Contrib. Astron. Obs. Skalnaté Pleso **43**, 53 – 67, (2013)

Astrometry of comets made at the Skalnaté Pleso Observatory in the year 2002

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Received: January 8, 2013; Accepted: February 12, 2013

Abstract. The paper presents the results of CCD astrometry of comets carried out at the Skalnaté Pleso Observatory in 2002. A total of 225 observations of 30 comets are given.
Key words: comets – astrometry

1. Introduction

This 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 being Svoreň, 2012) and contains positional comet observations made in the year 2001.

The article contains the cometary positions obtained by a 0.61-m f/4.4 mirror telescope of the Skalnaté Pleso Observatory equipped with a CCD camera SBIG ST-8. The CCD camera is placed at the Newton focus and the size of the observed sky area is 13×19 seconds of arc.

The reduction constants of the Skalnaté Pleso 0.61-m telescope are as follows:
$\lambda = -\ 1^h\ 20^m\ 58.70^s$,
$\varphi = +49^\circ\ 11'\ 20.0''$,
h = 1783 m a.s.l.,
$\rho = 0.99836$ of the equatorial radius of the Earth.

The reference stars were selected from the USNO-A V2.0 Star Catalogue (Monet et al., 1998). The method of plate constants and the computer programme Astrometrica (Raab, 1993) were used for reduction of obtained frames.

2. Positions of comets

The data have been arranged according to the new system designation. A list of collaborators is given, together with their share in photographing, measuring and reducing the positions.

The individual columns of the table contain the following:
N – ordinal number of observation
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 °, ′, ″)
Magn. – R magnitude of the comet
Ref. st. – number of reference stars used to calculate the plate constants and photometric calibration of an image
dα – the mean residual in R.A. (in s)
dδ – the mean residual in Decl. (in ″)
dmag – the mean residual in mag.

N	Date U.T.		$R.A._{2000}$ dα	$Decl._{2000}$ dδ	Magn. dmag	Ref. st.
			Periodic Comet 16P/Brooks 2			
001	2002 Jan.	03.74593	04 40 45.12	+13 09 00.4	16.8	9
			0.01	0.2	0.2	
002	2002 Jan.	03.75791	04 40 44.92	+13 09 02.3	17.6	9
			0.01	0.1	0.2	
003	2002 Jan.	07.84429	04 39 44.32	+13 19 26.2	15.6	8
			0.02	0.2	0.4	
004	2002 Jan.	07.86787	04 39 44.13	+13 19 31.4	15.7	8
			0.02	0.2	0.4	
			Periodic Comet 19P/Borelly			
005	2002 Jan.	08.91009	12 48 09.25	+41 52 46.3	14.0	7
			0.02	0.1	0.3	
006	2002 Jan.	08.92788	12 48 10.51	+41 53 03.2	14.1	7
			0.01	0.1	0.3	
007	2002 Jan.	09.90245	12 49 11.86	+42 08 35.6	13.9	7
			0.02	0.2	0.1	
008	2002 Jan.	09.91444	12 49 12.59	+42 08 47.7	13.9	7
			0.02	0.1	0.1	
009	2002 Jan.	10.92843	12 50 13.30	+42 25 01.8	14.1	7
			0.01	0.3	0.3	
010	2002 Jan.	10.93722	12 50 13.84	+42 25 10.1	14.0	7
			0.01	0.3	0.3	
011	2002 Jan.	25.91521	12 58 44.77	+46 27 56.8	14.0	7
			0.01	0.2	0.2	
012	2002 Jan.	25.92644	12 58 44.98	+46 28 08.3	13.9	7
			0.01	0.2	0.2	
013	2002 Mar.	08.86980	12 19 30.98	+53 23 20.2	14.9	9
			0.03	0.3	0.1	
014	2002 Mar.	09.76840	12 18 04.13	+53 23 30.7	14.7	6
			0.02	0.2	0.2	

