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:

Minor Planet Center
Smithsonian Astrophysical Observatory
Cambridge, MA 02138, U.S.A.

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

ERRATA.

MPC	Line				
10549	-23	For	Borngen	read	Borngen
10624	1	Add	Residuals in seconds of arc		
10630	- 7	Add	Residuals in seconds of arc		
10656	-27	For	+01 00.0	read	-01 00.0

* * * * *

CORRECTED OBSERVATIONS.

The following observations correct those previously published.

Object		Date	UT	R. A. (1950)	Decl.	Reference	Mag.	Obs.
1975 JJ	*	1975 05	15.00432	17 36 56.65	-00 06 05.3	MPC 4208	16.0	095
1982 VV		1982 11	15.29514	03 11 43.77	+15 35 33.1	MPC 7571		688
1984 EK		1984 03	06.28958	11 00 46.26	+13 27 41.1	MPC 8640		688

* * * * *

IDENTIFICATION CHANGE.

Continuation to MPC 10588.

Object		Date	UT	R. A. (1950)	Decl.	Old desig.	Obs.
1950 DM1	*	1950 02	16.97892	09 49 33.17	+08 05 33.2	1950 DD	012

* * * * *

IDENTIFICATIONS.

The following list of identifications with numbered minor planets continues that on MPC 10457.

	Note		Note
1929 VD = (3409)	1	1979 QG10 = (718)	2

Note 1: identification by S. Nakano. 2: identification by L. D. Schmadel.

* * * * *

OBSERVATIONS OF COMETS.

Observations are published here for the following observatory codes:

006 Fabra Observatory, Barcelona. Observers J. M. Codina, M. Hernandez and M. Moreno. Measured by N. Torras. Reduced by J. Nunez and Torras.

024 Heidelberg-Konigstuhl. 0.4-m f/5 Bruce astrograph. Observers H. Mandel and U. Gorze. Measured by P. Kiefer, H. Mandel, R. Madejsky and J. G. Schiffer.
051 Cape. Observers J. Churms and G. Roberts.
061 Uzhgorod. Observer I. I. Goroshchak. Measured and reduced by T. Yu. Galas, S. I. Vorinka, S. A. Ignatovich and M. M. Osipenko. From Kiev Komet. Tsirk. No. 349.
083 Golosseevo-Kiev. Observer Y. N. Ivashchenko.
084 Pulkovo. Observers N. V. Narizhnaya, N. M. Bronnikova, I. I. Nikiforov and L. S. Koroleva. From Kiev Komet. Tsirk. No. 349.
085 Kiev. Observers E. M. Izhakevich and Yu. V. Sizonenko. From Kiev Komet. Tsirk. No. 349.
094 Crimea-Simeis. Observers L. S. Merezhina, S. V. Fokanov, O. M. Nagornyuk and A. L. Shcherbanovskij. From Kiev Komet. Tsirk. Nos. 349 and 351.
114 Engelhardt Observatory, Zelenchukskaya Station. Observer V. N. Kitkin. In part from Kiev Komet. Tsirk. No. 349.
119 Abastuman. Observer R. Y. Inasaridze.
168 Kourovskaya. Observers G. T. Kajzer, S. N. Timofeev, S. A. Pyatkes, E. V. Zvonareva, N. D. Kalinina, A. R. Tearo, T. I. Levitskaya, S. Timirshin, V. Gusev and S. Golovlin. Measured and reduced in part by N. Kalinina and T. Baskakova. In part from Kiev Komet. Tsirk. No. 349.
210 Alma-Ata. Observers V. D. D'yakonova and A. A. Semenikin. Reduced by L. G. Karachkina. From Kiev Komet. Tsirk. No. 349.
334 Tsingtao. Observers S. S. Sun and Y. J. Shao.
372 Geisei. Observer T. Seki. Communicated by S. Nakano.
392 JCPM Sapporo Station. 0.25-m reflector. Observers K. Watanabe and H. Kaneda. Measured by Watanabe. Communicated by S. Nakano.
397 Sapporo Science Center. 0.60-m reflector. Observer K. Watanabe.
415 Kambah. Observer D. Herald.
474 Mt. John University Observatory. 0.25-m f/7 astrograph and 0.6-m f/14 reflector. Observer A. C. Gilmore. Measured by P. M. Kilmartin.
483 Carter Observatory, Black Birch Station. Observer G. G. Douglass.
581 Sedgefield. 0.36-m Schmidt-Cassegrain. Observer J. Hers. Long. and Parallax 22.80, -354, +237 (see MPC 7759).
657 Victoria. Observers D. D. Balam and J. B. Tatum.
675 Palomar. 0.46-m Schmidt. Observers C. S. and E. M. Shoemaker (comet 1986b); S. Singer-Brewster, D. Schneeberger and E. Burr (comet 1986d).
688 Lowell Observatory, Anderson Mesa Station. Observers B. A. Skiff and S. J. Bus. Measured by E. Bowell.
691 University of Arizona, Kitt Peak. 0.91-m reflector, CCD in scanning mode. Observer T. Gehrels. Measured by J. V. Scotti.
707 Chamberlin Observatory field station. Observer J. Briggs. Measured by Briggs and E. Everhart.
801 Oak Ridge Observatory. Observers R. E. McCrosky, G. Schwartz and C.-Y. Shao.
805 Cerro el Roble. Observer C. Torres. Measurer M. Wischnjewsky.
984 Eastfield (West Chinnock). Observer H. B. Ridley. Measured by D. G. Buczynski.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N Obs.
		Periodic Comet Stephan-Oterma				
/1980 X	1980 12	04.64227	05 31 32.39	+21 29 44.0		210
/1980 X	1980 12	09.70110	05 31 46.83	+24 18 49.0		210
/1980 X	1980 12	09.78582	05 31 46.54	+24 21 38.8		210
/1980 X	1980 12	09.79346	05 31 46.75	+24 21 55.4		210
/1980 X	1980 12	10.91321	05 31 46.51	+24 59 25.1		210
/1980 X	1980 12	10.92023	05 31 46.70	+24 59 36.0		210

Periodic Comet Halley

/1982i	1985	11	15.96423	03	49	07.74	+21	46	49.9	984
/1982i	1986	02	28.68691	20	27	05.89	-16	12	06.2	474
/1982i	1986	02	28.69177	20	27	05.42	-16	12	13.5	474
/1982i	1986	03	04.70334	20	19	59.10	-17	41	37.1	474
/1982i	1986	03	04.71521	20	19	57.86	-17	41	53.2	474
/1982i	1986	03	07.73730	20	14	16.22	-18	56	41.6	474
/1982i	1986	03	14.36671	19	59	34.36	-22	13	45.3	805
/1982i	1986	03	14.36810	19	59	34.06	-22	13	48.5	805
/1982i	1986	03	14.36949	19	59	33.91	-22	13	51.0	805
/1982i	1986	03	14.37088	19	59	33.68	-22	13	53.7	805
/1982i	1986	03	14.37227	19	59	33.49	-22	13	55.9	805
/1982i	1986	03	14.37366	19	59	33.30	-22	13	59.0	805
/1982i	1986	03	14.37505	19	59	33.04	-22	14	01.4	805
/1982i	1986	03	14.37644	19	59	32.84	-22	14	05.3	805
/1982i	1986	03	15.37157	19	56	55.43	-22	48	50.6	805
/1982i	1986	03	15.37296	19	56	55.18	-22	48	54.0	805
/1982i	1986	03	15.37435	19	56	54.88	-22	48	57.0	805
/1982i	1986	03	15.37574	19	56	54.66	-22	49	00.6	805
/1982i	1986	03	15.37713	19	56	54.49	-22	49	02.5	805
/1982i	1986	03	15.37852	19	56	54.23	-22	49	06.3	805
/1982i	1986	03	15.37990	19	56	54.01	-22	49	09.1	805
/1982i	1986	03	15.38129	19	56	53.96	-22	49	10.3	805
/1982i	1986	03	16.31254	19	54	18.02	-23	23	19.9	805
/1982i	1986	03	16.31393	19	54	17.72	-23	23	23.5	805
/1982i	1986	03	16.31532	19	54	17.44	-23	23	27.3	805
/1982i	1986	03	16.31671	19	54	17.20	-23	23	29.5	805
/1982i	1986	03	16.31948	19	54	16.75	-23	23	35.8	805
/1982i	1986	03	17.32711	19	51	17.94	-24	02	24.1	805
/1982i	1986	03	17.32850	19	51	17.59	-24	02	27.0	805
/1982i	1986	03	17.32989	19	51	17.26	-24	02	30.9	805
/1982i	1986	03	17.33128	19	51	17.11	-24	02	34.2	805
/1982i	1986	03	17.33267	19	51	16.83	-24	02	37.3	805
/1982i	1986	03	17.33406	19	51	16.54	-24	02	39.5	805
/1982i	1986	03	17.33545	19	51	16.32	-24	02	43.3	805
/1982i	1986	03	17.33683	19	51	16.08	-24	02	47.4	805
/1982i	1986	03	18.29171	19	48	15.22	-24	41	26.4	805
/1982i	1986	03	18.29310	19	48	14.92	-24	41	29.4	805
/1982i	1986	03	18.29448	19	48	14.60	-24	41	32.1	805
/1982i	1986	03	18.29587	19	48	14.32	-24	41	35.9	805
/1982i	1986	03	18.29726	19	48	13.98	-24	41	40.4	805
/1982i	1986	03	18.29865	19	48	13.74	-24	41	44.0	805
/1982i	1986	03	18.30004	19	48	13.47	-24	41	46.2	805
/1982i	1986	03	18.30143	19	48	13.26	-24	41	50.6	805
/1982i	1986	03	19.28546	19	44	53.86	-25	23	46.5	805
/1982i	1986	03	19.28685	19	44	53.46	-25	23	50.3	805
/1982i	1986	03	19.28823	19	44	53.23	-25	23	54.3	805
/1982i	1986	03	19.28962	19	44	52.91	-25	23	56.9	805
/1982i	1986	03	19.29101	19	44	52.72	-25	24	01.2	805
/1982i	1986	03	19.29240	19	44	52.35	-25	24	05.0	805
/1982i	1986	03	19.29379	19	44	52.08	-25	24	08.9	805
/1982i	1986	03	19.29518	19	44	51.75	-25	24	11.7	805
/1982i	1986	03	20.30490	19	41	11.87	-26	09	39.5	805
/1982i	1986	03	20.30629	19	41	11.57	-26	09	43.0	805
/1982i	1986	03	20.30768	19	41	11.24	-26	09	47.3	805
/1982i	1986	03	20.30907	19	41	10.96	-26	09	51.3	805
/1982i	1986	03	20.31046	19	41	10.64	-26	09	54.9	805
/1982i	1986	03	20.31185	19	41	10.24	-26	09	59.3	805
/1982i	1986	03	20.31323	19	41	10.00	-26	10	02.9	805

/1982i	1986	03	20.31462	19	41	09.71	-26	10	06.5	805
/1982i	1986	03	21.07257	19	38	13.11	-26	46	02.4	581
/1982i	1986	03	21.27087	19	37	25.01	-26	55	34.1	805
/1982i	1986	03	21.27226	19	37	24.63	-26	55	37.7	805
/1982i	1986	03	21.27365	19	37	24.41	-26	55	42.9	805
/1982i	1986	03	21.27504	19	37	24.02	-26	55	45.3	805
/1982i	1986	03	21.27643	19	37	23.66	-26	55	50.6	805
/1982i	1986	03	21.27782	19	37	23.37	-26	55	54.4	805
/1982i	1986	03	21.27921	19	37	22.92	-26	55	58.9	805
/1982i	1986	03	22.07257	19	34	03.02	-27	35	36.7	581
/1982i	1986	03	22.08889	19	33	58.68	-27	36	27.8	581
/1982i	1986	03	22.09045	19	33	58.08	-27	36	34.2	581
/1982i	1986	03	22.18299	19	33	33.74	-27	41	31.0	006
/1982i	1986	03	22.18924	19	33	32.01	-27	41	49.6	006
/1982i	1986	03	22.19410	19	33	30.87	-27	42	04.5	006
/1982i	1986	03	22.19896	19	33	29.63	-27	42	17.7	006
/1982i	1986	03	26.10799	19	12	57.38	-31	27	22.6	581
/1982i	1986	03	26.11667	19	12	54.37	-31	27	57.2	581
/1982i	1986	03	26.13738	19	12	46.13	-31	29	17.7	051
/1982i	1986	03	26.15683	19	12	38.73	-31	30	32.7	051
/1982i	1986	03	26.19583	19	12	24.19	-31	33	19.2	006
/1982i	1986	03	26.19965	19	12	22.41	-31	33	32.5	006
/1982i	1986	03	26.20382	19	12	20.98	-31	33	51.9	006
/1982i	1986	03	29.11563	18	50	46.91	-34	57	03.2	581
/1982i	1986	03	29.12743	18	50	40.62	-34	57	57.5	581
/1982i	1986	03	31.99340	18	21	23.14	-38	45	28.8	581
/1982i	1986	03	31.99757	18	21	20.16	-38	45	47.2	581
/1982i	1986	04	01.11933	18	19	51.00	-38	55	57.9	051
/1982i	1986	04	01.12564	18	19	46.30	-38	56	29.3	051
/1982i	1986	04	02.57338	18	00	29.22	-40	57	20.9	415
/1982i	1986	04	02.58245	18	00	20.99	-40	58	06.4	415
/1982i	1986	04	03.52436	17	45	53.46	-42	15	57.1	415
/1982i	1986	04	03.52518	17	45	52.58	-42	16	01.7	415
/1982i	1986	04	04.02326	17	37	33.19	-42	56	23.6	581
/1982i	1986	04	04.64120	17	26	34.67	-43	44	35.5	415
/1982i	1986	04	04.69276	17	25	36.70	-43	48	38.3	415
/1982i	1986	04	05.55402	17	08	56.25	-44	51	04.5	415
/1982i	1986	04	05.55472	17	08	55.27	-44	51	07.6	415
/1982i	1986	04	06.13160	16	56	52.76	-45	29	15.7	581
/1982i	1986	04	08.52498	16	00	23.96	-47	15	05.2	415
/1982i	1986	04	08.52660	16	00	21.08	-47	15	06.9	415
/1982i	1986	04	09.39741	15	37	48.05	-47	26	12.1	415
/1982i	1986	04	09.39973	15	37	44.52	-47	26	08.5	415
/1982i	1986	04	10.38883	15	11	34.65	-47	17	37.3	415
/1982i	1986	04	10.39193	15	11	29.47	-47	17	33.8	415
/1982i	1986	04	10.86910	14	58	52.02	-47	05	14.6	581
/1982i	1986	04	11.92535	14	31	22.12	-46	18	55.7	581
/1982i	1986	04	11.94410	14	30	53.04	-46	17	53.4	581
/1982i	1986	04	12.79207	14	09	44.92	-45	22	51.2	051
/1982i	1986	04	12.79624	14	09	38.83	-45	22	33.0	051
/1982i	1986	04	12.79826	14	09	36.14	-45	22	25.5	581
/1982i	1986	04	12.98160	14	05	08.54	-45	08	49.6	581
/1982i	1986	04	14.06979	13	40	03.31	-43	35	57.6	581
/1982i	1986	04	14.52221	13	30	20.10	-42	52	31.3	415
/1982i	1986	04	15.48403	13	10	58.94	-41	13	11.6	483
/1982i	1986	04	15.48819	13	10	54.17	-41	12	44.8	483
/1982i	1986	04	16.78090	12	47	55.28	-38	49	30.8	581
/1982i	1986	04	18.79395	12	18	24.43	-35	00	54.4	051
/1982i	1986	04	18.79844	12	18	20.98	-35	00	25.6	051

/1982i	1986	04	20.73831	11	56	02.17	-31	29	28.4			051
/1982i	1986	04	20.74311	11	55	59.16	-31	28	58.8			051
/1982i	1986	04	20.81632	11	55	14.08	-31	21	23.2			581
/1982i	1986	04	21.79247	11	45	56.44	-29	42	27.9			114
/1982i	1986	04	21.80081	11	45	51.81	-29	41	42.2			114
/1982i	1986	04	21.81374	11	45	44.63	-29	40	23.6			114
/1982i	1986	04	21.82464	11	45	38.88	-29	39	16.8			114
/1982i	1986	04	21.91632	11	44	49.65	-29	29	59.5			581
/1982i	1986	04	23.77159	11	30	07.14	-26	37	26.1			051
/1982i	1986	04	23.77645	11	30	05.08	-26	37	01.5			051
/1982i	1986	04	25.80209	11	17	13.85	-23	51	14.5			114
/1982i	1986	04	25.80627	11	17	12.37	-23	50	51.3			114
/1982i	1986	04	25.81014	11	17	11.22	-23	50	34.5			114
/1982i	1986	04	25.86771	11	16	51.94	-23	46	10.6			006
/1982i	1986	04	25.87257	11	16	50.29	-23	45	49.3			006
/1982i	1986	04	25.87674	11	16	48.87	-23	45	30.2			006
/1982i	1986	04	25.88160	11	16	47.19	-23	45	08.0			006
/1982i	1986	04	25.88576	11	16	45.73	-23	44	47.1			006
/1982i	1986	04	25.89063	11	16	44.19	-23	44	24.7			006
/1982i	1986	04	26.74132	11	12	11.64	-22	41	27.0			581
/1982i	1986	04	26.76493	11	12	04.52	-22	39	47.6			581
/1982i	1986	04	27.80866	11	07	02.45	-21	28	14.1			114
/1982i	1986	04	27.81268	11	07	01.26	-21	27	59.1			114
/1982i	1986	04	27.86771	11	06	46.02	-21	24	02.7			581
/1982i	1986	04	27.87118	11	06	45.07	-21	23	48.8			581
/1982i	1986	04	29.84483	10	58	41.41	-19	22	31.4			083
/1982i	1986	04	30.38165	10	56	46.12	-18	52	04.4			415
/1982i	1986	04	30.42413	10	56	37.12	-18	49	44.6			415
/1982i	1986	04	30.50660	10	56	19.65	-18	45	27.6			392
/1982i	1986	04	30.50787	10	56	19.31	-18	45	21.5			392
/1982i	1986	04	30.72865	10	55	34.68	-18	33	09.0			051
/1982i	1986	04	30.73698	10	55	32.96	-18	32	43.0			051
/1982i	1986	04	30.74774	10	55	30.71	-18	32	07.9			051
/1982i	1986	04	30.78611	10	55	22.56	-18	30	16.6			119
/1982i	1986	04	30.80998	10	55	17.78	-18	28	59.5			114
/1982i	1986	04	30.81510	10	55	16.71	-18	28	44.1			119
/1982i	1986	05	01.17222	10	54	06.50	-18	09	51.8			707
/1982i	1986	05	01.45619	10	53	12.52	-17	55	02.1		1	415
/1982i	1986	05	01.55160	10	52	54.42	-17	50	19.6	4 T		334
/1982i	1986	05	01.76962	10	52	14.01	-17	39	20.2			168
/1982i	1986	05	01.77118	10	52	13.79	-17	39	16.9			168
/1982i	1986	05	01.77315	10	52	13.42	-17	39	10.3			168
/1982i	1986	05	02.49043	10	50	07.51	-17	04	10.6	4 T		334
/1982i	1986	05	02.76759	10	49	20.62	-16	51	05.9			168
/1982i	1986	05	02.78974	10	49	16.90	-16	50	06.8			168
/1982i	1986	05	02.79146	10	49	16.72	-16	50	02.3			168
/1982i	1986	05	03.49593	10	47	24.59	-16	17	56.9	4 T		334
/1982i	1986	05	03.58412	10	47	10.84	-16	14	04.9	4 T		334
/1982i	1986	05	03.86076	10	46	29.16	-16	01	57.6			006
/1982i	1986	05	03.86771	10	46	28.30	-16	01	40.6			006
/1982i	1986	05	03.87396	10	46	27.15	-16	01	23.9			006
/1982i	1986	05	04.52990	10	44	52.45	-15	33	38.1	5 T		334
/1982i	1986	05	04.61253	10	44	40.86	-15	30	15.8	5 T		334
/1982i	1986	05	04.61601	10	44	40.48	-15	30	07.8	5 T		334
/1982i	1986	05	04.75006	10	44	22.49	-15	24	29.2			051
/1982i	1986	05	04.75631	10	44	21.62	-15	24	14.4			051
/1982i	1986	05	04.85174	10	44	08.40	-15	20	32.1			006
/1982i	1986	05	04.86424	10	44	06.79	-15	20	01.6			006
/1982i	1986	05	04.87604	10	44	05.19	-15	19	33.2			006

/1982i	1986	05	04.88854	10	44	03.39	-15	19	02.9		006
/1982i	1986	05	05.53262	10	42	39.28	-14	53	39.5	5 T	334
/1982i	1986	05	05.55276	10	42	36.61	-14	52	51.1	5 T	334
/1982i	1986	05	05.85278	10	41	59.24	-14	41	24.3		006
/1982i	1986	05	05.87014	10	41	57.11	-14	40	44.3		006
/1982i	1986	05	05.87639	10	41	56.38	-14	40	30.1		006
/1982i	1986	05	05.88247	10	41	55.52	-14	40	17.8		006
/1982i	1986	05	05.90590	10	41	52.59	-14	39	24.9		006
/1982i	1986	05	05.91771	10	41	51.25	-14	38	56.9		006
/1982i	1986	05	06.59090	10	40	31.21	-14	14	09.9	5 T	334
/1982i	1986	05	06.60479	10	40	29.60	-14	13	40.7	5 T	334
/1982i	1986	05	06.78156	10	40	09.78	-14	07	21.9		119
/1982i	1986	05	08.27847	10	37	32.58	-13	16	45.6		657
/1982i	1986	05	09.74091	10	35	19.18	-12	31	51.3		168
/1982i	1986	05	09.74227	10	35	19.09	-12	31	49.8		168
/1982i	1986	05	09.74549	10	35	18.83	-12	31	46.2		168
/1982i	1986	05	11.73299	10	32	45.16	-11	37	06.0		168
/1982i	1986	05	11.74392	10	32	44.38	-11	36	50.0		168
/1982i	1986	05	11.75804	10	32	43.27	-11	36	28.9		168
/1982i	1986	05	11.78851	10	32	41.04	-11	35	41.0		168
/1982i	1986	05	11.79138	10	32	41.09	-11	35	38.0		168
/1982i	1986	05	12.50706	10	31	52.59	-11	17	34.4		392
/1982i	1986	05	12.52205	10	31	51.53	-11	17	11.9		392
/1982i	1986	05	13.48337	10	30	52.22	-10	54	14.7		397
/1982i	1986	05	13.49503	10	30	51.50	-10	54	01.0		397

Comet IRAS-Araki-Alcock (1983 VII)

/1983 VII	1983	05	05.90452	18	44	04.9	+55	51	42		024
/1983 VII	1983	05	05.95870	18	43	40.7	+55	58	05		024
/1983 VII	1983	05	06.02466	18	43	08.9	+56	05	57		024

Periodic Comet Crommelin

/1984 IV	1984	02	06.62818	23	51	04.53	+03	35	40.3		168
/1984 IV	1984	02	07.61366	23	55	49.13	+03	25	12.5		168
/1984 IV	1984	02	07.61711	23	55	50.14	+03	25	08.4		168
/1984 IV	1984	02	07.62060	23	55	51.17	+03	25	10.1		168
/1984 IV	1984	02	07.62407	23	55	52.11	+03	25	01.5		168
/1984 IV	1984	02	08.61360	00	00	41.10	+03	13	53.8		168
/1984 IV	1984	02	10.60422	00	10	31.57	+02	49	31.9		168
/1984 IV	1984	02	10.61186	00	10	33.93	+02	49	31.1		168
/1984 IV	1984	02	13.60587	00	25	46.51	+02	07	21.6		168
/1984 IV	1984	02	18.60735	00	52	11.18	+00	42	28.6		168

Comet Levy-Rudenko (1984 XXIII)

/1984 XXIII	1985	03	12.85770	08	19	04.41	+37	29	36.5		168
/1984 XXIII	1985	03	12.88061	08	19	03.77	+37	28	16.3		168

Periodic Comet Giacobini-Zinner

/1984e	1985	08	14.03819	03	04	17.25	+55	49	16.3		061
/1984e	1985	08	15.95625	03	20	14.92	+54	32	49.0		061
/1984e	1985	08	15.95903	03	20	16.26	+54	32	42.7		061
/1984e	1985	08	15.96181	03	20	17.61	+54	32	34.7		061
/1984e	1985	08	17.04861	03	29	04.32	+53	44	34.5		061
/1984e	1985	08	17.05139	03	29	05.88	+53	44	26.4		061
/1984e	1985	08	17.05347	03	29	06.63	+53	44	22.5		061
/1984e	1985	08	17.97847	03	36	25.62	+53	00	39.1		061
/1984e	1985	08	17.98056	03	36	26.54	+53	00	33.9		061
/1984e	1985	08	25.05486	04	26	57.27	+46	10	46.2		061
/1984e	1985	08	25.05747	04	26	58.21	+46	10	35.3		061

/1984e	1985 08 25.05938	04 26 59.13	+46 10 28.5			061
/1984e	1985 08 26.05903	04 33 19.98	+45 02 41.8			061
/1984e	1985 08 26.06076	04 33 20.54	+45 02 35.9			061
/1984e	1985 08 26.06215	04 33 21.17	+45 02 31.0			061
/1984e	1985 08 29.00948	04 50 57.81	+41 31 03.2			084
/1984e	1985 08 30.01196	04 56 35.19	+40 15 35.1			084
/1984e	1985 08 30.01819	04 56 37.44	+40 15 05.8			084
/1984e	1985 08 30.02615	04 56 39.83	+40 14 31.1			084
/1984e	1985 08 30.95314	05 01 42.82	+39 03 12.9			084
/1984e	1985 09 15.01065	06 06 01.87	+18 15 23.0			084
/1984e	1985 09 16.08576	06 09 35.13	+16 46 40.4			061
/1984e	1985 09 16.09097	06 09 36.05	+16 46 13.0			061
/1984e	1985 09 19.09240	06 18 55.62	+12 42 59.8			085
/1984e	1985 09 19.10289	06 18 57.65	+12 42 13.0			061
/1984e	1985 09 19.10486	06 18 57.85	+12 42 05.9			061
/1984e	1985 09 19.10729	06 18 58.36	+12 41 55.2			061
/1984e	1985 09 19.10938	06 18 58.69	+12 41 43.6			061
/1984e	1985 09 19.11134	06 18 58.97	+12 41 35.0			061
/1984e	1985 09 19.11331	06 18 59.29	+12 41 22.0			061
/1984e	1985 09 19.11528	06 18 59.69	+12 41 14.6			061
/1984e	1985 09 19.11713	06 19 00.05	+12 41 05.5			061
/1984e	1985 09 20.08831	06 21 50.65	+11 24 14.1			061
/1984e	1985 09 20.09464	06 21 51.84	+11 23 39.8			085
/1984e	1985 09 20.09470	06 21 51.83	+11 23 38.9			085
/1984e	1985 09 21.07014	06 24 38.15	+10 07 22.2			061
/1984e	1985 09 21.07193	06 24 38.37	+10 07 15.4			061
/1984e	1985 09 21.07384	06 24 38.80	+10 07 08.9			061
/1984e	1985 09 21.08125	06 24 40.13	+10 06 32.5			061
/1984e	1985 09 21.08299	06 24 40.19	+10 06 24.9			061
/1984e	1985 09 21.08490	06 24 40.43	+10 06 14.3			061
/1984e	1986 01 09.53537	06 16 58.79	-33 54 04.0			474
/1984e	1986 01 09.54579	06 16 58.24	-33 53 53.5			474
/1984e	1986 02 08.57603	06 05 37.46	-24 04 28.3			474
/1984e	1986 02 08.59409	06 05 37.60	-24 04 06.5			474
	Comet Shoemaker (1984f)					
/1984f	1985 02 26.09910	16 07 52.09	-24 30 16.0			114
/1984f	1985 03 23.04061	15 43 44.72	-30 06 44.5			114
/1984f	1986 01 09.56245	07 55 09.82	-62 25 06.5			474
/1984f	1986 01 09.56888	07 55 07.80	-62 25 04.4			474
/1984f	1986 02 05.59061	06 01 10.38	-54 14 00.1			474
/1984f	1986 02 05.59605	06 01 09.58	-54 13 51.8			474
	Comet Hartley (1984v)					
/1984v	1986 02 08.53066	03 15 20.38	-79 51 20.8			474
/1984v	1986 02 08.55253	03 15 19.15	-79 51 15.0			474
	Periodic Comet Daniel					
/1985j	1986 03 07.50066	12 27 22.18	+31 37 01.0			691
/1985j	1986 03 07.51392	12 27 21.37	+31 37 05.2			691
/1985j	1986 03 07.52053	12 27 20.92	+31 37 07.6			691
	Comet Hartley-Good (1985l)					
/1985l	1985 11 10.71944	18 32 47.98	+09 19 00.7			094
/1985l	1985 11 11.73681	18 29 49.24	+09 47 25.1			094
/1985l	1985 11 14.71771	18 21 25.11	+11 04 02.5			094
/1985l	1985 11 15.76875	18 18 32.80	+11 28 49.5			984
/1985l	1985 11 20.69688	18 05 29.84	+13 09 30.2			094
/1985l	1985 11 21.67882	18 02 56.72	+13 26 41.3			094

/1985l	1985	12	09.76458	17	17	08.72	+15	27	46.3	984
/1985l	1986	03	02.44931	12	57	35.76	-21	39	19.3	707
			Comet Thiele (1985m)							
/1985m	1985	11	18.89271	22	21	26.30	+26	57	37.5	094
/1985m	1985	12	19.69410	21	00	57.77	+11	13	26.7	094
/1985m	1985	12	19.70608	21	00	57.32	+11	13	20.3	094
			Periodic Comet Ciffreo							
/1985p	1985	11	15.02743	04	29	30.83	+25	20	25.3	094
/1985p	1985	11	22.03611	04	24	50.01	+27	13	45.7	094
/1985p	1985	12	22.02795	04	05	11.25	+33	16	27.5	094
/1985p	1986	03	01.21181	05	13	36.60	+36	54	55.5	707
/1985p	1986	03	15.11698	05	40	31.13	+36	44	47.8	18.7T 691
/1985p	1986	03	15.13355	05	40	33.23	+36	44	50.8	691
/1985p	1986	03	15.14477	05	40	34.50	+36	44	51.1	691
			Periodic Comet Wirtanen							
/1985q	1986	03	31.87916	03	22	08.34	+19	58	31.7	984
/1985q	1986	04	01.86944	03	26	20.42	+20	23	08.3	984
			Periodic Comet Shoemaker 3							
/1986a	1986	03	16.26319	09	31	35.19	+24	47	47.8	691
/1986a	1986	04	15.26806	09	51	42.21	+22	06	43.9	691
/1986a	1986	04	15.27083	09	51	42.36	+22	06	42.5	691
/1986a	1986	04	15.29039	09	51	43.44	+22	06	33.9	691
			Comet Shoemaker (1986b)							
/1986b	1986	04	03.32813	10	55	25.87	+28	59	13.1	675
/1986b	1986	04	04.18472	10	53	20.97	+29	02	56.7	675
/1986b	1986	04	04.22048	10	53	15.69	+29	03	06.5	675
/1986b	1986	04	05.25833	10	50	46.13	+29	07	15.6	675
/1986b	1986	04	15.31684	10	28	36.53	+29	28	07.4	691
/1986b	1986	05	10.06166	09	51	07.67	+28	38	02.9	801
			Periodic Comet Singer Brewster							
/1986d	1986	05	03.33681	14	50	10.59	-06	34	02.2	15 T 675
/1986d	1986	05	03.36250	14	50	10.09	-06	33	49.5	675
/1986d	1986	05	05.58939	14	49	09.04	-06	11	17.6	16 T 474
/1986d	1986	05	05.60414	14	49	08.47	-06	11	06.5	474
/1986d	1986	05	06.48128	14	48	44.81	-06	02	30.5	16 T 474
/1986d	1986	05	06.50275	14	48	44.13	-06	02	17.7	474
/1986d	1986	05	06.54479	14	48	42.98	-06	02	05.8	16 T 372
/1986d	1986	05	06.57292	14	48	42.26	-06	01	52.7	372
/1986d	1986	05	08.30486	14	47	54.57	-05	45	12.8	657
/1986d	1986	05	08.52307	14	47	48.71	-05	42	59.8	16 T 474
/1986d	1986	05	08.54280	14	47	48.34	-05	42	48.4	474
/1986d	1986	05	09.19961	14	47	30.17	-05	36	51.4	801
/1986d	1986	05	10.22230	14	47	02.41	-05	27	25.9	2 801
/1986d	1986	05	13.26042	14	45	42.54	-05	00	44.8	16.8T 688
/1986d	1986	05	13.36528	14	45	39.80	-04	59	51.5	688
/1986d	1986	05	14.65903	14	45	07.18	-04	48	59.6	19 N 372
			Comet Machholz (1986e)							
/1986e	1986	05	13.43889	00	34	05.29	+39	12	12.7	688
/1986e	1986	05	13.45486	00	33	58.40	+39	12	48.3	688
/1986e	1986	05	13.72101	00	32	06.39	+39	22	35.4	11.0T 392
/1986e	1986	05	13.74022	00	31	57.87	+39	23	18.1	392
/1986e	1986	05	14.74931	00	24	40.02	+40	00	08.3	10.7T 372

/1986e	1986	05	14.77622	00	24	28.21	+40	01	08.6		372
/1986e	1986	05	15.32639	00	20	21.12	+40	20	49.9	3	801
/1986e	1986	05	15.42819	00	19	35.24	+40	24	28.3		657
/1986e	1986	05	15.46493	00	19	18.33	+40	25	49.7	4	657
/1986e	1986	05	16.42889	00	11	49.43	+40	59	49.2	14 T	657
/1986e	1986	05	16.43681	00	11	45.52	+41	00	12.8	4	688
/1986e	1986	05	16.44722	00	11	39.92	+41	00	36.6	4	688
/1986e	1986	05	17.71771	00	01	17.86	+41	44	19.2	11.0T	392
/1986e	1986	05	17.72431	00	01	14.09	+41	44	26.0		392
/1986e	1986	05	17.76910	00	00	52.00	+41	46	00.3	10.5T	372
/1986e	1986	05	17.77222	00	00	50.48	+41	46	09.1		372

Note 1: poor star distribution. 2: weak image. 3: trailed image; difficult to measure. 4: very diffuse and uncondensed.

* * * * *

OBSERVATIONS MADE AT CAUSSOLS.

Plates taken with the 0.9-m Schmidt in association with the International Near-Earth Asteroid Survey (INAS), measured by R. Chemin. Contact: J.-L. Heudier, CERGA, Avenue Copernic, F-06130 Grasse, France.

Object		Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
1986 JL	*	1986 05	11.93125	14 35 13.41	+09 10 13.6	18.0	1	010
1986 JL		1986 05	11.95208	14 35 11.95	+09 10 00.5			010
1986 JL		1986 05	11.95903	14 35 10.89	+09 09 52.7			010
1986 JL		1986 05	11.96597	14 35 10.36	+09 09 46.9			010

Note 1: discoverer C. Pollas.

OBSERVATIONS MADE AT TAUTENBURG BY W. HOGNER AND F. BORNGEN.

Plates taken with the 1.34-m (134/200/400 cm) Schmidt. Assistance from F. Ludwig. Reductions by F. Borngen. Contact: S. Marx, Karl Schwarzschild Observatorium, DDR-6901 Tautenburg, Democratic Republic of Germany.

Object		Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
2804		1967 04	11.00556	12 42 48.40	+13 11 57.7		033
2804		1967 04	11.03333	12 42 46.98	+13 12 02.3		033
2804		1967 04	11.86528	12 42 08.34	+13 13 54.0	15.5V	033
2804		1967 04	11.90694	12 42 06.59	+13 13 58.5		033
2804		1967 04	15.85417	12 39 07.17	+13 20 58.9		033
2804		1967 04	15.91667	12 39 04.74	+13 21 04.6		033
1964 FK	*	1964 03	19.03542	12 44 27.59	+13 41 27.2	16.4R	033
1964 FK		1964 03	19.08750	12 44 24.66	+13 41 27.0		033
1967 GX	*	1967 04	11.86528	12 31 53.84	+13 44 53.6	16.0V	033
1967 GX		1967 04	11.90694	12 31 52.33	+13 45 04.8		033
1967 GY	*	1967 04	11.86528	12 35 06.92	+11 47 22.8	16.3V	033
1967 GY		1967 04	11.90694	12 35 05.14	+11 47 20.4		033
1967 GZ	*	1967 04	11.86528	12 35 12.93	+12 39 47.2	15.7V	033
1967 GZ		1967 04	11.90694	12 35 10.71	+12 39 47.2		033
1967 GA1	*	1967 04	11.86528	12 35 33.96	+12 57 55.4	16.2V	033
1967 GA1		1967 04	11.90694	12 35 32.41	+12 58 03.9		033
1967 GB1	*	1967 04	11.86528	12 35 49.41	+11 41 01.6	15.9V	033
1967 GB1		1967 04	11.90694	12 35 47.54	+11 41 09.5		033
1967 GC1	*	1967 04	11.86528	12 35 55.34	+14 09 49.4	17.0V	033
1967 GC1		1967 04	11.90694	12 35 53.40	+14 10 06.9		033
1967 GD1	*	1967 04	11.86528	12 39 47.10	+12 37 18.6	16.1V	033
1967 GD1		1967 04	11.90694	12 39 45.20	+12 37 34.9		033
1967 GE1	*	1967 04	11.86528	12 40 55.63	+12 31 34.3	16.1V	033
1967 GE1		1967 04	11.90694	12 40 53.86	+12 31 38.6		033
1967 GF1		1967 04	11.00556	12 42 08.63	+13 57 03.3		033
1967 GF1		1967 04	11.03333	12 42 07.21	+13 57 15.3		033

1967	GF1	*	1967	04	11.86528	12	41	29.23	+14 03 10.9	15.1V	033
1967	GF1		1967	04	11.90694	12	41	27.45	+14 03 27.6		033
1967	GF1		1967	04	15.85417	12	38	31.64	+14 29 00.0		033
1967	GF1		1967	04	15.91667	12	38	29.02	+14 29 20.5		033
1967	GG1	*	1967	04	11.86528	12	41	43.18	+11 29 24.2	15.8V	033
1967	GG1		1967	04	11.90694	12	41	41.96	+11 29 34.5		033
1967	GH1	*	1967	04	11.86528	12	42	56.98	+12 37 35.0	16.1V	033
1967	GH1		1967	04	11.90694	12	42	55.10	+12 37 42.0		033
1967	GJ1	*	1967	04	11.86528	12	44	11.95	+12 16 24.8	16.2V	033
1967	GJ1		1967	04	11.90694	12	44	10.51	+12 16 43.6		033
1967	GK1	*	1967	04	15.85417	12	44	18.83	+12 21 58.8	15.2R	033
1967	GK1		1967	04	15.91667	12	44	16.25	+12 21 03.8		033
1986	DA		1986	04	12.95208	11	39	44.95	+22 21 09.6	14.0	033
1986	DA		1986	04	12.97083	11	39	48.56	+22 20 23.3		033

OBSERVATIONS MADE AT KLET BY A. MRKOS AND Z. VAVROVA.

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.
56	1986 04	01.99644	12 54 37.36	-05 46 17.8		046
56	1986 04	02.01056	12 54 36.88	-05 46 10.8		046
56	1986 04	02.94400	12 53 50.66	-05 38 06.6		046
56	1986 04	02.95810	12 53 49.95	-05 37 59.6		046
56	1986 04	09.93653	12 47 59.47	-04 37 00.4		046
56	1986 04	09.94764	12 47 58.94	-04 36 54.9		046
161	1986 04	01.99644	12 51 19.73	-03 52 50.9		046
161	1986 04	02.01056	12 51 19.03	-03 52 49.7		046
161	1986 04	02.94400	12 50 20.02	-03 50 21.9		046
161	1986 04	02.95810	12 50 19.10	-03 50 20.0		046
161	1986 04	09.93653	12 42 56.19	-03 32 04.6		046
161	1986 04	09.94764	12 42 55.56	-03 32 04.0		046
162	1986 04	02.90998	11 58 59.50	+05 58 53.8		046
162	1986 04	02.92410	11 58 58.82	+05 58 57.0		046
184	1986 03	17.88148	11 14 36.75	+04 16 23.2		046
184	1986 03	17.89288	11 14 36.23	+04 16 26.0		046
184	1986 04	01.87016	11 04 36.75	+05 14 45.0		046
184	1986 04	01.88428	11 04 36.30	+05 14 48.4		046
184	1986 04	02.84505	11 04 04.05	+05 17 54.9		046
184	1986 04	02.85917	11 04 03.56	+05 17 57.6		046
184	1986 04	08.86031	11 01 05.07	+05 35 10.1		046
184	1986 04	08.87438	11 01 04.63	+05 35 12.1		046
200	1986 03	17.91076	11 47 39.22	-05 02 06.2		046
200	1986 03	17.92292	11 47 38.54	-05 02 03.6		046
200	1986 04	01.90772	11 34 56.60	-04 01 29.9		046
200	1986 04	01.92531	11 34 55.71	-04 01 25.6		046
291	1986 04	14.97037	13 43 30.04	-08 06 23.6		046
291	1986 04	14.98455	13 43 29.13	-08 06 18.8		046
497	1986 03	17.85255	10 40 06.11	+11 17 58.1		046
497	1986 03	17.86424	10 40 05.58	+11 17 59.2		046
637	1986 04	01.99644	12 57 01.84	-06 15 16.4		046
637	1986 04	02.01056	12 57 01.39	-06 15 13.2		046
664	1986 04	01.87016	10 58 51.20	+05 49 29.1		046
664	1986 04	01.88428	10 58 50.77	+05 49 33.9		046
664	1986 04	02.84505	10 58 19.50	+05 55 24.0		046
664	1986 04	02.85917	10 58 19.00	+05 55 28.9		046
664	1986 04	08.86031	10 55 24.71	+06 29 27.8		046
664	1986 04	08.87438	10 55 24.35	+06 29 31.4		046
885	1986 04	14.90226	13 23 04.42	-04 47 46.8		046

885	1986	04	14.91638	13	23	03.65	-04	47	40.3		046
905	1986	04	01.99644	12	55	56.14	-02	07	39.2		046
905	1986	04	02.01056	12	55	55.21	-02	07	35.6		046
905	1986	04	02.94400	12	54	56.52	-02	03	15.6		046
905	1986	04	02.95810	12	54	55.46	-02	03	12.6		046
905	1986	04	09.93653	12	47	40.32	-01	32	02.7		046
905	1986	04	09.94764	12	47	39.75	-01	32	01.1		046
954	1986	03	17.88148	11	26	58.76	+03	49	59.5		046
954	1986	03	17.89288	11	26	58.42	+03	50	04.2		046
1044	1986	04	14.97037	13	54	49.01	-07	39	33.7		046
1044	1986	04	14.98455	13	54	48.25	-07	39	31.5		046
1044	1986	04	16.00372	13	53	52.46	-07	35	48.3		046
1044	1986	04	16.01646	13	53	51.69	-07	35	44.8		046
1231	1986	03	17.91076	11	45	10.70	-04	04	14.9		046
1231	1986	03	17.92292	11	45	10.04	-04	04	03.6		046
1231	1986	04	01.90772	11	30	33.97	-03	43	41.4		046
1231	1986	04	01.92531	11	30	32.80	-03	43	38.6		046
1307	1986	04	01.96362	13	05	38.22	-11	31	01.3		046
1307	1986	04	01.97774	13	05	37.30	-11	30	55.5		046
1469	1986	04	14.90226	13	30	34.49	-04	18	24.9		046
1469	1986	04	14.91638	13	30	33.80	-04	18	19.0		046
1469	1986	04	15.97465	13	29	50.13	-04	10	33.5		046
1469	1986	04	15.98600	13	29	49.69	-04	10	29.3		046
1486	1986	03	17.88148	11	26	52.35	+03	31	40.6		046
1486	1986	03	17.89288	11	26	51.29	+03	31	46.9		046
1618	1986	04	14.90226	13	29	28.33	-04	06	23.7		046
1618	1986	04	14.91638	13	29	27.50	-04	06	19.3		046
1618	1986	04	15.97465	13	28	36.29	-04	01	29.7		046
1618	1986	04	15.98600	13	28	35.71	-04	01	27.1		046
1671	1986	04	01.99644	12	55	03.89	-04	04	46.6		046
1671	1986	04	02.01056	12	55	03.24	-04	04	41.2		046
1671	1986	04	09.93653	12	48	14.26	-03	12	28.3		046
1671	1986	04	09.94764	12	48	13.43	-03	12	24.0		046
1802	1986	04	01.99644	12	59	59.19	-02	55	32.5		046
1802	1986	04	02.01056	12	59	58.50	-02	55	27.6		046
1850	1986	04	14.93617	13	50	24.04	-05	39	36.3		046
1850	1986	04	14.95035	13	50	23.03	-05	39	33.0		046
1850	1986	04	16.00372	13	49	20.37	-05	35	38.6		046
1850	1986	04	16.01646	13	49	19.60	-05	35	35.1		046
2039	1986	04	14.97037	13	50	11.33	-07	30	58.3	16.8	046
2039	1986	04	14.98455	13	50	10.65	-07	30	57.0		046
2039	1986	04	16.00372	13	49	23.86	-07	26	43.3		046
2039	1986	04	16.01646	13	49	23.13	-07	26	40.1		046
2324	1986	04	01.87016	11	02	10.84	+05	50	09.6		046
2324	1986	04	01.88428	11	02	10.38	+05	50	17.7		046
2324	1986	04	08.86031	10	58	22.29	+06	13	29.2		046
2324	1986	04	08.87438	10	58	21.85	+06	13	31.7		046
2403	1986	04	01.96362	13	01	22.84	-12	06	38.1		046
2403	1986	04	01.97774	13	01	22.01	-12	06	39.4		046
2425	1986	04	14.93617	13	51	05.76	-03	34	40.5		046
2425	1986	04	14.95035	13	51	04.98	-03	34	40.5		046
2542	1986	04	14.93617	13	45	32.36	-04	21	57.0		046
2542	1986	04	14.95035	13	45	31.88	-04	21	53.5		046
2575	1986	03	17.91076	11	43	48.12	-03	49	19.4		046
2575	1986	03	17.92292	11	43	47.48	-03	49	16.0		046
2575	1986	04	01.90772	11	28	39.25	-02	46	26.1		046
2575	1986	04	01.92531	11	28	38.20	-02	46	21.8		046
2602	1986	04	02.90998	12	03	55.36	+04	38	47.2		046
2602	1986	04	02.92410	12	03	54.63	+04	38	53.2		046

2687		1986	04	14.93617	13	43	07.06	-03	12	59.8	046
2687		1986	04	14.95035	13	43	06.16	-03	12	58.7	046
2939		1986	04	01.87016	10	56	55.96	+05	55	56.0	046
2939		1986	04	01.88428	10	56	55.45	+05	55	56.8	046
2939		1986	04	02.84505	10	56	16.66	+05	57	38.1	046
2939		1986	04	02.85917	10	56	16.05	+05	57	40.3	046
2945		1986	04	14.97037	13	43	34.59	-06	40	53.9	046
2945		1986	04	14.98455	13	43	33.99	-06	40	51.3	046
3028		1986	04	01.99644	12	57	57.44	-04	58	29.6	046
3028		1986	04	02.01056	12	57	56.96	-04	58	24.0	046
3028		1986	04	02.94400	12	57	17.68	-04	51	12.0	046
3028		1986	04	02.95810	12	57	16.93	-04	51	05.1	046
3155		1986	04	02.90998	12	06	10.11	+04	31	36.1	16.5 046
3155		1986	04	02.92410	12	06	09.70	+04	31	41.5	046
1968	FJ	1986	04	01.99644	12	55	17.40	-01	42	33.2	16.4 046
1968	FJ	1986	04	02.01056	12	55	16.75	-01	42	27.9	046
1968	FJ	1986	04	09.93653	12	48	35.84	-00	44	31.6	046
1975	EA6	1986	04	01.99644	12	56	03.57	-02	14	14.4	046
1975	EA6	1986	04	02.01056	12	56	02.84	-02	14	09.9	046
1975	EA6	1986	04	09.93653	12	48	55.17	-01	28	30.2	046
1975	EA6	1986	04	09.94764	12	48	54.69	-01	28	27.3	046
1984	HA1	1986	04	15.04381	18	06	46.88	+03	33	33.7	15.8 046
1984	HA1	1986	04	15.05799	18	06	46.93	+03	33	37.2	046
1984	HA1	1986	04	16.03791	18	06	51.32	+03	39	01.2	046
1984	HA1	1986	04	16.05214	18	06	51.38	+03	39	04.9	046
1984	SV	1986	03	17.88148	11	16	17.69	+03	04	52.5	046
1984	SV	1986	03	17.89288	11	16	16.76	+03	04	53.7	046
1984	SV	1986	04	01.87016	11	03	14.50	+03	47	13.7	046
1984	SV	1986	04	01.88428	11	03	13.81	+03	47	14.9	046
1986	CV	1986	02	15.01898	10	01	26.70	+10	29	45.2	046
1986	DA	1986	04	01.84499	11	04	05.25	+28	36	56.3	046
1986	DA	1986	04	01.85216	11	04	06.31	+28	36	45.2	046
1986	DA	1986	04	02.82149	11	06	59.80	+28	10	36.3	046
1986	DA	1986	04	02.82863	11	07	01.00	+28	10	24.8	046
1986	DA	1986	04	08.83485	11	25	57.93	+24	59	27.5	046
1986	DA	1986	04	08.83931	11	25	58.67	+24	59	17.1	046
1986	DA	1986	04	14.87535	11	46	21.36	+21	00	35.6	046
1986	DA	1986	04	14.87975	11	46	22.20	+21	00	23.8	046
1986	EB	1986	03	31.85847	09	46	51.47	+10	00	14.6	046
1986	EB	1986	03	31.86704	09	46	49.68	+09	59	52.0	046
1986	EB	1986	04	01.82606	09	44	00.38	+09	21	56.8	046
1986	EB	1986	04	01.83185	09	43	59.36	+09	21	43.0	046
1986	EB	1986	04	02.80448	09	41	17.18	+08	44	04.3	046
1986	EB	1986	04	02.81015	09	41	16.13	+08	43	50.7	046
1986	EZ	1986	04	01.87016	10	59	02.71	+06	01	48.5	16.8 046
1986	EZ	1986	04	01.88428	10	59	01.99	+06	01	46.7	046
1986	EZ	1986	04	02.84505	10	58	18.46	+06	00	19.1	046
1986	EZ	1986	04	02.85917	10	58	17.76	+06	00	19.0	046
1986	EZ	1986	04	08.86031	10	54	18.12	+05	49	05.2	046
1986	EZ	1986	04	08.87438	10	54	17.54	+05	49	03.5	046
1986	EM1	1986	04	01.99644	12	50	00.96	-03	37	18.3	16.7 046
1986	EM1	1986	04	02.01056	12	50	00.51	-03	37	15.2	046
1986	EM1	1986	04	02.94400	12	49	00.48	-03	33	00.0	046
1986	EM1	1986	04	02.95810	12	48	59.59	-03	32	55.8	046
1986	EM1	1986	04	09.93653	12	41	31.16	-03	01	26.4	046
1986	EM1	1986	04	09.94764	12	41	30.52	-03	01	23.8	046
1986	EZ1	1986	04	01.87016	11	06	24.48	+02	40	14.2	16.7 046
1986	EZ1	1986	04	01.88428	11	06	23.96	+02	40	18.7	046
1986	EZ1	1986	04	02.84505	11	05	50.40	+02	44	07.3	046

1986 EZ1		1986 04 02.85917	11 05 49.79	+02 44 11.4							046
1986 EZ1		1986 04 08.86031	11 02 55.09	+03 05 00.1							046
1986 EZ1		1986 04 08.87438	11 02 54.73	+03 05 02.9							046
1986 FD	*	1986 03 17.85255	10 33 45.30	+11 00 43.7				17.0			046
1986 FD		1986 03 17.86424	10 33 44.91	+11 00 43.2							046
1986 FE	*	1986 03 17.85255	10 35 13.26	+09 20 25.7				17.2			046
1986 FE		1986 03 17.86424	10 35 12.70	+09 20 32.3							046
1986 GA1	*	1986 04 01.87016	11 08 32.43	+02 02 37.2				16.9		1	046
1986 GA1		1986 04 01.88428	11 08 31.84	+02 02 42.8						1	046
1986 GB1	*	1986 04 01.99644	12 51 58.72	-05 02 41.3				16.9			046
1986 GB1		1986 04 02.01056	12 51 58.41	-05 02 33.5							046
1986 GC1	*	1986 04 02.90998	12 04 52.94	+04 58 13.2				16.6			046
1986 GC1		1986 04 02.92410	12 04 52.39	+04 58 15.8							046
1986 GD1	*	1986 04 14.90226	13 24 07.96	-04 44 09.9				16.6			046
1986 GD1		1986 04 14.91638	13 24 07.32	-04 43 59.9							046
1986 GD1		1986 04 15.97465	13 23 18.05	-04 33 23.1							046
1986 GD1		1986 04 15.98600	13 23 17.38	-04 33 18.0							046
1986 GE1	*	1986 04 14.90226	13 26 19.52	-03 57 18.8				16.7			046
1986 GE1		1986 04 14.91638	13 26 18.71	-03 57 12.9							046
1986 GF1	*	1986 04 14.90226	13 27 13.65	-03 06 19.2				16.6			046
1986 GF1		1986 04 14.91638	13 27 12.72	-03 06 14.8							046
1986 GF1		1986 04 15.97465	13 26 10.92	-03 02 07.9							046
1986 GF1		1986 04 15.98600	13 26 10.43	-03 02 04.0							046
1986 GG1	*	1986 04 14.90226	13 28 34.25	-02 17 05.9							046
1986 GG1		1986 04 14.91638	13 28 33.70	-02 16 57.7							046
1986 GH1	*	1986 04 14.90226	13 36 50.35	-03 54 46.8							046
1986 GH1		1986 04 14.91638	13 36 49.32	-03 54 51.0							046
1986 GJ1	*	1986 04 14.97037	13 50 06.90	-07 05 33.6							046
1986 GJ1		1986 04 14.98455	13 50 06.08	-07 05 30.9							046
1986 GJ1		1986 04 16.00372	13 49 20.68	-07 01 09.1							046
1986 GJ1		1986 04 16.01646	13 49 19.91	-07 01 01.5							046
1986 GK1	*	1986 04 14.97037	13 55 58.69	-08 10 00.9				16.8			046
1986 GK1		1986 04 14.98455	13 55 57.84	-08 09 58.4							046
1986 GL1	*	1986 04 15.97465	13 27 41.93	-02 02 33.7				16.7			046
1986 GL1		1986 04 15.98600	13 27 41.50	-02 02 27.8							046

Note 1: at edge of plate.

OBSERVATIONS MADE AT POZNAN BY E. WNUK, B. MORKOWSKA, E. KRYSZKIEWICZ, W. NASKRECKI, S. SWIERKOWSKA AND K. KURZYNSKA.

ORWO plates taken with the Zeiss 0.20-m f/15 refractor. Reductions by dependences, SAO reference stars. Assistance from M. Malicka, J. Szczesny, P. Dybczynski, D. Matz, and W. Kozurno. From Acta Astron. 35, 163, 1985.

Contact: E. Kryszkiewicz, Astronomical Observatory, PL-60286 Poznan, Poland.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
1	1972 01 20.92782	09 45 24.37	+27 28 43.7		047
1	1972 02 03.86647	09 34 03.98	+29 20 51.3		047
1	1972 02 03.86959	09 34 03.77	+29 20 53.1		047
1	1972 03 13.79413	09 04 17.38	+31 25 35.4		047
1	1972 03 13.79726	09 04 17.34	+31 25 34.8		047
1	1972 03 17.77530	09 03 07.00	+31 19 32.2		047
1	1972 03 17.77843	09 03 06.94	+31 19 31.4		047
1	1975 11 26.90363	04 31 55.05	+18 05 52.3		047
1	1975 11 26.90705	04 31 54.81	+18 05 52.5		047
1	1975 12 06.90547	04 21 46.16	+18 20 13.6		047
1	1975 12 06.90895	04 21 45.91	+18 20 13.9		047
1	1975 12 06.91207	04 21 45.74	+18 20 14.2		047
1	1975 12 08.88082	04 19 47.47	+18 23 16.9		047
1	1975 12 08.88394	04 19 47.26	+18 23 16.9		047
1	1975 12 08.90709	04 19 45.79	+18 23 18.8		047

1		1975	12	08.91264	04	19	45.48	+18 23 20.0	047
1		1975	12	10.86344	04	17	50.23	+18 26 25.1	047
1		1975	12	10.86657	04	17	50.02	+18 26 25.4	047
1		1975	12	10.86900	04	17	49.87	+18 26 25.9	047
1		1975	12	10.88937	04	17	48.67	+18 26 28.0	047
1		1975	12	11.87183	04	16	51.46	+18 28 03.4	047
1		1975	12	11.87489	04	16	51.28	+18 28 04.1	047
1		1975	12	11.88340	04	16	50.74	+18 28 05.2	047
1		1975	12	11.88699	04	16	50.53	+18 28 05.6	047
1		1976	02	03.77511	03	58	11.11	+20 58 47.9	047
1		1976	02	03.77859	03	58	11.20	+20 58 48.7	047
1		1976	03	04.79514	04	20	23.93	+23 11 16.5	047
1		1976	03	04.79931	04	20	24.16	+23 11 18.4	047
1		1976	03	04.80695	04	20	24.53	+23 11 19.9	047
1		1977	05	26.87641	12	11	32.32	+11 40 48.7	047
1		1977	05	27.89414	12	11	46.76	+11 32 58.4	047
3		1976	04	26.83735	10	22	49.99	+10 48 32.3	047
3		1976	04	26.84430	10	22	50.08	+10 48 33.6	047
3		1976	04	26.85160	10	22	50.17	+10 48 34.5	047
3		1976	04	27.83237	10	23	05.28	+10 50 27.7	047
3		1976	04	27.83584	10	23	05.28	+10 50 28.7	047
3		1976	04	28.84279	10	23	22.08	+10 52 15.6	047
3		1976	04	28.85425	10	23	22.18	+10 52 15.3	047
3		1976	04	29.86746	10	23	40.29	+10 53 51.9	047
3		1976	04	29.87126	10	23	40.37	+10 53 52.0	047
3		1976	04	29.87855	10	23	40.47	+10 53 53.1	047
3		1976	04	30.86570	10	23	59.45	+10 55 17.4	047
3		1976	04	30.86882	10	23	59.51	+10 55 17.9	047
3		1976	04	30.87334	10	23	59.61	+10 55 18.2	047
3		1976	05	05.84100	10	25	52.58	+10 59 58.6	047
3		1976	05	05.85524	10	25	52.88	+10 59 57.8	047
3		1976	05	07.87362	10	26	46.92	+11 00 46.2	047
3		1976	05	07.88022	10	26	47.07	+11 00 46.8	047
3		1976	05	07.88959	10	26	47.36	+11 00 46.8	047
4		1966	02	26.85160	05	54	44.60	+24 29 39.6	047
4		1966	02	27.81416	05	55	06.71	+24 31 28.0	047
4		1966	02	27.81762	05	55	06.81	+24 31 28.6	047
4		1966	03	11.83136	06	01	51.74	+24 51 49.9	047
4		1966	03	11.83494	06	01	51.87	+24 51 49.9	047
4		1966	03	24.81561	06	13	07.51	+25 08 18.2	047
4		1966	03	24.81908	06	13	07.67	+25 08 18.4	047
4		1966	03	25.85729	06	14	11.12	+25 09 19.4	047
4		1966	03	25.86146	06	14	11.38	+25 09 19.0	047
4		1966	03	26.80310	06	15	10.03	+25 10 10.9	047
4		1966	03	26.80657	06	15	10.25	+25 10 11.3	047
4		1974	03	28.92430	13	01	04.86	+07 15 16.6	047
4		1974	03	28.92778	13	01	04.68	+07 15 18.4	047
4		1974	06	10.91805	12	35	14.77	+05 49 02.4	047
4		1974	06	10.92222	12	35	14.99	+05 49 00.2	047
4		1974	06	11.90486	12	35	49.68	+05 40 37.3	047
4		1974	06	11.90833	12	35	49.79	+05 40 35.1	047
4		1977	03	15.85265	06	50	49.79	+26 03 00.8	047
4		1977	03	15.85647	06	50	49.88	+26 03 00.6	047
4		1977	03	15.86064	06	50	50.04	+26 03 00.5	047
4		1977	03	16.83390	06	51	22.09	+26 03 18.3	047
4		1977	03	16.83772	06	51	22.21	+26 03 18.0	047
4		1977	03	16.84259	06	51	22.40	+26 03 18.1	047
4		1977	03	17.79922	06	51	55.42	+26 03 32.7	047
4		1977	03	17.80651	06	51	55.68	+26 03 32.9	047

4		1977	03	18.81017	06	52	31.82	+26	03	44.0	047
4		1977	03	18.81468	06	52	31.99	+26	03	43.9	047
4		1977	03	18.81920	06	52	32.16	+26	03	44.1	047
4		1977	03	30.78741	07	01	41.40	+26	01	17.3	047
4		1977	03	30.79158	07	01	41.62	+26	01	17.4	047
4		1977	04	02.79556	07	04	30.37	+25	59	17.4	047
4		1977	04	02.79903	07	04	30.58	+25	59	17.7	047

OBSERVATIONS MADE AT BRORFELDE BY K. AUGUSTESEN, P. JENSEN AND H. J. FOGH OLSEN.

Observations made in part in association with the International Near-Earth Asteroid Survey (INAS). Contact: P. Jensen, Copenhagen University Observatory, Brorfelde, DK-4340 Tollose, Denmark.

