.4	330
1243	1983	11	01.51948	02	17	27.82	+23	03	40.2	330
1243	1983	11	05.56668	02	14	18.32	+22	33	54.9	330
1243	1983	11	23.46307	02	02	12.24	+20	16	05.6	330
1245	1983	11	27.67971	05	22	22.33	+18	54	24.0	330
1264	1983	11	01.51948	02	14	56.28	+24	39	52.2	330
1264	1983	11	05.56668	02	11	34.35	+23	56	44.6	330
1264	1983	11	23.46307	01	58	53.97	+20	40	55.3	330
1266	1983	02	08.65469	09	26	07.79	+16	20	10.8	330
1266	1983	02	18.65252	09	17	16.76	+16	18	52.9	330
1266	1983	03	05.60310	09	05	43.11	+16	08	36.0	330
1266	1983	03	13.54294	09	01	01.37	+15	57	58.9	330
1266	1983	03	17.57207	08	59	07.08	+15	51	18.7	330
1268	1983	02	08.60746	08	47	58.36	+21	59	08.8	330
1277	1983	10	29.64030	03	16	51.50	+22	02	55.2	330
1281	1983	12	02.63384	05	23	30.20	+15	02	16.9	330
1281	1983	12	08.66922	05	17	39.07	+14	46	16.3	330
1293	1983	10	29.64030	03	05	10.78	+20	19	54.6	330
1306	1983	02	10.56648	08	41	47.48	+03	22	15.6	330
1309	1983	11	01.61393	03	03	23.12	+12	09	30.6	330
1309	1983	11	25.51722	02	45	56.08	+09	35	28.4	330
1309	1983	12	01.53662	02	42	18.54	+09	05	01.1	330
1309	1983	12	04.51372	02	40	44.54	+08	51	46.2	330
1325	1983	11	01.66046	03	49	45.14	+28	23	54.9	330
1325	1983	11	25.56514	03	22	37.89	+28	27	47.2	330
1331	1983	11	05.61459	03	31	03.13	+14	43	44.7	330
1332	1983	03	06.68469	11	56	10.27	+01	38	56.3	330
1336	1983	11	27.67971	05	18	29.64	+21	18	07.2	330
1338	1983	02	11.54148	09	05	24.62	+17	57	52.8	330
1365	1983	12	30.63852	07	37	03.37	+17	25	55.2	330
1366	1983	02	14.62339	10	43	24.38	+19	44	16.2	330
1381	1983	02	08.65469	09	35	07.44	+18	34	29.9	330
1381	1983	02	18.62474	09	24	47.53	+19	05	38.1	330
1394	1983	11	29.63005	05	55	23.79	+19	18	41.6	330
1438	1983	11	27.63179	04	43	00.93	+21	38	40.2	330
1438	1983	12	08.62409	04	33	07.94	+21	11	04.8	330
1449	1983	12	27.60659	07	00	17.57	+20	47	18.4	330

1450	1983	11	28.63179	05	49	53.46	+23	54	31.8	330
1450	1983	12	04.60538	05	44	49.48	+24	11	41.6	330
1450	1983	12	09.55047	05	40	03.87	+24	25	17.5	330
1462	1983	02	08.70191	09	44	34.65	+14	56	06.8	330
1462	1983	02	18.60391	09	36	32.85	+15	34	52.3	330
1462	1983	03	05.53920	09	25	27.43	+16	24	08.0	330
1462	1983	03	05.57531	09	25	25.69	+16	24	14.9	330
1462	1983	03	13.51516	09	20	48.90	+16	42	38.9	330
1462	1983	03	13.57766	09	20	47.11	+16	42	47.6	330
1477	1983	02	08.60746	08	35	05.28	+23	24	28.4	330
1502	1983	11	05.61459	03	39	05.44	+16	29	42.9	330
1537	1983	10	29.61877	02	43	38.21	+17	08	07.9	330
1537	1983	11	12.70968	02	33	09.88	+15	41	36.9	330
1537	1983	11	24.53389	02	26	03.63	+14	35	56.9	330
1537	1983	11	28.53041	02	24	19.63	+14	17	23.6	330
1537	1983	12	02.54634	02	23	00.32	+14	01	12.9	330
1537	1983	12	08.52409	02	21	52.58	+13	42	09.2	330
1541	1983	11	01.66046	03	33	05.16	+24	52	14.8	330
1544	1983	02	11.68245	11	19	44.81	+10	13	02.6	330
1544	1983	02	14.66853	11	17	29.91	+10	29	59.0	330
1564	1983	02	18.70044	11	09	06.77	+00	47	35.0	330
1569	1983	12	01.63870	06	10	53.26	+19	06	10.8	330
1569	1983	12	04.62274	06	08	36.70	+19	14	17.9	330
1578	1983	02	11.54148	08	52	36.62	+18	36	04.8	330
1595	1983	12	04.57760	05	49	14.22	+20	17	38.3	330
1601	1983	11	01.61393	03	08	44.11	+13	17	46.0	330
1601	1983	11	25.51722	02	43	04.30	+12	19	40.1	330
1601	1983	12	01.53662	02	37	53.16	+12	11	51.6	330
1601	1983	12	04.51372	02	35	38.99	+12	09	27.8	330
1603	1983	02	11.68245	11	02	15.28	+12	07	11.7	330
1608	1983	02	18.71849	11	19	08.42	+06	16	58.6	330
1615	1983	02	14.54978	09	05	30.06	+15	58	42.8	330
1620	1983	02	10.66093	11	31	42.59	+15	32	01.1	330
1620	1983	03	06.54858	10	09	28.52	-07	29	54.5	330
1620	1983	03	06.56247	10	09	21.77	-07	31	37.2	330
1620	1983	03	06.57462	10	09	15.68	-07	33	09.2	330
1633	1983	11	05.65973	03	57	16.93	+17	09	27.8	330
1633	1983	11	28.57832	03	38	47.51	+16	15	32.1	330
1633	1983	12	01.58975	03	36	21.12	+16	08	52.3	330
1633	1983	12	04.55955	03	34	01.23	+16	02	40.7	330
1633	1983	12	09.50117	03	30	20.63	+15	53	19.5	330
1641	1983	11	01.51948	02	02	56.79	+26	20	08.9	330
1641	1983	11	05.56668	01	59	19.49	+26	04	48.1	330
1641	1983	11	23.46307	01	46	00.51	+24	42	51.6	330
1641	1983	11	28.47867	01	43	26.10	+24	19	08.5	330
1641	1983	12	01.48870	01	42	10.93	+24	05	27.6	330
1643	1983	12	27.60659	06	57	54.53	+23	40	58.4	330
1650	1983	11	01.70630	04	13	18.07	+18	43	40.1	330
1650	1983	11	05.65973	04	10	00.01	+18	30	39.1	330
1650	1983	11	28.57832	03	47	28.82	+17	06	32.9	330
1650	1983	12	01.58975	03	44	30.43	+16	55	39.3	330
1650	1983	12	04.55955	03	41	40.40	+16	45	23.2	330
1650	1983	12	09.50117	03	37	13.84	+16	29	18.0	330
1674	1983	02	08.70191	09	47	56.74	+16	25	22.7	330
1674	1983	02	18.60391	09	39	59.03	+17	11	09.0	330
1674	1983	03	05.53920	09	29	15.44	+18	05	56.5	330
1674	1983	03	13.57766	09	24	55.26	+18	25	12.0	330
1675	1983	10	29.61877	02	36	33.96	+17	30	40.3	330
1675	1983	11	24.53389	02	08	47.22	+17	20	50.8	330

1692	1983	10	28.53475	01	48	07.42	+10	20	42.8	330
1693	1983	11	01.70630	04	24	37.04	+17	54	36.6	330
1698	1983	12	02.69079	06	56	11.62	+24	48	26.7	330
1698	1983	12	08.71575	06	52	38.04	+24	56	44.5	330
1703	1983	12	04.51372	02	37	58.41	+08	27	03.1	330
1723	1983	03	13.54294	09	20	23.45	+15	17	33.8	330
1723	1983	03	17.57207	09	18	47.57	+15	38	57.3	330
1753	1983	11	01.67852	04	17	07.05	+21	08	41.4	330
1753	1983	11	05.65973	04	14	08.05	+21	12	35.8	330
1760	1983	02	10.56648	08	37	27.25	+05	52	35.6	330
1773	1983	02	10.66093	11	22	01.15	+13	38	36.5	330
1773	1983	02	14.66853	11	19	26.47	+14	05	22.8	330
1785	1983	11	27.63179	04	35	36.40	+25	53	53.0	330
1789	1983	12	04.60538	05	54	40.38	+22	19	05.2	330
1793	1983	11	27.65193	05	23	33.81	+21	56	27.1	330
1808	1983	10	29.61877	02	51	23.50	+18	12	18.0	330
1808	1983	11	12.70968	02	38	36.80	+17	30	42.0	330
1808	1983	11	24.53389	02	28	59.80	+16	54	13.6	330
1808	1983	11	28.53041	02	26	21.62	+16	43	30.0	330
1808	1983	12	02.54634	02	24	07.16	+16	34	06.7	330
1808	1983	12	08.52409	02	21	39.48	+16	23	26.6	330
1843	1983	11	01.51948	02	16	32.71	+24	09	32.0	330
1843	1983	11	05.53821	02	12	47.69	+23	40	48.0	330
1843	1983	11	23.46307	01	58	55.02	+21	25	15.6	330
1843	1983	11	28.47867	01	56	13.49	+20	49	09.0	330
1843	1983	12	01.48870	01	54	54.78	+20	28	37.1	330
1844	1983	12	02.63384	05	34	51.96	+17	15	06.6	330
1844	1983	12	08.66922	05	29	32.20	+17	28	04.1	330
1845	1983	12	30.73400	07	50	05.85	+12	15	04.4	330
1847	1983	01	08.57784	05	16	48.78	+17	59	32.8	330
1848	1983	12	02.69079	06	42	16.82	+24	55	19.3	330
1848	1983	12	08.71575	06	37	51.41	+25	00	19.6	330
1851	1983	10	28.61391	02	05	37.33	+13	11	49.7	330
1851	1983	11	01.56671	02	02	24.45	+12	57	45.0	330
1851	1983	11	05.49862	01	59	18.98	+12	44	01.1	330
1857	1983	02	18.70044	11	25	41.36	-03	53	30.9	330
1889	1983	12	27.55797	06	07	10.70	+35	48	32.7	330
1904	1983	11	29.63005	05	54	30.83	+14	46	21.6	330
1910	1983	11	29.57623	04	41	58.25	+10	42	28.3	330
1939	1983	02	08.70191	09	56	05.86	+13	57	46.0	330
1939	1983	02	18.60391	09	48	06.82	+14	39	02.3	330
1939	1983	03	05.53920	09	36	38.73	+15	34	00.4	330
1939	1983	03	13.57766	09	31	34.18	+15	56	17.4	330
1959	1983	11	01.51948	02	02	20.71	+23	24	45.4	330
1959	1983	11	05.56668	01	58	18.83	+22	54	28.0	330
1990	1983	10	28.61391	02	08	36.42	+10	54	59.2	330
1990	1983	11	01.53894	02	04	35.66	+10	27	42.2	330
2013	1983	01	08.59936	08	50	03.21	+22	47	11.8	330
2016	1983	11	05.58682	03	29	24.12	+19	45	27.8	330
2034	1983	02	10.63315	11	33	55.86	+14	26	06.9	330
2034	1983	02	14.66853	11	30	30.21	+14	40	27.8	330
2056	1983	01	08.57784	05	29	21.25	+18	02	34.7	330
2057	1983	10	29.64030	03	12	34.58	+19	08	43.5	330
2065	1983	01	08.59936	08	33	13.46	+24	16	10.5	330
2067	1983	03	06.53816	10	29	22.86	+10	05	25.3	330
2090	1983	02	08.67413	09	55	40.07	+17	38	59.4	330
2111	1983	03	06.53816	10	33	26.66	+06	55	51.5	330
2123	1983	10	10.59163	01	24	14.77	+10	28	54.1	330
2153	1983	12	27.60659	06	47	19.40	+24	29	26.4	330

2197	1983	02	08.65469	09	23	52.94	+19	19	27.1	330
2197	1983	02	18.65252	09	15	41.30	+19	55	31.4	330
2197	1983	03	05.60310	09	05	38.36	+20	30	44.9	330
2209	1983	11	05.65973	04	01	56.58	+16	32	54.9	330
2209	1983	11	28.57832	03	42	01.00	+15	25	49.1	330
2209	1983	12	01.58975	03	39	24.30	+15	18	04.9	330
2209	1983	12	04.55955	03	36	56.14	+15	11	07.0	330
2209	1983	12	09.50117	03	33	06.59	+15	01	02.2	330
2217	1983	11	28.57832	03	51	53.08	+17	15	56.9	330
2217	1983	12	01.58975	03	49	26.48	+17	09	25.6	330
2222	1983	12	02.69079	06	41	31.22	+22	40	24.0	330
2222	1983	12	08.71575	06	37	38.72	+22	50	11.7	330
2264	1983	10	10.56767	01	11	09.58	+07	43	59.7	330
2271	1983	02	10.58662	10	49	29.42	+09	07	23.0	330
2307	1983	02	11.61509	09	12	57.96	+05	01	25.6	330
2354	1983	10	28.63127	02	19	06.96	+10	13	51.8	330
2354	1983	11	01.56671	02	15	45.91	+09	52	12.2	330
2354	1983	11	05.49862	02	12	28.70	+09	31	27.4	330
2367	1983	11	28.55054	03	31	34.85	+16	21	33.7	330
2367	1983	12	04.55955	03	25	31.62	+15	57	02.1	330
2371	1983	12	04.57760	05	46	34.96	+22	08	19.6	330
2372	1983	11	27.67971	05	36	57.84	+21	46	41.5	330
2426	1983	11	01.67852	04	13	44.61	+21	08	48.5	330
2426	1983	11	05.65973	04	10	53.75	+20	53	29.5	330
2426	1983	11	28.55054	03	51	48.73	+19	12	26.2	330
2426	1983	12	01.58975	03	49	13.52	+18	58	24.6	330
2426	1983	12	04.55955	03	46	45.92	+18	44	50.0	330
2439	1983	10	28.63127	02	14	41.12	+13	04	08.4	330
2439	1983	11	01.56671	02	11	29.68	+12	47	46.7	330
2439	1983	11	05.51598	02	08	18.91	+12	31	22.1	330
2439	1983	11	25.43840	01	54	49.72	+11	20	55.4	330
2470	1983	02	08.60746	08	30	34.50	+22	39	54.2	330
2507	1983	02	08.70191	09	44	43.55	+17	00	36.3	330
2507	1983	02	18.60391	09	36	23.28	+18	18	38.2	330
2507	1983	03	05.53920	09	24	56.73	+19	59	20.8	330
2507	1983	03	05.60310	09	24	54.08	+19	59	44.6	330
2507	1983	03	13.57766	09	20	17.06	+20	40	14.0	330
2541	1983	02	08.67413	09	58	47.95	+17	01	58.9	330
2559	1983	02	18.71849	11	26	13.55	+05	42	55.4	330
2592	1983	02	18.74627	11	21	30.67	+02	43	17.2	330
2717	1983	12	02.63384	05	38	47.42	+17	42	03.3	330
2717	1983	12	08.66922	05	31	41.64	+17	36	18.4	330
2717	1984	01	03.51491	05	03	22.39	+17	31	00.6	330
2717	1984	01	09.67597	04	58	44.67	+17	35	36.9	330
2757	1983	12	04.60538	05	49	21.89	+24	28	03.9	330
2781	1983	12	27.60659	06	53	18.49	+20	15	08.8	330
2847	1983	11	27.63179	04	29	01.07	+21	45	57.0	330
2847	1983	12	08.59631	04	16	10.53	+21	04	17.0	330
2886	1983	11	01.70630	04	04	27.35	+18	43	00.2	330
2886	1983	11	05.65973	04	01	32.44	+18	34	57.3	330
2886	1983	11	28.57832	03	39	26.50	+17	37	35.1	330
2886	1983	12	01.58975	03	36	31.04	+17	30	24.9	330
2886	1983	12	04.55955	03	33	47.04	+17	23	53.5	330
2892	1983	02	10.51926	08	20	52.53	+28	12	06.3	330
2967	1983	11	01.66046	03	28	54.00	+27	53	29.6	330
2967	1983	11	29.53942	03	00	01.90	+28	53	46.8	330
2967	1983	12	02.59356	02	57	11.81	+28	55	12.2	330
2967	1983	12	08.57895	02	52	13.17	+28	56	07.0	330
3003	1983	12	27.60659	06	53	01.70	+21	38	23.7	330

1979	QA10		1983	11	29.53942	02	54	43.66	+27 25 52.1	330
1979	QA10		1983	12	02.59356	02	52	00.29	+27 13 33.8	330
1979	QA10		1983	12	08.57895	02	47	29.25	+26 48 57.4	330
1983	AG2		1983	02	18.65252	09	33	17.57	+20 17 24.7	330
1983	AG2		1983	03	05.57531	09	12	58.40	+16 18 16.9	330
1983	AG2		1983	03	13.51516	09	06	38.91	+14 21 05.4	330
1983	BM		1983	02	08.70191	10	00	59.38	+15 27 43.4	330
1983	BM		1983	02	18.60391	09	50	25.26	+15 28 52.0	330
1983	BM		1983	03	05.53920	09	35	25.24	+15 18 34.4	330
1983	CS2		1983	02	10.58662	10	50	13.70	+09 11 04.6	330
1983	CU3	*	1983	02	08.70191	09	47	51.01	+13 36 12.5	330
1983	CV3	*	1983	02	08.72135	10	18	22.16	+05 27 46.8	330
1983	CW3	*	1983	02	10.56648	08	48	45.62	+05 16 54.5	330
1983	CX3	*	1983	02	10.58662	10	52	47.24	+04 17 11.8	330
1983	CY3	*	1983	02	14.66853	11	26	47.10	+13 51 35.2	330
1983	DU	*	1983	02	18.67266	11	20	06.07	-02 13 40.0	330
1983	EC1	*	1983	03	06.62219	11	55	22.44	-00 19 38.7	330
1983	VE		1983	10	29.61877	02	44	32.24	+17 07 00.0	330
1983	VE		1983	11	12.70968	02	34	08.57	+15 28 14.2	330
1983	VE		1983	11	28.53041	02	25	25.29	+13 50 08.2	330
1983	VE		1983	12	02.54634	02	24	16.10	+13 31 31.0	330
1983	VE		1983	12	08.52409	02	23	32.86	+13 10 05.4	330
1983	VC7		1983	10	28.63127	02	06	37.97	+12 23 34.1	330
1983	VC7		1983	11	01.56671	02	02	45.08	+12 16 58.2	330
1983	VC7		1983	11	05.51598	01	59	02.89	+12 10 51.5	330
1983	VD7		1983	10	28.63127	02	14	51.39	+12 54 11.6	330
1983	VD7		1983	11	01.56671	02	10	11.07	+13 08 22.2	330
1983	VF7		1983	10	28.63127	02	14	01.91	+13 19 12.4	330
1983	VF7		1983	11	01.53894	02	09	36.88	+13 32 29.6	330
1983	VG7		1983	10	28.63127	02	13	43.30	+11 12 19.8	330
1983	VG7		1983	11	01.56671	02	09	34.37	+11 09 32.5	330
1983	VG7		1983	11	05.51598	02	05	29.40	+11 07 22.6	330
1983	VM7		1983	10	28.61391	02	21	04.71	+10 01 11.0	330
1983	VM7		1983	11	01.56671	02	17	01.69	+09 52 27.4	330
1983	VO7	*	1983	11	01.51948	02	03	04.74	+24 56 54.0	330
1983	VO7		1983	11	05.56668	01	58	39.53	+24 45 12.5	330
1983	VO7		1983	11	23.46307	01	44	14.54	+23 37 07.5	330
1983	VP7	*	1983	11	01.51948	02	05	03.85	+25 58 05.8	330
1983	VP7		1983	11	05.56668	02	00	29.37	+25 52 32.7	330
1983	VP7		1983	11	23.46307	01	43	56.94	+25 08 12.5	330
1983	VP7		1983	12	01.48870	01	39	21.42	+24 45 48.1	330
1983	VQ7	*	1983	11	01.61393	02	59	52.39	+12 50 36.7	330
1983	WL		1983	11	27.60402	04	27	00.21	+21 22 06.6	330
1983	WV		1983	11	27.63179	04	42	50.82	+21 51 01.4	330
1983	WV		1983	12	08.59631	04	32	57.31	+21 44 34.0	330
1983	WM1	*	1983	11	26.49638	01	43	58.31	+03 03 02.1	330
1983	WN1	*	1983	11	28.47867	01	40	50.70	+24 53 57.9	330
1983	XF		1983	12	08.62409	04	18	38.74	+21 07 58.5	330
1983	XE1	*	1983	12	01.63870	06	06	10.71	+21 55 59.1	330
1983	XE1		1983	12	04.65052	06	03	01.26	+22 08 26.5	330
1983	XF1	*	1983	12	08.45047	01	39	38.85	+04 32 38.2	330
1983	XG1	*	1983	12	09.55047	05	48	50.05	+23 34 49.0	330

OBSERVATIONS MADE AT GEISEI BY T. SEKI.
Plates taken with a 0.40-m reflector. Copied from Nihondaira
Obs. Circ. No. 1511. Contact: T. Seki, Kamimachi 2-9-35, Kochi, Japan.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
1983 WB	1985 02	13.70660	11 37 58.18	+17 41 41.2	15.5	372
1983 WB	1985 03	12.47986	11 18 01.26	+20 11 31.6	15.5	372

OBSERVATIONS MADE WITH THE 1.2-M U.K. SCHMIDT TELESCOPE AT SIDING SPRING.

Plates taken by J. Dawe, J. Barrow, M. Hartley, D. Morgan, K. Russell and A. Savage in the course of the U.K.-Caltech Asteroid Survey under the direction of E. Helin and E. Shoemaker. Measured by S. J. Bus using a PDS microdensitometer. Contact: S. J. Bus, Lowell Observatory, P.O. Box 1269, Flagstaff, AZ 86002, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
44	1981 02	02.70943	12 08 26.02	+02 17 46.4			413
44	1981 02	13.74138	12 06 28.04	+03 04 49.8			413
123	1981 02	12.60906	12 43 15.17	-11 58 34.7			413
140	1981 02	12.70048	12 43 58.40	-00 22 24.2			413
140	1981 02	13.69290	12 43 46.88	-00 19 35.5			413
150	1981 02	12.65408	12 31 16.98	-04 52 42.0			413
150	1981 02	12.74480	12 31 15.32	-04 52 32.8			413
150	1981 02	13.69290	12 30 58.84	-04 50 44.0			413
215	1981 02	12.74480	12 44 18.31	-03 34 49.0			413
215	1981 02	13.69290	12 44 07.33	-03 33 43.6			413
217	1981 02	12.70048	12 43 31.34	-00 47 28.2			413
217	1981 02	13.69290	12 43 18.84	-00 43 06.1			413
225	1981 02	09.60577	12 16 30.78	-11 48 38.2			413
225	1981 02	14.67563	12 15 07.63	-11 33 42.9			413
272	1981 02	12.70048	12 43 57.26	-00 11 59.3			413
272	1981 02	13.69290	12 43 45.12	-00 10 30.4			413
279	1981 02	09.68922	12 25 42.36	+00 12 50.8			413
279	1981 02	12.70048	12 24 58.98	+00 18 56.9			413
279	1981 02	13.69290	12 24 43.03	+00 21 07.4			413
331	1981 02	12.70048	12 38 44.07	-00 30 35.4			413
331	1981 02	13.69290	12 38 26.70	-00 29 05.1			413
358	1981 02	02.70943	11 56 01.16	-00 12 44.8			413
435	1981 02	09.68922	12 28 28.64	-01 42 11.9			413
435	1981 02	12.70048	12 27 31.17	-01 36 13.3			413
435	1981 02	13.69290	12 27 09.27	-01 33 58.0			413
565	1981 02	04.61463	12 34 06.93	-17 55 29.5			413
565	1981 02	08.60163	12 35 05.67	-18 10 25.6			413
569	1981 02	09.68922	12 15 53.29	-03 13 06.2			413
569	1981 02	12.65408	12 14 51.46	-03 08 49.9			413
569	1981 02	13.64027	12 14 27.81	-03 07 02.8			413
658	1981 02	09.64744	12 11 30.14	-01 11 38.5			413
658	1981 02	09.68922	12 11 29.40	-01 11 34.4			413
658	1981 02	13.64027	12 10 01.85	-01 03 53.6			413
699	1981 02	02.62286	11 59 11.20	-19 00 36.6			413
797	1981 02	12.60906	12 41 14.72	-10 40 54.0			413
837	1981 02	12.65408	12 28 13.07	-08 06 42.1			413
837	1981 02	12.74480	12 28 11.87	-08 06 30.6			413
959	1981 02	09.68922	12 25 21.56	+02 49 56.0			413
969	1981 02	09.64744	12 08 25.71	-03 58 08.1			413
969	1981 02	13.64027	12 06 32.73	-03 50 28.0			413
987	1981 02	02.66718	12 10 08.48	-07 02 27.9			413
987	1981 02	14.67563	12 05 45.46	-07 06 05.3			413
990	1981 02	12.65408	12 30 44.51	-03 48 38.6			413
990	1981 02	12.74480	12 30 42.29	-03 48 35.9			413
990	1981 02	13.69290	12 30 19.19	-03 48 07.3			413
991	1981 02	09.68922	12 27 04.94	-00 11 03.1			413
991	1981 02	12.70048	12 26 16.48	-00 04 18.7			413
991	1981 02	13.69290	12 25 58.20	-00 01 52.2			413
1018	1981 02	09.68922	12 10 40.72	+00 37 41.1			413
1018	1981 02	13.74138	12 08 41.27	+00 45 10.2			413
1086	1981 02	02.66718	12 05 08.01	-07 40 46.3			413
1086	1981 02	14.67563	12 01 01.31	-08 00 51.7			413

1242	1981	02	09.68922	12	16	31.96	-02	10	47.8	413
1242	1981	02	13.64027	12	14	39.19	-02	10	11.4	413
1258	1981	02	02.66718	11	49	44.36	-07	00	35.8	413
1280	1981	02	09.64744	11	47	21.52	-06	05	09.5	413
1374	1981	02	12.65408	12	22	51.10	-08	44	27.2	413
1374	1981	02	12.74480	12	22	48.37	-08	44	26.3	413
1394	1981	02	02.70943	11	49	39.91	-00	04	28.4	413
1399	1981	02	09.68922	12	24	00.52	-01	05	36.8	413
1399	1981	02	12.70048	12	23	04.57	-00	50	28.9	413
1399	1981	02	13.69290	12	22	42.93	-00	45	06.4	413
1547	1981	02	08.60163	12	45	58.80	-20	44	52.8	413
1554	1981	02	12.60906	12	43	49.92	-14	41	36.1	413
1561	1981	02	12.65408	12	27	43.09	-08	13	45.0	413
1561	1981	02	12.74480	12	27	41.88	-08	13	42.0	413
1640	1981	02	02.70943	12	12	06.93	-00	10	05.6	413
1640	1981	02	13.74138	12	06	49.22	+00	09	35.8	413
1695	1981	02	08.60163	12	38	26.01	-17	19	08.6	413
1718	1981	02	12.65408	12	21	16.79	-07	43	37.4	413
1718	1981	02	12.74480	12	21	14.17	-07	43	24.5	413
1742	1981	02	02.70943	11	50	07.75	+01	51	12.4	413
1767	1981	02	12.65408	12	23	03.44	-06	32	01.0	413
1767	1981	02	12.74480	12	23	01.79	-06	31	44.6	413
1769	1981	02	02.70943	11	59	36.99	-01	00	00.1	413
1769	1981	02	09.64744	11	56	57.27	-00	49	13.7	413
1769	1981	02	13.64027	11	54	48.59	-00	39	03.2	413
1769	1981	02	13.74138	11	54	45.19	-00	38	39.5	413
1802	1981	02	02.70943	12	07	40.42	+00	47	47.5	413
1802	1981	02	13.74138	12	04	38.65	+01	21	39.0	413
1824	1981	02	02.70943	12	09	19.98	+00	20	00.2	413
1824	1981	02	13.74138	12	06	02.51	+00	39	13.4	413
1892	1981	02	02.66718	11	57	29.12	-10	57	44.6	413
1940	1981	02	02.66718	11	54	26.28	-08	48	21.1	413
1944	1981	02	09.64744	12	05	56.26	-06	21	38.4	413
1944	1981	02	13.64027	12	04	08.39	-06	11	50.6	413
1953	1981	02	02.70943	12	08	38.07	+02	29	05.8	413
1953	1981	02	13.74138	12	04	48.33	+03	02	02.5	413
2021	1981	02	09.68922	12	26	13.74	-00	27	40.0	413
2021	1981	02	12.70048	12	25	26.53	-00	15	00.6	413
2021	1981	02	13.69290	12	25	07.78	-00	10	30.2	413
2031	1981	02	13.69290	12	47	10.67	-04	10	12.4	413
2264	1981	02	09.68922	12	29	12.28	-03	20	42.2	413
2264	1981	02	12.65408	12	28	26.91	-03	15	58.2	413
2264	1981	02	12.70048	12	28	26.17	-03	15	52.6	413
2264	1981	02	12.74480	12	28	25.25	-03	15	46.2	413
2264	1981	02	13.69290	12	28	08.72	-03	14	02.3	413
2296	1981	02	09.68922	12	15	34.19	-00	07	37.3	413
2296	1981	02	13.74138	12	14	33.16	-00	00	29.9	413
2354	1981	02	12.74480	12	35	53.81	-03	50	39.1	413
2354	1981	02	13.69290	12	35	39.34	-03	48	15.7	413
2432	1981	02	12.70048	12	41	55.98	-01	27	59.7	413
2432	1981	02	13.69290	12	41	39.90	-01	28	26.6	413
2452	1981	02	12.70048	12	42	18.71	-02	13	01.8	413
2452	1981	02	13.69290	12	42	05.12	-02	15	02.5	413
2461	1981	02	02.70943	12	05	06.57	+02	10	57.0	413
2461	1981	02	13.74138	12	01	24.68	+02	44	37.1	413
2518	1981	02	12.65408	12	26	29.13	-08	50	46.3	413
2518	1981	02	12.74480	12	26	29.03	-08	50	44.8	413
2547	1981	02	12.74480	12	35	26.25	-04	53	30.3	413
2547	1981	02	13.69290	12	35	06.48	-04	53	41.5	413

2627	1981	02	12.70048	12	43	47.57	-01	25	14.4	413
2627	1981	02	13.69290	12	43	33.18	-01	22	39.5	413
2662	1981	02	09.68922	12	14	52.02	-02	18	53.2	413
2763	1981	02	12.74480	12	41	11.81	-08	21	49.7	413
2771	1981	02	09.60577	12	14	00.32	-12	25	09.4	413
2771	1981	02	14.67563	12	12	19.32	-12	15	13.4	413
2780	1981	02	09.60577	12	32	10.90	-12	39	02.5	413
2780	1981	02	12.60906	12	32	20.86	-12	54	56.0	413
2789	1981	02	09.64744	12	04	37.19	-06	25	02.6	413
2789	1981	02	13.64027	12	02	41.60	-06	18	12.9	413
2798	1981	02	02.66718	12	02	17.43	-06	54	00.5	413
2798	1981	02	09.64744	12	00	29.87	-06	48	52.3	413
2798	1981	02	13.64027	11	58	53.54	-06	41	14.4	413
2799	1981	02	02.66718	12	10	53.78	-08	28	44.9	413
2799	1981	02	14.67563	12	07	22.42	-08	46	22.0	413
2808	1981	02	02.66718	12	02	01.36	-07	30	06.8	413
2808	1981	02	14.67563	11	57	14.31	-07	47	53.7	413
2823	1981	02	12.60906	12	32	20.80	-09	08	30.5	413
2823	1981	02	12.74480	12	32	18.55	-09	08	28.8	413
2884	1981	02	09.68922	12	13	25.81	+00	42	13.4	413
2884	1981	02	13.74138	12	11	53.13	+00	52	59.2	413
2885	1981	02	09.64744	12	07	47.78	-00	40	01.7	413
2885	1981	02	13.64027	12	05	40.10	-00	30	37.5	413
2885	1981	02	13.74138	12	05	36.43	-00	30	21.5	413
2886	1981	02	09.68922	12	17	57.90	-00	02	00.8	413
2886	1981	02	13.74138	12	16	35.17	+00	10	47.5	413
2919	1981	02	02.70943	12	01	15.31	+00	02	52.2	413
2919	1981	02	13.74138	11	57	54.31	+00	29	11.8	413
2921	1981	02	02.70943	11	59	22.04	+00	43	37.9	413
2921	1981	02	13.74138	11	55	26.57	+01	13	23.5	413
2923	1981	02	09.68922	12	18	47.18	-01	39	01.0	413
2923	1981	02	13.64027	12	18	02.86	-01	40	55.9	413
2928	1981	02	02.66718	12	01	31.86	-08	45	13.3	413
2928	1981	02	14.67563	11	56	56.36	-09	12	45.1	413
2940	1981	02	02.66718	12	06	05.45	-09	22	17.9	413
2940	1981	02	14.67563	12	01	10.46	-09	20	48.8	413
2944	1981	02	12.74480	12	35	23.93	-08	19	10.3	413
2948	1981	02	02.66718	12	08	30.39	-12	17	34.5	413
2948	1981	02	14.67563	12	05	49.78	-12	00	44.3	413
2952	1981	02	12.65408	12	27	57.46	-05	36	49.2	413
2952	1981	02	12.74480	12	27	55.20	-05	36	45.8	413
2964	1981	02	12.65408	12	13	09.29	-09	24	34.9	413
2964	1981	02	14.67563	12	12	01.25	-09	28	23.5	413
2968	1981	02	02.62286	12	08	49.81	-13	55	49.2	413
2968	1981	02	09.56416	12	06	52.02	-14	18	40.6	413
2969	1981	02	12.74480	12	37	46.31	-04	20	05.1	413
2969	1981	02	13.69290	12	37	35.63	-04	18	28.3	413
2980	1981	02	09.64744	11	55	04.87	-00	52	39.2	413
2981	1981	02	02.70943	12	04	54.04	-00	55	29.5	413
2981	1981	02	09.64744	12	03	12.52	-00	43	48.0	413
2981	1981	02	13.64027	12	01	48.10	-00	34	11.6	413
2981	1981	02	13.74138	12	01	45.63	-00	33	55.4	413
2985	1981	02	13.69290	12	47	14.91	-02	44	02.7	413
2990	1981	02	09.68922	12	29	30.86	-03	24	46.6	413
2990	1981	02	12.65408	12	29	17.01	-03	18	48.3	413
2990	1981	02	12.70048	12	29	16.66	-03	18	41.7	413
2990	1981	02	12.74480	12	29	16.15	-03	18	33.9	413
2990	1981	02	13.69290	12	29	08.35	-03	16	14.9	413
2993	1981	02	09.60577	12	27	54.61	-15	13	24.1	413

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2997		1981	02	02.70943	11	50	43.34	+03	01	55.8	413
2998		1981	02	09.68922	12	11	12.03	-00	13	06.8	413
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3027		1981	02	12.74480	12	40	33.19	-05	07	40.2	413
3027		1981	02	13.69290	12	40	17.51	-05	05	48.0	413
3029		1981	02	09.64744	11	58	17.47	-02	55	23.1	413
3029		1981	02	13.64027	11	56	54.91	-02	59	03.5	413
3030		1981	02	12.74480	12	38	25.07	-08	55	20.8	413
3039		1981	02	09.60577	12	27	45.45	-10	15	53.1	413
3039		1981	02	12.60906	12	27	39.27	-10	05	15.3	413
3042		1981	02	02.66718	12	10	36.94	-07	42	48.3	413
3042		1981	02	14.67563	12	07	39.40	-07	39	59.7	413
3058		1981	02	12.65408	12	28	35.13	-06	31	29.2	413
3058		1981	02	12.74480	12	28	33.32	-06	31	18.3	413
3059		1981	02	09.64744	12	04	07.16	-01	33	16.7	413
3059		1981	02	13.64027	12	02	24.58	-01	18	55.6	413
3075		1981	02	12.60906	12	36	04.08	-09	27	40.6	413
3075		1981	02	12.74480	12	36	01.21	-09	28	06.6	413
3105		1981	02	12.70048	12	41	50.45	+01	02	40.7	413
3105		1981	02	13.69290	12	41	36.46	+01	07	41.5	413
3122		1981	02	09.60577	12	14	40.38	-11	09	53.0	413
3135		1981	02	02.66718	12	07	52.67	-07	05	06.0	413
3135		1981	02	14.67563	12	03	07.55	-07	21	57.9	413
3189		1981	02	09.68922	12	19	43.47	-02	43	15.4	413
3189		1981	02	13.64027	12	18	28.83	-02	29	44.3	413
3190		1981	02	09.68922	12	21	23.68	-01	03	58.2	413
3190		1981	02	12.70048	12	20	15.16	-01	02	30.4	413
3190		1981	02	13.64027	12	19	51.48	-01	01	52.3	413
3202		1981	02	09.60577	12	23	32.49	-09	27	19.6	413
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3207		1981	02	09.68922	12	23	37.79	-02	15	47.2	413
3207		1981	02	12.70048	12	22	51.56	-02	08	44.2	413
3207		1981	02	13.69290	12	22	33.99	-02	06	08.7	413
3211		1981	02	12.65408	12	24	40.58	-07	19	04.0	413
3211		1981	02	12.74480	12	24	37.86	-07	19	10.8	413
3213		1981	02	12.74480	12	43	04.81	-03	53	45.7	413
3213		1981	02	13.69290	12	42	50.89	-03	52	14.7	413
3234		1981	02	09.68922	12	14	53.05	-00	15	21.0	413
3234		1981	02	13.74138	12	13	22.18	-00	04	26.3	413
3245		1981	02	02.70943	12	00	32.13	-00	01	37.6	413
3245		1981	02	13.74138	11	56	33.42	+00	23	15.0	413
A923	NB	1981	02	08.60163	12	38	35.58	-21	03	01.3	413
1971	OV	1981	02	12.74480	12	36	03.74	-05	44	22.8	413
1978	PS4	1981	02	09.60577	12	17	37.47	-10	21	29.3	413
1978	PS4	1981	02	14.67563	12	15	18.28	-10	31	56.5	413
1979	SY9	1981	02	02.70943	11	52	23.20	+01	31	28.8	413
1981	DJ	1981	02	09.60577	12	13	52.35	-12	19	09.5	413
1981	DJ	1981	02	14.67563	12	12	35.80	-12	18	33.7	413
1981	DK	1981	02	09.56416	12	16	03.77	-14	27	32.0	413
1981	DK	1981	02	09.60577	12	16	03.11	-14	27	35.9	413
1981	DL	1981	02	09.56416	12	15	51.88	-13	17	33.2	413
1981	DL	1981	02	09.60577	12	15	51.46	-13	17	33.6	413
1981	DM	1981	02	09.56416	12	16	35.71	-12	43	00.4	413
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1981 DO	1981 02	09.56416	12	15	55.60	-15	47	50.9	413
1981 DP	1981 02	09.56416	12	15	27.11	-13	47	01.6	413
1981 DP	1981 02	09.60577	12	15	27.10	-13	47	09.1	413
1981 DQ	1981 02	04.61463	12	18	27.49	-16	47	37.7	413
1981 DQ	1981 02	09.56416	12	17	46.23	-16	52	17.6	413
1981 DR	1981 02	09.56416	12	19	55.33	-14	30	31.1	413
1981 DR	1981 02	09.60577	12	19	54.79	-14	30	42.1	413
1981 DS	1981 02	09.56416	12	18	12.50	-13	59	33.9	413
1981 DS	1981 02	09.60577	12	18	12.02	-13	59	34.5	413
1981 DT	1981 02	09.60577	12	21	25.62	-11	57	02.5	413
1981 DT	1981 02	12.60906	12	20	22.51	-12	11	17.9	413
1981 DU	1981 02	09.60577	12	20	12.66	-12	28	47.4	413
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1981 DV	1981 02	09.56416	12	18	42.73	-15	02	47.6	413
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1981 DW	1981 02	09.60577	12	20	13.19	-12	38	01.3	413
1981 DX	1981 02	09.60577	12	20	37.61	-12	15	13.3	413
1981 DX	1981 02	12.60906	12	19	50.33	-12	18	09.5	413
1981 DY	1981 02	09.60577	12	20	24.97	-10	58	54.9	413
1981 DY	1981 02	12.60906	12	19	47.95	-11	06	21.6	413
1981 DY	1981 02	14.67563	12	19	14.36	-11	10	36.0	413
1981 DZ	1981 02	09.56416	12	19	29.08	-15	10	26.9	413
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1981 DA1	1981 02	04.61463	12	20	54.99	-17	03	18.9	413
1981 DA1	1981 02	08.60163	12	20	47.02	-17	14	48.5	413
1981 DA1	1981 02	09.56416	12	20	41.55	-17	17	05.2	413
1981 DB1	1981 02	09.60577	12	22	24.08	-12	34	40.4	413
1981 DB1	1981 02	12.60906	12	21	33.44	-12	30	22.3	413
1981 DC1	1981 02	09.56416	12	20	38.26	-13	32	24.6	413
1981 DC1	1981 02	09.60577	12	20	38.21	-13	32	24.8	413
1981 DC1	1981 02	12.60906	12	20	21.08	-13	31	32.5	413
1981 DD1	1981 02	09.60577	12	27	15.47	-11	05	42.3	413
1981 DD1	1981 02	12.60906	12	26	06.05	-11	25	04.6	413
1981 DE1	1981 02	09.60577	12	25	53.74	-12	57	30.2	413
1981 DE1	1981 02	12.60906	12	25	07.34	-13	03	37.7	413
1981 DF1	1981 02	09.60577	12	25	52.26	-13	07	44.6	413
1981 DF1	1981 02	12.60906	12	24	57.94	-13	18	36.3	413
1981 DH1	1981 02	09.60577	12	25	58.30	-12	23	55.9	413
1981 DH1	1981 02	12.60906	12	25	00.78	-12	25	36.1	413
1981 DJ1	1981 02	09.60577	12	24	04.43	-12	02	47.8	413
1981 DJ1	1981 02	12.60906	12	23	45.51	-12	14	32.9	413
1981 DK1	1981 02	09.60577	12	25	22.61	-14	00	48.3	413
1981 DK1	1981 02	12.60906	12	24	44.26	-13	59	41.7	413
1981 DL1	1981 02	09.60577	12	26	59.77	-14	16	01.8	413
1981 DM1	1981 02	09.60577	12	22	09.80	-13	42	42.8	413
1981 DM1	1981 02	12.60906	12	22	07.20	-13	41	24.2	413
1981 DN1	1981 02	09.60577	12	28	26.83	-13	55	04.4	413
1981 DN1	1981 02	12.60906	12	27	22.58	-14	02	16.6	413
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1981 DO1	1981 02	12.60906	12	22	03.37	-13	02	29.3	413
1981 DP1	1981 02	09.60577	12	26	08.37	-12	55	43.9	413
1981 DP1	1981 02	12.60906	12	25	37.28	-13	01	29.6	413
1981 DQ1	1981 02	09.60577	12	28	05.64	-14	18	35.2	413
1981 DQ1	1981 02	12.60906	12	27	18.27	-14	28	23.1	413
1981 DR1	1981 02	04.61463	12	24	43.17	-16	46	01.5	413
1981 DR1	1981 02	08.60163	12	24	52.25	-16	54	55.3	413
1981 DS1	1981 02	09.60577	12	28	49.20	-14	10	33.5	413

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1981	DT1	1981	02	12.60906	12	23	54.69	-14 50 24.5	413
1981	DU1	1981	02	04.61463	12	29	16.48	-16 54 45.7	413
1981	DU1	1981	02	08.60163	12	28	41.93	-17 00 49.6	413
1981	DW1	1981	02	09.60577	12	25	37.31	-12 41 56.8	413
1981	DX1	1981	02	09.60577	12	31	54.62	-15 04 57.7	413
1981	DX1	1981	02	12.60906	12	30	48.89	-15 16 19.0	413
1981	DY1	1981	02	09.60577	12	29	56.94	-12 36 39.2	413
1981	DY1	1981	02	12.60906	12	29	14.95	-12 51 35.0	413
1981	DZ1	1981	02	04.61463	12	27	38.22	-18 07 51.8	413
1981	DZ1	1981	02	08.60163	12	27	32.78	-18 03 58.5	413
1981	DA2	1981	02	09.60577	12	30	43.07	-11 30 40.9	413
1981	DA2	1981	02	12.60906	12	29	53.83	-11 33 39.3	413
1981	DB2	1981	02	09.60577	12	31	10.76	-12 40 12.4	413
1981	DB2	1981	02	12.60906	12	30	47.34	-12 52 12.7	413
1981	DC2	1981	02	04.61463	12	32	13.74	-15 28 42.5	413
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1981	DD2	1981	02	09.60577	12	30	59.29	-14 34 38.8	413
1981	DD2	1981	02	12.60906	12	30	31.82	-14 42 20.2	413
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1981	DG2	1981	02	09.60577	12	32	04.54	-12 39 38.1	413
1981	DH2	1981	02	04.61463	12	32	41.40	-17 06 52.4	413
1981	DH2	1981	02	08.60163	12	32	24.64	-17 12 12.7	413
1981	DJ2	1981	02	04.61463	12	33	24.49	-15 16 39.5	413
1981	DJ2	1981	02	08.60163	12	32	55.29	-15 16 11.9	413
1981	DJ2	1981	02	09.60577	12	32	45.09	-15 15 35.7	413
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1981	DK2	1981	02	09.60577	12	28	25.28	-09 44 46.8	413
1981	DK2	1981	02	12.60906	12	28	49.92	-10 09 21.5	413
1981	DL2	1981	02	09.60577	12	34	03.41	-10 35 50.2	413
1981	DL2	1981	02	12.60906	12	33	43.17	-10 53 50.8	413
1981	DM2	1981	02	12.60906	12	35	08.29	-12 51 37.8	413
1981	DN2	1981	02	04.61463	12	35	17.37	-15 37 57.1	413
1981	DN2	1981	02	08.60163	12	34	47.68	-15 43 50.4	413
1981	DP2	1981	02	12.60906	12	35	51.79	-14 21 41.4	413
1981	DQ2	1981	02	09.60577	12	34	46.20	-12 44 16.6	413
1981	DQ2	1981	02	12.60906	12	34	40.40	-12 50 58.4	413
1981	DR2	1981	02	09.60577	12	19	10.44	-12 27 13.6	413
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1981	DS2	1981	02	09.56416	12	18	05.78	-15 47 56.3	413
1981	DT2	1981	02	09.60577	12	20	57.12	-11 40 37.1	413
1981	DT2	1981	02	12.60906	12	19	39.78	-11 55 54.8	413
1981	DT2	1981	02	14.67563	12	18	37.50	-12 05 42.4	413
1981	DU2	1981	02	09.60577	12	19	22.46	-13 52 54.9	413
1981	DV2	1981	02	04.61463	12	19	34.93	-16 47 33.2	413
1981	DV2	1981	02	09.56416	12	18	59.93	-16 19 22.2	413
1981	DW2	1981	02	09.60577	12	22	39.67	-11 40 17.6	413
1981	DW2	1981	02	12.60906	12	21	55.58	-11 44 48.4	413
1981	DX2	1981	02	09.60577	12	22	40.90	-14 05 57.2	413
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1981	DY2	1981	02	09.60577	12	30	11.59	-14 10 29.7	413
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1981	DA3	1981	02	09.60577	12	23	32.79	-12 37 07.2	413
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1981	DE3	1981	02	09.60577	12	27	44.87	-12 48 54.6	413
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1981	DF3	1981	02	09.60577	12	27	20.03	-13 59 17.4	413
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1981	DG3	1981	02	09.60577	12	29	50.38	-13 59 33.6	413
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1981	DH3	1981	02	09.60577	12	29	46.14	-14 20 01.6	413
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1981	DL3	1981	02	12.60906	12	34	15.89	-12 07 16.8	413
1981	DM3	1981	02	12.74480	12	41	54.16	-08 57 38.7	413
1981	DO3	1981	02	12.60906	12	36	01.57	-11 56 27.3	413
1981	DQ3	1981	02	12.60906	12	36	38.79	-13 18 46.4	413
1981	DR3	1981	02	09.60577	12	17	41.22	-12 52 57.9	413
1981	DT3	1981	02	08.60163	12	33	40.58	-15 42 45.1	413
1981	EN	1981	02	09.64744	12	00	45.72	-00 40 00.7	413
1981	EN	1981	02	13.74138	12	00	24.14	-00 08 04.9	413
1981	EO	1981	02	02.70943	12	12	24.28	+03 03 58.5	413
1981	EO	1981	02	09.68922	12	10	11.52	+02 35 40.7	413
1981	EO	1981	02	13.74138	12	08	11.19	+02 21 14.1	413
1981	EP	1981	02	09.64744	12	08	43.40	-02 16 05.7	413
1981	EP	1981	02	13.64027	12	07	36.90	-01 42 05.7	413
1981	EQ	1981	02	12.70048	12	41	22.50	+00 11 12.9	413
1981	EQ	1981	02	13.69290	12	41	08.93	+00 10 43.8	413
1981	ET	1981	02	02.70943	12	07	23.43	+01 42 49.1	413
1981	ET	1981	02	13.74138	12	02	45.52	+01 56 09.7	413
1981	EU	1981	02	02.70943	12	05	11.45	-00 06 06.7	413
1981	EU	1981	02	13.74138	12	02	04.42	+00 20 20.5	413
1981	EZ	1981	02	02.70943	12	10	05.80	+00 16 37.0	413
1981	EZ	1981	02	13.74138	12	07	46.53	+00 29 47.0	413
1981	EB1	1981	02	02.70943	12	00	03.42	+01 58 25.4	413
1981	EB1	1981	02	13.74138	11	56	58.69	+02 31 39.8	413
1981	ED1	1981	02	02.70943	12	11	55.30	+03 20 54.3	413
1981	ED1	1981	02	13.74138	12	06	50.84	+03 19 04.1	413
1981	EE1	1981	02	02.70943	12	03	29.12	+01 00 42.1	413
1981	EE1	1981	02	13.74138	12	02	12.87	+01 35 01.0	413
1981	EG2	1981	02	02.62286	11	52	37.15	-13 50 36.4	413
1981	EH2	1981	02	02.66718	11	52	55.56	-11 37 20.3	413
1981	EJ2	1981	02	02.66718	11	55	26.36	-12 33 16.4	413
1981	EK2	1981	02	02.66718	11	56	08.88	-11 03 07.1	413
1981	EL2	1981	02	02.62286	11	57	02.28	-12 48 42.1	413
1981	EL2	1981	02	02.66718	11	57	01.64	-12 48 44.0	413
1981	EM2	1981	02	02.66718	11	53	10.81	-12 04 16.7	413
1981	EN2	1981	02	02.66718	11	56	50.91	-12 44 48.8	413
1981	EO2	1981	02	02.66718	11	56	32.75	-10 55 40.9	413
1981	EP2	1981	02	02.62286	11	56	37.62	-14 11 53.9	413
1981	EQ2	1981	02	02.66718	11	58	13.14	-08 49 12.5	413
1981	EQ2	1981	02	14.67563	11	54	45.00	-09 21 51.9	413
1981	ER2	1981	02	02.62286	11	50	54.22	-14 27 42.2	413
1981	ES2	1981	02	02.66718	11	59	01.99	-11 02 21.5	413
1981	ES2	1981	02	14.67563	11	55	25.16	-11 48 02.0	413

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1981 ET2	1981 02	02.66718	11	56	01.32	-12	43	07.9	413
1981 EU2	1981 02	02.66718	11	59	43.91	-08	47	36.6	413
1981 EU2	1981 02	14.67563	11	54	49.44	-09	09	15.1	413
1981 EV2	1981 02	02.62286	11	58	20.76	-12	47	42.5	413
1981 EV2	1981 02	02.66718	11	58	20.25	-12	47	46.0	413
1981 EV2	1981 02	09.56416	11	56	25.39	-12	57	05.5	413
1981 EW2	1981 02	02.66718	12	02	33.61	-09	37	11.3	413
1981 EW2	1981 02	14.67563	11	57	43.68	-10	37	37.4	413
1981 EY2	1981 02	02.66718	11	59	35.16	-10	05	53.2	413
1981 EZ2	1981 02	02.66718	11	57	42.20	-11	02	31.6	413
1981 EZ2	1981 02	14.67563	11	55	34.35	-11	05	31.7	413
1981 EA3	1981 02	02.66718	12	01	35.97	-08	59	07.7	413
1981 EA3	1981 02	14.67563	11	58	07.29	-09	30	15.6	413
1981 EB3	1981 02	02.66718	11	57	23.73	-11	22	10.3	413
1981 EB3	1981 02	14.67563	11	55	03.70	-11	28	56.1	413
1981 EC3	1981 02	14.67563	11	57	09.85	-11	34	52.2	413
1981 ED3	1981 02	02.66718	11	59	08.51	-11	41	12.1	413
1981 ED3	1981 02	14.67563	11	55	53.05	-11	22	29.0	413
1981 EF3	1981 02	02.66718	12	00	47.14	-10	45	48.2	413
1981 EF3	1981 02	14.67563	11	57	55.02	-11	07	16.7	413
1981 EG3	1981 02	02.66718	12	01	35.83	-12	19	37.4	413
1981 EG3	1981 02	14.67563	11	57	38.27	-12	38	02.6	413
1981 EH3	1981 02	02.66718	12	04	22.57	-10	49	42.8	413
1981 EH3	1981 02	14.67563	11	59	48.59	-11	01	03.8	413
1981 EJ3	1981 02	02.66718	12	06	09.00	-11	03	15.5	413
1981 EJ3	1981 02	14.67563	12	01	00.04	-11	47	16.0	413
1981 EK3	1981 02	02.66718	12	00	24.71	-09	01	22.0	413
1981 EK3	1981 02	14.67563	11	57	54.94	-09	14	00.9	413
1981 EL3	1981 02	02.66718	12	02	48.99	-11	08	00.4	413
1981 EL3	1981 02	14.67563	11	59	25.46	-11	46	43.6	413
1981 EM3	1981 02	02.66718	12	04	49.68	-09	55	23.2	413
1981 EM3	1981 02	14.67563	12	01	03.83	-10	08	50.2	413
1981 EN3	1981 02	09.56416	11	56	26.72	-15	18	42.2	413
1981 EO3	1981 02	02.66718	12	07	42.04	-10	34	53.6	413
1981 EO3	1981 02	14.67563	12	02	25.46	-11	23	56.3	413
1981 EP3	1981 02	02.66718	11	59	56.33	-12	04	19.7	413
1981 EQ3	1981 02	02.66718	12	05	03.72	-12	08	45.2	413
1981 EQ3	1981 02	14.67563	12	00	24.80	-12	34	09.5	413
1981 ES3	1981 02	02.66718	12	07	40.00	-12	11	45.2	413
1981 ES3	1981 02	14.67563	12	02	20.84	-12	43	31.3	413
1981 EU3	1981 02	02.62286	12	00	51.94	-13	45	12.1	413
1981 EU3	1981 02	09.56416	12	00	32.87	-14	02	54.8	413
1981 EV3	1981 02	02.66718	12	06	00.65	-09	04	32.4	413
1981 EV3	1981 02	14.67563	12	02	12.94	-09	11	15.0	413
1981 EW3	1981 02	02.66718	12	07	09.01	-11	09	09.0	413
1981 EW3	1981 02	14.67563	12	03	06.59	-11	30	21.8	413
1981 EX3	1981 02	02.66718	12	04	57.25	-11	26	10.4	413
1981 EX3	1981 02	14.67563	12	01	54.96	-11	31	27.8	413
1981 EY3	1981 02	02.66718	12	05	32.61	-11	31	42.3	413
1981 EY3	1981 02	14.67563	12	02	15.26	-11	33	04.9	413
1981 EA4	1981 02	02.66718	12	05	17.27	-09	48	05.8	413
1981 EA4	1981 02	14.67563	12	03	03.14	-09	56	52.7	413
1981 EB4	1981 02	02.66718	12	06	24.67	-09	09	55.3	413
1981 EB4	1981 02	14.67563	12	02	58.85	-09	43	01.2	413
1981 EC4	1981 02	02.62286	12	06	36.72	-14	15	21.6	413
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1981 ED4	1981 02	14.67563	11	59	36.46	-10	17	10.2	413
1981 EE4	1981 02	02.66718	12	05	48.37	-12	09	38.7	413