N	Date U.T.		$R.A._{2000}$ dα	$Decl._{2000}$ dδ	Magn. dmag	Ref. st.
015	2002 Mar.	11.77547	12 14 50.04	+53 22 22.4	14.7	10
			0.01	0.1	0.3	
016	2002 Mar.	12.78602	12 13 12.90	+53 20 59.6	14.8	6
			0.02	0.1	0.1	
017	2002 Mar.	17.91082	12 05 09.94	+53 05 59.0	14.6	8
			0.02	0.3	0.2	
			Periodic Comet 29P/SchwassmannWachmann 1			
018	2002 July	12.97377	21 00 50.55	-17 48 21.3	14.0	9
			0.01	0.2	0.2	
019	2002 July	12.97657	21 00 50.56	-17 48 18.0	13.9	9
			0.01	0.3	0.3	
020	2002 July	18.03196	20 58 38.01	-17 53 23.5	15.3	8
			0.01	0.3	0.2	
021	2002 July	18.04365	20 58 37.68	-17 53 24.4	15.6	8
			0.01	0.1	0.2	
022	2002 Aug.	03.94185	20 50 33.79	-18 11 47.6	12.5	9
			0.01	0.2	0.2	
023	2002 Aug.	03.95550	20 50 33.39	-18 11 48.3	12.4	9
			0.01	0.1	0.2	
024	2002 Aug.	31.89384	20 38 04.59	-18 35 17.3	14.0	7
			0.01	0.1	0.3	
025	2002 Aug.	31.90200	20 38 04.39	-18 35 17.7	14.0	7
			0.01	0.2	0.3	
026	2002 Sep.	03.84260	20 37 02.21	-18 36 36.4	14.1	7
			0.01	0.1	0.3	
027	2002 Sep.	03.84464	20 37 02.20	-18 36 36.0	14.6	7
			0.01	0.1	0.2	
			Periodic Comet 30P/Reinmuth 1			
028	2002 Dec.	13.16657	10 42 36.46	+09 48 23.0	15.2	10
			0.01	0.2	0.2	
029	2002 Dec.	13.18639	10 42 38.34	+09 48 19.5	15.3	10
			0.01	0.2	0.3	
			Periodic Comet 44P/Reinmuth 2			
030	2002 Jan.	03.77382	04 50 14.49	+27 51 46.5	16.5	8
			0.01	0.1	0.2	
031	2002 Jan.	03.78500	04 50 14.07	+27 51 43.6	16.6	8
			0.01	0.1	0.2	

N	Date U.T.		$R.A._{2000}$ dα	$Decl._{2000}$ dδ	Magn. dmag	Ref. st.
032	2002 Jan.	07.80904	04 47 56.70	+27 36 41.2	16.7	7
			0.01	0.3	0.3	
033	2002 Jan.	07.82087	04 47 56.27	+27 36 35.5	16.8	7
			0.01	0.3	0.3	
034	2002 Jan.	08.93785	04 47 22.54	+27 32 30.6	16.4	8
			0.01	0.2	0.1	
035	2002 Jan.	08.95366	04 47 22.12	+27 32 27.5	16.2	8
			0.01	0.1	0.1	
036	2002 Jan.	09.77120	04 46 58.89	+27 29 30.4	16.4	7
			0.01	0.2	0.2	
037	2002 Jan.	09.79332	04 46 58.32	+27 29 23.9	16.4	7
			0.02	0.2	0.2	
038	2002 Jan.	16.74670	04 44 22.41	+27 05 14.2	16.3	9
			0.01	0.2	0.2	
039	2002 Jan.	16.77044	04 44 21.95	+27 05 09.8	16.0	9
			0.02	0.2	0.3	
040	2002 Jan.	17.77774	04 44 05.68	+27 01 51.7	17.6	9
			0.01	0.1	0.1	
041	2002 Jan.	30.72107	04 42 58.67	+26 24 38.2	16.6	10
			0.01	0.3	0.1	
042	2002 Feb.	01.77788	04 43 11.02	+26 19 39.1	16.8	10
			0.01	0.1	0.2	
043	2002 Feb.	01.78661	04 43 11.00	+26 19 36.5	16.6	10
			0.01	0.1	0.2	
044	2002 Feb.	02.87249	04 43 19.93	+26 17 07.4	16.2	10
			0.01	0.2	0.2	
045	2002 Feb.	03.80221	04 43 28.85	+26 15 00.6	17.5	8
			0.02	0.1	0.2	
	Periodic Comet 51P/Harrington - Nucleus A					
046	2002 Jan.	09.96308	04 57 00.32	+15 40 36.1	17.2	8
			0.01	0.2	0.1	
047	2002 Jan.	09.98442	04 56 59.71	+15 40 41.9	17.3	8
			0.02	0.2	0.2	
048	2002 Jan.	14.97932	04 55 11.13	+16 03 00.0	16.9	10
			0.01	0.2	0.2	
	Periodic Comet 51P/Harrington - Nucleus D					
049	2002 Jan.	09.96308	04 56 59.58	+15 40 35.5	17.2	8
			0.01	0.2	0.1	
050	2002 Jan.	09.98442	04 56 59.04	+15 40 42.2	17.4	8
			0.02	0.2	0.2	