Object		Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
206		1986	04 10.92891	12 42 13.80	+00 14 45.6		054
251		1986	04 08.93377	12 18 30.24	+06 38 17.4		054
448		1986	04 08.93377	12 26 04.59	+06 51 48.6		054
448		1986	04 10.90183	12 24 34.73	+06 55 21.2		054
593		1986	05 01.91861	13 19 06.46	+14 10 22.4		054
595		1986	04 10.92891	12 49 27.20	-00 10 39.0		054
905		1986	04 03.00553	12 54 53.08	-02 02 54.2		054
905		1986	04 04.98412	12 52 49.10	-01 53 55.0		054
905		1986	04 05.00079	12 52 48.06	-01 53 49.5		054
905		1986	04 10.92891	12 46 39.43	-01 27 48.3		054
1689		1986	04 08.93377	12 20 09.77	+07 13 10.7		054
1689		1986	04 10.90183	12 18 33.95	+07 22 47.9		054
1731		1986	04 10.92891	12 46 57.88	+00 46 58.2		054
1802		1986	04 04.98412	12 57 38.27	-02 38 54.4		054
2787		1986	04 02.94716	12 31 53.20	+02 53 40.4		054
2787		1986	04 04.93343	12 30 12.76	+02 57 51.8		054
2787		1986	04 05.90773	12 29 23.94	+02 59 47.4		054
3422		1986	05 01.91861	13 13 43.25	+14 38 18.3		054
1968	FJ	1986	04 03.00553	12 54 26.51	-01 34 55.8		054
1968	FJ	1986	04 04.98412	12 52 46.24	-01 20 12.4		054
1968	FJ	1986	04 05.00079	12 52 45.36	-01 20 05.0		054
1968	FJ	1986	04 10.92891	12 47 46.92	-00 37 33.5		054
1980	DE1	1986	04 10.92891	12 48 19.14	-00 08 17.2		054
1986	EL1	1986	04 05.00079	12 51 14.90	-00 57 48.0		054
1986	EL1	1986	04 10.92891	12 46 14.99	-00 33 47.5		054
1986	GB	1986	04 05.90773	12 24 41.93	+07 12 40.1		054
1986	GB	1986	04 08.93377	12 21 45.38	+07 29 03.2		054
1986	GB	1986	04 10.90183	12 19 53.60	+07 38 46.2		054
1986	GC	1986	04 04.94002	12 28 03.34	+07 16 39.5		054
1986	GC	1986	04 08.93377	12 24 11.97	+07 24 39.1		054
1986	GC	1986	04 10.90183	12 22 21.51	+07 27 24.9		054
1986	GD	1986	04 04.94002	12 30 02.26	+05 49 20.8		054
1986	GD	1986	04 08.93377	12 26 19.52	+05 48 30.4		054
1986	GD	1986	04 10.90183	12 24 35.44	+05 47 02.5		054
1986	GG	1986	04 10.92891	12 42 22.13	+00 15 16.3		054
1986	GH	1986	04 10.92891	12 44 45.24	+00 59 44.0		054
1986	GN	1986	05 01.91861	13 05 31.68	+16 27 22.4	17.0	054
1986	GN	1986	05 02.92718	13 04 52.00	+16 28 05.5		054
1986	GN	1986	05 03.90935	13 04 14.68	+16 28 35.3		054
1986	GM1 *	1986	04 02.94716	12 29 28.26	+02 44 35.8	17.0	054
1986	GM1	1986	04 04.93343	12 27 48.75	+02 41 04.0	17.5	054
1986	JA *	1986	05 02.00600	15 32 26.65	+02 56 42.9	16.8	054
1986	JA	1986	05 03.98516	15 31 01.02	+03 14 57.9		054
1986	JA	1986	05 13.96745	15 23 07.78	+04 31 35.8	16.6	054
1986	JB	1986	05 13.96225	15 33 36.94	+01 03 40.2	16.5	054

1986	JB		1986 05 13.97613	15	33	36.20	+01	03	49.8	054
1986	JM	*	1986 05 01.91861	13	19	47.49	+16	15	35.6	16.2 054
1986	JM		1986 05 02.92718	13	19	07.98	+16	14	19.5	054
1986	JP	*	1986 05 13.96745	15	28	25.38	+01	10	15.4	16.8 054
1986	JQ	*	1986 05 13.99164	16	12	58.59	-06	56	03.8	16.5 054
1986	JQ		1986 05 14.00553	16	12	57.82	-06	55	48.2	054

OBSERVATIONS MADE AT THE BULGARIAN NATIONAL OBSERVATORY BY V. G. IVANOVA, V. G. SHKODROV AND A. S. GEORGIEVA.

Observations made in association with the International Near-Earth Asteroid Survey (INAS). Contact: V. Shkodrov, Department of Astronomy, Bulgarian Academy of Sciences, 72 Lenin Boulevard, BG-1184 Sofia, Bulgaria.

Object	Date	UT	R. A. (1950)			Decl.			Obs.
44	1985 05	18.85972	13	31	21.82	-03	17	28.7	071
44	1985 05	18.91234	13	31	20.19	-03	17	24.3	071
171	1985 08	21.90784	21	44	37.68	-16	13	21.9	071
171	1985 08	21.92914	21	44	36.63	-16	13	27.1	071
171	1985 08	24.91685	21	42	24.96	-16	25	19.1	071
171	1985 08	24.93634	21	42	23.94	-16	25	24.6	071
200	1986 03	09.05436	11	55	23.24	-05	32	48.7	071
200	1986 03	09.07679	11	55	22.08	-05	32	43.2	071
200	1986 03	09.93887	11	54	38.10	-05	30	03.6	071
200	1986 03	09.97498	11	54	36.21	-05	29	55.5	071
200	1986 03	14.90848	11	50	18.31	-05	13	12.4	071
200	1986 03	14.94460	11	50	16.36	-05	13	04.9	071
229	1986 02	15.03419	08	26	21.98	+22	00	34.4	071
243	1985 08	19.95764	21	59	35.00	-12	09	56.4	071
243	1985 08	19.97778	21	59	33.95	-12	10	01.4	071
243	1985 08	19.99654	21	59	33.04	-12	10	05.2	071
243	1985 08	20.92552	21	58	47.28	-12	13	49.8	071
243	1985 08	21.90785	21	57	58.62	-12	17	48.6	071
243	1985 08	21.92914	21	57	57.79	-12	17	52.5	071
252	1985 07	17.90483	18	54	43.35	-07	54	43.6	071
252	1985 07	17.96331	18	54	40.75	-07	54	50.2	071
403	1985 07	17.84817	18	39	32.08	-14	20	58.0	071
403	1985 07	17.88667	18	39	30.01	-14	20	59.2	071
479	1985 06	13.94216	16	51	23.04	-11	26	51.1	071
479	1985 06	13.95785	16	51	21.48	-11	26	50.4	071
479	1985 06	14.94469	16	50	29.89	-11	26	56.4	071
489	1985 07	17.82906	17	29	20.86	-05	55	08.8	071
489	1985 07	17.86935	17	29	19.60	-05	55	12.0	071
513	1985 05	18.85972	13	39	46.41	-03	12	54.6	071
513	1985 05	18.91234	13	39	44.84	-03	12	43.5	071
676	1985 05	18.94781	15	10	13.62	+01	25	43.7	071
676	1985 05	19.00697	15	10	10.96	+01	25	52.8	071
873	1985 05	18.85972	13	28	56.66	-00	54	46.0	071
873	1985 05	18.91234	13	28	55.25	-00	54	41.0	071
973	1986 03	14.88886	11	36	21.33	-00	10	01.0	071
973	1986 03	14.92678	11	36	19.35	-00	09	58.7	071
1231	1986 03	09.05436	11	53	56.48	-04	10	34.7	071
1231	1986 03	09.07679	11	53	54.70	-04	10	34.9	071
1231	1986 03	09.93887	11	53	05.88	-04	10	15.8	071
1231	1986 03	09.97498	11	53	03.67	-04	10	15.2	071
1231	1986 03	14.90848	11	48	12.29	-04	07	06.9	071
1231	1986 03	14.94460	11	48	10.01	-04	07	05.1	071
1462	1985 08	19.95764	21	51	46.96	-14	15	08.4	071
1462	1985 08	19.97778	21	51	45.99	-14	15	13.6	071
1462	1985 08	19.99653	21	51	45.15	-14	15	18.2	071
1462	1985 08	20.92552	21	51	02.63	-14	18	49.5	071

1462		1985	08	21.90784	21	50	17.72	-14	22	31.9	071
1462		1985	08	24.91685	21	48	01.61	-14	33	38.7	071
1462		1985	08	24.93634	21	48	00.64	-14	33	42.9	071
1524		1986	03	14.88886	11	37	10.95	+00	11	55.6	071
1524		1986	03	14.92678	11	37	09.12	+00	12	00.8	071
1555		1985	08	19.95764	21	47	38.09	-11	38	03.0	071
1555		1985	08	19.97778	21	47	36.96	-11	38	03.2	071
1555		1985	08	19.99653	21	47	35.74	-11	38	01.0	071
1555		1985	08	20.92552	21	46	44.45	-11	37	53.3	071
1606		1985	06	13.94216	16	38	55.51	-09	30	22.8	071
1606		1985	06	13.95785	16	38	53.78	-09	30	17.3	071
1697		1986	03	14.94460	11	55	24.32	-04	06	48.4	071
2159		1986	03	14.88886	11	46	52.30	+00	57	47.1	071
2159		1986	03	14.92678	11	46	50.24	+00	57	57.8	071
2188		1985	08	19.95764	22	03	47.99	-12	30	30.5	071
2188		1985	08	19.97778	22	03	47.03	-12	30	40.0	071
2188		1985	08	19.99653	22	03	46.06	-12	30	43.5	071
2188		1985	08	20.92552	22	03	02.73	-12	35	42.7	071
2311		1985	05	18.85972	13	39	41.53	-02	44	12.9	071
2311		1985	05	18.91234	13	39	39.99	-02	44	06.2	071
2481		1985	08	24.91685	21	49	10.81	-16	52	21.2	071
2481		1985	08	24.93634	21	49	09.86	-16	52	23.4	071
2553		1985	06	13.87199	16	29	38.50	-16	06	27.0	071
2553		1985	06	13.90999	16	29	36.59	-16	06	26.4	071
2553		1985	06	14.88456	16	28	52.52	-16	06	10.9	071
2553		1985	06	14.92221	16	28	49.92	-16	06	10.4	071
2575		1986	03	09.05436	11	52	50.37	-04	18	52.3	071
2575		1986	03	09.07679	11	52	49.20	-04	18	48.9	071
2575		1986	03	09.93887	11	51	58.94	-04	16	23.9	071
2575		1986	03	09.97498	11	51	56.32	-04	16	15.8	071
2575		1986	03	14.90848	11	46	56.69	-04	00	23.7	071
2575		1986	03	14.94460	11	46	54.31	-04	00	15.2	071
2697		1986	03	14.88886	11	37	31.63	-02	48	58.8	071
2697		1986	03	14.92678	11	37	30.05	-02	48	49.6	071
3147		1986	03	14.88886	11	44	00.65	-02	28	52.2	071
3147		1986	03	14.92678	11	43	58.70	-02	28	37.9	071
1979	XG	1985	08	19.95764	22	01	18.26	-14	58	44.7	071
1979	XG	1985	08	19.97778	22	01	17.15	-14	58	54.4	071
1979	XG	1985	08	19.99653	22	01	15.86	-14	59	02.9	071
1979	XG	1985	08	20.92552	22	00	24.11	-15	06	19.6	071
1979	XG	1985	08	21.90784	21	59	28.87	-15	13	57.8	071
1979	XG	1985	08	21.92914	21	59	27.57	-15	14	07.3	071
1980	RZ2	1985	08	19.95764	21	49	17.10	-13	06	09.1	071
1980	RZ2	1985	08	19.97778	21	49	16.00	-13	06	10.1	071
1980	RZ2	1985	08	20.92552	21	48	25.63	-13	07	11.9	071
1980	RZ2	1985	08	21.90785	21	47	33.47	-13	08	12.9	071
1980	RZ2	1985	08	21.92914	21	47	32.61	-13	08	13.8	071
1980	RZ2	1985	08	24.91685	21	44	55.13	-13	11	16.1	071
1980	RZ2	1985	08	24.93634	21	44	54.05	-13	11	18.2	071
1981	WB1	1986	03	09.05436	11	44	49.11	-01	57	41.4	071
1981	WB1	1986	03	09.07679	11	44	47.93	-01	57	29.6	071
1981	WB1	1986	03	09.93192	11	44	01.31	-01	50	05.8	071
1981	WB1	1986	03	09.97498	11	43	58.89	-01	49	43.6	071
1981	WB1	1986	03	14.88886	11	39	25.50	-01	05	54.0	071
1981	WB1	1986	03	14.92678	11	39	23.28	-01	05	34.2	071
1982	FN	1986	03	14.88886	11	29	53.77	-00	47	06.6	071
1982	FN	1986	03	14.92678	11	29	52.22	-00	46	15.3	071
1984	QO	1986	03	09.05436	11	54	28.52	-04	48	09.1	071
1984	QO	1986	03	09.07679	11	54	27.10	-04	48	08.8	071

1984	QO		1986	03	09.93887	11	53	30.55	-04 47 24.9	071
1984	QO		1986	03	09.97498	11	53	28.11	-04 47 28.6	071
1984	QO		1986	03	14.90848	11	47	59.74	-04 42 28.0	071
1984	QO		1986	03	14.94460	11	47	57.30	-04 42 24.9	071
1985	OU	*	1985	07	17.94278	19	44	38.92	-05 47 56.1	071
1985	OU		1985	07	18.00382	19	44	36.38	-05 47 50.5	071
1985	PB		1985	08	19.95764	21	55	30.20	-11 17 53.5	071
1985	PB		1985	08	19.97778	21	55	29.06	-11 18 03.7	071
1985	PB		1985	08	20.92552	21	54	37.79	-11 26 14.2	071
1985	PJ		1985	08	19.95764	22	02	07.73	-12 23 19.9	071
1985	PJ		1985	08	19.97778	22	02	06.76	-12 23 24.2	071
1985	PJ		1985	08	19.99653	22	02	05.86	-12 23 27.8	071
1985	PJ		1985	08	20.92552	22	01	20.03	-12 27 01.2	071
1985	QZ3	*	1985	08	19.95764	21	50	17.97	-13 10 59.1	071
1985	QZ3		1985	08	19.97778	21	50	16.84	-13 11 06.4	071
1985	QZ3		1985	08	19.99653	21	50	15.77	-13 11 14.2	071
1985	QZ3		1985	08	20.92552	21	49	23.17	-13 17 42.2	071
1985	QZ3		1985	08	21.90785	21	48	27.54	-13 24 27.7	071
1985	QZ3		1985	08	21.92914	21	48	26.30	-13 24 38.0	071
1985	QA4	*	1985	08	19.95764	21	57	41.87	-10 51 15.5	071
1985	QA4		1985	08	19.97778	21	57	40.62	-10 51 17.1	071
1985	QA4		1985	08	19.99653	21	57	39.70	-10 51 16.4	071
1985	QA4		1985	08	20.92552	21	56	46.91	-10 52 55.9	071
1985	QB4	*	1985	08	19.95764	21	59	42.74	-11 51 28.6	071
1985	QB4		1985	08	19.97778	21	59	41.62	-11 51 33.1	071
1985	QB4		1985	08	19.99654	21	59	40.61	-11 51 36.7	071
1985	QB4		1985	08	20.92552	21	58	47.00	-11 55 19.0	071
1985	QC4	*	1985	08	19.95764	22	01	21.32	-12 37 19.1	071
1985	QC4		1985	08	19.97778	22	01	20.37	-12 37 33.7	071
1985	QC4		1985	08	19.99653	22	01	19.55	-12 37 49.4	071
1985	QC4		1985	08	20.92552	22	00	38.70	-12 49 55.9	071
1985	QC4		1985	08	21.90784	21	59	55.40	-13 02 44.6	071
1985	QC4		1985	08	21.92914	21	59	54.29	-13 03 01.2	071
1985	QD4	*	1985	08	19.95764	22	04	36.01	-14 45 43.5	071
1985	QD4		1985	08	19.97778	22	04	34.72	-14 45 42.8	071
1985	QD4		1985	08	19.99653	22	04	33.16	-14 45 40.4	071
1985	QD4		1985	08	20.92552	22	03	33.61	-14 44 25.5	071
1985	QF4	*	1985	08	24.91685	21	40	45.09	-16 44 38.0	071
1985	QF4		1985	08	24.93634	21	40	44.02	-16 44 48.3	071
1985	QG4	*	1985	08	24.91685	21	48	34.58	-16 45 03.2	071
1985	QG4		1985	08	24.93634	21	48	33.41	-16 44 58.2	071
1985	QH4	*	1985	08	24.91685	21	51	44.94	-16 35 39.4	071
1985	QH4		1985	08	24.93634	21	51	43.76	-16 35 41.1	071
1986	DA		1986	04	15.91371	11	49	55.30	+20 15 31.2	071
1986	DA		1986	04	16.04699	11	50	21.82	+20 09 31.3	071
1986	DA		1986	04	16.06435	11	50	25.65	+20 08 48.0	071
1986	DA		1986	04	16.99443	11	53	39.18	+19 27 26.3	071
1986	DA		1986	04	17.00524	11	53	41.27	+19 26 56.3	071
1986	DA		1986	04	17.02260	11	53	44.71	+19 26 10.5	071
1986	DA		1986	04	17.06257	11	53	53.05	+19 24 19.2	071
1986	DA		1986	04	17.07993	11	53	56.59	+19 23 32.8	071
1986	DA		1986	04	18.04223	11	57	16.91	+18 39 53.3	071
1986	DA		1986	04	18.05783	11	57	20.26	+18 39 08.3	071
1986	DA		1986	04	18.07519	11	57	23.68	+18 38 24.8	071
1986	EH2	*	1986	03	14.88886	11	36	26.82	-02 34 01.9	071
1986	EH2		1986	03	14.92678	11	36	24.86	-02 33 41.2	071
1986	EJ2	*	1986	03	14.88886	11	39	34.21	+00 50 22.9	071
1986	EJ2		1986	03	14.92678	11	39	31.72	+00 50 26.0	071
1986	EK2	*	1986	03	14.88886	11	44	05.29	+00 55 42.3	071

1986 EK2	1986 03 14.92678	11 44 03.49	+00 55 53.7		071
1986 EL2 *	1986 03 14.88886	11 45 10.99	-00 32 41.4		071
1986 EL2	1986 03 14.92678	11 45 09.12	-00 32 25.2		071
1986 EM2 *	1986 03 14.92678	11 38 45.15	-01 14 34.1		071

OBSERVATIONS MADE AT TARTU BY H. K. RAUDSAAR AND U. O. TURO.
Reduced by M. Maazik. From Kiev Komet. Tsirk. No. 351. Contact: H. K. Raudaar, Tartu Observatory, Tartu, Estonian S.S.R., U.S.S.R.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
4	1985 04	10.82118	14 10 07.99	+00 16 15.6	075
4	1985 04	10.85069	14 10 06.46	+00 16 27.7	075
4	1985 04	10.85868	14 10 06.02	+00 16 29.1	075
4	1985 04	19.81806	14 02 01.39	+01 00 48.7	075
4	1985 04	19.84688	14 01 59.12	+01 00 52.7	075

OBSERVATIONS MADE AT ABASTUMAN BY R. Ya. INASARIDZE AND R. I. KILADZE.
From Kiev Komet. Tsirk. No. 349. Contact: R. I. Kiladze, Abastumani Astrophysical Observatory, 383762 Abustuman, U.S.S.R.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
194	1985 08	07.74743	13 34 37.28	+06 19 48.2	119
194	1985 08	07.76097	13 34 38.21	+06 19 41.1	119
194	1985 08	08.73233	13 35 46.16	+06 10 54.4	119
194	1985 08	09.72956	13 36 56.59	+06 01 46.1	119

OBSERVATIONS MADE AT THE BURLINGTON REMOTE SITE BY T. HANDLEY.
Contact: T. Handley, 13 Linden Avenue, Burlington, NJ 08016, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
3382	1985 09	14.35625	00 07 40.03	+00 27 53.8	293
3382	1985 09	14.37014	00 07 39.18	+00 27 53.3	293
1948 WF	1985 10	12.21493	01 35 25.18	-13 23 08.5	293
1948 WF	1985 10	12.23229	01 35 24.27	-13 23 12.9	293
1982 UG7	1985 10	12.16701	01 33 20.24	+10 19 04.8	293
1982 UG7	1985 10	12.18021	01 33 19.58	+10 18 58.8	293

OBSERVATION MADE AT GEISEI BY T. SEKI.
Contact: T. Seki, Kamimachi 2-9-35, Kochi, Japan.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
1986 JK	1986 05	17.67118	15 48 25.82	-17 31 01.9	14	372

OBSERVATIONS MADE AT NAGATORO BY N. KAWASATO.
Films taken with a 0.76-m f/5.0 reflector. Contact: N. Kawasato, Stellar House, Nagatoro, Saitama-ken, Japan.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
1975 EA6	1986 04	10.63547	12 48 18.21	-01 24 35.9	398
1975 EA6	1986 04	10.67986	12 48 15.62	-01 24 20.8	398

OBSERVATIONS MADE AT MAUNA KEA.
Observations made using the encoders at the Infrared Telescope Facility by D. J. Tholen, D. P. Cruikshank, W. K. Hartmann, M. W. Buie, D. M. Griep and W. F. Golisch. SAO reference stars. Contact: D. J. Tholen, Institute for Astronomy, 2680 Woodlawn Drive, Honolulu, HI 96822, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
39	1986 05	01.51788	16 34 27.62	-06 50 48.6	568
80	1986 05	01.56753	18 45 40.15	-15 06 18.3	568
364	1986 05	01.44236	14 22 54.06	-04 26 32.4	568
364	1986 05	01.48403	14 22 51.40	-04 26 23.1	568
3361	1986 05	01.54792	16 58 05.82	-07 43 21.0	568
3361	1986 05	02.47500	16 53 01.87	-07 36 43.0	568
3361	1986 05	02.49618	16 52 54.43	-07 36 34.7	568

1986 DA	1986 04 26.27650	12 25 41.60	+12 04 46.4			568
1986 DA	1986 04 30.37153	12 39 17.01	+08 43 12.7			568
1986 DA	1986 05 01.26354	12 42 12.76	+07 59 40.1			568
1986 EB	1986 04 26.29167	09 12 55.82	-02 39 48.3			568
1986 EB	1986 05 01.25556	09 12 55.66	-04 25 28.5			568
1986 JK	1986 05 18.37257	15 52 27.16	-17 53 15.9			568

OBSERVATIONS MADE AT CAVRIANA.

Plates with the 0.4-m reflector blinked, measured and reduced by L. Lai, I. Rocchetti, M. Ruzza and G. Vesentini. SAOC reference stars. Contact: L. Lai, Via Mantovana 130, I-37062 Dossobuono (Verona), Italy.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
43	1985 09	10.86736	21 03 49.59	-10 23 31.7	571
43	1985 09	10.87639	21 03 49.42	-10 23 32.3	571
43	1985 09	10.88472	21 03 49.31	-10 23 34.1	571
79	1985 09	10.86736	21 01 48.87	-10 05 35.2	571
79	1985 09	10.87639	21 01 48.57	-10 05 37.9	571
79	1985 09	10.88472	21 01 48.32	-10 05 40.3	571
79	1985 09	11.85486	21 01 19.60	-10 10 49.4	571
79	1985 09	11.86875	21 01 19.16	-10 10 53.4	571
175	1985 04	20.83333	11 55 04.78	+01 42 05.5	571
175	1985 04	20.84583	11 55 04.34	+01 42 07.5	571
315	1985 10	07.89097	23 39 20.12	-04 19 55.5	571
315	1985 10	07.91736	23 39 19.17	-04 20 04.2	571
315	1985 10	11.90069	23 37 12.76	-04 39 13.1	571
315	1985 10	11.91389	23 37 12.23	-04 39 16.5	571
453	1985 10	07.89097	23 37 29.11	-04 06 38.9	571
453	1985 10	07.91736	23 37 27.72	-04 06 42.8	571
453	1985 10	11.90069	23 34 09.96	-04 15 11.1	571
453	1985 10	11.91389	23 34 09.26	-04 15 12.5	571
453	1985 10	15.87431	23 31 15.85	-04 21 16.3	571
453	1985 10	15.88819	23 31 15.29	-04 21 19.0	571
592	1985 04	12.88264	12 08 12.71	+04 16 39.8	571
592	1985 04	12.89653	12 08 12.22	+04 16 44.6	571
592	1985 04	14.85000	12 07 04.05	+04 27 31.9	571
592	1985 04	14.86389	12 07 03.58	+04 27 35.7	571
592	1985 04	16.86181	12 05 57.30	+04 38 07.6	571
592	1985 04	16.87569	12 05 56.84	+04 38 11.0	571
625	1985 04	12.85000	12 16 34.78	+14 27 28.6	571
625	1985 04	12.86389	12 16 34.26	+14 27 31.5	571
625	1985 04	16.83542	12 13 43.14	+14 42 45.7	571
625	1985 04	20.85972	12 11 02.97	+14 54 47.8	571
625	1985 04	20.87222	12 11 02.34	+14 54 49.1	571
632	1985 04	12.91389	12 16 33.02	-02 55 23.4	571
632	1985 04	12.92778	12 16 32.32	-02 55 21.9	571
632	1985 04	14.88125	12 15 01.12	-02 47 38.4	571
632	1985 04	14.89514	12 15 00.37	-02 47 34.9	571
732	1985 04	12.88264	12 09 12.06	+04 44 19.0	571
732	1985 04	12.89653	12 09 11.51	+04 44 25.6	571
732	1985 04	14.85000	12 07 57.68	+05 00 44.5	571
732	1985 04	14.86389	12 07 57.21	+05 00 53.4	571
732	1985 04	16.86181	12 06 46.22	+05 16 41.7	571
732	1985 04	16.87569	12 06 45.80	+05 16 46.9	571
842	1985 10	07.89097	23 38 24.76	-04 30 45.0	571
842	1985 10	07.91736	23 38 23.61	-04 30 44.2	571
842	1985 10	11.90069	23 35 26.75	-04 25 52.0	571
842	1985 10	11.91389	23 35 26.17	-04 25 50.9	571
842	1985 10	15.88819	23 32 47.18	-04 19 32.5	571
929	1985 11	07.87569	01 57 19.50	+13 38 54.7	571

929	1985 11 07.88958	01 57 18.78	+13 38 50.5	571
929	1985 11 14.87431	01 51 18.91	+12 52 11.1	571
929	1985 11 14.89236	01 51 17.86	+12 52 04.5	571
1083	1985 03 19.90139	11 40 51.52	+12 44 12.3	571
1083	1985 03 19.91528	11 40 50.64	+12 44 16.4	571
1087	1985 11 07.87569	01 57 55.45	+13 59 18.4	571
1087	1985 11 07.88958	01 57 54.62	+13 59 17.1	571
1087	1985 11 14.87431	01 52 10.25	+13 52 37.5	571
1087	1985 11 14.89236	01 52 09.43	+13 52 36.8	571
1487	1985 05 16.89236	14 00 33.44	-08 55 40.2	571
1487	1985 05 16.90625	14 00 32.83	-08 55 40.5	571
1636	1985 10 07.89097	23 35 52.16	-05 00 57.9	571
1636	1985 10 07.91736	23 35 51.06	-05 01 09.6	571
1735	1985 03 19.92639	11 45 23.39	+07 43 15.3	571
1735	1985 03 19.93958	11 45 22.67	+07 43 16.4	571
1881	1985 09 10.87917	20 42 56.06	-04 02 11.5	571
1881	1985 09 10.89306	20 42 55.88	-04 02 15.1	571
1987	1985 09 11.81667	20 40 13.25	-03 59 42.5	571
1987	1985 09 11.83056	20 40 12.68	-03 59 32.9	571
1987	1985 09 13.81319	20 38 58.55	-03 37 13.2	571
1987	1985 09 13.82708	20 38 58.09	-03 37 04.8	571
2669	1985 11 07.90347	02 23 49.11	+28 12 25.5	571
2669	1985 11 07.91736	02 23 48.32	+28 12 20.4	571
2860	1985 10 07.85694	22 40 20.88	+14 13 19.5	571
2860	1985 10 07.87153	22 40 19.96	+14 13 23.0	571
2860	1985 10 11.87153	22 36 22.99	+14 30 10.2	571
2860	1985 10 11.88542	22 36 22.16	+14 30 12.4	571
2860	1985 10 15.84444	22 33 08.85	+14 45 01.6	571
2860	1985 10 15.85903	22 33 08.08	+14 45 03.7	571

OBSERVATIONS MADE AT ELDAGSEN BY W. BONK.

Contact: W. Bonk, Nordstrasse 33, D-3257 Springe 3, Federal Republic of Germany.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
739	1986 04 30.92847	15 42 31.34	+15 17 54.0		573
739	1986 04 30.93472	15 42 31.07	+15 17 55.8		573
739	1986 04 30.94028	15 42 30.83	+15 17 57.4		573
739	1986 04 30.94583	15 42 30.60	+15 17 59.1		573
739	1986 04 30.95139	15 42 30.36	+15 18 00.7		573
739	1986 04 30.95764	15 42 30.09	+15 18 02.5		573
739	1986 05 01.89236	15 41 48.02	+15 23 06.8		573
739	1986 05 01.89792	15 41 47.76	+15 23 08.6		573
739	1986 05 01.90347	15 41 47.50	+15 23 10.4		573
739	1986 05 01.90903	15 41 47.25	+15 23 12.2		573
739	1986 05 01.91458	15 41 46.99	+15 23 14.1		573
739	1986 05 01.92014	15 41 46.74	+15 23 15.9		573

OBSERVATION MADE AT VICTORIA BY D. D. BALAM.

For details see MPC 10595. 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.
1986 DA	1986 04 30.23097	12 38 50.13	+08 49 49.5		657

OBSERVATIONS MADE WITH THE 1.5-m REFLECTOR AND CCD AT PALOMAR BY J. GIBSON.

Coordination with J. G. Williams and with the Minor Planet Center. AGK3 and SAO reference stars, reduction using Palomar Sky Survey prints. Contact: J. Gibson, MS 138-307, Jet Propulsion Laboratory, Pasadena, CA 91109, U.S.A.

Object		Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
1984 LR	*	1984 06 09.36424		16 58 24.21	-25 18 09.1	18	675
1984 LR		1984 06 09.37306		16 58 24.05	-25 18 09.0		675
1984 LR		1984 06 09.38194		16 58 23.66	-25 18 07.7		675
1986 FC	*	1986 03 21.28764		10 00 21.03	+08 40 49.4	20	675
1986 FC		1986 03 21.29694		10 00 21.20	+08 40 45.6		675

OBSERVATIONS MADE WITH THE 1.2-m SCHMIDT AT PALOMAR BY J. GIBSON.
Contact: J. Gibson, MS 138-307, Jet Propulsion Laboratory, Pasadena, CA 91109, U.S.A.

Object		Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
1986 JN	*	1986 05 08.19585		12 14 56.25	+23 59 11.9	17.5	1	675
1986 JN		1986 05 08.24793		12 14 50.54	+24 01 09.4		1	675

Note 1: trail ends; sense of motion uncertain.

OBSERVATIONS MADE WITH THE 1.2-m SCHMIDT AT PALOMAR BY E. HELIN.
Plates measured by M. Rudnyk. Contact: E. Helin, MS 183-501, Jet Propulsion Laboratory, Pasadena, CA 91109, U.S.A.

Object		Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
1985 XB		1986 04 30.24930		09 00 42.89	+53 18 42.8	17.5		675
1985 XB		1986 04 30.26319		09 00 46.49	+53 18 19.@		1	675
1986 HA	*	1986 04 29.30833		13 51 36.97	-11 43 47.2	18.5	2	675
1986 HA		1986 04 29.34305		13 51 35.11	-11 43 37.6			675
1986 HB	*	1986 04 29.30833		13 53 43.71	-12 02 55.6	19.0	2	675
1986 HB		1986 04 29.34305		13 53 41.96	-12 02 35.7			675
1986 HC	*	1986 04 29.30833		13 54 09.36	-11 30 39.4	20.5	3	675
1986 HC		1986 04 29.34305		13 54 06.66	-11 30 23.6			675
1986 HD	*	1986 04 29.30833		13 55 04.35	-11 44 42.6	19.8	2	675
1986 HD		1986 04 29.34305		13 55 02.31	-11 44 33.4			675
1986 HE	*	1986 04 29.30833		13 56 03.53	-12 10 17.9	17.0	2	675
1986 HE		1986 04 29.34305		13 56 01.72	-12 10 01.3			675
1986 HF	*	1986 04 29.30833		13 56 16.88	-11 52 46.2	19.2	2	675
1986 HF		1986 04 29.34305		13 56 14.75	-11 52 38.8			675
1986 HG	*	1986 04 29.30833		13 55 36.83	-10 58 21.3	18.2	2	675
1986 HG		1986 04 29.34305		13 55 35.24	-10 58 04.3			675
1986 HH	*	1986 04 29.30833		13 57 32.83	-11 19 33.0	17.5	2	675
1986 HH		1986 04 29.34305		13 57 30.80	-11 19 17.8			675
1986 HJ	*	1986 04 29.30833		13 57 39.17	-10 41 59.2	20.0	2	675
1986 HJ		1986 04 29.34305		13 57 37.21	-10 41 54.0			675
1986 HK	*	1986 04 29.30833		13 57 41.53	-11 46 21.7	19.0	2	675
1986 HK		1986 04 29.34305		13 57 39.80	-11 45 58.2			675
1986 HL	*	1986 04 30.24930		08 58 58.96	+53 23 45.1	17.5	3	675
1986 HL		1986 04 30.26319		08 59 00.32	+53 23 30.3			675

Note 1: position uncertain; end of trail partly obscured by plate defect.
2: discoverer E. Helin. 3: discoverer M. Rudnyk.

OBSERVATIONS MADE WITH THE 1.2-m SCHMIDT AT PALOMAR BY C. T. KOWAL.
Plates scanned and measured by S. J. Bus, with assistance from E. Bowell. Contact: S. J. Bus, Lowell Observatory, 1400 W. Mars Hill Road, Flagstaff, AZ 86001, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
2799	1978 07 05.34340		19 01 27.83	-22 35 24.0	675
2799	1978 07 06.33854		19 00 26.22	-22 33 09.8	675
2940	1978 07 07.31649		19 13 07.14	-20 16 20.7	675
2940	1978 07 08.30729		19 12 09.61	-20 15 47.9	675
2940	1978 07 09.32830		19 11 10.16	-20 15 14.1	675
3418	1978 07 05.34340		19 02 18.40	-23 38 53.9	675
3418	1978 07 06.33854		19 01 26.85	-23 40 46.2	675
1965 AK1	1978 07 05.22535		18 22 46.42	-11 50 44.1	675

1965	AK1		1978	07	06.22396	18	21	59.25	-11	55 44.8	675
1973	QB2		1978	07	05.34340	18	43	17.68	-24	08 37.4	675
1973	QB2		1978	07	06.31250	18	42	26.64	-24	10 08.4	675
1975	TJ6		1978	07	07.25903	18	58	57.18	-15	47 56.7	675
1975	TJ6		1978	07	08.25070	18	57	56.67	-15	53 02.6	675
1977	EL		1977	02	13.39544	09	47	21.06	+15	59 33.4	675
1977	EL		1977	02	14.39509	09	46	18.62	+16	08 12.8	675
1978	NT7	*	1978	07	05.34340	18	51	43.39	-23	16 43.7	675
1978	NT7		1978	07	06.33854	18	50	52.04	-23	17 52.7	675
1978	NU7	*	1978	07	05.34340	18	52	20.75	-23	21 12.9	675
1978	NU7		1978	07	06.33854	18	51	29.32	-23	22 15.1	675
1978	SU5		1978	10	26.30868	02	25	46.13	+16	03 28.4	675
1978	SU5		1978	10	27.35209	02	24	45.74	+15	55 39.8	675
1978	SL6		1978	10	26.30868	02	07	27.74	+11	28 42.6	675
1978	SL6		1978	10	27.35209	02	06	22.96	+11	23 24.6	675
1979	OM15		1978	05	09.33368	14	45	38.83	-15	34 27.4	675
1979	OM15		1978	05	10.36979	14	44	50.09	-15	30 40.1	675
1981	EN		1978	07	05.22535	18	23	13.21	-08	57 43.7	675
1981	EN		1978	07	06.22396	18	22	15.69	-09	01 06.3	675
1981	EH4		1978	07	05.22535	18	19	23.47	-13	02 01.4	675
1981	EH4		1978	07	06.22396	18	18	25.76	-13	00 23.8	675
1981	EF5		1978	07	05.22535	18	22	58.09	-10	48 43.4	675
1981	EF5		1978	07	06.22396	18	22	04.33	-10	48 21.6	675
1981	ED6		1978	10	26.30868	02	15	43.71	+15	00 24.3	675
1981	ED6		1978	10	27.35209	02	14	44.95	+14	50 39.2	675
1981	ET8		1978	07	07.25903	19	03	24.92	-16	09 31.4	675
1981	ET8		1978	07	08.27674	19	02	23.94	-16	10 35.8	675
1981	ER10		1978	05	09.33368	14	44	33.40	-17	53 58.8	675
1981	ER10		1978	05	10.34375	14	43	31.00	-17	48 24.7	675
1981	EO11		1978	07	07.29045	19	18	20.61	-22	02 33.6	675
1981	EO11		1978	07	09.32830	19	16	07.33	-22	04 57.5	675
1981	EO11		1979	10	18.30764	01	38	32.56	+13	11 07.9	675
1981	EO11		1979	10	18.35972	01	38	29.83	+13	10 54.1	675
1981	EN12		1978	07	07.25903	18	42	20.44	-20	13 38.0	675
1981	EN12		1978	07	08.25070	18	41	19.38	-20	13 29.2	675
1981	EH13		1978	07	07.25903	18	56	51.07	-19	54 50.3	675
1981	EH13		1978	07	08.22465	18	55	55.85	-19	53 47.5	675
1981	EW13		1978	07	07.31649	19	15	59.19	-21	31 12.9	675
1981	EW13		1978	07	08.30729	19	14	57.76	-21	32 21.2	675
1981	EX13		1978	10	26.30868	02	05	58.46	+12	05 06.9	675
1981	EX13		1978	10	27.35209	02	05	10.10	+11	57 28.7	675
1981	EE14		1978	07	05.22535	18	20	18.67	-12	07 51.1	675
1981	EE14		1978	07	06.19792	18	19	24.39	-12	07 27.1	675
1981	EN17		1978	05	09.33368	14	53	58.22	-14	30 36.6	675
1981	EN17		1978	05	10.36979	14	52	56.28	-14	24 15.2	675
1981	EP20		1978	05	09.33368	14	52	31.98	-18	22 01.5	675
1981	EP20		1978	05	10.36979	14	51	28.63	-18	18 10.2	675
1981	ER24		1978	05	09.33368	15	05	51.50	-16	04 57.1	675
1981	ER24		1978	05	10.36979	15	04	48.80	-15	59 26.1	675
1981	EA29		1978	07	05.22535	18	32	07.69	-10	13 13.3	675
1981	EA29		1978	07	06.22396	18	31	13.87	-10	13 57.9	675
1981	EQ33		1978	07	07.31649	19	15	25.52	-23	49 59.6	675
1981	EQ33		1978	07	08.30729	19	14	24.14	-23	48 07.4	675
1981	EQ33		1978	07	09.32830	19	13	20.73	-23	46 09.1	675
1981	EE35		1978	07	05.22535	18	24	31.73	-10	43 33.1	675
1981	EE35		1978	07	06.22396	18	23	36.69	-10	46 22.6	675
1981	EF45		1978	10	26.30868	02	09	39.05	+12	06 08.9	675
1981	EF45		1978	10	27.35209	02	08	49.79	+12	02 17.0	675
1981	ES47		1978	05	09.33368	15	06	45.08	-17	09 37.5	675

1981 ES47	1978 05 10.36979	15 05 39.37	-17 06 11.4				675
1981 JA2	1978 07 05.28438	18 38 57.68	-21 19 14.1				675
1981 JA2	1978 07 06.28038	18 37 57.62	-21 18 39.5				675
1985 PB1	1978 07 05.22535	18 29 20.49	-10 30 36.8				675
1985 PB1	1978 07 06.22396	18 28 29.08	-10 31 21.1				675

OBSERVATIONS MADE WITH THE 0.46-m SCHMIDT AT PALOMAR.

Films taken by E. Helin, S. Singer-Brewster, D. Schneeberger and E. Burr in the course of the International Near-Earth Asteroid Survey (INAS) under the direction of E. Helin. Measured by S. Singer-Brewster. Contact: E. Helin, MS 183-501, Jet Propulsion Laboratory, Pasadena, CA 91109, U.S.A.

Object		Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
1986 GF		1986 04 30.22396	12 41 28.33	-05 27 47.4		16.8		675
1986 GF		1986 04 30.27882	12 41 27.42	-05 26 38.9				675
1986 GF		1986 05 03.26389	12 40 54.48	-04 27 13.9				675
1986 HM	*	1986 04 30.22396	12 37 24.81	-04 10 59.8		17.0		675
1986 HM		1986 04 30.27882	12 37 22.23	-04 10 56.3				675
1986 HM		1986 05 03.26389	12 35 12.32	-04 09 36.4				675
1986 JB	*	1986 05 02.41771	15 41 49.05	-01 35 06.8		16		675
1986 JB		1986 05 03.34688	15 41 15.07	-01 21 48.8			1	675
1986 JB		1986 05 03.37222	15 41 14.16	-01 21 27.1			1	675
1986 JC	*	1986 05 02.41771	15 49 31.21	-06 00 19.7		16.5		675
1986 JC		1986 05 03.34688	15 48 50.85	-05 58 56.7			1	675
1986 JC		1986 05 03.37222	15 48 49.62	-05 58 54.4			1	675
1986 JD	*	1986 05 02.41771	15 50 14.53	-05 34 10.4		16.8		675
1986 JD		1986 05 03.34688	15 49 31.17	-05 32 52.5			1	675
1986 JD		1986 05 03.37222	15 49 29.95	-05 32 53.0			1	675
1986 JF	*	1986 05 02.38472	15 24 49.63	-16 18 36.3		16.0		675
1986 JF		1986 05 02.40243	15 24 48.77	-16 18 31.5				675
1986 JF		1986 05 03.36771	15 24 02.08	-16 12 06.1				675
1986 JG	*	1986 05 02.38472	15 30 02.84	-21 21 29.0		16.2		675
1986 JG		1986 05 02.40243	15 30 01.93	-21 21 27.9				675
1986 JG		1986 05 03.36771	15 29 09.20	-21 18 47.8				675
1986 JH	*	1986 05 02.38472	15 34 34.98	-21 59 02.9		16.5		675
1986 JH		1986 05 02.40243	15 34 33.91	-21 59 11.4				675
1986 JH		1986 05 03.36771	15 33 19.09	-22 07 15.3				675
1986 JL		1986 05 02.37535	14 50 12.38	+10 57 35.5		17.0		675
1986 JL		1986 05 02.39340	14 50 10.71	+10 57 23.7				675
1986 JO	*	1986 05 02.42257	16 07 38.82	-09 23 20.5		16.8		675
1986 JO		1986 05 02.44028	16 07 37.93	-09 23 16.0				675
1986 JO		1986 05 03.37674	16 06 52.99	-09 19 55.6				675

Note 1: star images slightly elliptical.

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

Four-minute exposures with the 0.46-m Schmidt telescope. Film pairs scanned by C. Shoemaker with a stereomicroscope, measured by her with a Mann comparator at the U.S. Geological Survey. Reference stars from the SAO Catalog. Contact: C. S. Shoemaker, P.O. Box 984, Flagstaff, AZ 86002, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
2408	1986 04 04.44618	15 48 42.77	+03 43 28.6		17		675
2408	1986 04 04.50034	15 48 43.19	+03 44 15.1				675
2449	1986 04 04.37847	12 47 12.43	+07 35 38.6		17		675
2449	1986 04 04.41458	12 47 10.50	+07 36 39.8				675
1985 XB	1986 02 05.14670	05 01 56.99	+64 37 36.5			1	675
1986 DA	1986 04 03.29270	11 08 23.51	+27 57 38.3				675
1986 DA	1986 04 03.32813	11 08 29.42	+27 56 36.4				675
1986 DA	1986 04 04.18472	11 11 08.65	+27 31 48.9				675
1986 EB	1986 04 03.28107	09 39 59.92	+08 26 01.8				675

1986 EB		1986 04 03.31655	09 39 54.07	+08 24 40.4						675
1986 EB		1986 04 04.17326	09 37 44.50	+07 52 38.6						675
1986 EB		1986 04 04.20868	09 37 39.00	+07 51 18.9						675
1986 EL		1986 04 03.29844	08 55 17.36	+05 43 57.2						675
1986 EL		1986 04 04.19097	08 56 07.40	+05 58 12.1						675
1986 EO		1986 04 04.36909	12 25 38.46	+26 58 48.9						675
1986 EO		1986 04 05.37569	12 24 41.78	+26 58 43.7						675
1986 GU	*	1986 04 04.45052	15 51 22.33	+19 55 16.9					17.5	675
1986 GU		1986 04 04.50486	15 51 20.07	+19 55 24.7						675
1986 GV	*	1986 04 03.29270	11 00 14.36	+29 09 59.0					18	675
1986 GV		1986 04 03.32813	11 00 13.17	+29 10 02.5						675
1986 GV		1986 04 04.18472	10 59 45.73	+29 10 58.1						675
1986 GV		1986 04 04.22048	10 59 44.59	+29 11 00.6						675
1986 GV		1986 04 05.22829	10 59 13.42	+29 11 48.5						675
1986 JK		1986 05 04.33281	15 15 27.38	-14 18 15.7						675
1986 JK	*	1986 05 05.37830	15 16 43.38	-14 25 17.0					17.5	675
1986 JK		1986 05 09.30764	15 22 38.63	-14 59 10.4						675
1986 JK		1986 05 10.27552	15 24 28.35	-15 09 51.0						675
1986 JK		1986 05 10.46563	15 24 47.74	-15 12 02.1						675

Note 1: time given incorrectly as 1986 02 05.18889 on MPC 10488.

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

Observations made by S. J. Bus, B. A. Skiff and N. G. Thomas, measured by E. Bowell and S. J. Bus using a PDS scanning microdensitometer. See also MPC 9533. Contact: E. Bowell, Lowell Observatory, 1400 W. Mars Hill Road, Flagstaff, AZ 86001, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N Obs.
1	1986 03	06.20860	11 01 26.18	+24 36 24.8		688
1	1986 03	06.25793	11 01 23.49	+24 36 40.1		688
66	1986 04	09.30806	13 04 04.49	-07 44 07.5		688
66	1986 04	09.37571	13 04 00.83	-07 43 49.1		688
83	1986 03	06.18083	10 03 56.35	+19 14 58.7		688
83	1986 03	06.23600	10 03 53.18	+19 15 05.6		688
150	1986 03	06.28285	11 37 21.37	+00 32 32.3		688
150	1986 03	06.32729	11 37 19.37	+00 32 46.0		688
200	1986 03	06.30530	11 57 41.85	-05 40 48.7		688
200	1986 03	06.34946	11 57 39.58	-05 40 42.0		688
260	1986 03	06.30530	12 06 39.91	+01 06 58.3		688
260	1986 03	06.34946	12 06 38.29	+01 07 12.3		688
280	1986 03	06.18083	10 16 23.40	+17 48 39.0		688
401	1986 03	06.18083	10 04 34.93	+19 42 27.0		688
401	1986 03	06.23600	10 04 32.53	+19 42 34.9		688
464	1986 03	06.20860	10 38 48.39	+21 14 51.8		688
464	1986 03	06.25793	10 38 45.90	+21 15 07.1		688
514	1986 03	06.28285	11 35 26.41	-03 26 34.2		688
514	1986 03	06.32729	11 35 24.33	-03 26 23.1		688
533	1986 03	06.30530	12 08 38.54	-01 37 55.1		688
533	1986 03	06.34946	12 08 36.74	-01 37 36.7		688
605	1986 03	06.18083	10 02 19.28	+17 40 44.9		688
605	1986 03	06.23600	10 02 16.29	+17 40 43.5		688
650	1986 03	06.28285	11 50 45.74	-01 49 33.4		688
650	1986 03	06.32729	11 50 43.33	-01 49 18.7		688
670	1986 03	06.30530	12 08 27.74	-00 23 17.1		688
670	1986 03	06.34946	12 08 25.87	-00 23 00.6		688
682	1986 03	06.28285	11 28 08.67	-03 10 30.2		688
682	1986 03	06.32729	11 28 06.55	-03 10 07.6		688
713	1986 03	06.28285	11 29 41.43	-07 18 16.2		688
713	1986 03	06.32729	11 29 39.68	-07 18 04.1		688

752	1986	03	06.20860	10	43	10.90	+18	47	20.1			688
752	1986	03	06.25793	10	43	08.12	+18	47	35.6			688
885	1986	04	09.30806	13	27	06.59	-05	14	30.0			688
885	1986	04	09.37571	13	27	03.57	-05	14	10.5			688
893	1986	03	06.18083	10	21	44.94	+15	08	54.0			688
893	1986	03	06.23600	10	21	42.58	+15	09	18.6			688
953	1986	04	09.30806	13	12	17.52	-03	04	01.8			688
953	1986	04	09.37571	13	12	13.68	-03	03	50.7			688
973	1986	03	06.28285	11	43	48.78	-00	19	39.3			688
973	1986	03	06.32729	11	43	46.45	-00	19	36.7			688
1047	1986	03	06.18083	09	59	25.92	+21	40	33.3			688
1047	1986	03	06.23600	09	59	22.82	+21	40	47.6		1	688
1090	1986	03	06.20860	10	43	00.36	+19	04	20.3			688
1090	1986	03	06.25793	10	42	58.32	+19	05	23.6			688
1227	1986	03	06.18083	10	21	53.09	+21	50	21.3			688
1227	1986	03	06.23600	10	21	50.29	+21	50	24.6			688
1231	1986	03	06.30530	11	56	30.88	-04	10	59.2			688
1231	1986	03	06.34946	11	56	28.50	-04	10	59.5			688
1231	1986	04	09.17373	11	24	32.61	-03	33	27.3	17.0		688
1231	1986	04	09.21837	11	24	30.38	-03	33	24.5			688
1240	1986	03	06.28285	11	31	49.97	-04	28	59.8			688
1240	1986	03	06.32729	11	31	47.72	-04	28	52.4			688
1307	1986	04	09.28530	12	58	37.38	-10	36	29.9			688
1307	1986	04	09.35355	12	58	33.37	-10	35	57.4			688
1418	1986	03	06.30530	12	09	33.24	-01	17	59.8	17.0		688
1418	1986	03	06.34946	12	09	30.61	-01	17	53.4			688
1524	1986	03	06.28285	11	44	08.51	-00	07	32.5			688
1524	1986	03	06.32729	11	44	06.28	-00	07	26.8			688
1577	1986	03	06.18083	10	05	15.92	+15	49	54.0			688
1577	1986	03	06.23600	10	05	12.65	+15	50	13.4			688
1654	1986	03	06.25793	10	38	42.13	+20	37	24.5		1	688
1697	1986	03	06.30530	12	03	46.64	-04	36	25.1	16.8		688
1697	1986	03	06.34946	12	03	44.19	-04	36	17.6			688
1722	1986	03	06.30530	11	59	56.87	+01	00	59.1			688
1722	1986	03	06.34946	11	59	54.78	+01	01	19.4			688
1734	1986	03	06.28285	11	35	34.48	+00	19	57.4			688
1734	1986	03	06.32729	11	35	32.50	+00	20	14.3			688
1742	1986	03	06.30530	12	01	23.75	+01	23	26.6			688
1742	1986	03	06.34946	12	01	21.82	+01	23	39.1			688
1757	1986	04	09.30806	13	21	25.86	-05	50	05.6			688
1757	1986	04	09.37571	13	21	21.82	-05	49	53.4			688
1778	1986	04	09.30806	13	16	18.82	-03	55	49.9			688
1778	1986	04	09.37571	13	16	15.66	-03	55	31.4			688
1854	1986	03	06.30530	12	11	02.94	-03	11	33.8			688
1854	1986	03	06.34946	12	11	00.94	-03	11	15.5			688
1902	1986	03	06.20860	10	47	45.97	+24	25	08.0	16.5		688
1902	1986	03	06.25793	10	47	44.08	+24	25	15.9			688
2025	1986	04	09.28530	13	01	09.28	-15	05	02.3			688
2025	1986	04	09.35355	13	01	05.80	-15	04	48.8			688
2029	1986	04	09.28530	12	54	05.74	-15	30	14.4			688
2029	1986	04	09.35355	12	54	01.71	-15	29	50.8			688
2098	1986	03	06.30530	12	11	43.12	-05	04	18.0			688
2098	1986	03	06.34946	12	11	40.72	-05	04	10.7			688
2107	1986	04	09.28530	13	13	06.14	-12	55	46.7			688
2107	1986	04	09.35355	13	13	02.68	-12	55	16.3			688
2134	1986	04	09.28530	12	54	16.02	-13	54	12.4		1	688
2134	1986	04	09.35355	12	54	08.86	-13	54	45.2		1	688
2159	1986	03	06.30530	11	54	43.15	+00	21	24.8		1	688
2159	1986	03	06.34946	11	54	40.88	+00	21	34.7			688

2162		1986	03	06.18083	10	01	58.81	+14	37	48.3		688
2162		1986	03	06.23600	10	01	55.69	+14	38	08.3		688
2287		1986	03	06.18083	10	18	32.44	+18	38	09.4	17.2	688
2287		1986	03	06.23600	10	18	29.13	+18	38	26.2		688
2346		1986	04	09.28530	13	12	50.48	-14	45	38.8		688
2346		1986	04	09.35355	13	12	46.61	-14	45	10.4		688
2403		1986	04	09.28530	12	54	48.53	-11	28	34.8		688
2403		1986	04	09.35355	12	54	44.76	-11	28	12.8		688
2434		1986	04	09.30806	13	21	26.64	-05	27	30.7	16.5	688
2434		1986	04	09.37571	13	21	22.94	-05	27	25.9		688
2538		1986	04	09.30806	13	23	36.01	-04	20	18.7		688
2538		1986	04	09.37571	13	23	31.74	-04	20	00.7		688
2540		1986	03	06.30530	11	56	44.94	-00	05	16.1		688
2540		1986	03	06.34946	11	56	42.39	-00	05	00.4		688
2575		1986	03	06.30530	11	55	27.14	-04	25	48.3		688
2575		1986	03	06.34946	11	55	24.59	-04	25	42.6		688
2575		1986	04	09.17373	11	22	36.65	-02	17	02.0		688
2575		1986	04	09.21837	11	22	34.63	-02	16	53.0		688
2580		1986	04	09.30806	13	09	05.99	-04	27	55.4		688
2580		1986	04	09.37571	13	09	01.47	-04	27	26.3	1	688
2659		1986	04	09.30806	13	01	19.58	-05	09	06.6	16.5	688
2659		1986	04	09.37571	13	01	16.38	-05	08	46.7		688
2686		1986	04	09.28530	13	03	28.76	-13	38	49.0		688
2686		1986	04	09.35355	13	03	25.67	-13	38	18.0		688
2697		1986	03	06.28285	11	43	09.24	-03	22	39.0		688
2697		1986	03	06.32729	11	43	07.47	-03	22	29.7		688
2785		1986	04	09.30806	13	02	28.17	-08	17	09.4	17.2	688
2785		1986	04	09.37571	13	02	24.85	-08	16	53.0		688
2806		1986	04	09.30806	13	07	59.47	-02	58	57.2	17.0	688
2806		1986	04	09.37571	13	07	55.50	-02	58	33.7		688
2836		1986	04	09.28530	13	11	04.11	-16	03	25.1		688
2836		1986	04	09.35355	13	11	00.38	-16	03	15.5		688
2934		1986	03	06.30530	12	06	10.76	-06	26	48.7		688
2934		1986	03	06.34946	12	06	09.06	-06	26	35.5		688
3196		1986	03	06.18083	10	02	25.01	+21	14	24.6		688
3196		1986	03	06.23600	10	02	22.14	+21	14	29.7		688
3220		1986	04	09.30806	13	01	15.59	-04	36	26.4	17.0	688
3220		1986	04	09.37571	13	01	11.51	-04	36	10.5	3	688
3221		1986	03	06.18083	10	13	48.01	+17	11	25.2	1	688
3221		1986	03	06.23600	10	13	44.22	+17	11	43.0		688
1977	QK2	1986	03	06.28285	11	32	58.59	-04	38	33.1	16.5	688
1977	QK2	1986	03	06.32729	11	32	56.24	-04	38	31.9		688
1978	TO7	1986	03	06.20860	10	54	19.12	+23	06	43.2	17.2	688
1978	TO7	1986	03	06.25793	10	54	16.66	+23	06	58.2		688
1980	DE1	1986	04	09.26310	12	49	39.50	-00	11	29.2	17.0	688
1980	DE1	1986	04	09.33135	12	49	36.39	-00	11	24.0		688
1980	OA	1986	04	09.30806	13	07	30.38	-04	24	01.4	17.0	688
1980	OA	1986	04	09.37571	13	07	26.32	-04	23	41.8		688
1980	RJ2	1986	03	06.30530	12	09	35.87	-03	40	22.4	17.0	688
1980	RJ2	1986	03	06.34946	12	09	33.15	-03	40	12.4	1	688
1981	WQ	1986	03	06.20860	10	49	01.33	+23	38	25.8	15.5	688
1981	WQ	1986	03	06.25793	10	48	58.12	+23	38	32.0		688
1981	WB1	1986	03	06.28285	11	47	19.02	-02	21	12.1	17.8	688
1981	WB1	1986	03	06.32729	11	47	16.51	-02	20	49.8		688
1982	FN	1986	03	06.28285	11	35	17.18	-04	03	02.1	17.0	688
1982	FN	1986	03	06.32729	11	35	15.18	-04	01	56.3	3	688
1983	NU	1986	03	06.30530	12	09	51.97	-03	08	00.4	17.2	688
1983	NU	1986	03	06.34946	12	09	49.77	-03	07	49.8		688
1983	RL2	1986	03	06.18083	09	58	51.60	+16	40	22.6	17.5	688

1983	RL2		1986	03	06.23600	09	58	48.61	+16	40	34.6		688
1983	SC		1986	04	09.28530	13	01	54.59	-15	14	12.8	16.8	688
1983	SC		1986	04	09.35355	13	01	50.90	-15	13	59.8		688
1984	QO		1986	03	06.30530	11	57	26.92	-04	49	31.8	17.2	688
1984	QO		1986	03	06.34946	11	57	24.18	-04	49	31.6		688
1986	EO1	*	1986	03	06.18083	10	02	48.40	+17	40	44.5	16.8	7 688
1986	EO1		1986	03	06.23600	10	02	46.05	+17	40	59.8		3 688
1986	EP1	*	1986	03	06.18083	10	15	24.60	+15	41	28.8	17.0	4 688
1986	EP1		1986	03	06.23600	10	15	21.93	+15	41	30.3		688
1986	EQ1	*	1986	03	06.18083	10	20	19.73	+22	43	49.8	16.5	4 688
1986	EQ1		1986	03	06.23600	10	20	16.57	+22	44	05.6		688
1986	ER1	*	1986	03	06.18083	10	23	46.38	+21	53	57.5	16.8	4 688
1986	ER1		1986	03	06.23600	10	23	43.38	+21	54	21.6		688
1986	ES1	*	1986	03	06.20860	10	37	18.91	+18	59	59.0	17.5	7 688
1986	ES1		1986	03	06.25793	10	37	15.80	+19	00	14.8		688
1986	ET1	*	1986	03	06.20860	10	44	52.03	+19	25	29.2	17.5	4 688
1986	ET1		1986	03	06.25793	10	44	49.88	+19	25	49.5		1 688
1986	EU1	*	1986	03	06.20860	10	59	16.98	+24	19	22.1	16.8	4 688
1986	EU1		1986	03	06.25793	10	59	14.37	+24	19	20.2		1 688
1986	EV1	*	1986	03	06.20860	11	00	35.55	+20	38	56.5	17.2	4 688
1986	EV1		1986	03	06.25793	11	00	33.05	+20	39	17.9		688
1986	EW1	*	1986	03	06.28285	11	26	33.93	-02	58	27.1	17.2	4 688
1986	EW1		1986	03	06.32729	11	26	31.10	-02	58	20.2		688
1986	EX1	*	1986	03	06.28285	11	26	46.56	-01	24	11.9	16.5	4 688
1986	EX1		1986	03	06.32729	11	26	43.91	-01	24	12.6		688
1986	EY1	*	1986	03	06.28285	11	28	07.66	-02	36	40.3	16.8	4 688
1986	EY1		1986	03	06.32729	11	28	04.86	-02	36	31.6		688
1986	EZ1	*	1986	03	06.28285	11	28	41.06	+00	26	22.9	16.5	4 688
1986	EZ1		1986	03	06.32729	11	28	38.48	+00	26	36.6		688
1986	EA2	*	1986	03	06.28285	11	28	51.50	-04	10	16.2	17.0	4 688
1986	EA2		1986	03	06.32729	11	28	49.41	-04	09	50.6		688
1986	EB2	*	1986	03	06.28285	11	30	26.91	-05	18	54.6	17.0	4 688
1986	EB2		1986	03	06.32729	11	30	24.60	-05	18	41.1		688
1986	EC2	*	1986	03	06.28285	11	37	52.11	-06	39	20.2	17.0	4 688
1986	EC2		1986	03	06.32729	11	37	49.89	-06	38	55.8		688
1986	ED2	*	1986	03	06.28285	11	42	58.94	+00	22	50.1	17.5	4 688
1986	ED2		1986	03	06.32729	11	42	56.69	+00	23	08.1		1 688
1986	EE2	*	1986	03	06.30530	12	00	00.34	+00	41	18.4	17.0	4 688
1986	EE2		1986	03	06.34946	11	59	58.26	+00	41	44.4		688
1986	EF2	*	1986	03	06.30530	12	06	41.25	-00	36	47.3	17.2	7 688
1986	EF2		1986	03	06.34946	12	06	38.66	-00	36	41.6		688
1986	EG2	*	1986	03	06.30530	12	07	05.57	-01	01	06.9	17.0	4 688
1986	EG2		1986	03	06.34946	12	07	03.84	-01	00	54.8		688
1986	FA		1986	04	09.26310	12	39	28.39	+01	36	06.9	16.8	688
1986	FA		1986	04	09.33135	12	39	24.14	+01	36	16.2		688
1986	GO	*	1986	04	09.28530	13	15	27.40	-18	13	46.4	17.2	4 688
1986	GO		1986	04	09.35355	13	15	22.90	-18	13	32.6		1 688
1986	GP	*	1986	04	09.28530	13	15	44.67	-17	06	31.5	16.5	4 688
1986	GP		1986	04	09.35355	13	15	40.15	-17	06	35.6		688
1986	GQ	*	1986	04	09.30806	13	09	40.25	-07	39	05.1	16.8	6 688
1986	GQ		1986	04	09.37571	13	09	36.25	-07	38	57.9		688
1986	GR	*	1986	04	09.30806	13	10	45.11	-05	24	44.0	17.2	7 688
1986	GR		1986	04	09.37571	13	10	40.70	-05	24	35.7		688
1986	GS	*	1986	04	09.30806	13	13	47.26	-04	23	53.8	17.0	4 688
1986	GS		1986	04	09.37571	13	13	44.22	-04	23	35.1		688
1986	GT	*	1986	04	09.30806	13	21	36.34	-08	13	28.6	17.0	4 688
1986	GT		1986	04	09.37571	13	21	33.03	-08	12	57.3		688
1986	JK		1986	05	14.29144	15	34	31.75	-16	09	45.5	16.2	688
1986	JK		1986	05	14.32014	15	34	36.82	-16	10	18.2		688

Note 1: right ascension uncertain. 2: declination uncertain. 3 = 1 + 2. 4: discoverer E. Bowell. 6 = 2 + 4. 7 = 3 + 4.

OBSERVATIONS MADE AT THE LOWELL OBSERVATORY.

