

Periodic Comet Extreme Observations

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Introduction

This document lists the extreme observations from each apparition of all the known short-period comets as of February 11, 2013. It was inspired by the work of the late Dr. Ľubor Kresák in a paper titled “Short-period comets at Large Heliocentric Distances”, in *Bull. Astron. Inst. Czech.*, Vol. 24, pp. 264–283 (1973). The heading for each comet lists its name and the number or designation of the comet. The details listed have been found from a variety of sources. First and last observation dates are found in the Catalogue of Cometary Orbits prior to the 10th edition along with the first observer for a recovery, as well as in the M.P.C. publication of astrometric observations. The I.A.U. Circulars contain discovery and recovery announcements. Other useful sources include the “Catalogue of Short-period Comets” by Belyaev *et al.* (1986), “Comets: A Descriptive Catalog” by Kronk (1984), and “Physical Characteristics of Comets” by Vsekhsvyatskii (1958). The “Catalogue of Cometary Orbits” (Marsden and Williams – the latest is edition 18, 2010), supplemented by more recent orbits published in the M.P.C.s, were used to obtain the reference orbits for each apparition, including the perihelion times. The tables list the following details by column. The first column lists the new style designation. The second column lists the observation type; D indicates discovery, P indicates pre-discovery or pre-recovery, R indicates recovery, L indicates last observation, and A indicates near aphelic observation, F indicates post-discovery or post-recovery followup, S indicates Survey recovery. The next 3 columns give the UT date of observation. Column 6 (if available) gives the telescope aperture in centimeters. Columns 7 and 8 (if available) give the total and nuclear magnitudes if reported in the set of observations from the observatory making them. Column 9 and 10 list the heliocentric and geocentric distances in astronomical units of the comet at the time of observation. Column 11 gives the time in days from perihelion. A # marks the earliest pre-perihelion observation and a * marks the latest post-perihelion observation. Column 12 gives the observatory code for the telescope used in making the observation. Column 13 gives the name(s) of the observer(s).

Periodic comet Anderson-LINEAR (148P)

P/1963 W1	D 1963	Nov	22.53	16		2.00	1.41	+25	675	Anderson
	L 1963	Nov	25.50			2.00	1.39	+28	675	Anderson
	P 1993	Nov	07.46			2.22	1.34		260	
P/2000 SO ₂₅₃	D 2000	Sep	24.35	100	19.8	2.58	1.59	-220	704	LINEAR
	L 2001	Jan	21.14	59		1.94	1.95	-101	699	LONEOS
	R 2007	Sep	05.74	102	20.5	2.81	1.87	-260#	413	Sárniczky-Kiss
	L 2008	Mar	23.81	60	17.6	1.80	2.44	-60	204	Buzzi-Marinelli

Periodic comet Arend (50P)

P/1951 T1	P 1951	Oct	01.39			1.89	0.92	-53	711	Van Biesbroeck
	L 1952	Apr	24.15			2.28	2.71	+153	711	
P/1959 N1	R 1959	Jul	06.43	102	19.2	1.91	2.16	-57	689	Roemer
	L 1960	Feb	17.24	102	19.0	2.36	1.71	+169	689	Roemer
	P 1967	Sep	07.50	155		1.99	2.34	+86	693	Van Biesbroeck
	L 1967	Nov	04.50	155		2.23	2.04	+144	693	Roemer
	R 1975	Oct	06.50	229		2.21	2.41	+135	695	Roemer-Daniel
	L 1976	Mar	26			3.12	2.48	+307		
	R 1983	Sep	16.49	150	20.5	2.14	2.53	+117	675	Gibson
	L 1983	Dec	14.47	150		2.58	1.98	+206	675	Gibson
	R 1991	Aug	01.78	60	17.5	1.95	2.64	+68	372	Seki
	L 1991	Aug	11.79	60	18.5	1.98	2.62	+78	372	Seki
	R 1999	Aug	03.00		16.0	1.92	2.62	-1	118	Galád <i>et al.</i>
	L 2000	Apr	30.20		19.1	2.94	3.01	+270	695	
	R 2007	Jul	16.42	25	18.3	2.15	1.95	-108#	H06	Suzuki <i>et al.</i>
L 2009	Mar	19.25	181		4.10	3.14	+504*	291	Spacewatch	

Periodic comet Arend-Rigaux (49P)

P/1951 C2	P 1951	Jan	08	10.5		1.41	0.44	+21		Van Biesbroeck
	L 1951	May	02	18.2		2.00	1.62	+135		Cunningham
P/1958 B1	R 1958	Jan	29.43	102	19	2.07	1.54	+145	689	Roemer
	L 1958	Jun	07.26	102	20.5	2.95	2.49	+274	689	Roemer
	R 1963	Aug	24.31	102	19.8	3.02	2.04	-286	689	Roemer-Londak-Lloyd
	L 1963	Dec	18.11	102	19.7	2.26	2.37	-170	689	Roemer

R	1970	Jul	27.38	229		2.81	2.13	-253	695	Roemer-Reskin
L	1970	Nov	01			2.15	1.47	-156		
R	1977	Aug	15.33	150	19	2.26	1.65	-171	801	McCrosky
L	1978	Mar	12.44			1.50	1.22	+38	805	
R	1984	Aug	07.44	122	18.5	1.90	1.78	-116	675	Gibson
	1986	Mar	06.49			3.98	3.62	+460	695	
A	1988	May	17.52			5.75	4.98	-1233#	568	
	1993	Jul	22.22	21.9		4.79	4.35	+658*	691	Scotti
	1997	Jun	28.57	19.8		3.58	2.96	-379	568	
	1999	May	14.22	20.0		3.15	2.31	+306	704	LINEAR
										(Perennial)

