

OBSERVATIONS OF MINOR PLANETS MADE AT THE SKALNATÉ PLESO OBSERVATORY IN THE  
YEARS 1973-1975

J. Svoreň

Astronomical Institute of the Slovak Academy of Sciences, Skalnaté  
Pleso Observatory, 059 60 Tatranská Lomnica, Czecho-Slovakia

E.M. Pittich

Astronomical Institute of the Slovak Academy of Sciences, Interplanetary  
Matter Division, 842 28 Bratislava, Czecho-Slovakia

Received 25 September 1990

ABSTRACT. The paper presents the results of position photographing of minor planets carried out at the Skalnaté Pleso Observatory in the years 1973-1975. 84 observations of 19 minor planets are given together with the list of reference stars and dependences.

#### 1. INTRODUCTION

The presented paper is a continuation of the previous papers which gave the results of positional observations of minor planets obtained at the Skalnaté Pleso Observatory (Pittich, Svoreň; 1985). The observations made in the years 1973-1975 are included. The reduction constants as well as methods of observation and processing and all the other necessary data are not repeated here. They were given in our paper on comets (Pittich, Svoreň; 1989).

A list of reference stars and dependences and a list of collaborators are also given, together with their share in photographing, measuring and reducing the positions.

## 2. POSITIONS OF MINOR PLANETS

The data have been arranged according to serial numbers of minor planets.  
The individual columns of the table contain the following:

N - ordinal number of observation,  
Minor planet - number and name of minor planet,  
Date U.T. - date and time of the middle of the exposure,  
R.A.<sub>1950</sub> - right ascension for equinox 1950.0,  
Decl.<sub>1950</sub> - declination for equinox 1950.0,  
O - observer,  
M - measurer,  
R - reduction.

N	Minor planet	Date U.T.	R.A. <sub>1950</sub>	Decl. <sub>1950</sub>	O	M	R
1	18 Melpomene	1973 May 4.87292	13 <sup>h</sup> 02 <sup>m</sup> 56.85 <sup>s</sup>	+ 6 <sup>o</sup> 17'49.5"	L	L	P
2	18 Melpomene	1973 May 4.93125	13 02 54.45	+ 6 17 59.7	L	L	P
3	23 Thalia	1973 May 4.87292	12 50 36.72	+ 6 53 51.3	L	L	P
4	23 Thalia	1973 May 4.93125	12 50 34.78	+ 6 53 36.7	L	L	P
5	25 Phocaea	1975 Feb. 17.94028	9 18 21.43	-15 20 31.4	C	F	S
6	25 Phocaea	1975 Feb. 18.00208	9 18 17.91	-15 20 05.4	C	F	S
7	30 Urania	1973 May 4.85764	12 14 03.20	- 4 43 56.5	L	L	P
8	30 Urania	1973 May 4.91319	12 14 01.70	- 4 43 45.9	L	L	P
9	51 Nemausa	1973 Dec. 2.86806	7 26 42.39	+ 6 37 04.6	A	A	P
10	51 Nemausa	1973 Dec. 2.95833	7 26 40.45	+ 6 36 45.6	A	A	P
11	51 Nemausa	1973 Dec. 3.02014	7 26 39.03	+ 6 36 32.3	A	A	P
12	51 Nemausa	1973 Dec. 3.08403	7 26 37.60	+ 6 36 18.4	A	A	P
13	51 Nemausa	1974 Jan. 22.93646	6 44 06.16	+ 7 38 07.2	A	A	P
14	51 Nemausa	1974 Jan. 22.95729	6 44 05.08	+ 7 38 14.2	A	A	P
15	51 Nemausa	1974 Jan. 22.98438	6 44 03.68	+ 7 38 23.3	A	A	P
16	51 Nemausa	1975 May 17.96840	17 50 51.87	- 7 18 17.6	A	S	P
17	51 Nemausa	1975 May 17.97569	17 50 51.61	- 7 18 15.2	A	S	P
18	51 Nemausa	1975 May 17.99722	17 50 50.85	- 7 18 09.1	A	S	P
19	148 Gallia	1975 Mar. 12.12118	14 46 47.07	+13 29 06.1	C	S	P
20	148 Gallia	1975 Mar. 12.13924	14 46 46.89	+13 29 16.9	C	S	S
21	148 Gallia	1975 Mar. 12.15451	14 46 46.74	+13 29 26.5	C	S	S
22	291 Alice	1974 Sep. 12.97708	1 16 19.90	+ 6 36 28.9	C	R	S
23	291 Alice	1974 Sep. 13.04722	1 16 17.36	+ 6 36 08.9	C	R	S
24	305 Gordonia	1973 May 4.85764	12 18 38.32	- 3 22 25.8	L	L	P
25	305 Gordonia	1973 May 4.91319	12 18 37.13	- 3 22 15.9	L	L	P
26	389 Industria	1975 July 8.93611	17 52 41.78	-25 03 26.3	C	E	S
27	389 Industria	1975 July 8.97847	17 52 39.56	-25 03 17.4	C	E	S
28	454 Mathesis	1974 Sep. 12.97708	1 23 34.31	+ 5 11 02.5	C	J	P
29	454 Mathesis	1974 Sep. 13.04722	1 23 31.70	+ 5 10 52.4	C	J	P
30	480 Hansa	1975 Aug. 10.96944	22 58 12.27	+26 05 19.1	C	F	S
31	480 Hansa	1975 Aug. 11.03472	22 58 10.09	+26 05 28.8	C	F	S