Plates with the 0.33-m photographic telescope. Measured by S. J. Bus, using a PDS scanning microdensitometer. SAO reference stars, global solutions. Contact: E. L. G. Bowell, Lowell Observatory, 1400 W. Mars Hill Road, Flagstaff, AZ 86001, U.S.A.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
1931 GJ	1931	04 09.23611	12 40 24.44	+06 29 01.8	690
1931 GJ	1931	04 10.23333	12 39 25.01	+06 29 35.7	690
1931 GJ	1931	04 11.25347	12 38 24.42	+06 29 57.9	690
1947 LN	1947	06 15.31014	17 54 41.14	-22 18 44.4	690
1947 LN	1947	06 16.28587	17 53 42.67	-22 19 49.6	690

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

Observations made by T. Gehrels and A. Mikesell with a CCD in scanning mode. Reduced by J. V. Scotti using reference stars from the SAO 1984 catalog. For further details see MPC 9198 and 10373. 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.
2063		1986	04 14.46241	17 33 53.27	-26 45 17.0		1	691
2063		1986	04 14.46728	17 33 52.84	-26 45 23.9			691
3361		1986	04 14.43748	19 20 37.64	-10 11 56.6	17.3V		691
3361		1986	04 14.44803	19 20 30.04	-10 11 54.7			691
3361		1986	04 14.45313	19 20 26.22	-10 11 53.3			691
3361		1986	04 15.45697	19 09 01.03	-10 05 54.0			691
3361		1986	04 15.46451	19 08 55.59	-10 05 52.1			691
3361		1986	05 13.40916	16 06 06.07	-06 50 07.3			691
3361		1986	05 13.41997	16 06 03.73	-06 50 06.0	16.9V		691
3361		1986	05 13.42890	16 06 01.79	-06 50 05.1			691
1963	RH	1986	04 14.15815	08 05 14.91	+07 12 50.8			691
1963	RH	1986	04 14.16903	08 05 15.41	+07 12 49.1			691
1963	RH	1986	04 14.17615	08 05 15.75	+07 12 47.9			691
1984	AB	1986	03 15.22572	06 27 33.23	+38 36 09.1			691
1984	AB	1986	03 15.22824	06 27 33.47	+38 36 09.3			691
1984	AB	1986	03 15.24425	06 27 35.11	+38 36 09.2			691
1984	AB	1986	03 16.21910	06 29 17.40	+38 37 06.6	17.9V		691
1984	AB	1986	03 16.22278	06 29 17.77	+38 37 07.0			691
1984	AB	1986	03 16.23874	06 29 19.44	+38 37 07.7			691
1985	PA	1986	03 15.19851	04 55 13.42	+12 39 20.2			691
1985	PA	1986	03 15.20338	04 55 14.44	+12 39 52.0			691
1985	PA	1986	03 15.21240	04 55 16.47	+12 40 52.4			691
1985	PA	1986	03 16.15397	04 58 47.88	+14 24 13.3	16.7V		691
1985	PA	1986	03 16.16111	04 58 49.43	+14 24 59.7			691
1985	PA	1986	03 16.16765	04 58 50.90	+14 25 42.5			691
1985	YP	1986	05 11.13931	08 07 18.24	+05 46 58.4	18.7V		691
1985	YP	1986	05 11.14477	08 07 18.81	+05 46 56.2			691
1985	YP	1986	05 11.15465	08 07 19.95	+05 46 53.5			691
1986	EB	1986	04 14.18051	09 20 08.18	+02 25 11.7	16.5V		691
1986	EB	1986	04 14.19330	09 20 07.21	+02 24 49.8			691
1986	EB	1986	04 14.20084	09 20 06.65	+02 24 36.8			691
1986	EB	1986	04 15.24622	09 18 58.64	+01 54 56.0			691
1986	EB	1986	04 15.25589	09 18 57.98	+01 54 39.7			691
1986	EB	1986	04 15.26207	09 18 57.58	+01 54 29.1			691
1986	GW *	1986	04 04.37631	13 24 58.32	-07 49 20.7			691
1986	GW	1986	04 04.40046	13 24 57.38	-07 49 14.6			691
1986	GW	1986	04 04.42447	13 24 56.53	-07 49 08.9			691
1986	GW	1986	04 09.22373	13 21 59.25	-07 28 24.8			691

1986	GW		1986	04	09.24816	13	21	58.32	-07	28	17.8	691
1986	GW		1986	04	09.27105	13	21	57.48	-07	28	12.6	691
1986	GW		1986	04	15.33785	13	18	08.65	-07	01	39.9	18.3V 691
1986	GW		1986	04	15.36564	13	18	07.55	-07	01	32.6	691
1986	GW		1986	04	15.41427	13	18	05.67	-07	01	19.5	691
1986	GW		1986	05	01.22693	13	08	44.93	-05	56	31.6	18.6V 691
1986	GW		1986	05	01.23470	13	08	44.61	-05	56	30.3	691
1986	GW		1986	05	01.24905	13	08	44.13	-05	56	27.2	691
1986	GX	*	1986	04	04.37863	13	28	21.39	-07	42	20.7	691
1986	GX		1986	04	04.40278	13	28	20.36	-07	42	06.0	691
1986	GX		1986	04	04.42679	13	28	19.40	-07	41	52.1	691
1986	GX		1986	04	05.19784	13	27	49.68	-07	34	03.5	691
1986	GX		1986	04	05.22132	13	27	48.68	-07	33	49.1	691
1986	GX		1986	04	05.24458	13	27	47.77	-07	33	34.1	691
1986	GX		1986	04	10.29863	13	24	20.79	-06	41	38.0	691
1986	GX		1986	04	10.32132	13	24	19.77	-06	41	24.3	691
1986	GX		1986	04	10.34409	13	24	18.76	-06	41	09.6	691
1986	GX		1986	04	14.41058	13	21	26.69	-05	58	49.9	18.6V 691
1986	GX		1986	04	14.41760	13	21	26.38	-05	58	45.8	691
1986	GX		1986	04	14.42514	13	21	26.17	-05	58	42.3	691
1986	GY	*	1986	04	05.30615	13	11	58.12	-07	52	34.2	691
1986	GY		1986	04	05.35811	13	11	54.74	-07	52	19.3	691
1986	GY		1986	04	05.38506	13	11	53.01	-07	52	11.6	691
1986	GY		1986	04	14.36012	13	02	20.42	-07	07	52.5	17.5V 691
1986	GY		1986	04	14.37347	13	02	19.55	-07	07	48.3	691
1986	GY		1986	04	14.37686	13	02	19.28	-07	07	46.5	691
1986	GY		1986	04	15.34072	13	01	18.51	-07	03	01.3	691
1986	GY		1986	04	15.35398	13	01	17.64	-07	02	57.2	691
1986	GY		1986	04	15.41751	13	01	13.51	-07	02	38.3	691
1986	GY		1986	04	17.20939	12	59	21.69	-06	53	49.0	691
1986	GY		1986	04	17.24497	12	59	19.38	-06	53	38.9	691
1986	GY		1986	04	17.29031	12	59	16.48	-06	53	25.0	691
1986	GZ	*	1986	04	09.22252	13	20	14.01	-07	31	42.0	691
1986	GZ		1986	04	09.24691	13	20	12.67	-07	31	21.2	691
1986	GZ		1986	04	09.26985	13	20	11.46	-07	31	01.9	691
1986	GZ		1986	04	10.36707	13	19	13.60	-07	15	16.3	691
1986	GZ		1986	04	10.38980	13	19	12.31	-07	14	56.8	691
1986	GZ		1986	04	10.41248	13	19	11.11	-07	14	36.9	691
1986	GZ		1986	04	17.20343	13	13	12.67	-05	36	16.3	19.1V 691
1986	GZ		1986	04	17.21838	13	13	11.84	-05	36	03.8	691
1986	GZ		1986	04	17.28385	13	13	08.17	-05	35	07.3	691
1986	GZ		1986	05	06.21670	12	58	28.45	-01	18	51.2	691
1986	GZ		1986	05	06.24506	12	58	27.26	-01	18	30.5	19.2V 691
1986	GZ		1986	05	06.25959	12	58	26.80	-01	18	20.5	691
1986	GZ		1986	05	13.24281	12	54	39.11	-00	00	20.7	691
1986	GZ		1986	05	13.26032	12	54	38.56	-00	00	10.0	19.1V 691
1986	GZ		1986	05	13.28116	12	54	37.98	+00	00	02.9	691
1986	JE	*	1986	05	09.29916	14	54	21.85	-17	39	31.1	691
1986	JE		1986	05	09.32256	14	54	19.31	-17	39	50.6	691
1986	JE		1986	05	09.34576	14	54	16.58	-17	40	09.2	691
1986	JE		1986	05	10.27984	14	52	32.93	-17	52	39.8	19.8V 691
1986	JE		1986	05	10.30337	14	52	30.20	-17	52	59.4	691
1986	JE		1986	05	10.32676	14	52	27.58	-17	53	17.3	691
1986	JE		1986	05	11.28022	14	50	41.85	-18	05	54.6	691
1986	JE		1986	05	11.32690	14	50	36.42	-18	06	35.0	691
1986	JE		1986	05	13.29811	14	46	58.42	-18	32	33.6	691
1986	JE		1986	05	13.31374	14	46	56.50	-18	32	45.5	19.7V 691
1986	JE		1986	05	13.31961	14	46	55.79	-18	32	51.5	691
1986	JE		1986	05	14.31479	14	45	06.50	-18	45	47.1	691

1986	JE		1986	05	14.32156	14	45	05.56	-18	45	54.0	691
1986	JE		1986	05	14.32927	14	45	04.79	-18	45	59.4	691
1986	JJ	*	1986	05	10.35958	15	05	31.32	-18	08	35.2	18.8V 691
1986	JJ		1986	05	10.38316	15	05	29.87	-18	08	02.0	691
1986	JJ		1986	05	10.41037	15	05	28.03	-18	07	24.2	691
1986	JJ		1986	05	13.34904	15	02	29.55	-16	58	46.5	18.8V 691
1986	JJ		1986	05	13.35824	15	02	28.97	-16	58	33.5	691
1986	JJ		1986	05	13.38567	15	02	27.19	-16	57	54.3	691
1986	JJ		1986	05	14.33561	15	01	30.80	-16	35	49.7	19.2V 691
1986	JJ		1986	05	14.36079	15	01	29.25	-16	35	14.5	691
1986	JK		1986	05	14.37281	15	34	45.86	-16	11	14.1	15.7V 691
1986	JK		1986	05	14.38372	15	34	47.72	-16	11	26.4	691
1986	JK		1986	05	14.40406	15	34	51.21	-16	11	49.0	691
1986	JK		1986	05	15.30416	15	37	59.82	-16	30	13.7	15.5V 691
1986	JK		1986	05	15.31044	15	38	01.05	-16	30	22.5	691
1986	JK		1986	05	15.32751	15	38	04.35	-16	30	44.4	691

Note 1: extremely crowded field.

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.
938	1986	04 13.25810	13 32 50.71	-05 45 04.0			801
1942 EB	1986	02 09.42761	13 21 21.61	-00 42 15.6			801
1963 RH	1986	04 13.03754	08 04 20.60	+07 16 14.8			801
1975 ES	1986	04 14.27018	12 20 09.71	-05 48 36.4			801
1978 TO7	1986	04 13.16651	10 33 04.72	+24 18 08.1			801
1980 OA	1986	04 12.28921	13 04 32.51	-04 08 23.4			801
1980 RJ2	1986	04 12.24978	11 36 03.77	-01 19 16.3			801
1981 JA	1986	04 14.20789	10 45 14.55	+09 08 20.6		1	801
1983 RL2	1984	11 27.29386	04 59 38.00	+29 05 27.6			801
1983 RL2	1986	02 04.32151	10 24 56.81	+14 48 12.6			801
1983 RL2	1986	04 13.14403	09 40 56.93	+16 57 28.5			801
1984 HA1	1986	04 14.34777	18 06 43.33	+03 29 44.6			801
1984 QO	1986	04 13.23862	11 19 58.74	-03 53 23.2			801
1984 SV	1986	04 13.21608	10 56 47.91	+04 03 51.6			801
1984 SV	1986	04 14.23349	10 56 23.85	+04 04 30.8			801
1985 TB	1986	04 13.19392	10 05 40.71	+38 26 23.3			801
1985 TB	1986	04 14.31513	10 06 50.66	+37 37 22.8		2	801
1986 CN	1986	04 13.11217	09 33 25.32	+25 00 43.0			801
1986 GA	1986	04 13.30227	13 56 54.61	-09 28 49.7	17.0		801
1986 GN1	* 1986	04 13.30227	13 56 23.30	-09 09 04.1	17.0		801
1986 JK	1986	05 15.23954	15 37 44.56	-16 28 56.9		3	801
1986 JK	1986	05 16.25104	15 41 41.78	-16 52 11.6		3	801

Note 1: poor reference stars. 2: inkdot measured. 3: plate taken with 0.4-m astrograph; trailed image, difficult to measure.

OBSERVATIONS MADE AT THE EUROPEAN SOUTHERN OBSERVATORY BY H. DEBEHOGNE.

Plates taken with the 0.4-m GPO astrograph, measured by H. Debehogne, reduced by H. Debehogne and G. Peeters, in part on the Optronics machine at Garching. Contact: H. Debehogne, Observatoire Royal de Belgique, Avenue Circulaire 3, B-1180 Brussels, Belgium.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
17	1985	09 05.13160	22 48 04.73	-13 38 53.8		809
17	1985	09 05.13646	22 48 04.48	-13 38 55.5		809
17	1985	09 05.14132	22 48 04.19	-13 38 58.0		809

17	1985	09	07.05798	22	46	25.78	-13	52	31.7	809
17	1985	09	07.06285	22	46	25.51	-13	52	34.0	809
17	1985	09	07.06771	22	46	25.26	-13	52	36.1	809
17	1985	09	10.09444	22	43	52.05	-14	13	03.8	809
17	1985	09	10.09861	22	43	51.85	-14	13	05.4	809
17	1985	09	10.10278	22	43	51.62	-14	13	07.2	809
17	1985	09	12.09861	22	42	13.49	-14	25	49.8	809
17	1985	09	12.10278	22	42	13.33	-14	25	51.2	809
17	1985	09	12.10694	22	42	13.14	-14	25	52.3	809
104	1985	09	05.11701	22	15	16.50	-14	56	22.6	809
104	1985	09	05.11701	22	15	16.50	-14	56	22.6	809
104	1985	09	05.12187	22	15	16.27	-14	56	23.8	809
104	1985	09	07.03854	22	13	50.59	-15	03	03.3	809
104	1985	09	07.04340	22	13	50.38	-15	03	04.6	809
104	1985	09	07.04826	22	13	50.13	-15	03	05.5	809
104	1985	09	10.07986	22	11	37.81	-15	13	00.9	809
104	1985	09	10.08403	22	11	37.62	-15	13	01.6	809
104	1985	09	10.08819	22	11	37.43	-15	13	02.8	809
104	1985	09	11.09861	22	10	54.39	-15	16	10.4	809
104	1985	09	11.10278	22	10	54.21	-15	16	11.1	809
104	1985	09	11.10694	22	10	54.02	-15	16	12.1	809
104	1985	09	14.31458	22	08	41.74	-15	25	27.7	809
104	1985	09	14.31875	22	08	41.58	-15	25	28.4	809
104	1985	09	14.32291	22	08	41.42	-15	25	28.8	809
104	1985	09	14.33055	22	08	41.13	-15	25	30.3	809
104	1985	09	14.33472	22	08	40.96	-15	25	30.9	809
104	1985	09	14.33889	22	08	40.80	-15	25	31.7	809
104	1985	09	15.10000	22	08	10.85	-15	27	34.4	809
104	1985	09	15.10555	22	08	10.65	-15	27	35.4	809
104	1985	09	15.11111	22	08	10.43	-15	27	36.4	809
104	1985	09	15.11805	22	08	10.16	-15	27	37.4	809
104	1985	09	15.12361	22	08	09.95	-15	27	38.4	809
104	1985	09	15.12917	22	08	09.73	-15	27	39.6	809
104	1985	09	16.18680	22	07	28.49	-15	30	22.4	809
104	1985	09	16.19236	22	07	28.25	-15	30	23.6	809
104	1985	09	16.19791	22	07	28.05	-15	30	24.7	809
104	1985	09	17.99201	22	06	20.65	-15	34	45.2	809
104	1985	09	17.99687	22	06	20.48	-15	34	46.3	809
104	1985	09	18.00174	22	06	20.28	-15	34	47.1	809
104	1985	09	20.03576	22	05	07.19	-15	39	16.3	809
104	1985	09	20.04062	22	05	07.02	-15	39	17.0	809
104	1985	09	20.04548	22	05	06.83	-15	39	17.7	809
139	1985	09	12.14861	23	28	46.31	-06	56	35.0	809
139	1985	09	12.15278	23	28	46.10	-06	56	36.0	809
139	1985	09	12.15694	23	28	45.85	-06	56	36.8	809
139	1985	09	17.06424	23	24	29.41	-07	10	37.4	809
139	1985	09	17.06944	23	24	29.11	-07	10	38.3	809
139	1985	09	17.07465	23	24	28.84	-07	10	39.5	809
139	1985	09	19.25590	23	22	35.18	-07	16	32.5	809
139	1985	09	19.26076	23	22	34.92	-07	16	33.4	809
139	1985	09	19.26562	23	22	34.67	-07	16	34.0	809
139	1985	09	21.26701	23	20	51.80	-07	21	46.5	809
139	1985	09	21.27187	23	20	51.51	-07	21	47.0	809
139	1985	09	21.27639	23	20	51.26	-07	21	48.1	809
182	1985	09	05.11215	22	16	18.39	-13	38	22.4	809
182	1985	09	05.11701	22	16	18.13	-13	38	24.3	809
182	1985	09	05.12187	22	16	17.85	-13	38	26.1	809
182	1985	09	07.03854	22	14	34.20	-13	49	03.8	809
182	1985	09	07.04340	22	14	33.94	-13	49	05.4	809

182	1985	09	07.04826	22	14	33.69	-13	49	07.3	809
182	1985	09	10.07986	22	11	54.22	-14	05	05.4	809
182	1985	09	10.08403	22	11	54.00	-14	05	07.3	809
182	1985	09	10.08819	22	11	53.77	-14	05	08.8	809
182	1985	09	11.11285	22	11	01.45	-14	10	17.1	809
182	1985	09	11.11771	22	11	01.19	-14	10	18.4	809
182	1985	09	11.12257	22	11	00.94	-14	10	19.8	809
182	1985	09	14.33055	22	08	23.71	-14	25	28.1	809
182	1985	09	14.33472	22	08	23.50	-14	25	29.5	809
182	1985	09	14.33889	22	08	23.31	-14	25	30.5	809
182	1985	09	15.11805	22	07	47.39	-14	28	57.2	809
182	1985	09	15.12361	22	07	47.14	-14	28	58.8	809
182	1985	09	15.12917	22	07	46.89	-14	29	00.5	809
182	1985	09	16.20439	22	06	57.74	-14	33	36.2	809
182	1985	09	16.21204	22	06	57.39	-14	33	37.0	809
182	1985	09	16.21690	22	06	57.16	-14	33	39.3	809
182	1985	09	18.00937	22	05	39.42	-14	40	54.1	809
182	1985	09	18.01423	22	05	39.20	-14	40	55.3	809
182	1985	09	18.01910	22	05	38.97	-14	40	56.4	809
192	1985	09	18.13090	23	55	55.72	+03	39	16.0	809
192	1985	09	18.13507	23	55	55.42	+03	39	16.5	809
192	1985	09	18.24236	23	55	48.93	+03	39	26.9	809
196	1985	09	04.99410	21	02	10.72	-26	53	20.9	809
196	1985	09	04.99896	21	02	10.56	-26	53	21.1	809
196	1985	09	05.00382	21	02	10.39	-26	53	21.3	809
196	1985	09	06.00520	21	01	37.92	-26	54	12.4	809
196	1985	09	06.01076	21	01	37.76	-26	54	12.6	809
196	1985	09	06.01597	21	01	38.00	-26	54	12.7	809
196	1985	09	07.98299	21	00	37.36	-26	55	29.0	809
196	1985	09	07.98785	21	00	37.19	-26	55	29.1	809
196	1985	09	07.99271	21	00	37.05	-26	55	29.3	809
196	1985	09	09.98472	20	59	40.98	-26	56	11.9	809
196	1985	09	09.98889	20	59	40.83	-26	56	12.1	809
196	1985	09	09.99306	20	59	40.69	-26	56	12.3	809
243	1985	09	04.05278	21	47	31.68	-13	07	43.6	809
243	1985	09	04.05833	21	47	31.48	-13	07	44.2	809
243	1985	09	04.06389	21	47	31.23	-13	07	45.3	809
243	1985	09	06.02604	21	46	05.19	-13	14	26.6	809
243	1985	09	06.03160	21	46	04.96	-13	14	27.5	809
243	1985	09	06.03646	21	46	04.76	-13	14	28.4	809
274	1985	09	05.08785	22	07	53.10	-16	27	51.5	809
274	1985	09	05.09271	22	07	52.88	-16	27	52.5	809
274	1985	09	05.09757	22	07	52.69	-16	27	53.5	809
274	1985	09	07.02048	22	06	30.34	-16	35	09.7	809
274	1985	09	07.02535	22	06	30.13	-16	35	11.0	809
274	1985	09	07.03021	22	06	29.92	-16	35	12.0	809
274	1985	09	10.06389	22	04	24.48	-16	45	54.3	809
274	1985	09	10.06805	22	04	24.33	-16	45	55.2	809
274	1985	09	10.07222	22	04	24.18	-16	45	56.3	809
274	1985	09	11.07674	22	03	43.93	-16	49	16.6	809
274	1985	09	11.08160	22	03	43.72	-16	49	17.3	809
274	1985	09	11.08646	22	03	43.55	-16	49	18.5	809
274	1985	09	12.06805	22	03	05.09	-16	52	27.0	809
274	1985	09	12.07222	22	03	04.93	-16	52	28.0	809
274	1985	09	12.07639	22	03	04.77	-16	52	28.9	809
274	1985	09	14.26736	22	01	41.55	-16	59	08.4	809
274	1985	09	14.27153	22	01	41.41	-16	59	09.3	809
274	1985	09	14.27569	22	01	41.26	-16	59	10.1	809
274	1985	09	15.04618	22	01	13.32	-17	01	21.9	809

274	1985	09	15.05104	22	01	13.18	-17	01	22.4	809
274	1985	09	15.05590	22	01	13.02	-17	01	23.1	809
274	1985	09	17.00798	22	00	03.94	-17	06	38.2	809
274	1985	09	17.01284	22	00	03.77	-17	06	39.0	809
274	1985	09	17.01771	22	00	03.60	-17	06	39.5	809
274	1985	09	20.28437	21	58	16.18	-17	14	24.6	809
274	1985	09	20.28923	21	58	16.02	-17	14	25.3	809
274	1985	09	20.29409	21	58	15.88	-17	14	26.2	809
279	1985	09	14.22187	00	22	52.72	-00	39	09.8	809
279	1985	09	14.22673	00	22	52.56	-00	39	10.9	809
279	1985	09	14.23159	00	22	52.40	-00	39	11.9	809
279	1985	09	15.35868	00	22	16.08	-00	43	08.8	809
279	1985	09	15.36354	00	22	15.93	-00	43	09.7	809
279	1985	09	15.36840	00	22	15.77	-00	43	11.0	809
279	1985	09	16.10521	00	21	52.13	-00	45	46.9	809
279	1985	09	16.11007	00	21	52.00	-00	45	48.4	809
279	1985	09	16.11493	00	21	51.84	-00	45	49.5	809
279	1985	09	18.30278	00	20	39.93	-00	53	37.2	809
279	1985	09	18.30764	00	20	39.78	-00	53	38.3	809
279	1985	09	18.31215	00	20	39.64	-00	53	39.3	809
279	1985	09	19.33715	00	20	05.55	-00	57	19.2	809
279	1985	09	19.34201	00	20	05.40	-00	57	20.2	809
279	1985	09	19.34687	00	20	05.22	-00	57	21.5	809
279	1985	09	20.33923	00	19	32.10	-01	00	54.4	809
279	1985	09	20.34410	00	19	31.92	-01	00	55.8	809
279	1985	09	20.34896	00	19	31.76	-01	00	56.8	809
279	1985	09	21.31319	00	18	59.36	-01	04	25.0	809
279	1985	09	21.31736	00	18	59.21	-01	04	26.0	809
279	1985	09	21.32153	00	18	59.07	-01	04	27.1	809
279	1985	09	22.18333	00	18	30.11	-01	07	32.6	809
279	1985	09	22.18767	00	18	29.93	-01	07	33.1	809
315	1985	09	10.30382	00	00	20.64	-01	06	03.8	809
315	1985	09	10.30868	00	00	20.41	-01	06	06.0	809
315	1985	09	10.31354	00	00	20.21	-01	06	08.0	809
315	1985	09	11.32639	23	59	34.14	-01	13	38.8	809
315	1985	09	11.33055	23	59	33.95	-01	13	40.5	809
315	1985	09	11.33480	23	59	33.77	-01	13	42.6	809
315	1985	09	14.12604	23	57	23.33	-01	34	44.8	809
315	1985	09	14.13090	23	57	23.09	-01	34	47.1	809
315	1985	09	14.13576	23	57	22.85	-01	34	49.3	809
346	1985	09	06.15521	23	48	56.80	-16	23	20.0	809
346	1985	09	06.16007	23	48	56.56	-16	23	22.0	809
346	1985	09	06.16493	23	48	56.35	-16	23	24.2	809
346	1985	09	08.14305	23	47	26.82	-16	36	36.7	809
346	1985	09	08.14792	23	47	26.60	-16	36	39.0	809
346	1985	09	08.15278	23	47	26.38	-16	36	40.7	809
346	1985	09	10.20278	23	45	50.74	-16	49	54.7	809
346	1985	09	10.20694	23	45	50.55	-16	49	55.8	809
346	1985	09	10.21146	23	45	50.34	-16	49	57.7	809
346	1985	09	14.16840	23	42	41.19	-17	14	01.5	809
346	1985	09	14.17326	23	42	40.92	-17	14	02.9	809
346	1985	09	14.17812	23	42	40.67	-17	14	04.5	809
346	1985	09	16.33298	23	40	55.39	-17	26	10.7	809
346	1985	09	16.33785	23	40	55.15	-17	26	12.2	809
346	1985	09	16.34271	23	40	54.89	-17	26	13.7	809
346	1985	09	18.36910	23	39	15.74	-17	36	52.3	809
346	1985	09	18.37396	23	39	15.52	-17	36	54.1	809
346	1985	09	18.37882	23	39	15.28	-17	36	55.5	809
346	1985	09	20.16111	23	37	48.82	-17	45	41.2	809

346	1985	09	20.16632	23	37	48.56	-17	45	42.6	809
346	1985	09	20.17135	23	37	48.32	-17	45	44.3	809
346	1985	09	22.34861	23	36	02.65	-17	55	32.2	809
346	1985	09	22.35278	23	36	02.47	-17	55	33.4	809
357	1985	09	06.11701	23	01	21.27	-16	16	14.8	809
357	1985	09	06.12187	23	01	21.07	-16	16	17.4	809
357	1985	09	06.12674	23	01	20.88	-16	16	19.9	809
551	1985	09	07.11215	23	33	10.79	-03	05	27.0	809
551	1985	09	07.11701	23	33	10.58	-03	05	28.2	809
551	1985	09	07.12187	23	33	10.34	-03	05	29.7	809
551	1985	09	10.16180	23	30	51.93	-03	19	55.3	809
551	1985	09	10.16597	23	30	51.74	-03	19	56.6	809
551	1985	09	10.17014	23	30	51.55	-03	19	57.9	809
551	1985	09	12.16250	23	29	19.35	-03	29	34.0	809
551	1985	09	12.16667	23	29	19.14	-03	29	35.1	809
551	1985	09	12.17083	23	29	18.97	-03	29	36.7	809
551	1985	09	16.31146	23	26	05.28	-03	49	43.5	809
551	1985	09	16.31632	23	26	05.05	-03	49	44.9	809
551	1985	09	16.32118	23	26	04.83	-03	49	46.3	809
551	1985	09	17.08090	23	25	29.59	-03	53	26.9	809
551	1985	09	17.08576	23	25	29.35	-03	53	28.4	809
551	1985	09	17.09097	23	25	29.10	-03	53	30.0	809
551	1985	09	19.27326	23	23	47.24	-04	04	01.9	809
551	1985	09	19.27812	23	23	47.03	-04	04	03.3	809
551	1985	09	19.28299	23	23	46.80	-04	04	04.8	809
551	1985	09	22.16875	23	21	34.08	-04	17	47.6	809
551	1985	09	22.17292	23	21	33.88	-04	17	48.9	809
580	1985	09	06.17465	00	23	53.68	-03	03	57.7	809
580	1985	09	06.17951	00	23	53.53	-03	03	59.4	809
580	1985	09	06.18437	00	23	53.33	-03	04	00.7	809
580	1985	09	08.10833	00	22	46.26	-03	13	09.0	809
580	1985	09	08.11250	00	22	46.10	-03	13	09.8	809
580	1985	09	08.11667	00	22	45.97	-03	13	11.4	809
580	1985	09	10.32257	00	21	24.97	-03	23	52.8	809
580	1985	09	10.32743	00	21	24.80	-03	23	53.9	809
580	1985	09	10.33229	00	21	24.63	-03	23	55.1	809
603	1985	09	06.13594	23	40	39.34	-00	13	30.8	17.1 809
603	1985	09	06.14080	23	40	39.07	-00	13	31.6	809
603	1985	09	06.14549	23	40	38.82	-00	13	32.3	809
603	1985	09	08.07118	23	38	55.41	-00	19	29.8	809
603	1985	09	08.07604	23	38	55.15	-00	19	30.8	809
603	1985	09	08.08090	23	38	54.89	-00	19	31.8	809
603	1985	09	10.18663	23	36	59.50	-00	26	18.3	809
603	1985	09	10.19149	23	36	59.23	-00	26	19.3	809
603	1985	09	10.19635	23	36	58.97	-00	26	20.4	809
603	1985	09	14.09027	23	33	21.99	-00	39	26.2	809
603	1985	09	14.09514	23	33	21.74	-00	39	27.3	809
603	1985	09	14.10069	23	33	21.43	-00	39	28.2	809
603	1985	09	15.32257	23	32	12.33	-00	43	41.8	809
603	1985	09	15.32743	23	32	12.05	-00	43	42.8	809
603	1985	09	15.33229	23	32	11.77	-00	43	44.1	809
603	1985	09	17.28646	23	30	21.59	-00	50	32.6	809
603	1985	09	17.29132	23	30	21.31	-00	50	33.8	809
603	1985	09	17.29618	23	30	21.04	-00	50	34.9	809
603	1985	09	19.29965	23	28	28.23	-00	57	38.3	809
603	1985	09	19.30451	23	28	27.96	-00	57	39.3	809
603	1985	09	19.30937	23	28	27.67	-00	57	40.3	809
603	1985	09	22.30069	23	25	40.52	-01	08	14.2	809
603	1985	09	22.30486	23	25	40.29	-01	08	15.0	809

684	1985	09	04.10000	22	17	07.97	-10	41	17.2	809
684	1985	09	04.10625	22	17	07.63	-10	41	18.3	809
684	1985	09	04.11250	22	17	07.27	-10	41	19.4	809
684	1985	09	06.06910	22	15	16.93	-10	46	13.4	809
684	1985	09	06.07396	22	15	16.70	-10	46	14.3	809
684	1985	09	06.07882	22	15	16.41	-10	46	15.1	809
684	1985	09	08.01597	22	13	29.68	-10	50	50.2	809
684	1985	09	08.02014	22	13	29.47	-10	50	50.6	809
684	1985	09	08.02430	22	13	29.25	-10	50	51.1	809
684	1985	09	10.26215	22	11	29.15	-10	55	46.2	809
684	1985	09	10.26701	22	11	28.89	-10	55	46.8	809
684	1985	09	10.27187	22	11	28.63	-10	55	47.5	809
684	1985	09	11.27222	22	10	36.77	-10	57	51.8	809
684	1985	09	11.27639	22	10	36.56	-10	57	52.3	809
684	1985	09	11.28055	22	10	36.36	-10	57	52.9	809
684	1985	09	14.05358	22	08	18.77	-11	03	10.1	809
684	1985	09	14.05798	22	08	18.57	-11	03	10.5	809
684	1985	09	14.06169	22	08	18.41	-11	03	10.9	809
684	1985	09	16.22465	22	06	36.79	-11	06	48.3	809
684	1985	09	16.22951	22	06	36.57	-11	06	48.6	809
684	1985	09	16.23437	22	06	36.36	-11	06	49.1	809
684	1985	09	18.06146	22	05	16.00	-11	09	28.0	809
684	1985	09	18.06632	22	05	15.79	-11	09	28.6	809
684	1985	09	18.07118	22	05	15.59	-11	09	29.0	809
684	1985	09	20.00104	22	03	55.63	-11	11	54.1	809
684	1985	09	20.00590	22	03	55.43	-11	11	54.6	809
684	1985	09	20.01076	22	03	55.24	-11	11	54.8	809
698	1985	09	06.15521	23	52	43.45	-15	15	43.9	809
698	1985	09	06.16007	23	52	43.18	-15	15	45.3	809
698	1985	09	06.16493	23	52	42.95	-15	15	46.2	809
698	1985	09	08.14305	23	51	06.13	-15	23	41.3	809
698	1985	09	08.14792	23	51	05.91	-15	23	42.4	809
698	1985	09	08.15278	23	51	05.65	-15	23	43.6	809
698	1985	09	10.20278	23	49	23.06	-15	31	38.7	809
698	1985	09	10.20694	23	49	22.85	-15	31	39.3	809
698	1985	09	10.21146	23	49	22.62	-15	31	39.9	809
698	1985	09	14.16840	23	46	00.25	-15	45	52.8	809
698	1985	09	14.17326	23	46	00.00	-15	45	53.2	809
698	1985	09	14.17812	23	45	59.75	-15	45	54.2	809
698	1985	09	16.33298	23	44	07.86	-15	52	55.7	809
698	1985	09	16.33785	23	44	07.59	-15	52	56.5	809
698	1985	09	16.34271	23	44	07.33	-15	52	57.4	809
698	1985	09	18.36910	23	42	21.83	-15	59	05.2	809
698	1985	09	18.37396	23	42	21.58	-15	59	06.0	809
698	1985	09	18.37882	23	42	21.32	-15	59	06.9	809
710	1985	09	07.07535	23	16	12.36	-05	57	47.0	809
710	1985	09	07.08021	23	16	12.15	-05	57	48.4	809
710	1985	09	07.08507	23	16	11.94	-05	57	49.9	809
710	1985	09	10.12639	23	13	58.04	-06	13	16.0	809
710	1985	09	10.13055	23	13	57.86	-06	13	17.2	809
710	1985	09	10.13472	23	13	57.69	-06	13	18.8	809
710	1985	09	11.15104	23	13	12.86	-06	18	25.7	809
710	1985	09	11.15590	23	13	12.67	-06	18	27.2	809
710	1985	09	11.16076	23	13	12.43	-06	18	28.9	809
710	1985	09	12.13194	23	12	29.79	-06	23	23.5	809
710	1985	09	12.13680	23	12	29.58	-06	23	25.1	809
710	1985	09	12.14097	23	12	29.40	-06	23	26.2	809
710	1985	09	14.36319	23	10	52.01	-06	34	28.9	809
710	1985	09	14.36736	23	10	51.83	-06	34	30.2	809

710	1985	09	14.37153	23	10	51.65	-06	34	31.1	809
710	1985	09	16.28125	23	09	29.05	-06	43	51.6	809
710	1985	09	16.28680	23	09	28.78	-06	43	52.9	809
710	1985	09	16.29236	23	09	28.54	-06	43	54.8	809
710	1985	09	17.21180	23	08	49.28	-06	48	21.0	809
710	1985	09	17.21736	23	08	49.04	-06	48	22.5	809
710	1985	09	17.22292	23	08	48.80	-06	48	24.1	809
710	1985	09	19.23368	23	07	23.67	-06	57	56.1	809
710	1985	09	19.23854	23	07	23.48	-06	57	57.8	809
710	1985	09	19.24340	23	07	23.26	-06	57	59.2	809
710	1985	09	21.28542	23	05	58.74	-07	07	24.7	809
710	1985	09	21.29097	23	05	58.50	-07	07	26.2	809
710	1985	09	21.29652	23	05	58.25	-07	07	27.8	809
710	1985	09	22.06875	23	05	27.08	-07	10	56.7	809
710	1985	09	22.07291	23	05	26.90	-07	10	57.5	809
822	1985	09	07.00174	21	48	37.21	-12	10	06.3	809
822	1985	09	07.00660	21	48	36.95	-12	10	07.9	809
822	1985	09	07.01146	21	48	36.66	-12	10	09.4	809
822	1985	09	10.04930	21	45	59.88	-12	24	47.5	809
822	1985	09	10.05347	21	45	59.66	-12	24	48.3	809
822	1985	09	10.05798	21	45	59.41	-12	24	49.8	809
822	1985	09	11.06180	21	45	09.94	-12	29	26.0	809
822	1985	09	11.06597	21	45	09.69	-12	29	27.4	809
822	1985	09	11.07014	21	45	09.50	-12	29	28.9	809
822	1985	09	12.05347	21	44	22.27	-12	33	54.0	809
822	1985	09	12.05764	21	44	22.07	-12	33	55.2	809
822	1985	09	12.06180	21	44	21.89	-12	33	56.2	809
830	1985	09	06.13594	23	41	57.26	-00	52	42.2	809
830	1985	09	06.14080	23	41	57.05	-00	52	43.4	809
830	1985	09	06.14549	23	41	56.84	-00	52	44.5	809
830	1985	09	08.07118	23	40	34.11	-00	59	15.4	809
830	1985	09	08.07604	23	40	33.89	-00	59	16.3	809
830	1985	09	08.08090	23	40	33.67	-00	59	17.4	809
830	1985	09	10.18663	23	39	01.25	-01	06	38.9	809
830	1985	09	10.19149	23	39	01.05	-01	06	39.9	809
830	1985	09	10.19635	23	39	00.84	-01	06	41.0	809
830	1985	09	14.09027	23	36	07.01	-01	20	42.6	809
830	1985	09	14.09514	23	36	06.78	-01	20	43.2	809
830	1985	09	14.10069	23	36	06.54	-01	20	44.9	809
830	1985	09	15.32257	23	35	11.01	-01	25	13.7	809
830	1985	09	15.32743	23	35	10.79	-01	25	14.8	809
830	1985	09	15.33229	23	35	10.59	-01	25	15.9	809
830	1985	09	17.28646	23	33	42.24	-01	32	27.6	809
830	1985	09	17.29132	23	33	42.03	-01	32	28.9	809
830	1985	09	17.29618	23	33	41.83	-01	32	30.1	809
830	1985	09	19.29965	23	32	11.29	-01	39	55.6	809
830	1985	09	19.30451	23	32	11.08	-01	39	56.6	809
830	1985	09	19.30937	23	32	10.84	-01	39	57.4	809
962	1985	09	07.09410	23	27	48.24	-05	14	42.3	809
962	1985	09	07.09896	23	27	48.02	-05	14	43.8	809
962	1985	09	07.10382	23	27	47.82	-05	14	45.4	809
962	1985	09	10.14653	23	25	31.37	-05	32	43.8	809
962	1985	09	10.15069	23	25	31.18	-05	32	45.7	809
962	1985	09	10.15486	23	25	31.00	-05	32	46.6	809
962	1985	09	12.14861	23	24	00.58	-05	44	32.7	809
962	1985	09	12.15278	23	24	00.38	-05	44	34.2	809
962	1985	09	12.15694	23	24	00.19	-05	44	35.7	809
962	1985	09	14.18785	23	22	27.49	-05	56	32.7	809
962	1985	09	14.19271	23	22	27.29	-05	56	34.0	809

962	1985	09	14.19757	23	22	27.05	-05	56	36.1	809
996	1985	09	04.07500	22	23	53.43	-10	13	00.9	809
996	1985	09	04.08056	22	23	53.20	-10	13	02.6	809
996	1985	09	04.08611	22	23	52.92	-10	13	04.0	809
996	1985	09	18.02673	22	14	20.27	-11	05	04.7	809
996	1985	09	18.03160	22	14	20.09	-11	05	06.2	809
996	1985	09	18.03646	22	14	19.90	-11	05	07.3	809
996	1985	09	20.07153	22	13	05.81	-11	11	40.2	809
996	1985	09	20.07691	22	13	05.59	-11	11	41.5	809
996	1985	09	20.08194	22	13	05.40	-11	11	42.7	809
996	1985	09	20.98993	22	12	33.58	-11	14	32.0	809
996	1985	09	20.99479	22	12	33.40	-11	14	33.1	809
1016	1985	09	05.13160	22	47	41.37	-13	33	04.9	809
1016	1985	09	05.13646	22	47	41.05	-13	33	05.5	809
1016	1985	09	05.14132	22	47	40.71	-13	33	06.4	809
1016	1985	09	07.05798	22	45	35.35	-13	38	21.9	809
1016	1985	09	07.06285	22	45	35.03	-13	38	22.5	809
1016	1985	09	07.06771	22	45	34.72	-13	38	23.1	809
1016	1985	09	10.09444	22	42	17.71	-13	45	51.3	809
1016	1985	09	10.09861	22	42	17.43	-13	45	52.1	809
1016	1985	09	10.10278	22	42	17.16	-13	45	52.6	809
1016	1985	09	12.09861	22	40	09.52	-13	50	07.2	809
1016	1985	09	12.10278	22	40	09.30	-13	50	07.4	809
1016	1985	09	12.10694	22	40	09.05	-13	50	07.7	809
1016	1985	09	14.29722	22	37	51.44	-13	54	05.9	809
1016	1985	09	14.30139	22	37	51.21	-13	54	06.2	809
1016	1985	09	14.30590	22	37	50.95	-13	54	06.5	809
1016	1985	09	15.08090	22	37	04.02	-13	55	20.2	809
1016	1985	09	15.08576	22	37	03.72	-13	55	20.7	809
1016	1985	09	15.09062	22	37	03.43	-13	55	21.2	809
1016	1985	09	17.04409	22	35	06.13	-13	58	00.5	809
1016	1985	09	17.04896	22	35	05.88	-13	58	00.7	809
1016	1985	09	17.05382	22	35	05.57	-13	58	01.3	809
1016	1985	09	19.11562	22	33	06.22	-14	00	07.8	809
1016	1985	09	19.12048	22	33	05.93	-14	00	08.1	809
1016	1985	09	19.12535	22	33	05.67	-14	00	08.4	809
1016	1985	09	20.30312	22	31	59.53	-14	00	57.7	809
1016	1985	09	20.30798	22	31	59.25	-14	00	58.1	809
1016	1985	09	20.31285	22	31	58.95	-14	00	58.4	809
1016	1985	09	20.31979	22	31	58.60	-14	00	59.0	809
1016	1985	09	20.32465	22	31	58.32	-14	00	59.3	809
1016	1985	09	20.32951	22	31	58.03	-14	00	59.7	809
1016	1985	09	22.01250	22	30	28.48	-14	01	45.8	809
1016	1985	09	22.01736	22	30	28.20	-14	01	46.0	809
1016	1985	09	22.02309	22	30	27.86	-14	01	46.4	809
1028	1985	09	06.15521	23	47	11.55	-15	37	16.5	809
1028	1985	09	06.16007	23	47	11.37	-15	37	17.9	809
1028	1985	09	06.16493	23	47	11.15	-15	37	19.3	809
1028	1985	09	08.14305	23	45	48.33	-15	46	14.5	809
1028	1985	09	08.14792	23	45	48.10	-15	46	16.2	809
1028	1985	09	08.15278	23	45	47.93	-15	46	17.6	809
1028	1985	09	10.20278	23	44	20.44	-15	55	14.5	809
1028	1985	09	10.20694	23	44	20.26	-15	55	15.6	809
1028	1985	09	10.21146	23	44	20.05	-15	55	16.5	809
1028	1985	09	14.16840	23	41	27.50	-16	11	35.2	809
1028	1985	09	14.17326	23	41	27.28	-16	11	36.4	809
1028	1985	09	14.17812	23	41	27.06	-16	11	37.5	809
1028	1985	09	16.33298	23	39	51.53	-16	19	53.0	809
1028	1985	09	16.33785	23	39	51.29	-16	19	54.0	809

1028	1985	09	16.34271	23	39	51.08	-16	19	55.0	809
1028	1985	09	18.36910	23	38	21.08	-16	27	13.3	809
1028	1985	09	18.37396	23	38	20.87	-16	27	14.2	809
1028	1985	09	18.37882	23	38	20.67	-16	27	15.0	809
1028	1985	09	20.16111	23	37	01.95	-16	33	18.5	809
1028	1985	09	20.16632	23	37	01.71	-16	33	19.5	809
1028	1985	09	20.17135	23	37	01.50	-16	33	20.1	809
1028	1985	09	22.34861	23	35	25.10	-16	40	09.6	809
1028	1985	09	22.35278	23	35	24.92	-16	40	10.6	809
1056	1985	09	04.99410	21	00	10.02	-24	56	33.7	809
1056	1985	09	04.99896	21	00	09.95	-24	56	34.3	809
1056	1985	09	05.00382	21	00	09.88	-24	56	35.1	809
1056	1985	09	06.00590	20	59	53.18	-24	58	33.8	809
1056	1985	09	06.01076	20	59	53.10	-24	58	34.3	809
1056	1985	09	06.01597	20	59	53.02	-24	58	34.9	809
1056	1985	09	07.98299	20	59	26.68	-25	01	41.0	809
1056	1985	09	07.98785	20	59	26.59	-25	01	41.4	809
1056	1985	09	07.99271	20	59	26.50	-25	01	42.1	809
1056	1985	09	09.98472	20	59	08.50	-25	03	49.0	809
1056	1985	09	09.98889	20	59	08.44	-25	03	49.4	809
1056	1985	09	09.99306	20	59	08.36	-25	03	50.6	809
1069	1985	09	05.11215	22	15	31.75	-15	01	02.4	809
1069	1985	09	05.11701	22	15	31.58	-15	01	04.3	809
1069	1985	09	05.12187	22	15	31.41	-15	01	05.8	809
1069	1985	09	07.03854	22	14	15.19	-15	13	20.5	809
1069	1985	09	07.04340	22	14	15.02	-15	13	22.0	809
1069	1985	09	07.04826	22	14	14.86	-15	13	23.7	809
1069	1985	09	10.07986	22	12	17.36	-15	32	05.5	809
1069	1985	09	10.08403	22	12	17.21	-15	32	06.5	809
1069	1985	09	10.08819	22	12	17.04	-15	32	08.2	809
1069	1985	09	11.09861	22	11	38.91	-15	38	10.1	809
1069	1985	09	11.10278	22	11	38.76	-15	38	11.4	809
1069	1985	09	11.10694	22	11	38.62	-15	38	13.2	809
1069	1985	09	14.31458	22	09	41.50	-15	56	39.1	809
1069	1985	09	14.31875	22	09	41.39	-15	56	40.3	809
1069	1985	09	14.32291	22	09	41.26	-15	56	41.8	809
1069	1985	09	15.10000	22	09	14.20	-16	01	00.8	809
1069	1985	09	15.10555	22	09	14.04	-16	01	02.4	809
1069	1985	09	15.11111	22	09	13.88	-16	01	04.6	809
1069	1985	09	16.18680	22	08	36.65	-16	06	52.9	809
1069	1985	09	16.19236	22	08	36.49	-16	06	54.5	809
1069	1985	09	16.19791	22	08	36.33	-16	06	56.0	809
1069	1985	09	17.99201	22	07	36.61	-16	16	20.6	809
1069	1985	09	17.99687	22	07	36.46	-16	16	22.6	809
1069	1985	09	18.00174	22	07	36.30	-16	16	24.4	809
1069	1985	09	20.03576	22	06	31.67	-16	26	36.8	809
1069	1985	09	20.04062	22	06	31.55	-16	26	38.3	809
1069	1985	09	20.04548	22	06	31.40	-16	26	39.4	809
1073	1985	09	06.08924	22	53	14.36	-09	32	59.3	809
1073	1985	09	06.09410	22	53	14.14	-09	33	00.9	809
1073	1985	09	06.09896	22	53	13.91	-09	33	02.3	809
1073	1985	09	08.03194	22	51	47.74	-09	40	43.2	809
1073	1985	09	08.03715	22	51	47.51	-09	40	44.0	809
1073	1985	09	08.04201	22	51	47.31	-09	40	45.6	809
1073	1985	09	10.22083	22	50	10.71	-09	49	08.5	809
1073	1985	09	10.22604	22	50	10.49	-09	49	09.7	809
1073	1985	09	10.23090	22	50	10.27	-09	49	11.4	809
1077	1985	09	04.10000	22	21	28.67	-12	06	14.7	809
1077	1985	09	04.10625	22	21	28.32	-12	06	14.9	809

1077	1985	09	04.11250	22	21	27.96	-12	06	15.0	809
1077	1985	09	20.07153	22	08	33.21	-11	57	56.8	809
1077	1985	09	20.07691	22	08	33.00	-11	57	56.3	809
1077	1985	09	20.08194	22	08	32.78	-11	57	55.8	809
1077	1985	09	20.98993	22	08	00.49	-11	56	28.6	809
1077	1985	09	20.99479	22	08	00.34	-11	56	28.0	809
1188	1985	09	07.09410	23	33	29.91	-06	26	56.5	809
1188	1985	09	07.09896	23	33	29.63	-06	26	56.9	809
1188	1985	09	07.10382	23	33	29.36	-06	26	57.1	809
1188	1985	09	10.14653	23	30	32.60	-06	31	15.3	809
1188	1985	09	10.15069	23	30	32.36	-06	31	15.6	809
1188	1985	09	10.15486	23	30	32.13	-06	31	16.0	809
1188	1985	09	12.14861	23	28	33.48	-06	33	58.9	809
1188	1985	09	12.15278	23	28	33.25	-06	33	59.3	809
1188	1985	09	12.15694	23	28	32.99	-06	33	59.4	809
1188	1985	09	14.18785	23	26	30.74	-06	36	34.6	809
1188	1985	09	14.19271	23	26	30.44	-06	36	35.0	809
1188	1985	09	14.19757	23	26	30.14	-06	36	35.5	809
1188	1985	09	17.06424	23	23	38.16	-06	39	49.1	809
1188	1985	09	17.06944	23	23	37.84	-06	39	49.5	809
1188	1985	09	17.07465	23	23	37.53	-06	39	50.1	809
1188	1985	09	19.25590	23	21	26.91	-06	41	47.5	809
1188	1985	09	19.26076	23	21	26.59	-06	41	48.3	809
1188	1985	09	19.26562	23	21	26.31	-06	41	49.0	809
1267	1985	09	14.38160	00	25	39.99	-01	14	39.0	809
1267	1985	09	14.38576	00	25	39.76	-01	14	40.1	809
1267	1985	09	14.38993	00	25	39.53	-01	14	41.1	809
1267	1985	09	17.36042	00	22	53.44	-01	25	27.9	809
1267	1985	09	17.36597	00	22	53.13	-01	25	28.9	809
1267	1985	09	17.37153	00	22	52.83	-01	25	29.5	809
1267	1985	09	18.33437	00	21	57.80	-01	29	01.0	809
1267	1985	09	18.33923	00	21	57.53	-01	29	01.8	809
1267	1985	09	18.34410	00	21	57.26	-01	29	03.3	809
1267	1985	09	19.36979	00	20	58.08	-01	32	48.0	809
1267	1985	09	19.37465	00	20	57.80	-01	32	49.2	809
1267	1985	09	19.37951	00	20	57.51	-01	32	50.1	809
1267	1985	09	20.37326	00	19	59.76	-01	36	27.3	809
1267	1985	09	20.37812	00	19	59.50	-01	36	28.7	809
1267	1985	09	21.34722	00	19	02.92	-01	40	00.1	809
1267	1985	09	21.35139	00	19	02.69	-01	40	01.3	809
1267	1985	09	21.35555	00	19	02.44	-01	40	02.3	809
1267	1985	09	22.38264	00	18	02.17	-01	43	46.1	809
1267	1985	09	22.38680	00	18	01.94	-01	43	47.0	809
1381	1985	09	07.07535	23	16	06.02	-05	42	02.3	809
1381	1985	09	07.08021	23	16	05.77	-05	42	03.0	809
1381	1985	09	07.08507	23	16	05.51	-05	42	03.6	809
1381	1985	09	10.12639	23	13	14.83	-05	49	17.7	809
1381	1985	09	10.13055	23	13	14.60	-05	49	18.4	809
1381	1985	09	10.13472	23	13	14.37	-05	49	19.0	809
1381	1985	09	11.15104	23	12	16.92	-05	51	43.2	809
1381	1985	09	11.15590	23	12	16.65	-05	51	43.9	809
1381	1985	09	11.16076	23	12	16.38	-05	51	44.6	809
1381	1985	09	12.13194	23	11	21.54	-05	54	02.9	809
1381	1985	09	12.13680	23	11	21.28	-05	54	03.4	809
1381	1985	09	12.14097	23	11	21.07	-05	54	04.0	809
1381	1985	09	14.36319	23	09	15.16	-05	59	11.6	809
1381	1985	09	14.36736	23	09	14.93	-05	59	12.8	809
1381	1985	09	14.37153	23	09	14.71	-05	59	13.6	809
1381	1985	09	16.28125	23	07	28.24	-06	03	28.5	809

1381	1985	09	16.28680	23	07	27.95	-06	03	29.0	809
1381	1985	09	16.29236	23	07	27.62	-06	03	29.7	809
1381	1985	09	17.21180	23	06	37.01	-06	05	29.2	809
1381	1985	09	17.21736	23	06	36.70	-06	05	29.8	809
1381	1985	09	17.22292	23	06	36.39	-06	05	30.2	809
1381	1985	09	19.23368	23	04	46.89	-06	09	38.8	809
1381	1985	09	19.23854	23	04	46.65	-06	09	39.4	809
1381	1985	09	19.24340	23	04	46.40	-06	09	39.7	809
1381	1985	09	21.28542	23	02	58.08	-06	13	33.4	809
1381	1985	09	21.29097	23	02	57.77	-06	13	34.0	809
1381	1985	09	21.29652	23	02	57.47	-06	13	34.1	809
1381	1985	09	22.06875	23	02	18.04	-06	14	57.4	809
1381	1985	09	22.07291	23	02	17.80	-06	14	58.0	809
1434	1985	09	06.17465	00	22	55.10	-04	47	09.5	809
1434	1985	09	06.17951	00	22	54.94	-04	47	11.9	809
1434	1985	09	06.18437	00	22	54.78	-04	47	14.0	809
1434	1985	09	08.10833	00	21	49.03	-05	02	36.9	809
1434	1985	09	08.11250	00	21	48.88	-05	02	39.0	809
1434	1985	09	08.11667	00	21	48.75	-05	02	40.8	809
1434	1985	09	10.32257	00	20	29.17	-05	20	29.2	809
1434	1985	09	10.32743	00	20	29.00	-05	20	31.7	809
1434	1985	09	10.33229	00	20	28.84	-05	20	34.0	809
1434	1985	09	14.14757	00	18	04.10	-05	51	33.8	809
1434	1985	09	14.15243	00	18	03.93	-05	51	36.2	809
1434	1985	09	14.15712	00	18	03.76	-05	51	38.3	809
1445	1985	09	06.08924	22	53	43.77	-10	57	24.6	809
1445	1985	09	06.09410	22	53	43.53	-10	57	25.8	809
1445	1985	09	06.09896	22	53	43.31	-10	57	27.3	809
1445	1985	09	08.03194	22	52	17.58	-11	06	36.0	809
1445	1985	09	08.03715	22	52	17.33	-11	06	37.4	809
1445	1985	09	08.04201	22	52	17.11	-11	06	38.9	809
1445	1985	09	10.22083	22	50	40.61	-11	16	36.1	809
1445	1985	09	10.22604	22	50	40.41	-11	16	37.7	809
1445	1985	09	10.23090	22	50	40.19	-11	16	39.5	809
1445	1985	09	11.21840	22	49	56.97	-11	21	02.7	809
1445	1985	09	11.22326	22	49	56.75	-11	21	04.0	809
1445	1985	09	11.22813	22	49	56.54	-11	21	05.9	809
1445	1985	09	14.03567	22	47	56.12	-11	33	09.5	809
1445	1985	09	14.04037	22	47	55.93	-11	33	10.5	809
1445	1985	09	14.04504	22	47	55.73	-11	33	11.6	809
1445	1985	09	15.26146	22	47	04.17	-11	38	08.5	809
1445	1985	09	15.26632	22	47	03.99	-11	38	09.8	809
1445	1985	09	15.27118	22	47	03.79	-11	38	10.6	809
1445	1985	09	16.16666	22	46	26.88	-11	41	44.7	809
1445	1985	09	16.17222	22	46	26.64	-11	41	45.8	809
1445	1985	09	16.17778	22	46	26.39	-11	41	47.0	809
1445	1985	09	17.24340	22	45	42.76	-11	45	55.8	809
1445	1985	09	17.24826	22	45	42.55	-11	45	56.6	809
1445	1985	09	17.25312	22	45	42.38	-11	45	57.8	809
1445	1985	09	21.22500	22	43	08.28	-12	00	07.6	809
1445	1985	09	21.22847	22	43	08.15	-12	00	08.2	809
1445	1985	09	21.23507	22	43	07.89	-12	00	09.5	809
1603	1985	09	06.11701	22	59	55.76	-14	29	46.0	809
1603	1985	09	06.12187	22	59	55.55	-14	29	48.3	809
1603	1985	09	06.12674	22	59	55.32	-14	29	50.6	809
1603	1985	09	08.05312	22	58	26.76	-14	44	50.9	809
1603	1985	09	08.05798	22	58	26.54	-14	44	53.0	809
1603	1985	09	08.06285	22	58	26.34	-14	44	55.2	809
1603	1985	09	10.28351	22	56	43.88	-15	01	43.5	809

1603	1985	09	10.28889	22	56	43.63	-15	01	45.9	809
1603	1985	09	10.29375	22	56	43.42	-15	01	48.0	809
1603	1985	09	11.25295	22	55	59.54	-15	08	52.4	809
1603	1985	09	11.25833	22	55	59.30	-15	08	55.0	809
1603	1985	09	11.26319	22	55	59.07	-15	08	57.3	809
1603	1985	09	14.07014	22	53	52.71	-15	28	55.4	809
1603	1985	09	14.07430	22	53	52.52	-15	28	56.9	809
1603	1985	09	14.07917	22	53	52.29	-15	28	58.7	809
1603	1985	09	16.24409	22	52	16.41	-15	43	35.1	809
1603	1985	09	16.24896	22	52	16.21	-15	43	36.8	809
1603	1985	09	16.25382	22	52	16.00	-15	43	38.7	809
1603	1985	09	20.01771	22	49	37.22	-16	07	06.2	809
1603	1985	09	20.02257	22	49	37.02	-16	07	08.1	809
1603	1985	09	20.02743	22	49	36.81	-16	07	10.0	809
1605	1985	09	07.11215	23	33	05.11	-01	52	51.0	809
1605	1985	09	07.11701	23	33	04.92	-01	52	53.2	809
1605	1985	09	07.12187	23	33	04.72	-01	52	55.3	809
1788	1985	09	04.07500	22	25	22.59	-09	46	55.9	809
1788	1985	09	04.08056	22	25	22.35	-09	46	57.1	809
1788	1985	09	04.08611	22	25	22.09	-09	46	58.3	809
1788	1985	09	10.10903	22	21	06.63	-10	13	18.9	809
1788	1985	09	10.11337	22	21	06.44	-10	13	19.9	809
1788	1985	09	10.11771	22	21	06.23	-10	13	21.3	809
1788	1985	09	16.26215	22	17	10.85	-10	37	25.0	809
1788	1985	09	16.26701	22	17	10.69	-10	37	26.0	809
1788	1985	09	16.27187	22	17	10.52	-10	37	27.1	809
1788	1985	09	17.19236	22	16	38.44	-10	40	46.6	809
1788	1985	09	17.19791	22	16	38.22	-10	40	48.1	809
1788	1985	09	17.20347	22	16	38.04	-10	40	49.3	809
1788	1985	09	18.02673	22	16	10.27	-10	43	40.9	809
1788	1985	09	18.03160	22	16	10.10	-10	43	42.3	809
1788	1985	09	18.03646	22	16	09.94	-10	43	44.1	809
1788	1985	09	18.04236	22	16	09.74	-10	43	45.5	809
1788	1985	09	18.04757	22	16	09.56	-10	43	46.7	809
1788	1985	09	18.05243	22	16	09.38	-10	43	47.7	809
1788	1985	09	20.07153	22	15	03.60	-10	50	34.9	809
1788	1985	09	20.07691	22	15	03.43	-10	50	36.0	809
1788	1985	09	20.08194	22	15	03.25	-10	50	37.1	809
1788	1985	09	20.08837	22	15	03.09	-10	50	38.7	809
1788	1985	09	20.09375	22	15	02.90	-10	50	39.5	809
1788	1985	09	20.09861	22	15	02.74	-10	50	40.5	809
1788	1985	09	20.98993	22	14	35.27	-10	53	31.0	809
1788	1985	09	20.99479	22	14	35.10	-10	53	31.6	809
1790	1985	09	14.10798	23	38	18.64	-03	52	28.0	809
1790	1985	09	14.11285	23	38	18.34	-03	52	29.0	809
1790	1985	09	14.11771	23	38	18.04	-03	52	30.5	809
1790	1985	09	15.33993	23	37	01.66	-03	57	44.5	809
1790	1985	09	15.34479	23	37	01.38	-03	57	45.6	809
1790	1985	09	15.34965	23	37	01.07	-03	57	47.2	809
1790	1985	09	17.30521	23	34	59.26	-04	06	09.3	809
1790	1985	09	17.31007	23	34	58.97	-04	06	10.4	809
1790	1985	09	17.31493	23	34	58.68	-04	06	11.7	809
1809	1985	09	14.39548	00	40	37.69	-01	10	03.6	809
1809	1985	09	14.39965	00	40	37.52	-01	10	04.5	809
1809	1985	09	14.40382	00	40	37.35	-01	10	05.8	809
1809	1985	09	15.39201	00	39	57.40	-01	15	11.7	809
1809	1985	09	15.39687	00	39	57.20	-01	15	13.3	809
1809	1985	09	15.40173	00	39	57.00	-01	15	14.8	809
1809	1985	09	16.36910	00	39	17.04	-01	20	15.1	809