N	Date U.T.		$R.A._{2000}$ dα	$Decl._{2000}$ dδ	Magn. dmag	Ref. st.
			Periodic Comet 57P/du Toit-Neujmin-Delporte			
051	2002 Aug.	30.86852	20 04 06.56	-15 50 16.1	14.5	8
			0.02	0.2	0.2	
052	2002 Aug.	30.88264	20 04 07.03	-15 50 18.7	14.5	8
			0.02	0.1	0.2	
053	2002 Sep.	04.85139	20 07 26.43	-15 59 57.1	15.1	7
			0.02	0.3	0.2	
054	2002 Sep.	04.86282	20 07 26.92	-15 59 58.5	14.7	7
			0.01	0.3	0.2	
			Periodic Comet 65P/Gunn			
055	2002 May	31.85941	11 05 54.34	+16 55 51.7	15.1	8
			0.02	0.2	0.3	
056	2002 May	31.86951	11 05 54.64	+16 55 47.3	15.2	8
			0.01	0.3	0.4	
			Periodic Comet 155P/Shoemaker 3			
057	2002 Dec.	09.90556	09 22 38.30	+17 42 08.8	15.0	10
			0.02	0.2	0.3	
058	2002 Dec.	09.91315	09 22 38.90	+17 42 09.4	15.0	10
			0.02	0.2	0.2	
059	2002 Dec.	11.91477	09 25 21.93	+17 43 26.0	15.1	10
			0.02	0.1	0.2	
060	2002 Dec.	11.92392	09 25 22.63	+17 43 26.8	15.0	10
			0.02	0.2	0.1	
			Periodic Comet 214P/LINEAR			
061	2002 Apr.	04.88009	12 26 26.94	-18 42 41.5	16.7	9
			0.01	0.1	0.2	
062	2002 Apr.	04.89546	12 26 26.05	-18 42 49.6	16.7	9
			0.02	0.2	0.3	
			Periodic Comet 217P/LINEAR			
063	2002 Feb.	05.72488	02 05 51.50	-00 10 22.6	14.2	8
			0.02	0.2	0.1	
064	2002 Feb.	05.73635	02 05 53.61	-00 10 06.5	14.4	8
			0.02	0.3	0.2	

N	Date U.T.	$R.A._{2000}$ dα	$Decl._{2000}$ dδ	Magn. dmag	Ref. st.
		Periodic Comet 225P/LINEAR			
065	2002 Nov. 03.82155	01 07 55.66	+51 38 32.6	17.3	9
		0.03	0.1	0.2	
066	2002 Nov. 03.82829	01 07 55.47	+51 38 48.3	17.8	9
		0.02	0.1	0.2	
		Periodic Comet P/2002 T5 LINEAR			
067	2002 Dec. 26.79461	04 09 51.14	-12 29 14.4	16.7	9
		0.02	0.2	0.4	
068	2002 Dec. 26.80686	04 09 50.80	-12 29 09.8	16.7	9
		0.02	0.2	0.4	
		Comet 2000 SV74 LINEAR			
069	2002 Jan. 09.71853	22 59 50.12	+54 18 12.6	14.4	8
		0.01	0.2	0.1	
070	2002 Jan. 10.74104	23 00 00.62	+54 17 20.3	14.8	8
		0.02	0.2	0.2	
071	2002 Jan. 10.76259	23 00 00.80	+54 17 19.2	14.7	8
		0.02	0.2	0.2	
072	2002 Jan. 12.91676	23 00 27.76	+54 16 08.7	14.7	8
		0.03	0.2	0.2	
073	2002 Jan. 15.87684	23 01 15.27	+54 16 05.9	14.6	9
		0.03	0.3	0.2	
074	2002 Jan. 15.88731	23 01 15.41	+54 16 05.5	14.4	9
		0.03	0.3	0.2	
075	2002 Jan. 16.68208	23 01 30.19	+54 16 23.5	14.8	10
		0.02	0.2	0.2	
076	2002 Jan. 16.69638	23 01 30.42	+54 16 23.7	14.8	10
		0.02	0.1	0.2	
077	2002 Jan. 17.70027	23 01 50.15	+54 16 56.9	15.7	9
		0.02	0.2	0.3	
078	2002 Jan. 17.71865	23 01 50.49	+54 16 56.6	15.7	9
		0.02	0.2	0.3	
079	2002 Jan. 18.78038	23 02 12.66	+54 17 44.8	14.7	8
		0.03	0.2	0.3	
080	2002 Jan. 18.79963	23 02 13.06	+54 17 46.2	14.8	8
		0.02	0.2	0.4	
081	2002 Jan. 22.71891	23 03 46.88	+54 22 45.7	14.5	9
		0.02	0.1	0.2	
082	2002 Jan. 22.73216	23 03 47.14	+54 22 47.1	15.0	9
		0.03	0.2	0.3	

