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EDITORIAL NOTICE.

Several contributors have offered to communicate their observations in machine-readable form. For the moment, it would be preferable if such observations were sent on punched cards (either "026" or "029" code), rather than on punched tape or magnetic tape or disk. The format to be used is illustrated below for the first two observations published on MPC 4898.

Columns 16-80 of the cards would be punched as follows:

Col.	16	31	34	44	46	56	61	65	68	78	80
1977 09 08.93458	00	32	12.77	-01	34	15.0	0.2+	1+		095	
1977 09 09.91884	23	14	58.50	+00	22	50.4			16.5	095	

It is important that columns 16-56, which give the UT time of observation and the 1950.0 right ascension and declination, contain all leading zeros. If approximate or semiaccurate positions are being communicated, the decimal point is transferred to the appropriate quantity (and omitted entirely if the smallest unit is an integer) and the rest of the field blanked out, e.g.,

Col.	16	34	46	68	78
1977 09 09.91884	23	14.98	+00 22.8	16.5	095
1977 09 09.9188	23	14 58	+00 22.8	16.5	095
1977 09 09.919	12	15.0	+00 23	16	095

Approximate and semiaccurate observations are not encouraged nowadays.

Columns 57-71, which give the O-C and/or the magnitude, are optional. Here there are no leading zeros (except for a single one in front of a decimal point), and the signs for the O-C are to follow the number rather than precede it (signs being omitted for 0.0 and 0); the units are minutes of time for R.A. and minutes of arc for Decl. If the magnitude is not photographic (B), the color (e.g., V, R) can be indicated in column 72; in the case of comets, column 72 indicates whether the magnitude is total (T) or nuclear (N), a distinction that is considered mandatory. References to Notes should not be punched on the cards; if there are any Notes such references and the Notes themselves should be indicated on a printed listing of the cards. Columns 78-80 give the Observatory Code (see MPC 4766-4770).

The designation of the object is shown in columns 1-13. In the case of a numbered minor planet, the number is given in columns 1-4, without leading zeros (but ending in column 4). In the case of an unnumbered minor planet, up to eight characters of identification can be given in columns 5-12; this identification could be the standard designation supplied by the Minor Planet Center or a temporary label supplied by the observer; if the standard designation is used, there should be no space between the year and the letters; in the case of P-L objects, there should be no space between the number and P-L (the latter therefore in columns 9-11); a temporary label

should be consistently in the same columns for all observations in the same batch; the discovery observation can be indicated by an * in column 13. In the case of a comet, the year of perihelion passage should be indicated in columns 6-9, the Arabic equivalent of the Roman numeral designation in columns 10-11 and the last figure of the year and the letter designation in columns 12-13; in general, both the numeral and the letter designations should be given, column 13 being given as Z if the letter designation does not exist, and the year shown in columns 6-9 being that of discovery if the date of perihelion passage is not known. Columns 1-13 for the cases mentioned above and for some examples of comets follow:

Col.

1	13	
116		(1st observation on MPC 4898; no leading zero)
1977QJ2		(2nd observation on MPC 4898; no blank after year)
1975075E		(periodic comet Smirnova-Chernykh, 1975 VII = 1975e)
197711 Z		(periodic comet Encke, 1977 XI; no letter designation)
1979 9C		(comet Bradfield, 1979c; no Roman numeral designation yet)

Work is currently underway on the transformation of the Cincinnati file of minor-planet observations to the above format. That file is also being combined with the file of minor-planet and comet observations published on the MPCs since 1978 July and an earlier file of comet observations prepared by the IAU Central Bureau for Astronomical Telegrams. The total number of observations involved is in excess of 230 000.

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IDENTIFICATION CHANGES.

Continuation to MPC 4846.

Object	Date	UT	R. A. (1950)	Decl.	Old design.	Mag.	Obs.
1940 GA1 *	1940 04 12.96	13 03.6	-01 26	1940 GD		062	
1955 BW *	1955 01 26.01125	09 12 20.73	+14 20 33.6	646	15.0	020	
1965 WW *	1965 11 20.27	04 40.7	+23 30		1057		760
1966 DU *	1966 02 17.98407	10 07 01.31	+15 22 59.8	1261		020	
1966 DU	1966 02 18.02685	10 07 00.08	+15 23 35.7	1261		020	
1966 EB *	1966 03 14.93054	09 50 09.92	+16 39 33.2	1261		020	
1966 EB	1966 03 14.94647	09 50 03.66	+16 39 31.8	1261		020	
1966 EB	1966 03 16.88733	09 48 48.98	+16 49 25.2	1261		020	
1966 EB	1966 03 16.90188	09 48 48.83	+16 49 44.0	1261		020	
1966 VR *	1966 11 13.87311	01 37 29.24	+08 31 33.7	1966 UT	16.0	095	
1977 SO *	1977 09 18.86153	22 36 03.06	-01 01 33.7	1977 RM2	17.0	095	
1977 VC2 *	1977 11 14.20732	01 53 33.36	+10 17 44.2	1977 VJ		805	

* * * *

IDENTIFICATIONS.

The following identifications with numbered minor planets have not previously been published in the MPCs. The list continues that on MPC 4765.

Note	Note	Note
1940 GA1 = (947) 1	1966 DB = (707) 2	1966 DG = (1261) 2
1966 DM = (909) 2	1969 QC = (453) 2	1973 EN = (1835) 3
1973 EQ = (1827) 3	1976 SM = (1870) 3	1977 TF = (1880) 4
1979 MD = (1614) 5		

Note 1: identification by L. Oterma. 2: by C. M. Bardwell. 3: by O. Kippes. 4: by B. G. Marsden. 5: by E. Bowell.

OBSERVATIONS MADE WITH THE 0.9-M SCHMIDT TELESCOPE AT CAUSSOLS BY K. TOMITA
 (WITH ASSISTANCE FROM H. CHEMIN, R. CHEMIN, K. HURUKAWA AND K. OTSUKA).

Object	Date	UT	R. A. (1950)	Decl.	Obs.
578	1978 10 30	94670	03 43 09.67	+23 13 46.5	010
578	1978 11 01	94664	03 41 21.82	+23 12 16.4	010
578	1978 11 02	94485	03 40 26.87	+23 11 22.0	010
578	1978 11 02	96006	03 40 25.88	+23 11 22.0	010
1978 UA	1978 10	30.94670	03 33 47.85	+26 03 15.9	010
1978 UA	1978 11	01.94664	03 32 02.73	+25 16 13.6	010
1978 UA	1978 11	02.94485	03 31 08.26	+24 52 09.0	010
1978 UA	1978 11	02.96006	03 31 07.45	+24 51 51.1	010
1978 UY	*	1978 10 30.94670	03 35 17.91	+23 02 58.3	010
1978 UY	1978 11	01.94664	03 34 18.74	+23 11 30.7	010
1978 UZ	*	1978 10 30.94670	03 36 00.84	+23 43 12.2	010
1978 UA1	*	1978 10 30.94670	03 37 31.44	+25 16 21.3	010
1978 UB1	*	1978 10 30.94670	03 37 50.91	+24 33 28.6	010
1978 UC1	*	1978 10 30.94670	03 38 08.68	+24 55 58.9	010
1978 UD1	*	1978 10 30.94670	03 39 16.32	+23 18 11.7	010
1978 UD1	1978 11	01.94664	03 38 02.85	+23 17 18.2	010
1978 UE1	*	1978 10 30.94670	03 39 19.21	+22 37 40.5	010
1978 UF1	*	1978 10 30.94670	03 40 14.25	+25 00 01.2	010
1978 UG1	*	1978 10 30.94670	03 41 32.29	+23 33 22.9	010
1978 UH1	*	1978 10 30.94670	03 41 42.61	+23 25 06.1	010
1978 UJ1	*	1978 10 30.94670	03 42 51.40	+22 59 30.1	010
1978 UK1	*	1978 10 30.94670	03 44 25.84	+23 18 53.4	010
1978 UL1	*	1978 10 30.94670	03 44 37.27	+23 19 17.0	010
1978 UM1	*	1978 10 30.94670	03 45 34.35	+24 58 07.8	010
1978 UN1	*	1978 10 30.94670	03 46 13.05	+23 06 55.0	010
1978 UN1	1978 11	01.94664	03 44 27.55	+23 07 33.0	010
1978 UO1	*	1978 10 30.94670	03 49 45.24	+23 04 55.4	010
1978 UP1	*	1978 10 30.94670	03 50 20.94	+23 03 34.7	010
1978 UP1	1978 11	01.94664	03 48 42.77	+23 01 32.2	010
1978 UQ1	*	1978 10 30.94670	03 50 27.84	+22 43 50.8	010
1978 UR1	*	1978 10 30.94670	03 34 35.89	+23 18 19.7	010
1978 VF	1978 10	30.94670	03 32 33.77	+22 19 51.9	010
1978 VL	1978 10	30.94670	03 34 43.34	+23 20 51.3	010
1978 VL	1978 11	01.94664	03 32 48.21	+23 27 55.1	010
1978 VM	1978 11	01.94664	03 32 50.79	+24 41 08.5	010
1978 VM	1978 11	02.96006	03 31 44.84	+24 42 48.5	010
1978 VN	1978 10	30.94670	03 34 45.01	+21 53 06.8	010
1978 VN	1978 11	01.94664	03 33 06.80	+21 46 25.1	010
1978 VO	1978 10	30.94670	03 35 03.26	+24 39 32.7	010
1978 VO	1978 11	01.94664	03 33 18.99	+24 36 59.5	010
1978 VO	1978 11	02.94485	03 32 25.63	+24 35 33.0	010
1978 VO	1978 11	02.96006	03 32 24.88	+24 35 31.8	010
1978 VP	1978 10	30.94670	03 35 02.71	+23 02 25.8	010
1978 VP	1978 11	01.94664	03 33 23.59	+22 56 36.2	010
1978 VP	1978 11	02.94485	03 32 32.75	+22 53 31.8	010
1978 VP	1978 11	02.96006	03 32 31.95	+22 53 29.4	010
1978 VR	1978 10	30.94670	03 35 55.66	+25 42 09.8	010
1978 VR	1978 11	01.94664	03 34 17.29	+25 37 31.7	010
1978 VT	1978 10	30.94670	03 36 28.92	+24 55 27.1	010
1978 VT	1978 11	01.94664	03 34 41.44	+24 53 46.9	010
1978 VT	1978 11	02.94485	03 33 46.24	+24 52 45.5	010
1978 VT	1978 11	02.96006	03 33 45.43	+24 52 43.6	010
1978 VU	1978 10	30.94670	03 36 59.71	+22 37 36.4	010
1978 VU	1978 11	01.94664	03 35 15.47	+22 33 20.1	010
1978 VV	1978 10	30.94670	03 37 24.52	+23 56 43.6	010
1978 VW	1978 10	30.94670	03 37 19.05	+25 10 50.6	010

1978	VW	1978	11 01.94664	03 35 35.34	+25 09 43.1	010
1978	VX	1978	10 30.94670	03 37 47.51	+22 08 17.9	010
1978	VX	1978	11 01.94664	03 35 52.59	+22 09 39.2	010
1978	VY	1978	10 30.94670	03 37 55.54	+24 43 49.1	010
1978	VY	1978	11 01.94664	03 36 04.73	+24 38 16.9	010
1978	VZ	1978	10 30.94670	03 37 40.79	+25 17 02.8	010
1978	VA1	1978	10 30.94670	03 37 46.84	+23 22 51.9	010
1978	VA1	1978	11 01.94664	03 36 11.15	+23 16 34.7	010
1978	VB1	1978	10 30.94670	03 38 13.38	+23 39 17.5	010
1978	VB1	1978	11 01.94664	03 36 44.92	+23 29 23.5	010
1978	VB1	1978	11 02.94485	03 35 59.50	+23 24 14.9	010
1978	VB1	1978	11 02.96006	03 35 58.73	+23 24 09.9	010
1978	VC1	1978	11 01.94664	03 36 56.96	+25 24 58.0	010
1978	VD1	1978	10 30.94670	03 38 48.08	+25 40 21.8	010
1978	VD1	1978	11 01.94664	03 36 50.42	+25 41 11.8	010
1978	VD1	1978	11 02.94485	03 35 49.80	+25 41 21.7	010
1978	VD1	1978	11 02.96006	03 35 48.75	+25 41 22.2	010
1978	VE1	1978	11 01.94664	03 37 25.67	+23 44 03.4	010
1978	VF1	1978	11 01.94664	03 37 29.12	+24 50 08.1	010
1978	VF1	1978	11 02.94485	03 36 44.17	+24 46 59.8	010
1978	VF1	1978	11 02.96006	03 36 43.54	+24 46 56.9	010
1978	VG1	1978	11 01.94664	03 37 45.68	+24 31 42.5	010
1978	VH1	1978	10 30.94670	03 39 42.73	+22 37 26.8	010
1978	VH1	1978	11 01.94664	03 37 57.24	+22 40 40.2	010
1978	VJ1	1978	10 30.94670	03 40 28.61	+25 00 02.4	010
1978	VJ1	1978	11 01.94664	03 38 40.44	+24 52 15.4	010
1978	VJ1	1978	11 02.94485	03 37 44.41	+24 48 06.0	010
1978	VJ1	1978	11 02.96006	03 37 43.44	+24 48 00.9	010
1978	VK1	1978	10 30.94670	03 40 51.45	+22 35 31.8	010
1978	VK1	1978	11 01.94664	03 39 12.98	+22 31 09.1	010
1978	VL1	1978	10 30.94670	03 41 25.96	+23 33 20.4	010
1978	VL1	1978	11 01.94664	03 39 44.50	+23 29 52.2	010
1978	VM1	1978	10 30.94670	03 42 19.11	+26 03 25.1	010
1978	VM1	1978	11 01.94664	03 40 43.10	+26 00 51.6	010
1978	VN1	1978	10 30.94670	03 42 42.57	+22 28 10.1	010
1978	VN1	1978	11 01.94664	03 40 48.48	+22 35 13.2	010
1978	VO1	1978	10 30.94670	03 43 07.90	+22 45 11.3	010
1978	VO1	1978	11 01.94664	03 41 05.47	+22 44 28.4	010
1978	VP1	1978	10 30.94670	03 42 58.80	+21 47 36.1	010
1978	VQ1	1978	11 01.94664	03 41 24.82	+23 42 59.2	010
1978	VQ1	1978	11 02.94485	03 40 23.65	+23 41 41.1	010
1978	VQ1	1978	11 02.96006	03 40 22.71	+23 41 40.3	010
1978	VR1	1978	11 02.94485	03 40 48.31	+23 35 50.7	010
1978	VR1	1978	11 02.96006	03 40 47.43	+23 35 47.9	010
1978	VS1	1978	11 01.94664	03 41 37.51	+22 01 44.9	010
1978	VT1	1978	10 30.94670	03 44 19.56	+23 25 14.6	010
1978	VT1	1978	11 02.94485	03 41 35.73	+23 27 25.4	010
1978	VT1	1978	11 02.96006	03 41 34.69	+23 27 26.9	010
1978	VW1	1978	10 30.94670	03 45 37.85	+22 19 48.8	010
1978	VW1	1978	11 01.94664	03 43 27.99	+22 28 13.4	010
1978	VX1	1978	11 01.94664	03 43 41.64	+24 59 39.7	010
1978	VY1	1978	11 01.94664	03 43 48.29	+22 09 02.2	010
1978	VZ1	1978	10 30.94670	03 45 42.86	+23 01 56.8	010
1978	VZ1	1978	11 01.94664	03 43 42.09	+23 08 12.6	010
1978	VA2	1978	11 01.94664	03 43 54.19	+22 13 44.0	010
1978	VB2	1978	10 30.94670	03 45 43.95	+23 48 41.5	010
1978	VB2	1978	11 01.94664	03 43 47.96	+23 45 56.2	010
1978	VD2	1978	10 30.94670	03 45 53.32	+22 13 36.8	010
1978	VE2	1978	10 30.94670	03 46 14.73	+25 34 06.8	010

1978	VE2	1978	11	01.94664	03	44	15.40	+25	29	58.6	010
1978	VF2	1978	10	30.94670	03	46	18.76	+25	57	36.1	010
1978	VF2	1978	11	01.94664	03	44	24.67	+25	54	24.7	010
1978	VF2	1978	11	02.94485	03	43	25.57	+25	52	33.3	010
1978	VF2	1978	11	02.96006	03	43	24.79	+25	52	33.4	010
1978	VH2	1978	10	30.94670	03	46	32.65	+24	19	05.5	010
1978	VH2	1978	11	01.94664	03	44	36.33	+24	13	32.9	010
1978	VJ2	1978	10	30.94670	03	48	51.75	+23	23	12.4	010
1978	VJ2	1978	11	01.94664	03	47	07.02	+23	20	45.6	010
1978	VK2	1978	10	30.94670	03	49	06.77	+23	54	55.7	010
1978	VK2	1978	11	01.94664	03	47	20.26	+23	51	14.5	010
1978	VL2	1978	10	30.94670	03	49	30.56	+24	24	17.5	010
1978	VL2	1978	11	01.94664	03	47	23.86	+24	22	49.2	010
1978	VM2	1978	10	30.94670	03	49	52.00	+22	47	14.4	010
1978	VM2	1978	11	01.94664	03	48	24.03	+22	44	15.2	010
1978	VN2	1978	10	30.94670	03	49	56.76	+21	42	53.9	010
1978	VN2	1978	11	01.94664	03	48	26.21	+21	39	21.7	010
1978	VO2	1978	10	30.94670	03	50	10.77	+22	45	04.7	010
1978	VO2	1978	11	01.94664	03	48	40.50	+22	35	04.9	010
1978	VP2	1978	10	30.94670	03	50	28.88	+22	44	02.0	010
1978	VP2	1978	11	01.94664	03	48	49.13	+22	39	03.0	010
1978	VQ2	1978	10	30.94670	03	50	25.62	+22	52	25.8	010
1978	VQ2	1978	11	01.94664	03	48	52.91	+22	44	11.5	010
1978	VR2	1978	10	30.94670	03	50	31.26	+25	17	56.4	010
1978	VR2	1978	11	01.94664	03	48	48.82	+25	20	33.4	010
1978	VR2	1978	11	02.94485	03	47	55.04	+25	21	36.4	010
1978	VR2	1978	11	02.96006	03	47	54.17	+25	21	36.2	010
1978	VS2	1978	10	30.94670	03	51	54.55	+24	14	43.4	010
1978	VS2	1978	11	01.94664	03	50	03.94	+24	15	20.5	010
1978	VT2	1978	10	30.94670	03	52	18.35	+25	44	22.3	010
1978	VT2	1978	11	01.94664	03	50	31.04	+25	42	08.9	010
1978	VU2	1978	11	01.94664	03	53	19.51	+23	45	34.1	010
1978	VU11*	1978	11	01.94664	03	34	18.74	+23	11	30.7	010
1978	VV11*	1978	11	01.94664	03	35	15.03	+23	26	03.5	010
1978	VW11*	1978	11	01.94664	03	35	18.08	+24	04	53.5	010
1978	VX11*	1978	11	01.94664	03	38	02.85	+23	17	18.2	010
1978	VY11*	1978	11	01.94664	03	45	25.57	+25	56	36.9	010
1978	VZ11*	1978	11	01.94664	03	45	36.80	+26	08	28.0	010
1978	VA12*	1978	11	01.94664	03	46	43.03	+23	11	25.6	010
1978	VB12*	1978	11	02.94485	03	27	23.11	+23	48	57.3	010
1978	VB12	1978	11	02.96006	03	27	22.43	+23	48	53.3	010
1978	VC12*	1978	11	02.94485	03	33	02.45	+23	29	58.6	010
1978	VC12	1978	11	02.96006	03	33	01.65	+23	29	57.8	010

OBSERVATIONS MADE AT THE KLET OBSERVATORY BY A. MRKOS, L. BROZEK, J. KVETON
AND Z. VAVROVA.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
/1978f	1979	08	02.00600	23 35 02.96	-17 58 47.2	13.0T	046
/1978f	1979	08	02.01416	23 35 02.57	-17 58 47.5		046
/1978f	1979	08	15.96417	23 21 31.23	-18 22 38.2	13.3T	046
/1978f	1979	08	15.96862	23 21 30.92	-18 22 39.0		046
/1978f	1979	08	18.99306	23 18 20.71	-18 27 08.1	13.3T	046
/1978f	1979	08	19.00058	23 18 20.18	-18 27 08.8		046
/1978f	1979	08	30.99959	23 05 29.89	-18 39 39.8	13.5T	046
/1978f	1979	08	31.01505	23 05 28.86	-18 39 39.7		046
/1978f	1979	09	01.02153	23 04 24.52	-18 40 15.9	13.5T	046
/1978f	1979	09	01.02917	23 04 24.09	-18 40 15.2		046
/1978f	1979	09	18.90054	22 46 37.91	-18 35 53.7	13 T	046
/1978f	1979	09	18.91507	22 46 37.09	-18 35 52.2		046

246	1979	07	26.95646	20	45	41.44	-02	55	17.7	046
246	1979	07	26.97885	20	45	40.26	-02	55	30.6	046
246	1979	07	26.99101	20	45	39.72	-02	55	36.0	046
246	1979	07	29.95052	20	43	21.79	-03	20	51.7	046
246	1979	07	29.96481	20	43	21.09	-03	20	59.1	046
397	1979	08	14.84935	21	23	46.54	+10	11	49.1	046
397	1979	08	14.86353	21	23	45.88	+10	11	46.6	046
397	1979	08	15.86064	21	22	58.68	+10	08	50.6	046
397	1979	08	15.87487	21	22	57.93	+10	08	46.9	046
478	1979	07	29.98872	21	40	49.31	+05	48	25.7	046
478	1979	07	30.00307	21	40	48.72	+05	48	24.8	046
478	1979	07	31.01714	21	40	08.21	+05	47	38.0	046
478	1979	07	31.03138	21	40	07.65	+05	47	37.8	046
587	1979	08	30.95961	23	37	00.77	+18	31	42.8	046
587	1979	08	30.97436	23	37	00.04	+18	31	45.9	046
587	1979	08	31.98194	23	35	52.71	+18	36	15.4	046
587	1979	08	31.99653	23	35	51.78	+18	36	18.1	046
666	1979	08	14.89368	21	27	22.39	-01	02	32.2	046
666	1979	08	14.90797	21	27	21.67	-01	02	35.7	046
666	1979	08	15.89738	21	26	31.25	-01	07	20.8	046
666	1979	08	15.91168	21	26	30.53	-01	07	25.3	046
666	1979	08	18.95938	21	23	54.97	-01	23	14.2	046
666	1979	08	18.97361	21	23	54.21	-01	23	19.0	046
666	1979	08	25.84383	21	18	12.48	-02	04	23.4	046
666	1979	08	25.85801	21	18	11.77	-02	04	28.8	046
666	1979	08	29.89862	21	15	04.49	-02	31	21.0	046
666	1979	08	29.91321	21	15	03.81	-02	31	25.6	046
666	1979	08	30.92170	21	14	19.39	-02	38	21.2	046
666	1979	08	30.93640	21	14	18.71	-02	38	27.5	046
666	1979	09	12.79839	21	06	49.14	-04	10	21.5	046
666	1979	09	12.81263	21	06	48.73	-04	10	27.2	046
666	1979	09	13.81574	21	06	24.40	-04	17	36.5	046
666	1979	09	13.82998	21	06	24.09	-04	17	42.5	046
666	1979	09	16.78928	21	05	22.99	-04	38	34.4	046
666	1979	09	16.80485	21	05	22.66	-04	38	40.5	046
666	1979	09	19.79410	21	04	37.47	-04	59	11.8	046
666	1979	09	19.80856	21	04	37.30	-04	59	17.6	046
1064	1979	08	29.93988	23	31	44.30	+13	44	09.5	046
1064	1979	08	29.95453	23	31	43.54	+13	44	09.8	046
1064	1979	09	11.85841	23	20	24.66	+13	19	34.2	046
1064	1979	09	11.87277	23	20	23.84	+13	19	30.6	046
1064	1979	09	12.83589	23	19	31.09	+13	15	57.8	046
1064	1979	09	12.85030	23	19	30.22	+13	15	54.3	046
1168	1979	08	30.95961	23	39	10.33	+17	46	13.6	046
1168	1979	08	30.97436	23	39	09.90	+17	46	09.3	046
1168	1979	08	31.98194	23	38	40.46	+17	40	29.9	046
1168	1979	08	31.99653	23	38	40.04	+17	40	25.5	046
1183	1979	09	19.95016	00	14	39.60	+00	22	07.9	046
1183	1979	09	19.96492	00	14	38.79	+00	22	03.8	046
1369	1979	09	19.95016	00	13	26.84	+01	30	20.3	046
1369	1979	09	19.96492	00	13	26.30	+01	30	11.4	046
1408	1979	09	17.92858	23	53	18.05	+04	53	55.8	046
1408	1979	09	17.94299	23	53	17.46	+04	53	50.1	046
1408	1979	09	18.93718	23	52	36.76	+04	46	48.0	046
1408	1979	09	18.95465	23	52	35.96	+04	46	39.1	046
1436	1979	07	29.98872	21	37	44.88	+04	49	10.9	046
1436	1979	07	30.00307	21	37	44.28	+04	49	12.1	046
1436	1979	07	31.01714	21	37	01.17	+04	50	20.8	046
1436	1979	07	31.03138	21	37	00.66	+04	50	10.6	046

1690	1979	08	15.93760	22	57	10.53	+13	01	14.5		046
1690	1979	08	15.95010	22	57	10.12	+13	01	13.8		046
1979 KB	1979	07	30.93236	16	42	10.23	-02	52	57.2	17.5	046
1979 KB	1979	07	30.94706	16	42	10.47	-02	53	02.3		046
1979 OC	1979	08	30.92170	21	08	04.16	-02	34	32.7	16.5	046
1979 OC	1979	08	30.93640	21	08	03.44	-02	34	37.2		046
1979 OC	1979	09	17.80433	20	59	22.93	-03	58	59.0	16.8	046
1979 OC	1979	09	17.82574	20	59	22.75	-03	59	05.4		046
1979 PA *	1979	08	14.84935	21	28	23.18	+10	46	07.8	17.2	046
1979 PA	1979	08	14.86353	21	28	22.46	+10	46	04.6		046
1979 PA	1979	08	15.86064	21	27	38.65	+10	41	06.2		046
1979 PA	1979	08	15.87487	21	27	38.10	+10	41	03.6		046
1979 PA	1979	08	19.03628	21	25	20.16	+10	22	51.5		046
1979 PB *	1979	08	14.89368	21	29	55.09	-01	08	46.6	15.4	046
1979 PB	1979	08	14.90797	21	29	54.38	-01	08	50.6		046
1979 PB	1979	08	15.89738	21	29	03.40	-01	13	12.2		046
1979 PB	1979	08	15.91168	21	29	02.59	-01	13	15.9		046
1979 PB	1979	08	18.95938	21	26	27.22	-01	27	30.3		046
1979 PB	1979	08	18.97361	21	26	26.50	-01	27	34.9		046
1979 PB	1979	08	25.84383	21	20	54.20	-02	03	17.4		046
1979 PB	1979	08	25.85801	21	20	53.48	-02	03	21.3		046
1979 PB	1979	08	29.89862	21	17	56.17	-02	25	54.7		046
1979 PB	1979	08	29.91321	21	17	55.55	-02	25	58.7		046
1979 PB	1979	08	30.92170	21	17	13.96	-02	31	43.7	16.0	046
1979 PB	1979	08	30.93640	21	17	13.29	-02	31	49.1		046
1979 PB	1979	09	16.78928	21	08	59.61	-04	06	52.8		046
1979 PB	1979	09	16.80485	21	08	59.31	-04	06	57.4		046
1979 PB	1979	09	19.79410	21	08	16.58	-04	22	28.2		046
1979 PB	1979	09	19.80856	21	08	16.34	-04	22	33.0		046
1979 PC *	1979	08	14.89368	21	29	06	-03	32	6	15.8	1 046
1979 PC	1979	08	14.90797	21	29	05	-03	32	6		1 046
1979 PC	1979	08	25.84383	21	19	30.43	-03	37	08.2		046
1979 PC	1979	08	25.85801	21	19	29.60	-03	37	09.9		046
1979 PC	1979	08	29.89862	21	16	09.66	-03	40	54.8		046
1979 PC	1979	08	29.91321	21	16	08.99	-03	40	55.8		046
1979 PC	1979	08	30.92170	21	15	20.92	-03	41	59.8		046
1979 PC	1979	08	30.93640	21	15	20.21	-03	42	00.8		046
1979 PC	1979	09	12.79839	21	06	36.12	-03	58	38.1		046
1979 PC	1979	09	12.81263	21	06	35.70	-03	58	40.3		046
1979 PC	1979	09	13.81574	21	06	03.11	-04	00	04.1		046
1979 PC	1979	09	13.82998	21	06	02.64	-04	00	05.4		046
1979 PC	1979	09	16.78928	21	04	34.47	-04	04	10.4		046
1979 PC	1979	09	16.80485	21	04	33.95	-04	04	11.8		046
1979 PC	1979	09	19.79410	21	03	17.81	-04	08	12.2		046
1979 PC	1979	09	19.80856	21	03	17.47	-04	08	13.7		046
1979 PD *	1979	08	14.89368	21	29	26	-03	33	2	17.4	1 046
1979 PD	1979	08	14.90797	21	29	25	-03	33	3		1 046
1979 QD *	1979	08	30.99959	23	11	44.49	-19	37	23.2	16.6	2 046
1979 QD	1979	08	31.01505	23	11	43.82	-19	37	30.7		2 046
1979 QE *	1979	08	30.95961	23	35	54.96	+17	02	41.1	16.4	046
1979 QE	1979	08	30.97436	23	35	54.22	+17	02	40.4		046
1979 QE	1979	08	31.98194	23	35	12.00	+17	01	58.3		046
1979 QE	1979	08	31.99653	23	35	11.32	+17	01	55.8		046
1979 QE	1979	09	12.87409	23	26	13.28	+16	38	23.7		046
1979 QE	1979	09	12.88832	23	26	12.36	+16	38	21.0		046
1979 QE	1979	09	16.83286	23	23	05.65	+16	24	41.7		046
1979 QE	1979	09	16.84733	23	23	05.13	+16	24	39.7		046
1979 QE	1979	09	19.83212	23	20	44.00	+16	12	34.0		046
1979 QE	1979	09	19.84630	23	20	43.34	+16	12	31.0		046

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1979	QF	*	1979	08	29.93988	23	31	35.13	+13	10	31.7		16.5	046
1979	QF		1979	08	29.95453	23	31	34.66	+13	10	26.5		046	
1979	QF		1979	09	12.83589	23	22	10.57	+11	07	41.3		046	
1979	QF		1979	09	12.85030	23	22	09.73	+11	07	31.3		046	
1979	QF		1979	09	16.87869	23	19	12.91	+10	22	42.6		046	
1979	QF		1979	09	16.89299	23	19	12.39	+10	22	34.2		046	
1979	QF		1979	09	17.86584	23	18	29.69	+10	11	10.5		046	
1979	QF		1979	09	19.86973	23	17	02.70	+09	47	22.6		046	
1979	QF		1979	09	19.88409	23	17	02.20	+09	47	13.0		046	
1979	QF		1979	09	26.01241	23	12	47.45	+08	30	50.3		046	
1979	QF		1979	09	26.02699	23	12	46.80	+08	30	39.1		046	
1979	QK	*	1979	08	29.93988	23	32	37.12	+13	14	36.6	17.8	046	
1979	QK		1979	08	29.95453	23	32	36.58	+13	14	40.4		046	
1979	SA		1979	08	29.93988	23	29	02.95	+12	29	37.1	16.5	046	
1979	SA		1979	08	29.95453	23	29	02.43	+12	29	32.2		046	
1979	SA		1979	09	12.83589	23	20	15.30	+11	03	51.6		046	
1979	SA		1979	09	12.85030	23	20	14.73	+11	03	44.9		046	
1979	SA		1979	09	16.87869	23	17	34.81	+10	33	57.0		046	
1979	SA		1979	09	16.89299	23	17	34.36	+10	33	51.1		046	
1979	SA		1979	09	17.85172	23	16	56.40	+10	26	27.0		046	
1979	SA		1979	09	17.86584	23	16	55.84	+10	26	21.0		046	
1979	SA		1979	09	19.86973	23	15	36.80	+10	10	39.0		046	
1979	SA		1979	09	19.88409	23	15	36.28	+10	10	31.4		046	
1979	SA		1979	09	26.01241	23	11	41.73	+09	20	31.0		046	
1979	SA		1979	09	26.02699	23	11	41.27	+09	20	23.0		046	
1979	SF	*	1979	09	17.92858	23	46	37.95	+04	31	58.3	16.4	046	
1979	SF		1979	09	17.94299	23	46	37.12	+04	31	55.7		046	
1979	SF		1979	09	18.93718	23	45	41.48	+04	29	28.6		046	
1979	SF		1979	09	18.95465	23	45	40.24	+04	29	25.2		046	
1979	SF		1979	09	19.90747	23	44	47.15	+04	27	01.0		046	
1979	SF		1979	09	19.92222	23	44	46.34	+04	26	59.2		046	
1979	SF		1979	09	25.97219	23	39	10.54	+04	10	18.6		046	
1979	SF		1979	09	25.98648	23	39	09.70	+04	10	16.3		046	
1979	SF		1979	09	26.95431	23	38	17.30	+04	07	27.4		046	
1979	SF		1979	09	26.96895	23	38	16.47	+04	07	25.2		046	
1979	SF		1979	09	27.91801	23	37	25.51	+04	04	38.1		046	
1979	SF		1979	09	27.93259	23	37	24.67	+04	04	35.6		046	
1979	SG	*	1979	09	17.92858	23	51	50.61	+03	59	06.8	17.5	046	
1979	SG		1979	09	17.94299	23	51	49.73	+03	59	05.3		046	
1979	SH	*	1979	09	17.92858	23	48	36.55	+03	44	08.9	17.0	046	
1979	SH		1979	09	17.94299	23	48	35.54	+03	44	08.7		046	
1979	SH		1979	09	18.93718	23	47	44.60	+03	43	42.8		046	
1979	SH		1979	09	18.95465	23	47	43.29	+03	43	41.9		046	
1979	SH		1979	09	19.90747	23	46	54.44	+03	43	09.2		046	
1979	SH		1979	09	19.92222	23	46	53.66	+03	43	05.2		046	
1979	SH		1979	09	25.97219	23	41	40.15	+03	37	52.0		046	
1979	SH		1979	09	25.98648	23	41	39.55	+03	37	50.5		046	
1979	SH		1979	09	26.95431	23	40	50.28	+03	36	47.6		046	
1979	SH		1979	09	26.96895	23	40	49.50	+03	36	47.0		046	
1979	SH		1979	09	27.91801	23	40	01.97	+03	35	42.2		046	
1979	SH		1979	09	27.93259	23	40	00.88	+03	35	41.2		046	
1979	SJ	*	1979	09	19.95016	00	07	49.84	+00	38	25.6	17.0	046	
1979	SJ		1979	09	19.96492	00	07	49.14	+00	38	23.5		046	
1979	SJ		1979	09	25.93457	00	01	58.90	+00	35	31.7		046	
1979	SJ		1979	09	25.94887	00	01	58.08	+00	35	32.3		046	
1979	SJ		1979	09	26.91623	00	01	01.76	+00	35	02.1		046	
1979	SJ		1979	09	26.93081	00	01	00.96	+00	35	00.9		046	
1979	SJ		1979	09	27.95649	00	00	01.59	+00	34	31.5		046	
1979	SJ		1979	09	27.97079	00	00	01.04	+00	34	31.3		046	

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1979	SK	*	1979	09	19.	90747	23	37	10.0	+03	52	44		16.8	046
1979	SK		1979	09	19.	92222	23	37	09.0	+03	52	42		046	046
1979	SK		1979	09	25.	89591	23	32	09.42	+03	27	55.1		046	046
1979	SK		1979	09	25.	91050	23	32	08.74	+03	27	51.9		046	046
1979	SK		1979	09	26.	87346	23	31	22.71	+03	23	40.3		046	046
1979	SK		1979	09	26.	88804	23	31	22.11	+03	23	37.3		046	046
1979	SK		1979	09	27.	87825	23	30	35.64	+03	19	16.8		046	046
1979	SK		1979	09	27.	89249	23	30	34.93	+03	19	14.8		046	046
1979	SL	*	1979	09	19.	90747	23	39	55.32	+04	44	44.6	16.0	046	046
1979	SL		1979	09	19.	92222	23	39	54.53	+04	44	36.2		046	046
1979	SL		1979	09	25.	89591	23	35	55.96	+03	58	00.2		046	046
1979	SL		1979	09	25.	91050	23	35	55.46	+03	57	53.2		046	046
1979	SL		1979	09	26.	87346	23	35	17.90	+03	50	16.3		046	046
1979	SL		1979	09	26.	88804	23	35	17.38	+03	50	10.2		046	046
1979	SM	*	1979	09	19.	90747	23	51	17.63	+04	07	38.6	17.0	046	046
1979	SM		1979	09	19.	92222	23	51	16.32	+04	07	32.9		046	046
1979	SM		1979	09	25.	97219	23	46	04.39	+03	55	25.2		046	046
1979	SM		1979	09	25.	98648	23	46	03.69	+03	55	22.8		046	046
1979	SM		1979	09	26.	95431	23	45	14.60	+03	53	17.7		046	046
1979	SM		1979	09	26.	96895	23	45	13.81	+03	53	15.5		046	046
1979	SM		1979	09	27.	91801	23	44	25.76	+03	51	08.7		046	046
1979	SM		1979	09	27.	93259	23	44	25.16	+03	51	10.1		046	046
1979	SN	*	1979	09	25.	97219	23	44	17.36	+03	45	31.0	17.6	046	046
1979	SN		1979	09	25.	98648	23	44	16.61	+03	45	28.6		046	046
1979	SN		1979	09	26.	95431	23	43	22.44	+03	43	39.5		046	046
1979	SN		1979	09	26.	96895	23	43	21.70	+03	43	38.7		046	046
1979	SN		1979	09	27.	91801	23	42	28.99	+03	41	49.5		046	046
1979	SN		1979	09	27.	93259	23	42	28.10	+03	41	49.5		046	046
1979	SO	*	1979	09	25.	93457	00	08	17.10	-01	05	08.6	17.0	046	046
1979	SO		1979	09	25.	94887	00	08	16.23	-01	05	09.2		046	046
1979	SO		1979	09	26.	91623	00	07	22.10	-01	05	05.2		046	046
1979	SO		1979	09	26.	93081	00	07	21.26	-01	05	06.0		046	046
1979	SO		1979	09	27.	95649	00	06	23.79	-01	04	59.4		046	046
1979	SO		1979	09	27.	97079	00	06	23.19	-01	04	59.0		046	046
1979	SP	*	1979	09	25.	93457	00	02	28.42	-01	52	18.5	16.5	046	046
1979	SP		1979	09	25.	94887	00	02	27.95	-01	52	22.0		046	046
1979	SP		1979	09	26.	91623	00	01	45.50	-01	57	31.3		046	046
1979	SP		1979	09	26.	93081	00	01	44.95	-01	57	35.3		046	046
1979	SP		1979	09	27.	95649	00	01	00.00	-02	03	01.0		046	046
1979	SP		1979	09	27.	97049	00	00	59.42	-02	03	04.9		046	046
1979	SQ	*	1979	09	25.	89591	23	26	18.35	+02	15	22.2	15.8	046	046
1979	SQ		1979	09	25.	91050	23	26	17.61	+02	15	17.8		046	046
1979	SQ		1979	09	26.	87346	23	25	31.39	+02	10	26.5		046	046
1979	SQ		1979	09	26.	88804	23	25	30.70	+02	10	22.7		046	046
1979	SQ		1979	09	27.	87825	23	24	43.81	+02	05	23.0		046	046
1979	SQ		1979	09	27.	89249	23	24	43.05	+02	05	18.6		046	046
1979	SR	*	1979	09	25.	89591	23	29	26.34	+04	31	02.9	16.5	046	046
1979	SR		1979	09	25.	91050	23	29	25.83	+04	30	55.1		046	046
1979	SR		1979	09	26.	87346	23	28	48.13	+04	21	50.5		046	046
1979	SR		1979	09	26.	88804	23	28	47.62	+04	21	42.3		046	046
1979	SR		1979	09	27.	87825	23	28	09.33	+04	12	20.5		046	046
1979	SR		1979	09	27.	89249	23	28	08.74	+04	12	14.1		046	046
1979	SS	*	1979	09	25.	89591	23	31	18.23	+02	30	50.5	17.0	046	046
1979	SS		1979	09	25.	91050	23	31	17.56	+02	30	49.8		046	046
1979	SS		1979	09	26.	87346	23	30	24.18	+02	29	25.1		046	046
1979	SS		1979	09	26.	88804	23	30	23.29	+02	29	24.5		046	046
1979	SS		1979	09	27.	87825	23	29	29.47	+02	27	56.2		046	046
1979	SS		1979	09	27.	89249	23	29	28.48	+02	27	54.0		046	046
1979	ST	*	1979	09	25.	89591	23	34	20.45	+01	45	18.1	16.6	046	046

1979	ST	1979	09	25.91050	23	34	19.94	+01	45	14.2	046
1979	ST	1979	09	26.87346	23	33	37.89	+01	41	20.7	046
1979	ST	1979	09	26.88804	23	33	37.28	+01	41	16.8	046
1979	ST	1979	09	27.87825	23	32	54.53	+01	37	15.8	046
1979	ST	1979	09	27.89249	23	32	53.95	+01	37	12.8	046

Note 1: near edge of plate. 2: this object is a little diffuse.

OBSERVATIONS MADE AT TURKU (CODE 062) BY Y. VAISALA, L. OTERMA, V. LAIHO
AND M. VAISALA AND AT THE TURKU-TUORLA STATION (CODE 063) BY M.-A.
SNARE AND A. NIEMI. MEASURED BY J. LEHTINEN, SNARE AND NIEMI.

Object		Date	UT	R. A. (1950)	Decl.		N Obs.
/1979c		1979	08	31.88296	05 48 32.10	+59 21 58.0	063
/1979c		1979	08	31.88788	05 48 27.96	+59 22 28.0	063
/1979c		1979	08	31.95484	05 47 38.77	+59 26 49.2	063
/1979i		1979	09	28.82914	13 18 26.62	+65 20 38.4	063
/1979i		1979	09	28.84442	13 18 25.37	+65 20 18.9	063
/1979i		1979	09	28.88019	13 18 21.67	+65 19 39.5	063
1642		1942	09	07.93256	00 12 27.25	+07 09 59.8	1 062
1642		1942	09	11.94859	00 09 07.07	+07 05 45.1	1 062
1642		1942	09	14.96839	00 06 29.33	+07 01 18.6	1 062
1642		1942	10	03.89230	23 49 17.84	+06 16 39.4	1 062
1642		1942	10	03.89907	23 49 17.37	+06 16 36.8	1 062
1642		1942	10	11.87566	23 42 40.16	+05 53 52.3	1 062
1939 FY		1939	02	16.98632	11 30 11.46	+08 54 23.2	062
1939 FY		1939	03	14.93906	11 02 19.39	+09 42 46.3	062
1939 FY		1939	03	22.91024	10 54 10.42	+09 47 24.2	062
1939 UJ		1939	10	18.91069	01 56 00.54	+09 12 52.4	062
1939 UJ		1939	10	20.88693	01 54 17.70	+09 11 23.2	062
1939 UJ		1939	11	11.73215	01 36 07.92	+09 00 51.0	062
1940 FG		1940	04	12.84553	12 37 21.55	+05 29 43.2	062
1940 GD		1940	04	03.93452	13 11 20.64	-02 46 28.2	062
1940 GD		1940	04	04.89405	13 10 35.47	-02 35 43.6	062
1940 GD		1940	04	12.95896	13 04 13.50	-01 08 45.1	062
1940 GE		1940	04	03.93452	13 13 34.05	+00 56 01.2	062
1940 GE		1940	04	04.89405	13 12 33.78	+00 58 18.5	062
1940 GE		1940	04	12.95896	13 04 05.42	+01 13 45.7	062
1940 GE		1940	04	28.92126	12 49 21.22	+01 16 50.1	062
1940 GH		1940	04	04.99567	13 32 44.56	+06 39 57.8	062
1940 GH		1940	04	10.92882	13 27 47.41	+06 53 16.0	062
1940 GH		1940	04	11.89751	13 26 58.20	+06 55 04.8	062
1940 GH		1940	04	12.97470	13 26 03.43	+06 56 54.7	062
1940 GN		1940	04	09.99692	14 43 11.81	-01 02 25.6	062
1940 GN		1940	04	10.98328	14 42 30.02	-01 00 19.7	062
1940 GN		1940	04	13.00630	14 41 00.32	-00 56 18.9	2 062
1940 GN		1940	04	30.94802	14 24 39.27	-00 45 51.8	062
1940 GN		1940	05	01.93471	14 23 41.11	-00 46 56.6	062
1940 GO		1940	04	09.99692	14 55 33.98	+01 46 48.6	062
1940 GO		1940	04	10.98328	14 54 48.66	+01 50 16.9	062
1940 GO		1940	04	13.01116	14 53 12.18	+01 57 05.6	062
1940 GO		1940	05	01.93927	14 35 56.73	+02 34 18.8	062
1942 RM		1942	09	07.93962	23 48 36.44	-00 28 24.4	062
1942 RM		1942	09	08.91927	23 47 59.29	-00 42 27.9	062
1942 RM		1942	09	11.89465	23 46 03.23	-01 25 31.6	062
1942 RM		1942	09	15.91015	23 43 22.15	-02 23 50.4	062
1942 RM		1942	10	03.87176	23 32 22.69	-06 24 04.4	062
1943 EN		1943	03	03.93742	10 57 24.55	+14 20 43.6	062
1943 EN		1943	03	07.95360	10 52 54.92	+14 29 53.3	062
1943 EN		1943	03	09.90662	10 50 45.37	+14 33 27.3	062
1943 EN		1943	03	25.85628	10 35 27.13	+14 35 21.1	062

1943 GT	1943 04 03.95993	12 40 25.83	+04 04 10.8	062
1943 GT	1943 04 03.99477	12 40 23.61	+04 04 28.4	062
1943 GT	1943 04 07.91737	12 36 34.52	+04 26 37.4	062
1943 TD	1943 10 05.83032	23 52 44.21	+07 40 47.8	062
1943 TD	1943 10 05.86007	23 52 43.10	+07 40 32.3	062

Note 1: identification (1642) = 1942 RB by L. Oterma. 2: the approximate position on RI 2128 is in error.

OBSERVATIONS MADE AT THE PURPLE MOUNTAIN OBSERVATORY (CODE 330) AND
AT TSINGTAO (CODE 334).