1809	1985	09	16.37396	00	39	16.81	-01	20	16.3	809
1809	1985	09	16.37882	00	39	16.58	-01	20	18.0	809
1809	1985	09	17.37882	00	38	34.56	-01	25	32.1	809
1809	1985	09	17.38368	00	38	34.39	-01	25	33.6	809
1809	1985	09	17.38854	00	38	34.18	-01	25	35.3	809
1809	1985	09	18.35104	00	37	53.01	-01	30	38.8	809
1809	1985	09	18.35590	00	37	52.80	-01	30	40.2	809
1809	1985	09	18.36076	00	37	52.59	-01	30	41.6	809
1809	1985	09	19.38715	00	37	08.09	-01	36	04.9	809
1809	1985	09	19.39201	00	37	07.89	-01	36	06.3	809
1809	1985	09	19.39687	00	37	07.69	-01	36	08.2	809
1809	1985	09	20.38576	00	36	24.15	-01	41	21.0	809
1809	1985	09	20.39062	00	36	23.94	-01	41	22.8	809
1809	1985	09	21.36736	00	35	40.32	-01	46	33.2	809
1809	1985	09	21.37257	00	35	40.11	-01	46	34.4	809
1809	1985	09	21.37708	00	35	39.91	-01	46	35.8	809
1809	1985	09	22.39375	00	34	54.18	-01	51	57.0	809
1809	1985	09	22.39791	00	34	53.98	-01	51	58.3	809
1950	1985	09	06.17465	00	28	55.61	-04	32	54.3	809
1950	1985	09	06.17951	00	28	55.39	-04	32	56.1	809
1950	1985	09	06.18437	00	28	55.16	-04	32	57.7	809
1950	1985	09	08.10833	00	27	25.51	-04	44	23.4	809
1950	1985	09	08.11250	00	27	25.32	-04	44	24.7	809
1950	1985	09	08.11667	00	27	25.12	-04	44	26.0	809
1950	1985	09	10.32257	00	25	35.45	-04	57	46.6	809
1950	1985	09	10.32743	00	25	35.19	-04	57	48.1	809
1950	1985	09	10.33229	00	25	34.96	-04	57	49.7	809
1950	1985	09	14.14757	00	22	12.69	-05	21	18.0	809
1950	1985	09	14.15243	00	22	12.46	-05	21	19.6	809
1950	1985	09	14.15712	00	22	12.22	-05	21	21.4	809
1950	1985	09	17.10451	00	19	25.75	-05	39	38.0	809
1950	1985	09	17.10937	00	19	25.46	-05	39	39.8	809
1950	1985	09	17.11423	00	19	25.17	-05	39	41.6	809
1950	1985	09	18.28507	00	18	16.58	-05	46	53.7	809
1950	1985	09	18.29028	00	18	16.29	-05	46	55.3	809
1950	1985	09	18.29548	00	18	16.01	-05	46	57.2	809
1950	1985	09	20.12396	00	16	28.22	-05	58	08.2	809
1950	1985	09	20.12882	00	16	27.94	-05	58	10.1	809
1950	1985	09	20.13368	00	16	27.66	-05	58	11.8	809
2010	1985	09	07.07535	23	14	59.74	-06	29	10.8	809
2010	1985	09	07.08021	23	14	59.52	-06	29	12.0	809
2010	1985	09	07.08507	23	14	59.30	-06	29	12.9	809
2010	1985	09	10.12639	23	12	36.93	-06	41	22.4	809
2010	1985	09	10.13055	23	12	36.72	-06	41	23.5	809
2010	1985	09	10.13472	23	12	36.55	-06	41	24.9	809
2010	1985	09	11.15104	23	11	48.72	-06	45	24.9	809
2010	1985	09	11.15590	23	11	48.46	-06	45	26.3	809
2010	1985	09	11.16076	23	11	48.24	-06	45	27.3	809
2010	1985	09	12.13194	23	11	02.49	-06	49	18.8	809
2010	1985	09	12.13680	23	11	02.27	-06	49	19.5	809
2010	1985	09	12.14097	23	11	02.07	-06	49	20.6	809
2010	1985	09	14.36319	23	09	17.33	-06	58	00.8	809
2010	1985	09	14.36736	23	09	17.16	-06	58	01.5	809
2010	1985	09	14.37153	23	09	17.00	-06	58	02.6	809
2010	1985	09	16.28125	23	07	47.91	-07	05	21.4	809
2010	1985	09	16.28680	23	07	47.65	-07	05	22.5	809
2010	1985	09	16.29236	23	07	47.39	-07	05	23.9	809
2010	1985	09	17.21180	23	07	04.92	-07	08	51.1	809
2010	1985	09	17.21736	23	07	04.68	-07	08	52.3	809

2010	1985	09	17.22292	23	07	04.45	-07	08	53.6	809
2010	1985	09	19.23368	23	05	32.41	-07	16	16.5	809
2010	1985	09	19.23854	23	05	32.20	-07	16	17.7	809
2010	1985	09	19.24340	23	05	32.01	-07	16	19.0	809
2010	1985	09	21.28542	23	04	00.46	-07	23	32.9	809
2010	1985	09	21.29097	23	04	00.22	-07	23	34.1	809
2010	1985	09	21.29652	23	03	59.96	-07	23	35.6	809
2010	1985	09	22.06875	23	03	26.40	-07	26	14.5	809
2010	1985	09	22.07291	23	03	26.19	-07	26	15.2	809
2010	1985	09	22.33680	23	03	14.23	-07	27	09.0	809
2010	1985	09	22.34201	23	03	14.03	-07	27	10.1	809
2051	1985	09	04.05278	21	43	53.91	-11	37	32.4	809
2051	1985	09	04.05833	21	43	53.67	-11	37	33.8	809
2051	1985	09	04.06389	21	43	53.44	-11	37	35.0	809
2051	1985	09	06.02604	21	42	30.08	-11	45	39.7	809
2051	1985	09	06.03160	21	42	29.85	-11	45	41.1	809
2051	1985	09	06.03646	21	42	29.65	-11	45	42.2	809
2051	1985	09	09.99930	21	39	51.86	-12	01	15.6	809
2051	1985	09	10.00347	21	39	51.71	-12	01	16.7	809
2051	1985	09	10.00764	21	39	51.55	-12	01	17.5	809
2051	1985	09	11.01180	21	39	13.99	-12	05	02.8	809
2051	1985	09	11.01597	21	39	13.82	-12	05	03.7	809
2051	1985	09	11.02014	21	39	13.65	-12	05	04.7	809
2051	1985	09	12.00556	21	38	37.92	-12	08	40.1	809
2051	1985	09	12.00972	21	38	37.77	-12	08	41.2	809
2051	1985	09	12.01389	21	38	37.61	-12	08	42.2	809
2051	1985	09	14.01875	21	37	28.26	-12	15	44.8	809
2051	1985	09	14.02292	21	37	28.13	-12	15	45.8	809
2051	1985	09	14.02708	21	37	28.01	-12	15	46.7	809
2051	1985	09	15.24409	21	36	47.84	-12	19	52.2	809
2051	1985	09	15.24896	21	36	47.70	-12	19	53.0	809
2051	1985	09	15.25382	21	36	47.56	-12	19	53.9	809
2051	1985	09	16.14722	21	36	19.82	-12	22	50.0	809
2051	1985	09	16.15278	21	36	19.65	-12	22	50.8	809
2051	1985	09	16.15833	21	36	19.45	-12	22	51.9	809
2051	1985	09	17.26076	21	35	46.21	-12	26	20.9	809
2051	1985	09	17.26562	21	35	46.07	-12	26	21.8	809
2051	1985	09	17.27048	21	35	45.93	-12	26	22.8	809
2051	1985	09	19.19375	21	34	52.09	-12	32	10.4	809
2051	1985	09	19.19861	21	34	51.96	-12	32	11.1	809
2051	1985	09	19.20417	21	34	51.82	-12	32	12.3	809
2051	1985	09	21.20277	21	34	01.33	-12	37	46.7	809
2051	1985	09	21.20729	21	34	01.20	-12	37	47.6	809
2051	1985	09	21.21146	21	34	01.09	-12	37	48.4	809
2122	1985	09	04.99410	21	01	51.68	-25	24	52.2	809
2122	1985	09	04.99896	21	01	51.55	-25	24	53.4	809
2122	1985	09	05.00382	21	01	51.36	-25	24	54.7	809
2122	1985	09	06.00590	21	01	17.81	-25	27	53.5	809
2122	1985	09	06.01076	21	01	17.62	-25	27	54.5	809
2122	1985	09	06.01597	21	01	17.44	-25	27	55.3	809
2122	1985	09	07.98299	21	00	16.44	-25	33	10.8	809
2122	1985	09	07.98785	21	00	16.28	-25	33	11.5	809
2122	1985	09	07.99271	21	00	16.12	-25	33	12.6	809
2122	1985	09	09.98472	20	59	21.11	-25	37	42.4	809
2122	1985	09	09.98889	20	59	20.99	-25	37	43.6	809
2122	1985	09	09.99306	20	59	20.85	-25	37	44.5	809
2178	1985	09	06.08924	22	59	22.78	-09	53	34.8	809
2178	1985	09	06.09410	22	59	22.50	-09	53	35.5	809
2178	1985	09	06.09896	22	59	22.20	-09	53	36.5	809

2178	1985	09	08.03194	22	57	30.68	-09	59	38.2	809
2178	1985	09	08.03715	22	57	30.38	-09	59	39.5	809
2178	1985	09	08.04201	22	57	30.11	-09	59	40.3	809
2178	1985	09	10.22083	22	55	24.10	-10	06	07.7	809
2178	1985	09	10.22604	22	55	23.80	-10	06	09.0	809
2178	1985	09	10.23090	22	55	23.51	-10	06	09.6	809
2178	1985	09	11.21840	22	54	27.23	-10	08	57.7	809
2178	1985	09	11.22326	22	54	26.94	-10	08	58.6	809
2178	1985	09	11.22813	22	54	26.68	-10	08	59.1	809
2188	1985	09	05.06771	21	51	38.65	-13	52	24.4	809
2188	1985	09	05.07257	21	51	38.43	-13	52	25.7	809
2188	1985	09	05.07743	21	51	38.21	-13	52	27.3	809
2227	1985	09	06.13594	23	40	16.34	-00	32	04.6	809
2227	1985	09	06.14080	23	40	16.10	-00	32	07.0	809
2227	1985	09	06.14549	23	40	15.89	-00	32	08.9	809
2227	1985	09	08.07118	23	38	41.78	-00	48	23.9	809
2227	1985	09	08.07604	23	38	41.55	-00	48	26.4	809
2227	1985	09	08.08090	23	38	41.31	-00	48	28.8	809
2227	1985	09	10.18663	23	36	54.61	-01	06	49.4	809
2227	1985	09	10.19149	23	36	54.38	-01	06	51.8	809
2227	1985	09	10.19635	23	36	54.12	-01	06	54.6	809
2227	1985	09	14.09027	23	33	30.33	-01	41	58.5	809
2227	1985	09	14.09514	23	33	30.05	-01	42	01.3	809
2227	1985	09	14.10069	23	33	29.74	-01	42	04.4	809
2227	1985	09	15.32257	23	32	23.86	-01	53	18.0	809
2227	1985	09	15.32743	23	32	23.56	-01	53	20.9	809
2227	1985	09	15.33229	23	32	23.27	-01	53	23.8	809
2227	1985	09	17.28646	23	30	38.26	-02	11	30.6	809
2227	1985	09	17.29132	23	30	37.98	-02	11	33.4	809
2227	1985	09	17.29618	23	30	37.69	-02	11	36.2	809
2242	1985	09	06.13594	23	42	56.26	-01	17	39.5	809
2242	1985	09	06.14080	23	42	55.96	-01	17	40.7	809
2242	1985	09	06.14549	23	42	55.72	-01	17	41.7	809
2242	1985	09	08.07118	23	41	06.99	-01	26	08.0	809
2242	1985	09	08.07604	23	41	06.72	-01	26	09.2	809
2242	1985	09	08.08090	23	41	06.45	-01	26	10.4	809
2242	1985	09	10.18663	23	39	03.61	-01	35	47.1	809
2242	1985	09	10.19149	23	39	03.34	-01	35	48.3	809
2242	1985	09	10.19635	23	39	03.06	-01	35	49.6	809
2242	1985	09	14.09027	23	35	09.72	-01	54	20.5	809
2242	1985	09	14.09514	23	35	09.42	-01	54	21.9	809
2242	1985	09	14.10069	23	35	09.08	-01	54	23.5	809
2242	1985	09	14.10798	23	35	08.71	-01	54	25.7	809
2242	1985	09	14.11285	23	35	08.41	-01	54	27.2	809
2242	1985	09	14.11771	23	35	08.13	-01	54	28.6	809
2242	1985	09	15.32257	23	33	53.98	-02	00	18.5	809
2242	1985	09	15.32743	23	33	53.68	-02	00	19.9	809
2242	1985	09	15.33229	23	33	53.38	-02	00	21.4	809
2242	1985	09	17.28646	23	31	53.71	-02	09	56.0	809
2242	1985	09	17.29132	23	31	53.41	-02	09	57.6	809
2242	1985	09	17.29618	23	31	53.12	-02	09	59.0	809
2242	1985	09	19.29965	23	29	50.30	-02	19	50.2	809
2242	1985	09	19.30451	23	29	50.02	-02	19	51.7	809
2242	1985	09	19.30937	23	29	49.74	-02	19	53.3	809
2242	1985	09	22.30069	23	26	47.99	-02	34	30.7	809
2242	1985	09	22.30486	23	26	47.74	-02	34	31.7	809
2293	1985	09	07.12951	00	25	37.90	+02	25	26.7	809
2293	1985	09	07.13438	00	25	37.74	+02	25	25.6	809
2293	1985	09	07.13923	00	25	37.58	+02	25	24.5	809

2293	1985	09	08.12326	00	25	02.02	+02	21	40.9		809
2293	1985	09	08.12812	00	25	01.86	+02	21	39.8		809
2293	1985	09	08.13299	00	25	01.69	+02	21	38.5		809
2293	1985	09	11.18750	00	23	07.02	+02	09	34.5		809
2293	1985	09	11.19271	00	23	06.84	+02	09	33.3		809
2293	1985	09	11.19757	00	23	06.67	+02	09	32.3		809
2293	1985	09	16.12309	00	19	50.74	+01	48	51.2		809
2293	1985	09	16.12934	00	19	50.49	+01	48	49.8		809
2293	1985	09	16.13559	00	19	50.24	+01	48	48.3		809
2330	1985	09	05.13160	22	48	13.34	-12	15	57.7		809
2330	1985	09	05.13646	22	48	13.12	-12	15	59.8		809
2330	1985	09	05.14132	22	48	12.92	-12	16	01.6		809
2330	1985	09	07.05798	22	46	53.67	-12	28	28.1		809
2330	1985	09	07.06285	22	46	53.47	-12	28	30.0		809
2330	1985	09	07.06771	22	46	53.29	-12	28	31.6		809
2330	1985	09	10.09444	22	44	48.99	-12	47	34.0		809
2330	1985	09	10.09861	22	44	48.83	-12	47	35.6		809
2330	1985	09	10.10278	22	44	48.66	-12	47	37.2		809
2330	1985	09	12.09861	22	43	28.08	-12	59	48.3		809
2330	1985	09	12.10278	22	43	27.92	-12	59	49.6		809
2330	1985	09	12.10694	22	43	27.76	-12	59	51.2		809
2330	1985	09	14.29722	22	42	00.72	-13	12	47.2		809
2330	1985	09	14.30139	22	42	00.57	-13	12	48.4		809
2330	1985	09	14.30590	22	42	00.42	-13	12	49.9		809
2330	1985	09	15.08090	22	41	30.72	-13	17	18.0		809
2330	1985	09	15.08576	22	41	30.53	-13	17	19.8		809
2330	1985	09	15.09062	22	41	30.32	-13	17	21.1		809
2330	1985	09	17.04409	22	40	15.91	-13	28	17.9		809
2330	1985	09	17.04896	22	40	15.73	-13	28	19.3		809
2330	1985	09	17.05382	22	40	15.56	-13	28	20.5		809
2330	1985	09	19.08368	22	39	00.53	-13	39	16.2		809
2330	1985	09	19.08923	22	39	00.33	-13	39	18.0		809
2330	1985	09	19.09410	22	39	00.15	-13	39	19.6		809
2330	1985	09	19.11562	22	38	59.35	-13	39	26.7		809
2330	1985	09	19.12048	22	38	59.17	-13	39	28.3		809
2330	1985	09	19.12535	22	38	58.99	-13	39	29.9		809
2330	1985	09	20.31979	22	38	16.00	-13	45	39.7		809
2330	1985	09	20.32465	22	38	15.83	-13	45	41.1		809
2330	1985	09	20.32951	22	38	15.64	-13	45	42.6		809
2330	1985	09	21.15139	22	37	47.08	-13	49	51.0		809
2330	1985	09	21.15555	22	37	46.95	-13	49	52.3		809
2330	1985	09	21.15972	22	37	46.78	-13	49	53.7		809
2330	1985	09	21.22500	22	37	44.18	-13	50	14.6		809
2330	1985	09	21.22847	22	37	44.05	-13	50	15.8		809
2330	1985	09	21.23507	22	37	43.81	-13	50	17.8		809
2336	1985	09	05.04896	21	42	59.44	-17	14	21.3	17.3	809
2336	1985	09	05.05382	21	42	59.24	-17	14	21.8		809
2336	1985	09	05.05868	21	42	59.03	-17	14	22.2		809
2336	1985	09	10.03333	21	39	50.93	-17	29	05.2		809
2336	1985	09	10.03750	21	39	50.87	-17	29	04.8		809
2336	1985	09	10.04201	21	39	50.71	-17	29	04.3		809
2336	1985	09	11.04653	21	39	14.83	-17	31	48.9		809
2336	1985	09	11.05075	21	39	14.67	-17	31	49.3		809
2336	1985	09	11.05492	21	39	14.50	-17	31	49.8		809
2336	1985	09	12.03819	21	38	40.07	-17	34	22.9		809
2336	1985	09	12.04236	21	38	39.92	-17	34	23.5		809
2336	1985	09	12.04653	21	38	39.79	-17	34	23.9		809
2404	1985	09	05.11215	22	16	04.06	-13	47	36.5		809
2404	1985	09	05.11701	22	16	03.86	-13	47	37.8		809

2404	1985	09	05.12187	22	16	03.66	-13	47	39.1	809
2404	1985	09	07.03854	22	14	42.23	-13	55	48.7	809
2404	1985	09	07.04340	22	14	42.04	-13	55	49.9	809
2404	1985	09	07.04826	22	14	41.84	-13	55	51.1	809
2404	1985	09	10.07986	22	12	37.26	-14	08	05.9	809
2404	1985	09	10.08403	22	12	37.10	-14	08	07.3	809
2404	1985	09	10.08819	22	12	36.93	-14	08	08.3	809
2404	1985	09	11.11285	22	11	56.17	-14	12	04.1	809
2404	1985	09	11.11771	22	11	55.96	-14	12	05.0	809
2404	1985	09	11.12257	22	11	55.75	-14	12	06.1	809
2404	1985	09	14.33055	22	09	53.26	-14	23	43.1	809
2404	1985	09	14.33472	22	09	53.14	-14	23	44.3	809
2404	1985	09	14.33889	22	09	53.01	-14	23	45.3	809
2404	1985	09	15.11805	22	09	24.93	-14	26	23.2	809
2404	1985	09	15.12361	22	09	24.73	-14	26	24.5	809
2404	1985	09	15.12917	22	09	24.55	-14	26	25.7	809
2404	1985	09	16.20439	22	08	46.35	-14	29	57.5	809
2404	1985	09	16.21204	22	08	46.10	-14	29	59.1	809
2404	1985	09	16.21690	22	08	45.93	-14	29	59.8	809
2404	1985	09	18.00937	22	07	44.99	-14	35	35.5	809
2404	1985	09	18.01423	22	07	44.82	-14	35	36.2	809
2404	1985	09	18.01910	22	07	44.65	-14	35	37.0	809
2411	1985	09	07.09410	23	34	15.03	-04	45	51.3	809
2411	1985	09	07.09896	23	34	14.76	-04	45	53.3	809
2411	1985	09	07.10382	23	34	14.48	-04	45	55.3	809
2411	1985	09	10.14653	23	31	22.59	-05	06	55.9	809
2411	1985	09	10.15069	23	31	22.38	-05	06	57.6	809
2411	1985	09	10.15486	23	31	22.14	-05	06	59.4	809
2481	1985	09	05.04896	21	41	36.96	-17	05	27.9	809
2481	1985	09	05.05382	21	41	36.77	-17	05	28.0	809
2481	1985	09	05.05868	21	41	36.60	-17	05	28.0	809
2481	1985	09	06.98299	21	40	33.54	-17	05	53.9	809
2481	1985	09	06.98785	21	40	33.39	-17	05	53.9	809
2481	1985	09	06.99271	21	40	33.20	-17	05	53.9	809
2481	1985	09	10.03333	21	39	05.19	-17	05	23.1	809
2481	1985	09	10.03750	21	39	05.08	-17	05	23.1	809
2481	1985	09	10.04201	21	39	04.95	-17	05	23.0	809
2481	1985	09	11.04653	21	38	39.35	-17	04	53.3	809
2481	1985	09	11.05075	21	38	39.23	-17	04	53.2	809
2481	1985	09	11.05492	21	38	39.10	-17	04	53.0	809
2481	1985	09	12.03819	21	38	15.96	-17	04	13.4	809
2481	1985	09	12.04236	21	38	15.85	-17	04	13.2	809
2481	1985	09	12.04653	21	38	15.74	-17	04	13.0	809
2481	1985	09	14.00278	21	37	34.90	-17	02	25.5	809
2481	1985	09	14.00694	21	37	34.84	-17	02	25.1	809
2481	1985	09	14.01111	21	37	34.76	-17	02	24.8	809
2481	1985	09	16.08403	21	36	59.31	-16	59	48.5	809
2481	1985	09	16.08970	21	36	59.23	-16	59	48.0	809
2481	1985	09	16.09525	21	36	59.17	-16	59	47.4	809
2630	1985	09	04.10000	22	18	54.05	-11	59	36.4	809
2630	1985	09	04.10625	22	18	53.77	-11	59	37.6	809
2630	1985	09	04.11250	22	18	53.49	-11	59	38.8	809
2634	1985	09	05.04896	21	40	57.48	-16	05	26.5	809
2634	1985	09	05.05382	21	40	57.30	-16	05	27.8	809
2634	1985	09	05.05868	21	40	57.12	-16	05	29.0	809
2634	1985	09	06.98299	21	39	49.45	-16	13	04.7	809
2634	1985	09	06.98785	21	39	49.29	-16	13	05.6	809
2634	1985	09	06.99271	21	39	49.12	-16	13	06.4	809
2634	1985	09	10.03333	21	38	07.09	-16	24	32.3	809

2634	1985	09	10.03750	21	38	06.95	-16	24	33.9	809
2634	1985	09	10.04201	21	38	06.78	-16	24	34.2	809
2634	1985	09	11.04653	21	37	34.51	-16	28	09.7	809
2634	1985	09	11.05075	21	37	34.35	-16	28	10.6	809
2634	1985	09	11.05492	21	37	34.21	-16	28	11.7	809
2634	1985	09	12.03819	21	37	03.27	-16	31	38.1	809
2634	1985	09	12.04236	21	37	03.15	-16	31	38.9	809
2634	1985	09	12.04653	21	37	03.12	-16	31	39.7	809
2634	1985	09	14.00278	21	36	03.94	-16	38	14.6	809
2634	1985	09	14.00694	21	36	03.80	-16	38	15.4	809
2634	1985	09	14.01111	21	36	03.65	-16	38	16.3	809
2634	1985	09	15.00903	21	35	34.74	-16	41	31.7	809
2634	1985	09	15.01458	21	35	34.58	-16	41	32.6	809
2634	1985	09	15.02014	21	35	34.44	-16	41	33.5	809
2634	1985	09	16.08403	21	35	04.40	-16	44	53.3	809
2634	1985	09	16.08970	21	35	04.24	-16	44	54.3	809
2634	1985	09	16.09525	21	35	04.11	-16	44	55.1	809
2634	1985	09	17.16944	21	34	34.85	-16	48	11.4	809
2634	1985	09	17.17500	21	34	34.71	-16	48	12.3	809
2634	1985	09	17.18056	21	34	34.57	-16	48	13.2	809
2634	1985	09	18.26562	21	34	05.94	-16	51	24.7	809
2634	1985	09	18.27049	21	34	05.81	-16	51	25.7	809
2634	1985	09	18.27535	21	34	05.69	-16	51	26.8	809
2634	1985	09	19.15590	21	33	43.60	-16	53	57.0	809
2634	1985	09	19.16076	21	33	43.46	-16	53	58.1	809
2634	1985	09	19.16562	21	33	43.32	-16	53	59.1	809
2634	1985	09	20.24896	21	33	16.93	-16	56	56.6	809
2634	1985	09	20.25382	21	33	16.79	-16	56	57.7	809
2634	1985	09	20.25868	21	33	16.65	-16	56	58.7	809
2634	1985	09	21.01944	21	32	59.10	-16	58	59.5	809
2634	1985	09	21.02430	21	32	58.99	-16	59	00.1	809
2634	1985	09	21.02847	21	32	58.86	-16	59	00.8	809
2700	1985	09	07.12951	00	29	52.59	+02	38	07.5	809
2700	1985	09	07.13438	00	29	52.41	+02	38	06.3	809
2700	1985	09	07.13923	00	29	52.26	+02	38	04.8	809
2700	1985	09	08.12326	00	29	17.10	+02	33	25.7	809
2700	1985	09	08.12812	00	29	16.94	+02	33	24.5	809
2700	1985	09	08.13299	00	29	16.77	+02	33	23.3	809
2700	1985	09	11.18750	00	27	21.85	+02	18	18.6	809
2700	1985	09	11.19271	00	27	21.67	+02	18	17.2	809
2700	1985	09	11.19757	00	27	21.50	+02	18	15.8	809
2700	1985	09	14.23680	00	25	19.63	+02	02	26.5	809
2700	1985	09	14.24097	00	25	19.46	+02	02	25.5	809
2700	1985	09	14.24514	00	25	19.28	+02	02	24.1	809
2700	1985	09	15.14340	00	24	42.29	+01	57	35.2	809
2700	1985	09	15.14826	00	24	42.07	+01	57	33.6	809
2700	1985	09	15.15312	00	24	41.87	+01	57	31.6	809
2700	1985	09	16.12309	00	24	01.12	+01	52	17.3	809
2700	1985	09	16.12934	00	24	00.84	+01	52	15.3	809
2700	1985	09	16.13559	00	24	00.55	+01	52	13.0	809
2700	1985	09	18.31840	00	22	26.46	+01	40	10.4	809
2700	1985	09	18.32326	00	22	26.25	+01	40	08.5	809
2700	1985	09	18.32812	00	22	26.04	+01	40	06.8	809
2700	1985	09	19.35312	00	21	41.09	+01	34	23.1	809
2700	1985	09	19.35798	00	21	40.88	+01	34	21.5	809
2700	1985	09	19.36285	00	21	40.68	+01	34	19.9	809
2700	1985	09	20.35451	00	20	56.86	+01	28	43.8	809
2700	1985	09	20.35937	00	20	56.64	+01	28	42.2	809
2700	1985	09	20.36423	00	20	56.42	+01	28	40.5	809

2700	1985	09	22.19601	00	19	34.77	+01	18	15.2	809
2700	1985	09	22.20052	00	19	34.55	+01	18	13.4	809
2825	1985	09	04.07500	22	22	50.32	-09	03	04.7	809
2825	1985	09	04.08056	22	22	49.98	-09	03	05.9	809
2825	1985	09	04.08611	22	22	49.63	-09	03	06.9	809
2825	1985	09	10.10903	22	16	45.97	-09	22	48.2	809
2825	1985	09	10.11337	22	16	45.70	-09	22	49.3	809
2825	1985	09	10.11771	22	16	45.45	-09	22	50.2	809
2825	1985	09	11.13229	22	15	46.97	-09	25	55.4	809
2825	1985	09	11.13785	22	15	46.64	-09	25	56.5	809
2825	1985	09	11.14271	22	15	46.34	-09	25	57.5	809
2825	1985	09	12.11597	22	14	51.02	-09	28	50.2	809
2825	1985	09	12.12014	22	14	50.81	-09	28	51.2	809
2825	1985	09	12.12430	22	14	50.60	-09	28	52.0	809
2825	1985	09	14.34757	22	12	47.62	-09	35	11.0	809
2825	1985	09	14.35173	22	12	47.39	-09	35	11.5	809
2825	1985	09	14.35590	22	12	47.16	-09	35	12.2	809
2825	1985	09	15.29965	22	11	56.99	-09	37	45.9	809
2825	1985	09	15.30451	22	11	56.72	-09	37	46.9	809
2825	1985	09	15.30937	22	11	56.45	-09	37	47.8	809
2825	1985	09	16.26215	22	11	07.24	-09	40	15.8	809
2825	1985	09	16.26701	22	11	06.98	-09	40	16.5	809
2825	1985	09	16.27187	22	11	06.71	-09	40	17.5	809
2825	1985	09	17.19236	22	10	20.42	-09	42	33.3	809
2825	1985	09	17.19791	22	10	20.12	-09	42	34.4	809
2825	1985	09	17.20347	22	10	19.81	-09	42	35.5	809
2825	1985	09	18.04236	22	09	39.05	-09	44	35.7	809
2825	1985	09	18.04757	22	09	38.76	-09	44	36.4	809
2825	1985	09	18.05243	22	09	38.50	-09	44	36.9	809
2825	1985	09	20.08837	22	08	02.96	-09	49	06.2	809
2825	1985	09	20.09375	22	08	02.66	-09	49	06.9	809
2825	1985	09	20.09861	22	08	02.40	-09	49	07.9	809
2838	1985	09	05.08785	22	07	49.71	-15	34	07.5	809
2838	1985	09	05.09271	22	07	49.44	-15	34	08.9	809
2838	1985	09	05.09757	22	07	49.17	-15	34	10.4	809
2838	1985	09	07.02048	22	06	03.27	-15	43	32.2	809
2838	1985	09	07.02535	22	06	03.01	-15	43	33.6	809
2838	1985	09	07.03021	22	06	02.75	-15	43	34.9	809
2838	1985	09	10.06389	22	03	21.49	-15	57	18.5	809
2838	1985	09	10.06805	22	03	21.27	-15	57	19.7	809
2838	1985	09	10.07222	22	03	21.04	-15	57	20.6	809
2838	1985	09	11.07674	22	02	29.79	-16	01	33.5	809
2838	1985	09	11.08160	22	02	29.52	-16	01	34.6	809
2838	1985	09	11.08646	22	02	29.24	-16	01	35.7	809
2875	1985	09	04.07500	22	29	35.86	-10	11	33.5	809
2875	1985	09	04.08056	22	29	35.58	-10	11	34.3	809
2875	1985	09	04.08611	22	29	35.29	-10	11	35.2	809
2900	1985	09	06.11701	23	03	58.74	-16	14	34.4	809
2900	1985	09	06.12187	23	03	58.48	-16	14	35.3	809
2900	1985	09	06.12674	23	03	58.21	-16	14	35.7	809
2900	1985	09	08.05312	23	02	16.08	-16	17	49.9	809
2900	1985	09	08.05798	23	02	15.81	-16	17	50.3	809
2900	1985	09	08.06285	23	02	15.54	-16	17	50.5	809
2900	1985	09	10.28351	23	00	17.87	-16	21	04.0	809
2900	1985	09	10.28889	23	00	17.57	-16	21	04.5	809
2900	1985	09	10.29375	23	00	17.30	-16	21	04.9	809
2900	1985	09	11.25295	22	59	26.99	-16	22	17.6	809
2900	1985	09	11.25833	22	59	26.70	-16	22	18.2	809
2900	1985	09	11.26319	22	59	26.43	-16	22	18.6	809

2900	1985	09	14.07014	22	57	01.20	-16	25	08.8	809
2900	1985	09	14.07430	22	57	01.02	-16	25	10.4	809
2900	1985	09	14.07917	22	57	00.81	-16	25	12.4	809
2960	1985	09	12.08403	22	33	27.65	-13	22	10.2	809
2960	1985	09	12.08819	22	33	27.45	-13	22	11.1	809
2960	1985	09	12.09236	22	33	27.26	-13	22	12.0	809
2960	1985	09	14.28333	22	31	28.33	-13	36	49.0	809
2960	1985	09	14.28750	22	31	28.15	-13	36	50.0	809
2960	1985	09	14.29166	22	31	27.98	-13	36	50.8	809
2960	1985	09	15.06424	22	30	47.89	-13	41	50.5	809
2960	1985	09	15.06910	22	30	47.68	-13	41	51.9	809
2960	1985	09	15.07396	22	30	47.46	-13	41	52.6	809
2960	1985	09	17.02673	22	29	06.92	-13	54	02.2	809
2960	1985	09	17.03160	22	29	06.71	-13	54	03.3	809
2960	1985	09	17.03646	22	29	06.49	-13	54	04.4	809
2960	1985	09	20.30312	22	26	26.75	-14	12	56.3	809
2960	1985	09	20.30798	22	26	26.55	-14	12	57.4	809
2960	1985	09	20.31285	22	26	26.34	-14	12	58.6	809
3033	1985	09	16.28125	23	11	18.90	-05	40	29.8	17.2 809
3033	1985	09	16.28680	23	11	18.62	-05	40	32.4	809
3033	1985	09	16.29236	23	11	18.33	-05	40	35.2	809
3033	1985	09	17.21180	23	10	29.41	-05	48	04.0	809
3033	1985	09	17.21736	23	10	29.12	-05	48	06.7	809
3033	1985	09	17.22292	23	10	28.83	-05	48	09.4	809
3033	1985	09	19.23368	23	08	42.72	-06	04	20.2	809
3033	1985	09	19.23854	23	08	42.43	-06	04	22.7	809
3033	1985	09	19.24340	23	08	42.18	-06	04	25.0	809
3033	1985	09	21.28542	23	06	57.37	-06	20	25.9	809
3033	1985	09	21.29097	23	06	57.08	-06	20	28.5	809
3033	1985	09	21.29652	23	06	56.80	-06	20	31.1	809
3035	1985	09	04.05278	21	42	50.97	-11	38	31.8	17.2 809
3035	1985	09	04.05833	21	42	50.75	-11	38	33.3	809
3035	1985	09	04.06389	21	42	50.50	-11	38	35.0	809
3035	1985	09	06.02604	21	41	25.03	-11	47	59.1	809
3035	1985	09	06.03160	21	41	24.79	-11	48	00.8	809
3035	1985	09	06.03646	21	41	24.57	-11	48	02.1	809
3035	1985	09	09.99930	21	38	43.61	-12	06	12.7	809
3035	1985	09	10.00347	21	38	43.43	-12	06	12.8	809
3035	1985	09	10.00764	21	38	43.28	-12	06	13.0	809
3035	1985	09	11.01180	21	38	04.83	-12	10	37.9	809
3035	1985	09	11.01597	21	38	04.68	-12	10	38.0	809
3035	1985	09	11.02014	21	38	04.53	-12	10	38.2	809
3035	1985	09	12.00556	21	37	28.15	-12	14	53.6	809
3035	1985	09	12.00972	21	37	28.01	-12	14	53.7	809
3035	1985	09	12.01389	21	37	27.83	-12	14	54.0	809
3035	1985	09	14.01875	21	36	17.30	-12	23	10.2	809
3035	1985	09	14.02292	21	36	17.13	-12	23	11.1	809
3035	1985	09	14.02708	21	36	17.00	-12	23	12.2	809
3035	1985	09	15.24409	21	35	36.25	-12	28	00.9	809
3035	1985	09	15.24896	21	35	36.08	-12	28	01.9	809
3035	1985	09	15.25382	21	35	35.92	-12	28	03.2	809
3035	1985	09	16.14722	21	35	07.66	-12	31	30.4	809
3035	1985	09	16.15278	21	35	07.49	-12	31	31.9	809
3035	1985	09	16.15833	21	35	07.30	-12	31	33.0	809
3035	1985	09	17.26076	21	34	33.50	-12	35	39.7	809
3035	1985	09	17.26562	21	34	33.34	-12	35	41.0	809
3035	1985	09	17.27048	21	34	33.19	-12	35	42.2	809
3150	1985	09	07.07535	23	17	56.01	-06	47	13.7	17.0 809
3150	1985	09	07.08021	23	17	55.73	-06	47	13.6	809

3150	1985	09	07.08507	23	17	55.45	-06	47	13.4	809
3150	1985	09	10.12639	23	14	58.46	-06	45	32.8	809
3150	1985	09	10.13055	23	14	58.21	-06	45	32.7	809
3150	1985	09	10.13472	23	14	57.96	-06	45	32.4	809
3150	1985	09	11.15104	23	13	58.80	-06	44	56.0	809
3150	1985	09	11.15590	23	13	58.51	-06	44	55.8	809
3150	1985	09	11.16076	23	13	58.23	-06	44	55.7	809
3150	1985	09	12.13194	23	13	01.83	-06	44	20.9	809
3150	1985	09	12.13680	23	13	01.55	-06	44	20.8	809
3150	1985	09	12.14097	23	13	01.31	-06	44	20.6	809
3150	1985	09	14.36319	23	10	52.63	-06	42	53.0	809
3150	1985	09	14.36736	23	10	52.39	-06	42	52.9	809
3150	1985	09	14.37153	23	10	52.16	-06	42	52.7	809
3150	1985	09	16.28125	23	09	02.84	-06	41	31.3	809
3150	1985	09	16.28680	23	09	02.53	-06	41	31.2	809
3150	1985	09	16.29236	23	09	02.20	-06	41	30.9	809
3150	1985	09	17.21180	23	08	10.19	-06	40	49.1	809
3150	1985	09	17.21736	23	08	09.88	-06	40	48.7	809
3150	1985	09	17.22292	23	08	09.56	-06	40	48.3	809
3150	1985	09	19.23368	23	06	16.76	-06	39	09.9	809
3150	1985	09	19.23854	23	06	16.51	-06	39	09.9	809
3150	1985	09	19.24340	23	06	16.27	-06	39	09.6	809
3150	1985	09	21.28542	23	04	23.99	-06	37	17.8	809
3150	1985	09	21.29097	23	04	23.67	-06	37	17.6	809
3150	1985	09	21.29652	23	04	23.35	-06	37	17.3	809
3150	1985	09	22.06875	23	03	41.77	-06	36	32.1	809
3150	1985	09	22.07291	23	03	41.57	-06	36	31.9	809
3329	1985	09	11.17187	00	28	36.69	-00	17	47.5	17.4 809
3329	1985	09	11.17674	00	28	36.48	-00	17	48.1	809
3329	1985	09	11.18160	00	28	36.27	-00	17	48.8	809
3329	1985	09	14.22187	00	26	16.00	-00	23	45.1	809
3329	1985	09	14.22673	00	26	15.77	-00	23	45.7	809
3329	1985	09	14.23159	00	26	15.55	-00	23	46.3	809
3329	1985	09	14.38160	00	26	08.30	-00	24	04.6	809
3329	1985	09	14.38576	00	26	08.11	-00	24	05.1	809
3329	1985	09	14.38993	00	26	07.92	-00	24	05.5	809
3329	1985	09	15.35868	00	25	21.80	-00	26	05.0	809
3329	1985	09	15.36354	00	25	21.51	-00	26	05.8	809
3329	1985	09	15.36840	00	25	21.25	-00	26	06.7	809
3329	1985	09	15.37535	00	25	21.03	-00	26	05.4	809
3329	1985	09	15.38021	00	25	20.75	-00	26	06.1	809
3329	1985	09	15.38507	00	25	20.49	-00	26	06.7	809
3329	1985	09	16.10521	00	24	46.05	-00	27	37.2	809
3329	1985	09	16.11007	00	24	45.82	-00	27	37.8	809
3329	1985	09	16.11493	00	24	45.59	-00	27	38.4	809
3329	1985	09	16.35173	00	24	33.79	-00	28	09.7	809
3329	1985	09	16.35659	00	24	33.56	-00	28	10.2	809
3329	1985	09	16.36146	00	24	33.32	-00	28	10.8	809
3329	1985	09	17.36042	00	23	44.29	-00	30	14.6	809
3329	1985	09	17.36597	00	23	44.02	-00	30	15.3	809
3329	1985	09	17.37153	00	23	43.75	-00	30	15.9	809
3329	1985	09	18.30278	00	22	57.77	-00	32	15.1	809
3329	1985	09	18.30764	00	22	57.55	-00	32	15.7	809
3329	1985	09	18.31215	00	22	57.30	-00	32	16.2	809
3329	1985	09	18.33437	00	22	56.21	-00	32	18.5	809
3329	1985	09	18.33923	00	22	55.96	-00	32	19.0	809
3329	1985	09	18.34410	00	22	55.72	-00	32	19.5	809
3329	1985	09	19.33715	00	22	06.03	-00	34	27.4	809
3329	1985	09	19.34201	00	22	05.79	-00	34	28.0	809

3329	1985	09	19.34687	00	22	05.54	-00	34	28.7	809
3329	1985	09	19.36979	00	22	04.35	-00	34	32.2	809
3329	1985	09	19.37465	00	22	04.11	-00	34	32.8	809
3329	1985	09	19.37951	00	22	03.87	-00	34	33.4	809
3329	1985	09	20.33923	00	21	15.41	-00	36	36.8	809
3329	1985	09	20.34410	00	21	15.16	-00	36	37.4	809
3329	1985	09	20.34896	00	21	14.91	-00	36	38.0	809
3329	1985	09	20.37326	00	21	13.69	-00	36	41.3	809
3329	1985	09	20.37812	00	21	13.46	-00	36	42.0	809
3329	1985	09	21.31319	00	20	25.93	-00	38	43.4	809
3329	1985	09	21.31736	00	20	25.72	-00	38	44.0	809
3329	1985	09	21.32153	00	20	25.51	-00	38	44.6	809
3329	1985	09	21.32708	00	20	25.23	-00	38	45.3	809
3329	1985	09	21.33125	00	20	25.02	-00	38	45.8	809
3329	1985	09	21.33541	00	20	24.81	-00	38	46.4	809
3329	1985	09	21.34722	00	20	24.21	-00	38	47.9	809
3329	1985	09	21.35139	00	20	24.00	-00	38	48.4	809
3329	1985	09	21.35555	00	20	23.79	-00	38	49.0	809
3329	1985	09	22.18333	00	19	41.62	-00	40	36.0	809
3329	1985	09	22.18767	00	19	41.40	-00	40	36.7	809
3329	1985	09	22.38264	00	19	31.21	-00	41	04.1	809
3329	1985	09	22.38680	00	19	31.00	-00	41	04.7	809
3330	1985	09	17.34132	00	30	47.27	+00	59	25.6	16.0 809
3330	1985	09	17.34618	00	30	47.02	+00	59	25.5	809
3330	1985	09	17.35104	00	30	46.77	+00	59	25.3	809
3330	1985	09	18.38715	00	29	53.72	+00	58	26.8	809
3330	1985	09	18.39201	00	29	53.47	+00	58	26.5	809
3330	1985	09	18.39687	00	29	53.22	+00	58	26.2	809
3330	1985	09	20.14271	00	28	22.97	+00	56	44.6	809
3330	1985	09	20.14757	00	28	22.71	+00	56	44.0	809
3330	1985	09	20.15243	00	28	22.46	+00	56	43.6	809
3336	1985	09	06.13594	23	40	50.95	-00	11	57.9	17.2 809
3336	1985	09	06.14080	23	40	50.73	-00	11	59.3	809
3336	1985	09	06.14549	23	40	50.52	-00	12	00.5	809
3336	1985	09	08.07118	23	39	23.28	-00	21	24.2	809
3336	1985	09	08.07604	23	39	23.07	-00	21	25.6	809
3336	1985	09	08.08090	23	39	22.84	-00	21	27.1	809
3336	1985	09	10.18663	23	37	43.52	-00	32	14.5	809
3336	1985	09	10.19149	23	37	43.30	-00	32	16.0	809
3336	1985	09	10.19635	23	37	43.08	-00	32	17.5	809
3336	1985	09	14.09027	23	34	33.92	-00	53	18.3	809
3336	1985	09	14.09514	23	34	33.68	-00	53	19.9	809
3336	1985	09	14.10069	23	34	33.41	-00	53	21.6	809
3336	1985	09	15.32257	23	33	32.17	-01	00	09.3	809
3336	1985	09	15.32743	23	33	31.93	-01	00	10.9	809
3336	1985	09	15.33229	23	33	31.69	-01	00	12.5	809
3336	1985	09	17.28646	23	31	54.75	-01	11	13.0	809
3336	1985	09	17.29132	23	31	54.52	-01	11	14.5	809
3336	1985	09	17.29618	23	31	54.25	-01	11	16.0	809
3336	1985	09	19.29965	23	30	15.22	-01	22	36.0	809
3336	1985	09	19.30451	23	30	14.99	-01	22	37.6	809
3336	1985	09	19.30937	23	30	14.76	-01	22	39.5	809
3336	1985	09	22.30069	23	27	49.40	-01	39	32.8	809
3336	1985	09	22.30486	23	27	49.20	-01	39	34.4	809
3375	1985	09	16.28125	23	07	10.01	-05	39	53.5	17.2 809
3375	1985	09	16.28680	23	07	09.69	-05	39	55.5	809
3375	1985	09	16.29236	23	07	09.37	-05	39	57.6	809
3375	1985	09	17.21180	23	06	17.50	-05	46	00.0	809
3375	1985	09	17.21736	23	06	17.19	-05	46	02.2	809

3375		1985	09	17.22292	23	06	16.87	-05	46	04.4	809
3375		1985	09	19.23368	23	04	23.93	-05	59	07.1	809
3375		1985	09	19.23854	23	04	23.66	-05	59	09.0	809
3375		1985	09	19.24340	23	04	23.38	-05	59	10.9	809
3375		1985	09	21.28542	23	02	31.94	-06	12	04.2	809
3375		1985	09	21.29097	23	02	31.63	-06	12	06.2	809
3375		1985	09	21.29652	23	02	31.33	-06	12	08.2	809
3375		1985	09	22.06875	23	01	50.76	-06	16	53.4	809
3375		1985	09	22.07291	23	01	50.50	-06	16	54.9	809
1980	DS	1985	09	12.08403	22	31	59.74	-12	39	27.0	17.5 809
1980	DS	1985	09	12.08819	22	31	59.55	-12	39	29.0	809
1980	DS	1985	09	12.09236	22	31	59.36	-12	39	30.8	809
1980	DS	1985	09	14.28333	22	30	17.40	-12	56	43.3	809
1980	DS	1985	09	14.28750	22	30	17.22	-12	56	45.3	809
1980	DS	1985	09	14.29166	22	30	17.04	-12	56	47.2	809
1980	DS	1985	09	15.06424	22	29	42.98	-13	02	40.4	809
1980	DS	1985	09	15.06910	22	29	42.76	-13	02	42.4	809
1980	DS	1985	09	15.07396	22	29	42.56	-13	02	44.8	809
1980	DS	1985	09	17.02673	22	28	17.84	-13	17	09.3	809
1980	DS	1985	09	17.03160	22	28	17.63	-13	17	11.4	809
1980	DS	1985	09	17.03646	22	28	17.41	-13	17	13.6	809
1980	DS	1985	09	20.30312	22	26	05.09	-13	39	40.6	809
1980	DS	1985	09	20.30798	22	26	04.91	-13	39	42.6	809
1980	DS	1985	09	20.31285	22	26	04.71	-13	39	44.6	809
1980	DS	1985	09	22.01250	22	25	02.52	-13	50	33.5	809
1980	DS	1985	09	22.01736	22	25	02.35	-13	50	35.3	809
1980	DS	1985	09	22.02309	22	25	02.14	-13	50	37.5	809
1981	EQ40	1985	09	06.13594	23	41	03.00	-01	08	20.3	17.1 809
1981	EQ40	1985	09	06.14080	23	41	02.78	-01	08	22.4	809
1981	EQ40	1985	09	06.14549	23	41	02.59	-01	08	24.3	809
1981	EQ40	1985	09	08.07118	23	39	40.27	-01	21	28.8	809
1981	EQ40	1985	09	08.07604	23	39	40.06	-01	21	30.8	809
1981	EQ40	1985	09	08.08090	23	39	39.85	-01	21	32.8	809
1981	EQ40	1985	09	10.18663	23	38	05.88	-01	36	16.6	809
1981	EQ40	1985	09	10.19149	23	38	05.67	-01	36	18.6	809
1981	EQ40	1985	09	10.19635	23	38	05.46	-01	36	20.7	809
1981	EQ40	1985	09	14.09027	23	35	07.66	-02	04	17.6	809
1981	EQ40	1985	09	14.09514	23	35	07.44	-02	04	19.8	809
1981	EQ40	1985	09	14.10069	23	35	07.18	-02	04	22.2	809
1981	EQ40	1985	09	14.10798	23	35	06.85	-02	04	25.3	809
1981	EQ40	1985	09	14.11285	23	35	06.63	-02	04	27.4	809
1981	EQ40	1985	09	14.11771	23	35	06.41	-02	04	29.5	809
1981	EQ40	1985	09	15.32257	23	34	09.75	-02	13	11.6	809
1981	EQ40	1985	09	15.32743	23	34	09.52	-02	13	13.7	809
1981	EQ40	1985	09	15.33229	23	34	09.30	-02	13	15.8	809
1985	PE	1985	09	04.05278	21	49	59.71	-11	49	47.1	17.0 809
1985	PE	1985	09	04.05833	21	49	59.52	-11	49	50.0	809
1985	PE	1985	09	04.06389	21	49	59.33	-11	49	52.9	809
1985	PE	1985	09	06.02604	21	48	49.97	-12	07	00.0	809
1985	PE	1985	09	06.03160	21	48	49.77	-12	07	02.9	809
1985	PE	1985	09	06.03646	21	48	49.60	-12	07	05.4	809
1985	PE	1985	09	07.00174	21	48	16.68	-12	15	23.7	809
1985	PE	1985	09	07.00660	21	48	16.51	-12	15	26.1	809
1985	PE	1985	09	07.01146	21	48	16.34	-12	15	28.6	809
1985	PE	1985	09	10.04930	21	46	37.68	-12	41	03.3	809
1985	PE	1985	09	10.05347	21	46	37.54	-12	41	05.2	809
1985	PE	1985	09	10.05798	21	46	37.39	-12	41	07.6	809
1985	PE	1985	09	11.06180	21	46	06.77	-12	49	21.3	809
1985	PE	1985	09	11.06597	21	46	06.62	-12	49	23.4	809

1985	PE	1985	09	11.07014	21	46	06.48	-12	49	25.5	809
1985	PE	1985	09	12.05347	21	45	37.58	-12	57	21.5	809
1985	PE	1985	09	12.05764	21	45	37.46	-12	57	23.6	809
1985	PE	1985	09	12.06180	21	45	37.34	-12	57	25.3	809
1985	PE	1985	09	14.25208	21	44	36.13	-13	14	41.6	809
1985	PE	1985	09	14.25625	21	44	36.01	-13	14	43.5	809
1985	PE	1985	09	14.26041	21	44	35.88	-13	14	45.4	809
1985	PE	1985	09	15.02882	21	44	16.21	-13	20	41.4	809
1985	PE	1985	09	15.03368	21	44	16.08	-13	20	43.5	809
1985	PE	1985	09	15.03854	21	44	15.95	-13	20	45.8	809
1985	PE	1985	09	16.99062	21	43	28.45	-13	35	23.6	809
1985	PE	1985	09	16.99548	21	43	28.34	-13	35	25.9	809
1985	PE	1985	09	17.00035	21	43	28.21	-13	35	28.1	809
1985	PE	1985	09	19.04896	21	42	43.44	-13	50	14.4	809
1985	PE	1985	09	19.05382	21	42	43.34	-13	50	16.5	809
1985	PE	1985	09	19.05868	21	42	43.25	-13	50	18.6	809
1985	PE	1985	09	21.10902	21	42	04.11	-14	04	25.2	809
1985	PE	1985	09	21.11389	21	42	04.01	-14	04	26.6	809
1985	PE	1985	09	21.11910	21	42	03.94	-14	04	28.1	809
1985	PF	1985	09	04.05278	21	50	49.90	-12	05	49.2	16.8 809
1985	PF	1985	09	04.05833	21	50	49.64	-12	05	52.3	809
1985	PF	1985	09	04.06389	21	50	49.39	-12	05	55.4	809
1985	PM	1985	09	05.06771	21	56	42.84	-12	14	02.4	16.9 809
1985	PM	1985	09	05.07257	21	56	42.62	-12	14	02.4	809
1985	PM	1985	09	05.07743	21	56	42.40	-12	14	02.5	809
1985	PM	1985	09	07.00174	21	55	13.72	-12	14	59.9	809
1985	PM	1985	09	07.00660	21	55	13.48	-12	15	00.1	809
1985	PM	1985	09	07.01146	21	55	13.26	-12	15	00.2	809
1985	PM	1985	09	10.04930	21	53	01.57	-12	15	56.2	809
1985	PM	1985	09	10.05347	21	53	01.39	-12	15	56.3	809
1985	PM	1985	09	10.05798	21	53	01.19	-12	15	56.4	809
1985	PM	1985	09	11.06180	21	52	20.42	-12	16	05.9	809
1985	PM	1985	09	11.06597	21	52	20.25	-12	16	06.0	809
1985	PM	1985	09	11.07014	21	52	20.09	-12	16	06.0	809
1985	PM	1985	09	12.05347	21	51	41.50	-12	16	08.8	809
1985	PM	1985	09	12.05764	21	51	41.32	-12	16	08.9	809
1985	PM	1985	09	12.06180	21	51	41.14	-12	16	09.1	809
1985	PM	1985	09	14.25208	21	50	19.53	-12	15	54.5	809
1985	PM	1985	09	14.25625	21	50	19.38	-12	15	54.5	809
1985	PM	1985	09	14.26041	21	50	19.22	-12	15	54.5	809
1985	PM	1985	09	15.02882	21	49	52.86	-12	15	43.2	809
1985	PM	1985	09	15.03368	21	49	52.70	-12	15	43.1	809
1985	PM	1985	09	15.03854	21	49	52.53	-12	15	43.0	809
1985	PM	1985	09	16.99062	21	48	48.94	-12	14	58.0	809
1985	PM	1985	09	16.99548	21	48	48.78	-12	14	57.9	809
1985	PM	1985	09	17.00035	21	48	48.62	-12	14	57.8	809
1985	PM	1985	09	19.04896	21	47	48.38	-12	13	47.4	809
1985	PM	1985	09	19.05382	21	47	48.25	-12	13	47.1	809
1985	PM	1985	09	19.05868	21	47	48.09	-12	13	46.9	809
1985	PM	1985	09	20.26910	21	47	15.60	-12	12	49.7	809
1985	PM	1985	09	20.27396	21	47	15.46	-12	12	49.4	809
1985	PM	1985	09	20.27882	21	47	15.34	-12	12	49.2	809
1985	PM	1985	09	21.10902	21	46	55.21	-12	12	07.7	809
1985	PM	1985	09	21.11389	21	46	55.09	-12	12	07.5	809
1985	PM	1985	09	21.11910	21	46	54.96	-12	12	07.2	809
1985	QC	1985	09	04.07500	22	24	51.67	-08	39	50.9	16.9 809
1985	QC	1985	09	04.08056	22	24	51.37	-08	39	53.3	809
1985	QC	1985	09	04.08611	22	24	51.07	-08	39	55.6	809
1985	QC	1985	09	10.10903	22	19	26.99	-09	22	15.3	809

1985	QC	1985	09	10.11337	22	19	26.76	-09	22	17.3	809
1985	QC	1985	09	10.11771	22	19	26.53	-09	22	18.9	809
1985	QC	1985	09	11.13229	22	18	34.41	-09	29	11.2	809
1985	QC	1985	09	11.13785	22	18	34.15	-09	29	13.4	809
1985	QC	1985	09	11.14271	22	18	33.88	-09	29	15.6	809
1985	QC	1985	09	12.11597	22	17	44.83	-09	35	45.7	809
1985	QC	1985	09	12.12014	22	17	44.60	-09	35	47.4	809
1985	QC	1985	09	12.12430	22	17	44.39	-09	35	49.1	809
1985	QC	1985	09	14.34757	22	15	55.11	-09	50	15.5	809
1985	QC	1985	09	14.35173	22	15	54.91	-09	50	17.1	809
1985	QC	1985	09	14.35590	22	15	54.70	-09	50	18.9	809
1985	QC	1985	09	16.26215	22	14	25.85	-10	02	20.8	809
1985	QC	1985	09	16.26701	22	14	25.62	-10	02	22.5	809
1985	QC	1985	09	16.27187	22	14	25.40	-10	02	24.0	809
1985	QC	1985	09	17.19236	22	13	44.17	-10	08	01.9	809
1985	QC	1985	09	17.19791	22	13	43.92	-10	08	03.9	809
1985	QC	1985	09	17.20347	22	13	43.66	-10	08	05.9	809
1985	QC	1985	09	18.02673	22	13	07.79	-10	13	03.1	809
1985	QC	1985	09	18.03160	22	13	07.58	-10	13	04.9	809
1985	QC	1985	09	18.03646	22	13	07.37	-10	13	06.4	809
1985	QC	1985	09	18.04236	22	13	07.09	-10	13	08.9	809
1985	QC	1985	09	18.04757	22	13	06.87	-10	13	10.8	809
1985	QC	1985	09	18.05243	22	13	06.65	-10	13	12.5	809
1985	QC	1985	09	20.07153	22	11	41.71	-10	24	54.5	809
1985	QC	1985	09	20.07691	22	11	41.49	-10	24	56.4	809
1985	QC	1985	09	20.08194	22	11	41.27	-10	24	58.2	809
1985	QC	1985	09	20.08837	22	11	41.00	-10	25	00.4	809
1985	QC	1985	09	20.09375	22	11	40.77	-10	25	02.4	809
1985	QC	1985	09	20.09861	22	11	40.57	-10	25	04.1	809
1985	QC	1985	09	20.98993	22	11	05.24	-10	30	01.9	809
1985	QC	1985	09	20.99479	22	11	05.05	-10	30	03.7	809
1985	QR	1985	09	06.17465	00	23	58.77	-03	34	01.7	17.4 809
1985	QR	1985	09	06.17951	00	23	58.61	-03	34	03.9	809
1985	QR	1985	09	06.18437	00	23	58.45	-03	34	06.2	809
1985	QR	1985	09	08.10833	00	22	56.08	-03	49	09.5	809
1985	QR	1985	09	08.11250	00	22	55.94	-03	49	11.5	809
1985	QR	1985	09	08.11667	00	22	55.81	-03	49	13.5	809
1985	QR	1985	09	10.32257	00	21	39.95	-04	06	46.5	809
1985	QR	1985	09	10.32743	00	21	39.78	-04	06	48.8	809
1985	QR	1985	09	10.33229	00	21	39.61	-04	06	51.1	809
1985	QR	1985	09	14.14757	00	19	20.29	-04	37	43.0	809
1985	QR	1985	09	14.15243	00	19	20.11	-04	37	45.2	809
1985	QR	1985	09	14.15712	00	19	19.94	-04	37	47.5	809
1985	QR	1985	09	17.10451	00	17	25.63	-05	01	50.2	809
1985	QR	1985	09	17.10937	00	17	25.46	-05	01	52.6	809
1985	QR	1985	09	17.11423	00	17	25.28	-05	01	54.9	809
1985	QR	1985	09	18.28507	00	16	38.33	-05	11	26.0	809
1985	QR	1985	09	18.29028	00	16	38.12	-05	11	28.5	809
1985	QR	1985	09	18.29548	00	16	37.91	-05	11	31.0	809
1985	QR	1985	09	20.12396	00	15	24.23	-05	26	25.0	809
1985	QR	1985	09	20.12882	00	15	24.02	-05	26	27.4	809
1985	QR	1985	09	20.13368	00	15	23.82	-05	26	29.8	809
1985	QR	1985	09	22.36042	00	13	51.86	-05	44	28.2	809
1985	QR	1985	09	22.36458	00	13	51.69	-05	44	30.0	809
1985	QA4	1985	09	04.05278	21	44	08.30	-11	16	03.7	17.0 809
1985	QA4	1985	09	04.05833	21	44	08.01	-11	16	04.1	809
1985	QA4	1985	09	04.06389	21	44	07.73	-11	16	04.6	809
1985	QA4	1985	09	06.02604	21	42	35.96	-11	18	36.6	809
1985	QA4	1985	09	06.03160	21	42	35.70	-11	18	37.0	809

1985	QA4	1985	09	06.03646	21	42	35.49	-11	18	37.4	809
1985	QA4	1985	09	08.00000	21	41	08.38	-11	20	55.3	809
1985	QA4	1985	09	08.00417	21	41	08.21	-11	20	55.6	809
1985	QA4	1985	09	08.00833	21	41	08.02	-11	20	56.0	809
1985	QA4	1985	09	09.99930	21	39	45.00	-11	22	58.5	809
1985	QA4	1985	09	10.00347	21	39	44.84	-11	22	58.8	809
1985	QA4	1985	09	10.00764	21	39	44.69	-11	22	59.1	809
1985	QA4	1985	09	11.01180	21	39	04.87	-11	23	54.8	809
1985	QA4	1985	09	11.01597	21	39	04.71	-11	23	55.0	809
1985	QA4	1985	09	11.02014	21	39	04.55	-11	23	55.2	809
1985	QA4	1985	09	12.00556	21	38	27.05	-11	24	44.5	809
1985	QA4	1985	09	12.00972	21	38	26.89	-11	24	44.8	809
1985	QA4	1985	09	12.01389	21	38	26.72	-11	24	45.0	809
1985	QA4	1985	09	14.01875	21	37	15.03	-11	26	10.8	809
1985	QA4	1985	09	14.02292	21	37	14.87	-11	26	11.0	809
1985	QA4	1985	09	14.02708	21	37	14.73	-11	26	11.4	809
1985	QA4	1985	09	15.24409	21	36	34.05	-11	26	52.5	809
1985	QA4	1985	09	15.24896	21	36	33.87	-11	26	52.5	809
1985	QA4	1985	09	15.25382	21	36	33.69	-11	26	52.7	809
1985	QA4	1985	09	16.14722	21	36	05.80	-11	27	17.3	809
1985	QA4	1985	09	16.15278	21	36	05.62	-11	27	17.5	809
1985	QA4	1985	09	16.15833	21	36	05.45	-11	27	17.7	809
1985	QA4	1985	09	19.19375	21	34	40.59	-11	28	09.9	809
1985	QA4	1985	09	19.19861	21	34	40.45	-11	28	10.0	809
1985	QA4	1985	09	19.20417	21	34	40.30	-11	28	10.1	809
1985	QG4	1985	09	05.04896	21	37	35.87	-16	01	17.4	16.8 809
1985	QG4	1985	09	05.05382	21	37	35.65	-16	01	15.9	809
1985	QG4	1985	09	05.05868	21	37	35.44	-16	01	14.5	809
1985	QG4	1985	09	06.98299	21	36	01.66	-15	52	40.1	809
1985	QG4	1985	09	06.98785	21	36	01.42	-15	52	38.7	809
1985	QG4	1985	09	06.99271	21	36	01.22	-15	52	37.1	809
1985	QG4	1985	09	10.01944	21	33	47.73	-15	38	35.4	809
1985	QG4	1985	09	10.02361	21	33	47.55	-15	38	34.0	809
1985	QG4	1985	09	10.02778	21	33	47.34	-15	38	32.6	809
1985	QG4	1985	09	11.02951	21	33	07.28	-15	33	45.5	809
1985	QG4	1985	09	11.03437	21	33	07.08	-15	33	44.0	809
1985	QG4	1985	09	11.03950	21	33	06.87	-15	33	42.7	809
1985	QG4	1985	09	12.02187	21	32	29.64	-15	28	55.7	809
1985	QG4	1985	09	12.02674	21	32	29.43	-15	28	54.3	809
1985	QG4	1985	09	12.03171	21	32	29.24	-15	28	52.9	809
1985	QG4	1985	09	13.98750	21	31	21.30	-15	19	09.8	809
1985	QG4	1985	09	13.99167	21	31	21.09	-15	19	08.4	809
1985	QG4	1985	09	13.99583	21	31	20.90	-15	19	07.0	809
1985	QG4	1985	09	14.98958	21	30	49.52	-15	14	04.0	809
1985	QG4	1985	09	14.99514	21	30	49.34	-15	14	02.6	809
1985	QG4	1985	09	15.00069	21	30	49.14	-15	14	01.2	809
1985	QG4	1985	09	16.06667	21	30	17.63	-15	08	31.3	809
1985	QG4	1985	09	16.07222	21	30	17.43	-15	08	30.0	809
1985	QG4	1985	09	16.07778	21	30	17.24	-15	08	28.6	809
1985	QG4	1985	09	17.15139	21	29	48.02	-15	02	51.4	809
1985	QG4	1985	09	17.15694	21	29	47.83	-15	02	50.2	809
1985	QG4	1985	09	17.16250	21	29	47.65	-15	02	49.1	809
1985	QH4	1985	09	05.04896	21	41	15.06	-16	53	10.4	16.6 809
1985	QH4	1985	09	05.05382	21	41	14.84	-16	53	10.5	809
1985	QH4	1985	09	05.05868	21	41	14.62	-16	53	10.5	809
1985	QH4	1985	09	06.98299	21	39	38.26	-16	54	36.0	809
1985	QH4	1985	09	06.98785	21	39	38.06	-16	54	36.1	809
1985	QH4	1985	09	06.99271	21	39	37.83	-16	54	36.2	809
1985	QH4	1985	09	11.04653	21	36	31.90	-16	55	54.3	809

