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## Observations of Comets and Asteroids at the Kleť Observatory in the Year 1977

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During the year 1977 were observed at the Kleť Observatory 4 comets and 12 asteroids. The following paper contains their precise positions and total magnitudes.

В 1977 году на обсерватории Клеть были исследованы 4 кометы и 12 астероидов. В статье приведены их точные наблюдения и общий блеск.

V roce 1977 byly pozorovány na hvězdárně na Kletí 4 komety a 12 asteroid. V práci jsou uvedeny jejich přesné polohy a celkové jasnosti.

The routine program of comet and asteroid observations at the Kleť Observatory is continued. A list of precise observations of the following objects obtained at the Observatory during the year 1977 is presented:

Lovas 1977c	Asteroid 1558 1942 BD
Kohler 1977m	Asteroid 737 Dido
Chernykh 1977i	Asteroid 771 Libera
Tsuchinshan 1977q	Asteroid 1255 Schilowa
Asteroid 1977 RA	Asteroid 657 Ludmilla
Asteroid 1977 UA	Asteroid 1882 1941 UJ
Asteroid 81 Terpsichore	Asteroida 1407 Lindelof
Asteroid 1054 Forsytia	Asteroida 1832 1969 PC

The positions of comets were obtained by means of the instruments described in [1]. Reference stars were chosen from the Smithsonian Astrophysical Observatory and AGK-3 Star Catalogues.

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### Reference

- [1] MRKOS A.: Acta Univ. Carol., Math. et Phys. 11, 29 (1970) = Publ. Astr. Inst. Charles Univ. Prague No 61 (1970).

## Comet Lovas 1977c

Plate No.	1977 UT	$\alpha(1950.0)$	$\delta(1950.0)$	$m_1$	Observer
1465 Mar.	22.83559	10 <sup>h</sup> 09 <sup>m</sup> 21.72 <sup>s</sup>	+ 33° 1'27.0"	16.5	Mrkos
	22.85168	10 <sup>h</sup> 09 <sup>m</sup> 20.87 <sup>s</sup>	+ 33° 1'18.2"		Mrkos
1467	24.82889	10 <sup>h</sup> 08 <sup>m</sup> 1.19 <sup>s</sup>	+ 32°49'53.2"	16.7	Mrkos
	24.84388	10 <sup>h</sup> 08 <sup>m</sup> 0.40 <sup>s</sup>	+ 32°49'47.9"		Mrkos