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1981	EG4	1981	02	02.66718	12	09	05.96	-09 18 12.8	413
1981	EG4	1981	02	14.67563	12	05	06.94	-09 35 00.4	413
1981	EH4	1981	02	02.66718	12	09	04.96	-10 32 42.6	413
1981	EH4	1981	02	14.67563	12	04	38.55	-10 22 13.4	413
1981	EJ4	1981	02	02.66718	12	06	07.12	-10 23 55.6	413
1981	EJ4	1981	02	14.67563	12	02	53.64	-10 10 53.8	413
1981	EK4	1981	02	14.67563	12	06	17.12	-10 19 17.7	413
1981	EL4	1981	02	02.66718	12	08	34.26	-09 11 46.5	413
1981	EL4	1981	02	14.67563	12	04	45.04	-09 39 15.6	413
1981	EM4	1981	02	02.66718	12	11	41.97	-08 15 55.7	413
1981	EM4	1981	02	14.67563	12	07	14.94	-09 21 54.6	413
1981	EN4	1981	02	02.62286	12	07	44.67	-14 33 30.8	413
1981	EN4	1981	02	09.56416	12	06	13.98	-14 47 33.6	413
1981	EO4	1981	02	14.67563	12	05	23.07	-12 39 27.1	413
1981	EP4	1981	02	02.66718	12	06	11.38	-12 06 23.8	413
1981	EP4	1981	02	14.67563	12	03	55.56	-11 54 39.5	413
1981	EQ4	1981	02	02.66718	12	06	08.14	-11 31 46.9	413
1981	EQ4	1981	02	14.67563	12	03	52.78	-11 36 05.7	413
1981	ER4	1981	02	02.66718	12	07	35.17	-10 36 41.8	413
1981	ER4	1981	02	14.67563	12	04	39.62	-10 21 14.8	413
1981	ES4	1981	02	09.60577	12	11	11.59	-11 48 25.2	413
1981	ES4	1981	02	14.67563	12	08	30.15	-12 03 31.9	413
1981	EU4	1981	02	02.62286	12	09	15.34	-13 37 28.7	413
1981	EU4	1981	02	09.56416	12	07	44.93	-13 52 50.6	413
1981	EV4	1981	02	02.66718	12	08	06.67	-07 47 35.7	413
1981	EV4	1981	02	14.67563	12	06	42.72	-08 40 49.5	413
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1981	EX4	1981	02	09.56416	12	07	41.69	-16 01 26.9	413
1981	EY4	1981	02	09.60577	12	11	20.97	-10 09 35.0	413
1981	EZ4	1981	02	02.66718	12	12	26.67	-09 36 56.5	413
1981	EZ4	1981	02	09.60577	12	10	55.55	-10 09 17.0	413
1981	EA5	1981	02	02.62286	12	12	27.71	-13 46 28.1	413
1981	EA5	1981	02	09.56416	12	10	43.47	-13 59 58.8	413
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1981	EC5	1981	02	14.67563	12	10	32.09	-11 21 15.3	413
1981	ED5	1981	02	09.56416	12	09	57.28	-13 17 19.6	413
1981	EF5	1981	02	09.56416	12	11	58.48	-14 48 28.8	413
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1981	EG5	1981	02	12.65408	12	13	39.36	-08 33 54.0	413
1981	EG5	1981	02	14.67563	12	12	41.16	-08 37 06.4	413
1981	EH5	1981	02	09.56416	12	12	08.97	-12 45 34.3	413
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1981	EH5	1981	02	14.67563	12	10	28.78	-12 44 36.3	413
1981	EJ5	1981	02	12.65408	12	13	27.16	-08 45 38.1	413
1981	EJ5	1981	02	14.67563	12	12	39.52	-08 47 49.3	413
1981	EK5	1981	02	09.60577	12	12	20.60	-09 39 44.9	413
1981	EK5	1981	02	14.67563	12	10	45.51	-09 46 41.7	413
1981	EL5	1981	02	09.56416	12	12	47.76	-14 44 26.1	413
1981	EL5	1981	02	09.60577	12	12	47.18	-14 44 29.3	413
1981	EM5	1981	02	09.56416	12	13	44.71	-13 11 42.9	413
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1981	EN5	1981	02	14.67563	12	12	33.85	-09 46 29.2	413
1981	EO5	1981	02	09.60577	12	13	50.96	-10 34 54.8	413
1981	EO5	1981	02	14.67563	12	12	34.41	-10 38 07.6	413
1981	EQ5	1981	02	14.67563	12	13	39.85	-09 36 14.4	413
1981	ER5	1981	02	09.60577	12	17	26.27	-12 28 34.2	413
1981	ER5	1981	02	14.67563	12	15	24.19	-12 33 35.3	413
1981	ES5	1981	02	02.66718	11	58	54.97	-10 54 36.7	413
1981	ET5	1981	02	02.66718	11	56	04.86	-11 08 34.8	413
1981	EU5	1981	02	02.66718	11	58	05.02	-10 18 28.7	413
1981	EW5	1981	02	02.62286	12	02	10.88	-15 24 20.7	413
1981	EW5	1981	02	09.56416	12	00	16.01	-15 27 20.8	413
1981	EX5	1981	02	14.67563	11	56	50.00	-11 21 23.0	413
1981	EY5	1981	02	02.66718	12	03	56.87	-09 39 12.0	413
1981	EY5	1981	02	14.67563	11	58	58.07	-09 53 46.4	413
1981	EZ5	1981	02	02.66718	11	59	50.89	-10 46 30.9	413
1981	EZ5	1981	02	14.67563	11	56	46.41	-10 51 48.6	413
1981	EA6	1981	02	02.66718	12	03	49.36	-09 04 34.2	413
1981	EA6	1981	02	14.67563	11	59	58.47	-09 05 33.3	413
1981	EB6	1981	02	02.66718	12	07	41.91	-08 41 20.8	413
1981	EB6	1981	02	14.67563	12	02	42.22	-08 54 19.1	413
1981	EC6	1981	02	14.67563	12	05	40.17	-10 56 04.0	413
1981	ED6	1981	02	09.56416	12	04	28.78	-13 48 45.1	413
1981	EE6	1981	02	02.66718	12	05	57.85	-11 05 49.6	413
1981	EE6	1981	02	14.67563	12	03	53.89	-11 39 38.0	413
1981	EF6	1981	02	02.66718	12	11	00.45	-11 26 27.0	413
1981	EF6	1981	02	14.67563	12	07	07.77	-12 00 53.2	413
1981	EG6	1981	02	02.66718	12	09	07.80	-09 18 26.0	413
1981	EH6	1981	02	02.66718	12	07	26.44	-08 23 54.3	413
1981	EH6	1981	02	14.67563	12	08	09.08	-09 13 21.1	413
1981	EJ6	1981	02	09.56416	12	13	18.15	-14 11 21.9	413
1981	EJ6	1981	02	09.60577	12	13	17.60	-14 11 17.6	413
1981	EL6	1981	02	09.56416	12	13	21.76	-14 28 00.3	413
1981	EL6	1981	02	09.60577	12	13	21.30	-14 28 03.6	413
1981	EM6	1981	02	09.56416	12	18	20.30	-14 10 44.3	413
1981	EM6	1981	02	09.60577	12	18	19.66	-14 10 41.6	413
1981	EN6	1981	02	09.60577	12	19	00.32	-12 05 31.3	413
1981	EO6	1981	02	09.60577	12	22	51.76	-13 45 36.3	413
1981	EP6	1981	02	09.60577	12	24	10.16	-11 31 06.2	413
1981	EP6	1981	02	12.60906	12	23	10.02	-11 49 52.0	413
1981	EQ6	1981	02	09.60577	12	23	46.49	-09 46 39.0	413
1981	EQ6	1981	02	12.60906	12	22	58.53	-10 05 40.2	413
1981	ER6	1981	02	09.60577	12	20	09.57	-10 43 37.5	413
1981	ER6	1981	02	12.60906	12	19	49.82	-10 52 53.8	413
1981	ER6	1981	02	14.67563	12	19	26.47	-10 58 05.6	413
1981	ES6	1981	02	09.60577	12	21	34.79	-15 18 47.2	413
1981	ET6	1981	02	09.60577	12	23	31.72	-10 28 41.8	413
1981	ET6	1981	02	12.60906	12	22	48.17	-10 35 39.8	413
1981	EU6	1981	02	09.60577	12	28	09.35	-14 08 09.0	413
1981	EU6	1981	02	12.60906	12	27	23.52	-14 12 17.3	413
1981	EV6	1981	02	09.60577	12	28	02.27	-13 11 11.6	413
1981	EV6	1981	02	12.60906	12	27	12.76	-13 14 57.3	413
1981	EW6	1981	02	09.60577	12	27	14.27	-12 30 43.3	413
1981	EW6	1981	02	12.60906	12	27	00.70	-12 44 47.9	413
1981	EX6	1981	02	09.60577	12	31	36.61	-10 24 16.7	413
1981	EX6	1981	02	12.60906	12	30	32.83	-10 31 01.5	413
1981	EY6	1981	02	12.60906	12	30	31.79	-14 50 16.4	413
1981	EZ6	1981	02	09.60577	12	33	03.55	-13 06 54.5	413
1981	EA7	1981	02	09.60577	12	33	25.35	-11 55 07.4	413
1981	EC7	1981	02	09.60577	12	30	04.83	-11 36 01.1	413

1981	EC7	1981	02	12.60906	12	29	25.80	-11 41 12.4	413
1981	ED7	1981	02	08.60163	12	29	36.28	-15 35 11.3	413
1981	EE7	1981	02	09.60577	12	32	08.98	-10 13 17.5	413
1981	EE7	1981	02	12.60906	12	32	06.99	-10 30 24.2	413
1981	EF7	1981	02	12.60906	12	37	23.69	-12 36 07.8	413
1981	EG7	1981	02	12.60906	12	37	33.51	-12 12 12.2	413
1981	EH7	1981	02	09.56416	12	11	44.57	-12 44 19.6	413
1981	EH7	1981	02	09.60577	12	11	43.89	-12 44 12.0	413
1981	EH7	1981	02	14.67563	12	10	20.93	-12 29 39.8	413
1981	EJ7	1981	02	02.66718	11	55	15.43	-06 46 42.3	413
1981	EJ7	1981	02	09.64744	11	52	51.06	-06 54 30.3	413
1981	EK7	1981	02	09.64744	11	52	19.60	-04 08 32.0	413
1981	EL7	1981	02	02.66718	11	55	45.40	-10 48 42.9	413
1981	EM7	1981	02	09.64744	11	53	53.49	-06 29 24.1	413
1981	EN7	1981	02	09.64744	11	54	48.86	-04 11 45.6	413
1981	EO7	1981	02	02.66718	11	56	16.51	-10 28 58.5	413
1981	EP7	1981	02	02.66718	11	58	32.79	-09 20 33.5	413
1981	EP7	1981	02	14.67563	11	53	58.11	-09 23 56.5	413
1981	EQ7	1981	02	02.66718	11	58	07.37	-07 31 02.1	413
1981	ER7	1981	02	09.64744	11	55	58.02	-06 00 57.4	413
1981	ES7	1981	02	09.64744	11	54	12.88	-06 26 22.9	413
1981	ET7	1981	02	09.64744	11	58	08.63	-05 24 13.0	413
1981	ET7	1981	02	13.64027	11	56	15.91	-05 24 43.2	413
1981	EU7	1981	02	02.66718	12	01	12.64	-07 45 18.3	413
1981	EU7	1981	02	14.67563	11	55	57.03	-07 54 55.4	413
1981	EV7	1981	02	09.64744	11	56	26.02	-06 05 39.1	413
1981	EV7	1981	02	13.64027	11	54	44.92	-06 01 13.2	413
1981	EW7	1981	02	02.66718	11	54	41.78	-08 22 59.3	413
1981	EX7	1981	02	02.66718	11	58	30.59	-08 09 11.7	413
1981	EX7	1981	02	14.67563	11	54	32.34	-07 28 30.9	413
1981	EY7	1981	02	02.66718	11	54	36.98	-08 31 58.7	413
1981	EZ7	1981	02	09.64744	11	57	53.22	-06 12 56.0	413
1981	EZ7	1981	02	13.64027	11	56	09.66	-06 04 20.9	413
1981	EB8	1981	02	09.64744	12	01	43.96	-06 02 09.3	413
1981	EB8	1981	02	13.64027	11	59	36.05	-06 07 40.9	413
1981	EC8	1981	02	09.64744	12	01	01.32	-06 08 53.3	413
1981	EC8	1981	02	13.64027	11	59	01.68	-06 01 15.7	413
1981	ED8	1981	02	09.64744	12	00	16.05	-04 38 54.7	413
1981	ED8	1981	02	13.64027	11	58	35.58	-04 42 09.6	413
1981	EF8	1981	02	02.66718	11	59	58.55	-07 18 13.1	413
1981	EF8	1981	02	14.67563	11	55	55.30	-06 56 54.1	413
1981	EG8	1981	02	09.64744	11	57	16.84	-04 23 51.7	413
1981	EG8	1981	02	13.64027	11	56	17.52	-04 29 36.6	413
1981	EH8	1981	02	09.64744	12	00	22.21	-04 52 29.0	413
1981	EH8	1981	02	13.64027	11	58	56.55	-05 11 56.5	413
1981	EJ8	1981	02	09.64744	11	58	35.41	-04 24 01.6	413
1981	EJ8	1981	02	13.64027	11	57	09.65	-04 18 57.9	413
1981	EK8	1981	02	02.66718	12	02	05.20	-07 46 04.1	413
1981	EK8	1981	02	14.67563	11	58	20.71	-08 07 27.7	413
1981	EL8	1981	02	09.64744	12	02	43.05	-04 24 54.6	413
1981	EL8	1981	02	13.64027	12	00	28.61	-04 33 49.9	413
1981	EM8	1981	02	09.64744	11	59	12.71	-05 16 52.7	413
1981	EM8	1981	02	13.64027	11	57	33.55	-05 10 19.3	413
1981	EO8	1981	02	09.64744	12	01	20.32	-05 39 17.3	413
1981	EO8	1981	02	13.64027	11	59	32.90	-05 36 52.3	413
1981	EP8	1981	02	09.64744	12	01	34.61	-04 20 28.3	413
1981	EP8	1981	02	13.64027	12	00	02.86	-04 39 31.0	413
1981	EQ8	1981	02	09.64744	12	02	09.96	-05 21 04.7	413
1981	ER8	1981	02	09.64744	12	02	01.72	-03 37 55.3	413

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1981 ES8	1981 02 02.66718	12 01 54.15	-08 14 24.6					413
1981 ES8	1981 02 14.67563	11 58 01.50	-07 51 04.3					413
1981 ET8	1981 02 09.64744	12 00 24.49	-04 57 38.5					413
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1981 EU8	1981 02 09.64744	12 03 19.49	-06 44 23.0					413
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1981 EU8	1981 02 14.67563	12 00 44.39	-06 48 20.8					413
1981 EV8	1981 02 09.64744	12 03 12.77	-06 09 58.8					413
1981 EV8	1981 02 13.64027	12 01 23.33	-05 59 44.5					413
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1981 EX8	1981 02 13.64027	12 00 59.31	-04 43 52.1					413
1981 EY8	1981 02 02.66718	12 06 07.36	-07 08 19.1					413
1981 EY8	1981 02 14.67563	12 00 59.17	-07 05 54.2					413
1981 EA9	1981 02 09.64744	12 05 58.36	-03 42 21.2					413
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1981 ED9	1981 02 14.67563	12 02 49.99	-08 13 02.9					413
1981 EE9	1981 02 02.66718	12 06 36.72	-08 12 33.8					413
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1981 EG9	1981 02 09.64744	12 01 52.85	-06 16 01.5					413
1981 EG9	1981 02 13.64027	12 00 52.82	-06 16 43.8					413
1981 EH9	1981 02 09.64744	12 01 59.60	-06 52 24.6					413
1981 EH9	1981 02 14.67563	12 00 59.97	-07 01 32.7					413
1981 EJ9	1981 02 09.64744	12 04 20.41	-04 12 56.5					413
1981 EJ9	1981 02 13.64027	12 03 01.20	-04 16 45.7					413
1981 EK9	1981 02 09.64744	12 04 21.60	-04 09 33.4					413
1981 EK9	1981 02 13.64027	12 02 50.43	-04 04 33.4					413
1981 EL9	1981 02 09.64744	12 05 49.88	-05 59 22.0					413
1981 EL9	1981 02 13.64027	12 03 57.36	-06 03 54.5					413
1981 EM9	1981 02 02.66718	12 07 26.16	-07 58 13.7					413
1981 EM9	1981 02 14.67563	12 04 16.49	-08 17 39.8					413
1981 EN9	1981 02 09.64744	12 05 37.68	-01 50 36.0					413
1981 EN9	1981 02 13.64027	12 04 30.95	-02 04 28.4					413
1981 EO9	1981 02 02.66718	12 08 21.79	-07 50 26.4					413
1981 EO9	1981 02 14.67563	12 03 51.69	-08 01 26.7					413
1981 EP9	1981 02 02.66718	12 08 53.86	-08 03 57.5					413
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1981 EQ9	1981 02 09.64744	12 04 07.10	-05 10 18.2					413
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1981 ER9	1981 02 09.64744	12 05 27.84	-06 20 25.6					413
1981 ER9	1981 02 13.64027	12 04 06.97	-06 21 46.4					413
1981 ES9	1981 02 02.66718	12 05 44.01	-07 10 47.8					413
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1981 ET9	1981 02 09.64744	12 07 19.75	-06 16 30.2					413
1981 ET9	1981 02 13.64027	12 05 57.89	-06 22 24.5					413
1981 EU9	1981 02 09.64744	12 07 50.41	-06 01 41.8					413
1981 EU9	1981 02 13.64027	12 06 26.71	-05 54 37.3					413
1981 EV9	1981 02 02.66718	12 08 59.14	-07 13 19.1					413
1981 EV9	1981 02 14.67563	12 06 25.33	-07 45 02.3					413
1981 EW9	1981 02 09.64744	12 09 45.26	-04 34 53.2					413
1981 EW9	1981 02 13.64027	12 08 09.04	-04 36 42.3					413

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1981	EY9	1981	02	13.64027	12	07	53.41	-06	00	41.9	413
1981	EZ9	1981	02	02.66718	12	08	11.85	-08	53	59.5	413
1981	EZ9	1981	02	14.67563	12	05	18.68	-08	19	24.0	413
1981	EA10	1981	02	09.64744	12	10	35.78	-03	03	31.3	413
1981	EA10	1981	02	09.68922	12	10	34.71	-03	03	37.3	413
1981	EA10	1981	02	13.64027	12	08	41.75	-03	12	47.6	413
1981	EB10	1981	02	09.64744	12	06	10.23	-05	42	36.9	413
1981	EB10	1981	02	13.64027	12	05	26.65	-05	36	24.9	413
1981	EC10	1981	02	02.66718	12	07	27.58	-07	29	46.4	413
1981	EC10	1981	02	14.67563	12	05	05.75	-07	17	35.7	413
1981	ED10	1981	02	09.64744	12	06	01.96	-02	30	10.3	413
1981	ED10	1981	02	13.64027	12	05	30.28	-02	36	52.1	413
1981	EE10	1981	02	09.64744	12	10	00.44	-04	52	58.3	413
1981	EE10	1981	02	13.64027	12	08	31.67	-04	52	05.6	413
1981	EG10	1981	02	13.64027	12	07	59.02	-06	38	11.4	413
1981	EG10	1981	02	14.67563	12	07	31.83	-06	37	19.9	413
1981	EH10	1981	02	12.65408	12	10	43.76	-06	01	45.8	413
1981	EH10	1981	02	13.64027	12	10	14.77	-06	01	56.5	413
1981	EJ10	1981	02	02.66718	12	12	29.59	-07	19	44.5	413
1981	EJ10	1981	02	12.65408	12	09	17.14	-07	11	39.2	413
1981	EJ10	1981	02	14.67563	12	08	22.96	-07	08	05.5	413
1981	EK10	1981	02	09.64744	12	11	06.24	-04	24	23.8	413
1981	EK10	1981	02	12.65408	12	10	07.43	-04	26	02.5	413
1981	EK10	1981	02	13.64027	12	09	44.50	-04	26	09.8	413
1981	EL10	1981	02	12.65408	12	09	17.01	-06	36	43.6	413
1981	EL10	1981	02	13.64027	12	08	52.96	-06	36	36.2	413
1981	EL10	1981	02	14.67563	12	08	26.55	-06	36	20.0	413
1981	EM10	1981	02	09.64744	12	10	35.65	-04	55	13.1	413
1981	EM10	1981	02	12.65408	12	09	25.05	-04	55	56.1	413
1981	EM10	1981	02	13.64027	12	08	59.92	-04	55	57.9	413
1981	EN10	1981	02	12.65408	12	11	43.27	-04	21	44.7	413
1981	EN10	1981	02	13.64027	12	11	14.89	-04	24	38.0	413
1981	EO10	1981	02	02.66718	12	11	11.81	-10	30	39.6	413
1981	EO10	1981	02	14.67563	12	08	20.69	-09	54	56.2	413
1981	EP10	1981	02	12.65408	12	10	38.09	-07	18	55.3	413
1981	EP10	1981	02	14.67563	12	09	53.04	-07	23	05.9	413
1981	EQ10	1981	02	12.65408	12	12	10.01	-04	54	53.0	413
1981	EQ10	1981	02	13.64027	12	11	43.87	-04	54	24.5	413
1981	ER10	1981	02	13.64027	12	11	39.49	-04	48	33.2	413
1981	ES10	1981	02	12.65408	12	11	48.76	-07	11	56.7	413
1981	ES10	1981	02	14.67563	12	10	58.16	-07	11	18.1	413
1981	ET10	1981	02	12.65408	12	12	29.98	-06	42	45.1	413
1981	ET10	1981	02	13.64027	12	12	02.58	-06	45	15.5	413
1981	ET10	1981	02	14.67563	12	11	31.98	-06	47	43.2	413
1981	EU10	1981	02	12.65408	12	10	51.62	-06	11	53.8	413
1981	EU10	1981	02	13.64027	12	10	34.70	-06	14	12.6	413
1981	EV10	1981	02	14.67563	12	11	13.54	-08	47	54.2	413
1981	EW10	1981	02	12.65408	12	11	44.70	-07	12	07.3	413
1981	EW10	1981	02	14.67563	12	11	07.38	-07	20	21.2	413
1981	EX10	1981	02	02.66718	12	09	28.56	-07	49	03.1	413
1981	EX10	1981	02	14.67563	12	08	35.14	-07	41	03.3	413
1981	EY10	1981	02	12.65408	12	12	34.80	-04	27	19.3	413
1981	EY10	1981	02	13.64027	12	12	10.90	-04	24	47.1	413
1981	EZ10	1981	02	12.65408	12	12	13.16	-06	16	01.5	413
1981	EZ10	1981	02	13.64027	12	11	52.43	-06	15	12.2	413
1981	EA11	1981	02	12.65408	12	14	54.83	-03	52	05.1	413
1981	EA11	1981	02	13.64027	12	14	25.49	-03	52	00.7	413
1981	EB11	1981	02	12.65408	12	14	32.93	-05	32	21.0	413

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1981	EC11	1981	02	14.67563	12	13	25.54	-07	43	00.2	413
1981	ED11	1981	02	12.65408	12	15	03.75	-07	24	18.5	413
1981	ED11	1981	02	14.67563	12	14	18.45	-07	29	44.6	413
1981	EE11	1981	02	12.65408	12	14	55.48	-04	00	30.9	413
1981	EE11	1981	02	13.64027	12	14	36.47	-04	00	36.4	413
1981	EF11	1981	02	12.65408	12	16	42.38	-06	17	01.2	413
1981	EF11	1981	02	13.64027	12	16	15.36	-06	17	54.9	413
1981	EG11	1981	02	12.65408	12	12	52.37	-08	43	43.3	413
1981	EG11	1981	02	14.67563	12	12	27.51	-08	40	16.3	413
1981	EH11	1981	02	12.65408	12	17	11.04	-05	18	06.6	413
1981	EH11	1981	02	13.64027	12	16	41.77	-05	19	07.9	413
1981	EJ11	1981	02	12.65408	12	16	05.35	-06	39	30.9	413
1981	EJ11	1981	02	13.64027	12	15	43.61	-06	39	23.5	413
1981	EJ11	1981	02	14.67563	12	15	19.13	-06	39	07.0	413
1981	EK11	1981	02	02.66718	11	59	59.62	-10	33	43.3	413
1981	EK11	1981	02	14.67563	11	54	55.95	-10	11	00.6	413
1981	EL11	1981	02	02.66718	11	58	46.14	-07	38	34.8	413
1981	EL11	1981	02	14.67563	11	56	08.03	-08	03	21.3	413
1981	EM11	1981	02	02.66718	12	02	51.49	-06	42	16.1	413
1981	EM11	1981	02	14.67563	11	58	47.34	-07	16	13.1	413
1981	EN11	1981	02	02.70943	12	06	28.42	+00	18	48.8	413
1981	EN11	1981	02	09.64744	12	05	28.11	-00	35	00.5	413
1981	EN11	1981	02	13.64027	12	03	49.89	-01	00	34.9	413
1981	EO11	1981	02	09.64744	11	59	15.36	-02	50	05.4	413
1981	EO11	1981	02	13.64027	11	58	26.62	-02	52	13.4	413
1981	EP11	1981	02	09.64744	12	06	20.99	-04	10	21.9	413
1981	EP11	1981	02	13.64027	12	04	15.38	-04	06	51.7	413
1981	EQ11	1981	02	02.66718	12	10	33.00	-07	53	10.8	413
1981	EQ11	1981	02	14.67563	12	06	20.81	-07	54	51.4	413
1981	ER11	1981	02	09.64744	12	06	09.35	-03	58	00.3	413
1981	ER11	1981	02	13.64027	12	04	48.25	-03	55	43.8	413
1981	ES11	1981	02	02.66718	12	08	41.47	-07	57	51.5	413
1981	ES11	1981	02	14.67563	12	05	55.65	-08	10	32.7	413
1981	ET11	1981	02	12.65408	12	13	42.00	-06	13	19.2	413
1981	ET11	1981	02	13.64027	12	13	07.62	-06	17	04.5	413
1981	EU11	1981	02	09.68922	12	12	02.03	-02	50	13.8	413
1981	EU11	1981	02	13.64027	12	10	17.86	-02	54	31.4	413
1981	EV11	1981	02	02.66718	12	11	19.71	-09	43	10.6	413
1981	EV11	1981	02	14.67563	12	08	57.00	-09	36	26.3	413
1981	EW11	1981	02	09.64744	12	09	10.93	-03	38	48.5	413
1981	EW11	1981	02	13.64027	12	08	28.85	-03	38	05.4	413
1981	EX11	1981	02	13.64027	12	14	53.72	-01	03	34.9	413
1981	EY11	1981	02	12.65408	12	18	13.19	-05	52	14.2	413
1981	EY11	1981	02	13.64027	12	17	48.31	-05	54	06.9	413
1981	EZ11	1981	02	12.65408	12	16	23.17	-03	59	38.1	413
1981	EZ11	1981	02	13.64027	12	16	05.28	-04	00	30.0	413
1981	EA12	1981	02	12.65408	12	16	07.82	-04	53	15.8	413
1981	EA12	1981	02	13.64027	12	15	50.56	-04	51	45.6	413
1981	EB12	1981	02	09.60577	12	14	16.49	-09	52	43.6	413
1981	EB12	1981	02	14.67563	12	12	55.73	-09	55	24.5	413
1981	EC12	1981	02	09.60577	12	16	01.26	-10	34	20.7	413
1981	EC12	1981	02	14.67563	12	14	51.05	-10	44	18.8	413
1981	ED12	1981	02	09.60577	12	13	46.21	-11	24	17.4	413
1981	ED12	1981	02	14.67563	12	13	05.13	-11	12	17.1	413
1981	EE12	1981	02	09.60577	12	18	33.03	-10	04	57.2	413
1981	EE12	1981	02	14.67563	12	16	46.73	-10	12	27.9	413
1981	EF12	1981	02	09.60577	12	16	11.83	-10	27	34.5	413
1981	EF12	1981	02	14.67563	12	15	24.26	-10	42	46.3	413

1981	EG12	1981	02	09.60577	12	15	52.32	-10	53	11.0	413
1981	EG12	1981	02	14.67563	12	15	14.76	-10	54	14.0	413
1981	EH12	1981	02	12.65408	12	16	42.00	-09	07	58.3	413
1981	EH12	1981	02	14.67563	12	16	17.33	-09	11	11.0	413
1981	EJ12	1981	02	12.65408	12	16	54.04	-07	53	42.7	413
1981	EJ12	1981	02	14.67563	12	16	22.33	-07	54	28.4	413
1981	EK12	1981	02	12.65408	12	18	02.10	-09	06	22.5	413
1981	EK12	1981	02	14.67563	12	17	35.88	-09	04	49.9	413
1981	EL12	1981	02	12.65408	12	19	46.20	-07	14	20.9	413
1981	EL12	1981	02	12.74480	12	19	44.60	-07	14	28.2	413
1981	EL12	1981	02	14.67563	12	19	09.08	-07	16	57.2	413
1981	EM12	1981	02	14.67563	12	19	28.77	-08	29	19.4	413
1981	EN12	1981	02	12.65408	12	17	23.27	-06	36	43.9	413
1981	EN12	1981	02	13.64027	12	17	14.49	-06	37	20.5	413
1981	EN12	1981	02	14.67563	12	17	03.42	-06	37	49.1	413
1981	EO12	1981	02	09.60577	12	19	10.66	-09	20	47.2	413
1981	EO12	1981	02	14.67563	12	18	05.97	-09	15	41.3	413
1981	EP12	1981	02	09.60577	12	21	04.16	-10	38	48.1	413
1981	EP12	1981	02	12.60906	12	20	15.88	-10	42	32.7	413
1981	EP12	1981	02	14.67563	12	19	33.12	-10	43	56.1	413
1981	EQ12	1981	02	09.60577	12	21	35.42	-10	52	16.7	413
1981	EQ12	1981	02	12.60906	12	20	33.83	-10	51	18.7	413
1981	EQ12	1981	02	14.67563	12	19	43.86	-10	49	43.2	413
1981	ER12	1981	02	12.65408	12	20	06.50	-06	14	28.2	413
1981	ER12	1981	02	12.74480	12	20	04.56	-06	14	43.5	413
1981	ES12	1981	02	09.60577	12	18	53.18	-12	04	47.0	413
1981	ES12	1981	02	14.67563	12	17	46.00	-11	51	48.3	413
1981	ET12	1981	02	14.67563	12	16	19.14	-10	30	05.7	413
1981	EU12	1981	02	12.65408	12	17	53.37	-06	25	07.2	413
1981	EU12	1981	02	14.67563	12	17	35.45	-06	24	42.7	413
1981	EV12	1981	02	12.65408	12	21	18.26	-07	38	46.8	413
1981	EV12	1981	02	12.74480	12	21	15.83	-07	38	50.5	413
1981	EW12	1981	02	12.65408	12	21	58.82	-06	52	15.2	413
1981	EW12	1981	02	12.74480	12	21	56.78	-06	52	26.0	413
1981	EX12	1981	02	09.60577	12	19	32.35	-11	47	44.5	413
1981	EX12	1981	02	14.67563	12	18	35.39	-11	40	18.0	413
1981	EY12	1981	02	09.60577	12	20	12.43	-11	27	25.8	413
1981	EY12	1981	02	12.60906	12	19	49.92	-11	23	50.2	413
1981	EY12	1981	02	14.67563	12	19	24.58	-11	19	58.4	413
1981	EZ12	1981	02	09.60577	12	23	58.38	-09	33	54.3	413
1981	EZ12	1981	02	12.60906	12	23	02.75	-09	37	04.4	413
1981	EA13	1981	02	09.60577	12	22	54.79	-11	15	24.5	413
1981	EA13	1981	02	12.60906	12	22	05.47	-11	17	31.0	413
1981	EC13	1981	02	09.60577	12	23	08.95	-09	13	22.8	413
1981	EC13	1981	05	01.49549	11	33	36.97	-05	50	33.7	413
1981	ED13	1981	02	12.65408	12	23	39.31	-08	22	39.2	413
1981	ED13	1981	02	12.74480	12	23	36.93	-08	22	46.2	413
1981	EE13	1981	02	12.65408	12	23	24.16	-07	57	45.6	413
1981	EE13	1981	02	12.74480	12	23	22.19	-07	57	55.4	413
1981	EF13	1981	02	12.65408	12	24	46.19	-08	07	46.9	413
1981	EF13	1981	02	12.74480	12	24	43.94	-08	07	59.5	413
1981	EG13	1981	02	09.60577	12	24	06.77	-09	15	04.7	413
1981	EG13	1981	02	12.60906	12	23	29.60	-09	27	15.6	413
1981	EH13	1981	02	12.65408	12	24	07.15	-07	06	12.6	413
1981	EH13	1981	02	12.74480	12	24	05.04	-07	06	07.6	413
1981	EJ13	1981	02	09.60577	12	25	51.46	-09	31	21.0	413
1981	EJ13	1981	02	12.60906	12	25	01.18	-09	42	55.9	413
1981	EK13	1981	02	09.60577	12	25	21.40	-10	56	08.8	413
1981	EK13	1981	02	12.60906	12	24	32.76	-10	56	37.8	413

1981	EL13	1981	02	12.65408	12	23	06.04	-08	11	51.7	413
1981	EM13	1981	02	09.60577	12	21	56.18	-10	24	44.9	413
1981	EM13	1981	02	12.60906	12	21	50.05	-10	29	49.8	413
1981	EN13	1981	02	09.60577	12	22	50.41	-10	11	39.5	413
1981	EN13	1981	02	12.60906	12	22	37.53	-10	20	14.5	413
1981	EO13	1981	02	12.65408	12	24	46.09	-06	31	27.8	413
1981	EO13	1981	02	12.74480	12	24	44.71	-06	31	41.5	413
1981	EP13	1981	02	12.65408	12	26	20.30	-08	24	59.9	413
1981	EP13	1981	02	12.74480	12	26	18.43	-08	25	08.6	413
1981	EQ13	1981	02	12.65408	12	25	01.20	-07	06	35.7	413
1981	EQ13	1981	02	12.74480	12	24	59.96	-07	07	29.1	413
1981	ER13	1981	02	12.74480	12	24	50.25	-09	01	21.0	413
1981	ET13	1981	02	12.65408	12	21	35.78	-08	52	25.9	413
1981	ET13	1981	02	12.74480	12	21	35.72	-08	52	51.3	413
1981	EU13	1981	02	09.60577	12	23	28.76	-10	24	15.1	413
1981	EU13	1981	02	12.60906	12	23	20.68	-10	17	30.7	413
1981	EV13	1981	02	09.60577	12	24	20.18	-10	02	08.0	413
1981	EV13	1981	02	12.60906	12	23	47.78	-09	58	16.3	413
1981	EW13	1981	02	12.65408	12	24	49.01	-05	38	52.3	413
1981	EW13	1981	02	12.74480	12	24	47.79	-05	38	52.7	413
1981	EX13	1981	02	09.60577	12	25	05.81	-10	24	13.4	413
1981	EX13	1981	02	12.60906	12	24	27.03	-10	20	25.6	413
1981	EY13	1981	02	12.65408	12	24	47.17	-09	04	19.4	413
1981	EY13	1981	02	12.74480	12	24	45.53	-09	04	09.8	413
1981	EZ13	1981	02	12.65408	12	26	30.31	-08	22	21.3	413
1981	EZ13	1981	02	12.74480	12	26	28.67	-08	23	04.9	413
1981	EA14	1981	02	12.65408	12	23	54.01	-08	43	49.3	413
1981	EA14	1981	02	12.74480	12	23	53.07	-08	43	42.6	413
1981	EB14	1981	02	09.60577	12	26	28.77	-10	28	30.9	413
1981	EC14	1981	02	12.65408	12	25	52.01	-06	25	08.7	413
1981	EC14	1981	02	12.74480	12	25	50.60	-06	25	16.3	413
1981	ED14	1981	02	12.65408	12	24	47.46	-05	07	44.1	413
1981	ED14	1981	02	12.74480	12	24	46.54	-05	07	56.3	413
1981	ED14	1981	02	13.69290	12	24	38.39	-05	09	51.0	413
1981	EE14	1981	02	12.65408	12	25	26.78	-09	09	46.6	413
1981	EE14	1981	02	12.74480	12	25	25.58	-09	09	40.9	413
1981	EF14	1981	02	12.65408	12	24	55.42	-07	03	39.2	413
1981	EF14	1981	02	12.74480	12	24	54.46	-07	03	44.8	413
1981	EG14	1981	02	09.60577	12	27	18.76	-10	33	19.9	413
1981	EG14	1981	02	12.60906	12	26	39.21	-10	32	03.2	413
1981	EH14	1981	02	09.60577	12	27	03.81	-12	33	26.9	413
1981	EH14	1981	02	12.60906	12	26	17.00	-12	26	18.1	413
1981	EJ14	1981	02	12.65408	12	26	24.51	-08	30	49.0	413
1981	EJ14	1981	02	12.74480	12	26	23.17	-08	31	10.2	413
1981	EK14	1981	02	12.65408	12	27	45.01	-06	57	35.3	413
1981	EK14	1981	02	12.74480	12	27	43.03	-06	57	31.0	413
1981	EL14	1981	02	12.65408	12	27	57.67	-05	24	33.0	413
1981	EL14	1981	02	12.74480	12	27	55.37	-05	24	43.0	413
1981	EM14	1981	02	09.60577	12	26	18.32	-10	59	17.0	413
1981	EM14	1981	02	12.60906	12	25	48.73	-10	58	29.4	413
1981	EN14	1981	02	12.65408	12	25	56.18	-06	11	25.7	413
1981	EN14	1981	02	12.74480	12	25	55.07	-06	11	25.4	413
1981	EP14	1981	02	09.60577	12	24	44.03	-10	18	54.6	413
1981	EP14	1981	02	12.60906	12	24	41.55	-10	23	32.7	413
1981	EQ14	1981	02	09.60577	12	30	08.16	-09	41	00.3	413
1981	EQ14	1981	02	12.60906	12	29	05.95	-09	45	40.5	413
1981	ER14	1981	02	09.60577	12	29	38.12	-09	55	16.7	413
1981	ER14	1981	02	12.60906	12	28	46.59	-10	05	26.3	413
1981	ES14	1981	02	12.65408	12	26	37.81	-08	18	06.0	413

1981	ES14	1981	02	12.74480	12	26	36.52	-08 18 14.8	413
1981	ET14	1981	02	12.65408	12	27	20.20	-06 40 58.6	413
1981	ET14	1981	02	12.74480	12	27	18.59	-06 40 55.8	413
1981	EU14	1981	02	12.65408	12	27	35.84	-05 30 22.3	413
1981	EU14	1981	02	12.74480	12	27	34.58	-05 30 34.3	413
1981	EV14	1981	02	12.65408	12	26	49.69	-08 36 21.3	413
1981	EV14	1981	02	12.74480	12	26	48.56	-08 36 29.7	413
1981	EW14	1981	02	09.60577	12	31	40.50	-10 06 23.4	413
1981	EW14	1981	02	12.60906	12	30	31.66	-10 13 58.1	413
1981	EX14	1981	02	09.60577	12	26	48.16	-09 48 21.6	413
1981	EX14	1981	02	12.60906	12	26	24.80	-09 44 57.6	413
1981	EY14	1981	02	09.60577	12	28	27.18	-09 10 09.1	413
1981	EY14	1981	02	12.60906	12	28	11.69	-09 18 04.2	413
1981	EY14	1981	02	12.65408	12	28	11.28	-09 18 12.6	413
1981	EY14	1981	02	12.74480	12	28	10.39	-09 18 25.5	413
1981	EZ14	1981	02	09.60577	12	30	45.34	-09 25 15.5	413
1981	EZ14	1981	02	12.60906	12	29	53.43	-09 26 56.6	413
1981	EZ14	1981	02	12.65408	12	29	52.59	-09 26 59.1	413
1981	EZ14	1981	02	12.74480	12	29	50.83	-09 27 00.4	413
1981	EA15	1981	02	12.65408	12	29	47.92	-08 47 02.5	413
1981	EA15	1981	02	12.74480	12	29	46.31	-08 47 15.0	413
1981	EB15	1981	02	12.65408	12	29	09.51	-07 22 05.3	413
1981	EB15	1981	02	12.74480	12	29	08.27	-07 22 05.4	413
1981	EC15	1981	02	12.65408	12	28	23.74	-04 57 10.4	413
1981	EC15	1981	02	12.74480	12	28	22.99	-04 57 30.4	413
1981	EC15	1981	02	13.69290	12	28	16.59	-05 01 01.3	413
1981	ED15	1981	02	12.65408	12	31	07.80	-07 47 23.6	413
1981	ED15	1981	02	12.74480	12	31	06.14	-07 47 24.3	413
1981	EE15	1981	02	09.60577	12	30	05.80	-10 26 14.0	413
1981	EE15	1981	02	12.60906	12	29	38.39	-10 32 26.5	413
1981	EG15	1981	02	12.65408	12	29	54.02	-06 41 36.0	413
1981	EG15	1981	02	12.74480	12	29	53.17	-06 41 39.2	413
1981	EJ15	1981	02	12.65408	12	32	56.90	-06 54 22.3	413
1981	EJ15	1981	02	12.74480	12	32	54.94	-06 54 19.1	413
1981	EK15	1981	02	12.65408	12	32	38.02	-07 33 33.3	413
1981	EK15	1981	02	12.74480	12	32	35.98	-07 33 44.6	413
1981	EL15	1981	02	09.60577	12	29	55.81	-09 45 03.0	413
1981	EL15	1981	02	12.60906	12	29	43.77	-09 50 03.6	413
1981	EN15	1981	02	12.65408	12	32	18.39	-07 14 39.3	413
1981	EN15	1981	02	12.74480	12	32	17.13	-07 14 43.9	413
1981	EO15	1981	02	09.60577	12	32	20.17	-10 30 07.8	413
1981	EO15	1981	02	12.60906	12	31	46.42	-10 28 23.3	413
1981	EQ15	1981	02	09.60577	12	32	35.09	-11 17 16.3	413
1981	EQ15	1981	02	12.60906	12	32	08.76	-11 17 40.1	413
1981	ER15	1981	02	09.60577	12	31	00.94	-10 06 17.5	413
1981	ER15	1981	02	12.60906	12	30	54.52	-10 13 18.1	413
1981	ES15	1981	02	12.65408	12	32	11.60	-07 18 25.5	413
1981	ES15	1981	02	12.74480	12	32	10.63	-07 18 58.1	413
1981	ET15	1981	02	12.74480	12	35	32.23	-06 20 19.3	413
1981	EU15	1981	02	09.60577	12	32	20.69	-10 24 41.4	413
1981	EU15	1981	02	12.60906	12	32	09.70	-10 27 41.0	413
1981	EV15	1981	02	12.65408	12	34	36.45	-05 45 40.9	413
1981	EV15	1981	02	12.74480	12	34	34.82	-05 45 59.5	413
1981	EW15	1981	02	12.65408	12	34	25.41	-06 19 17.3	413
1981	EW15	1981	02	12.74480	12	34	24.04	-06 19 52.3	413
1981	EX15	1981	02	12.74480	12	34	23.06	-06 19 59.1	413
1981	EZ15	1981	02	09.60577	12	35	57.80	-10 08 13.8	413
1981	EZ15	1981	02	12.60906	12	35	19.83	-10 16 06.9	413
1981	EA16	1981	02	12.65408	12	34	04.18	-07 14 47.5	413

1981	EA16	1981	02	12.74480	12	34	03.11	-07 15 10.6	413
1981	EB16	1981	02	09.60577	12	33	56.94	-09 59 11.3	413
1981	EB16	1981	02	12.60906	12	33	45.56	-10 06 59.9	413
1981	EC16	1981	02	09.60577	12	33	21.66	-09 29 03.2	413
1981	EC16	1981	02	12.60906	12	33	20.07	-09 37 04.8	413
1981	ED16	1981	02	09.60577	12	31	25.90	-09 45 37.0	413
1981	ED16	1981	02	12.60906	12	31	48.40	-09 57 45.8	413
1981	EF16	1981	02	12.60906	12	35	46.87	-09 39 47.5	413
1981	EG16	1981	02	12.74480	12	36	16.20	-07 28 20.7	413
1981	EJ16	1981	02	12.74480	12	37	03.49	-05 44 24.1	413
1981	EK16	1981	02	12.74480	12	37	13.11	-06 26 03.2	413
1981	EL16	1981	02	12.65408	12	20	45.58	-05 34 07.2	413
1981	EL16	1981	02	12.74480	12	20	43.25	-05 34 15.1	413
1981	EL16	1981	02	13.64027	12	20	20.89	-05 35 25.4	413
1981	EM16	1981	02	12.65408	12	18	28.24	-08 05 15.3	413
1981	EM16	1981	02	14.67563	12	17	40.45	-08 08 12.5	413
1981	EN16	1981	02	12.65408	12	18	11.14	-07 20 30.6	413
1981	EN16	1981	02	14.67563	12	17	40.77	-07 30 57.3	413
1981	EO16	1981	02	09.60577	12	21	42.15	-10 44 55.3	413
1981	EO16	1981	02	14.67563	12	19	54.72	-10 37 38.9	413
1981	EP16	1981	02	12.65408	12	22	02.89	-08 37 46.2	413
1981	EQ16	1981	02	12.65408	12	21	18.28	-07 39 01.1	413
1981	EQ16	1981	02	12.74480	12	21	15.95	-07 39 12.3	413
1981	ER16	1981	02	12.65408	12	23	16.14	-05 48 11.7	413
1981	ER16	1981	02	12.74480	12	23	14.34	-05 48 33.8	413
1981	ES16	1981	02	12.74480	12	22	07.22	-05 16 21.5	413
1981	ET16	1981	02	09.60577	12	23	09.41	-09 38 45.4	413
1981	ET16	1981	02	12.60906	12	22	41.02	-09 30 18.3	413
1981	EU16	1981	02	12.65408	12	26	59.33	-06 13 56.6	413
1981	EU16	1981	02	12.74480	12	26	57.49	-06 14 06.6	413
1981	EW16	1981	02	12.65408	12	21	24.54	-06 08 35.8	413
1981	EW16	1981	02	12.74480	12	21	24.32	-06 08 38.4	413
1981	EX16	1981	02	12.65408	12	31	18.65	-04 30 34.4	413
1981	EX16	1981	02	12.74480	12	31	16.07	-04 30 45.0	413
1981	EX16	1981	02	13.69290	12	30	49.45	-04 32 22.3	413
1981	EY16	1981	02	12.74480	12	29	56.06	-07 41 51.8	413
1981	EZ16	1981	02	12.65408	12	33	23.75	-05 05 06.9	413
1981	EZ16	1981	02	12.74480	12	33	21.88	-05 05 12.1	413
1981	EB17	1981	02	12.74480	12	35	29.06	-05 08 04.0	413
1981	EB17	1981	02	13.69290	12	35	18.77	-05 08 50.4	413
1981	EC17	1981	02	12.74480	12	36	47.49	-07 30 04.2	413
1981	EE17	1981	02	02.62286	11	47	49.74	-17 01 18.1	413
1981	EF17	1981	02	09.64744	12	00	16.22	-05 38 54.6	413
1981	EF17	1981	02	13.64027	11	58	51.63	-05 22 13.6	413
1981	EG17	1981	02	02.66718	12	02	03.69	-08 45 34.1	413
1981	EG17	1981	02	14.67563	12	00	18.66	-07 22 15.9	413
1981	EH17	1981	02	09.64744	12	10	14.01	-04 59 19.3	413
1981	EH17	1981	02	12.65408	12	09	25.14	-04 50 14.6	413
1981	EH17	1981	02	13.64027	12	09	07.45	-04 46 59.7	413
1981	EJ17	1981	02	12.65408	12	10	13.82	-06 05 29.5	413
1981	EJ17	1981	02	13.64027	12	09	58.60	-06 01 43.9	413
1981	EK17	1981	02	14.67563	12	15	40.83	-06 52 34.8	413
1981	EL17	1981	02	09.60577	12	18	36.21	-09 55 58.7	413
1981	EL17	1981	02	14.67563	12	17	54.60	-09 36 58.7	413
1981	EM17	1981	02	12.65408	12	21	36.71	-06 48 01.1	413
1981	EM17	1981	02	12.74480	12	21	34.62	-06 47 45.6	413
1981	EN17	1981	02	12.65408	12	22	34.67	-06 47 51.9	413
1981	EN17	1981	02	12.74480	12	22	32.36	-06 47 38.6	413
1981	EQ17	1981	02	12.65408	12	32	35.42	-05 49 34.2	413

1981	EQ17	1981	02	12.74480	12	32	35.03	-05	49	33.7	413
1981	ER17	1981	02	09.64744	11	52	35.32	-03	28	37.2	413
1981	ES17	1981	02	09.64744	11	54	25.36	-02	26	51.8	413
1981	ET17	1981	02	09.64744	11	56	35.99	-01	22	39.7	413
1981	EW17	1981	02	09.64744	11	57	16.97	-02	16	27.7	413
1981	EW17	1981	02	13.64027	11	55	26.88	-02	05	18.7	413
1981	EX17	1981	02	02.70943	11	56	47.60	+01	26	27.0	413
1981	EY17	1981	02	02.70943	12	00	00.84	-00	18	39.9	413
1981	EY17	1981	02	13.74138	11	55	40.22	+00	18	47.2	413
1981	EZ17	1981	02	09.64744	11	52	20.63	-03	48	23.9	413
1981	EA18	1981	02	09.64744	11	54	04.65	-00	35	37.6	413
1981	EB18	1981	02	02.70943	11	56	15.65	-01	00	31.5	413
1981	EB18	1981	02	09.64744	11	55	13.51	-00	43	58.8	413
1981	ED18	1981	02	09.64744	11	56	14.49	-01	27	13.2	413
1981	ED18	1981	02	13.64027	11	54	44.64	-01	16	04.2	413
1981	EE18	1981	02	02.70943	12	00	18.98	+01	22	09.7	413
1981	EE18	1981	02	13.74138	11	56	14.53	+01	34	45.1	413
1981	EF18	1981	02	09.64744	11	58	53.87	-02	35	47.4	413
1981	EF18	1981	02	13.64027	11	57	09.87	-02	18	54.9	413
1981	EG18	1981	02	02.70943	12	02	59.83	-00	00	32.3	413
1981	EG18	1981	02	13.74138	11	58	45.47	+00	03	38.5	413
1981	EJ18	1981	02	02.70943	12	00	43.43	-00	39	57.5	413
1981	EJ18	1981	02	09.64744	11	58	27.69	-00	35	51.2	413
1981	EJ18	1981	02	13.74138	11	56	39.36	-00	30	25.4	413
1981	EK18	1981	02	09.64744	11	57	15.87	-01	13	26.7	413
1981	EK18	1981	02	13.64027	11	55	50.23	-01	04	27.6	413
1981	EL18	1981	02	09.64744	11	57	14.04	-03	39	01.8	413
1981	EL18	1981	02	13.64027	11	56	02.89	-03	31	49.6	413
1981	EM18	1981	02	02.70943	12	01	45.20	-00	43	02.2	413
1981	EM18	1981	02	09.64744	12	00	19.76	-01	02	44.6	413
1981	EM18	1981	02	13.64027	11	58	45.73	-01	10	13.8	413
1981	EN18	1981	02	09.64744	11	57	00.08	-04	04	42.5	413
1981	EN18	1981	02	13.64027	11	55	43.78	-03	54	12.1	413
1981	EO18	1981	02	09.64744	12	01	14.11	-01	07	13.1	413
1981	EO18	1981	02	13.64027	11	59	24.56	-01	00	53.4	413
1981	EP18	1981	02	09.64744	11	56	40.24	-03	37	09.8	413
1981	EP18	1981	02	13.64027	11	55	31.94	-03	22	41.6	413
1981	EQ18	1981	02	02.70943	12	01	23.10	+00	46	25.3	413
1981	EQ18	1981	02	13.74138	11	57	20.09	+01	19	18.8	413
1981	ER18	1981	02	02.70943	12	03	32.60	+00	02	53.8	413
1981	ER18	1981	02	13.74138	11	59	51.58	-00	03	59.3	413
1981	ES18	1981	02	09.64744	11	57	15.72	-02	18	42.4	413
1981	ES18	1981	02	13.64027	11	56	30.83	-02	14	00.2	413
1981	ET18	1981	02	02.70943	12	02	58.32	-00	22	27.9	413
1981	ET18	1981	02	13.74138	11	59	35.04	-00	26	09.3	413
1981	EU18	1981	02	02.70943	12	01	33.83	+00	07	47.4	413
1981	EU18	1981	02	13.74138	11	58	01.05	+00	31	46.7	413
1981	EV18	1981	02	09.64744	11	59	07.49	-03	43	24.1	413
1981	EV18	1981	02	13.64027	11	57	42.83	-03	34	10.9	413
1981	EW18	1981	02	02.70943	12	06	13.41	-00	06	58.2	413
1981	EW18	1981	02	13.74138	12	01	30.25	-00	00	46.0	413
1981	EY18	1981	02	09.64744	12	03	11.01	-03	49	56.1	413
1981	EY18	1981	02	13.64027	12	01	20.31	-03	44	32.9	413
1981	EZ18	1981	02	09.64744	12	00	58.44	-02	21	04.5	413
1981	EZ18	1981	02	13.64027	11	59	18.93	-02	13	40.5	413
1981	EA19	1981	02	02.70943	12	05	31.42	+00	55	49.3	413
1981	EA19	1981	02	13.74138	12	01	01.65	+01	19	44.9	413
1981	EB19	1981	02	02.70943	12	04	35.69	-00	39	02.7	413
1981	EB19	1981	02	13.74138	12	00	41.84	-00	07	32.3	413

1981	EC19	1981	02	13.74138	12	02	18.86	+00 20 55.2	413
1981	ED19	1981	02	02.70943	12	02	47.78	-00 23 39.7	413
1981	ED19	1981	02	13.74138	11	59	19.61	+00 07 02.3	413
1981	EE19	1981	02	09.64744	12	00	24.57	-02 03 09.4	413
1981	EE19	1981	02	13.64027	11	59	06.85	-01 54 45.7	413
1981	EF19	1981	02	09.64744	12	03	24.40	-02 16 22.8	413
1981	EF19	1981	02	13.64027	12	01	30.92	-02 11 56.7	413
1981	EH19	1981	02	02.70943	12	03	09.07	+01 59 55.9	413
1981	EH19	1981	02	13.74138	12	00	39.07	+02 02 15.8	413
1981	EJ19	1981	02	02.70943	12	01	20.04	+00 15 04.7	413
1981	EJ19	1981	02	13.74138	11	58	30.80	+00 37 04.1	413
1981	EK19	1981	02	09.64744	12	03	16.19	-01 52 40.2	413
1981	EK19	1981	02	13.64027	12	01	33.77	-01 52 29.2	413
1981	EL19	1981	02	09.64744	12	01	09.62	-02 21 32.4	413
1981	EL19	1981	02	13.64027	11	59	36.58	-02 06 49.2	413
1981	EM19	1981	02	02.70943	12	03	44.85	-00 48 22.9	413
1981	EM19	1981	02	09.64744	12	01	50.14	-00 39 27.3	413
1981	EM19	1981	02	13.74138	12	00	11.90	-00 30 54.8	413
1981	EN19	1981	02	09.64744	12	02	02.27	-03 47 52.3	413
1981	EN19	1981	02	13.64027	12	00	29.34	-03 37 26.0	413
1981	EO19	1981	02	09.64744	12	00	39.03	-02 57 13.3	413
1981	EO19	1981	02	13.64027	11	59	16.30	-02 40 36.2	413
1981	EP19	1981	02	02.70943	12	05	48.85	-00 44 51.0	413
1981	EP19	1981	02	13.74138	12	02	02.00	-00 05 52.1	413
1981	EQ19	1981	02	09.64744	12	03	57.12	-02 17 08.4	413
1981	EQ19	1981	02	13.64027	12	02	03.60	-02 03 35.2	413
1981	ET19	1981	02	13.74138	12	01	15.99	+01 33 13.9	413
1981	EU19	1981	02	02.70943	12	06	53.05	-00 28 29.9	413
1981	EU19	1981	02	09.64744	12	05	07.80	-00 33 39.7	413
1981	EU19	1981	02	13.64027	12	03	27.99	-00 33 06.2	413
1981	EU19	1981	02	13.74138	12	03	24.97	-00 33 03.9	413
1981	EV19	1981	02	09.64744	12	02	21.05	-02 12 20.6	413
1981	EV19	1981	02	13.64027	12	00	48.48	-02 00 10.5	413
1981	EW19	1981	02	09.64744	12	05	44.06	-01 26 23.9	413
1981	EW19	1981	02	13.64027	12	04	03.79	-01 33 40.9	413
1981	EX19	1981	02	09.64744	12	05	54.70	-01 30 35.5	413
1981	EX19	1981	02	13.64027	12	04	03.17	-01 18 11.6	413
1981	EY19	1981	02	09.64744	12	03	09.38	-01 57 05.3	413
1981	EY19	1981	02	13.64027	12	01	38.83	-01 48 56.7	413
1981	EZ19	1981	02	13.64027	12	03	09.09	-00 59 48.2	413
1981	EB20	1981	02	09.64744	12	05	00.24	-02 31 06.1	413
1981	EB20	1981	02	13.64027	12	03	41.70	-02 26 38.8	413
1981	EC20	1981	02	09.64744	12	05	55.58	-02 24 27.4	413
1981	EC20	1981	02	13.64027	12	04	04.41	-02 14 25.1	413
1981	ED20	1981	02	02.70943	12	10	12.10	+02 26 40.2	413
1981	ED20	1981	02	13.74138	12	05	53.63	+02 39 40.3	413
1981	EF20	1981	02	09.64744	12	01	26.24	-00 39 48.0	413
1981	EF20	1981	02	13.74138	12	00	32.42	-00 18 24.0	413
1981	EG20	1981	02	09.64744	12	05	33.23	-01 49 40.2	413
1981	EG20	1981	02	13.64027	12	03	50.54	-01 46 37.2	413
1981	EH20	1981	02	09.64744	12	04	02.84	-01 31 00.3	413
1981	EJ20	1981	02	02.70943	12	10	22.26	+02 23 29.8	413
1981	EJ20	1981	02	13.74138	12	06	13.43	+02 21 10.4	413
1981	EK20	1981	02	02.70943	12	10	12.26	+02 57 55.1	413
1981	EK20	1981	02	13.74138	12	06	13.26	+02 50 52.8	413
1981	EL20	1981	02	09.64744	12	06	17.09	-02 25 07.7	413
1981	EL20	1981	02	13.64027	12	04	35.37	-02 25 07.3	413
1981	EM20	1981	02	13.74138	12	03	11.72	+02 44 53.0	413
1981	EN20	1981	02	02.70943	12	08	33.48	+00 01 46.6	413