N	Date U.T.		$R.A._{2000}$ dα	$Decl._{2000}$ dδ	Magn. dmag	Ref. st.
083	2002 Jan.	30.71249	23 07 50.33	+54 42 40.7	15.3	9
			0.03	0.1	0.3	
084	2002 Feb.	01.72500	23 09 01.98	+54 49 45.8	14.5	9
			0.02	0.2	0.2	
085	2002 Feb.	01.73935	23 09 02.52	+54 49 48.0	15.3	9
			0.02	0.2	0.2	
086	2002 Feb.	02.69741	23 09 37.91	+54 53 28.1	15.3	9
			0.02	0.2	0.3	
087	2002 Feb.	03.69458	23 10 15.79	+54 57 28.1	15.1	8
			0.03	0.2	0.4	
088	2002 Feb.	04.71237	23 10 55.38	+55 01 45.8	15.0	7
			0.02	0.1	0.2	
089	2002 Feb.	04.72316	23 10 55.82	+55 01 48.5	15.0	7
			0.01	0.1	0.2	
090	2002 May	14.01395	01 39 22.26	+76 09 34.1	14.6	8
			0.07	0.2	0.1	
091	2002 May	22.89286	02 17 00.30	+78 55 22.7	14.5	10
			0.09	0.2	0.1	
092	2002 May	22.90502	02 17 04.26	+78 55 36.5	14.6	10
			0.07	0.1	0.1	
093	2002 June	11.97321	05 22 45.35	+83 43 22.6	14.6	10
			0.10	0.3	0.2	
094	2002 June	11.98190	05 22 53.04	+83 43 26.9	14.7	10
			0.10	0.3	0.2	
			Comet 2000 WM1 LINEAR			
095	2002 May	09.90003	18 09 18.51	+28 31 59.5	12.8	9
			0.03	0.1	0.4	
096	2002 May	09.90766	18 09 17.50	+28 32 12.3	12.7	9
			0.02	0.2	0.4	
097	2002 May	13.96138	17 59 40.55	+30 19 20.4	13.3	7
			0.02	0.2	0.3	
098	2002 May	22.86071	17 37 58.52	+33 21 53.5	13.3	9
			0.02	0.2	0.3	
099	2002 May	22.87472	17 37 56.51	+33 22 07.7	13.3	9
			0.02	0.1	0.4	
100	2002 June	15.95946	16 45 28.74	+36 13 10.7	13.8	8
			0.02	0.3	0.2	
101	2002 June	18.88413	16 40 28.68	+36 09 14.7	13.8	10
			0.02	0.2	0.1	
102	2002 June	18.89551	16 40 27.55	+36 09 13.3	13.8	10
			0.01	0.1	0.2	