1985	QH4	1985	09	11.05075	21	36	31.75	-16	55	54.3	809
1985	QH4	1985	09	11.05492	21	36	31.58	-16	55	54.4	809
1985	QH4	1985	09	12.03819	21	35	50.30	-16	55	50.5	809
1985	QH4	1985	09	12.04236	21	35	50.14	-16	55	50.4	809
1985	QH4	1985	09	12.04653	21	35	50.00	-16	55	50.4	809
1985	QH4	1985	09	14.00278	21	34	33.03	-16	55	18.1	809
1985	QH4	1985	09	14.00694	21	34	32.87	-16	55	18.0	809
1985	QH4	1985	09	14.01111	21	34	32.70	-16	55	17.9	809
1985	QH4	1985	09	15.00903	21	33	56.08	-16	54	48.4	809
1985	QH4	1985	09	15.01458	21	33	55.90	-16	54	48.4	809
1985	QH4	1985	09	15.02014	21	33	55.68	-16	54	48.3	809
1985	QH4	1985	09	16.08403	21	33	18.45	-16	54	05.6	809
1985	QH4	1985	09	16.08970	21	33	18.23	-16	54	05.5	809
1985	QH4	1985	09	16.09525	21	33	18.00	-16	54	05.5	809
1985	QH4	1985	09	17.16944	21	32	42.68	-16	53	11.6	809
1985	QH4	1985	09	17.17500	21	32	42.45	-16	53	11.5	809
1985	QH4	1985	09	17.18056	21	32	42.23	-16	53	11.3	809
1985	QH4	1985	09	18.26562	21	32	08.86	-16	52	05.9	809
1985	QH4	1985	09	18.27049	21	32	08.66	-16	52	05.7	809
1985	QH4	1985	09	18.27535	21	32	08.46	-16	52	05.6	809
1985	QH4	1985	09	19.15590	21	31	43.50	-16	51	04.0	809
1985	QH4	1985	09	19.16076	21	31	43.30	-16	51	04.6	809
1985	QH4	1985	09	19.16562	21	31	43.10	-16	51	04.3	809
1985	QH4	1985	09	20.24896	21	31	14.09	-16	49	39.5	809
1985	QH4	1985	09	20.25382	21	31	13.90	-16	49	39.1	809
1985	QH4	1985	09	20.25868	21	31	13.72	-16	49	38.8	809
1985	QH4	1985	09	21.01944	21	30	55.39	-16	48	32.9	809
1985	QH4	1985	09	21.02430	21	30	55.22	-16	48	32.8	809
1985	QH4	1985	09	21.02847	21	30	55.04	-16	48	32.5	809
1985	RH	1985	09	06.13594	23	41	57.43	-01	56	10.7	17.4 809
1985	RH	1985	09	06.14080	23	41	57.15	-01	56	10.9	809
1985	RH	1985	09	06.14549	23	41	56.89	-01	56	11.2	809
1985	RH	1985	09	08.07118	23	39	59.25	-01	57	49.9	809
1985	RH	1985	09	08.07604	23	39	58.97	-01	57	50.2	809
1985	RH	1985	09	08.08090	23	39	58.68	-01	57	50.4	809
1985	RH	1985	09	10.18663	23	37	48.15	-01	59	48.1	809
1985	RH	1985	09	10.19149	23	37	47.85	-01	59	48.4	809
1985	RH	1985	09	10.19635	23	37	47.55	-01	59	48.7	809
1985	RH	1985	09	14.09027	23	33	44.23	-02	03	46.3	809
1985	RH	1985	09	14.09514	23	33	43.94	-02	03	46.6	809
1985	RH	1985	09	14.10069	23	33	43.58	-02	03	46.9	809
1985	RH	1985	09	15.32257	23	32	26.64	-02	05	04.1	809
1985	RH	1985	09	15.32743	23	32	26.35	-02	05	04.4	809
1985	RH	1985	09	15.33229	23	32	26.06	-02	05	04.7	809
1985	RH	1985	09	17.28646	23	30	24.13	-02	07	10.4	809
1985	RH	1985	09	17.29132	23	30	23.83	-02	07	10.5	809
1985	RH	1985	09	17.29618	23	30	23.53	-02	07	10.9	809
1985	RH	1985	09	19.29965	23	28	19.27	-02	09	19.4	809
1985	RH	1985	09	19.30451	23	28	18.97	-02	09	19.7	809
1985	RH	1985	09	19.30937	23	28	18.67	-02	09	20.1	809
1985	RH	1985	09	22.30069	23	25	16.43	-02	12	26.1	809
1985	RH	1985	09	22.30486	23	25	16.16	-02	12	26.4	809
1985	RL	1985	09	17.30521	23	39	18.09	-04	38	02.4	17.2 809
1985	RL	1985	09	17.31007	23	39	17.87	-04	38	04.1	809
1985	RL	1985	09	17.31493	23	39	17.64	-04	38	05.8	809
1985	RL	1985	09	19.31701	23	37	45.40	-04	49	50.4	809
1985	RL	1985	09	19.32187	23	37	45.17	-04	49	52.3	809
1985	RL	1985	09	19.32673	23	37	44.93	-04	49	54.0	809
1985	RL	1985	09	22.31389	23	35	28.52	-05	07	04.1	809

1985	RL	1985	09	22.31805	23	35	28.33	-05	07	05.4	809
1985	RT	1985	09	08.09132	00	02	57.52	+00	15	15.7	17.1 809
1985	RT	1985	09	08.09618	00	02	57.29	+00	15	15.2	809
1985	RT	1985	09	08.10104	00	02	57.06	+00	15	14.6	809
1985	RT	1985	09	10.30382	00	01	10.84	+00	11	17.9	809
1985	RT	1985	09	10.30868	00	01	10.60	+00	11	17.4	809
1985	RT	1985	09	10.31354	00	01	10.39	+00	11	16.9	809
1985	RT	1985	09	11.32639	00	00	19.81	+00	09	16.2	809
1985	RT	1985	09	11.33055	00	00	19.60	+00	09	15.7	809
1985	RT	1985	09	11.33480	00	00	19.39	+00	09	15.2	809
1985	RT	1985	09	14.12604	23	57	55.14	+00	03	14.0	809
1985	RT	1985	09	14.13090	23	57	54.91	+00	03	13.1	809
1985	RT	1985	09	14.13576	23	57	54.68	+00	03	12.3	809
1985	RT	1985	09	18.09826	23	54	18.99	-00	06	20.0	809
1985	RT	1985	09	18.10312	23	54	18.73	-00	06	20.7	809
1985	RT	1985	09	18.10798	23	54	18.46	-00	06	21.4	809
1985	RT	1985	09	20.10659	23	52	26.64	-00	11	26.8	809
1985	RT	1985	09	20.11181	23	52	26.34	-00	11	27.8	809
1985	RT	1985	09	20.11701	23	52	26.05	-00	11	28.7	809
1985	RT	1985	09	22.32500	23	50	21.38	-00	17	12.7	809
1985	RT	1985	09	22.32917	23	50	21.16	-00	17	13.3	809
1985	RP1	1985	09	08.09132	00	09	22.89	+00	14	48.0	16.9 809
1985	RP1	1985	09	08.09618	00	09	22.66	+00	14	45.1	809
1985	RP1	1985	09	08.10104	00	09	22.44	+00	14	42.4	809
1985	RP1	1985	09	10.30382	00	07	42.11	-00	06	23.6	809
1985	RP1	1985	09	10.30868	00	07	41.88	-00	06	26.3	809
1985	RP1	1985	09	10.31354	00	07	41.66	-00	06	28.9	809
1985	RP1	1985	09	11.32639	00	06	54.25	-00	16	19.2	809
1985	RP1	1985	09	11.33055	00	06	54.06	-00	16	22.1	809
1985	RP1	1985	09	11.33480	00	06	53.86	-00	16	24.6	809
1985	RP1	1985	09	14.12604	00	04	39.86	-00	43	59.0	809
1985	RP1	1985	09	14.13090	00	04	39.62	-00	44	01.7	809
1985	RP1	1985	09	14.13576	00	04	39.38	-00	44	04.5	809
1985	RP1	1985	09	18.09826	00	01	20.99	-01	23	41.0	809
1985	RP1	1985	09	18.10312	00	01	20.75	-01	23	43.9	809
1985	RP1	1985	09	18.10798	00	01	20.52	-01	23	46.6	809
1985	RP1	1985	09	20.18125	23	59	34.85	-01	44	27.8	809
1985	RP1	1985	09	20.18611	23	59	34.60	-01	44	30.7	809
1985	RP1	1985	09	20.19097	23	59	34.36	-01	44	33.6	809
1985	RP1	1985	09	22.37153	23	57	43.08	-02	06	07.6	809
1985	RP1	1985	09	22.37569	23	57	42.87	-02	06	10.3	809
1985	RS1	1985	09	11.17187	00	26	39.43	-00	06	45.0	17.0 809
1985	RS1	1985	09	11.17674	00	26	39.22	-00	06	45.9	809
1985	RS1	1985	09	11.18160	00	26	39.00	-00	06	46.7	809
1985	RS1	1985	09	14.22187	00	24	21.70	-00	15	48.6	809
1985	RS1	1985	09	14.22673	00	24	21.48	-00	15	49.4	809
1985	RS1	1985	09	14.23159	00	24	21.26	-00	15	50.3	809
1985	RS1	1985	09	15.35868	00	23	27.26	-00	19	21.4	809
1985	RS1	1985	09	15.36354	00	23	26.99	-00	19	22.4	809
1985	RS1	1985	09	15.36840	00	23	26.71	-00	19	23.6	809
1985	RS1	1985	09	16.10521	00	22	51.81	-00	21	43.8	809
1985	RS1	1985	09	16.11007	00	22	51.63	-00	21	44.5	809
1985	RS1	1985	09	16.11493	00	22	51.43	-00	21	45.2	809
1985	RS1	1985	09	18.30278	00	21	01.95	-00	28	50.7	809
1985	RS1	1985	09	18.30764	00	21	01.72	-00	28	51.6	809
1985	RS1	1985	09	18.31215	00	21	01.50	-00	28	52.4	809
1985	RS1	1985	09	19.33715	00	20	09.16	-00	32	14.4	809
1985	RS1	1985	09	19.34201	00	20	08.91	-00	32	15.3	809
1985	RS1	1985	09	19.34687	00	20	08.67	-00	32	16.3	809

1985	RS1		1985	09	20.33923	00	19	17.52	-00	35	32.9	809
1985	RS1		1985	09	20.34410	00	19	17.27	-00	35	33.9	809
1985	RS1		1985	09	20.34896	00	19	17.01	-00	35	34.8	809
1985	RS1		1985	09	21.31319	00	18	26.88	-00	38	47.8	809
1985	RS1		1985	09	21.31736	00	18	26.66	-00	38	48.6	809
1985	RS1		1985	09	21.32153	00	18	26.45	-00	38	49.4	809
1985	RS1		1985	09	21.32708	00	18	26.16	-00	38	50.6	809
1985	RS1		1985	09	21.33125	00	18	25.94	-00	38	51.4	809
1985	RS1		1985	09	21.33541	00	18	25.73	-00	38	52.2	809
1985	RS1		1985	09	22.18333	00	17	41.71	-00	41	39.7	809
1985	RS1		1985	09	22.18767	00	17	41.48	-00	41	40.9	809
1985	RO2	*	1985	09	04.07500	22	23	58.78	-08	34	25.3	17.1 809
1985	RO2		1985	09	04.08056	22	23	58.53	-08	34	26.3	809
1985	RO2		1985	09	04.08611	22	23	58.28	-08	34	27.3	809
1985	RO2		1985	09	10.10903	22	19	31.29	-08	52	40.1	809
1985	RO2		1985	09	10.11337	22	19	31.08	-08	52	41.1	809
1985	RO2		1985	09	10.11771	22	19	30.89	-08	52	41.9	809
1985	RO2		1985	09	11.13229	22	18	49.69	-08	55	31.2	809
1985	RO2		1985	09	11.13785	22	18	49.46	-08	55	32.0	809
1985	RO2		1985	09	11.14271	22	18	49.27	-08	55	32.6	809
1985	RO2		1985	09	12.11597	22	18	10.96	-08	58	09.2	809
1985	RO2		1985	09	12.12014	22	18	10.79	-08	58	09.9	809
1985	RO2		1985	09	12.12430	22	18	10.63	-08	58	10.8	809
1985	RO2		1985	09	15.29965	22	16	14.19	-09	06	00.4	809
1985	RO2		1985	09	15.30451	22	16	14.01	-09	06	01.1	809
1985	RO2		1985	09	15.30937	22	16	13.83	-09	06	01.9	809
1985	RP2	*	1985	09	04.10000	22	17	53.22	-10	50	39.6	17.0 809
1985	RP2		1985	09	04.10625	22	17	52.95	-10	50	41.3	809
1985	RP2		1985	09	04.11250	22	17	52.68	-10	50	42.8	809
1985	RP2		1985	09	06.06910	22	16	26.96	-10	59	17.8	809
1985	RP2		1985	09	06.07396	22	16	26.76	-10	59	19.0	809
1985	RP2		1985	09	06.07882	22	16	26.55	-10	59	20.4	809
1985	RP2		1985	09	08.01597	22	15	03.40	-11	07	37.2	809
1985	RP2		1985	09	08.02014	22	15	03.22	-11	07	38.3	809
1985	RP2		1985	09	08.02430	22	15	03.04	-11	07	39.4	809
1985	RP2		1985	09	10.26215	22	13	29.15	-11	16	53.5	809
1985	RP2		1985	09	10.26701	22	13	28.97	-11	16	54.7	809
1985	RP2		1985	09	10.27187	22	13	28.79	-11	16	55.9	809
1985	RP2		1985	09	11.27222	22	12	48.23	-11	20	55.9	809
1985	RP2		1985	09	11.27639	22	12	48.07	-11	20	56.9	809
1985	RP2		1985	09	11.28055	22	12	47.90	-11	20	57.9	809
1985	RP2		1985	09	14.05358	22	11	00.08	-11	31	35.6	809
1985	RP2		1985	09	14.05798	22	10	59.90	-11	31	36.6	809
1985	RP2		1985	09	14.06169	22	10	59.74	-11	31	37.8	809
1985	RP2		1985	09	16.22465	22	09	39.96	-11	39	24.9	809
1985	RP2		1985	09	16.22951	22	09	39.78	-11	39	25.9	809
1985	RP2		1985	09	16.23437	22	09	39.61	-11	39	27.0	809
1985	RP2		1985	09	18.06146	22	08	36.57	-11	45	38.4	809
1985	RP2		1985	09	18.06632	22	08	36.42	-11	45	39.4	809
1985	RP2		1985	09	18.07118	22	08	36.25	-11	45	40.4	809
1985	RP2		1985	09	20.00104	22	07	33.62	-11	51	48.2	809
1985	RP2		1985	09	20.00590	22	07	33.47	-11	51	49.0	809
1985	RP2		1985	09	20.01076	22	07	33.31	-11	51	49.9	809
1985	RP2		1985	09	22.27916	22	06	24.92	-11	58	26.6	809
1985	RP2		1985	09	22.28333	22	06	24.79	-11	58	27.4	809
1985	RQ2	*	1985	09	04.99410	21	02	22.30	-25	55	38.3	17.8 809
1985	RQ2		1985	09	04.99896	21	02	22.15	-25	55	38.6	809
1985	RQ2		1985	09	06.00590	21	01	50.58	-25	54	46.4	809
1985	RQ2		1985	09	06.01076	21	01	50.44	-25	54	46.8	809

1985	RQ2		1985	09	06.01597	21	01	50.29	-25	54	47.1			809
1985	RQ2		1985	09	07.98299	21	00	55.45	-25	52	19.8			809
1985	RQ2		1985	09	07.98785	21	00	55.31	-25	52	19.2			809
1985	RQ2		1985	09	07.99271	21	00	55.14	-25	52	19.5			809
1985	RR2	*	1985	09	05.04896	21	35	55.56	-15	54	31.2		17.0	809
1985	RR2		1985	09	05.05382	21	35	55.35	-15	54	32.0			809
1985	RR2		1985	09	05.05868	21	35	55.14	-15	54	32.8			809
1985	RR2		1985	09	10.01944	21	32	22.02	-16	20	40.1			809
1985	RR2		1985	09	10.02361	21	32	21.84	-16	20	40.9			809
1985	RR2		1985	09	10.02778	21	32	21.67	-16	20	41.7			809
1985	RS2	*	1985	09	05.04896	21	37	52.25	-17	24	37.1		17.0	809
1985	RS2		1985	09	05.05382	21	37	52.04	-17	24	38.6			809
1985	RS2		1985	09	05.05868	21	37	51.84	-17	24	39.9			809
1985	RS2		1985	09	06.98299	21	36	19.28	-17	31	20.3			809
1985	RS2		1985	09	06.98785	21	36	19.06	-17	31	21.3			809
1985	RS2		1985	09	06.99271	21	36	18.85	-17	31	22.3			809
1985	RS2		1985	09	10.03333	21	34	03.45	-17	40	43.5			809
1985	RS2		1985	09	10.03750	21	34	03.24	-17	40	44.4			809
1985	RS2		1985	09	10.04201	21	34	03.04	-17	40	45.2			809
1985	RS2		1985	09	11.04653	21	33	21.62	-17	43	26.3			809
1985	RS2		1985	09	11.05075	21	33	21.45	-17	43	27.3			809
1985	RS2		1985	09	11.05492	21	33	21.28	-17	43	28.2			809
1985	RS2		1985	09	12.03819	21	32	42.48	-17	45	57.5			809
1985	RS2		1985	09	12.04236	21	32	42.31	-17	45	58.5			809
1985	RS2		1985	09	12.04653	21	32	42.14	-17	45	59.2			809
1985	RS2		1985	09	14.00278	21	31	30.02	-17	50	24.9			809
1985	RS2		1985	09	14.00694	21	31	29.87	-17	50	25.8			809
1985	RS2		1985	09	14.01111	21	31	29.72	-17	50	26.6			809
1985	RS2		1985	09	15.00903	21	30	55.41	-17	52	26.7			809
1985	RS2		1985	09	15.01458	21	30	55.24	-17	52	27.5			809
1985	RS2		1985	09	15.02014	21	30	55.07	-17	52	28.2			809
1985	RS2		1985	09	16.08403	21	30	20.49	-17	54	23.4			809
1985	RS2		1985	09	16.08970	21	30	20.32	-17	54	25.2			809
1985	RS2		1985	09	16.09525	21	30	20.15	-17	54	26.0			809
1985	RS2		1985	09	17.16944	21	29	47.39	-17	56	09.1			809
1985	RS2		1985	09	17.17500	21	29	47.22	-17	56	10.0			809
1985	RS2		1985	09	17.18056	21	29	47.05	-17	56	10.8			809
1985	RS2		1985	09	18.26562	21	29	16.36	-17	57	42.1			809
1985	RS2		1985	09	18.27049	21	29	16.18	-17	57	42.9			809
1985	RS2		1985	09	18.27535	21	29	16.01	-17	57	43.8			809
1985	RS2		1985	09	19.15590	21	28	53.14	-17	58	49.1			809
1985	RS2		1985	09	19.16076	21	28	53.00	-17	58	50.0			809
1985	RS2		1985	09	19.16562	21	28	52.86	-17	58	50.8			809
1985	RS2		1985	09	20.24896	21	28	26.38	-17	59	58.5			809
1985	RS2		1985	09	20.25382	21	28	26.24	-17	59	59.4			809
1985	RS2		1985	09	20.25868	21	28	26.10	-18	00	00.3			809
1985	RS2		1985	09	21.01944	21	28	09.75	-18	00	42.3			809
1985	RS2		1985	09	21.02430	21	28	09.59	-18	00	43.1			809
1985	RS2		1985	09	21.02847	21	28	09.43	-18	00	44.0			809
1985	RT2	*	1985	09	05.08785	22	03	33.95	-16	00	19.3		16.7	809
1985	RT2		1985	09	05.09271	22	03	33.74	-16	00	20.4			809
1985	RT2		1985	09	05.09757	22	03	33.53	-16	00	21.5			809
1985	RT2		1985	09	07.02048	22	02	10.80	-16	08	24.9			809
1985	RT2		1985	09	07.02535	22	02	10.59	-16	08	26.0			809
1985	RT2		1985	09	07.03021	22	02	10.37	-16	08	27.3			809
1985	RT2		1985	09	10.06389	22	00	05.14	-16	20	16.8			809
1985	RT2		1985	09	10.06805	22	00	04.98	-16	20	17.7			809
1985	RT2		1985	09	10.07222	22	00	04.82	-16	20	18.7			809
1985	RT2		1985	09	11.07674	21	59	25.06	-16	23	58.6			809

1985	RT2		1985	09	11.08160	21	59	24.85	-16	23	59.7	809
1985	RT2		1985	09	11.08646	21	59	24.66	-16	24	00.7	809
1985	RT2		1985	09	12.06805	21	58	46.73	-16	27	29.5	809
1985	RT2		1985	09	12.07222	21	58	46.58	-16	27	30.5	809
1985	RT2		1985	09	12.07639	21	58	46.41	-16	27	31.4	809
1985	RT2		1985	09	14.26736	21	57	24.85	-16	34	45.6	809
1985	RT2		1985	09	14.27153	21	57	24.69	-16	34	46.5	809
1985	RT2		1985	09	14.27569	21	57	24.54	-16	34	47.5	809
1985	RT2		1985	09	15.04618	21	56	57.56	-16	37	11.9	809
1985	RT2		1985	09	15.05104	21	56	57.38	-16	37	12.8	809
1985	RT2		1985	09	15.05590	21	56	57.21	-16	37	14.0	809
1985	RT2		1985	09	17.00798	21	55	50.94	-16	42	56.3	809
1985	RT2		1985	09	17.01284	21	55	50.76	-16	42	57.2	809
1985	RT2		1985	09	17.01771	21	55	50.58	-16	42	57.8	809
1985	RT2		1985	09	19.06493	21	54	45.71	-16	48	22.9	809
1985	RT2		1985	09	19.06979	21	54	45.55	-16	48	23.7	809
1985	RT2		1985	09	19.07465	21	54	45.40	-16	48	24.5	809
1985	RT2		1985	09	20.28437	21	54	09.21	-16	51	18.5	809
1985	RT2		1985	09	20.28923	21	54	09.07	-16	51	19.2	809
1985	RT2		1985	09	20.29409	21	54	08.93	-16	51	19.9	809
1985	RT2		1985	09	21.12778	21	53	45.53	-16	53	13.1	809
1985	RT2		1985	09	21.13194	21	53	45.40	-16	53	13.8	809
1985	RT2		1985	09	21.13611	21	53	45.27	-16	53	14.1	809
1985	RU2	*	1985	09	05.08785	22	08	14.93	-15	14	41.0	17.0 809
1985	RU2		1985	09	05.09271	22	08	14.66	-15	14	41.8	809
1985	RU2		1985	09	05.09757	22	08	14.39	-15	14	42.5	809
1985	RU2		1985	09	07.02048	22	06	27.74	-15	20	09.9	809
1985	RU2		1985	09	07.02535	22	06	27.48	-15	20	10.7	809
1985	RU2		1985	09	07.03021	22	06	27.21	-15	20	11.5	809
1985	RU2		1985	09	10.06389	22	03	46.04	-15	27	38.7	809
1985	RU2		1985	09	10.06805	22	03	45.83	-15	27	39.3	809
1985	RU2		1985	09	10.07222	22	03	45.61	-15	27	39.9	809
1985	RU2		1985	09	11.07674	22	02	54.73	-15	29	48.9	809
1985	RU2		1985	09	11.08160	22	02	54.49	-15	29	49.6	809
1985	RU2		1985	09	11.08646	22	02	54.26	-15	29	50.2	809
1985	RU2		1985	09	14.26736	22	00	22.04	-15	35	23.8	809
1985	RU2		1985	09	14.27153	22	00	21.84	-15	35	24.3	809
1985	RU2		1985	09	14.27569	22	00	21.65	-15	35	24.7	809
1985	RU2		1985	09	15.04618	21	59	48.04	-15	36	29.5	809
1985	RU2		1985	09	15.05104	21	59	47.81	-15	36	30.1	809
1985	RU2		1985	09	15.05590	21	59	47.59	-15	36	30.5	809
1985	RU2		1985	09	17.00798	21	58	25.16	-15	38	45.3	809
1985	RU2		1985	09	17.01284	21	58	24.98	-15	38	45.7	809
1985	RU2		1985	09	17.01771	21	58	24.76	-15	38	46.0	809
1985	RU2		1985	09	19.06493	21	57	05.42	-15	40	19.4	809
1985	RU2		1985	09	19.06979	21	57	05.25	-15	40	19.7	809
1985	RU2		1985	09	19.07465	21	57	05.06	-15	40	19.9	809
1985	RU2		1985	09	20.28437	21	56	21.50	-15	40	51.8	809
1985	RU2		1985	09	20.28923	21	56	21.33	-15	40	52.0	809
1985	RU2		1985	09	20.29409	21	56	21.15	-15	40	52.1	809
1985	RV2	*	1985	09	05.11215	22	15	28.56	-14	45	43.1	17.0 809
1985	RV2		1985	09	05.11701	22	15	28.39	-14	45	45.8	809
1985	RV2		1985	09	05.12187	22	15	28.22	-14	45	48.5	809
1985	RV2		1985	09	07.03854	22	14	22.16	-15	03	28.3	809
1985	RV2		1985	09	07.04340	22	14	22.00	-15	03	31.0	809
1985	RV2		1985	09	07.04826	22	14	21.83	-15	03	33.7	809
1985	RV2		1985	09	10.07986	22	12	43.98	-15	30	02.2	809
1985	RV2		1985	09	10.08403	22	12	43.86	-15	30	04.3	809
1985	RV2		1985	09	10.08819	22	12	43.71	-15	30	06.6	809

1985	RV2		1985	09	11.09861	22	12	13.40	-15	38	27.8	809
1985	RV2		1985	09	11.10278	22	12	13.27	-15	38	29.7	809
1985	RV2		1985	09	11.10694	22	12	13.15	-15	38	31.8	809
1985	RV2		1985	09	14.31458	22	10	45.76	-16	03	25.0	809
1985	RV2		1985	09	14.31875	22	10	45.66	-16	03	26.8	809
1985	RV2		1985	09	14.32291	22	10	45.52	-16	03	28.7	809
1985	RV2		1985	09	15.10000	22	10	27.60	-16	09	07.4	809
1985	RV2		1985	09	15.10555	22	10	27.48	-16	09	09.8	809
1985	RV2		1985	09	15.11111	22	10	27.35	-16	09	12.4	809
1985	RV2		1985	09	16.18680	22	10	02.78	-16	16	41.2	809
1985	RV2		1985	09	16.19236	22	10	02.65	-16	16	43.6	809
1985	RV2		1985	09	16.19791	22	10	02.52	-16	16	46.0	809
1985	RV2		1985	09	17.99201	22	09	27.20	-16	28	32.2	809
1985	RV2		1985	09	17.99687	22	09	27.10	-16	28	34.2	809
1985	RV2		1985	09	18.00174	22	09	27.01	-16	28	36.2	809
1985	RV2		1985	09	20.03576	22	08	53.27	-16	40	53.0	809
1985	RV2		1985	09	20.04062	22	08	53.19	-16	40	54.5	809
1985	RV2		1985	09	20.04548	22	08	53.11	-16	40	56.3	809
1985	RW2	*	1985	09	05.11215	22	15	48.99	-13	28	09.6	17.8 809
1985	RW2		1985	09	05.11701	22	15	48.77	-13	28	10.9	809
1985	RW2		1985	09	05.12187	22	15	48.52	-13	28	12.3	809
1985	RW2		1985	09	07.03854	22	14	20.04	-13	36	39.8	809
1985	RW2		1985	09	07.04340	22	14	19.82	-13	36	41.1	809
1985	RW2		1985	09	07.04826	22	14	19.60	-13	36	42.4	809
1985	RW2		1985	09	11.11285	22	11	19.72	-13	53	23.7	809
1985	RW2		1985	09	11.11771	22	11	19.50	-13	53	25.1	809
1985	RW2		1985	09	11.12257	22	11	19.28	-13	53	26.3	809
1985	RW2		1985	09	16.20439	22	07	54.93	-14	11	35.8	809
1985	RW2		1985	09	16.21204	22	07	54.78	-14	11	36.9	809
1985	RW2		1985	09	16.21690	22	07	54.69	-14	11	37.7	809
1985	RW2		1985	09	18.00937	22	06	49.54	-14	17	13.3	809
1985	RW2		1985	09	18.01423	22	06	49.36	-14	17	14.2	809
1985	RW2		1985	09	18.01910	22	06	49.18	-14	17	15.2	809
1985	RX2	*	1985	09	05.11215	22	16	38.85	-14	46	40.0	17.6 809
1985	RX2		1985	09	05.11701	22	16	38.63	-14	46	41.1	809
1985	RX2		1985	09	05.12187	22	16	38.41	-14	46	42.2	809
1985	RX2		1985	09	07.03854	22	15	12.28	-14	53	21.8	809
1985	RX2		1985	09	07.04340	22	15	12.06	-14	53	22.8	809
1985	RX2		1985	09	07.04826	22	15	11.84	-14	53	23.8	809
1985	RX2		1985	09	10.07986	22	13	03.04	-15	02	41.6	809
1985	RX2		1985	09	10.08403	22	13	02.88	-15	02	42.4	809
1985	RX2		1985	09	10.08819	22	13	02.71	-15	02	43.4	809
1985	RY2	*	1985	09	05.11215	22	17	30.14	-15	19	24.4	17.6 809
1985	RY2		1985	09	05.11701	22	17	29.92	-15	19	25.5	809
1985	RY2		1985	09	05.12187	22	17	29.71	-15	19	26.6	809
1985	RY2		1985	09	10.07986	22	13	52.64	-15	38	46.4	809
1985	RY2		1985	09	10.08403	22	13	52.47	-15	38	47.4	809
1985	RY2		1985	09	10.08819	22	13	52.30	-15	38	48.7	809
1985	RY2		1985	09	11.09861	22	13	09.87	-15	42	22.9	809
1985	RY2		1985	09	11.10278	22	13	09.70	-15	42	23.8	809
1985	RY2		1985	09	11.10694	22	13	09.53	-15	42	24.7	809
1985	RY2		1985	09	15.10000	22	10	30.47	-15	55	23.4	809
1985	RY2		1985	09	15.10555	22	10	30.26	-15	55	24.1	809
1985	RY2		1985	09	15.11111	22	10	30.04	-15	55	25.0	809
1985	RY2		1985	09	16.18680	22	09	49.51	-15	58	32.4	809
1985	RY2		1985	09	16.19236	22	09	49.30	-15	58	33.4	809
1985	RY2		1985	09	16.19791	22	09	49.09	-15	58	34.3	809
1985	RY2		1985	09	17.99201	22	08	44.83	-16	03	24.9	809
1985	RY2		1985	09	17.99687	22	08	44.66	-16	03	25.8	809

1985	RY2		1985	09	18.00174	22	08	44.48	-16	03	26.6		809
1985	RY2		1985	09	20.03576	22	07	35.50	-16	08	25.7		809
1985	RY2		1985	09	20.04062	22	07	35.34	-16	08	26.3		809
1985	RY2		1985	09	20.04548	22	07	35.18	-16	08	27.0		809
1985	RZ2	*	1985	09	05.13160	22	45	13.45	-12	34	34.8	16.8	809
1985	RZ2		1985	09	05.13646	22	45	13.23	-12	34	36.0		809
1985	RZ2		1985	09	05.14132	22	45	13.01	-12	34	37.6		809
1985	RZ2		1985	09	07.05798	22	43	48.26	-12	44	40.9		809
1985	RZ2		1985	09	07.06285	22	43	48.07	-12	44	42.6		809
1985	RZ2		1985	09	07.06771	22	43	47.86	-12	44	44.3		809
1985	RZ2		1985	09	10.09444	22	41	35.11	-13	00	02.4		809
1985	RZ2		1985	09	10.09861	22	41	34.92	-13	00	03.7		809
1985	RZ2		1985	09	10.10278	22	41	34.75	-13	00	05.3		809
1985	RZ2		1985	09	12.09861	22	40	09.02	-13	09	42.9		809
1985	RZ2		1985	09	12.10278	22	40	08.85	-13	09	44.2		809
1985	RZ2		1985	09	12.10694	22	40	08.67	-13	09	45.6		809
1985	RZ2		1985	09	14.29722	22	38	36.60	-13	19	48.5		809
1985	RZ2		1985	09	14.30139	22	38	36.45	-13	19	49.6		809
1985	RZ2		1985	09	14.30590	22	38	36.27	-13	19	50.9		809
1985	RZ2		1985	09	15.08090	22	38	04.94	-13	23	15.9		809
1985	RZ2		1985	09	15.08576	22	38	04.74	-13	23	17.4		809
1985	RZ2		1985	09	15.09062	22	38	04.53	-13	23	18.8		809
1985	RZ2		1985	09	17.04409	22	36	46.38	-13	31	36.4		809
1985	RZ2		1985	09	17.04896	22	36	46.19	-13	31	37.6		809
1985	RZ2		1985	09	17.05382	22	36	45.97	-13	31	38.7		809
1985	RZ2		1985	09	19.08368	22	35	27.84	-13	39	43.0		809
1985	RZ2		1985	09	19.08923	22	35	27.63	-13	39	44.3		809
1985	RZ2		1985	09	19.09410	22	35	27.45	-13	39	45.4		809
1985	RZ2		1985	09	19.11562	22	35	26.62	-13	39	50.0		809
1985	RZ2		1985	09	19.12048	22	35	26.43	-13	39	51.1		809
1985	RZ2		1985	09	19.12535	22	35	26.25	-13	39	52.2		809
1985	RZ2		1985	09	20.31979	22	34	41.55	-13	44	21.9		809
1985	RZ2		1985	09	20.32465	22	34	41.36	-13	44	22.8		809
1985	RZ2		1985	09	20.32951	22	34	41.20	-13	44	23.9		809
1985	RZ2		1985	09	21.15139	22	34	11.93	-13	47	21.6		809
1985	RZ2		1985	09	21.15555	22	34	11.80	-13	47	22.4		809
1985	RZ2		1985	09	21.15972	22	34	11.65	-13	47	23.5		809
1985	RA3	*	1985	09	05.13160	22	48	06.87	-12	24	08.8	16.8	809
1985	RA3		1985	09	05.13646	22	48	06.64	-12	24	10.3		809
1985	RA3		1985	09	05.14132	22	48	06.41	-12	24	11.8		809
1985	RA3		1985	09	07.05798	22	46	35.83	-12	34	09.2		809
1985	RA3		1985	09	07.06285	22	46	35.61	-12	34	10.6		809
1985	RA3		1985	09	07.06771	22	46	35.38	-12	34	12.0		809
1985	RA3		1985	09	10.09444	22	44	13.58	-12	49	14.1		809
1985	RA3		1985	09	10.09861	22	44	13.38	-12	49	15.4		809
1985	RA3		1985	09	10.10278	22	44	13.18	-12	49	16.6		809
1985	RA3		1985	09	12.09861	22	42	41.43	-12	58	46.8		809
1985	RA3		1985	09	12.10278	22	42	41.23	-12	58	48.0		809
1985	RA3		1985	09	12.10694	22	42	41.03	-12	58	49.3		809
1985	RA3		1985	09	14.29722	22	41	02.20	-13	08	42.3		809
1985	RA3		1985	09	14.30139	22	41	02.01	-13	08	43.4		809
1985	RA3		1985	09	14.30590	22	41	01.81	-13	08	44.6		809
1985	RA3		1985	09	15.08090	22	40	28.13	-13	12	08.3		809
1985	RA3		1985	09	15.08576	22	40	27.91	-13	12	09.5		809
1985	RA3		1985	09	15.09062	22	40	27.70	-13	12	10.8		809
1985	RA3		1985	09	17.04409	22	39	03.55	-13	20	21.2		809
1985	RA3		1985	09	17.04896	22	39	03.35	-13	20	22.3		809
1985	RA3		1985	09	17.05382	22	39	03.15	-13	20	23.5		809
1985	RA3		1985	09	19.08368	22	37	38.65	-13	28	22.6		809

1985	RA3		1985	09	19.08923	22	37	38.43	-13	28	23.9	809
1985	RA3		1985	09	19.09410	22	37	38.24	-13	28	25.0	809
1985	RA3		1985	09	19.11562	22	37	37.27	-13	28	31.0	809
1985	RA3		1985	09	19.12048	22	37	37.08	-13	28	32.1	809
1985	RA3		1985	09	19.12535	22	37	36.88	-13	28	33.1	809
1985	RA3		1985	09	20.31979	22	36	48.65	-13	32	57.8	809
1985	RA3		1985	09	20.32465	22	36	48.45	-13	32	58.9	809
1985	RA3		1985	09	20.32951	22	36	48.26	-13	32	59.9	809
1985	RA3		1985	09	21.15139	22	36	16.30	-13	35	56.7	809
1985	RA3		1985	09	21.15555	22	36	16.13	-13	35	57.6	809
1985	RA3		1985	09	21.15972	22	36	15.97	-13	35	58.5	809
1985	RB3	*	1985	09	05.13160	22	48	29.31	-13	31	59.3	17.6 809
1985	RB3		1985	09	05.13646	22	48	29.04	-13	31	59.5	809
1985	RB3		1985	09	05.14132	22	48	28.76	-13	31	59.9	809
1985	RB3		1985	09	07.05798	22	46	39.91	-13	34	33.3	809
1985	RB3		1985	09	07.06285	22	46	39.63	-13	34	33.6	809
1985	RB3		1985	09	07.06771	22	46	39.35	-13	34	34.0	809
1985	RB3		1985	09	10.09444	22	43	47.12	-13	37	41.0	809
1985	RB3		1985	09	10.09861	22	43	46.88	-13	37	41.3	809
1985	RB3		1985	09	10.10278	22	43	46.65	-13	37	41.6	809
1985	RB3		1985	09	12.09861	22	41	54.68	-13	39	01.4	809
1985	RB3		1985	09	12.10278	22	41	54.46	-13	39	01.6	809
1985	RB3		1985	09	12.10694	22	41	54.22	-13	39	01.9	809
1985	RB3		1985	09	14.29722	22	39	53.31	-13	39	44.3	809
1985	RB3		1985	09	14.30139	22	39	53.08	-13	39	44.3	809
1985	RB3		1985	09	14.30590	22	39	52.84	-13	39	44.4	809
1985	RB3		1985	09	15.08090	22	39	11.85	-13	39	48.6	809
1985	RB3		1985	09	15.08576	22	39	11.59	-13	39	48.6	809
1985	RB3		1985	09	15.09062	22	39	11.34	-13	39	48.7	809
1985	RB3		1985	09	17.04409	22	37	28.74	-13	39	28.7	809
1985	RB3		1985	09	17.04896	22	37	28.49	-13	39	28.5	809
1985	RB3		1985	09	17.05382	22	37	28.25	-13	39	28.5	809
1985	RB3		1985	09	19.08368	22	35	45.76	-13	38	22.7	809
1985	RB3		1985	09	19.08923	22	35	45.48	-13	38	22.5	809
1985	RB3		1985	09	19.09410	22	35	45.24	-13	38	22.4	809
1985	RB3		1985	09	19.11562	22	35	44.14	-13	38	21.1	809
1985	RB3		1985	09	19.12048	22	35	43.88	-13	38	21.0	809
1985	RB3		1985	09	19.12535	22	35	43.63	-13	38	20.7	809
1985	RB3		1985	09	20.31979	22	34	45.16	-13	37	18.3	809
1985	RB3		1985	09	20.32465	22	34	44.94	-13	37	18.1	809
1985	RB3		1985	09	20.32951	22	34	44.69	-13	37	17.8	809
1985	RB3		1985	09	21.15139	22	34	06.59	-13	36	26.4	809
1985	RB3		1985	09	21.15555	22	34	06.40	-13	36	26.2	809
1985	RB3		1985	09	21.15972	22	34	06.20	-13	36	25.9	809
1985	RC3	*	1985	09	06.06910	22	15	15.00	-11	25	03.0	18.0 809
1985	RC3		1985	09	06.07396	22	15	14.79	-11	25	04.3	809
1985	RC3		1985	09	06.07882	22	15	14.58	-11	25	05.5	809
1985	RC3		1985	09	10.26215	22	12	18.70	-11	41	40.9	809
1985	RC3		1985	09	10.26701	22	12	18.50	-11	41	42.0	809
1985	RC3		1985	09	10.27187	22	12	18.29	-11	41	43.3	809
1985	RC3		1985	09	14.05358	22	09	47.42	-11	55	50.3	809
1985	RC3		1985	09	14.05798	22	09	47.25	-11	55	51.5	809
1985	RC3		1985	09	14.06169	22	09	47.11	-11	55	52.4	809
1985	RC3		1985	09	16.22465	22	08	24.44	-12	03	29.2	809
1985	RC3		1985	09	16.22951	22	08	24.25	-12	03	30.2	809
1985	RC3		1985	09	16.23437	22	08	24.05	-12	03	31.2	809
1985	RC3		1985	09	18.06146	22	07	17.37	-12	09	41.3	809
1985	RC3		1985	09	18.06632	22	07	17.20	-12	09	42.3	809
1985	RC3		1985	09	18.07118	22	07	17.01	-12	09	43.3	809

1985	RC3		1985	09	20.00104	22	06	09.51	-12	15	53.6	809
1985	RC3		1985	09	20.00590	22	06	09.34	-12	15	54.4	809
1985	RC3		1985	09	20.01076	22	06	09.17	-12	15	55.3	809
1985	RD3	*	1985	09	06.08924	22	53	53.99	-10	47	48.4	17.6 809
1985	RD3		1985	09	06.09410	22	53	53.72	-10	47	50.4	809
1985	RD3		1985	09	06.09896	22	53	53.46	-10	47	52.2	809
1985	RD3		1985	09	08.03194	22	52	06.16	-11	01	20.3	809
1985	RD3		1985	09	08.03715	22	52	05.88	-11	01	22.4	809
1985	RD3		1985	09	08.04201	22	52	05.61	-11	01	24.4	809
1985	RD3		1985	09	10.22083	22	50	04.78	-11	16	09.6	809
1985	RD3		1985	09	10.22604	22	50	04.50	-11	16	11.8	809
1985	RD3		1985	09	10.23090	22	50	04.24	-11	16	13.8	809
1985	RD3		1985	09	11.21840	22	49	10.14	-11	22	44.2	809
1985	RD3		1985	09	11.22326	22	49	09.87	-11	22	46.0	809
1985	RD3		1985	09	11.22813	22	49	09.60	-11	22	48.2	809
1985	RD3		1985	09	14.03567	22	46	39.31	-11	40	41.2	809
1985	RD3		1985	09	14.04037	22	46	39.05	-11	40	42.8	809
1985	RD3		1985	09	14.04504	22	46	38.79	-11	40	44.4	809
1985	RD3		1985	09	15.26146	22	45	34.33	-11	48	07.0	809
1985	RD3		1985	09	15.26632	22	45	34.08	-11	48	08.9	809
1985	RD3		1985	09	15.27118	22	45	33.84	-11	48	10.6	809
1985	RD3		1985	09	16.16666	22	44	48.03	-11	53	28.1	809
1985	RD3		1985	09	16.17222	22	44	47.76	-11	53	30.2	809
1985	RD3		1985	09	16.17778	22	44	47.47	-11	53	32.1	809
1985	RD3		1985	09	17.24340	22	43	53.37	-11	59	38.9	809
1985	RD3		1985	09	17.24826	22	43	53.11	-11	59	40.8	809
1985	RD3		1985	09	17.25312	22	43	52.86	-11	59	42.5	809
1985	RD3		1985	09	21.22500	22	40	43.38	-12	20	40.2	809
1985	RD3		1985	09	21.22847	22	40	43.21	-12	20	41.1	809
1985	RD3		1985	09	21.23507	22	40	42.90	-12	20	43.2	809
1985	RD3		1985	09	22.03680	22	40	07.50	-12	24	33.3	809
1985	RD3		1985	09	22.04097	22	40	07.32	-12	24	34.6	809
1985	RD3		1985	09	22.04513	22	40	07.13	-12	24	35.8	809
1985	RE3	*	1985	09	06.08924	22	55	01.45	-10	58	43.3	17.7 809
1985	RE3		1985	09	06.09410	22	55	01.27	-10	58	46.7	809
1985	RE3		1985	09	06.09896	22	55	01.09	-10	58	49.7	809
1985	RE3		1985	09	08.03194	22	53	48.25	-11	18	50.6	809
1985	RE3		1985	09	08.03715	22	53	48.05	-11	18	53.9	809
1985	RE3		1985	09	08.04201	22	53	47.85	-11	18	56.8	809
1985	RE3		1985	09	10.22083	22	52	25.66	-11	41	08.2	809
1985	RE3		1985	09	10.22604	22	52	25.47	-11	41	11.4	809
1985	RE3		1985	09	10.23090	22	52	25.29	-11	41	14.3	809
1985	RE3		1985	09	11.21840	22	51	48.56	-11	51	07.7	809
1985	RE3		1985	09	11.22326	22	51	48.38	-11	51	10.8	809
1985	RE3		1985	09	11.22813	22	51	48.21	-11	51	13.5	809
1985	RE3		1985	09	14.03567	22	50	06.01	-12	18	43.0	809
1985	RE3		1985	09	14.04037	22	50	05.84	-12	18	45.9	809
1985	RE3		1985	09	14.04504	22	50	05.67	-12	18	48.6	809
1985	RE3		1985	09	15.26146	22	49	21.85	-12	30	20.8	809
1985	RE3		1985	09	15.26632	22	49	21.67	-12	30	23.6	809
1985	RE3		1985	09	15.27118	22	49	21.49	-12	30	26.6	809
1985	RE3		1985	09	16.16666	22	48	50.45	-12	38	49.9	809
1985	RE3		1985	09	16.17222	22	48	50.26	-12	38	53.0	809
1985	RE3		1985	09	16.17778	22	48	50.08	-12	38	56.2	809
1985	RE3		1985	09	17.24340	22	48	13.48	-12	48	47.7	809
1985	RE3		1985	09	17.24826	22	48	13.31	-12	48	50.4	809
1985	RE3		1985	09	17.25312	22	48	13.15	-12	48	53.2	809
1985	RF3	*	1985	09	06.11701	23	02	47.70	-14	38	06.6	17.4 809
1985	RF3		1985	09	06.12187	23	02	47.51	-14	38	08.8	809

1985	RF3		1985	09	06.12674	23	02	47.31	-14	38	11.1	809
1985	RF3		1985	09	08.05312	23	01	29.66	-14	53	07.1	809
1985	RF3		1985	09	08.05798	23	01	29.46	-14	53	09.4	809
1985	RF3		1985	09	08.06285	23	01	29.27	-14	53	11.6	809
1985	RF3		1985	09	10.28351	22	59	59.28	-15	09	40.2	809
1985	RF3		1985	09	10.28889	22	59	59.06	-15	09	42.4	809
1985	RF3		1985	09	10.29375	22	59	58.85	-15	09	44.5	809
1985	RF3		1985	09	11.25295	22	59	20.86	-15	16	34.3	809
1985	RF3		1985	09	11.25833	22	59	20.63	-15	16	36.6	809
1985	RF3		1985	09	11.26319	22	59	20.45	-15	16	38.7	809
1985	RF3		1985	09	14.07014	22	57	31.63	-15	35	34.1	809
1985	RF3		1985	09	14.07430	22	57	31.44	-15	35	35.8	809
1985	RF3		1985	09	14.07917	22	57	31.25	-15	35	37.8	809
1985	RF3		1985	09	16.24409	22	56	09.59	-15	49	02.7	809
1985	RF3		1985	09	16.24896	22	56	09.40	-15	49	04.5	809
1985	RF3		1985	09	16.25382	22	56	09.22	-15	49	06.5	809
1985	RF3		1985	09	18.07951	22	55	04.24	-15	59	31.9	809
1985	RF3		1985	09	18.08437	22	55	04.07	-15	59	33.6	809
1985	RF3		1985	09	18.08923	22	55	03.89	-15	59	35.3	809
1985	RF3		1985	09	20.01771	22	53	58.29	-16	09	41.8	809
1985	RF3		1985	09	20.02257	22	53	58.12	-16	09	43.3	809
1985	RF3		1985	09	20.02743	22	53	57.95	-16	09	44.9	809
1985	RF3		1985	09	22.29028	22	52	45.44	-16	20	21.5	809
1985	RF3		1985	09	22.29444	22	52	45.30	-16	20	22.7	809
1985	RG3	*	1985	09	06.11701	23	03	12.37	-15	39	55.2	17.8 809
1985	RG3		1985	09	06.12187	23	03	12.11	-15	39	57.2	809
1985	RG3		1985	09	06.12674	23	03	11.86	-15	39	59.1	809
1985	RG3		1985	09	08.05312	23	01	35.20	-15	52	52.8	809
1985	RG3		1985	09	08.05798	23	01	34.97	-15	52	54.8	809
1985	RG3		1985	09	08.06285	23	01	34.71	-15	52	56.7	809
1985	RG3		1985	09	10.28351	22	59	42.29	-16	07	08.9	809
1985	RG3		1985	09	10.28889	22	59	42.01	-16	07	10.9	809
1985	RG3		1985	09	10.29375	22	59	41.77	-16	07	12.8	809
1985	RG3		1985	09	11.25295	22	58	53.78	-16	13	05.5	809
1985	RG3		1985	09	11.25833	22	58	53.51	-16	13	07.5	809
1985	RG3		1985	09	11.26319	22	58	53.26	-16	13	09.3	809
1985	RH3	*	1985	09	06.11701	23	05	32.81	-15	24	54.2	18.0 809
1985	RH3		1985	09	06.12187	23	05	32.52	-15	24	53.5	809
1985	RH3		1985	09	06.12674	23	05	32.25	-15	24	53.0	809
1985	RH3		1985	09	08.05312	23	03	45.53	-15	19	55.6	809
1985	RH3		1985	09	08.05798	23	03	45.26	-15	19	54.8	809
1985	RH3		1985	09	08.06285	23	03	45.00	-15	19	54.0	809
1985	RH3		1985	09	10.28351	23	01	40.35	-15	13	22.9	809
1985	RH3		1985	09	10.28889	23	01	40.05	-15	13	21.8	809
1985	RH3		1985	09	10.29375	23	01	39.78	-15	13	20.9	809
1985	RH3		1985	09	11.25295	23	00	46.58	-15	10	14.1	809
1985	RH3		1985	09	11.25833	23	00	46.27	-15	10	13.0	809
1985	RH3		1985	09	11.26319	23	00	46.01	-15	10	12.1	809
1985	RH3		1985	09	14.07014	22	58	12.51	-15	00	03.2	809
1985	RH3		1985	09	14.07430	22	58	12.27	-15	00	02.3	809
1985	RH3		1985	09	14.07917	22	58	12.01	-15	00	01.2	809
1985	RJ3	*	1985	09	06.13594	23	43	29.91	-01	40	32.2	17.8 809
1985	RJ3		1985	09	06.14080	23	43	29.71	-01	40	33.7	809
1985	RJ3		1985	09	06.14549	23	43	29.51	-01	40	35.2	809
1985	RJ3		1985	09	08.07118	23	42	07.81	-01	50	33.8	809
1985	RJ3		1985	09	08.07604	23	42	07.61	-01	50	35.3	809
1985	RJ3		1985	09	08.08090	23	42	07.39	-01	50	37.4	809
1985	RJ3		1985	09	10.18663	23	40	36.32	-02	01	41.0	809
1985	RJ3		1985	09	10.19149	23	40	36.11	-02	01	42.5	809

1985	RJ3		1985	09	10.19635	23	40	35.91	-02	01	44.1			809
1985	RJ3		1985	09	14.10798	23	37	44.32	-02	22	35.1			809
1985	RJ3		1985	09	14.11285	23	37	44.11	-02	22	36.7			809
1985	RJ3		1985	09	14.11771	23	37	43.90	-02	22	38.2			809
1985	RJ3		1985	09	15.33993	23	36	49.51	-02	29	10.6			809
1985	RJ3		1985	09	15.34479	23	36	49.29	-02	29	12.2			809
1985	RJ3		1985	09	15.34965	23	36	49.08	-02	29	13.7			809
1985	RK3	*	1985	09	06.13594	23	45	02.50	-01	11	42.1		17.5	809
1985	RK3		1985	09	06.14080	23	45	02.36	-01	11	46.1			809
1985	RK3		1985	09	06.14549	23	45	02.22	-01	11	50.0			809
1985	RK3		1985	09	10.18663	23	43	02.36	-02	07	22.7			809
1985	RK3		1985	09	10.19149	23	43	02.22	-02	07	26.7			809
1985	RK3		1985	09	10.19635	23	43	02.09	-02	07	30.7			809
1985	RK3		1985	09	14.10798	23	40	55.61	-03	03	11.4			809
1985	RK3		1985	09	14.11285	23	40	55.45	-03	03	15.5			809
1985	RK3		1985	09	14.11771	23	40	55.29	-03	03	19.7			809
1985	RK3		1985	09	15.33993	23	40	13.53	-03	20	56.9			809
1985	RK3		1985	09	15.34479	23	40	13.36	-03	21	01.0			809
1985	RK3		1985	09	15.34965	23	40	13.20	-03	21	05.2			809
1985	RK3		1985	09	17.30521	23	39	06.76	-03	49	22.0			809
1985	RK3		1985	09	17.31007	23	39	06.60	-03	49	26.2			809
1985	RK3		1985	09	17.31493	23	39	06.43	-03	49	30.4			809
1985	RK3		1985	09	19.31701	23	37	58.04	-04	18	27.2			809
1985	RK3		1985	09	19.32187	23	37	57.90	-04	18	31.4			809
1985	RK3		1985	09	19.32673	23	37	57.72	-04	18	35.4			809
1985	RK3		1985	09	22.31389	23	36	16.90	-05	01	21.5			809
1985	RK3		1985	09	22.31805	23	36	16.75	-05	01	25.2			809
1985	RL3	*	1985	09	06.15521	23	50	38.29	-15	19	46.1		17.4	809
1985	RL3		1985	09	06.16007	23	50	38.02	-15	19	48.0			809
1985	RL3		1985	09	06.16493	23	50	37.74	-15	19	49.9			809
1985	RL3		1985	09	08.14305	23	48	46.15	-15	33	32.9			809
1985	RL3		1985	09	08.14792	23	48	45.89	-15	33	34.9			809
1985	RL3		1985	09	08.15278	23	48	45.62	-15	33	37.0			809
1985	RL3		1985	09	10.20278	23	46	47.19	-15	47	17.9			809
1985	RL3		1985	09	10.20694	23	46	46.95	-15	47	19.5			809
1985	RL3		1985	09	10.21146	23	46	46.70	-15	47	21.3			809
1985	RL3		1985	09	14.16840	23	42	53.55	-16	11	49.8			809
1985	RL3		1985	09	14.17326	23	42	53.27	-16	11	51.8			809
1985	RL3		1985	09	14.17812	23	42	52.99	-16	11	53.7			809
1985	RL3		1985	09	16.33298	23	40	44.51	-16	23	58.8			809
1985	RL3		1985	09	16.33785	23	40	44.22	-16	24	00.4			809
1985	RL3		1985	09	16.34271	23	40	43.93	-16	24	02.0			809
1985	RL3		1985	09	18.36910	23	38	43.52	-16	34	30.9			809
1985	RL3		1985	09	18.37396	23	38	43.23	-16	34	32.3			809
1985	RL3		1985	09	18.37882	23	38	42.95	-16	34	33.8			809
1985	RL3		1985	09	20.16111	23	36	58.64	-16	43	03.3			809
1985	RL3		1985	09	20.16632	23	36	58.35	-16	43	04.9			809
1985	RL3		1985	09	20.17135	23	36	58.06	-16	43	06.3			809
1985	RL3		1985	09	22.34861	23	34	51.33	-16	52	24.2			809
1985	RL3		1985	09	22.35278	23	34	51.09	-16	52	25.8			809
1985	RM3	*	1985	09	07.07535	23	12	41.06	-06	18	51.3		17.7	809
1985	RM3		1985	09	07.08021	23	12	40.81	-06	18	53.9			809
1985	RM3		1985	09	07.08507	23	12	40.56	-06	18	56.4			809
1985	RM3		1985	09	10.12639	23	10	04.71	-06	45	38.4			809
1985	RM3		1985	09	10.13055	23	10	04.49	-06	45	40.5			809
1985	RM3		1985	09	10.13472	23	10	04.28	-06	45	42.7			809
1985	RM3		1985	09	11.15104	23	09	11.70	-06	54	38.2			809
1985	RM3		1985	09	11.15590	23	09	11.45	-06	54	40.8			809
1985	RM3		1985	09	11.16076	23	09	11.20	-06	54	43.2			809

1985	RM3		1985	09	12.13194	23	08	21.08	-07	03	13.7			809
1985	RM3		1985	09	12.13680	23	08	20.83	-07	03	16.1			809
1985	RM3		1985	09	12.14097	23	08	20.61	-07	03	18.3			809
1985	RM3		1985	09	16.28125	23	04	48.01	-07	38	59.2			809
1985	RM3		1985	09	16.28680	23	04	47.71	-07	39	01.8			809
1985	RM3		1985	09	16.29236	23	04	47.41	-07	39	04.6			809
1985	RN3	*	1985	09	07.07535	23	13	49.11	-06	29	19.0		17.5	809
1985	RN3		1985	09	07.08021	23	13	48.81	-06	29	19.5			809
1985	RN3		1985	09	07.08507	23	13	48.52	-06	29	19.9			809
1985	RN3		1985	09	10.12639	23	10	44.18	-06	33	41.2			809
1985	RN3		1985	09	10.13055	23	10	43.93	-06	33	41.3			809
1985	RN3		1985	09	10.13472	23	10	43.68	-06	33	41.7			809
1985	RN3		1985	09	11.15104	23	09	42.06	-06	35	05.2			809
1985	RN3		1985	09	11.15590	23	09	41.76	-06	35	05.6			809
1985	RN3		1985	09	11.16076	23	09	41.46	-06	35	05.9			809
1985	RN3		1985	09	12.13194	23	08	42.97	-06	36	24.1			809
1985	RN3		1985	09	12.13680	23	08	42.68	-06	36	24.4			809
1985	RN3		1985	09	12.14097	23	08	42.43	-06	36	24.8			809
1985	RN3		1985	09	16.28125	23	04	37.10	-06	41	19.8			809
1985	RN3		1985	09	16.28680	23	04	36.77	-06	41	20.4			809
1985	RN3		1985	09	16.29236	23	04	36.43	-06	41	20.9			809
1985	RN3		1985	09	17.21180	23	03	43.99	-06	42	16.8			809
1985	RN3		1985	09	17.21736	23	03	43.66	-06	42	17.2			809
1985	RN3		1985	09	17.22292	23	03	43.34	-06	42	17.5			809
1985	RN3		1985	09	19.23368	23	01	50.66	-06	44	02.5			809
1985	RN3		1985	09	19.23854	23	01	50.38	-06	44	02.8			809
1985	RN3		1985	09	19.24340	23	01	50.11	-06	44	03.0			809
1985	RN3		1985	09	21.28542	23	00	00.34	-06	45	25.5			809
1985	RN3		1985	09	21.29097	23	00	00.04	-06	45	25.7			809
1985	RN3		1985	09	21.29652	22	59	59.72	-06	45	25.9			809
1985	RO3	*	1985	09	07.07535	23	17	35.59	-05	47	08.0		17.0	809
1985	RO3		1985	09	07.08021	23	17	35.37	-05	47	10.7			809
1985	RO3		1985	09	07.08507	23	17	35.15	-05	47	13.5			809
1985	RO3		1985	09	10.12639	23	15	00.81	-06	14	33.9			809
1985	RO3		1985	09	10.13055	23	15	00.61	-06	14	36.3			809
1985	RO3		1985	09	10.13472	23	15	00.40	-06	14	38.7			809
1985	RO3		1985	09	11.15104	23	14	08.89	-06	23	41.3			809
1985	RO3		1985	09	11.15590	23	14	08.64	-06	23	44.0			809
1985	RO3		1985	09	11.16076	23	14	08.40	-06	23	46.8			809
1985	RO3		1985	09	12.13194	23	13	19.51	-06	32	20.9			809
1985	RO3		1985	09	12.13680	23	13	19.26	-06	32	23.7			809
1985	RO3		1985	09	12.14097	23	13	19.05	-06	32	25.8			809
1985	RO3		1985	09	14.36319	23	11	27.80	-06	51	41.3			809
1985	RO3		1985	09	14.36736	23	11	27.58	-06	51	43.4			809
1985	RO3		1985	09	14.37153	23	11	27.36	-06	51	45.6			809
1985	RO3		1985	09	16.28125	23	09	54.57	-07	07	52.4			809
1985	RO3		1985	09	16.28680	23	09	54.28	-07	07	55.4			809
1985	RO3		1985	09	16.29236	23	09	53.99	-07	07	58.1			809
1985	RO3		1985	09	17.21180	23	09	10.34	-07	15	33.8			809
1985	RO3		1985	09	17.21736	23	09	10.07	-07	15	36.5			809
1985	RO3		1985	09	17.22292	23	09	09.80	-07	15	39.2			809
1985	RO3		1985	09	19.23368	23	07	36.32	-07	31	46.8			809
1985	RO3		1985	09	19.23854	23	07	36.08	-07	31	49.2			809
1985	RO3		1985	09	19.24340	23	07	35.83	-07	31	51.2			809
1985	RO3		1985	09	21.28542	23	06	04.91	-07	47	34.3			809
1985	RO3		1985	09	21.29097	23	06	04.67	-07	47	36.8			809
1985	RO3		1985	09	21.29652	23	06	04.41	-07	47	39.3			809
1985	RO3		1985	09	22.06875	23	05	32.01	-07	53	24.5			809
1985	RO3		1985	09	22.07291	23	05	31.83	-07	53	26.3			809