1981	EN20	1981	02	13.74138	12	05	44.99	+00	42	35.7	413
1981	EO20	1981	02	09.64744	12	05	59.85	-00	50	01.9	413
1981	EO20	1981	02	13.64027	12	04	40.91	-00	37	02.4	413
1981	EO20	1981	02	13.74138	12	04	38.43	-00	36	40.5	413
1981	EP20	1981	02	02.70943	12	11	45.58	+00	43	56.5	413
1981	EP20	1981	02	13.74138	12	07	03.67	+01	13	26.3	413
1981	EQ20	1981	02	09.64744	12	06	17.67	-01	13	46.3	413
1981	EQ20	1981	02	13.64027	12	04	50.76	-01	01	33.9	413
1981	ES20	1981	02	09.64744	12	07	17.50	-01	11	30.0	413
1981	ES20	1981	02	13.64027	12	05	42.45	-01	04	24.5	413
1981	ET20	1981	02	02.70943	12	09	38.05	+02	38	59.7	413
1981	ET20	1981	02	13.74138	12	06	46.69	+02	16	47.3	413
1981	EU20	1981	02	09.64744	12	07	41.35	-01	51	35.2	413
1981	EU20	1981	02	13.64027	12	06	08.94	-01	43	46.7	413
1981	EV20	1981	02	09.64744	12	09	49.54	-02	07	18.0	413
1981	EV20	1981	02	13.64027	12	08	06.04	-02	10	55.8	413
1981	EW20	1981	02	02.70943	12	08	29.69	-00	22	51.0	413
1981	EW20	1981	02	13.74138	12	05	03.63	-00	01	07.8	413
1981	EX20	1981	02	02.70943	12	06	45.46	-00	32	57.2	413
1981	EX20	1981	02	13.74138	12	04	31.67	+00	12	32.1	413
1981	EY20	1981	02	09.64744	12	07	22.39	-01	36	19.2	413
1981	EY20	1981	02	13.64027	12	05	48.65	-01	27	55.0	413
1981	EZ20	1981	02	09.64744	12	07	35.50	-02	07	50.6	413
1981	EZ20	1981	02	13.64027	12	06	06.57	-01	58	29.5	413
1981	EA21	1981	02	09.64744	12	07	03.58	-01	27	06.6	413
1981	EA21	1981	02	13.64027	12	05	43.03	-01	20	13.1	413
1981	EB21	1981	02	09.64744	12	07	13.68	-03	25	00.8	413
1981	EB21	1981	02	13.64027	12	05	46.63	-03	20	13.9	413
1981	EC21	1981	02	02.70943	12	11	41.48	+02	15	39.6	413
1981	EC21	1981	02	13.74138	12	07	51.67	+02	30	57.0	413
1981	ED21	1981	02	09.68922	12	12	59.33	-01	33	02.8	413
1981	ED21	1981	02	13.64027	12	10	42.72	-01	36	43.0	1 413
1981	EE21	1981	02	09.64744	12	07	51.45	-04	07	26.7	413
1981	EE21	1981	02	13.64027	12	06	20.23	-03	48	14.9	413
1981	EF21	1981	02	09.64744	12	05	04.79	-01	35	40.8	413
1981	EF21	1981	02	13.64027	12	04	20.25	-01	12	32.5	413
1981	EG21	1981	02	02.70943	12	08	18.27	+00	21	42.4	413
1981	EG21	1981	02	13.74138	12	05	10.95	+00	58	41.8	413
1981	EH21	1981	02	09.64744	12	05	37.80	-04	24	04.9	413
1981	EH21	1981	02	13.64027	12	04	31.26	-03	58	59.5	413
1981	EJ21	1981	02	02.70943	12	05	37.69	+00	14	37.7	413
1981	EJ21	1981	02	13.74138	12	03	40.99	+00	58	13.1	413
1981	EK21	1981	02	09.64744	12	09	36.42	-01	27	04.7	413
1981	EK21	1981	02	13.64027	12	08	03.91	-01	28	48.3	413
1981	EL21	1981	02	09.64744	12	08	53.58	-02	59	48.3	413
1981	EL21	1981	02	13.64027	12	07	24.30	-02	50	24.9	413
1981	EM21	1981	02	02.70943	12	09	19.12	+01	23	15.9	413
1981	EM21	1981	02	13.74138	12	06	46.54	+01	46	17.6	413
1981	EN21	1981	02	09.64744	12	08	05.11	-01	42	58.1	413
1981	EN21	1981	02	13.64027	12	06	46.56	-01	33	08.0	413
1981	EO21	1981	02	13.64027	12	09	57.81	-02	29	53.5	413
1981	EP21	1981	02	13.74138	12	10	02.92	+02	31	05.4	413
1981	EQ21	1981	02	09.64744	12	09	34.59	-02	37	00.2	413
1981	EQ21	1981	02	13.64027	12	07	53.39	-02	28	36.9	413
1981	ER21	1981	02	02.70943	12	10	05.84	+00	50	49.6	413
1981	ER21	1981	02	13.74138	12	06	51.18	+01	28	54.3	413
1981	ES21	1981	02	09.68922	12	13	40.37	+01	14	07.9	413
1981	ES21	1981	02	13.74138	12	11	33.53	+01	08	07.5	413
1981	ET21	1981	02	09.64744	12	08	56.97	-01	08	42.2	413

1981	ET21	1981	02	13.64027	12	07	49.70	-00	50	39.8	413
1981	ET21	1981	02	13.74138	12	07	47.50	-00	50	08.6	413
1981	EV21	1981	02	09.68922	12	11	50.99	+00	11	28.2	413
1981	EV21	1981	02	13.74138	12	10	01.17	+00	12	04.1	413
1981	EW21	1981	02	09.64744	12	08	44.68	-02	21	55.8	413
1981	EW21	1981	02	13.64027	12	07	47.26	-02	16	18.6	413
1981	EX21	1981	02	09.64744	12	10	16.10	-02	40	23.2	413
1981	EX21	1981	02	09.68922	12	10	15.25	-02	40	10.8	413
1981	EX21	1981	02	13.64027	12	08	46.87	-02	20	18.9	413
1981	EY21	1981	02	09.64744	12	09	02.28	-03	35	43.3	413
1981	EY21	1981	02	13.64027	12	07	50.09	-03	15	57.1	413
1981	EZ21	1981	02	09.64744	12	09	50.39	-02	23	43.7	413
1981	EZ21	1981	02	13.64027	12	08	34.78	-02	15	17.3	413
1981	EA22	1981	02	09.64744	12	09	18.91	-01	27	21.3	413
1981	EA22	1981	02	13.64027	12	08	15.01	-01	03	26.5	413
1981	EB22	1981	02	02.70943	12	10	37.10	+01	33	57.7	413
1981	EB22	1981	02	13.74138	12	08	27.89	+02	01	47.8	413
1981	EC22	1981	02	09.64744	12	10	59.97	-01	40	32.0	413
1981	EC22	1981	02	09.68922	12	10	59.40	-01	40	26.6	413
1981	EC22	1981	02	13.64027	12	09	58.99	-01	30	33.2	413
1981	ED22	1981	02	09.64744	12	10	12.08	-01	33	24.1	413
1981	ED22	1981	02	09.68922	12	10	11.62	-01	33	20.4	413
1981	ED22	1981	02	13.64027	12	09	09.34	-01	23	00.6	413
1981	EE22	1981	02	02.70943	12	12	18.07	+02	00	54.6	413
1981	EE22	1981	02	09.68922	12	10	57.30	+02	05	18.9	413
1981	EE22	1981	02	13.74138	12	09	38.24	+02	10	41.5	413
1981	EF22	1981	02	09.64744	12	09	20.19	-03	36	54.9	413
1981	EF22	1981	02	13.64027	12	08	43.08	-03	29	06.0	413
1981	EG22	1981	02	09.68922	12	12	21.14	+00	07	58.9	413
1981	EG22	1981	02	13.74138	12	11	10.80	-00	09	04.9	413
1981	EH22	1981	02	13.64027	12	09	43.99	-03	01	54.2	413
1981	EJ22	1981	02	09.64744	12	11	21.06	-04	08	18.2	413
1981	EJ22	1981	02	12.65408	12	10	29.33	-03	59	38.2	413
1981	EJ22	1981	02	13.64027	12	10	09.54	-03	56	23.6	413
1981	EK22	1981	02	09.64744	12	11	11.48	-02	20	07.7	413
1981	EK22	1981	02	09.68922	12	11	10.87	-02	20	04.7	413
1981	EK22	1981	02	13.64027	12	09	59.76	-02	13	48.0	413
1981	EL22	1981	02	02.70943	12	11	47.95	+00	28	01.0	413
1981	EL22	1981	02	13.74138	12	10	44.83	-00	01	20.4	413
1981	EM22	1981	02	13.64027	12	11	40.90	-01	55	56.4	413
1981	EN22	1981	02	09.68922	12	13	13.34	-02	14	52.6	413
1981	EN22	1981	02	13.64027	12	11	57.86	-02	16	29.8	413
1981	EO22	1981	02	09.64744	12	11	05.58	-02	33	38.8	413
1981	EO22	1981	02	13.64027	12	10	19.04	-02	31	23.2	413
1981	EQ22	1981	02	12.65408	12	12	20.61	-03	37	19.1	413
1981	EQ22	1981	02	13.64027	12	12	01.45	-03	35	23.9	413
1981	ER22	1981	02	09.68922	12	15	03.05	-01	03	09.8	413
1981	ER22	1981	02	13.64027	12	13	20.57	-00	51	10.7	413
1981	ET22	1981	02	09.68922	12	14	17.79	+01	34	34.2	413
1981	ET22	1981	02	13.74138	12	13	03.67	+01	41	47.1	413
1981	EU22	1981	02	09.68922	12	13	26.34	-01	45	46.8	413
1981	EU22	1981	02	13.64027	12	12	30.55	-01	45	31.2	413
1981	EV22	1981	02	09.68922	12	14	28.60	-01	17	57.7	413
1981	EV22	1981	02	13.64027	12	12	56.28	-01	04	32.9	413
1981	EW22	1981	02	13.64027	12	12	22.80	-02	55	08.0	413
1981	EY22	1981	02	09.68922	12	14	28.43	-02	34	17.1	413
1981	EY22	1981	02	13.64027	12	13	43.83	-02	23	41.5	413
1981	EZ22	1981	02	09.68922	12	17	58.31	-01	31	28.9	413
1981	EZ22	1981	02	13.64027	12	16	26.76	-01	24	41.4	413

1981	EA23	1981	02	09.68922	12	17	19.76	-01 07 28.2	413
1981	EA23	1981	02	13.64027	12	15	53.77	-01 10 47.9	413
1981	EB23	1981	02	09.68922	12	18	16.08	+00 15 08.0	413
1981	EB23	1981	02	13.74138	12	16	33.70	+00 26 10.3	413
1981	EC23	1981	02	02.70943	11	56	22.90	-00 52 07.1	413
1981	EC23	1981	02	09.64744	11	54	18.89	-00 40 18.6	413
1981	ED23	1981	02	02.70943	12	00	38.82	+00 30 36.0	413
1981	EE23	1981	02	09.64744	11	59	22.38	-02 53 35.0	413
1981	EE23	1981	02	13.64027	11	57	39.24	-02 48 19.3	413
1981	EG23	1981	02	02.70943	12	04	43.26	-00 07 10.4	413
1981	EG23	1981	02	13.74138	12	01	21.60	+00 12 32.3	413
1981	EH23	1981	02	09.64744	12	05	04.59	-02 14 32.3	413
1981	EH23	1981	02	13.64027	12	03	24.76	-02 06 24.7	413
1981	EJ23	1981	02	02.70943	12	06	54.18	-00 33 15.1	413
1981	EJ23	1981	02	13.64027	12	03	17.15	-00 26 20.5	413
1981	EJ23	1981	02	13.74138	12	03	14.17	-00 26 12.7	413
1981	EK23	1981	02	09.64744	12	05	26.26	-01 59 31.1	413
1981	EK23	1981	02	13.64027	12	03	49.37	-01 46 40.6	413
1981	EL23	1981	02	13.74138	12	04	09.41	+00 21 39.9	413
1981	EM23	1981	02	02.70943	12	09	46.24	+02 23 33.0	413
1981	EM23	1981	02	13.74138	12	05	14.84	+02 38 09.6	413
1981	EN23	1981	02	13.64027	12	03	55.16	-00 32 34.7	413
1981	EN23	1981	02	13.74138	12	03	53.51	-00 32 32.3	413
1981	EO23	1981	02	09.64744	12	09	08.78	-02 39 11.3	413
1981	EO23	1981	02	13.64027	12	07	31.47	-02 30 39.0	413
1981	EP23	1981	02	09.68922	12	11	03.04	+01 49 09.9	413
1981	EP23	1981	02	13.74138	12	09	15.13	+01 41 09.9	413
1981	EQ23	1981	02	09.64744	12	11	02.80	-01 34 18.9	413
1981	EQ23	1981	02	09.68922	12	11	02.23	-01 34 11.8	413
1981	EQ23	1981	02	13.64027	12	09	58.45	-01 20 33.9	413
1981	ER23	1981	02	09.68922	12	14	21.79	+01 10 21.2	413
1981	ER23	1981	02	13.74138	12	13	03.24	+01 22 57.7	413
1981	ES23	1981	02	09.68922	12	15	11.82	-01 03 54.2	413
1981	ES23	1981	02	13.64027	12	13	47.17	-00 52 07.0	413
1981	ET23	1981	02	09.68922	12	18	43.28	+00 46 52.9	413
1981	ET23	1981	02	13.74138	12	16	45.76	+00 54 48.0	413
1981	EV23	1981	02	09.68922	12	19	00.22	+00 10 45.8	413
1981	EV23	1981	02	13.74138	12	17	27.04	+00 09 41.1	413
1981	EX23	1981	02	09.64744	12	00	32.32	-03 32 17.3	413
1981	EX23	1981	02	13.64027	11	58	58.36	-03 25 39.6	413
1981	EZ23	1981	02	09.64744	12	03	59.23	-03 37 56.9	413
1981	EB24	1981	02	02.70943	12	09	27.41	+01 55 36.8	413
1981	EB24	1981	02	13.74138	12	05	53.00	+02 12 13.2	413
1981	ED24	1981	02	02.70943	12	07	15.43	-00 40 49.7	413
1981	ED24	1981	02	13.74138	12	04	35.71	+00 08 19.0	413
1981	EE24	1981	02	02.70943	12	11	52.02	+01 54 55.5	413
1981	EE24	1981	02	13.74138	12	08	32.39	+02 20 42.8	413
1981	EF24	1981	02	13.74138	12	10	51.58	+02 42 09.7	413
1981	EG24	1981	02	13.64027	12	11	07.77	-02 54 07.1	413
1981	EH24	1981	02	09.68922	12	14	52.31	+00 29 17.5	413
1981	EH24	1981	02	13.74138	12	13	25.32	+00 38 47.0	413
1981	EJ24	1981	02	09.68922	12	17	59.03	+02 05 39.5	413
1981	EJ24	1981	02	13.74138	12	16	38.20	+02 09 26.3	413
1981	EL24	1981	02	09.68922	12	16	41.88	-02 49 36.9	413
1981	EL24	1981	02	13.64027	12	15	22.84	-02 43 09.4	413
1981	EM24	1981	02	09.68922	12	17	53.92	-03 15 30.7	413
1981	EM24	1981	02	12.65408	12	16	51.03	-03 12 01.8	413
1981	EM24	1981	02	13.64027	12	16	27.50	-03 10 32.9	413
1981	EN24	1981	02	12.65408	12	17	36.65	-05 03 03.5	413

1981	EN24	1981	02	13.64027	12	17	17.25	-05	01	59.0	413
1981	EO24	1981	02	09.68922	12	18	21.27	-01	22	42.7	413
1981	EO24	1981	02	13.64027	12	17	08.61	-01	08	58.5	413
1981	EP24	1981	02	09.68922	12	17	25.46	-03	03	24.2	413
1981	EP24	1981	02	13.64027	12	16	14.81	-02	57	40.1	413
1981	EQ24	1981	02	12.65408	12	16	13.94	-05	32	41.4	413
1981	EQ24	1981	02	13.64027	12	16	00.66	-05	30	45.8	413
1981	ER24	1981	02	12.65408	12	17	37.92	-03	41	55.9	413
1981	ER24	1981	02	13.64027	12	17	20.98	-03	40	03.0	413
1981	ES24	1981	02	12.65408	12	19	21.70	-04	21	48.1	413
1981	ET24	1981	02	12.65408	12	15	59.15	-04	05	53.2	413
1981	ET24	1981	02	13.64027	12	15	47.70	-04	01	55.3	413
1981	EU24	1981	02	12.65408	12	18	49.10	-03	58	07.7	413
1981	EU24	1981	02	13.64027	12	18	26.38	-03	57	01.0	413
1981	EV24	1981	02	09.68922	12	20	25.45	-01	21	37.4	413
1981	EV24	1981	02	13.64027	12	19	10.15	-01	18	17.0	413
1981	EW24	1981	02	09.68922	12	19	00.60	-01	26	42.2	413
1981	EW24	1981	02	13.64027	12	17	47.37	-01	15	44.3	413
1981	EX24	1981	02	09.68922	12	19	04.27	-01	12	30.9	413
1981	EX24	1981	02	13.64027	12	17	46.14	-01	02	27.8	413
1981	EZ24	1981	02	12.65408	12	15	59.17	-05	29	23.0	413
1981	EZ24	1981	02	13.64027	12	15	49.65	-05	24	11.8	413
1981	EB25	1981	02	09.68922	12	19	04.02	-03	28	12.4	413
1981	EB25	1981	02	12.65408	12	18	15.21	-03	16	55.9	413
1981	EB25	1981	02	13.64027	12	17	56.78	-03	12	51.8	413
1981	EC25	1981	02	09.68922	12	23	03.31	-00	44	09.1	413
1981	EC25	1981	02	12.70048	12	21	55.12	-00	39	00.8	413
1981	ED25	1981	02	12.65408	12	20	31.17	-05	19	44.3	413
1981	ED25	1981	02	12.74480	12	20	29.02	-05	19	31.2	413
1981	ED25	1981	02	13.64027	12	20	09.20	-05	17	13.7	413
1981	EF25	1981	02	09.68922	12	21	11.33	-01	42	30.5	413
1981	EF25	1981	02	12.70048	12	20	25.10	-01	36	55.7	413
1981	EF25	1981	02	13.64027	12	20	07.36	-01	34	49.5	413
1981	EG25	1981	02	09.68922	12	20	25.50	-02	35	22.5	413
1981	EG25	1981	02	12.70048	12	19	51.58	-02	47	07.9	413
1981	EG25	1981	02	13.64027	12	19	37.65	-02	50	33.9	413
1981	EH25	1981	02	13.64027	12	17	37.21	-02	45	06.3	413
1981	EJ25	1981	02	09.68922	12	17	55.81	-02	56	41.5	413
1981	EJ25	1981	02	13.64027	12	17	40.55	-02	50	59.6	413
1981	EK25	1981	02	12.65408	12	20	58.74	-04	22	37.2	413
1981	EK25	1981	02	12.74480	12	20	56.93	-04	22	33.3	413
1981	EL25	1981	02	12.65408	12	20	00.54	-05	25	53.8	413
1981	EL25	1981	02	13.64027	12	19	47.04	-05	22	37.2	413
1981	EM25	1981	02	09.68922	12	19	11.25	-02	49	07.7	413
1981	EM25	1981	02	13.64027	12	18	49.20	-02	39	15.0	413
1981	EN25	1981	02	09.68922	12	19	18.47	-02	44	10.4	413
1981	EN25	1981	02	13.64027	12	18	58.33	-02	33	38.7	413
1981	EO25	1981	02	12.65408	12	18	50.46	-06	54	30.9	413
1981	EO25	1981	02	14.67563	12	18	20.85	-06	42	22.0	413
1981	EP25	1981	02	12.65408	12	20	13.57	-04	14	48.2	413
1981	EP25	1981	02	12.74480	12	20	12.12	-04	14	42.3	413
1981	EP25	1981	02	13.64027	12	19	58.42	-04	13	30.5	413
1981	ER25	1981	02	09.68922	12	23	19.42	-02	58	38.0	413
1981	ER25	1981	02	12.70048	12	22	28.08	-02	49	01.3	413
1981	ER25	1981	02	13.69290	12	22	08.34	-02	45	29.9	413
1981	ES25	1981	02	09.68922	12	22	54.47	-00	32	51.0	413
1981	ES25	1981	02	12.70048	12	22	17.83	-00	29	13.0	413
1981	ES25	1981	02	13.69290	12	22	02.20	-00	27	39.7	413
1981	ET25	1981	02	12.65408	12	21	28.94	-04	18	20.4	413

1981	ET25	1981	02	12.74480	12	21	27.61	-04 18 03.0	413
1981	EU25	1981	02	09.68922	12	22	48.75	-02 29 11.2	413
1981	EU25	1981	02	12.70048	12	22	08.59	-02 19 38.4	413
1981	EU25	1981	02	13.69290	12	21	52.50	-02 16 07.4	413
1981	EV25	1981	02	09.68922	12	23	13.48	-02 33 01.6	413
1981	EV25	1981	02	13.69290	12	22	00.61	-02 16 49.0	413
1981	EW25	1981	02	09.68922	12	28	26.20	+01 13 01.1	413
1981	EW25	1981	02	12.70048	12	27	12.15	+01 01 41.4	413
1981	EX25	1981	02	09.68922	12	23	39.45	-03 32 07.0	413
1981	EX25	1981	02	12.65408	12	22	59.46	-03 24 15.2	413
1981	EX25	1981	02	13.69290	12	22	42.01	-03 21 02.9	413
1981	EZ25	1981	02	12.65408	12	25	35.80	-04 01 02.3	413
1981	EZ25	1981	02	12.74480	12	25	33.24	-04 01 07.8	413
1981	EZ25	1981	02	13.69290	12	25	06.85	-04 02 00.8	413
1981	EA26	1981	02	12.65408	12	21	32.08	-04 57 12.7	413
1981	EA26	1981	02	12.74480	12	21	31.27	-04 57 10.3	413
1981	EB26	1981	02	09.68922	12	24	58.05	-03 09 22.1	413
1981	EB26	1981	02	12.65408	12	24	05.21	-03 07 43.6	413
1981	EB26	1981	02	13.69290	12	23	44.07	-03 06 48.6	413
1981	EC26	1981	02	09.68922	12	22	24.76	-01 28 05.4	413
1981	EC26	1981	02	13.69290	12	22	02.82	-01 27 06.3	413
1981	ED26	1981	02	12.65408	12	21	06.55	-05 02 44.7	413
1981	ED26	1981	02	12.74480	12	21	06.01	-05 02 31.9	413
1981	EE26	1981	02	12.65408	12	21	23.48	-05 10 41.0	413
1981	EE26	1981	02	12.74480	12	21	22.93	-05 10 30.5	413
1981	EF26	1981	02	09.68922	12	22	59.77	-02 50 04.6	413
1981	EF26	1981	02	12.70048	12	22	26.00	-02 40 11.6	413
1981	EF26	1981	02	13.69290	12	22	12.43	-02 36 37.3	413
1981	EG26	1981	02	09.68922	12	26	31.52	-01 41 25.9	413
1981	EG26	1981	02	12.70048	12	25	40.65	-01 47 48.7	413
1981	EG26	1981	02	13.69290	12	25	20.39	-01 49 39.2	413
1981	EH26	1981	02	09.68922	12	25	36.09	-00 39 19.5	413
1981	EH26	1981	02	12.70048	12	24	35.41	-00 30 34.2	413
1981	EH26	1981	02	13.69290	12	24	13.62	-00 27 28.2	413
1981	EJ26	1981	02	09.68922	12	27	21.89	-01 09 09.2	413
1981	EJ26	1981	02	12.70048	12	26	30.76	-01 03 07.9	413
1981	EJ26	1981	02	13.69290	12	26	10.29	-01 00 46.8	413
1981	EK26	1981	02	09.68922	12	24	50.11	-02 05 20.7	413
1981	EK26	1981	02	12.70048	12	24	19.07	-01 57 58.8	413
1981	EK26	1981	02	13.69290	12	24	05.72	-01 55 09.4	413
1981	EL26	1981	02	09.68922	12	26	47.25	-01 09 25.1	413
1981	EL26	1981	02	12.70048	12	26	11.95	-01 17 52.3	413
1981	EL26	1981	02	13.69290	12	25	56.36	-01 20 24.3	413
1981	EM26	1981	02	09.68922	12	26	16.25	-00 34 59.1	413
1981	EM26	1981	02	12.70048	12	25	24.39	-00 33 05.2	413
1981	EM26	1981	02	13.69290	12	25	04.75	-00 32 13.5	413
1981	EN26	1981	02	12.65408	12	22	01.57	-06 04 03.0	413
1981	EN26	1981	02	12.74480	12	22	01.06	-06 03 45.8	413
1981	EO26	1981	02	12.65408	12	25	30.76	-03 55 31.0	413
1981	EO26	1981	02	12.74480	12	25	29.02	-03 55 23.5	413
1981	EO26	1981	02	13.69290	12	25	12.21	-03 54 01.5	413
1981	EP26	1981	02	09.68922	12	23	30.86	-03 08 05.8	413
1981	EP26	1981	02	12.70048	12	23	20.74	-02 57 38.0	413
1981	EP26	1981	02	13.69290	12	23	13.92	-02 53 42.3	413
1981	EQ26	1981	02	09.68922	12	25	43.20	-02 17 18.4	413
1981	EQ26	1981	02	12.70048	12	25	03.56	-02 10 16.0	413
1981	EQ26	1981	02	13.69290	12	24	47.77	-02 07 38.7	413
1981	ER26	1981	02	09.68922	12	27	59.07	+00 34 05.3	413
1981	ER26	1981	02	12.70048	12	27	15.65	+00 31 36.6	413

1981	ER26	1981	02	13.69290	12	26	57.49	+00 31 05.6	413
1981	ES26	1981	02	12.65408	12	24	12.95	-05 14 02.1	413
1981	ES26	1981	02	12.74480	12	24	12.05	-05 13 58.0	413
1981	ES26	1981	02	13.69290	12	24	04.30	-05 12 60.0	413
1981	ET26	1981	02	09.68922	12	27	14.46	-02 24 58.0	413
1981	ET26	1981	02	12.70048	12	26	44.71	-02 27 10.1	413
1981	ET26	1981	02	13.69290	12	26	31.08	-02 27 32.5	413
1981	EV26	1981	02	12.65408	12	26	18.98	-04 11 00.5	413
1981	EV26	1981	02	12.74480	12	26	17.31	-04 10 53.7	413
1981	EV26	1981	02	13.69290	12	26	00.85	-04 09 35.9	413
1981	EW26	1981	02	09.68922	12	26	11.31	-03 09 39.9	413
1981	EW26	1981	02	12.70048	12	25	34.63	-02 56 31.7	413
1981	EW26	1981	02	13.69290	12	25	20.09	-02 51 49.2	413
1981	EX26	1981	02	12.65408	12	25	54.68	-05 01 06.8	413
1981	EX26	1981	02	12.74480	12	25	53.58	-05 00 59.8	413
1981	EX26	1981	02	13.69290	12	25	43.39	-04 59 35.0	413
1981	EY26	1981	02	12.65408	12	26	55.32	-04 50 14.1	413
1981	EY26	1981	02	12.74480	12	26	53.78	-04 50 16.2	413
1981	EY26	1981	02	13.69290	12	26	38.12	-04 50 28.3	413
1981	EZ26	1981	02	12.65408	12	26	26.22	-05 15 22.0	413
1981	EZ26	1981	02	12.74480	12	26	25.12	-05 15 21.2	413
1981	EZ26	1981	02	13.69290	12	26	14.84	-05 14 60.0	413
1981	EA27	1981	02	09.68922	12	27	48.57	-00 26 13.4	413
1981	EA27	1981	02	12.70048	12	27	09.41	-00 19 37.1	413
1981	EA27	1981	02	13.69290	12	26	53.67	-00 17 06.4	413
1981	EB27	1981	02	09.68922	12	27	32.67	-01 56 10.2	413
1981	EB27	1981	02	12.70048	12	27	04.96	-01 47 28.2	413
1981	EB27	1981	02	13.69290	12	26	52.56	-01 44 12.3	413
1981	EC27	1981	02	09.68922	12	29	02.08	-01 38 33.0	413
1981	EC27	1981	02	12.70048	12	28	14.11	-01 31 13.2	413
1981	EC27	1981	02	13.69290	12	27	55.60	-01 28 30.6	413
1981	ED27	1981	02	09.68922	12	26	31.89	-03 19 16.4	413
1981	ED27	1981	02	12.65408	12	26	07.08	-03 06 55.8	413
1981	ED27	1981	02	12.70048	12	26	06.61	-03 06 41.9	413
1981	ED27	1981	02	12.74480	12	26	05.94	-03 06 28.6	413
1981	ED27	1981	02	13.69290	12	25	55.65	-03 02 11.1	413
1981	EE27	1981	02	12.65408	12	25	10.92	-06 20 00.3	413
1981	EE27	1981	02	12.74480	12	25	10.53	-06 19 28.4	413
1981	EF27	1981	02	12.65408	12	26	54.14	-04 28 42.3	413
1981	EF27	1981	02	12.74480	12	26	53.21	-04 28 31.7	413
1981	EF27	1981	02	13.69290	12	26	45.19	-04 26 34.2	413
1981	EG27	1981	02	12.65408	12	28	31.05	-05 17 07.5	413
1981	EG27	1981	02	12.74480	12	28	29.72	-05 17 07.0	413
1981	EH27	1981	02	09.68922	12	33	22.58	-00 05 31.5	413
1981	EH27	1981	02	12.70048	12	32	29.05	-00 17 40.8	413
1981	EH27	1981	02	13.69290	12	32	07.49	-00 21 26.1	413
1981	EJ27	1981	02	12.65408	12	27	05.82	-04 08 44.3	413
1981	EJ27	1981	02	12.74480	12	27	05.50	-04 08 48.5	413
1981	EJ27	1981	02	13.69290	12	27	03.40	-04 09 15.9	413
1981	EK27	1981	02	09.68922	12	33	02.63	-02 54 59.1	413
1981	EK27	1981	02	12.70048	12	32	14.98	-02 57 27.6	413
1981	EK27	1981	02	13.69290	12	31	55.34	-02 57 56.0	413
1981	EL27	1981	02	12.65408	12	29	56.79	-04 26 53.2	413
1981	EL27	1981	02	12.74480	12	29	55.23	-04 26 40.7	413
1981	EL27	1981	02	13.69290	12	29	40.39	-04 24 27.9	413
1981	EM27	1981	02	09.68922	12	29	17.68	-00 52 52.7	413
1981	EM27	1981	02	12.70048	12	28	49.77	-00 45 28.6	413
1981	EM27	1981	02	13.69290	12	28	37.88	-00 42 43.6	413
1981	EO27	1981	02	12.65408	12	29	58.60	-06 24 33.7	413

1981	EO27	1981	02	12.74480	12	29	57.63	-06 24 19.7	413
1981	EP27	1981	02	12.65408	12	29	54.64	-06 25 38.9	413
1981	EP27	1981	02	12.74480	12	29	53.44	-06 25 18.3	413
1981	EQ27	1981	02	09.68922	12	28	52.68	-02 43 04.3	413
1981	EQ27	1981	02	12.70048	12	28	50.00	-02 37 36.8	413
1981	EQ27	1981	02	13.69290	12	28	45.54	-02 35 23.2	413
1981	ER27	1981	02	09.68922	12	35	02.26	-01 51 26.9	413
1981	ER27	1981	02	12.70048	12	34	04.88	-01 51 59.9	413
1981	ER27	1981	02	13.69290	12	33	42.44	-01 51 52.0	413
1981	ES27	1981	02	09.68922	12	31	00.68	+01 13 45.7	413
1981	ES27	1981	02	12.70048	12	30	53.26	+01 04 59.2	413
1981	ES27	1981	02	13.69290	12	30	46.51	+01 02 21.9	413
1981	ET27	1981	02	09.68922	12	31	04.68	-02 59 58.3	413
1981	ET27	1981	02	12.70048	12	30	32.23	-02 54 07.4	413
1981	ET27	1981	02	13.69290	12	30	18.86	-02 51 53.8	413
1981	EU27	1981	02	09.68922	12	28	24.31	-03 32 33.4	413
1981	EU27	1981	02	12.65408	12	28	32.85	-03 24 02.0	413
1981	EU27	1981	02	12.70048	12	28	32.77	-03 23 51.8	413
1981	EU27	1981	02	12.74480	12	28	32.67	-03 23 40.8	413
1981	EU27	1981	02	13.69290	12	28	32.12	-03 20 28.9	413
1981	EV27	1981	02	12.65408	12	31	31.41	-03 48 13.3	413
1981	EV27	1981	02	12.74480	12	31	30.14	-03 47 58.2	413
1981	EV27	1981	02	13.69290	12	31	16.03	-03 45 14.9	413
1981	EW27	1981	02	12.65408	12	32	01.94	-05 05 00.3	413
1981	EW27	1981	02	12.74480	12	32	00.48	-05 04 40.8	413
1981	EW27	1981	02	13.69290	12	31	45.59	-05 01 05.4	413
1981	EX27	1981	02	09.68922	12	29	12.51	-03 02 41.6	413
1981	EX27	1981	02	12.70048	12	29	22.24	-03 03 00.7	413
1981	EX27	1981	02	13.69290	12	29	21.66	-03 02 41.5	413
1981	EY27	1981	02	12.70048	12	35	12.91	-00 10 53.6	413
1981	EY27	1981	02	13.69290	12	34	51.19	-00 11 03.2	413
1981	EZ27	1981	02	09.68922	12	33	58.76	-01 58 43.6	413
1981	EZ27	1981	02	12.70048	12	33	25.85	-01 54 00.7	413
1981	EZ27	1981	02	13.69290	12	33	11.81	-01 52 06.7	413
1981	EA28	1981	02	12.70048	12	36	37.81	-01 15 41.1	413
1981	EA28	1981	02	13.69290	12	36	16.01	-01 15 00.0	413
1981	EB28	1981	02	09.68922	12	31	45.21	-01 37 19.0	413
1981	EB28	1981	02	12.70048	12	31	48.86	-01 32 17.9	413
1981	EB28	1981	02	13.69290	12	31	46.42	-01 30 12.9	413
1981	EC28	1981	02	09.68922	12	32	57.15	-00 25 59.9	413
1981	EC28	1981	02	12.70048	12	32	56.18	-00 29 30.7	413
1981	EC28	1981	02	13.69290	12	32	51.87	-00 30 21.0	413
1981	ED28	1981	02	09.68922	12	34	41.33	-02 15 59.5	413
1981	ED28	1981	02	12.70048	12	34	11.02	-02 08 55.5	413
1981	ED28	1981	02	13.69290	12	33	57.97	-02 06 12.2	413
1981	EE28	1981	02	12.70048	12	35	12.44	-01 39 05.0	413
1981	EE28	1981	02	13.69290	12	34	55.42	-01 37 13.0	413
1981	EF28	1981	02	12.70048	12	37	07.66	-00 08 17.1	413
1981	EF28	1981	02	13.69290	12	36	46.69	-00 07 42.5	413
1981	EG28	1981	02	12.74480	12	35	56.47	-05 59 42.4	413
1981	EH28	1981	02	12.70048	12	36	17.61	-01 46 52.9	413
1981	EH28	1981	02	13.69290	12	36	04.87	-01 45 41.8	413
1981	EJ28	1981	02	12.74480	12	38	22.15	-03 50 03.3	413
1981	EJ28	1981	02	13.69290	12	38	05.89	-03 47 38.0	413
1981	EK28	1981	02	12.70048	12	29	27.75	-02 37 47.9	413
1981	EL28	1981	02	09.68922	12	28	57.01	-02 36 33.9	413
1981	EL28	1981	02	12.70048	12	28	07.90	-02 29 29.0	413
1981	EL28	1981	02	13.69290	12	27	48.83	-02 26 49.5	413
1981	EM28	1981	02	12.70048	12	32	48.14	-01 19 49.0	413

1981	EM28	1981	02	13.69290	12	32	21.10	-01 23 27.6	413
1981	EO28	1981	02	12.70048	12	33	56.64	-03 13 56.1	413
1981	EO28	1981	02	12.74480	12	33	55.75	-03 13 55.3	413
1981	EO28	1981	02	13.69290	12	33	38.32	-03 13 42.0	413
1981	EP28	1981	02	12.65408	12	32	52.27	-04 49 22.8	413
1981	EP28	1981	02	12.74480	12	32	50.63	-04 49 16.3	413
1981	EP28	1981	02	13.69290	12	32	36.39	-04 48 03.1	413
1981	EQ28	1981	02	09.68922	12	35	18.66	-02 20 53.4	413
1981	EQ28	1981	02	12.70048	12	34	32.25	-02 11 56.2	413
1981	EQ28	1981	02	13.69290	12	34	14.19	-02 08 38.7	413
1981	ER28	1981	02	12.70048	12	38	56.56	-01 32 21.4	413
1981	ER28	1981	02	13.69290	12	38	33.18	-01 33 08.5	413
1981	ES28	1981	02	12.70048	12	38	17.94	-01 39 45.5	413
1981	ES28	1981	02	13.69290	12	38	07.67	-01 41 12.2	413
1981	ET28	1981	02	02.66718	11	59	40.44	-07 03 06.3	413
1981	ET28	1981	02	14.67563	11	54	09.01	-07 36 41.8	413
1981	EU28	1981	02	09.64744	11	57	25.55	-04 48 36.6	413
1981	EU28	1981	02	13.64027	11	55	22.46	-04 45 39.6	413
1981	EV28	1981	02	02.66718	11	56	51.17	-09 06 01.6	413
1981	EW28	1981	02	09.64744	11	56	55.00	-04 22 21.9	413
1981	EW28	1981	02	13.64027	11	55	22.32	-04 23 10.6	413
1981	EX28	1981	02	02.66718	11	59	25.50	-07 22 43.9	413
1981	EX28	1981	02	14.67563	11	55	25.74	-07 55 54.1	413
1981	EY28	1981	02	09.64744	12	00	41.05	-05 53 50.8	413
1981	EZ28	1981	02	14.67563	12	04	29.81	-07 17 58.6	413
1981	EA29	1981	02	09.64744	12	02	20.85	-05 21 13.5	413
1981	EA29	1981	02	13.64027	12	00	38.08	-05 06 49.3	413
1981	EB29	1981	02	09.64744	11	58	56.81	-06 12 45.7	413
1981	EB29	1981	02	13.64027	11	58	12.60	-05 55 18.2	413
1981	EC29	1981	02	09.64744	12	08	27.12	-04 47 47.3	413
1981	ED29	1981	02	09.64744	12	08	46.25	-03 58 19.0	413
1981	ED29	1981	02	13.64027	12	07	38.11	-04 19 14.5	413
1981	EE29	1981	02	14.67563	12	07	49.72	-06 47 39.6	413
1981	EF29	1981	02	09.64744	12	08	22.27	-03 18 39.6	413
1981	EG29	1981	02	09.64744	12	09	07.99	-05 40 02.0	413
1981	EG29	1981	02	13.64027	12	08	08.81	-05 22 36.7	413
1981	EJ29	1981	02	02.66718	12	12	09.28	-07 43 16.3	413
1981	EJ29	1981	02	12.65408	12	10	23.40	-07 23 14.1	413
1981	EJ29	1981	02	14.67563	12	09	46.29	-07 16 55.3	413
1981	EK29	1981	02	14.67563	12	10	31.67	-07 27 33.6	413
1981	EL29	1981	02	09.64744	12	11	37.57	-05 15 37.7	413
1981	EL29	1981	02	12.65408	12	10	59.22	-05 08 53.6	413
1981	EL29	1981	02	13.64027	12	10	43.43	-05 06 15.9	413
1981	EM29	1981	02	09.60577	12	20	17.82	-10 13 41.8	413
1981	EM29	1981	02	12.60906	12	19	45.91	-10 24 54.1	413
1981	EM29	1981	02	14.67563	12	19	14.02	-10 31 34.7	413
1981	EQ29	1981	02	12.74480	12	33	14.95	-08 52 56.4	413
1981	ER29	1981	02	09.60577	12	30	52.75	-11 03 21.5	413
1981	ER29	1981	02	12.60906	12	30	59.18	-10 53 16.0	413
1981	ES29	1981	02	09.60577	12	29	17.77	-11 28 05.7	413
1981	ES29	1981	02	12.60906	12	29	38.69	-11 28 47.9	413
1981	ET29	1981	02	12.74480	12	34	46.86	-08 49 21.2	413
1981	EU29	1981	02	12.74480	12	37	49.86	-08 00 25.9	413
1981	EV29	1981	02	02.62286	11	53	15.74	-12 57 39.2	413
1981	EV29	1981	02	02.66718	11	53	15.52	-12 57 41.5	413
1981	EW29	1981	02	02.66718	12	02	46.24	-09 00 20.5	413
1981	EW29	1981	02	14.67563	11	56	35.40	-10 56 33.3	413
1981	EX29	1981	02	02.66718	11	59	27.20	-11 38 22.5	413
1981	EX29	1981	02	14.67563	11	54	28.12	-12 34 08.9	413

1981	EZ29	1981	02	02.70943	12	00	29.96	+01 12 14.0	413
1981	EZ29	1981	02	13.74138	11	56	47.45	+01 16 17.6	413
1981	EA30	1981	02	09.64744	11	50	18.46	-03 14 13.9	413
1981	EB30	1981	02	09.64744	12	00	52.58	-01 30 22.5	413
1981	EC30	1981	02	02.66718	12	03	34.24	-11 50 48.8	413
1981	ED30	1981	02	02.62286	12	08	20.01	-13 46 19.8	413
1981	ED30	1981	02	09.56416	12	06	39.18	-13 57 46.6	413
1981	EE30	1981	02	02.66718	12	10	27.98	-11 49 20.6	413
1981	EE30	1981	02	14.67563	12	07	13.76	-12 01 40.7	413
1981	EF30	1981	02	02.70943	12	09	36.76	-00 54 22.0	413
1981	EF30	1981	02	13.74138	12	08	14.06	-00 06 00.2	413
1981	EH30	1981	02	09.64744	12	08	14.77	-02 23 50.1	413
1981	EH30	1981	02	13.64027	12	07	25.21	-02 07 13.6	413
1981	EJ30	1981	02	09.64744	11	54	17.39	-03 26 42.8	413
1981	EJ30	1981	02	13.64027	11	56	38.25	-03 23 51.7	413
1981	EK30	1981	02	14.67563	12	10	36.96	-11 36 52.7	413
1981	EM30	1981	02	09.68922	12	15	01.20	+00 30 21.5	413
1981	EM30	1981	02	13.74138	12	13	22.08	+00 44 52.6	413
1981	EN30	1981	02	09.68922	12	14	55.18	+00 52 55.7	413
1981	EN30	1981	02	13.74138	12	13	28.24	+01 03 54.8	413
1981	EO30	1981	02	09.68922	12	12	12.01	-03 32 20.5	413
1981	EO30	1981	02	13.64027	12	11	39.20	-03 10 20.0	413
1981	EP30	1981	02	09.68922	12	17	07.31	-02 44 05.1	413
1981	EP30	1981	02	13.64027	12	16	13.40	-02 17 38.0	413
1981	EQ30	1981	02	09.68922	12	23	21.52	+00 23 06.8	413
1981	EQ30	1981	02	12.70048	12	22	04.89	+00 24 31.1	413
1981	ER30	1981	02	12.65408	12	20	22.99	-04 17 49.4	413
1981	ER30	1981	02	12.74480	12	20	21.09	-04 17 38.8	413
1981	ER30	1981	02	13.64027	12	20	02.92	-04 15 44.0	413
1981	ET30	1981	02	09.68922	12	19	05.83	-03 18 57.8	413
1981	ET30	1981	02	12.65408	12	18	46.50	-03 07 48.8	413
1981	ET30	1981	02	13.64027	12	18	36.72	-03 03 32.3	413
1981	EU30	1981	02	12.65408	12	23	20.66	-04 36 10.9	413
1981	EU30	1981	02	12.74480	12	23	18.20	-04 36 12.6	413
1981	EV30	1981	02	12.65408	12	22	20.90	-04 35 08.5	413
1981	EV30	1981	02	12.74480	12	22	18.75	-04 35 04.8	413
1981	EV30	1981	02	13.69290	12	21	57.86	-04 34 06.0	413
1981	EW30	1981	02	09.68922	12	25	26.48	-02 45 01.0	413
1981	EW30	1981	02	13.69290	12	24	05.86	-02 34 56.9	413
1981	EY30	1981	02	09.68922	12	24	58.58	-01 18 55.9	413
1981	EY30	1981	02	12.70048	12	24	05.32	-01 07 49.8	413
1981	EY30	1981	02	13.69290	12	23	44.73	-01 03 50.9	413
1981	EZ30	1981	02	12.65408	12	23	32.97	-03 58 38.9	413
1981	EZ30	1981	02	12.74480	12	23	31.11	-03 58 35.6	413
1981	EZ30	1981	02	13.69290	12	23	12.44	-03 57 45.4	413
1981	EA31	1981	02	12.65408	12	22	13.37	-04 55 07.5	413
1981	EA31	1981	02	12.74480	12	22	12.43	-04 55 14.5	413
1981	EB31	1981	02	09.68922	12	22	54.60	-01 31 48.3	413
1981	EB31	1981	02	12.70048	12	22	28.68	-01 20 55.7	413
1981	EB31	1981	02	13.69290	12	22	17.35	-01 17 00.6	413
1981	ED31	1981	02	09.68922	12	26	36.76	-01 44 35.0	413
1981	ED31	1981	02	12.70048	12	25	52.22	-01 34 30.8	413
1981	ED31	1981	02	13.69290	12	25	34.26	-01 30 49.7	413
1981	EE31	1981	02	12.65408	12	22	46.27	-06 38 32.2	413
1981	EE31	1981	02	12.74480	12	22	45.37	-06 37 51.6	413
1981	EF31	1981	02	09.68922	12	27	04.99	-01 56 11.9	413
1981	EF31	1981	02	12.70048	12	26	32.58	-01 45 22.2	413
1981	EF31	1981	02	13.69290	12	26	18.31	-01 41 24.0	413
1981	EG31	1981	02	12.74480	12	28	23.43	-05 24 52.8	413

1981	EH31	1981	02	09.68922	12	28	51.30	-02	39	47.0	413
1981	EH31	1981	02	13.69290	12	27	48.24	-02	19	01.5	413
1981	EJ31	1981	02	09.68922	12	25	25.18	-02	38	15.3	413
1981	EJ31	1981	02	13.69290	12	25	18.08	-02	25	39.1	413
1981	EK31	1981	02	12.65408	12	31	07.15	-04	30	14.9	413
1981	EL31	1981	02	09.68922	12	26	05.86	-02	49	09.3	413
1981	EL31	1981	02	12.70048	12	26	17.43	-02	38	27.8	413
1981	EL31	1981	02	13.69290	12	26	17.44	-02	34	23.5	413
1981	EM31	1981	02	09.68922	12	30	30.57	-02	57	15.8	413
1981	EM31	1981	02	13.69290	12	29	41.40	-02	49	32.4	413
1981	EN31	1981	02	09.68922	12	31	15.20	-02	02	11.5	413
1981	EN31	1981	02	12.70048	12	30	38.91	-01	52	11.5	413
1981	EN31	1981	02	13.69290	12	30	23.71	-01	48	31.6	413
1981	EO31	1981	02	12.65408	12	28	34.36	-03	29	56.9	413
1981	EO31	1981	02	12.74480	12	28	33.75	-03	29	44.9	413
1981	EO31	1981	02	13.69290	12	28	28.70	-03	27	47.7	413
1981	EP31	1981	02	09.68922	12	33	53.69	-01	11	00.2	413
1981	EP31	1981	02	13.69290	12	32	48.53	-01	05	05.6	413
1981	EQ31	1981	02	09.68922	12	31	57.19	-02	21	39.5	413
1981	EQ31	1981	02	13.69290	12	31	03.86	-02	08	14.7	413
1981	ER31	1981	02	09.68922	12	30	33.69	-01	59	06.3	413
1981	ER31	1981	02	12.70048	12	30	35.48	-01	49	17.3	413
1981	ER31	1981	02	13.69290	12	30	32.28	-01	45	35.9	413
1981	ES31	1981	02	09.68922	12	32	52.60	-01	52	34.5	413
1981	ES31	1981	02	12.70048	12	32	25.35	-01	38	03.7	413
1981	ES31	1981	02	13.69290	12	32	14.13	-01	33	02.6	413
1981	ET31	1981	02	12.65408	12	33	34.40	-04	33	59.2	413
1981	ET31	1981	02	12.74480	12	33	33.05	-04	33	36.5	413
1981	ET31	1981	02	13.69290	12	33	20.35	-04	29	31.7	413
1981	EU31	1981	02	13.69290	12	34	27.62	-03	04	13.0	413
1981	EV31	1981	02	12.70048	12	35	57.41	-03	21	54.9	413
1981	EV31	1981	02	12.74480	12	35	56.55	-03	21	45.9	413
1981	EV31	1981	02	13.69290	12	35	41.49	-03	18	05.1	413
1981	EW31	1981	02	12.70048	12	34	09.27	-01	49	03.7	413
1981	EW31	1981	02	13.69290	12	33	54.78	-01	44	56.7	413
1981	EX31	1981	02	12.74480	12	36	22.00	-03	53	39.8	413
1981	EY31	1981	02	09.64744	11	54	29.85	-02	03	01.3	413
1981	EZ31	1981	02	09.60577	12	12	52.70	-14	17	36.6	413
1981	EA32	1981	02	09.60577	12	24	50.59	-14	56	38.4	413
1981	EB32	1981	02	09.60577	12	24	24.99	-14	06	50.9	413
1981	EB32	1981	02	12.60906	12	23	48.09	-14	11	02.7	413
1981	EC32	1981	02	09.60577	12	28	50.40	-14	44	44.2	413
1981	EC32	1981	02	12.60906	12	28	11.23	-14	49	30.6	413
1981	ED32	1981	02	12.60906	12	31	58.93	-11	23	23.8	413
1981	EE32	1981	02	09.60577	12	31	51.21	-11	48	14.1	413
1981	EE32	1981	02	12.60906	12	31	42.76	-11	52	08.6	413
1981	EF32	1981	02	08.60163	12	34	40.27	-15	12	25.0	413
1981	EG32	1981	02	04.61463	12	22	36.07	-17	07	57.2	413
1981	EG32	1981	02	08.60163	12	24	20.43	-16	56	35.2	413
1981	EK32	1981	02	02.66718	11	57	01.65	-08	38	12.8	413
1981	EL32	1981	02	09.64744	11	59	44.08	-02	20	32.6	413
1981	EL32	1981	02	13.64027	11	57	34.62	-02	29	11.4	413
1981	EN32	1981	02	02.66718	12	07	37.08	-11	39	50.9	413
1981	EN32	1981	02	14.67563	12	04	18.33	-11	51	23.6	413
1981	EO32	1981	02	13.64027	12	08	25.82	-06	46	34.1	413
1981	EO32	1981	02	14.67563	12	08	00.78	-06	45	50.9	413
1981	EP32	1981	02	09.68922	12	16	12.65	-02	45	52.7	413
1981	EQ32	1981	02	09.60577	12	14	13.04	-09	52	46.8	413
1981	EQ32	1981	02	14.67563	12	12	15.56	-09	46	20.4	413

1981	ER32	1981	02	13.74138	12	12	26.20	-00	03	43.2	413
1981	ES32	1981	02	14.67563	12	16	18.32	-10	30	48.5	413
1981	EW32	1981	02	02.66718	11	58	03.15	-07	14	56.5	413
1981	EX32	1981	02	02.66718	11	58	41.86	-08	09	06.4	413
1981	EX32	1981	02	14.67563	11	54	47.74	-07	59	18.9	413
1981	EY32	1981	02	02.66718	11	55	20.33	-09	57	30.0	413
1981	EZ32	1981	02	09.64744	11	56	27.81	-05	31	48.5	413
1981	EA33	1981	02	09.64744	12	01	11.73	-03	14	44.0	413
1981	EB33	1981	02	09.64744	12	01	19.04	-06	53	24.9	413
1981	EB33	1981	02	14.67563	11	58	40.16	-07	01	49.0	413
1981	EC33	1981	02	09.64744	12	01	51.12	-06	09	51.1	413
1981	ED33	1981	02	02.66718	12	04	42.37	-06	42	30.7	413
1981	ED33	1981	02	09.64744	12	02	07.18	-06	51	35.5	413
1981	ED33	1981	02	14.67563	11	59	28.01	-06	52	39.7	413
1981	EE33	1981	02	09.64744	12	03	33.94	-04	16	22.1	413
1981	EF33	1981	02	02.66718	11	57	54.50	-08	00	40.9	413
1981	EG33	1981	02	02.66718	11	58	08.89	-07	46	07.5	413
1981	EG33	1981	02	14.67563	11	56	51.25	-07	23	55.0	413
1981	EH33	1981	02	09.64744	12	00	01.09	-05	16	40.5	413
1981	EH33	1981	02	13.64027	11	58	41.92	-05	03	20.3	413
1981	EJ33	1981	02	09.64744	12	03	07.28	-04	43	11.2	413
1981	EJ33	1981	02	13.64027	12	01	30.87	-04	47	08.1	413
1981	EL33	1981	02	02.66718	12	07	16.63	-07	50	41.7	413
1981	EL33	1981	02	14.67563	12	02	08.30	-07	55	25.1	413
1981	EM33	1981	02	09.64744	12	04	39.63	-06	20	07.5	413
1981	EM33	1981	02	13.64027	12	02	35.44	-06	24	40.1	413
1981	EM33	1981	02	14.67563	12	01	59.94	-06	25	26.2	413
1981	EN33	1981	02	09.64744	12	03	04.60	-03	29	40.1	413
1981	EN33	1981	02	13.64027	12	01	46.51	-03	37	24.1	413
1981	EO33	1981	02	02.66718	11	58	07.92	-10	42	09.9	413
1981	EO33	1981	02	14.67563	11	57	15.81	-09	54	03.1	413
1981	EP33	1981	02	14.67563	12	00	25.11	-07	08	58.1	413
1981	EQ33	1981	02	02.66718	12	06	40.06	-07	02	41.4	413
1981	ER33	1981	02	09.64744	12	01	47.25	-06	08	50.4	413
1981	ER33	1981	02	13.64027	12	00	59.00	-06	02	42.2	413
1981	ES33	1981	02	09.64744	12	06	01.80	-05	39	21.9	413
1981	EU33	1981	02	02.66718	12	10	58.18	-08	51	31.9	413
1981	EU33	1981	02	14.67563	12	07	14.18	-08	47	18.4	413
1981	EV33	1981	02	02.66718	12	07	27.03	-08	51	15.4	413
1981	EV33	1981	02	14.67563	12	05	27.97	-07	26	40.7	413
1981	EW33	1981	02	09.64744	12	09	38.39	-04	58	11.8	413
1981	EW33	1981	02	13.64027	12	08	05.01	-04	51	46.3	413
1981	EX33	1981	02	14.67563	12	07	24.52	-07	52	42.8	413
1981	EY33	1981	02	09.64744	12	09	03.21	-04	59	01.0	413
1981	EZ33	1981	02	14.67563	12	07	59.29	-06	41	16.6	413
1981	EA34	1981	02	02.66718	12	11	08.87	-09	33	30.5	413
1981	EA34	1981	02	14.67563	12	08	07.09	-09	15	48.2	413
1981	EC34	1981	02	13.64027	12	10	01.46	-05	34	56.5	413
1981	ED34	1981	02	12.65408	12	11	34.47	-03	39	32.4	413
1981	ED34	1981	02	13.64027	12	11	05.20	-03	37	33.8	413
1981	EE34	1981	02	09.64744	12	10	13.56	-02	59	51.0	413
1981	EE34	1981	02	13.64027	12	09	31.36	-03	03	11.8	413
1981	EF34	1981	02	12.65408	12	13	09.29	-06	05	17.1	413
1981	EF34	1981	02	13.64027	12	12	53.76	-06	05	56.9	413
1981	EG34	1981	02	12.65408	12	24	44.47	-06	47	36.2	413
1981	EG34	1981	02	12.74480	12	24	42.90	-06	47	20.5	413
1981	EH34	1981	02	02.70943	11	55	31.75	+00	46	04.2	413
1981	EK34	1981	02	02.70943	11	56	54.13	+00	29	37.9	413
1981	EL34	1981	02	09.64744	11	54	46.89	-00	55	10.6	413

1981	EN34	1981	02	02.66718	11	58	06.45	-09 24 41.2	413
1981	EN34	1981	02	14.67563	11	54	39.27	-09 42 41.7	413
1981	EO34	1981	02	09.64744	11	56	50.89	-01 32 11.9	413
1981	EO34	1981	02	13.64027	11	55	02.92	-01 12 46.4	413
1981	EP34	1981	02	02.66718	11	58	46.51	-11 22 35.5	413
1981	EP34	1981	02	14.67563	11	55	56.96	-11 23 26.4	413
1981	EQ34	1981	02	13.74138	11	57	16.21	+00 14 08.0	413
1981	ER34	1981	02	14.67563	11	56	06.11	-11 21 03.7	413
1981	ET34	1981	02	02.66718	12	02	08.54	-10 56 45.8	413
1981	ET34	1981	02	14.67563	11	57	28.40	-10 38 14.6	413
1981	EU34	1981	02	02.70943	11	59	48.66	+01 34 54.2	413
1981	EU34	1981	02	13.74138	11	57	49.56	+02 01 22.7	413
1981	EW34	1981	02	02.70943	12	06	09.75	+01 38 58.7	413
1981	EW34	1981	02	13.74138	12	02	16.98	+01 26 00.4	413
1981	EX34	1981	02	02.70943	12	01	51.37	+00 33 38.2	413
1981	EX34	1981	02	13.74138	11	59	04.20	+01 24 43.1	413
1981	EY34	1981	02	02.62286	12	02	51.86	-15 53 39.4	413
1981	EY34	1981	02	09.56416	12	01	19.06	-15 51 52.7	413
1981	EZ34	1981	02	09.64744	12	01	23.99	-02 52 33.3	413
1981	EZ34	1981	02	13.64027	12	00	03.98	-02 38 42.2	413
1981	EA35	1981	02	02.70943	12	07	43.32	+00 55 02.8	413
1981	EA35	1981	02	13.74138	12	02	32.73	+00 59 46.4	413
1981	EB35	1981	02	09.64744	12	02	48.83	-03 22 39.2	413
1981	EB35	1981	02	13.64027	12	01	30.80	-03 06 35.7	413
1981	EC35	1981	02	13.74138	12	01	16.36	+01 12 21.9	413
1981	ED35	1981	02	02.70943	12	07	38.33	+00 01 26.3	413
1981	ED35	1981	02	13.74138	12	03	50.38	+00 19 38.1	413
1981	EE35	1981	02	13.74138	12	02	59.28	+00 28 28.2	413
1981	EF35	1981	02	13.74138	12	03	25.06	-00 06 36.8	413
1981	EH35	1981	02	09.64744	12	10	22.51	-03 06 28.3	413
1981	EH35	1981	02	13.64027	12	08	28.95	-03 03 34.2	413
1981	EJ35	1981	02	09.64744	12	05	41.26	-01 18 42.8	413
1981	EJ35	1981	02	13.64027	12	04	52.39	-00 59 54.8	413
1981	EK35	1981	02	09.64744	12	07	59.86	-01 57 59.2	413
1981	EK35	1981	02	13.64027	12	06	28.64	-01 49 22.9	413
1981	EM35	1981	02	09.68922	12	11	44.47	+01 29 35.3	413
1981	EM35	1981	02	13.74138	12	10	15.63	+01 31 11.7	413
1981	EO35	1981	02	14.67563	12	10	17.29	-09 24 42.7	413
1981	EQ35	1981	02	13.74138	12	07	38.52	+00 06 36.7	413
1981	ER35	1981	02	14.67563	12	09	26.72	-11 38 44.6	413
1981	ES35	1981	02	09.68922	12	12	36.20	+01 48 31.1	413
1981	ES35	1981	02	13.74138	12	10	57.65	+01 50 20.3	413
1981	ET35	1981	02	09.60577	12	10	41.28	-12 51 16.6	413
1981	EU35	1981	02	09.68922	12	15	50.35	-00 42 11.3	413
1981	EU35	1981	02	13.64027	12	14	16.59	-00 26 45.0	413
1981	EU35	1981	02	13.74138	12	14	13.75	-00 26 16.0	413
1981	EV35	1981	02	09.68922	12	17	21.74	-00 15 48.2	413
1981	EV35	1981	02	13.74138	12	15	30.43	-00 17 22.0	413
1981	EW35	1981	02	14.67563	12	12	24.80	-10 54 55.7	413
1981	EX35	1981	02	09.60577	12	14	41.85	-12 18 18.5	413
1981	EX35	1981	02	14.67563	12	13	40.94	-12 27 26.9	413
1981	EY35	1981	02	09.68922	12	17	24.50	+00 04 21.2	413
1981	EY35	1981	02	13.74138	12	16	35.97	+00 03 16.7	413
1981	EZ35	1981	02	02.70943	12	05	08.07	+00 09 04.7	413
1981	EZ35	1981	02	13.74138	12	02	36.00	+00 28 13.8	413
1981	EB36	1981	02	02.70943	12	10	18.03	+00 12 23.7	413
1981	EB36	1981	02	13.74138	12	07	40.66	+00 20 52.2	413
1981	EC36	1981	02	09.68922	12	14	49.04	-01 25 20.7	413
1981	EC36	1981	02	13.64027	12	13	26.90	-01 14 11.1	413