N	Minor planet	Date U.T.	R.A. 1950	Decl. 1950	O	M	R
32	480 Hansa	1975 Aug. 14.02569	22 <sup>h</sup> 56 <sup>m</sup> 24.00 <sup>s</sup>	+26 <sup>o</sup> 11'44.0"	C	J	P
33	480 Hansa	1975 Aug. 14.06806	22 56 22.47	+26 11 47.9	C	E	S
34	480 Hansa	1975 Sep. 1.96181	22 42 16.56	+25 43 42.7	C	F	S
35	480 Hansa	1975 Sep. 2.01944	22 42 13.62	+25 43 26.5	C	E	S
36	480 Hansa	1975 Sep. 6.96250	22 38 08.44	+25 16 11.9	C	J	P
37	480 Hansa	1975 Sep. 7.03472	22 38 04.76	+25 15 44.5	C	J	P
38	480 Hansa	1975 Sep. 23.80903	22 25 30.15	+22 50 15.5	C	J	P
39	480 Hansa	1975 Sep. 23.87639	22 25 27.56	+22 49 33.1	C	S	S
40	480 Hansa	1975 Sep. 27.80139	22 23 07.64	+22 06 29.2	C	E	S
41	480 Hansa	1975 Sep. 27.96319	22 23 02.16	+22 04 38.6	C	E	S
42	480 Hansa	1975 Sep. 28.03715	22 22 59.58	+22 03 47.9	C	E	S
43	480 Hansa	1975 Oct. 23.74757	22 17 05.79	+16 56 55.5	C	E	S
44	480 Hansa	1975 Oct. 23.78993	22 17 06.03	+16 56 25.0	C	E	S
45	480 Hansa	1975 Oct. 27.85382	22 17 46.37	+16 10 38.8	C	E	S
46	480 Hansa	1975 Nov. 9.84375	22 22 44.69	+13 59 56.1	C	E	S
47	480 Hansa	1975 Nov. 9.87778	22 22 45.86	+13 59 36.7	C	E	S
48	528 Rezia	1973 May 4.87292	12 54 17.26	+ 3 38 17.9	L	E	S
49	528 Rezia	1973 May 4.93125	12 54 15.29	+ 3 38 13.0	L	L	P
50	532 Herculina	1975 Oct. 27.90208	0 46 23.00	-19 14 55.2	C	R	S
51	532 Herculina	1975 Oct. 27.95556	0 46 20.79	-19 14 57.0	C	R	S
52	568 Cheruskia	1974 Oct. 19.01042	1 28 08.42	+30 54 45.5	A	A	P
53	568 Cheruskia	1974 Oct. 19.05208	1 28 06.55	+30 54 22.2	A	A	P
54	568 Cheruskia	1974 Nov. 1.73611	1 17 52.03	+28 18 32.0	A	E	S
55	568 Cheruskia	1974 Nov. 1.80903	1 17 48.97	+28 17 35.4	A	E	S
56	568 Cheruskia	1974 Nov. 1.85903	1 17 47.18	+28 17 03.3	A	A	P
57	568 Cheruskia	1974 Nov. 12.86042	1 11 42.56	+25 51 59.6	A	A	P
58	568 Cheruskia	1974 Nov. 12.92188	1 11 40.89	+25 51 11.5	A	A	P
59	568 Cheruskia	1974 Nov. 16.99375	1 10 10.43	+24 56 45.9	A	A	P
60	568 Cheruskia	1974 Nov. 17.04653	1 10 09.50	+24 56 03.6	A	A	P
61	568 Cheruskia	1974 Dec. 15.79097	1 12 58.68	+19 32 05.4	A	A	P
62	568 Cheruskia	1974 Dec. 15.83889	1 13 00.04	+19 31 40.3	A	A	P
63	568 Cheruskia	1974 Dec. 16.74583	1 13 27.96	+19 24 05.5	A	A	P
64	568 Cheruskia	1974 Dec. 16.78472	1 13 29.05	+19 23 45.9	A	A	P
65	584 Semiramis	1974 Nov. 1.73611	1 27 02.21	+31 24 55.9	A	E	S
66	584 Semiramis	1974 Nov. 1.80903	1 26 59.00	+31 24 08.8	A	E	S
67	700 Auravictrix	1973 May 4.87292	12 59 13.16	+ 6 26 25.6	L	E	S
68	700 Auravictrix	1973 May 4.93125	12 59 11.06	+ 6 26 16.1	L	L	P
69	704 Interamnia	1975 Nov. 11.10417	7 32 44.72	+24 34 12.7	C	R	S
70	704 Interamnia	1975 Nov. 11.12118	7 32 44.74	+24 34 09.1	C	R	S
71	704 Interamnia	1975 Nov. 11.12986	7 32 44.77	+24 34 06.8	C	R	S
72	704 Interamnia	1975 Dec. 28.98576	7 05 38.69	+21 46 26.4	C	R	S
73	704 Interamnia	1975 Dec. 28.99236	7 05 38.33	+21 46 24.9	C	J	P
74	704 Interamnia	1975 Dec. 29.03507	7 05 35.70	+21 46 16.4	C	J	P
75	887 Alinda	1974 Jan. 16.97153	8 05 43.36	+27 35 54.3	A	A	P

