

The Comets of 1994

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A Report of the Comet Section (Director: J. D. Shanklin)

This report is the fifth in the annual series^{1,2,3,4} which gives for each comet: the discovery details, orbital data and general information, magnitude parameters and BAA comet section observations. Further details of the analysis techniques used in this report are given in an earlier paper⁵. Ephemerides for the comets predicted to return during the year can be found in the BAA or ICQ Handbooks^{6,7}.

Table 1. Orbital data for the comets of 1994^{7,8}

Comet		T	q	e	P	ω	Ω	i	
a A1	P/Kushida	1993 XX	93 Dec 12.8620	1.367310	0.638830	7.37	214.4874	245.9368	4.1845
b	86P/Wild 3	1994 XXI	94 July 21.2113	2.299474	0.366074	6.91	179.2720	72.6260	15.4531
c	E1 Mueller	1993 XVIII	93 Nov 28.4586	1.751290	0.968171	408	98.9223	5.1730	145.1425
d	E2 Shoemaker-Levy	1994 XIV	94 May 27.4590	1.158820	0.997314		57.4964	166.5685	131.2547
e	89P/Russell 2	1994 XXIX	94 Oct 27.3760	2.276492	0.399665	7.38	249.1866	42.5329	12.0412
f	G1-A Takamizawa-Levy	1994 XIII	94 May 22.5373	1.359230	0.999123		61.6301	306.8298	132.8728
g	51P/Harrington	1994 XXII	94 Aug 23.2338	1.571888	0.561339	6.78	233.4550	119.2626	8.6557
h	J1 115P/Maury	1994 VIII	94 Mar 18.7215	2.026293	0.522364	8.74	119.8279	176.8312	11.6944
i	J2 Takamizawa	1994 XVII	94 June 29.6312	1.947758	0.996434		192.1223	51.1285	135.9611
j	16P/Brooks 2	1994 XXIII	94 Sep 1.0805	1.843340	0.490730	6.89	197.9895	176.9461	5.5413
k	J3 P/Shoemaker 4	1994 XXVIII	94 Oct 14.5947	2.944343	0.505554	14.5	192.1299	92.9426	24.8043
l	19P/Borrelly	1994 XXX	94 Nov 1.4923	1.365115	0.622804	6.88	353.3586	75.4239	30.2706
m	N1 Nakamura-Nishimura-Machholz	1994 XX	94 July 12.9413	1.140150	1.000057		123.0730	158.9121	94.3789
n	N2 P/McNaught-Hartley	1994 XXXI	94 Dec 8.1693	2.484594	0.671286	20.8	312.1885	36.0124	17.6482
o	P1-A P/Machholz 2	1994 XXVI	94 Sep 18.8041	0.752548	0.750145	5.23	149.2623	246.1772	12.7865
p	30P/Reinmuth 1		95 Sep 3.3166	1.873601	0.502491	7.31	13.2879	119.7412	8.1291
q	77P/Longmore		95 Oct 9.3201	2.398970	0.343060	6.98	195.7973	15.6559	24.4099
r	T1 Machholz	1994 XXVII	94 Oct 2.5584	1.845402	0.999517		142.7849	249.9436	101.7379
s	22P/Kopff		96 July 2.1998	1.579562	0.544074	6.45	162.8349	120.9133	4.7214
t	71P/Clark		95 May 31.0944	1.552580	0.501976	5.50	208.8476	59.7232	9.5048
u	X1 P/McNaught-Russell	1994 XXIV	94 Sep 7.9444	1.276890	0.815684	18.2	171.1487	218.0082	29.0741
v	V1 116P/Wild 4		96 Aug 31.2413	1.989056	0.407782	6.16	170.7526	22.0654	3.7196
w	73P/Schwassmann-Wachmann 3		95 Sep 22.8912	0.932773	0.694839	5.34	198.7713	69.9465	11.4234
	2P/Encke	1994 V	94 Feb 9.4778	0.330915	0.850213	3.28	186.2703	334.7295	11.9405
	10P/Tempel 2	1994 VII	94 Mar 16.8162	1.483536	0.522447	5.48	194.8834	118.2487	11.9748
	31P/Schwassmann-Wachmann 2	1994 II	94 Jan 23.9091	2.070266	0.398745	6.39	358.2177	126.2470	3.7530
	75P/Kohoutek		94 June 29.9011	1.784655	0.496309	6.67	175.8015	269.6865	5.9073

The epoch of the elements for each comet is the Julian Date ending in zero and exactly divisible by 40, closest to the date of perihelion. The elements for 1994f and 1994o are for the major body, fragment A. New style designations for the comets are given for reference. Comets with perihelion dates after 1994 Dec 31 were not assigned Roman Numeral designations.

Table 2. List of visual observers

Jose Guilherme de Souza Aguiar	Brazil
Alexandr R. Baransky	Ukraine
Sally Beaumont	Windermere, Cumbria
John E. Bortle	U.S.A.
Reinder Bouma	Holland
Eric Broens	Belgium

Robert Bullen	Bognor Regis, Sussex
Paul Camilleri	Australia
Tim Cooper	South Africa
Matyas Csukas	Romania
Haakon Dahle	Norway
Alfons Diepvens	Belgium
Stephen Getliffe	Haverhill, Suffolk
Bjoern Haakon Granslo	Norway
Werner Hasubick	Germany
Roberto Haver	Italy
Guy M. Hurst	Basingstoke, Hampshire
Albert F. Jones	New Zealand
Andreas Kammerer	Germany
Timo Karhola	Sweden
Richard Keen	U.S.A.
Graham Keitch	Manaton, Devon
Attila Kosa-Kiss	Romania
James Lancashire	Cambridge
Martin Lehky	Czech Republic
Romualdo Lourencon	Brazil
Brian Manning	Stakenbridge, Worcs
Oernulf Midtskogen	Norway
Herman Mikuz	Slovenia
Giannantonio Milani	Italy
Charles S. Morris	U.S.A.
Brian O'Halloran	Ireland
Gabriel Oksa	Slovak Republic
Roy W. Panther	Walgrave, Northampton
Andrew R. Pearce	Australia
Joao Porto	Portugal
John H. Rogers	Linton, Cambridge
Alex Scholten	Holland
Richard Schmude	U.S.A.
David A. J. Seargent	Australia
Jonathan D. Shanklin	Cambridge
Christopher E. Spratt	Canada
Tony Tanti	Malta
Melvyn D. Taylor	Wakefield, Yorkshire
Tonny VanMunster	Belgium
Alex Vincent	Worthing, West Sussex
Graham W. Wolf	New Zealand
Mauro Vittorio Zanotta	Italy

Table 3. List of astrometric, CCD and Photographic Observers

Observer	Site	IAU Station No
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