1981	ED36	1981	02	12.65408	12	17	55.24	-05 33 32.1	413
1981	EG36	1981	02	02.70943	11	53	24.54	-00 03 23.5	413
1981	EJ36	1981	02	13.74138	12	01	16.54	+00 42 50.2	413
1981	EN36	1981	02	14.67563	11	58	52.96	-09 49 19.1	413
1981	EO36	1981	02	14.67563	12	03	19.33	-08 40 13.6	413
1981	EP36	1981	02	02.66718	12	05	57.41	-12 19 55.5	413
1981	ES36	1981	02	13.64027	12	07	13.26	-06 24 51.7	413
1981	EU36	1981	02	02.66718	12	09	21.20	-07 46 16.5	413
1981	EU36	1981	02	14.67563	12	07	53.26	-07 55 23.1	413
1981	EW36	1981	02	02.66718	12	12	36.89	-08 19 45.0	413
1981	EW36	1981	02	14.67563	12	08	59.72	-08 28 34.3	413
1981	EA37	1981	02	13.64027	12	16	42.96	-02 57 52.6	413
1981	EB37	1981	02	02.70943	12	02	31.39	+02 38 33.7	413
1981	EB37	1981	02	13.74138	11	58	00.68	+02 45 19.0	413
1981	ED37	1981	02	09.68922	12	17	34.71	+02 07 51.3	413
1981	ED37	1981	02	13.74138	12	15	55.38	+02 19 23.7	413
1981	EE37	1981	02	09.68922	12	20	03.02	+01 20 30.4	413
1981	EE37	1981	02	13.74138	12	18	21.40	+01 30 29.1	413
1981	EF37	1981	02	09.68922	12	21	47.22	+02 35 51.9	413
1981	EF37	1981	02	12.70048	12	20	27.11	+02 33 46.9	413
1981	EF37	1981	02	13.74138	12	19	55.60	+02 33 17.4	413
1981	EG37	1981	02	02.66718	11	55	56.28	-07 14 22.2	413
1981	EH37	1981	02	09.64744	11	58	17.11	-05 38 16.4	413
1981	EJ37	1981	02	09.64744	12	01	33.71	-03 05 25.3	413
1981	EJ37	1981	02	13.64027	11	59	31.55	-03 08 21.5	413
1981	EL37	1981	02	02.66718	12	01	05.06	-09 06 05.1	413
1981	EM37	1981	02	09.64744	12	04	14.40	-05 16 20.0	413
1981	EM37	1981	02	13.64027	12	02	14.33	-05 09 48.4	413
1981	EO37	1981	02	13.64027	12	05	01.51	-03 56 58.5	413
1981	EP37	1981	02	13.64027	12	06	45.65	-04 46 02.6	413
1981	ES37	1981	02	14.67563	12	06	55.32	-07 33 41.2	413
1981	EU37	1981	02	14.67563	12	11	06.76	-08 10 40.9	413
1981	EV37	1981	02	14.67563	12	11	07.50	-08 32 08.7	413
1981	EW37	1981	02	12.65408	12	12	42.19	-06 24 53.7	413
1981	EW37	1981	02	14.67563	12	11	57.45	-06 25 45.0	413
1981	EX37	1981	02	12.65408	12	11	46.49	-05 06 17.9	413
1981	EX37	1981	02	13.64027	12	11	31.96	-05 04 21.6	413
1981	EZ37	1981	02	12.65408	12	11	42.69	-04 28 15.9	413
1981	EZ37	1981	02	13.64027	12	11	23.36	-04 25 05.6	413
1981	EC38	1981	02	12.65408	12	15	56.77	-05 12 16.6	413
1981	EE38	1981	02	12.65408	12	16	03.11	-03 42 35.5	413
1981	EE38	1981	02	13.64027	12	15	40.10	-03 41 07.9	413
1981	EF38	1981	02	14.67563	12	13	22.01	-08 46 58.2	413
1981	EH38	1981	02	12.65408	12	17	08.87	-06 28 11.8	413
1981	EH38	1981	02	14.67563	12	16	38.20	-06 25 16.4	413
1981	EJ38	1981	02	12.65408	12	16	19.59	-07 49 13.9	413
1981	EJ38	1981	02	14.67563	12	15	56.49	-07 43 11.8	413
1981	EK38	1981	02	14.67563	12	17	51.69	-06 38 09.0	413
1981	EL38	1981	02	12.65408	12	17	51.02	-08 38 57.3	413
1981	EL38	1981	02	14.67563	12	17	23.76	-08 29 54.0	413
1981	EM38	1981	02	12.65408	12	25	02.78	-07 40 03.7	413
1981	EM38	1981	02	12.74480	12	25	00.98	-07 40 08.7	413
1981	EO38	1981	02	12.65408	12	25	49.60	-07 38 14.6	413
1981	EO38	1981	02	12.74480	12	25	48.21	-07 37 54.7	413
1981	EP38	1981	02	12.65408	12	27	40.65	-07 14 42.7	413
1981	EP38	1981	02	12.74480	12	27	39.12	-07 14 27.5	413
1981	EQ38	1981	02	12.65408	12	25	01.60	-08 19 56.5	413
1981	ER38	1981	02	12.65408	12	27	35.04	-08 07 04.1	413
1981	ER38	1981	02	12.74480	12	27	33.96	-08 06 43.0	413

1981	ES38	1981	02	12.65408	12	29	32.78	-07 11 39.3	413
1981	ES38	1981	02	12.74480	12	29	31.16	-07 11 25.1	413
1981	ET38	1981	02	12.65408	12	30	32.32	-07 28 31.8	413
1981	ET38	1981	02	12.74480	12	30	30.67	-07 28 16.4	413
1981	EU38	1981	02	12.65408	12	29	29.61	-06 15 51.8	413
1981	EU38	1981	02	12.74480	12	29	29.23	-06 15 49.2	413
1981	EV38	1981	02	12.65408	12	31	15.92	-06 47 31.8	413
1981	EV38	1981	02	12.74480	12	31	14.69	-06 47 35.9	413
1981	EW38	1981	02	09.60577	12	35	18.51	-09 43 01.4	413
1981	EW38	1981	02	12.60906	12	34	56.75	-09 47 58.1	413
1981	EX38	1981	02	02.66718	11	56	58.88	-10 04 10.6	413
1981	EY38	1981	02	02.62286	11	56	45.19	-14 07 55.0	413
1981	EY38	1981	02	09.56416	11	54	56.89	-14 30 41.7	413
1981	EA39	1981	02	09.64744	11	54	50.17	-00 53 22.7	413
1981	EB39	1981	02	09.64744	11	53	24.43	-03 53 29.0	413
1981	EC39	1981	02	09.64744	11	53	22.95	-05 49 50.1	413
1981	EE39	1981	02	02.70943	11	57	44.10	+00 12 01.2	413
1981	EG39	1981	02	02.70943	12	00	16.05	+00 07 02.9	413
1981	EL39	1981	02	09.64744	12	01	10.64	-01 01 50.8	413
1981	EM39	1981	02	02.70943	12	02	49.76	+02 26 41.8	413
1981	EM39	1981	02	13.74138	11	59	33.07	+02 25 59.3	413
1981	EN39	1981	02	09.64744	11	58	53.49	-01 33 03.1	413
1981	EO39	1981	02	02.70943	12	02	04.54	+00 07 31.4	413
1981	EO39	1981	02	13.74138	11	58	10.28	+00 41 24.3	413
1981	EQ39	1981	02	09.64744	12	00	01.19	-00 40 56.4	413
1981	EQ39	1981	02	13.74138	11	58	45.10	-00 33 16.4	413
1981	ES39	1981	02	13.64027	12	05	00.66	-02 34 32.3	413
1981	ET39	1981	02	09.64744	12	06	58.58	-02 27 46.0	413
1981	ET39	1981	02	13.64027	12	05	23.86	-02 24 03.4	413
1981	EU39	1981	02	02.70943	12	12	16.09	+03 01 02.2	413
1981	EU39	1981	02	13.74138	12	07	57.19	+03 04 17.7	413
1981	EV39	1981	02	13.64027	12	06	03.57	-02 13 07.4	413
1981	EW39	1981	02	13.74138	12	08	42.22	+01 22 39.5	413
1981	EY39	1981	02	09.64744	12	09	17.02	-01 47 37.3	413
1981	EY39	1981	02	13.64027	12	08	31.20	-01 41 23.6	413
1981	EA40	1981	02	13.74138	12	08	44.38	+01 33 57.8	413
1981	EB40	1981	02	13.74138	12	09	22.12	-00 19 26.9	413
1981	EC40	1981	02	09.60577	12	12	55.33	-13 46 28.3	413
1981	ED40	1981	02	13.64027	12	09	00.81	-03 23 36.8	413
1981	EE40	1981	02	13.74138	12	10	09.32	+01 11 30.0	413
1981	EF40	1981	02	09.68922	12	14	04.31	+01 01 58.8	413
1981	EF40	1981	02	13.74138	12	12	21.86	+01 05 04.4	413
1981	EG40	1981	02	09.68922	12	12	48.73	-00 17 14.5	413
1981	EG40	1981	02	13.74138	12	11	20.52	-00 05 05.9	413
1981	EH40	1981	02	09.68922	12	13	19.50	+00 32 20.4	413
1981	EH40	1981	02	13.74138	12	12	11.34	+00 35 45.6	413
1981	EJ40	1981	02	09.60577	12	21	18.68	-11 12 13.3	413
1981	EJ40	1981	02	14.67563	12	17	46.17	-11 35 53.0	413
1981	EK40	1981	02	09.68922	12	15	22.25	-03 29 16.3	413
1981	EK40	1981	02	13.64027	12	14	00.71	-03 17 27.0	413
1981	EL40	1981	02	09.68922	12	15	22.82	-02 33 25.3	413
1981	EL40	1981	02	13.64027	12	14	20.65	-02 36 51.9	413
1981	EM40	1981	02	09.68922	12	16	25.70	+01 18 25.8	413
1981	EM40	1981	02	13.74138	12	15	00.61	+01 33 37.8	413
1981	EO40	1981	02	13.64027	12	14	11.18	-01 50 40.9	413
1981	EP40	1981	02	12.65408	12	16	09.41	-05 41 59.6	413
1981	EP40	1981	02	13.64027	12	15	48.06	-05 38 44.5	413
1981	EQ40	1981	02	09.68922	12	18	38.93	-02 29 56.2	413
1981	EQ40	1981	02	13.64027	12	17	11.45	-02 18 39.4	413

1981	ER40	1981	02	09.68922	12	15	54.92	-03	04	36.3	413
1981	ER40	1981	02	13.64027	12	15	08.95	-03	04	22.0	413
1981	ES40	1981	02	12.65408	12	16	36.40	-05	37	56.8	413
1981	ET40	1981	02	12.65408	12	17	03.69	-04	41	01.0	413
1981	EU40	1981	02	13.64027	12	17	33.88	-05	02	13.4	413
1981	EV40	1981	02	09.68922	12	22	01.52	-00	07	29.0	413
1981	EV40	1981	02	12.70048	12	20	36.34	-00	09	33.8	413
1981	EW40	1981	02	09.68922	12	21	46.47	-01	46	21.1	413
1981	EW40	1981	02	13.64027	12	20	01.16	-01	47	20.2	413
1981	EX40	1981	02	09.68922	12	19	48.65	-02	55	43.4	413
1981	EX40	1981	02	13.64027	12	18	17.54	-02	58	25.4	413
1981	EY40	1981	02	12.65408	12	17	45.81	-03	25	35.7	413
1981	EY40	1981	02	13.64027	12	17	26.68	-03	23	37.7	413
1981	EZ40	1981	02	09.68922	12	22	27.42	-02	38	05.8	413
1981	EA41	1981	02	12.65408	12	16	56.25	-03	32	46.0	413
1981	EA41	1981	02	13.64027	12	16	40.63	-03	29	36.7	413
1981	EE41	1981	02	12.65408	12	20	18.85	-04	31	24.3	413
1981	EE41	1981	02	12.74480	12	20	17.06	-04	31	03.5	413
1981	EE41	1981	02	13.64027	12	20	01.86	-04	27	16.2	413
1981	EH41	1981	02	12.65408	12	20	16.49	-06	04	51.3	413
1981	EH41	1981	02	12.74480	12	20	15.19	-06	04	34.1	413
1981	EK41	1981	02	12.65408	12	21	18.50	-06	00	34.3	413
1981	EK41	1981	02	12.74480	12	21	17.21	-06	00	19.5	413
1981	EL41	1981	02	09.68922	12	24	31.89	+00	29	41.6	413
1981	EL41	1981	02	12.70048	12	23	31.68	+00	29	50.9	413
1981	EL41	1981	02	13.69290	12	23	09.39	+00	30	06.5	413
1981	EM41	1981	02	12.65408	12	23	47.78	-04	48	23.7	413
1981	EM41	1981	02	12.74480	12	23	45.50	-04	48	20.7	413
1981	EN41	1981	02	09.68922	12	22	21.85	-00	39	41.3	413
1981	EN41	1981	02	12.70048	12	21	56.92	-00	32	36.3	413
1981	EO41	1981	02	12.70048	12	25	23.21	+00	20	32.6	413
1981	EO41	1981	02	13.69290	12	24	58.11	+00	21	39.2	413
1981	EP41	1981	02	09.68922	12	27	03.19	-02	36	50.1	413
1981	EQ41	1981	02	12.65408	12	25	19.27	-04	45	34.9	413
1981	EQ41	1981	02	12.74480	12	25	17.18	-04	45	34.2	413
1981	EQ41	1981	02	13.69290	12	24	56.57	-04	45	06.5	413
1981	ER41	1981	02	09.68922	12	30	04.42	+01	54	57.3	413
1981	ER41	1981	02	12.70048	12	28	41.22	+01	44	02.9	413
1981	ES41	1981	02	09.68922	12	24	29.39	-01	54	37.5	413
1981	ES41	1981	02	12.70048	12	23	52.70	-01	52	17.0	413
1981	ES41	1981	02	13.69290	12	23	37.64	-01	51	13.2	413
1981	ET41	1981	02	09.68922	12	26	42.13	-03	11	33.5	413
1981	ET41	1981	02	13.69290	12	25	38.75	-02	53	40.6	413
1981	EU41	1981	02	12.65408	12	26	35.41	-04	49	03.1	413
1981	EU41	1981	02	12.74480	12	26	33.54	-04	48	51.4	413
1981	EU41	1981	02	13.69290	12	26	17.27	-04	46	50.9	413
1981	EV41	1981	02	12.65408	12	26	10.55	-04	35	10.1	413
1981	EV41	1981	02	12.74480	12	26	08.95	-04	35	08.7	413
1981	EV41	1981	02	13.69290	12	25	52.43	-04	34	41.9	413
1981	EW41	1981	02	12.70048	12	26	30.15	-02	04	03.8	413
1981	EW41	1981	02	13.69290	12	26	12.38	-02	01	22.5	413
1981	EX41	1981	02	12.65408	12	26	53.72	-03	37	59.3	413
1981	EX41	1981	02	12.74480	12	26	51.91	-03	37	46.1	413
1981	EX41	1981	02	13.69290	12	26	33.43	-03	35	43.1	413
1981	EY41	1981	02	13.69290	12	25	46.30	-03	58	23.8	413
1981	EA42	1981	02	12.65408	12	28	13.73	-03	31	46.9	413
1981	EA42	1981	02	12.74480	12	28	12.29	-03	31	20.1	413
1981	EA42	1981	02	13.69290	12	27	57.51	-03	26	41.9	413
1981	ED42	1981	02	13.69290	12	26	50.69	-02	02	07.1	413

1981	EE42	1981	02	09.68922	12	28	17.38	-02 43 10.2	413
1981	EE42	1981	02	12.70048	12	27	43.63	-02 28 17.6	413
1981	EE42	1981	02	13.69290	12	27	30.08	-02 23 04.8	413
1981	EF42	1981	02	09.68922	12	28	52.12	-01 06 52.1	413
1981	EF42	1981	02	12.70048	12	28	24.04	-01 03 07.6	413
1981	EF42	1981	02	13.69290	12	28	11.60	-01 01 35.0	413
1981	EJ42	1981	02	12.65408	12	26	53.60	-05 55 13.4	413
1981	EJ42	1981	02	12.74480	12	26	52.96	-05 54 52.4	413
1981	EK42	1981	02	12.65408	12	28	05.07	-05 48 58.9	413
1981	EK42	1981	02	12.74480	12	28	03.98	-05 48 47.0	413
1981	EL42	1981	02	12.65408	12	30	25.16	-03 22 38.4	413
1981	EL42	1981	02	12.74480	12	30	23.38	-03 22 28.0	413
1981	EM42	1981	02	12.65408	12	29	15.36	-05 32 10.9	413
1981	EM42	1981	02	12.74480	12	29	14.09	-05 31 55.3	413
1981	EM42	1981	05	01.43386	11	46	55.30	+01 49 16.4	413
1981	EN42	1981	02	12.65408	12	30	07.60	-04 18 47.5	413
1981	EN42	1981	02	12.74480	12	30	06.51	-04 18 42.3	413
1981	EN42	1981	02	13.69290	12	29	55.80	-04 17 33.4	413
1981	EO42	1981	02	09.68922	12	33	28.09	-01 44 12.4	413
1981	EO42	1981	02	12.70048	12	32	30.60	-01 41 32.6	413
1981	EO42	1981	02	13.69290	12	32	08.73	-01 40 23.4	413
1981	EP42	1981	02	12.74480	12	30	44.15	-04 40 56.3	413
1981	EP42	1981	02	13.69290	12	30	28.19	-04 38 38.9	413
1981	ER42	1981	02	09.68922	12	31	53.79	-02 48 01.5	413
1981	ER42	1981	02	12.70048	12	31	06.70	-02 43 33.2	413
1981	ER42	1981	02	13.69290	12	30	48.63	-02 41 50.0	413
1981	ES42	1981	02	09.68922	12	32	41.70	-02 13 09.8	413
1981	ES42	1981	02	12.70048	12	32	01.14	-02 09 49.7	413
1981	ES42	1981	02	13.69290	12	31	44.45	-02 08 23.3	413
1981	ET42	1981	02	12.65408	12	32	01.01	-04 26 48.5	413
1981	ET42	1981	02	12.74480	12	31	59.69	-04 26 45.3	413
1981	ET42	1981	02	13.69290	12	31	44.89	-04 26 05.7	413
1981	EV42	1981	02	09.68922	12	35	10.56	-02 05 20.9	413
1981	EV42	1981	02	12.70048	12	34	29.67	-02 09 25.2	413
1981	EV42	1981	02	13.69290	12	34	12.77	-02 10 27.3	413
1981	EX42	1981	02	12.74480	12	36	13.81	-03 17 23.1	413
1981	EX42	1981	02	13.69290	12	35	54.99	-03 16 38.0	413
1981	EY42	1981	02	12.65408	12	32	00.96	-04 10 22.0	413
1981	EY42	1981	02	12.74480	12	32	00.57	-04 10 21.4	413
1981	EZ42	1981	02	12.65408	12	33	10.06	-04 02 18.5	413
1981	EZ42	1981	02	12.74480	12	33	09.40	-04 02 14.2	413
1981	EZ42	1981	02	13.69290	12	33	03.65	-04 01 21.5	413
1981	EB43	1981	02	13.69290	12	34	33.01	-02 51 25.2	413
1981	EC43	1981	02	12.74480	12	35	48.89	-05 44 40.7	413
1981	EF43	1981	02	12.74480	12	37	12.32	-05 46 23.0	413
1981	EJ43	1981	02	09.64744	11	55	11.91	-01 41 14.6	413
1981	EK43	1981	02	02.70943	11	58	55.97	+01 55 00.4	413
1981	EN43	1981	02	13.74138	12	08	45.29	+02 52 03.0	413
1981	EO43	1981	02	13.64027	12	09	13.33	-00 57 10.7	413
1981	ER43	1981	02	09.68922	12	15	01.15	-02 53 44.1	413
1981	ER43	1981	02	13.64027	12	13	37.62	-02 46 11.7	413
1981	ES43	1981	02	09.68922	12	13	51.52	-03 17 42.2	413
1981	ES43	1981	02	13.64027	12	12	38.04	-03 09 23.9	413
1981	ET43	1981	02	09.56416	12	13	10.65	-14 37 08.7	413
1981	ET43	1981	02	09.60577	12	13	10.42	-14 36 54.4	413
1981	EU43	1981	02	09.60577	12	22	01.86	-13 55 38.7	413
1981	EW43	1981	02	09.68922	12	20	57.27	+00 42 55.8	413
1981	EX43	1981	02	12.65408	12	19	53.94	-06 50 13.6	413
1981	EX43	1981	02	12.74480	12	19	52.09	-06 49 59.7	413

1981	EX43	1981	02	14.67563	12	19	09.33	-06	44	52.3	413
1981	EF44	1981	02	12.65408	12	32	03.15	-05	57	04.0	413
1981	EF44	1981	02	12.74480	12	32	01.84	-05	57	04.2	413
1981	EG44	1981	02	09.68922	12	35	20.56	+00	41	42.1	413
1981	EG44	1981	02	12.70048	12	34	31.90	+00	42	25.6	413
1981	EG44	1981	02	13.69290	12	34	13.17	+00	42	52.0	413
1981	EL44	1981	02	02.66718	12	01	59.82	-07	06	44.8	413
1981	EL44	1981	02	14.67563	11	56	28.57	-07	23	02.1	413
1981	EM44	1981	02	14.67563	11	54	45.35	-08	43	43.9	413
1981	EO44	1981	02	13.74138	11	58	32.72	-00	45	52.7	413
1981	ES44	1981	02	09.64744	12	02	52.33	-05	42	54.8	413
1981	EZ44	1981	02	14.67563	12	05	45.36	-06	52	26.4	413
1981	EA45	1981	02	14.67563	12	08	04.73	-07	41	39.9	413
1981	ED45	1981	02	14.67563	12	14	35.46	-06	44	26.5	413
1981	EE45	1981	02	12.70048	12	37	24.13	+00	56	52.3	413
1981	EE45	1981	02	13.69290	12	37	06.17	+00	56	47.0	413
1981	EF45	1981	02	09.68922	12	24	37.52	+00	08	48.6	413
1981	EF45	1981	02	12.70048	12	24	06.99	+00	13	32.7	413
1981	EF45	1981	02	13.69290	12	23	54.07	+00	15	23.4	413
1981	EG45	1981	02	09.64744	11	56	03.04	-04	39	17.2	413
1981	EH45	1981	02	14.67563	12	17	10.12	-10	08	16.1	413
1981	EJ45	1981	02	14.67563	12	17	16.99	-08	15	54.6	413
1981	EL45	1981	02	09.60577	12	18	33.23	-10	57	42.1	413
1981	EL45	1981	02	14.67563	12	17	38.40	-11	08	11.6	413
1981	EM45	1981	02	12.74480	12	20	36.09	-08	37	41.3	413
1981	EN45	1981	02	12.65408	12	22	53.83	-06	21	09.8	413
1981	EN45	1981	02	12.74480	12	22	51.18	-06	21	06.5	413
1981	EP45	1981	02	12.65408	12	26	15.76	-06	12	53.3	413
1981	EP45	1981	02	12.74480	12	26	13.73	-06	13	07.9	413
1981	ER45	1981	02	12.65408	12	29	50.18	-07	45	41.8	413
1981	ER45	1981	02	12.74480	12	29	49.74	-07	45	29.3	413
1981	ES45	1981	02	09.60577	12	32	59.00	-10	10	17.6	413
1981	ET45	1981	02	09.60577	12	31	51.05	-09	58	25.7	413
1981	ET45	1981	02	12.60906	12	31	33.33	-09	48	20.1	413
1981	EV45	1981	02	12.74480	12	34	31.79	-07	08	46.9	413
1981	EY45	1981	02	12.74480	12	37	13.65	-07	53	04.8	413
1981	EZ45	1981	02	02.70943	11	54	16.03	+01	23	20.0	413
1981	EE46	1981	02	09.64744	11	54	24.42	-03	24	53.7	413
1981	EG46	1981	02	02.70943	11	57	45.40	+00	21	04.0	413
1981	EG46	1981	02	13.74138	11	54	56.90	+00	08	19.5	413
1981	EJ46	1981	02	09.64744	11	57	16.10	-02	09	12.7	413
1981	EJ46	1981	02	13.64027	11	55	43.82	-01	59	19.5	413
1981	EM46	1981	02	09.64744	12	00	55.17	-02	22	23.7	413
1981	EO46	1981	02	13.74138	11	57	58.70	+01	20	31.5	413
1981	EP46	1981	02	02.70943	12	08	02.35	+00	29	31.8	413
1981	EP46	1981	02	13.74138	12	02	38.17	+00	45	05.2	413
1981	EQ46	1981	02	13.74138	12	01	34.12	+00	20	06.4	413
1981	ET46	1981	02	09.64744	12	05	51.13	-01	20	08.7	413
1981	ET46	1981	02	13.64027	12	04	09.89	-01	12	18.0	413
1981	EV46	1981	02	09.64744	12	09	24.43	-01	39	54.2	413
1981	EV46	1981	02	13.64027	12	07	38.47	-01	31	01.0	413
1981	EW46	1981	02	13.74138	12	05	40.39	+00	16	10.4	413
1981	EX46	1981	02	09.64744	12	09	08.65	-02	21	33.7	413
1981	EY46	1981	02	13.74138	12	09	28.22	+00	48	16.9	413
1981	EZ46	1981	02	09.68922	12	10	58.65	+01	16	46.3	413
1981	EZ46	1981	02	13.74138	12	09	02.78	+01	30	17.3	413
1981	EA47	1981	02	13.64027	12	11	52.52	-01	06	46.9	413
1981	EB47	1981	02	13.74138	12	12	46.06	+01	37	07.4	413
1981	EC47	1981	02	02.70943	12	11	26.60	+00	30	52.9	413

1981	ED47	1981	02	09.68922	12	13	31.80	-01	57	35.2	413
1981	ED47	1981	02	13.64027	12	12	17.71	-01	55	44.2	413
1981	EE47	1981	02	13.74138	12	15	29.31	-00	05	10.1	413
1981	EF47	1981	02	13.74138	12	16	10.25	-00	20	23.2	413
1981	EG47	1981	02	12.65408	12	15	24.12	-05	49	06.4	413
1981	EG47	1981	02	13.64027	12	15	09.87	-05	48	40.6	413
1981	EJ47	1981	02	09.68922	12	19	02.48	-02	00	19.2	413
1981	EK47	1981	02	12.65408	12	19	25.36	-04	29	07.5	413
1981	EK47	1981	02	13.64027	12	19	10.24	-04	27	47.9	413
1981	EL47	1981	02	12.74480	12	22	01.66	-03	58	42.4	413
1981	EO47	1981	02	13.69290	12	29	26.02	-02	05	56.4	413
1981	EP47	1981	02	12.65408	12	29	12.64	-05	34	27.0	413
1981	EP47	1981	02	12.74480	12	29	11.02	-05	34	05.1	413
1981	EQ47	1981	02	09.68922	12	33	52.33	-01	50	14.3	413
1981	EQ47	1981	02	12.70048	12	33	05.04	-01	42	10.1	413
1981	EQ47	1981	02	13.69290	12	32	46.34	-01	39	11.6	413
1981	ER47	1981	02	12.70048	12	33	51.49	-01	12	32.1	413
1981	ER47	1981	02	13.69290	12	33	30.66	-01	10	07.7	413
1981	ES47	1981	02	12.70048	12	35	07.43	-00	29	36.3	413
1981	ES47	1981	02	13.69290	12	34	47.76	-00	26	50.3	413
1981	ET47	1981	02	12.74480	12	34	39.67	-03	31	14.3	413
1981	ET47	1981	02	13.69290	12	34	19.83	-03	30	13.1	413
1981	EV47	1981	02	12.65408	12	31	25.38	-04	48	28.4	413
1981	EV47	1981	02	12.74480	12	31	24.61	-04	48	04.2	413
1981	EV47	1981	02	13.69290	12	31	18.09	-04	43	35.9	413
1981	EZ47	1981	02	02.70943	12	00	12.16	+00	56	25.4	413
1981	EZ47	1981	02	13.74138	11	55	00.60	+01	25	33.6	413
1981	EE48	1981	02	12.65408	12	15	14.73	-06	57	35.7	413
1981	EE48	1981	02	14.67563	12	15	02.05	-06	48	40.9	413
1981	EF48	1981	02	12.65408	12	28	27.44	-04	40	09.8	413
1981	EF48	1981	02	12.74480	12	28	26.09	-04	40	01.8	413
1981	EF48	1981	02	13.69290	12	28	11.64	-04	38	35.2	413
1981	EG48	1981	02	12.65408	12	31	28.40	-07	30	44.7	413
1981	EG48	1981	02	12.74480	12	31	27.73	-07	30	33.4	413
1981	EH48	1981	02	09.60577	12	33	42.85	-11	31	59.1	413
1981	EH48	1981	02	12.60906	12	33	21.50	-11	32	54.8	413
1981	FB	1981	02	09.60577	12	33	08.32	-11	01	36.7	413
1981	FB	1981	02	12.60906	12	33	13.46	-10	51	37.1	413
1981	FD	1981	02	09.68922	12	21	57.49	+01	09	35.2	413
1981	FD	1981	02	12.70048	12	23	22.27	+00	56	54.7	413
1981	FD	1981	02	13.69290	12	23	45.83	+00	53	04.3	413
1981	FP	1981	02	09.64744	12	05	29.17	-01	49	26.8	413
1981	FP	1981	02	13.64027	12	04	45.94	-01	40	46.4	413
1981	FQ	1981	02	02.70943	12	06	28.20	-00	22	21.8	413
1981	FQ	1981	02	13.74138	12	03	58.90	-00	06	03.2	413
1981	FR	1981	02	09.64744	12	06	19.31	-03	44	09.8	413
1981	FR	1981	02	13.64027	12	05	12.61	-03	23	57.1	413
1981	FC1	1981	02	02.70943	11	59	30.64	+03	37	33.7	413
1981	FC1	1981	02	13.74138	11	55	22.58	+03	35	29.0	413
1981	GB	1981	02	12.74480	12	40	34.56	-06	03	14.1	413
1981	GD1	1981	02	12.65408	12	28	23.53	-07	12	05.9	413
1981	GD1	1981	02	12.74480	12	28	22.26	-07	12	01.3	413
1981	GM1	1981	02	13.74138	12	17	39.32	+04	25	16.7	413
1981	GN1	1981	02	09.64744	12	09	42.08	-03	37	39.7	413
1981	GN1	1981	02	13.64027	12	08	31.24	-03	17	59.6	413
1981	GO1	1981	02	02.70943	12	09	55.81	+01	16	47.8	413
1981	GO1	1981	02	13.74138	12	08	53.42	+01	16	14.0	413
1984	AB1	1981	02	13.74138	12	15	01.23	+04	38	15.9	413
2037	P-L	1981	02	13.74138	12	14	04.86	+04	11	44.9	413

4063	P-L	1981	02	12.74480	12	36	27.33	-06 49 18.2	413
4113	P-L	1981	02	12.65408	12	20	22.73	-04 10 02.2	413
4113	P-L	1981	02	12.74480	12	20	21.49	-04 09 54.4	413
4113	P-L	1981	02	13.64027	12	20	10.76	-04 08 29.6	413
4805	P-L	1981	02	02.70943	12	11	26.01	+01 15 15.6	413
4805	P-L	1981	02	09.68922	12	11	20.34	+01 15 06.9	413
4805	P-L	1981	02	13.74138	12	10	34.19	+01 19 05.9	413
6073	P-L	1981	02	02.70943	12	04	42.14	-00 50 23.0	413
6073	P-L	1981	02	09.64744	12	02	44.97	-00 47 39.8	413
6073	P-L	1981	02	13.64027	12	01	06.22	-00 42 56.8	413
6073	P-L	1981	02	13.74138	12	01	03.16	-00 42 47.0	413
6299	P-L	1981	02	09.60577	12	15	05.61	-10 33 46.7	413
6299	P-L	1981	02	14.67563	12	14	09.64	-10 14 38.8	413

Note 1: replaces the position on MPC 9528.

OBSERVATIONS MADE AT MOUNT JOHN UNIVERSITY OBSERVATORY.

Plates taken with the 0.6-m f/14 Cassegrain reflector by A. C. Gilmore, measured by P. M. Kilmartin. Computational support from R. McIntosh and W. M. Kissling. Reductions using field plates from the Carter Observatory, AGK3, SAO Catalog and Cape Photographic Catalogue. Contact: A. C. Gilmore, P.O. Box 57, Lake Tekapo, New Zealand.

Object		Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
1981 VA		1985 04	23.34911	10 06 57.03	-33 52 04.9	18		474
1981 VA		1985 04	23.41485	10 06 47.19	-33 49 58.0			474
1985 FE	*	1985 03	23.49551	11 08 13.31	-06 28 22.7		1	474
1985 FE		1985 03	23.54461	11 08 10.86	-06 28 03.9		1	474
1985 FE		1985 03	24.46443	11 07 27.35	-06 22 49.5			474
1985 FE		1985 03	24.47792	11 07 26.64	-06 22 44.3			474
1985 FE		1985 03	25.39655	11 06 43.68	-06 17 26.3	16.1		474
1985 FE		1985 03	25.40997	11 06 43.00	-06 17 21.1			474
1985 FE		1985 03	27.37902	11 05 12.95	-06 05 50.4			474
1985 FE		1985 03	27.39736	11 05 12.20	-06 05 44.8			474
1985 FE		1985 03	29.35689	11 03 46.24	-05 54 10.3			474
1985 FE		1985 03	29.37179	11 03 45.58	-05 54 05.2			474

Note 1: plates taken with the 0.25-m astrograph.

OBSERVATIONS MADE AT HAUTE PROVENCE.

Plates taken with the 0.6-m f/3.5 OHP-Liege Schmidt. Contact: F. Dossin, Institut d'Astrophysique, Universite de Liege, Avenue de Cointe 5, B-4200 Cointe Ougree, Belgium.

Object		Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
1984 YV		1985 03	17.88403	06 46 22.03	+05 41 38.0	16	511
1985 FF	*	1985 03	17.88403	06 45 17.36	+05 37 48.6	17	511
1985 FF		1985 03	23.86250	06 54 48.19	+07 35 21.6		511
1985 FF		1985 03	24.86528	06 56 26.91	+07 53 45.1		511

OBSERVATIONS MADE AT THE OSSERVATORIO S. VITTORE.

Plates taken by C. Vacchi and G. Sassi; blinked by Vacchi; measured by Vacchi, V. Goretti and E. Colombini. Reduced by Colombini from least-squares plate-constants solutions with five or more AGK3 or SAO reference stars. Contact: E. Colombini, Via S. Vittore 44, I-40136 Bologna, Italy.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
609	1985 03	19.89028	11 02 30.84	+06 32 26.2	15.4	552
609	1985 03	19.91250	11 02 29.89	+06 32 34.1		552
609	1985 03	19.93264	11 02 29.04	+06 32 40.1		552
2068	1985 02	18.87431	08 47 54.09	+30 48 59.5	16.1	552
2068	1985 02	18.90139	08 47 52.74	+30 49 07.5		552
2068	1985 02	19.85833	08 47 08.19	+30 52 58.2	16.2	552
2068	1985 02	19.88264	08 47 06.94	+30 53 03.1		552

3210	1985 03 25.90833	11 04 42.98	+19 50 59.2		16.0		552
3210	1985 03 25.92708	11 04 42.22	+19 51 04.2				552
3243	1985 02 18.93403	09 48 53.06	+19 09 12.3		16.9		552
3243	1985 02 18.95694	09 48 51.74	+19 09 15.8				552
1982 JA	1985 02 18.87431	08 47 39.22	+30 35 07.4		17.6		552
1982 JA	1985 02 18.90139	08 47 37.58	+30 35 13.6		17.6		552
1982 JA	1985 02 19.85833	08 46 44.10	+30 38 01.3		17.6		552
1982 JA	1985 02 19.88264	08 46 42.83	+30 38 06.9		17.6		552
1985 DZ	1985 02 18.93403	09 48 40.90	+19 09 29.9		17.1		552
1985 DZ	1985 02 18.95694	09 48 39.52	+19 09 29.2				552

OBSERVATIONS MADE AT THE OSSERVATORIO CHAONIS BY G. PELLEGRINI AND J. M. BAUR.

Plates taken with the 0.40-m f/4.5 reflector, blinked by G. Carniel. Measured and reduced by J. M. Baur using the Marcolin precision engine and least-squares plate-constants solutions with four or five SAO or AGK3 reference stars. Contact: J. M. Baur, Via Zara 20, I-33083 Chions, Italy.

Object	Date UT	R. A. (1950)	Decl.	Mag.	Obs.
372	1985 02 22.93750	10 17 47.62	+05 08 47.3		567
372	1985 02 22.94722	10 17 46.93	+05 08 46.7		567
912	1985 02 23.03125	12 59 46.70	+11 51 53.9		567
912	1985 02 23.04166	12 59 46.21	+11 51 54.9		567
1650	1985 02 22.95764	10 18 10.25	+07 03 20.6		567
1650	1985 02 22.96736	10 18 09.67	+07 03 25.1		567
1650	1985 02 22.97708	10 18 09.09	+07 03 28.8		567
2733	1985 04 21.92222	13 57 18.93	+07 18 29.1	16.6	567
2733	1985 04 21.93264	13 57 18.12	+07 18 30.8		567
2923	1985 04 16.94935	13 31 25.78	-12 53 05.1	16.1	567
2923	1985 04 16.96041	13 31 25.21	-12 53 02.1		567
2923	1985 04 16.97153	13 31 24.47	-12 52 59.3		567
1949 DA	1985 04 16.99166	14 04 23.71	-07 54 51.7	16.2	567
1949 DA	1985 04 17.00208	14 04 23.07	-07 54 48.1		567
1984 HA1	1985 04 17.01870	15 31 18.66	+03 53 38.1	15.7	567
1984 HA1	1985 04 17.02917	15 31 18.43	+03 53 41.7		567

OBSERVATIONS MADE AT VICTORIA BY J. B. TATUM AND D. D. BALAM.

Films (Kodak 2415 emulsion) taken with a 0.25-m f/2 Schmidt (Celestron 10). Measurements on single-coordinate engine. Generally 6-8 reference stars from SAO Catalog, least-squares plate-constants solution (Tatum 1982, J. Roy. Astron. Soc. Canada 76, 97). Contact: J. B. Tatum, Dept of Physics, University of Victoria, P.O. Box 1700, Victoria, BC, V8W 2Y2, Canada.

Object	Date UT	R. A. (1950)	Decl.	Obs.
1981 EM4	1985 03 13.17510	08 33 01.45	+19 59 14.5	657
1981 EM4	1985 03 13.21818	08 33 00.83	+19 58 59.8	657

OBSERVATIONS MADE WITH THE 1.2-M SCHMIDT AT PALOMAR BY J. GIBSON.

Coordination with J. G. Williams and with the Minor Planet Center. AGK3 and SAO reference stars. Contact: J. Gibson, MS 264-781, Jet Propulsion Laboratory, Pasadena, CA 91109, U.S.A.

Object	Date UT	R. A. (1950)	Decl.	Mag.	N	Obs.
318	1983 09 01.32572	22 28 28.17	-08 12 05.7	14		675
318	1983 09 02.26670	22 27 50.03	-08 18 20.2			675
318	1983 09 02.44170	22 27 42.69	-08 19 29.6			675
557	1983 08 30.24864	22 27 39.39	-06 41 26.0	15.5		675
557	1983 08 31.29516	22 26 41.19	-06 46 21.2			675
557	1983 09 01.32572	22 25 43.84	-06 51 14.1			675
557	1983 09 02.26670	22 24 51.79	-06 55 42.4			675
557	1983 09 02.44170	22 24 41.82	-06 56 31.6			675
707	1985 03 17.15384	05 36 57.12	+22 30 34.9	17.5	1	675

1109			1985	03	14.24516	05	30	28.02	+22	26	50.4	17	675
1109			1985	03	17.15384	05	32	11.46	+22	26	51.8	1	675
1928	SL		1985	03	14.24516	05	32	45.48	+22	39	24.9	17	675
1928	SL		1985	03	17.15384	05	34	54.61	+22	40	38.5	1	675
1979	MM5		1983	08	31.29516	22	26	19.18	-06	29	50.1		675
1979	MM5		1983	09	01.32572	22	25	25.27	-06	34	55.9		675
1979	MM5		1983	09	02.26670	22	24	36.41	-06	39	36.7		675
1983	QK	*	1983	08	30.24864	22	24	03.76	-06	07	03.3	16	675
1983	QK		1983	09	01.32572	22	22	04.39	-06	15	29.9		675
1983	QK		1983	09	02.26670	22	21	10.58	-06	19	22.8		675
1983	QK		1983	09	02.44170	22	21	00.07	-06	20	05.5		675
1983	QL	*	1983	08	30.24864	22	24	05.38	-06	51	33.1	16.5	675
1983	QL		1983	08	31.29516	22	23	21.79	-07	02	37.0		675
1983	QL		1983	09	01.32572	22	22	39.19	-07	13	31.3		675
1983	QL		1983	09	02.26670	22	22	01.06	-07	23	27.0		675
1983	QL		1983	09	02.44170	22	21	53.37	-07	25	17.3		675
1983	QM	*	1983	08	30.24864	22	24	45.61	-05	59	19.8	16.5	675
1983	QM		1983	08	31.29516	22	23	51.51	-06	07	28.6		675
1983	QM		1983	09	01.32572	22	22	58.77	-06	15	32.9		675
1983	QM		1983	09	02.26670	22	22	11.19	-06	22	53.4		675
1983	QM		1983	09	02.44170	22	22	01.84	-06	24	14.2		675
1983	QN	*	1983	08	30.24864	22	26	33.60	-06	15	10.0	16.5	675
1983	QN		1983	08	31.29516	22	25	48.76	-06	22	37.1		675
1983	QN		1983	09	01.32572	22	25	04.61	-06	29	59.1		675
1983	QN		1983	09	02.26670	22	24	24.57	-06	36	43.4		675
1983	QN		1983	09	02.44170	22	24	16.87	-06	37	57.5		675
1983	QO	*	1983	08	30.24864	22	26	46.02	-06	22	23.1	17.0	675
1983	QO		1983	08	31.29516	22	25	53.29	-06	27	40.1		675
1983	QO		1983	09	01.32572	22	25	01.45	-06	32	55.6		675
1983	QO		1983	09	02.26670	22	24	14.53	-06	37	43.5		675
1983	QO		1983	09	02.44170	22	24	05.44	-06	38	36.9		675
1983	QP	*	1983	08	30.24864	22	27	35.44	-07	19	01.0	16.5	675
1983	QP		1983	08	31.29516	22	26	40.23	-07	23	30.0		675
1983	QP		1983	09	01.32572	22	25	45.77	-07	27	58.3		675
1983	QP		1983	09	02.26670	22	24	56.45	-07	32	01.5		675
1983	QQ	*	1983	08	30.24864	22	28	58.77	-06	24	45.6	16.5	675
1983	QQ		1983	08	31.29516	22	28	05.27	-06	32	53.2		675
1983	QQ		1983	09	01.32572	22	27	12.49	-06	40	56.7		675
1983	QQ		1983	09	02.26670	22	26	24.59	-06	48	20.3		675
1983	QQ		1983	09	02.44170	22	26	15.21	-06	49	42.4		675
1983	QR	*	1983	08	30.24864	22	30	37.72	-07	31	06.7	17	675
1983	QR		1983	08	31.29516	22	29	38.21	-07	36	07.1		675
1983	QR		1983	09	01.32572	22	28	39.53	-07	41	07.8		675
1983	QR		1983	09	02.26670	22	27	46.30	-07	45	40.2		675
1983	QS	*	1983	08	30.24864	22	30	54.79	-06	42	21.5	16	675
1983	QS		1983	08	31.29516	22	30	04.07	-06	48	22.5		675
1983	QS		1983	09	01.32572	22	29	14.40	-06	54	19.6		675
1983	QS		1983	09	02.26670	22	28	29.55	-06	59	45.8		675
1983	QS		1983	09	02.44170	22	28	20.67	-07	00	45.7		675
1983	QT	*	1983	08	30.24864	22	31	58.28	-07	11	22.2	17.5	675
1983	QT		1983	08	31.29516	22	31	02.52	-07	13	53.5		675
1983	QT		1983	09	01.32572	22	30	07.63	-07	16	25.0		675
1983	QT		1983	09	02.26670	22	29	17.82	-07	18	42.9		675
1983	QT		1983	09	02.44170	22	29	08.14	-07	19	08.7		675
1983	QU	*	1983	08	30.24864	22	32	24.31	-07	23	36.6	18.5	675
1983	QU		1983	08	31.29516	22	31	20.65	-07	25	47.7		675
1983	QU		1983	09	01.32572	22	30	17.90	-07	27	56.8		675
1983	QU		1983	09	02.26670	22	29	20.84	-07	29	54.5		675
1983	QV	*	1983	08	30.24864	22	32	28.16	-06	16	25.2	17	675

1983	QV		1983	08	31.29516	22	31	45.40	-06	23	26.3	2 675
1983	QV		1983	09	01.32572	22	31	03.49	-06	30	20.6	675
1983	QV		1983	09	02.26670	22	30	25.27	-06	36	41.0	675
1983	QV		1983	09	02.26670	22	30	25.27	-06	36	41.0	675
1983	QV		1983	09	02.44170	22	30	17.89	-06	37	51.4	675
1983	QW	*	1983	08	30.24864	22	32	44.83	-07	49	24.8	16.5 675
1983	QW		1983	08	31.29516	22	31	43.73	-07	53	57.9	675
1983	QW		1983	09	01.32572	22	30	43.72	-07	58	27.6	675
1983	QW		1983	09	02.26670	22	29	49.56	-08	02	31.0	675
1983	QX	*	1983	08	30.24864	22	32	52.32	-06	43	36.7	18.5 675
1983	QX		1983	08	31.29516	22	32	02.59	-06	48	19.2	675
1983	QX		1983	09	01.32572	22	31	13.75	-06	52	59.5	675
1983	QX		1983	09	02.26670	22	30	29.30	-06	57	15.5	675
1983	QX		1983	09	02.44170	22	30	20.76	-06	58	02.5	675
1983	QY	*	1983	08	30.24864	22	33	02.42	-06	26	52.3	18 675
1983	QY		1983	08	31.29516	22	31	58.70	-06	26	10.0	675
1983	QY		1983	09	01.32572	22	30	55.96	-06	25	28.6	675
1983	QY		1983	09	02.26670	22	29	58.86	-06	24	53.5	675
1983	QY		1983	09	02.44170	22	29	47.55	-06	24	46.6	675
1983	QZ	*	1983	08	30.24864	22	33	03.35	-07	11	55.5	17.5 675
1983	QZ		1983	08	31.29516	22	32	05.16	-07	18	45.3	675
1983	QZ		1983	09	02.26670	22	30	16.31	-07	31	36.1	675
1983	QZ		1983	09	02.44170	22	30	06.28	-07	32	44.2	675
1983	QA1	*	1983	08	30.24864	22	33	12.42	-07	20	53.9	17 675
1983	QA1		1983	08	31.29516	22	32	17.20	-07	29	42.1	675
1983	QA1		1983	09	01.32572	22	31	22.84	-07	38	25.8	675
1983	QA1		1983	09	02.26670	22	30	33.32	-07	46	22.9	675
1983	QA1		1983	09	02.44170	22	30	23.73	-07	47	50.7	675
1983	QB1	*	1983	08	30.24864	22	33	17.27	-07	28	24.1	18.5 675
1983	QB1		1983	08	31.29516	22	32	15.27	-07	28	27.0	675
1983	QB1		1983	09	01.32572	22	31	14.23	-07	28	31.4	675
1983	QB1		1983	09	02.26670	22	30	18.83	-07	28	35.0	675
1983	QC1	*	1983	08	30.24864	22	33	20.89	-06	37	21.3	18 675
1983	QC1		1983	08	31.29516	22	32	26.48	-06	42	42.1	675
1983	QC1		1983	09	01.32572	22	31	32.96	-06	48	01.4	675
1983	QC1		1983	09	02.26670	22	30	44.20	-06	52	53.9	675
1983	QC1		1983	09	02.44170	22	30	34.68	-06	53	47.5	675
1983	QD1	*	1983	08	30.24864	22	33	25.03	-06	51	16.8	18 675
1983	QD1		1983	08	31.29516	22	32	27.47	-06	57	54.9	675
1983	QD1		1983	09	01.32572	22	31	30.78	-07	04	31.2	675
1983	QD1		1983	09	02.26670	22	30	39.03	-07	10	31.8	675
1983	QD1		1983	09	02.44170	22	30	29.04	-07	11	38.6	675
1983	QE1	*	1983	08	30.24864	22	33	44.57	-06	08	12.2	17 675
1983	QE1		1983	08	31.29516	22	32	40.42	-06	13	28.0	675
1983	QE1		1983	09	01.32572	22	31	37.56	-06	18	39.5	675
1983	QE1		1983	09	02.26670	22	30	40.52	-06	23	24.9	675
1983	QE1		1983	09	02.44170	22	30	29.50	-06	24	17.6	675
1983	QF1	*	1983	08	30.24864	22	33	59.25	-07	16	35.6	18 675
1983	QF1		1983	08	31.29516	22	33	07.01	-07	20	22.1	675
1983	QF1		1983	09	01.32572	22	32	15.69	-07	24	07.5	675
1983	QF1		1983	09	02.26670	22	31	29.14	-07	27	31.6	675
1983	QG1	*	1983	08	31.29516	22	30	01.23	-06	46	46.3	18.5 675
1983	QG1		1983	09	01.32572	22	29	04.48	-06	52	26.1	675
1983	QG1		1983	09	02.26670	22	28	12.78	-06	57	35.8	675
1983	QG1		1983	09	02.44170	22	28	02.80	-06	58	33.4	675
1983	RJ1		1983	08	30.24864	22	26	43.21	-06	40	36.3	15.0 675
1983	RJ1		1983	08	31.29516	22	25	53.90	-06	46	00.3	675
1983	RJ1		1983	09	01.32572	22	25	05.52	-06	51	22.5	675
1983	RJ1		1983	09	02.26670	22	24	21.99	-06	56	17.4	675

1983 RJ1	1983 09 02.44170	22 24 13.36	-06 57 11.6				675
1983 RV3	1983 08 30.24864	22 26 16.94	-06 18 04.3		15.5		675
1983 RV3	1983 08 31.29516	22 25 30.50	-06 25 56.3				675
1983 RV3	1983 09 01.32572	22 24 44.88	-06 33 43.1				675
1983 RV3	1983 09 02.26670	22 24 03.66	-06 40 50.4				675
1983 RV3	1983 09 02.44170	22 23 55.62	-06 42 08.8				675
1983 WF1	1984 12 31.49724	10 54 07.40	+27 10 22.4				675
1983 WF1	1985 01 01.50141	10 54 04.99	+27 18 02.8				675
1983 WF1	1985 03 14.37502	10 10 27.44	+35 20 32.3				675
1985 DD	1985 03 13.36182	10 36 20.74	+56 56 50.4				675
1985 EA *	1985 03 14.24516	05 33 56.85	+22 33 18.1		18		675

Note 1: plate taken by J. Schombert. 2: trail ends on a star trail; measurement uncertain.

OBSERVATIONS MADE WITH THE 1.2-M SCHMIDT AT PALOMAR BY E. HELIN.

Plates measured by D. Steele. Contact: E. Helin, MS 183-501, Jet Propulsion Laboratory, 4800 Oak Grove Drive, Pasadena, CA 91109, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
1985 DP1 *	1985 02 24.21528	04 54 52.02	+15 07 30.2		16.8	675
1985 DP1	1985 02 24.25741	04 54 55.44	+15 07 49.1			675

OBSERVATIONS MADE AT PALOMAR BY C. S. SHOEMAKER AND E. SHOEMAKER.

Four-minute exposures with the 0.46-m Schmidt telescope. Film pairs scanned with a stereomicroscope. Reference stars from the SAO Catalog. Assistance from B. Anderson, T. Dowling, A. Grossman, M. Nolan, D. Padgett, J. Platt and K. Stapelfeldt. Contact: C. Shoemaker, Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, CA 91125, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
2928	1984 10 23.48056	04 02 08.41	+34 13 50.9				675
2928	1984 10 27.43056	03 59 39.74	+34 16 34.9				675
1984 SZ4	1984 10 23.32431	01 33 27.60	+22 22 31.9				675
1984 SZ4	1984 10 27.20903	01 30 38.91	+21 55 19.1				675
1984 UT3	1984 09 27.45278	01 53 22.60	+21 26 06.2				675
1984 UT3	1984 09 27.49931	01 53 20.83	+21 26 14.5				675
1984 WW1 *	1984 11 21.33611	03 39 30.99	+36 28 23.5		17	1	675
1984 WW1	1984 11 21.35278	03 39 29.77	+36 28 24.0				675
1985 FC *	1985 03 20.33125	12 19 29.03	+14 35 11.4		17.5	2	675
1985 FC	1985 03 24.33819	12 11 27.54	+13 50 42.0				675
1985 FC	1985 03 25.43056	12 09 16.24	+13 37 38.5				675
1985 FD *	1985 03 21.28056	11 49 14.37	+27 29 00.7		17.5	2	675
1985 FD	1985 03 24.31250	11 46 32.17	+27 42 15.7				675
1985 FD	1985 03 25.44722	11 45 32.00	+27 46 25.4				675

Note 1: discoverer C. Brigham. 2: discoverer C. Shoemaker.

OBSERVATIONS MADE WITH THE 0.33-M PHOTOGRAPHIC TELESCOPE AT THE LOWELL OBSERVATORY'S ANDERSON MESA STATION.

