SUPPLEMENT

Comet astrometry made at the Skalnaté Pleso Observatory in the years 1992 and 1993

J. Svoreň

Astronomical Institute of the Slovak Academy of Sciences
059 60 Tatranská Lomnica, The Slovak Republic

Received: January 31, 2000

Abstract. The paper presents the results of position photographing of comets carried out at the Skalnaté Pleso Observatory in the years 1992 and 1993. A total of 113 observations of 8 comets are given.

Key words: comets – astrometry

1. Introduction

The presented paper is a continuation of the previous papers which gave the results of positional observations of comets made at the Skalnaté Pleso Observatory (the last paper of this series: Svoreň; 1999) and contains positional comet observations made in the years 1992 and 1993.

The reference stars were selected from the Smithsonian Astrophysical Observatory Star Catalog (1966). The positions were measured in B1950.0 system and then converted to J2000.0 following the formulas published by System Transition Committee of the IAU Commission 20 (Yeomans, 1990). The formulas used are given in Svoreň (1998).

The reduction constants as well as methods of observation and processing and all the other necessary data are not repeated here. They are also given in Svoreň (1998).

A total of 113 accurate positions of 8 comets, arranged according to the new system designation of the comets, are given. The list of collaborators is given, together with their share in photographing, measuring and reducing the positions.

2. Positions of comets

The data have been arranged according to individual comets. The individual columns of the table contain the following:
N - ordinal number of observation,

Contrib. Astron. Obs. Skalnaté Pleso **30**, (2000), 53 – 63.

Date U.T. - date and time of the middle of the exposure,
$R.A._{2000}$ - right ascension for equinox 2000.0 (in h,m,s),
$Decl._{2000}$ - declination for equinox 2000.0 (in °,′, ″),
T - the exposure time in minutes,
A - the difference between independent determinations of R.A. in arc seconds,
B - the difference between independent determinations of Decl. in arc seconds.

Notes: N. 6 – poor guiding, N. 7 and 8 – bad seeing, N. 31 – dark plate,
N. 59 and 60 – faint image, N. 111 and 112 - diffuse image.

N	Date U.T.	$R.A._{2000}$	$Decl._{2000}$	T	A	B
		Comet C/1991 B1 (Shoemaker-Levy)				
1	1992 July	24.87488	20 26 25.05	+35 45 39.0	30	0.6	0.1
2	1992 July	24.89780	20 26 23.42	+35 45 17.6	30	0.7	0.7
3	1992 July	27.85845	20 23 02.45	+34 51 20.1	20	0.3	0.2
4	1992 July	27.87865	20 23 00.97	+34 50 54.8	20	0.8	0.5
		Comet C/1991 T2 (Shoemaker-Levy)				
5	1992 May	03.03194	00 56 54.51	+40 43 24.3	30	0.1	0.3
6	1992 May	03.05903	00 56 56.62	+40 43 58.2	30	0.1	0.5
7	1992 June	28.94583	05 51 20.44	+78 28 59.5	10	0.7	0.6
8	1992 June	29.00001	05 53 22.65	+78 29 57.8	10	0.1	0.6
9	1992 June	29.88889	06 27 48.90	+78 37 55.8	14	0.9	0.5
10	1992 June	29.90278	06 28 19.45	+78 37 51.1	14	0.2	0.6
11	1992 July	02.97986	08 57 07.38	+75 48 16.5	6	0.7	0.2
12	1992 July	02.99028	08 57 24.77	+75 47 30.4	6	0.3	0.3
13	1992 July	07.96806	10 34 48.52	+66 43 39.9	12	0.6	0.8
14	1992 July	07.97986	10 34 58.47	+66 42 05.1	12	0.5	0.6
		Comet C/1993 A1 (Mueller)				
15	1993 May	12.86806	06 42 17.10	+55 15 51.4	60	0.6	0.4
16	1993 May	13.87569	06 42 29.78	+55 14 10.8	60	0.2	0.1
17	1993 Sep.	06.78403	08 40 35.03	+66 23 16.5	24	0.4	0.5
18	1993 Sep.	06.80347	08 40 37.25	+66 23 40.3	24	0.1	0.6
19	1993 Sep.	07.80417	08 42 44.10	+66 42 56.0	22	0.2	0.6
20	1993 Sep.	07.82292	08 42 46.74	+66 43 22.0	22	0.6	0.1
21	1993 Sep.	15.90764	09 02 19.71	+69 35 54.6	22	0.1	0.9
22	1993 Sep.	16.01806	09 02 37.55	+69 38 25.7	26	0.1	0.1
23	1993 Sep.	19.90625	09 14 16.20	+71 12 54.7	24	1.0	0.6
24	1993 Sep.	19.99722	09 14 34.10	+71 15 14.8	22	0.5	0.5
25	1993 Sep.	20.88889	09 17 32.39	+71 38 02.5	20	0.1	0.1
26	1993 Sep.	21.00833	09 17 56.66	+71 41 08.5	20	0.1	0.4
27	1993 Sep.	21.87708	09 20 58.60	+72 03 45.4	20	1.0	0.4