Periodic comet ASH (P/2011 N1)

P/2011 N1	D	2011	Jul	01	40	19.7		3.73	3.41	-335	116	ASH
	L	2013	Jan	02.86	44	19.3		3.27	2.33	+217	215	Hasubick

Periodic comet Ashbrook-Jackson (47P)

P/1948 Q1	D	1948	Aug	26	33	11		2.34	1.34	-39		Ashbrook-Jackson
	L	1949	Oct	28.51		19.3		3.38	2.91	+389	662	Jeffers
P/1955 H1	R	1955	Apr	24	208	17		3.23	2.68	-348		Van Biesbroeck
	L	1957	Feb	19.28				3.12	3.02	+319	662	Jeffers
	R	1962	May	09.31	102	19.4		3.83	2.86	-511	689	Roemer-Thomas
	L	1965	Feb	25.24	102	20.1		3.83	3.32	+512	689	Roemer
	R	1970	Mar	09.32				3.30	3.42	-369	821	Pereyra
	L	1972	Feb	17.16	155			3.19	2.96	+341	693	Roemer
	R	1977	Apr	28.33		19.5		3.71	2.83	-479	821	Pereyra-Moyano
	L	1979	Jan	18.75		17		2.52	2.53	+152	046	
	R	1985	Mar	20.66	60	18		3.08	3.20	-310	474	Gilmore-Kilmartin
	L	1988	Mar	13.26	91	20.0		4.62	3.94	+779	691	Gehrels-Scotti
	R	1991	Apr	24.05	250	21.5		4.70	3.71	-812#	950	Lindgren-Tancredi
	L	1997	Feb	01.44	120	22.0		5.33	4.56	+1298*	696	Hergenrother
		1999	Feb	02.53	155	21.4		4.40	4.23	-693	693	Hergenrother
												(Perennial)

Periodic comet Barnard 1 (D/1884 O1)

D/1884 O1	D 1884	Jul 17	16		1.33	0.44	-30		Barnard
	L 1884	Nov 20			1.66	1.17	+96		Perrotin

Periodic comet Barnard 2 (177P)

P/1889 M1	D 1889	Jun 24	16		1.11	1.10	+3		Barnard
	L 1889	Aug 07			1.33	1.39	+47		
P/2006 M3	D 2006	Jun 23.26	100	17.1	1.51	0.50	-66	704	LINEAR
	L 2006	Dec 11.22	100	19.5	1.92	1.13	+105	704	LINEAR

Periodic comet Barnard-Boattini (206P)

P/1892 T1	D 1892	Oct 13.14	15		1.57	1.11	-59		Barnard
	L 1892	Dec 08.80			1.43	1.28	-2		Javelle
P/2008 T3	D 2008	Oct 07.22	68	17.5	1.17	0.25	-18	703	Boattini
	L 2009	Jan 04.48	100	20.1	1.45	0.86	+71	474	Gilmore-Kilmartin

Periodic comet Bernardi (268P)

P/2005 V1	D 2005	Nov 01.62	360	20.5	2.43	2.96	+81	568	Bernardi <i>et al.</i>
	L 2007	Jun 15.31	820	22.8	4.75	3.79	+672	568	Bernardi-Tholen
P/2012 P2	R 2012	Aug 13.55	820	24.2	5.72	4.81	-987	568	Tholen <i>et al.</i>

Periodic comet Beshore (P/2008 J2)

P/2008 J2	D 2008	May 06.45	150	13.8	2.43	1.51	+47	G96	Beshore
	L 2008	Aug 04.89	25	18.2	2.55	1.93	+137	J70	Navarro-Navarro

Periodic comet Biela (3D)

D/1772 E1	D 1772	Mar 08	5		1.03	0.63	+20		Montaigne
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	L 1772	Apr 05			1.21	0.68	+48	
D/1805 V1	D 1805	Nov 10	12		1.21	0.25	-53	Pons
	L 1805	Dec 15			0.95	0.06	-18	
D/1826 D1	D 1826	Feb 27			0.95	1.21	-19	Biela
	L 1826	May 09			1.19	1.03	+52	
D/1832 S1	R 1832	Sep 24			1.29	0.74	-63	Herschel
	L 1833	Jan 04			1.07	1.04	+39	
	R 1845	Nov 26			1.43	0.95	-77#	
	L 1846	Apr 27			1.41	0.64	+75*	
	R 1852	Aug 26			0.97	1.44	-28	
	L 1852	Sep 29			0.87	1.54	+6	Struve

Periodic comet Blanpain (D/1819 W1)

D/1819 W1	D 1819	Nov 28			0.90	0.24	+8	Blanpain
	L 1820	Jan 25			1.30	0.51	+66	

Periodic comet Boattini 1 (P/2008 O3)

P/2008 O3	D 2008	Jul 29.46	150	19.4	2.55	2.91	+56	G96 Boattini
	L 2008	Oct 10.47	150	19.8	2.75	2.22	+129	G96 MLS

Periodic comet Boattini 2 (P/2008 T1)