N	Minor planet	Date U.T.	R.A. 1950	Decl. 1950	O	M	R
76	887 Alinda	1974 Jan. 16.97500	8 <sup>h</sup> 05 <sup>m</sup> 44.25 <sup>s</sup>	+27°36'05.6"	A	A	P
77	887 Alinda	1974 Jan. 16.99444	8 05 49.38	+27 37 09.2	A	A	P
78	887 Alinda	1974 Jan. 16.99936	8 05 50.70	+27 37 25.1	A	A	P
79	887 Alinda	1974 Jan. 22.91736	8 32 01.59	+32 15 38.0	A	A	P
80	887 Alinda	1974 Jan. 22.92049	8 32 02.28	+32 15 45.3	A	A	P
81	887 Alinda	1974 Jan. 22.92361	8 32 02.98	+32 15 53.2	A	A	P
82	887 Alinda	1974 Jan. 22.98958	8 32 18.23	+32 18 28.8	A	A	P
83	990 Yerkes	1974 Sep. 12.97708	0 57 14.56	+ 9 11 34.8	C	R	S
84	990 Yerkes	1974 Sep. 13.04722	0 57 11.88	+ 9 11 46.1	C	J	P

### 3. REFERENCE STARS AND DEPENDENCES

The individual columns of the table contain the following:

N - Ordinal number of the observation in agreement with the section 2,

Catalogue - the catalogue of the reference stars,

A - the difference between independent determinations of R.A. in arc seconds,

B - the difference between independent determinations of Decl. in arc seconds,

C - notes.