N	Date U.T.		$R.A._{2000}$ dα	$Decl._{2000}$ dδ	Magn. dmag	Ref. st.
103	2002 June	19.89554	16 38 49.89	+36 07 00.0	14.2	10
			0.02	0.3	0.2	
104	2002 June	19.90432	16 38 49.01	+36 06 59.2	14.2	10
			0.02	0.2	0.3	
105	2002 June	20.87654	16 37 16.60	+36 04 26.3	14.0	12
			0.01	0.1	0.2	
106	2002 Aug.	30.85009	16 11 45.01	+26 36 23.4	16.1	6
			0.01	0.2	0.1	
107	2002 Sep.	05.76603	16 14 38.04	+25 50 06.4	16.2	8
			0.01	0.2	0.2	
108	2002 Sep.	05.77546	16 14 38.34	+25 50 02.5	16.3	8
			0.02	0.3	0.2	
			Comet 2001 K5 LINEAR			
109	2002 June	04.88720	16 42 26.04	+15 07 17.0	14.2	8
			0.01	0.2	0.1	
110	2002 June	04.89796	16 42 25.61	+15 07 22.5	14.1	8
			0.01	0.2	0.2	
111	2002 June	12.02258	16 37 58.32	+16 03 17.2	13.7	10
			0.02	0.3	0.2	
112	2002 June	12.04027	16 37 57.61	+16 03 24.5	13.6	9
			0.02	0.3	0.2	
113	2002 June	18.86750	16 33 49.36	+16 49 32.9	13.9	10
			0.02	0.2	0.2	
114	2002 June	18.87833	16 33 48.94	+16 49 36.4	13.9	9
			0.01	0.3	0.2	
115	2002 June	19.87241	16 33 13.90	+16 55 42.4	13.8	9
			0.02	0.3	0.1	
116	2002 June	20.86027	16 32 39.30	+17 01 37.6	14.0	10
			0.01	0.2	0.2	
117	2002 June	20.86929	16 32 38.95	+17 01 42.2	14.0	10
			0.01	0.1	0.2	
118	2002 June	29.83257	16 27 43.37	+17 48 21.2	14.3	7
			0.02	0.2	0.3	
119	2002 June	30.90035	16 27 10.56	+17 53 04.8	14.4	9
			0.02	0.2	0.2	
120	2002 July	15.88654	16 20 41.66	+18 42 12.8	14.0	7
			0.02	0.3	0.2	
121	2002 Aug.	31.80569	16 18 17.15	+18 51 57.1	14.5	6
			0.01	0.2	0.3	

N	Date U.T.		$R.A._{2000}$ $d\alpha$	$Decl._{2000}$ $d\delta$	Magn. dmag	Ref. st.
			Comet 2001 N2 LINEAR			
122	2002 June	18.90405	18 16 45.30 0.01	+20 39 30.4 0.2	15.0 0.2	9
123	2002 June	18.91589	18 16 42.62 0.01	+20 39 23.3 0.2	14.9 0.2	9
124	2002 June	19.91308	18 13 01.27 0.01	+20 29 12.6 0.3	14.9 0.1	10
125	2002 June	20.89121	18 09 23.33 0.01	+20 18 34.2 0.2	14.8 0.1	10
126	2002 July	17.99760	16 35 45.36 0.02	+11 54 19.4 0.1	14.9 0.4	7
127	2002 July	18.00550	16 35 44.07 0.01	+11 54 08.9 0.2	15.0 0.5	7
128	2002 Aug.	03.88197	15 56 47.75 0.01	+05 33 00.4 0.2		7
129	2002 Aug.	03.88625	15 56 47.27 0.01	+05 32 55.0 0.1		7
			Comet 2001 OG108 LONEOS			
130	2002 May	01.81677	09 31 12.81 0.01	+29 51 02.8 0.1	14.9 0.3	8
131	2002 May	01.82976	09 31 13.39 0.01	+29 49 28.1 0.1	15.1 0.3	6
			Comet 2001 RX14 LINEAR			
132	2002 Jan.	07.78140	01 08 22.20 0.01	+21 53 17.1 0.1	16.2 0.2	8
133	2002 Jan.	07.80200	01 08 22.33 0.01	+21 53 18.2 0.1	16.0 0.2	8
134	2002 Jan.	09.74052	01 08 39.45 0.01	+21 54 51.1 0.1	16.3 0.2	7
135	2002 Jan.	09.76247	01 08 39.65 0.01	+21 54 51.8 0.1	16.3 0.2	7
136	2002 Jan.	10.82896	01 08 50.49 0.01	+21 55 51.6 0.1	16.2 0.1	8
137	2002 Jan.	16.81485	01 10 10.96 0.02	+22 03 13.0 0.2	15.4 0.2	9
138	2002 Jan.	16.82935	01 10 11.12 0.02	+22 03 15.7 0.1	15.1 0.3	9
139	2002 Feb.	01.71356	01 16 15.21 0.02	+22 38 00.0 0.3	15.7 0.1	9