N	Date U.T.	$R.A._{2000}$	$Decl._{2000}$	T	A	B
		Comet C/1993 A1 (Mueller) - cont.				
28	1993 Sep.	21.96528	09 21 17.87	+72 06 03.5	20	0.1	0.2
29	1993 Oct.	06.76458	10 51 34.85	+79 17 28.1	16	0.3	0.2
30	1993 Oct.	06.78681	10 51 48.59	+79 18 03.7	16	0.2	0.6
31	1993 Oct.	07.73403	11 02 30.00	+79 46 08.0	14	0.1	0.4
32	1993 Oct.	09.91806	11 31 41.07	+80 48 11.2	14	0.9	0.2
33	1993 Oct.	09.93125	11 31 54.00	+80 48 31.8	14	1.0	0.5
34	1993 Nov.	18.82361	20 07 41.05	+56 40 18.3	10	0.2	0.1
35	1993 Nov.	18.83681	20 07 43.75	+56 39 33.6	10	0.2	0.3
36	1993 Dec.	10.73177	20 53 04.43	+36 16 47.7	12	0.2	1.0
37	1993 Dec.	10.75035	20 53 05.95	+36 15 57.9	18	0.2	0.8
38	1993 Dec.	10.76632	20 53 07.11	+36 15 16.7	12	0.2	0.8
		Comet C/1993 Q1 (Mueller)				
39	1993 Sep.	15.87292	01 10 10.81	+49 17 25.2	60	0.1	0.9
40	1993 Sep.	19.96806	01 02 11.45	+48 45 03.7	50	0.7	1.0
41	1993 Sep.	20.85833	01 00 21.57	+48 36 41.2	50	0.2	0.3
42	1993 Sep.	20.97778	01 00 06.38	+48 35 30.4	50	0.2	0.6
43	1993 Sep.	21.93889	00 58 05.44	+48 25 47.1	46	0.1	0.5
44	1993 Sep.	22.02708	00 57 54.13	+48 24 53.2	46	0.7	0.6
45	1993 Oct.	25.03264	23 40 17.49	+35 12 07.6	30	0.3	0.3
46	1993 Oct.	25.05764	23 40 14.13	+35 11 03.9	30	1.0	0.4
47	1993 Nov.	10.77523	23 10 55.43	+23 32 58.3	15	0.1	0.3
48	1993 Nov.	10.79618	23 10 53.79	+23 32 09.8	15	0.3	0.3
		Periodic comet 4P/Faye				
49	1992 Jan.	03.70637	02 47 35.24	+03 05 28.4	20	0.5	0.2
50	1992 Jan.	03.76458	02 47 40.65	+03 05 56.0	20	0.1	0.4
		Periodic comet 24P/Schaumasse				
51	1992 Dec.	16.80417	03 54 34.00	+17 23 13.7	50	0.7	0.1
52	1992 Dec.	16.88472	03 54 26.61	+17 24 26.2	50	0.7	0.4
53	1992 Dec.	17.73542	03 53 18.17	+17 36 47.1	46	0.5	0.8
54	1992 Dec.	17.80625	03 53 11.72	+17 37 52.1	46	0.9	0.3
55	1992 Dec.	19.78750	03 50 32.98	+18 07 47.6	40	0.8	0.1
56	1992 Dec.	19.85208	03 50 28.16	+18 08 45.4	40	0.1	0.9
57	1992 Dec.	23.74514	03 45 33.46	+19 11 12.1	36	0.9	0.2
58	1992 Dec.	23.80694	03 45 29.02	+19 12 14.7	36	0.1	0.4
59	1992 Dec.	28.69167	03 40 05.16	+20 37 10.1	35	0.4	1.1
60	1992 Dec.	28.71875	03 40 03.43	+20 37 44.2	35	1.2	0.4
61	1993 Jan.	13.70567	03 31 22.49	+26 01 01.6	28	0.4	0.3
62	1993 Jan.	15.71829	03 31 28.87	+26 45 53.2	24	0.3	0.6
63	1993 Jan.	17.72616	03 31 53.41	+27 31 30.7	18	0.2	0.7