1985	RP3	*	1985	09	07.07535	23	18	26.33	-05	48	00.6	17.6	809
1985	RP3		1985	09	07.08021	23	18	26.06	-05	48	01.8		809
1985	RP3		1985	09	07.08507	23	18	25.78	-05	48	03.1		809
1985	RP3		1985	09	10.12639	23	15	31.42	-06	01	33.4		809
1985	RP3		1985	09	10.13055	23	15	31.18	-06	01	34.6		809
1985	RP3		1985	09	10.13472	23	15	30.95	-06	01	35.9		809
1985	RP3		1985	09	11.15104	23	14	32.76	-06	06	02.2		809
1985	RP3		1985	09	11.15590	23	14	32.48	-06	06	03.4		809
1985	RP3		1985	09	11.16076	23	14	32.20	-06	06	04.5		809
1985	RP3		1985	09	12.13194	23	13	37.05	-06	10	19.1		809
1985	RP3		1985	09	12.13680	23	13	36.77	-06	10	20.4		809
1985	RP3		1985	09	12.14097	23	13	36.54	-06	10	21.4		809
1985	RP3		1985	09	16.28125	23	09	45.19	-06	27	40.0		809
1985	RP3		1985	09	16.28680	23	09	44.89	-06	27	41.4		809
1985	RP3		1985	09	16.29236	23	09	44.59	-06	27	42.8		809
1985	RP3		1985	09	17.21180	23	08	54.97	-06	31	23.3		809
1985	RP3		1985	09	17.21736	23	08	54.67	-06	31	24.6		809
1985	RP3		1985	09	17.22292	23	08	54.37	-06	31	26.0		809
1985	RP3		1985	09	19.23368	23	07	07.62	-06	39	10.6		809
1985	RP3		1985	09	19.23854	23	07	07.36	-06	39	11.7		809
1985	RP3		1985	09	19.24340	23	07	07.12	-06	39	12.7		809
1985	RP3		1985	09	21.28542	23	05	22.87	-06	46	37.4		809
1985	RP3		1985	09	21.29097	23	05	22.58	-06	46	38.7		809
1985	RP3		1985	09	21.29652	23	05	22.31	-06	46	39.8		809
1985	RQ3	*	1985	09	07.09410	23	30	21.57	-05	50	01.3	17.1	809
1985	RQ3		1985	09	07.09896	23	30	21.37	-05	50	04.4		809
1985	RQ3		1985	09	07.10382	23	30	21.17	-05	50	07.7		809
1985	RQ3		1985	09	10.14653	23	28	07.25	-06	23	23.0		809
1985	RQ3		1985	09	10.15069	23	28	07.07	-06	23	25.7		809
1985	RQ3		1985	09	10.15486	23	28	06.89	-06	23	28.4		809
1985	RQ3		1985	09	12.14861	23	26	38.60	-06	44	59.5		809
1985	RQ3		1985	09	12.15278	23	26	38.42	-06	45	02.3		809
1985	RQ3		1985	09	12.15694	23	26	38.23	-06	45	04.9		809
1985	RQ3		1985	09	14.18785	23	25	08.31	-07	06	42.8		809
1985	RQ3		1985	09	14.19271	23	25	08.09	-07	06	45.9		809
1985	RQ3		1985	09	14.19757	23	25	07.88	-07	06	49.2		809
1985	RQ3		1985	09	17.06424	23	23	03.23	-07	36	39.0		809
1985	RQ3		1985	09	17.06944	23	23	02.98	-07	36	42.1		809
1985	RQ3		1985	09	17.07465	23	23	02.78	-07	36	45.3		809
1985	RQ3		1985	09	19.25590	23	21	29.16	-07	58	43.7		809
1985	RQ3		1985	09	19.26076	23	21	28.97	-07	58	46.5		809
1985	RQ3		1985	09	19.26562	23	21	28.76	-07	58	49.5		809
1985	RQ3		1985	09	21.26701	23	20	05.65	-08	18	22.4		809
1985	RQ3		1985	09	21.27187	23	20	05.45	-08	18	25.2		809
1985	RQ3		1985	09	21.27639	23	20	05.26	-08	18	27.9		809
1985	RR3	*	1985	09	07.11215	23	33	21.48	-02	45	24.1	17.3	809
1985	RR3		1985	09	07.11701	23	33	21.30	-02	45	26.6		809
1985	RR3		1985	09	07.12187	23	33	21.11	-02	45	29.2		809
1985	RR3		1985	09	10.16180	23	31	18.97	-03	11	53.5		809
1985	RR3		1985	09	10.16597	23	31	18.78	-03	11	55.7		809
1985	RR3		1985	09	10.17014	23	31	18.63	-03	11	57.9		809
1985	RR3		1985	09	12.16250	23	29	57.44	-03	29	25.1		809
1985	RR3		1985	09	12.16667	23	29	57.27	-03	29	27.1		809
1985	RR3		1985	09	12.17083	23	29	57.10	-03	29	29.4		809
1985	RR3		1985	09	16.31146	23	27	07.08	-04	05	45.5		809
1985	RR3		1985	09	16.31632	23	27	06.88	-04	05	48.0		809
1985	RR3		1985	09	16.32118	23	27	06.69	-04	05	50.6		809
1985	RR3		1985	09	17.08090	23	26	35.99	-04	12	27.0		809
1985	RR3		1985	09	17.08576	23	26	35.79	-04	12	29.7		809

1985	RR3		1985	09	17.09097	23	26	35.58	-04	12	32.3		809
1985	RR3		1985	09	19.27326	23	25	06.70	-04	31	25.7		809
1985	RR3		1985	09	19.27812	23	25	06.51	-04	31	28.2		809
1985	RR3		1985	09	19.28299	23	25	06.32	-04	31	30.6		809
1985	RS3	*	1985	09	07.12951	00	29	23.46	+03	04	39.7	18.0	809
1985	RS3		1985	09	07.13438	00	29	23.27	+03	04	38.7		809
1985	RS3		1985	09	07.13923	00	29	23.11	+03	04	37.7		809
1985	RS3		1985	09	08.12326	00	28	48.40	+03	01	04.3		809
1985	RS3		1985	09	08.12812	00	28	48.23	+03	01	03.3		809
1985	RS3		1985	09	08.13299	00	28	48.06	+03	01	02.3		809
1985	RS3		1985	09	11.18750	00	26	54.85	+02	49	26.2		809
1985	RS3		1985	09	11.19271	00	26	54.66	+02	49	25.0		809
1985	RS3		1985	09	11.19757	00	26	54.48	+02	49	23.9		809
1985	RS3		1985	09	14.23680	00	24	54.58	+02	37	03.9		809
1985	RS3		1985	09	14.24097	00	24	54.40	+02	37	02.9		809
1985	RS3		1985	09	14.24514	00	24	54.25	+02	37	01.9		809
1985	RS3		1985	09	15.14340	00	24	17.73	+02	33	13.5		809
1985	RS3		1985	09	15.14826	00	24	17.54	+02	33	12.2		809
1985	RS3		1985	09	15.15312	00	24	17.33	+02	33	11.0		809
1985	RS3		1985	09	16.12309	00	23	37.15	+02	29	03.5		809
1985	RS3		1985	09	16.12934	00	23	36.90	+02	29	01.9		809
1985	RS3		1985	09	16.13559	00	23	36.64	+02	29	00.3		809
1985	RS3		1985	09	18.31840	00	22	04.03	+02	19	27.5		809
1985	RS3		1985	09	18.32326	00	22	03.83	+02	19	26.3		809
1985	RS3		1985	09	18.32812	00	22	03.63	+02	19	25.1		809
1985	RS3		1985	09	20.19826	00	20	42.75	+02	11	01.4		809
1985	RS3		1985	09	20.20312	00	20	42.53	+02	10	59.9		809
1985	RS3		1985	09	20.20799	00	20	42.31	+02	10	58.8		809
1985	RS3		1985	09	21.38472	00	19	50.37	+02	05	39.0		809
1985	RS3		1985	09	21.38888	00	19	50.18	+02	05	37.9		809
1985	RS3		1985	09	21.39305	00	19	50.00	+02	05	36.8		809
1985	RS3		1985	09	22.19601	00	19	14.74	+02	01	54.0		809
1985	RS3		1985	09	22.20052	00	19	14.54	+02	01	52.8		809
1985	RT3	*	1985	09	07.12951	00	29	51.82	+01	48	24.6	17.4	809
1985	RT3		1985	09	07.13438	00	29	51.61	+01	48	23.1		809
1985	RT3		1985	09	07.13923	00	29	51.40	+01	48	21.5		809
1985	RT3		1985	09	08.12326	00	29	11.08	+01	43	00.7		809
1985	RT3		1985	09	08.12812	00	29	10.88	+01	42	59.1		809
1985	RT3		1985	09	08.13299	00	29	10.68	+01	42	57.5		809
1985	RT3		1985	09	11.17187	00	26	59.03	+01	25	48.4		809
1985	RT3		1985	09	11.17674	00	26	58.82	+01	25	46.8		809
1985	RT3		1985	09	11.18160	00	26	58.61	+01	25	45.2		809
1985	RT3		1985	09	14.22187	00	24	37.96	+01	07	41.3		809
1985	RT3		1985	09	14.22673	00	24	37.74	+01	07	39.5		809
1985	RT3		1985	09	14.23159	00	24	37.51	+01	07	37.8		809
1985	RT3		1985	09	16.10521	00	23	07.14	+00	56	06.6		809
1985	RT3		1985	09	16.11007	00	23	06.92	+00	56	05.0		809
1985	RT3		1985	09	16.11493	00	23	06.69	+00	56	03.2		809
1985	RT3		1985	09	18.30278	00	21	17.42	+00	42	16.8		809
1985	RT3		1985	09	18.30764	00	21	17.18	+00	42	14.9		809
1985	RT3		1985	09	18.31215	00	21	16.96	+00	42	13.0		809
1985	RT3		1985	09	18.31840	00	21	16.63	+00	42	10.4		809
1985	RT3		1985	09	18.32326	00	21	16.39	+00	42	08.6		809
1985	RT3		1985	09	18.32812	00	21	16.15	+00	42	06.8		809
1985	RT3		1985	09	19.33715	00	20	24.77	+00	35	40.7		809
1985	RT3		1985	09	19.34201	00	20	24.53	+00	35	38.8		809
1985	RT3		1985	09	19.34687	00	20	24.28	+00	35	37.0		809
1985	RT3		1985	09	19.35312	00	20	23.94	+00	35	34.6		809
1985	RT3		1985	09	19.35798	00	20	23.71	+00	35	32.8		809

1985	RT3		1985	09	19.36285	00	20	23.46	+00	35	31.0	809
1985	RT3		1985	09	20.33923	00	19	33.41	+00	29	14.4	809
1985	RT3		1985	09	20.34410	00	19	33.15	+00	29	12.5	809
1985	RT3		1985	09	20.34896	00	19	32.91	+00	29	10.5	809
1985	RT3		1985	09	20.35451	00	19	32.61	+00	29	08.3	809
1985	RT3		1985	09	20.35937	00	19	32.35	+00	29	06.4	809
1985	RT3		1985	09	20.36423	00	19	32.10	+00	29	04.6	809
1985	RT3		1985	09	21.31319	00	18	43.00	+00	22	57.7	809
1985	RT3		1985	09	21.31736	00	18	42.77	+00	22	56.1	809
1985	RT3		1985	09	21.32153	00	18	42.55	+00	22	54.5	809
1985	RT3		1985	09	21.32708	00	18	42.26	+00	22	52.6	809
1985	RT3		1985	09	21.33125	00	18	42.05	+00	22	51.0	809
1985	RT3		1985	09	21.33541	00	18	41.83	+00	22	49.3	809
1985	RT3		1985	09	22.18333	00	17	57.84	+00	17	17.8	809
1985	RT3		1985	09	22.18767	00	17	57.62	+00	17	16.0	809
1985	RU3	*	1985	09	07.12951	00	31	22.22	+02	30	22.9	16.9 809
1985	RU3		1985	09	07.13438	00	31	22.06	+02	30	20.3	809
1985	RU3		1985	09	07.13923	00	31	21.90	+02	30	17.7	809
1985	RU3		1985	09	08.12326	00	30	50.16	+02	21	39.5	809
1985	RU3		1985	09	08.12812	00	30	50.01	+02	21	37.0	809
1985	RU3		1985	09	08.13299	00	30	49.85	+02	21	34.4	809
1985	RU3		1985	09	11.18750	00	29	04.58	+01	53	53.4	809
1985	RU3		1985	09	11.19271	00	29	04.39	+01	53	50.6	809
1985	RU3		1985	09	11.19757	00	29	04.23	+01	53	48.0	809
1985	RU3		1985	09	14.23680	00	27	10.57	+01	25	01.0	809
1985	RU3		1985	09	14.24097	00	27	10.40	+01	24	58.4	809
1985	RU3		1985	09	14.24514	00	27	10.24	+01	24	55.8	809
1985	RU3		1985	09	15.14340	00	26	35.35	+01	16	14.2	809
1985	RU3		1985	09	15.14826	00	26	35.16	+01	16	11.3	809
1985	RU3		1985	09	15.15312	00	26	34.98	+01	16	08.3	809
1985	RU3		1985	09	15.35868	00	26	26.47	+01	14	08.5	809
1985	RU3		1985	09	15.36354	00	26	26.30	+01	14	05.8	809
1985	RU3		1985	09	15.36840	00	26	26.13	+01	14	03.0	809
1985	RU3		1985	09	16.12309	00	25	56.33	+01	06	39.1	809
1985	RU3		1985	09	16.12934	00	25	56.07	+01	06	35.3	809
1985	RU3		1985	09	16.13559	00	25	55.82	+01	06	31.4	809
1985	RU3		1985	09	18.30278	00	24	26.60	+00	44	58.8	809
1985	RU3		1985	09	18.30764	00	24	26.40	+00	44	55.9	809
1985	RU3		1985	09	18.31215	00	24	26.22	+00	44	53.3	809
1985	RU3		1985	09	18.31840	00	24	25.93	+00	44	49.7	809
1985	RU3		1985	09	18.32326	00	24	25.75	+00	44	47.0	809
1985	RU3		1985	09	18.32812	00	24	25.57	+00	44	43.9	809
1985	RU3		1985	09	19.33715	00	23	43.11	+00	34	35.3	809
1985	RU3		1985	09	19.34201	00	23	42.90	+00	34	32.3	809
1985	RU3		1985	09	19.34687	00	23	42.70	+00	34	29.2	809
1985	RU3		1985	09	19.35312	00	23	42.46	+00	34	25.5	809
1985	RU3		1985	09	19.35798	00	23	42.24	+00	34	22.6	809
1985	RU3		1985	09	19.36285	00	23	42.02	+00	34	19.7	809
1985	RU3		1985	09	20.33923	00	23	00.49	+00	24	27.0	809
1985	RU3		1985	09	20.34410	00	23	00.29	+00	24	24.1	809
1985	RU3		1985	09	20.34896	00	23	00.07	+00	24	21.2	809
1985	RU3		1985	09	20.35451	00	22	59.84	+00	24	17.8	809
1985	RU3		1985	09	20.35937	00	22	59.64	+00	24	14.6	809
1985	RU3		1985	09	20.36423	00	22	59.43	+00	24	11.7	809
1985	RU3		1985	09	21.31319	00	22	18.58	+00	14	32.3	809
1985	RU3		1985	09	21.31736	00	22	18.41	+00	14	29.9	809
1985	RU3		1985	09	21.32153	00	22	18.22	+00	14	27.3	809
1985	RU3		1985	09	21.32708	00	22	17.98	+00	14	23.7	809
1985	RU3		1985	09	21.33125	00	22	17.80	+00	14	20.9	809

1985	RU3		1985	09	21.33541	00	22	17.62	+00	14	18.4		809
1985	RU3		1985	09	22.18333	00	21	41.00	+00	05	39.1		809
1985	RU3		1985	09	22.18767	00	21	40.80	+00	05	36.5		809
1985	RV3	*	1985	09	08.09132	00	04	40.74	+00	42	52.7	17.2	809
1985	RV3		1985	09	08.09618	00	04	40.54	+00	42	51.3		809
1985	RV3		1985	09	08.10104	00	04	40.34	+00	42	49.7		809
1985	RV3		1985	09	10.30382	00	03	08.15	+00	31	05.6		809
1985	RV3		1985	09	10.30868	00	03	07.95	+00	31	04.0		809
1985	RV3		1985	09	10.31354	00	03	07.75	+00	31	02.5		809
1985	RV3		1985	09	11.32639	00	02	24.33	+00	25	30.2		809
1985	RV3		1985	09	11.33055	00	02	24.15	+00	25	28.8		809
1985	RV3		1985	09	11.33480	00	02	23.97	+00	25	27.4		809
1985	RV3		1985	09	14.12604	00	00	21.57	+00	09	51.3		809
1985	RV3		1985	09	14.13090	00	00	21.36	+00	09	49.7		809
1985	RV3		1985	09	14.13576	00	00	21.14	+00	09	47.9		809
1985	RV3		1985	09	17.32396	23	57	56.16	-00	08	31.1		809
1985	RV3		1985	09	17.32882	23	57	55.94	-00	08	32.9		809
1985	RV3		1985	09	17.33368	23	57	55.71	-00	08	34.6		809
1985	RV3		1985	09	18.09826	23	57	21.01	-00	13	00.8		809
1985	RV3		1985	09	18.10312	23	57	20.77	-00	13	02.5		809
1985	RV3		1985	09	18.10798	23	57	20.55	-00	13	04.2		809
1985	RW3	*	1985	09	08.09132	00	08	57.01	-00	43	38.9	17.0	809
1985	RW3		1985	09	08.09618	00	08	56.82	-00	43	40.4		809
1985	RW3		1985	09	08.10104	00	08	56.62	-00	43	42.0		809
1985	RW3		1985	09	10.30382	00	07	28.41	-00	55	14.3		809
1985	RW3		1985	09	10.30868	00	07	28.22	-00	55	15.9		809
1985	RW3		1985	09	10.31354	00	07	28.02	-00	55	17.4		809
1985	RW3		1985	09	11.32639	00	06	46.48	-01	00	42.1		809
1985	RW3		1985	09	11.33055	00	06	46.31	-01	00	43.4		809
1985	RW3		1985	09	11.33480	00	06	46.12	-01	00	44.6		809
1985	RW3		1985	09	14.12604	00	04	49.28	-01	15	49.7		809
1985	RW3		1985	09	14.13090	00	04	49.09	-01	15	51.3		809
1985	RW3		1985	09	14.13576	00	04	48.87	-01	15	52.9		809
1985	RW3		1985	09	17.32396	00	02	30.21	-01	33	24.8		809
1985	RW3		1985	09	17.32882	00	02	30.00	-01	33	26.5		809
1985	RW3		1985	09	17.33368	00	02	29.79	-01	33	28.1		809
1985	RW3		1985	09	18.09826	00	01	56.74	-01	37	38.9		809
1985	RW3		1985	09	18.10312	00	01	56.54	-01	37	40.5		809
1985	RW3		1985	09	18.10798	00	01	56.33	-01	37	42.0		809
1985	RW3		1985	09	20.18125	00	00	24.90	-01	49	06.0		809
1985	RW3		1985	09	20.18611	00	00	24.69	-01	49	07.6		809
1985	RW3		1985	09	20.19097	00	00	24.46	-01	49	09.4		809
1985	RW3		1985	09	22.37153	23	58	48.09	-02	01	04.5		809
1985	RW3		1985	09	22.37569	23	58	47.90	-02	01	05.9		809
1985	RX3	*	1985	09	08.12326	00	30	32.32	+01	25	42.2	17.3	809
1985	RX3		1985	09	08.12812	00	30	32.15	+01	25	40.3		809
1985	RX3		1985	09	08.13299	00	30	31.97	+01	25	38.1		809
1985	RX3		1985	09	11.17187	00	28	41.93	+01	03	47.7		809
1985	RX3		1985	09	11.17674	00	28	41.74	+01	03	45.6		809
1985	RX3		1985	09	11.18160	00	28	41.55	+01	03	43.5		809
1985	RX3		1985	09	14.22187	00	26	43.49	+00	41	03.4		809
1985	RX3		1985	09	14.22673	00	26	43.30	+00	41	01.1		809
1985	RX3		1985	09	14.23159	00	26	43.12	+00	40	58.9		809
1985	RX3		1985	09	15.35868	00	25	57.34	+00	32	24.6		809
1985	RX3		1985	09	15.36354	00	25	57.11	+00	32	22.0		809
1985	RX3		1985	09	15.36840	00	25	56.88	+00	32	19.4		809
1985	RX3		1985	09	16.10521	00	25	27.04	+00	26	39.6		809
1985	RX3		1985	09	16.11007	00	25	26.88	+00	26	37.8		809
1985	RX3		1985	09	16.11493	00	25	26.72	+00	26	35.9		809

1985	RX3		1985	09	18.30278	00	23	54.68	+00	09	39.3	809
1985	RX3		1985	09	18.30764	00	23	54.48	+00	09	37.0	809
1985	RX3		1985	09	18.31215	00	23	54.31	+00	09	35.0	809
1985	RX3		1985	09	19.33715	00	23	10.42	+00	01	34.8	809
1985	RX3		1985	09	19.34201	00	23	10.21	+00	01	32.6	809
1985	RX3		1985	09	19.34687	00	23	10.01	+00	01	30.3	809
1985	RX3		1985	09	19.35312	00	23	09.73	+00	01	27.3	809
1985	RX3		1985	09	19.35798	00	23	09.53	+00	01	25.0	809
1985	RX3		1985	09	19.36285	00	23	09.31	+00	01	22.7	809
1985	RX3		1985	09	20.33923	00	22	27.22	-00	06	16.0	809
1985	RX3		1985	09	20.34410	00	22	27.02	-00	06	18.3	809
1985	RX3		1985	09	20.34896	00	22	26.82	-00	06	20.6	809
1985	RX3		1985	09	20.35451	00	22	26.55	-00	06	23.1	809
1985	RX3		1985	09	20.35937	00	22	26.33	-00	06	25.4	809
1985	RX3		1985	09	20.36423	00	22	26.11	-00	06	27.6	809
1985	RX3		1985	09	21.31319	00	21	44.91	-00	13	55.2	809
1985	RX3		1985	09	21.31736	00	21	44.73	-00	13	57.1	809
1985	RX3		1985	09	21.32153	00	21	44.55	-00	13	59.0	809
1985	RX3		1985	09	21.32708	00	21	44.31	-00	14	01.9	809
1985	RX3		1985	09	21.33125	00	21	44.13	-00	14	04.0	809
1985	RX3		1985	09	21.33541	00	21	43.95	-00	14	05.8	809
1985	RX3		1985	09	22.18333	00	21	06.97	-00	20	45.3	809
1985	RX3		1985	09	22.18767	00	21	06.78	-00	20	47.3	809
1985	RY3	*	1985	09	08.12326	00	32	02.25	+02	53	01.4	16.7 809
1985	RY3		1985	09	08.12812	00	32	02.08	+02	53	00.1	809
1985	RY3		1985	09	08.13299	00	32	01.89	+02	52	58.8	809
1985	RY3		1985	09	11.18750	00	30	16.15	+02	39	21.6	809
1985	RY3		1985	09	11.19271	00	30	15.97	+02	39	20.3	809
1985	RY3		1985	09	11.19757	00	30	15.79	+02	39	19.0	809
1985	RY3		1985	09	14.23680	00	28	22.27	+02	24	51.9	809
1985	RY3		1985	09	14.24097	00	28	22.10	+02	24	50.5	809
1985	RY3		1985	09	14.24514	00	28	21.94	+02	24	49.3	809
1985	RY3		1985	09	15.14340	00	27	47.24	+02	20	24.4	809
1985	RY3		1985	09	15.14826	00	27	47.05	+02	20	22.9	809
1985	RY3		1985	09	15.15312	00	27	46.86	+02	20	21.5	809
1985	RY3		1985	09	16.12309	00	27	08.52	+02	15	31.1	809
1985	RY3		1985	09	16.12934	00	27	08.29	+02	15	29.1	809
1985	RY3		1985	09	16.13559	00	27	08.03	+02	15	27.2	809
1985	RY3		1985	09	18.31840	00	25	39.13	+02	04	20.9	809
1985	RY3		1985	09	18.32326	00	25	38.93	+02	04	19.4	809
1985	RY3		1985	09	18.32812	00	25	38.73	+02	04	18.0	809
1985	RY3		1985	09	20.19826	00	24	20.99	+01	54	34.6	809
1985	RY3		1985	09	20.20312	00	24	20.79	+01	54	33.2	809
1985	RY3		1985	09	20.20799	00	24	20.59	+01	54	31.7	809
1985	RY3		1985	09	21.38472	00	23	30.64	+01	48	20.0	809
1985	RY3		1985	09	21.38888	00	23	30.46	+01	48	18.6	809
1985	RY3		1985	09	21.39305	00	23	30.28	+01	48	17.3	809
1985	RY3		1985	09	22.19601	00	22	56.28	+01	44	01.5	809
1985	RY3		1985	09	22.20052	00	22	56.10	+01	44	00.4	809
1985	RZ3	*	1985	09	10.10903	22	20	30.37	-09	36	16.3	18.1 809
1985	RZ3		1985	09	10.11337	22	20	30.15	-09	36	16.9	809
1985	RZ3		1985	09	10.11771	22	20	29.94	-09	36	17.5	809
1985	RZ3		1985	09	12.11597	22	18	48.73	-09	40	41.0	809
1985	RZ3		1985	09	12.12014	22	18	48.52	-09	40	41.5	809
1985	RZ3		1985	09	12.12430	22	18	48.31	-09	40	42.0	809
1985	RA4	*	1985	09	10.12639	23	12	02.09	-05	46	19.8	17.5 809
1985	RA4		1985	09	10.13055	23	12	01.87	-05	46	20.4	809
1985	RA4		1985	09	10.13472	23	12	01.64	-05	46	21.0	809
1985	RA4		1985	09	11.15104	23	11	05.90	-05	48	43.8	809

1985	RA4		1985	09	11.15590	23	11	05.64	-05	48	44.5	809
1985	RA4		1985	09	11.16076	23	11	05.36	-05	48	45.0	809
1985	RA4		1985	09	12.13194	23	10	12.30	-05	51	02.6	809
1985	RA4		1985	09	12.13680	23	10	12.03	-05	51	03.2	809
1985	RA4		1985	09	12.14097	23	10	11.80	-05	51	04.0	809
1985	RA4		1985	09	16.28125	23	06	27.99	-06	00	26.2	809
1985	RA4		1985	09	16.28680	23	06	27.69	-06	00	27.0	809
1985	RA4		1985	09	16.29236	23	06	27.39	-06	00	27.7	809
1985	RA4		1985	09	17.21180	23	05	38.88	-06	02	26.2	809
1985	RA4		1985	09	17.21736	23	05	38.58	-06	02	27.0	809
1985	RA4		1985	09	17.22292	23	05	38.29	-06	02	27.8	809
1985	RA4		1985	09	19.23368	23	03	53.46	-06	06	38.8	809
1985	RA4		1985	09	19.23854	23	03	53.21	-06	06	39.4	809
1985	RA4		1985	09	19.24340	23	03	52.95	-06	06	39.9	809
1985	RA4		1985	09	21.28542	23	02	09.22	-06	10	39.9	809
1985	RA4		1985	09	21.29097	23	02	08.94	-06	10	40.7	809
1985	RA4		1985	09	21.29652	23	02	08.66	-06	10	41.2	809
1985	RB4	*	1985	09	10.12639	23	12	14.79	-05	36	14.9	17.6 809
1985	RB4		1985	09	10.13055	23	12	14.58	-05	36	16.5	809
1985	RB4		1985	09	10.13472	23	12	14.37	-05	36	18.2	809
1985	RB4		1985	09	11.15104	23	11	24.28	-05	43	07.9	809
1985	RB4		1985	09	11.15590	23	11	24.05	-05	43	09.6	809
1985	RB4		1985	09	11.16076	23	11	23.80	-05	43	11.5	809
1985	RB4		1985	09	12.13194	23	10	36.49	-05	49	40.5	809
1985	RB4		1985	09	12.13680	23	10	36.25	-05	49	42.5	809
1985	RB4		1985	09	12.14097	23	10	36.06	-05	49	44.2	809
1985	RB4		1985	09	14.36319	23	08	48.29	-06	04	20.0	809
1985	RB4		1985	09	14.36736	23	08	48.09	-06	04	21.5	809
1985	RB4		1985	09	14.37153	23	08	47.88	-06	04	23.2	809
1985	RB4		1985	09	16.28125	23	07	18.76	-06	16	29.7	809
1985	RB4		1985	09	16.28680	23	07	18.50	-06	16	31.7	809
1985	RB4		1985	09	16.29236	23	07	18.24	-06	16	33.7	809
1985	RB4		1985	09	17.21180	23	06	36.47	-06	22	16.7	809
1985	RB4		1985	09	17.21736	23	06	36.21	-06	22	18.8	809
1985	RB4		1985	09	17.22292	23	06	35.96	-06	22	20.9	809
1985	RB4		1985	09	19.23368	23	05	06.87	-06	34	26.1	809
1985	RB4		1985	09	19.23854	23	05	06.65	-06	34	27.7	809
1985	RB4		1985	09	19.24340	23	05	06.44	-06	34	29.6	809
1985	RB4		1985	09	21.28542	23	03	40.62	-06	46	09.4	809
1985	RB4		1985	09	21.29097	23	03	40.38	-06	46	11.2	809
1985	RB4		1985	09	21.29652	23	03	40.14	-06	46	13.0	809
1985	RC4	*	1985	09	10.14653	23	23	54.84	-06	07	34.2	17.3 809
1985	RC4		1985	09	10.15069	23	23	54.64	-06	07	35.6	809
1985	RC4		1985	09	10.15486	23	23	54.45	-06	07	37.1	809
1985	RC4		1985	09	12.14861	23	22	23.21	-06	19	14.1	809
1985	RC4		1985	09	12.15278	23	22	23.02	-06	19	15.6	809
1985	RC4		1985	09	12.15694	23	22	22.83	-06	19	17.1	809
1985	RC4		1985	09	14.18785	23	20	49.57	-06	31	03.0	809
1985	RC4		1985	09	14.19271	23	20	49.36	-06	31	04.8	809
1985	RC4		1985	09	14.19757	23	20	49.13	-06	31	06.5	809
1985	RC4		1985	09	17.06424	23	18	38.72	-06	47	23.8	809
1985	RC4		1985	09	17.06944	23	18	38.49	-06	47	25.5	809
1985	RC4		1985	09	17.07465	23	18	38.26	-06	47	27.3	809
1985	RC4		1985	09	19.25590	23	16	59.87	-06	59	30.7	809
1985	RC4		1985	09	19.26076	23	16	59.63	-06	59	32.3	809
1985	RC4		1985	09	19.26562	23	16	59.41	-06	59	33.9	809
1985	RC4		1985	09	21.26701	23	15	31.12	-07	10	20.3	809
1985	RC4		1985	09	21.27187	23	15	30.90	-07	10	21.9	809
1985	RC4		1985	09	21.27639	23	15	30.69	-07	10	23.4	809

1985	RD4	*	1985	09	10.16180	23	27	01.62	-03	17	44.3	17.5	809
1985	RD4		1985	09	10.16597	23	27	01.38	-03	17	44.9		809
1985	RD4		1985	09	10.17014	23	27	01.14	-03	17	45.6		809
1985	RD4		1985	09	16.31146	23	21	06.02	-03	36	12.6		809
1985	RD4		1985	09	16.31632	23	21	05.73	-03	36	13.5		809
1985	RD4		1985	09	16.32118	23	21	05.45	-03	36	14.4		809
1985	RE4	*	1985	09	10.28351	22	59	38.51	-14	29	34.6	17.2	809
1985	RE4		1985	09	10.28889	22	59	38.29	-14	29	37.3		809
1985	RE4		1985	09	10.29375	22	59	38.10	-14	29	39.6		809
1985	RE4		1985	09	11.25295	22	58	58.06	-14	37	08.6		809
1985	RE4		1985	09	11.25833	22	58	57.85	-14	37	11.2		809
1985	RE4		1985	09	11.26319	22	58	57.63	-14	37	13.4		809
1985	RE4		1985	09	14.07014	22	57	02.18	-14	58	31.7		809
1985	RE4		1985	09	14.07430	22	57	02.00	-14	58	33.8		809
1985	RE4		1985	09	14.07917	22	57	01.80	-14	58	36.0		809
1985	RE4		1985	09	16.24409	22	55	34.21	-15	14	15.4		809
1985	RE4		1985	09	16.24896	22	55	34.03	-15	14	17.6		809
1985	RE4		1985	09	16.25382	22	55	33.83	-15	14	19.7		809
1985	RE4		1985	09	18.07951	22	54	22.33	-15	26	58.9		809
1985	RE4		1985	09	18.08437	22	54	22.13	-15	27	01.0		809
1985	RE4		1985	09	18.08923	22	54	21.96	-15	27	03.2		809
1985	RE4		1985	09	20.01771	22	53	08.48	-15	39	48.8		809
1985	RE4		1985	09	20.02257	22	53	08.29	-15	39	50.7		809
1985	RE4		1985	09	20.02743	22	53	08.10	-15	39	52.6		809
1985	RE4		1985	09	22.29028	22	51	44.70	-15	54	01.6		809
1985	RE4		1985	09	22.29444	22	51	44.55	-15	54	03.2		809
1985	RF4	*	1985	09	11.11285	22	09	25.16	-13	12	51.6	16.8	809
1985	RF4		1985	09	11.11771	22	09	24.89	-13	12	53.0		809
1985	RF4		1985	09	11.12257	22	09	24.64	-13	12	54.4		809
1985	RF4		1985	09	16.20439	22	05	07.72	-13	36	43.9		809
1985	RF4		1985	09	16.21204	22	05	07.33	-13	36	46.2		809
1985	RF4		1985	09	16.21690	22	05	07.09	-13	36	47.5		809
1985	RG4	*	1985	09	11.13229	22	16	39.30	-08	30	39.6	17.7	809
1985	RG4		1985	09	11.13785	22	16	39.08	-08	30	42.6		809
1985	RG4		1985	09	11.14271	22	16	38.87	-08	30	45.0		809
1985	RG4		1985	09	12.11597	22	15	59.05	-08	39	27.5		809
1985	RG4		1985	09	12.12014	22	15	58.87	-08	39	29.8		809
1985	RG4		1985	09	12.12430	22	15	58.72	-08	39	32.3		809
1985	RG4		1985	09	15.29965	22	13	54.13	-09	07	19.7		809
1985	RG4		1985	09	15.30451	22	13	53.96	-09	07	22.2		809
1985	RG4		1985	09	15.30937	22	13	53.77	-09	07	24.8		809
1985	RG4		1985	09	16.26215	22	13	18.36	-09	15	33.4		809
1985	RG4		1985	09	16.26701	22	13	18.19	-09	15	35.9		809
1985	RG4		1985	09	16.27187	22	13	18.02	-09	15	38.6		809
1985	RG4		1985	09	17.19236	22	12	44.44	-09	23	23.2		809
1985	RG4		1985	09	17.19791	22	12	44.25	-09	23	25.9		809
1985	RG4		1985	09	17.20347	22	12	44.04	-09	23	28.7		809
1985	RG4		1985	09	18.04236	22	12	14.46	-09	30	28.4		809
1985	RG4		1985	09	18.04757	22	12	14.27	-09	30	31.0		809
1985	RG4		1985	09	18.05243	22	12	14.11	-09	30	33.4		809
1985	RG4		1985	09	20.08837	22	11	04.95	-09	47	05.6		809
1985	RG4		1985	09	20.09375	22	11	04.77	-09	47	08.3		809
1985	RG4		1985	09	20.09861	22	11	04.60	-09	47	10.6		809
1985	RH4	*	1985	09	11.17187	00	26	00.02	+01	14	06.4	17.9	809
1985	RH4		1985	09	11.17674	00	25	59.83	+01	14	04.6		809
1985	RH4		1985	09	11.18160	00	25	59.63	+01	14	02.8		809
1985	RH4		1985	09	14.22187	00	23	57.11	+00	55	00.4		809
1985	RH4		1985	09	14.22673	00	23	56.91	+00	54	58.6		809
1985	RH4		1985	09	14.23159	00	23	56.72	+00	54	56.7		809

1985	RJ4	*	1985	09	11.17187	00	28	51.48	+00	49	16.6	17.6	809
1985	RJ4		1985	09	11.17674	00	28	51.29	+00	49	15.5		809
1985	RJ4		1985	09	11.18160	00	28	51.09	+00	49	14.5		809
1985	RJ4		1985	09	14.22187	00	26	50.44	+00	38	25.4		809
1985	RJ4		1985	09	14.22673	00	26	50.25	+00	38	24.5		809
1985	RJ4		1985	09	14.23159	00	26	50.06	+00	38	23.6		809
1985	RJ4		1985	09	15.35868	00	26	03.10	+00	34	14.2		809
1985	RJ4		1985	09	15.36354	00	26	02.87	+00	34	12.9		809
1985	RJ4		1985	09	15.36840	00	26	02.63	+00	34	11.6		809
1985	RJ4		1985	09	16.10521	00	25	32.05	+00	31	25.5		809
1985	RJ4		1985	09	16.11007	00	25	31.90	+00	31	24.6		809
1985	RJ4		1985	09	16.11493	00	25	31.73	+00	31	23.6		809
1985	RJ4		1985	09	18.30278	00	23	56.98	+00	23	02.9		809
1985	RJ4		1985	09	18.30764	00	23	56.76	+00	23	01.8		809
1985	RJ4		1985	09	18.31215	00	23	56.56	+00	23	00.6		809
1985	RJ4		1985	09	19.33715	00	23	11.41	+00	19	03.4		809
1985	RJ4		1985	09	19.34201	00	23	11.20	+00	19	02.3		809
1985	RJ4		1985	09	19.34687	00	23	10.99	+00	19	01.1		809
1985	RJ4		1985	09	19.35312	00	23	10.72	+00	18	59.6		809
1985	RJ4		1985	09	19.35798	00	23	10.51	+00	18	58.5		809
1985	RJ4		1985	09	19.36285	00	23	10.30	+00	18	57.4		809
1985	RJ4		1985	09	20.33923	00	22	26.83	+00	15	08.3		809
1985	RJ4		1985	09	20.34410	00	22	26.62	+00	15	07.2		809
1985	RJ4		1985	09	20.34896	00	22	26.41	+00	15	05.8		809
1985	RJ4		1985	09	20.35451	00	22	26.16	+00	15	04.7		809
1985	RJ4		1985	09	20.35937	00	22	25.94	+00	15	03.6		809
1985	RJ4		1985	09	20.36423	00	22	25.73	+00	15	02.5		809
1985	RJ4		1985	09	21.31319	00	21	43.21	+00	11	19.8		809
1985	RJ4		1985	09	21.31736	00	21	43.02	+00	11	18.8		809
1985	RJ4		1985	09	21.32153	00	21	42.83	+00	11	17.8		809
1985	RJ4		1985	09	21.32708	00	21	42.57	+00	11	16.5		809
1985	RJ4		1985	09	21.33125	00	21	42.39	+00	11	15.5		809
1985	RJ4		1985	09	21.33541	00	21	42.20	+00	11	14.4		809
1985	RJ4		1985	09	22.18333	00	21	04.09	+00	07	55.0		809
1985	RJ4		1985	09	22.18767	00	21	03.88	+00	07	53.5		809
1985	RK4	*	1985	09	11.18750	00	27	54.35	+02	49	25.1	17.7	809
1985	RK4		1985	09	11.19271	00	27	54.13	+02	49	23.7		809
1985	RK4		1985	09	11.19757	00	27	53.93	+02	49	22.5		809
1985	RK4		1985	09	14.23680	00	25	45.60	+02	36	20.9		809
1985	RK4		1985	09	14.24097	00	25	45.42	+02	36	19.9		809
1985	RK4		1985	09	14.24514	00	25	45.24	+02	36	18.8		809
1985	RK4		1985	09	15.14340	00	25	05.89	+02	32	16.5		809
1985	RK4		1985	09	15.14826	00	25	05.67	+02	32	15.2		809
1985	RK4		1985	09	15.15312	00	25	05.46	+02	32	13.9		809
1985	RK4		1985	09	16.12309	00	24	22.22	+02	27	49.2		809
1985	RK4		1985	09	16.12934	00	24	21.94	+02	27	47.5		809
1985	RK4		1985	09	16.13559	00	24	21.66	+02	27	45.8		809
1985	RK4		1985	09	18.31840	00	22	41.27	+02	17	34.3		809
1985	RK4		1985	09	18.32326	00	22	41.04	+02	17	32.8		809
1985	RK4		1985	09	18.32812	00	22	40.82	+02	17	31.5		809
1985	RK4		1985	09	20.19826	00	21	13.00	+02	08	31.4		809
1985	RK4		1985	09	20.20312	00	21	12.77	+02	08	29.7		809
1985	RK4		1985	09	20.20799	00	21	12.55	+02	08	28.5		809
1985	RK4		1985	09	21.38472	00	20	16.13	+02	02	44.6		809
1985	RK4		1985	09	21.38888	00	20	15.93	+02	02	43.4		809
1985	RK4		1985	09	21.39305	00	20	15.72	+02	02	42.2		809
1985	RK4		1985	09	22.19601	00	19	37.17	+01	58	43.3		809
1985	RK4		1985	09	22.20052	00	19	36.96	+01	58	42.0		809
1985	RL4	*	1985	09	11.29028	00	32	25.94	-01	20	02.6	17.5	809

1985	RL4		1985	09	11.29444	00	32	25.74	-01	20	03.4	809
1985	RL4		1985	09	11.29861	00	32	25.53	-01	20	04.2	809
1985	RL4		1985	09	14.38160	00	29	51.80	-01	30	20.0	809
1985	RL4		1985	09	14.38576	00	29	51.60	-01	30	20.8	809
1985	RL4		1985	09	14.38993	00	29	51.39	-01	30	21.7	809
1985	RL4		1985	09	15.37535	00	28	59.70	-01	33	46.5	809
1985	RL4		1985	09	15.38021	00	28	59.44	-01	33	47.7	809
1985	RL4		1985	09	15.38507	00	28	59.18	-01	33	48.8	809
1985	RL4		1985	09	16.35173	00	28	07.37	-01	37	09.8	809
1985	RL4		1985	09	16.35659	00	28	07.11	-01	37	10.8	809
1985	RL4		1985	09	16.36146	00	28	06.85	-01	37	12.0	809
1985	RL4		1985	09	17.36042	00	27	12.24	-01	40	42.1	809
1985	RL4		1985	09	17.36597	00	27	11.94	-01	40	43.3	809
1985	RL4		1985	09	17.37153	00	27	11.64	-01	40	44.5	809
1985	RL4		1985	09	18.33437	00	26	18.07	-01	44	08.7	809
1985	RL4		1985	09	18.33923	00	26	17.80	-01	44	09.6	809
1985	RL4		1985	09	18.34410	00	26	17.53	-01	44	10.7	809
1985	RL4		1985	09	19.36979	00	25	19.45	-01	47	48.0	809
1985	RL4		1985	09	19.37465	00	25	19.18	-01	47	49.3	809
1985	RL4		1985	09	19.37951	00	25	18.89	-01	47	50.3	809
1985	RL4		1985	09	20.37326	00	24	22.02	-01	51	19.7	809
1985	RL4		1985	09	20.37812	00	24	21.76	-01	51	21.1	809
1985	RL4		1985	09	21.34722	00	23	25.77	-01	54	45.1	809
1985	RL4		1985	09	21.35139	00	23	25.53	-01	54	46.1	809
1985	RL4		1985	09	21.35555	00	23	25.29	-01	54	47.0	809
1985	RL4		1985	09	22.38264	00	22	25.23	-01	58	22.9	809
1985	RL4		1985	09	22.38680	00	22	25.00	-01	58	23.6	809
1985	RM4	*	1985	09	11.29028	00	34	07.28	-01	17	38.5	17.5 809
1985	RM4		1985	09	11.29444	00	34	07.07	-01	17	39.7	809
1985	RM4		1985	09	11.29861	00	34	06.87	-01	17	40.7	809
1985	RM4		1985	09	14.38160	00	31	33.11	-01	29	44.0	809
1985	RM4		1985	09	14.38576	00	31	32.90	-01	29	44.9	809
1985	RM4		1985	09	14.38993	00	31	32.69	-01	29	46.0	809
1985	RM4		1985	09	15.37535	00	30	42.09	-01	33	42.7	809
1985	RM4		1985	09	15.38021	00	30	41.83	-01	33	44.0	809
1985	RM4		1985	09	15.38507	00	30	41.58	-01	33	45.2	809
1985	RM4		1985	09	16.35173	00	29	50.99	-01	37	38.3	809
1985	RM4		1985	09	16.35659	00	29	50.74	-01	37	39.6	809
1985	RM4		1985	09	16.36146	00	29	50.50	-01	37	40.8	809
1985	RM4		1985	09	18.33437	00	28	05.78	-01	45	38.2	809
1985	RM4		1985	09	18.33923	00	28	05.52	-01	45	39.5	809
1985	RM4		1985	09	18.34410	00	28	05.26	-01	45	40.7	809
1985	RM4		1985	09	19.36979	00	27	09.80	-01	49	50.2	809
1985	RM4		1985	09	19.37465	00	27	09.53	-01	49	51.4	809
1985	RM4		1985	09	19.37951	00	27	09.27	-01	49	52.4	809
1985	RM4		1985	09	20.37326	00	26	15.23	-01	53	51.7	809
1985	RM4		1985	09	20.37812	00	26	14.93	-01	53	52.7	809
1985	RM4		1985	09	21.34722	00	25	21.90	-01	57	46.9	809
1985	RM4		1985	09	21.35139	00	25	21.66	-01	57	48.0	809
1985	RM4		1985	09	21.35555	00	25	21.43	-01	57	49.1	809
1985	RN4	*	1985	09	11.29028	00	39	44.51	-01	03	49.8	17.6 809
1985	RN4		1985	09	11.29444	00	39	44.38	-01	03	50.3	809
1985	RN4		1985	09	11.29861	00	39	44.26	-01	03	50.8	809
1985	RN4		1985	09	11.30660	00	39	44.02	-01	03	51.8	809
1985	RN4		1985	09	11.31146	00	39	43.87	-01	03	52.4	809
1985	RN4		1985	09	11.31632	00	39	43.72	-01	03	53.0	809
1985	RN4		1985	09	14.39548	00	38	10.27	-01	10	13.4	809
1985	RN4		1985	09	14.39965	00	38	10.15	-01	10	13.9	809
1985	RN4		1985	09	14.40382	00	38	10.02	-01	10	14.4	809

1985	RN4		1985	09	16.36910	00	37	02.79	-01	14	35.7		809
1985	RN4		1985	09	16.37396	00	37	02.63	-01	14	36.3		809
1985	RN4		1985	09	16.37882	00	37	02.48	-01	14	36.9		809
1985	RN4		1985	09	18.35104	00	35	49.80	-01	19	07.9		809
1985	RN4		1985	09	18.35590	00	35	49.63	-01	19	08.5		809
1985	RN4		1985	09	18.36076	00	35	49.44	-01	19	09.2		809
1985	RN4		1985	09	20.38576	00	34	30.12	-01	23	49.7		809
1985	RN4		1985	09	20.39062	00	34	29.95	-01	23	50.3		809
1985	RO4	*	1985	09	11.30660	00	43	40.55	-01	37	41.6	17.5	809
1985	RO4		1985	09	11.31146	00	43	40.32	-01	37	42.9		809
1985	RO4		1985	09	11.31632	00	43	40.11	-01	37	44.3		809
1985	RO4		1985	09	14.39548	00	41	19.75	-01	52	28.0		809
1985	RO4		1985	09	14.39965	00	41	19.57	-01	52	29.0		809
1985	RO4		1985	09	14.40382	00	41	19.38	-01	52	30.3		809
1985	RO4		1985	09	16.36910	00	39	45.28	-02	02	06.5		809
1985	RO4		1985	09	16.37396	00	39	45.04	-02	02	07.6		809
1985	RO4		1985	09	16.37882	00	39	44.80	-02	02	08.8		809
1985	RO4		1985	09	18.35104	00	38	07.21	-02	11	52.1		809
1985	RO4		1985	09	18.35590	00	38	06.97	-02	11	53.5		809
1985	RO4		1985	09	18.36076	00	38	06.72	-02	11	54.9		809
1985	RO4		1985	09	19.38715	00	37	14.87	-02	16	58.5		809
1985	RO4		1985	09	19.39201	00	37	14.62	-02	17	00.0		809
1985	RO4		1985	09	19.39687	00	37	14.40	-02	17	01.4		809
1985	RO4		1985	09	20.38576	00	36	23.74	-02	21	55.1		809
1985	RO4		1985	09	20.39062	00	36	23.50	-02	21	56.9		809
1985	RO4		1985	09	21.36736	00	35	32.73	-02	26	46.4		809
1985	RO4		1985	09	21.37257	00	35	32.46	-02	26	47.9		809
1985	RO4		1985	09	21.37708	00	35	32.18	-02	26	49.2		809
1985	RP4	*	1985	09	12.08403	22	37	11.32	-12	40	29.9	17.9	809
1985	RP4		1985	09	12.08819	22	37	11.17	-12	40	31.5		809
1985	RP4		1985	09	12.09236	22	37	11.02	-12	40	33.0		809
1985	RP4		1985	09	14.28333	22	35	54.40	-12	54	25.5		809
1985	RP4		1985	09	14.28750	22	35	54.25	-12	54	27.2		809
1985	RP4		1985	09	14.29166	22	35	54.11	-12	54	28.9		809
1985	RP4		1985	09	15.06424	22	35	29.20	-12	59	10.8		809
1985	RP4		1985	09	15.06910	22	35	29.05	-12	59	12.4		809
1985	RP4		1985	09	15.07396	22	35	28.88	-12	59	14.3		809
1985	RQ4	*	1985	09	14.03567	22	45	04.95	-11	37	29.7	16.2	809
1985	RQ4		1985	09	14.04037	22	45	04.77	-11	37	30.9		809
1985	RQ4		1985	09	14.04504	22	45	04.57	-11	37	32.2		809
1985	RQ4		1985	09	15.26146	22	44	12.93	-11	43	10.3		809
1985	RQ4		1985	09	15.26632	22	44	12.75	-11	43	11.6		809
1985	RQ4		1985	09	15.27118	22	44	12.54	-11	43	13.0		809
1985	RQ4		1985	09	16.16666	22	43	35.56	-11	47	15.8		809
1985	RQ4		1985	09	16.17222	22	43	35.34	-11	47	17.3		809
1985	RQ4		1985	09	16.17778	22	43	35.12	-11	47	18.9		809
1985	RQ4		1985	09	17.24340	22	42	51.53	-11	52	01.5		809
1985	RQ4		1985	09	17.24826	22	42	51.33	-11	52	02.8		809
1985	RQ4		1985	09	17.25312	22	42	51.13	-11	52	04.0		809
1985	RQ4		1985	09	21.22500	22	40	16.52	-12	08	26.9		809
1985	RQ4		1985	09	21.22847	22	40	16.38	-12	08	27.7		809
1985	RQ4		1985	09	21.23507	22	40	16.13	-12	08	29.4		809
1985	RQ4		1985	09	22.03680	22	39	46.91	-12	11	31.3		809
1985	RQ4		1985	09	22.04097	22	39	46.76	-12	11	32.2		809
1985	RQ4		1985	09	22.04513	22	39	46.60	-12	11	33.1		809
1985	RR4	*	1985	09	14.09027	23	36	26.50	-00	33	49.8	17.5	809
1985	RR4		1985	09	14.09514	23	36	26.29	-00	33	52.7		809
1985	RR4		1985	09	14.10069	23	36	26.05	-00	33	56.2		809
1985	RR4		1985	09	15.32257	23	35	35.77	-00	46	10.2		809

1985	RR4		1985	09	15.32743	23	35	35.56	-00	46	13.1		809
1985	RR4		1985	09	15.33229	23	35	35.35	-00	46	15.8		809
1985	RR4		1985	09	17.28646	23	34	15.74	-01	05	52.5		809
1985	RR4		1985	09	17.29132	23	34	15.53	-01	05	55.5		809
1985	RR4		1985	09	17.29618	23	34	15.32	-01	05	58.4		809
1985	RR4		1985	09	19.29965	23	32	53.96	-01	26	05.2		809
1985	RR4		1985	09	19.30451	23	32	53.75	-01	26	08.3		809
1985	RR4		1985	09	19.30937	23	32	53.56	-01	26	11.2		809
1985	RS4	*	1985	09	14.18785	23	20	39.45	-06	52	39.0	17.5	809
1985	RS4		1985	09	14.19271	23	20	39.26	-06	52	40.6		809
1985	RS4		1985	09	14.19757	23	20	39.06	-06	52	42.3		809
1985	RS4		1985	09	19.25590	23	17	11.19	-07	22	36.7		809
1985	RS4		1985	09	19.26076	23	17	11.00	-07	22	38.4		809
1985	RS4		1985	09	19.26562	23	17	10.80	-07	22	40.0		809
1985	RS4		1985	09	21.26701	23	15	50.42	-07	34	05.9		809
1985	RS4		1985	09	21.27187	23	15	50.22	-07	34	07.6		809
1985	RS4		1985	09	21.27639	23	15	50.04	-07	34	09.1		809
1985	RT4	*	1985	09	14.38160	00	26	09.77	-01	15	28.1	17.8	809
1985	RT4		1985	09	14.38576	00	26	09.57	-01	15	30.0		809
1985	RT4		1985	09	14.38993	00	26	09.37	-01	15	31.8		809
1985	RT4		1985	09	15.37535	00	25	21.54	-01	22	57.7		809
1985	RT4		1985	09	15.38021	00	25	21.30	-01	23	00.1		809
1985	RT4		1985	09	15.38507	00	25	21.06	-01	23	02.3		809
1985	RT4		1985	09	16.35173	00	24	33.53	-01	30	24.0		809
1985	RT4		1985	09	16.35659	00	24	33.31	-01	30	26.2		809
1985	RT4		1985	09	16.36146	00	24	33.05	-01	30	28.9		809
1985	RU4	*	1985	09	15.14340	00	25	36.70	+03	05	48.0	17.8	809
1985	RU4		1985	09	15.14826	00	25	36.49	+03	05	45.8		809
1985	RU4		1985	09	15.15312	00	25	36.29	+03	05	43.7		809
1985	RU4		1985	09	16.12309	00	24	55.59	+02	58	52.4		809
1985	RU4		1985	09	16.12934	00	24	55.33	+02	58	49.8		809
1985	RU4		1985	09	16.13559	00	24	55.06	+02	58	47.2		809
1985	RU4		1985	09	18.31840	00	23	19.46	+02	42	57.3		809
1985	RU4		1985	09	18.32326	00	23	19.25	+02	42	55.2		809
1985	RU4		1985	09	18.32812	00	23	19.05	+02	42	53.1		809
1985	RU4		1985	09	20.19826	00	21	55.08	+02	28	57.1		809
1985	RU4		1985	09	20.20312	00	21	54.87	+02	28	54.8		809
1985	RU4		1985	09	20.20799	00	21	54.65	+02	28	52.7		809
1985	RU4		1985	09	21.38472	00	20	59.98	+02	19	59.0		809
1985	RU4		1985	09	21.38888	00	20	59.79	+02	19	57.1		809
1985	RU4		1985	09	21.39305	00	20	59.60	+02	19	55.2		809
1985	RU4		1985	09	22.19601	00	20	22.77	+02	13	47.3		809
1985	RU4		1985	09	22.20052	00	20	22.57	+02	13	45.0		809
1985	RV4	*	1985	09	15.14340	00	28	06.51	+02	58	06.1	17.6	809
1985	RV4		1985	09	15.14826	00	28	06.32	+02	58	04.9		809
1985	RV4		1985	09	15.15312	00	28	06.13	+02	58	03.7		809
1985	RV4		1985	09	16.12309	00	27	27.15	+02	54	00.4		809
1985	RV4		1985	09	16.12934	00	27	26.90	+02	53	58.8		809
1985	RV4		1985	09	16.13559	00	27	26.65	+02	53	57.2		809
1985	RV4		1985	09	18.31840	00	25	56.39	+02	44	37.3		809
1985	RV4		1985	09	18.32326	00	25	56.19	+02	44	36.0		809
1985	RV4		1985	09	18.32812	00	25	55.99	+02	44	34.8		809
1985	RV4		1985	09	20.19826	00	24	37.00	+02	36	21.6		809
1985	RV4		1985	09	20.20312	00	24	36.80	+02	36	20.3		809
1985	RV4		1985	09	20.20799	00	24	36.61	+02	36	18.9		809
1985	RV4		1985	09	21.38472	00	23	45.74	+02	31	02.6		809
1985	RV4		1985	09	21.38888	00	23	45.57	+02	31	01.5		809
1985	RV4		1985	09	21.39305	00	23	45.39	+02	31	00.4		809
1985	RV4		1985	09	22.19601	00	23	10.83	+02	27	22.2		809

1985	RV4		1985	09	22.20052	00	23	10.67	+02	27	20.9		809
1985	RW4	*	1985	09	15.26146	22	43	51.20	-12	44	26.9	18.0	809
1985	RW4		1985	09	15.26632	22	43	51.00	-12	44	30.0		809
1985	RW4		1985	09	15.27118	22	43	50.80	-12	44	33.0		809
1985	RW4		1985	09	16.16666	22	43	13.90	-12	54	13.2		809
1985	RW4		1985	09	16.17222	22	43	13.67	-12	54	16.9		809
1985	RW4		1985	09	16.17778	22	43	13.44	-12	54	20.4		809
1985	SC1		1985	09	07.12951	00	30	12.13	+02	17	02.1	17.5	809
1985	SC1		1985	09	07.13438	00	30	11.95	+02	17	01.3		809
1985	SC1		1985	09	07.13923	00	30	11.76	+02	17	00.3		809
1985	SC1		1985	09	08.12326	00	29	34.90	+02	14	12.7		809
1985	SC1		1985	09	08.12812	00	29	34.71	+02	14	11.9		809
1985	SC1		1985	09	08.13299	00	29	34.53	+02	14	11.0		809
1985	SC1		1985	09	11.18750	00	27	33.43	+02	04	50.0		809
1985	SC1		1985	09	11.19271	00	27	33.22	+02	04	49.0		809
1985	SC1		1985	09	11.19757	00	27	33.04	+02	04	48.1		809
1985	SC1		1985	09	14.23680	00	25	23.77	+01	54	39.4		809
1985	SC1		1985	09	14.24097	00	25	23.61	+01	54	38.6		809
1985	SC1		1985	09	14.24514	00	25	23.43	+01	54	37.7		809
1985	SC1		1985	09	15.14340	00	24	43.97	+01	51	29.7		809
1985	SC1		1985	09	15.14826	00	24	43.76	+01	51	28.6		809
1985	SC1		1985	09	15.15312	00	24	43.55	+01	51	27.6		809
1985	SC1		1985	09	16.12309	00	24	00.29	+01	48	02.0		809
1985	SC1		1985	09	16.12934	00	24	00.01	+01	48	00.7		809
1985	SC1		1985	09	16.13559	00	23	59.74	+01	47	59.4		809
1985	SC1		1985	09	18.31840	00	22	19.47	+01	40	01.0		809
1985	SC1		1985	09	18.32326	00	22	19.25	+01	40	00.0		809
1985	SC1		1985	09	18.32812	00	22	19.02	+01	39	58.7		809
1985	SC1		1985	09	19.35312	00	21	31.25	+01	36	09.8		809
1985	SC1		1985	09	19.35798	00	21	31.02	+01	36	08.6		809
1985	SC1		1985	09	19.36285	00	21	30.78	+01	36	07.5		809
1985	SC1		1985	09	20.19826	00	20	51.90	+01	32	59.7		809
1985	SC1		1985	09	20.20312	00	20	51.67	+01	32	58.7		809
1985	SC1		1985	09	20.20799	00	20	51.44	+01	32	57.4		809
1985	SC1		1985	09	20.35451	00	20	44.27	+01	32	23.5		809
1985	SC1		1985	09	20.35937	00	20	44.05	+01	32	22.5		809
1985	SC1		1985	09	20.36423	00	20	43.82	+01	32	21.4		809
1985	SC1		1985	09	22.19601	00	19	17.39	+01	25	25.4		809
1985	SC1		1985	09	22.20052	00	19	17.17	+01	25	24.5		809
1985	SF1	*	1985	09	16.10521	00	26	35.56	+00	58	41.9	18.0	809
1985	SF1		1985	09	16.11007	00	26	35.29	+00	58	41.2		809
1985	SF1		1985	09	16.11493	00	26	35.00	+00	58	40.6		809
1985	SF1		1985	09	18.31840	00	24	26.98	+00	53	35.1		809
1985	SF1		1985	09	18.32326	00	24	26.70	+00	53	34.4		809
1985	SF1		1985	09	18.32812	00	24	26.41	+00	53	33.8		809
1985	SF1		1985	09	19.35312	00	23	25.88	+00	51	06.8		809
1985	SF1		1985	09	19.35798	00	23	25.59	+00	51	06.1		809
1985	SF1		1985	09	19.36285	00	23	25.31	+00	51	05.4		809
1985	SF1		1985	09	20.35451	00	22	26.38	+00	48	42.4		809
1985	SF1		1985	09	20.35937	00	22	26.10	+00	48	41.7		809
1985	SF1		1985	09	20.36423	00	22	25.81	+00	48	41.0		809
1985	SF1		1985	09	21.32708	00	21	28.27	+00	46	20.2		809
1985	SF1		1985	09	21.33125	00	21	28.02	+00	46	19.5		809
1985	SF1		1985	09	21.33541	00	21	27.77	+00	46	18.9		809
1985	SF1		1985	09	22.19601	00	20	36.20	+00	44	11.1		809
1985	SF1		1985	09	22.20052	00	20	35.93	+00	44	10.5		809
1985	SG1	*	1985	09	16.16666	22	47	19.25	-12	32	47.8	17.8	809
1985	SG1		1985	09	16.17222	22	47	18.97	-12	32	50.6		809
1985	SG1		1985	09	16.17778	22	47	18.70	-12	32	53.5		809

1985	SG1		1985	09	21.22500	22	43	38.42	-12	51	24.3	809
1985	SG1		1985	09	21.22847	22	43	38.27	-12	51	24.8	809
1985	SG1		1985	09	21.23507	22	43	37.99	-12	51	25.6	809
1985	SG1		1985	09	22.03680	22	43	04.94	-12	54	02.8	809
1985	SG1		1985	09	22.04097	22	43	04.78	-12	54	03.4	809
1985	SG1		1985	09	22.04513	22	43	04.62	-12	54	04.2	809
1985	SH1	*	1985	09	18.30278	00	20	54.86	+00	48	56.9	18.0 809
1985	SH1		1985	09	18.30764	00	20	54.66	+00	48	54.9	809
1985	SH1		1985	09	18.31215	00	20	54.46	+00	48	53.1	809
1985	SH1		1985	09	18.31840	00	20	54.19	+00	48	50.5	809
1985	SH1		1985	09	18.32326	00	20	53.98	+00	48	48.4	809
1985	SH1		1985	09	18.32812	00	20	53.76	+00	48	46.4	809
1985	SH1		1985	09	20.33923	00	19	23.55	+00	34	09.4	809
1985	SH1		1985	09	20.34410	00	19	23.33	+00	34	07.3	809
1985	SH1		1985	09	20.34896	00	19	23.11	+00	34	05.1	809
1985	SH1		1985	09	20.35451	00	19	22.86	+00	34	02.6	809
1985	SH1		1985	09	20.35937	00	19	22.65	+00	34	00.1	809
1985	SH1		1985	09	20.36423	00	19	22.43	+00	33	58.2	809
1985	SH1		1985	09	21.31319	00	18	39.00	+00	27	00.4	809
1985	SH1		1985	09	21.31736	00	18	38.83	+00	26	58.6	809
1985	SH1		1985	09	21.32153	00	18	38.64	+00	26	56.7	809
1985	SH1		1985	09	21.32708	00	18	38.38	+00	26	54.6	809
1985	SH1		1985	09	21.33125	00	18	38.19	+00	26	52.7	809
1985	SH1		1985	09	21.33541	00	18	38.00	+00	26	50.8	809
1985	SJ1	*	1985	09	18.30278	00	24	58.28	+00	22	11.8	18.1 809
1985	SJ1		1985	09	18.30764	00	24	58.07	+00	22	09.8	809
1985	SJ1		1985	09	18.31215	00	24	57.88	+00	22	07.9	809
1985	SJ1		1985	09	21.31319	00	22	48.25	+00	01	02.2	809
1985	SJ1		1985	09	21.31736	00	22	48.07	+00	01	00.4	809
1985	SJ1		1985	09	21.32153	00	22	47.88	+00	00	58.6	809
1985	SJ1		1985	09	21.32708	00	22	47.65	+00	00	56.2	809
1985	SJ1		1985	09	21.33125	00	22	47.47	+00	00	54.4	809
1985	SJ1		1985	09	21.33541	00	22	47.29	+00	00	52.6	809
1985	SJ1		1985	09	22.18333	00	22	10.11	-00	05	07.5	809
1985	SJ1		1985	09	22.18767	00	22	09.88	-00	05	09.6	809
1985	SK1	*	1985	09	20.33923	00	24	04.91	-00	49	20.9	18.2 809
1985	SK1		1985	09	20.34410	00	24	04.57	-00	49	20.1	809
1985	SK1		1985	09	20.34896	00	24	04.24	-00	49	19.2	809
1985	SK1		1985	09	21.31319	00	22	57.58	-00	46	33.3	809
1985	SK1		1985	09	21.31736	00	22	57.28	-00	46	32.4	809
1985	SK1		1985	09	21.32153	00	22	57.00	-00	46	31.6	809
1985	TJ1		1985	09	11.30660	00	43	47.05	-02	51	03.8	17.4 809
1985	TJ1		1985	09	11.31146	00	43	46.83	-02	51	04.5	809
1985	TJ1		1985	09	11.31632	00	43	46.60	-02	51	05.3	809
1985	TJ1		1985	09	15.39201	00	40	40.93	-02	59	31.9	809
1985	TJ1		1985	09	15.39687	00	40	40.71	-02	59	32.5	809
1985	TJ1		1985	09	15.40173	00	40	40.49	-02	59	33.0	809
1985	TJ1		1985	09	16.36910	00	39	54.31	-03	01	35.6	809
1985	TJ1		1985	09	16.37396	00	39	54.07	-03	01	36.2	809
1985	TJ1		1985	09	16.37882	00	39	53.85	-03	01	36.8	809
1985	TJ1		1985	09	17.37882	00	39	05.45	-03	03	43.1	809
1985	TJ1		1985	09	17.38368	00	39	05.21	-03	03	43.7	809
1985	TJ1		1985	09	17.38854	00	39	04.98	-03	03	44.3	809
1985	TJ1		1985	09	18.35104	00	38	17.76	-03	05	45.0	809
1985	TJ1		1985	09	18.35590	00	38	17.52	-03	05	45.6	809
1985	TJ1		1985	09	18.36076	00	38	17.30	-03	05	46.2	809
1985	TJ1		1985	09	19.38715	00	37	26.23	-03	07	54.6	809
1985	TJ1		1985	09	19.39201	00	37	25.97	-03	07	55.3	809
1985	TJ1		1985	09	19.39687	00	37	25.73	-03	07	56.1	809

1985 TJ1	1985 09 20.38576	00 36 36.13	-03 10 01.0		809
1985 TJ1	1985 09 20.39062	00 36 35.89	-03 10 01.8		809
1985 TJ1	1985 09 21.36736	00 35 46.20	-03 12 01.8		809
1985 TJ1	1985 09 21.37257	00 35 45.94	-03 12 02.3		809
1985 TJ1	1985 09 21.37708	00 35 45.70	-03 12 02.7		809
1985 TJ1	1985 09 22.39375	00 34 53.66	-03 14 08.1		809
1985 TJ1	1985 09 22.39791	00 34 53.46	-03 14 08.5		809

OBSERVATIONS MADE AT THE EUROPEAN SOUTHERN OBSERVATORY.