P/2008 T1	P 2008	Sep 02.38	91		19.0	3.19	2.33	+189	691 Spacewatch
	L 2009	Dec 11.03	51		20.5	4.24	3.26	+654	B37 Garrigós <i>et al.</i>

Periodic comet Boattini 3 (P/2008 Y1)

P/2008 Y1	D 2008	Dec 22.09	68	17.9	1.52	1.66	-65	703 Boattini	
	L 2009	Apr 13.86	60		18.5	1.41	1.89	+48	204 Buzzi

Periodic comet Boattini 4 (P/2009 B1)

P/2009 B1	P 2008	Nov 18.12	68		19.1	2.53	1.70	-80	703	Boattini
	L 2009	Mar 29.13	150	18.8		2.47	2.87	+51	G96	MLS

Periodic comet Boattini 5 (P/2009 Q4)

P/2009 Q4	D 2009	Aug 26.47	68	18.9		1.64	1.30	-67	703	Boattini
	L 2010	May 28.84				2.30	2.01	+190	C51	WISE

Periodic comet Boattini 6 (P/2010 U1)

P/2010 U1	P 2009	Sep 17.33	150	18.6		4.96	3.97	-192	G96	MLS
	L 2011	Dec 28.17	150	21.1		5.48	4.61	+640	G96	MLS

Periodic comet Boattini 7 (P/2011 V1)

P/2011 V1	P 2011	Oct 22.29	150	20.4		2.29	1.30	+163	G96	MLS
	L 2011	Nov 20.68	40	20.5		2.45	1.54	+193	C32	Gerke-Novichonok-Plaksa-Chestn

Periodic comet Boattini 8 (P/2011 Y2)

P/2011 Y2	P 2011	Sep 04.43	180	22.4		2.71	1.80	-199	F51	Pan-STARRS
	L 2012	Apr 11.12		19.6		1.80	2.33	+20	H06	Sato-Bryssinck

Periodic comet Boethin (85P)

P/1975 A1	D 1975	Jan 04	20			1.09	1.14	-1		Boethin
	L 1975	Jun 03.18	229			2.21	2.79	+149	695	Roemer
P/1985 T2	P 1985	Oct 06.48	60	17		1.77	1.47	-102	372	Seki
	L 1986	Mar 01.20				1.27	1.44	+44	657	Balam-Tatum

Periodic comet Borrelly (19P)

P/1904 Y2	D 1904	Dec 28	16	10	1.41	0.92	-20		Borrelly
	L 1905	May 25			1.96	2.36	+128		
P/1911 S1	R 1911	Sep 20		13	1.71	1.02	-89		Knox Shaw-Schaumasse
	L 1912	Jun 08			2.28	2.61	+173		
	R 1918	Aug 08		13	1.78	1.51	-101		Fayet
	L 1919	May 02			2.23	2.07	+166		
	R 1925	Aug 14	40	13.0	1.52	1.59	-54		Schaumasse
	L 1926	May 11		16.5	2.58	2.29	+216		Van Biesbroeck
	R 1932	Jul 30		12	1.42	1.94	-28		Van Biesbroeck
	L 1933	Mar 28		16	2.56	1.81	+213		Van Biesbroeck
	R 1954	Feb 08		18	2.76	2.17	+244		Roemer
	L 1954	Mar 04		19.5	2.92	2.16	+268		Roemer
	R 1960	Sep 05			1.72	2.49	+84		McClure
	L 1961	Feb 22.39	102	20.0	2.83	2.12	+254	689	Roemer
	R 1967	Oct 05			1.86	2.45	+110		Tomita
	L 1968	Mar 23			2.99	2.19	+280		
	R 1973	Aug 23.07			2.91	2.12	-263	821	Pereyra
	L 1975	May 04			3.51	2.73	+357		
	R 1980	Jul 09.31			2.66	1.98	-226	809	Schuster
	L 1981	May 13.18	122		1.62	2.16	+82	675	Gibson
	R 1987	Jun 05.73	60	19	2.44	2.39	-196	474	Gilmore-Kilmartin
	L 1988	May 19.29	220		2.13	2.28	+153	568	Meech <i>et al.</i>
	R 1994	Jun 12.73	60	16.7	2.05	2.21	-142	474	Gilmore-Kilmartin-Garradd
	L 1997	Jun 24.99	82 (22)		5.64	4.86	+966*	954	Licandro-Casas <i>et al.</i>
	R 1999	Jun 13.05		22	5.36	4.36	-825#	809	

(Perennial)

Periodic comet Bowell-Skiff (140P)

P/1983 C1	P 1983	Feb 08.65			1.97	0.99	-35	330	
	L 1983	Jun 10.22			2.14	1.95	+87	707	Everhart
	R 1998	Dec 14.45	100	18.8	2.47	1.54	-151	704	LINEAR (Williams)
	L 1999	May 08.19	100	17.4	1.97	1.95	-7	704	LINEAR

Periodic comet Bradfield 1 (D/1984 A1)

D/1984 A1	D 1984	Jan 07	11	1.35	1.82	+10	Bradfield
	L 1984	May 30.78	60	(18) 2.48	2.36	+155	474 Gilmore-Kilmartin

Periodic comet Bradfield 2 (D/1989 A3)

D/1989 A3	D 1989	Jan 06	12	0.86	1.34	+32	Bradfield
	L 1989	Mar 10.40	(16)	1.92	2.67	+95	413 Hartley <i>et al.</i>