N	Date U.T.	$R.A._{2000}$	$Decl._{2000}$	T	A	B
		Periodic comet 24P/Schaumasse - cont.				
64	1993 Jan. 28.74664	03 39 55.36	+31 54 14.6	18	0.8	0.9
65	1993 Feb. 09.75266	04 00 48.63	+36 54 11.5	5	0.1	0.1
66	1993 Feb. 10.73669	04 03 07.68	+37 18 47.2	4	0.4	0.7
67	1993 Feb. 12.74907	04 08 09.56	+38 08 45.9	4	0.7	0.1
68	1993 Feb. 15.73160	04 16 23.62	+39 21 52.2	4	0.2	0.8
69	1993 Feb. 24.76574	04 47 09.53	+42 49 08.8	4	0.4	0.6
70	1993 Feb. 24.82361	04 47 22.65	+42 50 19.2	4	0.9	0.5
71	1993 Feb. 28.73310	05 03 33.53	+44 09 15.6	7	0.5	0.6
72	1993 Feb. 28.76470	05 03 40.72	+44 09 55.4	8	0.8	0.4
73	1993 Feb. 28.77361	05 03 43.73	+44 10 02.1	6	0.8	0.9
74	1993 Mar. 20.92569	06 50 53.60	+47 31 52.7	16	0.2	0.1
75	1993 Mar. 20.94583	06 50 59.63	+47 31 53.8	16	0.6	0.8
76	1993 Apr. 10.79861	08 51 44.10	+42 35 56.0	18	0.6	0.2
77	1993 Apr. 10.82917	08 51 53.41	+42 35 09.5	18	0.8	0.8
78	1993 Apr. 14.94375	09 12 30.82	+40 45 04.1	18	0.8	0.2
79	1993 Apr. 17.80949	09 26 02.40	+39 22 10.6	18	0.9	0.1
80	1993 Apr. 17.82708	09 26 06.99	+39 21 38.0	18	0.6	0.5
81	1993 Apr. 22.93333	09 48 31.68	+36 44 02.3	20	0.8	0.3
82	1993 Apr. 22.96111	09 48 38.10	+36 43 08.9	20	0.1	0.5
83	1993 Apr. 23.89306	09 52 30.82	+36 13 26.0	22	0.1	0.1
84	1993 May 10.84792	10 52 23.41	+26 58 03.6	36	0.5	0.4
85	1993 May 10.89653	10 52 31.62	+26 56 36.4	36	0.2	0.5
86	1993 May 11.86181	10 55 25.66	+26 25 23.1	36	1.1	0.5
87	1993 May 11.92500	10 55 36.67	+26 23 24.3	36	0.6	0.6
88	1993 May 12.94583	10 58 38.11	+25 50 30.3	36	0.6	0.2
		Periodic comet 47P/Ashbrook-Jackson				
89	1993 Aug. 27.01528	01 33 11.72	+10 48 23.1	44	0.7	0.2
90	1993 Aug. 27.07292	01 33 11.67	+10 48 47.1	44	1.0	0.1
91	1993 Sep. 15.82639	01 27 25.36	+12 45 22.9	40	0.3	0.4
92	1993 Sep. 15.98750	01 27 19.83	+12 46 09.9	46	0.4	0.7
93	1993 Sep. 18.92222	01 25 33.78	+12 59 16.0	40	0.5	0.4
94	1993 Sep. 19.81944	01 24 59.41	+13 03 04.4	40	0.3	0.1
95	1993 Sep. 19.93194	01 24 54.82	+13 03 32.8	40	0.1	0.7
96	1993 Sep. 20.80972	01 24 19.68	+13 07 10.8	40	0.4	0.6
97	1993 Sep. 20.92917	01 24 14.57	+13 07 39.2	40	0.5	0.7
98	1993 Sep. 21.90347	01 23 34.61	+13 11 29.7	40	0.4	0.8
99	1993 Sep. 21.99236	01 23 30.82	+13 11 49.4	40	0.1	0.8
100	1993 Oct. 07.76250	01 10 37.68	+13 57 05.7	50	0.1	0.8
101	1993 Oct. 11.77917	01 07 02.80	+14 03 56.0	44	0.1	0.7
102	1993 Oct. 11.84931	01 06 59.29	+14 04 01.5	44	0.8	0.8