## Reference Stars Numbers

1465	SAO	061918	061908	061904	061922	061928	AGK2+33° 1005
1467	SAO	061918	061908	061901	061904	061922	061928

## Comet Kohler 1977m

Plate No.	1977 UT	$\alpha(1950.0)$	$\delta(1950.0)$	$m_1$	Observer
119 Sept.	7.79997	15 <sup>h</sup> 29 <sup>m</sup> 23.45 <sup>s</sup>	+ 28°28'21.4"	10.8	Mrkos
	7.80459	15 <sup>h</sup> 29 <sup>m</sup> 23.98 <sup>s</sup>	+ 28°28'16.2"		Mrkos
120	8.78822	15 <sup>h</sup> 31 <sup>m</sup> 13.79 <sup>s</sup>	+ 28° 9'33.7"	10.6	Mrkos
	8.79279	15 <sup>h</sup> 31 <sup>m</sup> 14.29 <sup>s</sup>	+ 28° 9'27.7"		Mrkos
121	9.79397	15 <sup>h</sup> 33 <sup>m</sup> 8.31 <sup>s</sup>	+ 27°50' 6.6"	10.5	Mrkos
	9.79987	15 <sup>h</sup> 33 <sup>m</sup> 9.13 <sup>s</sup>	+ 27°49'57.1"		Mrkos
123	11.78293	15 <sup>h</sup> 37 <sup>m</sup> 3.27 <sup>s</sup>	+ 27°10'41.7"	10.4	Mrkos
	11.78761	15 <sup>h</sup> 37 <sup>m</sup> 3.84 <sup>s</sup>	+ 27°10'34.5"		Mrkos
124	12.80156	15 <sup>h</sup> 39 <sup>m</sup> 7.53 <sup>s</sup>	+ 26°50' 1.1"	10.2	Vávrová
	12.80868	15 <sup>h</sup> 39 <sup>m</sup> 8.42 <sup>s</sup>	+ 26°49'51.4"		Vávrová
127	13.77668	15 <sup>h</sup> 41 <sup>m</sup> 19.48 <sup>s</sup>	+ 26°28'58.7"	9.2	Mrkos
	13.78137	15 <sup>h</sup> 41 <sup>m</sup> 19.54 <sup>s</sup>	+ 26°28'59.0"		Mrkos
130	14.77899	15 <sup>h</sup> 43 <sup>m</sup> 16.33 <sup>s</sup>	+ 26° 8'53.1"	9.0	Mrkos
	14.78490	15 <sup>h</sup> 43 <sup>m</sup> 17.18 <sup>s</sup>	+ 26° 8'45.9"		Mrkos
133 Sept.	16.84542	15 <sup>h</sup> 47 <sup>m</sup> 47.75 <sup>s</sup>	+ 25°24'25.7"	9.0	Vávrová
	16.85236	15 <sup>h</sup> 47 <sup>m</sup> 48.54 <sup>s</sup>	+ 25°24'18.8"		Vávrová
135	25.77378	16 <sup>h</sup> 09 <sup>m</sup> 37.89 <sup>s</sup>	+ 21°52'44.2"	8.5	Vávrová
136	28.77655	16 <sup>h</sup> 17 <sup>m</sup> 50.76 <sup>s</sup>	+ 20°33'08.1"	8.4	Vávrová
1731 Oct.	6.75914	16 <sup>h</sup> 41 <sup>m</sup> 59.42 <sup>s</sup>	+ 16°36'03.2"	8.2	Vávrová
	6.76314	16 <sup>h</sup> 42 <sup>m</sup> 00.11 <sup>s</sup>	+ 16°35'55.1"		Vávrová
140	7.75602	16 <sup>h</sup> 45 <sup>m</sup> 14.99 <sup>s</sup>	+ 16°03'32.2"	8.2	Vávrová
	7.75995	16 <sup>h</sup> 45 <sup>m</sup> 15.77 <sup>s</sup>	+ 16°03'25.3"		Vávrová
143	8.74889	16 <sup>h</sup> 48 <sup>m</sup> 33.39 <sup>s</sup>	+ 15°30'29.4"	8.3	Mrkos
	8.75201	16 <sup>h</sup> 48 <sup>m</sup> 33.99 <sup>s</sup>	+ 15°30'22.2"		Mrkos
146	9.75140	16 <sup>h</sup> 51 <sup>m</sup> 56.94 <sup>s</sup>	+ 14°56'21.3"	8.1	Mrkos
	9.75425	16 <sup>h</sup> 51 <sup>m</sup> 57.51 <sup>s</sup>	+ 14°56'15.6"		Mrkos
153	15.72918	17 <sup>h</sup> 13 <sup>m</sup> 24.78 <sup>s</sup>	+ 11°17'09.5"	8.0	Mrkos
	15.73091	17 <sup>h</sup> 13 <sup>m</sup> 25.13 <sup>s</sup>	+ 11°17'05.1"		Mrkos