Periodic comet Bressi (P/2011 U2)

P/2011 U2	D 2011	Oct 24.21	91	19.4	4.86	3.92	-197	691 Bressi
	L 2013	Jan 19.15	150	19.7	4.88	4.06	+256	G96 MLS

Periodic comet Brewington (154P)

P/1992 Q1	D 1992	Aug 28	40	10	1.83	2.28	+82	Brewington	
	L 1993	Mar 30.19	91	19.9	22.4	3.26	2.76	+295*	691 Scotti
P/2002 Q4	R 2002	Jul 07.15	30	20.2	2.79	1.86	-227#	859 Jacques	
	L 2003	Mar 29.42	30	14.0	1.65	2.43	+38	340 Ezaki	

Periodic comet Brooks 1 (D/1886 K1)

D/1886 K1	D 1886	May 23	23	1.34	0.57	-15	Brooks
	L 1886	Jul 03		1.36	0.71	+26	Tempel-Perrotin

Periodic comet Brooks 2 (16P)

P/1889 N1	D 1889	Jul 07	26	11	2.08	1.46	-85	Brooks
	L 1891	Jan 13	91		3.76	2.80	+470*	Barnard
P/1896 M1	R 1896	Jun 21	12		2.25	1.58	-136	Javelle
	L 1897	Feb 26			2.17	2.68	+114	Hussey

R 1903	Aug 19		14		2.16	1.17	-109		Aitken
L 1904	Feb 16				2.05	2.62	+72		
R 1910	Sep 29		15		2.13	1.60	-101		Aitken
L 1910	Nov 30	102	16		1.99	2.10	-39		Barnard
R 1925	Sep 09		13.1		1.92	0.91	-53		Shajn
L 1926	Jan 08		16		1.95	1.75	+68		Jeffers
R 1932	Sep 08				1.89	0.94	-31		Delporte (Van B)
L 1933	Mar 22		16		2.32	2.71	+164		Shorr?
R 1939	Jun 17		17		2.03	1.90	-90		Jeffers-Adams
L 1940	Jan 06		15.5		2.11	1.55	+113		Van Biesbroeck
R 1946	Jun 28		18		1.95	1.87	-58		Jeffers
L 1947	Jan 24		17.5		2.27	1.78	+152		Jeffers
R 1953	Jun 18		18		1.92	2.06	-50		Roemer-Jeffers
L 1954	Feb 05		19		2.40	1.95	+182		Van Biesbroeck
R 1960	Aug 04.41	102		17.8	1.82	2.03	+48	689	Roemer-Marsden
L 1961	Feb 09.29	102		20.2	2.66	1.95	+237*	689	Roemer
R 1973	Jul 01.39	229		19	2.42	1.52	-187	695	Roemer-Latta
L 1973	Nov 25.08	154			1.87	1.74	-40	693	Roemer
R 1980	Jun 13.31		19		2.32	1.76	-165	809	Schuster
L 1981	Mar 02.02	150			2.03	2.46	+97	801	McCrosky-Shao-Schwartz
R 1987	Apr 11.50	150	21		2.43	2.78	-188	675	Gibson
L 1988	Jan 16.00				2.01	1.72	+91	801	McCrosky-Shao
P 1994	May 06.78	60	19		2.10	2.45	-117	372	Seki
L 1995	Feb 24.47	60	18.7		2.37	2.23	+176	360	Nakamura
R 2000	Jul 27.14				3.27	2.57	-358	809	
L 2002	Feb 15.57	60	18.5		2.53	2.06	+211	360	Nakamura
R 2007	Aug 31.42	102	20		2.57	2.24	-225#	413	Sárneczky <i>et al.</i>
L 2009	Mar 03.15	91	19.9		3.16	2.30	+325	691	Spacewatch

Periodic comet Brorsen (5D)

D/1846 D2	D 1846	Feb 26			0.65	0.67	+1		Brorsen
	L 1846	Apr 22			1.17	0.58	+56		
D/1857 F1	D 1857	Mar 18			0.66	1.19	-11		Bruhns
	L 1857	Jun 23			1.55	1.14	+86		
	R 1868	Mar 22			0.79	1.56	-96		Tempel
	L 1868	Jun 23			1.31	1.10	+67		
	R 1873	Sep 01			0.95	1.02	-39		

L 1873	Oct	27			0.68	1.45	+17	
R 1879	Jan	14			1.43	1.92	-76	
L 1879	May	23			1.14	0.73	+53	Peter

Periodic comet Brorsen-Metcalf (23P)

P/1847 O1	D 1847	Jul	20			1.20	0.77	-52	Brorsen
	L 1847	Sep	13			0.49	1.23	+3	
P/1919 Q1	D 1919	Aug	21	18		1.29	0.34	-57	Metcalf
	L 1919	Nov	18			0.88	1.51	+32	
P/1989 N1	P 1989	Jul	03.77	15.0		1.51	1.09	-70#	323 Jekabsons
	L 1989	Sep	15.20	38		0.49	1.21	+3	006 Codina-Torras

Periodic comet Broughton (P/2005 T5)

P/2005 T5	P 2005	Aug	26.64	50		19.3	3.28	2.41	-69	E12 SSS
	L 2006	Jan	06.80	60		18.8	3.28	3.41	+64	204 Buzzi

Periodic comet Bus (87P)