N	Date U.T.		$R.A._{2000}$	$Decl._{2000}$	T	A	B
			Periodic comet 109P/Swift-Tuttle				
103	1992 Oct.	19.74668	14 53 40.26	+54 54 19.1	4	0.2	0.9
104	1992 Oct.	19.76878	14 53 52.19	+54 53 30.3	4	0.2	0.9
105	1992 Oct.	27.78819	16 03 52.56	+48 16 03.0	6	0.6	0.1
106	1992 Nov.	09.69653	17 32 59.08	+31 56 41.0	6	0.1	0.6
107	1992 Nov.	09.73611	17 33 12.33	+31 53 25.2	6	0.5	0.1
108	1992 Nov.	10.68958	17 38 30.46	+30 32 23.1	6	0.3	0.4
109	1992 Nov.	24.67292	18 40 24.76	+11 26 01.1	6	0.6	0.1
110	1992 Nov.	24.72292	18 40 35.12	+11 22 12.6	6	0.4	0.5
111	1992 Nov.	30.66666	19 00 01.60	+04 23 29.5	4	0.7	0.2
112	1992 Nov.	30.68889	19 00 05.65	+04 22 01.9	4	0.2	0.2
113	1992 Dec.	08.66667	19 21 55.48	−03 40 22.9	6	0.2	0.1

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,
Numbers of reference stars and dependences

N	Numbers of stars and dependences					
1	69919	.13950	70024	.55598	70068	.30452
	69938	.32535	70050	.38430	70079	.29035
2	69919	.14700	70024	.54788	70068	.30512
	69938	.32931	70050	.38991	70079	.28078
3	69876	.23529	69919	.38468	69976	.38003
	69863	.40790	69943	.29769	70004	.29441
4	69876	.24544	69919	.37853	69976	.37603
	69863	.40615	69943	.31297	70004	.28088
5	36737	.32032	54302	.38795	36827	.29173
	36756	.25981	54245	.32804	36846	.41215
6	36737	.31608	54302	.38399	36827	.29993
	36756	.26345	54245	.31924	36846	.41731
7	5527	.19599	5683	.47304	5696	.33097
	5520	.18461	5653	.53650	5754	.27889
8	5527	.12655	5683	.50548	5696	.36797
	5520	.14271	5653	.52303	5754	.33426