N	Date U.T.		$R.A._{2000}$ dα	$Decl._{2000}$ dδ	Magn. dmag	Ref. st.
140	2002 Feb.	02.75330	01 16 46.35	+22 40 59.9	15.0	7
			0.01	0.3	0.5	
141	2002 Dec.	13.13932	11 31 13.58	+47 09 10.3	12.7	9
			0.01	0.1	0.1	
142	2002 Dec.	13.15388	11 31 15.19	+47 09 06.8	12.7	9
			0.01	0.2	0.1	
			Comet 2002 A3 LINEAR			
143	2002 Feb.	04.77108	06 34 16.53	-10 27 33.2	17.1	8
			0.01	0.3	0.1	
144	2002 Mar.	17.80253	06 33 42.58	-03 40 36.6	16.8	8
			0.02	0.2	0.3	
145	2002 Mar.	17.81057	06 33 42.77	-03 40 32.2	16.9	8
			0.01	0.2	0.2	
			Comet 2002 B1 LINEAR			
146	2002 Feb.	05.75427	03 02 02.61	+65 03 11.5	17.2	8
			0.01	0.3	0.2	
147	2002 Feb.	05.77674	03 02 02.47	+65 03 12.8	17.3	8
			0.02	0.2	0.3	
148	2002 Mar.	13.80391	03 47 40.05	+67 05 06.4	16.8	10
			0.02	0.3	0.2	
149	2002 Mar.	17.87022	03 58 19.60	+67 24 00.3	16.9	10
			0.02	0.1	0.1	
150	2002 Mar.	17.85779	03 58 17.53	+67 23 56.2	16.6	10
			0.02	0.1	0.1	
151	2002 May	01.90314	07 02 51.29	+68 04 41.0	16.5	8
			0.03	0.2	0.1	
			Comet 2002 C1 Ikeya - Zhang			
152	2002 Apr.	17.88603	22 56 02.37	+57 41 49.5	8.8	10
			0.02	0.1	0.4	
153	2002 Apr.	29.86714	19 29 10.67	+59 46 55.9	9.5	9
			0.03	0.3	0.2	
154	2002 May	03.83388	18 27 22.39	+55 55 15.5	10.3	8
			0.03	0.2	0.4	
155	2002 May	03.86583	18 26 55.87	+55 53 00.4	10.5	7
			0.01	0.1	0.3	
156	2002 May	08.93154	17 28 42.26	+49 01 19.9	10.1	8
			0.03	0.2	0.2	

N	Date U.T.		$R.A._{2000}$ dα	$Decl._{2000}$ dδ	Magn. dmag	Ref. st.
157	2002 May	09.85066	17 20 20.46	+47 39 50.8	10.2	9
			0.03	0.3	0.3	
158	2002 May	09.85747	17 20 16.89	+47 39 16.0	10.2	9
			0.02	0.3	0.4	
159	2002 May	13.94479	16 49 27.62	+41 32 35.3	10.3	9
			0.03	0.2	0.3	
160	2002 May	13.95187	16 49 24.80	+41 31 56.6	10.2	9
			0.02	0.3	0.3	
161	2002 May	22.84312	16 07 14.03	+29 15 34.0	10.7	8
			0.02	0.2	0.3	
162	2002 May	22.85435	16 07 11.73	+29 14 45.0	10.9	8
			0.01	0.2	0.4	
163	2002 May	31.91700	15 43 49.75	+19 21 46.9	11.6	8
			0.02	0.2	0.5	
164	2002 May	31.92462	15 43 48.74	+19 21 20.6	12.5	6
			0.01	0.2	0.4	
165	2002 June	18.85516	15 24 30.05	+06 24 54.8	12.0	9
			0.01	0.1	0.1	
166	2002 June	19.85380	15 24 03.22	+05 52 45.5	12.1	9
			0.01	0.1	0.2	
167	2002 June	19.86214	15 24 03.00	+05 52 28.7	12.1	9
			0.01	0.1	0.2	
168	2002 June	27.90860	15 22 02.54	+02 02 52.6	12.1	10
			0.01	0.3	0.2	
			Comet 2002 C2 LINEAR			
169	2002 Feb.	05.70741	02 20 28.64	+53 08 29.6	16.2	8
			0.02	0.2	0.2	
170	2002 Feb.	05.71484	02 20 29.05	+53 08 17.5	16.3	8
			0.02	0.2	0.2	
171	2002 Mar.	18.75179	02 58 19.15	+39 39 12.7	16.3	11
			0.01	0.2	0.3	
172	2002 Mar.	18.75941	02 58 19.56	+39 39 06.0	16.5	11
			0.01	0.2	0.3	
			Comet 2002 E2 Snyder - Murakami			
173	2002 May	07.82271	19 19 53.20	+63 36 03.7	14.1	8
			0.03	0.2	0.1	
174	2002 May	07.83227	19 19 52.47	+63 36 35.5	14.7	8
			0.04	0.2	0.1	
175	2002 May	08.86264	19 18 41.48	+64 29 45.4	14.0	7
			0.03	0.1	0.1	