Object	Date	UT	R. A. (1950)	Decl.	O - C	Obs.
/1962 VIII	1965 01 08.82998	11 17 20.94	-00 42 42.0			330
/1965 I	1965 01 06.68004	06 44 28.80	+27 07 16.3			330
/1965 I	1965 01 07.72778	06 44 25.99	+27 29 13.4			330
/1965 I	1965 01 11.86250	06 44 25.28	+28 55 16.9			330
/1965 I	1965 03 04.52569	07 38 52.78	+37 43 52.3			330
/1965 I	1965 04 06.72049	08 54 04.41	+33 41 56.7			330
/1965 I	1965 04 23.58438	09 32 24.49	+30 00 30.4			330
/1965 II	1965 03 09.62604	08 04 07.27	+12 39 06.3			330
/1965 II	1965 03 27.53402	08 21 14.72	+11 21 12.0			330
/1965 II	1965 04 24.58750	09 02 29.33	+08 46 54.6			330
/1965 VIII	1965 11 09.89120	11 45 04.74	-23 47 07.5			330
/1965 VIII	1965 11 19.88148	11 07 56.41	-29 27 08.2			330
/1965 VIII	1965 11 22.88343	10 55 59.90	-31 01 59.7			330
/1972 IX	1972 10 10.50346	15 47 02.34	+23 51 44.5			330
/1972 IX	1972 10 12.46469	15 48 31.79	+23 52 43.3			330
/1972 XI	1973 01 27.56904	06 22 53.33	+30 06 47.7			330
/1973 II	1972 11 29.78886	07 14 27.51	-23 49 41.3			330
/1973 XII	1973 10 08.87532	10 43 03.27	-02 10 27.4			330
/1973 XII	1973 10 09.88021	10 44 52.18	-02 23 17.1			330
/1973 XII	1973 10 16.88403	10 58 41.67	-03 55 36.5			330
/1973 XII	1973 10 18.88065	11 02 51.45	-04 23 18.5			330
/1973 XII	1973 10 21.88082	11 09 23.79	-05 07 28.0			330
/1973 XII	1973 10 22.88329	11 11 38.48	-05 22 37.1			330
/1973 XII	1973 10 23.87949	11 13 55.20	-05 38 05.6			330
/1973 XII	1973 10 24.87951	11 16 11.43	-05 51 43.7			330
/1973 XII	1973 10 29.87598	11 28 26.82	-07 16 29.0			330
/1973 XII	1973 10 31.87881	11 33 41.18	-07 51 53.4			330
/1973 XII	1973 11 01.88025	11 36 23.46	-08 10 00.5			330
/1973 XII	1973 11 12.87312	12 10 19.00	-11 53 01.4			334
/1973 XII	1973 11 13.88001	12 13 53.86	-12 15 42.6			334
/1973 XII	1973 11 13.88696	12 13 55.19	-12 15 52.4			334
/1973 XII	1973 11 15.87259	12 21 18.79	-13 02 01.9			330
/1973 XII	1973 11 16.87677	12 25 13.10	-13 25 59.5			330
/1973 XII	1973 11 18.87784	12 33 20.26	-14 15 13.5			334
/1973 XII	1973 11 19.87670	12 37 34.18	-14 40 18.1			334
/1973 XII	1973 11 19.89371	12 37 38.95	-14 40 47.0			334
/1973 XII	1973 11 21.88733	12 46 32.12	-15 32 16.3			334
/1973 XII	1973 11 21.89323	12 46 33.98	-15 32 27.7			334
/1973 XII	1973 11 21.89579	12 46 34.62	-15 32 29.8			330
/1973 XII	1973 11 22.90174	12 51 16.91	-15 59 04.9			330
/1973 XII	1973 11 23.89108	12 56 03.98	-16 25 35.4			330
/1973 XII	1973 11 24.89045	13 01 03.87	-16 52 47.7			330
/1973 XII	1973 11 25.87556	13 06 09.83	-17 19 55.0			334
/1973 XII	1973 11 25.88632	13 06 12.79	-17 20 11.2			334
/1973 XII	1973 11 25.89396	13 06 15.28	-17 20 23.4			334
/1973 XII	1973 11 26.90061	13 11 38.73	-17 48 25.8			330
/1973 XII	1973 11 28.89572	13 22 55.14	-18 44 43.9			334
/1973 XII	1973 11 28.90127	13 22 57.75	-18 44 56.6			334

/1973	XII	1973	11	29.90486	13	28	57.15	-19	13	33.6		330	
/1973	XII	1973	11	30.89595	13	35	05.41	-19	41	55.0		330	
/1973	XII	1973	12	01.88842	13	41	27.84	-20	10	22.6		330	
/1973	XII	1973	12	03.89395	13	55	06.63	-21	07	45.8		334	
/1973	XII	1973	12	05.89164	14	09	47.07	-22	03	56.5		334	
/1973	XII	1973	12	05.90142	14	09	52.78	-22	04	08.6		330	
/1973	XII	1973	12	05.91143	14	09	55.90	-22	04	25.6		334	
/1973	XII	1973	12	08.89251	14	34	02.27	-23	23	51.4		330	
/1973	XII	1974	01	06.41612	20	37	40.03	-14	41	21.0		334	
/1973	XII	1974	01	07.43443	20	49	42.45	-13	50	00.8		334	
/1973	XII	1974	01	11.43199	21	36	37.42	-10	13	55.2		334	
/1973	XII	1974	01	12.42980	21	48	11.28	-09	16	51.1		334	
/1973	XII	1974	01	12.44578	21	48	22.38	-09	15	56.2		334	
/1973	XII	1974	01	19.45693	23	05	30.24	-02	27	35.0		334	
/1973	XII	1974	01	21.44832	23	25	26.81	-00	15	00.4		330	
/1973	XII	1974	01	24.46412	23	53	30.16	+01	56	50.2		334	
/1973	XII	1974	01	29.45573	00	34	08.78	+05	35	11.5		334	
/1973	XII	1974	02	01.45155	00	55	19.17	+07	24	16.4		334	
/1973	XII	1974	02	02.46951	01	01	59.07	+07	57	46.2		334	
/1973	XII	1974	02	02.47993	01	02	03.55	+07	58	11.0		334	
/1973	XII	1974	02	11.46506	01	51	27.85	+11	49	49.8		330	
/1973	XII	1974	02	12.46856	01	56	06.00	+12	09	55.5		330	
/1973	XII	1974	02	15.48294	02	09	10.24	+13	02	41.6		330	
/1973	XII	1974	02	20.47501	02	28	24.61	+14	21	51.4		330	
/1974	II	1973	09	21.53172	21	08	42.22	-15	54	45.6		330	
/1974	II	1973	09	23.58473	21	08	16.84	-15	54	41.3		330	
/1974	III	1974	03	18.47149	01	49	02.40	-04	13	19.8		330	
/1974	III	1974	03	28.46846	02	14	49.17	+21	07	41.0		330	
1		1975	12	02.69277	04	26	03.88	+18	14	00.0	0.0	0	330
1		1975	12	22.47521	04	07	26.66	+18	47	13.7	0.1-	0	330
2		1975	10	30.49168	23	31	55.76	-13	15	13.5		330	
4		1975	10	30.49168	23	30	50.76	-14	26	55.8		330	
5		1973	11	21.54509	02	17	50.07	+04	54	23.3	0.0	0	330
5		1973	11	24.49948	02	15	38.77	+04	47	11.5	0.0	0	330
5		1973	11	30.49692	02	11	46.35	+04	37	33.4	0.0	0	330
5		1977	10	12.55778	01	43	51.32	+02	46	55.8	0.0	0	330
5		1977	11	03.58413	01	24	53.05	+00	42	34.6	0.0	0	330
5		1977	11	04.57095	01	24	06.71	+00	38	21.3	0.1-	0	330
5		1977	11	08.55436	01	21	08.59	+00	22	56.3	0.1-	0	330
5		1977	11	11.53614	01	19	06.20	+00	13	12.4	0.1-		330
7		1973	12	22.63159	06	36	00.68	+20	22	30.7	0.0	0	330
7		1973	12	25.64363	06	32	38.44	+20	12	37.2	0.0	0	330
8		1966	01	28.86356	10	14	27.22	+16	20	03.0	0.0	0	330
8		1966	02	13.68900	09	58	54.83	+18	35	25.9	0.0	1+	330
8		1966	02	14.64248	09	57	53.69	+18	43	08.1	0.0	1+	330
8		1966	02	16.65288	09	55	44.92	+18	59	08.8	0.1-	1+	330
8		1966	02	25.72398	09	46	23.09	+20	03	22.0	0.0	1+	330
9		1975	10	30.71182	05	32	41.45	+22	24	49.4		330	
9		1975	11	24.56208	05	20	21.73	+23	43	50.1	0.0	1+	330
10		1974	10	12.65045	02	00	46.74	+17	45	39.1	0.0	0	330
10		1974	11	18.64286	01	34	31.71	+15	01	56.7	0.0	0	330
10		1976	01	05.59660	06	00	46.15	+24	17	16.2	0.0	0	330
11		1974	10	23.68530	03	05	11.78	+09	20	52.2	0.1-	1-	330
14		1973	10	23.87598	00	17	13.79	-11	58	34.5	0.3+	0	330
14		1974	11	18.70396	06	49	38.77	+22	43	04.3		330	
14		1974	12	14.62242	06	33	54.52	+24	33	56.0	0.0	0	330
14		1974	12	18.69013	06	29	52.44	+24	53	23.1	0.0	0	330
14		1975	01	04.58257	06	11	24.63	+26	08	50.4	0.0	0	330
14		1975	01	12.52770	06	03	07.75	+26	38	35.6	0.0	0	330

14	1975	01	16.57095	05	59	20.96	+26	51	56.6	0.0	0	330
14	1975	01	17.61476	05	58	25.97	+26	55	12.4	0.0	0	330
14	1975	01	18.63441	05	57	34.24	+26	58	19.4	0.0	0	330
16	1973	05	04.58410	15	00	56.85	-12	36	27.2	0.0	1-	330
17	1965	05	28.58168	15	21	46.54	-08	37	29.1	0.0+	0	330
17	1976	02	01.63623	09	55	53.07	+15	07	18.8	0.1+	0	330
18	1966	04	18.62108	12	58	28.50	+06	06	17.9	0.4+	1-	330
20	1966	02	14.69664	10	14	31.87	+09	44	19.2	0.0	1-	330
20	1966	02	24.72677	10	05	00.93	+10	40	04.9	0.0	0	330
20	1966	03	16.59788	09	49	55.36	+12	10	29.8			330
20	1974	05	25.53904	14	29	29.37	-14	18	02.0	0.0	0	330
21	1974	11	18.70396	06	42	49.52	+23	21	34.1			330
21	1974	12	14.62242	06	22	08.99	+24	09	44.2	0.3-	1+	330
21	1974	12	18.69013	06	17	39.62	+24	16	47.6	0.4-	1+	330
21	1975	01	04.58257	05	58	52.00	+24	38	37.2	0.3-	1+	330
21	1975	01	12.52770	05	51	11.47	+24	44	32.2	0.3-	0	330
21	1975	01	16.57095	05	47	49.92	+24	46	41.7	0.2-	0	330
21	1975	01	17.61476	05	47	02.15	+24	47	11.2	0.3-	1-	330
21	1975	01	18.63441	05	46	17.35	+24	47	38.0	0.3-	0	330
24	1973	11	16.59448	02	56	18.76	+17	03	08.9	0.4-	1-	330
24	1975	01	16.81470	10	04	20.35	+13	01	08.3	0.4-	2+	330
24	1975	01	22.86594	10	01	15.25	+13	18	59.9	0.5-	3+	330
24	1975	02	12.55003	09	46	14.01	+14	39	00.1	0.5-	3+	330
24	1975	02	12.60559	09	46	11.77	+14	39	04.7	0.4-	2+	330
24	1975	02	19.77855	09	40	20.55	+15	07	41.4	0.5-	3+	330
26	1974	03	28.61013	12	34	44.26	+00	15	11.9	0.4+	0	330
27	1973	01	30.56662	08	35	18.22	+20	27	20.8	0.0	0	330
29	1976	02	01.63623	10	00	34.49	+18	22	41.6	0.1+	0	330
32	1975	12	02.69277	04	27	35.13	+17	33	34.6	0.1-	1-	330
32	1975	12	22.47521	04	09	44.01	+16	25	13.4	0.1-	2-	330
32	1976	01	02.57425	04	02	51.29	+16	00	51.4	0.2-	2-	330
38	1977	10	16.64408	03	02	21.58	+28	19	18.5	0.0	0	330
39	1965	12	31.84103	08	08	10.28	+09	27	09.1	0.1-	1-	330
39	1966	01	21.66252	07	50	19.44	+11	00	37.5	0.0	0	330
39	1973	08	24.66782	22	22	07.37	-08	50	49.1	0.6-	1-	330
39	1973	11	27.48987	22	29	47.36	-13	48	09.6	0.6-	1-	330
40	1973	08	23.67749	22	34	57.42	-16	13	34.3	0.0	0	330
40	1973	11	27.48987	22	36	14.07	-13	59	49.5	0.0	0	330
40	1977	11	14.68613	05	00	16.53	+19	11	14.0	0.1-	1-	330
40	1977	12	08.55438	04	34	31.01	+19	11	30.9	0.2-	0	330
42	1975	11	28.59617	02	58	32.09	+09	13	44.6	0.0	0	330
43	1973	12	31.60618	07	35	06.36	+19	27	27.8	0.1+	1-	330
43	1974	02	11.53485	06	52	32.48	+20	08	33.0	0.0	0	330
44	1972	11	29.68956	06	00	27.67	+18	09	48.3	0.0	0	330
44	1972	12	08.62078	05	52	47.04	+18	14	05.4	0.0	0	330
44	1972	12	29.60278	05	31	19.54	+18	42	03.6	0.1-	0	330
45	1975	10	31.64103	01	47	26.87	+01	43	45.9	0.0	0	330
47	1965	10	20.72698	03	15	05.64	+23	03	00.5	0.1-	1-	330
47	1975	10	31.70422	04	46	34.38	+28	28	31.3	0.0	0	330
48	1973	11	21.54509	02	08	43.28	+06	53	08.2	0.0	0	330
48	1973	11	24.49948	02	07	05.89	+06	43	05.2	0.0	0	330
48	1973	11	30.49692	02	04	17.41	+06	26	36.1	0.0	0	330
50	1965	10	19.72494	03	15	05.24	+14	02	36.5	0.1+	2+	330
50	1965	10	23.75844	03	12	36.85	+13	42	50.9	0.1+	1+	330
50	1974	12	19.70337	07	42	07.65	+17	05	08.9	0.0	0	330
50	1975	01	10.70269	07	20	15.89	+17	57	41.7	0.0	0	330
50	1975	01	16.63900	07	14	08.06	+18	14	25.9	0.1-	0	330
51	1965	09	20.71935	01	11	27.42	+03	20	53.8	0.1+	2+	330
53	1973	05	04.69382	15	54	04.99	-12	23	55.6	0.0	0	330

54	1975	12	01.63926	04	51	41.21	+37	38	50.6	0.0	0	330
55	1966	02	25.89134	11	51	32.52	+04	53	52.9	0.0	1-	330
55	1975	04	11.54456	10	25	40.00	+13	56	15.6			330
57	1974	03	18.59163	11	51	10.95	-07	03	15.7	0.0	0	330
57	1977	10	10.67163	02	32	32.34	+09	46	54.9	0.3+	0	330
57	1977	10	21.85809	02	25	34.81	+08	04	51.5	0.3+	0	330
58	1965	12	31.89867	08	45	36.70	+12	46	46.6	0.0	0	330
58	1973	11	21.54509	02	09	54.44	+06	09	33.9	0.0	1-	330
58	1973	11	24.49948	02	08	02.53	+06	01	24.5	0.1+	1-	330
58	1973	11	30.49692	02	04	47.94	+05	48	59.1	0.1+	0	330
61	1966	02	14.69664	10	13	40.60	+13	15	19.4	0.0	0	330
61	1966	02	24.72677	10	04	25.68	+13	26	29.9	0.0	0	330
61	1966	03	16.59788	09	48	06.16	+13	34	25.9	0.1-	0	330
62	1965	09	20.71935	01	08	06.01	+03	48	26.9	1.8+	10+	330
64	1965	12	30.90002	08	20	49.51	+20	08	59.7	0.0	0	330
64	1966	01	20.57461	08	02	14.84	+20	54	11.2	0.0	1-	330
64	1966	01	28.76565	07	54	16.24	+21	10	42.6	0.0	0	330
64	1966	02	13.63553	07	41	50.43	+21	31	13.7	0.0	1-	330
64	1966	02	16.55323	07	40	15.06	+21	33	05.3	0.0	2+	330
64	1973	10	31.52534	00	54	26.04	+07	55	43.9	0.0	0	330
65	1965	09	20.66588	01	40	20.01	+06	57	57.2	0.5+	2+	330
65	1965	10	16.61661	01	22	36.01	+04	51	36.7	0.6+	3+	330
65	1973	12	31.60618	07	34	19.85	+18	10	12.7	0.0	1-	330
67	1974	05	25.65640	15	07	21.66	-11	29	03.7	2.2-	10+	330
67	1975	11	23.53493	03	47	16.24	+13	55	42.0	1.7-	5-	330
69	1972	10	28.60333	00	52	28.01	+02	05	12.5	0.0	1-	330
70	1966	03	15.64198	10	29	49.17	+26	33	24.0	0.0	1-	330
71	1972	11	27.55008	03	48	08.18	+52	00	13.8	0.1-	0	330
71	1972	11	28.54416	03	46	52.22	+51	55	39.0	0.0	1+	330
72	1965	12	24.74249	06	41	48.60	+14	44	43.4	0.1-	1+	330
72	1966	01	21.56669	06	13	13.03	+15	09	35.6	0.6-	1+	330
72	1975	12	22.47521	04	19	59.12	+14	50	02.8	0.2-	0	330
72	1975	12	30.52763	04	14	09.08	+14	36	58.1	0.1-	0	330
77	1973	01	30.66870	10	17	09.57	+13	11	08.1	0.3-	2-	330
78	1973	02	01.58260	07	44	35.38	+29	49	03.0	0.1-	0	330
79	1974	10	23.73669	03	38	01.24	+16	51	17.0	0.0	0	330
80	1974	01	01.64708	07	32	50.95	+07	55	14.4	0.8-	0	330
80	1975	04	12.62062	13	38	59.99	-13	36	44.5	0.4-	1-	330
85	1965	11	25.74801	05	50	13.00	+08	39	54.5	0.1-	0	330
86	1975	11	26.65725	05	40	11.05	+22	05	17.5	0.2+	1-	330
86	1975	11	29.59619	05	37	48.42	+22	09	32.4	0.1-	0	330
86	1975	12	02.62228	05	35	12.33	+22	13	47.0	0.0	0	330
86	1975	12	11.74446	05	26	46.01	+22	26	00.9	0.0	0	330
86	1975	12	22.52903	05	16	40.80	+22	38	45.4	0.1-	0	330
86	1975	12	24.55237	05	14	53.33	+22	40	58.3	0.0	0	330
86	1975	12	29.58108	05	10	41.74	+22	46	18.7	0.0	0	330
86	1976	01	05.54799	05	05	41.57	+22	53	34.8	0.0	0	330
88	1966	03	16.71663	10	10	39.28	+04	07	18.9	0.0	0	330
88	1973	11	20.62083	04	50	58.20	+26	10	06.2	0.0	0	330
88	1973	12	17.51765	04	25	00.51	+24	41	29.4	0.0	0	330
92	1965	10	16.63750	02	43	11.00	+01	41	53.8	1.1-	8-	330
92	1965	10	20.67490	02	40	17.29	+01	27	34.9	1.2-	8-	330
93	1966	03	15.58816	10	20	17.74	+16	13	37.5	0.4+	0	330
93	1977	10	10.61052	01	21	56.39	+12	51	30.3	1.0+	9+	330
93	1977	10	16.58784	01	16	17.04	+12	35	30.0	1.0+	9+	330
93	1977	11	01.50904	01	02	24.10	+11	48	51.3	1.0+	8+	330
93	1977	11	08.60436	00	57	26.84	+11	30	10.2	0.9+	8+	330
96	1975	04	02.63678	11	27	37.73	-15	17	32.0	0.0	0	330
100	1973	12	25.64363	06	21	47.97	+18	29	54.3	0.1-	1+	330

101	1966	02	13.74039	10	33	06.93	+12	29	37.6	0.0	1+	330
101	1966	02	14.74942	10	32	09.61	+12	32	26.6	0.0	0	330
101	1966	02	24.74483	10	22	21.27	+12	59	30.4	0.0	0	330
101	1966	02	25.77051	10	21	20.32	+13	02	06.4	0.0	1-	330
101	1966	03	15.58816	10	04	56.94	+13	35	12.9	0.1-	1-	330
101	1966	03	16.59788	10	04	08.74	+13	36	16.0			330
102	1966	02	16.75670	11	28	11.13	-02	03	16.9	0.2+	0	330
103	1975	11	28.59617	02	48	08.04	+07	30	32.3	0.1-	0	330
107	1965	10	17.56109	23	19	49.35	-05	16	16.3			330
107	1975	04	02.58748	11	18	53.28	+04	46	04.4	0.0	0	330
110	1974	04	15.58162	12	37	33.54	+02	39	45.9	0.1-	1+	330
112	1973	12	25.56655	05	18	53.64	+26	44	18.7	0.3-	0	330
113	1972	12	12.71914	06	32	25.70	+18	45	52.7	0.1-	0	330
114	1977	10	10.67163	02	22	39.48	+08	35	14.0	0.3+	1+	330
114	1977	10	21.85809	02	13	51.85	+07	30	41.9	0.3+	2+	330
115	1965	03	05.80903	11	27	46.03	-10	28	31.8	0.2+	1-	330
116	1973	11	23.50427	03	18	59.08	+17	25	55.1	0.0	0	330
116	1973	11	24.54774	03	18	00.57	+17	23	29.2	0.0	0	330
116	1973	11	28.48989	03	14	24.64	+17	14	43.9	0.0	0	330
118	1973	10	16.57153	02	39	15.12	+11	44	28.6	0.0	1-	330
119	1965	10	24.69903	03	43	24.30	+15	59	10.0	0.4-	2-	330
119	1965	11	20.73111	03	20	23.06	+13	20	30.7	0.4-	1-	330
119	1965	11	23.62125	03	17	49.11	+13	04	51.6	0.3-	0	330
119	1965	11	26.78470	03	15	06.59	+12	48	43.2	0.3-	1-	330
119	1965	11	30.80133	03	11	54.13	+12	29	54.0	0.3-	1-	330
119	1965	12	13.49242	03	04	01.02	+11	45	51.0	0.4-	2-	330
119	1965	12	18.51979	03	02	01.64	+11	35	31.9			330
119	1973	09	30.60663	00	43	03.55	+07	07	07.5	0.3-	1-	330
120	1965	02	23.67986	08	49	33.57	+22	03	53.2	0.0	0	330
120	1965	03	05.67847	08	43	16.74	+22	02	35.7			330
120	1973	08	26.61734	23	27	26.81	-02	39	36.3	0.2-	1-	330
121	1977	11	14.68613	05	15	02.40	+22	26	57.4	0.0	0	330
122	1965	09	23.63663	00	48	14.43	+04	43	53.9	0.2+	1+	330
122	1965	10	18.56383	00	31	01.29	+02	44	37.0	0.2+	1+	330
122	1965	10	21.53250	00	29	09.67	+02	31	43.4	0.2+	1+	330
123	1965	08	27.61977	22	11	25.21	-06	31	54.2	0.0	0	330
125	1973	12	17.56487	06	13	51.55	+16	37	02.4	0.6-	1-	330
126	1965	01	09.75208	07	44	01.27	+26	06	49.5	3.6+	8-	330
127	1973	11	20.62083	04	45	53.15	+30	11	12.1	0.2-	1-	330
128	1975	05	06.56299	14	07	35.57	-06	36	06.5	0.6+	4-	330
131	1973	11	23.54536	03	55	53.50	+19	45	18.7	0.2-	1-	330
131	1977	12	08.60508	05	40	59.43	+25	39	29.7	0.0	1-	330
131	1977	12	12.59270	05	36	31.97	+25	47	05.9	0.1+	0	330
136	1965	09	21.64389	00	28	13.58	+04	00	39.5	0.1-	0	330
136	1965	10	17.61109	00	28	45.79	-00	49	22.9	0.1-	0	330
136	1965	10	20.51656	00	07	10.86	-01	15	58.2	0.1-	0	330
136	1965	10	24.59417	00	05	17.87	-01	50	40.1	0.1-	1-	330
136	1972	10	28.60333	01	07	15.96	+01	18	55.6	0.0	0	330
137	1975	11	28.59617	02	49	13.63	+06	52	37.6	0.1+	0	330
138	1977	03	26.72239	12	48	58.81	-01	15	51.1	0.9-	6+	330
140	1973	08	23.67749	22	37	07.59	-13	19	33.0	0.1-	0	330
141	1973	10	18.51224	23	09	49.46	+11	59	24.8	0.4-	1-	330
141	1975	01	12.68811	09	59	37.22	+13	10	11.1	0.0	2-	330
148	1965	02	02.73958	10	48	34.05	+11	43	20.8	0.0	0	330
150	1973	10	16.57153	02	27	20.08	+14	09	30.4	0.1-	0	330
150	1973	12	01.51782	01	56	08.47	+10	52	45.4	0.2-	1-	330
153	1973	01	30.61430	08	45	40.18	+07	37	58.4	0.1-	0	330
153	1974	03	18.59163	11	36	03.86	-06	16	51.6	0.2-	0	330
154	1977	11	03.58413	01	26	25.00	+03	16	40.5	0.1+	2+	330

154	1977	11	04.51886	01	25	40.35	+03	17	08.3	0.0	1+	330
154	1977	11	04.57095	01	25	37.74	+03	17	09.3	0.0	1+	330
156	1974	11	18.64286	01	41	40.52	+16	37	24.0	0.0	0	330
159	1974	12	18.65610	06	49	49.30	+17	13	45.3	0.0	1+	330
159	1974	12	20.76111	06	48	07.67	+17	18	02.4	0.0	0	330
160	1975	01	22.81594	09	47	38.13	+18	20	52.0	0.0	0	330
160	1975	02	12.55003	09	28	59.97	+19	38	49.3	0.1-	0	330
161	1965	10	18.56383	00	24	45.94	+01	25	02.2	0.3+	3+	330
161	1973	12	24.59390	06	25	07.32	+37	19	21.7	0.4-	1+	330
163	1965	09	20.71935	01	14	53.37	+03	30	01.6	0.5+	2+	330
165	1972	12	29.70000	07	08	11.12	+28	02	07.0	0.0	0	330
166	1966	01	01.83444	08	26	18.99	+14	40	49.7	0.4-	0	330
166	1966	01	20.62113	08	09	31.86	+17	05	42.4	0.5-	0	330
166	1966	01	28.81218	08	01	47.46	+18	11	23.5	0.4-	0	330
166	1966	02	14.54560	07	48	53.07	+20	11	24.7	0.4-	1+	330
166	1966	02	16.55323	07	47	44.83	+20	23	52.8	0.4-	2+	330
166	1966	02	24.56392	07	44	18.13	+21	08	36.5			330
166	1975	01	12.68811	09	58	43.36	+14	15	06.0	0.0	1-	330
166	1975	01	16.72859	09	56	32.48	+14	45	49.1	0.1-	0	330
166	1975	02	12.55003	09	35	11.06	+18	35	01.2	0.0	0	330
171	1966	01	30.81775	09	45	48.72	+16	02	02.5	0.5+	2-	330
171	1966	02	14.59525	09	34	09.01	+17	12	42.9	0.5+	1-	330
171	1966	02	24.67625	09	26	18.87	+17	55	11.7	0.5+	2-	330
172	1976	02	01.63623	09	46	50.29	+17	10	47.5	0.1-	1+	330
173	1966	04	14.52352	11	24	25.68	+14	03	57.6	0.0	0	330
173	1966	04	14.54435	11	24	26.28	+14	03	51.5	0.0	0	330
177	1965	12	20.76359	07	15	03.47	+24	28	18.3	0.0	0	330
190	1972	10	28.60333	00	50	45.44	+02	01	20.7	0.1+	1-	330
190	1973	12	13.55609	05	47	29.22	+14	39	34.0	0.1+	0	330
190	1973	12	22.58089	05	40	50.95	+14	36	42.2	0.0	0	330
194	1973	08	04.51177	19	16	46.89	+00	06	28.8	0.2-	1-	330
197	1973	01	29.74084	09	53	50.09	+24	02	52.8	0.2-	0	330
198	1966	01	01.78653	07	46	29.78	+15	35	16.8	1.2-	9+	330
198	1966	01	16.67986	07	29	55.00	+15	25	50.2	1.2-	9+	330
198	1966	01	19.66142	07	26	40.41	+15	25	12.9	1.2-	8+	330
199	1965	10	20.67490	02	43	30.93	-02	37	00.3	0.6+	6+	330
201	1965	02	02.73958	10	39	05.31	+07	35	42.8	0.2+	1-	330
203	1965	09	21.64389	00	33	22.55	+05	15	54.2	0.8+	6+	330
205	1972	11	16.83603	05	18	28.34	+12	50	37.7	0.0	1+	330
205	1972	11	28.61777	05	09	08.97	+11	48	05.3	0.0	0	330
208	1973	12	25.56655	05	16	06.24	+25	41	02.4	0.2-	0	330
208	1975	02	16.85964	12	08	17.46	-00	14	20.5	0.1-	0	330
208	1975	04	02.58748	11	36	17.28	+02	48	05.3	0.0	0	330
209	1966	03	16.81559	12	19	56.07	-02	28	13.0	0.0	1+	330
209	1966	03	26.71803	12	12	04.24	-01	58	52.4	0.1+	1-	330
212	1977	12	12.53297	04	13	43.89	+27	07	09.3	0.4-	3-	330
213	1965	12	24.74249	06	42	46.73	+19	00	30.8	0.0	1+	330
215	1965	11	23.68826	05	00	10.77	+24	36	56.9	3.9-	7-	330
215	1965	12	24.58450	04	30	56.68	+23	55	25.2	4.0-	10-	330
215	1965	12	30.74516	04	26	29.62	+23	45	26.3	3.9-	11-	330
215	1974	10	23.73669	03	41	30.86	+20	40	17.0	0.0	0	330
215	1974	12	18.55263	02	57	11.16	+18	19	27.2	0.0	1-	330
215	1974	12	20.65000	02	56	23.00	+18	16	08.8			330
216	1965	05	29.75322	16	43	10.91	-11	22	31.9	0.1+	0	330
217	1965	01	08.80486	07	37	19.40	+10	20	16.0	0.1+	0	330
218	1972	10	28.70299	02	12	07.36	-02	45	41.4	1.1-	5-	330
218	1974	02	15.54336	07	21	21.18	+05	30	22.6	1.6-	4-	330
219	1974	10	23.68530	02	54	51.29	+10	20	40.6	0.0	1-	330
220	1966	01	01.78653	07	47	43.18	+14	39	03.6	0.7-	3+	330

220	1966	01	16.67986	07	31	10.68	+14	46	32.3	0.6-	4+	330
220	1966	01	19.66142	07	27	54.82	+14	49	21.5	0.7-	3+	330
220	1966	01	27.77778	07	19	35.53	+14	58	18.5	0.7-	3+	330
220	1972	12	12.71914	06	29	29.84	+20	33	59.0	0.1+	0	330
221	1966	04	14.52352	11	05	52.38	+14	07	37.5			330
221	1966	04	14.54435	11	05	52.97	+14	07	33.8			330
221	1973	08	24.59491	21	30	45.76	-15	26	41.0	0.1-	1-	330
225	1965	11	28.64190	04	26	42.37	+00	38	35.5	0.7-	1-	330
225	1965	12	19.63230	04	11	57.01	-00	11	22.6	0.8-	0	330
226	1965	01	10.71250	07	16	35.56	+12	07	27.1	2.1-	4-	330
226	1966	03	15.75170	12	40	32.84	+14	50	13.6	0.1-	0	330
227	1975	01	17.68073	08	29	14.53	+25	03	21.6	0.1-	1-	330
228	1974	11	18.70396	06	48	29.51	+26	00	47.7			330
228	1974	12	14.62242	06	24	22.44	+26	18	02.3	0.1-	0	330
228	1974	12	18.69013	06	19	10.42	+26	17	56.6	0.1-	0	330
228	1975	01	16.57095	05	45	49.47	+25	44	44.8	0.0	0	330
228	1975	01	17.61476	05	44	59.93	+25	42	50.8	0.1-	0	330
228	1975	01	18.63441	05	44	12.30	+25	41	04.4	0.1-	0	330
229	1972	12	29.70000	07	00	35.47	+25	30	07.6	0.1+	0	330
232	1975	11	28.59617	03	00	46.12	+07	52	03.3	0.5-	3-	330
233	1976	12	14.57406	06	10	04.82	+14	37	58.2	0.1+	1-	330
233	1976	12	20.59905	06	04	11.05	+14	25	50.7	0.0	1-	330
234	1965	12	31.84103	08	10	59.97	+08	09	15.7	0.0	1-	330
234	1966	01	01.88097	08	10	05.26	+08	14	44.2	0.0	0	330
234	1966	01	21.66252	07	50	37.77	+10	25	24.5	0.0	0	330
236	1965	09	17.48889	21	56	23.92	-06	21	06.8			330
238	1973	08	25.62199	20	37	34.76	-04	30	57.5	0.1-	1-	330
240	1976	12	16.58380	06	07	51.86	+21	43	52.7	1.5-	1+	330
241	1965	12	20.76359	07	01	49.44	+21	30	43.1	0.0	1+	330
241	1966	01	16.63194	06	37	54.53	+21	21	55.2	0.1+	0	330
241	1966	01	28.71322	06	29	15.08	+21	16	21.9			330
241	1975	11	24.52667	02	41	01.84	+21	18	34.8	0.0	1+	330
242	1965	06	27.71353	19	17	15.39	-06	05	53.5	0.0	1+	330
243	1973	01	29.67765	08	03	53.59	+21	04	00.1	0.0	0	330
244	1974	12	14.60506	05	22	20.44	+18	45	27.2	0.1-	1-	330
244	1977	10	12.60639	02	27	20.48	+14	34	56.7	0.1-	0	330
244	1977	11	03.64246	02	07	42.74	+11	57	07.7	0.1-	1-	330
244	1977	11	12.57364	02	00	19.42	+10	56	47.1	0.0	0	330
246	1965	04	26.62847	14	03	35.41	+08	04	36.4	0.1+	0	330
246	1974	05	25.69668	15	19	29.64	+07	01	58.4	0.2-	0	330
248	1976	12	16.58380	06	05	15.78	+21	01	52.6	0.0	0	330
250	1966	04	14.52352	11	13	05.12	+14	29	47.3			330
250	1966	04	14.54435	11	13	05.73	+14	29	49.0			330
251	1975	02	16.85964	12	05	27.33	+03	17	30.7	0.3-	1+	330
255	1965	09	22.61861	00	29	42.96	+00	38	41.5	0.1+	1+	330
255	1965	10	17.61109	00	08	05.01	-00	23	58.3	0.1+	1+	330
255	1965	10	20.51656	00	05	56.47	-00	28	43.0	0.1+	1+	330
255	1965	10	24.59417	00	03	10.45	-00	33	53.9	0.0	1+	330
256	1965	06	20.68524	19	42	09.17	-02	03	47.2	2.5+	2+	330
256	1965	06	27.79964	19	37	37.66	-02	01	44.8	2.6+	3+	330
259	1974	03	19.58124	11	19	53.93	+21	16	32.6	0.2-	1+	330
262	1972	11	28.70735	06	59	31.37	+32	49	36.8			330
262	1972	12	03.64816	06	57	09.96	+33	24	48.0	0.0	1+	330
262	1972	12	15.82611	06	47	25.61	+34	44	23.6	0.0	1-	330
263	1965	12	18.64062	06	11	42.10	+21	48	24.4	0.0	1-	330
263	1965	12	19.74828	06	10	38.53	+21	48	17.4	0.1-	1-	330
266	1973	11	23.50427	03	18	35.95	+18	23	34.3	0.2-	0	330
266	1973	11	24.54774	03	17	45.60	+18	13	07.7	0.3-	1-	330
266	1973	11	28.48989	03	14	43.87	+17	35	13.7	0.3-	1-	330

268	1965	09	20.71935	01	18	48.76	+04	53	14.8	0.4+	1+	330
268	1965	09	21.69850	01	18	13.21	+04	49	05.4	0.4+	2+	330
268	1965	10	19.56730	00	58	40.16	+02	41	58.3	0.3+	1+	330
269	1966	02	24.67625	09	13	42.04	+14	00	49.1	0.2-	2+	330
269	1975	03	21.81001	13	21	16.40	-02	57	10.6	1.0-	5+	330
270	1972	12	01.60488	04	26	36.09	+22	07	48.1	0.0	0	330
272	1965	11	21.73453	04	31	26.04	+25	14	53.9	2.6+	6+	330
272	1965	11	25.58991	04	27	37.69	+25	13	20.3	2.6+	7+	330
274	1965	10	24.69903	03	49	09.29	+16	34	21.1	1.2+	5+	330
274	1965	11	20.73111	03	28	09.22	+15	33	06.0	1.2+	5+	330
274	1965	11	23.62125	03	25	44.97	+15	26	31.3	1.1+	6+	330
274	1965	11	26.78470	03	23	09.38	+15	19	34.1	1.1+	6+	330
274	1965	11	30.80133	03	19	59.45	+15	11	20.8	1.1+	5+	330
274	1965	12	13.49242	03	11	16.68	+14	51	31.5	1.0+	6+	330
274	1965	12	18.51979	03	08	32.63	+14	46	43.9			330
274	1975	10	31.58408	00	43	43.80	-00	34	22.7	0.0	0	330
277	1973	09	30.60663	00	48	05.89	+06	28	32.9	0.5-	3+	330
280	1966	03	16.76698	11	40	43.77	+05	37	39.4	0.4+	6-	330
280	1966	03	26.59685	11	32	24.85	+06	03	58.1	0.4+	6-	330
280	1966	03	26.65661	11	32	21.83	+06	04	02.8	0.4+	6-	330
280	1966	04	14.61241	11	19	44.77	+06	28	42.6	0.3+	6-	330
282	1975	04	11.54456	10	24	52.37	+16	25	53.0			330
284	1974	12	20.80972	08	23	12.43	+09	12	59.9	0.0	0	330
284	1975	01	16.69873	07	59	44.06	+09	17	26.3	0.3-	1-	330
285	1965	07	28.77965	21	37	47.16	-11	51	25.7	4.8+	52+	330
287	1973	12	24.67133	06	58	36.67	+11	18	49.2	0.2-	0	330
288	1973	05	04.69382	15	59	30.43	-13	18	26.0	0.0	0	330
288	1975	11	28.59617	02	56	10.28	+10	49	37.1	0.1-	0	330
289	1965	06	28.66145	18	28	54.88	-12	51	21.4	0.2+	0	330
289	1976	12	14.57406	06	10	02.44	+12	51	59.9	0.1-	1-	330
291	1966	03	16.81559	12	24	45.73	-01	22	37.4	1.0-	6+	330
292	1972	11	17.85057	02	51	09.91	+19	21	39.2	0.1+	1+	330
292	1972	11	28.49624	02	40	00.94	+19	34	56.5	0.0	0	330
292	1972	12	08.68596	02	31	49.21	+19	48	17.9	0.1+	1-	330
294	1966	02	14.59525	09	46	50.56	+14	42	33.1	0.0	1+	330
294	1966	02	14.61470	09	46	49.90	+14	42	44.0	0.0	1+	330
294	1966	02	25.67745	09	38	48.73	+15	33	41.2	0.0	0	330
294	1966	03	16.53399	09	27	24.41	+16	43	39.6			330
295	1975	12	11.81911	06	35	46.69	+23	40	35.7	0.3+	1+	330
295	1976	01	05.59660	06	11	57.26	+23	20	25.6	0.5-	0	330
296	1965	01	11.88958	09	23	08.73	+15	39	06.6	0.1-	0	330
298	1965	09	23.63663	01	01	05.85	+06	53	03.9	0.2-	2-	330
299	1974	12	18.65610	06	44	57.41	+21	32	56.6	0.9+	7-	330
299	1974	12	20.76111	06	42	47.02	+21	33	29.3	0.9+	7-	330
300	1965	09	18.63674	01	26	44.04	+08	33	16.2	0.6-	1-	330
300	1965	09	20.66588	01	25	36.23	+08	26	48.3	0.5-	2-	330
300	1965	09	21.69850	01	25	00.25	+08	23	23.2	0.5-	3-	330
300	1965	10	19.51765	01	05	25.66	+06	29	58.9	0.5-	2-	330
301	1965	05	28.67821	16	28	39.52	-13	52	05.1	0.0	0	330
301	1965	06	27.57100	16	05	52.56	-13	41	39.9	0.0	0	330
301	1965	06	28.55172	16	05	23.85	-13	43	26.1	0.0	1-	330
302	1965	11	21.73453	04	38	36.99	+27	31	34.3	0.5-	1-	330
302	1965	11	25.58991	04	34	27.89	+27	30	05.2	0.6-	2-	330
304	1966	04	18.62108	12	56	20.12	+10	20	39.1	0.1+	1+	330
304	1976	01	01.60685	06	29	37.60	+01	34	16.9	0.3+	1+	330
305	1965	09	21.64389	00	33	14.75	+06	22	54.1	0.2+	1-	330
306	1965	10	24.74972	04	06	05.32	+08	54	11.5			330
306	1974	02	12.50365	08	49	54.08	+16	21	53.2	0.1-	0	330
306	1974	02	20.52675	08	42	43.01	+17	11	12.4	0.1-	0	330

313	1972	10	28.70299	02	07	13.44	+00	25	00.0	0.1-	1-	330
313	1974	05	25.58001	14	39	54.42	+00	35	22.9	0.1-	3-	330
315	1975	10	31.58408	00	38	14.70	+00	47	16.0	0.1-	1-	330
316	1965	09	20.71935	00	59	50.18	+02	57	59.1	0.0	0	330
316	1965	09	23.63663	00	57	56.27	+02	43	59.6	0.0	1-	330
316	1965	10	18.56383	00	39	53.32	+00	42	14.4	0.1+	1-	330
316	1965	10	21.53250	00	37	52.18	+00	29	47.3	0.0	1-	330
317	1976	02	05.62949	08	16	52.23	+18	32	20.0	0.2-	1+	330
321	1965	11	20.87556	05	42	21.04	+25	40	12.1	0.2-	1-	330
321	1965	11	22.69211	05	41	02.86	+25	41	49.1	0.2-	0	330
321	1965	12	30.79620	05	06	08.19	+25	39	57.8	0.3-	0	330
321	1966	01	16.52361	04	55	47.85	+25	25	28.7			330
322	1965	09	20.61519	00	27	15.47	+17	58	35.6	0.4+	2+	330
322	1965	09	23.53733	00	25	16.91	+17	44	37.1	0.3+	3+	330
325	1966	01	28.86356	10	01	13.28	+17	42	47.8	0.1-	1+	330
325	1966	01	30.81775	09	59	38.50	+17	47	30.4	0.1-	1+	330
325	1966	02	14.59525	09	46	45.74	+18	20	53.1	0.0	1+	330
325	1966	02	14.64248	09	46	43.34	+18	20	59.5	0.0	1+	330
325	1966	02	25.67745	09	37	12.20	+18	37	34.4	0.0	1+	330
326	1974	10	12.58309	01	03	18.76	-07	14	22.1	0.0	1-	330
327	1977	10	10.61052	01	17	34.38	+13	30	44.9	0.4-	4-	330
327	1977	10	16.58784	01	12	05.29	+13	12	51.4	0.4-	4-	330
327	1977	11	01.50904	00	58	42.03	+12	19	56.6	0.5-	5-	330
327	1977	11	08.60436	00	53	59.56	+11	58	15.1	0.5-	5-	330
332	1965	01	01.68820	06	50	33.58	+26	58	36.5	0.0	0	330
332	1965	01	05.61181	06	46	34.26	+27	03	52.1	0.0	0	330
332	1965	01	07.55278	06	44	37.03	+27	06	04.7	0.0	0	330
332	1965	01	08.64653	06	43	31.67	+27	07	13.8	0.0	0	330
332	1966	03	16.81559	12	17	02.65	+00	32	09.3	0.0	0	330
334	1974	04	15.58162	12	29	30.67	+02	39	16.4	0.0	0	330
335	1973	05	04.63955	15	09	26.12	-08	13	23.3	0.5-	2+	330
335	1974	10	23.68530	02	56	54.59	+08	45	25.1	0.3-	2-	330
336	1973	08	26.66734	23	42	48.39	+08	06	59.0	0.5-	0	330
336	1977	11	14.68613	05	18	46.29	+20	50	36.5	0.0	0	330
339	1965	10	16.52778	22	59	16.96	-07	12	23.4			330
341	1974	12	18.60888	05	34	44.50	+31	22	40.2	0.1-	0	330
341	1975	01	09.56514	05	09	44.88	+30	58	21.1	0.2-	1-	330
345	1973	08	21.57940	21	24	30.97	+01	02	43.8	0.0	0	330
348	1966	04	18.62108	13	01	20.52	+08	28	46.4	0.1+	0	330
349	1972	11	29.66873	04	34	54.86	+29	56	08.8	0.2+	0	330
349	1974	02	20.58716	11	06	12.04	+16	24	04.6	0.0	0	330
349	1974	03	18.53885	10	44	27.45	+17	48	05.3	0.0	0	330
349	1977	12	12.53297	04	20	32.65	+29	49	33.4	0.0	1+	330
351	1965	10	19.61869	01	22	52.09	-06	13	07.4	0.7-	2-	330
352	1965	03	04.77222	12	37	04.83	-09	20	29.7	0.1-	1+	330
352	1973	11	22.59861	04	50	13.48	+22	31	13.7	0.2-	0	330
352	1973	11	28.54059	04	43	49.84	+22	03	06.4	0.2-	0	330
352	1973	12	17.51765	04	23	59.26	+20	31	05.4	0.2-	0	330
355	1966	02	14.64248	10	03	23.43	+15	19	21.2	0.1-	0	330
355	1966	02	25.67745	09	52	28.70	+15	52	16.7	0.0	0	330
355	1966	03	16.53399	09	37	58.79	+16	17	31.8			330
355	1974	02	13.51898	08	57	08.71	+21	42	45.4	0.1-	1+	330
357	1965	01	01.74861	07	07	48.93	+10	12	18.5	1.4+	2+	330
357	1965	01	10.71250	07	00	19.98	+10	57	05.8	1.3+	2+	330
358	1974	10	23.68530	02	57	14.43	+12	24	04.3	0.1+	0	330
360	1966	03	26.77984	12	30	36.00	+10	58	18.0	0.0	0	330
363	1966	04	14.52352	11	22	00.02	+12	28	49.2	2.7+	18-	330
363	1966	04	14.54435	11	22	00.58	+12	28	48.0	2.7+	18-	330
363	1973	11	28.54059	04	33	14.36	+22	34	01.9	0.0	0	330

363	1973	12	17.51765	04	14	45.52	+22	32	58.2	0.0	0	330
367	1965	01	01.68820	06	48	25.75	+24	43	08.8	0.6-	2+	330
369	1972	11	29.68956	06	00	37.07	+19	02	56.1	0.5-	1-	330
369	1972	12	08.62078	05	52	11.03	+19	41	20.0	0.5-	1-	330
369	1972	12	29.60278	05	30	13.22	+21	16	48.3	0.6-	1-	330
374	1975	04	12.62062	13	37	52.66	-13	56	21.5	0.5-	1-	330
377	1973	12	17.56487	06	00	07.11	+14	12	51.1	0.0	0	330
379	1965	12	18.64062	06	04	28.40	+21	01	30.9	1.1-	0	330
379	1965	12	19.74828	06	03	27.64	+21	01	39.6	1.1-	0	330
380	1965	03	04.74792	12	36	26.84	+05	50	39.0	0.2-	2+	330
381	1974	01	01.70681	07	55	25.31	+16	59	47.3	0.4-	3+	330
387	1966	01	01.78653	07	38	15.71	+13	24	52.4	0.0	0	330
387	1966	01	16.67986	07	24	59.58	+14	43	54.5	0.0	0	330
387	1966	01	19.66142	07	22	19.49	+15	00	53.5	0.0	0	330
389	1972	10	28.65611	01	48	29.93	+23	45	25.7	0.3-	2-	330
393	1973	12	13.50539	04	42	26.25	+08	09	49.8	0.1-	0	330
399	1975	02	12.66809	10	56	54.58	+11	06	20.6	0.0	0	330
399	1975	02	16.78464	10	53	26.60	+11	10	23.0	0.1-	0	330
401	1972	12	15.88167	06	55	59.65	+29	56	52.8	0.0	0	330
403	1977	10	13.72654	02	35	07.16	+22	20	09.1	0.0	0	330
404	1965	01	01.68820	06	55	21.90	+26	32	35.1	2.0-	9-	330
404	1965	01	07.55278	06	48	45.66	+27	10	00.3	2.0-	9-	330
404	1965	01	08.64653	06	47	31.48	+27	16	45.0	2.0-	9-	330
404	1965	01	11.72847	06	44	03.99	+27	35	10.1	2.0-	9-	330
404	1972	11	30.60859	04	56	23.16	+15	14	29.6	0.4+	2-	330
404	1972	12	15.77681	04	40	32.24	+15	44	24.0	0.3+	2-	330
404	1972	12	29.55417	04	27	44.48	+16	21	15.1	0.3+	3-	330
407	1965	01	12.88472	09	50	52.66	+08	57	13.5	0.1-	7-	330
408	1965	02	23.73125	11	29	15.29	-07	13	36.2	1.0+	9-	330
408	1965	03	05.80903	11	21	49.85	-06	48	11.0	1.1+	8-	330
411	1965	11	25.74801	05	43	21.88	+12	54	06.5	0.5-	6-	330
413	1973	06	06.67079	17	24	43.13	+08	41	02.5	0.1-	0	330
421	1977	10	12.55778	01	32	20.86	+05	21	21.5	0.3-	2-	330
421	1977	11	03.58413	01	20	40.65	+01	27	42.0	0.4-	2-	330
421	1977	11	04.57095	01	20	18.94	+01	19	45.0	0.3-	2-	330
421	1977	11	08.55436	01	19	05.76	+00	50	46.1	0.3-	2-	330
421	1977	11	11.53614	01	18	27.83	+00	32	31.4	0.4-	2-	330
422	1975	04	12.62062	13	39	01.90	-12	48	35.2	0.0	1-	330
424	1965	12	31.74103	04	45	34.22	+18	37	07.6	1.2+	9-	330
427	1965	12	24.66263	06	25	20.41	+26	12	32.3	0.3-	0	330
427	1966	01	16.58194	06	04	56.07	+25	49	21.5	0.2-	1-	330
427	1966	01	28.65697	05	57	20.00	+25	30	58.3			330
428	1974	10	12.65045	02	12	14.44	+15	34	53.8	0.3+	2+	330
428	1974	11	18.64286	01	37	21.52	+15	36	47.4	0.1+	2+	330
429	1973	12	13.55609	05	33	03.74	+12	23	49.6	1.0+	5-	330
429	1973	12	22.58089	05	24	17.18	+11	52	34.4	1.1+	5-	330
429	1973	12	23.52399	05	23	24.30	+11	49	54.4	1.1+	5-	330
430	1965	01	05.53333	03	33	00.01	+16	29	34.4			330
433	1972	10	10.60624	21	11	54.44	+00	07	40.3	0.0	1+	330
434	1965	02	23.73125	11	25	53.48	-04	53	24.3	1.6+	2-	330
434	1974	10	12.58309	01	14	23.07	-10	58	24.9	0.1-	0	330
437	1965	11	20.87556	05	45	59.23	+24	58	09.0	0.0	0	330
437	1965	11	22.69211	05	44	16.08	+24	52	44.7	0.0	1+	330
437	1965	11	23.71639	05	43	15.86	+24	49	39.5	0.1+	1+	330
437	1965	12	19.68890	05	13	43.56	+23	12	41.6	0.2-	0	330
437	1965	12	30.79620	05	02	25.75	+22	27	47.5	0.1-	0	330
438	1972	11	28.70735	06	49	21.18	+20	50	55.5	1.0-	1-	330
438	1972	12	03.64816	06	45	52.34	+30	21	08.4	1.1-	2-	330
438	1972	12	15.82611	06	34	39.53	+31	09	21.6	0.9-	2-	330

439	1965	11	21.66578	04	11	27.66	+02	24	51.1	0.4+	0	330
439	1965	12	24.49874	03	49	06.19	+00	05	24.8	0.5-	1-	330
442	1973	12	17.56487	05	58	37.83	+16	03	08.4	1.4-	1-	330
447	1972	12	13.83044	06	42	08.20	+25	44	02.1	0.7+	0	330
447	1977	12	08.60508	05	30	36.80	+24	24	26.7	0.0	1-	330
447	1977	12	12.59270	05	26	48.84	+24	27	54.2	0.0	0	330
448	1977	10	10.67163	02	21	01.20	+11	01	10.0	0.7-	6-	330
448	1977	10	21.85809	02	11	10.75	+10	59	05.2	0.9-	6-	330
448	1977	11	03.64246	01	59	26.05	+10	55	18.0	0.8-	6-	330
448	1977	11	12.57364	01	51	56.21	+10	55	05.2	0.8-	6-	330
449	1977	12	08.60508	05	48	52.35	+23	06	16.8	0.0	1-	330
449	1977	12	12.59270	05	44	49.96	+23	13	06.6	0.0	0	330
455	1965	05	28.63515	15	53	50.34	-15	13	26.7	0.4+	2-	330
456	1965	05	29.70417	16	03	16.68	-13	46	00.8	0.0	0	330
456	1972	11	30.67942	06	24	50.05	+10	35	03.2	0.0	1-	330
456	1972	12	13.77558	06	14	26.67	+09	41	42.4	0.0	0	330
456	1973	01	09.65513	05	50	27.33	+08	42	42.5	0.0	1-	330
460	1972	12	01.66183	04	16	15.38	+16	14	39.0	0.6+	1+	330
460	1972	12	13.59433	04	05	42.97	+15	36	36.4	0.5+	1+	330
461	1972	11	29.68956	05	44	35.82	+21	12	06.8	0.2-	0	330
461	1972	12	08.62078	05	37	15.38	+21	07	42.0	0.1-	1+	330
461	1972	12	29.60278	05	18	48.60	+20	58	30.1	0.2-	0	330
461	1977	12	04.53280	01	34	51.31	+08	00	25.2			330
462	1966	03	15.69198	11	48	50.41	+05	59	35.0	2.7-	17+	330
462	1966	03	16.76698	11	47	59.42	+06	05	27.5	2.7-	17+	330
462	1966	03	26.59685	11	40	21.26	+06	56	03.5	2.7-	16+	330
462	1966	03	26.65661	11	40	18.25	+06	56	18.7	2.8-	16+	330
462	1966	04	14.61241	11	28	01.40	+08	06	46.4	2.6-	14+	330
462	1975	01	09.66028	08	04	58.99	+21	12	41.4	0.1+	0	330
465	1965	12	20.76359	07	14	10.36	+24	32	34.8	3.2+	9-	330
468	1965	07	28.64840	21	18	05.01	-16	26	50.7	0.3-	1-	330
470	1965	07	28.60882	20	31	07.36	-09	27	34.3	0.2-	1-	330
470	1974	12	20.80972	08	27	06.96	+09	12	14.2	0.7-	1+	330
470	1975	01	16.69873	08	06	29.88	+10	12	51.7	0.8-	2+	330
471	1974	05	25.61751	14	46	36.82	-02	58	16.0	0.0	1+	330
474	1965	12	31.89867	08	51	35.32	+09	19	00.1			330
477	1965	09	18.63674	01	34	06.35	+09	53	43.3	3.4+	30+	330
477	1965	09	22.67903	01	31	15.45	+09	53	34.2	3.4+	32+	330
477	1965	10	16.59375	01	08	30.98	+09	15	36.9	3.5+	33+	330
477	1965	10	20.57073	01	04	38.02	+09	06	29.9	3.4+	32+	330
477	1965	10	24.64556	01	00	53.42	+08	57	32.9	3.4+	32+	330
478	1975	12	02.69277	04	30	36.47	+16	26	26.6	0.2-	0	330
478	1975	12	22.47521	04	14	48.83	+14	35	56.7	0.2-	0	330
478	1975	12	30.52763	04	10	07.67	+14	02	09.5	0.2-	0	330
479	1973	12	23.52399	05	16	49.92	+10	59	20.1	0.1-	1-	330
479	1975	04	12.55396	12	35	04.48	+07	18	43.0	0.0	1+	330
482	1977	10	12.64875	02	36	53.71	+03	28	04.4	0.0	0	330
484	1965	11	28.71412	06	09	51.77	+10	20	22.3	0.9+	1+	330
485	1975	05	06.61715	15	18	23.99	-06	03	09.3	0.1+	1+	330
486	1965	12	19.68890	05	29	24.13	+20	14	26.3	0.3+	0	330
486	1965	12	31.78929	05	15	48.96	+20	55	04.4	0.3+	1+	330
486	1966	01	16.52361	05	02	20.36	+21	48	17.1			330
487	1966	04	13.58395	11	08	49.71	+19	01	40.2			330
487	1973	12	17.56487	06	12	24.28	+16	21	26.6	0.0	0	330
490	1965	10	24.74972	03	56	48.07	+09	41	31.7			330
491	1965	09	22.61861	00	14	34.74	-01	43	25.9	1.0+	0	330
492	1965	01	12.83611	08	56	28.06	+19	34	37.1	1.1+	5-	330
492	1966	03	16.81559	12	13	06.80	+00	20	07.2	1.2+	9-	330
498	1965	03	04.74792	12	37	43.59	+10	26	49.2	0.2+	2+	330