SUPPLEMENT

N	Numbers of stars and dependences					
9	5768	.30013	5877	.36441	5882	.33546
	5782	.40084	5846	.41744	5952	.18172
10	5768	.27582	5877	.38074	5882	.34344
	5782	.38976	5846	.40718	5952	.20306
11	6666	.55437	6709	.19021	6725	.25542
	6660	.37704	6696	.39690	6728	.22606
12	6666	.53391	6709	.17213	6725	.29396
	6660	.35931	6696	.39028	6728	.25041
13	15184	.24599	15230	.44639	15249	.30762
	15181	.40039	15213	.22292	15272	.37669
14	15184	.23469	15230	.43994	15249	.32537
	15181	.38268	15213	.23476	15272	.38256
15	25848	.26085	25873	.47189	25966	.26726
	25827	.37772	25889	.28076	25968	.34152
16	25828	.35289	25895	.28023	25966	.36688
	25817	.31117	25889	.35404	25968	.33479
17	14588	.21740	14598	.49487	14689	.28773
	14587	.26339	14605	.47774	14683	.25887
18	14588	.22176	14598	.48800	14689	.29024
	14587	.26692	14605	.47077	14683	.26231
19	14588	.20904	14633	.45870	14665	.33226
	14587	.39739	14654	.35937	14673	.24324
20	14588	.20788	14633	.45392	14665	.33820
	14587	.39498	14654	.35681	14673	.24821
21	14717	.42173	6721	.36678	14775	.21149
	6681	.26778	14740	.52517	6765	.20705
22	14717	.36826	6721	.41114	14775	.22060
	6681	.27873	14740	.46597	6765	.25530
23	6769	.48871	6795	.32303	6818	.18826
	6748	.42159	6757	.25345	6862	.32496
24	6769	.46883	6795	.28730	6818	.24387
	6748	.39095	6757	.27117	6862	.33788
25	6748	.24021	6766	.43218	6892	.32761
	6711	.30736	6826	.41756	6871	.27508
26	6769	.23111	6795	.22375	6827	.54514
	6757	.21303	6817	.45224	6824	.33473
27	6759	.29987	6826	.33285	6876	.36728
	6796	.26877	6797	.47256	6892	.25867
28	6759	.29063	6826	.31642	6876	.39295
	6796	.29407	6797	.43057	6892	.27536

N	Numbers of stars and dependences					
29	7165	.46083	1793	.29674	7307	.24243
	7195	.45397	1794	.19581	7242	.35022
30	7165	.44865	1793	.31129	7307	.24006
	7195	.43746	1794	.20891	7242	.35363
31	7230	.41957	1797	.39723	1872	.18320
	7195	.32003	1795	.34896	7352	.33101
32	1863	.36783	1866	.34450	1937	.28767
	1852	.20363	1872	.48948	1934	.30689
33	1863	.35168	1866	.35294	1937	.29538
	1852	.19657	1872	.48710	1934	.31633
34	32246	.35362	32297	.37096	32383	.27542
	32269	.46587	32288	.16140	32347	.37273
35	32246	.35601	32297	.36125	32383	.28274
	32269	.44232	32288	.18287	32347	.37481
36	70580	.36103	70616	.29232	70670	.34665
	70555	.45187	70651	.22482	70701	.32331
37	70580	.36484	70616	.27781	70670	.35735
	70555	.45357	70651	.21163	70701	.33480
38	70580	.36852	70616	.26568	70670	.36580
	70555	.45529	70651	.20053	70701	.34418
39	36944	.40653	36960	.38581	37100	.20766
	36927	.44303	37011	.31139	37051	.24558
40	36801	.34384	36865	.35551	36933	.30065
	36755	.28347	36888	.39257	36944	.32396
41	36801	.63468	36865	.19637	36933	.16895
	36755	.41801	36888	.39773	36944	.18426
42	36801	.67511	36865	.17419	36933	.15070
	36755	.43664	36888	.39856	36944	.16480
43	36759	.34890	36786	.34996	36885	.30114
	36735	.26962	36793	.45744	36900	.27294
44	36752	.28555	36802	.41424	36856	.30021
	36747	.29936	36821	.32546	36834	.37518
45	73369	.44088	73433	.19879	73472	.36033
	73374	.24517	73410	.54731	73502	.20752
46	73369	.45644	73433	.17980	73472	.36376
	73374	.23750	73410	.56452	73502	.19798
47	81034	.31507	91058	.28701	91099	.39792
	91024	.22552	91045	.38976	91109	.38472
48	81034	.32579	91058	.27749	91099	.39672
	91024	.23823	91045	.37805	91109	.38372