P/1981 E1	P 1981	Feb	09.65	122	19.8		2.34	1.50	-122	413 Russell-Bus
	L 1981	Jun	27.09	150			2.19	1.95	+16	801 Shao-Schwartz
P/1987 B4	R 1987	Jan	29.33	91	19.5		3.02	2.08	-324	691 Gehrels-Scotti
	L 1988	Jul	16.26				2.61	1.71	+210	688 Bus-Skiff-Zeigler
	R 1993	Jan	01.20	91	21.5		3.78	2.86	-543#	691 Scotti
	A 1997	Dec	30.27				4.78	4.46	+1281*	568 Meech
										(Perennial)

Periodic comet Catalina 1 (P/1999 V1)

P/1999 V1	D 1999	Nov	05.44	41	17.6		2.95	2.95	+11	703 CSS
	L 2000	Apr	24.51	60	17.9		3.23	2.76	+183	360 Nakamura

Periodic comet Catalina 2 (P/1999 XN₁₂₀)

P/1999 XN ₁₂₀	P	1999	Nov	03.33		18.6	3.38	2.43	-180	704	LINEAR
	L	2000	Mar	30.45	60	17.8		3.29	3.73	-32	360 Nakamura

Periodic comet Catalina 3 (P/2005 JQ₅)

P/2005 JQ ₅	D	2005	May	06.28		16.7	1.44	0.44	-83	703	CSS
	L	2005	Dec	29.26	150	21.4		2.12	1.24	+154	G96 MLS

Periodic comet Catalina 4 (257P)

P/2005 JY ₁₂₆	P	2005	Apr	17.40	68		18.4	3.05	2.21	-310	703 CSS
	L	2007	Jan	13.94	60		19	3.12	2.71	+327	204 Buzzi-Luppi
P/2012 F4	R	2012	Mar	21.60	200		19.6	3.59	2.82	-440	E10 Sostero-Howes-Guido
	L	2012	Jul	17.88			18.8	3.10	2.80	-322	204 Buzzi

Periodic comet Catalina 5 (P/2007 C2)

P/2007 C2	P	2006	Oct	19.34	68		18.9	4.22	3.33	-320	703 CSS
	L	2008	May	03.89	44	18.7		4.04	4.18	+242	215 Hasubick

Periodic comet Catalina 6 (P/2007 T6)

P/2007 T6	P	2007	Oct	06.42	100		18.1	2.27	2.37	+48	704 LINEAR
	L	2008	Jun	10.21	181	22		3.16	3.48	+296	291 Scotti

Periodic comet Catalina 7 (P/2007 VQ₁₁)

P/2007 VQ ₁₁	D	2007	Nov	03.42	68		18.8	2.80	1.88	-102	703 CSS
	L	2008	Mar	27.17	100	19.8		2.71	2.94	+43	704 LINEAR

Periodic comet Catalina 8 (P/2007 WX₅₁)

P/2007 WX ₅₁	D 2009	Nov 22.25	68		18.6	1.33	0.36	-70	703	CSS
	L 2010	Apr 17.63	360	21.4		1.41	0.79	+77	568	Tholen-Laychak-Woodworth

Periodic comet Catalina 9 (P/2013 AL₇₆)

P/2013 AL ₇₆	D 2013	Jan 14.21	68	19.5		2.07	1.22	+32	703	CSS
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Periodic comet Catalina-LINEAR (227P)

	P 1997	Jan 15.46	100		18.7	1.80	0.91		566	Haleakala-NEAT/GEODSS (Mey
P/2004 EW ₃₈	P 2003	Dec 28.48	100		20.2	1.83	1.64	+39	704	LINEAR
	L 2004	May 19.20	91	20.5		2.37	1.50	+181	691	Spacewatch
P/2009 S4	R 2009	Sep 21.37	181	22.0		3.23	2.44	-347#	291	Scotti
	L 2011	May 31.20		20.3		2.83	1.86	+270*	H06	Sostero <i>et al.</i>

Periodic comet Catalina-McNaught (P/2008 S1)

P/2008 JK	D 2008	May 02.34	68		19.8				703	CSS
P/2008 S1	D 2008	Sep 17.41	50	16.6		1.20	1.02	-14	E12	McNaught
	L 2009	Jan 04.43	100		19.4	1.66	1.72	+95	474	Gilmore-Kilmartin

Periodic comet Catalina-NEAT (P/2005 JD₁₀₈)

P/2005 JD ₁₀₈	D 2005	May 12.43	68		18.9	4.06	3.83	-90	703	CSS
	L 2007	Nov 05.30	150	20.7		5.59	4.60	+817	G96	MLS

Periodic comet Chernykh (101P)

P/1978 Q1	D 1977	Aug 19.02	40	14		2.95	2.09	-180	095	Chernykh
	L 1978	Dec 03.31	150			3.44	2.79	+291	801	

P/1991 L1	R 1991 Jun 08.41 91 20.3	3.03	2.85	-231#	691 Scotti
	L 1993 Apr 20.16 91 20.5 22.4	4.17	4.06	+451*	691 Scotti
	R 2005 Jul 10.47 61 17.0	2.74	2.28	-168	673 Young <i>et al.</i>
	L 2007 Feb 13.23 150 21.7	3.98	3.04	+415	G96 MLS

Periodic comet Christensen 1 (210P)