Plate No.	1977 UT	$\alpha(1950.0)$	$\delta(1950.0)$	$m_1$	Observer
154	16.81062	17 <sup>h</sup> 17 <sup>m</sup> 31.38 <sup>s</sup>	+ 10°34'26.7"		Vávrová
	16.81236	17 <sup>h</sup> 17 <sup>m</sup> 31.74 <sup>s</sup>	+ 10°34'22.1"		Vávrová
157	17.73700	17 <sup>h</sup> 21 <sup>m</sup> 06.31 <sup>s</sup>	+ 9°57'08.7"	7.8	Mrkos
	17.73845	17 <sup>h</sup> 21 <sup>m</sup> 06.64 <sup>s</sup>	+ 9°57'06.7"		Mrkos
161	18.74126	17 <sup>h</sup> 25 <sup>m</sup> 02.57 <sup>s</sup>	+ 9°15'53.9"	7.5	Mrkos
	18.74230	17 <sup>h</sup> 25 <sup>m</sup> 02.84 <sup>s</sup>	+ 9°15'52.2"		Mrkos
164	19.74497	17 <sup>h</sup> 29 <sup>m</sup> 02.59 <sup>s</sup>	+ 8°33'51.7"	7.5	Mrkos
	19.74635	17 <sup>h</sup> 29 <sup>m</sup> 02.98 <sup>s</sup>	+ 8°33'46.9"		Mrkos
168	20.74025	17 <sup>h</sup> 33 <sup>m</sup> 04.15 <sup>s</sup>	+ 7°51'17.9"	7.3	Mrkos
	20.74118	17 <sup>h</sup> 33 <sup>m</sup> 04.44 <sup>s</sup>	+ 7°51'17.3"		Mrkos
170 Nov.	5.71353	18 <sup>h</sup> 46 <sup>m</sup> 01.75 <sup>s</sup>	- 5°11'54.9"	6.3	Mrkos
	5.71457	18 <sup>h</sup> 46 <sup>m</sup> 02.01 <sup>s</sup>	- 5°11'57.2"		Mrkos
1764	6.72006	18 <sup>h</sup> 51 <sup>m</sup> 08.09 <sup>s</sup>	- 6°05'52.5"	6.2	Mrkos
	6.72116	18 <sup>h</sup> 51 <sup>m</sup> 08.54 <sup>s</sup>	- 6°05'56.1"		Mrkos
1769	7.70615	18 <sup>h</sup> 56 <sup>m</sup> 11.77 <sup>s</sup>	- 6°58'57.8"	6.1	Mrkos
	7.70711	18 <sup>h</sup> 56 <sup>m</sup> 11.81 <sup>s</sup>	- 6°58'59.8"		Mrkos
181	10.71040	19 <sup>h</sup> 11 <sup>m</sup> 54.71 <sup>s</sup>	- 9°41'11.5"	6.0	Mrkos
	10.71139	19 <sup>h</sup> 11 <sup>m</sup> 55.01 <sup>s</sup>	- 9°41'13.9"		Mrkos
183	11.71679	19 <sup>h</sup> 17 <sup>m</sup> 16.60 <sup>s</sup>	- 10°35'28.1"	6.2	Mrkos
	11.71888	19 <sup>h</sup> 17 <sup>m</sup> 17.32 <sup>s</sup>	- 10°35'33.4"		Mrkos

Reference Stars Numbers

119	SAO	083868	083876	083851	083859	083855	083860
120	SAO	083868	083876	083900	083903	083978	083977
121	SAO	083892	083906	083914	083903	083900	083878
123	SAO	083910	083906	083932	083938	083939	083946
124	SAO	083947	083946	083957	083951	083939	083910
127	SAO	083947	083946	083957	083992	084002	083960
130	SAO	083947	083946	083957	083992	084002	083998
133	SAO	084012	084023	084040	084035	084029	083998
135	SAO	084250	084257	084245	084225	084226	084234
136	SAO	084291	102091	084318	084333	084307	084293
1731	SAO	102351	102361	102368	102369	102360	102336
140	SAO	102380	102368	102369	102403	102390	AGK2 + 15° 1682
143	SAO	102415	102412	102449	102453	102451	102429
146	SAO	102462	102454	102449	102472	102470	102477
153	SAO	102684	102702	102712	102691	102677	102663
154	SAO	102729	102730	102737	122312	102775	102764
157	SAO	122354	122338	122329	122312	102775	122369
161	SAO	122416	122409	123371	123366	122406	122432
164	SAO	122473	122497	122479	122439	122440	122445
168	SAO	122560	122572	122568	122532	122510	122539
170	SAO	142645	142597	142656	142672	142681	142670
1764	SAO	142751	142779	142797	142785	142768	142738
1769	SAO	142872	142845	142831	142867	142881	142892
181	SAO	162389	162345	162327	162333	162364	162388
183	SAO	162466	162455	162510	162509	162485	162496