N	Date U.T.		$R.A._{2000}$ dα	$Decl._{2000}$ dδ	Magn. dmag	Ref. st.
176	2002 May	22.98107	18 44 40.63	+74 34 11.9	14.4	10
			0.07	0.3	0.2	
177	2002 June	11.93543	16 14 11.80	+81 26 36.5	15.3	9
			0.01	0.1	0.1	
			Comet 2002 H2 LINEAR			
178	2002 May	03.88646	19 06 35.43	+43 20 26.1	14.2	7
			0.02	0.3	0.1	
179	2002 May	04.84192	19 03 50.12	+44 34 40.9	14.1	9
			0.01	0.2	0.2	
180	2002 May	06.85948	18 57 29.57	+47 08 55.9	14.3	8
			0.02	0.3	0.2	
181	2002 May	06.86972	18 57 27.50	+47 09 43.7	14.4	8
			0.03	0.3	0.2	
182	2002 May	07.84309	18 54 07.30	+48 22 38.6	14.6	7
			0.02	0.2	0.2	
183	2002 May	07.85579	18 54 04.64	+48 23 34.3	14.6	7
			0.01	0.2	0.2	
184	2002 May	08.87824	18 50 21.68	+49 38 57.9	14.4	7
			0.01	0.1	0.2	
185	2002 May	08.88884	18 50 19.31	+49 39 44.2	14.4	7
			0.01	0.2	0.2	
186	2002 May	09.94358	18 46 15.52	+50 56 00.3	14.7	9
			0.02	0.2	0.3	
187	2002 May	09.95829	18 46 11.80	+50 57 05.8	14.9	9
			0.02	0.3	0.2	
188	2002 May	13.99839	18 28 14.01	+55 32 42.3	14.9	9
			0.03	0.3	0.3	
189	2002 May	22.93553	17 32 54.85	+63 39 27.9	14.5	11
			0.02	0.3	0.2	
190	2002 May	22.94799	17 32 49.22	+63 40 00.9	14.5	11
			0.03	0.3	0.2	
191	2002 June	12.00512	14 42 38.55	+69 01 21.6	15.4	10
			0.05	0.3	0.2	
192	2002 June	12.01336	14 42 34.91	+69 01 17.9	15.2	10
			0.01	0.3	0.2	
193	2002 June	15.92771	14 15 57.72	+68 26 58.8	15.1	8
			0.04	0.2	0.2	
194	2002 June	20.94038	13 48 16.01	+67 22 16.7	15.1	11
			0.05	0.1	0.1	
195	2002 June	20.95399	13 48 12.02	+67 22 01.4	15.1	11
			0.05	0.2	0.1	