N	Numbers of stars and dependences					
49	110738	.45844	110740	.27903	110782	.26253
	110713	.36684	110769	.27470	110779	.35846
50	110738	.44496	110740	.27232	110782	.28272
	110713	.35153	110769	.28204	110779	.36643
51	93649	.38262	93654	.39764	93701	.21974
	93608	.38527	93667	.31363	93734	.30110
52	93649	.40495	93654	.39668	93701	.19837
	93608	.38665	93667	.32710	93734	.28625
53	93644	.40685	93654	.57342	93701	.01973
	93608	.39618	93643	.34123	93734	.26259
54	93644	.41983	93654	.57848	93701	.00169
	93608	.39729	93643	.35008	93734	.25263
55	93592	.17363	93632	.50424	93644	.32213
	93607	.28968	93608	.30541	93661	.40491
56	93592	.19757	93632	.47581	93644	.32662
	93607	.31140	93608	.29618	93661	.39242
57	93541	.18179	93587	.38430	93598	.43391
	93552	.18877	76163	.34022	93592	.47101
58	93541	.19449	93587	.37001	93598	.43550
	93552	.20209	76163	.34157	93592	.45634
59	76044	.39392	76055	.31636	93560	.28972
	76007	.19262	93541	.41666	76092	.39072
60	76044	.39524	76055	.32404	93560	.28072
	76007	.19904	93541	.40904	76092	.39192
61	75947	.37783	75965	.34402	76004	.27815
	75932	.31795	75963	.37045	76020	.31160
62	75955	.55668	75967	.26474	76011	.17858
	75947	.27182	75963	.46859	76004	.25959
63	75936	.32160	75983	.31122	76004	.36718
	75962	.48505	75972	.34713	76012	.16782
64	56591	.37082	56606	.41951	56683	.20967
	56584	.42644	56614	.29913	56671	.27443
65	56852	.41144	56913	.16347	56915	.42509
	56855	.33101	56865	.39338	56955	.27561
66	56865	.30415	56940	.28344	56955	.41241
	56875	.29632	56938	.42327	56952	.28041
67	56940	.34296	57010	.31442	57053	.34262
	56975	.53418	56985	.21722	57042	.24860
68	57077	.28665	57099	.31899	57150	.39436
	57054	.30626	57119	.39920	57175	.29454

N	Numbers of stars and dependences					
69	39707	.36145	39763	.45256	39798	.18599
	39712	.34400	39730	.34075	39813	.31525
70	39707	.34650	39763	.41109	39798	.24241
	39712	.39039	39730	.16638	39798	.44323
71	39948	.36089	39964	.31024	40030	.32887
	39964	.40373	39957	.30363	40022	.29264
72	39948	.35815	39964	.28685	40030	.35500
	39964	.36554	39957	.31187	40022	.32259
73	39948	.35329	39964	.28151	40030	.36520
	39964	.35195	39957	.31304	40022	.33501
74	41348	.34302	41370	.24361	41411	.41337
	41349	.37033	41364	.30774	41431	.32193
75	41348	.33483	41370	.23091	41411	.43426
	41349	.35917	41364	.30525	41431	.33558
76	42543	.31957	42572	.35787	42608	.32256
	42549	.20071	42556	.44250	42619	.35679
77	42543	.30773	42572	.34748	42608	.34479
	42549	.20028	42556	.42485	42619	.37487
78	42711	.33025	42734	.41842	42808	.25133
	42707	.23061	42746	.49175	42773	.27764
79	61433	.38455	61498	.35784	42877	.25761
	42836	.35388	61476	.40346	42890	.24266
80	61433	.36878	61498	.36730	42877	.26392
	42836	.33545	61476	.41046	42890	.25409
81	61666	.41592	61687	.30115	61743	.28293
	61667	.39920	61692	.41288	61764	.18792
82	61666	.41117	61687	.29078	61743	.29805
	61667	.39629	61692	.40316	61764	.20055
83	61715	.50989	61726	.12919	61743	.36092
	61709	.23962	61712	.45487	61764	.30551
84	81534	.31372	81566	.43010	81577	.25618
	81545	.38040	81557	.40002	81592	.21958
85	81534	.29870	81566	.39300	81577	.30830
	81545	.40563	81557	.34271	81592	.25166
86	81549	.33451	81592	.43610	81606	.22939
	81565	.61585	81596	.20912	81625	.17503
87	81549	.31515	81592	.41719	81606	.26766
	81565	.57272	81596	.24929	81625	.17799
88	81577	.27666	81594	.50097	81669	.22237
	81565	.25929	81608	.51034	81643	.23037