## Comet Černych 19771

Plate No.	1977 UT	$\alpha(1950.0)$	$\delta(1950.0)$	$m_1$	Observer
117 Sept.	6.94892	00 <sup>h</sup> 16 <sup>m</sup> 22.80 <sup>s</sup>	— 4°29'43.9"	13.6	Mrkos
	6.96322	00 <sup>h</sup> 16 <sup>m</sup> 22.52 <sup>s</sup>	— 4°29'50.4"		Mrkos
122	9.89449	00 <sup>h</sup> 15 <sup>m</sup> 14.58 <sup>s</sup>	— 4°45'03.6"	13.4	Vávrová
	9.91116	00 <sup>h</sup> 15 <sup>m</sup> 14.22 <sup>s</sup>	— 4°45'07.7"		Vávrová
1720	12.93396	00 <sup>h</sup> 13 <sup>m</sup> 57.17 <sup>s</sup>	— 5°01'14.1"	13.4	Vávrová
	12.94993	00 <sup>h</sup> 13 <sup>m</sup> 56.83 <sup>s</sup>	— 5°01'18.3"		Vávrová
129	13.92755	00 <sup>h</sup> 13 <sup>m</sup> 30.60 <sup>s</sup>	— 5°06'36.6"	13.4	Mrkos
	13.94248	00 <sup>h</sup> 13 <sup>m</sup> 30.20 <sup>s</sup>	— 5°06'41.5"		Mrkos
132	14.88333	00 <sup>h</sup> 13 <sup>m</sup> 04.61 <sup>s</sup>	— 5°11'56.6"	13.2	Mrkos
	14.89855	00 <sup>h</sup> 13 <sup>m</sup> 03.88 <sup>s</sup>	— 5°11'48.8"		Mrkos
134	16.91278	00 <sup>h</sup> 12 <sup>m</sup> 7.37 <sup>s</sup>	— 5°22'46.3"	13.2	Vávrová
139 Oct.	6.87315	00 <sup>h</sup> 02 <sup>m</sup> 00.01 <sup>s</sup>	— 7°03' 1.7"	13.0	Mrkos
	6.88397	00 <sup>h</sup> 01 <sup>m</sup> 59.78 <sup>s</sup>	— 7°03' 4.1"		Mrkos
1736	7.83484	00 <sup>h</sup> 01 <sup>m</sup> 32.21 <sup>s</sup>	— 7°07' 1.3"	13.0	Mrkos
	7.84566	00 <sup>h</sup> 01 <sup>m</sup> 31.90 <sup>s</sup>	— 7°07' 3.0"		Mrkos
145	8.84368	00 <sup>h</sup> 01 <sup>m</sup> 03.57 <sup>s</sup>	— 7°11' 8.1"	12.8	Mrkos
	8.85444	00 <sup>h</sup> 01 <sup>m</sup> 03.17 <sup>s</sup>	— 7°11'10.6"		Mrkos
150	9.87149	00 <sup>h</sup> 0 <sup>m</sup> 34.70 <sup>s</sup>	— 7°11'10.2"	12.8	Vávrová
	9.88289	00 <sup>h</sup> 0 <sup>m</sup> 34.32 <sup>s</sup>	— 7°15'12.2"		Vávrová
156	16.87660	23 <sup>h</sup> 57 <sup>m</sup> 37.35 <sup>s</sup>	— 7°38'46.6"	12.6	Mrkos
	16.88910	23 <sup>h</sup> 57 <sup>m</sup> 37.10 <sup>s</sup>	— 7°38'48.8"		Mrkos
160	17.91785	23 <sup>h</sup> 57 <sup>m</sup> 14.33 <sup>s</sup>	— 7°41'38.3"	12.8	Mrkos
	17.92861	23 <sup>h</sup> 57 <sup>m</sup> 14.08 <sup>s</sup>	— 7°41'39.9"		Mrkos
163	18.90122	23 <sup>h</sup> 56 <sup>m</sup> 53.44 <sup>s</sup>	— 7°44'10.8"	12.8	Mrkos
	18.91256	23 <sup>h</sup> 56 <sup>m</sup> 53.24 <sup>s</sup>	— 7°44'12.9"		Mrkos
166	19.95122	23 <sup>h</sup> 56 <sup>m</sup> 32.07 <sup>s</sup>	— 7°46'44.1"	12.8	Vávrová
	19.96233	23 <sup>h</sup> 56 <sup>m</sup> 31.92 <sup>s</sup>	— 7°46'45.1"		Vávrová
1767 Nov.	6.83157	23 <sup>h</sup> 53 <sup>m</sup> 39.72 <sup>s</sup>	— 8°00'24.7"	13.0	Vávrová
	6.84269	23 <sup>h</sup> 53 <sup>m</sup> 39.59 <sup>s</sup>	— 8°00'24.8"		Vávrová
1771	7.77464	23 <sup>h</sup> 53 <sup>m</sup> 41.68 <sup>s</sup>	— 7°59'27.8"	13.2	Mrkos
	7.78610	23 <sup>h</sup> 53 <sup>m</sup> 41.80 <sup>s</sup>	— 7°59'30.9"		Mrkos
182	10.72667	23 <sup>h</sup> 53 <sup>m</sup> 55.73 <sup>s</sup>	— 7°55'42.6"	13.2	Mrkos
	10.73756	23 <sup>h</sup> 53 <sup>m</sup> 55.80 <sup>s</sup>	— 7°55'41.0"		Mrkos
185	11.79762	23 <sup>h</sup> 54 <sup>m</sup> 3.62 <sup>s</sup>	— 7°53'57.1"	13.5	Mrkos
189 Dec.	4.76991	00 <sup>h</sup> 03 <sup>m</sup> 5.58 <sup>s</sup>	— 6°29'38.7"	13.5	Mrkos
	4.78071	00 <sup>h</sup> 03 <sup>m</sup> 6.02 <sup>s</sup>	— 6°29'35.0"		Mrkos
192	7.75302	00 <sup>h</sup> 05 <sup>m</sup> 5.30 <sup>s</sup>	— 6°12'51.2"	13.7	Vávrová
	7.76413	00 <sup>h</sup> 05 <sup>m</sup> 5.67 <sup>s</sup>	— 6°12'48.1"		Vávrová