Observations made by B. A. Skiff, measured by E. Bowell and S. J. Bus using a PDS scanning microdensitometer. See also MPC 9533. Contact: E. Bowell, Lowell Observatory, P.O. Box 1269, Flagstaff, AZ 86002, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
4	1985 04 15.24265	14 06 14.85	+00 39 23.2				688
4	1985 04 15.30833	14 06 11.16	+00 39 42.7				688
36	1985 03 24.36811	12 50 33.94	-12 39 59.8				688
36	1985 03 24.40538	12 50 31.83	-12 39 56.6				688
39	1985 03 21.25579	10 54 08.84	+09 57 42.6				688
39	1985 03 21.31748	10 54 06.23	+09 58 07.4				688
41	1985 04 15.19861	13 10 39.48	+04 50 28.4				688
41	1985 04 15.26470	13 10 37.13	+04 51 25.3				688

44	1985	04	14.25926	13	58	37.92	-05	31	39.6	688
44	1985	04	14.34641	13	58	32.89	-05	31	09.6	688
62	1985	04	15.35255	14	56	56.69	-13	42	43.6	688
62	1985	04	15.39655	14	56	54.96	-13	42	35.4	688
67	1985	03	24.36811	12	49	25.09	-07	35	09.4	688
67	1985	03	24.40538	12	49	23.18	-07	34	52.9	688
82	1985	03	21.25579	11	04	30.04	+09	01	52.9	688
82	1985	03	21.31748	11	04	27.14	+09	02	02.4	688
88	1985	03	24.38686	13	30	03.59	-17	32	50.7	688
88	1985	03	24.42373	13	30	02.02	-17	32	44.6	688
91	1985	03	24.38686	13	42	39.35	-11	09	18.0	688
91	1985	03	24.42373	13	42	37.67	-11	09	11.2	688
92	1985	03	21.27083	11	11	55.02	+18	37	46.2	688
92	1985	03	21.33264	11	11	52.41	+18	38	00.3	688
122	1985	03	24.15388	09	08	00.51	+15	21	15.7	688
122	1985	03	24.22934	09	07	59.59	+15	21	22.2	688
126	1985	04	14.25926	13	52	13.26	-11	57	04.1	688
126	1985	04	14.34641	13	52	08.24	-11	56	41.7	688
163	1985	03	22.30197	12	02	33.88	+03	01	25.3	688
163	1985	03	22.36944	12	02	30.07	+03	01	59.6	688
167	1985	03	24.15388	09	24	57.97	+14	26	53.9	688
167	1985	03	24.22934	09	24	56.49	+14	27	04.4	688
208	1985	03	24.36811	12	49	57.79	-05	38	47.8	688
208	1985	03	24.40538	12	49	56.02	-05	38	38.5	688
210	1985	04	15.33032	14	32	04.66	-15	23	30.4	688
210	1985	04	15.37459	14	32	02.46	-15	23	24.8	688
223	1985	03	24.15388	09	14	59.50	+18	42	46.8	688
223	1985	03	24.22934	09	14	58.72	+18	42	45.3	688
224	1985	03	21.25579	10	58	27.88	+07	09	03.1	688
224	1985	03	21.31748	10	58	24.65	+07	09	13.5	688
232	1985	03	24.15388	09	07	58.41	+16	49	02.0	688
239	1985	04	15.35255	14	51	32.13	-11	01	49.0	688
239	1985	04	15.39655	14	51	30.29	-11	01	36.8	688
247	1985	03	21.30104	12	24	21.47	-06	59	11.7	688
247	1985	03	21.36302	12	24	17.33	-06	59	11.9	688
247	1985	03	24.32257	12	21	04.25	-06	58	56.7	688
247	1985	03	24.35295	12	21	02.22	-06	58	56.1	688
247	1985	04	14.19931	11	59	35.83	-06	48	32.6	688
247	1985	04	14.28657	11	59	30.95	-06	48	30.3	688
259	1985	03	24.27031	10	21	41.69	+25	24	11.6	688
259	1985	03	24.30741	10	21	40.39	+25	24	13.8	688
265	1985	03	24.25133	10	15	15.16	-03	45	45.7	688
265	1985	03	24.28892	10	15	12.06	-03	46	05.5	688
283	1985	03	24.25133	10	25	15.52	+02	18	06.6	688
283	1985	03	24.28892	10	25	14.13	+02	18	14.5	688
306	1985	03	24.15388	09	24	24.30	+17	28	33.8	688
306	1985	03	24.22934	09	24	22.58	+17	28	48.5	688
328	1985	03	21.28576	11	19	31.83	+04	06	04.3	688
328	1985	03	21.34797	11	19	28.42	+04	06	06.1	688
384	1985	03	22.30197	12	02	59.30	+07	01	06.9	688
384	1985	03	22.36944	12	02	55.49	+07	01	23.1	688
387	1985	03	22.28351	11	36	57.74	+23	07	37.3	688
387	1985	03	22.35072	11	36	54.31	+23	08	08.4	688
392	1985	03	24.38686	13	48	47.66	-13	57	38.0	688
392	1985	03	24.42373	13	48	46.34	-13	57	24.7	688
417	1985	04	15.35255	15	02	01.07	-13	34	16.0	688
417	1985	04	15.39655	15	01	59.42	-13	34	00.4	688
423	1985	04	15.24265	14	03	27.59	-00	36	51.3	688
423	1985	04	15.30833	14	03	24.32	-00	36	41.7	688

435	1985	03	24.36811	13	04	18.95	-06	18	03.2		688
435	1985	03	24.40538	13	04	17.01	-06	17	52.9		688
454	1985	03	21.27083	11	00	42.81	+14	11	58.1		688
454	1985	03	21.33264	11	00	39.47	+14	12	03.9		688
461	1985	03	24.36811	13	05	12.62	-05	36	16.3		688
461	1985	03	24.40538	13	05	11.04	-05	36	06.4		688
483	1985	04	15.19861	13	32	53.05	+03	31	05.4		688
483	1985	04	15.26470	13	32	50.51	+03	31	34.7		688
490	1985	04	14.25926	13	46	45.85	-04	31	42.1		688
490	1985	04	14.34641	13	46	42.14	-04	31	12.0		688
513	1985	04	14.25926	14	02	25.01	-06	18	10.8		688
513	1985	04	14.34641	14	02	21.21	-06	17	37.8		688
547	1985	03	24.36811	12	46	46.23	-06	15	38.8		688
547	1985	03	24.40538	12	46	44.59	-06	15	20.8		688
549	1985	03	24.38686	13	46	17.55	-17	17	21.7	16.2	688
549	1985	03	24.42373	13	46	15.87	-17	17	15.0		688
558	1985	04	15.24265	13	48	43.59	+00	41	34.6		688
558	1985	04	15.30833	13	48	40.52	+00	41	57.8		688
563	1985	03	22.32066	12	49	53.84	+11	04	34.6		688
563	1985	03	22.38802	12	49	50.27	+11	04	56.7		688
563	1985	04	14.23171	12	30	22.33	+12	31	28.7		688
563	1985	04	14.31910	12	30	18.18	+12	31	38.0		688
577	1985	03	24.15388	09	04	35.04	+17	06	20.9		688
577	1985	03	24.22934	09	04	33.65	+17	06	21.1		688
591	1985	03	22.26858	11	16	42.39	-04	59	50.8		688
591	1985	03	22.33576	11	16	38.09	-04	59	55.7		688
609	1985	03	21.25579	11	01	35.26	+06	39	51.2		688
609	1985	03	21.31748	11	01	32.63	+06	40	10.4		688
625	1985	03	22.32066	12	33	50.80	+12	15	57.7		688
625	1985	03	22.38802	12	33	47.50	+12	16	28.6		688
625	1985	04	14.23171	12	15	33.95	+14	33	08.2		688
625	1985	04	14.31910	12	15	29.99	+14	33	28.6		688
629	1985	04	15.19861	13	27	11.69	+04	46	24.5		688
629	1985	04	15.26470	13	27	08.51	+04	46	36.2		688
632	1985	03	21.30104	12	36	04.74	-04	32	52.0		688
632	1985	03	21.36302	12	36	01.39	-04	32	37.5		688
634	1985	03	22.19138	08	31	34.06	+20	30	43.5		688
634	1985	03	22.24366	08	31	33.68	+20	30	51.2		688
641	1985	03	21.28576	11	29	57.49	+05	34	28.9		688
641	1985	03	21.34797	11	29	53.76	+05	34	49.1		688
674	1985	03	22.28351	11	31	04.14	+24	38	25.1		688
674	1985	03	22.35072	11	31	00.47	+24	38	25.1		688
716	1985	03	21.25579	11	02	32.60	+11	53	34.2		688
716	1985	03	21.31748	11	02	29.97	+11	53	59.2		688
746	1985	03	21.30104	12	35	54.35	-06	52	31.3		688
746	1985	03	21.36302	12	35	51.12	-06	52	26.6		688
784	1985	03	21.27083	11	10	04.73	+14	29	43.5		688
784	1985	03	21.33264	11	10	01.34	+14	29	46.3		688
794	1985	03	21.25579	10	54	33.63	+07	55	10.4		688
794	1985	03	21.31748	10	54	31.01	+07	55	29.7		688
795	1985	03	22.22205	09	21	36.15	+36	51	43.1		688
795	1985	03	22.25648	09	21	35.25	+36	51	25.0		688
795	1985	03	24.13171	09	20	47.53	+36	33	50.1		688
795	1985	03	24.20723	09	20	45.62	+36	33	07.3		688
796	1985	03	22.32066	12	42	33.55	+09	31	58.6		688
796	1985	03	22.38802	12	42	29.80	+09	32	11.0		688
796	1985	04	14.23171	12	21	38.87	+10	17	59.0		688
796	1985	04	14.31910	12	21	34.31	+10	18	02.4		688
797	1985	04	14.19931	11	40	34.37	-04	01	53.1		688

797	1985	04	14.28657	11	40	31.15	-04	01	19.7			688
818	1985	04	15.22072	13	46	31.45	+06	33	36.3			688
818	1985	04	15.28652	13	46	28.21	+06	33	45.2			688
829	1985	03	21.30104	12	37	11.69	-07	42	09.4			688
829	1985	03	21.36302	12	37	08.16	-07	41	58.7			688
848	1985	04	15.35255	14	43	47.61	-15	35	47.0			688
848	1985	04	15.39655	14	43	45.74	-15	35	38.1			688
855	1985	03	24.38686	13	45	32.08	-10	45	34.2			688
855	1985	03	24.42373	13	45	30.31	-10	45	42.1			688
861	1985	04	15.19861	13	18	23.58	+04	08	54.4			688
861	1985	04	15.26470	13	18	20.58	+04	09	10.6			688
873	1985	04	15.24265	13	52	30.23	-03	25	22.2			688
873	1985	04	15.30833	13	52	26.93	-03	24	55.4			688
906	1985	04	15.19861	13	18	59.62	-02	03	54.8			688
906	1985	04	15.26470	13	18	55.97	-02	03	47.2			688
912	1985	03	22.38802	12	38	13.53	+12	34	22.2			688
912	1985	04	14.23171	12	16	43.68	+12	00	54.5			688
912	1985	04	14.31910	12	16	39.23	+12	00	36.5			688
942	1985	04	15.19861	13	12	18.30	+04	58	08.8			688
942	1985	04	15.26470	13	12	15.28	+04	58	20.5			688
952	1985	03	22.17888	08	13	12.78	+31	12	14.3			688
952	1985	03	22.23108	08	13	12.74	+31	11	59.4			688
952	1985	03	24.16921	08	13	18.76	+31	03	29.5			688
952	1985	03	24.18837	08	13	18.77	+31	03	25.8			688
961	1985	03	24.13171	09	00	00.46	+30	17	01.8			688
961	1985	03	24.20723	08	59	59.18	+30	16	40.8			688
969	1985	03	21.30104	12	26	26.33	-06	32	44.1			688
969	1985	03	21.36302	12	26	22.82	-06	32	22.9		3	688
969	1985	03	24.32257	12	23	44.56	-06	16	26.8			688
969	1985	03	24.35295	12	23	42.90	-06	16	15.9			688
999	1985	03	22.26858	11	20	37.06	-05	31	24.3			688
999	1985	03	22.33576	11	20	33.81	-05	30	54.5			688
1018	1985	03	21.28576	11	27	06.40	+04	45	15.3			688
1018	1985	03	21.34797	11	27	02.99	+04	45	29.6			688
1020	1985	04	15.37459	14	23	23.80	-10	39	05.7			688
1023	1985	04	15.35255	15	07	38.04	-11	01	36.5			688
1023	1985	04	15.39655	15	07	36.48	-11	01	23.0			688
1062	1985	03	24.36811	12	49	31.38	-09	45	42.4			688
1062	1985	03	24.40538	12	49	29.54	-09	45	35.5			688
1071	1985	03	22.30197	12	09	17.73	+06	08	50.0			688
1071	1985	03	22.36944	12	09	14.13	+06	09	07.5			688
1072	1985	03	21.27083	11	03	18.89	+15	37	58.5			688
1072	1985	03	21.33264	11	03	16.03	+15	38	04.9			688
1081	1985	04	15.35255	14	49	17.57	-17	13	44.3			688
1081	1985	04	15.39655	14	49	15.76	-17	13	39.8			688
1089	1985	04	15.35255	14	52	00.46	-12	49	14.8			688
1089	1985	04	15.39655	14	51	57.86	-12	49	05.8			688
1102	1985	04	15.33032	14	35	45.81	-15	18	06.2			688
1102	1985	04	15.37459	14	35	43.97	-15	17	47.5			688
1104	1985	03	21.25579	11	03	17.25	+12	44	48.3			688
1104	1985	03	21.31748	11	03	14.22	+12	45	09.6			688
1114	1985	03	24.36811	13	05	51.99	-07	32	56.0	16.0		688
1114	1985	03	24.40538	13	05	50.40	-07	32	41.2			688
1130	1985	04	15.35255	14	52	25.20	-16	27	06.7	16.5		688
1130	1985	04	15.39655	14	52	23.05	-16	26	55.2			688
1136	1985	03	24.36811	13	09	39.29	-10	49	52.3	17.0		688
1136	1985	03	24.40538	13	09	37.43	-10	49	38.0			688
1139	1985	04	15.33032	14	38	12.00	-14	41	30.7			688
1139	1985	04	15.37459	14	38	09.37	-14	41	02.5			688

1158	1985	03	21.30104	12	19	58.55	-11	32	26.5			688
1158	1985	03	21.36302	12	19	54.64	-11	32	22.9			688
1158	1985	03	24.32257	12	16	50.84	-11	28	35.3			688
1158	1985	03	24.35295	12	16	48.85	-11	28	33.5			688
1160	1985	03	24.38686	13	34	29.51	-16	41	58.0			688
1160	1985	03	24.42373	13	34	27.38	-16	42	00.0			688
1165	1985	03	21.30104	12	20	38.90	-08	21	54.2			688
1165	1985	03	21.36302	12	20	36.29	-08	21	28.3			688
1165	1985	03	24.32257	12	18	33.53	-08	00	21.0			688
1165	1985	03	24.35295	12	18	32.26	-08	00	07.4			688
1165	1985	04	14.19931	12	04	35.12	-05	21	09.6		3	688
1167	1985	03	21.30104	12	16	07.77	-07	30	47.6			688
1167	1985	03	21.36302	12	16	05.22	-07	30	28.5			688
1167	1985	03	24.32257	12	14	05.71	-07	14	57.8	16.0		688
1167	1985	03	24.35295	12	14	04.45	-07	14	47.8			688
1167	1985	04	14.19931	12	00	47.66	-05	19	04.8			688
1167	1985	04	14.28657	12	00	44.63	-05	18	36.9			688
1169	1985	03	22.26858	11	20	39.19	-03	12	25.2			688
1169	1985	03	22.33576	11	20	35.38	-03	11	56.4			688
1170	1985	03	21.30104	12	32	08.35	-07	41	29.2			688
1170	1985	03	21.36302	12	32	03.40	-07	41	30.5			688
1170	1985	04	14.19931	12	02	35.80	-07	35	20.5			688
1170	1985	04	14.28657	12	02	29.97	-07	35	18.3			688
1176	1985	04	14.19931	11	44	31.46	-09	05	33.1			688
1176	1985	04	14.28657	11	44	28.13	-09	05	01.3			688
1182	1985	03	22.26858	11	27	20.57	-02	35	20.4			688
1182	1985	03	22.33576	11	27	16.14	-02	35	07.4			688
1183	1985	03	24.15388	09	25	54.40	+18	00	29.0	16.8		688
1183	1985	03	24.22934	09	25	52.93	+18	00	25.4			688
1204	1985	04	15.33032	14	28	34.12	-16	12	49.3			688
1204	1985	04	15.37459	14	28	31.51	-16	12	41.4			688
1262	1985	03	22.28351	11	30	54.24	+18	34	48.7		3	688
1262	1985	03	22.35072	11	30	51.32	+18	35	09.7			688
1263	1985	03	24.15388	09	22	04.59	+13	03	29.7			688
1263	1985	03	24.22934	09	22	04.13	+13	04	32.3			688
1270	1985	03	21.27083	10	54	38.36	+16	19	13.6			688
1270	1985	03	21.33264	10	54	35.00	+16	19	30.3			688
1283	1985	03	24.15388	09	10	44.12	+14	22	53.7			688
1283	1985	03	24.22934	09	10	43.12	+14	23	07.3			688
1289	1985	04	14.25926	13	52	59.34	-10	55	15.4			688
1289	1985	04	14.34641	13	52	55.07	-10	54	49.6			688
1298	1985	03	21.30104	12	38	17.20	-11	49	51.6			688
1298	1985	03	21.36302	12	38	14.68	-11	49	36.3			688
1323	1985	04	15.33032	14	42	38.38	-10	04	59.9			688
1323	1985	04	15.37459	14	42	36.02	-10	05	05.8			688
1326	1985	04	15.22072	13	52	39.72	+12	26	42.2			688
1326	1985	04	15.28652	13	52	36.31	+12	26	57.8			688
1357	1985	04	15.24265	14	08	51.40	+03	57	56.1			688
1357	1985	04	15.30833	14	08	48.37	+03	58	07.3			688
1382	1985	03	24.38686	13	50	42.83	-12	41	46.1	15.8		688
1382	1985	03	24.42373	13	50	41.44	-12	41	42.8			688
1393	1985	03	22.30197	12	06	06.49	+08	48	09.4			688
1393	1985	03	22.36944	12	06	02.35	+08	48	25.5			688
1394	1985	03	24.36811	13	02	05.10	-05	34	07.5			688
1394	1985	03	24.40538	13	02	03.24	-05	33	53.5			688
1416	1985	03	24.36811	13	01	14.70	-12	14	26.5			688
1416	1985	03	24.40538	13	01	12.87	-12	14	21.4			688
1435	1985	03	24.36811	13	04	48.17	-06	34	30.1	17.0		688
1435	1985	03	24.40538	13	04	46.40	-06	34	15.1			688

1440		1985	04	14.34641	13	46	47.63	-09	57	27.0			688
1450		1985	04	15.33032	14	40	06.86	-10	38	46.4			688
1450		1985	04	15.37459	14	40	04.51	-10	38	37.9			688
1453		1985	03	22.30197	12	05	38.92	+05	55	06.0			688
1453		1985	03	22.36944	12	05	31.02	+05	54	31.4			688
1471		1985	03	24.25133	10	26	45.48	+00	16	58.4			688
1471		1985	03	24.28892	10	26	43.87	+00	17	02.7			688
1487		1985	04	15.33032	14	23	34.12	-10	37	49.7			688
1487		1985	04	15.37459	14	23	32.20	-10	37	39.7			688
1516		1985	04	15.22072	13	51	36.70	+05	35	52.4			688
1516		1985	04	15.28652	13	51	33.63	+05	36	16.5			688
1552		1985	03	21.25579	11	03	27.73	+11	53	09.5			688
1552		1985	03	21.31748	11	03	24.56	+11	53	16.0			688
1553		1985	03	22.30197	11	56	32.07	+05	32	58.8			688
1553		1985	03	22.36944	11	56	28.79	+05	33	20.6			688
1557		1985	03	24.38686	13	46	58.55	-18	16	13.0			688
1557		1985	03	24.42373	13	46	57.02	-18	16	12.1			688
1572		1985	03	21.25579	11	11	26.54	+11	02	01.7			688
1572		1985	03	21.31748	11	11	23.68	+11	02	08.3			688
1595		1985	03	21.28576	11	20	47.23	+10	13	00.4			688
1595		1985	03	21.34797	11	20	44.07	+10	13	20.8			688
1611		1985	03	21.30104	12	32	53.38	-08	29	02.7		17.0	688
1611		1985	03	21.36302	12	32	50.79	-08	28	45.0			688
1616		1985	04	15.33032	14	38	55.69	-12	38	09.4			688
1616		1985	04	15.37459	14	38	53.53	-12	38	05.8			688
1619		1985	03	21.27083	10	58	06.51	+17	02	19.7			688
1619		1985	03	21.33264	10	58	02.92	+17	02	30.6			688
1623		1985	04	15.37459	14	41	28.54	-12	09	19.4		17.2	688
1624		1985	04	14.25926	13	43	48.76	-07	41	20.8		16.0	688
1624		1985	04	14.34641	13	43	44.69	-07	40	57.4			688
1631		1985	03	21.28576	11	22	37.92	+09	19	19.5			688
1631		1985	03	21.34797	11	22	33.88	+09	19	32.9			688
1632		1985	04	14.25926	13	50	07.17	-10	04	07.4			688
1632		1985	04	14.34641	13	50	02.80	-10	03	33.5			688
1634		1985	04	15.19861	13	31	32.00	+04	45	55.3			688
1634		1985	04	15.26470	13	31	27.92	+04	46	12.9			688
1638		1985	04	15.35255	14	51	22.49	-16	17	35.3			688
1638		1985	04	15.39655	14	51	20.66	-16	17	27.6			688
1645		1985	03	24.38686	13	41	14.44	-11	52	12.1			688
1645		1985	03	24.42373	13	41	13.03	-11	52	04.3			688
1675		1985	04	15.35255	14	42	17.85	-17	00	37.3		16.5	688
1675		1985	04	15.37459	14	42	16.30	-17	00	35.3		16.5	688
1675		1985	04	15.39655	14	42	15.16	-17	00	35.2			688
1681		1985	03	21.27083	11	06	26.33	+18	07	28.0			688
1681		1985	03	21.33264	11	06	23.37	+18	07	40.0			688
1682		1985	03	24.32257	12	02	48.70	-04	38	23.0			688
1682		1985	03	24.35295	12	02	46.80	-04	38	12.7			688
1682		1985	04	14.19931	11	43	08.71	-02	47	37.4			688
1718		1985	04	14.25926	14	07	20.91	-11	14	35.9			688
1718		1985	04	14.34641	14	07	16.14	-11	13	54.0			688
1730		1985	04	15.19861	13	22	28.28	-01	23	11.5			688
1730		1985	04	15.26470	13	22	25.35	-01	22	47.3			688
1771		1985	03	24.27031	10	33	39.13	+25	02	46.4			688
1771		1985	03	24.30741	10	33	37.75	+25	02	48.8			688
1798		1985	04	15.33032	14	26	22.20	-12	23	44.5		17.0	688
1798		1985	04	15.37459	14	26	19.53	-12	23	38.6			688
1799		1985	03	21.28576	11	31	26.78	+08	10	31.6			688
1799		1985	03	21.34797	11	31	24.13	+08	10	56.4			688
1800		1985	03	21.34797	11	36	49.73	+10	14	17.5			688

1803	1985	03	24.15388	09	11	30.18	+16	46	38.0		688
1803	1985	03	24.22934	09	11	27.20	+16	45	50.4		688
1813	1985	04	15.33032	14	17	02.30	-12	54	29.9		688
1813	1985	04	15.37459	14	16	59.79	-12	54	28.4		688
1828	1985	03	22.26858	11	05	48.07	+00	41	55.7		688
1828	1985	03	22.33576	11	05	45.48	+00	42	28.9	1	688
1845	1985	04	15.24265	14	01	16.46	+03	01	05.1		688
1845	1985	04	15.30833	14	01	13.49	+03	01	29.0		688
1849	1985	03	24.27031	10	14	31.05	+26	17	36.6		688
1849	1985	03	24.30741	10	14	29.79	+26	17	33.5		688
1889	1985	04	15.19861	13	24	45.65	+03	40	38.8		688
1889	1985	04	15.26470	13	24	42.16	+03	40	42.1		688
1905	1985	03	21.30104	12	37	39.08	-05	29	04.7	16.5	688
1905	1985	03	21.36302	12	37	35.62	-05	28	38.6		688
1910	1985	03	24.25133	10	20	43.88	+00	47	39.3		688
1910	1985	03	24.28892	10	20	42.89	+00	47	56.7		688
1913	1985	04	15.35255	15	01	58.04	-18	46	50.7		688
1913	1985	04	15.39655	15	01	56.24	-18	46	44.0		688
1914	1985	03	21.28576	11	33	01.74	+11	14	43.3		688
1914	1985	03	21.34797	11	32	58.37	+11	15	08.1		688
1947	1985	03	24.13171	09	03	42.77	+29	46	34.7	16.8	688
1947	1985	03	24.20723	09	03	41.95	+29	46	30.0		688
1957	1985	03	24.27031	10	30	34.53	+25	20	59.8		688
1957	1985	03	24.30741	10	30	33.04	+25	20	58.7		688
1958	1985	03	24.32257	12	04	40.05	-05	46	29.3		688
1958	1985	03	24.35295	12	04	38.45	-05	46	22.6		688
1958	1985	04	14.19931	11	48	33.31	-04	46	35.8		688
1958	1985	04	14.28657	11	48	29.71	-04	46	21.0		688
1990	1985	03	24.36811	13	08	45.85	-07	31	13.8	16.8	688
1990	1985	03	24.40538	13	08	43.96	-07	30	57.9		688
1995	1985	03	24.27031	10	20	00.90	+27	01	46.5		688
1995	1985	03	24.30741	10	19	59.41	+27	01	40.1		688
1997	1985	04	14.28657	11	55	01.41	-02	17	41.8		688
2032	1985	04	14.25926	13	51	38.94	-11	24	16.2		688
2032	1985	04	14.34641	13	51	34.90	-11	23	55.6		688
2040	1985	04	15.19861	13	11	31.62	+01	06	28.1		688
2040	1985	04	15.26470	13	11	27.92	+01	06	26.8		688
2139	1985	04	15.35255	14	45	03.74	-18	21	50.7		688
2139	1985	04	15.39655	14	45	01.56	-18	21	42.2		688
2144	1985	03	21.25579	11	09	29.40	+07	50	52.0		688
2144	1985	03	21.31748	11	09	26.60	+07	51	10.7		688
2149	1985	04	14.23171	12	19	45.85	+08	25	23.7		688
2149	1985	04	14.31910	12	19	41.25	+08	25	33.2		688
2153	1985	03	24.36811	13	05	10.29	-05	53	25.3		688
2153	1985	03	24.40538	13	05	08.67	-05	53	17.5		688
2158	1985	03	24.15388	09	07	14.73	+15	10	26.2		688
2158	1985	03	24.22934	09	07	13.53	+15	10	32.3		688
2169	1985	04	14.25926	13	50	39.10	-09	38	22.9		688
2169	1985	04	14.34641	13	50	34.55	-09	38	01.8		688
2193	1985	03	24.13171	09	24	50.26	+30	14	00.3		688
2193	1985	03	24.20723	09	24	48.50	+30	13	45.7		688
2200	1985	03	24.38686	13	53	52.97	-16	37	20.1	16.8	688
2200	1985	03	24.42373	13	53	51.53	-16	37	21.7		688
2204	1985	04	15.22072	13	55	09.67	+11	49	00.6		688
2204	1985	04	15.28652	13	55	06.02	+11	49	37.6		688
2219	1985	04	15.19861	13	09	43.19	+01	53	05.2		688
2219	1985	04	15.26470	13	09	40.36	+01	53	16.9		688
2230	1985	03	21.25579	10	55	46.99	+07	52	40.5		688
2230	1985	03	21.31748	10	55	44.22	+07	52	58.1		688

2232	1985	03	22.26858	11	06	02.16	+01	25	11.7			688
2232	1985	03	22.33576	11	05	59.02	+01	25	36.0			688
2255	1985	03	22.28351	11	21	04.52	+21	25	35.1		3	688
2255	1985	03	22.35072	11	21	01.47	+21	25	40.0		3	688
2268	1985	04	15.37459	14	26	24.29	-10	21	50.9			688
2295	1985	03	24.36811	12	51	25.76	-08	51	08.6			688
2295	1985	03	24.40538	12	51	23.87	-08	50	58.6			688
2311	1985	04	14.25926	13	59	56.16	-04	50	20.5			688
2338	1985	04	15.19861	13	07	46.54	-01	56	10.7			688
2338	1985	04	15.26470	13	07	43.48	-01	55	50.8			688
2354	1985	03	24.15388	09	05	50.30	+14	34	55.5			688
2354	1985	03	24.22934	09	05	49.36	+14	35	05.9			688
2369	1985	03	21.28576	11	21	12.55	+07	47	16.0			688
2369	1985	03	21.34797	11	21	09.57	+07	47	31.7			688
2371	1985	04	15.33032	14	17	03.51	-14	58	08.7	16.8		688
2371	1985	04	15.37459	14	17	01.13	-14	57	55.4			688
2372	1985	03	22.30197	11	49	05.17	+05	23	31.1			688
2372	1985	03	22.36944	11	49	02.19	+05	23	51.0			688
2392	1985	03	21.28576	11	15	01.89	+08	10	49.7	17.2		688
2392	1985	03	21.34797	11	14	58.61	+08	11	13.6			688
2398	1985	03	22.30197	12	01	37.83	+07	21	31.7			688
2398	1985	03	22.36944	12	01	33.90	+07	21	51.0			688
2412	1985	03	21.30104	12	13	30.86	-12	15	29.7	16.8		688
2412	1985	03	21.36302	12	13	27.35	-12	15	16.3			688
2433	1985	03	22.26858	11	19	11.36	-00	03	25.0			688
2433	1985	03	22.33576	11	19	08.08	-00	02	43.4			688
2434	1985	03	24.13171	09	21	52.53	+33	41	51.4			688
2434	1985	03	24.20723	09	21	50.63	+33	41	34.1			688
2464	1985	04	15.37459	14	36	26.17	-15	54	26.9			688
2504	1985	03	24.38686	13	50	04.59	-12	31	46.7			688
2504	1985	03	24.42373	13	50	03.14	-12	31	44.7			688
2520	1985	03	22.30197	12	02	49.96	+00	43	25.2	17.2		688
2520	1985	03	22.36944	12	02	46.60	+00	43	41.0			688
2528	1985	04	15.35255	14	54	58.56	-16	04	19.6			688
2528	1985	04	15.39655	14	54	56.65	-16	04	11.5			688
2534	1985	04	15.35255	15	05	53.58	-16	31	58.7			688
2534	1985	04	15.39655	15	05	51.97	-16	31	52.5			688
2543	1985	04	15.19861	13	19	00.84	-00	13	36.7			688
2543	1985	04	15.26470	13	18	57.41	-00	13	29.4			688
2550	1985	04	15.24265	14	10	07.55	-01	20	39.5			688
2550	1985	04	15.30833	14	10	04.77	-01	20	19.8			688
2574	1985	03	22.30197	11	59	49.60	+01	18	47.3			688
2574	1985	03	22.36944	11	59	46.07	+01	19	05.4			688
2585	1985	03	21.25579	11	09	58.81	+10	49	51.3	17.0		688
2585	1985	03	21.31748	11	09	55.70	+10	50	14.4			688
2717	1985	03	22.30197	12	01	18.89	+01	26	38.8			688
2717	1985	03	22.36944	12	01	14.72	+01	27	09.3			688
2733	1985	04	15.22072	14	03	37.65	+06	44	23.1			688
2733	1985	04	15.28652	14	03	34.05	+06	44	45.7			688
2738	1985	03	24.36811	12	55	38.34	-07	57	33.1			688
2738	1985	03	24.40538	12	55	36.73	-07	57	20.1		3	688
2753	1985	03	24.32257	12	03	56.41	-04	08	41.2			688
2753	1985	03	24.35295	12	03	54.61	-04	08	34.9			688
2753	1985	04	14.19931	11	47	11.13	-03	02	37.5			688
2753	1985	04	14.28657	11	47	07.62	-03	02	23.4			688
2762	1985	03	24.38686	13	31	47.05	-18	13	30.3	16.8		688
2762	1985	03	24.42373	13	31	45.00	-18	13	25.4			688
2781	1985	03	22.30197	12	03	47.11	+01	33	57.8			688
2781	1985	03	22.36944	12	03	44.43	+01	34	17.9			688

2788		1985	03	24.15388	09	23	21.13	+17	59	37.3			688
2788		1985	03	24.22934	09	23	20.14	+17	59	31.6			688
2798		1985	03	24.38686	13	38	54.05	-13	30	12.8			688
2798		1985	03	24.42373	13	38	52.37	-13	29	59.6			688
2811		1985	04	15.33032	14	35	04.18	-16	39	27.9			688
2811		1985	04	15.37459	14	35	02.05	-16	39	19.6			688
2848		1985	04	15.35255	14	49	12.68	-17	24	05.4			688
2848		1985	04	15.39655	14	49	10.80	-17	23	57.9			688
2886		1985	04	15.35255	14	42	52.78	-13	43	07.3			688
2886		1985	04	15.39655	14	42	50.67	-13	42	56.7		1	688
2891		1985	04	14.23171	12	17	19.63	+10	54	34.3			688
2891		1985	04	14.31910	12	17	16.59	+10	54	49.6			688
2923		1985	03	24.38686	13	51	41.33	-14	01	53.1	17.2		688
2923		1985	03	24.42373	13	51	39.73	-14	01	51.8			688
2950		1985	03	21.27083	10	56	29.14	+19	05	28.7			688
2950		1985	03	21.33264	10	56	26.39	+19	05	42.7			688
2951		1985	03	24.27031	10	28	55.64	+25	54	45.4			688
2951		1985	03	24.30741	10	28	54.10	+25	54	36.3			688
2989		1985	03	22.30197	11	56	22.13	+06	45	20.9	17.0		688
2989		1985	03	22.36944	11	56	17.97	+06	45	46.0			688
2990		1985	04	14.25926	14	02	48.04	-09	23	18.4			688
2990		1985	04	14.34641	14	02	43.22	-09	22	45.5			688
2996		1985	03	24.38686	13	41	40.65	-14	47	50.4			688
2996		1985	03	24.42373	13	41	39.21	-14	47	45.2			688
3000		1985	04	14.25926	13	56	02.58	-11	15	51.7			688
3000		1985	04	14.34641	13	55	57.62	-11	15	20.1			688
3039		1985	03	22.26858	11	10	26.55	-02	24	43.9			688
3039		1985	03	22.33576	11	10	23.51	-02	23	56.3			688
3045		1985	03	22.30197	12	05	04.26	+02	25	30.9			688
3045		1985	03	22.36944	12	05	01.20	+02	25	47.8			688
3128		1985	04	15.35255	15	08	57.94	-13	41	09.8	17.2		688
3128		1985	04	15.39655	15	08	56.28	-13	41	03.5			688
3164		1985	03	21.28576	11	29	56.85	+06	59	22.4			688
3164		1985	03	21.34797	11	29	54.02	+06	59	38.5			688
3210		1985	03	21.27083	11	07	39.02	+19	26	40.8			688
3210		1985	03	21.33264	11	07	36.47	+19	27	02.1			688
1932	CN	1985	04	15.24265	14	06	18.63	-02	12	58.6	17.0		688
1932	CN	1985	04	15.30833	14	06	14.63	-02	12	44.7			688
1934	AF	1985	04	14.25926	14	06	42.30	-11	24	15.3	17.0		688
1934	AF	1985	04	14.34641	14	06	38.24	-11	23	53.5			688
1938	DZ	1985	03	21.30104	12	17	24.18	-05	01	54.1	16.5		688
1938	DZ	1985	03	21.36302	12	17	20.19	-05	01	45.9			688
1938	DZ	1985	03	24.32257	12	14	18.35	-04	54	10.3	16.2		688
1938	DZ	1985	03	24.35295	12	14	16.35	-04	54	05.1			688
1938	DZ	1985	04	14.19931	11	54	21.48	-03	56	21.2	16.2		688
1938	DZ	1985	04	14.28657	11	54	17.31	-03	56	08.9			688
1949	DA	1985	04	14.25926	14	06	56.64	-08	13	40.6	16.8		688
1949	DA	1985	04	14.34641	14	06	51.69	-08	13	04.6			688
1975	TS2	1985	04	15.19861	13	31	10.31	-00	27	34.6	17.0		688
1975	TS2	1985	04	15.26470	13	31	07.28	-00	27	31.2			688
1976	SE1	1985	03	24.40538	12	50	03.90	-05	06	47.3	17.8		688
1978	UF	1985	03	24.32257	12	04	55.01	-04	42	05.5	17.2		688
1978	UF	1985	03	24.35295	12	04	53.35	-04	41	48.3			688
1979	EB	1985	04	15.35255	15	02	21.73	-13	15	40.0	17.0		688
1979	EB	1985	04	15.39655	15	02	19.93	-13	15	24.4			688
1979	QA10	1985	03	21.28576	11	16	06.83	+05	31	27.2	17.5		688
1979	QA10	1985	03	21.34797	11	16	03.22	+05	31	39.0			688
1979	TK	1985	04	14.25926	14	00	56.52	-11	02	32.1	17.0		688
1979	TK	1985	04	14.34641	14	00	50.80	-11	02	18.4			688

1981	DD		1985	03	21.30104	12	34	29.16	-10	18	49.5	17.2	688
1981	DD		1985	03	21.36302	12	34	25.73	-10	18	20.1		688
1981	QO2		1985	03	22.30197	11	53	32.40	+01	42	12.4	17.5	688
1981	QO2		1985	03	22.36944	11	53	29.10	+01	42	31.6		688
1982	TD1		1985	03	24.38686	13	35	46.14	-13	13	03.5	17.2	688
1982	TD1		1985	03	24.42373	13	35	44.50	-13	13	03.0		688
1983	QD		1985	03	24.25133	10	16	11.10	-00	09	44.8	17.5	688
1983	VV1		1985	03	24.15388	09	17	20.13	+16	48	41.1	17.5	688
1983	VV1		1985	03	24.22934	09	17	18.83	+16	48	40.5		688
1983	WB		1985	03	21.27083	11	11	00.30	+20	39	10.3	16.5	688
1983	WB		1985	03	21.33264	11	10	57.34	+20	39	19.0		688
1984	AR		1985	04	14.25926	13	44	20.12	-10	51	16.2	17.2	688
1984	AR		1985	04	14.34641	13	44	16.07	-10	50	53.0		688
1984	QR1	*	1984	08	31.27118	22	39	01.24	-13	29	28.9		688
1984	QR1		1984	08	31.30417	22	38	59.41	-13	29	43.2		688
1984	QR1		1984	08	31.34583	22	38	57.18	-13	29	59.3		688
1984	QS1	*	1984	08	31.38473	23	47	44.89	+03	03	21.9	16.5	688
1984	QS1		1984	08	31.40556	23	47	43.81	+03	03	23.3	1	688
1985	CT		1985	03	24.15388	09	22	31.18	+20	25	16.1	17.0	688
1985	CT		1985	03	24.22934	09	22	30.53	+20	25	53.0		688
1985	DN1		1985	03	22.28351	11	16	56.36	+24	36	23.8	17.0	688
1985	DN1		1985	03	22.35072	11	16	53.07	+24	36	38.9		688
1985	FH		1985	03	21.25579	10	51	40.67	+09	34	31.5	17.0	688
1985	FH		1985	03	21.31748	10	51	38.01	+09	35	12.2		688
1985	FP		1985	03	24.36811	13	00	08.42	-05	38	30.2	17.0	688
1985	FP		1985	03	24.40538	13	00	06.41	-05	38	11.8		688
1985	FS	*	1985	03	21.25579	11	01	43.41	+09	59	09.4	17.0	4 688
1985	FS		1985	03	21.31748	11	01	40.96	+09	59	33.0		688
1985	FT	*	1985	03	21.25579	11	05	59.77	+12	40	13.6	17.0	4 688
1985	FT		1985	03	21.31748	11	05	57.36	+12	40	35.0		688
1985	FU	*	1985	03	21.25579	11	12	34.97	+09	26	45.7	17.2	5 688
1985	FU		1985	03	21.31748	11	12	32.20	+09	27	02.9		688
1985	FV	*	1985	03	21.28576	11	25	35.62	+07	19	36.9	16.8	4 688
1985	FV		1985	03	21.34797	11	25	32.69	+07	19	53.2		688
1985	FW	*	1985	03	21.28576	11	25	47.69	+09	57	03.0	17.2	4 688
1985	FW		1985	03	21.34797	11	25	43.91	+09	57	20.5		688
1985	FX	*	1985	03	21.28576	11	30	02.02	+05	23	31.0	16.8	4 688
1985	FX		1985	03	21.34797	11	29	58.47	+05	23	46.0		688
1985	FY	*	1985	03	21.28576	11	34	10.36	+09	53	57.7	17.0	4 688
1985	FY		1985	03	21.34797	11	34	07.12	+09	54	17.1		688
1985	FZ	*	1985	03	21.30104	12	15	49.93	-10	37	51.3	17.0	4 688
1985	FZ		1985	03	21.36302	12	15	46.57	-10	37	42.7		688
1985	FZ		1985	03	24.32257	12	13	07.66	-10	29	29.5	17.0	688
1985	FZ		1985	03	24.35295	12	13	05.95	-10	29	25.5		688
1985	FZ		1985	04	14.19931	11	55	33.02	-09	07	04.5	17.2	688
1985	FZ		1985	04	14.28657	11	55	28.89	-09	06	41.2		688
1985	FA1	*	1985	03	21.30104	12	18	29.13	-10	54	34.5	16.8	4 688
1985	FA1		1985	03	21.36302	12	18	25.04	-10	54	21.7		688
1985	FA1		1985	03	24.32257	12	15	20.75	-10	43	18.3	17.0	688
1985	FA1		1985	03	24.35295	12	15	18.87	-10	43	12.5		688
1985	FA1		1985	04	14.28657	11	55	30.01	-08	58	22.6	16.5	688
1985	FB1	*	1985	03	21.30104	12	22	11.38	-07	15	01.4	17.2	4 688
1985	FB1		1985	03	21.36302	12	22	05.91	-07	15	26.6		688
1985	FB1		1985	03	24.32257	12	17	50.29	-07	34	37.8	17.2	688
1985	FB1		1985	03	24.35295	12	17	47.69	-07	34	49.3		688
1985	FC1	*	1985	03	21.30104	12	23	46.32	-05	07	35.5	16.8	4 688
1985	FC1		1985	03	21.36302	12	23	42.42	-05	07	21.1		688
1985	FC1		1985	03	24.32257	12	20	44.83	-04	54	52.9	16.8	688
1985	FC1		1985	03	24.35295	12	20	42.78	-04	54	45.4		688

1985	FC1		1985	04	14.19931	12	01	28.84	-03	26	15.8	16.8	688
1985	FC1		1985	04	14.28657	12	01	24.74	-03	25	56.6		688
1985	FD1	*	1985	03	21.30104	12	26	15.77	-07	56	25.9	16.5	4 688
1985	FD1		1985	03	21.36302	12	26	12.57	-07	56	09.1		688
1985	FD1		1985	03	24.32257	12	23	50.01	-07	41	34.0	16.8	688
1985	FD1		1985	03	24.35295	12	23	48.38	-07	41	24.4		688
1985	FE1	*	1985	03	22.26858	11	08	27.44	-00	27	19.9	17.5	6 688
1985	FE1		1985	03	22.33576	11	08	23.83	-00	27	01.1		688
1985	FF1	*	1985	03	22.26858	11	17	05.20	-00	00	27.4	17.2	6 688
1985	FF1		1985	03	22.33576	11	17	01.73	-00	00	12.0		688
1985	FG1	*	1985	03	22.26858	11	18	23.69	+01	38	26.0	17.0	6 688
1985	FG1		1985	03	22.33576	11	18	19.74	+01	38	39.0		688
1985	FH1	*	1985	03	22.26858	11	18	51.26	-03	16	57.8	16.5	6 688
1985	FH1		1985	03	22.33576	11	18	47.73	-03	16	22.1		688
1985	FJ1	*	1985	03	22.26858	11	23	06.30	-00	38	34.0	16.8	6 688
1985	FJ1		1985	03	22.33576	11	23	03.24	-00	37	40.6		688
1985	FK1	*	1985	03	22.26858	11	26	08.06	-01	03	49.1	17.2	6 688
1985	FK1		1985	03	22.33576	11	26	04.18	-01	03	50.9		688
1985	FL1	*	1985	03	22.26858	11	27	46.62	-04	31	14.7	17.2	6 688
1985	FL1		1985	03	22.33576	11	27	44.24	-04	30	53.5		688
1985	FM1	*	1985	03	22.26858	11	27	59.17	-04	59	58.9	17.0	6 688
1985	FM1		1985	03	22.33576	11	27	54.76	-04	59	55.2		688
1985	FN1	*	1985	03	22.30197	11	47	16.11	+07	50	33.6	17.0	4 688
1985	FN1		1985	03	22.36944	11	47	11.97	+07	50	47.0		688
1985	FO1	*	1985	03	22.30197	11	51	39.48	+03	13	10.2	17.5	4 688
1985	FO1		1985	03	22.36944	11	51	36.05	+03	13	33.2		688
1985	FP1	*	1985	03	22.30197	11	51	55.13	+04	33	53.5	17.2	4 688
1985	FP1		1985	03	22.36944	11	51	51.24	+04	34	25.0		688
1985	FQ1	*	1985	03	22.30197	11	52	00.06	+01	28	22.8	17.0	4 688
1985	FQ1		1985	03	22.36944	11	51	56.68	+01	28	51.9		688
1985	FR1	*	1985	03	22.30197	11	54	53.21	+08	40	11.9	17.5	4 688
1985	FR1		1985	03	22.36944	11	54	50.02	+08	40	18.4		688
1985	FS1	*	1985	03	22.30197	11	56	45.94	+05	12	04.5	17.5	4 688
1985	FS1		1985	03	22.36944	11	56	43.14	+05	12	32.5		3 688
1985	FT1	*	1985	03	22.30197	11	59	04.12	+00	47	07.8	16.5	4 688
1985	FT1		1985	03	22.36944	11	59	00.50	+00	47	54.0		688
1985	FU1	*	1985	03	22.30197	12	01	02.56	+06	07	50.2	16.5	4 688
1985	FU1		1985	03	22.36944	12	00	58.94	+06	08	20.5		688
1985	FV1	*	1985	03	22.30197	12	06	24.46	+01	54	12.3	16.8	4 688
1985	FV1		1985	03	22.36944	12	06	21.76	+01	55	19.4		688
1985	FW1	*	1985	03	22.30197	12	07	41.41	+02	08	59.3	17.2	4 688
1985	FW1		1985	03	22.36944	12	07	37.19	+02	09	05.4		688
1985	FX1	*	1985	03	22.30197	12	09	42.21	+04	20	11.2	17.0	4 688
1985	FX1		1985	03	22.36944	12	09	38.59	+04	20	32.1		688
1985	FY1	*	1985	03	22.30197	12	11	11.80	+05	25	11.6	16.8	4 688
1985	FY1		1985	03	22.36944	12	11	07.23	+05	25	26.6		688
1985	FZ1	*	1985	03	22.32066	12	35	29.64	+11	55	56.1	16.8	4 688
1985	FZ1		1985	03	22.38802	12	35	26.48	+11	56	36.7		688
1985	FZ1		1985	04	14.23171	12	18	53.81	+14	53	45.8	16.8	688
1985	FZ1		1985	04	14.31910	12	18	50.34	+14	54	11.1		688
1985	FA2	*	1985	03	22.32066	12	47	15.37	+12	08	43.7	17.0	4 688
1985	FA2		1985	03	22.38802	12	47	12.34	+12	09	09.1		688
1985	FA2		1985	04	14.23171	12	30	24.85	+13	56	12.3	17.0	688
1985	FA2		1985	04	14.31910	12	30	20.97	+13	56	26.5		688
1985	FB2	*	1985	03	22.32066	12	48	14.05	+08	47	31.6	16.5	4 688
1985	FB2		1985	03	22.38802	12	48	11.07	+08	48	24.2		688
1985	FB2		1985	04	14.23171	12	32	08.96	+12	40	55.2	16.2	688
1985	FB2		1985	04	14.31910	12	32	05.59	+12	41	30.1		688
1985	FC2	*	1985	03	22.32066	12	59	25.07	+14	08	18.0	17.2	4 688

1985	FC2		1985	03	22.38802	12	59	21.33	+14	08	31.3		688
1985	FC2		1985	04	14.23171	12	37	17.19	+14	31	54.6	17.0	688
1985	FC2		1985	04	14.31910	12	37	12.11	+14	31	45.3		688
1985	FD2	*	1985	03	24.25133	10	10	04.04	-01	05	19.6	16.8 6	688
1985	FD2		1985	03	24.28892	10	10	03.01	-01	05	01.2		688
1985	FE2	*	1985	03	24.25133	10	13	31.83	-05	12	57.4	16.5 6	688
1985	FE2		1985	03	24.28892	10	13	30.45	-05	12	43.5		688
1985	FF2	*	1985	03	24.25133	10	24	39.26	+02	19	55.6	17.2 6	688
1985	FF2		1985	03	24.28892	10	24	38.00	+02	20	00.7		688
1985	FG2	*	1985	03	24.32257	12	01	51.94	-08	26	57.9	17.2 4	688
1985	FG2		1985	03	24.35295	12	01	50.57	-08	26	52.0		688
1985	FH2	*	1985	03	24.32257	12	04	39.62	-07	03	15.2	17.0 4	688
1985	FH2		1985	03	24.35295	12	04	37.79	-07	03	05.5		688
1985	FJ2	*	1985	03	24.32257	12	05	11.55	-10	53	01.8	17.2 4	688
1985	FJ2		1985	03	24.35295	12	05	10.00	-10	52	57.2		688
1985	FK2	*	1985	03	24.32257	12	08	24.36	-11	14	08.4	17.2 4	688
1985	FK2		1985	03	24.35295	12	08	22.58	-11	14	03.9		688
1985	FL2	*	1985	03	24.36811	12	44	55.97	-06	09	30.4	16.8 4	688
1985	FL2		1985	03	24.40538	12	44	54.27	-06	09	08.0		688
1985	FM2	*	1985	03	24.38686	13	36	40.27	-12	27	11.3	17.5 4	688
1985	FM2		1985	03	24.42373	13	36	38.88	-12	26	56.3		688
1985	GA	*	1985	04	14.19931	11	48	25.42	-09	32	25.6	17.8 4	688
1985	GA		1985	04	14.28657	11	48	22.60	-09	31	51.4		688
1985	GB	*	1985	04	14.25926	13	44	18.78	-09	48	57.8	16.2 4	688
1985	GB		1985	04	14.34641	13	44	14.71	-09	48	39.5		688
1985	GC	*	1985	04	14.25926	13	46	28.64	-07	39	55.5	17.2 4	688
1985	GC		1985	04	14.34641	13	46	23.15	-07	39	45.4		688
1985	GD	*	1985	04	14.25926	13	49	57.66	-05	01	00.4	17.2 4	688
1985	GD		1985	04	14.34641	13	49	52.39	-05	00	37.8		688
1985	GE	*	1985	04	14.25926	13	51	05.92	-04	57	08.4	17.2 4	688
1985	GE		1985	04	14.34641	13	51	02.22	-04	56	37.7		688
1985	GF	*	1985	04	14.25926	13	51	36.81	-09	03	56.5	17.0 4	688
1985	GF		1985	04	14.34641	13	51	32.74	-09	03	31.4		688
1985	GG	*	1985	04	14.25926	13	54	35.78	-06	17	56.6	17.2 4	688
1985	GG		1985	04	14.34641	13	54	31.38	-06	17	49.8		688
1985	GH	*	1985	04	14.25926	13	55	42.53	-09	40	03.1	17.0 4	688
1985	GH		1985	04	14.34641	13	55	38.66	-09	39	39.8		688
1985	GJ	*	1985	04	14.25926	13	59	02.41	-08	07	33.5	17.2 4	688
1985	GJ		1985	04	14.34641	13	58	57.45	-08	07	12.5		688
1985	GK	*	1985	04	14.25926	14	01	17.08	-10	09	11.7	16.8 4	688
1985	GK		1985	04	14.34641	14	01	12.91	-10	08	17.6		688
1985	GL	*	1985	04	14.25926	14	04	17.32	-12	11	21.1	16.5 4	688
1985	GL		1985	04	14.34641	14	04	11.90	-12	11	16.0		688
1985	GM	*	1985	04	14.25926	14	06	56.50	-08	26	39.4	16.8 4	688
1985	GM		1985	04	14.34641	14	06	52.20	-08	26	19.5		688
1985	GN	*	1985	04	15.19861	13	08	51.77	+00	03	27.9	17.2 4	688
1985	GN		1985	04	15.26470	13	08	48.66	+00	03	39.7		688
1985	GO	*	1985	04	15.19861	13	10	21.03	+01	45	39.3	17.0 4	688
1985	GO		1985	04	15.26470	13	10	17.20	+01	45	56.7		688
1985	GP	*	1985	04	15.19861	13	20	26.90	+01	23	44.7	16.0 4	688
1985	GP		1985	04	15.26470	13	20	23.15	+01	24	12.5		688
1985	GQ	*	1985	04	15.19861	13	24	01.13	+00	00	35.8	17.0 5	688
1985	GQ		1985	04	15.26470	13	23	57.07	+00	00	46.9		688
1985	GR	*	1985	04	15.22072	13	53	43.21	+10	28	03.7	16.5 4	688
1985	GR		1985	04	15.28652	13	53	39.24	+10	28	06.2		688
1985	GS	*	1985	04	15.22072	13	56	15.76	+13	23	40.8	16.5 4	688
1985	GS		1985	04	15.28652	13	56	12.69	+13	24	00.1		688
1985	GT	*	1985	04	15.22072	13	59	12.19	+10	50	30.3	16.5 4	688
1985	GT		1985	04	15.28652	13	59	08.98	+10	51	09.9		688

1985 GU	*	1985 04 15.22072	14 05 25.63	+11 07 00.2				17.2	4	688
1985 GU		1985 04 15.28652	14 05 22.24	+11 07 23.9						688
1985 GV	*	1985 04 15.24265	13 50 09.89	+03 15 59.8				15.8	4	688
1985 GV		1985 04 15.30833	13 50 06.78	+03 16 34.7						688
1985 GW	*	1985 04 15.24265	13 50 20.89	+02 51 32.8				17.0	7	688
1985 GW		1985 04 15.30833	13 50 16.86	+02 51 49.3						688
1985 GX	*	1985 04 15.24265	14 00 19.32	+03 52 26.4				16.8	4	688
1985 GX		1985 04 15.30833	14 00 16.15	+03 53 00.9						688
1985 GY	*	1985 04 15.24265	14 00 28.14	+00 18 06.8				17.5	4	688
1985 GY		1985 04 15.30833	14 00 24.73	+00 18 15.6						688
1985 GZ	*	1985 04 15.24265	14 00 29.94	-01 28 00.8				17.0	7	688
1985 GZ		1985 04 15.30833	14 00 26.46	-01 27 35.5						688
1985 GA1	*	1985 04 15.24265	14 07 46.60	-00 55 34.1				16.8	4	688
1985 GA1		1985 04 15.30833	14 07 43.07	-00 55 04.1						688
1985 GB1	*	1985 04 15.24265	14 10 22.75	+02 06 40.1				17.8	C	688
1985 GB1		1985 04 15.30833	14 10 19.34	+02 07 21.5					8	688
1985 GC1	*	1985 04 15.24265	14 11 13.58	+00 17 51.4				17.2	4	688
1985 GC1		1985 04 15.30833	14 11 10.90	+00 18 28.9						688
1985 GD1	*	1985 04 15.33032	14 22 20.25	-14 04 20.3				17.2	4	688
1985 GD1		1985 04 15.37459	14 22 18.09	-14 04 08.7						688
1985 GE1	*	1985 04 15.33032	14 26 35.30	-15 50 15.7				15.5	4	688
1985 GE1		1985 04 15.37459	14 26 33.19	-15 49 56.0						688
1985 GF1	*	1985 04 15.33032	14 27 30.91	-10 45 24.4				17.0	4	688
1985 GF1		1985 04 15.37459	14 27 28.29	-10 45 17.2						688
1985 GG1	*	1985 04 15.33032	14 32 38.72	-10 42 46.3				16.8	4	688
1985 GG1		1985 04 15.37459	14 32 36.24	-10 42 40.5						688
1985 GH1	*	1985 04 15.35255	14 48 14.73	-14 33 21.3				17.5	4	688
1985 GH1		1985 04 15.39655	14 48 13.11	-14 33 06.8						688
1985 GJ1	*	1985 04 15.35255	14 55 13.26	-15 42 37.0				17.2	4	688
1985 GJ1		1985 04 15.39655	14 55 11.27	-15 42 34.4						688
1985 GK1	*	1985 04 15.35255	14 56 27.37	-12 12 39.3				17.2	4	688
1985 GK1		1985 04 15.39655	14 56 25.74	-12 12 32.4						688
1985 GL1	*	1985 04 15.35255	14 58 11.68	-17 04 37.7				17.0	4	688
1985 GL1		1985 04 15.39655	14 58 09.91	-17 04 11.5						688
1985 GM1	*	1985 04 15.35255	14 58 30.42	-11 48 45.6				17.2	4	688
1985 GM1		1985 04 15.39655	14 58 28.79	-11 48 27.6						688
1985 GN1	*	1985 04 15.35255	15 05 35.72	-18 28 35.2				17.0	4	688
1985 GN1		1985 04 15.39655	15 05 33.56	-18 28 35.3						688
1985 GO1	*	1985 04 15.35255	15 05 53.91	-14 26 39.1				17.0	4	688
1985 GO1		1985 04 15.39655	15 05 52.00	-14 26 33.1						688
6563 P-L		1985 03 24.38686	13 39 32.55	-12 43 28.9				17.5		688
6563 P-L		1985 03 24.42373	13 39 30.78	-12 43 26.9						688

Note 1: right ascension uncertain. 2: declination uncertain. 3 = 1 + 2. 4: discoverer Bowell. 5 = 1 + 4. 6: discoverer Skiff. 7 = 3 + 4. 8: diffuse. C = 4 + 8.

OBSERVATIONS MADE WITH THE SPACEWATCH CAMERA 0.91-M TELESCOPE ON KITT PEAK.

Observations made by T. Gehrels with a CCD in scanning mode. Reductions by J. V. Scotti using reference stars from the 1984 SAO Catalog. For further details see MPC 9198. Contact: T. Gehrels, Space Sciences Building, University of Arizona, Tucson, AZ 85721, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
1866	1985 04 14.47657		16 48 22.33	-03 33 17.7	15.4V		691
1866	1985 04 14.49054		16 48 21.82	-03 33 21.8			691
1866	1985 04 14.49394		16 48 21.69	-03 33 22.9			691
1941 UG	1985 04 14.16378		08 38 33.66	+13 29 19.6	18.2V		691
1941 UG	1985 04 14.17802		08 38 34.16	+13 29 19.1			691
1973 SZ1	1985 04 14.20332		10 22 57.81	+13 49 28.3	18.0V	1	691
1973 SZ1	1985 04 14.21769		10 22 57.68	+13 49 28.5		1	691

1973 SZ1		1985	04	14.23213	10	22	57.53	+13	49	28.6	1	691
1973 SZ1		1985	04	14.31424	10	22	56.69	+13	49	28.5	1	691
1981 YC		1985	04	13.17243	08	24	49.93	-12	34	34.9	18.0V	691
1981 YC		1985	04	13.18630	08	24	50.67	-12	34	25.8		691
1981 YC		1985	04	13.20093	08	24	51.43	-12	34	16.6		691
1982 HS		1985	04	14.26514	08	53	16.16	+46	56	56.7	18.4V 3	691
1982 HS		1985	04	14.28427	08	53	16.60	+46	56	42.7	3	691
1982 HS		1985	04	14.30113	08	53	16.98	+46	56	30.1	3	691
1982 RB		1985	04	14.38154	17	41	48.11	+17	23	14.1	19.4V 4	691
1982 RB		1985	04	14.39579	17	41	49.27	+17	23	34.7	4	691
1982 RB		1985	04	14.41027	17	41	50.42	+17	23	55.1	4	691
1982 UM		1985	04	14.12462	08	37	22.81	+23	29	26.0	18.4V 1	691
1982 UM		1985	04	14.13972	08	37	22.96	+23	29	24.2	1	691
1982 UM		1985	04	14.15521	08	37	23.13	+23	29	22.5	1	691
1984 HA1		1985	04	13.32785	15	32	37.70	+03	32	57.4	15.8V 1	691
1984 HA1		1985	04	13.34194	15	32	37.40	+03	33	02.2	1	691
1984 HA1		1985	04	13.35606	15	32	37.11	+03	33	06.9	1	691
1985 CN		1985	04	13.28912	11	22	41.46	+09	48	38.6	18.4V 1	691
1985 CN		1985	04	13.30333	11	22	41.14	+09	48	43.3	1	691
1985 CN		1985	04	13.31749	11	22	40.80	+09	48	47.3	1	691
1985 FC		1985	04	15.12144	11	33	42.71	+08	33	44.3	16.5V	691
1985 FC		1985	04	15.13589	11	33	41.52	+08	33	30.1		691
1985 FC		1985	04	15.15031	11	33	40.37	+08	33	16.0		691
1985 FC		1985	04	16.13510	11	32	24.83	+08	17	06.3		691
1985 FC		1985	04	16.14921	11	32	23.73	+08	16	52.6		691
1985 FC		1985	04	16.15694	11	32	23.13	+08	16	44.9		691
1985 FC		1985	04	16.16369	11	32	22.59	+08	16	38.4		691
1985 FC		1985	04	18.18441	11	29	56.79	+07	43	09.8		691
1985 FC		1985	04	18.19779	11	29	55.80	+07	42	56.2		691
1985 FC		1985	04	18.21248	11	29	54.76	+07	42	41.7		691
1985 FC3	*	1985	03	22.22935	12	13	30.95	+12	16	04.3	19.8V	691
1985 FC3		1985	03	22.25201	12	13	28.64	+12	16	00.5		691
1985 FC3		1985	03	22.27546	12	13	26.28	+12	15	54.3		691
1985 FC3		1985	03	22.30284	12	13	23.49	+12	15	48.8		691
1985 FC3		1985	03	22.32603	12	13	21.07	+12	15	44.6		691
1985 FC3		1985	03	22.34959	12	13	18.61	+12	15	38.4		691
1985 FC3		1985	03	24.38225	12	09	54.21	+12	07	25.7		691
1985 FC3		1985	03	24.39683	12	09	52.76	+12	07	21.9		691
1985 FC3		1985	03	24.41135	12	09	51.22	+12	07	15.3		691
1985 HA	*	1985	04	18.18464	11	30	18.97	+07	38	41.3	17.5V	691
1985 HA		1985	04	18.19806	11	30	18.53	+07	38	44.1		691
1985 HA		1985	04	18.21273	11	30	18.05	+07	38	47.7		691

Note 1: poor fit to reference stars in right ascension. 2: poor fit in declination. 3 = 1 + 2. 4: only two reference stars.

OBSERVATIONS MADE AT THE GOETHE LINK OBSERVATORY.