N	Catalogue	Numbers of stars and dependences				A	B	C
1	SAO 2	119737 .55469	119766 .13522	119796 .31009				
		119739 .42007	119742 .23193	119796 .34800	0.2	0.3		
2	SAO 2	119737 .55798	119766 .14138	119796 .30064				
		119739 .42675	119742 .23140	119796 .34185	0.6	0.5		
3	SAO 2	119619 .33797	119655 .26357	119659 .39846				
		119635 .52444	119655 .26666	119667 .20890	0.1	0.6		
4	SAO 2	119619 .34570	119655 .25994	119659 .39436				
		119635 .53363	119655 .26678	119667 .19959	0.4	0.5		
5	SAO 3	155036 .24842	155106 .34316	155146 .40842				
		155078 .45421	155119 .24298	155146 .30281	0.7	0.8		
6	SAO 3	155036 .25883	155106 .33439	155146 .40678				
		155078 .47088	155119 .23096	155146 .29816	0.2	0.2		
7	SAO 3	138676 .57040	138688 .15854	138718 .27106				
		138644 .26289	138688 .39525	138724 .34186	0.5	0.5		
8	SAO 3	138676 .57300	138688 .16332	138718 .26368				
		138644 .26689	138688 .39342	138724 .33969	0.5	0.0		

N	Catalogue	Numbers of stars and dependences					A	B	C
9	SAO 2	115481	.34366	115516	.49567	115566	.16067		
		115484	.21287	115516	.61219	115525	.17494		
		115500	.08771	115513	.83806	115544	.07423		
		115483	.15180	115484	.39942	115542	.44878		
		115500	.65680	115507	.12149	115560	.22171	0.2	0.2
10	SAO 2	115481	.36330	115516	.47880	115566	.15790		
		115484	.23842	115516	.58512	115525	.17646		
		115500	.12561	115513	.80802	115544	.06637		
		115483	.15578	115484	.40792	115542	.43630		
		115500	.66931	115507	.12194	115560	.20875	0.1	0.0
11	SAO 2	115481	.37727	115516	.46717	115566	.15556		
		115484	.25687	115516	.56581	115525	.17732		
		115500	.15340	115513	.78609	115544	.06051		
		115483	.15840	115484	.41458	115542	.42702		
		115500	.67821	115507	.12255	115560	.19924	0.2	0.1
12	SAO 2	115481	.39138	115516	.45522	115566	.15340		
		115484	.27570	115516	.54597	115525	.17833		
		115500	.18146	115513	.76399	115544	.05455		
		115483	.16131	115484	.42085	115542	.41784		
		115500	.68755	115507	.12285	115560	.18960	0.3	0.1
13	SAO 2	114380	.32382	114396	.39010	114417	.28608		
		114361	.25542	114404	.44158	114419	.30300		
		114380	.50054	114400	.11220	114420	.38726	0.3	0.8
14	SAO 2	114380	.33249	114396	.39278	114417	.27473		
		114361	.26139	114404	.44488	114419	.29373		
		114380	.50281	114400	.12744	114420	.36975	0.3	0.6
15	SAO 2	114380	.34364	114396	.39619	114417	.26017		
		114361	.26920	114404	.44916	114419	.28164		
		114380	.50541	114400	.14733	114420	.34726	0.2	0.7
16	SAO 3	141909	.26215	141922	.39439	141967	.34346		
		141901	.41607	141956	.24940	141969	.33453		
		141915	.30886	141931	.45611	141982	.23503		
		141903	.28633	141930	.34559	141969	.36808	0.1	0.1
17	SAO 3	141909	.26334	141922	.39408	141967	.34258		
		141901	.41712	141956	.24810	141969	.33478		
		141915	.30964	141931	.45615	141982	.23421		
		141903	.28747	141930	.34514	141969	.36739	0.1	0.3
18	SAO 3	141909	.26625	141922	.39385	141967	.33990		
		141901	.42014	141956	.24462	141969	.33524		
		141915	.31187	141931	.45648	141982	.23165		
		141903	.29088	141930	.34371	141969	.36541	0.2	0.2