## Reference Stars Numbers

117	SAO	128702	128682	128663	128679	128693	128723
122	SAO	128702	128682	128648	128647	128674	128693
1720	SAO	128679	128648	128647	128665	128674	128693
129	SAO	128679	128648	128647	128665	128674	128693
132	SAO	128679	128648	128647	128665	128674	128693
134	SAO	128644	128632	128647	128674	128699	128668
139	SAO	128564	128605	128608	128551	147050	147049
1736	SAO	128564	128605	128608	128551	147050	147049
145	SAO	128564	128551	147050	147049	128554	128568
150	SAO	128564	128551	147050	147049	128554	128568
156	SAO	147029	147049	147027	147014	146999	146990
160	SAO	147029	147049	147027	147014	146999	146990
163	SAO	147011	147022	147027	147014	146999	146990
166	SAO	147011	147022	147027	147014	146999	146990
1767	SAO	146999	146990	146955	146976	147011	147029
1771	SAO	146999	146990	146955	146976	147011	147029
182	SAO	146999	146990	146955	146976	147011	147029
185	SAO	146999	146990	146955	146976	147011	147029
189	SAO	128597	128603	128551	128564	128568	128608
192	SAO	128597	128603	128551	128564	128568	128608

## Asteroid 19977 RA

Plate No.	1977 UT	$\alpha(1950.0)$	$\delta(1950.0)$	$m_1$	Observer
128 Sept.	13.88368	22 <sup>h</sup> 57 <sup>m</sup> 06.71 <sup>s</sup>	+ 17°24'58.8"	14.7	Mrkos
	13.89878	22 <sup>h</sup> 57 <sup>m</sup> 07.13 <sup>s</sup>	+ 17°25'02.5"		Mrkos
131	14.83640	22 <sup>h</sup> 57 <sup>m</sup> 42.40 <sup>s</sup>	+ 17°28'52.9"	14.7	Mrkos
	14.85098	22 <sup>h</sup> 57 <sup>m</sup> 42.80 <sup>s</sup>	+ 17°28'56.9"		Mrkos
1732 Oct.	6.81487	23 <sup>h</sup> 14 <sup>m</sup> 34.51 <sup>s</sup>	+ 16°44'43.4"	15.2	Mrkos
	6.82911	23 <sup>h</sup> 14 <sup>m</sup> 34.95 <sup>s</sup>	+ 16°44'40.6"		Mrkos
141	7.79352	23 <sup>h</sup> 15 <sup>m</sup> 30.74 <sup>s</sup>	+ 16°39'01.4"	15.0	Mrkos
	7.80781	23 <sup>h</sup> 15 <sup>m</sup> 31.52 <sup>s</sup>	+ 16°38'57.1"		Mrkos
144	8.80479	23 <sup>h</sup> 16 <sup>m</sup> 30.16 <sup>s</sup>	+ 16°32'59.6"	15.5	Mrkos
	8.81937	23 <sup>h</sup> 16 <sup>m</sup> 30.90 <sup>s</sup>	+ 16°32'54.1"		Mrkos
148	9.80616	23 <sup>h</sup> 17 <sup>m</sup> 29.72 <sup>s</sup>	+ 16°26'54.4"	15.3	Mrkos
	9.82074	23 <sup>h</sup> 17 <sup>m</sup> 30.53 <sup>s</sup>	+ 16°26'49.3"		Mrkos