498	1973	01	29.74084	09	48	14.44	+22	44	16.1	0.1-	0	330
499	1972	11	16.80922	02	46	32.07	+17	35	31.6	0.1-	0	330
499	1972	11	24.47560	02	41	35.35	+17	08	00.3	0.0	0	330
499	1972	11	28.49624	02	39	15.78	+16	54	23.7	0.0	1-	330
499	1972	12	03.57733	02	36	39.09	+16	38	20.0	0.0	1-	330
499	1972	12	08.68596	02	34	32.73	+16	24	31.5	0.0	0	330
499	1974	02	12.50365	08	39	56.74	+15	53	04.1	0.2-	0	330
500	1973	08	20.64807	23	12	26.78	+09	20	03.4	0.7+	5+	330
507	1965	02	23.73125	11	28	49.61	-08	24	30.8	0.0	2+	330
507	1965	03	05.80903	11	21	25.80	-08	00	43.2	0.0	2+	330
507	1975	01	09.56514	05	08	48.95	+28	58	26.0	0.2-	0	330
508	1973	11	16.59448	03	00	11.10	+18	58	26.9	0.1-	1-	330
509	1973	05	04.69382	16	01	15.68	-13	36	19.1	0.0	0	330
510	1972	11	30.67942	06	08	51.22	+11	21	38.5	0.5+	0	330
516	1976	02	01.63623	09	46	12.25	+17	47	06.0	0.5+	5-	330
517	1965	11	21.73453	04	39	14.51	+24	38	04.6	0.4-	0	330
517	1965	11	25.58991	04	35	55.67	+24	27	17.0	0.4-	0	330
517	1965	11	25.63574	04	35	53.14	+24	27	06.8	0.3-	0	330
517	1965	11	28.69433	04	33	10.40	+24	17	54.7	0.4-	0	330
517	1965	12	13.55214	04	20	20.48	+23	27	54.8	0.4-	0	330
517	1965	12	18.57535	04	16	34.87	+23	10	36.3	0.5-	1+	330
517	1965	12	24.58450	04	12	45.79	+22	50	52.0	0.4-	0	330
517	1965	12	30.74516	04	09	46.78	+22	32	36.8			330
518	1972	11	30.60859	04	55	17.52	+14	34	04.1	2.3-	2+	330
518	1972	12	15.77681	04	40	00.95	+13	50	04.3	2.3-	2+	330
518	1972	12	29.55417	04	28	53.04	+13	29	35.0	2.1-	1+	330
519	1973	11	16.59448	03	00	34.63	+18	53	58.8	0.1-	0	330
521	1965	05	29.70417	16	06	36.70	-14	11	14.9	0.2+	3-	330
522	1966	01	16.63194	06	32	55.06	+21	37	32.1	1.7-	1+	330
522	1966	01	28.71322	06	25	30.43	+21	55	09.7			330
525	1965	09	21.64389	00	36	16.36	+07	26	14.6	0.0	1+	330
529	1975	11	26.58086	04	48	21.88	+23	53	35.8	0.2-	0	330
529	1975	11	28.63645	04	46	21.91	+23	58	26.0	0.2-	1-	330
529	1975	11	29.53647	04	45	28.72	+24	00	32.2	0.2-	0	330
529	1975	12	23.53359	04	22	46.61	+24	43	20.1	0.3-	1-	330
529	1975	12	29.50260	04	18	24.33	+24	51	25.8	0.3-	1-	330
530	1966	01	01.83444	08	17	28.79	+17	14	41.8	1.3+	2-	330
530	1966	01	20.62113	08	03	09.40	+18	25	57.9	1.1+	2-	330
530	1966	01	28.78439	07	56	43.36	+18	57	32.2	1.2+	1-	330
530	1966	02	14.54560	07	45	15.50	+19	56	04.4	1.1+	0	330
530	1966	02	24.56392	07	40	21.84	+20	24	41.2			330
533	1965	01	12.88472	09	42	55.11	+06	42	50.2	2.2+	8-	330
534	1965	10	19.72494	03	15	59.54	+14	01	12.8	0.4-	3-	330
534	1965	10	23.75844	03	13	08.99	+13	50	13.0	0.5-	3-	330
534	1965	11	20.68076	02	49	32.66	+12	30	45.3	0.6-	3-	330
534	1965	11	23.57368	02	47	14.15	+12	24	14.1	0.6-	3-	330
534	1965	11	26.63123	02	44	55.13	+12	18	07.1	0.5-	3-	330
534	1965	11	30.74994	02	42	03.16	+12	11	17.3	0.6-	3-	330
534	1965	12	11.48697	02	36	16.08	+12	02	16.0			330
534	1975	12	02.69277	04	26	47.22	+19	29	25.9	0.0	0	330
535	1972	12	29.70000	07	06	13.61	+25	57	26.8	0.1-	2+	330
535	1976	12	16.58380	06	04	25.14	+24	13	35.4	0.0	3+	330
536	1965	11	30.69091	02	02	02.54	+02	46	11.5			330
536	1972	12	01.60488	04	14	08.67	+25	02	11.1	0.1-	1-	330
537	1966	01	16.63194	06	48	21.46	+19	27	11.3	0.4-	1+	330
537	1966	01	28.71322	06	39	38.19	+20	01	06.1			330
539	1965	01	11.83958	08	16	29.40	+15	24	13.4	0.2+	2-	330
539	1965	01	26.63194	08	01	50.48	+15	40	53.8	0.2+	3-	330
539	1965	02	02.60972	07	55	21.84	+15	49	57.1	0.2+	2-	330

539	1965	02	23.55417	07	41	21.27	+16	13	22.0			330
539	1974	01	01.70681	07	54	03.22	+17	48	44.7	0.1+	0	330
539	1977	10	16.64408	02	53	46.00	+27	00	25.0	0.1+	0	330
542	1966	02	13.74039	10	21	03.13	+09	30	45.4	0.1-	0	330
542	1966	02	14.69664	10	20	20.15	+09	37	46.7	0.2-	0	330
542	1966	02	24.72677	10	12	41.04	+10	52	11.8	0.1-	2-	330
542	1966	03	16.59788	09	59	02.86	+13	06	17.0			330
544	1977	01	10.58958	07	25	33.37	+23	52	38.7	0.1+	1+	330
545	1972	10	28.65611	01	37	07.96	+25	02	58.2	0.1-	1-	330
545	1973	12	24.59390	06	24	35.45	+36	28	35.4	0.1-	0	330
545	1975	03	07.66553	09	36	41.33	+16	02	43.9	0.0	1+	330
547	1973	08	21.63148	22	57	48.55	+10	54	22.7	0.0	0	330
548	1973	11	20.56805	03	18	22.44	+11	26	57.7	0.0	0	330
552	1973	01	30.61430	08	53	58.27	+09	27	00.6	0.4-	1+	330
554	1977	12	12.59270	05	44	04.67	+26	24	33.8	0.0	0	330
557	1965	12	30.90002	08	22	30.53	+19	28	04.3	1.1+	4-	330
557	1966	01	20.57461	08	02	37.32	+19	58	54.1	1.2+	3-	330
557	1966	01	28.76565	07	54	02.53	+20	10	52.9	1.2+	3-	330
557	1966	01	28.81218	07	53	59.78	+20	10	51.8	1.2+	3-	330
557	1966	02	13.63553	07	40	49.55	+20	24	22.9	1.1+	3-	330
557	1966	02	14.54560	07	40	17.02	+20	24	39.3	1.0+	2-	330
557	1966	02	16.55323	07	39	10.28	+20	25	08.0	1.1+	2-	330
557	1966	02	24.56392	07	36	07.58	+20	24	31.5			330
558	1973	12	24.67133	06	55	05.49	+13	50	43.9	0.4-	1+	330
558	1977	10	04.57707	00	40	39.56	-05	24	09.4	0.0	1+	330
560	1965	05	28.58168	15	20	45.49	-08	26	45.6	0.7-	3+	330
560	1972	12	12.71914	06	23	23.32	+19	20	00.6	0.3+	1-	330
563	1965	10	19.61869	01	25	46.20	-09	11	40.1	0.1-	2-	330
564	1975	12	23.59817	05	04	18.94	+27	42	53.8	0.0	0	330
566	1966	03	16.76698	11	58	48.63	+07	26	22.2	0.7-	4+	330
566	1966	04	14.61241	11	40	34.63	+09	03	29.8	0.6-	4+	330
569	1975	11	29.59619	05	23	23.53	+24	52	37.7	0.7-	0	330
569	1975	12	24.55237	04	59	18.68	+24	10	14.9	0.7-	1-	330
569	1975	12	30.58596	04	54	28.11	+23	57	35.2	0.8-	1-	330
570	1965	01	10.75972	07	48	11.75	+18	48	17.3	0.4+	0	330
572	1965	12	19.81008	06	55	29.55	+04	32	56.7	1.0-	1+	330
572	1972	10	28.60333	00	54	13.99	+02	11	16.6	2.6-	10-	330
575	1965	03	04.77222	12	37	19.50	-09	37	33.5	0.3-	2+	330
579	1973	11	23.54536	04	12	36.02	+15	30	53.4	0.0	0	330
580	1976	02	01.63623	10	00	06.76	+15	59	55.1	0.1+	2-	330
583	1966	07	19.74315	20	25	10.31	-10	51	40.9	0.3+	1+	330
585	1965	10	24.74972	04	03	08.53	+11	24	11.0			330
586	1973	11	23.50427	03	08	53.31	+17	28	40.7	0.0	0	330
586	1973	11	28.48989	03	04	59.12	+17	10	24.1	0.0	0	330
586	1975	01	16.81470	10	15	07.78	+08	23	26.3	0.0	1-	330
586	1975	01	22.86594	10	12	03.50	+08	36	27.3	0.0	1-	330
586	1975	02	12.60559	09	57	43.45	+09	50	24.8	0.0	1-	330
586	1975	02	19.77855	09	51	55.30	+10	21	46.1	0.1-	0	330
588	1966	02	14.79873	10	44	02.92	+02	42	27.8	0.0	1-	330
592	1972	10	28.70299	02	09	24.91	+01	04	34.9	0.0	1+	330
593	1973	05	04.63955	15	20	34.47	-05	14	04.7	1.0+	8-	330
595	1977	10	12.60639	02	24	04.04	+18	31	49.2	0.1-	0	330
597	1973	11	22.55000	03	32	02.33	+27	13	06.7	0.3-	1-	330
597	1977	10	04.57707	00	43	00.88	-06	52	15.2	0.0	0	330
608	1966	01	01.83444	08	22	10.94	+18	54	49.7	2.5-	21+	330
608	1966	01	20.62113	08	05	30.49	+18	59	51.6	2.7-	21+	330
608	1966	01	28.78439	07	58	01.45	+19	01	58.1	2.8-	21+	330
608	1966	02	14.54560	07	45	00.58	+19	01	34.3	2.7-	19+	330
608	1966	02	24.56392	07	39	45.19	+18	37	19.6			330

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609	1965	07	28.64840	21	07	24.19	-12	53	19.8	1.5+	5+	330
617	1965	10	21.65090	02	08	55.09	+06	12	40.7	0.0	1+	330
617	1977	10	10.67163	02	25	31.63	+08	28	29.8	0.0	0	330
617	1977	10	21.85809	02	18	49.93	+08	25	13.8	0.0	1+	330
617	1977	11	03.64246	02	10	45.35	+08	22	52.7	0.0	0	330
617	1977	11	12.57364	02	05	19.22	+08	23	49.7	0.0	0	330
618	1973	06	06.67079	17	34	00.91	-10	29	07.0	0.1-	0	330
622	1975	01	16.81470	10	02	38.79	+10	22	47.9	0.0	0	330
622	1975	01	22.86594	09	58	30.93	+11	08	06.7	0.0	0	330
624	1966	02	13.74039	10	40	20.46	+11	38	26.7	0.1-	2+	330
624	1966	02	14.74942	10	39	46.33	+11	39	45.9	0.2-	3+	330
624	1966	02	16.69871	10	38	39.57	+11	42	17.1	0.2-	2+	330
624	1966	02	24.74483	10	33	56.40	+11	52	37.2	0.3-	3+	330
624	1966	02	25.77051	10	33	19.61	+11	53	53.2	0.2-	3+	330
624	1966	03	16.66108	10	22	33.53	+12	12	00.5	0.2-	1+	330
627	1966	01	01.83444	08	08	44.91	+15	40	11.5	0.2-	1+	330
627	1966	01	20.62113	07	52	56.16	+16	52	13.5	0.2-	1+	330
627	1966	01	28.81218	07	45	54.28	+17	26	14.4	0.2-	1+	330
627	1966	02	14.54560	07	34	03.59	+18	31	11.9	0.1-	2+	330
627	1966	02	24.56392	07	29	35.17	+19	03	59.2			330
628	1965	01	11.88958	09	44	12.32	+19	37	46.5	0.2	0	330
628	1976	12	14.57406	06	15	16.39	+16	26	40.1	0.3+	0	330
629	1977	10	12.64875	02	37	46.28	+03	30	58.4	0.0	0	330
630	1965	11	25.74801	05	29	32.01	+11	40	32.0	2.6-	10-	330
635	1965	12	19.81008	06	59	22.29	+06	31	18.0	0.2-	1-	330
638	1965	01	12.83611	08	54	13.68	+21	43	15.6	0.0	0	330
640	1965	12	19.81008	07	01	33.30	+09	25	24.4	2.1+	3+	330
641	1965	02	02.73958	10	30	39.41	+12	32	01.6	0.2-	2-	330
641	1965	02	25.75344	10	07	09.80	+14	39	58.8	0.2-	2-	330
641	1965	03	04.67222	10	00	17.70	+15	11	09.2	0.1-	3-	330
650	1965	12	19.74828	05	57	25.70	+19	40	45.4	0.1-	1+	330
655	1966	02	14.74942	10	34	51.95	+12	50	35.6	0.9+	3-	330
655	1966	02	24.74483	10	27	10.53	+13	54	34.8	0.9+	3-	330
655	1966	02	25.77051	10	26	22.34	+14	00	57.7	0.9+	3-	330
655	1966	03	15.58816	10	13	29.62	+15	36	44.0	0.8+	2-	330
655	1976	02	05.62949	08	15	24.53	+19	09	43.0	0.2-	1+	330
657	1965	09	23.50955	00	19	04.72	+17	56	38.6	0.0	0	330
661	1976	02	01.63623	09	56	19.33	+16	25	44.6	0.4-	2+	330
664	1965	09	22.61861	00	18	20.59	+00	22	44.0	1.5+	5+	330
664	1965	10	17.61109	00	01	56.67	-02	18	49.3	1.4+	4+	330
664	1965	10	20.51656	00	00	27.79	-02	33	39.1	1.4+	4+	330
664	1965	10	24.59417	23	58	36.42	-02	52	29.9	1.4+	5+	330
669	1965	06	27.71353	19	16	26.96	-06	46	08.0	1.2+	1+	330
670	1965	11	25.74801	05	37	55.27	+11	27	20.4	0.9-	2-	330
670	1965	12	18.62431	05	17	11.76	+10	54	34.2	1.0-	2-	330
672	1965	08	27.69095	22	35	56.97	-12	03	24.9	1.1+	15+	330
672	1965	09	18.52424	22	14	41.99	-11	38	02.7	1.1+	13+	330
673	1975	12	22.52903	05	35	19.20	+20	30	51.3	0.2-	0	330
674	1975	04	03.63267	11	15	09.08	+25	07	10.4	0.2-	3+	330
675	1965	01	08.70625	06	51	30.36	+16	45	06.0	0.1-	1-	330
677	1974	12	19.70337	07	36	31.31	+19	06	09.5	0.0	0	330
677	1975	01	10.70269	07	17	14.21	+18	44	53.5	0.0	0	330
677	1975	01	16.63900	07	11	38.88	+18	40	29.7	0.1-	1-	330
678	1975	01	09.66028	08	02	47.20	+18	00	51.8	0.2-	1+	330
680	1972	11	16.80922	02	34	09.05	+17	33	39.4	0.0	0	330
680	1972	11	24.47560	02	27	45.72	+17	29	04.2	0.1-	1+	330
680	1972	11	28.49624	02	24	45.20	+17	27	04.8	0.1-	1-	330
680	1972	12	03.57733	02	21	20.14	+17	25	20.8	0.1-	1-	330
680	1972	12	08.68596	02	18	29.46	+17	24	49.4	0.1-	1-	330

681	1965	10	17.56109	23	09	30.45	-05	14	58.0			330
684	1976	02	01.63623	09	44	42.08	+16	30	36.3	0.1+	0	330
687	1965	02	02.73958	10	45	49.01	+09	23	58.5	0.1+	1-	330
688	1972	11	30.67942	06	12	31.66	+08	36	17.9	0.4+	0	330
688	1972	12	13.77558	06	01	28.10	+08	19	30.8	0.5+	1-	330
694	1965	05	29.70417	16	06	09.86	-14	14	19.5	0.7+	1+	330
696	1973	01	29.67765	08	07	37.99	+18	45	01.2	0.3-	0	330
699	1965	06	27.68089	17	16	25.18	-09	03	38.2	2.7+	14+	330
701	1974	11	18.64286	01	27	43.85	+14	27	05.1	0.1-	0	330
702	1973	08	06.66931	22	07	46.04	+09	13	44.9	0.0	0	330
702	1973	08	22.59478	21	54	29.51	+09	37	13.0	0.0	1-	330
703	1966	01	01.83444	08	06	51.67	+15	46	34.9	0.2-	1-	330
703	1966	01	27.77778	07	37	52.54	+17	01	10.6	0.3-	2-	330
707	1966	01	30.76984	08	59	12.31	+13	09	20.9			330
707	1966	02	16.60323	08	40	48.36	+13	59	06.6			330
707	1966	02	24.62434	08	33	50.73	+14	19	48.4			330
708	1975	12	23.59817	05	02	47.22	+28	13	20.8	0.0	1-	330
709	1966	02	14.69664	10	12	54.24	+08	34	44.6	0.1-	1+	330
709	1966	02	24.72677	10	03	33.97	+08	45	39.2	0.1+	1+	330
709	1973	08	06.73736	22	17	54.18	-10	06	02.4	0.2-	1-	330
709	1973	08	22.64270	22	02	25.60	-09	33	02.8	0.2-	2-	330
710	1975	12	01.57676	03	30	03.21	+16	32	26.0	0.1-	1-	330
712	1972	11	16.83603	05	21	42.83	+15	56	49.1	2.4-	11-	330
712	1972	11	28.61777	05	12	22.56	+13	56	53.2	2.5-	11-	330
715	1973	12	24.59390	06	39	48.83	+39	20	26.9	0.3-	0	330
715	1977	10	21.85809	02	27	35.53	+09	34	35.9	0.1-	0	330
715	1977	11	03.64246	02	14	32.31	+09	41	39.5	0.1-	1+	330
715	1977	11	12.57364	02	05	49.58	+09	50	20.0	0.0	0	330
715	1977	12	04.53280	01	50	43.05	+10	37	16.9			330
716	1966	02	14.69664	10	11	54.06	+11	46	33.0	0.2+	0	330
716	1966	02	24.72677	10	03	53.15	+13	06	11.2	0.2+	0	330
720	1965	09	21.69850	01	10	41.92	+05	56	09.0	0.2+	1-	330
720	1965	10	19.56730	00	48	53.11	+04	00	10.0	0.1+	0	330
721	1965	10	20.72698	03	19	32.28	+19	23	26.4	0.5-	3-	330
721	1972	11	29.66873	04	51	36.16	+29	14	06.9	0.0	1+	330
725	1977	12	04.53280	01	38	31.34	+07	39	12.9			330
727	1966	03	15.75170	12	28	23.95	+15	13	02.5	0.1-	1-	330
735	1975	11	24.52667	02	30	45.68	+19	24	52.7	0.3-	2-	330
736	1966	02	25.67745	09	50	14.55	+14	51	38.4	0.1+	2+	330
736	1966	03	16.53399	09	34	30.06	+16	33	55.9			330
738	1965	12	30.84343	07	56	17.76	+18	51	54.6	0.0	1+	330
738	1966	01	16.73472	07	42	04.62	+19	44	57.2	0.1+	1+	330
738	1975	11	26.54058	04	11	57.78	+16	14	43.7	0.1+	1+	330
739	1976	01	01.60685	06	28	46.10	+02	38	02.9	0.0	0	330
740	1965	12	30.90002	08	10	20.78	+19	08	47.1	2.5-	1+	330
740	1966	01	01.83444	08	08	59.99	+19	19	48.2	2.5-	2+	330
740	1966	01	20.57461	07	53	33.13	+21	15	31.8	2.7-	1+	330
740	1966	01	28.76565	07	46	29.97	+22	05	04.4	2.6-	0	330
740	1966	02	13.63553	07	35	13.68	+23	28	01.4	2.5-	0	330
741	1965	10	24.74972	04	05	45.85	+11	07	29.9			330
742	1975	01	09.56514	04	57	08.14	+28	37	05.0	0.6+	4+	330
743	1966	07	19.74315	20	11	17.82	-12	47	11.1	0.0	0	330
743	1972	11	29.68956	05	46	28.19	+19	34	19.2	0.0	1-	330
743	1972	12	08.62078	05	38	32.79	+19	12	53.9	0.1-	0	330
743	1972	12	29.60278	05	19	01.55	+18	29	48.3	0.1-	0	330
748	1973	11	23.50427	03	13	12.83	+19	41	02.0	0.1-	1-	330
748	1973	11	24.54774	03	12	29.11	+19	37	29.3	0.0	1-	330
748	1973	11	28.48989	03	09	48.44	+19	24	23.6	0.1-	1-	330
749	1965	12	19.68890	05	31	14.39	+19	36	58.5	0.3+	1+	330

751	1976	12	14.62406	06	20	55.09	+28	34	39.5	0.2-	0	330
752	1973	12	22.63159	06	32	51.18	+24	58	26.7	0.6-	0	330
754	1966	03	16.81559	12	23	54.13	-00	52	42.0	1.4+	2+	330
758	1972	12	12.71914	06	30	29.50	+21	05	20.2	0.1-	1-	330
759	1975	01	16.81470	10	10	52.08	+09	52	20.2	0.0	0	330
759	1975	01	22.86594	10	06	16.02	+09	47	11.5	0.0	0	330
759	1975	02	12.60559	09	46	21.51	+09	47	13.0	0.1-	0	330
762	1966	01	30.76984	08	59	24.95	+14	59	45.6	0.9+	7-	330
762	1966	02	16.60323	08	44	02.15	+14	46	56.4	0.9+	7-	330
762	1966	02	24.62434	08	37	55.52	+14	39	10.8			330
763	1965	01	12.86736	09	48	55.91	+10	32	08.8	0.1-	1-	330
764	1966	01	21.53370	06	05	27.34	+18	00	43.9	0.6-	1+	330
767	1965	01	12.83611	08	45	17.46	+20	26	29.7	0.5+	1-	330
767	1966	03	15.69198	12	04	52.32	+03	03	08.1	0.0	1-	330
767	1974	10	23.73669	03	45	47.11	+17	56	32.3	0.7+	3+	330
767	1974	12	18.55263	03	04	18.34	+16	09	25.4	0.6+	3+	330
769	1965	11	21.73453	04	43	54.40	+27	18	56.5	1.2+	5+	330
769	1965	11	25.58991	04	40	33.29	+27	19	07.2	1.3+	5+	330
769	1973	01	29.74084	09	54	18.63	+23	21	53.9	0.1+	0	330
772	1975	10	31.70422	04	56	51.79	+23	20	10.3	0.0	1-	330
772	1975	11	06.64540	04	52	34.50	+23	53	40.3	0.2-	2-	330
772	1975	11	23.57243	04	36	22.99	+25	25	17.1	0.2-	2-	330
772	1975	11	26.58086	04	33	04.12	+25	40	18.0	0.1-	2-	330
772	1975	11	29.53647	04	29	44.63	+25	54	32.6	0.2-	1-	330
772	1975	12	23.53359	04	03	47.05	+27	28	55.8	0.0	2-	330
772	1975	12	29.50260	03	58	34.22	+27	47	16.6	0.2-	2-	330
774	1972	12	12.71914	06	18	57.20	+20	45	14.1	0.1-	1-	330
774	1977	11	14.68613	05	06	15.48	+22	52	51.5	0.1-	0	330
774	1977	12	08.55438	04	46	34.65	+21	55	46.6	0.1-	0	330
775	1966	01	16.58194	06	01	56.42	+27	59	50.0	0.6-	2+	330
775	1966	01	28.65697	05	54	43.01	+27	12	28.2			330
778	1965	02	02.73958	10	30	56.07	+07	56	08.8	1.4+	16-	330
779	1965	12	30.84343	07	53	24.51	+18	04	41.0	0.4-	2-	330
779	1966	01	01.78653	07	51	30.09	+18	01	59.3	0.0	0	330
779	1966	01	16.67986	07	36	06.31	+17	44	02.9	0.0	0	330
779	1966	01	16.73472	07	36	02.93	+17	44	00.4	0.1-	0	330
779	1966	01	19.66142	07	33	01.67	+17	40	49.5	0.0	0	330
779	1966	01	27.77778	07	25	04.23	+17	32	19.3	0.0	0	330
780	1975	02	12.66809	11	03	57.02	+12	09	13.1	0.2-	0	330
780	1975	02	16.78464	11	01	28.00	+12	45	33.9	0.2-	1+	330
782	1965	01	01.68820	06	40	35.02	+26	25	26.9	0.2-	3+	330
784	1965	09	18.63674	01	40	56.59	+11	06	38.9	1.4-	11-	330
784	1965	10	16.59375	01	19	04.91	+10	17	23.8	1.4-	12-	330
784	1965	10	20.57073	01	15	45.41	+10	07	53.5	1.4-	11-	330
784	1965	10	24.64556	01	12	25.54	+09	58	10.1	1.4-	9-	330
786	1974	11	18.70396	06	41	02.91	+22	39	41.1			330
786	1974	12	14.62242	06	24	36.09	+24	06	39.9	0.1-	0	330
786	1974	12	18.69013	06	21	05.31	+24	20	56.9	0.1-	0	330
786	1975	01	04.58257	06	05	47.06	+25	16	19.5	0.2-	0	330
786	1975	01	12.52770	05	58	59.74	+25	38	58.9	0.2-	1-	330
786	1975	01	16.57095	05	55	50.12	+25	49	32.1	0.2-	1-	330
786	1975	01	17.61476	05	55	03.60	+25	52	09.6	0.2-	1-	330
786	1975	01	18.63441	05	54	19.36	+25	54	41.7	0.1-	1-	330
791	1965	11	28.64190	04	25	42.53	-00	21	21.9	4.5+	23+	330
791	1965	12	19.63230	04	09	17.73	+00	25	33.8	4.2+	21+	330
792	1966	01	01.88097	08	27	55.28	+11	30	47.8	0.5+	0	330
792	1966	01	21.61634	08	09	47.48	+10	52	03.3	0.5+	0	330
792	1966	01	27.72503	08	03	39.47	+10	48	52.2	0.5+	1+	330
792	1966	02	13.58553	07	49	22.28	+10	54	57.0	0.5+	1+	330

792	1966	02	18.52263	07	46	28.03	+10	59	23.7		330
797	1975	10	30.71182	05	27	54.12	+22	16	21.1		330
797	1975	11	24.56208	05	12	10.98	+21	16	06.1	0.0	1-
797	1977	04	19.57221	12	22	36.09	-07	50	12.2	0.2+	2-
803	1966	01	01.78653	07	46	03.10	+13	16	47.6	0.0	0
803	1966	01	16.67986	07	33	48.08	+13	19	43.4	0.1-	1+
803	1966	01	19.66142	07	31	19.90	+13	21	45.7	0.1-	1+
809	1965	01	01.72083	07	21	48.65	+13	05	53.2	0.5+	2+
811	1965	10	24.69903	03	34	49.81	+14	33	03.8	1.2-	7-
811	1965	11	20.73111	03	12	27.84	+13	07	00.1	1.2-	8-
811	1965	11	23.62125	03	10	03.32	+12	58	58.6	1.2-	7-
811	1965	11	26.78470	03	07	30.59	+12	50	57.9	1.2-	7-
811	1965	11	30.80133	03	04	29.11	+12	41	52.6	1.2-	7-
811	1965	12	13.49242	02	56	41.59	+12	23	20.1		330
811	1965	12	18.51979	02	54	32.11	+12	20	46.5		330
811	1975	11	26.54058	04	05	57.04	+16	25	56.1	0.1-	1+
813	1973	01	29.74084	09	46	59.71	+25	01	47.3	0.4-	4+
817	1966	01	01.78653	07	40	15.42	+15	33	20.2	0.1+	1+
817	1966	01	16.67986	07	25	45.29	+17	34	02.8	0.1+	1+
817	1966	01	19.66142	07	22	53.85	+17	58	47.2	0.2+	1+
818	1965	10	24.74972	03	50	07.39	+11	08	49.6		330
818	1965	11	20.73111	03	26	56.47	+11	38	55.7	0.2+	3+
818	1965	11	23.62125	03	24	17.57	+11	44	06.1	0.3+	2+
818	1965	11	26.78470	03	21	27.04	+11	50	20.0	0.2+	2+
818	1965	11	30.80133	03	17	59.63	+11	59	09.8	0.1+	2+
818	1965	12	13.49242	03	08	41.75	+12	34	34.6	0.2+	2+
818	1965	12	18.51979	03	05	52.83	+12	51	48.9		330
820	1965	01	11.83958	08	34	44.69	+19	11	25.0	0.4-	2+
822	1965	09	21.69850	01	14	08.02	+08	18	44.7	0.0	1+
822	1965	10	19.56730	00	48	41.71	+05	29	47.2	0.1-	1-
823	1977	10	04.64443	01	21	53.68	+14	30	19.1	0.3+	2+
823	1977	10	10.61052	01	16	10.99	+13	52	54.4	0.2+	2+
823	1977	10	16.58784	01	10	15.67	+13	10	41.6	0.2+	1+
823	1977	11	01.50904	00	55	54.45	+11	11	02.1	0.3+	2+
823	1977	11	08.60436	00	51	09.14	+10	22	19.1	0.2+	0
825	1977	11	04.51886	01	36	44.48	+04	20	20.3	0.1-	0
826	1965	02	23.70347	11	18	55.70	-06	21	57.3	1.3-	11+
826	1965	03	05.80903	11	10	52.77	-05	32	04.5	1.4-	11+
834	1974	12	18.65610	06	41	08.29	+17	50	29.8	0.2-	1-
834	1974	12	20.76111	06	39	29.76	+17	51	23.5	0.1-	1-
846	1965	07	28.64840	21	15	44.84	-15	35	49.6	0.7-	3-
851	1974	10	23.68530	03	00	16.40	+12	48	57.7	0.0	0
856	1965	01	11.83958	08	32	59.81	+16	31	00.3	0.2+	1+
858	1965	11	20.82903	05	10	05.80	+24	04	19.8	0.5+	1+
858	1965	11	23.68826	05	07	34.49	+24	08	17.6	0.4+	2+
858	1974	10	23.68530	03	03	50.62	+11	25	40.9	0.0	1+
863	1973	12	24.67133	07	00	23.47	+12	21	02.7	0.1-	1+
865	1966	04	14.61241	11	21	38.71	+07	17	29.6	4.2-	12+
866	1965	11	20.87556	05	49	59.02	+20	41	02.0	0.0	1-
866	1965	11	23.71639	05	48	04.87	+20	45	44.8	0.0	0
866	1965	12	19.68890	05	25	55.99	+21	31	09.2	0.1-	0
866	1965	12	30.79620	05	16	21.89	+21	50	07.5	0.1-	0
866	1965	12	31.78929	05	15	34.97	+21	51	49.7	0.1-	0
866	1966	01	16.52361	05	05	34.77	+22	18	48.9		330
866	1975	10	30.49168	23	20	37.16	-16	42	50.8		330
868	1965	01	11.83958	08	23	12.88	+19	51	47.3	2.1+	1+
868	1974	02	13.51898	08	51	42.29	+20	45	58.6	2.5+	1-
869	1965	01	12.86736	09	52	48.29	+08	56	04.4	0.8+	1-
872	1973	11	20.56805	03	15	47.17	+11	06	43.2	0.0	1-

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874	1965	12	31.81152	08	14	34.81	+04	23	43.6	1.4-	4+	330
885	1972	11	30.60859	04	50	17.97	+17	36	54.1	0.1-	1+	330
885	1972	12	15.77681	04	37	03.22	+17	19	39.5	0.1-	0	330
885	1977	10	12.55778	01	27	26.76	+04	40	38.8	0.0	1+	330
885	1977	11	03.58413	01	12	06.49	+02	59	18.4	0.1+	0	330
885	1977	11	04.57095	01	11	33.19	+02	56	04.5	0.1+	0	330
885	1977	11	08.55436	01	09	29.55	+02	44	32.0	0.0	1+	330
885	1977	11	11.53614	01	08	09.25	+02	37	34.3	0.1+	1+	330
887	1973	12	31.55965	06	45	20.33	+08	49	38.5	0.3+	3+	330
887	1974	01	21.55839	08	26	21.52	+31	19	54.9	0.1+	2+	330
887	1974	02	12.58142	09	33	40.40	+38	38	15.2	0.0	0	330
889	1965	05	29.75322	16	43	48.82	-11	12	48.6	4.5+	17-	330
891	1965	01	09.75208	07	45	10.72	+23	37	31.8	0.2-	0	330
897	1965	01	01.74861	07	21	27.75	+11	07	12.1	4.1+	29-	330
897	1965	01	10.68472	07	12	10.29	+10	46	14.3	4.1+	28-	330
900	1965	09	20.66588	01	43	24.19	+06	34	39.5	0.9+	7+	330
900	1965	10	18.61661	01	22	44.90	+01	35	15.1	0.8+	9+	330
903	1977	10	12.64875	02	31	30.81	+01	09	49.5	0.1+	1+	330
904	1965	11	25.69025	05	26	27.31	+03	49	46.7	2.1-	5+	330
905	1966	04	14.52352	11	08	33.09	+10	55	00.8			330
905	1966	04	14.54435	11	08	33.83	+10	55	01.5			330
906	1975	04	12.55396	12	35	03.65	+05	30	41.2	0.1-	1+	330
909	1966	02	14.74942	10	44	08.45	+11	50	21.1			330
909	1966	02	16.69871	10	42	58.15	+12	04	53.7			330
917	1965	02	02.73958	10	47	50.04	+09	24	37.1	0.8+	7-	330
918	1965	01	12.80833	09	04	00.89	+24	25	22.4	0.1+	1-	330
918	1975	01	16.81470	10	20	56.44	+12	48	56.6	0.0	2-	330
918	1975	01	22.86594	10	17	11.47	+12	57	04.7	0.0	1-	330
918	1975	02	12.60559	10	00	20.37	+13	37	56.2	0.0	1-	330
918	1975	03	07.66553	09	40	21.00	+14	18	25.2	0.0	2-	330
924	1965	11	28.71412	06	23	16.87	+11	15	19.9	0.3-	1-	330
924	1973	05	04.63955	15	21	14.30	-05	23	03.7	0.1-	1+	330
929	1965	10	20.72698	03	14	56.01	+19	08	38.9	0.1-	0	330
929	1965	11	20.68076	02	43	47.47	+16	06	17.5	0.0	1+	330
929	1965	11	23.57368	02	41	07.45	+15	49	06.5	0.1-	1-	330
929	1965	11	26.63123	02	38	28.85	+15	31	41.4	0.0	1-	330
929	1965	11	30.74994	02	35	15.59	+15	09	46.4	0.0	1-	330
929	1965	12	11.48697	02	29	00.82	+14	23	12.2			330
936	1965	10	19.72494	03	19	48.03	+17	12	22.7	0.2-	2-	330
936	1965	11	20.68076	02	54	09.93	+15	48	02.5	0.3-	1-	330
936	1965	11	23.57368	02	51	56.68	+15	40	30.5	0.3-	1-	330
936	1965	11	26.63123	02	49	42.56	+15	32	58.1	0.3-	2-	330
936	1965	11	30.74994	02	46	54.59	+15	23	37.5	0.3-	1-	330
936	1965	12	11.48697	02	41	04.40	+15	05	15.4			330
937	1974	12	18.65610	06	48	44.55	+19	48	48.9	0.1-	0	330
937	1974	12	20.76111	06	46	21.35	+19	48	27.2	0.1-	1-	330
938	1965	08	27.80623	23	33	15.64	-06	11	58.2	0.9-	6-	330
938	1965	09	21.57940	23	16	13.41	-08	21	11.1	1.0-	6-	330
938	1965	10	16.52778	23	03	55.02	-09	36	02.7			330
943	1966	01	30.86671	10	22	03.65	+20	03	01.5	0.6+	6-	330
943	1966	02	13.68900	10	12	47.45	+22	15	49.6	0.7+	5-	330
943	1966	02	16.65288	10	10	33.01	+22	42	23.6	0.6+	6-	330
943	1966	02	25.72398	10	03	39.70	+23	55	02.2	0.4+	5-	330
947	1965	11	21.73453	04	47	02.09	+26	17	27.3	0.6-	1-	330
947	1965	11	25.58991	04	43	05.39	+26	27	14.8	0.5-	1-	330
954	1972	12	01.66183	04	05	55.66	+19	14	28.3	0.0	1-	330
955	1966	02	13.68900	10	05	17.97	+19	33	36.9	1.1-	11-	330
955	1966	02	16.65288	10	02	08.53	+19	42	20.0	1.0-	12-	330
955	1966	02	25.72398	09	52	22.16	+20	03	57.9	1.2-	10-	330

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956	1977	10	10.67163	02	35	38.20	+11	53	24.3	0.0	0	330
956	1977	10	21.85809	02	25	50.50	+10	17	42.9	0.2+	1+	330
956	1977	11	03.64246	02	13	36.96	+08	30	47.5	0.2+	1+	330
956	1977	11	12.57364	02	05	58.20	+07	28	03.5	0.2+	1+	330
961	1965	10	18.56383	00	35	32.05	-00	19	43.6	2.7+	26+	330
961	1965	10	21.53250	00	33	00.09	-00	19	51.1	2.6+	24+	330
962	1976	12	16.58380	06	03	22.77	+20	06	46.0	0.6+	1+	330
966	1975	11	29.59619	05	33	03.78	+25	34	21.7	0.0	0	330
966	1975	12	02.62228	05	30	06.45	+25	44	30.6	0.0	1+	330
966	1975	12	23.59817	05	08	04.94	+26	41	42.0	0.1-	0	330
966	1976	01	01.55616	04	59	25.75	+26	58	47.1	0.1-	0	330
968	1965	11	22.62336	04	18	06.89	+11	13	56.4	3.2+	0	330
974	1965	12	30.90002	08	12	30.17	+23	51	20.8	0.6+	5-	330
976	1965	10	20.72698	03	13	59.29	+21	49	49.9	0.1+	0	330
987	1972	10	28.65611	01	41	13.37	+24	42	02.7	0.0	1-	330
992	1975	11	23.53493	03	46	15.60	+12	47	43.0	0.0	1+	330
993	1975	12	22.52903	05	26	52.48	+20	30	15.4	0.6-	1-	330
993	1975	12	29.58108	05	20	32.17	+20	25	57.4	0.5-	0	330
993	1976	01	05.54799	05	14	59.81	+20	22	42.1	0.6-	0	330
999	1974	10	12.65045	02	11	09.30	+15	29	25.0	0.5-	1-	330
1002	1975	12	01.63926	04	40	15.66	+38	58	18.0	0.0	0	330
1004	1974	12	14.60506	05	20	57.76	+19	02	55.5	0.3-	0	330
1007	1965	01	11.86181	09	22	41.19	+15	16	37.0	0.0	0	330
1010	1975	01	09.66028	08	14	24.40	+21	42	09.8	0.2-	0	330
1014	1965	11	20.82903	05	15	50.86	+23	09	16.3			330
1014	1965	11	23.68826	05	13	38.07	+23	03	45.8			330
1014	1965	12	20.64796	04	48	28.56	+21	56	48.0			330
1014	1965	12	31.70804	04	39	50.22	+21	29	14.3			330
1022	1965	01	10.75972	07	46	45.29	+21	55	42.7	1.5-	6-	330
1029	1965	09	21.69850	01	16	52.51	+06	58	49.4	1.0-	5-	330
1029	1965	10	19.56730	00	55	08.18	+05	05	21.8	1.1-	6-	330
1032	1965	11	20.78111	04	59	25.20	+21	22	52.7	0.8+	3+	330
1032	1965	11	25.63574	04	55	26.56	+21	25	33.1	0.7+	4+	330
1032	1965	12	20.64796	04	34	02.03	+21	34	40.1	0.6+	4+	330
1032	1965	12	31.74103	04	26	08.93	+21	38	48.2			330
1036	1972	11	30.63150	05	12	50.60	-10	04	56.8	1.0+	2-	330
1045	1965	01	01.68820	06	47	05.45	+22	57	29.1	1.4+	1+	330
1052	1975	10	31.64103	01	35	26.77	+00	21	16.9	0.0	0	330
1054	1965	11	22.62336	04	00	29.50	+12	46	50.3	1.1-	7-	330
1054	1975	11	26.54058	04	12	10.18	+14	19	42.4	0.6-	2-	330
1055	1966	02	14.74942	10	44	07.87	+09	08	32.0	1.8+	6-	330
1055	1966	02	16.69871	10	42	19.88	+09	23	18.1	1.8+	7-	330
1055	1977	10	12.64875	02	24	52.55	+04	37	39.3	0.0	1+	330
1057	1965	11	20.78111	04	56	25.85	+23	45	43.7	1.2+	4-	330
1057	1965	11	25.63574	04	51	56.33	+23	30	51.1	1.3+	4-	330
1057	1965	11	28.69433	04	48	59.24	+23	20	52.9	1.2+	4-	330
1057	1965	11	30.84890	04	46	52.56	+23	13	34.5	1.3+	4-	330
1057	1965	12	13.55214	04	34	47.58	+22	28	52.3	1.2+	5-	330
1057	1965	12	18.57535	04	30	32.59	+22	11	24.1	1.2+	5-	330
1057	1965	12	24.58450	04	26	08.85	+21	51	50.7	1.1+	5-	330
1057	1965	12	30.74516	04	22	35.35	+21	34	03.3			330
1057	1975	12	11.81911	06	31	59.74	+22	08	55.5	0.2+	1+	330
1060	1965	06	28.66145	18	28	41.48	-12	15	29.4	0.1-	2-	330
1062	1977	10	04.64443	01	28	12.31	+15	00	30.8			330
1062	1977	10	10.61052	01	23	21.62	+14	44	12.7			330
1062	1977	10	16.58784	01	18	19.54	+14	24	37.9			330
1062	1977	11	01.50904	01	05	38.21	+13	24	43.8			330
1062	1977	11	08.60436	01	00	59.11	+12	58	35.9			330
1063	1973	05	04.69382	16	11	52.38	-14	09	22.1	0.0	1-	330

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1064	1965	01	11.83958	08	18	39.40	+14	57	36.2	4.4-	24+	330
1064	1965	01	26.63194	08	03	42.42	+15	07	31.7	4.4-	24+	330
1064	1965	02	02.60972	07	56	52.43	+15	13	47.0	4.3-	23+	330
1064	1965	02	23.55417	07	41	04.63	+15	30	55.1			330
1076	1965	10	21.65090	02	12	21.92	+07	31	38.3	1.4+	7+	330
1076	1965	11	20.63180	01	47	51.14	+05	17	39.5	1.3+	6+	330
1076	1975	05	06.56299	14	09	32.36	-07	42	15.0	0.0	0	330
1078	1975	01	04.58257	06	13	54.13	+24	32	45.2	0.5-	0	330
1078	1975	01	12.52770	06	05	25.85	+25	15	49.1	0.4-	0	330
1078	1975	01	16.57095	06	01	42.08	+25	35	47.9	0.4-	0	330
1078	1975	01	17.61476	06	00	49.17	+25	40	44.7	0.4-	0	330
1078	1975	01	18.63441	05	59	59.63	+25	45	28.7	0.5-	1-	330
1079	1965	12	30.90002	08	20	26.53	+20	36	03.3			330
1079	1966	01	20.57461	08	02	20.64	+21	26	34.7			330
1079	1966	01	28.76565	07	54	44.45	+21	44	25.0			330
1079	1966	02	13.63553	07	42	28.16	+22	08	00.1			330
1079	1966	02	16.55323	07	40	46.55	+22	10	34.7			330
1081	1965	09	21.57940	23	21	15.82	-08	45	28.3	3.8+	28+	330
1081	1965	10	16.52778	23	06	03.64	-09	28	47.2			330
1084	1973	12	25.64363	06	35	04.80	+17	26	42.8	0.6-	0	330
1086	1975	01	16.81470	10	11	53.53	+09	33	10.8	0.0	1+	330
1086	1975	01	22.86594	10	08	30.63	+09	34	37.4	0.0	0	330
1086	1975	02	12.60559	09	52	45.48	+10	01	28.0	0.2-	1+	330
1086	1975	02	19.77855	09	46	39.01	+10	15	04.8	0.2-	2+	330
1088	1975	05	06.56299	14	13	12.51	-09	48	26.0	0.0	0	330
1094	1965	10	20.62490	02	12	47.45	-08	13	45.7	0.6-	4-	330
1095	1965	10	18.66904	02	18	56.69	+05	29	50.9			330
1095	1965	10	21.65090	02	16	47.15	+05	09	57.1			330
1095	1965	11	20.63180	01	56	09.55	+02	30	24.7			330
1095	1965	11	25.53470	01	53	44.62	+02	15	48.6			330
1095	1965	11	30.69091	01	51	41.07	+02	04	41.7			330
1096	1975	10	30.71182	05	34	45.98	+20	05	59.8			330
1096	1975	11	24.56208	05	17	30.67	+20	59	44.4	0.0	0	330
1102	1965	09	20.61519	00	18	24.38	+16	04	28.5	0.9-	2-	330
1107	1975	05	06.61715	15	10	58.41	-08	21	21.0	0.2-	1-	330
1108	1975	11	24.52667	02	39	09.32	+18	25	02.2	0.6+	0	330
1109	1965	08	27.61977	22	09	06.25	-05	24	20.9	1.8-	12-	330
1118	1974	12	20.68680	05	56	32.13	+38	40	35.0	0.4+	3-	330
1119	1974	12	18.60888	05	29	01.35	+28	35	27.1	0.0	1-	330
1119	1975	01	09.56514	05	07	50.43	+28	40	56.9	0.1-	1-	330
1121	1977	10	16.64408	02	58	07.92	+24	09	15.9	1.3+	7+	330
1126	1965	10	17.56109	23	16	18.65	-04	32	48.7	0.0	2-	330
1128	1966	02	13.74039	10	27	40.66	+11	18	30.5	1.7-	11+	330
1128	1966	02	14.74942	10	26	51.15	+11	23	24.2	1.8-	10+	330
1128	1966	02	24.72677	10	18	22.59	+12	12	05.3	1.8-	10+	330
1128	1966	02	24.74483	10	18	21.51	+12	12	10.7	1.8-	10+	330
1128	1966	02	25.77051	10	17	29.18	+12	17	05.1	1.8-	10+	330
1128	1966	03	16.59788	10	02	50.64	+13	33	50.5			330
1129	1972	11	29.66873	04	44	20.89	+26	35	45.2	0.1-	1+	330
1129	1977	10	16.64408	03	00	04.72	+27	12	22.0	0.2-	0	330
1132	1973	08	23.73235	23	03	47.79	-18	45	19.6	0.0	0	330
1135	1966	01	28.86356	10	10	21.70	+14	43	12.8	1.0-	3+	330
1135	1966	02	14.64248	09	55	31.30	+15	46	02.1	1.0-	4+	330
1135	1966	02	25.67745	09	45	17.58	+16	22	52.5	1.0-	4+	330
1135	1966	03	16.53399	09	31	09.98	+17	00	23.4			330
1135	1977	10	12.60639	02	14	43.41	+18	37	00.3	0.1-	1+	330
1135	1977	11	01.55765	01	56	09.67	+17	39	20.8	0.1-	1-	330
1135	1977	11	08.65367	01	49	53.68	+17	12	25.3	0.0	1-	330
1138	1974	12	14.62242	06	24	05.31	+27	57	25.2	0.1-	1-	330