Observations with the CCD camera on the Danish 1.5-m reflector by P. Christensen, P. Gammelgaard, L. Hansen, H. U. Norgaard-Nielsen and B. Thomsen. Reductions using Palomar Sky Survey and SAOC. Contact: H. U. Norgaard-Nielsen, Copenhagen University Observatory, Ostervoldgade 3, DK-1350 Copenhagen K, Denmark.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
1985 SA	1985 09 18.22799		22 49 52.8	-18 03 18	809
1985 SA	1985 09 18.23218		22 49 52.7	-18 03 20	809
1985 SA	1985 10 22.04696		22 40 30.4	-18 37 43	809
1985 SA	1986 01 05.04824		23 55 35.4	-08 04 41	809
1985 SA	1986 01 05.05515		23 55 36.0	-08 04 36	809

* * * * *

ORBITAL ELEMENTS OF ONE-OPPOSITION MINOR PLANETS.

The orbit computers and authors of double designations are B = C. M. Bardwell, G = D. W. E. Green, M = B. G. Marsden, N = S. Nakano. For further details see MPC 10375.

Planet	H	Epoch	M	Peri.	Node	Incl.	e	a	Arc	O	N	C
1967 GF1	11.5	670331	284.83	128.76	143.37	14.16	0.0736	2.5683	5	6		M
1977 PF1	12.0	770825	341.03	190.55	166.88	15.95	0.1310	2.8906	50	3	1	N
1980 RZ3	13.0	801008	351.20	12.33	7.31	7.33	0.2384	2.6858	39	3	1	N
1980 TQ14	14.0	801207	24.45	238.91	141.17	3.60	0.1885	2.4236	51	7	1	N
1981 JO	15.0	810426	304.44	70.82	226.34	5.57	0.1847	2.1612	3	5	3	M
1981 PQ	11.5	810804	7.39	153.95	162.66	5.75	0.0796	3.3241	25	6	1	N
1981 RQ4	13.5	811003	19.89	344.65	343.61	12.93	0.1442	2.6587	23	3	1	N
1981 SD1	13.5	811003	18.03	333.09	9.86	8.16	0.2319	2.8868	12	5	1	N
1981 SG3	15.0	811003	11.19	74.62	279.66	3.75	0.2321	2.4110	26	3	1	N
1981 TT	15.0	811023	28.41	131.78	204.49	4.26	0.1937	2.2626	19	4	1	N
1981 TB2	14.5	811023	11.64	142.91	232.95	5.80	0.1814	2.1450	27	4	1	N
1981 TF4	12.5	811202	324.04	91.94	16.90	17.69	0.2023	2.6397	50	5	1	N
1981 UB1	12.5	811023	325.84	295.78	146.98	1.13	0.2026	3.1433	35	6	1	N
1981 UT7	12.5	811023	48.69	206.92	136.06	1.76	0.1765	3.0979	30	5	1	N
1981 US14	13.8	811112	29.53	285.03	78.69	2.60	0.1452	2.4391	12	5	1	N
1981 UU15	12.0	811023	301.90	171.31	320.15	3.88	0.2330	2.6734	7	4	1	M
1981 XM2	13.5	811222	359.31	190.60	257.12	9.24	0.1350	2.5213	28	4	1	N
1982 DY2		820220	258.21	110.70	160.27	10.38	0.1088	2.5313	7	4	1	N
1982 OD	14.0	820730	354.76	202.49	119.57	14.67	0.2950	2.6172	12	6	1	N
1982 PC	12.0	820730	294.70	268.75	154.09	12.91	0.2823	3.0049	7	8	3	M
1982 ST1	13.5	820928	32.74	50.36	265.89	2.17	0.3147	2.8996	12	3	1	N
1982 SU1	12.5	820928	1.40	125.94	250.59	1.00	0.0407	2.8624	12	4	1	N
1982 UV6	14.0	821107	357.89	189.07	222.55	7.32	0.2847	2.7387	47	5	1	N
1982 UY7	14.5	821107	13.50	108.95	263.16	5.51	0.2621	2.3971	21	3	1	N
1982 UZ9	13.0	821018	20.26	140.76	223.30	21.37	0.1924	2.9806	23	3	1	N
1983 GR	13.5	830506	0.85	184.79	36.28	6.93	0.0613	2.3691	34	7	1	N
1983 RJ4	15.5	830903	345.90	339.96	34.09	7.74	0.2112	2.0644	27	6	1	N
1985 PJ	14.0	850803	2.92	338.38	338.67	0.86	0.1994	2.6617	8	0		B
1985 PM	13.0	850823	12.67	338.39	332.20	5.68	0.1921	2.7192	38	0		M

1985	QC	13.0	850823	165.20	358.93	168.41	3.55	0.0631	2.2437	32	0	M
1985	QZ3		850803	241.91	302.38	145.06	4.03	0.0833	2.3017	2	6	2 B
1985	QC4		850803	305.31	248.94	146.60	20.73	0.1670	2.8290	2	6	M
1985	QG4	14.0	850823	34.52	296.46	336.85	9.82	0.2274	2.3348	23	0	M
1985	QH4	13.5	850912	326.10	25.79	351.84	4.39	0.1370	2.3678	16	0	M
1985	RH	13.0	850912	88.42	255.16	350.48	14.20	0.1568	2.6102	16	0	M
1985	RL	12.0	850912	85.34	114.22	146.17	3.10	0.0593	2.8683	8	0	M
1985	RP1	14.0	850912	42.70	126.14	169.99	5.65	0.1775	2.2665	14	0	M
1985	RO2	14.5	850823	18.71	343.77	316.55	1.77	0.2663	2.5378	11	0	M
1985	RP2	13.0	850912	335.40	241.11	139.98	0.52	0.2730	3.1961	18	0	2 M
1985	RQ2	15.0	850823	329.60	316.49	53.27	4.17	0.2313	2.2266	3	8	M
1985	RS2	13.5	850912	96.64	155.06	78.23	1.79	0.0248	2.1603	16	0	2 M
1985	RT2	12.0	850912	3.59	224.72	105.48	3.34	0.0624	2.9186	16	0	M
1985	RU2	14.5	850912	325.84	7.61	16.36	2.67	0.1559	2.2381	15	0	M
1985	RV2	15.0	850912	352.75	211.55	140.96	5.85	0.2444	2.3383	15	0	M
1985	RW2	13.5	850912	0.68	240.15	96.10	1.78	0.0794	2.7802	13	0	2 M
1985	RX2	15.0	850823	5.96	254.27	67.88	1.80	0.1997	2.3591	5	9	M
1985	RZ2	12.5	850912	343.87	253.80	110.17	3.49	0.1646	3.0723	16	0	M
1985	RA3	12.5	850912	24.30	213.52	100.89	3.24	0.0562	2.8557	16	0	M
1985	RB3	15.5	850912	334.99	21.73	9.63	5.35	0.3204	2.5762	16	0	M
1985	RC3	12.5	850912	215.66	13.46	114.11	0.59	0.1260	3.0906	14	0	2 M
1985	RD3	15.0	850912	324.41	271.33	117.03	2.46	0.1169	2.1952	16	0	M
1985	RE3	14.0	850912	7.03	180.75	152.23	13.47	0.1924	3.1098	11	0	2 M
1985	RF3	15.0	850912	6.45	210.97	122.49	6.10	0.2506	2.6535	16	0	M
1985	RG3	14.5	850823	329.78	277.59	100.74	5.42	0.1561	2.5030	5	0	M
1985	RH3	16.0	850823	344.29	357.48	10.40	8.47	0.3288	2.6756	8	0	M
1985	RJ3	13.0	850823	78.61	82.69	173.48	1.96	0.1229	3.0815	9	0	M
1985	RK3	15.0	850912	346.64	203.85	170.16	10.48	0.2431	2.4556	16	0	M
1985	RL3	14.0	850912	78.85	175.94	82.72	7.31	0.1048	2.2660	16	0	M
1985	RM3	15.5	850912	326.55	237.13	156.39	3.46	0.1697	2.1613	9	0	2 M
1985	RN3	15.5	850912	8.96	341.70	353.12	4.62	0.1588	2.1796	14	0	M
1985	RP3	15.0	850912	43.58	281.49	3.32	2.12	0.2044	2.3768	14	0	M
1985	RQ3	13.5	850912	42.80	119.86	160.73	10.91	0.2638	2.7493	14	0	M
1985	RR3	13.0	850912	19.38	155.23	169.78	9.48	0.1369	2.9708	12	0	M
1985	RS3	13.0	850912	309.85	53.11	6.27	0.55	0.0879	3.1006	15	0	2 M
1985	RT3	13.0	850912	241.17	336.42	155.54	2.11	0.1445	2.4486	15	0	M
1985	RU3	12.5	850912	285.37	274.53	176.81	12.54	0.1433	2.6690	15	0	M
1985	RV3	13.0	850912	14.73	157.34	178.75	1.60	0.1403	2.8359	10	0	M
1985	RW3	13.0	850912	26.53	168.49	142.57	1.76	0.2619	3.1686	14	0	M
1985	RY3	12.0	850912	14.77	172.21	166.56	1.48	0.1867	3.1492	14	0	M
1985	RA4	13.5	850912	46.94	301.23	349.48	7.38	0.1047	2.7523	11	0	M
1985	RB4	16.0	850912	26.95	145.78	159.24	1.49	0.2291	2.2520	11	0	M
1985	RC4	13.0	850912	2.31	207.96	138.06	2.50	0.0980	2.8893	11	0	M
1985	RE4	12.5	850912	21.92	178.44	138.63	11.35	0.0984	3.0108	12	0	M
1985	RG4	13.0	850912	104.26	56.38	163.77	13.59	0.1316	2.6565	9	0	M
1985	RJ4	13.5	850912	12.68	304.04	34.56	2.17	0.2321	3.1096	11	0	M
1985	RK4	13.5	850912	306.22	55.36	10.30	0.62	0.1158	2.7668	11	0	2 M
1985	RL4	15.0	850912	18.23	296.31	35.14	3.31	0.1633	2.1595	11	0	M
1985	RN4	16.0	850912	8.16	286.93	53.32	2.37	0.3132	2.3778	9	0	M
1985	RO4	13.0	850912	115.29	180.59	58.89	4.36	0.0666	2.5411	10	0	2 M
1985	RP4	16.0	850912	347.41	232.80	134.84	3.56	0.3070	2.5907	3	9	M
1985	RR4	14.0	850912	16.18	151.06	178.69	10.32	0.1586	2.8348	5	0	M
1985	RS4	12.0	850912	119.03	63.34	155.26	7.13	0.1204	3.1496	7	9	M
1985	RT4	13.0	850912	221.08	356.29	158.78	6.66	0.2686	2.3611	2	9	2 M
1985	RU4	15.0	850912	5.44	168.17	182.26	2.98	0.1680	2.3752	7	0	M
1985	RV4	13.0	850912	358.01	355.51	8.23	0.36	0.1397	3.1630	7	0	M
1985	SC1	13.5	850912	23.41	306.04	11.19	2.27	0.2832	3.0772	16	0	M
1985	SF1	14.5	850912	50.82	287.62	8.54	7.01	0.1251	2.4505	6	0	M
1985	SG1	13.0	850912	307.16	341.54	70.04	2.89	0.1568	2.9890	6	9	2 M

1985 SH1	15.5	850912	352.90	202.73	164.82	2.48	0.1778	2.3280	3	0	M
1985 SJ1	14.0	850912	320.49	244.35	165.67	4.76	0.1273	2.7996	4	0 2	M
1985 TJ1	12.5	850912	37.24	291.30	26.07	10.89	0.0883	3.0028	34	0	M
1986 EL	14.0	860311	24.86	291.23	178.12	22.64	0.2449	2.3594	28	6	M
1986 EZ	13.0	860311	352.42	184.35	353.51	12.67	0.0888	2.6571	35	8	G
1986 EM1	13.0	860311	232.01	303.30	23.73	4.73	0.1522	2.1951	36	8	G
1986 EZ1	13.5	860311	33.90	190.68	293.79	1.72	0.1608	2.3688	34	8	G
1986 GB	13.0	860331	265.46	202.06	98.12	5.25	0.1729	2.2496	8	6	G
1986 GC	13.5	860331	320.21	180.18	53.86	7.36	0.0947	2.3913	8	5	M
1986 GD	14.0	860331	21.63	110.40	44.54	7.39	0.1982	2.4614	8	5	M
1986 GF	14.0	860420	27.43	315.84	206.34	23.37	0.1787	2.3092	25	7	M
1986 GN	13.0	860331	85.04	300.04	140.95	15.60	0.2526	2.2655	31	4	G
1986 GV	13.5	860331	100.63	310.13	116.03	17.09	0.0263	2.4894	2	5	B
1986 GW	13.5	860331	316.45	76.34	183.15	2.55	0.1781	3.9937	27	0	M
1986 GX	16.5	860331	338.12	37.34	193.70	8.56	0.2092	2.6523	10	0	M
1986 GY	15.0	860331	245.43	307.60	14.91	2.86	0.1225	2.1720	12	0 2	M
1986 GZ	15.5	860420	264.54	125.98	198.99	22.51	0.2502	2.3474	34	0	M
1986 JA	13.5	860420	331.05	102.60	159.45	12.08	0.1716	2.3861	12	3	M
1986 JE	18.0	860510	335.32	207.69	46.10	20.12	0.0307	1.8171	5	0	M
1986 JJ	18.0	860510	45.01	309.01	229.86	17.79	0.0572	1.8312	4	8	M

Note 1: double designations 1977 PF1 = 1977 TE1 (N); 1980 RZ3 = 1980 TK7 (N); 1980 TQ14 = 1980 WG (N); 1981 JO = 1981 JJ3 (N); 1981 PQ = 1981 RZ2 (N); 1981 RQ4 = 1981 SA4 (N); 1981 SD1 = 1981 TQ3 (N); 1981 SG3 = 1981 UQ13 (N); 1981 TT = 1981 UE11 (N); 1981 TB2 = 1981 UD1 (N); 1981 TF4 = 1981 WZ3 (N); 1981 UB1 = 1981 SP5 (N); 1981 UT7 = 1981 WX (N); 1981 US14 = 1981 VM (N); 1981 UU15 = 1981 UP8 (N); 1981 XM2 = 1981 YK (N); 1982 DY2 = 1982 DD6 (N); 1982 OD = 1982 OU (N); 1982 PC = 1982 QL (N); 1982 ST1 = 1982 SX4 (N); 1982 SU1 = 1982 SY4 (N); 1982 UV6 = 1982 VV = 1982 XT4 (N); 1982 UY7 = 1982 VS6 (N); 1982 UZ9 = 1982 VH11 (N); 1983 GR = 1983 JS (N); 1983 RJ4 = 1983 TG2 (N). 2 = e assumed. 3 = 1 + 2.

* * * * *

ORBITAL ELEMENTS BY D. K. YEOMANS, JET PROPULSION LABORATORY.

(46) Hestia
Epoch 1986 June 19.0 ET = JDE 2446600.5

M	4.93230		(1950.0)	P	Q
n	0.24563184	Peri.	175.43223	+0.99765103	+0.06849973
a	2.5251059	Node	180.64048	-0.06406557	+0.93067679
e	0.1724132	Incl.	2.33411	-0.02424917	+0.35937237
P	4.01	H	8.6	G 0.25	

From 149 observations at 33 oppositions 1912-1985, mean residual 0".83.

(1627) Ivar
Epoch 1986 June 19.0 ET = JDE 2446600.5

M	131.71299		(1950.0)	P	Q
n	0.38759428	Peri.	167.33513	+0.50189988	+0.85816256
a	1.8630213	Node	132.67498	-0.80577374	+0.50928232
e	0.3966274	Incl.	8.44331	-0.31436475	+0.06471898
P	2.54	H	13.2	G 0.25	

From 233 observations at 12 oppositions 1929-1985, mean residual 0".98.

ORBITAL ELEMENTS BY L. D. SCHMADEL, ASTRONOMISCHES RECHEN-INSTITUT, HEIDELBERG.

(727) Nipponia
Epoch 1986 June 19.0 ET = JDE 2446600.5

M	95.32286	(1950.0)	P	Q
n	0.23953390	Peri. 274.38749	+0.65655771	-0.72976318
a	2.5677815	Node 132.64058	+0.75294650	+0.61909562
e	0.1056334	Incl. 15.02721	+0.04476085	+0.29011429
P	4.11	H 10.1	G 0.25	

From 72 observations at 21 oppositions 1908-1984, mean residual 1".2.

(1814) Bach
Epoch 1986 June 19.0 ET = JDE 2446600.5

M	113.94385	(1950.0)	P	Q
n	0.29679774	Peri. 65.42054	+0.08238675	-0.99626616
a	2.2258488	Node 19.90491	+0.88469812	+0.06118830
e	0.1309971	Incl. 4.34771	+0.45882640	+0.06090748
P	3.32	H 13.3	G 0.25	

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

311009	024	4.0+	2.5+	611110	760	1.9-	1.3-	840925	688	0.5-	1.0-
311017	024	1.1-	1.6-	711012	095	2.3+	1.6-	840925	688	0.1-	0.4-
311020	024	(11.1+	1.1-)	740827	095	1.1-	0.0	840928	688	0.6+	0.2-
311102	024	2.4-	0.7-	740911	095	(0.2-	5.4-)	840928	688	0.0	0.2+
311103	024	3.3+	1.0-	740912	026	0.9+	0.5+	841018	071	0.7+	1.2+
410927	062	(0.00+	0.03+)X	740914	026	0.9+	0.8+	841018	071	0.6-	0.6+
410930	062	(4.6+	50.7+)X	740914	095	0.4+	1.3+	841026	688	0.7-	1.3-
511026	020	0.8+	0.9+	760402	095	4.3-	4.8+	841026	688	2.0-	1.0-
511031	020	2.0+	0.3+	811024	095	0.9+	0.1-	860305	688	2.3+	0.9-
611012	760	0.4-	1.1-	811025	330	1.0+	0.1+	860305	688	1.7-	0.0
611012	760	0.3-	1.3-	811028	095	1.9+	2.1+	860409	688	3.0+	1.5-
611104	760	2.7-	1.3-	811029	330	0.4+	1.6+	860409	688	1.2-	2.4-
611104	760	0.8-	1.3-	811030	381	0.9-	0.4+	860409	688	1.8+	1.2-
611110	760	2.7-	0.4+	811030	381	0.5-	1.2+	860409	688	0.7-	0.1+

From 38 observations at 9 oppositions 1931-1986, mean residual 1".2.

* * * * *

ORBITAL ELEMENTS BY H. OISHI, NIIZA, JAPAN.

The following orbital elements are from JAM 1998, 1999 and 2002. The identifications are by H. Oishi unless otherwise stated.

(3433)* 1963 TJ1 = 1935 EG = 1957 BF = 1970 PA1 = 1974 RJ1 = 1985 QD
Discovered 1963 Oct. 15 at the Goethe Link Observatory, Indiana University.
Epoch 1986 June 19.0 ET = JDE 2446600.5

M	28.67911	(1950.0)	P	Q
n	0.26610882	Peri. 73.13607	+0.64593078	-0.76275179
a	2.3938478	Node 336.53955	+0.66695676	+0.58383742
e	0.1866102	Incl. 4.51721	+0.37140559	+0.27810714
P	3.70	H 12.5	G 0.25	

Residuals in seconds of arc

350307	024	1.0+	1.4+	631017	760	1.5+	0.8-	850820	688	0.6+	3.1+
570129	024	0.6+	3.3+	631022	012	1.9+	0.2+	850912	688	1.8+	0.4-
631015	760	1.3-	0.0	700811	095	0.1-	1.0-	850912	688	0.5-	0.3-
631015	760	0.4+	0.9-	740912	095	(6.2+	2.6-)	850913	675	2.1-	0.8+
631017	760	1.2-	1.5-	850820	688	0.4+	3.6+	850914	675	3.1-	0.1-

(3434)* 1981 VO = 1938 TC = 1951 WP2 = 1964 VJ2

Discovered 1981 Nov. 2 by B. A. Skiff at the Anderson Mesa Station of the Lowell Observatory.

Epoch 1986 June 19.0 ET = JDE 2446600.5

M 61.46334	(1950.0)	P	Q	
n 0.23007046	Peri. 260.55897	+0.97859853	+0.19678250	
a 2.6377207	Node 88.07478	-0.15711998	+0.90338268	
e 0.2308426	Incl. 3.45207	-0.13288429	+0.38102020	
P 4.28	H 12.8	G 0.25		

Residuals in seconds of arc

381004	094(93.6-	32.2+)X	811102	688	0.0	1.5-	811202	688	1.4-	3.7-
511129	760	2.6-	1.2+	811102	688	1.7+	1.9-	850914	293	0.5+	1.4-
511129	760	1.5+	0.8+	811105	688	0.6+	0.2-	850914	293	2.6+	1.1+
641111	330	0.5+	0.6+	811105	688	0.1-	0.2-	850920	474	1.0-	1.0-
811007	095	0.2+	1.5+	811120	688	2.8-	1.3-	850920	474	2.0-	0.9+
811022	095	2.6+	2.9+	811120	688	0.7-	1.3+				
811027	095	1.1+	2.2+	811202	688	1.1-	2.0-				

(3435)* 1981 XC2 = 1952 QN = 1976 JT2 = 1976 KH = 1977 QV3 = 1977 SM

Discovered 1981 Dec. 2 by F. Dossin at Haute Provence.

Epoch 1986 June 19.0 ET = JDE 2446600.5

M 64.56637	(1950.0)	P	Q	
n 0.27820237	Peri. 297.28187	-0.30545992	-0.95194254	
a 2.3239610	Node 170.42331	+0.91420311	-0.29975400	
e 0.0466133	Incl. 7.72144	+0.26632109	-0.06287243	
P 3.54	H 13.0	G 0.25		

Residuals in seconds of arc

520828	024	0.1-	2.0-	811129	808	0.6+	1.5+	811203	808	1.0-	0.8-
760502	095	0.2-	0.3+	811201	808	0.8+	0.8+	860112	688	0.2+	1.2-
760525	095	2.6+	0.5+	811201	808	1.3-	0.8-	860112	688	0.5-	1.9-
770824	095	0.9-	1.5-	811202	511	0.1+	1.3+	860114	889	3.9-	0.4+
770918	095	1.1-	0.4-	811203	511	0.6+	0.4+	860114	889	0.4-	0.6-
811125	095	0.9+	0.0	811203	511	0.9+	0.4-	860209	801	0.4+	0.1+
811129	808	0.1-	1.6+	811203	808	2.0+	0.1+				

* * * * *

ORBITAL ELEMENTS BY K. HURUKAWA, TOKYO ASTRONOMICAL OBSERVATORY.

The identifications are by K. Hurukawa unless otherwise stated.

1984 HZ1 = 1984 JN1 = 1951 DD = 1952 HX2 = 1953 NE = 1953 PG = 1973 FH1

The double designation 1984 HZ1 = 1984 JN1 is by F. N. Bowman and A. Lowe, who found it independently (MPC 10610). The double designation 1953 NE = 1953 PG is by O. Kippes (MPC 1331).

Epoch 1986 June 19.0 ET = JDE 2446600.5

M 45.16398	(1950.0)	P	Q	
n 0.18516841	Peri. 103.99533	+0.83222132	+0.55127539	
a 3.0485368	Node 222.59317	-0.53643720	+0.77360822	
e 0.1235087	Incl. 5.01709	-0.14015278	+0.31245122	
P 5.32	H 11.3	G 0.25		

Residuals in seconds of arc

510227	760	1.5-	5.4-	530809	760	0.2-	1.1+	840428	809	(9.1+	0.3+)
510227	760	0.5-	0.6-	730327	095	1.9+	1.6+	840501	809	0.5+	0.4-
520426	711	4.6-	8.4- Y	730402	095	0.1-	2.4+	840501	809	0.3-	0.4+
530714	760	(1.5-	1.7+)	840427	809	0.0-	0.2-	840505	809	0.4-	0.8-
530714	760	(1.3+	0.9+)	840427	809	0.2-	0.1+	840505	809	1.4-	0.5-
530809	760	1.0+	3.3-	840428	809	1.2+	0.5+				

1984 SE3 = 1950 BX = 1950 BT1 = 1973 FE = 1986 GH

The identifications 1984 SE3 = 1950 BX = 1950 BT1 = 1986 GH were independently found by B. Knudsen.

Epoch 1986 June 19.0 ET = JDE 2446600.5

M	117.85638	(1950.0)		P	Q
n	0.30424527	Peri.	310.25049	+0.05537508	-0.99757871
a	2.1893750	Node	136.51874	+0.93359633	+0.03679012
e	0.0983306	Incl.	3.50555	+0.35402188	+0.05901863
P	3.24	H	13.8	G 0.25	

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

500125	012	0.8+	2.4+	840926	809	0.2-	0.6+	
500128	760(0.03-	0.04-)X		840927	809	0.1-	0.2+	
730329	805	2.5-	3.3-	840927	809	0.0-	0.3+	
840922	809	1.1-	2.0+	840927	809	0.2-	0.4+	
840922	809	1.2-	1.9+	840928	688	0.9+	1.4-	
840922	809	1.4-	2.1+	840928	688	1.7+	1.1-	
840923	809	1.3-	1.7+	840928	809	1.0+	0.4-	
840923	809	1.5-	1.6+	840928	809	1.1+	1.2-	
840923	809	1.1-	1.8+	840928	809	0.6+	1.4+	
840924	809	1.1-	0.8+	840928	809	0.7+	0.7-	
840924	809	1.2-	0.9+	840928	809	0.6-	1.0+	
840924	809	1.2-	1.3+	840928	809	0.1+	1.0+	
840926	809	0.0-	0.8+	840929	809	0.2-	0.4-	
840926	809	0.8-	0.5+	840929	809	0.0-	0.4-	
840929	809	0.3-	0.5-					
840930	809	0.4+	0.8-					
840930	809	0.4+	0.5-					
840930	809	0.4+	0.7-					
841001	809	0.7+	1.1-					
841001	809	1.0+	1.2-					
841001	809	0.4+	1.0-					
860403	054	0.3+	2.8+					
860405	054	1.9+	2.6+					
860409	688	1.6-	3.1+					
860409	688	3.8+	0.8+					
860410	054	(3.9+	1.4+)					

1986 EL1 = 1979 VX2 = 1979 YS1

The double designation 1979 VX2 = 1979 YS1 was independently suggested by N. S. Chernykh.

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	217.15296	(1950.0)		P	Q
n	0.21808582	Peri.	307.92487	+0.99574200	+0.06739363
a	2.7334971	Node	48.30450	-0.03218497	+0.89351869
e	0.1181001	Incl.	4.83197	-0.08638290	+0.44393969
P	4.52	H	12.0	G 0.25	

Residuals in seconds of arc

791114	095	1.3+	5.1+	860305	688	0.9+	1.6+	
791223	095	1.2-	5.2-	860403	054	1.3+	0.0+	
860305	688	1.6+	0.8+	860404	054	0.5-	2.3+	
860409	688	2.0-	1.8-					
860409	688	0.7+	1.5-					

* * * * *

ORBITAL ELEMENTS BY S. NAKANO, TOKYO.

The identifications are by S. Nakano unless otherwise stated.

(3436)* 1976 SS3 = 1971 TP1 = 1979 HR2 = 1980 NK = 1981 TW3 = 1981 WJ7 = 1984 FJ = 1984 HG2

Discovered 1976 Sept. 24 by N. S. Chernykh at the Crimean Astrophysical Observatory. The identification 1976 SS3 = 1969 AD1 (NOC 1067) is invalid.

Epoch 1986 June 19.0 ET = JDE 2446600.5

M	43.00644	(1950.0)		P	Q
n	0.20339010	Peri.	133.88596	+0.78770137	+0.61604249
a	2.8636252	Node	188.08959	-0.57353159	+0.73078152
e	0.0585484	Incl.	1.73725	-0.22491790	+0.29402385
P	4.85	H	12.0	G 0.25	

Residuals in seconds of arc

711012	095	0.9-	1.8-		800712	805	0.7-	1.4+		840331	688	1.7+	2.6-
760924	095	0.6-	0.3-		800712	805	0.3+	0.1+		840331	688	0.1+	1.1-
760929	095	1.3+	1.9-		800713	805	0.1+	0.8-		840430	809	0.6-	0.8+
761025	095	4.1+	0.6-		800713	805	0.3-	0.1+		840430	809	0.5-	0.3+
790425	095	1.4-	2.4-		811007	095	0.8-	0.4-		840502	809	0.4-	0.4-
800711	805	0.4+	0.2-		811125	095	1.4-	0.4+		840502	809	0.8-	0.6+

(3437)* 1982 UZ5 = 1982 VS5 = 1951 UE = 1953 FA = 1972 YC1 = 1975 WS1 = 1984 HU1

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

Epoch 1986 June 19.0 ET = JDE 2446600.5

M	311.57786		(1950.0)	P	Q
n	0.28797927	Peri.	79.46791	-0.40136775	-0.91509889
a	2.2710598	Node	34.27771	+0.81112517	-0.37475590
e	0.0747161	Incl.	3.94046	+0.42541731	-0.14883560
P	3.42	H	13.5	G 0.25	

Residuals in seconds of arc

511029	760	1.8+	0.2-		751126	381	0.8-	0.8-		840429	809	0.6-	0.7-
511029	760	1.0-	1.1+		821020	095	1.7-	2.3-		840430	809	0.4+	0.2+
530318	062	0.9-	3.0+		821024	095	1.7-	0.0		840430	809	0.2-	0.3-
530318	062	0.5-	0.3-		821107	095	3.3+	2.1+		840507	809	0.2+	0.1-
530318	062	1.1+	1.4-		821108	095	1.7+	0.3-		840507	809	0.1+	0.2+
721230	095	0.7+	0.2-		821108	095	1.2-	0.9-		840507	809	0.4+	0.5-
751126	381	0.8-	0.4+		840429	809	0.5-	0.9-					

1927 UE = 1937 UL = 1937 VP = 1967 TA = 1984 YV2

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	214.37254		(1950.0)	P	Q
n	0.29478964	Peri.	136.02538	+0.98675347	-0.13593626
a	2.2359501	Node	231.99511	+0.09944936	+0.93806183
e	0.1993240	Incl.	6.45157	+0.12816945	+0.31868688
P	3.34	H	13.0	G 0.25	

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

271029	024	3.3-	0.3+		371103	094(0.23- | 0.01-)X		841223	095	2.9+	0.9+
271030	024	0.2+	3.5-		371107	094(19.5-	48.9-)X		841227	095(16.2-	3.0-)	
271101	024	3.1+	3.2+		371111	020(18.4+ | 22.4+)		841230	095	3.0-	1.0-
371026	094(65.4+ | 46.1-)X			671002	095	0.0	0.0					

1975 BF = 1973 SA6 = 1979 UR4 = 1979 WV5

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	37.31959		(1950.0)	P	Q
n	0.17547873	Peri.	257.92962	+0.29516115	-0.95544573
a	3.1597587	Node	174.90207	+0.88438670	+0.27248286
e	0.1634748	Incl.	1.18093	+0.36157993	+0.11347488
P	5.62	H	12.5	G 0.25	

Residuals in seconds of arc

730928	095	0.7+	1.7-		750117	095	0.7-	0.4+		791117	095	0.2+	2.2+
750116	330	0.5+	1.6-		791017	095	0.7-	0.4-					

1976 SZ3 = 1974 DF2 = 1978 ED3 = 1979 OL3 = 1980 WR2

Epoch 1986 June 19.0 ET = JDE 2446600.5

M	172.00917		(1950.0)	P	Q
n	0.27191443	Peri.	50.25768	-0.15524864	-0.98784410
a	2.3596563	Node	48.67538	+0.90307800	-0.14514625
e	0.1656547	Incl.	0.60029	+0.40043475	-0.05564718
P	3.62	H	14.0	G 0.25	

Residuals in seconds of arc

740216	879	0.1-	1.2+	Y	780306	095	0.5+	1.1-	801130 095	2.4+ 2.3+
740216	879	0.3+	1.3+	Y	790724	675	1.1-	2.8+	801210 095	2.9- 0.5+
760924	095	0.1+	0.7-		790724	413	1.4-	0.6+		
760929	095	1.7+	1.0-		790725	675	0.4+	2.3+		

1980 FR1 = 1983 VC1
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	166.70525	(1950.0)		P	Q
n	0.17546941	Peri.	71.45055	+0.79080313	-0.61103066
a	3.1598706	Node	326.18717	+0.53458759	+0.71789649
e	0.1319791	Incl.	3.67453	+0.29807133	+0.33356582
P	5.62	H	12.5	G 0.25	

Residuals in seconds of arc

800316	809	0.0	0.5+		800317	809	0.0	0.4-	831103 046	1.6- 0.8-
800316	809	0.4+	0.3-		800317	809	0.2+	0.2-	831106 046	0.4+ 1.3-
800316	809	0.5+	0.5+		800317	809	0.2-	0.4-	831106 046	0.3+ 0.5-
800316	809	0.0	0.3-		800323	809	0.8-	0.6+	831107 046	2.2+ 2.1+
800317	809	0.0	0.0		831103	046	0.7-	0.0	831107 046	0.5- 0.5+

1980 TL15 = 1980 XC = 1958 DE = 1958 DA1 = 1975 EJ3
The double designation 1958 DE = 1958 DA1 is by O. Kippes (NAZ 13, 3).
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	175.66625	(1950.0)		P	Q
n	0.29218653	Peri.	324.87793	-0.35276368	-0.93448433
a	2.2492106	Node	145.70660	+0.87675326	-0.34799549
e	0.0912200	Incl.	4.87945	+0.32689678	-0.07508779
P	3.37	H	13.5	G 0.25	

Residuals in seconds of arc

580222	024	3.4-	0.1-		750316	095	1.8+	2.5-	801016 323	2.7+ 0.7+
580224	760	0.8+	0.3-		801010	323	0.1-	1.8-	801210 381	0.2- 3.5+
580224	760	2.4+	0.4-		801010	323	1.4-	1.3-	801210 381	1.3- 0.7-
750314	095	1.8-	2.3+		801016	323	0.2+	0.6-		

1981 UC1 = 1981 SN5 = 1948 NA = 1970 QK1 = 1974 VH1
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	156.15820	(1950.0)		P	Q
n	0.27210974	Peri.	244.45558	+0.70784155	+0.70571326
a	2.3585270	Node	70.64004	-0.63590055	+0.65541939
e	0.2076243	Incl.	1.85147	-0.30755621	+0.26906174
P	3.62	H	13.5	G 0.25	

Residuals in seconds of arc

480705	078	(3.6-	32.1-)X		741117	095	0.5+	2.4+	811030 704	1.1+ 2.6-
700831	095	0.2-	0.3+		810925	095	0.3+	0.8+	811030 704	0.5+ 1.9-
741112	095	0.7-	1.5-		811024	095	1.5-	2.2+	811031 704	0.1+ 0.6+

1981 UT15 = 1981 UV5 = 1976 UD2
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	27.52718	(1950.0)		P	Q
n	0.20540723	Peri.	359.47836	+0.99848981	-0.05490260
a	2.8448526	Node	3.67062	+0.05051138	+0.90348898
e	0.0730575	Incl.	1.74805	+0.02160345	+0.42508042
P	4.80	H	13.0	G 0.25	

Residuals in seconds of arc

761024	381	0.5+	0.0		811024	095	0.0	1.1-	811030 381	3.3+ 0.3-
761024	381	0.9-	0.1-		811024	095	0.0	2.5-	811030 381	3.2- 0.2-
761026	095	0.4+	0.1+		811024	095	0.1-	4.0+		

1981 YX1 = 1951 WH1 = 1957 HR = 1958 UB = 1972 HD = 1973 TR = 1977 TK7
= 1977 VH2 = 1979 FL1 = 1980 OJ
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	237.75939	(1950.0)	P	Q
n	0.26334426	Peri. 34.31557	-0.04496419	+0.99560945
a	2.4105770	Node 233.24365	-0.93796008	-0.07035820
e	0.0492958	Incl. 5.88143	-0.34381552	+0.06173778
P	3.74	H 12.5	G 0.25	

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

511129	711	(31.0+	2.5+)Y	731001	095	6.5+	4.0+	800717	095	4.7-	1.0+
570424	076	(0.08+	0.03+)X	771010	095	2.4+	2.4-	800721	095	0.4+	4.0+
581016	760	2.1-	4.5-	771106	095	1.8+	0.2+	811125	095	4.4-	0.3+
581016	760	1.8+	4.8-	790323	095	0.9+	2.2-	811220	330	0.7+	4.2+
720418	095	(14.7+	13.6-)	790329	095	1.0+	2.5-	811223	330	5.0-	5.0+

1981 YY1 = 1982 BJ8 = 1971 SQ = 1985 QG
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	7.15816	(1950.0)	P	Q
n	0.21173059	Peri. 289.88385	+0.40784466	-0.90721155
a	2.7879255	Node 135.59514	+0.88309621	+0.36325450
e	0.2128278	Incl. 8.47316	+0.23195651	+0.21216354
P	4.66	H 13.0	G 0.25	

Residuals in seconds of arc

710916	808	0.2-	0.8+	820120	330	2.6+	2.8-	850912	688	3.2+	1.1+
811220	330	1.0+	0.4-	850822	688	0.2-	1.7-	850912	688	3.1-	0.5-
811223	330	3.5-	3.0+	850822	688	0.4+	0.4-				

1982 UV1 = 1971 SA2
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	257.23561	(1950.0)	P	Q
n	0.18116204	Peri. 254.51454	+0.99115074	-0.12374998
a	3.0933242	Node 112.57477	+0.13270893	+0.91582070
e	0.1753572	Incl. 2.98114	+0.00292452	+0.38204500
P	5.44	H 12.5	G 0.25	

Residuals in seconds of arc

710923	095	0.2+	1.3+	821016	046	1.4-	2.4-	821021	046	0.7-	1.7+
711011	095	0.1-	1.4-	821020	046	0.8+	0.4+	821021	046	1.6+	0.9+
821016	046	0.0	0.7-	821020	046	0.4-	0.2+				

1982 VJ11 = 1982 XY = 1949 UN = 1951 GR = 1973 FM1
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	261.14088	(1950.0)	P	Q
n	0.27024287	Peri. 80.61691	-0.87996244	-0.45888729
a	2.3693766	Node 71.98397	+0.36914039	-0.82328765
e	0.0756962	Incl. 7.42155	+0.29900078	-0.33409565
P	3.65	H 12.5	G 0.25	

Residuals in seconds of arc

491028	760	(44.9+	6.6+)X	821110	330	0.0	0.7-	821214	381	1.1+	0.1+
510402	711	17.7+	2.7- Y	821117	330	0.8-	0.0	821214	381	0.3-	0.1-
510402	711	18.6-	0.9+ Y	821213	381	0.1-	0.5+				
730327	095	1.1+	2.0+	821213	381	0.2-	0.8+				

1983 AE1 = 1983 CW3 = 1952 DO = 1959 RE = 1974 OL
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	149.69195	(1950.0)	P	Q
n	0.19179982	Peri. 309.46883	-0.52030944	+0.80875417
a	2.9778635	Node 287.07333	-0.66856181	-0.58555141
e	0.1332850	Incl. 16.66998	-0.53132211	-0.05519274
P	5.14	H 11.0	G 0.25	

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

520226	760	0.1+ 0.5+	740725	095	0.1- 0.4+	830122	688	0.3- 0.5+
520226	760	0.5+ 0.5+	830112	688	0.1- 0.2+	830122	688	1.1+ 0.9+
590907	760	(0.03- 0.00-)X	830112	688	0.5- 0.5+	830210	330	0.6- 2.7-

1983 XU = 1972 XF2 = 1972 YF1 = 1982 QT
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	165.68359	(1950.0)		P	Q
n	0.17879370	Peri.	2.78716	+0.23155997	-0.97206024
a	3.1205808	Node	73.82611	+0.89172512	+0.19628989
e	0.1622418	Incl.	2.29479	+0.38885253	+0.12872132
P	5.51	H	12.5	G 0.25	

Residuals in seconds of arc

721201	095	4.6- 2.8-	831204	046	1.5- 1.5+	831205	046	0.4+ 0.3+
721230	095	5.1+ 1.9-	831204	046	1.0- 1.4+			
820817	801	0.2+ 0.5-	831205	046	1.5+ 1.4+			

* * * * *

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

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

Comet Shoemaker (1986b)
Epoch 1986 Feb. 19.0 ET = JDE 2446480.5
T 1986 Mar. 11.39223 ET

q	3.5933131	(1950.0)		P	Q
z	+0.0153933	Peri.	123.61251	-0.93972814	+0.13309366
	+/-0.0003847	Node	294.16514	+0.05543066	+0.96824690
e	0.9446869	Incl.	159.80561	+0.33739956	+0.21162236

From 14 observations 1986 Mar. 4-May 10, mean residual 0".7.

Comet Machholz (1986e)
T 1986 Apr. 24.48473 ET

q	0.1436597	(1950.0)		P	Q
		Peri.	20.58964	-0.07618915	-0.22507051
		Node	89.55145	+0.72348704	-0.68283969
e	1.0	Incl.	76.26128	+0.68612077	+0.69503469

From 10 observations 1986 May 13-17.

Periodic Comet Singer Brewster (1986d)
T 1986 June 5.60371 ET

q	1.9313331	(1950.0)		P	Q
n	0.16372035	Peri.	44.49861	-0.54840285	+0.83553115
a	3.3092858	Node	192.37257	-0.80442381	-0.53816025
e	0.4163897	Incl.	9.07439	-0.22837832	-0.11077561
P	6.02				

From 13 observations 1986 May 3-13.

(3438)* 1974 SD5 = 1942 RD = 1969 TC4

Discovered 1974 Sept. 21 at the El Leoncito Station of the Felix Aguilar Observatory. The identifications 1974 SD5 = 1942 RD and 1974 SD5 = 1969 TC4 are by L. Oterma and by L. D. Schmadel, respectively (MPC 7598).
Epoch 1986 June 19.0 ET = JDE 2446600.5

M	79.07715	(1950.0)		P	Q
n	0.18509986	Peri.	346.25216	+0.98036992	+0.19683637
a	3.0492895	Node	2.48270	-0.14661045	+0.76647153
e	0.1992835	Incl.	15.27665	-0.13183398	+0.61137290
P	5.32	H	13.0	G 0.25	

Residuals in seconds of arc

420907	062	1.3-	0.7-		421003	062	0.5-	0.4+		741019	808	0.6+	0.8-
420908	062	0.1-	0.4+		691011	095	0.0	0.1+		741019	808	0.8+	0.8-
420908	062	0.1+	1.3-		740921	808	1.1-	0.1+		850912	801	0.0	1.1+
420910	024	1.8+	1.8+		740921	808	0.2+	0.1+		851016	801	0.3-	0.8-
420915	062	1.9-	0.6-		741010	808	0.5+	0.5+					
420915	062	1.0+	0.6+		741010	808	0.4+	0.2-					

(3439)* 1983 RL2 = 1974 QR1 = 1979 UN4 = 1981 AB3

Discovered 1983 Sept. 4 by E. Bowell at the Anderson Mesa Station of the Lowell Observatory. The identifications 1983 RL2 = 1974 QR1 = 1981 AB3 are by K. Hurukawa and W. Landgraf (MPC 8382), who found them independently. The identification 1983 RL2 = 1979 UN4 was also found by Landgraf.

Epoch 1986 June 19.0 ET = JDE 2446600.5

M	256.03532		(1950.0)	P	Q
n	0.21679175	Peri.	282.13222	+0.34141218	+0.93984566
a	2.7443587	Node	7.85863	-0.82694467	+0.30607429
e	0.1356135	Incl.	4.74386	-0.44676641	+0.15168608
P	4.55	H	14.5	G 0.25	

Residuals in seconds of arc

740824	095	0.9+	4.0-		830903	809	1.8-	0.4+		830909	809	0.0	0.9+
740911	095	2.2+	2.7-		830903	809	0.6-	0.4-		830910	688	0.2-	0.0
791017	095	0.1+	0.1+		830904	809	0.8-	0.0		830910	688	0.4-	1.1-
810108	381	0.1+	1.0+		830904	809	0.5-	0.1-		830912	809	0.1-	1.1+
810108	381	0.1-	1.2-		830904	809	0.4-	0.1+		830912	809	0.2-	0.9+
810108	381	0.9+	0.3+		830904	688	0.7-	1.0-		830912	809	0.1+	0.6+
830813	688	1.3+	0.7+		830904	688	0.7+	0.3-		830912	688	0.1-	2.0-
830813	688	0.2+	1.8+		830906	809	1.3-	1.2+		830912	688	0.4-	0.1-
830901	809	1.0-	0.3+		830906	809	1.6-	1.1+		830916	809	(23.5-	0.9-)
830901	809	0.7-	0.3+		830906	809	1.4-	1.2+		830916	809	(23.5-	1.1-)
830901	809	0.5-	0.3+		830906	688	1.5+	1.0-		841127	801	0.8-	0.9+
830902	688	1.6+	1.5-		830906	688	2.7+	1.1-		860204	801	2.0-	0.2+
830902	688	0.7+	1.2-		830908	809	0.3-	0.8+		860306	688	2.5+	2.0-
830902	809	0.1+	0.5+		830908	809	(5.8-	0.3-)		860306	688	0.3+	0.7+
830902	809	0.3+	0.3+		830908	809	1.5+	1.1+		860413	801	2.2-	0.0
830902	809	0.5+	0.5+		830909	809	0.0	0.9+					
830903	809	0.7-	0.3-		830909	809	0.1+	0.9+					

1971 QU = 1957 WZ = 1962 WS = 1966 PB = 1970 GC2 = 1970 JK = 1970 JQ = 1980 JW = 1985 HO1

The identifications are by S. Nakano.

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	354.90235		(1950.0)	P	Q
n	0.19716394	Peri.	70.05692	+0.71832112	+0.69116547
a	2.9236042	Node	246.12717	-0.66634077	+0.65068717
e	0.0883112	Incl.	4.98146	-0.20001186	+0.31447814
P	5.00	H	12.0	G 0.25	

Residuals in seconds of arc

571126	760	0.4-	1.7+		700412	805	0.6-	0.2-		850424	688	0.5+	1.2-
571126	760	0.1+	1.7+		700502	805	0.7+	0.4+		850424	688	2.2+	1.7-
621124	760	(21.5+	14.5-)X		700508	805	0.4+	0.5+		850521	688	0.3+	2.3+
660813	095	0.1-	1.5-		710818	095	1.2+	0.9+		850521	688	1.8-	2.3+
700412	805	0.1+	1.3-		710824	095	1.4-	1.3+					
700412	805	0.1-	1.4-		800510	095	0.7-	3.5+					

1975 VK2 = 1975 WY1 = 1985 RY2

The double designation 1975 VK2 = 1975 WY1 is by H. Oishi (JAM 735).

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	33.58744	(1950.0)		P	Q
n	0.18993507	Peri.	276.71248	+0.99862733	-0.01211534
a	2.9973225	Node	83.99045	+0.03162780	+0.91497018
e	0.1048436	Incl.	2.93707	-0.04175088	+0.40333954
P	5.19	H	13.5	G 0.25	

Residuals in seconds of arc

751102	095	0.6-	0.1+	850910	809	0.0	1.9-	850916	809	1.3-	1.0-
751107	095	0.8-	1.2-	850911	809	1.4-	0.4-	850917	809	1.1-	0.2-
751128	381	0.5-	0.5+	850911	809	1.2-	0.4-	850917	809	1.0-	0.3-
751128	381	1.6-	0.7-	850911	809	1.1-	0.4-	850918	809	1.0-	0.4-
850905	809	0.4-	0.5-	850915	809	1.0-	1.7-	850920	809	0.1-	1.8-
850905	809	0.3-	0.4-	850915	809	0.8-	1.4-	850920	809	0.0	1.7-
850905	809	0.0	0.2-	850915	809	0.8-	1.3-	850920	809	0.1+	1.7-
850910	809	0.4-	1.4-	850916	809	1.4-	1.0-				
850910	809	0.2-	1.5-	850916	809	1.3-	1.1-				

1979 SU9 = 1978 NU7

The identification is by S. J. Bus.

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	66.83725	(1950.0)		P	Q
n	0.17914031	Peri.	35.01355	+0.82501587	-0.56510956
a	3.1165544	Node	359.39634	+0.51725213	+0.75518699
e	0.1651735	Incl.	0.29941	+0.22759404	+0.33218037
P	5.50	H	12.0	G 0.25	

Residuals in seconds of arc

780705	675	0.6-	0.4-	790928	095	0.3+	0.6-	791116	095	0.1+	0.6+
780706	675	0.6+	0.3+	791016	095	0.5-	1.5+				
790922	095	0.0	0.0	791111	095	0.1+	1.4-				

1979 SQ11 = 1951 WE1 = 1978 NT7

The key identification 1979 SQ11 = 1978 NT7 is by S. J. Bus.

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	74.87326	(1950.0)		P	Q
n	0.17337047	Peri.	300.19930	+0.98234799	-0.18691685
a	3.1853231	Node	70.57445	+0.17419804	+0.89969372
e	0.1661338	Incl.	0.44856	+0.06817230	+0.39447853
P	5.68	H	12.0	G 0.25	

Residuals in seconds of arc

511129	711	(2.4+	11.8+)Y	780706	675	1.1-	1.2+	791116	095	0.7-	0.2-
511129	711	0.7-	3.1+ Y	790924	095	0.2+	0.9-	791122	095	0.0	0.0
780705	675	0.9+	0.8+	791014	095	1.2+	0.8-				

1981 EO11

The 1978-1979 observations were found by S. J. Bus.

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	161.68596	(1950.0)		P	Q
n	0.27318023	Peri.	257.13754	-0.99954806	+0.00096920
a	2.3523615	Node	282.91208	+0.01125733	-0.91468467
e	0.1655257	Incl.	1.76642	-0.02787379	-0.40416707
P	3.61	H	16.0	G 0.25	

Residuals in seconds of arc

780707	675	0.8-	0.1+		810311	413	2.2-	0.0		810406	413	0.5+	0.4+
780709	675	0.7+	0.2+		810311	413	0.1-	0.9-		810407	413	1.3-	1.6+
791018	675	3.3-	1.3-		810311	413	0.4-	0.7+		810407	413	1.6+	0.3+
791018	675	2.9+	2.4+		810311	413	1.2+	0.4-		810407	413	2.2+	0.2-
810209	413	2.2+	0.0		810315	413	2.0-	0.1-		810408	413	0.5-	1.0+
810213	413	0.3-	0.6-		810315	413	0.6-	0.6-		810408	413	1.2+	1.0-
810302	413	1.2+	0.1-		810316	413	2.3-	1.3+		810411	413	1.1-	0.6+
810303	413	1.0+	0.1-		810316	413	0.2-	1.4+		810411	413	0.2-	0.3-
810307	413	1.2-	0.9+		810329	413	0.1+	0.0		810412	413	1.0-	1.2+
810307	413	0.7+	0.2-		810329	413	1.0+	0.2-		810412	413	2.6+	0.9-
810307	413	1.9-	0.2-		810405	413	1.7+	0.9-		810430	413	1.3-	1.1-
810307	413	0.4-	0.4-		810405	413	0.4-	0.7-		810502	413	1.4+	0.3-

1981 WQ = 1931 GJ = 1957 WB1 = 1976 JX1

The identification 1981 WQ = 1976 JX1 was suggested by L. D. Schmadel.

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	52.22278	(1950.0)	P	Q
n	0.28601618	Peri. 75.07957	-0.62448975	-0.77332542
a	2.2814442	Node 54.09378	+0.65450944	-0.59463076
e	0.1557321	Incl. 7.76631	+0.42618065	-0.21995919
P	3.45	H 13.0	G 0.25	

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

310409	690	2.3-	0.7-		811004	095	2.6-	3.1-		811124	688	0.5+	0.6+
310410	690	3.0+	0.0		811007	095	0.2-	1.3+		811202	688	1.9+	1.4+
310411	690	0.7-	1.0+		811023	095	0.8+	3.2-		860306	688	0.0	0.1+
571126	760(0.05+	0.02+)X			811027	095	0.4+	1.0+		860306	688	0.4-	0.5-
760502	095	0.4-	1.4-		811124	688	0.4-	0.6+					

1982 FN = 1982 HJ2

The double designation is by E. Bowell (MPC 7360).

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	359.08929	(1950.0)	P	Q
n	0.24157725	Peri. 32.56412	-0.86430076	+0.50254039
a	2.5532866	Node 177.32780	-0.50087252	-0.86374106
e	0.2099540	Incl. 26.65190	+0.04594470	+0.03747709
P	4.08	H 14.0	G 0.25	

Residuals in seconds of arc

820321	688	1.7-	3.3-		820331	688	3.8+	0.2+		820527	801	0.9-	1.3-
820321	688	0.9-	4.1-		820414	688	3.4+	1.0+		860306	688	2.0+	2.0-
820324	675	1.9+	2.5+		820414	688	2.0-	1.1+		860306	688	(2.6-	6.0+)
820324	675	0.5-	2.1+		820423	801	0.1-	0.0		860314	071	1.1-	3.0+
820328	688	0.1-	1.2+		820424	671	1.7-	0.2+		860314	071	0.9-	0.6+
820328	688	2.7+	1.3-		820425	033	1.5-	1.3+					
820331	688	2.0-	0.8-		820427	033	1.5-	0.2+					

1982 UO7 = 1972 TE2 = 1972 XD = 1980 BG3 = 1984 KJ

The key identification 1982 UO7 = 1984 KJ is by A. Lowe.

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	331.29180	(1950.0)	P	Q
n	0.29919058	Peri. 35.08577	-0.58032756	-0.81002417
a	2.2139695	Node 90.53138	+0.72658060	-0.56165780
e	0.0705442	Incl. 4.82720	+0.36783224	-0.16852706
P	3.29	H 13.5	G 0.25	

Residuals in seconds of arc

721008	095	0.5+	1.4-		821021	095	0.2-	0.3+		840522	046	2.0+	2.6-
721202	095	1.9+	2.2-		821023	095	0.7+	0.3-		840526	046	5.0-	3.0-
721206	095	0.9-	0.3-		821112	095	1.1-	2.1+		840526	046	1.1+	4.1+
800117	330	0.1-	1.0-		840522	046	1.3+	0.6-					

1984 DS = 1962 TB = 1965 OB = 1975 RF2 = 1978 JZ2 = 1985 RO3
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M 120.14799	(1950.0)	P	Q	
n 0.29844590	Peri. 137.37497	+0.43106042	+0.90195632	
a 2.2176508	Node 158.12168	-0.84531312	+0.41363407	
e 0.1892671	Incl. 3.95841	-0.31564638	+0.12402283	
P 3.30	H 14.5	G 0.25		

Residuals in seconds of arc

621001 760	1.3-	1.6+	850907 809	0.7-	0.0	850916 809	0.7+	0.2+
621001 760	0.2+	1.3+	850907 809	0.1-	0.0	850916 809	0.6+	0.0
650729 760(30.8+	32.2-)X		850907 809	0.4+	0.2-	850916 809	0.4+	0.0
750904 808	0.3-	0.9+	850910 809	0.5-	0.3+	850917 809	0.1+	0.1-
750904 808	0.3-	1.3+	850910 809	0.2-	0.1+	850917 809	0.2+	0.1-
780509 095(41.6-	10.3+)		850910 809	0.0	0.0	850917 809	0.4+	0.1-
840223 809	1.1-	1.2-	850911 809	0.5-	0.5-	850919 809	0.5+	1.2+
840223 809	0.3-	1.1-	850911 809	0.3-	0.6-	850919 809	0.4+	1.0+
840223 809	0.5+	0.9-	850911 809	0.0	0.8-	850919 809	0.2+	1.3+
840226 809	0.3+	0.4+	850912 809	1.0-	1.1-	850921 809	0.1+	0.0
840226 809	0.7+	0.4+	850912 809	0.8-	1.3-	850921 809	0.4+	0.0
840226 809	1.2+	0.4+	850912 809	0.6-	1.2-	850921 809	0.3+	0.1-
840301 809	0.5-	0.1+	850914 809	0.5+	0.7-	850922 809	0.4+	0.9-
840301 809	0.6-	0.1+	850914 809	0.4+	0.7-	850922 809	0.5+	0.8-
840301 809	0.8-	0.2+	850914 809	0.3+	0.7-			

1984 HR1 = 1985 RM4
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M 141.88308	(1950.0)	P	Q	
n 0.23562296	Peri. 234.89374	-0.05758899	+0.99713188	
a 2.5961224	Node 31.91215	-0.88301843	-0.02792513	
e 0.1497890	Incl. 5.33032	-0.46579177	-0.07034348	
P 4.18	H 13.5	G 0.25		

Residuals in seconds of arc

840428 809	0.0	0.8-	850914 809	0.7-	1.4+	850918 809	0.7+	0.6-
840428 809	0.6+	0.7-	850914 809	0.6-	1.5+	850919 809	0.5-	1.5-
840429 809	0.4-	0.3-	850914 809	0.4-	1.4+	850919 809	0.5-	1.5-
840429 809	0.3-	0.3-	850915 809	1.4+	0.4+	850919 809	0.4-	1.3-
840502 809	0.3-	0.3+	850915 809	1.4+	0.3+	850920 809	0.1+	0.1+
840502 809	0.9-	0.5+	850915 809	1.5+	0.3+	850920 809	0.3-	0.3+
840505 809	0.5+	0.6+	850916 809	1.1-	0.2-	850921 809	0.4+	0.3+
840505 809	0.7+	0.5+	850916 809	0.9-	0.3-	850921 809	0.3+	0.2+
850911 809	0.5-	0.3+	850916 809	0.6-	0.4-	850921 809	0.4+	0.1+
850911 809	0.5-	0.0	850918 809	0.5+	0.5-			
850911 809	0.3-	0.0	850918 809	0.6+	0.6-			

1985 XB
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M 34.50649	(1950.0)	P	Q	
n 0.35543363	Peri. 69.12180	-0.65631022	-0.60221797	
a 1.9737762	Node 70.80532	+0.37690579	-0.78355959	
e 0.2250630	Incl. 28.76890	+0.65360456	-0.15286562	
P 2.77	H 14.5	G 0.25		

From 18 observations 1985 Dec. 15-1986 Apr. 30, mean residual 1".9.

1985 YP = 1986 AF = 1986 CF
The triple designation is by F. N. Bowman; C. S. Shoemaker independently suggested the double designation 1986 AF = 1986 CF (MPC 10610).

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M 133.12349		(1950.0)	P	Q
n 0.43443093	Peri.	109.76307	+0.86198246	-0.42124431
a 1.7265921	Node	276.02539	+0.28921933	+0.86555665
e 0.1492140	Incl.	16.47483	+0.41633930	+0.27085958
P 2.27	H	15.0	G 0.25	

From 9 observations 1985 Dec. 18-1986 May 11, mean residual 1".3.

1986 JK

Epoch 1986 May 10.0 ET = JDE 2446560.5

M 349.43964		(1950.0)	P	Q
n 0.20040478	Peri.	232.34350	+0.41580415	+0.90884089
a 2.8919936	Node	62.25791	-0.82203162	+0.39128905
e 0.6899383	Incl.	2.16232	-0.38906417	+0.14457217
P 4.92	H	19.0	G 0.25	

From 17 observations 1986 May 4-18.

* * * * *

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

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

(3440)* 1950 DD = 1933 OH = 1979 HQ4 = 1980 RD3 = 1985 RX3

Discovered 1950 Feb. 17 by K. Reinmuth at Heidelberg. The double designation 1933 OH = 1933 QD1 (MPC 1749) is invalid.