P/2003 K2	D 2003 May 26.18 68 14.6	1.07	1.21	+48	703 Chrstensen
	L 2003 Jul 02.12 41 17.9	1.57	1.79	+85	H41 Sherrod
P/2008 X4	R 2008 Dec 08.24	0.59	0.60	-12	C50 STEREO
	L 2009 May 24.95 30	19.2	2.39	1.59	+156 J47 Muler-Ruiz-Naves

Periodic comet Christensen 2 (164P)

P/2004 Y1	P 1998 Jan 24.49 100	17.0	2.38	1.46	+186	566 NEAT
	L 1998 Apr 18.24 59		2.87	2.42	+270	699 LONEOS
	P 2004 Oct 19.42 100	18.4	2.00	2.20	+120	704 LINEAR
	L 2005 Jun 18.24 150 18.9		3.37	3.63	+361	G96 MLS
	R 2010 Oct 07.51	20.3	2.68	2.28	-238	D96 Camilleri <i>et al.</i>
	L 2012 May 18.20 68 18.6		3.31	3.12	+351	703 CSS

Periodic comet Christensen 3 (170P)

P/2005 M1	P 1997 Oct 31.60 100	17.9	3.00	2.03	+133	566 NEAT
	L 1997 Dec 27.27 100	18.3	3.09	2.52	+189	566 NEAT
	D 2005 Jun 17.41 150 19.9		3.17	2.71	-223#	G96 Christensen
	L 2008 Feb 27.25 150 21.1		4.51	3.68	+762*	G96 MLS

Periodic comet Christensen 3 (P/2005 L4)

P/2005 L4	P 2005 Jun 03.40 91	19.9	2.44	1.64	-82	691 Spacewatch
	L 2006 Jan 07.08 150 21.0		2.56	3.12	+135	G96 MLS

Periodic comet Christensen 4 (P/2005 T2)

P/2005 T2	D 2005	Oct 07.21	150	19.9	2.57	1.58	+179	G96 Christensen
	L 2005	Nov 25.23	150	21.5	2.75	2.01	+228	G96 MLS

Periodic comet Christensen 5 (P/2006 R2)

P/2006 R2	P 2006	Aug 30.31	59	17.5	3.06	2.07	+76	699 LONEOS
	L 2007	Jan 08.11	150	21.1	3.21	3.50	+207	G96 MLS

Periodic comet Christensen 6 (P/2006 S1)

P/2006 S1	P 2006	Aug 23.31	100	17.9	1.37	0.42	-11	704 LINEAR
	L 2006	Dec 16.22	150	21.0	1.81	1.12	+108	G96 MLS

Periodic comet Christensen 7 (P/2006 S4)

P/2006 S4	D 2006	Sep 22.37	68	16.8	3.17	2.27	+113	703 Christensen
	L 2006	Dec 25.88	40	19.7	3.38	3.12	+207	130 Casali <i>et al.</i>

Periodic comet Christensen 8 (266P)

P/2006 U5	D 2006	Oct 27.39	68	18.0	2.39	1.80	-84	703 Christensen
	L 2008	Apr 30.28	150	20.0	3.51	2.51	+467	G96 MLS
P/2012 P1	R 2012	Aug 15.93	150	21.4	3.23	2.60	-381	188 Burhonov-Novichonok

Periodic comet Christensen 9 (P/2007 A2)

P/2007 A2	D 2007	Jan 10.41		19.4	2.80	1.87	-8	G96 Christensen
	L 2007	Mar 17.85	36	19.9	2.83	2.12	+59	170 Manteca

Periodic comet Christensen 10 (P/2007 B1)

P/2007 B1	D 2007	Jan	17.27	68	18.6	2.44	1.49	-3	703	Christensen
	L 2007	Mar	23.91	20		19.2	2.50	1.85	+63	J70 Navarro

Periodic comet Christensen 11 (P/2007 C1)

P/2007 C1	D 2007	Feb	09.28	68	18.8	2.06	1.09	-24	703	Christensen
	L 2007	Apr	12.87	60	19.6	2.07	1.38	+39	561	Kelemen

Periodic comet Churyumov-Gerasimenko (67P)

P/1969 R1	D 1969	Sep	09.91	50	13	1.29	1.39	-1	210	Churyumov-Gerasimenko
	L 1970	May	08.21	229		2.75	2.29	+239	695	Roemer
P/1976 P1	R 1975	Aug	08.34	229		19.5	2.77	1.77	-243	695 Roemer-McCallister
	L 1975	Dec	07.08	154			1.89	2.15	-122	693 Roemer
	R 1982	May	31.45		19		2.21	2.25	-165	675 Gibson
	L 1983	May	13.07	150			2.33	2.23	+182	801
	R 1988	Jul	06.35	150		20	3.44	2.45	-347#	675 Gibson
	L 1991	May	16.23	210		21.8	4.98	4.02	+697*	695 B. Mueller
	R 1995	Jul	03.41	154	17.3		2.45	1.79	-198	693 Hergenrother
	L 1997	May	31.22	91	21.9		4.23	3.59	+500	691 Scotti
	R 2002	Jun	18.75	18	15.0		1.48	2.03	-61	349 Kadota
	L 2005	May	14.47	360	22.7		5.61	4.60	+1000	568 Wainscoat <i>et al.</i>
	R 2008	Jun	01.12	30		18.9	2.98	2.50	-272	J47 Muler
	L 2010	Jul	07.90	50		19.9	4.22	4.15	+495	A77 Rinner-Kugel