1749	16.83811	23 <sup>h</sup> 25 <sup>m</sup> 01.70 <sup>s</sup>	+ 15°42'35.3"	15.8	Mrkos
	16.85241	23 <sup>h</sup> 25 <sup>m</sup> 02.53 <sup>s</sup>	+ 15°42'30.3"		Mrkos
158	17.81895	23 <sup>h</sup> 26 <sup>m</sup> 09.34 <sup>s</sup>	+ 15°36'26.5"	15.6	Mrkos
	17.83388	23 <sup>h</sup> 26 <sup>m</sup> 10.32 <sup>s</sup>	+ 15°36'20.9"		Mrkos
162	18.86285	23 <sup>h</sup> 27 <sup>m</sup> 22.29 <sup>s</sup>	+ 15°29'55.7"	15.8	Mrkos
	18.87708	23 <sup>h</sup> 27 <sup>m</sup> 23.25 <sup>s</sup>	+ 15°29'50.1"		Mrkos
165	19.90990	23 <sup>h</sup> 28 <sup>m</sup> 36.72 <sup>s</sup>	+ 15°23'27.6"	15.6	Mrkos
	19.92448	23 <sup>h</sup> 28 <sup>m</sup> 37.69 <sup>s</sup>	+ 15°23'21.9"		Mrkos
169	20.98388	23 <sup>h</sup> 29 <sup>m</sup> 54.16 <sup>s</sup>	+ 15°16'54.8"	16.2	Mrkos
	20.99811	23 <sup>h</sup> 29 <sup>m</sup> 55.04 <sup>s</sup>	+ 15°16'48.8"		Mrkos

## Reference Stars Numbers

128	SAO	108298	108281	108310	108310	108350	108319
131	SAO	108298	108281	108283	108310	108350	108319
1732	SAO	108537	108522	108514	108475	108477	108490
141	SAO	108537	108522	108514	108513	108516	108538
144	SAO	108556	108564	108514	108513	108516	108557
148	SAO	108556	108564	108514	108513	108516	108557
1749	SAO	108646	108650	108641	108599	108600	108635
158	SAO	108646	108650	108641	108599	108600	108635
162	SAO	108673	108686	108641	108599	108600	108635
165	SAO	108673	108686	108641	108599	108600	108635
169	SAO	108667	108706	108789	108686	108646	108635

## Asteroid 1977 UA

Plate No.	1977 UT	$\alpha(1950.0)$	$\delta(1950.0)$	$m_1$	Observer
155 Oct.	16.83811	23 <sup>h</sup> 28 <sup>m</sup> 42.07 <sup>s</sup>	+ 15°41'31.2"	17	Mrkos
158	17.81895	23 <sup>h</sup> 28 <sup>m</sup> 12.20 <sup>s</sup>	+ 15°33'21.9"		Mrkos
162	18.86285	23 <sup>h</sup> 27 <sup>m</sup> 42.13 <sup>s</sup>	+ 15°24'51.0"		Mrkos
	18.87708	23 <sup>h</sup> 27 <sup>m</sup> 41.76 <sup>s</sup>	+ 15°24'47.0"		Mrkos
165	19.90989	23 <sup>h</sup> 27 <sup>m</sup> 14.17 <sup>s</sup>	+ 15°16'13.2"		Mrkos
	19.92448	23 <sup>h</sup> 27 <sup>m</sup> 13.80 <sup>s</sup>	+ 15°16' 8.0"		Mrkos
169	20.98388	23 <sup>h</sup> 26 <sup>m</sup> 47.79 <sup>s</sup>	+ 15°07'25.7"		Mrkos
	20.99811	23 <sup>h</sup> 26 <sup>m</sup> 47.39 <sup>s</sup>	+ 15°07'20.3"		Mrkos