N	Catalogue	Numbers of stars and dependences						A	B	C
19	SAO 2	101197	.18897	101234	.53475	101241	.27628	0.5	0.2	
		101206	.13219	101222	.48995	101253	.37786			
20	SAO 2	101197	.18888	101234	.53844	101241	.27268	0.3	0.1	
		101206	.13084	101222	.49250	101253	.37666			
21	SAO 2	101197	.18880	101234	.54175	101241	.26945	0.4	0.1	
		101206	.12959	101222	.49468	101253	.37573			
22	SAO 2	109749	.10356	109790	.44785	109824	.44859	0.3	0.0	
		109735	.05527	109802	.56019	109810	.38454			
23	SAO 2	109749	.10719	109790	.45266	109824	.44015	0.6	0.2	
		109735	.06218	109802	.55602	109810	.38180			
24	SAO 3	138714	.34296	138728	.30318	138755	.35386	0.3	0.5	
		138707	.34272	138714	.23979	138759	.41749			
25	SAO 3	138714	.34871	138728	.30124	138755	.35005	0.2	0.1	
		138707	.33992	138714	.24671	138759	.41337			
26	SAO 3	185886	.29194	185960	.49547	186022	.21259	0.5	0.6	
		185848	.36962	185971	.13206	186032	.49832			
27	SAO 3	185886	.29957	185960	.49310	186022	.20733	0.4	0.1	
		185848	.37405	185971	.13355	186032	.49240			
28	SAO 2	109872	.51668	109886	.30975	109931	.17357	0.1	0.4	
		109833	.35577	109902	.29669	109915	.34754			
29	SAO 2	109872	.52551	109886	.30797	109931	.16652	0.9	0.1	
		109833	.36246	109902	.29748	109915	.34006			
30	SAO 2	90861	.31064	90918	.34743	91033	.34193	0.7	0.5	
		90854	.32346	90918	.28653	91027	.39001			
31	SAO 2	90861	.31397	90918	.34620	91033	.33983	0.7	0.6	
		90854	.32632	90918	.28599	91027	.38769			
32	SAO 2	90888	.27252	90910	.37364	90935	.35384	0.6	1.1	
		90886	.43584	90920	.16613	90940	.39803			
33	SAO 2	90888	.47165	90935	.35831	90937	.17004	0.5	0.1	
		90886	.47343	90920	.32498	90967	.20159			
34	SAO 2	90687	.29645	90755	.35013	90800	.35342	0.3	0.7	
		90696	.32891	90708	.32962	90837	.34147			
35	SAO 2	90739	.61770	90755	.19535	90796	.18695	0.4	0.5	
		90689	.28370	90745	.44713	90824	.26917			
36	SAO 2	90654	.25403	90700	.56612	90738	.17985	0.7	0.4	
		90687	.16464	90689	.67342	90739	.16194			
37	SAO 2	90654	.26200	90700	.57252	90738	.16548	0.3	1.0	
		90687	.16347	90689	.69173	90739	.14480			