Plates measured and reduced at Indiana University under the direction of D. Owings in response to requests from the Minor Planet Center. Contact: F. K. Edmondson, Swain Hall West 319A, Indiana University, Bloomington, IN 47401, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	N Obs.
1949 UL	1949	10 28.20638	01 47 14.89	+03 49 14.2	760
1949 UL	1949	10 28.27999	01 47 09.83	+03 49 05.8	760
1955 TA	1955	10 10.06634	22 48 53.32	+14 23 36.3	760
1955 TA	1955	10 10.10592	22 48 50.41	+14 23 12.2	760
1955 UP	1955	10 20.17363	01 10 25.94	+08 17 43.8	760
1955 UP	1955	10 20.21461	01 10 23.71	+08 17 22.9	760
1955 UQ	1955	10 20.21461	01 08 34.96	+08 16 17.1	760
1955 UR	1955	10 20.17363	01 10 31.47	+04 44 18.0	760

1955	UR	1955	10	20.21461	01	10	29.55	+04	44	05.5	760
1955	UU	1955	10	20.17363	01	05	05.90	+04	06	07.0	760
1955	UU	1955	10	20.21461	01	05	04.02	+04	05	51.5	760
1955	UH1	1955	10	25.29096	02	24	04.17	+18	47	35.9	1 760
1955	UH1	1955	10	25.32708	02	24	02.40	+18	47	16.0	1 760
1955	UL1	1955	10	25.29096	02	18	52.17	+19	27	14.6	760
1955	UL1	1955	10	25.32708	02	18	49.64	+19	27	03.3	760
1955	UM1	1955	10	25.29096	02	14	58.93	+19	19	44.1	760
1955	UM1	1955	10	25.32708	02	14	57.43	+19	19	31.8	760
1955	UO1	1955	10	25.29096	02	11	58.49	+18	52	52.5	760
1955	UO1	1955	10	25.32708	02	11	56.79	+18	52	34.5	760
1955	VB	1955	11	07.08336	00	31	54.96	-05	20	15.9	760
1955	VJ	1955	11	10.17362	02	12	20.37	+04	18	19.1	760
1955	VJ	1955	11	10.20972	02	12	18.55	+04	18	13.5	760
1955	VM	1955	11	10.17362	02	04	40.98	+02	25	37.6	760
1955	VM	1955	11	10.20972	02	04	39.48	+02	25	27.7	760
1955	VO	1955	11	10.20972	02	01	26.64	+09	16	03.2	760
1955	VP	1955	11	10.17362	01	56	29.48	+04	24	33.9	760
1955	VP	1955	11	10.20972	01	56	27.12	+04	24	44.0	760
1957	UV	1957	10	20.24877	01	44	53.87	+03	50	09.8	760
1957	UV	1957	10	20.30449	01	44	50.56	+03	49	51.4	760

Note 1: approximate position on MPC 1317 inferior.

OBSERVATIONS MADE AT OAK RIDGE OBSERVATORY BY R. E. McCROSKY, C.-Y. SHAO AND G. SCHWARTZ.

Plates with the 1.5-m reflector, reduced using the Astrographic Catalogue. Coordination and verification by, and assistance with identifications from, C. M. Bardwell. Contact: R. E. McCrosky, Harvard-Smithsonian Center for Astrophysics, 60 Garden Street, Cambridge, MA 02138, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
1650	1985	03 22.23293	09 55 29.31	+09 44 40.5	16		801
1864	1985	03 21.29017	11 33 03.25	+12 48 36.0			801
1866	1985	03 25.39234	16 50 57.73	-02 23 41.4			801
1915	1985	03 23.28247	09 32 43.20	+45 30 43.6			801
3241	1985	03 23.14564	09 19 24.06	+16 37 38.5			801
1932 CN	1985	03 19.38377	14 26 09.75	-03 55 38.1			801
1933 SJ	1985	03 26.05078	08 11 20.27	+19 59 18.5			801
1941 UG	1985	02 17.18199	08 45 19.40	+11 57 22.7			801
1941 WA	1985	03 20.09112	07 56 36.18	+23 51 20.0			801
1949 DA	1985	02 18.38321	14 17 02.53	-11 29 37.6			801
1949 DA	1985	03 21.37018	14 22 49.94	-10 36 16.4			801
1953 VN2	1985	02 21.38593	12 45 36.00	+05 47 58.9			801
1953 VN2	1985	03 19.30541	12 26 40.77	+08 19 22.4			801
1973 SZ1	1985	02 16.27310	10 52 01.07	+11 17 19.2			801
1973 SZ1	1985	03 21.15835	10 31 29.64	+13 17 46.2		1	801
1975 TS2	1985	03 19.35613	13 50 27.00	-01 12 53.3			801
1976 SE1	1985	03 26.29964	12 48 19.38	-04 52 58.5			801
1978 OJ	1985	02 18.18826	07 36 26.09	+25 28 55.4			801
1978 OJ	1985	03 26.02642	07 32 20.82	+26 39 25.8			801
1978 PA	1985	03 23.26051	10 53 55.45	+46 19 26.8			801
1978 UF2	1985	03 22.01572	05 08 38.07	+41 54 58.7			801
1978 VR9	1985	02 18.28606	09 11 57.23	+18 54 42.0			801
1978 VR9	1985	03 22.20186	08 56 10.85	+19 52 19.4			801
1979 HF5	1985	03 20.06143	07 22 12.97	+17 09 42.2			801
1979 OB15	1985	02 17.28589	10 25 00.94	+06 44 39.5			801
1979 OB15	1985	03 22.23293	09 56 05.61	+09 19 53.3			801
1979 OB15	1985	03 26.19614	09 53 47.09	+09 33 36.0			801
1979 QA10	1985	03 24.24186	11 13 18.91	+05 40 54.3			801
1979 QA10	1985	03 25.25296	11 12 23.19	+05 43 57.8			801

1980	RA		1985	03	19.12683	08	05	47.19	+28	28	28.3	801
1981	AA		1985	03	21.32123	13	20	26.23	+31	00	34.8	801
1981	EX16		1985	02	17.21059	08	48	46.08	+35	24	26.2	801
1981	EX16		1985	03	19.16900	08	30	31.70	+32	13	35.6	801
1981	QO2		1985	03	22.28119	11	53	33.06	+01	42	08.2	801
1981	SJ1		1984	05	27.23357	15	16	30.06	-07	44	57.9	801
1981	XA		1985	03	21.18561	07	51	06.55	+51	02	10.8	801
1982	DA		1985	03	17.03507	06	21	31.88	+15	51	31.5	801
1982	GG		1985	02	16.29454	11	04	05.81	+13	48	24.4	801
1982	GG		1985	03	21.23648	10	30	32.02	+16	13	55.2	801
1982	HE1		1985	03	22.14287	08	08	22.37	+32	08	01.4	801
1982	HQ1		1985	02	16.32478	11	31	16.60	+15	55	47.8	801
1982	HQ1		1985	03	19.25534	11	00	10.58	+19	02	00.4	801
1983	RJ		1985	02	17.31617	10	40	15.39	+20	50	48.9	801
1983	RJ		1985	03	23.16788	10	06	19.94	+22	38	42.6	801
1983	VV1		1985	03	21.21391	09	18	11.21	+16	48	06.9	801
1983	WF1		1985	03	26.13825	10	03	26.70	+35	26	05.9	801
1983	XS		1985	03	23.11540	08	45	30.10	+14	41	27.7	801
1984	YV		1985	03	20.00696	06	48	27.00	+05	32	02.4	801
1985	DA		1985	03	19.28371	11	17	59.68	+20	36	10.7	801
1985	DA		1985	03	21.26196	11	16	36.05	+21	24	35.4	801
1985	FG	*	1985	03	22.04730	04	51	19.24	+14	26	05.3	18 801
1985	FT2	*	1985	03	22.23293	09	56	23.53	+09	29	49.2	19.5 801
1985	FU2	*	1985	03	22.28119	11	52	54.26	+01	59	34.8	17.5 801
1985	FV2	*	1985	03	22.28119	11	54	17.37	+01	45	12.5	17.5 801
1985	FW2	*	1985	03	25.21736	10	37	13.00	+31	07	52.5	801
1985	FW2		1985	03	26.22183	10	36	06.93	+31	01	36.0	17 801
1985	FX2	*	1985	03	26.19614	09	52	57.95	+09	38	55.4	18.5 801
1985	FY2	*	1985	03	26.22183	10	36	59.14	+31	07	39.2	17 801
1985	FZ2	*	1985	03	26.24937	11	29	18.73	+02	07	21.9	17.5 801
1985	FA3	*	1985	03	26.29964	12	47	30.26	-04	48	39.0	17 801
1985	FB3	*	1985	03	26.29964	12	49	34.83	-04	44	00.0	17 801
2631	P-L		1985	02	21.33286	11	02	52.63	+08	10	01.7	801
2631	P-L		1985	03	22.25598	10	41	28.88	+10	10	27.3	801
6563	P-L		1985	03	26.32391	13	38	04.55	-12	41	59.2	801

Note 1: weak image.

OBSERVATIONS MADE AT TOYOTA BY K. SUZUKI.
Plates measured by T. Urata. Copied from Nihondaira Obs. Circ. No. 1511. Contact: T. Urata, Nishitaka-cho 8-23, Shimizu, Shizuoka 424, Japan.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
468	1985 02	24.57153	10 21 00.37	+10 46 27.0	15.5		881
468	1985 02	24.58819	10 20 59.67	+10 46 32.1			881
1481	1985 02	24.57153	10 21 13.79	+12 11 25.5	15.5		881
1481	1985 02	24.58819	10 21 13.08	+12 11 26.9			881
1975 VG9	1985 02	24.51944	09 24 43.16	+08 53 17.2	15.5		881
1975 VG9	1985 02	24.54792	09 24 41.21	+08 53 16.9			881
1985 BA	1985 02	17.45556	07 47 16.17	+21 18 31.5	16.5	1	881
1985 BA	1985 02	17.47986	07 47 15.02	+21 18 32.2		1	881
1985 CD	1985 02	24.57153	10 21 51.43	+11 26 18.7	16.5		881
1985 CD	1985 02	24.58819	10 21 50.51	+11 26 31.5			881

Note 1: doubtful image.

OBSERVATIONS MADE AT KARASUYAMA BY Y. BANNO.
Copied (with correction) from Nihondaira Obs. Circ. No. 1511. Contact: T. Urata, Nishitaka-cho 8-23, Shimizu, Shizuoka 424, Japan.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
1246	1985 02	15.52986	07 27 25.17	+17 23 09.8	16.5	889
1246	1985 02	15.57917	07 27 23.38	+17 23 05.7		889

2460	1985	02	15.52986	07	26	14.58	+16	54	39.4	16	889
2460	1985	02	15.57917	07	26	13.31	+16	54	50.2		889
1985 AF	1985	02	15.52986	07	28	17.16	+17	44	34.3	16	889
1985 AF	1985	02	15.57917	07	28	15.93	+17	44	28.5		889

* * * * *

ORBITAL ELEMENTS OF ONE-OPPOSITION MINOR PLANETS.

The orbit computers and authors of double designations are A = A. Lowe, B = C. M. Bardwell, E = E. Bowell, h = K. Hurukawa, l = W. Landgraf, M = B. G. Marsden, U = T. Urata, Z = Purple Mountain Observatory. For further information see MPC 7828.

Planet	B(1,0)	Epoch	M	Peri.	Node	Incl.	e	a	Arc	O	N	C
1979 HH3	14.0	790507	23.14	144.22	43.81	7.02	0.0504	2.3557	42	8	1	B
1981 DU	16.0	810317	262.63	38.44	257.07	6.54	0.1610	2.2861	59	0		M
1981 DB1	14.0	810317	222.29	124.54	210.52	14.14	0.2476	3.1282	58	0		M
1981 DM1	13.5	810317	11.25	316.34	209.91	11.07	0.1408	2.6825	59	0		M
1981 DN1	15.0	810317	186.19	52.26	307.13	9.94	0.2051	2.5590	59	0		M
1981 DC2	15.0	810317	237.06	98.91	224.69	11.86	0.2030	2.6624	64	0		M
1981 DF2	15.5	810317	153.21	126.16	255.57	7.30	0.2012	2.3181	59	0		M
1981 DV2	16.5	810317	66.10	245.95	192.09	22.37	0.3010	2.4218	64	0		M
1981 EN	15.5	810317	15.58	349.72	163.60	9.57	0.1623	2.3664	36	0	1	M
1981 EO	15.0	810317	316.13	241.72	352.92	16.02	0.1684	2.5535	69	0		M
1981 ET	13.5	810317	237.75	318.28	358.70	9.68	0.2505	2.7521	68	0		M
1981 EZ	15.5	810317	45.61	92.76	20.20	1.25	0.1777	2.4083	68	0		M
1981 ED1	14.5	810317	91.29	67.71	359.34	12.60	0.1425	2.6870	68	0		M
1981 EZ2	14.0	810317	339.15	343.44	218.83	8.61	0.1021	2.5357	69	0		M
1981 EW3	14.0	810317	244.14	32.43	276.69	7.45	0.1589	2.5371	66	0		M
1981 EH4	15.0	810317	166.07	137.73	229.31	8.15	0.2307	2.6249	66	0		M
1981 EK4	14.5	810317	139.05	66.54	321.49	12.08	0.1907	2.6576	54	0		M
1981 ES4	15.0	810317	177.67	35.28	326.76	15.88	0.1807	2.6146	59	0		M
1981 EU4	13.5	810317	262.70	24.06	261.21	9.00	0.0712	2.9872	66	0		M
1981 EG5	15.0	810317	214.55	11.35	320.51	8.68	0.1277	2.4137	56	0		M
1981 ER5	15.5	810317	233.56	53.07	273.89	7.33	0.2663	2.3867	59	0		M
1981 EU6	16.5	810317	253.62	70.63	245.83	7.97	0.2895	2.3170	59	7		M
1981 EM7	15.0	810317	261.50	73.74	221.48	5.79	0.2053	2.5882	62	0		M
1981 EC8	16.5	810317	208.26	99.48	237.35	4.13	0.2261	2.2007	62	0		M
1981 ES8	13.5	810317	167.96	159.38	207.06	9.63	0.1022	3.0220	69	0		M
1981 EB9	14.5	810317	264.80	307.32	342.23	12.67	0.1649	2.6094	62	0		M
1981 EH11	15.0	810317	203.49	358.62	344.03	13.78	0.1847	2.6437	59	0		M
1981 EQ12	16.0	810317	222.26	94.33	240.19	6.45	0.2666	2.3916	59	0		M
1981 EN13	15.0	810317	7.66	270.57	260.67	4.36	0.0820	2.2234	59	0		M
1981 ET13	15.5	810317	329.92	294.79	291.72	4.19	0.2182	2.2823	56	0		M
1981 ER14	15.0	810317	261.42	339.15	324.79	9.08	0.2218	2.3407	59	0		M
1981 EM17	15.0	810317	190.86	153.24	199.74	7.36	0.2399	2.5564	53	0		M
1981 EN17	14.5	810317	167.95	157.31	210.73	4.57	0.1725	2.2946	57	0		M
1981 EZ17	14.0	810317	333.12	34.61	174.29	14.82	0.1299	2.5687	48	0	1	M
1981 EK18	13.5	810317	28.75	281.93	215.81	1.30	0.1282	3.1445	61	0		M
1981 EM18	15.0	810317	357.12	201.23	337.23	5.86	0.0992	2.2818	67	0		M
1981 EB19	16.0	810317	247.29	139.92	168.47	1.68	0.2311	2.2503	68	0		M
1981 ED19	14.0	810317	232.81	140.53	167.45	2.30	0.0729	2.6763	68	0		M
1981 EK19	15.5	810317	273.07	303.76	335.25	4.95	0.1484	2.3245	61	0		M
1981 EL19	13.5	810317	223.63	139.75	182.20	6.80	0.1511	2.7837	61	0		M
1981 EQ19	15.0	810317	147.95	184.03	193.71	2.76	0.1828	2.3831	61	0		M
1981 EU19	15.0	810317	277.42	288.15	345.51	5.39	0.1392	2.3141	68	0		M
1981 EX19	15.5	810317	220.05	130.82	196.86	1.10	0.2119	2.1551	61	0		M

1981	EC20	15.0	810317	207.47	74.54	262.88	1.17	0.2232	2.4013	58	0		M
1981	EP20	15.5	810317	136.26	4.58	19.35	2.47	0.2236	2.3715	68	0		M
1981	EW21	14.5	810317	327.27	359.13	219.14	1.08	0.1250	2.6264	61	0		M
1981	EX21	15.0	810317	169.44	187.79	176.00	12.35	0.1966	2.6539	61	0		M
1981	EY21	14.0	810317	59.97	272.61	178.67	10.99	0.2290	3.1366	61	0		M
1981	ET22	15.0	810317	45.64	88.95	26.32	2.59	0.1599	2.3963	61	0		M
1981	EU22	14.5	810317	0.69	196.65	339.30	1.93	0.0683	2.1769	61	0		M
1981	EZ22	16.5	810317	230.67	325.31	355.19	2.45	0.1856	2.2050	61	0		M
1981	EB23	15.5	810317	190.03	325.66	24.45	2.69	0.2098	2.4412	61	0		M
1981	EC25	15.5	810317	206.88	331.05	7.03	3.69	0.1737	2.1724	61	0		M
1981	EG25	16.0	810317	322.85	262.92	346.86	9.84	0.3445	2.7746	62	0		M
1981	ET25	15.0	810317	267.29	100.75	182.33	6.16	0.1015	2.4204	57	0		M
1981	EF26	12.0	810317	36.34	321.48	174.47	6.96	0.0969	3.2207	60	0		M
1981	EN26	14.5	810317	356.95	358.00	186.12	8.17	0.1588	2.7842	57	0		M
1981	EP26	15.0	810317	327.55	45.72	171.40	6.19	0.0859	2.3916	57	0		M
1981	ET26	15.0	810317	288.68	277.54	353.13	3.88	0.1779	2.2321	60	0		M
1981	EX26	16.0	810317	291.16	79.07	198.73	2.99	0.2529	2.4255	57	0		M
1981	EY26	12.0	810317	304.55	266.88	340.40	5.24	0.1054	3.1809	56	0		M
1981	EQ27	13.0	810317	6.65	7.41	163.68	2.74	0.1325	2.5552	60	0		M
1981	EY27	15.0	810317	251.32	301.70	5.29	11.79	0.1841	2.5286	57	0		M
1981	EA28	15.0	810317	178.31	354.69	6.91	7.57	0.1357	2.3614	57	0		M
1981	EF28	14.0	810317	223.68	318.20	9.44	10.48	0.1557	2.6461	57	0		M
1981	EQ28	14.5	810317	106.24	257.40	157.29	3.39	0.1980	2.7574	60	0		M
1981	ES29	13.0	810317	356.79	338.58	208.92	8.32	0.2129	2.8560	59	0	1	M
1981	EQ30	15.5	810317	242.87	316.77	1.12	12.70	0.2671	2.5936	60	0		M
1981	EQ32	15.5	810317	229.08	102.38	228.48	7.38	0.3011	2.6963	59	9		M
1981	EU35	15.0	810317	203.05	180.98	160.95	4.04	0.2366	2.3899	61	0		M
1981	EY35	15.5	810317	316.10	232.09	1.70	3.88	0.1418	2.2827	61	0		M
1981	EE37	15.5	810317	206.10	318.68	19.30	4.51	0.1817	2.2769	61	0		M
1981	EF37	14.0	810317	250.67	296.93	1.38	15.20	0.1211	2.5488	61	0		M
1981	EU38	15.5	810317	307.19	43.14	203.71	3.17	0.1349	2.2511	57	0		M
1981	EH41	13.5	810317	259.48	99.98	189.51	10.02	0.0825	2.9986	57	0		M
1981	FQ	13.0	810317	316.78	202.96	30.21	0.32	0.1565	3.1110	68	0		M
1981	FR	14.5	810317	270.89	104.80	177.96	12.21	0.1542	2.6247	61	0		M
1981	FC1	13.5	810317	23.45	142.31	357.96	8.89	0.1696	3.1456	68	9		M
1981	GB	14.0	810317	346.40	20.47	188.21	3.77	0.2893	3.0307	79	9		M
1981	GM1	14.5	810317	356.50	177.95	2.23	14.00	0.0995	2.5938	57	0		M
1981	GN1	15.0	810317	241.20	129.57	177.49	9.85	0.1285	2.3268	61	0		M
1981	GO1	16.0	810317	1.56	162.02	11.77	2.57	0.1439	2.3868	68	0	1	M
1983	BM	13.5	830126	321.25	213.52	332.95	11.50	0.0987	2.6616	42	9		B
1983	QK	13.0	830814	285.62	135.36	301.01	3.81	0.2610	2.5772	3	4		M
1983	QL	14.0	830814	30.27	116.27	164.08	10.99	0.2554	2.8499	3	5	2	M
1983	QM	13.5	830814	72.30	53.53	175.52	6.62	0.2645	2.5774	3	5		M
1983	QN	12.0	830814	164.15	358.96	165.94	13.09	0.1679	2.9267	3	5		M
1983	QO	14.5	830814	10.15	77.50	241.10	1.79	0.1081	2.6098	3	5		M
1983	QP	12.5	830814	131.72	236.73	310.37	3.36	0.1966	2.5994	3	4		M
1983	QQ	14.5	830814	315.95	211.62	177.40	4.15	0.1556	2.3527	3	5		M
1983	QR	14.0	830814	185.61	202.11	305.51	2.02	0.0720	2.3776	3	4		M
1983	QS	14.0	830814	18.74	98.67	203.31	1.74	0.2055	2.5614	3	5		M
1983	QT	15.0	830814	343.21	28.82	324.70	5.41	0.1202	2.7457	3	5		M
1983	QU	17.0	830814	323.26	54.89	325.71	4.32	0.1673	2.2392	3	4	2	M
1983	QV	13.5	830814	27.98	115.80	172.27	6.35	0.2356	3.3076	3	6		M
1983	QW	15.0	830814	35.03	324.33	316.65	1.78	0.1782	2.2301	3	4	2	M
1983	QX	13.5	830814	158.13	249.68	277.11	1.88	0.3302	2.7520	3	5		M
1983	QY	17.0	830814	329.23	53.13	326.76	6.83	0.2438	2.3924	3	5		M
1983	QZ	15.0	830814	69.33	59.83	186.54	2.02	0.1441	2.3504	3	4		M
1983	QA1	13.0	830814	196.56	341.71	162.12	11.31	0.2624	2.3442	3	5		M
1983	QB1	16.5	830814	349.25	15.35	330.87	8.05	0.1636	2.5540	3	4	2	M
1983	QC1	16.0	830814	322.22	141.28	241.78	1.24	0.1653	2.5084	3	5	2	M

1983 QD1	16.5	830814	321.36	182.17	197.57	1.56	0.1280	2.2120	3	5	2	M
1983 QE1	14.5	830814	85.30	294.35	298.44	2.40	0.1233	2.2145	3	5		M
1983 QF1	16.5	830814	1.73	18.29	309.79	1.85	0.2025	2.5840	3	4	2	M
1983 QG1	17.5	830814	319.22	156.34	235.32	1.15	0.2271	2.2200	2	4	2	M
1983 RJ1	15.5	830903	12.19	91.81	226.22	1.45	0.2195	2.4504	17	0		M
1983 RV3	15.0	830903	11.75	144.84	175.57	5.38	0.1659	2.7261	18	0		M
1983 VC7	14.5	831102	21.67	324.76	37.31	3.09	0.2183	2.2083	8	5		B
1983 VD7	14.0	831102	31.75	305.21	36.43	11.82	0.2802	2.5312	10	8		B
1983 VF7	15.5	831102	22.14	324.85	35.29	7.53	0.2464	2.2122	10	6	2	B
1983 VG7	14.5	831102	353.03	0.24	45.83	5.14	0.1624	2.2651	10	7		B
1983 VM7	15.0	831102	15.07	311.13	65.18	3.72	0.1509	2.2640	10	6		B
1983 VO7	14.9	830923	29.40	338.72	351.88	8.37	0.2901	2.4734	22	3		Z
1983 VP7	13.4	830923	52.41	310.72	4.81	13.52	0.1958	2.6344	30	4		Z
1984 SJ7	14.5	840917	6.58	51.68	303.71	8.36	0.1085	2.3424	2	6		B
1984 UT3		841007	13.26	35.07	327.20	5.76	0.1965	2.2562	30	4		M
1985 BA	13.5	850204	46.68	103.53	309.41	3.95	0.2427	2.6845	31	6		U
1985 CN	17.0	850316	59.22	284.99	162.82	9.65	0.2432	2.3764	59	0		M
1985 CT	14.0	850224	74.84	258.51	146.85	23.06	0.2366	2.3153	40	8		B
1985 DA	16.0	850316	10.01	3.90	155.50	23.38	0.0741	1.9035	25	7		B
1985 DD	15.5	850224	356.64	67.31	87.68	23.79	0.1167	1.9549	25	3		B
1985 FC	16.0	850405	23.95	143.53	14.60	23.93	0.0404	1.8612	29	0		B
1985 FD	14.5	850316	310.39	144.38	92.29	14.86	0.1638	2.6869	4	3		M
1985 FE	13.0	850405	317.29	338.33	266.53	6.73	0.2430	2.8829	6	0		B
1985 FF	14.5	850316	32.79	268.04	159.12	27.39	0.3383	2.3874	7	3	2	M
1985 FH	15.0	850316	336.13	39.25	162.21	8.86	0.1687	2.4791	11	0		M
1985 FL	14.0	850316	268.31	273.27	5.06	3.17	0.1569	2.3498	11	8		M
1985 FZ	14.7	850316	329.14	279.75	309.33	5.52	0.2068	2.6585	24	6		E
1985 FA1	15.0	850316	7.21	226.42	307.71	4.92	0.0752	2.1509	24	5		E
1985 FC1	14.2	850316	75.40	108.49	345.35	4.13	0.1198	2.3592	24	6		E

Note 1: double designations 1979 HH3 = 1979 GS = 1979 KK1 (h); 1981 EN = 1981 EG35 (a, l, MPC 8665); 1981 EZ17 = 1981 ED (l, MPC 8530); 1981 ES29 = 1981 GY (h, l, MPC 8380); 1981 GO1 = 1981 GS1 (M, MPC 8530). 2: e assumed.

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ORBITAL ELEMENTS BY W. LANDGRAF, ASTRONOMISCHE ARBEITSGEMEINSCHAFT, MAINZ.

(2201) Oljato
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	289.75374		(1950.0)	P	Q
n	0.30760720	Peri.	95.71088	-0.98969092	-0.13671802
a	2.1733936	Node	76.43654	+0.10776356	-0.90707582
e	0.7119125	Incl.	2.51530	+0.09433398	-0.39814775
P	3.20	B(1,0)	16.7		

From 53 observations at 4 oppositions 1979-1983, mean residual 0".8.

1985 DQ = 1951 CG = 1978 SA1 = 1978 TK9 = 1980 CB
The identifications are by W. Landgraf.
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	4.84687		(1950.0)	P	Q
n	0.23302369	Peri.	94.61368	-0.57702835	+0.80189031
a	2.6153872	Node	138.84026	-0.81106697	-0.54033196
e	0.1437060	Incl.	13.61711	-0.09596169	-0.25497705
P	4.23	B(1,0)	13.0		

Residuals in seconds of arc

510210	760	0.5+	0.5+	800206	801	(3.4-)	2.0+	850315	046	1.0+	0.5+
510210	760	0.4-	0.4+	800207	675	0.1-	2.2-	850315	046	1.1-	0.6-
780927	095	0.2+	2.9+	850216	046	(5.9-)	0.2-	850324	046	1.7+	0.3+
781007	095	0.8-	1.0+	850216	046	(8.0-)	0.5+	850324	046	2.7+	0.3-
800204	675	0.4+	1.6-	850312	046	2.5-	(2.6+)				
800205	675	0.3+	1.6-	850312	046	1.4-	1.5+				

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ORBITAL ELEMENTS BY T. URATA, SHIMIZU, JAPAN.

The following orbital elements are from NOC 1512-1514. The identifications are by T. Urata unless otherwise stated.

(3247)* 1981 YE = A909 BL = 1968 HR = 1979 HO1

Discovered 1981 Dec. 30 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	299.42891		(1950.0)	P	Q
n	0.26889058	Peri.	144.51298	-0.98454322	+0.16823520
a	2.3773091	Node	45.25137	-0.17231462	-0.88069382
e	0.1289972	Incl.	3.93188	-0.03134210	-0.44280393
P	3.67	B(1,0)	14.0		

Residuals in seconds of arc

090124	024	0.8+	2.5+	811220	688	0.8-	1.9-	820116	688	1.9+	0.0
680422	095	2.7-	6.4-	811220	688	0.2+	0.6-	830601	372	0.4-	1.0-
790424	095	0.6-	0.1+	811230	688	0.3-	0.4-	830601	372	1.3+	0.4-
790430	808	1.2+	1.7+	811230	688	0.2+	1.5-	841003	801	0.1-	1.3-
790430	808	0.1-	2.5+	820116	688	0.4+	0.6+	841019	801	0.3-	0.6-

(3248)* 1982 FK = 1933 UN1 = 1950 TK4 = 1955 NC = 1956 VM = 1976 GF1

Discovered 1982 Mar. 21 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory. The identifications 1982 FK = 1933 UN1 = 1950 TK4 = 1955 NC = 1956 VM are by K. Hurukawa.

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	112.64500		(1950.0)	P	Q
n	0.17303269	Peri.	309.60433	+0.78247471	+0.62141389
a	3.1894609	Node	12.15232	-0.49763154	+0.66240789
e	0.1691766	Incl.	10.87741	-0.37429423	+0.41840238
P	5.70	B(1,0)	12.0		

Residuals in seconds of arc

331019	024	3.1+	1.6-	830416	474	0.7-	1.1-	841024	563	0.6+	1.8+
331020	024	1.5+	1.8-	830416	474	0.4-	0.9-	841024	563	0.0	1.9+
501010	711	4.7-	1.9+ Y	840729	801	0.9+	0.3-	841024	563	0.1-	0.6+
550713	076	0.9-	2.5+	840826	801	0.8+	0.5-	841028	563	2.8-	0.3-
561106	062	0.8+	0.5-	840827	801	0.6+	0.9-	841028	563	0.5-	0.7+
561106	062	0.4-	0.0	840923	801	0.5+	0.2-	841028	563	0.9-	1.4-
760401	095	3.8+	4.5+	840924	071	(0.5+	0.1+)	841028	563	0.9-	1.1-
760402	095	1.1-	3.7+	840924	071	(0.5+	0.4+)	841028	563	0.5+	0.0
820321	688	2.4-	2.8-	841003	801	0.3+	0.9-	841029	688	0.8+	2.4-
820321	688	1.1-	2.7-	841023	688	0.8+	3.1-	841029	688	0.8+	1.9-
820414	688	0.7-	2.8-	841023	688	0.4+	2.9-	841030	552	0.7+	0.7+
820414	688	0.8+	2.0-	841024	563	0.3-	1.5+	841030	552	0.8+	1.7+
820425	688	1.2-	0.3-	841024	563	1.1+	1.5+				
820425	688	0.5-	1.3-	841024	563	0.2-	2.0+				

1985 AF = 1952 HE2 = 1980 VQ2

The identification 1985 AF = 1980 VQ2 was independently found by S. Nakano.

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	71.76027	(1950.0)	P	Q
n	0.26557783	Peri. 209.42025	-0.71304367	-0.69416616
a	2.3970424	Node 286.26660	+0.66162267	-0.61971414
e	0.1957746	Incl. 5.88928	+0.23200036	-0.36617991
P	3.71	B(1,0) 14.0		

Residuals in seconds of arc

520423	711	2.0+	2.5-	Y	850121	881	0.2+	0.5-	850126	881	1.3-	0.7-
520423	711	1.9-	2.9+	Y	850121	881	1.2-	3.9+	850211	881	1.2-	0.4+
801111	330	0.1+	0.2+		850123	881	1.4+	2.9-	850211	881	0.1-	0.8-
850115	881	1.1-	3.5+		850123	881	2.2+	3.0-	850215	889	0.5+	0.1-
850115	881	1.7-	1.4+		850126	881	0.9+	1.6-	850215	889	1.5+	0.4+

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ORBITAL ELEMENTS BY K. HURUKAWA, TOKYO ASTRONOMICAL OBSERVATORY.

The following orbital elements are taken in part from JAM 1872. The identifications are by K. Hurukawa unless otherwise stated.

(3249)* 1977 DT4 = 1961 XA = 1975 QL

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

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	260.99279	(1950.0)	P	Q
n	0.27431917	Peri. 309.36066	+0.90283027	-0.42620025
a	2.3458412	Node 75.93339	+0.41036782	+0.81440299
e	0.2469580	Incl. 3.36971	+0.12843579	+0.39382878
P	3.59	B(1,0) 14.8		

Residuals in seconds of arc

611203	760	2.6+	0.1+		770218	381	0.1-	0.7+	840126	688	1.2-	0.0
611203	760	2.4-	0.6-		770219	381	0.4+	0.5+	840126	688	1.1-	2.9-
750830	808	0.5-	0.0		770219	381	0.2+	0.6+	840201	801	1.0-	2.1+
750830	808	0.3+	0.1-		770312	381	0.2-	1.0-	840204	688	1.0+	0.7+
750902	808	0.1-	0.2-		770312	381	1.0-	1.2-	840204	688	2.6+	1.5-
750902	808	0.5+	0.8-		770315	381	0.8-	1.2-	840301	801	0.3-	2.9+
770218	381	0.7+	0.2+		770315	381	0.0	1.1-				

(3250)* 1979 EB = 1979 FP = A908 TF = 1929 TS = 1940 XE = 1974 FY1 = 1976 SD8 = 1982 YX1

Discovered 1979 Mar. 6 by C.-I. Lagerkvist at the Uppsala southern station. The double designation 1979 EB = 1979 FP is by B. G. Marsden (MPC 6190). The identification 1979 EB = 1976 SD8 was suggested independently by L. D. Schmadel. The 1985 observations were independently identified by E. Bowell.

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	246.96785	(1950.0)	P	Q
n	0.18850624	Peri. 177.31568	+0.93081227	-0.35916331
a	3.0124434	Node 204.08091	+0.33215101	+0.90858440
e	0.1089035	Incl. 9.55802	+0.15252612	+0.21325129
P	5.23	B(1,0) 12.3		

Residuals in seconds of arc

081001	024	1.5+	3.8-	740324	808	0.1+	1.4+	790321	414	0.1+	0.6-
291009	690	(3.2+	39.5-)X	760928	095	4.7-	6.7+	790321	414	2.5-	0.4+
401204	062	0.0+	1.6+	760928	095	(8.1-	14.8+)	790329	808	0.7-	0.7-
401204	062	1.4+	3.3-	790306	808	0.0+	0.6+	790329	808	0.5-	0.1-
401204	062	0.2-	1.8-	790306	808	1.1-	0.6-	821219	330	2.4+	3.0+
401204	062	0.3+	0.4-	790306	414	0.5+	0.7+	850415	688	3.3+	0.6-
740324	808	0.4-	1.9+	790306	414	0.6+	1.7+	850415	688	1.5+	0.9+

(3251)* 6536 P-L = A916 SA = 1955 XE = 1982 RU1

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

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	190.12072		(1950.0)	P	Q
n	0.17961123	Peri.	240.70566	+0.92365343	-0.38314998
a	3.1110982	Node	141.82180	+0.35580840	+0.84985346
e	0.1607175	Incl.	0.72062	+0.14235423	+0.36186348
P	5.49	B(1,0)	13.4		

Residuals in seconds of arc

160930	029	2.7+	0.0 Y	601022	675	0.9-	1.0+	820917	046	2.3-	3.0-
161003	029	1.1-	3.8+Y	601022	675	0.3-	0.3+	820917	046	0.2-	1.0-
551206	760	0.3+	0.8-	601024	675	0.8-	0.7+	850213	691	0.6-	3.0-
551206	760	1.5-	0.0	601026	675	1.4-	0.8+	850213	691	1.3-	2.2-
600924	675	0.5+	0.1+	820915	046	2.1+	1.2-	850213	691	1.1-	2.3-
600926	675	0.1+	0.0	820915	046	2.0+	0.9-	850320	691	(0.9-	0.2-)
600927	675	0.1+	0.4+	820915	046	2.1-	2.6-	850320	691	(0.9-	0.1-)
600928	675	0.2-	0.5+	820915	046	4.4+	1.2-	850320	691	(0.8-	0.0)
601017	675	0.3-	0.7+	820916	046	0.1-	0.3-	850320	691	(0.9-	1.4+)
601017	675	0.0	0.0	820916	046	1.2+	0.0				

1979 QP8 = 1962 PA = 1974 WU = 1977 EA5

The identifications 1979 QP8 = 1962 PA = 1974 WU are by T. Urata (NOC 1308). The identification 1979 QP8 = 1974 WU was independently suggested by L. D. Schmadel.

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	60.19367		(1950.0)	P	Q
n	0.17743723	Peri.	94.13315	+0.84553854	+0.53317724
a	3.1364648	Node	233.64885	-0.50261467	+0.77715014
e	0.1943471	Incl.	1.99562	-0.18011960	+0.33430478
P	5.55	B(1,0)	13.5		

Residuals in seconds of arc

620801	760(0.06+	0.01-)X	790820	095	0.2-	0.0	840702	801	1.1-	0.2-
741118	095	0.3+	0.3-	790828	095	2.2+	0.7+	840725	801	1.2+	0.0
770312	381	0.4+	0.4+	790923	095	0.9-	0.2+				
770312	381	0.1-	0.5+	791016	095	1.7-	0.1+				

1980 OD = 1980 RE3

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	335.78288		(1950.0)	P	Q
n	0.18738911	Peri.	232.50711	+0.95893540	-0.26086569
a	3.0244101	Node	142.24600	+0.28143385	+0.92386320
e	0.2365856	Incl.	10.47540	-0.03518357	+0.28004621
P	5.26	B(1,0)	13.6		

Residuals in seconds of arc

800717	688	1.1-	1.4-	800904	688	0.9+	1.0-	820123	801	1.4+	0.0
800717	688	0.0	0.2-	800904	095	0.3-	2.0+	820326	801	2.0-	1.3+
800808	688	0.2+	0.3+	800907	688	1.1+	1.3+	840507	801	0.6-	0.3+
800902	688	0.1-	1.4-	801002	688	1.0-	1.2+	840605	801	0.9+	0.8+

1984 SQ5 = 1966 PO = 1966 PY = 1976 GV8 = 1976 JB2
The double designation 1966 PO = 1966 PY is by H. Oishi (JAM 853).
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	236.00185	(1950.0)	P	Q
n	0.27989931	Peri. 137.22018	-0.34860282	+0.93213501
a	2.3145631	Node 112.16198	-0.88594608	-0.29358903
e	0.0515666	Incl. 6.07314	-0.30590131	-0.21196653
P	3.52	B(1,0) 14.6		

Residuals in seconds of arc

660807	074	0.7-	1.3+	840921	809	0.5+	0.1-	840927	809	2.4+	0.4-
660807	074	1.2-	1.1+	840922	809	0.5+	0.1-	840928	809	0.6-	0.9+
660809	074	1.9+	0.6-	840922	809	0.7+	0.1+	840928	809	0.0	0.5+
660810	074	0.6-	0.3-	840922	809	0.7+	0.2-	840928	809	0.1-	0.1+
660812	074	1.0+	0.5-	840923	809	0.2+	0.2+	840929	809	1.5-	0.4+
660812	074	0.4-	0.8-	840923	809	0.5+	0.2+	840929	809	1.3-	0.5+
660816	074	(9.9-	3.9-)	840923	809	1.1+	0.2+	840929	809	1.0-	0.5+
760406	808	0.8+	0.4+	840924	809	0.4-	0.0	840930	809	1.1-	0.2-
760406	808	1.0+	0.2-	840924	809	0.4+	0.0	840930	809	1.2-	0.1+
760502	095	1.6-	0.1-	840924	809	0.7+	0.0	840930	809	1.7-	0.2+
840920	809	0.6+	0.3-	840926	809	1.1-	0.1-	841001	809	1.2-	0.1+
840920	809	0.8+	0.1+	840926	809	0.6-	0.3-	841001	809	1.2-	0.3-
840920	809	0.9+	0.2+	840926	809	0.2+	0.6-	841001	809	0.4-	0.6-
840921	809	0.0	0.1-	840927	809	1.2+	0.4-				
840921	809	0.2+	0.2-	840927	809	1.8+	0.2-				

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ORBITAL ELEMENTS BY H. OISHI, NIIZA, JAPAN.

The following orbital elements are from JAM 1873-1875. The identifications are by T. Furuta unless otherwise stated.

1978 QQ2 = 1931 TF1 = 1975 VF1 = 1975 WH1
The identification 1978 QQ2 = 1931 TF1 was independently suggested by E. Bowell.
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	348.48034	(1950.0)	P	Q
n	0.29290753	Peri. 250.81038	+0.38014419	-0.92492211
a	2.2455181	Node 176.84197	+0.86817805	+0.35567048
e	0.1302023	Incl. 3.20333	+0.31899416	+0.13422963
P	3.37	B(1,0) 14.8		

Residuals in seconds of arc

311006	690	1.2+	0.6-	311012	024	0.9+	5.2+	780831	095	0.3-	1.3+
311006	024	3.2-	4.0-	311016	024	1.2+	0.9+	780905	095	1.0-	0.3-
311007	690	0.9+	0.0	751102	095	1.7-	5.7-	780927	095	1.4+	1.1-
311009	690	1.4-	0.2-	751126	330	1.5+	4.6+				

1979 WX3 = 1975 VQ3
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	238.62293	(1950.0)	P	Q
n	0.25956239	Peri. 266.98262	+0.85562098	-0.51684786
a	2.4339355	Node 124.13677	+0.48727500	+0.78610239
e	0.1776698	Incl. 1.93493	+0.17457321	+0.33898572
P	3.80	B(1,0) 14.4		

Residuals in seconds of arc

751102	095	0.6-	1.1-	791117	095	0.6-	2.6+	791218	095	1.4-	0.2+
751107	095	0.8+	0.6+	791214	095	2.0+	2.2-				

1980 TG5 = 1964 WR = 1975 XM2
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	25.95649	(1950.0)		P	Q
n	0.17852081	Peri.	67.98422	+0.46631074	+0.86990238
a	3.1237602	Node	230.82674	-0.86866456	+0.41593363
e	0.2310434	Incl.	11.96355	-0.16726081	+0.26508314
P	5.52	B(1,0)	12.8		

Residuals in seconds of arc

641127 330	4.3+	0.4+	801007 675	0.4-	1.3-	801010 675	0.1-	0.2-
641203 330	4.4-	1.6+	801008 675	0.9-	0.7+	801107 675	0.3+	0.6+
751202 095	0.1+	2.3-	801009 675	1.1+	0.4+			

1981 EJ5 = 1975 NU
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	67.57809	(1950.0)		P	Q
n	0.30257791	Peri.	9.24385	+0.43520866	+0.89653994
a	2.1974151	Node	286.59111	-0.83140151	+0.36502620
e	0.2253657	Incl.	4.93956	-0.34549233	+0.25094224
P	3.26	B(1,0)	15.6		

Residuals in seconds of arc

750711 095	2.1-	0.2-	810307 413	1.1+	0.2-	810312 413	2.4+	0.8-
750713 095	2.1+	0.2+	810307 413	0.0	0.4+	810407 413	0.2-	0.4-
810212 413 (0.1-	0.2-)		810307 413	0.1-	1.8+	810407 413	1.0+	0.4-
810214 413 (0.1+	0.5+)		810310 413	1.6-	0.7-	810408 413	1.2-	0.1+
810301 413	0.6+	1.2+	810310 413	0.9+	0.8-	810408 413	0.7-	0.4+
810302 413	1.9-	1.3-	810311 413	1.1+	0.5+	810409 413	0.4-	0.3+
810307 413	2.2-	0.4+	810312 413	0.4-	0.0	810409 413	1.5+	0.5-

1981 JH = 1955 QR = 1955 RJ = 1975 VR2 = 1978 OA
The double designation 1955 QR = 1955 RJ is by S. Kanda (MPC 1453). The double designation 1955 QR = 1955 RK (MPC 1453) is invalid.
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	83.49692	(1950.0)		P	Q
n	0.29816567	Peri.	250.20020	+0.44972766	+0.89189801
a	2.2190401	Node	46.62012	-0.79297112	+0.42322091
e	0.1915674	Incl.	3.75274	-0.41102534	+0.15938006
P	3.31	B(1,0)	14.8		

Residuals in seconds of arc

550823 760	0.6+	2.1-	780730 688	0.3-	1.6+	810505 675	1.2-	0.0
550913 760	0.6+	0.4-	810411 675	2.6-	1.1+	810505 675	1.6+	1.3+
751102 095	0.0	0.7+	810411 675	1.4-	0.2+	810506 675	0.7+	0.0
751107 095	1.4-	2.1+	810503 688	1.6+	1.0-	810506 675	0.0	0.2+
780728 688	0.0	0.1-	810503 688	3.2+	1.2-	810510 675	1.8-	0.4+

1981 JY1 = 1955 EE
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	210.20336	(1950.0)		P	Q
n	0.30796929	Peri.	353.69887	-0.95330236	-0.30199507
a	2.1716940	Node	168.72159	+0.27789887	-0.88188828
e	0.0255596	Incl.	1.08026	+0.11826594	-0.36203872
P	3.20	B(1,0)	14.9		

Residuals in seconds of arc

550314 760	0.7-	0.1-	550523 760	1.3+	3.0-	810505 675	0.6-	0.6+
550314 760	0.9+	0.6+	810411 675	0.7-	0.7+	810506 675	0.3+	1.6-
550523 760	1.5-	2.3+	810411 675	0.9+	0.2+	810510 675	0.2+	0.1+

ORBITAL ELEMENTS BY S. NAKANO, TOKYO.

The identifications are by S. Nakano unless otherwise stated.

1929 TD1 = 1978 SR5
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M 354.29205	(1950.0)	P	Q	
n 0.26170294	Peri. 290.12347	+0.91835838	+0.39343293	
a 2.4206455	Node 46.73519	-0.33759706	+0.83520687	
e 0.1841914	Incl. 3.36637	-0.20650934	+0.38423953	
P 3.77	B(1,0) 16.0			

Residuals in seconds of arc

291001 690 1.1+ 0.5-	291011 690 1.8- 1.8+	780927 095 0.1+ 0.6+
291005 690 0.6- 0.3-	291012 690 (4.8- 4.3+)	781003 095 1.5- 0.2-
291011 690 (2.4- 0.0)	291012 690 1.2+ 1.0-	781007 095 1.4+ 0.4-

1930 VD = 1930 XO = 1930 XQ = 1967 SB = 1972 VN1 = 1972 XC2
= 1972 YD1 = 1978 EP4

The double designation 1930 XO = 1930 XQ was published in AN 251, 129. The double designation 1930 VD = 1930 XO is by E. Bowell and C. M. Bardwell, who found it independently (MPC 5313).
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M 300.70339	(1950.0)	P	Q	
n 0.21161394	Peri. 137.05687	+0.66146069	-0.74056181	
a 2.7889500	Node 271.16404	+0.65193787	+0.64586435	
e 0.3110226	Incl. 6.80591	+0.37073814	+0.18554633	
P 4.66	B(1,0) 13.5			

Residuals in seconds of arc

301115 012 8.8- 0.3- Y	301213 690 1.3+ 2.5-	721109 095 3.6+ 2.8+
301116 012(21.3+ 2.7-)Y	301214 690 3.9+ 2.4+	721201 095 5.7- 0.5-
301117 012(24.8- 11.8-)Y	301216 690 2.7+ 0.9+	721230 095 3.1+ 3.2-
301121 389 1.4+ 2.2+	670930 095(14.6+ 6.9+)	780306 095 1.2- 1.6-
301124 012(21.1+ 3.9-)Y	671004 095 0.3- 0.5-	
301130 094(25.0+ 59.6-)X	671006 095 2.2+ 2.6-	

1938 DN1 = 1955 GB
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M 200.06762	(1950.0)	P	Q	
n 0.23607316	Peri. 314.43537	-0.44355925	-0.89291516	
a 2.5928209	Node 161.46244	+0.87569510	-0.45011518	
e 0.1246037	Incl. 14.05068	+0.19082264	-0.00994180	
P 4.18	B(1,0) 14.0			

Residuals in seconds of arc

380220 024 (6.1- 15.6-)	380305 024 1.5+ 0.4-	550401 760 1.4+ 1.1-
380223 024 3.7- 1.2+	380309 024 3.8- 0.5-	550416 760 2.3- 2.8+
380303 024 5.9+ 0.3-	550401 760 0.8+ 0.3+	550416 760 0.2+ 2.0-

1940 ED = 1983 JH
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M 256.72054	(1950.0)	P	Q	
n 0.27686597	Peri. 53.73920	-0.55973806	+0.82866517	
a 2.3314380	Node 182.22837	-0.78084149	-0.52852274	
e 0.1483412	Incl. 3.99217	-0.27745247	-0.18433053	
P 3.56	B(1,0) 15.0			

Residuals in seconds of arc

400312 053(41.8- 31.8+)X	400329 053 (4.7+ 13.5+)X	830515 046 0.4+ 0.6-
400315 053(57.5- 9.8-)X	400330 053 4.2+ 4.9+ X	830516 046 0.7- 1.6+
400318 053 2.4- 2.9- X	400414 053 1.8- 2.1- X	830516 046 1.0+ 0.7+
400327 053 (7.3+ 39.0-)X	830514 046 0.8- 1.8-	

1948 WF = 1934 NW = 1934 PU = 1975 XC4 = 1978 NE2
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	28.36822		(1950.0)	P	Q
n	0.29119563	Peri.	236.93677	+0.98316833	+0.11580114
a	2.2543102	Node	116.06128	-0.06358886	+0.94200414
e	0.2715381	Incl.	9.05081	-0.17127897	+0.31498935
P	3.38	B(1,0)	14.5		

Residuals in seconds of arc

340712	078(39.3+ 17.6-)X	481128	012	0.2+	2.8-	481210 012	0.5+ 0.7-
340717	078(19.4- 82.3+)X	481128	012	1.7+	5.0+	751203 095	0.1- 0.3+
340801	078(47.5- 14.2-)X	481202	012	2.3-	2.0-	780706 095	0.0 0.2-

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

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

Comet Shoemaker (1984r)
Epoch 1984 Sept. 17.0 ET = JDE 2445960.5
T 1984 Sept. 3.84038 ET

q	5.4889526		(1950.0)	P	Q
z	+0.0011138	Peri.	183.27732	+0.57728950	+0.81645677
	+/-0.0003165	Node	238.01688	+0.74943499	-0.52414046
e	0.9938866	Incl.	179.21462	+0.32416665	-0.24222946

From 25 observations 1984 Oct. 23-1985 Feb. 16, mean residual 1".1.

Comet Levy-Rudenko (1984t)
Epoch 1984 Dec. 6.0 ET = JDE 2446040.5
T 1984 Dec. 14.25572 ET

q	0.9179539		(1950.0)	P	Q
z	+0.0008118	Peri.	82.74014	+0.31109452	-0.83747659
	+/-0.0000115	Node	330.46743	-0.09116228	+0.44426280
e	0.9992548	Incl.	65.70944	+0.94599663	+0.31821930

From 93 observations 1984 Nov. 14-1985 Apr. 13, mean residual 1".3.

Comet Hartley (1984v)
T 1985 Sept. 28.10150 ET

q	4.0023528		(1950.0)	P	Q
		Peri.	255.21195	+0.07896315	-0.34097508
		Node	249.52273	+0.60758964	-0.72851216
e	1.0	Incl.	89.34653	-0.79031617	-0.59414310

From 11 observations 1984 Nov. 17-1985 Jan. 30.

(3252)* 1981 EM4

Discovered 1981 Mar. 2 by S. J. Bus at Siding Spring in the course of the U.K. Schmidt-Caltech Asteroid Survey.
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	75.19248		(1950.0)	P	Q
n	0.22676178	Peri.	156.89704	-0.55763499	-0.82120473
a	2.6633167	Node	326.63057	+0.72304196	-0.40886478
e	0.1138247	Incl.	12.71924	+0.40774200	-0.39806078
P	4.35	B(1,0)	11.5		

Residuals in seconds of arc

810202	413	0.6-	0.2-	810409	413	0.0	0.6-	831014	552	0.5-	0.1+
810214	413	0.9+	0.0	830904	552	0.2-	0.0	850211	054	1.0+	0.5+
810302	413	0.7-	0.2+	830904	552	0.4+	0.4+	850212	046	0.1+	0.0
810302	413	0.7+	0.4+	830906	688	0.2-	0.7-	850212	046	0.7-	0.2+
810307	413	0.0	0.5+	830906	688	2.0-	1.7-	850212	054	1.7+	0.6+
810307	413	0.9+	0.0	831005	491	0.5-	0.6-	850213	046	0.9-	0.6-
810310	413	0.4-	0.6+	831006	491	0.6+	0.8+	850213	046	1.2-	0.4-
810310	413	1.0+	0.1+	831012	688	1.4+	1.2-	850213	054	2.2+	0.3-
810312	413	0.8-	0.1-	831012	688	1.8+	0.5-	850218	567	1.6+	0.5-
810312	413	0.5+	0.6-	831012	552	0.7-	2.7+	850218	567	1.4-	0.5-
810407	413	0.9-	0.6+	831012	552	0.7+	3.9+	850218	567	1.4-	0.5-
810407	413	0.4+	0.4-	831013	552	0.8-	1.0-	850218	054	0.3-	0.5+
810408	413	0.8-	0.4+	831013	552	0.4-	1.2-	850313	657	1.5-	0.9+
810408	413	0.7+	0.3-	831014	552	1.0-	0.6-	850313	657	0.4+	0.2-
810409	413	0.9-	0.5-	831014	552	1.3+	0.6-				

(3253)* 1982 HQ1 = 1949 UL = 1978 EZ3

Discovered 1982 Apr. 28 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory. The identification 1982 HQ1 = 1978 EZ3 is by L. D. Schmadel (MPC 8393).

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	327.77266		(1950.0)	P	Q
n	0.29249658	Peri.	233.78791	+0.39408122	+0.91226114
a	2.2476164	Node	59.78600	-0.79624642	+0.39958772
e	0.1980824	Incl.	7.42763	-0.45901158	+0.09005151
P	3.37	B(1,0)	15.0		

Residuals in seconds of arc

491028	760	1.5-	3.0+	820520	688	1.0-	0.4-	831206	688	2.7+	0.0
780306	095	0.2-	0.8-	831128	688	2.5-	1.3-	831209	688	1.6+	1.7-
820418	688	0.2-	0.4-	831128	688	0.4+	1.2-	831209	688	0.7-	0.4+
820418	688	1.3+	1.4-	831201	688	2.3-	0.3-	850216	801	2.3+	2.7+
820428	688	0.4-	0.2-	831205	688	1.5+	1.8-	850319	801	0.0	2.0+
820428	688	0.3+	0.7-	831205	688	0.4-	0.4+				
820520	688	1.9-	0.0	831206	688	1.7+	0.2-				

(3254)* 1982 UM

Discovered 1982 Oct. 17 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	163.68924		(1950.0)	P	Q
n	0.12588820	Peri.	307.64800	+0.98679601	+0.15279623
a	3.9428722	Node	43.63718	-0.11288256	+0.88669148
e	0.1777860	Incl.	4.46557	-0.11615146	+0.43638461
P	7.83	B(1,0)	12.0		

Residuals in seconds of arc

821017	688	0.2+	0.5-	830113	801	1.6+	1.0+	850321	691	0.7+	0.1+
821017	688	0.3+	0.1-	830120	801	2.8+	2.3+	850321	691	0.3+	0.3+
821024	688	0.7-	0.1-	831128	675	1.1-	0.1-	850414	691	0.0	0.4+
821024	688	0.4-	0.4+	831129	675	1.0-	0.5+	850414	691	0.1-	0.2+
821115	688	1.0-	0.0	840104	688	1.4+	2.1-	850414	691	0.1-	0.2+
821115	688	1.2-	0.0	850216	801	0.4-	0.1+				
821221	801	0.4-	0.8-	850321	691	0.6+	0.1+				

1928 SL = 1967 RL = 1983 RV
The identification 1928 SL = 1972 HO1 (MPC 8906) is invalid.
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	76.90555		(1950.0)	P	Q
n	0.12471089	Peri.	137.79578	+0.85088034	-0.52486834
a	3.9676558	Node	253.87699	+0.47544456	+0.78771009
e	0.2487809	Incl.	1.35475	+0.22350641	+0.32253067
P	7.90	B(1,0)	11.5		

Residuals in seconds of arc

280922 024	2.6-	2.0+	830904 688	2.2+	0.3+	830908 046	0.9+	1.6-
281007 024	0.4+	3.4+	830905 046	0.2+	0.2+	830908 046	0.2+	2.0-
281015 024	0.5-	1.6+	830906 046	0.4-	0.4-	850314 675	0.0	2.6-
670909 095	0.2-	0.5+	830907 046	0.4-	1.7-	850317 675	0.1+	2.2-
830904 688	1.7+	0.5+	830907 046	1.1-	2.9-			

1981 FD
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	299.35701		(1950.0)	P	Q
n	0.16979731	Peri.	138.21244	-0.92468161	-0.38045276
a	3.2298487	Node	19.44107	+0.33643858	-0.83468986
e	0.4765219	Incl.	2.55196	+0.17824985	-0.39818153
P	5.80	B(1,0)	16.0		

From 27 observations 1981 Feb. 9-June 1, mean residual 1".2.

1981 GD1
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	4.49809		(1950.0)	P	Q
n	0.18606517	Peri.	261.31829	-0.62938654	-0.77581537
a	3.0387339	Node	227.78432	+0.73449433	-0.57519494
e	0.0968544	Incl.	3.44715	+0.25375314	-0.25934781
P	5.30	B(1,0)	14.5		

From 25 observations 1981 Feb. 12-May 3, mean residual 1".0.