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1138	1974	12	18.69013	06	20	13.97	+27	45	12.8	0.1-	1-	330
1138	1975	01	04.58257	06	04	01.19	+26	43	54.5	0.2-	0	330
1138	1975	01	12.52770	05	57	15.44	+26	11	03.5	0.2-	0	330
1138	1975	01	16.57095	05	54	13.83	+25	53	51.9	0.1-	1-	330
1138	1975	01	17.61476	05	53	29.97	+25	49	24.9	0.2-	1-	330
1138	1975	01	18.63441	05	52	48.80	+25	45	05.0	0.1-	1-	330
1140	1975	12	23.59817	05	23	06.08	+28	26	37.1	0.0	1+	330
1140	1976	01	01.55616	05	13	59.66	+28	58	59.5	0.1-	0	330
1143	1974	10	23.73669	03	42	52.63	+18	55	12.2	0.0	0	330
1147	1976	02	05.62949	08	02	01.76	+16	32	11.8	0.3-	0	330
1149	1965	12	31.84103	08	22	47.80	+09	07	12.8	1.4+	9-	330
1149	1966	01	01.88097	08	22	00.09	+09	05	15.9	1.4+	9-	330
1149	1966	01	21.61634	08	04	41.28	+08	49	51.0	1.5+	9-	330
1149	1966	01	21.66252	08	04	38.64	+08	49	52.2	1.4+	9-	330
1149	1966	01	27.72503	07	59	06.48	+08	52	47.3	1.5+	9-	330
1149	1966	02	13.58553	07	45	51.53	+09	13	44.3	1.4+	8-	330
1149	1966	02	18.52263	07	42	55.88	+09	22	04.8			330
1150	1965	11	20.82903	05	10	14.07	+19	56	51.7	4.5+	4+	330
1150	1965	11	23.68826	05	07	06.73	+19	48	31.1	4.5+	6+	330
1150	1965	12	30.64796	04	36	20.92	+18	36	26.2	4.2+	5+	330
1150	1965	12	31.74103	04	27	40.97	+18	20	17.0			330
1154	1975	11	26.54058	04	06	53.43	+18	42	52.5	0.0	0	330
1162	1975	11	24.56208	05	10	49.27	+24	22	21.1	0.0	1-	330
1166	1965	01	09.75208	07	31	44.69	+23	39	45.3	0.0	0	330
1167	1965	01	08.80486	07	56	41.64	+13	14	01.1	0.0	0	330
1171	1975	11	28.59617	02	46	11.89	+11	10	36.4	0.0	1+	330
1180	1965	09	21.62627	00	08	23.60	-10	05	33.6	0.2-	1-	330
1185	1977	10	04.57707	00	54	37.03	-04	23	38.9	0.1-	0	330
1186	1972	11	17.85057	02	50	28.82	+18	02	59.3	0.1+	0	330
1186	1972	11	28.49624	02	41	31.99	+17	57	42.6	0.1-	0	330
1186	1972	12	03.57733	02	37	55.44	+17	56	16.6	0.0	0	330
1186	1972	12	08.68596	02	34	56.98	+17	56	06.7	0.1+	1-	330
1186	1977	10	12.55778	01	36	01.50	+03	22	41.7	0.4+	4+	330
1186	1977	11	03.58413	01	17	15.24	+03	04	40.8	0.3+	4+	330
1186	1977	11	04.57095	01	16	31.60	+03	04	53.3	0.4+	4+	330
1186	1977	11	08.55436	01	13	45.45	+03	06	49.4	0.3+	4+	330
1186	1977	11	11.53614	01	11	52.87	+03	09	29.3	0.3+	3+	330
1191	1965	01	01.74861	07	20	07.29	+08	47	49.2	9.6+	43+	330
1191	1965	01	10.71250	07	12	12.26	+09	46	08.3	9.6+	42+	330
1194	1965	01	12.88472	09	47	00.81	+06	34	30.3	0.0	0	330
1199	1965	01	08.80486	07	53	08.33	+09	29	25.8	0.8+	4-	330
1202	1965	01	12.80833	08	58	33.28	+21	33	18.4	3.9+	16-	330
1204	1965	10	17.56109	23	19	57.65	-04	15	34.1	2.7-	17-	330
1204	1972	11	16.80922	02	37	12.73	+17	49	43.6	0.0	0	330
1204	1972	11	24.47560	02	30	21.94	+17	19	37.0	0.0	0	330
1204	1972	11	28.49624	02	27	29.51	+17	05	59.2	0.0	1-	330
1204	1972	12	03.57733	02	24	37.70	+16	51	38.5	0.1-	1-	330
1204	1972	12	08.68596	02	22	44.42	+16	41	13.5	0.0	1-	330
1208	1965	11	25.53470	02	02	34.26	+02	07	35.1	3.0-	50-	330
1208	1965	11	30.69091	02	00	00.36	+02	21	23.7	3.2-	50-	330
1209	1966	02	13.68900	10	05	20.55	+20	24	51.9	1.4-	6+	330
1209	1966	02	16.65288	10	03	02.31	+20	40	04.6	1.4-	6+	330
1209	1966	02	25.72398	09	55	55.29	+21	22	29.7	1.5-	6+	330
1209	1975	12	02.69277	04	27	01.79	+18	12	11.4	0.6-	3-	330
1209	1975	12	22.47521	04	11	29.60	+18	05	49.9	0.5-	3-	330
1210	1965	12	30.90002	08	24	18.13	+21	53	38.4	0.9+	1-	330
1210	1966	01	20.57461	08	07	42.43	+23	50	54.1	0.9+	0	330
1210	1966	01	21.70870	08	06	42.51	+23	57	06.9	0.9+	0	330
1210	1966	01	27.83128	08	01	21.85	+24	29	10.3	1.0+	0	330

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1216	1974	12	19.70337	07	37	31.56	+17	54	53.0	0.0	0	330
1216	1975	01	10.70269	07	14	35.42	+19	32	32.7	0.0	0	330
1216	1975	01	16.63900	07	07	49.21	+20	01	00.7	0.0	0	330
1218	1976	01	05.59660	06	05	00.52	+26	46	32.3	0.3-	1+	330
1225	1975	12	24.63293	04	39	44.44	+27	30	08.7	0.0	1-	330
1227	1965	08	27.71838	23	21	46.22	-14	45	38.0	2.8+	34+	330
1234	1975	01	12.68811	09	45	48.50	+11	17	33.0	0.1+	0	330
1237	1977	10	04.57707	00	59	41.30	-06	45	45.9	0.0	0	330
1239	1965	09	23.63663	00	48	02.86	+02	29	39.2	0.8+	7+	330
1239	1965	10	18.56383	00	26	27.71	+00	19	53.1	0.8+	8+	330
1239	1965	10	21.50299	00	24	08.41	+00	07	01.8	0.8+	7+	330
1239	1974	10	23.73669	03	38	46.62	+18	08	49.3	1.2+	5+	330
1243	1972	10	28.65611	01	46	49.30	+22	20	42.6	0.0	1+	330
1243	1975	04	02.63678	11	38	51.90	-16	11	55.8	0.1-	0	330
1245	1973	11	23.54536	04	11	34.41	+16	34	36.3	0.0	0	330
1245	1975	03	07.66553	09	54	54.61	+12	45	59.0	0.0	0	330
1247	1965	07	28.64840	21	19	46.61	-14	08	27.0	0.6+	3+	330
1248	1966	03	15.64198	10	46	22.50	+22	49	22.7	0.0	0	330
1248	1975	02	19.82577	11	15	30.72	+19	54	43.5	0.4-	2+	330
1248	1975	03	17.68278	10	53	24.89	+22	12	09.8	0.3-	2+	330
1248	1975	04	01.64436	10	43	07.06	+22	31	42.4	0.5-	3+	330
1248	1975	04	03.52677	10	42	08.55	+22	30	43.6	0.4-	3+	330
1248	1975	04	11.59560	10	38	54.55	+22	18	26.4			330
1249	1975	11	24.52667	02	32	27.65	+19	19	47.8	0.0	0	330
1251	1972	11	16.83603	05	22	46.24	+14	16	05.0	0.0	1-	330
1251	1972	11	28.61777	05	12	49.67	+14	01	58.9	0.0	1-	330
1254	1965	03	04.77222	12	26	10.63	-13	25	36.2	0.9+	6-	330
1254	1974	11	18.70396	06	54	36.83	+25	54	52.5			330
1254	1974	12	14.62242	06	39	20.69	+25	41	35.4	0.9-	2+	330
1254	1974	12	18.69013	06	35	50.47	+25	38	16.9	0.9-	2+	330
1254	1975	01	04.58257	06	20	19.62	+25	17	44.4	1.0-	3+	330
1259	1966	01	28.86356	10	01	32.97	+15	28	53.1	0.1-	1-	330
1259	1966	01	30.81775	10	00	11.58	+15	37	35.0	0.0	0	330
1259	1966	02	14.59525	09	48	40.99	+16	45	15.4	0.1-	1-	330
1259	1966	02	14.64248	09	48	38.67	+16	45	29.4	0.2-	1-	330
1259	1966	02	25.67745	09	39	41.84	+17	31	29.7	0.1-	1-	330
1259	1966	03	16.53399	09	27	26.82	+18	24	04.0			330
1259	1975	10	30.71182	05	28	01.33	+23	01	39.0			330
1259	1975	11	24.56208	05	13	35.47	+22	59	26.2	0.2+	1-	330
1261	1966	01	28.86356	10	11	39.37	+15	00	51.9			330
1261	1966	02	14.64248	09	59	23.45	+16	18	05.7			330
1261	1966	02	25.67745	09	50	32.99	+17	04	53.6			330
1261	1966	03	16.53399	09	38	31.78	+17	55	24.9			330
1266	1965	03	05.80903	11	26	17.92	-10	26	56.1	0.9+	8-	330
1268	1975	01	17.68073	08	15	43.54	+24	46	32.1	0.0	1+	330
1269	1973	01	30.66870	10	10	55.40	+11	57	16.6	0.4+	3-	330
1271	1965	12	24.71471	06	32	11.06	+17	54	42.5	0.2+	2+	330
1271	1976	12	14.57406	06	09	43.39	+17	05	50.5	0.3+	3+	330
1282	1975	04	02.63678	11	23	41.53	-13	09	36.0	0.3-	2+	330
1284	1965	01	09.75208	07	43	04.51	+25	11	38.8	0.6+	3-	330
1285	1977	02	14.53194	08	49	58.35	+18	13	18.1	0.2-	1+	330
1289	1965	02	02.73958	10	34	33.76	+07	16	17.1	0.3-	3+	330
1291	1965	10	19.72494	03	17	27.34	+16	33	18.2	0.4-	1-	330
1291	1965	11	20.68076	02	53	09.06	+13	18	42.8	0.5-	2-	330
1291	1965	11	23.57368	02	51	03.60	+13	02	23.3	0.5-	1-	330
1291	1965	11	26.63123	02	48	57.86	+12	45	57.9	0.5-	1-	330
1291	1965	11	30.74994	02	46	22.26	+12	25	21.3	0.4-	1-	330
1291	1965	12	11.45398	02	41	07.98	+11	41	38.9			330
1291	1976	12	14.57406	06	14	26.14	+12	39	20.3	0.4+	2-	330

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1292	1965	07	28.74701	21	30	04.02	-12	18	32.7	1.2-	7-	330
1294	1977	10	12.64875	02	31	26.65	+00	57	42.7	0.1-	1-	330
1295	1966	02	14.79873	10	49	37.83	+05	18	49.4	0.3-	2+	330
1295	1966	02	25.83162	10	42	02.02	+06	12	07.1	0.3-	2+	330
1295	1966	03	16.71663	10	29	11.85	+07	45	32.4	0.3-	2+	330
1297	1966	02	16.75670	11	14	03.12	-05	28	08.3	1.2-	9+	330
1297	1976	02	05.62949	08	12	22.68	+17	34	03.7	0.1-	0	330
1300	1965	12	20.70317	06	14	00.26	+25	36	59.1	0.4+	1+	330
1300	1965	12	24.69214	06	09	54.23	+25	51	54.4	0.4+	2+	330
1300	1966	01	16.58194	05	48	32.85	+26	56	30.2			330
1300	1966	01	28.65697	05	41	32.09	+27	19	04.4			330
1302	1974	10	23.73669	03	46	48.95	+17	14	31.6	0.0	0	330
1302	1974	12	18.55263	03	06	25.93	+15	36	11.8	0.1-	0	330
1304	1965	12	20.64796	04	53	17.54	+17	58	17.9	2.0+	14+	330
1304	1965	12	31.70804	04	44	30.13	+18	31	11.2	2.0+	15+	330
1305	1972	12	13.83044	06	43	22.72	+24	48	56.9	0.0	0	330
1306	1965	12	20.76359	07	15	07.50	+19	38	27.2	0.1-	0	330
1317	1966	03	15.69198	12	03	30.63	+04	56	09.9	0.2+	2-	330
1326	1974	12	18.65610	06	42	39.98	+19	31	44.1	0.2-	1+	330
1326	1974	12	20.76111	06	40	28.07	+19	49	13.1	0.3-	0	330
1332	1965	12	30.90002	08	07	37.57	+23	46	10.5	2.4+	6-	330
1332	1966	01	20.57461	07	49	29.47	+24	36	50.3	2.6+	4-	330
1332	1966	01	28.76565	07	42	17.78	+24	51	08.2	2.5+	4-	330
1332	1966	02	13.63553	07	30	54.51	+25	05	32.9	2.4+	3-	330
1334	1965	10	21.70403	03	34	29.14	+02	31	26.6	0.2-	1-	330
1336	1965	01	01.68820	06	39	52.22	+23	19	35.3	3.1-	0	330
1338	1966	01	30.81775	09	45	58.09	+14	45	58.4	0.4+	2-	330
1338	1966	02	14.59525	09	29	34.96	+15	20	38.2	0.6+	2-	330
1338	1966	02	24.67625	09	19	05.17	+15	38	24.0	0.5+	3-	330
1341	1965	10	21.70403	03	18	56.01	-00	09	29.5	0.6+	0	330
1352	1975	12	02.69277	04	37	32.92	+16	38	39.3	0.1-	1-	330
1352	1975	12	22.47521	04	20	25.02	+15	59	30.0	0.1-	0	330
1354	1965	11	21.70675	04	33	27.92	+26	57	51.7	0.0	1+	330
1354	1965	11	25.58991	04	30	04.46	+26	55	16.8	0.0	0	330
1357	1965	11	20.87556	05	51	58.36	+21	32	25.7	0.7+	0	330
1357	1965	11	23.71639	05	49	59.09	+21	43	12.3	0.6+	1+	330
1357	1965	12	19.68890	05	26	42.64	+23	21	26.0	0.3+	1+	330
1357	1965	12	30.79620	05	16	40.31	+23	58	51.1	0.2+	3+	330
1357	1965	12	31.78929	05	15	51.43	+24	02	01.6	0.2+	2+	330
1357	1966	01	16.52361	05	05	30.42	+24	48	32.1			330
1358	1965	02	02.73958	10	27	44.48	+12	28	11.8	0.7+	5-	330
1358	1965	02	25.72566	10	06	41.40	+14	20	31.4	0.7+	5-	330
1359	1975	12	23.59817	05	13	17.84	+28	30	48.4	0.1-	0	330
1359	1976	01	01.55616	05	05	24.23	+28	43	30.2	0.1-	0	330
1363	1965	10	19.56730	00	49	00.77	+05	48	34.5	0.2+	2+	330
1372	1965	02	23.70347	11	25	28.40	-05	38	20.6	4.6-	41+	330
1372	1965	03	05.78125	11	15	44.59	-05	35	40.3	4.8-	42+	330
1376	1965	10	24.69903	03	49	44.75	+14	18	41.1	0.0	1+	330
1376	1965	11	20.73111	03	21	27.99	+12	09	13.4	0.4-	1+	330
1376	1965	11	23.62125	03	18	26.16	+11	58	15.6	0.2-	1+	330
1376	1965	11	26.78470	03	15	16.17	+11	47	34.2	0.1-	2+	330
1376	1965	11	30.80133	03	11	34.17	+11	36	09.3	0.3-	1+	330
1376	1965	12	13.49242	03	02	45.25	+11	17	25.8			330
1376	1965	12	18.51979	03	00	38.27	+11	17	26.3			330
1376	1975	11	23.53493	03	37	17.52	+13	03	16.5	0.1-	0	330
1378	1965	01	11.86181	09	40	42.80	+19	53	09.4	2.5+	16-	330
1378	1965	02	02.68854	09	21	29.90	+21	47	24.1	2.8+	16-	330
1378	1965	02	11.84514	09	11	34.63	+22	30	34.3	2.9+	14-	330
1378	1965	02	23.67986	08	59	32.78	+23	10	27.3	2.8+	12-	330

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1388	1977	11	04.51886	01	41	47.95	+03	10	24.7	0.0	1-	330
1389	1966	01	16.63194	06	42	35.42	+20	12	20.4	2.4+	3-	330
1391	1975	11	23.53493	03	39	58.10	+10	45	27.4	0.1-	1-	330
1396	1974	12	19.63184	04	52	55.40	+29	38	33.8	0.1-	0	330
1397	1966	03	16.76698	11	46	50.61	+07	26	30.0	0.1-	1+	330
1397	1966	03	26.59685	11	38	02.97	+08	20	18.9	0.1-	0	330
1397	1966	03	26.65661	11	37	59.61	+08	20	33.4	0.0	1+	330
1397	1966	04	14.61241	11	23	37.53	+09	30	33.9	0.0	1+	330
1397	1975	03	21.77702	13	29	16.87	-03	50	51.7	0.0	0	330
1406	1965	03	04.77222	12	22	44.81	-11	55	14.9	0.2-	3+	330
1407	1965	01	11.83958	08	20	53.64	+14	52	37.6	0.1+	1-	330
1407	1965	01	26.63194	08	05	57.23	+15	15	45.2	0.2+	0	330
1407	1965	02	02.58194	07	59	23.10	+15	28	01.4	0.2+	1-	330
1407	1965	02	23.55417	07	45	14.25	+16	00	32.2			330
1409	1965	07	28.59146	20	30	23.98	-10	14	34.5	0.5+	2-	330
1412	1965	09	21.62627	00	08	22.79	-07	59	59.9	2.6-	17-	330
1418	1974	12	20.68680	06	01	54.38	+35	16	22.6	0.0	1-	330
1423	1965	09	22.61861	00	27	57.33	-01	10	35.6	1.9-	13-	330
1423	1965	10	17.61109	00	08	40.82	-02	49	05.1	1.8-	11-	330
1423	1965	10	20.51656	00	06	51.72	-02	56	23.1	1.8-	11-	330
1423	1965	10	24.59417	00	04	34.07	-03	05	25.6	1.7-	12-	330
1425	1975	03	21.81001	13	22	11.22	-05	52	43.3	0.0	1+	330
1427	1975	12	11.81911	06	38	52.53	+26	27	23.2	0.2+	0	330
1427	1976	01	05.59660	06	13	53.49	+27	40	37.8	0.0	0	330
1434	1965	11	25.69025	05	33	24.98	+08	24	49.2	5.8+	10+	330
1434	1965	11	25.74801	05	33	22.61	+08	24	47.0	5.8+	11+	330
1440	1965	09	20.71935	01	02	02.01	+04	10	11.3	4.7+	32+	330
1440	1965	09	23.60886	01	00	08.64	+03	59	53.5	4.7+	33+	330
1440	1965	10	18.56383	00	41	32.49	+02	24	27.7	4.7+	33+	330
1440	1965	10	21.53250	00	39	28.95	+02	14	51.4	4.6+	33+	330
1449	1965	06	20.59705	17	25	31.55	-17	15	25.0	2.5+	9-	330
1454	1965	02	23.67986	08	47	24.15	+23	03	23.4	0.0	1-	330
1457	1974	11	18.70396	06	53	37.06	+26	46	01.1			330
1457	1974	12	14.62242	06	36	14.31	+26	47	45.3	0.2+	1-	330
1457	1974	12	18.69013	06	32	16.24	+26	46	09.1	0.2+	1-	330
1457	1975	01	04.58257	06	14	41.97	+26	29	34.0	0.2+	0	330
1457	1975	01	12.52770	06	06	54.33	+26	16	16.8	0.3+	0	330
1457	1975	01	16.57095	06	03	17.83	+26	09	09.6	0.3+	1-	330
1457	1975	01	17.61476	06	02	25.42	+26	06	20.5	0.3+	2-	330
1457	1975	01	18.63441	06	01	35.11	+26	04	15.1	0.2+	2-	330
1461	1966	03	15.64198	10	42	29.70	+27	21	25.1	0.0	0	330
1461	1966	04	18.56587	10	28	27.79	+27	30	43.6			330
1466	1965	11	28.64190	04	34	10.87	+01	22	33.5	0.1-	1-	330
1470	1975	02	16.85964	11	59	39.69	+00	45	25.6	0.2-	0	330
1470	1975	04	02.55970	11	29	05.07	+03	28	16.4	0.1-	0	330
1478	1965	01	12.83611	08	59	01.66	+20	57	21.7	0.7-	12-	330
1482	1975	12	02.62228	05	41	58.72	+24	06	59.0	0.1-	0	330
1482	1975	12	11.74446	05	33	29.18	+24	10	50.1	0.0	0	330
1482	1975	12	22.52903	05	23	04.01	+24	12	09.2	0.1-	0	330
1482	1975	12	29.58108	05	16	37.02	+24	11	14.6	0.0	0	330
1482	1976	01	05.54799	05	10	56.04	+24	09	35.8	0.1-	0	330
1487	1977	12	08.60508	05	38	19.94	+22	25	19.6	0.2+	1+	330
1487	1977	12	12.59270	05	34	49.86	+22	25	19.3	0.1+	0	330
1490	1975	04	02.63678	11	36	27.84	-13	34	17.4	0.3-	2-	330
1494	1974	12	14.60506	05	18	19.31	+18	44	07.5	0.1-	0	330
1512	1965	09	23.63663	00	49	19.89	+05	17	02.9	0.8+	7+	330
1512	1965	10	18.56383	00	33	38.67	+04	04	55.8	0.7+	6+	330
1512	1965	10	21.53250	00	31	55.99	+03	57	04.9	0.7+	6+	330
1524	1975	02	16.85964	11	57	37.48	-00	43	57.0	0.2-	2+	330

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1530	1965	09	18.54854	23	53	09.86	+09	31	09.3	4.9+	34+	330
1530	1965	09	22.57000	23	49	42.05	+09	16	30.0	5.0+	34+	330
1542	1965	01	10.75972	07	36	10.55	+17	37	17.3	1.8+	4-	330
1544	1974	10	23.73669	03	47	37.84	+18	30	07.1	0.1-	0	330
1547	1975	12	01.63926	04	39	43.06	+37	14	52.3	0.0	1+	330
1549	1972	12	01.66183	04	11	48.24	+17	42	37.6	0.0	1+	330
1551	1975	02	12.66809	10	59	33.45	+11	15	27.5	0.0	1-	330
1551	1975	02	16.78464	10	56	11.68	+11	43	22.8	0.0	0	330
1551	1975	04	11.54456	10	17	17.74	+15	40	17.2			330
1555	1965	01	11.88958	09	30	48.67	+15	59	07.3	0.0	0	330
1560	1966	02	16.75670	11	31	29.10	-05	03	00.5	0.1-	2-	330
1576	1965	11	20.78111	04	41	32.90	+20	43	41.7	0.0	0	330
1576	1965	11	25.63574	04	37	26.71	+20	34	50.2	0.0	0	330
1576	1965	11	28.69433	04	34	45.70	+20	29	03.9	0.0	0	330
1576	1965	12	13.55214	04	21	59.49	+20	01	25.5	0.1-	0	330
1576	1965	12	18.57535	04	18	12.11	+19	53	20.1	0.0	0	330
1576	1965	12	24.58450	04	14	18.23	+19	45	16.7	0.0	1-	330
1576	1965	12	30.74516	04	11	11.39	+19	39	29.6			330
1578	1965	10	19.56730	00	58	50.96	+05	15	38.8	0.0	0	330
1578	1975	01	09.66028	08	13	13.54	+20	45	10.0	0.0	0	330
1581	1966	03	15.69198	11	58	32.50	+04	11	16.4	0.2-	1+	330
1581	1966	03	16.76698	11	57	44.89	+04	16	51.9	0.2-	1+	330
1581	1966	03	26.59685	11	50	29.71	+05	06	10.9	0.2-	1+	330
1581	1966	04	14.61241	11	38	36.22	+06	16	46.6	0.2-	1+	330
1581	1975	12	02.69277	04	28	16.20	+19	39	08.1	0.0	0	330
1582	1975	11	26.65725	05	41	13.64	+19	25	31.1	0.2+	0	330
1582	1975	12	11.74446	05	28	52.53	+19	48	36.1	0.0	1+	330
1586	1973	01	29.67765	08	03	46.45	+20	08	10.3	0.1+	0	330
1589	1965	08	27.71838	23	14	01.77	-14	35	44.4	0.1+	4-	330
1596	1965	01	01.74861	07	21	05.24	+09	07	34.0	0.0	0	330
1596	1965	01	10.69514	07	12	35.05	+08	47	20.3	0.1-	1+	330
1602	1965	10	19.72494	03	21	20.40	+14	21	48.9	0.2+	1+	330
1602	1965	10	23.73066	03	18	01.91	+14	12	31.0	0.2+	1+	330
1602	1965	11	20.68076	02	48	35.57	+12	58	49.8	0.1-	0	330
1602	1965	11	23.57368	02	45	38.82	+12	52	51.4	0.0	0	330
1602	1965	11	26.63123	02	42	41.90	+12	47	26.5	0.0	0	330
1602	1965	11	30.74994	02	39	04.22	+12	41	49.9	0.1-	1+	330
1602	1965	12	11.45398	02	31	52.25	+12	38	01.1			330
1603	1965	03	04.74792	12	40	35.24	+05	55	03.2	0.2-	0	330
1605	1965	11	25.69025	05	27	27.79	+07	26	45.3	1.4-	1+	330
1615	1965	11	20.82903	05	13	39.35	+20	22	30.2	0.0	1+	330
1615	1965	11	23.68826	05	11	27.58	+20	19	12.9	0.0	0	330
1615	1965	12	20.64796	04	48	08.93	+19	49	55.7	0.1-	0	330
1615	1965	12	31.74103	04	40	31.11	+19	43	37.2	0.1-	0	330
1616	1977	11	12.57364	01	47	22.25	+07	59	28.6	0.0	0	330
1622	1975	01	17.68073	08	24	23.35	+29	13	48.2	0.0	0	330
1628	1965	09	20.71935	01	06	24.52	+02	15	33.0	0.3-	0	330
1633	1977	10	10.67163	02	25	43.48	+10	35	55.6	0.2+	1+	330
1633	1977	10	21.83031	02	17	55.38	+09	53	35.7	0.1+	1+	330
1633	1977	11	03.64246	02	08	15.31	+09	04	15.1	0.0	0	330
1633	1977	11	12.57364	02	01	47.42	+08	33	14.7	0.0	0	330
1636	1965	09	22.61861	00	32	00.02	+00	55	19.1	0.4+	1+	330
1636	1965	10	17.61109	00	11	53.02	-02	34	22.1	0.3+	2+	330
1636	1972	11	16.83603	05	26	22.38	+14	55	41.5	1.0+	0	330
1636	1972	11	28.61777	05	16	23.44	+14	21	09.2	0.8+	1+	330
1643	1975	12	23.59817	05	05	15.12	+25	31	19.1	0.1-	0	330
1645	1965	07	28.64840	21	09	01.19	-15	15	54.1	0.1-	1+	330
1648	1965	08	27.69095	22	35	49.77	-12	58	37.8	0.0	1-	330
1650	1966	02	14.79873	10	39	21.90	+05	01	42.8	0.1+	0	330

1650	1966	02	25.83162	10	29	21.66	+06	07	39.6	0.0	0	330
1650	1966	03	16.71663	10	12	32.85	+08	07	30.0	0.1-	0	330
1662	1975	01	12.68811	09	55	56.56	+14	27	09.1	0.0	0	330
1662	1975	01	16.72859	09	53	23.46	+14	36	30.1	0.0	0	330
1662	1975	02	12.55003	09	30	02.88	+15	58	00.0	0.1-	1-	330
1665	1975	04	03.63267	11	18	58.18	+24	05	42.2	0.1-	0	330
1670	1974	12	18.55263	03	09	52.13	+18	48	04.3	0.2-	1-	330
1670	1974	12	20.65000	03	08	47.77	+18	51	45.5	0.2-	1-	330
1672	1974	12	19.70337	07	39	48.97	+19	50	31.7	0.2+	0	330
1672	1975	01	10.70269	07	22	06.25	+20	28	59.3	0.3+	0	330
1672	1975	01	16.63900	07	16	55.07	+20	40	34.4	0.3+	1-	330
1674	1966	01	28.86356	10	02	09.28	+15	04	41.8			330
1674	1966	02	14.61470	09	49	19.52	+16	26	16.9			330
1674	1966	02	25.67745	09	40	39.23	+17	14	20.3			330
1674	1977	01	10.58958	07	26	13.62	+22	59	33.0	0.4+	0	330
1687	1973	01	30.66870	10	09	26.90	+14	30	50.6	0.1-	0	330
1691	1974	12	19.70337	07	51	41.94	+19	32	27.7	0.1-	0	330
1701	1965	10	19.61869	01	32	16.88	-08	25	27.6			330
1701	1965	10	23.63170	01	28	44.74	-08	22	50.8			330
1701	1977	12	12.53297	04	16	07.80	+24	56	31.1	0.1-	0	330
1707	1972	11	28.70735	06	45	41.36	+30	34	21.5	0.0	1-	330
1707	1972	12	03.64816	06	42	23.32	+30	51	52.9	0.1+	0	330
1725	1975	11	23.53493	03	29	13.26	+14	26	10.4	0.0	0	330
1728	1966	01	01.88097	08	18	56.44	+10	26	25.3			330
1728	1966	01	21.61634	08	00	37.89	+10	44	35.8			330
1728	1966	02	13.58553	07	40	42.41	+11	40	45.7			330
1728	1966	02	18.52263	07	37	39.39	+11	54	32.3			330
1731	1977	11	04.51886	01	32	28.26	+01	51	55.2	0.6+	3+	330
1742	1964	11	11.74583	04	20	43.86	+17	35	26.0			330
1742	1964	11	27.61632	04	06	39.16	+16	56	12.1			330
1742	1964	12	25.55972	03	45	59.77	+16	13	00.6			330
1742	1966	02	14.69664	10	17	18.92	+10	30	12.1			330
1742	1966	02	24.72677	10	09	12.41	+11	22	36.8			330
1742	1966	03	16.59788	09	54	56.06	+12	53	09.0			330
1742	1974	12	14.60506	05	24	19.64	+19	34	58.2	0.1-	0	330
1745	1975	12	01.57676	03	48	05.17	+18	32	09.1	0.1-	0	330
1748	1975	12	22.52903	05	28	56.91	+20	24	17.6	0.1-	0	330
1749	1974	11	18.64286	01	41	38.18	+17	01	29.7	0.1+	1+	330
1749	1975	12	24.63293	04	29	18.68	+29	26	30.8	0.3+	1+	330
1761	1977	12	08.55438	04	34	53.74	+21	57	51.0	0.6+	0	330
1768	1965	09	22.61861	00	32	26.68	+02	26	32.3			330
1768	1965	10	17.61109	00	10	49.45	+01	13	55.9			330
1768	1965	10	24.59417	00	06	27.89	+01	02	45.4			330
1777	1975	01	16.81470	10	14	10.04	+12	21	55.7	0.1-	0	330
1777	1975	01	22.86594	10	10	41.38	+12	35	50.3	0.0	1+	330
1777	1975	02	12.60559	09	53	25.99	+13	45	06.5	0.1-	0	330
1778	1975	05	06.56299	14	03	56.69	-08	43	23.8	0.1-	1-	330
1790	1965	09	22.61861	00	19	15.71	+02	14	08.9			330
1790	1965	09	23.55677	00	18	18.03	+02	10	11.7			330
1790	1965	10	17.58157	23	54	49.13	+00	35	23.9			330
1790	1965	10	20.48566	23	52	34.06	+00	26	59.4			330
1790	1965	10	24.59417	23	49	44.50	+00	16	58.5			330
1801	1975	01	16.57095	05	47	22.95	+28	46	00.2			330
1801	1975	01	18.63441	05	45	58.84	+28	50	22.5			330
1810	1977	12	08.60508	05	33	19.47	+22	28	22.7	0.3+	0	330
1810	1977	12	12.59270	05	28	48.50	+22	12	47.2	0.3+	0	330
1811	1977	11	04.51886	01	43	45.23	+02	02	51.7	0.1+	1+	330
1824	1966	02	14.61470	10	06	31.21	+13	59	56.4			330
1824	1966	02	25.67745	09	57	01.87	+14	44	59.3			330

1824	03	16.53399	09	43	34.11	+15	39	18.9	330		
1858	02	14.79873	10	40	25.23	+05	59	14.1	330		
1888	11	16.80922	02	41	35.49	+18	39	57.1	330		
1888	11	24.47560	02	35	07.58	+17	44	42.0	330		
1888	11	28.49624	02	32	10.72	+17	16	59.4	330		
1888	12	03.57733	02	29	00.07	+16	44	03.0	330		
1888	12	08.68596	02	26	36.59	+16	15	12.6	330		
1902	12	23.59817	05	03	33.69	+28	54	30.8	330		
1907	02	16.60323	08	57	47.84	+15	53	41.7	330		
1907	02	24.62434	08	51	19.18	+16	32	49.9	330		
1939	12	30.90002	08	17	24.75	+20	58	16.6	330		
1939	01	20.57461	08	00	41.34	+21	52	16.5	330		
1939	01	28.76565	07	53	37.71	+22	11	42.9	330		
1939	02	13.63553	07	41	46.37	+22	39	44.9	330		
1939	02	16.55323	07	40	02.10	+22	43	21.2	330		
1947	10	12.64875	02	34	34.82	-00	15	12.2	0.0	0	330
1952	11	20.87556	05	53	56.96	+23	08	04.7	330		
1952	11	23.71639	05	52	01.83	+23	23	06.1	330		
1952	12	30.79620	05	17	30.72	+26	25	07.8	330		
1952	12	14.62406	06	19	06.46	+27	54	40.9	0.0	2+	330
1961	01	17.68073	08	31	53.31	+29	08	01.3	330		
1965	01	30.81775	09	42	49.86	+16	42	54.3	330		
1965	02	14.59525	09	28	55.25	+18	01	09.3	330		
1965	02	24.67625	09	19	55.25	+18	45	05.9	330		
1972	10	31.58408	00	37	31.58	+00	42	51.0	330		
1976	02	16.69871	10	46	41.74	+11	46	37.6	330		
2004	01	11.86181	09	36	06.44	+18	14	42.6	330		
2004	02	02.68854	09	14	36.40	+19	45	59.2	330		
2004	02	23.67986	08	52	27.10	+20	45	36.0	330		
2004	03	05.67847	08	45	40.29	+20	51	34.6	330		
2007	01	11.88958	09	34	12.82	+19	26	51.8	330		
2007	02	02.68854	09	15	09.49	+20	59	51.9	330		
2007	02	11.84514	09	05	18.96	+21	33	53.6	330		
2007	03	05.67847	08	46	41.71	+22	08	54.9	330		
2012	11	26.58086	04	37	38.00	+24	28	32.4	330		
2012	11	29.53647	04	34	11.62	+24	18	36.6	330		
2040	10	12.55778	01	35	39.01	+02	44	58.4	330		
2040	11	03.58413	01	16	27.44	+02	24	48.9	330		
2040	11	04.57095	01	15	40.61	+02	24	52.1	330		
2040	11	08.55436	01	12	39.37	+02	25	57.4	330		
2040	11	11.53614	01	10	33.36	+02	27	56.6	330		
2041	10	12.55778	01	27	50.23	+04	25	42.9	330		
2041	11	03.58413	01	12	15.99	+02	49	19.4	330		
2041	11	04.57095	01	11	41.27	+02	46	15.1	330		
2041	11	08.55436	01	09	31.31	+02	35	19.2	330		
2041	11	11.53614	01	08	06.18	+02	28	46.8	330		
2058	01	28.86356	10	02	45.16	+14	43	25.7	330		
2058	02	14.64248	09	50	15.85	+15	58	56.5	330		
2058	02	25.67745	09	41	37.59	+16	45	40.9	330		
2065	10	04.64443	01	17	24.55	+18	15	21.3	330		
2086	02	16.55323	07	36	34.30	+20	05	52.5	330		
2087	11	26.78470	03	17	51.02	+16	03	02.5	330		
2087	11	30.80133	03	13	57.29	+15	53	24.0	330		
2087	12	13.49242	03	04	21.80	+15	33	53.6	330		
2087	01	05.54799	05	20	15.62	+22	54	49.9	330		
2089	04	03.63267	11	20	20.18	+27	07	20.3	330		
2092	01	28.76565	07	54	31.27	+24	19	29.6	330		
2092	02	13.63553	07	41	57.98	+24	52	22.8	330		
2115	11	24.52667	02	36	26.31	+18	22	39.4	330		

2118	1976	02	01.63623	09	52	07.13	+15	27	11.1	330
2123	1966	02	13.74039	10	25	46.40	+09	18	45.1	330
2123	1966	02	14.69664	10	24	59.69	+09	22	55.3	330
2123	1966	02	24.72677	10	16	39.26	+10	07	40.1	330
2123	1966	02	25.77051	10	15	47.45	+10	12	19.7	330
2123	1975	01	04.58257	06	10	02.98	+24	20	27.4	330
2123	1975	01	16.57095	05	59	55.06	+24	16	57.2	330
2123	1975	01	17.61476	05	59	09.16	+24	16	30.3	330
2123	1975	01	18.63441	05	58	26.75	+24	16	01.1	330
2132	1975	10	31.64103	01	37	09.18	+01	57	33.9	330
2144	1965	01	11.83958	08	27	17.12	+17	44	28.0	330
2144	1975	01	16.81470	10	11	12.21	+11	16	59.9	330
2144	1975	01	22.86594	10	08	01.05	+11	40	31.5	330
2144	1975	02	12.60559	09	52	40.05	+13	23	49.4	330
2144	1975	03	07.66553	09	34	41.79	+15	15	19.7	330
2144	1978	10	29.69333	03	54	33.11	+15	54	59.8	330
2144	1978	11	03.70326	03	50	54.72	+15	40	29.2	330
2144	1978	11	26.69715	03	31	05.41	+14	33	22.8	330
2144	1978	11	30.60061	03	27	48.02	+14	23	57.7	330
2144	1978	12	05.57908	03	23	53.40	+14	13	26.2	330
2147	1966	02	24.72677	10	02	57.84	+13	30	13.4	330
2153	1972	12	13.83044	06	39	02.82	+24	28	37.0	330
2155	1965	09	21.69850	01	24	36.48	+07	03	01.2	330
1964 TR2 *	1964	10	08.71806	01	04	29.18	+06	28	02.3	330
1964 TR2	1964	10	30.67917	00	44	53.60	+05	19	33.7	330
1964 TR2	1964	11	01.60911	00	43	41.17	+05	16	04.8	330
1964 TR2	1964	11	09.62708	00	39	54.42	+05	08	04.6	330
1964 TS2 *	1964	10	08.71806	01	07	11.36	+06	36	00.2	330
1964 TS2	1964	10	30.67917	00	50	47.89	+03	36	47.3	330
1964 TS2	1964	11	01.59175	00	49	48.09	+03	24	37.6	330
1964 TT2 *	1964	10	08.71806	01	10	39.64	+05	55	01.2	330
1964 TT2	1964	10	30.67917	00	52	54.45	+04	53	11.9	330
1964 TT2	1964	11	09.62708	00	48	02.18	+04	43	20.3	330
1964 TU2 *	1964	10	09.65069	00	59	32.16	+14	22	08.8	330
1964 TU2	1964	10	30.60000	00	41	13.34	+13	16	08.9	330
1964 TU2	1964	11	09.57569	00	36	33.38	+12	46	52.2	330
1964 TV2 *	1964	10	09.65069	01	07	27.51	+14	30	53.7	330
1964 TV2	1964	10	30.60000	00	52	55.40	+12	28	54.9	330
1964 TV2	1964	11	09.59306	00	48	01.52	+11	33	51.8	330
1964 TV2	1964	11	30.51181	00	44	49.11	+10	14	29.0	330
1964 TV2	1964	12	03.50903	00	45	11.82	+10	08	10.9	330
1964 TV2	1966	01	01.78653	07	51	04.88	+16	37	38.7	330
1964 TV2	1966	01	16.67986	07	38	24.01	+16	50	13.6	330
1964 TV2	1966	01	19.66142	07	35	50.12	+16	53	28.1	330
1964 VZ2 *	1964	11	11.71806	04	07	52.03	+19	44	43.2	330
1964 VZ2	1964	11	27.61632	03	54	06.36	+19	31	04.2	330
1964 VZ2	1964	12	03.67431	03	48	52.14	+19	25	40.6	330
1964 VA3 *	1964	11	11.71806	04	09	14.83	+19	36	22.1	330
1964 VA3	1964	11	27.61632	03	56	28.82	+18	59	24.1	330
1964 VA3	1964	12	03.67431	03	51	40.18	+18	45	05.2	330
1965 AC *	1965	01	01.66042	06	44	57.59	+24	38	18.6	330
1965 AD *	1965	01	01.66042	06	47	43.58	+26	31	36.7	330
1965 AE *	1965	01	01.66042	06	54	17.29	+25	30	38.7	330
1965 AF *	1965	01	01.66042	06	58	14.15	+26	18	16.8	330
1965 AG *	1965	01	01.66042	06	58	49.16	+27	13	41.1	330
1965 AH *	1965	01	01.68820	06	39	45.19	+23	20	33.0	330
1965 AJ *	1965	01	01.68820	06	46	09.13	+24	28	09.0	330
1965 AK *	1965	01	01.68820	06	55	34.82	+23	43	41.0	330
1965 AK	1965	01	11.76111	06	46	25.71	+23	54	55.2	330

1965	AL	*	1965	01	01.68820	06	57	29.47	+24	26	38.7	330
1965	AL		1965	01	11.76111	06	47	46.87	+24	51	02.6	330
1965	AM	*	1965	01	01.72083	07	05	49.99	+07	58	10.4	330
1965	AN	*	1965	01	01.72083	07	19	50.29	+09	04	40.9	330
1965	AN		1965	01	10.68472	07	11	37.28	+08	53	07.9	330
1965	AO	*	1965	01	01.72083	07	24	00.27	+11	37	31.8	330
1965	AP	*	1965	01	01.74861	07	24	42.40	+10	48	28.9	330
1965	AQ	*	1965	01	08.64653	06	47	28.24	+26	48	59.9	330
1965	AR	*	1965	01	08.67847	06	50	13.88	+20	15	53.3	330
1965	AS	*	1965	01	08.70625	06	48	41.05	+18	31	22.8	330
1965	AT	*	1965	01	08.77708	07	54	08.80	+13	56	29.1	330
1965	AU	*	1965	01	08.80486	07	41	00.32	+10	12	31.9	330
1965	AV	*	1965	01	08.80486	07	51	07.53	+09	59	53.4	330
1965	AW	*	1965	01	09.75208	07	30	52.38	+22	09	01.8	330
1965	AX	*	1965	01	09.75208	07	35	23.01	+22	24	43.8	330
1965	AY	*	1965	01	10.75972	07	34	20.85	+20	57	14.5	330
1965	AZ	*	1965	01	10.75972	07	45	00.51	+20	42	29.1	330
1965	AA1	*	1965	01	10.75972	07	49	56.12	+21	48	44.4	330
1965	AB1	*	1965	01	10.75972	07	50	39.12	+21	31	21.3	330
1965	AC1	*	1965	01	11.81111	08	17	10.81	+17	03	40.1	330
1965	AC1		1965	01	26.60417	08	03	51.03	+17	01	31.3	330
1965	AD1	*	1965	01	11.81111	08	28	20.57	+17	03	23.2	330
1965	AE1	*	1965	01	11.81111	08	31	36.74	+16	03	14.2	330
1965	AF1	*	1965	01	11.81111	08	38	16.06	+18	28	21.6	330
1965	AG1	*	1965	01	11.83958	08	20	36.18	+18	56	41.9	330
1965	AH1	*	1965	01	11.86181	09	26	39.04	+17	52	48.4	330
1965	AJ1	*	1965	01	11.86181	09	30	53.35	+16	47	36.0	330
1965	AK1	*	1965	01	11.88958	09	27	27.53	+18	16	56.6	330
1965	AK1		1965	02	02.68854	09	12	45.57	+21	44	44.3	330
1965	AK1		1965	03	04.60556	08	51	58.80	+25	40	09.7	330
1965	AL1	*	1965	01	12.83611	08	50	07.46	+23	07	41.3	330
1965	AM1	*	1965	01	12.88472	09	48	51.81	+10	16	24.7	330
1965	BC		1965	01	01.74861	07	08	45.93	+08	23	58.7	330
1965	BC		1965	01	10.68472	07	01	46.33	+08	27	47.8	330
1965	BD	*	1965	01	26.60417	08	03	23.15	+17	13	57.0	330
1965	CG	*	1965	02	02.73958	10	28	35.50	+10	38	23.7	330
1965	CH	*	1965	02	02.73958	10	34	08.54	+09	41	49.6	330
1965	CJ	*	1965	02	11.80556	07	56	30.79	+13	43	22.4	330
1965	DA	*	1965	02	23.55417	07	40	22.41	+14	46	39.1	330
1965	DB	*	1965	02	23.70347	11	28	36.62	-09	43	25.1	330
1965	DC	*	1965	02	25.72566	10	08	49.89	+15	04	40.9	330
1965	DC		1965	03	04.67222	10	03	39.05	+15	36	31.6	330
1965	DD	*	1965	02	25.72566	10	10	41.55	+14	40	05.7	330
1965	DD		1965	03	04.67222	10	04	47.12	+14	46	32.4	330
1965	DE	*	1965	02	25.72566	10	10	48.68	+13	00	39.3	330
1965	EA	*	1965	03	04.60556	08	50	03.23	+25	13	07.7	330
1965	OJ	*	1965	07	28.64840	21	12	51.79	-16	05	21.3	330
1965	QE	*	1965	08	27.61977	22	19	37.57	-05	18	00.5	330
1965	SN	*	1965	09	18.63674	01	32	25.16	+12	21	35.5	330
1965	SN		1965	10	16.59375	01	07	24.69	+10	27	27.6	330
1965	SN		1965	10	20.57073	01	03	25.67	+10	05	14.6	330
1965	SN		1965	10	24.64556	00	59	31.69	+09	42	33.0	330
1965	SO	*	1965	09	20.71935	01	00	24.34	+02	52	36.5	330
1965	SO		1965	09	23.63663	00	57	55.49	+02	41	18.2	330
1965	SO		1965	10	18.56383	00	35	19.24	+01	09	24.5	330
1965	SO		1965	10	21.53250	00	33	03.01	+01	02	09.5	330
1965	SP	*	1965	09	20.71935	01	00	55.56	+05	42	46.4	330
1965	SP		1965	09	23.60886	00	59	12.24	+05	19	49.1	330
1965	SP		1965	10	18.56383	00	42	32.34	+01	51	53.4	330

1965	SP	1965	10	21.53250	00	40	43.15	+01	29	13.3	330	
1965	SQ	*	1965	09	20.71935	01	11	00.30	+03	04	21.4	330
1965	SR	*	1965	09	21.57940	23	17	28.89	-08	35	31.2	330
1965	SS	*	1965	09	21.62627	00	12	46.07	-08	15	44.1	330
1965	ST	*	1965	09	22.61861	00	14	35.65	+01	48	24.0	330
1965	SU	*	1965	09	22.61861	00	16	40.12	+00	43	40.2	330
1965	SU	1965	09	23.58524	00	15	44.21	+00	37	22.0	330	
1965	SU	1965	10	17.61109	23	53	55.35	-01	46	46.3	330	
1965	SU	1965	10	20.48566	23	51	58.78	-01	59	05.2	330	
1965	SU	1965	10	24.59417	23	49	35.81	-02	13	52.1	330	
1965	SV	*	1965	09	22.61861	00	24	01.85	+01	51	09.7	330
1965	SV	1965	09	23.58524	00	23	13.07	+01	42	08.6	330	
1965	SV	1965	10	17.61109	00	03	31.82	-01	55	49.4	330	
1965	SV	1965	10	20.48566	00	01	45.04	-02	16	47.9	330	
1965	SV	1965	10	24.59417	23	59	34.94	-02	43	21.8	330	
1965	SW	*	1965	09	22.61861	00	28	34.05	+02	52	50.7	330
1965	SX	*	1965	09	23.60886	00	45	55.86	+06	44	57.9	330
1965	SY	*	1965	09	23.63663	00	48	35.97	+04	08	56.6	330
1965	UW	*	1965	10	16.52778	23	07	20.09	-08	58	07.6	330
1965	UX	*	1965	10	16.52778	23	12	02.09	-09	16	45.4	330
1965	UY	*	1965	10	16.59375	00	59	16.14	+09	45	41.9	330
1965	UY	1965	10	20.57073	00	56	34.99	+09	10	30.5	330	
1965	UZ	*	1965	10	16.59375	01	02	20.95	+10	30	01.1	330
1965	UZ	1965	10	20.57073	00	58	55.04	+10	10	22.3	330	
1965	UZ	1965	10	24.64556	00	55	33.86	+09	50	19.9	330	
1965	UA1	*	1965	10	16.59375	01	03	14.74	+10	25	47.0	330
1965	UA1	1965	10	20.57073	00	59	43.74	+10	03	44.3	330	
1965	UA1	1965	10	24.64556	00	56	18.54	+09	41	19.1	330	
1965	UB1	*	1965	10	16.59375	01	05	06.78	+09	55	18.2	330
1965	UB1	1965	10	20.57073	01	00	57.38	+10	04	00.1	330	
1965	UB1	1965	10	24.64556	00	56	57.34	+10	12	40.3	330	
1965	UC1	*	1965	10	16.59375	01	10	06.84	+07	42	26.6	330
1965	UC1	1965	10	20.57073	01	06	10.12	+07	34	03.3	330	
1965	UC1	1965	10	24.64556	01	02	22.85	+07	26	19.8	330	
1965	UD1	*	1965	10	16.59375	01	13	52.63	+12	30	33.7	330
1965	UD1	1965	10	20.57073	01	10	15.35	+12	18	40.6	330	
1965	UD1	1965	10	24.64556	01	06	13.69	+12	00	39.5	330	
1965	UE1	*	1965	10	17.58157	00	03	12.07	-00	27	00.3	330
1965	UE1	1965	10	20.48566	00	01	29.86	-00	36	53.6	330	
1965	UE1	1965	10	24.59417	23	59	16.13	-00	49	25.0	330	
1965	UF1	*	1965	10	17.61109	00	09	26.61	+01	24	16.9	330
1965	UF1	1965	10	20.48566	00	07	32.23	+01	15	44.2	330	
1965	UF1	1965	10	24.59417	00	05	01.46	+01	04	03.0	330	
1965	UG1	*	1965	10	17.61109	23	52	47.31	-01	47	41.1	330
1965	UG1	1965	10	20.48566	23	51	18.67	-01	55	05.4	330	
1965	UG1	1965	10	24.59417	23	49	28.53	-02	03	51.6	330	
1965	UH1	*	1965	10	18.56383	00	37	54.93	+03	54	16.8	330
1965	UH1	1965	10	21.53250	00	36	24.20	+03	27	34.1	330	
1965	UJ1	*	1965	10	18.56383	00	39	32.59	+02	41	51.4	330
1965	UJ1	1965	10	21.53250	00	37	12.67	+02	32	27.5	330	
1965	UK1	*	1965	10	18.61661	01	17	00.16	+03	25	46.4	330
1965	UL1	*	1965	10	18.61661	01	18	32.85	+03	38	38.5	330
1965	UL1	1965	10	23.59385	01	14	52.11	+03	19	28.2	330	
1965	UM1	*	1965	10	18.61661	01	25	22.06	+03	53	30.0	330
1965	UM1	1965	10	23.59385	01	21	28.14	+03	04	18.8	330	
1965	UN1	*	1965	10	18.66904	02	18	58.27	+06	49	28.4	330
1965	UN1	1965	10	21.65090	02	16	12.56	+06	35	34.6	330	
1965	UO1	*	1965	10	18.66904	02	22	42.42	+04	36	43.1	330
1965	UO1	1965	10	21.65090	02	19	57.56	+04	24	33.4	330	