N	Catalogue	Numbers of stars and dependences						A	B	C
38	SAO 2	90511	.48147	90521	.22681	90551	.29172	0.9	0.9	
		90490	.29880	90526	.36827	90550	.33293			
39	SAO 2	90511	.50156	90521	.21718	90551	.28126	0.9	0.6	
		90490	.31450	90526	.35051	90550	.33499			
40	SAO 2	90451	.34979	90459	.20004	90535	.45017	0.4	0.8	
		90448	.29631	90511	.35850	90512	.34519			
41	SAO 2	90451	.37941	90459	.18303	90535	.43756	0.1	0.6	
		90448	.31826	90511	.31375	90512	.36799			
42	SAO 2	90451	.39304	90459	.17532	90535	.43164	0.4	0.4	
		90448	.32861	90511	.29306	90512	.37833			
43	SAO 2	107773	.36974	107825	.27519	107882	.35507	0.4	0.7	
		107785	.34521	107808	.35720	107897	.29759			
44	SAO 2	107773	.37315	107825	.26836	107882	.35849	0.4	0.4	
		107785	.33989	107808	.36316	107897	.29695			
45	SAO 2	107773	.63891	107825	.35228	107882	.71337	0.6	0.0	
		107785	.15318	107808	.87579	107897	.27739			
46	SAO 2	107852	.36002	107908	.37282	107949	.26716	0.0	0.1	
		107846	.36760	107884	.26552	107961	.36688			
47	SAO 2	107852	.35608	107908	.37597	107949	.26795	0.5	0.7	
		107846	.36795	107884	.26205	107961	.37000			
48	SAO 2	119625	.34781	119675	.21899	119728	.43320	0.3	0.4	
		119649	.39123	119675	.15363	119704	.45514			
49	SAO 2	119649	.26142	119665	.31577	119704	.42281	0.6	0.6	
		119660	.23705	119665	.44358	119712	.31937			
50	SAO 3	147440	.41449	166573	.37349	177518	.21202	0.1	0.0	
		147435	.28434	166566	.29904	147493	.41662			
51	SAO 3	147440	.41694	166573	.37513	177518	.20793	0.6	0.2	
		147435	.28678	166566	.30243	147493	.41079			
52	SAO 1	54708	.35567	54744	.13377	54780	.51056	0.5	0.4	
		54711	.33123	54748	.40438	54805	.26439			
53	SAO 1	54708	.36430	54744	.12751	54780	.50819	0.8	0.7	
		54711	.32985	54748	.41367	54805	.25648			
54	SAO 2	74500	.32572	74623	.36937	74733	.30491	0.7	0.7	
		74634	.39099	74639	.38552	74699	.22349			
55	SAO 2	74500	.33789	74623	.36083	74733	.30128	0.3	0.6	
		74634	.38226	74639	.40385	74699	.21389			
56	SAO 2	74625	.28582	74650	.23172	74653	.48246	1.0	0.4	
		74632	.22031	74639	.38143	74667	.39826			

N	Catalogue	Numbers of stars and dependences						A	B	C
57	SAO 2	74570	.23870	74583	.52585	74585	.23545			
		74559	.41072	74588	.32677	74593	.26251	0.2	0.2	
58	SAO 2	74570	.26257	74583	.54263	74585	.19480			
		74559	.42527	74588	.30621	74593	.26852	0.9	0.1	
59	SAO 2	74530	.18771	74563	.26347	74568	.54882			
		74541	.13540	74553	.47924	74578	.38536	0.5	0.1	
60	SAO 2	74541	.13533	74553	.48831	74578	.37636			
		74536	.29228	74552	.43208	74593	.27564	0.4	0.1	
61	SAO 2	92329	.20167	92330	.55721	92361	.24112			
		92325	.59570	92343	.25011	92382	.15419	0.1	0.4	
62	SAO 2	92329	.20287	92330	.55026	92361	.24687			
		92325	.58971	92343	.25417	92382	.15612	0.4	0.1	
63	SAO 2	92329	.21588	92330	.42215	92361	.36197			
		92325	.47596	92343	.32309	92382	.20095	0.4	0.2	
64	SAO 2	92329	.21679	92330	.41667	92361	.36654			
		92325	.47127	92343	.32619	92382	.20254	0.7	0.3	
65	SAO 1	54696	.30758	54748	.33944	54766	.35298			
		54708	.53321	54723	.24696	54830	.21983	1.6	0.1	
66	SAO 1	54696	.31562	54748	.34349	54766	.34089			
		54708	.54391	54723	.24164	54830	.21445	1.0	0.5	
67	SAO 2	119667	.12780	119670	.30475	119766	.56745			
		119698	.36571	119737	.41738	119740	.21691	0.5	0.0	
68	SAO 2	119698	.39767	119737	.14834	119739	.45399			
		119709	.30268	119725	.28304	119737	.41428	0.5	1.1	
69	SAO 2	79481	.45796	79568	.41188	79574	.13016			
		79460	.27398	79555	.44588	79561	.28014	0.7	0.1	
70	SAO 2	79481	.45796	79568	.41113	79574	.13091			
		79460	.27401	79555	.44504	79561	.28095	0.5	0.4	
71	SAO 2	79481	.45789	79568	.41066	79574	.13145			
		79460	.27400	79555	.44446	79561	.28154	0.6	0.6	
72	SAO 2	79081	.61694	79104	.22304	79174	.16002			
		79083	.47255	79079	.22632	79139	.30113	0.2	0.1	
73	SAO 2	79049	.18733	79113	.39466	79117	.41801			
		79081	.32431	79104	.37608	79126	.29961	0.0	0.5	
74	SAO 2	79049	.20057	79113	.37686	79117	.42257			
		79081	.34508	79104	.37412	79126	.28080	0.4	0.0	