1981 VA
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	36.36479		(1950.0)	P	Q
n	0.25572905	Peri.	59.42450	+0.52219106	+0.78100391
a	2.4581932	Node	245.99677	-0.85264121	+0.46968925
e	0.7445080	Incl.	22.02377	-0.01787324	+0.41161256
P	3.85	B(1,0)	18.0		

Residuals in seconds of arc

811104 675	0.5+	1.7-	811107 675	0.6+	4.3+	811203 675	1.9+	2.7-
811104 675	0.0	0.8+	811108 801	0.9+	0.8-	811204 675	0.4-	1.0+
811105 675	0.0	0.5-	811109 801	1.1-	0.8-	811206 675	0.7-	0.4-
811105 675	0.2-	0.1+	811117 675	0.8+	0.8-	811206 675	0.5-	0.1+
811105 675	1.1-	1.8-	811118 675	0.5+	0.3-	811218 675	0.0	0.4+
811105 675	0.2-	1.6+	811118 675	0.2-	0.1+	811223 675	0.5+	0.1-
811107 801	0.2+	0.1-	811123 801	0.4-	0.2-	850423 474	0.5-	0.1+
811107 675	0.8-	0.6-	811127 474	0.4+	2.0+	850423 474	0.3+	0.2-
811107 675	0.4-	0.6-	811127 474	0.4+	0.7+			

1983 WF1
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	158.74019		(1950.0)	P	Q
n	0.17377852	Peri.	275.30684	+0.91508599	-0.18696227
a	3.1803286	Node	95.82700	+0.31325887	+0.88752764
e	0.3113705	Incl.	21.04831	-0.25394196	+0.42111730
P	5.67	B(1,0)	13.0		

Residuals in seconds of arc

831129	688	0.6-	1.0-	831229	688	0.1+	1.9-	850101	675	0.0	0.6+
831129	688	0.6+	0.2+	840221	675	0.2-	0.2+	850314	675	0.8-	1.2-
831209	688	0.3+	1.6+	840304	801	0.1-	0.2+	850326	801	0.8+	1.2+
831209	688	0.1-	1.0+	840322	675	0.3-	1.0+				
831229	688	0.1-	0.8-	841231	675	0.1-	0.8-				

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

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

(3255)* 1980 RA = 1969 SD

Discovered 1980 Sept. 2 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	115.66976		(1950.0)	P	Q
n	0.26971009	Peri.	79.18247	+0.53279247	-0.83398674
a	2.3724911	Node	336.80391	+0.56112070	+0.47511444
e	0.3627045	Incl.	21.36933	+0.63346329	+0.28059291
P	3.65	B(1,0)	15.0		

Residuals in seconds of arc

690919	808	0.5-	0.4+	800904	688	1.6+	1.6-	800917	688	0.6+	1.4+
690920	808	0.8-	0.9+	800904	095	2.5-	2.0+	801002	688	0.8-	0.7-
800808	688	0.7-	1.5+	800907	688	5.1+	1.1-	850121	688	1.2-	0.0
800902	688	0.0	1.1-	800907	688	0.1-	1.7-	850121	688	1.5+	0.0
800902	688	0.6-	0.4+	800907	095	(7.2+	6.6-)	850221	801	0.2+	0.4+
800904	688	0.1+	1.6-	800909	095	1.9-	1.4+	850319	801	0.7-	0.1-

(3256)* 1981 SJ1 = 1976 QW

Discovered 1981 Sept. 26 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory.

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	266.64529		(1950.0)	P	Q
n	0.21254082	Peri.	266.15189	+0.16858595	-0.98558708
a	2.7808303	Node	174.08682	+0.94973934	+0.15861191
e	0.0964090	Incl.	7.82797	+0.26376877	+0.05882488
P	4.64	B(1,0)	13.5		

Residuals in seconds of arc

760826	095	0.7-	2.4+	811004	688	1.2+	1.1-	830114	801	0.3-	0.2+
760827	675	0.2+	0.2-	811102	688	0.8-	1.4+	830215	801	1.4+	1.4+
810926	688	0.2-	2.2-	811102	688	0.3-	2.3+	840527	801	0.6-	2.9-
810926	688	0.7-	1.9-	830112	688	1.8-	1.3-				
811004	688	1.9+	2.2-	830112	688	0.4+	1.4-				

(3257)* 1982 GG = 1982 FL3 = 1972 HT = 1975 EK3

Discovered 1982 Apr. 15 by A. Mrkos at Klet. The double designation 1982 GG = 1982 FL3 is by F. Bowman (MPC 7360).

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	306.31950		(1950.0)	P	Q
n	0.29199937	Peri.	274.97664	+0.57065863	+0.81976031
a	2.2501671	Node	29.98293	-0.70978805	+0.52202351
e	0.1700076	Incl.	5.55687	-0.41297656	+0.23555146
P	3.38	B(1,0)	14.5		

Residuals in seconds of arc

720418	095	0.7-	3.9-		820324	809	2.3+	0.5+		820425	046	4.9-	2.1+
750314	095	2.1+	6.3+		820326	809	1.2+	1.7+		820425	046	0.7-	0.8-
820321	809	0.3-	0.8-		820326	809	0.8-	0.1-		831128	688	0.2-	1.4-
820321	809	0.5-	0.7+		820326	809	2.0-	1.0+		831128	688	0.3+	1.9-
820321	809	0.2+	3.1+		820329	809	0.7-	0.9+		831128	688	0.2-	1.4-
820322	809	0.8-	0.7-		820329	809	1.2-	1.8+		831128	688	0.3-	0.9-
820322	809	0.4-	0.7-		820329	809	0.8+	0.2+		831205	688	0.9+	0.6-
820322	809	1.5+	0.2+		820415	046	1.1+	0.9-		831205	688	1.3+	1.5+
820323	809	0.8+	0.8-		820415	046	0.5-	0.1-		850216	801	0.3-	1.6+
820323	809	0.8+	0.0		820419	046	1.2-	3.2-		850315	046	5.6-	2.0-
820323	809	0.4-	0.6+		820419	046	1.7-	0.5-		850315	046	3.5+	5.2-
820324	809	1.0+	0.1+		820423	046	1.2-	1.7-		850321	801	1.9+	0.2-
820324	809	2.0+	0.9+		820423	046	3.0+	2.4-					

(3258)* 1983 RJ = 1979 HF3 = 1980 YG

Discovered 1983 Sept. 8 by P. Wild at Zimmerwald.

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	252.32664		(1950.0)	P	Q
n	0.30086397	Peri.	296.33628	+0.94018857	+0.32787719
a	2.2057482	Node	44.68778	-0.24639017	+0.84187080
e	0.1962082	Incl.	7.55188	-0.23523890	+0.42866082
P	3.28	B(1,0)	14.5		

Residuals in seconds of arc

790425	095	1.6-	0.4-		801231	688	0.8+	0.0		831003	026	1.3+	1.5+
790426	323	0.4-	0.5-		830908	026	1.6-	0.6+		831004	026	0.7-	0.7+
790427	323	1.0-	0.0		830912	688	1.1-	0.8-		831009	688	2.2+	0.9-
790430	095	1.0-	2.0+		830914	688	1.5-	0.9-		831012	688	0.2+	2.0-
790501	323	0.7+	1.7-		830914	688	0.0	0.6-		831012	688	0.2-	1.1-
790501	323	1.2+	1.5-		830917	026	0.2-	1.1+		831013	026	0.0	0.4-
790502	323	0.8+	0.3-		830928	026	1.1+	0.3+		850217	801	0.4+	0.1+
801231	688	0.5-	1.0-		831002	026	0.8+	1.4+		850323	801	0.1-	1.1+

(3259)* 1984 SZ4 = 1934 XE = 1937 JJ = 1937 KD = 1943 MC = 1948 JA
= 1951 XX = 1954 KF = 1956 TO = 1965 JG = 1973 SQ5
= 1976 KA = 1978 RE1 = 1979 VH3 = 1979 XX1 = 1979 YC2

Discovered 1984 Sept. 25 by J. Platt at Palomar. The double designation 1979 VH3 = 1979 YC2 is by N. S. Chernykh.

Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	262.83878		(1950.0)	P	Q
n	0.17559861	Peri.	317.32163	-0.92012614	+0.31178152
a	3.1583141	Node	242.28341	-0.24618597	-0.93110659
e	0.1337543	Incl.	15.52728	-0.30456583	-0.18929551
P	5.61	B(1,0)	11.5		

Residuals in seconds of arc

341207	012	(21.8- | 11.8+)X		561010	760	(80.7- | 29.4+)X		791211	049	0.7-	2.0-
370514	078	(6.2+ | 17.5-)X		650504	760	(30.2+ | 68.3-)X		791223	095	3.3-	1.2-
370531	078	(38.2+	21.4+)X		730928	095	5.7+	1.7+		840925	675	0.4-	1.5-
430625	078	(33.2-	52.5-)X		760524	095	2.8-	3.1-		840927	675	0.7-	0.5+
480502	078	(23.5+	17.2+)X		760526	095	4.0+	4.5+		841023	675	1.8-	1.7-
511205	711	0.5+	4.4+	Y	780903	095	0.6+	1.7+		841027	675	0.7-	0.4+
511222	711	1.0-	1.9-	Y	791114	095	0.4-	0.8+					
540524	078	0.5-	1.3-		791211	049	2.3+	0.3-					

1981 EY17
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	181.55418		(1950.0)	P	Q
n	0.25650619	Peri.	247.39013	+0.55908706	-0.82907334
a	2.4532305	Node	168.60764	+0.77423092	+0.51874312
e	0.1585187	Incl.	2.22963	+0.29662794	+0.20866950
P	3.84	B(1,0)	15.0		

Residuals in seconds of arc

810202	413	0.8+	0.7+	810307	413	0.5+	1.3-	810408	413	0.7-	1.2+
810213	413	0.6+	1.4+	810311	413	0.7+	0.5+	810408	413	1.6+	0.8-
810302	413	1.7-	0.2+	810311	413	1.3+	1.1-	810411	413	0.8+	1.0-
810302	413	1.0-	1.2-	810316	413	2.9-	1.9+	831104	688	0.8-	0.1+
810303	413	1.8-	0.7+	810329	413	1.9-	1.8+	831104	688	1.2+	0.5-
810303	413	1.9+	1.9-	810329	413	0.9+	0.7-	831107	688	1.4-	0.6-
810307	413	0.5-	0.3+	810407	413	2.2+	1.3-	831107	688	1.4+	0.2+

1984 HA1
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5 (J-P)

M	306.04918		(1950.0)	P	Q
n	0.08561868	Peri.	129.69711	+0.62786530	+0.77829530
a	5.0982901	Node	179.11573	-0.77821335	+0.62761761
e	0.0706359	Incl.	24.70394	+0.01300558	-0.01877675
P	11.51	B(1,0)	9.5		

Residuals in seconds of arc

840419	046	0.3+	0.0	840427	046	0.3-	1.2-	850321	801	0.6-	0.7+
840419	046	0.2-	0.0	840628	801	0.2+	3.2+	850413	691	0.7+	0.2+
840424	046	0.1+	0.0	840630	801	1.0+	2.6+	850413	691	0.6+	0.2+
840424	046	0.4-	0.1+	840730	801	0.2+	0.5+	850413	691	0.8+	0.1+
840425	046	0.5+	0.9-	850321	691	0.6-	0.9-	850417	567	0.1-	0.6+
840425	046	0.3-	1.1-	850321	691	1.2-	1.3-	850417	567	0.1+	0.7+
840427	046	0.2+	1.2-	850321	691	1.0-	1.9-				

1984 YV
Epoch 1985 Dec. 1.0 ET = JDE 2446400.5

M	87.27435		(1950.0)	P	Q
n	0.37019832	Peri.	224.37976	-0.79391772	-0.49358888
a	1.9209368	Node	282.83871	+0.60786412	-0.65776499
e	0.0770221	Incl.	21.35590	-0.01399534	-0.56895978
P	2.66	B(1,0)	14.5		

From 17 observations 1984 Dec. 23-1985 Mar. 20, mean residual 1".1.

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EPHEMERIDES.

1981 VA a,e,i = 2.46, 0.74, 22 Elements MPC 9686

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	04 25	10 03.02	-32 57.7	0.586	1.401	121.0	38.0	18.4
1985	05 05	09 42.22	-26 32.5					
1985	05 15	09 26.40	-18 39.7	0.473	1.161	96.2	59.9	18.1
1985	05 25	09 13.73	-09 13.3					
1985	06 04	08 59.90	+02 24.7	0.382	0.919	64.7	93.2	17.9
1985	06 14	08 36.79	+17 07.9					
1985	06 24	07 52.16	+33 25.5	0.356	0.709	24.8	143.0	18.3
1985	07 14	05 52.73	+46 57.0	0.537	0.629	32.0	121.1	18.4
1985	07 24	05 36.25	+45 10.5					
1985	08 03	05 41.88	+42 29.7	0.801	0.748	46.9	81.8	18.8
1985	08 13	05 55.56	+39 50.2					

1985 08 23	06 10.36	+37 21.2	0.982	0.971	58.3	62.3	19.3
1985 09 02	06 23.41	+35 02.6					
1985 09 12	06 33.48	+32 52.6	1.063	1.215	71.8	51.9	19.7
1985 09 22	06 39.81	+30 49.5					
1985 10 02	06 41.82	+28 51.3	1.069	1.452	89.1	43.6	20.0
1985 10 12	06 39.02	+26 55.5					
1985 10 22	06 30.95	+24 59.3	1.038	1.676	111.0	33.7	20.0
1985 11 01	06 17.61	+23 00.0					
1985 11 11	05 59.65	+20 56.0	1.029	1.885	138.1	20.5	19.9
1985 11 21	05 38.66	+18 49.6					
1985 12 01	05 17.08	+16 48.0	1.108	2.081	167.0	6.1	19.9
1985 12 11	04 57.31	+15 00.6					
1985 12 21	04 41.12	+13 35.2	1.313	2.263	160.2	8.5	20.6

Comet Shoemaker (1984r) Elements MPC 9685

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	m2
1985 06 04	02 02.92	+12 06.3	6.578	5.838	40.0	6.4	19.8
1985 06 14	02 03.67	+12 09.2					
1985 06 24	02 03.70	+12 08.2	6.348	5.889	59.0	8.5	19.7
1985 07 04	02 02.87	+12 02.4					
1985 07 14	02 01.04	+11 51.1	6.057	5.942	78.7	9.7	19.7
1985 07 24	01 58.08	+11 33.6					
1985 08 03	01 53.87	+11 09.0	5.743	5.998	99.7	9.6	19.6
1985 08 13	01 48.36	+10 36.8					
1985 08 23	01 41.51	+09 56.4	5.458	6.057	122.2	8.1	19.5
1985 09 02	01 33.38	+09 08.1					
1985 09 12	01 24.13	+08 12.2	5.257	6.119	146.2	5.3	19.5
1985 09 22	01 14.00	+07 10.2					
1985 10 02	01 03.36	+06 04.0	5.192	6.183	171.3	1.4	19.5
1985 10 12	00 52.61	+04 56.4					
1985 10 22	00 42.17	+03 50.1	5.291	6.250	163.1	2.6	19.6
1985 11 01	00 32.44	+02 47.9					
1985 11 11	00 23.72	+01 52.1	5.546	6.318	138.1	6.0	19.7
1985 11 21	00 16.24	+01 04.1					
1985 12 01	00 10.10	+00 24.9	5.921	6.389	114.2	8.1	19.9
1985 12 11	00 05.31	-00 05.5					
1985 12 21	00 01.84	-00 27.4	6.358	6.462	91.7	8.8	20.1
1985 12 31	23 59.57	-00 41.5					
1986 01 10	23 58.37	-00 48.7	6.802	6.537	70.4	8.1	20.3
1986 01 20	23 58.11	-00 49.9					
1986 01 30	23 58.64	-00 46.0	7.203	6.614	50.1	6.6	20.5
1986 02 09	23 59.80	-00 38.2					
1986 02 19	00 01.46	-00 27.2	7.524	6.693	30.6	4.3	20.6

1982 TA a,e,i = 2.30, 0.77, 12 Elements MPC 8539

Date ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985 07 14	23 03.95	-17 23.3	2.752	3.491	-0.41	-3.6	21.2
1985 07 19	23 01.69	-17 47.2					
1985 07 24	22 58.84	-18 13.8	2.603	3.448	-0.44	-3.7	21.0
1985 07 29	22 55.40	-18 42.6					
1985 08 03	22 51.39	-19 13.2	2.477	3.402	-0.46	-3.7	20.8
1985 08 08	22 46.82	-19 45.1					
1985 08 13	22 41.75	-20 17.4	2.378	3.355	-0.47	-3.6	20.6
1985 08 18	22 36.23	-20 49.6					
1985 08 23	22 30.34	-21 20.7	2.308	3.306	-0.47	-3.5	20.4
1985 08 28	22 24.21	-21 50.0					
1985 09 02	22 17.93	-22 16.7	2.270	3.254	-0.46	-3.3	20.4
1985 09 07	22 11.63	-22 40.1					
1985 09 12	22 05.44	-22 59.9	2.264	3.201	-0.43	-3.0	20.5

1985 09 17	21 59.48	-23 15.5						
1985 09 22	21 53.89	-23 26.7	2.286	3.146	-0.40	-2.7	20.5
1985 09 27	21 48.76	-23 33.5					
1985 10 02	21 44.17	-23 36.1	2.334	3.089	-0.36	-2.5	20.6
1985 10 07	21 40.19	-23 34.5					
1985 10 12	21 36.87	-23 29.0	2.400	3.029	-0.32	-2.4	20.7
1985 10 17	21 34.23	-23 19.9					
1985 10 22	21 32.28	-23 07.4	2.480	2.967	-0.29	-2.3	20.8

Periodic Comet Encke Elements MPC 7455

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	m2
1985 07 14		23 08.86	-05 32.2	3.299	3.969	124.9	12.1	20.4
1985 07 24		23 03.36	-05 58.5					
1985 08 03		22 56.18	-06 34.4	3.114	4.006	147.3	7.9	20.2
1985 08 13		22 47.61	-07 18.0					
1985 08 23		22 38.07	-08 06.7	3.034	4.036	171.3	2.2	20.0
1985 09 02		22 28.14	-08 56.7					
1985 09 12		22 18.45	-09 44.6	3.082	4.060	164.2	3.9	20.1
1985 09 22		22 09.62	-10 27.2					
1985 10 02		22 02.14	-11 02.1	3.256	4.078	140.5	9.0	20.4

Periodic Comet Gunn Elements MPC 7773

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	m2
1985 07 14		04 34.99	+21 02.6	5.284	4.563	40.8	8.4	20.2
1985 07 24		04 43.49	+21 26.0					
1985 08 03		04 51.35	+21 46.8	5.075	4.586	56.0	10.6	20.1
1985 08 13		04 58.47	+22 05.2					
1985 08 23		05 04.69	+22 21.5	4.816	4.607	72.1	12.1	20.0
1985 09 02		05 09.86	+22 36.0					
1985 09 12		05 13.84	+22 49.1	4.528	4.627	89.3	12.6	19.9
1985 09 22		05 16.46	+23 01.0					
1985 10 02		05 17.58	+23 11.8	4.237	4.645	108.0	11.8	19.8
1985 10 12		05 17.10	+23 21.7					
1985 10 22		05 14.96	+23 30.4	3.978	4.661	128.4	9.6	19.7
1985 11 01		05 11.21	+23 37.7					
1985 11 11		05 05.98	+23 43.1	3.789	4.676	150.4	6.0	19.6
1985 11 21		04 59.57	+23 46.2					
1985 12 01		04 52.40	+23 47.0	3.708	4.689	173.5	1.4	19.6
1985 12 11		04 44.97	+23 45.5					
1985 12 21		04 37.84	+23 42.4	3.752	4.700	162.6	3.6	19.6
1985 12 31		04 31.50	+23 38.7					
1986 01 10		04 26.36	+23 35.6	3.917	4.710	139.7	7.8	19.7
1986 01 20		04 22.71	+23 34.3					
1986 01 30		04 20.68	+23 35.4	4.174	4.718	118.0	10.6	19.8
1986 02 09		04 20.30	+23 39.6					
1986 02 19		04 21.53	+23 46.9	4.484	4.724	98.0	12.0	20.0
1986 03 01		04 24.26	+23 57.1					
1986 03 11		04 28.34	+24 09.7	4.807	4.729	79.6	11.9	20.2
1986 03 21		04 33.64	+24 24.4					
1986 03 31		04 40.00	+24 40.3	5.111	4.732	62.4	10.8	20.3
1986 04 10		04 47.27	+24 56.9					
1986 04 20		04 55.33	+25 13.7	5.371	4.733	46.3	8.8	20.4
1986 04 30		05 04.04	+25 30.0					
1986 05 10		05 13.29	+25 45.5	5.569	4.733	31.0	6.3	20.5

1982 HR a,e,i = 1.21, 0.32, 3 Elements MPC 7840

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985 08 03		23 54.16	+03 28.9	0.700	1.559	-3.41	-18.1	20.9
1985 08 08		23 53.18	+03 24.8					

1985 08 13	23 50.86	+03 10.8	0.617	1.540	-4.05	-22.1	20.5
1985 08 18	23 47.07	+02 45.7					
1985 08 23	23 41.74	+02 08.4	0.546	1.517	-4.73	-26.5	20.0
1985 08 28	23 34.88	+01 18.4					
1985 09 02	23 26.55	+00 16.0	0.491	1.490	-5.30	-30.1	19.5
1985 09 07	23 16.92	-00 58.1					
1985 09 12	23 06.30	-02 21.8	0.454	1.459	-5.55	-31.3	19.0
1985 09 17	22 55.13	-03 51.7					
1985 09 22	22 43.98	-05 23.5	0.437	1.425	-5.34	-29.0	19.3
1985 09 27	22 33.36	-06 53.0					
1985 10 02	22 23.77	-08 16.5	0.439	1.388	-4.74	-23.8	19.5
1985 10 07	22 15.57	-09 31.1					
1985 10 12	22 09.02	-10 35.1	0.455	1.347	-3.96	-17.8	19.7
1985 10 17	22 04.26	-11 27.8					
1985 10 22	22 01.32	-12 08.9	0.479	1.303	-3.19	-12.4	19.9
1985 10 27	22 00.13	-12 39.2					
1985 11 01	22 00.57	-12 59.3	0.505	1.256	-2.53	-8.1	20.1
1985 11 06	22 02.49	-13 10.2					
1985 11 11	22 05.78	-13 12.6	0.529	1.207	-2.00	-4.7	20.3
1985 11 16	22 10.29	-13 07.2					
1985 11 21	22 15.91	-12 54.5	0.548	1.155	-1.57	-2.0	20.4

1984 QA a,e,i = 0.99, 0.47, 10 Elements MPC 9297

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985 08 03	03 33.32	+26 01.8	0.229	0.972	+15.42	+118.2	17.9
1985 08 08	03 11.97	+21 44.2					
1985 08 13	02 50.50	+16 57.2	0.213	1.051	+5.66	+91.4	17.5
1985 08 18	02 28.12	+11 40.7					
1985 08 23	02 04.42	+05 59.7	0.207	1.123	-4.14	-0.4	17.0
1985 08 28	01 39.49	+00 07.9					
1985 09 02	01 13.90	-05 33.7	0.217	1.188	-10.15	-65.7	16.8
1985 09 07	00 48.55	-10 42.4					
1985 09 12	00 24.55	-15 00.9	0.250	1.245	-11.37	-64.3	16.8
1985 09 17	00 02.89	-18 21.9					
1985 09 22	23 44.29	-20 47.6	0.306	1.295	-9.89	-42.0	17.4
1985 09 27	23 29.02	-22 25.8					
1985 10 02	23 17.01	-23 26.4	0.380	1.338	-7.80	-24.4	18.1
1985 10 07	23 07.97	-23 58.1					
1985 10 12	23 01.57	-24 08.0	0.467	1.374	-5.98	-14.0	18.7
1985 10 17	22 57.47	-24 01.4					
1985 10 22	22 55.33	-23 42.3	0.563	1.403	-4.60	-8.4	19.3
1985 10 27	22 54.85	-23 13.7					
1985 11 01	22 55.74	-22 37.8	0.664	1.426	-3.59	-5.4	19.8
1985 11 06	22 57.79	-21 56.2					
1985 11 11	23 00.83	-21 09.9	0.768	1.442	-2.85	-3.8	20.2
1985 11 16	23 04.73	-20 19.6					
1985 11 21	23 09.35	-19 26.1	0.873	1.451	-2.31	-2.9	20.5
1985 11 26	23 14.59	-18 29.7					
1985 12 01	23 20.37	-17 31.0	0.976	1.453	-1.91	-2.5	20.7

Periodic Comet Halley (1982i) Elements MPC 9214

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	m2
1985 08 03	05 53.41	+18 54.9	3.759	3.079	41.9	12.7	16.3
1985 08 13	05 59.31	+19 04.3					
1985 08 23	06 04.59	+19 13.1	3.235	2.838	58.3	17.7	15.6
1985 09 02	06 08.95	+19 22.1					
1985 09 12	06 11.98	+19 32.2	2.643	2.589	75.9	22.1	14.7
1985 09 22	06 13.03	+19 45.1					
1985 10 02	06 11.11	+20 02.7	2.008	2.330	95.6	25.3	13.7

1985 10 12	06 04.55	+20 28.0						
1985 10 22	05 50.24	+21 03.7	1.370	2.060	120.3	24.7	12.3	
1985 11 01	05 22.28	+21 48.2						
1985 11 11	04 29.35	+22 13.6	0.818	1.778	158.9	11.5	10.6	
1985 11 21	02 57.99	+20 18.8						
1985 12 01	01 05.30	+13 39.1	0.631	1.483	131.7	29.8	9.2	
1985 12 11	23 39.54	+05 59.2						
1985 12 21	22 48.47	+00 50.5	0.939	1.176	75.4	54.0	9.1	
1985 12 31	22 17.39	-02 18.7						
1986 01 10	21 55.77	-04 28.4	1.324	0.872	41.2	48.0	8.5	
1986 01 20	21 37.78	-06 17.2						
1986 01 30	21 20.15	-08 11.0	1.553	0.630	12.7	20.0	7.5	
1986 02 09	21 01.82	-10 26.1						
1986 02 19	20 43.73	-13 07.6	1.448	0.623	20.3	33.4	7.3	
1986 03 01	20 26.46	-16 19.5						
1986 03 11	20 07.43	-20 27.8	1.037	0.859	50.0	62.4	7.9	
1986 03 21	19 38.37	-26 43.5						
1986 03 31	18 32.43	-37 25.2	0.549	1.163	92.8	59.1	7.9	
1986 04 10	15 21.58	-47 23.5						
1986 04 20	12 03.83	-32 47.1	0.519	1.469	147.7	21.4	8.7	
1986 04 30	10 58.11	-19 13.3						
1986 05 10	10 34.96	-12 24.2	1.082	1.765	115.0	31.2	11.1	
1986 05 20	10 26.23	-08 49.4						
1986 05 30	10 23.89	-06 50.3	1.736	2.048	92.5	29.6	12.8	
1986 06 09	10 24.92	-05 44.2						
1986 06 19	10 27.94	-05 11.0	2.378	2.318	74.2	25.0	14.0	
1986 06 29	10 32.19	-04 59.6						
1986 07 09	10 37.24	-05 03.7	2.972	2.577	57.8	19.5	15.0	
1986 07 19	10 42.81	-05 19.1						
1986 07 29	10 48.68	-05 43.2	3.496	2.827	42.2	14.0	15.7	

Periodic Comet Neujmin 1 (1984c) Elements MPC 7455

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	m2
1985 08 03	06 01.03	+35 12.8	4.198	3.501	41.3	11.0	19.2	
1985 08 13	06 13.53	+35 29.8						
1985 08 23	06 24.91	+35 46.2	4.137	3.655	55.1	13.1	19.3	
1985 09 02	06 35.03	+36 03.3						
1985 09 12	06 43.75	+36 21.8	4.027	3.806	70.2	14.4	19.4	
1985 09 22	06 50.92	+36 42.8						
1985 10 02	06 56.36	+37 06.6	3.883	3.955	86.8	14.6	19.4	
1985 10 12	06 59.90	+37 33.8						
1985 10 22	07 01.36	+38 04.0	3.730	4.102	105.0	13.6	19.3	
1985 11 01	07 00.64	+38 36.2						
1985 11 11	06 57.68	+39 08.9	3.603	4.246	124.8	11.0	19.3	
1985 11 21	06 52.56	+39 39.5						
1985 12 01	06 45.53	+40 05.2	3.543	4.388	145.2	7.4	19.2	
1985 12 11	06 37.05	+40 23.0						
1985 12 21	06 27.75	+40 30.6	3.585	4.528	161.5	4.0	19.2	
1985 12 31	06 18.36	+40 27.0						
1986 01 10	06 09.62	+40 12.8	3.749	4.666	156.3	4.9	19.4	
1986 01 20	06 02.12	+39 49.8						
1986 01 30	05 56.31	+39 20.6	4.030	4.801	137.4	8.0	19.7	
1986 02 09	05 52.38	+38 47.9						
1986 02 19	05 50.39	+38 14.0	4.400	4.935	117.5	10.2	20.0	
1986 03 01	05 50.27	+37 40.6						
1986 03 11	05 51.84	+37 08.8	4.823	5.066	98.5	11.2	20.3	
1986 03 21	05 54.92	+36 39.1						
1986 03 31	05 59.31	+36 11.7	5.263	5.195	80.6	10.9	20.5	

Periodic Comet Daniel Elements MPC 8273

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		m2
1985	08 03	06 32.68	+25 35.9	2.409	1.651	-1.60	-7.0	19.7
1985	08 13	07 03.81	+26 25.2					
1985	08 23	07 34.99	+26 54.3	2.329	1.661	-1.67	-4.2	19.6
1985	09 02	08 05.87	+27 04.2					
1985	09 12	08 36.17	+26 56.8	2.255	1.695	-1.64	-1.2	19.7
1985	09 22	09 05.59	+26 35.0					
1985	10 02	09 33.89	+26 02.3	2.182	1.749	-1.55	+1.7	19.8
1985	10 12	10 00.90	+25 22.3					
1985	10 22	10 26.45	+24 39.2	2.106	1.822	-1.41	+4.2	20.0
1985	11 01	10 50.41	+23 57.0					
1985	11 11	11 12.70	+23 19.6	2.021	1.909	-1.26	+6.3	20.2
1985	11 21	11 33.17	+22 50.9					
1985	12 01	11 51.69	+22 34.2	1.925	2.007	-1.14	+8.3	20.5
1985	12 11	12 08.10	+22 32.3					
1985	12 21	12 22.16	+22 47.8	1.822	2.113	-1.06	+10.3	20.7
1985	12 31	12 33.61	+23 22.0					
1986	01 10	12 42.16	+24 15.2	1.722	2.225	-1.06	+12.5	20.9
1986	01 20	12 47.46	+25 25.9					
1986	01 30	12 49.27	+26 49.9	1.645	2.340	-1.15	+14.4	21.1

Periodic Comet Schuster (1978 I) Elements MPC 7658

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		m2
1985	08 03	06 46.69	+30 29.6	2.455	1.666	-1.54	-5.1	18.2
1985	08 13	07 17.39	+31 02.7					
1985	08 23	07 47.12	+31 15.7	2.447	1.756	-1.45	-1.9	18.4
1985	09 02	08 15.61	+31 12.2					
1985	09 12	08 42.67	+30 56.0	2.428	1.860	-1.30	+0.7	18.6
1985	09 22	09 08.14	+30 31.1					
1985	10 02	09 31.93	+30 01.7	2.389	1.975	-1.14	+2.8	18.8
1985	10 12	09 53.99	+29 31.7					
1985	10 22	10 14.24	+29 04.9	2.325	2.097	-0.99	+4.4	19.0
1985	11 01	10 32.62	+28 44.8					
1985	11 11	10 49.05	+28 34.6	2.238	2.224	-0.88	+5.9	19.2
1985	11 21	11 03.39	+28 37.5					
1985	12 01	11 15.46	+28 55.6	2.132	2.353	-0.81	+7.3	19.4
1985	12 11	11 25.05	+29 30.8					
1985	12 21	11 31.87	+30 23.8	2.024	2.483	-0.81	+8.9	19.5
1985	12 31	11 35.64	+31 33.4					
1986	01 10	11 36.10	+32 56.3	1.938	2.613	-0.89	+10.3	19.6
1986	01 20	11 33.10	+34 26.6					
1986	01 30	11 26.78	+35 55.3	1.909	2.741	-1.04	+10.9	19.8
1986	02 09	11 17.62	+37 12.4					
1986	02 19	11 06.54	+38 08.3	1.967	2.868	-1.18	+10.1	20.0
1986	03 01	10 54.82	+38 36.2					
1986	03 11	10 43.72	+38 34.3	2.128	2.993	-1.19	+8.3	20.4
1986	03 21	10 34.36	+38 04.7					
1986	03 31	10 27.41	+37 12.6	2.383	3.115	-1.09	+6.5	20.8

(3250) 1979 EB a,e,i = 3.01, 0.11, 10 Elements MPC 9680

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	04 25	14 55.90	-12 22.2	2.323	3.314	168.3	3.5	16.7
1985	05 05	14 48.51	-11 25.3					
1985	05 15	14 41.10	-10 30.8	2.314	3.306	166.6	4.1	16.7
1985	05 25	14 34.38	-09 42.8					
1985	06 04	14 28.95	-09 04.6	2.417	3.297	144.7	10.3	17.0
1985	06 14	14 25.19	-08 38.1					
1985	06 24	14 23.33	-08 24.3	2.606	3.286	124.2	14.8	17.3

1929 TD1 a,e,i = 2.42, 0.18, 3 Elements MPC 9684

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	04 25	18 24.92	-25 24.9	1.635	2.293	118.6	22.7	19.4
1985	05 05	18 28.82	-25 44.9					
1985	05 15	18 29.58	-26 08.7	1.406	2.252	136.9	17.9	18.9
1985	05 25	18 26.93	-26 36.0					
1985	06 04	18 20.97	-27 04.7	1.239	2.212	157.9	10.0	18.4
1985	06 14	18 12.23	-27 31.4					
1985	06 24	18 01.74	-27 52.2	1.159	2.174	175.3	2.2	17.9
1985	07 04	17 51.09	-28 04.7					
1985	07 14	17 41.85	-28 08.7	1.174	2.137	154.5	11.8	18.3
1985	07 24	17 35.37	-28 06.4					
1985	08 03	17 32.49	-28 00.7	1.270	2.103	133.6	20.5	18.6
1985	08 13	17 33.42	-27 54.0					
1985	08 23	17 38.10	-27 47.2	1.421	2.071	115.7	26.1	18.9
1985	09 02	17 46.19	-27 40.1					
1985	09 12	17 57.27	-27 31.4	1.602	2.044	100.7	28.9	19.2
1985	09 22	18 10.93	-27 19.2					
1985	10 02	18 26.76	-27 01.6	1.795	2.020	87.7	29.7	19.5

1938 DN1 a,e,i = 2.59, 0.12, 14 Elements MPC 9684

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	04 25	19 24.32	-06 31.8	2.493	2.877	102.1	20.0	18.7
1985	05 05	19 27.65	-05 45.4					
1985	05 15	19 28.77	-05 04.3	2.257	2.887	119.1	17.8	18.5
1985	05 25	19 27.55	-04 31.4					
1985	06 04	19 24.00	-04 09.5	2.065	2.896	137.6	13.7	18.2
1985	06 14	19 18.31	-04 01.2					
1985	06 24	19 10.89	-04 08.4	1.948	2.904	155.5	8.3	17.9
1985	07 04	19 02.39	-04 31.9					
1985	07 14	18 53.62	-05 10.6	1.929	2.909	161.1	6.5	17.9
1985	07 24	18 45.47	-06 02.0					
1985	08 03	18 38.72	-07 02.5	2.015	2.913	146.2	11.2	18.1
1985	08 13	18 33.94	-08 08.0					
1985	08 23	18 31.46	-09 14.9	2.189	2.915	127.3	16.0	18.4
1985	09 02	18 31.41	-10 20.2					
1985	09 12	18 33.71	-11 21.4	2.424	2.916	109.3	19.0	18.7
1985	09 22	18 38.23	-12 16.9					
1985	10 02	18 44.74	-13 05.4	2.689	2.915	92.8	20.1	18.9

1930 VD a,e,i = 2.79, 0.31, 7 Elements MPC 9684

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	04 25	19 27.59	-21 42.4	2.843	3.237	104.0	17.6	18.7
1985	05 05	19 30.60	-21 22.4					
1985	05 15	19 31.49	-21 05.3	2.531	3.189	122.4	15.5	18.4
1985	05 25	19 30.08	-20 51.6					
1985	06 04	19 26.34	-20 41.4	2.270	3.138	142.7	11.3	18.0
1985	06 14	19 20.35	-20 34.2					
1985	06 24	19 12.43	-20 29.2	2.092	3.084	164.9	4.9	17.6
1985	07 04	19 03.21	-20 25.1					
1985	07 14	18 53.49	-20 21.1	2.020	3.029	171.2	3.0	17.4
1985	07 24	18 44.20	-20 16.5					
1985	08 03	18 36.24	-20 11.3	2.060	2.971	148.3	10.3	17.7
1985	08 13	18 30.29	-20 05.7					
1985	08 23	18 26.78	-20 00.3	2.189	2.911	126.9	16.1	17.9
1985	09 02	18 25.90	-19 55.0					
1985	09 12	18 27.61	-19 49.5	2.376	2.850	107.8	19.7	18.1
1985	09 22	18 31.79	-19 43.2					
1985	10 02	18 38.22	-19 35.2	2.587	2.786	90.8	21.1	18.3

1980 TG5 a,e,i = 3.12, 0.23, 12 Elements MPC 9683

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	05 15	20 21.93	-07 14.0	1.920	2.420	107.2	23.5	16.7
1985	05 25	20 27.29	-05 39.3					
1985	06 04	20 30.24	-04 09.5	1.704	2.409	122.8	20.7	16.3
1985	06 14	20 30.63	-02 48.1					
1985	06 24	20 28.45	-01 39.3	1.536	2.403	139.7	15.9	16.0
1985	07 04	20 23.93	-00 47.4					
1985	07 14	20 17.56	-00 15.7	1.439	2.402	155.6	10.1	15.7
1985	07 24	20 10.13	-00 06.2					
1985	08 03	20 02.70	-00 18.4	1.431	2.406	159.0	8.7	15.7
1985	08 13	19 56.26	-00 48.8					
1985	08 23	19 51.70	-01 32.4	1.514	2.414	145.2	13.8	15.9
1985	09 02	19 49.60	-02 23.0					
1985	09 12	19 50.18	-03 14.9	1.674	2.427	128.1	19.1	16.3
1985	09 22	19 53.46	-04 03.6					
1985	10 02	19 59.26	-04 45.4	1.889	2.444	111.8	22.3	16.6
1985	10 12	20 07.28	-05 17.9					
1985	10 22	20 17.24	-05 39.7	2.138	2.466	97.0	23.6	17.0

(3256) 1981 SJ1 a,e,i = 2.78, 0.10, 8 Elements MPC 9688

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	05 15	21 10.39	-08 44.1	2.701	2.985	96.2	19.7	18.5
1985	05 25	21 15.43	-08 07.0					
1985	06 04	21 18.62	-07 38.2	2.426	2.972	113.0	18.3	18.2
1985	06 14	21 19.79	-07 19.6					
1985	06 24	21 18.81	-07 13.3	2.184	2.958	131.6	14.9	17.9
1985	07 04	21 15.68	-07 20.6					
1985	07 14	21 10.54	-07 42.0	2.007	2.944	152.2	9.3	17.6
1985	07 24	21 03.76	-08 17.0					
1985	08 03	20 55.95	-09 03.2	1.922	2.929	171.2	3.0	17.2
1985	08 13	20 47.89	-09 56.8					
1985	08 23	20 40.45	-10 53.5	1.946	2.913	159.1	7.1	17.4
1985	09 02	20 34.41	-11 48.7					
1985	09 12	20 30.35	-12 38.8	2.071	2.896	137.7	13.5	17.7
1985	09 22	20 28.61	-13 21.1					
1985	10 02	20 29.30	-13 53.9	2.271	2.878	117.8	17.9	18.0
1985	10 12	20 32.34	-14 16.5					
1985	10 22	20 37.57	-14 28.5	2.515	2.860	100.0	20.0	18.2

1978 TU7 a,e,i = 2.38, 0.23, 9 Elements MPC 7608

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	05 15	20 57.95	-21 23.1	1.821	2.269	102.7	25.8	18.7
1985	05 25	21 08.07	-21 32.4					
1985	06 04	21 16.22	-21 55.6	1.553	2.217	117.9	23.9	18.2
1985	06 14	21 22.03	-22 35.2					
1985	06 24	21 25.10	-23 33.4	1.322	2.165	135.2	19.3	17.7
1985	07 04	21 25.08	-24 50.0					
1985	07 14	21 21.80	-26 21.8	1.152	2.114	154.3	12.0	17.2
1985	07 24	21 15.40	-28 01.5					
1985	08 03	21 06.64	-29 37.8	1.063	2.065	167.5	6.1	16.8
1985	08 13	20 56.81	-30 58.7					
1985	08 23	20 47.59	-31 54.6	1.065	2.019	152.9	13.2	17.0
1985	09 02	20 40.69	-32 21.4					
1985	09 12	20 37.22	-32 20.1	1.145	1.975	133.2	21.8	17.3
1985	09 22	20 37.73	-31 54.1					
1985	10 02	20 42.21	-31 07.6	1.278	1.936	115.8	27.7	17.6
1985	10 12	20 50.25	-30 03.8					
1985	10 22	21 01.37	-28 44.8	1.439	1.903	101.2	30.9	17.9

1966 AA a,e,i = 2.61, 0.13, 13 Elements MPC 7233

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 04	22 26.50	+00 23.4	2.581	2.843	94.3	20.8	18.3
1985	06 14	22 31.08	+01 50.0					
1985	06 24	22 33.79	+03 10.7	2.307	2.825	110.2	19.7	18.0
1985	07 04	22 34.42	+04 23.0					
1985	07 14	22 32.80	+05 24.4	2.065	2.805	127.8	16.6	17.7
1985	07 24	22 28.88	+06 12.0					
1985	08 03	22 22.80	+06 43.0	1.881	2.785	146.6	11.6	17.4
1985	08 13	22 14.94	+06 55.2					
1985	08 23	22 05.95	+06 47.9	1.785	2.763	161.5	6.7	17.1
1985	09 02	21 56.76	+06 23.0					
1985	09 12	21 48.31	+05 44.5	1.793	2.740	155.3	8.8	17.2
1985	09 22	21 41.48	+04 58.0					
1985	10 02	21 36.90	+04 09.7	1.899	2.716	136.7	14.6	17.4
1985	10 12	21 34.88	+03 25.2					
1985	10 22	21 35.51	+02 48.5	2.078	2.691	117.9	19.1	17.7
1985	11 01	21 38.66	+02 22.6					
1985	11 11	21 44.10	+02 09.0	2.299	2.665	100.6	21.4	17.9

1979 EE a,e,i = 2.57, 0.24, 12 Elements MPC 7662

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 04	22 58.65	-07 31.2	2.926	3.094	89.9	19.1	20.7
1985	06 14	23 03.61	-06 38.7					
1985	06 24	23 06.90	-05 53.7	2.625	3.071	106.5	18.5	20.5
1985	07 04	23 08.32	-05 17.6					
1985	07 14	23 07.66	-04 51.2	2.347	3.045	124.9	15.9	20.1
1985	07 24	23 04.77	-04 35.7					
1985	08 03	22 59.67	-04 31.2	2.124	3.017	145.7	10.9	19.8
1985	08 13	22 52.53	-04 37.2					
1985	08 23	22 43.77	-04 52.1	1.988	2.985	168.4	3.9	19.4
1985	09 02	22 34.13	-05 13.0					
1985	09 12	22 24.47	-05 36.1	1.964	2.952	166.5	4.6	19.4
1985	09 22	22 15.71	-05 57.5					
1985	10 02	22 08.64	-06 13.6	2.050	2.916	143.4	11.8	19.7
1985	10 12	22 03.77	-06 21.8					
1985	10 22	22 01.38	-06 20.5	2.223	2.877	122.0	17.1	19.9
1985	11 01	22 01.49	-06 08.9					
1985	11 11	22 03.97	-05 46.8	2.446	2.836	102.9	19.9	20.2

1981 VO a,e,i = 2.64, 0.23, 3 Elements MPC 6629

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985	06 24	22 43.60	-11 46.0	1.470	2.100	-1.87	-10.2	17.1
1985	07 04	22 51.17	-11 31.1					
1985	07 14	22 56.23	-11 33.1	1.267	2.072	-2.22	-12.7	16.6
1985	07 24	22 58.44	-11 53.4					
1985	08 03	22 57.65	-12 31.3	1.114	2.050	-2.61	-14.9	16.1
1985	08 13	22 53.96	-13 23.2					
1985	08 23	22 47.89	-14 22.5	1.032	2.035	-2.89	-15.5	15.7
1985	09 02	22 40.51	-15 19.5					
1985	09 12	22 33.16	-16 04.9	1.039	2.025	-2.85	-14.1	15.8
1985	09 22	22 27.22	-16 31.3					
1985	10 02	22 23.79	-16 35.3	1.132	2.023	-2.53	-11.8	16.2
1985	10 12	22 23.40	-16 16.9					
1985	10 22	22 26.19	-15 37.8	1.292	2.027	-2.12	-10.2	16.6
1985	11 01	22 31.94	-14 40.6					
1985	11 11	22 40.26	-13 28.2	1.496	2.038	-1.77	-9.2	17.1
1985	11 21	22 50.75	-12 02.6					
1985	12 01	23 03.02	-10 26.1	1.726	2.056	-1.50	-8.6	17.4

1982 YC1 a,e,i = 2.48, 0.19, 16 Elements MPC 7942

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 12.11	+03 40.2	2.542	2.918	101.4	20.0	17.8
1985	07 04	23 13.99	+04 55.9					
1985	07 14	23 13.78	+06 03.0	2.279	2.908	118.7	17.9	17.5
1985	07 24	23 11.29	+06 59.1					
1985	08 03	23 06.50	+07 41.9	2.061	2.895	137.8	13.6	17.2
1985	08 13	22 59.53	+08 09.0					
1985	08 23	22 50.80	+08 18.5	1.921	2.879	157.1	7.9	16.9
1985	09 02	22 41.00	+08 10.7					
1985	09 12	22 31.05	+07 47.6	1.884	2.861	163.0	5.9	16.8
1985	09 22	22 21.90	+07 13.3					
1985	10 02	22 14.41	+06 33.6	1.956	2.841	146.0	11.4	17.0
1985	10 12	22 09.17	+05 54.1					
1985	10 22	22 06.49	+05 19.8	2.117	2.819	125.9	16.6	17.3
1985	11 01	22 06.40	+04 54.4					
1985	11 11	22 08.77	+04 40.0	2.336	2.794	107.2	19.8	17.5
1985	11 21	22 13.39	+04 38.0					
1985	12 01	22 19.97	+04 48.6	2.579	2.767	90.4	20.9	17.7

(2960) Ohtaki a,e,i = 2.22, 0.11, 5 Elements MPC 8382

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 02.09	-07 15.6	1.894	2.412	108.1	23.6	18.9
1985	07 04	23 06.84	-07 07.4					
1985	07 14	23 09.23	-07 16.2	1.657	2.395	125.5	20.2	18.6
1985	07 24	23 08.97	-07 43.8					
1985	08 03	23 05.95	-08 30.3	1.469	2.377	145.8	13.9	18.1
1985	08 13	23 00.24	-09 33.6					
1985	08 23	22 52.30	-10 48.8	1.357	2.357	168.6	4.9	17.7
1985	09 02	22 43.02	-12 07.8					
1985	09 12	22 33.55	-13 21.5	1.347	2.336	165.8	6.1	17.7
1985	09 22	22 25.16	-14 22.0					
1985	10 02	22 18.95	-15 03.6	1.436	2.313	142.7	15.2	18.1
1985	10 12	22 15.53	-15 24.5					
1985	10 22	22 15.19	-15 24.8	1.601	2.289	122.0	21.6	18.4
1985	11 01	22 17.87	-15 06.2					
1985	11 11	22 23.27	-14 30.8	1.808	2.265	104.2	25.1	18.7
1985	11 21	22 31.07	-13 40.5					
1985	12 01	22 40.91	-12 37.0	2.032	2.239	88.8	26.1	19.0

1981 ET26 a,e,i = 2.23, 0.18, 4 Elements MPC 9677

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985	06 24	23 03.55	-09 58.5	1.323	1.910	-1.74	-13.9	17.7
1985	07 04	23 10.63	-09 10.2					
1985	07 14	23 14.58	-08 38.4	1.171	1.940	-2.03	-16.3	17.4
1985	07 24	23 15.04	-08 24.6					
1985	08 03	23 11.93	-08 28.6	1.058	1.973	-2.38	-18.4	17.0
1985	08 13	23 05.48	-08 48.2					
1985	08 23	22 56.40	-09 18.4	1.011	2.010	-2.62	-19.0	16.7
1985	09 02	22 46.06	-09 51.4					
1985	09 12	22 35.99	-10 19.7	1.053	2.048	-2.54	-17.3	16.8
1985	09 22	22 27.71	-10 36.9					
1985	10 02	22 22.25	-10 39.4	1.187	2.088	-2.18	-14.5	17.3
1985	10 12	22 20.04	-10 26.5					
1985	10 22	22 21.08	-09 58.8	1.393	2.130	-1.78	-12.1	17.9
1985	11 01	22 25.09	-09 17.4					
1985	11 11	22 31.64	-08 24.0	1.645	2.171	-1.44	-10.2	18.4
1985	11 21	22 40.31	-07 19.9					
1985	12 01	22 50.69	-06 06.4	1.922	2.213	-1.19	-8.9	18.8

(3031) 1984 CX a,e,i = 2.24, 0.10, 4 Elements MPC 8681

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 10.23	-04 54.7	1.824	2.311	105.3	25.1	17.7
1985	07 04	23 14.56	-04 07.5					
1985	07 14	23 16.31	-03 34.4	1.622	2.331	122.4	21.6	17.4
1985	07 24	23 15.23	-03 17.3					
1985	08 03	23 11.26	-03 17.0	1.462	2.350	142.6	15.2	17.0
1985	08 13	23 04.56	-03 33.2					
1985	08 23	22 55.67	-04 03.7	1.375	2.368	165.5	6.1	16.7
1985	09 02	22 45.59	-04 43.5					
1985	09 12	22 35.52	-05 26.4	1.388	2.384	169.3	4.5	16.7
1985	09 22	22 26.68	-06 06.0					
1985	10 02	22 20.07	-06 36.5	1.503	2.399	146.0	13.5	17.1
1985	10 12	22 16.22	-06 54.8					
1985	10 22	22 15.34	-06 59.2	1.699	2.413	125.1	19.7	17.5
1985	11 01	22 17.30	-06 49.4					
1985	11 11	22 21.81	-06 26.2	1.945	2.424	106.8	23.0	17.9
1985	11 21	22 28.56	-05 50.2					
1985	12 01	22 37.18	-05 02.6	2.213	2.434	90.7	23.9	18.2

1979 FH2 a,e,i = 2.74, 0.03, 4 Elements MPC 7608

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 08.65	-11 04.1	2.287	2.775	108.0	20.4	18.5
1985	07 04	23 12.13	-11 01.9					
1985	07 14	23 13.43	-11 13.3	2.060	2.781	125.9	17.2	18.2
1985	07 24	23 12.37	-11 38.4					
1985	08 03	23 08.96	-12 15.8	1.886	2.787	146.1	11.7	17.9
1985	08 13	23 03.37	-13 02.3					
1985	08 23	22 56.06	-13 53.2	1.796	2.792	167.6	4.5	17.6
1985	09 02	22 47.76	-14 42.5					
1985	09 12	22 39.40	-15 24.4	1.812	2.797	165.5	5.2	17.6
1985	09 22	22 31.90	-15 54.2					
1985	10 02	22 26.06	-16 09.1	1.933	2.802	143.7	12.2	17.9
1985	10 12	22 22.40	-16 08.4					
1985	10 22	22 21.15	-15 52.8	2.136	2.807	123.1	17.3	18.3
1985	11 01	22 22.32	-15 23.6					
1985	11 11	22 25.73	-14 42.4	2.392	2.811	104.7	19.9	18.6
1985	11 21	22 31.17	-13 50.7					
1985	12 01	22 38.35	-12 49.8	2.669	2.815	88.1	20.5	18.9

1981 EX19 a,e,i = 2.16, 0.21, 1 Elements MPC 9676

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985	06 24	22 39.25	-06 40.4	1.045	1.720	-2.74	-14.8	17.5
1985	07 04	22 50.10	-05 29.7					
1985	07 14	22 58.17	-04 35.7	0.888	1.705	-3.33	-18.6	17.1
1985	07 24	23 02.98	-04 02.9					
1985	08 03	23 04.24	-03 54.4	0.768	1.699	-4.02	-22.8	16.5
1985	08 13	23 01.92	-04 11.2					
1985	08 23	22 56.52	-04 51.0	0.703	1.701	-4.50	-25.3	16.1
1985	09 02	22 49.28	-05 45.8					
1985	09 12	22 41.87	-06 44.3	0.711	1.712	-4.35	-24.0	16.0
1985	09 22	22 36.04	-07 34.8					
1985	10 02	22 33.13	-08 08.0	0.796	1.731	-3.70	-20.1	16.6
1985	10 12	22 33.70	-08 19.8					
1985	10 22	22 37.83	-08 08.9	0.944	1.757	-2.96	-16.3	17.2
1985	11 01	22 45.15	-07 36.8					
1985	11 11	22 55.15	-06 45.9	1.137	1.790	-2.36	-13.5	17.7
1985	11 21	23 07.33	-05 38.7					
1985	12 01	23 21.24	-04 17.8	1.361	1.829	-1.93	-11.4	18.2

(3067) 1982 TE2 a,e,i = 2.25, 0.14, 5 Elements MPC 8894

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 10.70	-08 17.2	1.889	2.386	106.5	24.1	18.3
1985	07 04	23 15.77	-07 41.4					
1985	07 14	23 18.47	-07 18.6	1.641	2.358	123.4	21.1	17.9
1985	07 24	23 18.48	-07 10.3					
1985	08 03	23 15.60	-07 17.0	1.437	2.330	143.1	15.2	17.5
1985	08 13	23 09.84	-07 38.0					
1985	08 23	23 01.54	-08 10.4	1.306	2.300	165.8	6.2	17.0
1985	09 02	22 51.55	-08 48.7					
1985	09 12	22 41.05	-09 26.3	1.272	2.269	169.5	4.6	16.9
1985	09 22	22 31.44	-09 56.4					
1985	10 02	22 23.94	-10 13.7	1.339	2.238	145.8	14.6	17.2
1985	10 12	22 19.33	-10 15.7					
1985	10 22	22 17.98	-10 01.6	1.483	2.206	124.7	21.8	17.6
1985	11 01	22 19.86	-09 31.7					
1985	11 11	22 24.69	-08 47.3	1.673	2.175	106.7	25.9	17.9
1985	11 21	22 32.13	-07 49.4					
1985	12 01	22 41.80	-06 39.3	1.882	2.143	91.2	27.4	18.2

1983 CW1 a,e,i = 2.70, 0.03, 11 Elements MPC 7782

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 15.16	-02 05.4	2.354	2.767	103.1	21.0	17.6
1985	07 04	23 18.29	-01 04.9					
1985	07 14	23 19.28	-00 14.3	2.109	2.766	120.4	18.5	17.3
1985	07 24	23 17.95	+00 24.8					
1985	08 03	23 14.25	+00 51.0	1.909	2.764	140.0	13.6	16.9
1985	08 13	23 08.32	+01 03.4					
1985	08 23	23 00.53	+01 02.2	1.785	2.763	161.4	6.7	16.6
1985	09 02	22 51.60	+00 49.1					
1985	09 12	22 42.41	+00 27.4	1.764	2.760	169.7	3.7	16.4
1985	09 22	22 33.94	+00 01.4					
1985	10 02	22 27.07	-00 23.9	1.851	2.758	149.0	10.8	16.8
1985	10 12	22 22.38	-00 44.3					
1985	10 22	22 20.18	-00 56.5	2.029	2.755	128.0	16.5	17.1
1985	11 01	22 20.53	-00 58.5					
1985	11 11	22 23.27	-00 49.3	2.265	2.752	109.0	19.9	17.4
1985	11 21	22 28.18	-00 28.7					
1985	12 01	22 35.00	+00 03.1	2.529	2.748	92.1	21.0	17.7

1972 RU3 a,e,i = 2.20, 0.15, 5 Elements MPC 8785

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	22 55.68	-14 33.3	1.295	1.924	112.2	29.3	18.2
1985	07 04	23 04.59	-14 13.9					
1985	07 14	23 10.69	-14 11.0	1.110	1.907	127.4	25.0	17.7
1985	07 24	23 13.55	-14 25.9					
1985	08 03	23 12.85	-14 57.3	0.968	1.895	145.7	17.6	17.2
1985	08 13	23 08.59	-15 40.9					
1985	08 23	23 01.22	-16 28.8	0.890	1.887	165.7	7.6	16.8
1985	09 02	22 51.95	-17 10.2					
1985	09 12	22 42.38	-17 35.2	0.895	1.884	164.2	8.4	16.8
1985	09 22	22 34.28	-17 37.1					
1985	10 02	22 29.02	-17 14.0	0.983	1.885	143.7	18.3	17.3
1985	10 12	22 27.24	-16 28.1					
1985	10 22	22 29.10	-15 22.8	1.136	1.892	125.1	25.5	17.7
1985	11 01	22 34.29	-14 01.4					
1985	11 11	22 42.33	-12 27.2	1.330	1.903	109.3	29.4	18.2
1985	11 21	22 52.77	-10 42.2					
1985	12 01	23 05.12	-08 48.4	1.550	1.918	95.7	30.8	18.6

1984 HX a,e,i = 2.30, 0.10, 6 Elements MPC 8891

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985	06 24	23 13.97	-02 31.5	1.863	2.321	-1.17	-9.2	18.8
1985	07 04	23 19.77	-01 21.9					
1985	07 14	23 23.30	-00 22.7	1.620	2.298	-1.38	-10.8	18.4
1985	07 24	23 24.23	+00 23.4					
1985	08 03	23 22.34	+00 54.2	1.415	2.274	-1.64	-12.6	17.9
1985	08 13	23 17.57	+01 07.9					
1985	08 23	23 10.17	+01 03.5	1.275	2.250	-1.85	-14.2	17.5
1985	09 02	23 00.90	+00 42.7					
1985	09 12	22 50.85	+00 09.6	1.226	2.227	-1.91	-14.8	17.2
1985	09 22	22 41.40	-00 29.5					
1985	10 02	22 33.83	-01 07.0	1.277	2.204	-1.75	-13.9	17.5
1985	10 12	22 29.01	-01 36.8					
1985	10 22	22 27.41	-01 54.3	1.410	2.182	-1.51	-12.2	17.9
1985	11 01	22 29.05	-01 56.9					
1985	11 11	22 33.71	-01 44.0	1.596	2.161	-1.29	-10.5	18.3
1985	11 21	22 41.05	-01 15.6					
1985	12 01	22 50.69	-00 32.6	1.808	2.141	-1.13	-9.2	18.6