Epoch 1986 June 19.0 ET = JDE 2446600.5

M 101.61164		(1950.0)	P	Q
n 0.21013919	Peri.	141.83546	+0.67930083	+0.73356558
a 2.8019778	Node	170.88753	-0.70141094	+0.65733196
e 0.0576839	Incl.	7.54050	-0.21580796	+0.17261587
P 4.69	H	12.0	G 0.25	

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

330724	024	0.5+	1.5-	850914	809	1.6+	0.7+	850919	809	0.8-	0.2-
330727	024	(0.01+	0.04+)	850915	809	0.9+	1.1+	850920	809	0.4-	0.1+
500217	024	2.5+	2.1-	850915	809	0.5+	0.7+	850920	809	0.2-	0.1+
500223	024	0.8-	0.3+	850915	809	0.1+	0.4+	850920	809	0.1+	0.1+
500308	024	2.5-	0.7-	850916	809	0.9-	0.4-	850920	809	0.3-	0.2+
790424	095	0.5+	1.4+	850916	809	0.2-	0.0	850920	809	0.3-	0.2+
800904	095	0.2-	2.4-	850916	809	0.5+	0.3+	850920	809	0.4-	0.3+
850908	809	0.6-	0.8-	850918	809	0.7-	0.0	850921	809	0.4+	0.1-
850908	809	0.5-	0.6-	850918	809	0.5-	0.1-	850921	809	0.5+	0.0
850908	809	0.6-	0.8-	850918	809	0.1-	0.1+	850921	809	0.6+	0.0
850911	809	0.1+	0.1-	850919	809	1.2-	0.1-	850921	809	0.8+	0.3-
850911	809	0.2+	0.1-	850919	809	1.1-	0.0	850921	809	0.9+	0.4-
850911	809	0.2+	0.0	850919	809	0.9-	0.1-	850921	809	1.0+	0.2-
850914	809	1.0+	0.8+	850919	809	0.9-	0.1-	850922	809	0.0	0.5+
850914	809	1.2+	0.7+	850919	809	0.7-	0.1-	850922	809	0.1+	0.5+

(3441)* 1969 TS1 = 1974 QS3 = 1977 DW9 = 1980 TG14 = 1985 RQ4

Discovered 1969 Oct. 8 by L. I. Chernykh at the Crimean Astrophysical Observatory. The identification 1969 TS1 = 1977 DQ (JAM 1507) is invalid.

Epoch 1986 June 19.0 ET = JDE 2446600.5

M 26.78024		(1950.0)	P	Q
n 0.18050456	Peri.	264.04271	+0.95404780	-0.29635710
a 3.1008250	Node	113.18956	+0.29045432	+0.87820266
e 0.1866837	Incl.	2.76432	+0.07368235	+0.37540986
P 5.46	H	12.5	G 0.25	

Residuals in seconds of arc

691008	095	0.1+	1.2+	801013	095	0.3+	3.1+	850917	809	0.1+	0.6+
691013	095	2.5+	3.6-	850914	809	0.1-	0.2-	850917	809	0.2+	0.6+
691015	095	5.1+	0.3+	850914	809	0.3+	0.1-	850917	809	0.2+	0.6+
691016	095	1.2+	0.1+	850914	809	0.4+	0.1-	850921	809	0.1+	1.3-
691104	095	3.8-	1.4-	850915	809	0.6-	0.4+	850921	809	0.0	1.3-
691111	095	2.5-	0.5-	850915	809	0.2-	0.4+	850921	809	0.1+	1.5-
691113	095	2.6-	0.2-	850915	809	0.2-	0.3+	850922	809	0.0	0.3-
740823	095	1.6+	0.9-	850916	809	1.0-	1.0+	850922	809	0.2+	0.2-
770219	381	0.9-	0.4-	850916	809	0.7-	1.0+	850922	809	0.1+	0.1-
770219	381	0.0	1.2-	850916	809	0.4-	0.9+				

(3442)* 1978 TO7 = 1929 AG = 1955 SL = 1980 BL5 = 1984 WY

Discovered 1978 Oct. 2 by L. Zhuravleva at the Crimean Astrophysical Observatory. The identification 1978 TO7 = 1984 WY was found independently by E. Bowell (MPC 9355).

Epoch 1986 June 19.0 ET = JDE 2446600.5

M	123.84883		(1950.0)	P	Q
n	0.17557177	Peri.	300.45005	+0.74231805	-0.63667320
a	3.1586360	Node	99.94254	+0.66413662	+0.65781394
e	0.1271306	Incl.	12.24058	+0.08880574	+0.40240286
P	5.61	H	11.5	G 0.25	

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

290108	029(0.02-	0.07+)X	841120	688	0.7+	0.4-	851215	801	0.3+	1.3+
550917	760	0.2-	0.2+	841120	688	0.6+	0.4+	860113	801	0.4-	0.6+
781002	095	1.0-	0.4+	841127	688	0.8+	0.4-	860306	688	1.2+	0.5+
781008	095	0.6-	1.3+	841127	688	2.7-	1.1-	860306	688	0.6-	0.0
781101	095	1.0+	0.1+	841223	095	0.7+	0.1-	860413	801	0.0	0.1-
800122	095	0.4+	0.1-	841227	095(15.0-		5.6+)				

(3443)* 1979 SB1 = 1938 LA = 1968 UP2 = 1971 FT = 1975 JJ = 1978 EH7 = 1986 JB

Discovered 1979 Sept. 26 at the Purple Mountain Observatory.

Epoch 1986 June 19.0 ET = JDE 2446600.5

M	334.29649		(1950.0)	P	Q
n	0.26661518	Peri.	111.63909	+0.43776675	+0.89892868
a	2.3908159	Node	184.43394	-0.88448770	+0.42719600
e	0.3093521	Incl.	12.66951	-0.16137467	+0.09711237
P	3.70	H	13.5	G 0.25	

Residuals in seconds of arc

380603	012	0.1-	1.0+	790924	095	0.3+	1.7-	791027	330	1.1+	1.0-
380604	012	0.1-	1.1-	790926	330	2.7+	0.2+	860502	675	1.2-	2.2+
681023	095	(3.2-	7.6-)	791011	330	1.1-	1.5+	860503	675	1.4-	1.3-
710319	095	(2.2-	15.3-)	791015	330	3.7-	3.5-	860503	675	0.4+	1.4-
750515	095	0.7+	0.8-	791019	330	0.6+	0.2+	860513	054	1.0+	0.7+
780305	095	0.1-	2.4-	791022	330	0.5+	2.2+	860513	054	0.3+	0.4-

(3444)* 1980 RJ2 = 1972 TD4 = 1984 QP

Discovered 1980 Sept. 7 by N. S. Chernykh at the Crimean Astrophysical Observatory. The identification 1980 RJ2 = 1972 TD4 is by L. D. Schmadel (MPC 9161).

Epoch 1986 June 19.0 ET = JDE 2446600.5

M	107.45661		(1950.0)	P	Q
n	0.24126163	Peri.	81.43641	+0.43008939	-0.90218769
a	2.5555078	Node	342.97414	+0.77779491	+0.38878210
e	0.2664376	Incl.	6.44574	+0.45832106	+0.18683107
P	4.09	H	12.5	G 0.25	

Residuals in seconds of arc

721005 095	1.4-	2.8+	840828 046	2.5-	1.8+	840925 688	1.5+	2.0-
800907 095	2.2+	0.1-	840829 046	0.9+	1.4+	841026 688	1.2+	0.8-
800908 095	1.2+	0.4-	840829 046	0.0	1.7+	860306 688	1.9+	1.3-
801008 095	1.2-	0.5-	840831 046	0.9-	0.1+	860306 688	1.4-	0.4+
801012 095	0.2-	0.5-	840831 046	0.5-	0.4-	860412 801	0.9+	3.4+
840828 046	1.9-	0.7+	840925 688	0.4+	0.8-			

(3445)* 1983 FC = 1952 DF = 1974 CK1

Discovered 1983 Mar. 16 by E. Barr at the Anderson Mesa Station of the Lowell Observatory.

Epoch 1986 June 19.0 ET = JDE 2446600.5

M 269.96543		(1950.0)	P	Q	
n 0.22372983	Peri.	198.82205	-0.98912785	-0.11904979	
a 2.6873245	Node	333.87368	+0.14696593	-0.82102709	
e 0.1251831	Incl.	11.30624	-0.00520749	-0.55833831	
P 4.41	H	12.5	G 0.25		

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

520220 020(0.14+ 0.00+)X			830316 688	1.2+	1.0+	851018 054	0.3-	0.5-
520220 711	2.0-	3.1- Y	830410 688	1.1-	0.2+	851018 054	0.1+	0.0
520228 020(0.09+ 0.01-)X			830410 688	1.1+	0.3+	851107 054	0.3+	0.0
740215 095	1.1+	1.8+	830507 688	2.8-	2.3-	851113 054	0.1+	0.2+
830316 688	2.1+	0.6+	830507 688	0.3-	1.0+			

1977 QJ2 = 1985 QA4

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M 95.83087		(1950.0)	P	Q	
n 0.24249985	Peri.	339.70651	+0.47341774	+0.87859562	
a 2.5468064	Node	318.48260	-0.79447388	+0.39511909	
e 0.1303919	Incl.	5.43758	-0.38037730	+0.26823617	
P 4.06	H	13.0	G 0.25		

Residuals in seconds of arc

770821 095	0.1-	0.2-	850908 809	0.3-	0.9-	850914 809	1.1-	0.4-
770823 095	0.1-	0.0	850908 809	0.1-	0.9-	850914 809	0.9-	0.6-
770909 095	1.0+	0.0	850908 809	0.1-	1.0-	850915 809	0.8+	0.2-
850819 071	0.3-	0.6-	850909 809	0.3+	0.1-	850915 809	0.5+	0.1-
850819 071	1.1-	0.1-	850910 809	0.5+	0.1-	850915 809	0.3+	0.2-
850819 071	1.7+	2.5+	850910 809	0.9+	0.2-	850916 809	1.2-	1.0+
850820 071	2.6+	1.9+	850911 809	0.3-	0.5-	850916 809	1.2-	0.9+
850904 809	1.0-	2.3-	850911 809	0.2-	0.5-	850916 809	1.0-	0.9+
850904 809	1.2-	2.2-	850911 809	0.0	0.4-	850919 809	0.1+	0.8+
850904 809	1.2-	2.3-	850912 809	0.3-	0.2-	850919 809	0.0	0.7+
850906 809	0.5-	1.1-	850912 809	0.2-	0.3-	850919 809	0.0	0.6+
850906 809	0.4-	1.1-	850912 809	0.3-	0.3-			
850906 809	0.1-	1.1-	850914 809	1.0-	0.4-			

1982 BQ = 1965 AD1 = 1986 JO

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M 61.39092		(1950.0)	P	Q	
n 0.28999723	Peri.	47.20543	-0.99351302	-0.07349464	
a 2.2605165	Node	128.39173	+0.04067529	-0.94227759	
e 0.0963574	Incl.	6.35664	+0.10619514	-0.32666723	
P 3.40	H	13.5	G 0.25		

Residuals in seconds of arc

650111 330	0.1-	0.9-	820121 046	1.0+	0.5+	820128 046	0.9+	0.5+
820118 688	0.4+	0.6-	820121 046	0.1+	0.1+	860502 675	0.1-	0.9-
820118 688	0.8-	0.6-	820125 046	0.4-	1.5-	860502 675	0.2-	0.2-
820120 046	0.8-	3.5+	820125 046	1.1-	1.9-	860503 675	0.2+	1.3+
820120 046	0.2-	0.2+	820127 046	1.0+	0.1-			

1982 KC1 = 1974 HS2 = 1978 AF = 1978 JJ2 = 1986 JF
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	12.61688	(1950.0)	P	Q
n	0.24573588	Peri. 12.13751	-0.68948451	+0.72232679
a	2.5243982	Node 214.31537	-0.67217772	-0.66560299
e	0.1313645	Incl. 5.43880	-0.26979295	-0.18766107
P	4.01	H 13.0	G 0.25	

Residuals in seconds of arc

740424	805	0.3+	2.8-	820515	675	0.1+	0.6-	820524	675	2.2+	1.5-
740425	805	1.2+	1.7-	820516	675	1.3-	0.2-	820524	675	1.1+	0.0
780112	809	0.1-	0.3+	820516	675	1.7-	1.7+	860502	675	0.3+	1.1+
780113	809	0.9+	0.2-	820517	675	0.1-	0.7-	860502	675	0.6+	1.1-
780506	095	1.4-	0.1-	820518	675	0.2-	1.0+	860503	675	(9.5-	0.1+)

1984 QO = 1980 RP2
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	98.03659	(1950.0)	P	Q
n	0.24053166	Peri. 89.19130	+0.29029222	-0.95438782
a	2.5606806	Node 343.41351	+0.75147734	+0.27252718
e	0.2587239	Incl. 14.15660	+0.59246286	+0.12195424
P	4.10	H 12.5	G 0.25	

Residuals in seconds of arc

800908	095	0.1+	0.2-	840925	688	1.6+	0.6-	860309	071	1.1-	1.2-
840828	046	0.1+	0.1+	840925	688	2.4+	1.1-	860309	071	0.1+	1.9-
840828	046	(2.6+	6.1-)	840928	688	1.0+	1.7-	860309	071	(1.4-	4.8+)
840829	046	1.3-	0.8-	840928	688	2.6+	0.9-	860309	071	1.3-	0.5-
840829	046	1.3-	0.5+	841223	801	1.4+	0.9+	860314	071	1.0-	0.7-
840831	046	(6.2-	1.0-)	860306	688	1.1-	0.1+	860314	071	0.4-	0.3-
840831	046	2.8-	0.1-	860306	688	1.5+	0.6-	860413	801	0.1+	0.6+

1984 WX = 1984 YM2 = 1981 FL1 = 1986 CN
The double designation 1984 WX = 1984 YM2 is by F. Bowman (MPC 10151).
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	261.23538	(1950.0)	P	Q
n	0.18817151	Peri. 165.13621	+0.07530573	+0.97979744
a	3.0160208	Node 108.91260	-0.93365913	+0.13452686
e	0.0718419	Incl. 11.29414	-0.35015663	-0.14798483
P	5.24	H 12.0	G 0.25	

Residuals in seconds of arc

810331	095	0.2-	0.6-	841127	688	2.5+	1.0-	860215	046	(47.5-	46.0+)
841120	688	1.9-	0.5+	841223	095	0.4+	0.3-	860215	046	(50.6-	46.9+)
841120	688	1.3+	0.2+	860207	046	0.3-	0.3-	860413	801	0.4+	1.0+
841127	688	2.3-	0.7+	860207	046	0.0	0.2+				

1985 WA
Epoch 1986 June 19.0 ET = JDE 2446600.5

M	47.23757	(1950.0)	P	Q
n	0.20531744	Peri. 350.87990	+0.82693982	-0.55023392
a	2.8456763	Node 43.17465	+0.52595333	+0.68407277
e	0.6016134	Incl. 9.74509	+0.19885582	+0.47883931
P	4.80	H 19.0	G 0.25	

From 31 observations 1985 Nov. 16-1986 Jan. 19, mean residual 0".8.

1986 EO = 1964 WH = 1972 XA2 = 1976 YB4
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	62.79845	(1950.0)		P	Q
n	0.24236139	Peri.	47.78039	-0.61927808	-0.73094113
a	2.5477763	Node	82.80898	+0.60790398	-0.67748063
e	0.0824244	Incl.	16.79888	+0.49693804	-0.08212825
P	4.07	H	12.0	G 0.25	

Residuals in seconds of arc

641129	760	0.5-	0.1-	761218	095	0.1+	2.0+	860404	675	0.1+	0.6-
641129	760	1.1+	0.4-	761220	095	0.7-	4.5-	860405	675	1.4-	0.7+
641203	330	1.2-	1.2+	860305	675	0.8+	0.6-				
721201	095	1.1+	2.1+	860305	675	0.3+	0.7+				

* * * * *

ORBITAL ELEMENTS BY D. W. E. GREEN, SMITHSONIAN ASTROPHYSICAL OBSERVATORY.

The 1978 observations of the 1981 UCAS objects were found by S. J. Bus.

1981 EN = 1981 EG35

The double designation is by W. Landgraf and A. Lowe (MPC 8665), who found it independently.

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	175.34856	(1950.0)		P	Q
n	0.27044430	Peri.	349.85451	-0.89496475	-0.44364735
a	2.3681999	Node	163.56038	+0.42007482	-0.87350988
e	0.1609228	Incl.	9.57307	+0.15025062	-0.20039342
P	3.64	H	14.5	G 0.25	

Residuals in seconds of arc

780705	675	0.8-	0.0	810303	413	0.2-	0.3-	810308	809	0.7+	0.8+
780706	675	0.9+	0.1+	810304	809	0.4+	1.3-	810308	809	1.0+	0.7+
810209	413	0.4-	0.3+	810304	809	0.8+	1.1-	810308	809	1.0+	0.9+
810213	413	0.1-	0.3-	810304	809	1.3+	0.9-	810309	809	0.5+	1.4+
810301	809	1.1-	0.7-	810305	809	0.3+	0.2+	810309	809	0.4+	1.4+
810301	809	0.2-	0.7-	810305	809	0.1-	0.0	810309	809	0.4+	1.4+
810301	809	0.7+	0.5-	810305	809	0.6-	0.3-	810309	809	1.1+	1.4+
810302	809	0.8-	0.3+	810306	809	0.2+	0.4+	810310	809	0.6+	0.9-
810302	809	0.4-	0.0	810306	809	0.5+	0.0	810310	809	0.8+	0.8-
810302	809	0.2-	0.0	810306	809	0.8+	0.5-	810310	809	1.1+	0.8-
810302	413	0.1-	0.4+	810307	809	0.9-	0.6-	810316	809	0.4-	0.0
810303	809	0.1+	0.3+	810307	809	0.7-	0.7-	810316	809	0.3-	0.1+
810303	809	0.6-	0.4+	810307	809	0.7-	0.9-	810316	809	0.1+	0.1+
810303	809	1.5-	0.2+	810307	413	0.6-	1.9+	810317	809	2.6-	0.6-
810303	413	1.7-	0.8+	810307	413	0.3+	0.2+	810317	809	1.0-	1.7-

1981 EH4

Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	250.92100	(1950.0)		P	Q
n	0.23227780	Peri.	138.37882	+0.98612309	-0.12641462
a	2.6209885	Node	229.21563	+0.08772973	+0.94711499
e	0.2317380	Incl.	8.17082	+0.14094231	+0.29494498
P	4.24	H	14.0	G 0.25	

Residuals in seconds of arc

780705	675	0.7-	0.3-	810302	413	2.8+	1.4-	810312	413	1.4-	1.0+
780706	675	0.6+	0.0	810307	413	0.7-	1.2+	810312	413	1.4+	1.7-
810202	413	0.8+	1.4-	810307	413	1.1+	0.1+	810409	413	1.9-	0.7+
810214	413	0.7+	1.0-	810310	413	0.6-	0.9+	810409	413	0.3+	0.8-
810302	413	4.5-	1.9+	810310	413	1.7+	0.1+	810429	413	0.5+	0.4-

1981 EF5 = 1975 VK3
The identification was suggested by L. D. Schmadel.
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	159.60688	(1950.0)		P	Q
n	0.23559053	Peri.	223.81700	+0.04515865	-0.99090619
a	2.5963607	Node	224.05723	+0.95937096	+0.07839103
e	0.2117309	Incl.	10.50234	+0.27851043	-0.10936071
P	4.18	H	14.5	G 0.25	

Residuals in seconds of arc

751102	095	3.8-	0.7-	810302	413	0.1-	0.4-	810312	413	1.1-	0.7+
751107	095	3.4+	3.1+	810302	413	1.8+	0.1+	810312	413	0.9+	0.5-
780705	675	0.6-	1.1+	810307	413	1.6-	1.2+	810409	413	0.6+	0.8+
780706	675	0.4+	0.2-	810307	413	0.2-	0.3-	810409	413	1.5+	0.3-
810209	413	1.3-	0.8-	810310	413	1.4-	0.9+	810503	413	1.1+	1.9+
810209	413	0.4+	1.1-	810310	413	0.5+	0.8-				

1981 ED6
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	30.16811	(1950.0)		P	Q
n	0.24123138	Peri.	65.98860	+0.24376622	+0.96164644
a	2.5557265	Node	218.80923	-0.94665424	+0.20775161
e	0.2921703	Incl.	11.57507	-0.21076948	+0.17909602
P	4.09	H	16.0	G 0.25	

Residuals in seconds of arc

781026	675	1.5-	1.6-	810307	413	1.5-	0.7-	810409	413	1.8-	1.3+
781027	675	1.6+	1.3+	810310	413	1.3-	1.1+	810409	413	1.2+	1.9-
810209	413	0.1+	0.8+	810312	413	1.3-	0.2+				
810307	413	0.6+	0.5+	810312	413	3.9+	1.5-				

1981 ET8
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	122.14342	(1950.0)		P	Q
n	0.26501771	Peri.	353.15999	-0.89790047	+0.43866144
a	2.4004186	Node	212.93727	-0.40058362	-0.84885873
e	0.0610537	Incl.	3.87602	-0.18250342	-0.29498304
P	3.72	H	14.5	G 0.25	

Residuals in seconds of arc

780707	675	1.2-	1.1+	810311	413	0.4-	0.4+	810407	413	1.5+	0.7-
780708	675	1.4+	0.3+	810311	413	1.5+	1.1-	810410	413	0.3-	0.6+
810209	413	0.3-	1.0+	810315	413	0.7+	1.3-	810410	413	0.7+	1.0-
810213	413	0.5-	0.6+	810405	413	2.9-	0.9+	810412	413	1.4-	1.6+
810301	413	0.2+	0.5+	810405	413	0.0	0.6-	810412	413	2.3+	1.2-
810301	413	2.7+	1.1-	810406	413	2.0-	0.6+	810430	413	0.5+	0.1-
810307	413	0.8+	0.2+	810406	413	0.0	0.8-	810502	413	0.7+	0.1-
810307	413	1.5+	0.9-	810407	413	1.6-	1.6+				

1981 ER10
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	15.06705	(1950.0)		P	Q
n	0.28599085	Peri.	97.48987	+0.99121744	+0.12675276
a	2.2815789	Node	255.23368	-0.13140580	+0.91204764
e	0.1514875	Incl.	2.23473	-0.01484910	+0.39000364
P	3.45	H	15.5	G 0.25	

Residuals in seconds of arc

780509	675	0.2-	0.8+	810307	413	1.5+	0.6+	810406	413	0.6+	0.1-
780510	675	0.3+	0.2-	810311	413	2.1-	1.0+	810407	413	2.6-	1.3+
810213	413	0.3-	0.8+	810311	413	1.6+	0.6-	810407	413	0.4+	0.7-
810301	413	0.5-	0.5+	810315	413	2.2-	0.3+	810412	413	0.2+	0.4-
810301	413	1.6+	0.3-	810315	413	1.2+	0.0	810430	413	0.3+	1.0-
810307	413	1.0+	0.1-	810406	413	0.2+	0.7-	810502	413	1.5-	1.5-

1981 EN12
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	149.09825		(1950.0)	P	Q
n	0.28274761	Peri.	333.90711	-0.74615602	+0.66437557
a	2.2989928	Node	247.79642	-0.60237068	-0.70124702
e	0.1283108	Incl.	2.66724	-0.28355027	-0.25856860
P	3.49	H	15.0	G 0.25	

Residuals in seconds of arc

780707	675	0.1-	0.1-	810306	413	1.0-	1.1+	810408	413	0.6+	0.7+
780708	675	0.0	0.4-	810308	413	2.1-	0.0	810408	413	3.2+	1.1-
810212	413	1.3+	0.5-	810308	413	0.3-	0.5-	810409	413	0.1-	0.0
810213	413	1.3-	1.5+	810312	413	0.6-	0.8+	810409	413	1.4+	1.5-
810214	413	0.3-	0.8-	810312	413	0.3+	0.2-	810501	413	0.0	0.2+
810301	413	1.1-	0.4+	810406	413	1.1-	0.3+	810503	413	1.9-	2.1+
810301	413	0.5+	0.6-	810406	413	2.2+	1.4-				

1981 EH13
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	26.22863		(1950.0)	P	Q
n	0.26523306	Peri.	64.63733	+0.77491875	+0.63002164
a	2.3991191	Node	256.26905	-0.59703362	+0.70326478
e	0.2160146	Incl.	2.99356	-0.20748924	+0.32938031
P	3.72	H	15.5	G 0.25	

Residuals in seconds of arc

780707	675	0.7+	0.1-	810308	413	0.6-	1.2+	810408	413	0.7+	3.8-
780708	675	0.7-	0.2+	810308	413	1.2+	0.4-	810409	413	0.3-	0.6-
810212	413	0.1-	0.2+	810312	413	1.4+	0.5+	810503	413	0.6-	2.4+
810212	413	2.4-	0.6+	810312	413	0.9+	0.1+				
810301	413	0.7-	0.3+	810408	413	0.0	0.1-				

1981 EW13
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	163.60623		(1950.0)	P	Q
n	0.26027607	Peri.	241.34399	-0.88515140	-0.46427618
a	2.4294842	Node	270.97781	+0.43694991	-0.80655532
e	0.0772504	Incl.	1.77081	+0.15994301	-0.36594556
P	3.79	H	15.5	G 0.25	

Residuals in seconds of arc

780707	675	0.3+	0.6+	810306	413	0.6+	0.6+	810408	413	0.2-	0.1-
780708	675	0.4-	0.8+	810308	413	0.7-	0.7+	810408	413	2.7+	0.8-
810212	413	0.4-	0.6-	810308	413	0.4+	0.5+	810409	413	1.1-	0.4+
810212	413	0.4-	0.8-	810311	413	0.7-	0.5-	810409	413	0.8+	0.4-
810301	413	1.3-	1.6+	810311	413	0.8-	0.0	810410	413	0.8-	0.1+
810301	413	1.8+	0.0	810312	413	1.4-	1.8+	810410	413	0.5+	2.1-
810302	413	0.2+	0.4+	810312	413	1.7+	0.5+	810501	413	1.3+	0.9-
810306	413	2.6-	0.1-	810315	413	0.7-	0.4-	810503	413	0.3-	0.9-
810306	413	0.2+	1.1+	810405	413	0.4+	1.1+				

1981 EX13
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	247.16434	(1950.0)		P	Q
n	0.19242094	Peri.	102.09807	+0.66825143	+0.73917103
a	2.9714518	Node	210.36641	-0.73070559	+0.63094872
e	0.0919189	Incl.	9.57179	-0.13967595	+0.23564783
P	5.12	H	13.0	G 0.25	

Residuals in seconds of arc

781026	675	0.2- 0.7+	810306	413	0.8+ 1.2-	810408	413	1.0- 0.9+
781027	675	0.2+ 0.8-	810308	413	0.6- 0.3+	810408	413	2.8+ 2.2-
810209	413	0.2- 0.3+	810308	413	0.8+ 0.5-	810409	413	0.8- 0.2-
810212	413	0.1+ 0.8-	810312	413	0.5- 1.3+	810409	413	0.4+ 0.4-
810301	413	0.4- 0.2-	810312	413	1.7+ 1.0-	810501	413	0.4- 0.4-
810301	413	0.4+ 0.6-	810406	413	1.1- 2.1+	810503	413	1.1+ 2.0-
810306	413	0.5- 1.1+	810406	413	2.7- 3.0+			

1981 EE14
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	60.00738	(1950.0)		P	Q
n	0.27358573	Peri.	85.75523	+0.45853349	+0.88676266
a	2.3500366	Node	211.74581	-0.85294462	+0.42073230
e	0.1105485	Incl.	6.36182	-0.24946443	+0.19140616
P	3.60	H	15.5	G 0.25	

Residuals in seconds of arc

780705	675	0.4+ 0.0	810306	413	1.2+ 0.1+	810409	413	0.7- 0.4+
780706	675	0.4- 0.4+	810308	413	1.0- 1.4+	810409	413	0.2+ 0.3-
810212	413	1.3- 0.2+	810308	413	0.3+ 0.4+	810501	413	1.7+ 1.1-
810212	413	0.1+ 0.0	810312	413	2.2- 1.3+	810503	413	0.6- 1.1-
810301	413	1.0- 0.3+	810312	413	0.5+ 0.5-			
810306	413	4.3+ 2.5-	810408	413	1.7- 1.4+			

1981 EN17
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	352.85975	(1950.0)		P	Q
n	0.28375680	Peri.	157.31175	+0.98966354	-0.13751468
a	2.2935386	Node	210.67906	+0.11626670	+0.93548627
e	0.1734190	Incl.	4.57426	+0.08395310	+0.32550754
P	3.47	H	13.5	G 0.25	

Residuals in seconds of arc

780509	675	0.9- 0.4-	810306	413	1.3+ 0.8-	810315	413	2.8- 1.3+
780510	675	0.7+ 0.2-	810308	413	2.3- 0.3-	810405	413	0.9- 0.8+
810212	413	1.6+ 0.5-	810308	413	0.1+ 1.6-	810405	413	3.8+ 1.6-
810212	413	1.0- 0.8+	810311	413	0.9+ 0.6-	810406	413	0.1+ 0.3-
810301	413	1.0- 0.9+	810311	413	2.0+ 1.1-	810410	413	0.2+ 1.8+
810301	413	0.3+ 0.7-	810312	413	1.5- 1.2+	810502	413	0.3- 0.9+
810306	413	1.5- 1.0+	810312	413	1.9+ 1.6-	810503	413	0.5- 0.4+

1981 ER24
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	114.38597	(1950.0)		P	Q
n	0.29844003	Peri.	81.30108	+0.28541770	+0.95831270
a	2.2176799	Node	205.29474	-0.89095523	+0.26024136
e	0.0940579	Incl.	1.76667	-0.35317917	+0.11794580
P	3.30	H	16.0	G 0.25	

Residuals in seconds of arc

780509	675	0.3-	0.7+	810302	413	0.8+	2.0-	810405	413	6.2+	4.1-
780510	675	0.3+	0.0	810306	413	1.8-	1.5+	810410	413	0.4-	0.0
810212	413	2.7-	1.9+	810311	413	0.9+	0.0	810426	413	0.6+	0.5-
810213	413	2.0-	1.6+	810315	413	2.2+	0.2+	810502	413	1.4-	0.8+
810302	413	1.0-	0.2+	810405	413	2.3-	0.7+				

1981 EA29
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	182.60851		(1950.0)	P	Q
n	0.21920493	Peri.	202.24273	+0.80796681	-0.58815730
a	2.7241856	Node	193.95612	+0.56032880	+0.78558273
e	0.2111146	Incl.	8.46561	+0.18226703	+0.19217380
P	4.50	H	14.5	G 0.25	

Residuals in seconds of arc

780705	675	1.1-	0.1+	810307	413	0.6-	0.1-	810408	413	3.0-	1.7+
780706	675	0.9+	0.2-	810307	413	3.1+	2.2-	810411	413	0.2-	0.1+
810209	413	0.7+	0.5+	810311	413	3.9-	2.9+	810411	413	0.9+	0.8-
810213	413	0.2-	0.9+	810311	413	0.2-	0.2-	810430	413	0.3-	1.4-
810301	413	0.7-	0.5+	810315	413	2.0-	0.9+	810502	413	1.4+	0.9-
810301	413	4.4+	2.6-	810408	413	0.3+	0.6+				

1981 EQ33
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	47.76063		(1950.0)	P	Q
n	0.26701049	Peri.	1.80801	+0.43780247	+0.89527028
a	2.3884603	Node	294.16327	-0.82597324	+0.36422760
e	0.1344318	Incl.	5.19322	-0.35510169	+0.25657239
P	3.69	H	16.5	G 0.25	

Residuals in seconds of arc

780707	675	0.5-	0.0	810202	413	1.0+	0.8+	810311	413	1.5-	2.0+
780708	675	0.3-	0.0	810301	413	0.2+	0.3-	810311	413	3.3-	0.9-
780709	675	0.8+	0.1-	810307	413	0.8+	0.2-	810315	413	3.1+	1.3-

1981 EE35
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	330.87425		(1950.0)	P	Q
n	0.25130994	Peri.	169.82829	+0.90596132	+0.42208132
a	2.4869314	Node	165.07444	-0.39682667	+0.87368204
e	0.1938261	Incl.	7.33547	-0.14752182	+0.24192365
P	3.92	H	15.5	G 0.25	

Residuals in seconds of arc

780705	675	0.0	0.4+	810303	413	2.1+	0.9-	810329	413	0.0	1.1+
780706	675	0.1+	0.3-	810307	413	2.2-	1.2+	810502	413	0.6-	1.0-
810213	413	1.5-	0.1+	810307	413	1.2+	0.6-	810503	413	0.3+	0.7-
810302	413	0.7-	0.7-	810311	413	2.5+	0.3+				
810303	413	0.8-	0.0	810329	413	0.4-	1.0+				

1981 EF45
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	320.51139		(1950.0)	P	Q
n	0.18478695	Peri.	173.02217	-0.70327810	+0.71033143
a	3.0527370	Node	52.28209	-0.65396649	-0.63052606
e	0.1548265	Incl.	2.08615	-0.27879695	-0.31283566
P	5.33	H	15.0	G 0.25	

Residuals in seconds of arc

781026	675	0.5-	1.1+	810315	413	0.2+	0.1-	810410	413	0.8-	1.9+
781027	675	0.1-	0.6+	810405	413	1.6+	0.9+	810410	413	1.5-	0.6+
810209	413	0.7+	0.9-	810405	413	0.9+	0.7-	810426	413	1.6+	0.2+
810212	413	0.2-	1.2-	810406	413	1.8-	1.3+	810501	413	0.4-	0.6+
810213	413	0.9-	1.1-	810406	413	0.5+	0.1+				

1981 ES47
Epoch 1986 June 19.0 ET = JDE 2446600.5 (J-P)

M	347.86989	(1950.0)		P	Q
n	0.28337345	Peri.	318.39950	+0.97812518	-0.20523411
a	2.2956066	Node	53.47504	+0.20025173	+0.88488414
e	0.1527751	Incl.	2.41869	+0.05630617	+0.41816147
P	3.48	H	16.5	G 0.25	

Residuals in seconds of arc

780509	675	0.8-	0.2+	810302	413	2.1+	5.3-	810315	413	4.1-	2.5+
780510	675	0.8+	1.3-	810302	413	0.1-	1.1-	810426	413	1.4+	0.2-
810212	413	0.9-	0.6+	810306	413	1.5+	0.4-	810501	413	0.7-	2.0+
810213	413	1.9+	2.2+	810311	413	0.7+	0.5-				

* * * * *

ORBITAL ELEMENTS BY T. KOBAYASHI, TOKYO.

1974 QM2 = 1974 RT = 1957 QL = 1984 QH
The double designation 1974 QM2 = 1974 RT is by H. Oishi (JAM 735). The identifications 1974 QM2 = 1957 QL = 1984 QH are by T. Kobayashi. The identification 1974 QM2 = 1984 QH was independently suggested by F. N. Bowman.
Epoch 1986 June 19.0 ET = JDE 2446600.5

M	229.76502	(1950.0)		P	Q
n	0.29250209	Peri.	296.85336	+0.14386728	+0.98905728
a	2.2475881	Node	341.33194	-0.86779780	+0.11021958
e	0.1794744	Incl.	5.85980	-0.47563556	+0.09806809
P	3.37	H	14.5	G 0.25	

Residuals in seconds of arc

570821	839	0.1+	0.2-	840821	046	3.9-	0.7+	840823	046	6.0-	2.9-
740827	095	0.5+	1.4-	840821	046	0.7+	0.4+	840823	046	0.5+	1.0+
740911	095	0.3+	3.8+	840822	046	1.2+	0.8+	840901	046	1.7+	0.3+
740914	095	0.7-	2.8-	840822	046	5.5+	0.4-	840901	046	0.0	0.7+

* * * * *

ORBITAL ELEMENTS BY L. K. KRISTENSEN, INSTITUTE OF PHYSICS, AARHUS.

1985 SA
Epoch 1986 June 19.0 ET = JDE 2446600.5

M	110.13593	(1950.0)		P	Q
n	0.27836310	Peri.	180.91186	+0.52683097	+0.84276800
a	2.3230662	Node	120.88738	-0.77897701	+0.53070970
e	0.1352925	Incl.	7.39221	-0.34006462	+0.08994064
P	3.54	H	13.2	G 0.25	

From observations 1985 Sept. 16-1986 Jan. 5.

EPHEMERIDES.

Comet Shoemaker (1986b) Elements MPC 10759

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	m1
1986 05	30	09 36.24	+27 12.2	3.879	3.661	70.1	15.1	16.6
1986 06	09	09 32.45	+26 25.0					
1986 06	19	09 30.47	+25 37.7	4.260	3.699	50.6	12.3	16.8
1986 06	29	09 29.89	+24 51.1					
1986 07	09	09 30.36	+24 05.7	4.563	3.744	32.3	8.3	17.0

Periodic Comet Singer Brewster (1986d) Elements MPC 10759

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	m1
1986 05	30	14 40.69	-03 16.1	0.992	1.932	148.9	15.7	15.8
1986 06	09	14 40.65	-02 53.0					
1986 06	19	14 43.38	-02 59.1	1.107	1.934	131.3	23.3	16.1
1986 06	29	14 48.91	-03 30.1					
1986 07	09	14 57.04	-04 20.9	1.271	1.950	116.5	27.8	16.4
1986 07	19	15 07.52	-05 26.1					
1986 07	29	15 20.03	-06 40.6	1.469	1.977	104.0	29.9	16.8
1986 08	08	15 34.27	-08 00.0					
1986 08	18	15 50.00	-09 20.6	1.691	2.017	93.1	30.1	17.2
1986 08	28	16 06.97	-10 38.9					
1986 09	07	16 24.97	-11 52.5	1.932	2.067	82.9	28.9	17.6
1986 09	17	16 43.84	-12 59.0					

Comet Machholz (1986e) Elements MPC 10759

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	m1
1986 05	30	21 38.84	+45 24.3	0.486	1.064	82.3	70.8	11.2
1986 06	04	20 22.56	+42 38.6					
1986 06	09	19 11.99	+36 31.5	0.465	1.274	113.5	46.9	11.9
1986 06	14	18 16.78	+28 34.8					
1986 06	19	17 37.22	+20 44.0	0.561	1.471	135.8	28.8	12.9
1986 06	24	17 09.57	+14 00.1					
1986 06	29	16 50.21	+08 33.7	0.742	1.656	140.2	23.2	14.0
1986 07	04	16 36.57	+04 14.1					
1986 07	09	16 26.97	+00 46.4	0.973	1.833	134.1	23.5	15.1
1986 07	14	16 20.29	-02 01.9					
1986 07	19	16 15.78	-04 20.5	1.233	2.002	125.4	24.4	16.0
1986 07	24	16 12.92	-06 16.7					
1986 07	29	16 11.35	-07 55.7	1.511	2.164	116.5	24.8	16.7
1986 08	03	16 10.81	-09 21.2					
1986 08	08	16 11.11	-10 36.0	1.801	2.322	107.8	24.6	17.4

1986 JK a,e,i = 2.89, 0.69, 2 Elements MPC 10764

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986 05	30	22 11.64	-21 17.0	0.030	1.019	100.4	77.9	13.9
1986 06	04	01 00.35	-02 51.5					
1986 06	09	01 46.11	+03 09.4	0.096	0.959	52.0	123.5	18.8
1986 06	14	02 06.82	+05 49.7					
1986 06	19	02 19.81	+07 27.2	0.179	0.917	52.0	119.1	19.7
1986 06	24	02 29.87	+08 39.7					
1986 06	29	02 38.74	+09 40.6	0.263	0.898	56.3	109.6	19.8
1986 07	04	02 47.13	+10 35.3					
1986 07	09	02 55.30	+11 25.7	0.346	0.903	61.4	99.0	19.8
1986 07	14	03 03.31	+12 12.8					
1986 07	19	03 11.14	+12 56.6	0.422	0.934	66.7	88.8	19.9
1986 07	24	03 18.72	+13 37.2					
1986 07	29	03 25.93	+14 14.2	0.489	0.985	72.4	79.4	20.0

(3200) Phaethon a,e,i = 1.27, 0.89, 22 Elements MPC 9428

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	07 29	06 37.94	+37 46.8	0.782	0.527	30.7	99.9	16.5
1986	08 03	06 20.27	+40 52.3					
1986	08 08	06 06.71	+43 17.2	0.820	0.751	46.9	80.3	16.5
1986	08 13	05 55.54	+45 20.2					
1986	08 18	05 45.46	+47 11.4	0.842	0.940	60.1	69.0	16.7
1986	08 23	05 35.49	+48 56.1					
1986	08 28	05 24.75	+50 37.3	0.844	1.105	72.5	60.7	16.8
1986	09 02	05 12.44	+52 15.6					
1986	09 07	04 57.76	+53 49.7	0.833	1.251	85.0	53.4	16.8
1986	09 12	04 39.99	+55 16.1					
1986	09 17	04 18.56	+56 29.4	0.815	1.382	98.2	46.1	16.8
1986	09 22	03 53.23	+57 21.7					
1986	09 27	03 24.37	+57 43.9	0.803	1.500	111.9	38.3	16.8
1986	10 02	02 53.16	+57 27.0					
1986	10 07	02 21.53	+56 25.7	0.807	1.608	125.4	30.5	16.7
1986	10 12	01 51.62	+54 40.3					
1986	10 17	01 25.12	+52 17.4	0.838	1.705	136.6	23.7	16.8
1986	10 22	01 02.83	+49 27.9					
1986	10 27	00 44.87	+46 23.7	0.902	1.795	142.3	19.8	16.9
1986	11 01	00 30.88	+43 15.6					
1986	11 06	00 20.34	+40 12.3	1.000	1.876	140.8	19.5	17.2
1986	11 11	00 12.70	+37 19.9					
1986	11 16	00 07.45	+34 42.1	1.128	1.951	134.1	21.3	17.6
1986	11 21	00 04.13	+32 20.3					
1986	11 26	00 02.39	+30 14.9	1.279	2.018	125.4	23.5	18.0
1986	12 01	00 01.96	+28 25.4					
1986	12 06	00 02.62	+26 51.0	1.447	2.079	116.2	25.2	18.4
1986	12 11	00 04.17	+25 30.3					
1986	12 16	00 06.47	+24 22.2	1.627	2.134	107.1	26.1	18.7
1986	12 21	00 09.39	+23 25.3					
1986	12 26	00 12.84	+22 38.4	1.812	2.184	98.4	26.5	19.0
1986	12 31	00 16.76	+22 00.4					
1987	01 05	00 21.06	+21 30.4	1.999	2.228	90.0	26.2	19.3

1982 KC1 a,e,i = 2.52, 0.13, 5 Elements MPC 10767

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	05 10	15 18.52	-15 27.3	1.185	2.193	176.1	1.8	15.3
1986	05 20	15 10.07	-14 21.0					
1986	05 30	15 02.65	-13 22.9	1.220	2.197	158.9	9.5	15.7
1986	06 09	14 57.28	-12 38.8					
1986	06 19	14 54.63	-12 12.2	1.343	2.203	137.7	18.1	16.2
1986	06 29	14 54.93	-12 03.8					
1986	07 09	14 58.09	-12 12.1	1.527	2.213	119.5	23.6	16.6
1986	07 19	15 03.92	-12 34.6					
1986	07 29	15 12.10	-13 08.0	1.749	2.226	104.1	26.3	17.0

(3443) 1979 SB1 a,e,i = 2.39, 0.31, 13 Elements MPC 10765

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	05 10	15 36.67	+00 11.5	0.932	1.915	160.7	10.0	15.3
1986	05 20	15 28.76	+02 16.1					
1986	05 30	15 20.96	+03 49.9	0.902	1.851	150.2	15.8	15.4
1986	06 09	15 14.70	+04 44.3					
1986	06 19	15 11.19	+04 56.7	0.942	1.794	132.7	24.6	15.6
1986	06 29	15 11.08	+04 30.9					
1986	07 09	15 14.55	+03 33.1	1.028	1.744	117.1	31.3	15.9
1986	07 19	15 21.56	+02 10.4					
1986	07 29	15 31.81	+00 30.0	1.137	1.703	104.5	35.3	16.2

1982 BQ a,e,i = 2.26, 0.10, 6 Elements MPC 10766

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	05 10	16 01.04	-08 58.3	1.145	2.133	163.9	7.6	15.9
1986	05 20	15 51.16	-08 34.6					
1986	05 30	15 41.31	-08 25.1	1.162	2.153	163.3	7.8	16.0
1986	06 09	15 32.81	-08 32.2					
1986	06 19	15 26.73	-08 56.2	1.271	2.173	143.6	16.1	16.5
1986	06 29	15 23.62	-09 35.3					
1986	07 09	15 23.61	-10 26.8	1.449	2.195	124.8	22.3	17.0
1986	07 19	15 26.58	-11 27.7					
1986	07 29	15 32.26	-12 34.8	1.673	2.217	108.6	25.7	17.4
1986	08 08	15 40.32	-13 45.3					
1986	08 18	15 50.48	-14 56.9	1.920	2.239	94.4	26.8	17.7

1982 UV1 a,e,i = 3.09, 0.18, 3 Elements MPC 10758

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	05 10	16 13.08	-17 45.8	2.374	3.355	163.6	4.9	17.4
1986	05 20	16 05.30	-17 26.4					
1986	05 30	15 57.11	-17 07.0	2.319	3.327	172.2	2.4	17.2
1986	06 09	15 49.26	-16 49.6					
1986	06 19	15 42.47	-16 36.6	2.377	3.297	150.1	8.8	17.5
1986	06 29	15 37.27	-16 29.6					
1986	07 09	15 34.02	-16 29.8	2.529	3.267	129.1	14.0	17.8
1986	07 19	15 32.88	-16 37.5					
1986	07 29	15 33.86	-16 52.5	2.743	3.236	110.1	17.1	18.0
1986	08 08	15 36.88	-17 14.1					
1986	08 18	15 41.80	-17 41.1	2.987	3.204	93.0	18.4	18.2

1983 XU a,e,i = 3.12, 0.16, 2 Elements MPC 10759

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	05 10	16 15.17	-20 32.7	2.623	3.601	163.0	4.7	17.7
1986	05 20	16 07.43	-20 16.5					
1986	05 30	15 59.40	-19 58.5	2.599	3.609	174.0	1.7	17.5
1986	06 09	15 51.75	-19 40.6					
1986	06 19	15 45.12	-19 24.8	2.690	3.615	151.5	7.7	17.9
1986	06 29	15 39.99	-19 13.1					
1986	07 09	15 36.65	-19 06.6	2.878	3.620	130.4	12.3	18.2
1986	07 19	15 35.24	-19 06.3					
1986	07 29	15 35.75	-19 12.3	3.132	3.624	111.1	15.1	18.5
1986	08 08	15 38.10	-19 24.1					
1986	08 18	15 42.17	-19 41.1	3.420	3.626	93.5	16.2	18.7

1976 SZ3 a,e,i = 2.36, 0.17, 1 Elements MPC 10756

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	05 10	18 54.82	-23 20.2	2.017	2.735	126.0	17.4	18.5
1986	05 20	18 52.33	-23 26.3					
1986	05 30	18 47.04	-23 35.5	1.836	2.743	147.0	11.6	18.1
1986	06 09	18 39.21	-23 46.2					
1986	06 19	18 29.48	-23 56.4	1.741	2.748	170.2	3.6	17.7
1986	06 29	18 18.84	-24 04.1					
1986	07 09	18 08.37	-24 08.3	1.753	2.750	165.9	5.2	17.8
1986	07 19	17 59.22	-24 09.3					
1986	07 29	17 52.23	-24 08.1	1.870	2.750	143.1	12.8	18.2
1986	08 08	17 47.89	-24 06.1					
1986	08 18	17 46.41	-24 04.5	2.066	2.748	122.6	18.1	18.6
1986	08 28	17 47.74	-24 03.5					
1986	09 07	17 51.66	-24 03.1	2.310	2.742	104.5	20.8	18.9
1986	09 17	17 57.92	-24 02.5					
1986	09 27	18 06.23	-24 00.7	2.573	2.734	88.3	21.5	19.2

1980 TL15 a,e,i = 2.25, 0.09, 5 Elements MPC 10757

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986 05 10	20 06.25	-15 33.6	1.938	2.448	108.1	23.1	17.8
1986 05 20	20 10.20	-15 14.7					
1986 05 30	20 11.47	-15 05.3	1.715	2.452	125.9	19.6	17.5
1986 06 09	20 09.85	-15 07.3					
1986 06 19	20 05.31	-15 21.8	1.542	2.454	146.4	13.2	17.1
1986 06 29	19 58.12	-15 48.2					
1986 07 09	19 48.88	-16 24.6	1.449	2.454	168.9	4.6	16.6
1986 07 19	19 38.59	-17 07.3					
1986 07 29	19 28.49	-17 52.1	1.457	2.453	165.4	6.0	16.7
1986 08 08	19 19.77	-18 35.3					
1986 08 18	19 13.41	-19 14.2	1.565	2.450	142.9	14.4	17.1
1986 08 28	19 09.97	-19 47.2					
1986 09 07	19 09.62	-20 13.7	1.749	2.445	122.7	20.3	17.5
1986 09 17	19 12.31	-20 33.1					
1986 09 27	19 17.75	-20 45.2	1.978	2.438	105.0	23.4	17.9
1986 10 07	19 25.63	-20 49.5					
1986 10 17	19 35.62	-20 45.6	2.226	2.430	89.5	24.2	18.2

1981 EE35 a,e,i = 2.49, 0.19, 7 Elements MPC 10772

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986 05 10	20 26.15	-10 27.9	1.710	2.160	102.1	27.2	19.4
1986 05 20	20 35.85	-09 30.3					
1986 05 30	20 43.42	-08 39.8	1.470	2.126	116.5	25.3	19.0
1986 06 09	20 48.53	-08 00.1					
1986 06 19	20 50.89	-07 35.6	1.265	2.095	133.1	20.7	18.5
1986 06 29	20 50.36	-07 30.0					
1986 07 09	20 46.94	-07 46.6	1.113	2.068	152.3	13.2	18.0
1986 07 19	20 41.05	-08 26.4					
1986 07 29	20 33.55	-09 27.0	1.037	2.045	170.4	4.7	17.5
1986 08 08	20 25.66	-10 42.8					
1986 08 18	20 18.81	-12 05.4	1.050	2.027	158.6	10.5	17.7
1986 08 28	20 14.24	-13 26.3					
1986 09 07	20 12.74	-14 38.4	1.147	2.014	138.3	19.5	18.2
1986 09 17	20 14.68	-15 37.1					
1986 09 27	20 19.99	-16 19.9	1.305	2.007	120.3	25.5	18.6
1986 10 07	20 28.35	-16 45.6					
1986 10 17	20 39.39	-16 54.0	1.501	2.005	105.0	28.7	19.0

1971 QU a,e,i = 2.92, 0.09, 5 Elements MPC 10760

Date ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986 05 30	21 50.92	-07 44.6	2.291	2.669	100.5	21.9	16.9
1986 06 09	21 56.36	-06 49.2					
1986 06 19	21 59.72	-06 03.1	2.048	2.667	116.9	19.9	16.6
1986 06 29	22 00.86	-05 28.4					
1986 07 09	21 59.63	-05 07.0	1.844	2.665	135.4	15.5	16.2
1986 07 19	21 56.09	-05 00.3					
1986 07 29	21 50.49	-05 08.6	1.706	2.666	155.9	8.9	15.8
1986 08 08	21 43.35	-05 30.7					
1986 08 18	21 35.46	-06 03.8	1.661	2.668	172.2	3.0	15.5
1986 08 28	21 27.76	-06 43.4					
1986 09 07	21 21.16	-07 24.7	1.720	2.671	155.6	9.0	15.8
1986 09 17	21 16.43	-08 02.9					
1986 09 27	21 14.02	-08 34.4	1.873	2.675	134.7	15.4	16.2
1986 10 07	21 14.11	-08 56.7					
1986 10 17	21 16.68	-09 08.3	2.094	2.681	115.7	19.6	16.6
1986 10 27	21 21.54	-09 08.5					
1986 11 06	21 28.43	-08 57.5	2.353	2.689	98.8	21.4	16.9

1981 EN a,e,i = 2.37, 0.16, 10 Elements MPC 10768

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	06 19	23 25.99	-00 57.7	2.465	2.748	95.1	21.6	19.6
1986	06 29	23 31.67	-00 36.6					
1986	07 09	23 35.51	-00 29.6	2.204	2.749	111.8	20.1	19.3
1986	07 19	23 37.28	-00 38.8					
1986	07 29	23 36.80	-01 05.7	1.974	2.748	130.8	16.2	18.9
1986	08 08	23 33.98	-01 51.1					
1986	08 18	23 28.91	-02 54.1	1.805	2.744	152.5	9.8	18.5
1986	08 28	23 21.98	-04 11.5					
1986	09 07	23 13.79	-05 37.8	1.730	2.737	176.3	1.3	18.0
1986	09 17	23 05.25	-07 05.3					
1986	09 27	22 57.31	-08 26.3	1.768	2.728	159.2	7.5	18.4
1986	10 07	22 50.85	-09 34.4					
1986	10 17	22 46.50	-10 25.4	1.908	2.716	136.2	14.7	18.8
1986	10 27	22 44.59	-10 57.7					
1986	11 06	22 45.18	-11 11.4	2.120	2.702	115.7	19.3	19.1
1986	11 16	22 48.17	-11 07.8					
1986	11 26	22 53.33	-10 48.7	2.371	2.686	97.6	21.4	19.4

1981 ET8 a,e,i = 2.40, 0.06, 4 Elements MPC 10769

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	07 09	00 02.19	+04 24.1	2.050	2.495	103.7	23.3	19.0
1986	07 19	00 06.66	+05 00.0					
1986	07 29	00 08.87	+05 20.6	1.827	2.504	120.8	20.4	18.7
1986	08 08	00 08.58	+05 23.7					
1986	08 18	00 05.72	+05 07.8	1.646	2.513	140.7	14.8	18.3
1986	08 28	00 00.43	+04 32.6					
1986	09 07	23 53.14	+03 39.8	1.539	2.521	163.2	6.6	17.9
1986	09 17	23 44.64	+02 34.1					
1986	09 27	23 35.96	+01 22.3	1.533	2.528	171.2	3.5	17.7
1986	10 07	23 28.16	+00 12.4					
1986	10 17	23 22.16	-00 48.2	1.633	2.534	148.0	12.0	18.2
1986	10 27	23 18.55	-01 34.3					
1986	11 06	23 17.56	-02 03.3	1.819	2.538	126.6	18.3	18.7
1986	11 16	23 19.20	-02 14.2					
1986	11 26	23 23.25	-02 08.0	2.061	2.542	107.8	21.7	19.0
1986	12 06	23 29.45	-01 46.1					
1986	12 16	23 37.50	-01 10.3	2.327	2.545	91.2	22.7	19.3

1984 DF1 a,e,i = 2.68, 0.11, 4 Elements MPC 9474

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	07 09	00 51.54	+05 54.3	2.757	2.969	91.9	20.0	18.9
1986	07 19	00 57.02	+06 38.1					
1986	07 29	01 00.81	+07 12.1	2.481	2.961	108.3	19.0	18.7
1986	08 08	01 02.68	+07 35.0					
1986	08 18	01 02.41	+07 45.8	2.231	2.952	126.9	15.9	18.4
1986	08 28	00 59.91	+07 43.6					
1986	09 07	00 55.21	+07 28.0	2.038	2.941	148.0	10.5	18.0
1986	09 17	00 48.59	+07 00.1					
1986	09 27	00 40.59	+06 22.3	1.935	2.929	171.1	3.0	17.5
1986	10 07	00 31.98	+05 38.5					
1986	10 17	00 23.65	+04 54.0	1.943	2.916	164.4	5.3	17.6
1986	10 27	00 16.47	+04 14.2					
1986	11 06	00 11.10	+03 43.6	2.061	2.901	141.2	12.4	18.0
1986	11 16	00 07.95	+03 25.5					
1986	11 26	00 07.17	+03 21.2	2.262	2.885	120.0	17.2	18.4
1986	12 06	00 08.71	+03 30.9					
1986	12 16	00 12.41	+03 54.1	2.510	2.868	101.2	19.7	18.7

(3343) 1982 HS a,e,i = 2.35, 0.31, 25 Elements MPC 10301

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	07 09	01 19.50	-28 00.8	1.344	1.798	98.3	34.0	16.7
1986	07 19	01 30.58	-28 07.0					
1986	07 29	01 37.97	-28 29.0	1.251	1.861	110.0	30.8	16.5
1986	08 08	01 41.17	-29 04.5					
1986	08 18	01 39.74	-29 47.4	1.172	1.929	123.9	25.8	16.3
1986	08 28	01 33.49	-30 28.2					
1986	09 07	01 22.62	-30 54.3	1.130	2.000	138.5	19.5	16.1
1986	09 17	01 08.14	-30 51.3					
1986	09 27	00 51.82	-30 08.7	1.158	2.073	147.2	15.2	16.1
1986	10 07	00 35.78	-28 43.4					
1986	10 17	00 21.98	-26 40.3	1.276	2.146	141.4	16.9	16.5
1986	10 27	00 11.60	-24 10.3					
1986	11 06	00 05.05	-21 24.9	1.480	2.219	126.7	21.0	17.0
1986	11 16	00 02.19	-18 32.8					
1986	11 26	00 02.57	-15 40.5	1.750	2.291	110.6	23.8	17.5
1986	12 06	00 05.69	-12 51.2					
1986	12 16	00 11.04	-10 06.4	2.060	2.362	95.2	24.5	17.9

1985 GO a,e,i = 2.25, 0.10, 4 Elements MPC 10029

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	07 09	00 51.57	+00 30.7	2.054	2.354	93.9	25.5	18.7
1986	07 19	00 59.68	+00 56.9					
1986	07 29	01 05.77	+01 08.4	1.834	2.373	109.4	23.8	18.4
1986	08 08	01 09.53	+01 03.8					
1986	08 18	01 10.63	+00 42.4	1.637	2.391	127.4	19.6	18.0
1986	08 28	01 08.91	+00 04.6					
1986	09 07	01 04.33	-00 47.9	1.491	2.408	148.4	12.7	17.6
1986	09 17	00 57.21	-01 50.7					
1986	09 27	00 48.27	-02 56.9	1.430	2.423	169.9	4.2	17.2
1986	10 07	00 38.54	-03 58.8					
1986	10 17	00 29.26	-04 48.1	1.474	2.437	160.6	7.8	17.5
1986	10 27	00 21.52	-05 19.5					
1986	11 06	00 16.10	-05 30.4	1.618	2.448	138.3	15.6	17.9
1986	11 16	00 13.42	-05 20.6					
1986	11 26	00 13.50	-04 52.2	1.834	2.458	118.1	20.7	18.4
1986	12 06	00 16.19	-04 07.6					
1986	12 16	00 21.23	-03 09.4	2.092	2.466	100.4	23.1	18.7

1976 GJ2 a,e,i = 2.69, 0.17, 11 Elements MPC 9765

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	07 09	00 51.18	+12 19.3	2.451	2.645	89.4	22.6	18.5
1986	07 19	00 58.32	+12 57.6					
1986	07 29	01 03.61	+13 22.6	2.230	2.681	105.2	21.4	18.3
1986	08 08	01 06.81	+13 32.5					
1986	08 18	01 07.71	+13 25.3	2.026	2.718	123.3	18.1	18.0
1986	08 28	01 06.22	+12 59.6					
1986	09 07	01 02.39	+12 14.5	1.872	2.753	144.2	12.4	17.7
1986	09 17	00 56.56	+11 11.0					
1986	09 27	00 49.30	+09 52.5	1.801	2.788	167.2	4.6	17.4
1986	10 07	00 41.44	+08 24.6					
1986	10 17	00 33.90	+06 55.1	1.840	2.821	167.3	4.4	17.4
1986	10 27	00 27.53	+05 31.6					
1986	11 06	00 22.95	+04 20.5	1.990	2.854	144.2	11.7	17.9
1986	11 16	00 20.55	+03 25.9					
1986	11 26	00 20.41	+02 49.5	2.227	2.885	122.9	16.7	18.3
1986	12 06	00 22.46	+02 31.0					
1986	12 16	00 26.53	+02 29.2	2.518	2.915	103.9	19.1	18.7

1981 XH2 a,e,i = 3.04, 0.25, 8 Elements MPC 9951

Date	ET	R. A. (1950)	Decl.	Delta	r	Variation		V
1986	07 09	00 30.00	+13 18.6	2.065	2.361	-1.27	-5.9	16.5
1986	07 19	00 39.62	+14 46.9					
1986	07 29	00 47.63	+16 05.0	1.818	2.334	-1.47	-6.3	16.1
1986	08 08	00 53.69	+17 10.4					
1986	08 18	00 57.50	+18 00.1	1.595	2.312	-1.72	-7.0	15.8
1986	08 28	00 58.80	+18 30.8					
1986	09 07	00 57.47	+18 39.1	1.418	2.295	-1.99	-8.3	15.3
1986	09 17	00 53.67	+18 22.1					
1986	09 27	00 47.96	+17 39.5	1.312	2.284	-2.18	-9.9	14.9
1986	10 07	00 41.23	+16 34.1					
1986	10 17	00 34.65	+15 12.9	1.297	2.278	-2.17	-10.7	14.8
1986	10 27	00 29.37	+13 46.0					
1986	11 06	00 26.25	+12 23.7	1.381	2.278	-1.98	-10.1	15.2
1986	11 16	00 25.81	+11 14.6					
1986	11 26	00 28.16	+10 23.8	1.546	2.283	-1.72	-8.6	15.6
1986	12 06	00 33.19	+09 53.2					
1986	12 16	00 40.64	+09 42.7	1.765	2.295	-1.48	-6.9	16.0

(3303) 1967 UN a,e,i = 2.90, 0.07, 3 Elements MPC 10022

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	07 29	01 11.41	+04 36.2	2.226	2.701	106.9	21.1	16.3
1986	08 08	01 15.21	+04 54.9					
1986	08 18	01 16.80	+05 00.5	2.002	2.708	124.6	17.9	16.0
1986	08 28	01 16.02	+04 52.9					
1986	09 07	01 12.83	+04 32.3	1.829	2.716	145.0	12.3	15.6
1986	09 17	01 07.45	+04 00.5					
1986	09 27	01 00.38	+03 20.8	1.738	2.725	167.6	4.5	15.2
1986	10 07	00 52.36	+02 38.0					
1986	10 17	00 44.34	+01 57.8	1.753	2.735	167.9	4.4	15.2
1986	10 27	00 37.27	+01 25.6					
1986	11 06	00 31.88	+01 05.4	1.875	2.746	144.9	12.0	15.7
1986	11 16	00 28.68	+00 59.7					
1986	11 26	00 27.85	+01 08.9	2.083	2.758	123.9	17.3	16.1
1986	12 06	00 29.38	+01 32.7					
1986	12 16	00 33.11	+02 09.5	2.344	2.770	105.2	20.0	16.4
1986	12 26	00 38.80	+02 57.6					
1987	01 05	00 46.21	+03 55.4	2.629	2.783	88.6	20.7	16.7

(3175) 1979 YP a,e,i = 2.36, 0.21, 1 Elements MPC 9357

Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	V
1986	07 29	00 54.15	+06 27.0	1.398	1.991	110.1	28.6	16.8
1986	08 08	01 02.81	+07 20.5					
1986	08 18	01 09.07	+07 58.1	1.187	1.955	125.3	25.0	16.3
1986	08 28	01 12.52	+08 17.8					
1986	09 07	01 12.78	+08 17.1	1.017	1.924	143.6	18.1	15.8
1986	09 17	01 09.79	+07 55.6					
1986	09 27	01 03.95	+07 15.4	0.911	1.898	165.6	7.6	15.2
1986	10 07	00 56.19	+06 21.7					
1986	10 17	00 48.04	+05 24.2	0.889	1.879	170.3	5.1	15.0
1986	10 27	00 41.12	+04 33.7					
1986	11 06	00 36.73	+03 59.3	0.954	1.866	147.2	16.7	15.5
1986	11 16	00 35.70	+03 46.9					
1986	11 26	00 38.18	+03 57.8	1.087	1.860	127.4	24.9	16.0
1986	12 06	00 44.02	+04 30.7					
1986	12 16	00 52.84	+05 22.9	1.267	1.862	111.0	29.6	16.5
1986	12 26	01 04.20	+06 30.8					
1987	01 05	01 17.69	+07 50.7	1.472	1.871	97.3	31.4	16.9