N	Catalogue	Numbers of stars and dependences			A	B	C
75	SAO 2	79945 .35756	79983 .21837	79990 .42407			
		79963 .34837	79976 .46302	79983 .18861			
		79955 .33846	79978 .46657	79983 .19497	0.2	0.3	
76	SAO 2	79945 .35271	79983 .22263	79990 .42466			
		79963 .33832	79976 .46539	79983 .19629			
		79955 .33111	79978 .46624	79983 .20265	0.1	0.2	
77	SAO 2	79945 .32503	79983 .24692	79990 .42805			
		79963 .28012	79976 .47957	79983 .24031			
		79955 .28824	79978 .46486	79983 .24690	0.5	0.2	
78	SAO 2	79945 .31786	79983 .25305	79990 .42909			
		79963 .26532	79976 .48325	79983 .25143			
		79955 .27727	79978 .46458	79983 .25815	0.3	0.1	
79	SAO 1	60880 .37100	60911 .22555	60928 .40345			
		60886 .23920	60909 .57123	60933 .18957			
		60881 .39463	60913 .28405	60935 .32132			
		60894 .44190	60908 .31612	60950 .24198	0.3	0.8	
80	SAO 1	60880 .36800	60911 .22798	60928 .40402			
		60886 .23920	60909 .56690	60933 .19390			
		60881 .39437	60913 .27910	60935 .32653			
		60894 .43932	60908 .31688	60950 .24380	0.6	0.7	
81	SAO 1	60880 .36483	60911 .23055	60928 .40462			
		60886 .23923	60909 .56213	60933 .19864			
		60881 .39423	60913 .27380	60935 .33197			
		60894 .43673	60908 .31773	60950 .24554	0.5	0.6	
82	SAO 1	60880 .29842	60911 .28153	60928 .42005			
		60886 .23705	60909 .46684	60933 .29611			
		60881 .38777	60913 .16900	60935 .44323			
		60894 .38216	60908 .33304	60950 .28480	0.5	0.5	
83	SAO 2	109543 .24654	109549 .38243	109652 .37103			
		109551 .31975	109583 .23794	109610 .44231	1.0	0.3	
84	SAO 2	109554 .36873	109594 .30329	109610 .32798			
		109551 .27882	109583 .34992	109608 .37126	0.7	0.4	

Note: T - time uncertain.

#### 4. LIST OF COLLABORATORS

Name	Abbreviation	Exposures	Measurements	Reductions
M. Antal	A	33	26	-
G. Červák	E	-	18	-
T. Čiško	C	39	-	-
J. Fabricius	F	-	5	-
J. Klobušník	J	-	9	-
L. Petrik	L	12	10	-
E.M. Pittich	P	-	-	49
P. Rychtarčík	R	-	9	-
J. Svoreň	S	-	7	35

#### REFERENCES

- Pittich, E.M., Svoreň, J.: 1985, *Contr. Astron. Obs. Skalnaté Pleso* 13, 45.  
 -: 1989, *Contr. Astron. Obs. Skalnaté Pleso* 18, 23.  
 Smithsonian Astrophysical Observatory Star Catalog. Parts 1-3. Washington,  
 Smithsonian Institution, 1966.