(Perennial)

Periodic comet Ciffréo (108P)

P/1985 V1	D 1985	Nov	08.10			1.70	0.75	+9	010	Ciffréo
	L 1986	Mar	15.14	91	18.7	2.12	1.84	+136	691	Gehrels-Scotti
P/1992 S1	P 1992	Aug	26.63	60	19.5	2.20	1.26	-149	372	Seki
	L 1993	Feb	26.13	91	16.5	20.5	1.74	1.97	+34	691 Scotti
	R 1999	Nov	10.42		19.6		2.26	2.09	-160#	474
	L 2000	Dec	22.46	122	20.5		2.76	2.36	+248*	696 Hergenrother

R 2007	Jul	24.44	25	16.7	1.72	2.33	+6	H06	Guido-Sostero
L 2008	Feb	28.91	50	19.0	2.63	1.76	+226	A77	Rinner-Kugel

Periodic comet CINEOS (167P)

P 2002	Jun	12.37	120	20.8	11.84	10.97	+414	644	NEAT
P/2004 PY ₄₂	D 2004	Aug	10.87	60	19.8	12.19	11.19	+1205	599 CINEOS
	L 2008	Dec	19.81	60	20.4	13.65	13.86	+2797	204 Buzzi
									(Perennial)

Periodic comet Clark (71P)

P/1973 L1	P 1973	Jun	01.70	10	13	1.56	0.74	+8	474	Clark
	L 1973	Nov	21.19	229		2.25	2.04	+180	695	Roemer
P/1978 G1	R 1978	Apr	13.60	60	18	2.51	1.76	-227	372	Seki
	L 1979	Aug	03.85			2.64	2.33	+251	323	
	R 1983	Dec	15.52			19.5	2.16	2.59	-166	675 Gibson
	L 1984	Sep	19			1.88	1.10	+113		
	R 1989	Jan	02.55	150	20	3.06	2.52	-330#	675	Gibson
	L 1989	Jan	18.51	150	19	2.98	2.25	-314	675	Gibson
	P 1994	Dec	05.84	60	17	2.22	2.73	-176	372	Seki
	L 1997	Dec	30.30			4.67	3.73	+944*	568	
	R 2000	Feb	04.07			2.91	2.04	-302	557	
	L 2001	Oct	14.65	60	18.5	2.99	2.00	+317	360	Nakamura
	R 2005	Dec	22.64	224		19.2	2.17	2.49	-166	568 Pittichova <i>et al.</i>
	L 2006	Dec	31.41	25	17.5	2.40	2.72	+208	349	Kadota
	R 2011	Jan	28.46	68	19.8	3.01	2.17	-322	703	CSS
	L 2012	Nov	18.55	41		17.9	3.10	2.28	+339	D90 Hills

Periodic comet Comas Solá (32P)

P/1926 V1	D 1926	Nov	04	38	12	2.20	1.22	-138		Comas Solá
	L 1927	May	31	61	14	1.90	2.44	+70		Van Biesbroeck
P/1935 P1	R 1935	Aug	09	61	14.5	1.86	2.51	-58		Van B (Jeffers)
	L 1936	Jul	16		18	3.04	3.22	+284		Jeffers
	R 1943	Oct	02		15?	2.50	1.60	-192		Oterma

L 1944	Jun 15				1.88	2.61	+65		Van B? Giclas?
R 1951	Jul 07.44	152	19.5		3.87	3.48	-431#	672	Cunningham
L 1953	Jul 04		17.5		3.12	3.07	+297		Van Biesbroeck
R 1960	Jun 29.43	102		18.9	3.01	3.17	-279	689	Roemer-Marsden
L 1962	May 04.28	102		20.0	3.67	2.68	+395	689	Roemer
R 1968	Oct 27.21	154	20		3.52	2.87	-367	693	Roemer
L 1970	Jul 01				2.82	2.90	+245		
R 1977	Sep 11.24	150		20.2	3.58	2.62	-378	801	McCrosky
L 1979	Apr 26.51				2.66	1.88	+214	323	
P 1986	Jul 28.41	150			3.62	3.10	-386	675	Gibson
L 1988	May 19.44	220			3.00	2.29	+275	568	Meech <i>et al.</i>
R 1995	Aug 01.44	91	19.7	21.9	3.22	2.83	-314	691	Scotti
L 1997	Jun 25.89	60	18.7		3.59	3.16	+380	118	Galád <i>et al.</i>
R 2004	Jul 20.08	30		17.7	2.89	2.88	-255	J87	Lacruz
L 2006	May 30.24	150	17.0		3.82	2.95	+424*	G96	MLS

Periodic comet Crommelin (27P)

P/1818 D1	D 1818	Feb 23	12		0.81	0.69	+17		Pons
	L 1818	Feb 27			0.85	0.67	+21		
P/1873 V1	D 1873	Nov 10	16		0.85	0.24	-22		Coggia
	L 1873	Nov 16			0.81	0.22	-16		
P/1928 W1	P 1928	Oct 25			0.77	0.55	-10		Quenisset
	L 1928	Dec 24			1.17	1.28	+50		
P/1956 S1	R 1956	Sep 29			0.89	0.62	-26		Pajdušáková
	L 1956	Nov 29			0.99	1.27	+35		
	R 1983	Aug 09.01			2.96	2.11	-195#	493	Kohoutek
	L 1984	May 27.40			1.79	1.50	+97*	474	Gilmore-Kilmartin
	R 2011	May 12.78	70	18.7	1.39	2.12	-36	372	Seki-Shimomoto-Sato
	L 2012	Jan 26.35	60	20.6	2.74	2.85	+176	I40	Jehin <i>et al.</i>