1965	UO1	1965	11	20.63180	01	54	06.35	+03	40	08.4	330	
1965	UO1	1965	11	25.53470	01	51	46.10	+03	51	21.1	330	
1965	UO1	1965	11	30.69091	01	50	12.01	+04	09	00.7	330	
1965	UP1	*	1965	10	18.66904	02	31	18.00	+04	59	18.6	330
1965	UP1	1965	10	23.70913	02	27	17.41	+04	30	56.7	330	
1965	UP1	1965	11	25.53470	02	02	40.12	+02	32	27.0	330	
1965	UQ1	*	1965	10	19.56730	00	46	49.59	+04	02	24.9	330
1965	UR1	*	1965	10	19.56730	00	52	39.07	+04	36	48.2	330
1965	US1	*	1965	10	19.56730	01	02	43.94	+05	15	40.7	330
1965	UT1	*	1965	10	19.56730	01	02	58.38	+01	55	46.1	330
1965	UT1	1965	10	23.54594	00	59	52.15	+01	40	59.9	330	
1965	UU1	*	1965	10	19.72494	03	21	11.03	+13	22	34.7	330
1965	UU1	1965	10	23.75844	03	17	43.01	+13	41	32.6	330	
1965	UU1	1965	11	20.68076	02	46	59.94	+15	55	06.7	330	
1965	UU1	1965	11	23.57368	02	43	58.22	+16	09	12.0	330	
1965	UU1	1965	11	26.63123	02	40	57.47	+16	24	14.0	330	
1965	UU1	1965	11	30.74994	02	37	16.28	+16	44	52.2	330	
1965	UV1	*	1965	10	20.57073	01	11	19.73	+07	29	54.1	330
1965	UV1	1965	10	24.64556	01	05	05.32	+08	09	15.8	330	
1965	UW1	*	1965	10	20.64538	02	42	33.99	+00	21	46.4	330
1965	UX1	*	1965	10	20.64538	02	49	20.04	-01	14	30.0	330
1965	UY1	*	1965	10	20.72698	03	08	50.77	+20	10	24.9	330
1965	UZ1	*	1965	10	20.72698	03	18	11.58	+21	44	35.3	330
1965	UA2	*	1965	10	20.72698	03	18	15.55	+21	03	03.0	330
1965	UB2	*	1965	10	21.59812	01	01	44.31	-02	50	29.4	330
1965	UC2	*	1965	10	21.65090	02	08	56.96	+04	42	13.4	330
1965	UD2	*	1965	10	24.69903	03	38	52.30	+14	23	26.6	330
1965	UD2	1965	11	20.73111	03	14	39.96	+13	39	08.1	330	
1965	UD2	1965	11	23.62125	03	11	46.52	+13	36	11.1	330	
1965	UD2	1965	11	26.78470	03	08	42.39	+13	33	56.9	330	
1965	UD2	1965	11	30.80133	03	05	05.87	+13	32	46.9	330	
1965	UD2	1965	12	13.49242	02	56	39.76	+13	44	33.9	330	
1965	UE2	*	1965	10	24.69903	03	43	10.18	+14	17	24.2	330
1965	WJ	1965	12	13.55214	04	25	27.28	+19	20	32.1	330	
1965	WJ	1965	12	18.57535	04	21	05.29	+19	42	16.8	330	
1965	WJ	1965	12	24.58450	04	16	30.02	+20	08	52.1	330	
1965	WJ	1965	12	30.74516	04	12	43.23	+20	36	59.8	330	
1965	WP	*	1965	11	20.73111	03	14	08.11	+12	48	12.1	330
1965	WQ	*	1965	11	20.78111	04	40	11.43	+23	28	00.9	330
1965	WQ	1965	11	25.63574	04	35	33.33	+23	06	43.2	330	
1965	WQ	1965	11	28.69433	04	32	27.09	+22	52	15.9	330	
1965	WQ	1965	12	13.55214	04	17	21.80	+21	35	32.8	330	
1965	WQ	1965	12	18.57535	04	12	56.19	+21	09	47.7	330	
1965	WR	*	1965	11	21.73453	04	45	27.14	+24	24	06.9	330
1965	WR	1965	11	25.58991	04	41	43.70	+23	51	08.4	330	
1965	WR	1965	11	25.63574	04	41	40.66	+23	50	45.1	330	
1965	WR	1965	11	28.69433	04	38	38.19	+23	23	51.6	330	
1965	WR	1965	12	13.55214	04	24	23.75	+21	11	06.1	330	
1965	WR	1965	12	18.57535	04	20	18.24	+20	28	25.9	330	
1965	WR	1965	12	24.58450	04	16	13.61	+19	41	09.9	330	
1965	WS	*	1965	11	26.78470	03	12	39.74	+14	47	33.8	330
1965	WT	*	1965	11	26.78470	03	23	15.22	+13	49	42.7	330
1965	WU	*	1965	11	28.64190	04	22	18.91	+01	41	07.5	330
1965	WV	*	1965	11	28.64190	04	27	29.06	+02	33	49.7	330
1965	XC	*	1965	12	13.49242	03	04	02.91	+15	48	14.5	330
1965	XC	1965	12	18.51979	03	02	10.32	+15	39	49.6	330	
1965	YB	*	1965	12	19.68890	05	15	49.85	+20	50	32.0	330
1965	YC	*	1965	12	19.68890	05	21	37.09	+21	19	00.0	330
1965	YC	1965	12	31.78929	05	09	29.43	+20	45	27.0	330	

1965	YD	*	1965	12	19.	68890	05	26	48.85	+22	38	40.0	330
1965	YD		1965	12	30.	76843	05	17	34.11	+22	31	19.5	330
1965	YE	*	1965	12	19.	68890	05	34	33.94	+19	14	05.9	330
1965	YF	*	1965	12	20.	70317	06	12	46.14	+23	03	39.2	330
1965	YF		1965	12	24.	66263	06	08	12.75	+23	20	23.9	330
1965	YG	*	1965	12	20.	76359	07	02	43.09	+22	11	53.7	330
1965	YG		1966	01	16.	63194	06	35	14.83	+23	09	58.5	330
1965	YG		1966	01	28.	71322	06	26	46.44	+23	27	05.0	330
1965	YH	*	1965	12	20.	76359	07	09	54.44	+20	13	59.6	330
1965	YJ	*	1965	12	24.	55152	04	31	02.97	+21	35	59.7	330
1965	YJ		1965	12	30.	74516	04	26	46.67	+21	38	24.4	330
1965	YK	*	1965	12	24.	69214	06	15	32.75	+28	04	48.2	330
1965	YL	*	1965	12	30.	79620	05	07	16.31	+26	15	07.2	330
1965	YM	*	1965	12	30.	79620	05	12	20.45	+23	36	16.7	330
1965	YM		1966	01	16.	52361	05	02	32.09	+22	28	25.9	330
1965	YN	*	1965	12	30.	90002	08	09	21.11	+23	21	05.6	330
1965	YN		1966	01	20.	57461	07	51	55.52	+24	25	26.7	330
1965	YN		1966	01	28.	76565	07	44	48.72	+24	45	08.2	330
1966	AA	*	1966	01	01.	88097	08	25	32.86	+12	20	50.9	330
1966	AA		1966	02	13.	58553	07	43	58.65	+10	06	51.2	330
1966	AA		1966	02	18.	52263	07	40	59.42	+10	01	22.3	330
1966	BF	*	1966	01	16.	52361	04	54	51.25	+25	09	16.2	330
1966	BG	*	1966	01	16.	52361	05	04	56.27	+26	42	53.5	330
1966	BH	*	1966	01	16.	52361	05	07	03.53	+22	21	40.6	330
1966	BJ	*	1966	01	16.	58194	05	45	38.19	+23	42	16.8	330
1966	BK	*	1966	01	16.	58194	05	51	25.62	+25	52	54.4	330
1966	BK		1966	01	28.	65697	05	45	55.53	+24	51	47.1	330
1966	BL	*	1966	01	20.	57461	08	01	55.76	+20	50	59.0	330
1966	BL		1966	01	28.	76565	07	53	42.69	+20	42	54.4	330
1966	BL		1966	02	13.	63553	07	40	54.41	+20	19	07.4	330
1966	BL		1966	02	16.	55323	07	39	15.16	+20	13	32.2	330
1966	BM	*	1966	01	20.	57461	08	02	39.70	+20	41	28.0	330
1966	BM		1966	01	28.	76565	07	53	13.14	+20	14	46.0	330
1966	BN	*	1966	01	20.	57461	08	02	42.40	+23	28	50.8	330
1966	BO	*	1966	01	20.	62113	08	03	40.03	+14	56	26.3	330
1966	BO		1966	01	28.	81218	07	55	37.61	+15	53	14.7	330
1966	BO		1966	02	14.	54560	07	41	47.64	+17	49	15.7	330
1966	BO		1966	02	24.	53094	07	36	55.49	+18	50	23.9	330
1966	BP	*	1966	01	21.	53370	06	04	55.93	+19	48	49.5	330
1966	BQ	*	1966	01	21.	70870	08	11	37.72	+23	23	48.9	330
1966	BR	*	1966	01	21.	70870	08	13	38.85	+22	33	34.1	330
1966	BS	*	1966	01	21.	70870	08	20	29.27	+21	08	14.3	330
1966	BT	*	1966	01	21.	70870	08	21	08.28	+21	19	09.7	330
1966	BU	*	1966	01	27.	90073	10	53	06.46	+09	45	25.6	330
1966	BV	*	1966	01	28.	86356	10	01	06.83	+14	47	25.7	330
1966	BW	*	1966	01	30.	76984	08	58	23.10	+15	14	02.0	330
1966	BW		1966	02	16.	60323	08	44	46.23	+16	12	45.1	330
1966	BW		1966	02	24.	62434	08	39	13.64	+16	37	14.5	330
1966	BX	*	1966	01	30.	81775	09	42	18.06	+15	10	42.4	330
1966	BY	*	1966	01	30.	81775	09	49	43.68	+15	04	23.9	330
1966	BY		1966	02	14.	59525	09	34	39.05	+16	32	42.0	330
1966	BZ	*	1966	01	30.	81775	09	50	57.42	+13	17	32.8	330
1966	BZ		1966	02	14.	59525	09	38	23.82	+14	39	37.0	330
1966	BZ		1966	02	24.	67625	09	29	56.40	+15	32	25.1	330
1966	BA1	*	1966	01	30.	81775	09	53	41.13	+14	10	48.8	330
1966	BA1		1966	02	14.	59525	09	45	29.34	+14	30	38.2	330
1966	BA1		1966	02	14.	61470	09	45	28.56	+14	30	40.5	330
1966	BA1		1966	02	25.	67745	09	39	19.54	+14	44	18.2	330
1966	BA1		1966	03	16.	49927	09	30	26.09	+14	58	35.0	330

1966	CD	*	1966	02	13.63553	07	29	11.03	+24	50	09.0	330
1966	CE	*	1966	02	13.63553	07	40	37.16	+21	12	22.4	330
1966	CE		1966	02	16.55323	07	39	00.14	+21	30	24.3	330
1966	CF	*	1966	02	13.68900	10	05	05.05	+20	57	49.0	330
1966	CF		1966	02	16.65288	10	02	21.80	+21	27	14.3	330
1966	CF		1966	02	25.72398	09	54	03.65	+22	48	14.3	330
1966	CG	*	1966	02	13.74039	10	20	14.39	+10	31	26.6	330
1966	CG		1966	02	14.69664	10	19	30.24	+10	37	28.3	330
1966	CG		1966	02	24.72677	10	10	59.81	+11	20	18.3	330
1966	CH	*	1966	02	13.74039	10	21	39.64	+11	36	26.3	330
1966	CH		1966	02	14.69664	10	20	31.60	+11	35	34.5	330
1966	CJ	*	1966	02	13.74039	10	27	04.95	+11	39	47.7	330
1966	CJ		1966	02	14.74942	10	26	11.55	+11	46	33.5	330
1966	CK	*	1966	02	13.74039	10	29	48.84	+12	24	16.5	330
1966	CK		1966	02	14.74942	10	29	02.93	+12	32	02.5	330
1966	CK		1966	02	25.77051	10	20	07.11	+13	57	58.1	330
1966	CL	*	1966	02	13.74039	10	33	21.53	+11	37	30.4	330
1966	CL		1966	02	14.74942	10	32	29.36	+11	44	35.6	330
1966	CL		1966	02	25.77051	10	22	15.68	+13	03	44.2	330
1966	CM	*	1966	02	13.74039	10	36	31.76	+09	52	48.3	330
1966	CM		1966	02	14.74942	10	35	49.60	+10	04	44.5	330
1966	CM		1966	02	25.77051	10	27	35.20	+12	17	44.6	330
1966	CN	*	1966	02	13.74039	10	38	51.56	+09	20	11.4	330
1966	CN		1966	02	14.74942	10	38	20.98	+09	22	29.3	330
1966	CN		1966	02	16.69871	10	37	20.72	+09	27	01.9	330
1966	CN		1966	02	25.77051	10	32	32.78	+09	48	34.9	330
1966	CO	*	1966	02	14.61470	09	53	35.98	+16	09	17.1	330
1966	CO		1966	02	25.67745	09	42	18.34	+16	39	29.6	330
1966	CP	*	1966	02	14.61470	10	02	39.99	+15	32	30.7	330
1966	CP		1966	02	25.67745	09	53	48.09	+16	25	22.9	330
1966	CQ	*	1966	02	14.61470	10	06	33.29	+14	48	07.2	330
1966	CR	*	1966	02	14.64248	09	53	38.10	+16	39	46.1	330
1966	CR		1966	02	25.67745	09	44	07.08	+18	02	40.5	330
1966	CS	*	1966	02	14.69664	10	08	38.15	+10	05	03.1	330
1966	CT	*	1966	02	14.69664	10	10	19.03	+12	20	01.4	330
1966	CU	*	1966	02	14.69664	10	15	14.32	+10	31	07.8	330
1966	CV	*	1966	02	14.79873	10	33	49.58	+05	52	43.1	330
1966	CW	*	1966	02	14.79873	10	33	57.20	+06	12	25.9	330
1966	CX	*	1966	02	14.79873	10	38	55.57	+03	27	41.7	330
1966	CY	*	1966	02	14.79873	10	41	58.40	+02	43	32.3	330
1966	CZ	*	1966	02	14.79873	10	48	28.78	+07	24	34.6	330
1966	DD		1966	01	30.76984	09	05	44.83	+14	48	54.2	330
1966	DD		1966	02	16.60323	08	50	12.35	+15	41	49.6	330
1966	DD		1966	02	24.62434	08	44	04.34	+16	02	42.7	330
1966	DH		1966	01	28.86356	10	11	11.95	+15	39	02.7	330
1966	DH		1966	02	14.61470	09	56	19.15	+16	23	04.3	330
1966	DH		1966	02	25.67745	09	45	55.37	+16	46	22.1	330
1966	DJ		1966	01	30.81775	09	53	23.46	+16	51	19.1	330
1966	DJ		1966	02	14.59525	09	38	16.48	+17	32	30.6	330
1966	DJ		1966	02	24.67625	09	27	45.81	+17	52	07.2	330
1966	DP		1966	02	16.75670	11	26	57.87	-03	02	32.6	330
1966	DR	*	1966	02	16.55323	07	32	58.93	+18	38	12.2	330
1966	DS	*	1966	02	16.55323	07	44	08.26	+20	02	13.6	330
1966	DT	*	1966	02	24.72677	10	07	02.56	+11	04	08.8	330
1966	EA	*	1966	03	15.75170	12	34	57.48	+17	42	34.7	330
1966	FJ	*	1966	03	16.49927	09	30	52.34	+17	00	32.9	330
1966	FK	*	1966	03	16.53399	09	29	29.62	+18	07	18.7	330
1966	FL	*	1966	03	16.53399	09	31	52.72	+16	58	55.9	330
1966	FM	*	1966	03	16.71663	10	17	23.41	+03	53	25.9	330

1966	FN	*	1966	03	16.76698	11	50	19.52	+04	21	56.3	330
1966	FN	*	1966	03	26.59685	11	45	41.71	+05	13	04.2	330
1966	FO	*	1966	03	16.81559	12	13	40.65	-02	07	20.7	330
1966	FP	*	1966	03	26.65661	11	50	27.11	+05	06	21.9	330
1966	FQ	*	1966	03	26.71803	12	00	21.02	+00	24	51.8	330
1966	FR	*	1966	03	26.71803	12	00	52.56	-01	41	46.2	330
1966	FS	*	1966	03	26.71803	12	06	47.32	-00	09	12.1	330
1966	HM	*	1966	04	18.68601	14	24	05.55	-04	53	50.3	330
1972	WA	*	1972	11	29.68956	05	51	17.77	+19	16	17.0	330
1972	WB	*	1972	11	30.60859	05	04	11.49	+16	05	18.2	330
1972	XL2	*	1972	12	04.63076	05	06	44.93	+12	58	55.8	330
1972	XM2	*	1972	12	08.62078	05	43	22.48	+19	15	22.1	330
1972	YR1	*	1972	12	29.65208	06	32	09.42	+35	46	34.8	330
1972	YS1	*	1972	12	29.70000	07	13	10.76	+29	01	55.7	330
1973	AW4	*	1973	01	09.65513	06	09	01.72	+08	21	51.0	330
1973	BD	*	1973	01	29.67765	07	52	11.32	+20	53	31.8	330
1973	UY4	*	1973	10	16.57153	02	26	32.10	+09	59	55.9	330
1973	WH	*	1973	11	22.55000	03	24	34.99	+29	46	09.2	330
1974	TP	*	1974	10	12.65045	02	07	16.72	+17	22	13.4	330
1974	TQ	*	1974	10	12.65045	02	09	26.90	+15	17	42.5	330
1974	TR	*	1974	10	12.65045	02	10	54.43	+15	17	43.7	330
1974	UL	*	1974	10	23.68530	03	01	09.29	+08	56	05.6	330
1974	UM	*	1974	10	23.73669	03	34	14.08	+19	06	25.7	330
1974	UN	*	1974	10	23.73669	03	40	33.09	+19	23	07.4	330
1974	UO	*	1974	10	23.73669	03	48	17.32	+19	42	24.7	330
1974	WH1	*	1974	11	18.64286	01	29	07.19	+15	30	23.3	330
1974	WJ1	*	1974	11	18.64286	01	35	21.72	+14	16	25.7	330
1974	WK1	*	1974	11	18.64286	01	46	02.77	+15	50	10.6	330
1974	WL1	*	1974	11	18.64286	01	48	25.30	+16	01	20.9	330
1974	WM1	*	1974	11	18.70396	06	54	35.74	+23	00	08.7	330
1974	XQ	1974	12	14.65459	06	21	10.35	+24	58	36.3	330	
1974	XQ	1974	12	18.69013	06	17	26.62	+25	02	20.0	330	
1974	XQ	1975	01	12.52770	05	55	14.65	+25	11	54.8	330	
1974	XQ	1975	01	16.57095	05	52	23.84	+25	11	32.2	330	
1974	XQ	1975	01	17.61476	05	51	42.85	+25	11	23.6	330	
1974	XQ	1975	01	18.63441	05	51	04.94	+25	11	13.1	330	
1974	XU	*	1974	12	14.53561	01	35	00.90	+16	14	58.0	330
1974	XV	*	1974	12	14.60506	05	16	56.76	+19	26	06.9	330
1974	XW	*	1974	12	14.62242	06	29	21.42	+24	52	43.2	330
1974	XW	1974	12	18.69013	06	25	33.74	+25	08	20.8	330	
1974	XX	*	1974	12	14.62242	06	39	01.67	+25	18	32.3	330
1974	XX	1974	12	18.69013	06	35	26.83	+25	47	39.6	330	
1974	XX	1975	01	04.58257	06	19	13.40	+27	41	18.5	330	
1974	YB	*	1974	12	18.55263	02	59	51.60	+17	30	23.8	330
1974	YC	*	1974	12	18.60888	05	26	52.61	+30	27	40.8	330
1974	YD	*	1974	12	18.60888	05	27	29.53	+30	10	14.8	330
1974	YE	*	1974	12	18.60888	05	31	41.67	+29	25	44.8	330
1974	YF	*	1974	12	18.60888	05	35	00.74	+28	13	36.8	330
1974	YG	*	1974	12	18.69013	06	14	52.80	+27	02	12.1	330
1974	YH	*	1974	12	18.69013	06	27	46.60	+24	54	03.2	330
1974	YJ	*	1974	12	18.69013	06	28	05.49	+24	53	09.9	330
1974	YK	*	1974	12	19.63184	04	47	03.73	+26	47	47.6	330
1974	YL	*	1974	12	19.63184	04	54	35.94	+27	19	50.9	330
1974	YM	*	1974	12	19.63184	04	54	37.01	+27	20	00.1	330
1974	YN	*	1974	12	19.63184	05	01	39.47	+25	28	29.7	330
1974	YO	*	1974	12	19.63184	05	01	52.35	+28	34	15.8	330
1974	YP	*	1974	12	19.70337	07	36	57.45	+20	47	00.7	330
1974	YP	1975	01	10.70269	07	12	00.64	+19	28	22.7	330	
1974	YP	1975	01	16.63900	07	05	18.81	+19	08	25.3	330	

1974	YQ	*	1974	12	20.73333	06	45	02.96	+18	18	29.9	330
1974	YR	*	1974	12	20.80972	08	21	53.42	+08	51	55.2	330
1975	AW	*	1975	01	04.58257	06	00	22.86	+25	11	32.2	330
1975	AX	*	1975	01	04.58257	06	02	31.35	+24	17	04.6	330
1975	AY	*	1975	01	04.58257	06	10	01.60	+25	42	50.3	330
1975	AZ	*	1975	01	04.58257	06	10	12.21	+25	41	46.3	330
1975	AA1	*	1975	01	09.56514	05	06	57.93	+29	28	41.7	330
1975	AB1	*	1975	01	09.66028	07	56	41.29	+18	31	24.4	330
1975	AC1	*	1975	01	10.70269	07	21	05.62	+19	12	46.2	330
1975	AC1		1975	01	16.63900	07	15	03.74	+20	02	28.1	330
1975	AD1	*	1975	01	12.52770	05	58	41.50	+27	26	31.8	330
1975	AE1	*	1975	01	12.52770	06	01	20.14	+26	25	54.4	330
1975	BC		1975	01	16.63900	07	11	21.67	+21	56	57.0	330
1975	BF		1975	01	16.63900	07	19	22.45	+20	32	31.9	330
1975	BU		1975	01	12.68811	09	45	27.22	+14	10	32.5	330
1975	BU		1975	01	18.68858	09	42	32.24	+15	08	05.7	330
1975	BV		1975	01	16.72859	09	46	35.98	+17	18	28.7	330
1975	BV		1975	01	18.68858	09	44	59.74	+17	26	46.8	330
1975	BV		1975	01	22.81594	09	41	17.10	+17	44	59.0	330
1975	BX		1975	01	16.74595	09	47	31.41	+16	44	30.3	330
1975	BX		1975	01	18.70594	09	46	44.06	+17	22	08.9	330
1975	BX		1975	01	22.81594	09	44	41.17	+18	44	35.9	330
1975	BX		1975	02	11.61388	09	29	07.15	+25	58	28.8	330
1975	BX		1975	03	07.59053	09	09	24.65	+33	10	56.2	330
1975	BA1		1975	01	12.68811	09	56	34.00	+14	31	07.9	330
1975	BA1		1975	01	16.72859	09	54	48.76	+14	42	16.4	330
1975	BA1		1975	01	18.68858	09	53	50.24	+14	49	00.7	330
1975	BJ1	*	1975	01	16.57095	05	46	59.76	+26	22	28.2	330
1975	BJ1		1975	01	17.61476	05	46	17.34	+26	17	46.7	330
1975	BK1	*	1975	01	16.57095	05	59	13.27	+27	13	32.4	330
1975	BK1		1975	01	17.61476	05	58	23.49	+27	09	32.4	330
1975	BK1		1975	01	18.63441	05	57	37.47	+27	05	39.2	330
1975	BL1	*	1975	01	16.59178	05	47	17.74	+28	22	31.6	330
1975	BL1		1975	01	18.63441	05	45	52.40	+28	15	55.9	330
1975	BM1	*	1975	01	16.69873	07	53	37.68	+09	34	08.4	330
1975	BN1	*	1975	01	16.69873	07	58	22.30	+09	25	07.1	330
1975	BO1	*	1975	01	16.69873	08	05	40.18	+09	09	28.1	330
1975	BP1	*	1975	01	16.81470	10	10	08.79	+10	38	05.8	330
1975	BP1		1975	01	22.86594	10	07	12.58	+10	58	16.1	330
1975	BP1		1975	02	12.60559	09	52	39.25	+12	32	57.3	330
1975	BQ1	*	1975	01	17.68073	08	16	04.22	+26	14	18.8	330
1975	BR1	*	1975	01	17.68073	08	20	18.10	+25	21	51.3	330
1975	BS1	*	1975	01	17.68073	08	29	17.01	+27	10	12.3	330
1975	BT1	*	1975	01	18.68858	09	51	28.49	+19	00	03.1	330
1975	BT1		1975	01	22.81594	09	48	53.97	+19	38	02.8	330
1975	CD	*	1975	02	12.55003	09	33	24.85	+17	32	11.6	330
1975	CE	*	1975	02	12.55003	09	36	01.91	+16	22	30.5	330
1975	CF	*	1975	02	12.66809	10	51	39.08	+14	38	58.9	330
1975	CF		1975	02	16.78464	10	49	10.78	+14	55	35.9	330
1975	CG	*	1975	02	12.66809	11	02	47.37	+12	14	11.1	330
1975	DD	*	1975	02	16.78464	10	55	48.72	+13	13	16.6	330
1975	DE	*	1975	02	16.78464	11	00	17.78	+13	04	57.2	330
1975	EY1		1975	01	16.81470	10	19	10.87	+09	47	53.2	330
1975	EY1		1975	01	22.86594	10	16	10.26	+10	23	25.4	330
1975	EY1		1975	02	12.60559	09	58	56.40	+13	06	50.3	330
1975	EA2		1975	03	07.66553	09	48	48.01	+15	39	59.7	330
1975	EB6	*	1975	03	07.66553	09	34	20.14	+14	07	26.9	330
1975	FW	*	1975	03	17.68278	10	51	07.62	+23	10	11.6	330
1975	FW		1975	04	01.64436	10	40	45.43	+23	16	26.7	330

1975	FW	1975	04	03.52677	10	39	42.97	+23	14	20.8	330	
1975	FW	1975	04	11.59560	10	36	04.75	+22	58	48.9	330	
1975	FX	*	1975	03	17.68278	10	56	40.54	+23	18	00.0	330
1975	FX	1975	04	01.64436	10	46	22.53	+23	14	23.3	330	
1975	FX	1975	04	03.52677	10	45	22.27	+23	10	56.9	330	
1975	FX	1975	04	11.59560	10	41	56.92	+22	48	37.1	330	
1975	FY	*	1975	03	21.81001	13	32	17.60	-03	21	16.0	330
1975	GG	1975	04	12.55396	12	27	14.54	+02	49	30.6	330	
1975	GM	1975	04	12.55396	12	36	00.87	+02	38	28.4	330	
1975	GM1	*	1975	04	12.55396	12	28	50.70	+02	48	29.3	330
1975	GN1	*	1975	04	12.55396	12	32	05.37	+04	46	13.3	330
1975	UJ	*	1975	10	31.58408	00	41	38.71	+02	25	04.8	330
1975	VP1	1975	12	02.69277	04	26	18.00	+18	09	55.7	330	
1975	VL9	*	1975	11	06.64540	04	54	06.92	+26	01	11.2	330
1975	VM9	*	1975	11	06.64540	04	57	50.47	+25	38	48.8	330
1975	WC1	*	1975	11	23.53493	03	46	43.64	+13	47	18.9	330
1975	WD1	*	1975	11	23.57243	04	43	23.39	+25	30	40.4	330
1975	WE1	*	1975	11	24.52667	02	32	58.71	+21	15	14.4	330
1975	WF1	*	1975	11	24.52667	02	41	03.11	+17	13	00.0	330
1975	WG1	*	1975	11	26.54058	04	14	27.47	+18	11	57.3	330
1975	WH1	*	1975	11	26.54058	04	19	03.84	+15	22	02.0	330
1975	WJ1	*	1975	11	26.58086	04	43	36.79	+23	13	14.1	330
1975	WJ1	1975	11	29.53647	04	40	54.55	+23	05	39.0	330	
1975	WK1	*	1975	11	26.65725	05	31	40.51	+22	26	17.1	330
1975	WK1	1975	11	29.59619	05	28	53.40	+22	18	47.4	330	
1975	WK1	1975	12	02.62228	05	25	48.65	+22	10	44.2	330	
1975	WK1	1975	12	11.74446	05	15	43.39	+21	44	41.4	330	
1975	WK1	1975	12	24.55237	05	01	48.04	+21	07	20.9	330	
1975	WL1	*	1975	11	26.65725	05	38	36.86	+22	38	41.8	330
1975	WL1	1975	11	29.59619	05	36	24.72	+22	40	02.4	330	
1975	WL1	1975	12	02.62228	05	33	59.90	+22	41	15.0	330	
1975	WL1	1975	12	11.74446	05	26	05.70	+22	44	09.6	330	
1975	WL1	1975	12	22.52903	05	16	25.84	+22	45	57.8	330	
1975	WL1	1975	12	24.55237	05	14	40.80	+22	46	08.9	330	
1975	WL1	1976	01	05.54799	05	05	26.23	+22	47	14.3	330	
1975	WM1	*	1975	11	26.65725	05	41	53.64	+21	36	46.6	330
1975	WM1	1975	11	29.59619	05	40	17.12	+21	41	34.6	330	
1975	WM1	1975	12	02.62228	05	38	33.81	+21	46	29.8	330	
1975	WM1	1975	12	11.74446	05	33	04.48	+22	01	19.6	330	
1975	WM1	1975	12	22.52903	05	26	22.98	+22	18	32.7	330	
1975	WM1	1975	12	29.58108	05	22	08.55	+22	29	31.3	330	
1975	WN1	*	1975	11	26.65725	05	43	03.45	+21	35	27.0	330
1975	WO1	*	1975	11	26.65725	05	43	37.21	+24	35	18.8	330
1975	WO1	1975	11	29.59619	05	41	14.41	+24	53	56.9	330	
1975	WO1	1975	12	02.62228	05	38	35.71	+25	13	00.3	330	
1975	WO1	1975	12	23.59817	05	17	53.89	+27	11	54.5	330	
1975	WO1	1976	01	01.55616	05	09	54.15	+27	52	10.2	330	
1975	WP1	*	1975	11	28.63645	04	54	34.91	+20	04	45.0	330
1975	WQ1	*	1975	11	28.63645	04	57	20.24	+22	11	26.3	330
1975	WR1	*	1975	11	29.59619	05	20	32.28	+20	45	49.2	330
1975	XX1	1975	11	26.58086	04	38	55.72	+25	55	46.3	330	
1975	XX1	1975	11	29.53647	04	36	01.70	+25	52	40.2	330	
1975	XY1	1975	11	23.57243	04	43	34.44	+25	33	19.0	330	
1975	XY1	1975	11	26.58086	04	40	17.71	+24	35	10.0	330	
1975	XY1	1975	11	29.53647	04	36	58.22	+23	35	59.0	330	
1975	XY1	1975	12	22.47521	04	13	30.33	+15	46	03.3	330	
1975	XY1	1975	12	30.52763	04	08	31.12	+13	23	31.2	330	
1975	XZ1	1975	11	23.57243	04	51	31.20	+25	52	27.0	330	
1975	XZ1	1975	11	26.58086	04	48	41.24	+25	59	36.1	330	

1975	XZ1	1975	11	29.53647	04	45	49.78	+26	06	08.0	330	
1975	XZ1	1975	12	23.53359	04	23	10.05	+26	41	00.2	330	
1975	XZ1	1975	12	29.50260	04	18	35.70	+26	45	57.8	330	
1975	XA3	1975	11	23.57243	04	40	02.23	+26	41	35.2	330	
1975	XA3	1975	11	26.58086	04	36	12.80	+26	49	11.0	330	
1975	XA3	1975	11	29.53647	04	32	23.82	+26	55	22.6	330	
1975	XA3	1975	12	23.53359	04	05	46.85	+27	09	41.2	330	
1975	XA3	1975	12	29.50260	04	01	52.40	+27	08	06.9	330	
1975	XF3	1975	11	26.58086	04	39	34.03	+25	27	26.2	330	
1975	XF3	1975	11	29.53647	04	36	23.79	+25	20	46.3	330	
1975	XP3	1975	11	26.58086	04	50	53.46	+27	32	07.7	330	
1975	XP3	1975	11	29.53647	04	47	39.67	+27	30	56.6	330	
1975	XW6	*	1975	12	01.57676	03	36	29.53	+18	32	24.0	330
1975	XX6	*	1975	12	01.63926	04	42	29.08	+39	50	08.9	330
1975	XY6	*	1975	12	01.63926	05	03	02.05	+38	07	44.8	330
1975	XZ6	*	1975	12	02.69277	04	18	09.19	+17	19	24.4	330
1975	XZ6	1975	12	22.47521	04	02	11.31	+16	50	16.4	330	
1975	XA7	*	1975	12	02.69277	04	28	16.58	+15	42	35.9	330
1975	XB7	*	1975	12	02.69277	04	37	17.50	+18	25	00.9	330
1975	XC7	*	1975	12	11.74446	05	16	27.23	+19	51	11.0	330
1975	XD7	*	1975	12	11.74446	05	21	17.72	+19	42	54.0	330
1975	XD7	1975	12	24.55237	05	06	57.63	+20	37	52.4	330	
1975	YF	*	1975	12	22.47521	04	07	14.98	+17	18	20.0	330
1975	YG	*	1975	12	22.47521	04	09	49.61	+19	14	12.6	330
1975	YH	*	1975	12	22.47521	04	12	28.73	+19	13	48.0	330
1975	YJ	*	1975	12	22.47521	04	13	03.13	+15	00	23.4	330
1975	YJ	1975	12	30.52763	04	08	39.52	+14	52	49.9	330	
1975	YK	*	1975	12	23.53359	04	01	48.07	+23	16	13.2	330
1975	YL	*	1975	12	23.53359	04	06	33.57	+24	11	13.2	330
1975	YM	*	1975	12	24.55237	05	04	41.34	+19	44	04.2	330
1975	YN	*	1975	12	24.55237	05	05	18.80	+19	30	21.2	330
1975	YO	*	1975	12	24.55237	05	12	01.57	+23	25	58.8	330
1975	YP	*	1975	12	29.65191	08	24	22.62	+18	58	09.4	330
1976	AD	1975	12	22.52903	05	31	32.94	+24	04	02.4	330	
1976	AD	1975	12	29.58108	05	25	17.46	+23	59	34.1	330	
1976	AD	1976	01	05.54799	05	19	40.34	+23	54	25.4	330	
1976	AJ	*	1976	01	02.62703	07	43	04.69	+27	43	50.3	330
1976	AK	*	1976	01	05.54799	05	22	57.88	+20	15	46.3	330
1976	AL	*	1976	01	05.64590	07	47	06.91	+20	58	56.1	330
1976	CA	*	1976	02	05.62949	07	59	10.31	+16	38	40.3	330
1976	YT3	1976	12	14.57406	06	18	06.64	+14	50	03.3	330	
1976	YT7	*	1976	12	16.63171	07	47	20.46	+23	51	22.2	330
1977	AT2	*	1977	01	10.52431	05	48	37.61	+18	22	01.2	330
1977	CE	*	1977	02	14.53194	08	47	42.03	+18	35	57.5	330
1977	CF	*	1977	02	14.60556	09	17	40.59	+16	44	48.5	330
1977	CG	*	1977	02	14.60556	09	23	15.37	+15	49	45.4	330
1977	HF	*	1977	04	19.57221	12	21	24.90	-07	43	19.6	330
1977	HG	*	1977	04	19.57221	12	26	30.18	-08	51	30.8	330
1977	TZ	1977	11	01.50904	01	12	36.21	+13	10	33.6	330	
1977	TZ	1977	11	08.60436	01	05	56.57	+13	19	43.6	330	
1977	TH3	*	1977	10	04.57707	00	52	16.70	-09	00	14.5	330
1977	TJ3	*	1977	10	04.61665	01	23	19.19	+16	00	06.3	330
1977	TJ3	1977	10	10.61052	01	20	27.45	+15	24	16.2	330	
1977	TJ3	1977	10	16.58784	01	17	33.38	+14	46	49.6	330	
1977	TJ3	1977	11	01.50904	01	10	13.18	+13	04	08.5	330	
1977	TJ3	1977	11	08.60436	01	07	23.58	+12	19	21.6	330	
1977	TK3	*	1977	10	04.64443	01	08	35.07	+17	11	52.6	330
1977	TL3	*	1977	10	04.64443	01	24	09.26	+15	35	04.6	330
1977	TL3	1977	10	10.61052	01	21	19.82	+15	09	36.8	330	

1977	TL3	1977	10	16.58784	01	18	26.60	+14	42	27.5	330	
1977	TL3	1977	11	01.50904	01	11	06.61	+13	26	55.7	330	
1977	TL3	1977	11	08.60436	01	08	16.57	+12	53	47.1	330	
1977	TL3	1978	10	28.69159	03	48	16.93	+15	16	02.1	330	
1977	TL3	1978	11	26.66938	03	33	34.87	+13	33	51.4	330	
1977	TL3	1978	11	30.60027	03	31	34.37	+13	21	13.0	330	
1977	TL3	1978	12	05.55131	03	29	09.58	+13	05	55.9	330	
1977	TM3	*	1977	10	10.61052	01	08	54.55	+12	27	07.8	330
1977	TN3	*	1977	10	10.61052	01	17	47.70	+16	17	20.5	330
1977	TN3	1977	10	16.58784	01	13	24.92	+15	27	40.1	330	
1977	TO3	*	1977	10	10.61052	01	20	16.13	+13	32	52.8	330
1977	TO3	1977	10	16.58784	01	14	18.89	+13	02	07.7	330	
1977	TP3	*	1977	10	10.67163	02	23	42.43	+11	21	40.9	330
1977	TQ3	*	1977	10	10.67163	02	29	44.60	+08	57	49.0	330
1977	TQ3	1977	10	21.85809	02	18	52.99	+09	16	18.9	330	
1977	TQ3	1977	11	03.64246	02	05	23.13	+09	40	22.0	330	
1977	TQ3	1977	11	12.57364	01	57	17.91	+10	03	01.7	330	
1977	TR3	*	1977	10	12.55778	01	38	30.39	+04	22	08.5	330
1977	TR3	1977	11	03.58413	01	20	06.75	+02	04	54.5	330	
1977	TR3	1977	11	04.57095	01	19	27.01	+02	00	48.6	330	
1977	TR3	1977	11	08.55436	01	17	01.39	+01	46	45.3	330	
1977	TR3	1977	11	11.53614	01	15	29.76	+01	38	52.6	330	
1977	TS3	*	1977	10	12.55778	01	42	27.28	+02	47	20.1	330
1977	TT3	*	1977	10	12.60639	02	09	24.83	+18	50	59.6	330
1977	TT3	1977	11	01.54029	01	54	12.13	+16	37	07.1	330	
1977	TT3	1977	11	08.65367	01	49	06.10	+15	45	40.1	330	
1977	TU3	*	1977	10	12.60639	02	25	26.11	+16	08	31.8	330
1977	TV3	*	1977	10	12.60639	02	29	26.85	+17	07	21.1	330
1977	TW3	*	1977	10	12.64875	02	23	52.14	-00	15	03.8	330
1977	TX3	*	1977	10	12.64875	02	38	42.37	+02	08	10.0	330
1977	TY3	*	1977	10	13.72654	02	31	46.31	+21	26	27.9	330
1977	TZ3	*	1977	10	13.72654	02	31	55.04	+18	59	22.9	330
1977	TA4	*	1977	10	13.72654	02	32	37.79	+22	20	17.2	330
1977	TB4	*	1977	10	13.72654	02	41	10.07	+20	05	33.1	330
1977	TC4	*	1977	10	13.72654	02	41	52.82	+20	55	33.8	330
1977	UX	*	1977	10	16.64408	03	01	05.21	+27	56	32.0	330
1977	VH	1977	10	10.67163	02	20	40.09	+12	06	56.8	330	
1977	VH	1977	10	21.85809	02	11	32.94	+11	52	19.7	330	
1977	VH	1977	11	03.64246	02	00	34.42	+11	33	07.2	330	
1977	VH	1977	11	12.57364	01	53	24.21	+11	21	23.6	330	
1977	VJ	1977	11	03.64246	02	02	01.49	+10	35	47.1	330	
1977	VN	1977	10	12.60639	02	23	24.30	+14	39	44.7	330	
1977	VN	1977	11	01.55765	02	08	10.73	+13	28	49.4	330	
1977	VN	1977	11	08.65367	02	02	39.49	+13	01	26.5	330	
1977	VP	1977	10	10.67163	02	34	55.02	+10	53	57.4	330	
1977	VP	1977	10	21.85809	02	24	00.44	+10	39	41.2	330	
1977	VP	1977	11	03.64246	02	09	59.74	+10	21	42.8	330	
1977	VP	1977	11	12.57364	02	00	39.94	+10	12	55.3	330	
1977	VQ	1977	11	12.57364	02	04	55.17	+10	34	05.8	330	
1977	VV	1977	11	03.64246	02	14	20.82	+11	01	19.1	330	
1977	VJ1	*	1977	11	01.55765	01	50	50.39	+14	40	46.1	330
1977	VJ1	1977	11	08.65367	01	46	01.49	+13	17	31.9	330	
1977	VK1	*	1977	11	03.58413	01	11	45.17	+01	09	52.9	330
1977	VK1	1977	11	04.57095	01	10	59.83	+01	12	14.8	330	
1977	VK1	1977	11	08.55436	01	08	08.16	+01	23	01.3	330	
1977	VK1	1977	11	11.53614	01	06	12.57	+01	32	24.1	330	
1977	VL1	*	1977	11	03.58413	01	11	51.16	+03	20	55.1	330
1977	VL1	1977	11	04.57095	01	11	12.66	+03	22	21.5	330	
1977	VL1	1977	11	08.55436	01	08	52.05	+03	29	43.9	330	

1977	VL1	1977	11	11.53614	01	07	24.89	+03	37	02.9	330	
1977	VM1	*	1977	11	03.58413	01	21	17.88	+00	35	51.6	330
1977	VM1		1977	11	04.57095	01	20	28.42	+00	39	04.3	330
1977	VM1		1977	11	08.55436	01	17	25.42	+00	54	14.7	330
1977	VM1		1977	11	11.53614	01	15	27.66	+01	07	54.7	330
1977	VN1	*	1977	11	03.58413	01	26	38.62	+01	29	56.6	330
1977	VN1		1977	11	04.57095	01	26	02.84	+01	28	04.6	330
1977	VO1	*	1977	11	03.64246	02	00	04.83	+07	53	41.6	330
1977	VO1		1977	11	12.57364	01	53	23.49	+06	47	27.6	330
1977	VP1	*	1977	11	03.64246	02	09	59.66	+06	50	04.9	330
1977	VQ1	*	1977	11	04.51886	01	26	05.05	+01	28	11.4	330
1977	VR1	*	1977	11	04.51886	01	42	11.11	+02	26	46.4	330
1977	VS1	*	1977	11	08.65367	01	51	13.88	+15	45	25.3	330
1977	VT1	*	1977	11	08.65367	02	02	43.48	+17	41	17.2	330
1977	VU1	*	1977	11	08.65367	02	03	42.22	+15	53	43.4	330
1977	VV1	*	1977	11	08.65367	02	03	46.23	+17	11	27.7	330
1977	VW1	*	1977	11	12.57364	01	48	30.90	+09	02	24.2	330
1977	VX1	*	1977	11	12.57364	02	02	46.76	+06	25	58.2	330
1977	VY1	*	1977	11	14.55627	00	54	20.81	+00	32	26.5	330
1977	VZ1	*	1977	11	14.68613	05	04	36.98	+19	52	52.6	330
1977	VA2	*	1977	11	14.68613	05	15	33.61	+20	31	54.3	330
1977	VB2	*	1977	11	14.68613	05	19	47.09	+22	29	49.4	330
1977	XB	*	1977	12	08.55438	04	32	37.67	+21	02	53.4	330
1977	XC	*	1977	12	08.55438	04	34	23.00	+22	23	23.5	330
1977	XD	*	1977	12	08.55438	04	45	41.60	+20	16	19.2	330
1977	XE	*	1977	12	12.59270	05	44	58.96	+26	58	04.2	330

OBSERVATIONS MADE AT GEISEI BY T. SEKI.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	Obs.	
/1978f	1979	07	30.69132	23 37 03.23	-17 54 40.2	372	
/1979c	1979	09	04.78194	04 45 55.0	+63 27 39	16.5T	372
/1979c	1979	09	04.79653	04 45 37.0	+63 28 24		372
/1979c	1979	09	04.81007	04 45 19.8	+63 29 05		372

OBSERVATIONS MADE AT JCPC HAMATONBETSU STATION BY M. TAKEISHI. FROM JAPAN
ASTRON. CIRC. NOS. 214 AND 215.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
/1979c	1979	08	23.72674	06 51 52.87	+51 14 22.4	13	T 1 394
/1979c	1979	08	23.74028	06 51 49.91	+51 14 56.2		1 394
/1979i	1979	09	23.64010	13 27 11.73	+67 14 41.7	13	T 1 394
/1979i	1979	09	23.65781	13 27 10.07	+67 14 13.4		1 394
/1979i	1979	09	25.49097	13 23 50.49	+66 33 05.1	14	T 1 394
/1979i	1979	09	25.51076	13 23 48.05	+66 32 42.3		1 394
/1979i	1979	09	26.45868	13 22 11.51	+66 11 42.3	14	T 1 394

Note 1: observatory code 394, Long. and Parallax 142.32, -301, -301 (see MPC 4766).