SUPPLEMENT

N	Numbers of stars and dependences					
89	92477	.33203	92494	.27001	92528	.39796
	92459	.42409	92496	.14842	92538	.42749
90	92457	.47057	92493	.13847	92550	.39096
	92465	.47205	109993	.32515	92540	.20280
91	92425	.37890	92430	.12155	92462	.49955
	92417	.28748	92449	.25128	92460	.46124
92	92425	.37938	92430	.14253	92462	.47809
	92417	.30161	92449	.26018	92460	.43821
93	92384	.24957	92420	.29300	92456	.45743
	92379	.31057	92414	.31228	92476	.37715
94	92384	.30356	92420	.32249	92456	.37395
	92379	.39428	92414	.27111	92476	.33461
95	92384	.31098	92420	.32606	92456	.36296
	92379	.40513	92414	.26605	92476	.32882
96	92377	.36837	92420	.24994	92451	.38169
	92397	.26283	92409	.52909	92462	.20808
97	92379	.31825	92414	.31229	92449	.36946
	92363	.22267	92417	.50672	92455	.27061
98	92379	.44489	92414	.25399	92449	.30112
	92363	.31306	92417	.46540	92455	.22154
99	92377	.44679	92420	.30814	92451	.24507
	92357	.29626	92409	.43175	92462	.27199
100	92269	.33204	92302	.33868	92311	.32928
	92268	.24007	92278	.50573	92335	.25420
101	92225	.34812	92268	.28916	92278	.36272
	92218	.25205	92260	.60680	92302	.14115
102	92225	.35955	92268	.28620	92278	.35425
	92218	.25992	92260	.60499	92302	.13509
103	29299	.37338	29317	.31001	29367	.31661
	29264	.20320	29327	.21126	29345	.58554
104	29299	.35568	29317	.30521	29367	.33911
	29264	.18497	29327	.21616	29345	.59887
105	45846	.16004	45866	.33292	45887	.50704
	45835	.40048	45883	.33412	45900	.26540
106	66076	.14822	66093	.39169	66178	.46009
	66089	.38961	66113	.25499	66186	.35540
107	66076	.20337	66093	.29809	66178	.49854
	66089	.40322	66113	.19516	66186	.40162
108	66157	.27764	66227	.31093	85298	.41143
	85242	.26174	66184	.47571	85354	.26255

N	Numbers of stars and dependences					
109	103927	.45775	103981	.16660	104021	.37565
	103907	.14614	103967	.64995	104040	.20391
110	103927	.45061	103981	.11437	104021	.43502
	103907	.09464	103967	.69734	104040	.20802
111	124082	.36097	124166	.26927	124173	.36976
	124076	.25373	124151	.50611	124171	.24016
112	124082	.34682	124166	.28760	124173	.36558
	124076	.23554	124151	.53964	124171	.22482
113	143290	.44671	143311	.29826	143363	.25503
	143248	.26281	143310	.44177	143374	.29542

4. List of collaborators

Name	Exposures	Measurements	Reductions
G. Červák	79	82	–
L. Neslušan	2	–	–
P. Rychtarčík	32	31	–
J. Svoreň	–	–	113

Acknowledgements. This work was supported, in part, by the Slovak Grant Agency for Science (grant No. 5100).

References

Smithsonian Astrophysical Observatory Star Catalog. Parts 1-3, Washington, Smithsonian Institution, 1966

Svoreň, J.: 1998, *Contrib. Astron. Obs. Skalnaté Pleso* **28**, 73

Svoreň, J.: 1999, *Contrib. Astron. Obs. Skalnaté Pleso* **29**, 47

Yeomans, D.K.: 1990, *Conversion to FK5/J2000.0*, IAU Commission 20, The letter dated 5 December 1990