## Reference Stars Numbers

155	SAO	108628	108650	108641	108686	108673	108635
158	SAO	108628	108650	108641	108686	108673	108635
162	SAO	108673	108686	108641	108599	108600	108635
165	SAO	108673	108686	108641	108599	108600	108635
169	SAO	108667	108673	108646	108599	108600	108635

## Asteroid 81 Terpsichore

Plate No.	1977 UT	$\alpha(1950.0)$	$\delta(1950.0)$	$m_1$	Observer
1680 Mar.	21.83918	10 <sup>h</sup> 22 <sup>m</sup> 26.10 <sup>s</sup>	+ 14°20'59.2"		Vávrová
	21.85191	10 <sup>h</sup> 22 <sup>m</sup> 25.58 <sup>s</sup>	+ 14°20'59.9"		Vávrová

## Reference Stars Nubers

1680	SAO	099094	099095	099102	099123	099139	099121
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Asteroid 1054 Forsytia

1683 Mar.	22.87975	10 <sup>h</sup> 27 <sup>m</sup> 05.14 <sup>s</sup>	+ 25°06'56.1"	Vávrová
	22.89225	10 <sup>h</sup> 27 <sup>m</sup> 04.63 <sup>s</sup>	+ 25°06'56.5"	Vávrová

Reference Stars Numbers

1683	SAO	081367	081374	081403	081398	081394	081366
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Asteroid 1942 BD 1558

1681 Mar.	22.79826	10 <sup>h</sup> 04 <sup>m</sup> 15.80 <sup>s</sup>	+ 22°33'51.4"	Vávrová
	22.81238	10 <sup>h</sup> 04 <sup>m</sup> 15.16 <sup>s</sup>	+ 22°33'54.6"	Vávrová

Reference Stars Numbers

1681	SAO	081193	081206	081229	081195	081168	081172
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Asteroid 737 Dido

1690 Apr.	17.86632	11 <sup>h</sup> 03 <sup>m</sup> 53.16 <sup>s</sup>	+ 6°37'36.8"	14.0	Vávrová
	17.88125	11 <sup>h</sup> 03 <sup>m</sup> 52.93 <sup>s</sup>	+ 6°37'37.8"		Vávrová

Reference Stars Numbers

1690	SAO	118667	118658	118635	118642	118673	118691
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Asteroid 771 Libera

Plate No.	1977 UT	$\alpha(1950.0)$	$\delta(1950.0)$	m <sub>1</sub>	Observer
107 Jul.	19.92080	21 <sup>h</sup> 24 <sup>m</sup> 48.14 <sup>s</sup>	+ 7°19'40.1"	16.0	Vávrová
	19.93573	21 <sup>h</sup> 24 <sup>m</sup> 47.50 <sup>s</sup>	+ 7°19'40.6"		Vávrová
108	23.94387	21 <sup>h</sup> 22 <sup>m</sup> 02.26 <sup>s</sup>	+ 7°20'28.6"	16.0	Vávrová
	23.95845	21 <sup>h</sup> 22 <sup>m</sup> 01.63 <sup>s</sup>	+ 7°20'28.6"		Vávrová

Reference Stars Numbers

107	SAO	126810	126815	126791	126796	126799	126823
108	SAO	126790	126815	126791	126761	126745	126737

Asteroid 1255 Schilowa

110 Aug.	6.90065	21 <sup>h</sup> 17 <sup>m</sup> 23.95 <sup>s</sup>	— 2°07'27.7"	15.0	Mrkos
	6.91506	21 <sup>h</sup> 17 <sup>m</sup> 23.27 <sup>s</sup>	— 2°07'29.9"		Mrkos
111	16.88936	21 <sup>h</sup> 09 <sup>m</sup> 49.09 <sup>s</sup>	— 2°36'32.6"	15.0	Hoštičková
	16.90493	21 <sup>h</sup> 09 <sup>m</sup> 48.40 <sup>s</sup>	— 2°36'36.4"		Hoštičková