OBSERVATIONS MADE WITH THE 1.2-M U.K. SCHMIDT TELESCOPE AT COONABARABRAN
BY E. HELIN AND S. J. BUS. MEASURED BY BUS.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	Obs.	
933	1979	06	23.63125	20 27 33.26	-15 01 42.9	413	
933	1979	06	24.63611	20 26 56.50	-15 04 38.4	413	
933	1979	06	25.66181	20 26 17.47	-15 07 44.4	15.5	413
933	1979	06	29.67859	20 23 30.79	-15 21 00.0		413
1244	1979	06	23.63125	20 19 02.17	-16 13 42.5		413
1244	1979	06	24.63611	20 18 18.92	-16 11 28.4		413
1244	1979	06	25.66181	20 17 33.18	-16 09 16.0	15.0	413
1244	1979	06	29.67859	20 14 19.17	-16 01 23.6		413
1827	1979	06	23.63125	20 16 51.06	-13 31 38.9		413

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1827	1979	06	24.63611	20	16	15.11	-13	32	06.6		413
1827	1979	06	25.66181	20	15	37.30	-13	32	38.3	17.0	413
1827	1979	06	29.67859	20	12	58.71	-13	35	34.8		413
1979 MA	1979	06	23.64167	20	26	28.34	-16	09	36.6		413
1979 MA	1979	06	24.63611	20	25	25.00	-15	58	30.7		413
1979 MA *	1979	06	25.66181	20	24	17.74	-15	47	06.6	19.0	413
1979 MA	1979	06	29.70984	20	19	35.40	-15	02	52.5		413
1979 MD1	1979	06	23.62778	20	11	59.00	-17	54	17.2		413
1979 MD1 *	1979	06	24.63611	20	11	25.59	-17	58	35.3	19.5	413
1979 ME1 *	1979	06	24.63611	20	12	24.46	-17	09	52.1	20.0	413
1979 ME1	1979	06	29.67859	20	09	01.33	-17	00	19.2		413
1979 MF1 *	1979	06	24.63611	20	13	59.95	-16	26	26.2	20.0	413
1979 MF1	1979	06	29.70984	20	11	28.97	-17	00	41.2		413
1979 MG1 *	1979	06	24.63611	20	16	44.06	-12	33	06.9	20.0	413
1979 MG1	1979	06	29.70984	20	13	28.27	-12	45	01.2		413
1979 MH1	1979	06	23.62778	20	28	50.41	-15	22	31.9		413
1979 MH1 *	1979	06	24.63611	20	28	23.52	-15	26	18.6	20.0	413
1979 MH1	1979	06	29.70984	20	25	52.78	-15	46	52.2		413
1979 MJ1 *	1979	06	24.63611	20	29	29.30	-14	02	23.3	20.0	413
1979 MJ1	1979	06	29.67859	20	27	00.53	-13	57	51.1		413
1979 MK1	1979	06	23.63125	20	08	35.27	-15	45	55.7		413
1979 MK1	1979	06	24.69049	20	07	59.96	-15	48	14.2		413
1979 MK1 *	1979	06	25.66181	20	07	25.74	-15	50	30.1	18.5	413
1979 ML1	1979	06	23.63125	20	08	59.59	-17	37	30.4		413
1979 ML1	1979	06	24.63611	20	08	23.68	-17	34	33.2		413
1979 ML1 *	1979	06	25.66181	20	07	44.89	-17	31	35.3	18.0	413
1979 MM1	1979	06	23.63125	20	08	52.20	-13	02	56.7		413
1979 MM1	1979	06	24.63611	20	08	21.40	-13	07	21.1		413
1979 MM1 *	1979	06	25.66181	20	07	48.88	-13	11	56.7	19.0	413
1979 MN1	1979	06	23.62778	20	10	01.38	-17	21	23.5		413
1979 MN1	1979	06	24.63611	20	09	20.67	-17	23	53.1		413
1979 MN1 *	1979	06	25.66181	20	08	37.67	-17	26	30.9	19.0	413
1979 MO1	1979	06	23.62778	20	09	52.86	-17	18	57.7		413
1979 MO1	1979	06	24.69049	20	09	19.49	-17	19	21.2		413
1979 MO1 *	1979	06	25.66181	20	08	46.99	-17	19	50.7	20.0	413
1979 MP1	1979	06	23.63125	20	09	53.41	-17	32	58.0		413
1979 MP1	1979	06	24.63611	20	09	21.97	-17	34	24.7		413
1979 MP1 *	1979	06	25.66181	20	08	48.16	-17	35	59.1	19.5	413
1979 MQ1	1979	06	23.63125	20	10	24.94	-17	24	24.3		413
1979 MQ1	1979	06	24.69049	20	09	41.59	-17	19	11.2		413
1979 MQ1 *	1979	06	25.66181	20	09	00.35	-17	14	24.0	20.0	413
1979 MR1	1979	06	23.62778	20	10	10.90	-17	37	17.0		413
1979 MR1	1979	06	24.63611	20	09	42.84	-17	39	11.2		413
1979 MR1 *	1979	06	25.66181	20	09	12.73	-17	41	13.4	19.5	413
1979 MR1	1979	06	29.70984	20	07	01.18	-17	50	10.6		413
1979 MS1	1979	06	24.63611	20	09	47.98	-17	07	44.3		413
1979 MS1 *	1979	06	25.66181	20	09	14.72	-17	09	15.3	20.0	413
1979 MT1	1979	06	23.63125	20	10	09.68	-16	50	14.9		413
1979 MT1	1979	06	24.63611	20	09	43.58	-16	53	35.6		413
1979 MT1 *	1979	06	25.66181	20	09	15.15	-16	57	08.4	20.0	413
1979 MU1	1979	06	23.62778	20	10	24.87	-13	23	34.3		413
1979 MU1	1979	06	24.63611	20	09	57.59	-13	25	13.6		413
1979 MU1 *	1979	06	25.66181	20	09	28.26	-13	27	02.6	20.0	413
1979 MV1	1979	06	23.63125	20	10	40.82	-14	48	11.6		413
1979 MV1	1979	06	24.63611	20	10	08.33	-14	52	14.1		413
1979 MV1 *	1979	06	25.66181	20	09	33.64	-14	56	31.1	18.5	413
1979 MV1	1979	06	29.67859	20	07	01.04	-15	14	55.6		413
1979 MW1	1979	06	23.64167	20	10	55.61	-14	39	51.9		413
1979 MW1	1979	06	24.63611	20	10	22.88	-14	38	45.9		413

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1979	MW1	*	1979	06	25.66181	20	09	47.48	-14	37	42.1		18.5	413
1979	MW1		1979	06	29.70984	20	07	13.43	-14	34	32.0			413
1979	MX1		1979	06	24.63611	20	10	27.61	-18	04	08.5			413
1979	MX1	*	1979	06	25.66181	20	09	48.29	-18	04	36.0		19.5	413
1979	MX1		1979	06	29.67859	20	07	02.28	-18	07	04.2			413
1979	MY1		1979	06	23.62778	20	11	06.16	-14	25	25.9			413
1979	MY1		1979	06	24.63611	20	10	31.48	-14	26	45.4			413
1979	MY1	*	1979	06	25.66181	20	09	53.55	-14	28	15.2		20.0	413
1979	MY1		1979	06	29.67859	20	07	10.59	-14	35	25.4			413
1979	MZ1		1979	06	24.69049	20	10	29.83	-16	04	34.4			413
1979	MZ1	*	1979	06	25.66181	20	09	57.74	-16	07	21.4		20.0	413
1979	MZ1		1979	06	29.67859	20	07	32.86	-16	19	54.7			413
1979	MA2		1979	06	23.64167	20	11	25.53	-12	41	39.1			413
1979	MA2		1979	06	24.63611	20	10	51.17	-12	37	43.0			413
1979	MA2	*	1979	06	25.66181	20	10	13.97	-12	33	49.2		19.5	413
1979	MA2		1979	06	29.67859	20	07	29.10	-12	19	54.6			413
1979	MB2		1979	06	23.63125	20	11	37.32	-15	53	20.1			413
1979	MB2		1979	06	24.63611	20	10	59.05	-15	55	44.7			413
1979	MB2	*	1979	06	25.66181	20	10	18.59	-15	58	17.7		19.5	413
1979	MB2		1979	06	29.70984	20	07	27.45	-16	09	17.0			413
1979	MC2		1979	06	23.63125	20	11	39.82	-16	40	09.2			413
1979	MC2		1979	06	24.63611	20	11	05.94	-16	41	18.2			413
1979	MC2	*	1979	06	25.66181	20	10	30.13	-16	42	31.5		18.0	413
1979	MC2		1979	06	29.70984	20	07	56.69	-16	48	18.3			413
1979	MD2		1979	06	23.63125	20	11	58.56	-14	47	18.2			413
1979	MD2		1979	06	24.63611	20	11	18.55	-14	48	26.2			413
1979	MD2	*	1979	06	25.66181	20	10	36.07	-14	49	42.8		19.5	413
1979	MD2		1979	06	29.70984	20	07	34.86	-14	55	48.5			413
1979	ME2		1979	06	23.62778	20	11	08.95	-14	43	10.6			413
1979	ME2		1979	06	24.69049	20	10	53.15	-14	47	58.2			413
1979	ME2	*	1979	06	25.66181	20	10	37.19	-14	52	35.4		19.5	413
1979	ME2		1979	06	29.67859	20	09	13.35	-15	13	48.3			413
1979	MF2		1979	06	23.63125	20	11	19.14	-17	52	04.2			413
1979	MF2		1979	06	24.63611	20	11	00.97	-17	52	37.5			413
1979	MF2	*	1979	06	25.66181	20	10	40.31	-17	53	18.3		18.5	413
1979	MF2		1979	06	29.70984	20	08	58.43	-17	57	22.3			413
1979	MG2		1979	06	24.69049	20	11	17.89	-16	52	56.9			413
1979	MG2	*	1979	06	25.66181	20	10	43.19	-16	55	31.5		20.0	413
1979	MG2		1979	06	29.67859	20	08	02.01	-17	07	26.4			413
1979	MH2		1979	06	23.62778	20	11	49.04	-14	08	09.1			413
1979	MH2		1979	06	24.63611	20	11	19.69	-14	08	26.6			413
1979	MH2	*	1979	06	25.66181	20	10	48.62	-14	08	49.5		19.0	413
1979	MH2		1979	06	29.70984	20	08	34.21	-14	11	20.8			413
1979	MJ2		1979	06	23.63125	20	12	19.75	-17	29	15.8			413
1979	MJ2		1979	06	24.63611	20	11	42.08	-17	33	37.3			413
1979	MJ2	*	1979	06	25.66181	20	11	02.15	-17	38	07.0		20.0	413
1979	MJ2		1979	06	29.67859	20	08	09.26	-17	57	05.0			413
1979	MK2		1979	06	23.64167	20	12	26.24	-17	50	15.2			413
1979	MK2		1979	06	24.63611	20	11	48.54	-17	54	37.5			413
1979	MK2	*	1979	06	25.66181	20	11	08.07	-17	59	12.7		16.5	413
1979	ML2		1979	06	23.64167	20	12	11.99	-12	33	29.7			413
1979	ML2		1979	06	24.63611	20	11	47.25	-12	38	53.2			413
1979	ML2	*	1979	06	25.66181	20	11	20.23	-12	44	37.2		17.0	413
1979	ML2		1979	06	29.67859	20	09	21.28	-13	08	48.1			413
1979	MM2		1979	06	24.63611	20	11	58.95	-15	31	49.7			413
1979	MM2	*	1979	06	25.66181	20	11	22.45	-15	29	15.0		19.5	413
1979	MM2		1979	06	29.70984	20	08	42.20	-15	20	06.0			413
1979	MN2		1979	06	23.63125	20	12	45.31	-16	21	34.5			413
1979	MN2		1979	06	24.63611	20	12	18.55	-16	23	49.2			413

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1979	MN2	*	1979	06	25.66181	20	11	49.39	-16	26	14.6		16.5	413
1979	MN2		1979	06	29.70984	20	09	36.83	-16	37	15.9			413
1979	MO2		1979	06	23.63125	20	12	38.21	-12	21	32.4			413
1979	MO2		1979	06	24.63611	20	12	17.03	-12	17	59.0			413
1979	MO2	*	1979	06	25.66181	20	11	53.20	-12	14	30.4		18.5	413
1979	MP2		1979	06	23.62778	20	13	18.21	-15	31	44.5			413
1979	MP2		1979	06	24.69049	20	12	40.88	-15	29	54.5			413
1979	MP2	*	1979	06	25.66181	20	12	04.58	-15	28	13.9		20.0	413
1979	MP2		1979	06	29.70984	20	09	23.31	-15	22	03.3			413
1979	MQ2		1979	06	23.63125	20	13	24.84	-12	38	09.4			413
1979	MQ2		1979	06	24.63611	20	12	51.37	-12	39	57.7			413
1979	MQ2	*	1979	06	25.66181	20	12	15.50	-12	41	57.8		19.5	413
1979	MQ2		1979	06	29.67859	20	09	39.59	-12	51	27.3			413
1979	MR2		1979	06	23.63125	20	13	50.34	-18	02	26.4			413
1979	MR2		1979	06	24.63611	20	13	16.62	-18	03	44.1			413
1979	MR2	*	1979	06	25.66181	20	12	40.78	-18	05	07.1		19.0	413
1979	MS2		1979	06	23.62778	20	14	25.15	-15	43	00.5			413
1979	MS2		1979	06	24.63611	20	13	51.55	-15	43	10.3			413
1979	MS2	*	1979	06	25.66181	20	13	15.73	-15	43	27.8		19.5	413
1979	MS2		1979	06	29.67859	20	10	37.91	-15	45	54.8			413
1979	MT2		1979	06	24.63611	20	13	59.58	-18	05	50.0			413
1979	MT2	*	1979	06	25.66181	20	13	18.88	-18	04	06.2		20.0	413
1979	MT2		1979	06	29.70984	20	10	26.16	-17	57	48.3			413
1979	MU2		1979	06	23.63125	20	14	15.82	-12	58	04.3			413
1979	MU2		1979	06	24.63611	20	13	49.27	-12	59	25.1			413
1979	MU2	*	1979	06	25.66181	20	13	21.06	-13	00	53.1		18.5	413
1979	MU2		1979	06	29.70984	20	11	17.02	-13	07	59.0			413
1979	MV2		1979	06	24.69049	20	13	53.40	-16	05	07.9			413
1979	MV2	*	1979	06	25.66181	20	13	21.10	-16	09	52.1		20.0	413
1979	MV2		1979	06	29.70984	20	10	49.57	-16	30	57.5			413
1979	MW2		1979	06	23.63125	20	14	25.77	-15	19	36.8			413
1979	MW2		1979	06	24.63611	20	13	55.90	-15	20	54.0			413
1979	MW2	*	1979	06	25.66181	20	13	24.18	-15	22	18.1		19.0	413
1979	MW2		1979	06	29.70984	20	11	07.64	-15	28	45.4			413
1979	MX2		1979	06	23.63125	20	14	47.24	-17	24	55.9			413
1979	MX2		1979	06	24.63611	20	14	12.75	-17	23	10.7			413
1979	MX2	*	1979	06	25.66181	20	13	36.26	-17	21	26.9		17.0	413
1979	MX2		1979	06	29.67859	20	11	01.43	-17	15	08.7			413
1979	MY2		1979	06	23.63125	20	15	09.46	-13	54	05.6			413
1979	MY2		1979	06	24.63611	20	14	30.15	-13	53	34.2			413
1979	MY2	*	1979	06	25.66181	20	13	48.51	-13	53	08.4		18.5	413
1979	MY2		1979	06	29.70984	20	10	50.36	-13	52	36.6			413
1979	MZ2		1979	06	23.63125	20	15	11.63	-17	23	48.6			413
1979	MZ2		1979	06	24.63611	20	14	34.06	-17	25	52.8			413
1979	MZ2	*	1979	06	25.66181	20	13	54.17	-17	28	03.6		19.5	413
1979	MZ2		1979	06	29.67859	20	11	05.89	-17	37	23.8			413
1979	MA3		1979	06	24.63611	20	14	37.23	-17	52	39.8			413
1979	MA3	*	1979	06	25.66181	20	13	54.69	-17	53	04.9		20.0	413
1979	MA3		1979	06	29.70984	20	10	51.23	-17	55	33.0			413
1979	MB3		1979	06	23.64167	20	15	29.56	-15	46	57.3			413
1979	MB3		1979	06	24.63611	20	15	00.43	-15	55	15.8			413
1979	MB3	*	1979	06	25.66181	20	14	28.70	-16	03	59.6		18.5	413
1979	MB3		1979	06	29.67859	20	12	09.21	-16	39	50.7			413
1979	MC3		1979	06	23.63125	20	15	45.90	-16	28	20.7			413
1979	MC3		1979	06	24.63611	20	15	13.98	-16	29	46.2			413
1979	MC3	*	1979	06	25.66181	20	14	39.91	-16	31	17.9		20.0	413
1979	MC3		1979	06	29.67859	20	12	10.74	-16	38	30.7			413
1979	MD3		1979	06	24.69049	20	15	14.79	-14	27	31.5			413
1979	MD3	*	1979	06	25.66181	20	14	43.19	-14	28	41.2		20.0	413

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1979	MD3	1979	06	29.67859	20	12	25.24	-14	34	07.0		413
1979	ME3	1979	06	24.69049	20	15	24.21	-12	51	27.5		413
1979	ME3 *	1979	06	25.66181	20	14	55.67	-12	52	44.3	20.0	413
1979	ME3	1979	06	29.70984	20	12	43.59	-12	59	14.0		413
1979	MF3	1979	06	24.69049	20	15	26.64	-15	29	52.8		413
1979	MF3 *	1979	06	25.66181	20	14	58.49	-15	30	24.4	20.0	413
1979	MF3	1979	06	29.67859	20	12	47.25	-15	33	47.3		413
1979	MG3	1979	06	23.63125	20	16	09.37	-15	05	16.3		413
1979	MG3	1979	06	24.63611	20	15	36.45	-15	03	16.9		413
1979	MG3 *	1979	06	25.66181	20	15	01.57	-15	01	18.2	18.5	413
1979	MG3	1979	06	29.70984	20	12	32.11	-14	54	18.5		413
1979	MH3	1979	06	24.63611	20	15	34.11	-18	00	17.5		413
1979	MH3 *	1979	06	25.66181	20	15	02.75	-18	04	32.4	20.0	413
1979	MJ3	1979	06	24.63611	20	15	44.77	-12	30	26.4		413
1979	MJ3 *	1979	06	25.66181	20	15	09.96	-12	31	36.3	20.0	413
1979	MK3	1979	06	23.63125	20	16	27.42	-16	49	10.9		413
1979	MK3	1979	06	24.63611	20	15	55.28	-16	51	37.1		413
1979	MK3 *	1979	06	25.66181	20	15	21.59	-16	54	09.9	19.5	413
1979	MK3	1979	06	29.70984	20	12	59.42	-17	04	51.4		413
1979	ML3	1979	06	23.63125	20	17	37.50	-14	50	21.9		413
1979	ML3	1979	06	24.63611	20	17	04.06	-14	50	22.2		413
1979	ML3 *	1979	06	25.66181	20	16	28.38	-14	50	29.0	17.0	413
1979	ML3	1979	06	29.67859	20	13	54.22	-14	52	00.7		413
1979	MM3	1979	06	23.64167	20	17	30.12	-15	52	46.9		413
1979	MM3	1979	06	24.63611	20	17	01.25	-15	59	24.9		413
1979	MM3 *	1979	06	25.66181	20	16	30.02	-16	06	25.5	18.5	413
1979	MM3	1979	06	29.67859	20	14	15.10	-16	35	11.7		413
1979	MN3	1979	06	23.63125	20	18	06.77	-16	58	07.4		413
1979	MN3	1979	06	24.69049	20	17	24.95	-16	59	09.1		413
1979	MN3 *	1979	06	25.66181	20	16	45.01	-17	00	12.7	18.5	413
1979	MN3	1979	06	29.67859	20	13	44.41	-17	05	28.3		413
1979	MO3	1979	06	24.69049	20	17	25.08	-16	55	34.2		413
1979	MO3 *	1979	06	25.66181	20	16	58.63	-16	57	57.2	20.0	413
1979	MO3	1979	06	29.67859	20	14	55.42	-17	08	47.5		413
1979	MP3	1979	06	23.62778	20	18	15.04	-15	02	18.0		413
1979	MP3	1979	06	24.63611	20	17	40.10	-15	02	23.6		413
1979	MP3 *	1979	06	25.66181	20	17	02.34	-15	02	36.0	19.5	413
1979	MP3	1979	06	29.67859	20	14	18.25	-15	04	34.3		413
1979	MQ3	1979	06	23.62778	20	18	18.76	-12	00	45.7		413
1979	MQ3	1979	06	24.63611	20	17	45.95	-12	03	46.1		413
1979	MQ3 *	1979	06	25.66181	20	17	11.13	-12	06	58.6	19.0	413
1979	MQ3	1979	06	29.67859	20	14	40.58	-12	21	04.5		413
1979	MR3	1979	06	23.64167	20	18	26.63	-15	56	11.6		413
1979	MR3	1979	06	24.63611	20	18	05.10	-16	01	47.4		413
1979	MR3 *	1979	06	25.66181	20	17	40.84	-16	07	45.4	16.5	413
1979	MR3	1979	06	29.67859	20	15	47.24	-16	33	04.0		413
1979	MS3	1979	06	23.63125	20	18	43.00	-15	49	30.3		413
1979	MS3	1979	06	24.63611	20	18	13.39	-15	49	22.0		413
1979	MS3 *	1979	06	25.66181	20	17	42.22	-15	49	17.3	19.5	413
1979	MS3	1979	06	29.67859	20	15	27.61	-15	49	46.9		413
1979	MT3	1979	06	23.63125	20	18	23.94	-16	59	54.4		413
1979	MT3	1979	06	24.63611	20	18	06.06	-16	56	48.5		413
1979	MT3 *	1979	06	25.66181	20	17	45.83	-16	53	47.8	20.0	413
1979	MT3	1979	06	29.70984	20	16	03.24	-16	42	50.5		413
1979	MU3 *	1979	06	25.66181	20	18	01.31	-18	00	38.7	20.0	413
1979	MU3	1979	06	29.67859	20	15	04.10	-18	07	18.0		413
1979	MV3	1979	06	23.64167	20	18	52.49	-12	12	39.6		413
1979	MV3	1979	06	24.63611	20	18	37.91	-12	11	25.2		413
1979	MV3 *	1979	06	25.66181	20	18	20.83	-12	10	18.0	19.5	413

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1979	MV3	1979	06	29.70984	20	16	54.99	-12	07	39.1		413
1979	MW3	1979	06	23.63125	20	19	13.95	-15	11	10.3		413
1979	MW3	1979	06	24.63611	20	18	51.39	-15	09	33.2		413
1979	MW3 *	1979	06	25.66181	20	18	26.26	-15	08	02.4	18.5	413
1979	MW3	1979	06	29.67859	20	16	27.88	-15	03	38.2		413
1979	MX3	1979	06	24.63611	20	18	50.80	-15	48	46.5		413
1979	MX3 *	1979	06	25.66181	20	18	29.48	-15	46	21.1	19.5	413
1979	MX3	1979	06	29.70984	20	16	44.08	-15	37	53.5		413
1979	MY3	1979	06	23.63125	20	19	24.37	-16	59	08.3		413
1979	MY3	1979	06	24.63611	20	18	59.21	-17	03	02.5		413
1979	MY3 *	1979	06	25.66181	20	18	31.67	-17	07	11.1	19.5	413
1979	MY3	1979	06	29.67859	20	16	27.48	-17	24	50.0		413
1979	MZ3	1979	06	23.63125	20	19	51.88	-17	53	43.3		413
1979	MZ3	1979	06	24.63611	20	19	20.56	-17	55	05.4		413
1979	MZ3 *	1979	06	25.66181	20	18	47.38	-17	56	33.3	18.5	413
1979	MZ3	1979	06	29.67859	20	16	25.81	-18	03	00.2		413
1979	MA4	1979	06	23.63125	20	19	43.12	-13	37	57.7		413
1979	MA4	1979	06	24.63611	20	19	18.09	-13	38	24.9		413
1979	MA4 *	1979	06	25.66181	20	18	51.34	-13	38	57.6	17.0	413
1979	MA4	1979	06	29.70984	20	16	54.30	-13	42	08.7		413
1979	MB4	1979	06	23.63125	20	20	20.57	-11	59	32.5		413
1979	MB4	1979	06	24.63611	20	19	50.36	-12	01	11.2		413
1979	MB4 *	1979	06	25.66181	20	19	17.84	-12	03	02.3	19.0	413
1979	MB4	1979	06	29.67859	20	16	53.21	-12	12	06.9		413
1979	MC4	1979	06	23.62778	20	20	03.59	-13	04	48.7		413
1979	MC4	1979	06	24.69049	20	19	43.94	-12	59	03.8		413
1979	MC4 *	1979	06	25.66181	20	19	23.98	-12	53	50.1	20.0	413
1979	MC4	1979	06	29.70984	20	17	38.30	-12	32	56.6		413
1979	MD4	1979	06	23.63125	20	20	17.26	-16	30	57.5		413
1979	MD4	1979	06	24.63611	20	19	52.08	-16	30	54.5		413
1979	MD4 *	1979	06	25.66181	20	19	24.36	-16	30	59.1	16.0	413
1979	MD4	1979	06	29.70984	20	17	15.81	-16	32	27.6		413
1979	ME4	1979	06	23.64167	20	20	29.46	-15	56	29.5		413
1979	ME4	1979	06	24.69049	20	19	59.56	-16	03	02.0		413
1979	ME4 *	1979	06	25.66181	20	19	30.39	-16	09	17.1	19.5	413
1979	ME4	1979	06	29.67859	20	17	15.58	-16	36	37.2		413
1979	MF4	1979	06	23.63125	20	20	15.80	-15	44	35.2		413
1979	MF4	1979	06	24.63611	20	19	59.66	-15	48	37.8		413
1979	MF4 *	1979	06	25.66181	20	19	41.02	-15	52	58.0	15.0	413
1979	MG4	1979	06	23.63125	20	20	49.19	-17	33	57.0		413
1979	MG4	1979	06	24.63611	20	20	18.93	-17	35	37.1		413
1979	MG4 *	1979	06	25.66181	20	19	46.79	-17	37	23.4	18.0	413
1979	MG4	1979	06	29.67859	20	17	29.09	-17	45	07.1		413
1979	MH4	1979	06	24.63611	20	20	21.42	-12	13	37.9		413
1979	MH4 *	1979	06	25.66181	20	19	56.41	-12	13	04.7	19.5	413
1979	MH4	1979	06	29.70984	20	17	59.47	-12	12	40.3		413
1979	MJ4	1979	06	23.63125	20	20	39.76	-13	36	10.1		413
1979	MJ4	1979	06	24.63611	20	20	21.86	-13	43	17.1		413
1979	MJ4 *	1979	06	25.66181	20	20	01.79	-13	50	46.1	18.0	413
1979	MJ4	1979	06	29.67859	20	18	26.50	-14	22	20.6		413
1979	MK4	1979	06	23.63125	20	20	54.59	-15	42	39.7		413
1979	MK4	1979	06	24.69049	20	20	31.07	-15	45	44.0		413
1979	MK4 *	1979	06	25.66181	20	20	07.74	-15	48	44.3	20.0	413
1979	MK4	1979	06	29.70984	20	18	10.95	-16	02	54.0		413
1979	ML4	1979	06	24.69049	20	20	52.85	-12	49	50.4		413
1979	ML4 *	1979	06	25.66181	20	20	16.57	-12	48	51.0	20.0	413
1979	ML4	1979	06	29.70984	20	17	32.23	-12	45	48.5		413
1979	MM4	1979	06	23.63125	20	21	31.49	-13	43	12.0		413
1979	MM4	1979	06	24.63611	20	21	05.51	-13	42	40.9		413

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1979	MM4	*	1979	06	25.66181	20	20	36.84	-13	42	20.0		18.5	413
1979	MM4		1979	06	29.70984	20	18	23.58	-13	42	45.6			413
1979	MN4		1979	06	23.63125	20	20	42.14	-13	20	12.2			413
1979	MN4		1979	06	24.69049	20	20	40.55	-13	11	40.3			413
1979	MN4	*	1979	06	25.66181	20	20	37.38	-13	03	52.7		19.0	413
1979	MN4		1979	06	29.67859	20	20	02.69	-12	32	10.9			413
1979	MO4	*	1979	06	25.66181	20	21	16.21	-16	58	04.4		20.0	413
1979	MO4		1979	06	29.70984	20	18	51.16	-17	06	16.8			413
1979	MP4		1979	06	24.63611	20	21	53.27	-13	13	03.2			413
1979	MP4	*	1979	06	25.66181	20	21	22.07	-13	12	50.1		20.0	413
1979	MP4		1979	06	29.70984	20	19	04.10	-13	13	15.4			413
1979	MQ4		1979	06	23.63125	20	22	32.37	-12	05	47.4			413
1979	MQ4		1979	06	24.63611	20	22	00.23	-12	04	15.2			413
1979	MQ4	*	1979	06	25.66181	20	21	26.36	-12	02	45.5		18.5	413
1979	MQ4		1979	06	29.70984	20	19	02.27	-11	57	46.9			413
1979	MR4		1979	06	23.63125	20	22	58.85	-12	19	28.2			413
1979	MR4		1979	06	24.63611	20	22	23.44	-12	19	35.6			413
1979	MR4	*	1979	06	25.66181	20	21	45.85	-12	19	51.0		16.5	413
1979	MR4		1979	06	29.67859	20	19	04.69	-12	22	01.8			413
1979	MS4		1979	06	23.63125	20	22	40.19	-15	35	43.7			413
1979	MS4		1979	06	24.63611	20	22	14.63	-15	38	05.5			413
1979	MS4	*	1979	06	25.66181	20	21	46.72	-15	40	38.0		19.5	413
1979	MS4		1979	06	29.67859	20	19	39.53	-15	52	08.2			413
1979	MT4		1979	06	23.63125	20	23	07.17	-13	50	34.2			413
1979	MT4		1979	06	24.63611	20	22	28.87	-13	47	46.5			413
1979	MT4	*	1979	06	25.66181	20	21	48.47	-13	45	01.5		18.5	413
1979	MT4		1979	06	29.70984	20	18	55.99	-13	34	52.3			413
1979	MU4		1979	06	23.63125	20	23	15.36	-16	38	46.0			413
1979	MU4		1979	06	24.63611	20	22	47.52	-16	40	43.2			413
1979	MU4	*	1979	06	25.66181	20	22	17.20	-16	42	50.7		18.5	413
1979	MV4		1979	06	23.63125	20	23	41.62	-16	09	00.2			413
1979	MV4		1979	06	24.69049	20	23	02.75	-16	08	20.6			413
1979	MV4	*	1979	06	25.66181	20	22	25.27	-16	07	52.1		19.0	413
1979	MV4		1979	06	29.67859	20	19	33.46	-16	06	58.3			413
1979	MW4		1979	06	24.63611	20	22	59.95	-15	14	16.3			413
1979	MW4	*	1979	06	25.66181	20	22	26.90	-15	19	16.7		20.0	413
1979	MW4		1979	06	29.67859	20	20	05.36	-15	40	04.6			413
1979	MX4		1979	06	23.63125	20	23	22.43	-12	10	06.0			413
1979	MX4		1979	06	24.63611	20	22	56.51	-12	02	20.6			413
1979	MX4	*	1979	06	25.66181	20	22	28.11	-11	54	30.6		16.5	413
1979	MY4		1979	06	24.69049	20	23	03.79	-14	47	09.0			413
1979	MY4	*	1979	06	25.66181	20	22	39.49	-14	37	34.3		20.0	413
1979	MY4		1979	06	29.67859	20	20	38.03	-13	58	10.9			413
1979	MZ4		1979	06	23.63125	20	23	17.81	-15	32	52.5			413
1979	MZ4		1979	06	24.63611	20	23	01.67	-15	38	09.0			413
1979	MZ4	*	1979	06	25.66181	20	22	43.35	-15	43	44.6		18.0	413
1979	MZ4		1979	06	29.70984	20	21	13.44	-16	07	43.6			413
1979	MA5		1979	06	23.63125	20	23	54.14	-12	13	00.0			413
1979	MA5		1979	06	24.63611	20	23	22.98	-12	11	08.5			413
1979	MA5	*	1979	06	25.66181	20	22	49.95	-12	09	19.0		18.5	413
1979	MA5		1979	06	29.70984	20	20	28.18	-12	03	05.4			413
1979	MB5		1979	06	23.63125	20	23	43.31	-13	10	02.8			413
1979	MB5		1979	06	24.63611	20	23	23.36	-13	09	11.0			413
1979	MB5	*	1979	06	25.66181	20	23	01.22	-13	08	26.3		18.0	413
1979	MB5		1979	06	29.67859	20	21	17.72	-13	06	57.4			413
1979	MC5		1979	06	23.62778	20	23	53.35	-11	56	37.7			413
1979	MC5		1979	06	24.63611	20	23	29.96	-11	56	25.4			413
1979	MC5	*	1979	06	25.66181	20	23	04.07	-11	56	21.7		20.0	413
1979	MC5		1979	06	29.70984	20	21	02.82	-11	57	46.3			413

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1979	MD5	1979	06	23.63125	20	24	26.88	-17	49	37.4		413
1979	MD5	1979	06	24.63611	20	23	59.41	-17	55	17.4		413
1979	MD5 *	1979	06	25.66181	20	23	29.99	-18	01	11.9	19.5	413
1979	ME5	1979	06	23.64167	20	24	49.16	-12	43	26.2		413
1979	ME5	1979	06	24.69049	20	24	15.20	-12	45	57.9		413
1979	ME5 *	1979	06	25.66181	20	23	42.16	-12	48	28.7	20.0	413
1979	ME5	1979	06	29.67859	20	21	11.40	-13	00	14.2		413
1979	MF5	1979	06	24.63611	20	24	24.46	-17	42	35.2		413
1979	MF5 *	1979	06	25.66181	20	23	50.97	-17	42	04.8	20.0	413
1979	MF5	1979	06	29.70984	20	21	24.88	-17	40	50.9		413
1979	MG5	1979	06	23.63125	20	24	25.56	-13	43	06.0		413
1979	MG5	1979	06	24.69049	20	24	08.93	-13	39	43.8		413
1979	MG5 *	1979	06	25.66181	20	23	51.84	-13	36	48.0	17.5	413
1979	MG5	1979	06	29.70984	20	22	19.90	-13	26	03.5		413
1979	MH5	1979	06	24.63611	20	24	38.28	-17	24	20.7		413
1979	MH5 *	1979	06	25.66181	20	24	07.04	-17	24	33.1	20.0	413
1979	MJ5	1979	06	23.63125	20	25	22.25	-13	18	10.9		413
1979	MJ5	1979	06	24.69049	20	24	45.79	-13	19	36.4		413
1979	MJ5 *	1979	06	25.66181	20	24	10.71	-13	21	02.5	18.5	413
1979	MJ5	1979	06	29.67859	20	21	30.27	-13	28	19.3		413
1979	MK5	1979	06	23.63125	20	25	38.87	-15	18	42.6		413
1979	MK5 *	1979	06	25.66181	20	24	28.28	-15	20	21.7	19.5	413
1979	MK5	1979	06	29.67859	20	21	52.45	-15	24	45.4		413
1979	ML5	1979	06	24.63611	20	25	22.16	-12	28	26.6		413
1979	ML5 *	1979	06	25.66181	20	24	52.93	-12	29	25.2	20.0	413
1979	ML5	1979	06	29.70984	20	22	44.30	-12	34	39.4		413
1979	MM5	1979	06	23.63125	20	26	02.65	-17	32	56.5		413
1979	MM5	1979	06	24.63611	20	25	34.91	-17	33	25.0		413
1979	MM5 *	1979	06	25.66181	20	25	04.77	-17	33	59.8	18.5	413
1979	MM5	1979	06	29.67859	20	22	49.80	-17	37	13.5		413
1979	MN5	1979	06	24.63611	20	25	53.85	-15	56	22.4		413
1979	MN5 *	1979	06	25.66181	20	25	24.09	-15	58	23.9	20.0	413
1979	MN5	1979	06	29.67859	20	23	13.79	-16	07	24.9		413
1979	MO5	1979	06	23.62778	20	26	22.86	-12	51	18.1		413
1979	MO5	1979	06	24.69049	20	25	54.05	-12	48	49.2		413
1979	MO5 *	1979	06	25.66181	20	25	25.91	-12	46	42.0	20.0	413
1979	MO5	1979	06	29.70984	20	23	09.48	-12	39	18.6		413
1979	MP5	1979	06	23.62778	20	25	59.49	-16	23	06.4		413
1979	MP5	1979	06	24.63611	20	25	48.31	-16	25	04.8		413
1979	MP5 *	1979	06	25.66181	20	25	34.82	-16	27	14.0	19.5	413
1979	MP5	1979	06	29.70984	20	24	21.81	-16	37	31.1		413
1979	MQ5	1979	06	24.69049	20	26	05.62	-12	47	36.8		413
1979	MQ5 *	1979	06	25.66181	20	25	35.02	-12	45	46.0	20.0	413
1979	MQ5	1979	06	29.67859	20	23	17.46	-12	38	56.1		413
1979	MR5	1979	06	23.63125	20	26	33.61	-17	50	26.7		413
1979	MR5	1979	06	24.63611	20	26	08.15	-17	50	20.1		413
1979	MR5 *	1979	06	25.66181	20	25	40.30	-17	50	19.0	18.5	413
1979	MR5	1979	06	29.67859	20	23	32.02	-17	51	16.9		413
1979	MS5	1979	06	23.63125	20	26	47.54	-17	33	56.6		413
1979	MS5	1979	06	24.69049	20	26	15.60	-17	38	57.0		413
1979	MS5 *	1979	06	25.66181	20	25	44.71	-17	43	42.1	20.0	413
1979	MS5	1979	06	29.67859	20	23	20.26	-18	04	31.8		413
1979	MT5	1979	06	24.63611	20	26	18.56	-12	48	11.2		413
1979	MT5 *	1979	06	25.66181	20	25	44.79	-12	52	37.4	20.0	413
1979	MT5	1979	06	29.70984	20	23	20.42	-13	11	22.1		413
1979	MU5	1979	06	24.63611	20	26	40.01	-18	03	25.4		413
1979	MU5 *	1979	06	25.66181	20	26	20.02	-18	05	31.3	19.5	413
1979	MV5 *	1979	06	25.66181	20	26	30.19	-15	30	55.3	20.0	413
1979	MV5	1979	06	29.70984	20	24	12.07	-15	34	55.8		413

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1979	MW5	1979	06	24.63611	20	26	57.70	-15	28	40.7		413	
1979	MW5	*	1979	06	25.66181	20	26	42.69	-15	34	17.4	20.0	413
1979	MW5	1979	06	29.70984	20	25	27.77	-15	58	06.4		413	
1979	MX5	1979	06	23.63125	20	28	25.24	-15	38	43.4		413	
1979	MX5	1979	06	24.63611	20	27	51.46	-15	40	33.5		413	
1979	MX5	*	1979	06	25.66181	20	27	15.20	-15	42	32.7	18.5	413
1979	MX5	1979	06	29.67859	20	24	36.40	-15	51	39.3		413	
1979	MY5	1979	06	23.63125	20	28	36.17	-14	07	23.6		413	
1979	MY5	1979	06	24.63611	20	28	02.14	-14	02	45.9		413	
1979	MY5	*	1979	06	25.66181	20	27	25.77	-13	58	07.7	17.0	413
1979	MY5	1979	06	29.67859	20	24	48.37	-13	40	48.4		413	
1979	MZ5	1979	06	24.63611	20	27	56.02	-15	41	21.7		413	
1979	MZ5	*	1979	06	25.66181	20	27	26.71	-15	40	57.8	19.5	413
1979	MA6	1979	06	23.63125	20	28	33.16	-15	06	35.7		413	
1979	MA6	1979	06	24.63611	20	28	01.14	-15	09	41.6		413	
1979	MA6	*	1979	06	25.66181	20	27	26.89	-15	12	59.5	18.5	413
1979	MA6	1979	06	29.67859	20	24	56.97	-15	27	15.0		413	
1979	MB6	1979	06	23.68681	20	28	07.07	-14	45	01.2		413	
1979	MB6	1979	06	24.63611	20	27	50.32	-14	46	16.2		413	
1979	MB6	*	1979	06	25.66181	20	27	30.24	-14	47	46.2	18.0	413
1979	MB6	1979	06	29.67859	20	25	51.60	-14	55	24.0		413	
1979	MC6	1979	06	23.64167	20	29	13.25	-13	49	58.0		413	
1979	MC6	1979	06	24.63611	20	28	41.60	-13	37	47.6		413	
1979	MC6	*	1979	06	25.66181	20	28	06.75	-13	25	11.9	18.5	413
1979	MC6	1979	06	29.67859	20	25	30.82	-12	35	58.6		413	
1979	MD6	1979	06	24.69049	20	28	39.80	-17	10	34.1		413	
1979	MD6	*	1979	06	25.66181	20	28	15.96	-17	13	01.5	20.0	413
1979	MD6	1979	06	29.70984	20	26	23.43	-17	24	00.2		413	
1979	ME6	1979	06	24.69049	20	28	53.52	-12	59	53.9		413	
1979	ME6	*	1979	06	25.66181	20	28	24.27	-12	55	36.7	20.0	413
1979	ME6	1979	06	29.70984	20	26	02.42	-12	39	00.5		413	
1979	MF6	1979	06	24.63611	20	29	09.64	-13	58	18.0		413	
1979	MF6	*	1979	06	25.66181	20	28	45.86	-14	01	13.6	20.0	413
1979	MF6	1979	06	29.67859	20	26	55.02	-14	14	27.2		413	
1979	MG6	1979	06	23.63125	20	29	36.69	-12	33	13.1		413	
1979	MG6	1979	06	24.63611	20	29	13.71	-12	28	37.4		413	
1979	MG6	*	1979	06	25.66181	20	28	48.18	-12	24	04.5	18.5	413
1979	MG6	1979	06	29.67859	20	26	48.36	-12	07	38.5		413	
1979	MH6	1979	06	24.63611	20	30	04.03	-17	36	55.2		413	
1979	MH6	*	1979	06	25.66181	20	29	34.22	-17	41	25.6	20.0	413
1979	MH6	1979	06	29.67859	20	27	26.69	-17	59	55.9		413	
1979	MJ6	1979	06	24.69049	20	30	18.77	-16	58	32.3		413	
1979	MJ6	*	1979	06	25.66181	20	30	01.88	-16	59	52.5	20.0	413
1979	MJ6	1979	06	29.70984	20	28	32.17	-17	06	57.7		413	
1979	MK6	1979	06	23.64167	20	31	07.23	-15	47	20.6		413	
1979	MK6	1979	06	24.63611	20	30	40.02	-15	48	50.3		413	
1979	MK6	*	1979	06	25.66181	20	30	10.42	-15	50	27.0	19.0	413
1979	MK6	1979	06	29.70984	20	27	59.58	-15	57	56.3		413	
1979	ML6	1979	06	24.63611	20	30	33.75	-14	05	36.0		413	
1979	ML6	*	1979	06	25.66181	20	30	12.96	-14	07	40.4	18.5	413
1979	ML6	1979	06	29.67859	20	28	33.88	-14	17	29.4		413	
1979	MM6	1979	06	23.62778	20	31	16.06	-13	26	13.5		413	
1979	MM6	1979	06	24.69049	20	30	45.95	-13	26	16.1		413	
1979	MM6	*	1979	06	25.66181	20	30	16.87	-13	26	23.7	19.5	413
1979	MM6	1979	06	29.70984	20	28	05.14	-13	27	50.3		413	
1979	MN6	1979	06	23.63125	20	31	30.22	-17	28	23.6		413	
1979	MN6	1979	06	24.63611	20	30	57.44	-17	31	06.5		413	
1979	MN6	*	1979	06	25.66181	20	30	22.22	-17	33	59.2	19.0	413
1979	MN6	1979	06	29.67859	20	27	45.73	-17	46	31.9		413	

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1979	MO6	1979	06	23.63125	20	31	29.77	-16	45	56.2		413
1979	MO6	1979	06	24.63611	20	31	03.57	-16	51	06.3		413
1979	MO6 *	1979	06	25.66181	20	30	35.36	-16	56	28.6	18.5	413
1979	MO6	1979	06	29.67859	20	28	30.71	-17	18	52.8		413
1979	MP6	1979	06	24.63611	20	31	14.42	-16	06	17.6		413
1979	MP6 *	1979	06	25.66181	20	30	42.39	-16	05	43.1	19.5	413
1979	MP6	1979	06	29.70984	20	28	22.23	-16	04	19.6		413
1979	MQ6	1979	06	24.63611	20	31	39.09	-16	18	58.2		413
1979	MQ6 *	1979	06	25.66181	20	31	01.94	-16	17	49.7	19.0	413
1979	MQ6	1979	06	29.67859	20	28	17.62	-16	14	23.3		413
1979	MR6	1979	06	23.62778	20	32	04.17	-12	43	18.0		413
1979	MR6	1979	06	24.63611	20	31	37.42	-12	44	42.3		413
1979	MR6 *	1979	06	25.66181	20	31	08.27	-12	46	18.1	19.5	413
1979	MR6	1979	06	29.67859	20	28	55.36	-12	54	24.4		413
1979	MS6	1979	06	23.63125	20	32	18.67	-12	06	02.7		413
1979	MS6	1979	06	24.63611	20	31	44.98	-12	04	57.8		413
1979	MS6 *	1979	06	25.66181	20	31	09.18	-12	03	58.9	17.5	413
1979	MS6	1979	06	29.67859	20	28	34.44	-12	01	19.4		413
1979	MT6	1979	06	23.62778	20	32	44.15	-14	45	30.5		413
1979	MT6	1979	06	24.63611	20	32	09.27	-14	42	16.0		413
1979	MT6 *	1979	06	25.66181	20	31	32.44	-14	39	04.9	20.0	413
1979	MU6	1979	06	24.63611	20	32	31.54	-13	12	18.3		413
1979	MU6 *	1979	06	25.66181	20	32	05.16	-13	17	09.1	20.0	413
1979	MU6	1979	06	29.70984	20	30	08.29	-13	37	46.1		413
1979	MV6	1979	06	23.64167	20	33	09.40	-13	18	02.3		413
1979	MV6	1979	06	24.63611	20	32	43.67	-13	17	15.7		413
1979	MV6 *	1979	06	25.66181	20	32	15.25	-13	16	34.9	17.0	413
1979	MV6	1979	06	29.67859	20	30	07.45	-13	15	16.9		413
1979	MW6	1979	06	24.63611	20	32	56.34	-14	46	13.5		413
1979	MW6 *	1979	06	25.66181	20	32	27.28	-14	47	04.9	20.0	413
1979	MW6	1979	06	29.67859	20	30	18.59	-14	51	35.6		413
1979	MX6	1979	06	23.62778	20	09	15.12	-13	40	49.5		413
1979	MX6	1979	06	24.63611	20	08	36.41	-13	38	02.9		413
1979	MX6 *	1979	06	25.71042	20	07	53.25	-13	35	13.1	17.0	413
1979	MY6	1979	06	24.69049	20	10	03.63	-15	16	38.1		413
1979	MY6 *	1979	06	25.71042	20	09	36.91	-15	17	37.1	20.0	413
1979	MY6	1979	06	29.70984	20	07	33.83	-15	22	53.7		413
1979	MZ6	1979	06	23.63125	20	10	38.32	-15	31	03.7		413
1979	MZ6	1979	06	24.63611	20	10	10.66	-15	28	48.8		413
1979	MZ6 *	1979	06	25.71042	20	09	39.07	-15	26	32.2	18.0	413
1979	MZ6	1979	06	29.70984	20	07	23.35	-15	19	06.1		413
1979	MA7	1979	06	24.63611	20	10	26.55	-15	56	25.4		413
1979	MA7 *	1979	06	25.71042	20	09	47.73	-15	56	40.4	20.0	413
1979	MA7	1979	06	29.70984	20	07	10.81	-15	58	27.8		413
1979	MB7	1979	06	23.63125	20	11	15.25	-13	32	09.0		413
1979	MB7	1979	06	24.69049	20	10	42.42	-13	31	16.3		413
1979	MB7 *	1979	06	25.71042	20	10	09.40	-13	30	33.2	20.0	413
1979	MB7	1979	06	29.67859	20	07	45.36	-13	28	50.5		413
1979	MC7	1979	06	24.69049	20	10	48.81	-16	14	39.6		413
1979	MC7 *	1979	06	25.71042	20	10	23.15	-16	16	55.8	20.0	413
1979	MC7	1979	06	29.67859	20	08	25.36	-16	27	10.3		413
1979	MD7	1979	06	24.63611	20	11	16.91	-16	13	25.2		413
1979	MD7 *	1979	06	25.71042	20	10	32.09	-16	18	04.2	20.0	413
1979	MD7	1979	06	29.70984	20	07	29.32	-16	36	40.1		413
1979	ME7	1979	06	23.63125	20	12	26.28	-13	51	57.4		413
1979	ME7	1979	06	24.69049	20	11	43.54	-13	48	30.4		413
1979	ME7 *	1979	06	25.71042	20	11	00.84	-13	45	15.2	18.5	413
1979	ME7	1979	06	29.67859	20	08	02.25	-13	33	14.0		413
1979	MF7	1979	06	23.62778	20	12	06.27	-16	05	14.0		413

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1979	MF7	1979	06	24.63611	20	11	38.15	-16	08	34.7		413	
1979	MF7	*	1979	06	25.71042	20	11	06.76	-16	12	16.3	20.0	413
1979	MG7	1979	06	24.69049	20	12	23.34	-15	39	20.8		413	
1979	MG7	*	1979	06	25.71042	20	11	49.03	-15	40	36.5	20.0	413
1979	MG7	1979	06	29.70984	20	09	20.58	-15	46	31.1		413	
1979	MH7	1979	06	24.63611	20	12	40.01	-12	41	23.2		413	
1979	MH7	*	1979	06	25.71042	20	12	00.92	-12	46	50.9	18.5	413
1979	MH7	1979	06	29.67859	20	09	24.67	-13	08	22.0		413	
1979	MJ7	*	1979	06	25.71042	20	12	25.73	-16	07	56.0	20.0	413
1979	MJ7	1979	06	29.70984	20	10	13.57	-16	20	44.2		413	
1979	MK7	1979	06	23.62778	20	13	45.20	-16	13	59.7		413	
1979	MK7	1979	06	24.63611	20	13	11.40	-16	14	56.1		413	
1979	MK7	*	1979	06	25.71042	20	12	33.92	-16	16	00.0	20.0	413
1979	MK7	1979	06	29.70984	20	10	04.77	-16	20	36.5		413	
1979	ML7	1979	06	24.69049	20	13	22.84	-17	50	10.3		413	
1979	ML7	*	1979	06	25.71042	20	12	55.72	-17	53	37.4	19.5	413
1979	ML7	1979	06	29.67859	20	10	51.77	-18	08	25.5		413	
1979	MM7	1979	06	23.62778	20	14	10.77	-13	47	13.8		413	
1979	MM7	1979	06	24.63611	20	13	46.34	-13	48	42.7		413	
1979	MM7	*	1979	06	25.71042	20	13	17.88	-13	50	30.6	19.0	413
1979	MM7	1979	06	29.67859	20	11	13.42	-13	59	05.3		413	
1979	MN7	1979	06	23.62778	20	14	30.79	-13	05	00.7		413	
1979	MN7	1979	06	24.69049	20	13	56.85	-13	06	59.8		413	
1979	MN7	*	1979	06	25.71042	20	13	22.77	-13	09	04.2	20.0	413
1979	MN7	1979	06	29.67859	20	10	55.62	-13	18	25.4		413	
1979	MO7	1979	06	24.63611	20	14	17.80	-12	14	11.7		413	
1979	MO7	*	1979	06	25.71042	20	13	43.41	-12	13	46.0	20.0	413
1979	MO7	1979	06	29.67859	20	11	26.45	-12	13	03.9		413	
1979	MP7	1979	06	24.69049	20	14	50.68	-14	09	17.8		413	
1979	MP7	*	1979	06	25.71042	20	14	24.03	-14	10	47.5	20.0	413
1979	MQ7	*	1979	06	25.71042	20	15	19.25	-17	04	35.7	20.0	413
1979	MQ7	1979	06	29.70984	20	12	08.68	-17	03	21.9		413	
1979	MR7	1979	06	24.69049	20	16	08.91	-17	37	44.7		413	
1979	MR7	*	1979	06	25.71042	20	15	34.14	-17	33	29.6	20.0	413
1979	MR7	1979	06	29.70984	20	12	58.00	-17	17	13.6		413	
1979	MS7	1979	06	23.62778	20	17	23.47	-15	06	47.3		413	
1979	MS7	1979	06	24.69049	20	16	51.74	-15	05	24.4		413	
1979	MS7	*	1979	06	25.71042	20	16	20.30	-15	04	17.1	20.0	413
1979	MS7	1979	06	29.70984	20	14	01.61	-15	00	39.6		413	
1979	MT7	1979	06	24.69049	20	17	08.30	-13	28	43.3		413	
1979	MT7	*	1979	06	25.71042	20	16	32.14	-13	30	28.6	20.0	413
1979	MT7	1979	06	29.67859	20	13	59.06	-13	38	21.2		413	
1979	MU7	1979	06	23.63125	20	20	04.27	-13	06	26.0		413	
1979	MU7	1979	06	24.63611	20	19	53.74	-13	00	42.8		413	
1979	MU7	*	1979	06	25.71042	20	19	39.90	-12	54	46.2	18.5	413
1979	MU7	1979	06	29.67859	20	18	28.75	-12	34	08.2		413	
1979	MV7	1979	06	24.63611	20	20	34.83	-13	04	10.2		413	
1979	MV7	*	1979	06	25.71042	20	20	03.46	-13	04	07.3	19.5	413
1979	MV7	1979	06	29.67859	20	17	55.15	-13	04	56.7		413	
1979	MW7	1979	06	23.63125	20	21	40.44	-13	54	13.8		413	
1979	MW7	*	1979	06	25.71042	20	20	46.84	-13	49	33.6	20.0	413
1979	MW7	1979	06	29.70984	20	18	40.14	-13	42	21.3		413	
1979	MX7	1979	06	24.69049	20	22	16.06	-16	45	13.7		413	
1979	MX7	*	1979	06	25.71042	20	21	43.30	-16	42	32.8	20.0	413
1979	MX7	1979	06	29.70984	20	19	18.18	-16	32	34.1		413	
1979	MY7	1979	06	24.63611	20	23	04.17	-17	45	13.0		413	
1979	MY7	*	1979	06	25.71042	20	22	26.55	-17	43	00.6	20.0	413
1979	MY7	1979	06	29.70984	20	19	51.89	-17	35	21.0		413	
1979	MZ7	1979	06	23.62778	20	23	05.29	-14	43	53.8		413	