N	Date U.T.		$R.A._{2000}$ dα	$Decl._{2000}$ dδ	Magn. dmag	Ref. st.
196	2002 June	30.95826	13 11 04.88	+64 42 51.7	15.6	9
			0.05	0.2	0.2	
197	2002 July	08.95774	12 53 44.63	+62 32 27.7	16.3	6
			0.01	0.2	0.1	
			Comet 2002 J4 NEAT			
198	2002 May	31.89892	15 38 40.61	-00 17 39.1	15.8	9
			0.02	0.2	0.1	
199	2002 May	31.91061	15 38 40.17	-00 17 40.8	15.9	9
			0.02	0.2	0.1	
200	2002 June	17.88765	15 29 19.74	-01 22 24.6	16.7	8
			0.01	0.2	0.2	
201	2002 June	30.86769	15 23 36.04	-02 26 27.3	16.5	8
			0.01	0.1	0.2	
			Comet 2002 K4 NEAT			
202	2002 June	30.92054	21 00 30.48	+13 45 27.8	16.3	8
			0.02	0.1	0.1	
203	2002 June	30.93721	21 00 28.32	+13 45 52.6	16.4	8
			0.01	0.1	0.2	
204	2002 July	08.91545	20 42 41.88	+17 01 55.5	16.7	7
			0.01	0.1	0.2	
205	2002 July	10.89799	20 37 55.02	+17 48 20.5	16.3	7
			0.01	0.3	0.2	
206	2002 Aug.	29.89931	18 38 37.18	+27 12 38.1	17.6	6
			0.01	0.2	0.1	
207	2002 Aug.	31.82988	18 35 36.00	+27 13 30.2	16.6	8
			0.01	0.1	0.2	
208	2002 Sep.	10.88491	18 22 34.71	+27 07 11.4	17.5	6
			0.01	0.2	0.2	
			Comet 2002 T7 LINEAR			
209	2002 Dec.	11.86517	05 23 39.43	+28 38 29.8	16.3	9
			0.01	0.1	0.2	
210	2002 Dec.	11.87755	05 23 38.71	+28 38 29.9	16.1	8
			0.01	0.1	0.3	
211	2002 Dec.	13.07123	05 22 28.00	+28 38 22.4	15.8	8
			0.01	0.2	0.2	
212	2002 Dec.	14.71575	05 20 50.40	+28 38 05.7	16.0	7
			0.01	0.2	0.1	

N	Date U.T.		$R.A._{2000}$ dα	$Decl._{2000}$ dδ	Magn. dmag	Ref. st.
213	2002 Dec.	14.72865	05 20 49.58	+28 38 05.7	15.9	7
			0.01	0.2	0.1	
214	2002 Dec.	26.74046	05 08 49.84	+28 32 21.8	16.2	9
			0.01	0.2	0.2	
215	2002 Dec.	26.75025	05 08 49.25	+28 32 21.3	16.2	9
			0.01	0.2	0.2	
			Comet 2002 V1 NEAT			
216	2002 Dec.	08.92736	03 10 02.02	+16 17 49.6	13.8	10
			0.02	0.2	0.2	
217	2002 Dec.	08.93519	03 09 59.45	+16 17 47.5	13.8	10
			0.02	0.2	0.1	
218	2002 Dec.	09.74663	03 05 33.67	+16 13 57.7	13.5	10
			0.01	0.2	0.1	
219	2002 Dec.	09.75996	03 05 29.20	+16 13 53.5	13.5	10
			0.01	0.2	0.1	
220	2002 Dec.	10.74444	03 00 02.18	+16 08 50.8	13.4	10
			0.02	0.1	0.3	
221	2002 Dec.	10.76095	02 59 56.65	+16 08 44.7	13.6	10
			0.01	0.3	0.2	
222	2002 Dec.	11.84686	02 53 51.20	+16 02 37.2	13.5	10
			0.02	0.3	0.2	
223	2002 Dec.	11.85641	02 53 47.97	+16 02 33.1	13.3	10
			0.01	0.2	0.2	
224	2002 Dec.	26.72064	01 29 18.15	+13 49 25.8	12.7	8
			0.01	0.3	0.2	
225	2002 Dec.	26.73317	01 29 14.07	+13 49 17.7	12.8	8
			0.01	0.3	0.2	

3. List of collaborators

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M. Husárik	33	33	–
M. Jakubík	5	–	–
M. Kamenický	38	28	–
L. Neslušan	2	–	–
P. Rychtarčík	77	64	–
J. Svoreň	–	18	225

Acknowledgements. This article was supported by the VEGA Grant No. 2/0022/10 of the Slovak Academy of Sciences and by the realization of the Project ITMS No. 26220120029, based on the supporting operational Research and development program financed from the European Regional Development Fund.

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