Reference Stars Numbers

110	SAO	145309	145294	145287	145307	145316	145328
111	SAO	145190	145219	145244	145233	145198	145162

Asteroid 675 Ludmilla

112 Aug.	16.94637	21 <sup>h</sup> 56 <sup>m</sup> 48.93 <sup>s</sup>	+ 2°50'02.7"	12.2	Mrkos
	16.95730	21 <sup>h</sup> 56 <sup>m</sup> 48.29 <sup>s</sup>	+ 2°50'01.0"		Mrkos
113	19.86516	21 <sup>h</sup> 54 <sup>m</sup> 16.84 <sup>s</sup>	+ 2°44'13.1"	12.2	Mrkos
	19.87488	21 <sup>h</sup> 54 <sup>m</sup> 16.33 <sup>s</sup>	+ 2°44'12.0"		Mrkos

Reference Stars Numbers

112	SAO	127209	127215	127229	127234	127207	127184
113	SAO	127184	127209	127207	127180	127155	127158

Asteroid 1882—1941UJ

Plate No.	1977 UT	$\alpha(1950.0)$	$\delta(1950.0)$	m <sub>1</sub>	Observer
115 Aug.	19.97622	23 <sup>h</sup> 20 <sup>m</sup> 21.39 <sup>s</sup>	+ 5°25'11.6"	15.5	Vávrová
	19.99097	23 <sup>h</sup> 20 <sup>m</sup> 20.82 <sup>s</sup>	+ 5°25'07.5"		Vávrová

Reference Stars Numbers

115	SAO	128155	128182	128168	128152	128114	128123
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Asteroid 1407 Lindelof

114 Aug.	19.90804	22 <sup>h</sup> 40 <sup>m</sup> 56.16 <sup>s</sup>	+ 2°20'17.1"	14.5	Hoštičková
	19.92483	22 <sup>h</sup> 40 <sup>m</sup> 55.44 <sup>s</sup>	+ 2°20'16.7"		Hoštičková

Reference Stars Numbers

114	SAO	127727	127762	127730	127731	127710	127713
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Asteroid 1832—1969 PC

1452 Jan.	21.78313	05 <sup>h</sup> 57 <sup>m</sup> 00.46 <sup>s</sup>	+ 32°11'50.4"	16.5	Mrkos
	21.79763	05 <sup>h</sup> 56 <sup>m</sup> 59.93 <sup>s</sup>	+ 32°11'44.9"		Mrkos
1453	22.76485	05 <sup>h</sup> 56 <sup>m</sup> 24.36 <sup>s</sup>	+ 32°06'09.0"	16.5	Mrkos
	22.77920	05 <sup>h</sup> 56 <sup>m</sup> 23.85 <sup>s</sup>	+ 32°06'05.4"		Mrkos

Reference Stars Numbers

1452	SAO	058652	058656	058662	058637	058646	AKG2 + 32°586
1453	SAO	058652	058656	058662	058646	AGK2 + 32°582	AGK2 + 31°574

Comet 1977q (Tsuchinshan)

Plate No.	1977 UT	$\alpha(1950.0)$	$\delta(1950.0)$	$m_1$	Observer
190 Dec.	4.81045	00 <sup>h</sup> 28 <sup>m</sup> 32.47 <sup>s</sup>	— 0°47'07.5"	15.0	Mrkos
	4.82486	00 <sup>h</sup> 28 <sup>m</sup> 31.31 <sup>s</sup>	— 0°47'10.4"		Mrkos
193	7.78792	00 <sup>h</sup> 24 <sup>m</sup> 59.42 <sup>s</sup>	— 0°58'20.9"	15.0	Vávrová
	7.80337	00 <sup>h</sup> 24 <sup>m</sup> 58.27 <sup>s</sup>	— 0°58'23.7"		Vávrová

Reference Stars Numbers

190	SAO	128818	128808	128801	128788	128880	128819
193	SAO	128742	128735	128779	128788	128780	128762