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1979 NOV. 1

1979	MZ7	1979	06	24.63611	20	22	48.58	-14	44	37.1		413	
1979	MZ7	*	1979	06	25.71042	20	22	28.77	-14	45	33.7	20.0	413
1979	MA8	1979	06	24.63611	20	23	17.58	-15	53	59.8		413	
1979	MA8	*	1979	06	25.71042	20	22	44.54	-15	56	00.0	20.0	413
1979	MA8	1979	06	29.70984	20	20	30.47	-16	04	15.1		413	
1979	MB8	1979	06	24.63611	20	23	28.10	-12	53	38.3		413	
1979	MB8	*	1979	06	25.71042	20	22	50.31	-12	55	55.0	20.0	413
1979	MB8	1979	06	29.67859	20	20	17.92	-13	05	38.0		413	
1979	MC8	1979	06	24.69049	20	23	09.45	-16	32	36.1		413	
1979	MC8	*	1979	06	25.71042	20	22	50.82	-16	31	48.6	20.0	413
1979	MC8	1979	06	29.67859	20	21	19.44	-16	29	57.7		413	
1979	MD8	1979	06	24.63611	20	25	04.12	-12	24	53.3		413	
1979	MD8	*	1979	06	25.71042	20	24	26.29	-12	23	50.3	20.0	413
1979	MD8	1979	06	29.70984	20	21	53.86	-12	20	48.8		413	
1979	ME8	1979	06	24.63611	20	25	20.97	-13	08	23.5		413	
1979	ME8	*	1979	06	25.71042	20	24	40.19	-13	09	24.9	19.5	413
1979	ME8	1979	06	29.67859	20	21	54.59	-13	14	24.3		413	
1979	MF8	1979	06	24.63611	20	25	24.10	-17	15	11.0		413	
1979	MF8	*	1979	06	25.71042	20	24	52.42	-17	16	43.1	20.0	413
1979	MG8	1979	06	24.63611	20	25	41.60	-15	37	50.6		413	
1979	MG8	*	1979	06	25.71042	20	25	10.47	-15	42	34.3	20.0	413
1979	MG8	1979	06	29.67859	20	23	03.74	-16	01	14.6		413	
1979	MH8	1979	06	24.69049	20	25	49.44	-14	56	05.0		413	
1979	MH8	*	1979	06	25.71042	20	25	33.04	-14	56	04.3	20.0	413
1979	MH8	1979	06	29.67859	20	24	10.06	-14	57	35.1		413	
1979	MJ8	1979	06	24.69049	20	26	04.18	-13	26	47.8		413	
1979	MJ8	*	1979	06	25.71042	20	25	34.40	-13	25	57.7	20.0	413
1979	MJ8	1979	06	29.67859	20	23	23.23	-13	23	46.4		413	
1979	MK8	1979	06	24.69049	20	26	25.43	-15	19	15.2		413	
1979	MK8	*	1979	06	25.71042	20	26	02.43	-15	19	27.7	20.0	413
1979	MK8	1979	06	29.67859	20	24	14.16	-15	21	46.6		413	
1979	ML8	1979	06	24.69049	20	26	41.10	-14	48	05.3		413	
1979	ML8	*	1979	06	25.71042	20	26	05.07	-14	50	11.6	20.0	413
1979	ML8	1979	06	29.67859	20	23	29.52	-14	59	29.4		413	
1979	MM8	1979	06	23.63125	20	27	28.90	-13	13	33.5		413	
1979	MM8	1979	06	24.63611	20	27	06.26	-13	13	52.9		413	
1979	MM8	*	1979	06	25.71042	20	26	40.15	-13	14	22.8	18.5	413
1979	MM8	1979	06	29.67859	20	24	46.94	-13	17	44.3		413	
1979	MN8	1979	06	24.69049	20	27	41.55	-13	07	02.5		413	
1979	MN8	*	1979	06	25.71042	20	27	15.49	-13	07	14.2	20.0	413
1979	MO8	1979	06	23.63125	20	28	37.42	-16	59	09.7		413	
1979	MO8	1979	06	24.63611	20	28	05.71	-16	57	11.9		413	
1979	MO8	*	1979	06	25.71042	20	27	30.32	-16	55	08.5	20.0	413
1979	MO8	1979	06	29.67859	20	25	06.83	-16	48	09.0		413	
1979	MP8	*	1979	06	25.71042	20	27	36.88	-17	45	54.9	20.0	413
1979	MP8	1979	06	29.67859	20	25	00.66	-17	45	24.4		413	
1979	MQ8	1979	06	24.69049	20	28	17.33	-17	06	36.3		413	
1979	MQ8	*	1979	06	25.71042	20	27	44.00	-17	09	24.6	20.0	413
1979	MQ8	1979	06	29.67859	20	25	19.88	-17	21	21.6		413	
1979	MR8	*	1979	06	25.71042	20	27	45.47	-16	15	59.2	20.0	413
1979	MR8	1979	06	29.70984	20	25	31.44	-16	33	19.5		413	
1979	MS8	1979	06	23.63125	20	29	53.61	-16	55	34.7		413	
1979	MS8	1979	06	24.63611	20	29	28.83	-16	56	30.1		413	
1979	MS8	*	1979	06	25.71042	20	29	00.72	-16	57	32.7	16.5	413
1979	MS8	1979	06	29.70984	20	27	02.12	-17	02	24.8		413	
1979	MT8	1979	06	23.62778	20	30	28.01	-12	27	26.3		413	
1979	MT8	1979	06	24.63611	20	29	57.56	-12	27	32.5		413	
1979	MT8	*	1979	06	25.71042	20	29	23.75	-12	27	45.1	20.0	413
1979	MT8	1979	06	29.70984	20	27	07.18	-12	29	28.2		413	

1979	MU8	1979	06	23.64167	20	31	03.42	-14	10	49.1		413
1979	MU8	1979	06	24.63611	20	30	34.08	-14	16	44.9		413
1979	MU8 *	1979	06	25.71042	20	30	00.67	-14	23	19.1	18.0	413
1979	MU8	1979	06	29.67859	20	27	43.09	-14	49	07.3		413
1979	MV8	1979	06	24.63611	20	31	01.81	-12	08	01.4		413
1979	MV8 *	1979	06	25.71042	20	30	43.71	-12	10	26.1	20.0	413
1979	MV8	1979	06	29.70984	20	29	18.38	-12	21	26.0		413
1979	MW8	1979	06	24.69049	20	31	10.96	-16	26	10.8		413
1979	MW8 *	1979	06	25.71042	20	30	46.68	-16	29	31.1	20.0	413
1979	MW8	1979	06	29.67859	20	28	57.37	-16	43	52.2		413
1979	MX8	1979	06	24.63611	20	31	48.05	-17	06	34.9		413
1979	MX8 *	1979	06	25.71042	20	31	17.61	-17	07	49.2	20.0	413
1979	MX8	1979	06	29.70984	20	29	10.75	-17	13	23.0		413
1979	MY8 *	1979	06	25.71042	20	31	41.85	-17	47	10.7	20.0	413
1979	MY8	1979	06	29.70984	20	29	34.19	-17	57	00.7		413
1979	MZ8	1979	06	24.63611	20	32	16.70	-13	56	17.4		413
1979	MZ8 *	1979	06	25.71042	20	31	43.52	-13	53	49.4	20.0	413
1979	MZ8	1979	06	29.67859	20	29	26.43	-13	45	27.3		413
1979	MA9	1979	06	24.69049	20	32	14.40	-12	11	25.8		413
1979	MA9 *	1979	06	25.71042	20	31	47.24	-12	15	31.9	20.0	413
1979	MA9	1979	06	29.67859	20	29	51.69	-12	32	32.2		413
1979	MB9	1979	06	24.63611	20	32	35.59	-17	03	51.4		413
1979	MB9 *	1979	06	25.71042	20	32	04.70	-17	05	32.5	20.0	413
1979	MB9	1979	06	29.67859	20	30	00.00	-17	12	29.6		413
1979	MC9	1979	06	23.62778	20	32	53.14	-14	40	22.5		413
1979	MC9	1979	06	24.63611	20	32	33.35	-14	40	38.5		413
1979	MC9 *	1979	06	25.71042	20	32	09.68	-14	41	07.2	20.0	413
1979	MC9	1979	06	29.70984	20	30	22.93	-14	44	30.3		413

OBSERVATIONS MADE WITH THE U.K. 1.2-M SCHMIDT TELESCOPE AT COONABARABRAN
BY K. R. RUSSELL.

Object	Date	UT	R. A. (1950)	Decl.	Obs.
1979 QB	1979 08	16.56759	21 49 29.95	-17 49 05.0	413
1979 QB	1979 08	16.61273	21 49 29.80	-17 48 40.6	413
1979 QB	1979 09	21.49149	22 02 04.46	-09 55 30.9	413
1979 QB	1979 09	21.54010	22 02 07.04	-09 54 39.9	413

OBSERVATIONS MADE AT OSSERVATORIO S. VITTORE.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
1979 QF	1979 08	29.92778	23 31 35.66	+13 10 38.6	15.0	552
1979 QF	1979 08	29.93681	23 31 35.34	+13 10 35.2		552
1979 QF	1979 09	16.96597	23 19 09.02	+10 21 44.8		552
1979 QF	1979 09	16.98056	23 19 08.50	+10 21 33.9		552
1979 QF	1979 09	17.87847	23 18 29.07	+10 11 07.2		552
1979 QF	1979 09	17.89306	23 18 28.39	+10 10 57.2		552
1979 QF	1979 09	18.88889	23 17 44.86	+09 59 08.6		552
1979 QF	1979 09	18.90625	23 17 44.47	+09 58 58.2		552
1979 QF	1979 09	26.88542	23 12 13.36	+08 19 40.9		552
1979 QF	1979 09	26.90069	23 12 12.13	+08 19 27.9		552
1979 QF	1979 09	27.86389	23 11 35.77	+08 07 06.3		552
1979 QF	1979 09	27.88125	23 11 35.01	+08 06 52.0		552
1979 SA *	1979 09	16.96597	23 17 31.46	+10 33 21.7	15.5	552
1979 SA	1979 09	16.98056	23 17 30.87	+10 33 13.9		552
1979 SA	1979 09	17.87847	23 16 55.30	+10 26 16.6		552
1979 SA	1979 09	17.89306	23 16 54.87	+10 26 09.2		552
1979 SA	1979 09	18.88889	23 16 15.64	+10 18 25.0		552
1979 SA	1979 09	18.90625	23 16 14.97	+10 18 17.1		552
1979 SA	1979 09	26.91875	23 11 08.22	+09 12 56.2		552
1979 SA	1979 09	26.93333	23 11 07.79	+09 12 47.3		552

1979 SA	1979 09 27.89653	23 10 32.60	+09 04 39.9		552
1979 SA	1979 09 27.91111	23 10 32.08	+09 04 32.3		552

OBSERVATIONS MADE AT MOUNT WILSON OBSERVATORY BY L. E. CUNNINGHAM. MEASURED BY A. G. MOWBRAY.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
1951 SX	1951 10 27.37773	03 11 38.91	-29 39 10.5		17	672
1951 SX	1951 10 27.38155	03 11 38.76	-29 39 25.1			672
1951 SX	1951 10 27.38433	03 11 38.73	-29 39 35.3			672

OBSERVATIONS MADE WITH THE 1.2-M SCHMIDT TELESCOPE AT PALOMAR.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N	Obs.
/1979h	1979 07 25.18333	19 24 55.09	-17 50 26.4		19	T	9 675
/1979h	1979 07 25.23542	19 24 53.95	-17 50 33.1				8 675
1951 SX *	1951 09 29.40069	03 06 01.23	+06 21 56.8				2 675
1951 SX	1951 10 02.38750	03 08 17.91	+02 37 24.3				2 675
1951 SX	1951 10 04.37778	03 09 35.21	+00 01 28.7				2 675
1951 SX	1951 10 05.39410	03 10 10.39	-01 19 44.2				5 675
1951 SX	1951 10 07.40903	03 11 11.55	-04 03 13.7				2 675
1954 WZ *	1954 11 20.20000	01 29 44.4	-03 15 18		17		6 675
1954 WZ	1954 11 20.23472	01 29 28.6	-03 17 04				6 675
1979 QG *	1979 08 22.32917	21 50 28.65	-13 59 37.8		17		7 675
1979 QG	1979 08 22.38125	21 50 25.80	-14 00 21.5				7 675
1979 QG	1979 08 23.29861	21 49 37.97	-14 13 39.9				7 675
1979 QG	1979 08 23.34028	21 49 35.75	-14 14 13.9				7 675
1979 SB *	1979 09 20.21597	23 32 49.59	-08 27 06.1		17.0		8 675
1979 SB	1979 09 20.26806	23 32 43.15	-08 26 14.0				8 675
1979 SB	1979 09 21.21319	23 30 45.28	-08 10 15.2		17.0		8 675
1979 SB	1979 09 21.26528	23 30 38.71	-08 09 22.5				8 675

Note 1: correction to MPC 4904. 2: observers A. G. Wilson and R. G. Harrington, measurers A. G. Mowbray and J. Gibson. 3: time of observation changed by -30 seconds. 5 = 2 + 3. 6: end of long trail, discovered by R. Weinberger on the blue and red Palomar Sky Survey prints. 7: observer E. Helin, measurer S. J. Bus. 8: observer C. T. Kowal. 9 = 1 + 8.

OBSERVATION MADE AT THE EUROPEAN SOUTHERN OBSERVATORY. MEASURED BY R. M. WEST.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
1979 MF	1979 07 21.14907	17 19 37.54	-13 10 25.2		17.5	809

OBSERVATIONS MADE AT THE HARVARD OBSERVATORY AGASSIZ STATION BY R. E. MC CROSKY, C.-Y. SHAO, G. SCHWARTZ AND J. H. BULGER (WITH ASSISTANCE FROM C. M. BARDWELL AND B. G. MARSDEN).

Object	Date	UT	R. A. (1950)	Decl.	Mag.	Obs.
/1975 VII	1979 09 01.23172	23 06 01.90	-14 50 52.5		20	N 801
/1975 VII	1979 09 17.15370	22 57 05.75	-15 43 01.8		19	T 801
/1977s	1979 09 16.24902	00 12 00.56	-03 53 14.9			801
/1977s	1979 09 17.23294	00 11 24.29	-03 58 51.9		17	T 801
/1977s	1979 09 18.24910	00 10 46.72	-04 04 37.6			801
/1979c	1979 09 21.17914	22 33 16.71	+35 49 10.1		18	T 801
/1979c	1979 09 21.27155	22 32 26.96	+35 31 39.5			801
/1979c	1979 09 24.18890	22 11 01.23	+26 53 09.8		19	T 801
/1979i	1979 09 21.09129	13 32 17.8	+68 13 50.6			801
/1979i	1979 09 24.15238	13 26 14.02	+67 03 04.7			801
/1979i	1979 09 27.04782	13 21 13.71	+65 58 50.8		12	T 801
306	1979 09 16.11323	22 17 12.77	-15 37 05.7		12	801
306	1979 09 18.19046	22 16 05.61	-15 51 13.3			801
306	1979 09 19.20472	22 15 35.32	-15 57 44.2			801
1979 SC	1979 09 16.24902	00 11 11.42	-04 04 49.2			801

1979	SC	*	1979	09	17.23294	00	10	11.23	-04	09	27.2		17	801	
1979	SC		1979	09	18.24910	00	09	09.06	-04	14	06.3			801	
1979	SD		1979	09	16.24902	00	12	20.42	-04	01	28.4			801	
1979	SD	*	1979	09	17.23294	00	11	31.63	-04	05	54.6		18	801	
1979	SD		1979	09	18.24910	00	10	40.79	-04	10	26.9			801	
1979	SE	*	1979	09	16.11323	22	16	47.33	-15	36	07.0			17.5	801
1979	SE		1979	09	18.19046	22	15	23.97	-15	42	51.9			17.5	801
1979	SE		1979	09	19.20472	22	14	44.80	-15	45	57.0			801	
1979	SE		1979	09	21.20940	22	13	30.05	-15	51	36.7		17.5	801	
1979	SE		1979	09	27.20645	22	10	13.71	-16	05	18.1			801	
6512	P-L		1979	09	16.11323	22	16	28.80	-15	46	01.3			801	
6512	P-L		1979	09	18.19046	22	14	47.18	-15	47	00.1			801	
6512	P-L		1979	09	19.20472	22	13	59.74	-15	47	11.9			801	
6512	P-L		1979	09	21.20940	22	12	29.50	-15	47	08.2			801	
6512	P-L		1979	09	27.20645	22	08	39.12	-15	42	57.3			801	

OBSERVATIONS MADE AT THE LOWELL OBSERVATORY (CODE 690) AND BY H. L. GICLAS
AT THE ANDERSON MESA STATION (CODE 688). MEASURED BY M. L. KANTZ.

Object	Date	UT	R. A. (1950)	Decl.	N Obs.
/1979i	1979	09 20.21128	13 34 13.19	+68 34 40.9	688
/1979i	1979	09 22.17222	13 30 02.82	+67 48 37.7	688
1929 TM	1929	10 01.34375	00 46.15	+01 21.1	690
1929 TM	1929	10 11.33333	00 37.17	+00 54.2	690
1929 TM	1929	10 12.36606	00 36.28	+00 51.0	690
1959 EM	1959	03 11.20486	10 26 06.38	+09 39 17.5	690
1959 EM	1959	03 12.20139	10 25 38.99	+09 42 44.1	690
407	1979	07 15.25243	16 48 36.41	-27 33 00.2	688
710	1979	08 23.25833	20 21 33.78	-19 06 32.7	688
949	1979	07 25.19931	17 20 11.58	-34 25 40.2	688
1105	1979	07 15.29792	20 44 03.56	-19 45 44.9	688
1886	1979	08 23.22407	19 56 56.44	-39 33 21.9	688
2165	1929	10 27.30903	03 24 41.00	+19 22 06.7	1 690
2166	1929	10 05.37500	01 04 17.21	+01 42 19.4	690
2166	1929	10 11.33333	00 58 54.88	+00 52 59.6	690
2166	1929	10 12.36806	00 58 00.14	+00 44 53.2	690

Note 1: remeasurement of observation on MPC 2733.

OBSERVATIONS MADE AT RAYLEIGH (CODE 002) BY F. VAN LOOY, AT STAKENBRIDGE
(CODE 494) BY B. MANNING AND AT WOOLSTON OBSERVATORY (CODE 993) BY
H. B. RIDLEY AND P. BIRTWHISTLE. MEASURED BY MANNING, BIRTWHISTLE
AND R. L. WATERFIELD.

Object	Date	UT	R. A. (1950)	Decl.	Mag.	N Obs.
/1979c	1979	08 29.13854	06 16 36.05	+56 24 21.6	12.5T	494
/1979c	1979	09 15.94244	23 42 41.31	+52 48 54.8	12.0T	993
/1979i	1979	09 22.84236	13 28 43.46	+67 33 01.0	12 T 1	494
/1979i	1979	09 22.85816	13 28 40.96	+67 32 40.3	13.5T	993
/1979i	1979	09 27.82222	13 19 59.35	+65 42 07.4		494
/1979i	1979	09 27.84236	13 19 57.59	+65 41 43.2		494
115	1979	03 21.8299	05 23 41.29	+27 11 19.9		002
115	1979	03 21.8306	05 23 41.39	+27 11 19.3		002
115	1979	03 23.8817	05 27 25.41	+27 03 21.5		002
115	1979	03 23.8946	05 27 26.75	+27 03 18.9		002
324	1978	11 26.7827	02 17 34.24	+37 05 31.2		002
324	1978	11 26.7862	02 17 34.23	+37 05 31.5		002
324	1978	12 25.7771	02 21 04.34	+33 15 16.7		002
324	1978	12 25.9743	02 21 10.32	+33 14 15.0		002
324	1978	12 27.9618	02 22 37.20	+33 01 21.8		002
324	1978	12 27.9639	02 22 37.11	+33 01 21.0		002

Note 1: strongly condensed; forked tail 1'.5 long in p.a. 10 and 45.

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 * M. P. C. 5000 *
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INDEX TO ORBITAL ELEMENTS.

The following index to orbital elements continues that on MPC 4001-4006 and refers to orbits of both comets and minor planets published since then. Only the latest orbit for each object is indexed, and multiple-designation minor planets are listed only under the principal designation.

Comet	MPC	Comet	MPC	Comet	MPC	Comet	MPC
/1921 I	4601	/1951 IX	4601	/1972 III	4601	/1973 IX	4540
/1973 X	4601	/1973 XI	4602	/1975 II	4602	/1975 III	4602
/1975 VII	4830	/1975 VIII	4602	/1976 IV	4602	/1976 IX	4602
/1976 XII	4540	/1977 III	4603	/1977 IX	4603	/1977 X	4603
/1977 XII	4603	/1977 XIII	4603	/1977 XIV	4540	/1977g	4658
/19771	4539	/1977o	4603	/1978b	4604	/1978f	4604
/1978j	4604	/1978k	4604	/1978l	4604	/1978m	4604
/1978n	4605	/1978o	4605	/1979a	4772	/1979c	4933
/1979d	4933	/1979e	4933				

Comet	MPC	Comet	MPC	Comet	MPC
P/Brooks 2	4773	P/Forbes	4773	P/Reinmuth 1	4659
P/Reinmuth 2	4773			P/Schwassmann-Wachmann 1	4830
P/Stephan-Oterma	4658	P/Wirtanen	4773		

Planet	MPC								
(6)	4360	(7)	4360	(8)	4360	(9)	4361	(10)	4361
(11)	4361	(12)	4361	(13)	4361	(14)	4361	(15)	4361
(16)	4824	(17)	4361	(18)	4361	(19)	4361	(20)	4361
(22)	4362	(23)	4362	(24)	4362	(25)	4362	(27)	4362
(28)	4362	(29)	4362	(30)	4362	(31)	4362	(32)	4362
(33)	4362	(34)	4363	(36)	4363	(37)	4363	(40)	4363
(41)	4363	(42)	4363	(43)	4363	(44)	4363	(45)	4363
(46)	4363	(47)	4363	(48)	4364	(49)	4364	(52)	4364
(53)	4736	(54)	4364	(55)	4364	(56)	4364	(57)	4364
(58)	4364	(59)	4364	(60)	4736	(61)	4364	(63)	4364
(64)	4365	(65)	4365	(67)	4365	(68)	4365	(69)	4365
(70)	4365	(71)	4365	(72)	4365	(74)	4365	(78)	4365
(79)	4365	(80)	4366	(83)	4366	(84)	4366	(85)	4473
(87)	4366	(88)	4366	(92)	4366	(93)	4366	(94)	4366
(95)	4366	(96)	4366	(97)	4367	(100)	4367	(103)	4367
(105)	4367	(107)	4367	(114)	4367	(115)	4772	(116)	4367
(121)	4367	(122)	4367	(125)	4367	(128)	4368	(131)	4368
(132)	4368	(135)	4368	(136)	4368	(138)	4737	(139)	4368
(140)	4368	(141)	4368	(144)	4368	(145)	4368	(154)	4368
(156)	4737	(158)	4369	(162)	4369	(164)	4369	(165)	4369
(173)	4369	(184)	4369	(185)	4369	(186)	4369	(187)	4369
(192)	4369	(196)	4369	(198)	4370	(200)	4370	(205)	4737
(208)	4370	(212)	4370	(216)	4370	(221)	4370	(230)	4370
(243)	4370	(247)	4370	(268)	4370	(279)	4370	(283)	4371
(300)	4371	(303)	4371	(306)	4371	(313)	4371	(323)	4371
(324)	4371	(325)	4737	(327)	4371	(329)	4371	(334)	4371
(338)	4371	(339)	4372	(344)	4372	(354)	4372	(356)	4372
(361)	4372	(363)	4737	(364)	4372	(367)	4372	(372)	4372
(374)	4372	(375)	4372	(381)	4372	(385)	4373	(386)	4373

(387)	4373	(388)	4737	(391)	4373	(393)	4373	(398)	4083
(405)	4373	(409)	4373	(415)	4373	(416)	4373	(419)	4373
(420)	4373	(421)	4374	(426)	4374	(434)	4374	(439)	4374
(441)	4374	(444)	4374	(446)	4374	(451)	4374	(453)	4374
(462)	4374	(466)	4374	(481)	4375	(498)	4375	(505)	4375
(510)	4375	(513)	4375	(520)	4375	(525)	4375	(530)	4375
(531)	4824	(532)	4375	(540)	4375	(544)	4375	(554)	4376
(558)	4376	(563)	4376	(574)	4376	(579)	4376	(584)	4376
(588)	4376	(589)	4738	(592)	4376	(594)	4376	(602)	4376
(605)	4376	(609)	4377	(613)	4377	(617)	4377	(624)	4377
(637)	4738	(639)	4377	(641)	4186	(650)	4377	(654)	4377
(658)	4377	(659)	4377	(665)	4377	(674)	4377	(675)	4378
(679)	4378	(694)	4824	(695)	4378	(696)	4378	(702)	4378
(712)	4378	(714)	4378	(737)	4823	(747)	4378	(756)	4378
(758)	4378	(776)	4379	(782)	4379	(783)	4379	(790)	4825
(796)	4825	(798)	4738	(801)	4379	(804)	4379	(814)	4379
(822)	4084	(831)	4379	(839)	4379	(846)	4738	(847)	4379
(849)	4380	(863)	4380	(869)	4380	(884)	4380	(892)	4380
(895)	4380	(903)	4380	(911)	4380	(925)	4380	(932)	4380
(944)	4380	(948)	4084	(952)	4738	(958)	4085	(965)	4344
(973)	4381	(976)	4381	(980)	4381	(990)	4085	(998)	4381
(1006)	4381	(1012)	4381	(1019)	4381	(1025)	4381	(1036)	4381
(1040)	4186	(1043)	4381	(1044)	4381	(1061)	4382	(1073)	4010
(1080)	4186	(1090)	4382	(1091)	4014	(1101)	4382	(1103)	4382
(1109)	4382	(1112)	4738	(1122)	4382	(1125)	4307	(1128)	4008
(1134)	4382	(1141)	4382	(1143)	4739	(1151)	4179	(1156)	4014
(1161)	4382	(1168)	4825	(1172)	4382	(1173)	4383	(1178)	4383
(1187)	4739	(1191)	4086	(1206)	4823	(1208)	4383	(1212)	4383
(1216)	4383	(1222)	4187	(1235)	4383	(1245)	4383	(1253)	4383
(1265)	4383	(1272)	4383	(1276)	4383	(1284)	4384	(1287)	4384
(1293)	4384	(1297)	4384	(1299)	4384	(1303)	4384	(1304)	4384
(1307)	4739	(1311)	4014	(1316)	4407	(1320)	4384	(1322)	4384
(1327)	4384	(1340)	4739	(1361)	4384	(1373)	4385	(1380)	4385
(1381)	4168	(1383)	4739	(1386)	4577	(1393)	4385	(1399)	4385
(1414)	4385	(1422)	4385	(1423)	4187	(1433)	4068	(1437)	4739
(1443)	4385	(1446)	4385	(1451)	4086	(1452)	4385	(1460)	4385
(1464)	4385	(1465)	4831	(1468)	4386	(1473)	4386	(1483)	4086
(1486)	4386	(1493)	4386	(1515)	4407	(1516)	4086	(1521)	4386
(1534)	4386	(1559)	4386	(1565)	4386	(1567)	4386	(1568)	4386
(1569)	4386	(1570)	4387	(1571)	4387	(1572)	4387	(1573)	4387
(1575)	4387	(1576)	4387	(1577)	4387	(1578)	4387	(1579)	4387
(1581)	4387	(1582)	4387	(1583)	4739	(1584)	4388	(1585)	4388
(1586)	4388	(1587)	4388	(1588)	4388	(1589)	4388	(1590)	4739
(1591)	4388	(1592)	4388	(1597)	4388	(1599)	4388	(1610)	4389
(1620)	4389	(1626)	4389	(1628)	4408	(1629)	4408	(1632)	4335
(1633)	4389	(1639)	4577	(1640)	4577	(1641)	4335	(1645)	4389
(1647)	4389	(1657)	4389	(1660)	4389	(1667)	4389	(1679)	4389
(1698)	4389	(1704)	4409	(1708)	4578	(1717)	4390	(1738)	4390
(1749)	4390	(1767)	4390	(1787)	4390	(1846)	4638	(1847)	4638
(1849)	4638	(1850)	4638	(1851)	4638	(1852)	4639	(1853)	4639
(1862)	4832	(1868)	4639	(1869)	4639	(1874)	4639	(1875)	4390
(1876)	4390	(1878)	4639	(1880)	4639	(1881)	4639	(1883)	4640
(1885)	4640	(1912)	4640	(1918)	4390	(1922)	4640	(1923)	4640
(1924)	4640	(1948)	4640	(1950)	4640	(1952)	4641	(1953)	4641
(1954)	4641	(1955)	4641	(1964)	4641	(1965)	4390	(1966)	4390
(1968)	4641	(1969)	4641	(1970)	4641	(1979)	4642	(1980)	4010
(1981)	4010	(1982)	4069	(1983)	4069	(1984)	4069	(1985)	4070
(1986)	4070	(1987)	4070	(1988)	4070	(1989)	4071	(1990)	4071
(1991)	4071	(1992)	4071	(1993)	4071	(1994)	4072	(1995)	4072

(1996) 4072	(1997) 4072	(1998) 4073	(1999) 4073	(2000) 4073
(2001) 4073	(2002) 4074	(2003) 4074	(2004) 4074	(2005) 4074
(2006) 4075	(2007) 4075	(2008) 4075	(2009) 4075	(2010) 4076
(2011) 4076	(2012) 4076	(2013) 4076	(2014) 4077	(2015) 4077
(2016) 4087	(2017) 4179	(2018) 4179	(2019) 4179	(2020) 4180
(2021) 4180	(2022) 4180	(2023) 4180	(2024) 4180	(2025) 4181
(2026) 4181	(2027) 4181	(2028) 4181	(2029) 4182	(2030) 4182
(2031) 4182	(2032) 4182	(2033) 4182	(2034) 4183	(2035) 4183
(2036) 4183	(2037) 4183	(2038) 4184	(2039) 4184	(2040) 4184
(2041) 4184	(2042) 4185	(2043) 4335	(2044) 4336	(2045) 4336
(2046) 4336	(2047) 4336	(2048) 4337	(2049) 4337	(2050) 4337
(2051) 4337	(2052) 4338	(2053) 4338	(2054) 4338	(2055) 4339
(2056) 4344	(2057) 4345	(2058) 4345	(2059) 4346	(2060) 4346
(2061) 4405	(2062) 4406	(2063) 4406	(2064) 4406	(2065) 4407
(2066) 4409	(2067) 4409	(2068) 4409	(2069) 4410	(2070) 4410
(2071) 4410	(2072) 4411	(2073) 4411	(2074) 4411	(2075) 4412
(2076) 4412	(2077) 4412	(2078) 4413	(2079) 4413	(2080) 4413
(2081) 4413	(2082) 4414	(2083) 4473	(2084) 4474	(2085) 4474
(2086) 4474	(2087) 4475	(2088) 4475	(2089) 4475	(2090) 4476
(2091) 4502	(2092) 4502	(2093) 4502	(2094) 4503	(2095) 4503
(2096) 4537	(2097) 4537	(2098) 4537	(2099) 4541	(2100) 4541
(2101) 4541	(2102) 4605	(2103) 4605	(2104) 4606	(2105) 4824
(2106) 4607	(2107) 4607	(2108) 4607	(2109) 4607	(2110) 4608
(2111) 4608	(2112) 4608	(2113) 4609	(2114) 4609	(2115) 4609
(2116) 4610	(2117) 4610	(2118) 4610	(2119) 4661	(2120) 4662
(2121) 4662	(2122) 4662	(2123) 4662	(2124) 4663	(2125) 4663
(2126) 4740	(2127) 4740	(2128) 4740	(2129) 4740	(2130) 4741
(2131) 4741	(2132) 4741	(2133) 4742	(2134) 4743	(2135) 4773
(2136) 4774	(2137) 4774	(2138) 4774	(2139) 4774	(2140) 4775
(2141) 4775	(2142) 4775	(2143) 4776	(2144) 4776	(2145) 4776
(2146) 4777	(2147) 4777	(2148) 4777	(2149) 4778	(2150) 4778
(2151) 4778	(2152) 4778	(2153) 4779	(2154) 4779	(2155) 4779
(2156) 4825	(2157) 4826	(2158) 4826	(2159) 4826	(2160) 4826
(2161) 4827	(2162) 4827	(2163) 4827	(2164) 4827	(2165) 4831
(2166) 4831	(2167) 4832	(2168) 4928	(2169) 4928	(2170) 4928
(2171) 4929	(2172) 4929	(2173) 4929	(2174) 4930	(2175) 4930
(2176) 4930	(2177) 4930	(2178) 4933		

Planet	MPC	Planet	MPC	Planet	MPC	Planet	MPC
1930 XU	4822	1931 TV	4780	1934 CD	4933	1935 SO1	4414
1938 TB	4822	1939 BF	4828	1939 BM	4822	1939 QB	4822
1939 TA	4822	1939 TM	4822	1939 UB	4822	1940 FG	4822
1940 GF	4822	1940 GG	4822	1940 GJ	4822	1941 HP	4822
1941 ST	4822	1941 SZ	4822	1941 SA1	4828	1941 UN	4822
1941 UV	4822	1941 WA	4822	1942 CB	4823	1942 CG	4823
1942 RJ	4823	1942 RZ	4823	1942 VW	4823	1942 YA	4414
1943 EO	4823	1943 EP	4828	1943 EQ	4611	1950 DB	4782
1951 QD	4771	1952 UT	4642	1952 UW1	4643	1953 FH1	4771
1953 FK1	4771	1953 GE	4771	1953 GG	4771	1953 GH	4771
1953 PR	4771	1953 TC1	4771	1953 TD1	4771	1953 TF1	4771
1953 TG1	4771	1953 TP1	4771	1953 TS2	4771	1953 UD	4771
1953 VX1	4771	1953 VY1	4771	1953 VN2	4771	1954 TS	4771
1954 UN2	4771	1954 UQ2	4771	1954 XA	4823	1954 XQ	4771
1955 FU1	4771	1955 QP1	4771	1955 RS	4771	1955 RV	4771
1955 RX	4771	1955 SF	4771	1956 SC	4771	1956 XA	4771
1957 HJ	4643	1957 JP	4771	1957 VC	4771	1957 WH	4771
1959 OB	4169	1959 VE	4771	1959 VF	4771	1961 BC	4771
1961 CG	4771	1961 TN1	4771	1962 FA	4771	1962 HD	4771
1962 HE	4771	1963 RJ	4715	1963 RK	4715	1963 TM	4715

1963	TJ1	4715	1963	UF	4715	1964	TA1	4715	1964	TC1	4715
1964	TH1	4715	1964	TR1	4715	1964	TX1	4643	1964	TA2	4715
1964	TC2	4715	1964	TG2	4715	1964	TN2	4715	1964	UO	4715
1964	UP	4715	1964	UQ	4715	1964	VD	4538	1964	VE	4715
1964	VO	4715	1964	VP	4715	1964	VY	4715	1964	VL1	4715
1964	VM1	4715	1964	VN1	4715	1964	VT1	4715	1965	MA	4715
1965	MC	4715	1965	QC	4715	1965	SB	4715	1966	PD	4715
1966	PK	4715	1966	PL	4715	1966	PM	4715	1966	PN	4715
1966	PP	4715	1966	PQ	4715	1966	PX	4715	1966	PY	4715
1966	TE	4715	1966	TP	4715	1966	UZ	4090	1967	CB	4715
1967	DA	4715	1967	DB	4715	1967	JM	4715	1967	JN	4715
1967	JO	4715	1967	JP	4715	1967	JQ	4715	1967	JS	4715
1967	KB	4715	1967	SB	4716	1967	UM	4716	1967	UN	4716
1967	UO	4716	1967	UQ	4716	1967	UR	4716	1967	US	4716
1967	UT	4716	1967	UV	4716	1968	BC	4644	1968	DL	4742
1968	DM	4716	1968	FH	4716	1968	FJ	4716	1968	HH	4716
1968	HK1	4780	1968	OL	4716	1968	OZ	4716	1968	QD	4716
1968	QE	4716	1968	SB	4716	1968	UP	4716	1968	UQ	4716
1969	DA	4716	1969	GA	4716	1969	GB	4716	1969	GC	4716
1969	GD	4716	1969	LA	4716	1969	LB	4716	1969	OW	4716
1969	OZ	4716	1969	PD	4716	1969	QR	4716	1969	RY	4415
1969	RD2	4169	1969	TA	4716	1969	TJ1	4716	1969	TL1	4716
1969	TM1	4716	1969	TO1	4644	1969	TP1	4716	1969	TQ1	4716
1969	TR1	4716	1969	TS1	4716	1969	TT1	4716	1969	TY1	4716
1969	TB2	4716	1969	TC2	4716	1969	TD2	4716	1969	TE2	4716
1969	TJ2	4716	1969	TK2	4716	1969	TO2	4716	1969	TP2	4716
1969	TR2	4716	1969	TB3	4716	1969	TC3	4090	1969	TK4	4716
1969	TN4	4716	1969	TQ4	4716	1969	TH6	4716	1969	UC	4091
1969	UR	4716	1969	UP1	4716	1969	VC	4716	1969	VU	4716
1969	VW	4717	1969	VX	4717	1969	VB1	4717	1969	VK1	4717
1970	AF1	4636	1970	HA	4636	1970	JB	4636	1970	NA	4636
1970	NB	4636	1970	OB	4636	1970	OF	4636	1970	OG	4934
1970	PA	4636	1970	PL	4636	1970	PQ	4636	1970	PR	4636
1970	PS	4636	1970	PU	4636	1970	QK	4636	1970	QV	4636
1970	QA1	4636	1971	BF1	4636	1971	FB	4636	1971	HY	4636
1971	LF	4636	1971	MG	4636	1971	OG	4078	1971	OH	4636
1971	OU	4636	1971	OV	4636	1971	OE1	4636	1971	QN	4636
1971	QP	4636	1971	QR1	4636	1971	QW1	4636	1971	SC	4636
1971	SN1	4636	1971	SS1	4636	1971	SX1	4636	1971	SY1	4636
1971	SD2	4636	1971	SK2	4636	1971	SL2	4829	1971	SN2	4636
1971	TF	4636	1971	TO	4636	1971	TZ	4636	1971	TD2	4636
1971	TF2	4636	1971	TH2	4636	1971	TJ2	4636	1971	TS2	4636
1971	TY2	4636	1971	UL1	4637	1971	UQ1	4578	1972	AJ	4637
1972	AK	4637	1972	AL	4637	1972	AM	4637	1972	AR	4637
1972	AT	4637	1972	AU	4637	1972	FA	4661	1972	FC	4637
1972	FD	4637	1972	GJ	4637	1972	HL	4637	1972	HN	4637
1972	HP	4637	1972	HR	4637	1972	HW	4229	1972	KG	4637
1972	KJ	4637	1972	KL	4229	1972	KM	4637	1972	LD1	4782
1972	NC	4476	1972	NR	4637	1972	NS	4637	1972	NW	4637
1972	PA	4637	1972	QF	4637	1972	RA	4659	1972	RB	4659
1972	RQ1	4637	1972	RU1	4637	1972	RX1	4637	1972	RE2	4637
1972	RF2	4637	1972	RU2	4637	1972	RT3	4637	1972	RU3	4637
1972	RV3	4637	1972	TF	4637	1972	TG	4637	1972	TB2	4637
1972	TF2	4637	1972	TL2	4637	1972	TP2	4637	1972	TR8	4637
1972	UA	4637	1972	XE1	4637	1972	YX	4637	1973	DP	4574
1973	FE1	4574	1973	FF1	4574	1973	FR1	4574	1973	FT1	4574
1973	FU1	4574	1973	NA	4659	1973	QJ	4574	1973	QL	4574
1973	QN	4574	1973	QP	4574	1973	QQ	4574	1973	QY	4574
1973	QO1	4574	1973	QR1	4574	1973	QY1	4574	1973	QZ1	4574

1973 QB2	4230	1973 QD2	4574	1973 SD	4644	1973 SF	4574
1973 SG	4574	1973 SL	4289	1973 SM	4290	1973 SN	4290
1973 SO	4290	1973 SP	4290	1973 SQ	4290	1973 SR	4290
1973 SS	4290	1973 ST	4290	1973 SU	4290	1973 SV	4291
1973 SW	4291	1973 SX	4291	1973 SY	4291	1973 SZ	4291
1973 SA1	4291	1973 SB1	4291	1973 SC1	4291	1973 SD1	4291
1973 SE1	4292	1973 SF1	4292	1973 SG1	4292	1973 SH1	4292
1973 SJ1	4292	1973 SK1	4292	1973 SL1	4292	1973 SM1	4292
1973 SN1	4292	1973 SO1	4293	1973 SP1	4293	1973 SQ1	4293
1973 SR1	4293	1973 SS1	4293	1973 ST1	4293	1973 SU1	4293
1973 SV1	4293	1973 SW1	4293	1973 SX1	4294	1973 SY1	4294
1973 SZ1	4294	1973 SA2	4294	1973 SB2	4294	1973 SC2	4574
1973 SM2	4574	1973 SN2	4574	1973 SO2	4574	1973 SP2	4574
1973 SQ2	4574	1973 SX2	4574	1973 SZ2	4574	1973 SD3	4574
1973 SJ4	4574	1973 SQ4	4574	1973 ST4	4230	1973 SU4	4780
1974 EC	4574	1974 ED	4575	1974 ER	4575	1974 HD	4575
1974 KB	4575	1974 MA	4659	1974 MC	4575	1974 ME	4575
1974 MG	4575	1974 MH	4575	1974 MJ	4575	1974 OE	4575
1974 OS	4575	1974 PF	4575	1974 QA	4934	1974 QL	4575
1974 QQ	4091	1974 QE1	4579	1974 QF1	4575	1974 QT1	4575
1974 QU1	4091	1974 QX1	4092	1974 QN2	4092	1974 QO2	4575
1974 RG1	4575	1974 RK1	4575	1974 RV1	4575	1974 RX1	4575
1974 RY1	4575	1974 SE	4092	1974 SK	4575	1974 SL	4575
1974 SP	4575	1974 SS	4575	1974 SV	4575	1974 SW	4092
1974 SX	4575	1974 SD1	4575	1974 SF1	4575	1974 SG1	4575
1974 SH1	4575	1974 SK1	4575	1974 SN1	4093	1974 SR1	4575
1974 ST1	4575	1974 SU1	4575	1974 SX1	4093	1974 SB3	4575
1974 SE3	4575	1974 SJ3	4575	1974 SB5	4575	1974 UB	4611
1974 VG	4093	1974 VK	4093	1974 VQ2	4575	1974 XS	4926
1974 XT	4926	1975 AA	4575	1975 AK	4580	1975 AM	4575
1975 BU	4231	1975 BA1	4230	1975 DA	4926	1975 DB	4926
1975 EC	4575	1975 ED	4575	1975 EG	4575	1975 ES	4575
1975 EC1	4575	1975 EM1	4575	1975 EU1	4575	1975 EV1	4575
1975 EA2	4575	1975 EA3	4575	1975 EE3	4644	1975 EG3	4575
1975 EA6	4575	1975 GA	4576	1975 LR	4926	1975 LS	4926
1975 LT	4926	1975 LU	4926	1975 NC	4576	1975 NF	4576
1975 NY	4926	1975 PA	4600	1975 QC	4576	1975 QD	4576
1975 QE	4576	1975 QK	4926	1975 QM	4926	1975 QO	4926
1975 QP	4926	1975 RA2	4926	1975 SA	4576	1975 SC	4576
1975 SE	4576	1975 SF	4926	1975 TC	4600	1975 TN	4231
1975 TO2	4576	1975 TT2	4231	1975 TU2	4576	1975 TX2	4231
1975 TZ2	4231	1975 TJ3	4232	1975 TQ3	4232	1975 TR3	4576
1975 TS3	4576	1975 TR4	4232	1975 TU4	4576	1975 TG6	4926
1975 TH6	4926	1975 TJ6	4926	1975 TK6	4926	1975 UA	4576
1975 UD	4504	1975 VB	4341	1975 VC	4576	1975 VD	4576
1975 VF	4341	1975 VU	4234	1975 VZ	4576	1975 VB1	4576
1975 VE1	4576	1975 VD3	4233	1975 VR3	4233	1975 VW3	4233
1975 VY8	4234	1975 VZ8	4234	1975 VA9	4234	1975 VB9	4234
1975 VC9	4576	1975 VD9	4234	1975 VG9	4234	1975 XB	4576
1975 XD	4576	1975 XE	4576	1975 XF	4576	1975 XG	4576
1975 XJ	4576	1975 XK	4576	1975 XQ	4576	1975 YD	4926
1975 YE	4926	1976 AF	4926	1976 AG	4926	1976 AH	4926
1976 DC	4081	1976 DD	4081	1976 EA	4661	1976 EB	4499
1976 EC	4499	1976 GA1	4926	1976 GJ1	4926	1976 GP1	4499
1976 GT1	4499	1976 GY1	4926	1976 GA2	4499	1976 GD2	4926
1976 GJ2	4926	1976 GK2	4499	1976 GM2	4499	1976 GQ2	4499
1976 GR2	4499	1976 GX2	4499	1976 GZ2	4499	1976 GA3	4499
1976 GB3	4499	1976 GC3	4499	1976 GE3	4499	1976 GG3	4499
1976 GJ3	4499	1976 GK3	4499	1976 GL3	4499	1976 GN3	4499

1976	GO3	4499	1976	GQ3	4499	1976	GR3	4742	1976	GS3	4499
1976	GU3	4926	1976	GV3	4926	1976	GX3	4499	1976	GY3	4499
1976	GD4	4926	1976	GM7	4499	1976	GB8	4926	1976	GC8	4926
1976	GO8	4926	1976	HS	4926	1976	JW	4499	1976	JN1	4926
1976	JA2	4926	1976	JF2	4926	1976	JG2	4926	1976	JQ2	4926
1976	KV	4926	1976	MK	4926	1976	ML	4926	1976	OQ	4499
1976	QA	4499	1976	QB	4743	1976	QC	4504	1976	QD	4499
1976	QE1	4499	1976	QF1	4499	1976	QG1	4499	1976	QK1	4499
1976	QL1	4499	1976	QM1	4499	1976	QN1	4499	1976	QU1	4926
1976	QZ1	4926	1976	SA	4500	1976	SB	4500	1976	SC	4500
1976	SF	4500	1976	SE1	4500	1976	SG1	4500	1976	SF2	4500
1976	SG2	4500	1976	SH2	4500	1976	SK2	4500	1976	SM2	4500
1976	SS2	4500	1976	SU2	4500	1976	SD3	4500	1976	SK3	4500
1976	SS3	4500	1976	SW3	4500	1976	SJ4	4500	1976	SP4	4500
1976	SQ7	4500	1976	SZ7	4500	1976	TA	4829	1976	UA	4659
1976	UB	4539	1976	UE	4500	1976	UG	4500	1976	UH	4743
1976	UJ	4500	1976	UU	4500	1976	UY	4500	1976	UB1	4500
1976	UF1	4500	1976	UH1	4500	1976	UL4	4500	1976	WA	4660
1976	WC	4343	1976	YJ	4500	1976	YM	4500	1976	YP	4500
1976	YQ	4500	1976	YR	4500	1976	YT	4500	1976	YV	4500
1976	YX	4500	1976	YY	4500	1976	YE1	4500	1976	YM1	4500
1976	YO1	4500	1976	YP1	4600	1976	YQ1	4500	1976	YR1	4600
1976	YS1	4600	1976	YU1	4600	1976	YX1	4600	1976	YZ1	4500
1976	YB2	4600	1976	YD2	4500	1976	YF2	4500	1976	YK2	4500
1976	YN2	4600	1976	YO2	4600	1976	YP2	4600	1976	YQ2	4600
1976	YS2	4600	1976	YF3	4600	1976	YJ3	4600	1976	YQ3	4600
1976	YU3	4600	1976	YR5	4600	1976	YW5	4637	1976	YZ5	4600
1976	YA6	4600	1976	YP7	4833	1976	YQ7	4781	1976	YS7	4717
1977	BY	4926	1977	CA	4195	1977	CB	4829	1977	CC	4926
1977	CD	4926	1977	EM	4600	1977	EV	4600	1977	EX	4600
1977	EZ	4600	1977	EB1	4600	1977	EC1	4600	1977	EF1	4600
1977	EG1	4600	1977	EJ1	4600	1977	EK1	4600	1977	EL1	4600
1977	EN1	4600	1977	EO1	4600	1977	EP1	4600	1977	EQ1	4600
1977	ET1	4600	1977	EU1	4600	1977	EV1	4600	1977	EY1	4600
1977	EA2	4600	1977	EB2	4600	1977	EC2	4600	1977	FA	4501
1977	FB	4501	1977	FN	4501	1977	FO	4501	1977	FS	4501
1977	FT	4501	1977	FY	4717	1977	FZ	4717	1977	FN1	4717
1977	GA	4931	1977	HC	4612	1977	HD	4638	1977	JA	4501
1977	JP	4717	1977	JV	4717	1977	JA1	4717	1977	KB	4501
1977	NG	4926	1977	NH	4926	1977	NK	4717	1977	NP	4717
1977	NR	4717	1977	NT	4926	1977	OH	4931	1977	PB	4926
1977	PA1	4927	1977	QS	4927	1977	QU	4927	1977	QV	4927
1977	QW	4927	1977	QX	4927	1977	QY	4927	1977	QB1	4927
1977	QC1	4927	1977	QD1	4927	1977	QF1	4927	1977	QH1	4927
1977	QJ1	4927	1977	QL1	4927	1977	QM1	4927	1977	QN1	4927
1977	QO1	4927	1977	QD2	4927	1977	QG2	4927	1977	QJ2	4927
1977	QK2	4927	1977	QL2	4927	1977	QN2	4927	1977	QP2	4927
1977	QQ2	4927	1977	QR2	4927	1977	QT2	4927	1977	QU2	4927
1977	QV2	4927	1977	QX2	4927	1977	QA3	4927	1977	QD3	4927
1977	QG3	4927	1977	QH3	4927	1977	QJ3	4927	1977	QK3	4931
1977	QL3	4927	1977	QO3	4927	1977	QY3	4927	1977	RA	4660
1977	RB	4781	1977	RC	4501	1977	RF	4501	1977	RG	4576
1977	RK	4309	1977	RL	4309	1977	RM	4309	1977	RO	4829
1977	RV	4927	1977	RD2	4927	1977	RE2	4927	1977	RF2	4927
1977	RD3	4927	1977	SA	4501	1977	SN	4927	1977	TC	4309
1977	TD	4309	1977	TE	4309	1977	TG	4927	1977	TZ	4501
1977	TA1	4501	1977	TB1	4501	1977	TC1	4501	1977	TD1	4501
1977	UA	4501	1977	UP	4501	1977	UQ	4501	1977	VA	4660
1977	VC	4932	1977	VD	4932	1977	VH	4576	1977	VP	4576

1977	VY	4501	1977	YA	4501	1978	BG	4501	1978	CA	4660
1978	DA	4660	1978	GA	4501	1978	GB	4717	1978	GC	4501
1978	GD	4580	1978	LA	4781	1978	LB	4501	1978	NC	4501
1978	ND	4501	1978	NE	4501	1978	NF	4501	1978	NG	4501
1978	NH	4501	1978	NJ	4501	1978	NN	4501	1978	NP	4501
1978	NQ	4501	1978	NS	4501	1978	NU	4576	1978	NV	4576
1978	NW	4576	1978	NX	4576	1978	ND1	4576	1978	PA	4576
1978	PC	4576	1978	PD	4576	1978	PF	4576	1978	RB	4830
1978	RC	4717	1978	SB	4661	1978	SG	4576	1978	SM	4576
1978	SP	4576	1978	SQ	4600	1978	SR	4576	1978	SS	4576
1978	TA	4717	1978	TB	4664	1978	UC	4637	1978	VA	4637
1978	VB	4637	1978	WB	4637	1978	WC	4600	1978	XC	4771
1978	YA	4823	1979	BA	4717	1979	DA	4717	1979	DC	4771
1979	DE	4771	1979	DF	4771	1979	DK	4771	1979	FE	4717
1979	FK	4781	1979	HA	4771	1979	KA	4927	1979	KB	4832
1979	KC	4823	1979	KD	4927	1979	KF	4772	1979	KG	4772
1979	KJ	4772	1979	KK	4772	1979	KL	4927	1979	KM	4823
1979	KN	4927	1979	KP	4823	1979	KR	4823	1979	KU	4823
1979	KW	4823	1979	MB	4927	1979	MC	4927	1979	MF	4823
1979	MH	4927	1979	MK	4823	1979	ML	4823	1979	OA	4927
1979	OB	4927	1979	OC	4927	2509	P-L	4830	2524	P-L	4539
2525	P-L	4932	2528	P-L	4415	2533	P-L	4644	6090	P-L	4664
6512	P-L	4645	6545	P-L	4344	6561	P-L	4415	6591	P-L	4831
7631	P-L	4932	9597	P-L	4581						

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ORBITAL ELEMENTS OF ONE-OPPOSITION MINOR PLANETS.