1931 TJ1 a,e,i = 2.35, 0.13, 3 Elements MPC 9305

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 14.86	-04 44.1	2.053	2.504	104.2	23.2	18.1
1985	07 04	23 20.26	-04 19.5					
1985	07 14	23 23.54	-04 09.6	1.798	2.480	121.0	20.6	17.7
1985	07 24	23 24.40	-04 16.5					
1985	08 03	23 22.68	-04 41.4	1.584	2.454	140.5	15.2	17.3
1985	08 13	23 18.35	-05 23.9					
1985	08 23	23 11.66	-06 21.7	1.442	2.427	162.9	7.0	16.9
1985	09 02	23 03.28	-07 29.3					
1985	09 12	22 54.18	-08 39.3	1.397	2.399	172.7	3.1	16.6
1985	09 22	22 45.54	-09 43.4					
1985	10 02	22 38.49	-10 34.6	1.456	2.370	148.9	12.6	17.0
1985	10 12	22 33.85	-11 08.4					
1985	10 22	22 32.08	-11 23.1	1.599	2.341	127.4	19.7	17.3
1985	11 01	22 33.27	-11 18.7					
1985	11 11	22 37.25	-10 56.6	1.795	2.312	108.7	23.9	17.6
1985	11 21	22 43.76	-10 18.3					
1985	12 01	22 52.44	-09 25.7	2.014	2.282	92.6	25.6	17.9

1984 CD1 a,e,i = 2.39, 0.16, 3 Elements MPC 8684

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 26.91	-07 40.8	1.948	2.385	102.5	24.6	18.4
1985	07 04	23 32.24	-07 20.5					
1985	07 14	23 35.14	-07 15.8	1.753	2.421	119.5	21.4	18.1
1985	07 24	23 35.37	-07 27.6					
1985	08 03	23 32.82	-07 55.5	1.596	2.456	139.3	15.6	17.8
1985	08 13	23 27.57	-08 37.4					
1985	08 23	23 20.01	-09 29.3	1.510	2.490	161.6	7.4	17.5
1985	09 02	23 10.92	-10 24.5					
1985	09 12	23 01.33	-11 16.1	1.523	2.523	172.0	3.2	17.4
1985	09 22	22 52.40	-11 57.4					
1985	10 02	22 45.15	-12 24.0	1.641	2.555	149.5	11.5	17.9
1985	10 12	22 40.22	-12 33.9					
1985	10 22	22 37.94	-12 27.3	1.847	2.585	128.3	17.6	18.3
1985	11 01	22 38.32	-12 05.4					
1985	11 11	22 41.17	-11 29.9	2.111	2.613	109.4	20.9	18.7
1985	11 21	22 46.22	-10 42.6					
1985	12 01	22 53.14	-09 45.1	2.403	2.639	92.6	21.9	19.0

(3117) 1983 CM1 a,e,i = 2.85, 0.06, 3 Elements MPC 9076

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 20.62	-07 37.0	2.248	2.681	104.0	21.6	17.4
1985	07 04	23 25.71	-07 22.4					
1985	07 14	23 28.73	-07 21.8	2.015	2.684	121.0	18.9	17.1
1985	07 24	23 29.47	-07 36.1					
1985	08 03	23 27.84	-08 05.0	1.827	2.689	140.5	13.9	16.8
1985	08 13	23 23.90	-08 46.8					
1985	08 23	23 17.95	-09 38.1	1.713	2.693	162.2	6.6	16.5
1985	09 02	23 10.60	-10 33.2					
1985	09 12	23 02.68	-11 25.9	1.699	2.699	172.0	3.0	16.3
1985	09 22	22 55.15	-12 10.1					
1985	10 02	22 48.92	-12 41.0	1.791	2.706	150.2	10.6	16.7
1985	10 12	22 44.64	-12 56.2					
1985	10 22	22 42.68	-12 55.1	1.973	2.713	129.1	16.5	17.0
1985	11 01	22 43.16	-12 38.4					
1985	11 11	22 45.96	-12 07.5	2.216	2.721	110.2	20.0	17.4
1985	11 21	22 50.91	-11 23.9					
1985	12 01	22 57.71	-10 29.4	2.489	2.730	93.4	21.1	17.6

1983 HO a,e,i = 3.98, 0.13, 10 Elements MPC 8213

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 25.82	-10 20.6	3.122	3.507	103.8	16.3	17.6
1985	07 04	23 29.34	-10 32.7					
1985	07 14	23 31.22	-10 56.4	2.878	3.519	121.7	14.2	17.4
1985	07 24	23 31.35	-11 31.7					
1985	08 03	23 29.74	-12 17.2	2.685	3.533	141.2	10.4	17.1
1985	08 13	23 26.50	-13 10.5					
1985	08 23	23 21.85	-14 08.0	2.575	3.548	161.3	5.2	16.9
1985	09 02	23 16.23	-15 05.3					
1985	09 12	23 10.17	-15 57.7	2.572	3.563	168.3	3.3	16.8
1985	09 22	23 04.28	-16 40.9					
1985	10 02	22 59.15	-17 11.9	2.681	3.580	149.6	8.1	17.1
1985	10 12	22 55.26	-17 29.1					
1985	10 22	22 52.94	-17 32.2	2.886	3.597	129.1	12.4	17.4
1985	11 01	22 52.37	-17 21.8					
1985	11 11	22 53.55	-16 59.2	3.157	3.616	109.9	14.9	17.6
1985	11 21	22 56.43	-16 25.8					
1985	12 01	23 00.86	-15 43.2	3.463	3.635	92.0	15.7	17.9

1982 UJ2 a,e,i = 2.28, 0.17, 4 Elements MPC 8901

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 33.94	-07 17.0	2.219	2.608	100.8	22.5	18.8
1985	07 04	23 39.24	-06 52.5					
1985	07 14	23 42.48	-06 41.0	1.954	2.587	117.6	20.4	18.5
1985	07 24	23 43.35	-06 44.1					
1985	08 03	23 41.65	-07 02.2	1.727	2.564	136.9	15.7	18.1
1985	08 13	23 37.28	-07 34.5					
1985	08 23	23 30.40	-08 18.7	1.568	2.538	158.9	8.2	17.7
1985	09 02	23 21.53	-09 09.6					
1985	09 12	23 11.53	-10 00.8	1.506	2.509	174.2	2.3	17.3
1985	09 22	23 01.56	-10 45.3					
1985	10 02	22 52.79	-11 16.9	1.552	2.479	151.7	11.0	17.7
1985	10 12	22 46.15	-11 32.3					
1985	10 22	22 42.24	-11 30.1	1.688	2.446	129.6	18.3	18.0
1985	11 01	22 41.27	-11 10.7					
1985	11 11	22 43.15	-10 35.7	1.883	2.411	110.2	22.7	18.3
1985	11 21	22 47.65	-09 46.6					
1985	12 01	22 54.47	-08 44.9	2.104	2.375	93.3	24.5	18.6

1981 JY1 a,e,i = 2.17, 0.03, 1 Elements MPC 9683

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 25.80	-03 05.3	1.794	2.224	101.0	26.7	18.5
1985	07 04	23 33.00	-02 21.0					
1985	07 14	23 37.92	-01 51.7	1.574	2.226	116.8	24.1	18.2
1985	07 24	23 40.24	-01 39.8					
1985	08 03	23 39.69	-01 47.1	1.387	2.227	135.5	18.6	17.8
1985	08 13	23 36.17	-02 14.4					
1985	08 23	23 29.84	-03 00.6	1.259	2.227	157.4	10.0	17.4
1985	09 02	23 21.36	-04 01.0					
1985	09 12	23 11.76	-05 08.4	1.221	2.227	178.2	0.8	16.8
1985	09 22	23 02.35	-06 13.9					
1985	10 02	22 54.45	-07 08.8	1.283	2.226	153.9	11.4	17.4
1985	10 12	22 49.02	-07 47.3					
1985	10 22	22 46.60	-08 06.6	1.433	2.225	132.0	19.4	17.9
1985	11 01	22 47.29	-08 06.1					
1985	11 11	22 50.90	-07 47.3	1.640	2.223	113.1	24.2	18.3
1985	11 21	22 57.11	-07 11.7					
1985	12 01	23 05.56	-06 21.3	1.876	2.220	96.8	26.2	18.6

1983 CS2 a,e,i = 2.86, 0.23, 3 Elements MPC 8062

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 38.05	-03 06.8	3.228	3.520	98.2	16.6	19.2
1985	07 04	23 40.59	-02 46.7					
1985	07 14	23 41.46	-02 37.0	2.955	3.526	116.3	15.0	18.9
1985	07 24	23 40.54	-02 38.3					
1985	08 03	23 37.80	-02 50.8	2.725	3.529	136.3	11.4	18.7
1985	08 13	23 33.31	-03 13.9					
1985	08 23	23 27.27	-03 46.3	2.572	3.531	158.3	6.1	18.4
1985	09 02	23 20.12	-04 25.2					
1985	09 12	23 12.40	-05 07.2	2.524	3.530	178.4	0.5	17.9
1985	09 22	23 04.77	-05 48.2					
1985	10 02	22 57.87	-06 24.3	2.595	3.528	155.0	6.9	18.5
1985	10 12	22 52.26	-06 52.6					
1985	10 22	22 48.33	-07 11.0	2.771	3.522	132.7	12.0	18.7
1985	11 01	22 46.28	-07 18.4					
1985	11 11	22 46.16	-07 14.6	3.020	3.515	112.2	15.1	19.0
1985	11 21	22 47.89	-07 00.1					
1985	12 01	22 51.34	-06 35.5	3.306	3.506	93.4	16.3	19.2

(3150) 1983 CB a,e,i = 3.20, 0.12, 22 Elements MPC 9289

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 45.82	-09 41.5	2.669	3.001	99.0	19.5	17.0
1985	07 04	23 48.85	-08 53.1					
1985	07 14	23 49.86	-08 13.4	2.429	3.022	116.4	17.5	16.7
1985	07 24	23 48.65	-07 42.5					
1985	08 03	23 45.16	-07 20.0	2.229	3.044	136.2	13.3	16.5
1985	08 13	23 39.46	-07 05.0					
1985	08 23	23 31.82	-06 55.8	2.104	3.066	158.3	7.0	16.2
1985	09 02	23 22.81	-06 49.8					
1985	09 12	23 13.17	-06 44.4	2.083	3.088	177.4	0.9	15.8
1985	09 22	23 03.76	-06 36.6					
1985	10 02	22 55.45	-06 23.9	2.178	3.111	154.4	8.0	16.3
1985	10 12	22 48.85	-06 04.9					
1985	10 22	22 44.37	-05 38.6	2.376	3.134	132.3	13.6	16.7
1985	11 01	22 42.17	-05 04.5					
1985	11 11	22 42.19	-04 23.0	2.646	3.157	112.3	16.9	17.0
1985	11 21	22 44.29	-03 34.0					
1985	12 01	22 48.25	-02 38.0	2.952	3.180	94.2	18.0	17.3

1974 SB1 a,e,i = 2.38, 0.21, 3 Elements MPC 9472

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 13.79	-05 04.8	1.715	2.203	104.6	26.5	18.5
1985	07 04	23 22.34	-04 24.3					
1985	07 14	23 28.92	-03 58.3	1.463	2.156	119.7	24.2	18.1
1985	07 24	23 33.14	-03 49.6					
1985	08 03	23 34.69	-04 00.6	1.248	2.111	137.5	18.9	17.5
1985	08 13	23 33.35	-04 32.4					
1985	08 23	23 29.10	-05 24.1	1.094	2.068	158.5	10.3	17.0
1985	09 02	23 22.44	-06 30.8					
1985	09 12	23 14.27	-07 44.6	1.022	2.028	176.6	1.7	16.4
1985	09 22	23 05.95	-08 54.6					
1985	10 02	22 58.98	-09 50.7	1.044	1.991	153.7	12.8	16.9
1985	10 12	22 54.51	-10 25.7					
1985	10 22	22 53.27	-10 36.5	1.144	1.959	132.4	22.0	17.3
1985	11 01	22 55.48	-10 22.8					
1985	11 11	23 00.96	-09 46.6	1.297	1.932	114.6	27.8	17.6
1985	11 21	23 09.38	-08 50.2					
1985	12 01	23 20.30	-07 36.4	1.479	1.910	99.6	30.6	18.0

(3033) 1984 EJ a,e,i = 2.24, 0.10, 5 Elements MPC 8780

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 27.85	-01 11.2	1.811	2.222	99.8	26.8	17.6
1985	07 04	23 35.07	-00 35.2					
1985	07 14	23 40.00	-00 16.0	1.608	2.244	115.7	24.1	17.3
1985	07 24	23 42.31	-00 16.1					
1985	08 03	23 41.80	-00 37.4	1.436	2.266	134.5	18.6	17.0
1985	08 13	23 38.41	-01 20.3					
1985	08 23	23 32.35	-02 23.2	1.324	2.287	156.6	10.1	16.6
1985	09 02	23 24.29	-03 40.7					
1985	09 12	23 15.22	-05 04.8	1.301	2.308	179.0	0.4	16.1
1985	09 22	23 06.37	-06 25.9					
1985	10 02	22 58.95	-07 35.1	1.383	2.327	154.8	10.6	16.8
1985	10 12	22 53.81	-08 26.5					
1985	10 22	22 51.45	-08 57.3	1.554	2.346	132.7	18.2	17.2
1985	11 01	22 51.96	-09 07.4					
1985	11 11	22 55.17	-08 58.3	1.786	2.363	113.6	22.6	17.6
1985	11 21	23 00.81	-08 32.1					
1985	12 01	23 08.51	-07 50.9	2.051	2.379	96.9	24.3	18.0

1978 PR4 a,e,i = 2.24, 0.10, 5 Elements MPC 9424

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 36.84	-08 17.6	1.925	2.335	100.5	25.3	18.3
1985	07 04	23 43.20	-07 51.6					
1985	07 14	23 47.21	-07 40.5	1.714	2.355	116.9	22.7	18.1
1985	07 24	23 48.57	-07 45.5					
1985	08 03	23 47.06	-08 06.7	1.536	2.373	136.0	17.3	17.7
1985	08 13	23 42.63	-08 42.5					
1985	08 23	23 35.50	-09 29.4	1.423	2.390	157.8	9.2	17.4
1985	09 02	23 26.33	-10 21.2					
1985	09 12	23 16.15	-11 10.3	1.404	2.406	173.3	2.8	17.1
1985	09 22	23 06.18	-11 49.6					
1985	10 02	22 57.66	-12 13.5	1.489	2.420	152.2	11.1	17.5
1985	10 12	22 51.44	-12 19.7					
1985	10 22	22 48.04	-12 08.0	1.664	2.432	130.6	18.1	18.0
1985	11 01	22 47.55	-11 39.8					
1985	11 11	22 49.79	-10 57.1	1.899	2.443	111.6	22.1	18.3
1985	11 21	22 54.50	-10 01.8					
1985	12 01	23 01.32	-08 55.7	2.163	2.452	94.8	23.6	18.7

(3100) 1977 EQ1 a,e,i = 2.26, 0.09, 3 Elements MPC 9026

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 34.43	-05 55.1	2.037	2.432	100.1	24.3	19.5
1985	07 04	23 40.78	-05 20.8					
1985	07 14	23 45.01	-04 59.9	1.792	2.422	116.4	22.1	19.2
1985	07 24	23 46.80	-04 54.2					
1985	08 03	23 45.90	-05 04.7	1.582	2.411	135.3	17.2	18.8
1985	08 13	23 42.21	-05 31.0					
1985	08 23	23 35.84	-06 11.4	1.434	2.398	157.1	9.4	18.4
1985	09 02	23 27.33	-07 01.2					
1985	09 12	23 17.57	-07 53.8	1.379	2.384	176.6	1.4	17.9
1985	09 22	23 07.76	-08 41.8					
1985	10 02	22 59.15	-09 18.3	1.429	2.369	154.0	10.7	18.4
1985	10 12	22 52.73	-09 38.9					
1985	10 22	22 49.11	-09 41.8	1.569	2.353	131.9	18.3	18.8
1985	11 01	22 48.48	-09 26.9					
1985	11 11	22 50.75	-08 55.7	1.769	2.336	112.6	23.0	19.1
1985	11 21	22 55.67	-08 09.6					
1985	12 01	23 02.89	-07 10.5	1.999	2.318	95.8	25.0	19.4

(3023) 1981 JS a,e,i = 2.22, 0.09, 4 Elements MPC 8673

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 32.14	+02 07.3	1.910	2.278	97.5	26.3	18.3
1985	07 04	23 38.96	+03 08.8					
1985	07 14	23 43.56	+03 56.5	1.698	2.296	113.1	24.0	18.0
1985	07 24	23 45.63	+04 27.7					
1985	08 03	23 44.95	+04 39.9	1.512	2.312	131.5	19.2	17.7
1985	08 13	23 41.44	+04 31.0					
1985	08 23	23 35.27	+04 00.0	1.383	2.328	152.8	11.5	17.3
1985	09 02	23 27.04	+03 08.8					
1985	09 12	23 17.68	+02 02.3	1.340	2.343	173.5	2.8	16.9
1985	09 22	23 08.40	+00 48.3					
1985	10 02	23 00.43	-00 24.1	1.401	2.356	157.2	9.5	17.3
1985	10 12	22 54.66	-01 27.0					
1985	10 22	22 51.66	-02 14.9	1.556	2.368	135.2	17.2	17.7
1985	11 01	22 51.56	-02 44.9					
1985	11 11	22 54.24	-02 56.5	1.776	2.378	115.6	22.1	18.1
1985	11 21	22 59.43	-02 50.5					
1985	12 01	23 06.79	-02 28.4	2.032	2.387	98.5	24.1	18.5

A922 WB a,e,i = 2.32, 0.09, 8 Elements MPC 9161

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 36.59	-04 01.3	1.948	2.333	98.9	25.5	18.0
1985	07 04	23 43.55	-02 50.0					
1985	07 14	23 48.40	-01 48.1	1.699	2.312	114.4	23.6	17.6
1985	07 24	23 50.80	-00 57.2					
1985	08 03	23 50.44	-00 19.1	1.481	2.291	132.4	19.1	17.2
1985	08 13	23 47.13	+00 04.9					
1985	08 23	23 40.90	+00 14.1	1.320	2.270	153.5	11.4	16.7
1985	09 02	23 32.22	+00 09.5					
1985	09 12	23 21.97	-00 06.0	1.245	2.250	175.5	2.0	16.2
1985	09 22	23 11.43	-00 27.5					
1985	10 02	23 02.02	-00 48.5	1.272	2.230	157.6	9.9	16.6
1985	10 12	22 54.88	-01 03.5					
1985	10 22	22 50.75	-01 07.9	1.390	2.210	135.3	18.5	17.0
1985	11 01	22 49.90	-00 59.0					
1985	11 11	22 52.22	-00 36.1	1.570	2.192	115.9	24.0	17.3
1985	11 21	22 57.44	+00 01.0					
1985	12 01	23 05.18	+00 51.6	1.784	2.175	99.4	26.6	17.7

(3139) 1980 VL1 a,e,i = 3.19, 0.04, 21 Elements MPC 9209

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 39.94	+21 19.6	2.944	3.077	87.8	19.3	17.2
1985	07 04	23 45.09	+22 57.7					
1985	07 14	23 48.57	+24 28.3	2.697	3.077	102.2	18.8	17.0
1985	07 24	23 50.17	+25 48.5					
1985	08 03	23 49.76	+26 55.1	2.472	3.077	117.7	17.0	16.8
1985	08 13	23 47.29	+27 44.3					
1985	08 23	23 42.84	+28 12.2	2.291	3.077	133.7	13.7	16.6
1985	09 02	23 36.78	+28 15.3					
1985	09 12	23 29.65	+27 51.8	2.181	3.078	147.5	10.1	16.4
1985	09 22	23 22.22	+27 02.1					
1985	10 02	23 15.35	+25 50.2	2.165	3.080	151.1	9.0	16.3
1985	10 12	23 09.77	+24 22.2					
1985	10 22	23 06.06	+22 46.2	2.248	3.081	140.4	11.9	16.5
1985	11 01	23 04.55	+21 10.3					
1985	11 11	23 05.32	+19 41.2	2.419	3.084	124.0	15.4	16.7
1985	11 21	23 08.30	+18 23.6					
1985	12 01	23 13.31	+17 20.7	2.651	3.086	107.0	17.8	17.0

1983 AV a,e,i = 2.66, 0.21, 13 Elements MPC 7938

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 52.47	-14 30.0	2.881	3.206	99.3	18.2	19.2
1985	07 04	23 56.98	-14 54.9					
1985	07 14	23 59.71	-15 33.6	2.624	3.209	116.5	16.5	19.0
1985	07 24	00 00.46	-16 25.9					
1985	08 03	23 59.11	-17 30.2	2.410	3.209	135.1	12.9	18.7
1985	08 13	23 55.62	-18 43.2					
1985	08 23	23 50.11	-20 00.1	2.270	3.207	153.6	8.1	18.5
1985	09 02	23 42.98	-21 14.5					
1985	09 12	23 34.80	-22 19.7	2.232	3.203	161.7	5.7	18.4
1985	09 22	23 26.34	-23 09.6					
1985	10 02	23 18.45	-23 40.2	2.304	3.196	147.9	9.6	18.6
1985	10 12	23 11.85	-23 50.2					
1985	10 22	23 07.09	-23 40.1	2.472	3.187	128.4	14.2	18.8
1985	11 01	23 04.47	-23 12.1					
1985	11 11	23 04.05	-22 29.1	2.704	3.175	109.5	17.1	19.1
1985	11 21	23 05.77	-21 33.5					
1985	12 01	23 09.44	-20 28.0	2.969	3.161	92.0	18.2	19.3

1981 YS a,e,i = 2.93, 0.16, 15 Elements MPC 7942

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 49.62	-18 13.1	2.871	3.228	101.3	18.0	18.2
1985	07 04	23 54.58	-18 41.4					
1985	07 14	23 57.79	-19 23.2	2.600	3.205	118.0	16.3	18.0
1985	07 24	23 59.03	-20 17.9					
1985	08 03	23 58.14	-21 23.4	2.375	3.182	135.7	12.9	17.7
1985	08 13	23 55.08	-22 36.2					
1985	08 23	23 49.93	-23 51.0	2.226	3.157	152.5	8.5	17.4
1985	09 02	23 43.07	-25 00.8					
1985	09 12	23 35.06	-25 58.7	2.175	3.131	158.1	6.9	17.3
1985	09 22	23 26.71	-26 38.6					
1985	10 02	23 18.90	-26 56.8	2.230	3.104	145.2	10.6	17.4
1985	10 12	23 12.39	-26 52.4					
1985	10 22	23 07.78	-26 26.5	2.375	3.077	126.8	15.0	17.7
1985	11 01	23 05.39	-25 41.8					
1985	11 11	23 05.29	-24 41.7	2.583	3.048	108.7	17.9	17.9
1985	11 21	23 07.42	-23 29.0					
1985	12 01	23 11.58	-22 06.4	2.822	3.018	91.8	19.1	18.1

1983 CA3 a,e,i = 2.79, 0.07, 5 Elements MPC 7935

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985	06 24	23 46.96	+04 48.0	2.715	2.948	-0.73	-4.5	18.5
1985	07 04	23 52.18	+05 43.3					
1985	07 14	23 55.68	+06 28.8	2.445	2.942	-0.82	-4.9	18.2
1985	07 24	23 57.27	+07 02.5					
1985	08 03	23 56.78	+07 22.7	2.204	2.935	-0.93	-5.6	17.9
1985	08 13	23 54.15	+07 27.6					
1985	08 23	23 49.47	+07 16.1	2.021	2.928	-1.03	-6.3	17.6
1985	09 02	23 43.07	+06 48.3					
1985	09 12	23 35.50	+06 06.2	1.926	2.919	-1.08	-6.8	17.3
1985	09 22	23 27.54	+05 13.5					
1985	10 02	23 20.05	+04 15.9	1.940	2.910	-1.05	-6.8	17.4
1985	10 12	23 13.83	+03 19.3					
1985	10 22	23 09.46	+02 29.4	2.061	2.901	-0.97	-6.3	17.7
1985	11 01	23 07.32	+01 50.3					
1985	11 11	23 07.48	+01 24.5	2.263	2.891	-0.86	-5.6	18.0
1985	11 21	23 09.90	+01 13.0					
1985	12 01	23 14.40	+01 15.8	2.513	2.880	-0.76	-4.9	18.2

1971 UX a,e,i = 2.32, 0.19, 1 Elements MPC 6294

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 20.78	-03 01.9	1.503	1.983	102.1	30.1	19.1
1985	07 04	23 31.70	-01 45.7					
1985	07 14	23 40.65	-00 41.4	1.286	1.955	115.7	27.9	18.6
1985	07 24	23 47.20	+00 07.9					
1985	08 03	23 50.99	+00 39.2	1.099	1.931	131.9	23.0	18.2
1985	08 13	23 51.68	+00 49.9					
1985	08 23	23 49.15	+00 38.5	0.961	1.912	151.5	14.6	17.7
1985	09 02	23 43.73	+00 06.2					
1985	09 12	23 36.24	-00 42.1	0.895	1.899	174.2	3.1	17.1
1985	09 22	23 28.04	-01 38.1					
1985	10 02	23 20.76	-02 30.9	0.915	1.891	161.7	9.6	17.4
1985	10 12	23 15.72	-03 11.3					
1985	10 22	23 13.83	-03 33.0	1.017	1.890	139.9	19.8	17.9
1985	11 01	23 15.40	-03 33.0					
1985	11 11	23 20.25	-03 11.7	1.179	1.895	121.6	26.4	18.4
1985	11 21	23 28.07	-02 30.6					
1985	12 01	23 38.40	-01 32.2	1.379	1.906	106.2	29.8	18.8

1964 XA a,e,i = 2.35, 0.30, 22 Elements MPC 7233

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	00 06.91	-21 49.2	2.566	2.902	98.8	20.2	19.3
1985	07 04	00 11.99	-22 00.2					
1985	07 14	00 15.04	-22 24.6	2.287	2.867	114.9	18.8	19.0
1985	07 24	00 15.72	-23 01.9					
1985	08 03	00 13.73	-23 49.7	2.044	2.828	132.3	15.4	18.7
1985	08 13	00 08.88	-24 44.3					
1985	08 23	00 01.16	-25 39.2	1.867	2.786	149.4	10.6	18.3
1985	09 02	23 50.93	-26 26.0					
1985	09 12	23 38.95	-26 56.1	1.785	2.740	157.0	8.2	18.1
1985	09 22	23 26.35	-27 02.5					
1985	10 02	23 14.44	-26 41.3	1.810	2.691	144.9	12.4	18.2
1985	10 12	23 04.35	-25 53.5					
1985	10 22	22 56.90	-24 42.3	1.928	2.638	125.9	17.8	18.4
1985	11 01	22 52.46	-23 12.7					
1985	11 11	22 51.04	-21 29.5	2.109	2.582	107.3	21.5	18.7
1985	11 21	22 52.43	-19 36.3					
1985	12 01	22 56.33	-17 35.7	2.318	2.524	90.3	23.0	18.9

1982 TR a,e,i = 2.18, 0.07, 4 Elements MPC 8777

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985	06 24	23 41.42	-01 18.2	1.828	2.193	-1.20	-9.3	18.6
1985	07 04	23 50.03	-00 02.0					
1985	07 14	23 56.64	+01 04.0	1.591	2.178	-1.41	-10.8	18.3
1985	07 24	00 00.87	+01 57.5					
1985	08 03	00 02.38	+02 36.1	1.380	2.163	-1.69	-12.7	17.9
1985	08 13	00 00.88	+02 57.7					
1985	08 23	23 56.27	+03 00.5	1.218	2.148	-1.98	-14.8	17.4
1985	09 02	23 48.86	+02 44.5					
1985	09 12	23 39.40	+02 12.4	1.132	2.133	-2.15	-16.2	16.9
1985	09 22	23 29.13	+01 29.5					
1985	10 02	23 19.57	+00 44.2	1.144	2.119	-2.06	-15.8	17.1
1985	10 12	23 12.02	+00 04.4					
1985	10 22	23 07.43	-00 23.1	1.247	2.105	-1.80	-14.0	17.5
1985	11 01	23 06.19	-00 34.3					
1985	11 11	23 08.26	-00 28.0	1.416	2.092	-1.51	-11.9	17.9
1985	11 21	23 13.39	-00 04.1					
1985	12 01	23 21.19	+00 36.2	1.623	2.081	-1.29	-10.2	18.3

1984 DA a,e,i = 1.92, 0.06, 23 Elements MPC 8779

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985	06 24	23 32.45	+04 36.5	1.647	2.030	-1.47	+2.6	18.8
1985	07 04	23 42.55	+04 24.1					
1985	07 14	23 50.69	+03 44.9	1.425	2.032	-1.74	+2.2	18.4
1985	07 24	23 56.45	+02 33.2					
1985	08 03	23 59.48	+00 44.2	1.227	2.033	-2.09	+1.2	18.0
1985	08 13	23 59.46	-01 44.9					
1985	08 23	23 56.25	-04 52.6	1.083	2.032	-2.46	-0.1	17.5
1985	09 02	23 50.16	-08 29.1					
1985	09 12	23 41.96	-12 16.5	1.030	2.029	-2.67	-0.2	17.2
1985	09 22	23 32.91	-15 51.6					
1985	10 02	23 24.59	-18 53.2	1.084	2.025	-2.56	+1.4	17.5
1985	10 12	23 18.32	-21 09.5					
1985	10 22	23 15.03	-22 37.6	1.226	2.019	-2.21	+3.0	18.0
1985	11 01	23 15.10	-23 21.6					
1985	11 11	23 18.42	-23 28.4	1.421	2.012	-1.84	+3.3	18.4
1985	11 21	23 24.72	-23 04.8					
1985	12 01	23 33.55	-22 16.8	1.639	2.003	-1.55	+2.7	18.8

1984 EM a,e,i = 2.26, 0.13, 3 Elements MPC 8779

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985	06 24	23 45.31	-00 27.5	1.817	2.165	-1.19	-6.4	18.1
1985	07 04	23 53.96	+00 22.2					
1985	07 14	00 00.42	+00 56.8	1.621	2.195	-1.35	-7.4	17.8
1985	07 24	00 04.36	+01 13.7					
1985	08 03	00 05.50	+01 11.0	1.448	2.225	-1.56	-8.7	17.5
1985	08 13	00 03.69	+00 47.5					
1985	08 23	23 58.95	+00 03.5	1.324	2.255	-1.78	-10.1	17.2
1985	09 02	23 51.75	-00 57.6					
1985	09 12	23 42.90	-02 09.6	1.281	2.284	-1.89	-10.7	16.8
1985	09 22	23 33.57	-03 24.0					
1985	10 02	23 25.07	-04 31.3	1.341	2.313	-1.80	-10.0	17.1
1985	10 12	23 18.44	-05 24.4					
1985	10 22	23 14.39	-05 58.9	1.497	2.341	-1.57	-8.6	17.6
1985	11 01	23 13.20	-06 13.3					
1985	11 11	23 14.80	-06 08.4	1.723	2.369	-1.32	-7.2	18.0
1985	11 21	23 18.97	-05 46.0					
1985	12 01	23 25.37	-05 08.2	1.990	2.394	-1.11	-6.1	18.4

1983 AN a,e,i = 2.41, 0.12, 7 Elements MPC 7829

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985	06 24	23 46.95	-09 33.2	2.098	2.465	-1.06	-6.6	17.6
1985	07 04	23 55.04	-09 23.1					
1985	07 14	00 01.27	-09 28.2	1.840	2.440	-1.23	-8.0	17.3
1985	07 24	00 05.32	-09 50.1					
1985	08 03	00 06.87	-10 29.3	1.615	2.414	-1.44	-9.5	16.9
1985	08 13	00 05.71	-11 24.6					
1985	08 23	00 01.75	-12 32.9	1.449	2.387	-1.66	-10.6	16.5
1985	09 02	23 55.27	-13 47.6					
1985	09 12	23 46.89	-15 00.0	1.368	2.361	-1.80	-10.5	16.1
1985	09 22	23 37.65	-16 00.7					
1985	10 02	23 28.83	-16 41.2	1.389	2.334	-1.75	-9.3	16.3
1985	10 12	23 21.58	-16 57.2					
1985	10 22	23 16.78	-16 47.7	1.501	2.308	-1.56	-7.8	16.6
1985	11 01	23 14.89	-16 14.6					
1985	11 11	23 15.96	-15 21.3	1.676	2.283	-1.34	-6.9	16.9
1985	11 21	23 19.84	-14 11.0					
1985	12 01	23 26.23	-12 46.7	1.886	2.258	-1.15	-6.5	17.2

5550 P-L a,e,i = 2.60, 0.12, 12 Elements MPC 7841

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	00 04.57	-09 26.8	2.615	2.881	94.6	20.6	18.9
1985	07 04	00 09.89	-09 01.9					
1985	07 14	00 13.34	-08 48.5	2.361	2.888	111.2	19.2	18.6
1985	07 24	00 14.67	-08 46.9					
1985	08 03	00 13.72	-08 57.0	2.136	2.894	129.9	15.6	18.3
1985	08 13	00 10.37	-09 17.5					
1985	08 23	00 04.69	-09 46.0	1.973	2.898	150.7	9.8	18.0
1985	09 02	23 57.02	-10 18.5					
1985	09 12	23 47.97	-10 50.0	1.903	2.901	170.3	3.4	17.7
1985	09 22	23 38.37	-11 15.2					
1985	10 02	23 29.20	-11 29.6	1.946	2.901	158.8	7.2	17.9
1985	10 12	23 21.33	-11 30.5					
1985	10 22	23 15.42	-11 16.7	2.093	2.901	137.0	13.5	18.2
1985	11 01	23 11.84	-10 48.7					
1985	11 11	23 10.69	-10 08.0	2.317	2.898	116.6	17.8	18.5
1985	11 21	23 11.88	-09 15.9					
1985	12 01	23 15.21	-08 14.0	2.584	2.894	98.2	19.7	18.8

1982 BD3 a,e,i = 3.14, 0.07, 6 Elements MPC 6951

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 59.93	-02 04.7	2.992	3.207	92.8	18.5	18.3
1985	07 04	00 05.56	-01 46.9					
1985	07 14	00 09.67	-01 40.7	2.708	3.194	109.4	17.5	18.1
1985	07 24	00 12.06	-01 47.2					
1985	08 03	00 12.60	-02 07.0	2.454	3.181	128.0	14.6	17.8
1985	08 13	00 11.19	-02 40.2					
1985	08 23	00 07.87	-03 25.7	2.260	3.168	148.7	9.6	17.5
1985	09 02	00 02.88	-04 20.8					
1985	09 12	23 56.61	-05 21.7	2.158	3.155	170.4	3.0	17.1
1985	09 22	23 49.67	-06 23.0					
1985	10 02	23 42.81	-07 19.1	2.167	3.141	164.1	5.0	17.2
1985	10 12	23 36.72	-08 05.3					
1985	10 22	23 32.05	-08 38.0	2.284	3.128	141.8	11.3	17.5
1985	11 01	23 29.19	-08 55.4					
1985	11 11	23 28.36	-08 57.3	2.486	3.114	121.0	15.8	17.8
1985	11 21	23 29.60	-08 44.3					
1985	12 01	23 32.81	-08 17.9	2.739	3.101	102.2	18.1	18.1

1979 SG10 a,e,i = 3.42, 0.05, 1 Elements MPC 9349

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985	06 24	00 01.28	+01 20.1	3.118	3.298	-0.63	-4.1	17.5
1985	07 04	00 06.57	+01 58.5					
1985	07 14	00 10.36	+02 27.5	2.836	3.291	-0.70	-4.5	17.2
1985	07 24	00 12.47	+02 45.8					
1985	08 03	00 12.78	+02 52.4	2.582	3.283	-0.77	-5.0	17.0
1985	08 13	00 11.22	+02 46.7					
1985	08 23	00 07.84	+02 28.7	2.385	3.276	-0.85	-5.5	16.7
1985	09 02	00 02.85	+01 59.5					
1985	09 12	23 56.67	+01 21.5	2.277	3.270	-0.90	-5.9	16.4
1985	09 22	23 49.86	+00 38.0					
1985	10 02	23 43.13	-00 06.3	2.279	3.264	-0.89	-5.8	16.4
1985	10 12	23 37.13	-00 47.0					
1985	10 22	23 32.46	-01 20.1	2.392	3.258	-0.83	-5.4	16.7
1985	11 01	23 29.53	-01 42.8					
1985	11 11	23 28.53	-01 53.4	2.595	3.253	-0.76	-4.9	17.0
1985	11 21	23 29.52	-01 51.5					
1985	12 01	23 32.40	-01 37.3	2.854	3.249	-0.68	-4.4	17.2

1983 BN a,e,i = 2.74, 0.02, 6 Elements MPC 9072

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 59.72	-05 56.1	2.466	2.738	94.4	21.7	17.6
1985	07 04	00 06.82	-05 41.4					
1985	07 14	00 12.17	-05 40.4	2.217	2.741	110.4	20.3	17.4
1985	07 24	00 15.52	-05 54.2					
1985	08 03	00 16.66	-06 23.2	1.997	2.745	128.5	16.8	17.1
1985	08 13	00 15.48	-07 06.7					
1985	08 23	00 11.95	-08 02.7	1.834	2.749	148.7	11.0	16.8
1985	09 02	00 06.34	-09 06.6					
1985	09 12	23 59.17	-10 12.5	1.759	2.753	168.4	4.2	16.5
1985	09 22	23 51.19	-11 13.4					
1985	10 02	23 43.38	-12 02.5	1.791	2.756	160.7	6.9	16.6
1985	10 12	23 36.60	-12 35.1					
1985	10 22	23 31.59	-12 48.8	1.926	2.760	139.5	13.5	16.9
1985	11 01	23 28.80	-12 43.5					
1985	11 11	23 28.37	-12 20.6	2.138	2.763	119.5	18.2	17.3
1985	11 21	23 30.27	-11 42.1					
1985	12 01	23 34.33	-10 50.4	2.396	2.766	101.5	20.4	17.6

1971 UG1 a,e,i = 2.85, 0.08, 2 Elements MPC 5519

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	06 24	23 56.74	+00 30.0	2.493	2.733	92.5	21.8	18.2
1985	07 04	00 03.97	+01 14.4					
1985	07 14	00 09.57	+01 47.7	2.226	2.719	108.1	20.8	17.9
1985	07 24	00 13.28	+02 08.0					
1985	08 03	00 14.87	+02 13.9	1.985	2.706	125.8	17.7	17.6
1985	08 13	00 14.20	+02 04.4					
1985	08 23	00 11.23	+01 38.9	1.795	2.694	146.1	12.1	17.2
1985	09 02	00 06.16	+00 58.9					
1985	09 12	23 59.45	+00 07.5	1.689	2.683	168.8	4.2	16.8
1985	09 22	23 51.84	-00 50.3					
1985	10 02	23 44.27	-01 47.7	1.687	2.673	167.4	4.7	16.8
1985	10 12	23 37.66	-02 38.5					
1985	10 22	23 32.77	-03 17.3	1.790	2.663	144.4	12.6	17.2
1985	11 01	23 30.12	-03 40.8					
1985	11 11	23 29.90	-03 47.8	1.977	2.655	123.5	18.1	17.5
1985	11 21	23 32.10	-03 38.4					
1985	12 01	23 36.55	-03 13.7	2.214	2.648	105.1	21.1	17.8

1940 EF a,e,i = 2.84, 0.02, 3 Elements MPC 9207

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 13.98	-02 29.6	2.392	2.884	108.8	19.5	17.6
1985	07 24	00 16.94	-02 26.3					
1985	08 03	00 17.83	-02 36.9	2.153	2.880	127.0	16.4	17.3
1985	08 13	00 16.52	-03 01.1					
1985	08 23	00 13.01	-03 38.2	1.971	2.876	147.5	10.9	17.0
1985	09 02	00 07.52	-04 25.4					
1985	09 12	00 00.52	-05 18.3	1.876	2.872	169.5	3.7	16.7
1985	09 22	23 52.70	-06 11.5					
1985	10 02	23 44.95	-06 58.8	1.889	2.867	164.7	5.3	16.8
1985	10 12	23 38.11	-07 35.4					
1985	10 22	23 32.88	-07 57.5	2.009	2.863	142.3	12.3	17.1
1985	11 01	23 29.74	-08 03.8					
1985	11 11	23 28.88	-07 54.3	2.212	2.858	121.6	17.2	17.4
1985	11 21	23 30.30	-07 29.8					
1985	12 01	23 33.85	-06 52.0	2.464	2.853	103.0	19.7	17.7
1985	12 11	23 39.32	-06 02.7					
1985	12 21	23 46.47	-05 03.2	2.737	2.848	86.3	20.2	17.9

1948 RD a,e,i = 2.24, 0.18, 6 Elements MPC 9583

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 08.19	-03 48.6	1.218	1.840	110.6	31.1	16.5
1985	07 24	00 16.75	-02 31.5					
1985	08 03	00 22.39	-01 26.7	1.047	1.832	125.5	26.8	16.0
1985	08 13	00 24.67	-00 36.0					
1985	08 23	00 23.24	-00 00.4	0.914	1.831	143.9	19.0	15.6
1985	09 02	00 18.15	+00 20.3					
1985	09 12	00 10.00	+00 28.1	0.843	1.836	166.2	7.5	15.1
1985	09 22	00 00.03	+00 27.5					
1985	10 02	23 50.07	+00 25.2	0.855	1.848	169.5	5.6	15.1
1985	10 12	23 41.81	+00 27.7					
1985	10 22	23 36.56	+00 40.3	0.951	1.865	146.7	17.0	15.6
1985	11 01	23 34.95	+01 06.5					
1985	11 11	23 36.94	+01 46.8	1.116	1.888	127.3	24.7	16.2
1985	11 21	23 42.26	+02 41.0					
1985	12 01	23 50.43	+03 47.8	1.327	1.916	111.0	28.7	16.7
1985	12 11	00 00.95	+05 05.2					
1985	12 21	00 13.43	+06 31.8	1.564	1.948	97.1	30.1	17.1

1983 AT2 a,e,i = 2.41, 0.10, 6 Elements MPC 8288

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 20.10	-03 22.7	1.848	2.364	107.7	24.2	18.8
1985	07 24	00 25.23	-02 50.0					
1985	08 03	00 27.95	-02 30.5	1.613	2.343	124.5	20.9	18.4
1985	08 13	00 27.96	-02 24.8					
1985	08 23	00 25.07	-02 33.1	1.424	2.322	144.3	14.7	17.9
1985	09 02	00 19.35	-02 53.4					
1985	09 12	00 11.23	-03 22.0	1.310	2.302	166.8	5.7	17.5
1985	09 22	00 01.59	-03 53.4					
1985	10 02	23 51.68	-04 20.5	1.295	2.282	167.7	5.4	17.4
1985	10 12	23 42.80	-04 37.4					
1985	10 22	23 36.08	-04 39.5	1.379	2.264	144.6	14.8	17.8
1985	11 01	23 32.20	-04 24.8					
1985	11 11	23 31.40	-03 53.4	1.540	2.247	123.8	21.5	18.2
1985	11 21	23 33.63	-03 06.3					
1985	12 01	23 38.62	-02 05.0	1.748	2.232	106.0	25.1	18.5
1985	12 11	23 46.02	-00 51.6					
1985	12 21	23 55.50	+00 32.4	1.977	2.218	90.6	26.3	18.8

1979 MU2 a,e,i = 3.11, 0.16, 6 Elements MPC 6639

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 14.82	+01 23.5	2.190	2.672	107.1	21.3	20.3
1985	07 24	00 19.20	+01 31.0					
1985	08 03	00 21.45	+01 22.6	1.979	2.689	124.6	18.1	20.0
1985	08 13	00 21.43	+00 57.8					
1985	08 23	00 19.13	+00 16.8	1.818	2.708	144.8	12.4	19.7
1985	09 02	00 14.77	-00 38.0					
1985	09 12	00 08.79	-01 42.6	1.738	2.729	167.1	4.7	19.4
1985	09 22	00 01.90	-02 50.9					
1985	10 02	23 54.99	-03 55.8	1.763	2.751	168.6	4.1	19.5
1985	10 12	23 48.91	-04 51.2					
1985	10 22	23 44.36	-05 32.2	1.894	2.776	146.0	11.6	19.9
1985	11 01	23 41.84	-05 56.3					
1985	11 11	23 41.52	-06 03.0	2.111	2.802	125.2	16.8	20.2
1985	11 21	23 43.40	-05 53.1					
1985	12 01	23 47.36	-05 28.3	2.384	2.829	106.6	19.5	20.6
1985	12 11	23 53.14	-04 50.4					
1985	12 21	00 00.54	-04 01.4	2.683	2.857	90.0	20.1	20.9

1981 WE a,e,i = 2.60, 0.19, 13 Elements MPC 7449

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 02.53	+15 49.7	1.624	2.108	103.6	28.0	17.2
1985	07 24	00 10.03	+17 00.5					
1985	08 03	00 15.14	+17 51.3	1.437	2.116	118.3	25.0	16.9
1985	08 13	00 17.57	+18 17.8					
1985	08 23	00 17.15	+18 15.0	1.283	2.129	135.9	19.3	16.5
1985	09 02	00 14.03	+17 39.4					
1985	09 12	00 08.67	+16 29.7	1.189	2.146	155.6	11.2	16.2
1985	09 22	00 01.99	+14 49.1					
1985	10 02	23 55.22	+12 46.8	1.181	2.168	167.1	5.9	16.1
1985	10 12	23 49.55	+10 35.7					
1985	10 22	23 45.96	+08 30.0	1.270	2.193	150.8	12.8	16.4
1985	11 01	23 45.02	+06 40.9					
1985	11 11	23 46.85	+05 15.2	1.446	2.222	130.7	19.7	16.9
1985	11 21	23 51.35	+04 15.2					
1985	12 01	23 58.23	+03 40.5	1.681	2.254	112.8	23.8	17.3
1985	12 11	00 07.13	+03 28.6					
1985	12 21	00 17.75	+03 36.4	1.952	2.289	96.9	25.3	17.7

1980 EE2 a,e,i = 2.31, 0.10, 3 Elements MPC 9210

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 22.93	+06 25.3	2.116	2.548	103.2	22.9	18.7
1985	07 24	00 27.17	+07 02.2					
1985	08 03	00 29.17	+07 24.6	1.878	2.547	120.4	20.1	18.4
1985	08 13	00 28.71	+07 30.4					
1985	08 23	00 25.64	+07 17.8	1.681	2.543	140.4	14.7	18.0
1985	09 02	00 20.11	+06 46.3					
1985	09 12	00 12.51	+05 57.1	1.559	2.538	162.9	6.7	17.6
1985	09 22	00 03.59	+04 54.0					
1985	10 02	23 54.44	+03 43.9	1.538	2.531	171.0	3.5	17.4
1985	10 12	23 46.13	+02 34.4					
1985	10 22	23 39.61	+01 33.3	1.624	2.522	147.7	12.2	17.8
1985	11 01	23 35.54	+00 46.3					
1985	11 11	23 34.17	+00 16.4	1.798	2.512	126.1	18.6	18.2
1985	11 21	23 35.51	+00 04.7					
1985	12 01	23 39.38	+00 10.5	2.025	2.499	107.1	22.2	18.5
1985	12 11	23 45.47	+00 32.5					
1985	12 21	23 53.53	+01 08.8	2.276	2.485	90.4	23.3	18.8

1980 JE a,e,i = 2.56, 0.19, 14 Elements MPC 9028

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 34.80	-14 34.1	2.159	2.657	108.1	21.3	18.8
1985	07 24	00 38.02	-15 02.0					
1985	08 03	00 38.75	-15 43.4	1.977	2.695	125.5	17.9	18.5
1985	08 13	00 36.83	-16 35.7					
1985	08 23	00 32.22	-17 34.5	1.847	2.732	144.2	12.5	18.3
1985	09 02	00 25.21	-18 33.2					
1985	09 12	00 16.34	-19 24.3	1.801	2.766	159.4	7.3	18.1
1985	09 22	00 06.48	-20 00.6					
1985	10 02	23 56.70	-20 16.5	1.860	2.800	155.1	8.7	18.3
1985	10 12	23 47.99	-20 10.0					
1985	10 22	23 41.14	-19 41.6	2.020	2.831	137.0	13.9	18.6
1985	11 01	23 36.63	-18 54.0					
1985	11 11	23 34.59	-17 50.9	2.258	2.860	118.0	17.8	19.0
1985	11 21	23 34.97	-16 35.6					
1985	12 01	23 37.56	-15 11.0	2.543	2.888	100.3	19.6	19.3
1985	12 11	23 42.09	-13 39.6					
1985	12 21	23 48.28	-12 02.9	2.846	2.913	84.0	19.6	19.5

1978 PC a,e,i = 2.29, 0.24, 24 Elements MPC 7599

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 39.95	-30 09.8	2.027	2.577	111.3	21.6	18.6
1985	07 24	00 45.40	-31 32.2					
1985	08 03	00 48.15	-33 09.3	1.815	2.535	124.9	19.2	18.3
1985	08 13	00 47.76	-34 56.2					
1985	08 23	00 43.88	-36 45.1	1.657	2.491	136.6	16.2	18.0
1985	09 02	00 36.46	-38 24.3					
1985	09 12	00 25.90	-39 41.0	1.573	2.444	141.6	14.8	17.8
1985	09 22	00 13.22	-40 22.5					
1985	10 02	00 00.01	-40 20.6	1.573	2.394	135.8	16.9	17.8
1985	10 12	23 47.92	-39 33.6					
1985	10 22	23 38.38	-38 05.5	1.648	2.343	123.0	20.9	17.9
1985	11 01	23 32.19	-36 04.1					
1985	11 11	23 29.57	-33 38.1	1.778	2.290	108.2	24.2	18.1
1985	11 21	23 30.35	-30 54.7					
1985	12 01	23 34.14	-28 00.0	1.941	2.236	93.8	26.1	18.3
1985	12 11	23 40.49	-24 58.0					
1985	12 21	23 48.99	-21 51.2	2.116	2.181	80.5	26.4	18.4

4237 P-L a,e,i = 2.34, 0.07, 2 Elements MPC 9300

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 31.93	+04 11.9	2.058	2.478	102.0	23.6	20.6
1985	07 24	00 37.09	+04 54.6					
1985	08 03	00 40.04	+05 24.1	1.818	2.473	118.8	21.1	20.2
1985	08 13	00 40.51	+05 38.6					
1985	08 23	00 38.28	+05 36.6	1.617	2.466	138.3	15.8	19.9
1985	09 02	00 33.39	+05 17.8					
1985	09 12	00 26.14	+04 43.1	1.485	2.457	160.7	7.8	19.5
1985	09 22	00 17.23	+03 55.9					
1985	10 02	00 07.70	+03 02.2	1.450	2.448	174.3	2.3	19.2
1985	10 12	23 58.72	+02 09.1					
1985	10 22	23 51.39	+01 23.8	1.522	2.438	150.5	11.6	19.6
1985	11 01	23 46.48	+00 52.0					
1985	11 11	23 44.35	+00 36.4	1.683	2.427	128.6	18.6	20.0
1985	11 21	23 45.08	+00 38.1					
1985	12 01	23 48.48	+00 56.6	1.900	2.415	109.5	22.6	20.3
1985	12 11	23 54.27	+01 30.4					
1985	12 21	00 02.16	+02 17.8	2.144	2.403	92.8	24.1	20.6

(3097) 2011 P-L a,e,i = 2.93, 0.09, 7 Elements MPC 9023

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 28.31	+07 30.1	2.413	2.799	101.5	20.8	17.6
1985	07 24	00 32.73	+07 53.3					
1985	08 03	00 35.16	+08 02.0	2.183	2.816	118.8	18.4	17.4
1985	08 13	00 35.44	+07 54.6					
1985	08 23	00 33.50	+07 30.0	1.995	2.834	138.6	13.7	17.1
1985	09 02	00 29.47	+06 48.6					
1985	09 12	00 23.71	+05 52.0	1.882	2.851	160.7	6.7	16.8
1985	09 22	00 16.79	+04 44.1					
1985	10 02	00 09.53	+03 30.8	1.871	2.869	174.8	1.8	16.5
1985	10 12	00 02.76	+02 18.8					
1985	10 22	23 57.25	+01 14.6	1.972	2.887	151.8	9.4	17.0
1985	11 01	23 53.57	+00 23.2					
1985	11 11	23 51.99	-00 12.7	2.168	2.905	130.0	15.1	17.3
1985	11 21	23 52.62	-00 32.0					
1985	12 01	23 55.37	-00 35.1	2.429	2.924	110.5	18.4	17.7
1985	12 11	00 00.04	-00 23.4					
1985	12 21	00 06.43	+00 01.6	2.723	2.942	92.9	19.5	18.0

1973 DS a,e,i = 2.35, 0.15, 10 Elements MPC 9472

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 38.69	-08 27.5	2.083	2.546	105.2	22.7	18.6
1985	07 24	00 43.32	-08 49.4					
1985	08 03	00 45.59	-09 27.4	1.879	2.570	122.4	19.5	18.4
1985	08 13	00 45.25	-10 20.5					
1985	08 23	00 42.19	-11 26.1	1.722	2.593	141.7	14.0	18.1
1985	09 02	00 36.53	-12 38.8					
1985	09 12	00 28.69	-13 51.4	1.644	2.613	160.3	7.5	17.8
1985	09 22	00 19.42	-14 55.4					
1985	10 02	00 09.79	-15 43.0	1.668	2.632	160.3	7.3	17.9
1985	10 12	00 00.88	-16 09.1					
1985	10 22	23 53.63	-16 11.6	1.795	2.648	141.6	13.5	18.2
1985	11 01	23 48.67	-15 51.5					
1985	11 11	23 46.28	-15 11.8	2.004	2.662	121.8	18.4	18.6
1985	11 21	23 46.46	-14 15.6					
1985	12 01	23 49.04	-13 06.4	2.262	2.674	103.7	21.0	18.9
1985	12 11	23 53.74	-11 46.9					
1985	12 21	00 00.28	-10 19.3	2.541	2.683	87.4	21.5	19.2

1984 ES1 a,e,i = 2.25, 0.12, 3 Elements MPC 9068

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 37.43	+04 09.9	1.859	2.280	100.8	26.0	18.6
1985	07 24	00 43.16	+05 01.0					
1985	08 03	00 46.43	+05 38.0	1.657	2.306	117.2	23.0	18.3
1985	08 13	00 46.97	+05 59.3					
1985	08 23	00 44.54	+06 03.4	1.489	2.331	136.7	17.3	18.0
1985	09 02	00 39.22	+05 49.9					
1985	09 12	00 31.37	+05 19.9	1.386	2.355	159.3	8.7	17.7
1985	09 22	00 21.78	+04 36.8					
1985	10 02	00 11.63	+03 47.1	1.378	2.377	175.3	2.0	17.4
1985	10 12	00 02.18	+02 57.9					
1985	10 22	23 54.55	+02 16.4	1.477	2.399	151.5	11.4	17.9
1985	11 01	23 49.50	+01 48.1					
1985	11 11	23 47.30	+01 35.6	1.664	2.419	129.6	18.4	18.3
1985	11 21	23 47.98	+01 39.7					
1985	12 01	23 51.30	+01 59.8	1.909	2.437	110.5	22.3	18.8
1985	12 11	23 56.94	+02 34.2					
1985	12 21	00 04.59	+03 21.3	2.183	2.453	93.8	23.6	19.1

1983 BH a,e,i = 2.34, 0.20, 7 Elements MPC 7935

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		Mag.
1985	07 14	00 32.85	+11 54.7	2.207	2.566	-0.97	-6.0	18.7
1985	07 24	00 38.23	+13 05.2					
1985	08 03	00 41.60	+14 05.7	1.930	2.528	-1.16	-6.8	18.3
1985	08 13	00 42.65	+14 53.5					
1985	08 23	00 41.11	+15 25.5	1.687	2.488	-1.36	-8.1	17.9
1985	09 02	00 36.89	+15 38.4					
1985	09 12	00 30.12	+15 29.5	1.505	2.447	-1.54	-9.7	17.5
1985	09 22	00 21.36	+14 57.3					
1985	10 02	00 11.58	+14 04.2	1.415	2.403	-1.59	-10.8	17.1
1985	10 12	00 01.98	+12 55.6					
1985	10 22	23 53.81	+11 40.4	1.429	2.359	-1.48	-10.7	17.3
1985	11 01	23 48.05	+10 28.3					
1985	11 11	23 45.26	+09 27.4	1.534	2.313	-1.30	-9.6	17.6
1985	11 21	23 45.62	+08 42.9					
1985	12 01	23 49.01	+08 17.4	1.701	2.267	-1.13	-8.1	17.9
1985	12 11	23 55.16	+08 11.3					
1985	12 21	00 03.76	+08 23.4	1.897	2.220	-1.02	-6.8	18.1

1967 JP a,e,i = 3.12, 0.11, 4 Elements MPC 9416

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 39.73	+06 33.6	2.953	3.275	99.3	17.8	19.3
1985	07 24	00 42.64	+07 06.4					
1985	08 03	00 43.77	+07 28.7	2.705	3.294	117.1	15.9	19.1
1985	08 13	00 42.98	+07 39.4					
1985	08 23	00 40.26	+07 37.9	2.499	3.312	137.0	12.0	18.9
1985	09 02	00 35.71	+07 24.2					
1985	09 12	00 29.62	+06 59.1	2.370	3.329	158.9	6.3	18.6
1985	09 22	00 22.49	+06 24.7					
1985	10 02	00 14.98	+05 44.6	2.346	3.345	175.4	1.4	18.3
1985	10 12	00 07.76	+05 02.9					
1985	10 22	00 01.53	+04 24.0	2.439	3.361	153.8	7.5	18.7
1985	11 01	23 56.79	+03 52.1					
1985	11 11	23 53.87	+03 29.7	2.633	3.375	131.8	12.6	19.0
1985	11 21	23 52.91	+03 18.5					
1985	12 01	23 53.90	+03 19.2	2.899	3.389	111.6	15.7	19.3
1985	12 11	23 56.71	+03 31.4					
1985	12 21	00 01.19	+03 54.4	3.201	3.402	93.3	16.8	19.6

1965 AK1 a,e,i = 3.18, 0.11, 18 Elements MPC 6707

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1985	07 14	00 37.60	-12 16.5	3.088	3.518	106.7	16.1	18.0
1985	07 24	00 40.69	-13 04.7					
1985	08 03	00 42.05	-14 05.4	2.842	3.515	124.4	13.8	17.8
1985	08 13	00 41.59	-15 17.1					
1985	08 23	00 39.26	-16 36.7	2.654	3.511	142.5	10.1	17.6
1985	09 02	00 35.17	-17 59.5					
1985	09 12	00 29.60	-19 20.0	2.557	3.506	157.2	6.4	17.4
1985	09 22	00 23.01	-20 31.9					
1985	10 02	00 16.02	-21 29.5	2.567	3.500	155.0	6.9	17.4
1985	10 12	00 09.30	-22 08.9					
1985	10 22	00 03.48	-22 27.9	2.684	3.493	138.6	10.9	17.6
1985	11 01	23 59.08	-22 26.8					
1985	11 11	23 56.42	-22 07.1	2.885	3.485	119.9	14.3	17.8
1985	11 21	23 55.65	-21 31.3					
1985	12 01	23 56.77	-20 42.1	3.137	3.476	101.8	16.1	18.1
1985	12 11	23 59.68	-19 42.1					
1985	12 21	00 04.22	-18 33.5	3.410	3.466	85.0	16.4	18.2