The orbit computers and authors of double designations are B = C. M. Bardwell, F = E. Fogelin, M = B. G. Marsden, O = L. Oterma, W = J. G. Williams, Z = Purple Mountain Observatory. See also MPC 4499.

Planet	B(1,0)	Epoch	M	Peri.	Node	Incl.	e	a	Arc	O	N	C
1939	FY	13.4	390315	58.55	100.85	0.07	8.41	0.0799	2.2678	34	3	O
1939	UJ	11.9	391021	327.43	30.86	35.64	13.16	0.0788	3.2550	24	3	O
1940	GD	14.6	400405	8.33	8.76	176.16	5.90	0.1460	2.1022	9	3	O
1940	GN	14.0	400413	338.61	162.31	79.48	9.57	0.1903	2.4387	23	5	O
1940	GO	12.5	400413	66.51	37.47	90.86	12.95	0.1594	2.6395	23	4	O
1942	RM	13.6	420916	32.82	129.41	172.80	14.01	0.2355	2.5846	26	5	O
1943	EN	14.5	430310	332.23	182.47	14.51	6.65	0.0995	2.2279	22	4	O
1951	SX	17.0	511001	345.61	211.71	194.04	39.12	0.2522	1.8740	28	8	W
1964	TR2	14.0	641231	63.64	304.26	19.63	3.21	0.1529	2.2599	32	4	Z
1964	TS2	14.9	641231	359.50	219.69	192.95	3.77	0.1856	2.2474	24	3	Z
1964	TT2	13.6	641231	44.36	306.81	31.96	3.05	0.2090	2.6282	32	3	Z
1964	TU2	14.8	641231	22.19	44.14	335.35	5.25	0.1671	2.2908	31	3	Z
1964	VZ2	14.5	641231	0.82	0.69	72.26	2.49	0.2641	2.9135	22	3	Z
1964	VA3	11.1	641231	164.28	86.42	166.79	1.09	0.3568	3.0298	22	3	Z
1965	AK1	12.3	641231	334.71	34.86	123.07	18.37	0.0945	3.1917	52	3	Z
1965	SN	13.4	641231	225.45	108.36	324.59	1.93	0.0593	2.1930	36	4	Z
1965	SO	14.0	641231	327.18	275.46	41.55	3.10	0.1854	2.4521	31	4	Z
1965	SP	12.4	641231	300.70	194.84	186.83	10.35	0.0980	3.0295	31	4	Z
1965	SU	14.4	641231	210.62	320.82	124.33	0.62	0.1304	2.1925	32	5	Z
1965	UZ		651027	333.27	96.92	319.25	2.38	0.1077	2.6272	8	3	B
1965	UA1		651027	342.20	108.32	297.86	1.88	0.1132	2.4543	8	3	B
1965	UB1		651027	357.25	19.22	11.45	6.75	0.2134	2.1519	8	3	B
1965	UC1		651027	24.81	331.19	19.43	3.89	0.1697	2.1747	8	3	B
1965	UO1	13.6	641231	269.13	296.76	99.40	4.69	0.1433	2.2352	43	5	Z
1965	UP1	12.7	641231	271.89	273.98	145.18	6.49	0.0229	2.7566	38	3	Z

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1965	UU1	12.3	641231	285.03	359.40	50.83	14.32	0.1821	2.6282	42	6	Z
1965	UD2	14.5	641231	245.26	11.33	87.86	3.74	0.2368	2.3918	50	6	Z
1965	WJ	12.6	641231	291.09	6.09	79.75	11.83	0.2401	3.1502	17	4	Z
1965	WQ	14.2	641231	240.39	222.53	255.46	3.68	0.2239	2.4176	28	5	2 Z
1965	WR	13.3	641231	311.68	137.45	252.34	12.21	0.1743	2.6485	33	7	Z
1965	YG	14.3	641231	274.93	333.62	107.40	1.30	0.1543	2.3596	39	3	Z
1965	YN	10.8	641231	294.32	56.80	57.09	2.51	0.1419	3.1484	29	3	Z
1966	AA	13.6	641231	289.06	178.35	278.17	13.32	0.1272	2.6099	48	3	Z
1966	BL	12.0	641231	266.42	194.88	300.67	7.01	0.1634	2.7849	27	4	Z
1966	BO	14.2	641231	213.61	51.93	142.11	8.20	0.1976	2.5573	35	4	Z
1966	BW	12.0	641231	206.86	16.94	205.21	1.32	0.0744	3.1001	25	3	Z
1966	BZ	12.1	641231	33.49	226.67	138.40	4.34	0.1828	2.7440	25	3	Z
1966	BA1	9.3	641231	52.82	79.95	327.06	14.17	0.0902	5.2394	45	5	Z
1966	CF		660224	5.46	27.05	115.38	9.59	0.0692	2.3910	12	3	B
1966	CK		660224	309.15	91.95	136.24	6.83	0.2289	2.8469	12	3	B
1966	CL		660224	294.40	114.75	126.84	3.37	0.1961	2.4480	12	3	B
1966	CM		660224	354.77	11.15	149.80	15.67	0.0797	2.6846	12	3	B
1966	DH	12.7	641231	306.74	124.40	344.86	6.86	0.0397	2.7921	28	3	Z
1974	XX	12.8	770726	176.38	348.30	88.06	16.60	0.1495	3.2017	21	3	Z
1974	YP	14.0	770726	285.22	90.94	280.50	13.49	0.2572	2.5986	28	3	Z
1975	BV	14.5	750108	48.19	41.22	12.66	2.36	0.2485	2.3980	6	5	1 B
1975	BX	14.1	770726	200.21	71.41	126.77	24.29	0.2209	2.3921	50	5	Z
1975	BP1	13.0	770726	89.10	97.20	149.01	3.09	0.3561	3.2712	27	3	Z
1975	EA2	13.5	750309	359.03	172.59	343.43	7.87	0.1822	2.5880	8	4	B
1975	FW	12.2	770726	37.49	242.58	52.96	10.86	0.0910	2.9944	25	4	Z
1975	FX	12.8	770726	220.05	43.32	53.32	10.95	0.0727	3.0235	25	4	Z
1975	VP1	14.0	751104	36.63	172.69	192.83	2.24	0.1965	2.3709	31	3	B
1975	WK1	14.0	770726	166.96	204.67	243.46	2.49	0.0905	2.2381	28	5	Z
1975	WL1	12.3	770726	76.94	25.87	87.36	2.82	0.1363	3.2093	40	7	Z
1975	WO1	12.0	770726	119.77	342.34	73.92	12.92	0.2442	3.1450	36	5	Z
1975	XX1	16.0	751124	14.15	38.98	1.34	1.83	0.2759	2.3883	6	4	2 B
1975	XY1	14.5	770726	131.57	223.40	250.43	23.47	0.2149	2.3900	37	5	Z
1975	XA3	14.5	751214	54.83	309.06	46.95	6.91	0.2120	2.2560	36	6	B
1975	XF3	14.0	751124	29.78	46.77	329.45	1.69	0.2665	2.5205	6	3	B
1975	XP3	15.0	751124	20.13	32.95	8.57	3.06	0.1444	2.4093	6	3	B
1976	AD	12.0	760103	154.20	261.82	28.62	0.64	0.0588	3.0060	18	5	1 B
1976	YT3	13.5	761208	291.26	300.88	236.47	9.46	0.1783	2.5798	6	3	B
1977	TJ3	9.7	770726	115.11	45.57	211.13	32.49	0.0325	5.1264	35	5	Z
1977	TQ3	15.3	770726	357.52	304.90	48.36	6.59	0.2601	2.3099	33	4	Z
1977	VJ	12.5	771113	103.33	229.55	41.25	10.34	0.2174	2.8291	8	3	B
1977	VN	12.0	771024	340.39	54.37	9.57	0.67	0.2077	3.1567	33	6	B
1977	VK1		771113	358.60	348.39	41.08	14.21	0.1481	3.0932	8	4	B
1977	VL1		771113	3.95	335.52	50.43	5.65	0.2331	2.6095	8	4	B
1977	VM1		771113	351.51	347.32	59.56	7.27	0.1851	2.2436	8	4	B
1978	UA	16.5	781019	315.30	234.66	233.17	28.72	0.2202	2.2542	3	4	M
1978	VN	13.0	781019	241.30	299.44	253.90	4.63	0.3122	2.7745	2	3	M
1978	VO	14.5	781019	57.31	338.46	356.64	4.24	0.1418	2.8803	3	5	M
1978	VP	12.5	781019	266.13	231.26	280.08	3.11	0.0905	2.7367	3	5	M
1978	VT	11.0	781019	28.64	14.08	358.46	4.26	0.0844	2.6347	3	5	M
1978	VU	16.5	781019	21.18	21.80	334.72	1.69	0.3618	2.7841	2	3	M
1978	VX	17.0	781019	17.03	350.18	32.35	5.37	0.1138	2.3751	2	3	M
1978	VB1	13.0	781019	19.08	129.24	249.60	7.56	0.1825	3.0734	3	5	F
1978	VD1	15.0	781019	35.70	347.41	9.58	5.32	0.1547	2.4247	3	5	F
1978	VF1	14.0	781019	0.27	138.37	270.33	5.80	0.0547	3.2256	3	4	1 M
1978	VH1	16.0	781019	321.15	62.68	35.06	7.28	0.1588	2.6065	2	3	F
1978	VJ1	17.0	781019	25.87	91.82	275.63	3.64	0.1613	2.2595	3	5	F
1978	VK1	16.0	781019	306.27	171.96	307.69	1.71	0.1953	2.4866	2	3	1 F
1978	VN1	18.0	781019	16.70	324.44	32.51	4.92	0.4172	2.5496	2	3	F
1978	VO1	17.0	781019	49.62	307.05	26.70	4.37	0.2114	2.3912	2	3	1 F

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1978	VQ1	15.0	781019	175.91	209.34	22.52	5.38	0.2317	2.2841	3	4	1	M
1978	VT1	16.0	781019	300.23	98.70	25.49	4.95	0.1738	2.3395	3	5		F
1978	VW1	15.5	781019	59.82	285.20	44.80	15.37	0.1591	2.5279	2	3		F
1978	VZ1	16.0	781019	283.37	107.14	39.77	10.36	0.2080	2.2857	2	3	1	F
1978	VB2	16.0	781019	292.08	179.71	338.99	2.30	0.3854	2.2293	2	3		F
1978	VF2	16.0	781019	66.38	11.49	324.36	3.43	0.0395	2.2667	3	5		F
1978	VH2	16.5	781019	40.64	46.99	300.93	2.32	0.1732	2.1920	2	3	1	F
1978	VP2	16.5	781019	13.71	94.48	292.05	1.51	0.1320	2.2883	2	3		F
1978	VQ2	19.0	781019	13.86	123.56	257.10	2.43	0.1957	2.1227	2	3	1	F
1978	VR2	16.5	781019	18.26	2.72	9.36	3.91	0.2521	2.3720	3	5		F
1978	VS2	15.5	781019	34.46	336.54	17.79	4.10	0.2084	2.4476	2	3		F
1978	VT2	17.0	781019	22.84	25.82	332.12	2.47	0.3100	2.2716	2	3		F
1979	BA	17.0	790328	72.03	290.36	142.96	46.65	0.2013	1.8414	120	6		M
1979	DE	12.0	790507	37.40	358.47	132.66	20.23	0.1666	2.8932	107	9		M
1979	KO	13.5	790527	199.62	321.05	106.35	18.09	0.1109	3.1775	5	3	1	M
1979	KQ	15.0	790527	182.55	204.30	176.95	5.42	0.1213	2.5052	4	5	1	M
1979	KS	13.5	790527	181.47	202.74	175.35	2.80	0.2162	2.9812	5	6	1	M
1979	KT	13.5	790527	171.50	235.28	150.53	2.32	0.2020	2.9339	5	6	1	M
1979	KV	14.0	790527	134.39	24.12	31.38	1.32	0.1201	3.1577	5	5	1	M
1979	KX	14.0	790527	285.52	264.74	17.15	2.89	0.0698	3.2177	4	3	1	M
1979	MA	16.5	790616	43.45	285.26	284.94	21.62	0.3183	2.4290	6	4		M
1979	MC	15.0	790726	354.94	161.00	147.88	12.15	0.2691	2.4284	56	8	2	M
1979	MF	17.0	790706	336.16	170.80	143.89	6.88	0.2662	2.2941	35	4		M
1979	MV1	15.5	790616	282.17	253.17	130.32	8.19	0.1684	2.3302	6	4	1	M
1979	MW1	15.5	790616	301.03	119.06	244.23	4.59	0.1549	2.6328	6	4		M
1979	MC2	14.5	790616	33.04	31.79	199.98	2.09	0.2748	3.2092	6	4	1	M
1979	MF2	17.0	790616	349.77	120.00	177.85	1.06	0.2176	2.3252	6	4		M
1979	MK2	12.5	790616	177.60	352.73	119.21	10.89	0.1768	2.5817	2	3	1	M
1979	ML2	14.0	790616	339.29	188.00	129.15	13.84	0.1739	2.9744	6	4		M
1979	MN2	14.5	790616	2.14	137.62	143.81	3.19	0.1612	2.4554	6	4	1	M
1979	MU2	15.0	790616	357.06	131.09	162.28	5.65	0.1663	3.1820	6	4		M
1979	MX2	13.0	790616	300.10	82.43	281.87	9.50	0.1337	3.0393	6	4		M
1979	MY2	15.5	790616	57.36	330.87	238.85	4.56	0.1931	2.5724	6	4		M
1979	MB3	15.5	790616	25.27	135.64	118.12	14.83	0.1331	2.6010	6	4		M
1979	MG3	14.5	790616	20.56	352.48	270.09	8.24	0.1451	3.1754	6	4		M
1979	ML3	14.0	790616	25.85	33.88	225.23	3.23	0.0624	2.5598	6	4		M
1979	MM3	14.5	790616	287.48	260.70	119.59	18.18	0.1561	2.8807	6	4		M
1979	MN3	15.5	790616	125.35	283.34	233.30	1.91	0.0641	2.2589	6	4		M
1979	MR3	14.5	790616	341.76	186.75	121.82	7.82	0.1331	2.2992	6	4		M
1979	MW3	17.0	790616	8.54	35.82	234.01	2.67	0.2101	2.3257	6	4		M
1979	MZ3	14.5	790616	39.65	27.88	207.09	1.11	0.1811	3.2066	6	4	1	M
1979	MA4	13.0	790616	335.22	137.82	189.08	4.10	0.1794	3.4518	6	4		M
1979	MD4	13.5	790616	303.03	151.07	218.46	1.76	0.2392	2.3294	6	4		M
1979	MF4	13.5	790616	331.40	197.88	126.52	5.70	0.1749	2.2572	2	3		M
1979	MG4	14.0	790616	32.81	90.17	161.15	1.71	0.0958	3.0750	6	4	1	M
1979	MJ4	15.5	790616	341.61	189.47	123.86	12.82	0.1871	2.6055	6	4		M
1979	MM4	17.0	790616	21.41	45.98	204.52	2.81	0.2140	2.2806	6	4		M
1979	MQ4	14.0	790616	70.11	313.30	259.69	8.85	0.0933	3.1954	6	4	1	M
1979	MR4	13.0	790616	201.32	246.40	207.19	4.52	0.1085	2.3823	6	4		M
1979	MT4	14.5	790616	184.29	192.55	275.64	11.98	0.0693	2.6124	6	4		M
1979	MX4	14.5	790616	342.17	46.29	268.79	11.05	0.2153	2.6406	2	3		M
1979	MZ4	15.5	790616	332.87	204.27	122.96	8.82	0.2042	2.5804	6	4		M
1979	MA5	14.0	790616	38.10	349.28	259.33	8.40	0.0795	3.1095	6	4		M
1979	MB5	15.5	790616	328.94	132.65	201.23	3.49	0.2053	2.6165	6	4		M
1979	MG5	16.0	790616	351.13	59.98	237.84	3.57	0.2054	2.3332	6	4		M
1979	MJ5	15.5	790616	220.45	269.96	168.31	4.37	0.1331	2.2187	6	4		M
1979	MM5	15.5	790616	293.95	132.80	252.99	1.62	0.2672	2.5063	6	4		M
1979	MR5	16.0	790616	303.06	95.02	267.18	1.97	0.1710	2.3164	6	4		M
1979	MX5	16.0	790616	50.83	48.27	167.96	2.31	0.2031	2.4208	6	4		M

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1979	MY5	14.0	790616	24.86	340.67	277.28	11.62	0.1317	2.7233	6	4	M
1979	MA6	15.0	790616	243.51	290.71	134.58	6.63	0.1980	2.2982	6	4	1 M
1979	MB6	15.5	790616	302.82	230.29	147.05	3.85	0.2937	2.2858	6	4	1 M
1979	MC6	16.0	790616	334.05	47.91	281.13	18.07	0.2334	2.5836	6	4	M
1979	MG6	16.5	790616	354.96	38.57	254.44	5.85	0.1421	2.2787	6	4	M
1979	MO6	15.0	790616	268.73	277.67	120.27	11.83	0.1313	2.6669	6	4	M
1979	MS6	14.0	790616	100.40	296.60	244.14	5.59	0.0997	2.4802	6	4	M
1979	MV6	14.0	790616	357.18	67.09	225.92	3.53	0.0669	2.4410	6	4	M
1979	MX6	14.5	790616	33.68	344.88	254.70	6.59	0.1650	2.5181	2	3	M
1979	MZ6	16.0	790616	318.76	95.51	248.66	3.86	0.2039	2.3666	6	4	M
1979	ME7	14.5	790616	264.88	136.46	272.89	12.44	0.2245	2.5770	6	4	M
1979	MU7	17.0	790616	341.76	66.49	245.63	4.51	0.2360	2.2476	6	4	M
1979	MM8	16.0	790616	302.23	192.50	174.40	3.81	0.1896	2.4281	6	4	M
1979	MS8	13.0	790616	302.50	170.74	204.83	1.33	0.2395	2.9386	6	4	1 M
1979	MU8	14.5	790616	107.07	51.11	125.27	13.96	0.0709	2.4791	6	4	M
1979	OC	14.5	790904	7.78	64.23	255.25	7.45	0.0856	2.2907	57	8	M
1979	PA	15.5	790815	10.73	82.31	224.53	12.00	0.2269	2.4656	4	5	M
1979	PB	13.0	790904	53.35	14.00	237.70	7.52	0.2198	2.6833	36	0	M
1979	QB	15.0	790904	354.19	11.30	342.16	3.38	0.4430	2.3338	36	8	M
1979	QE	12.0	790904	244.92	196.37	277.41	12.96	0.0418	3.0415	20	0	M
1979	SA	11.5	790904	250.87	273.87	205.07	18.81	0.1925	3.2287	29	0	M
1979	SC	14.0	790924	180.83	153.53	25.02	6.49	0.1764	2.2133	2	3	1 M
1979	SD	14.0	790924	187.21	137.32	36.91	5.35	0.1591	2.6762	2	3	1 M
1979	SE	13.5	790924	112.75	122.80	90.68	3.38	0.1314	2.8012	11	5	M
1979	SF	13.5	790904	30.81	345.55	332.44	7.93	0.0735	2.6620	10	0	M
1979	SH	16.0	790904	342.31	51.46	331.41	5.12	0.2833	2.5940	10	0	M
1979	SJ	17.0	790904	6.54	340.69	359.43	4.03	0.2057	2.0645	8	8	M
1979	SK	16.0	790904	354.06	62.10	295.78	2.89	0.1999	2.2022	8	8	M
1979	SL	12.5	790904	356.49	155.00	202.35	9.40	0.1037	3.1346	7	6	M
1979	SM	14.0	790904	353.37	26.27	337.11	7.74	0.1606	2.9912	8	8	M
1979	SN	16.5	790904	352.42	30.20	331.49	4.63	0.1871	2.2135	2	6	1 M
1979	SO	15.0	790904	6.05	335.98	8.15	8.64	0.2346	2.8362	2	6	M
1979	SP	13.0	790904	318.15	275.98	140.08	1.93	0.2009	3.2164	2	6	M
1979	SQ	13.0	790904	13.64	43.77	290.12	3.41	0.1008	2.6096	2	6	M
1979	SR	13.0	790904	319.29	216.18	199.82	11.55	0.2490	3.1393	2	6	M
1979	SS	16.5	790904	346.78	37.53	330.46	4.60	0.1858	2.1192	2	6	M
1979	ST	15.0	790904	341.92	89.00	295.01	2.35	0.2978	2.8051	2	6	1 M

Note 1: e assumed. 2: double designations 1965 WQ = 1965 WW (B), 1975

XX1 = 1975 XE3 (B), 1979 MC = 1979 QC (M).

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

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

1935 SQ1 = 1974 XQ

Epoch 1979 Nov. 23.0 ET = JDE 2444200.5 (J-P)

M	21.44986	(1950.0)	P	Q
n	0.17958288	Peri. 323.05487	+0.97317250	-0.22899196
a	3.1114319	Node 50.19811	+0.21741867	+0.88356858
e	0.1808004	Incl. 1.66448	+0.07526229	+0.40849630
P	5.49	B(1,0) 12.5		

Residuals in seconds of arc

350928	078	0.9+	0.1+	351030	078	0.4+	0.9-	750116	330	0.4+	1.1+
351001	078	0.7-	0.1-	741214	330	1.6+	0.8+	750117	330	3.4-	1.8+
351015	078	0.3-	0.7+	741214	095	0.5+	0.6-	750118	330	1.9+	1.7+
351018	078	0.8-	0.7+	741218	330	2.4+	1.1+				
351027	078	2.3-	1.0-	750112	330	0.4+	1.4+				

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1938 CG = 1975 EY1

Epoch 1979 Nov. 23.0 ET = JDE 2444200.5 (J-P)

M	215.75121	(1950.0)	P	Q	
n	0.29359871	Peri.	287.11731	+0.37459676	-0.92549461
a	2.2419925	Node	140.73657	+0.88074169	+0.33630270
e	0.1266324	Incl.	5.07718	+0.28977807	+0.17424185
P	3.36	B(1,0)	14.5		

Residuals in seconds of arc

380206	024	0.0	2.0+	380304	024	2.0+	1.0-	750212	330	0.9+	8.3-
380219	024	1.0-	0.8-	750116	330	0.4-	1.7+	750308	095	2.5-	2.1+
380223	024	0.8+	0.2-	750122	330	0.6+	0.8+	750312	095	1.2+	2.6+

1939 QB = 1943 TD

Epoch 1979 Nov. 23.0 ET = JDE 2444200.5 (J-P)

M	77.69149	(1950.0)	P	Q	
n	0.25113609	Peri.	126.15202	+0.99747066	-0.00428023
a	2.4880789	Node	234.19831	-0.02083381	+0.93673953
e	0.2376118	Incl.	5.01866	+0.06795767	+0.35000103
P	3.92	B(1,0)	14.3		

Residuals in seconds of arc

390818	062	2.0-	1.2+	391007	062	0.6+	0.7+	431005	062	0.2+	0.6+
390916	062	0.9+	1.8-	391018	062	0.0	0.4+	431005	062	0.2+	0.1+
390920	062	2.6+	0.1-								

1940 GH = 1951 JT = 1975 XZ1 = 1975 XM3

The identification 1950 DH = 1951 JT (MPC 2807) is invalid.

Epoch 1979 Nov. 23.0 ET = JDE 2444200.5 (J-P)

M	31.21179	(1950.0)	P	Q	
n	0.18314935	Peri.	239.40909	+0.48524550	+0.84604096
a	3.0709070	Node	61.22655	-0.69085063	+0.52575703
e	0.0690798	Incl.	14.58994	-0.53596847	+0.08828502
P	5.38	B(1,0)	11.5		

Residuals in seconds of arc

400404	062	1.4-	2.4+	510503	711	2.7-	6.2-	Y	751202	095	2.5+	1.4-
400410	062	0.1-	1.1+	751123	330	0.5-	2.2+		751223	330	0.3+	1.6+
400411	062	1.5-	3.4+	751126	330	0.2+	2.0+		751229	330	0.5-	2.5+
400412	062	1.7-	3.6+	751129	330	0.1+	2.8+					
510503	711	3.6-	0.2-	Y	751201	095	1.6+	7.6+				

1955 RX = 1955 SA2 = 1965 SV = 1970 ET2

The double designation 1955 RX = 1955 SA2 was found independently by B. Potter (MPC 1410) and S. Kanda (MPC 1454).

Epoch 1979 Nov. 23.0 ET = JDE 2444200.5 (J-P)

M	33.80875	(1950.0)	P	Q	
n	0.29474121	Peri.	253.24439	+0.31125102	-0.95032545
a	2.2361950	Node	178.61577	+0.90142842	+0.29454057
e	0.1744814	Incl.	4.94810	+0.30091460	+0.10063492
P	3.34	B(1,0)	15.0		

Residuals in seconds of arc

550913	760	1.0+	1.9+	550919	024	2.1+	4.4+		651024	330	1.2-	0.0
550913	760	1.7+	2.1+	550920	024	1.6-	1.3-		700306	805	0.6-	0.5+
550916	760	0.7-	0.7-	650922	330	3.9+	1.6-		700306	805	0.0	0.5+
550916	760	0.9-	0.1+	650923	330	0.7+	0.3-		700306	805	0.7+	0.2+
550918	760	1.0-	0.1+	651017	330	1.0-	1.0-					
550918	760	1.6-	0.1+	651020	330	1.1-	2.8-					

1975 WM1 = 1951 XK

Epoch 1979 Nov. 23.0 ET = JDE 2444200.5 (J-P)

M 1

(1950, 0)

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0

n	0.08328269	Peri.	321.40604	+0.64795406	-0.69817372
a	5.1931843	Node	85.93357	+0.75236682	+0.52434951
e	0.0428733	Incl.	17.77320	+0.11874220	+0.48745364

$$P = 11.83 \quad B(1,0) = 9.5$$

Residuals in seconds of arc											
511205	711	1.1-	0.2+	751126	330	0.2+	0.6+	751222	330	0.7-	0.9+
511205	711	1.5-	0.8+	751129	330	3.2-	1.6+	751229	330	2.8-	0.5+
511223	711	1.9-	0.4+	751202	330	3.2-	0.4+				
511223	711	2.8-	0.6-	751211	330	0.4-	0.0				

1977 OH1 = 1959 EM = 1978 UU

Epoch 1979 Nov. 23.0 ET = JDE 2444200.5 (J-P)

M	335.38229	(1950.0)	P	Q	
n	0.08429807	Peri.	294.95840	-0.06359220	-0.99703381
a	5.1513987	Node	158.55338	+0.95302500	-0.07356169
e	0.0181032	Incl.	6.80977	+0.29614079	+0.02263300

P 11.69 B(1,0) 10.0

Residuals in seconds of arc											
590311	690	0.0	0.5+	770824	095	2.2-	2.3-	770922	095	1.0+	0.2-
590312	690	1.7-	1.5+	770906	095	0.2-	0.5+	771007	095	1.0-	0.6+
770819	095	0.0	1.9-	770908	095	0.3+	0.3-	781028	688	0.1+	3.5+
770820	095	0.5-	1.0-	770910	095	0.5-	1.3-				
770822	095	0.2+	1.8-	770918	095	0.3-	2.0-				

1977 TL3

The 1978 recovery was made on the basis of calculations at the Purple Mountain Observatory (Chinese Astron. Circ. No. 3).

Epoch 1979 Nov. 23.0 ET = JDE 2444200.5 (J-P)

M	167.15157	(1950.0)	P	Q	
n	0.08459736	Peri.	58.68050	+0.13742996	+0.97414116
a	5.1392418	Node	220.46931	-0.97646979	+0.10286437
e	0.0130960	Incl.	16.04022	-0.16619192	+0.20116641
P	11.65	B(1,0)	9.8		

Residuals in seconds of arc											
771004	330	1.4-	1.4-	771101	330	0.4+	1.7+	781126	330	2.6+	0.2-
771010	330	1.1+	1.3+	771108	330	0.9-	0.3-	781130	330	2.7-	5.0+
771016	330	0.6+	1.0-	781028	330	0.2+	2.6-	781205	330	0.1-	2.4-

6521 P-T₁ = 1970 OB = 1977 TR 3

Epoch 1979 Nov. 23.0 ET = JDE 2444200.5 (J-P)

EPOCH 1950.0 REV. 257.0 E1 32111200.0 (S-T)
M 215.64087 (1950.0) P Q
n 0.29167313 Peri. 240.90535 +0.82997770 -0.55706344
a 2.2518492 Node 152.91747 +0.53109349 +0.77353774
e 0.1322386 Incl. 3.60028 +0.17051896 +0.30219146
P 3.38 B(1.0) 15.0

Residuals in seconds of arc											
600924	675	0.7+	1.1+	601022	675	0.5-	0.8+	771103	330	0.8-	1.5-
600926	675	1.0+	1.1+	601025	675	0.9-	1.0+	771104	330	0.1+	2.3-
600927	675	0.7+	0.3+	601026	675	0.1-	0.9+	771108	330	0.9+	1.2-
600928	675	1.1+	0.7+	700828	095	0.7+	2.4-	771111	330	1.0+	0.3-
601017	675	1.1-	1.1+	771012	330	3.0+	2.0+				

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

The identifications are by B. G. Marsden.

(646) Kastalia

Epoch 1979 Nov. 23.0 ET = JDE 2444200.5

M 141.81235	(1950.0)	P	Q
n 0.27782191	Peri. 36.99451	+0.93368528	+0.34342679
a 2.3260822	Node 302.62068	-0.35056603	+0.81883367
e 0.2123158	Incl. 6.91731	-0.07304281	+0.45996680
P 3.55	B(1,0) 14.3		

Residuals in seconds of arc

070911 024 0.5-	3.2+	140824 045 0.3-	0.5-	530816 012 (2.0-	7.7+)
070916 024 (4.3-	2.5+)	140829 045(11.3-	0.9+)	530829 078 1.2+	0.2+
070919 045 0.7-	2.0-	321130 012(46.8-	27.0+)X	530906 760 0.4+	0.9+
070930 045 (3.8+	0.3+)	370111 029 0.4+	1.5-	530906 760 0.4+	1.0+
071005 045 (7.2+	0.3+)	370112 029 1.4-	0.0	641104 760 1.6+	0.1-
071008 045 0.6+	0.6-	370113 754 0.4+	0.2-	641104 760 0.3-	0.2+
071012 045 0.1+	1.5+	391020 062 (5.3+	6.1+)X	641207 760 0.2-	1.6+
071023 045 1.0+	2.2-	530804 078 1.5+	1.5-	710927 095(12.5+	8.9+)
071029 045 (2.8+	1.1-)	530810 760 0.5+	0.4+	711014 095 0.0	0.4-
071104 045 0.9+	0.4-	530810 760(22.3-	11.8+)	711020 095 1.0-	0.9-
140821 045 1.0-	1.2-	530813 012 3.7-	0.3+	711111 095 0.9-	1.4+
140823 045 1.1+	0.5-				

1936 TK = 1976 EG = 1979 PC

Epoch 1979 Nov. 23.0 ET = JDE 2444200.5 (J-P)

M 327.64770	(1950.0)	P	Q
n 0.18089622	Peri. 103.99184	+0.79296791	-0.57196495
a 3.0963539	Node 291.30104	+0.43476171	+0.77256551
e 0.2088874	Incl. 13.01998	+0.42683035	+0.27567848
P 5.45	B(1,0) 12.5		

Residuals in seconds of arc

361007 690 1.6+	1.8+	790829 046 0.8-	0.6+	790913 046 0.1+	1.0-
361009 690 0.2+	0.4+	790829 046 0.1-	0.5+	790916 046 0.2+	0.5-
361011 690 1.7-	2.3-	790830 046 0.2-	1.1+	790916 046 0.9-	0.6-
760307 808 0.7+	0.0	790830 046 0.1-	1.1+	790919 046 2.0+	0.1+
760307 808 0.5-	0.3+	790912 046 1.9-	0.1+	790919 046 2.2+	0.3-
790825 046 0.7+	0.5+	790912 046 0.8-	0.9-		
790825 046 0.7-	0.5-	790913 046 0.0	0.9-		

1965 QC = 1936 SF = 1969 MB = 1973 GH1 = 1979 MB

Epoch 1979 Nov. 23.0 ET = JDE 2444200.5 (J-P)

M 286.26945	(1950.0)	P	Q
n 0.20355305	Peri. 257.00956	+0.58834190	-0.80159564
a 2.8621024	Node 155.97014	+0.80539549	+0.56920288
e 0.1574329	Incl. 15.13096	+0.07205492	+0.18290026
P 4.84	B(1,0) 12.0		

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

360917 078(28.0+ 43.1+)X	650829 760 1.5+	4.1+	690619 095 0.4-	0.3-
360917 078(58.1+ 13.1+)X	650829 760 1.5+	2.7+	730403 095 0.4+	3.3+
360926 078(25.4+ 15.2-)X	650903 760(16.1-	6.7+)	790628 688 0.4-	1.6+
361004 078(0.07+ 0.00+)X	650903 760 7.1-	2.4-	790702 688 2.4-	0.4-
361010 078 (7.4+ 11.7-)X	650928 760 4.0+	0.7-	790723 688 0.8+	0.6-
361016 078(12.8- 31.1+)X	650928 760 0.2-	1.8+	790730 688 1.0+	1.9-

1975 TN = 1979 QF

Epoch 1979 Nov. 23.0 ET = JDE 2444200.5 (J-P)

M 338.29305	(1950.0)	P	Q
n 0.24050290	Peri. 196.34729	+0.75168360	-0.65064362
a 2.5608848	Node 205.25406	+0.62985259	+0.75670387
e 0.1318659	Incl. 14.64483	+0.19559520	+0.06373488
P 4.10	B(1,0) 14.0		

Residuals in seconds of arc

751003 095 0.4+	1.1+	790912 046 0.1-	1.0-	790918 552 0.2+	0.6+
751101 095 0.9-	0.7+	790916 046 0.3-	0.9-	790919 046 2.1-	1.9-
751106 095 0.3-	2.5-	790916 046 1.6+	0.5+	790919 046 0.0	1.1-
751108 095 1.5+	1.3+	790916 552 0.9+	1.3+	790926 046 1.1+	1.3-
790829 552 0.4+	1.0+	790916 552 3.0+	0.5+	790926 046 0.3+	1.3-
790829 552 0.7+	1.3+	790917 046 1.4-	4.1-	790926 552 0.2-	0.0
790829 046 0.3-	0.6-	790917 552 2.5-	1.1+	790926 552 (9.2-	1.2-)
790829 046 0.8+	0.2+	790917 552 2.7-	1.3+	790927 552 0.3-	1.2+
790912 046 2.7+	0.2-	790918 552 (5.7-	1.4-)	790927 552 1.3-	0.3+

* * * * *

NEW NAMES OF MINOR PLANETS.

(1912) Anubis = 6534 P-L

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

Named for the Egyptian god who had the shape of a jackal and was the protector of the dead.

(1923) Osiris = 4011 P-L

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

Named for the Egyptian god of vegetation, of the waxing and waning moon and of the annual flooding of the Nile.

(1924) Horus = 4023 P-L

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

Named for the son of Osiris, an Egyptian god in the shape of a falcon, king of the sky and the stars.

(1958) Chandra = 1970 SB

Discovered 1970 Sept. 24 by C. U. Cesco at the Yale-Columbia Southern Station, El Leoncito.

Named for Subrahmanyan Chandrasekhar, the Indian-born distinguished service professor at the University of Chicago, generally regarded as the world's leading theoretical astrophysicist.

(2075) Martinez = 1974 VA

Discovered 1974 Nov. 9 at the El Leoncito Station of the Felix Aguilar Observatory.

Named in memory of Hugo Arturo Martinez (1890-1976), astronomer at the La Plata Observatory for many years.

(2124) Nissen = 1974 MK

Discovered 1974 June 20 at the El Leoncito Station of the Felix Aguilar Observatory.

Named in memory of Juan Jose Nissen (1901-1978), first director of the Felix Aguilar Observatory, previously director of the Cordoba Observatory and a department head at the La Plata Observatory.

(2135) Aristaeus = 1977 HA

Discovered 1977 Apr. 17 by E. F. Helin and S. J. Bus at Palomar.

This Apollo object is named for the son of Apollo and the nymph Cyrene.

(2153) Akiyama = 1978 XD

Discovered 1978 Dec. 1 at the Harvard College Observatory, Agassiz Station.

Named in memory of Kaoru Akiyama (1901-1970), professor at Hosei University, Tokyo, during 1930-1940 and 1949-1970, well known for his work on minor planets. Initially in collaboration with K. Hirayama, he made the first detailed study of the orbit of the 3/2 commensurability object (153) Hilda. Name proposed by K. Tomita.

(2159) Kukkamaki = 1941 UX

Discovered 1941 Oct. 16 by L. Oterma at Turku.

Named in honor of T. J. Kukkamaki on the occasion of his 70th birthday, 1979 Oct. 11. A distinguished disciple of Y. Vaisala, this leading geodesist was for many years Director of the Finnish Geodetic Institute. He is an active member of several international scientific organizations and has served as President of the International Association of Geodesy since 1975.

* * * *

EPHEMERIDES.

1935 SQ1				Elements MPC 5009				
Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1979 09 24	02	50.81	+15 27.8	1.753	2.563	135.0	16.1	16.1
1979 10 04	02	47.75	+15 18.4					
1979 10 14	02	42.27	+14 58.9	1.627	2.574	156.8	8.8	15.8
1979 10 24	02	34.96	+14 31.2					
1979 11 03	02	26.75	+13 59.0	1.597	2.589	179.2	0.3	15.3
1979 11 13	02	18.74	+13 26.9					
1979 11 23	02	11.95	+13 00.1	1.675	2.606	155.5	9.0	15.9
1979 12 03	02	07.18	+12 42.8					
1979 12 13	02	04.87	+12 37.6	1.849	2.626	133.5	15.8	16.3
1979 12 23	02	05.16	+12 45.4					
1980 01 02	02	07.98	+13 05.8	2.091	2.648	114.0	19.8	16.7
1980 01 12	02	13.10	+13 37.2					
1980 01 22	02	20.28	+14 17.8	2.370	2.672	96.8	21.4	17.0
1977 QH1				Elements MPC 5011				
Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1979 09 24	04	53.26	+15 12.0	4.701	5.071	106.0	11.0	17.1
1979 10 04	04	53.96	+14 58.6					
1979 10 14	04	53.31	+14 43.2	4.424	5.069	125.5	9.2	17.0
1979 10 24	04	51.30	+14 26.6					
1979 11 03	04	48.03	+14 09.5	4.213	5.068	146.3	6.2	16.8
1979 11 13	04	43.71	+13 52.8					
1979 11 23	04	38.62	+13 37.3	4.101	5.067	166.7	2.6	16.5
1979 12 03	04	33.13	+13 24.3					
1979 12 13	04	27.66	+13 14.5	4.109	5.066	164.9	2.9	16.6
1979 12 23	04	22.61	+13 08.9					
1980 01 02	04	18.36	+13 08.0	4.237	5.065	143.9	6.6	16.8
1980 01 12	04	15.19	+13 12.0					
1980 01 22	04	13.28	+13 21.0	4.462	5.064	122.8	9.4	17.0
1980 02 01	04	12.74	+13 34.4					
1980 02 11	04	13.57	+13 51.7	4.750	5.063	102.9	11.0	17.2

M. P. C. 5015

1979 NOV. 1

1977 TL3		Elements MPC 5011						
Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1979 09 24	06	07.48	+12 48.7	5.139	5.203	88.1	11.1	17.2
1979 10 04	06	10.30	+12 17.3	4.835	5.204	106.3	10.6	17.0
1979 10 14	06	11.89	+11 44.7	4.563	5.204	125.7	8.9	16.9
1979 10 24	06	12.16	+11 11.7	4.359	5.205	145.8	6.1	16.7
1979 11 03	06	11.10	+10 39.3	4.256	5.205	163.0	3.2	16.5
1979 11 13	06	08.74	+10 08.5	4.073	5.206	159.6	3.8	16.5
1979 11 23	06	05.20	+09 40.4	3.980	5.206	140.7	6.9	16.8
1979 12 03	06	00.69	+09 16.0	3.887	5.206	120.5	9.4	16.9
1979 12 13	05	55.52	+08 56.5	3.794	5.206	101.3	10.8	17.1
1979 12 23	05	50.03	+08 42.4	3.701	5.206			
1980 01 02	05	44.64	+08 34.4	3.608	5.206			
1980 01 12	05	39.75	+08 32.3	3.515	5.206			
1980 01 22	05	35.67	+08 36.0	3.422	5.206			
1980 02 01	05	32.68	+08 44.7	3.329	5.206			
1980 02 11	05	30.94	+08 57.4	3.236	5.206			
1980 02 21	05	30.53	+09 13.2	3.143	5.206			
1980 03 02	05	31.46	+09 31.0	3.050	5.206			
1977 NT		Elements MPC 4926						
Date	ET	R. A. (1950)	Decl.	Delta	r	Variation	Mag.	
1979 10 14	07	09.41	+23 19.8	3.473	3.675	-0.56	+0.9	18.9
1979 10 24	07	13.14	+23 16.2	3.380	3.680	-0.62	+1.0	18.7
1979 11 03	07	14.99	+23 15.8	3.287	3.684	-0.68	+1.1	18.4
1979 11 13	07	14.80	+23 19.0	3.194	3.686	-0.73	+1.0	18.2
1979 11 23	07	12.49	+23 25.8	3.001	3.687	-0.76	+0.7	17.7
1979 12 03	07	08.10	+23 35.6	2.908	3.687	-0.76	+0.7	17.7
1979 12 13	07	01.87	+23 47.3	2.815	3.686	-0.74	+0.4	18.2
1979 12 23	06	54.20	+23 59.3	2.722	3.686	-0.74	+0.4	18.2
1980 01 02	06	45.74	+24 10.0	2.629	3.687	-0.76	+0.7	17.7
1980 01 12	06	37.25	+24 18.2	2.536	3.687	-0.76	+0.7	17.7
1980 01 22	06	29.50	+24 23.4	2.443	3.686	-0.74	+0.4	18.2
1980 02 01	06	23.15	+24 25.8	2.350	3.684	-0.68	+0.2	18.4
1980 02 11	06	18.65	+24 26.0	2.257	3.684	-0.68	+0.2	18.4
1980 02 21	06	16.24	+24 24.6	2.164	3.684	-0.68	+0.2	18.4
1980 03 02	06	16.00	+24 22.2	2.071	3.681	-0.62	+0.1	18.7
1980 03 12	06	17.83	+24 19.0	1.978	3.676	-0.56	+0.2	18.9
1980 03 22	06	21.57	+24 14.9	1.885	3.676	-0.56	+0.2	18.9
1939 QB		Elements MPC 5010						
Date	ET	R. A. (1950)	Decl.	Delta	r	Elong.	Phase	Mag.
1979 11 03	08	21.85	+15 12.7	2.148	2.449	95.4	23.8	18.5
1979 11 13	08	27.63	+14 25.5	1.955	2.501	113.0	21.3	18.2
1979 11 23	08	30.77	+13 45.6	1.862	2.552	133.5	16.3	18.0
1979 12 03	08	31.01	+13 15.0	1.769	2.602	156.5	8.7	17.7
1979 12 13	08	28.26	+12 55.6	1.676	2.650	172.3	2.9	17.5
1979 12 23	08	22.59	+12 48.3	1.583	2.695	151.5	10.0	17.9
1980 01 02	08	14.40	+12 53.1	1.490	2.739	129.6	16.2	18.4
1980 01 12	08	04.51	+13 08.3	1.397	2.781	110.3	19.6	18.8
1980 01 22	07	53.99	+13 31.3	1.304	2.820	93.4	20.8	19.1
1980 02 01	07	44.09	+13 58.4	1.211				
1980 02 11	07	35.88	+14 26.6	1.118				
1980 02 21	07	30.08	+14 53.3	1.025				
1980 03 02	07	27.08	+15 16.5	0.932				
1980 03 12	07	26.86	+15 35.1	0.839				
1980 03 22	07	29.25	+15 48.2	0.746				
1980 04 01	07	33.97	+15 55.2	0.653				
1980 04 11	07	40.65	+15 55.6	0.560				

M. P. C. 5016

1979 NOV. 1

1977 QL3		Elements MPC 4927					
Date	ET	R. A. (1950)	Decl.	Delta	r	Variation	Mag.
1979	11 03	09 00.19	+20 24.0	3.305	3.416	-0.65	+2.0
1979	11 13	09 06.32	+20 15.8	3.021	3.422	-0.71	+2.4
1979	11 23	09 10.75	+20 15.6	2.764	3.428	-0.78	+2.7
1979	12 03	09 13.28	+20 24.4	2.569	3.434	-0.86	+2.9
1979	12 13	09 13.78	+20 42.9	2.469	3.441	-0.92	+2.8
1979	12 23	09 12.13	+21 10.6	2.488	3.448	-0.93	+2.4
1980	01 02	09 08.40	+21 46.2	2.621	3.454	-0.88	+1.9
1980	01 12	09 02.82	+22 27.0	2.842	3.461	-0.80	+1.7
1980	01 22	08 55.84	+23 09.3	2.842	3.461	-0.80	+1.7
1980	02 01	08 48.12	+23 49.0	2.842	3.461	-0.80	+1.7
1980	02 11	08 40.46	+24 22.6	2.842	3.461	-0.80	+1.7
1980	02 21	08 33.62	+24 47.3	2.842	3.461	-0.80	+1.7
1980	03 02	08 28.27	+25 02.2	2.842	3.461	-0.80	+1.7
1980	03 12	08 24.83	+25 07.3	2.842	3.461	-0.80	+1.7
1980	03 22	08 23.51	+25 03.3	2.842	3.461	-0.80	+1.7
1980	04 01	08 24.33	+24 51.3	2.842	3.461	-0.80	+1.7
1980	04 11	08 27.16	+24 32.2	2.842	3.461	-0.80	+1.7
1977 RG		Elements MPC 4576					
Date	ET	R. A. (1950)	Decl.	Delta	r	Variation	Mag.
1979	11 23	10 00.12	+05 54.9	2.748	2.914	-0.79	+2.2
1979	12 03	10 06.61	+05 16.3	2.452	2.894	-0.89	+2.6
1979	12 13	10 11.36	+04 47.6	2.181	2.873	-1.02	+3.0
1979	12 23	10 14.12	+04 31.3	1.969	2.852	-1.15	+3.4
1980	01 02	10 14.68	+04 29.8	1.851	2.830	-1.23	+3.6
1980	01 12	10 12.94	+04 44.9	1.847	2.807	-1.22	+3.3
1980	01 22	10 08.91	+05 17.7	1.951	2.785	-1.13	+2.7
1980	02 01	10 02.88	+06 07.3	2.135	2.762	-1.02	+2.2
1980	02 11	09 55.42	+07 10.6	2.362	2.739	-0.91	+2.0
1980	02 21	09 47.30	+08 22.5	2.783	2.908	-0.61	+6.7
1980	03 02	09 39.53	+09 36.6	2.304	2.969	-0.74	+8.4
1980	03 12	09 32.98	+10 46.5	2.304	2.969	-0.74	+8.4
1980	03 22	09 28.37	+11 47.1	2.304	2.969	-0.74	+8.4
1980	04 01	09 26.13	+12 35.0	2.304	2.969	-0.74	+8.4
1980	04 11	09 26.39	+13 09.0	2.304	2.969	-0.74	+8.4
1980	04 21	09 29.09	+13 28.7	2.304	2.969	-0.74	+8.4
1980	05 01	09 34.02	+13 34.6	2.304	2.969	-0.74	+8.4
1978 VB		Elements MPC 4637					
Date	ET	R. A. (1950)	Decl.	Delta	r	Variation	Mag.
1979	11 23	10 29.79	+18 05.2	2.533	2.939	-0.66	+7.5
1979	12 03	10 36.22	+17 27.8	2.304	2.969	-0.74	+8.4
1979	12 13	10 40.68	+17 00.4	2.053	3.027	-0.92	+9.1
1979	12 23	10 42.92	+16 43.9	2.091	3.055	-0.92	+8.5
1980	01 02	10 42.74	+16 38.6	2.091	3.055	-0.92	+8.5
1980	01 12	10 40.03	+16 43.7	2.091	3.055	-0.92	+8.5
1980	01 22	10 34.81	+16 57.3	2.091	3.055	-0.92	+8.5
1980	02 01	10 27.39	+17 16.2	2.091	3.055	-0.92	+8.5
1980	02 11	10 18.35	+17 35.8	2.091	3.055	-0.92	+8.5
1980	02 21	10 08.52	+17 51.6	2.091	3.055	-0.92	+8.5
1980	03 02	09 58.92	+17 59.7	2.091	3.055	-0.92	+8.5
1980	03 12	09 50.47	+17 57.7	2.091	3.055	-0.92	+8.5
1980	03 22	09 43.85	+17 45.0	2.091	3.055	-0.92	+8.5
1980	04 01	09 39.51	+17 21.9	2.091	3.055	-0.92	+8.5
1980	04 11	09 37.55	+16 49.7	2.091	3.055	-0.92	+8.5
1980	04 21	09 37.89	+16 09.6	2.091	3.055	-0.92	+8.5
1980	05 01	09 40.34	+15 22.4	2.091	3.055	-0.92	+8.5