Periodic comet Daniel (33P)

P/1909 X1	D 1909	Dec 07	15		1.39	0.42	+8		Daniel
	L 1910	Apr 12			1.99	1.57	+134		
P/1937 B1	R 1937	Jan 31			1.54	1.23	+4		Shimizu
	L 1937	Apr 01			1.67	1.76	+64		

R 1943	Oct 23			1.56	0.84	-30	
L 1944	Mar 14			1.91	1.30	+113	
R 1950	Aug 16			1.47	2.03	-7	
L 1951	Mar 07			2.41	1.52	+196	
R 1964	Feb 06.13	102		1.82	2.15	-75	689 Roemer
L 1964	Mar 09.14	102	20.0	1.71	2.29	-43	689 Roemer
R 1979	Feb 02.69	19		2.52	1.87	+209	413
L 1979	Feb 07.72	19		2.55	1.85	+214	413
R 1985	Jul 27.49		20	1.65	2.44	-8	675 Gibson
L 1986	Mar 07.52	91		2.56	1.66	+215	691 Gehrels-Scotti
R 1992	Jul 29.79	60	19	1.68	2.29	-34	372 Seki
L 1993	May 28.16	91	20.7	2.87	2.62	+268	691 Scotti
R 1999	Nov 13.26		21.5	2.74	2.04	-223#	695
L 2001	Apr 16.57		17.6	3.06	2.37	+297*	402
R 2008	Aug 31.10	20		18.1	2.19	2.85	+45 A71 Jäger-Vollmann
L 2009	Apr 29.84	20		19.0	3.01	2.54	+284 A77 Klotz-Kugel-Rinner

Periodic comet d'Arrest(6P)

P/1678 R1	D 1678	Sep 11				+19	La Hire
	L 1678	Oct 07				+45	
P/1851 M1	D 1851	Jun 28	10	1.18	0.71	-11	d'Arrest
	L 1851	Oct 07	38 10.5	1.61	0.81	+90	Galle
P/1857 X1	R 1857	Dec 05		1.17	1.70	+7	MacLear
	L 1858	Jan 18		1.34	1.90	+51	MacLear, Mann
	R 1870	Aug 31	10 10	1.31	0.81	-23	Winnecke
	L 1870	Dec 20.71		1.64	1.55	+88	066
	R 1877	Jun 13				+34	White
	L 1877	Sep 11	12	1.91	1.47	+124	Schmidt
	R 1890	Oct 07		1.34	0.85	+19	Barnard
	L 1890	Dec 14		1.66	1.50	+87	
	R 1897	Jun 29	30	1.39	1.42	+37	Perrine
	L 1897	Oct 04		1.98	1.26	+134	Perrine
	R 1910	Aug 26	32 14	1.30	0.67	-21	Gonnessiat
	L 1911	Jan 27	15	1.96	2.08	+133	
	R 1923	Aug 05		1.44	0.70	-41	
	L 1924	Jan 31		2.01	2.27	+138	
	R 1943	Oct 04	208 13	1.39	0.90	+12	Van Biesbroeck

L 1944	Jan 21			1.91	2.14	+121		Van Biesbroeck
R 1950	Apr 20	208	18.5	1.48	1.56	-47		Van Biesbroeck
L 1951	Feb 06		19	2.77	2.61	+245		Van Biesbroeck
R 1963	Oct 09.12	102		18.5	1.38	1.35	-14	689 Roemer
L 1964	Feb 04.12	102		18.5	1.79	2.31	+104	689 Roemer
R 1970	Mar 14.50	229	19		1.42	1.75	-65	695 Roemer-Schreur
L 1971	Jan 20.23	229			2.83	2.19	+247	695 Roemer
R 1976	Feb 25.48	229		21.5	2.24	2.00	-169	695 Roemer-Heller
L 1977	Jan 22.07				2.19	1.93	+162	809
P 1982	Apr 23.32	150	19		2.04	1.21	-144	801
L 1982	Dec 13				1.66	1.49	+90	
R 1987	Mar 31.39	210		23	4.86	4.04	-676	695 Meech-Jewitt
L 1989	Dec 27.36	220			3.29	2.39	+326	568 Meech
R 1995	Feb 02.53			21.9	2.27	2.47	-175	688
L 1997	Dec 30.39				5.36	4.50	+887*	568
A 1999	Feb 14.37	155	22.8		5.60	4.62	-1085#	693 Hergenrother
L 2001	May 25.32			20.4	2.82	2.29	-254	695

(Perennial)

Periodic comet Denning (D/1894 F1)

D/1894 F1	D 1894	Mar 26	25		1.29	0.39	+45		Denning
	L 1894	Jun 05			1.84	1.23	+116		Javelle

Periodic comet Denning-Fujikawa (72D)

P/1881 T1	D 1881	Oct 04	25	7	0.85	0.83	+21		Denning
	L 1881	Nov 25.13	46	11	1.40	1.07	+72	522	Winnecke
P/1978 T2	D 1978	Oct 09	12		0.79	0.30	+7		Fujikawa
	L 1978	Dec 29.39	150		1.59	0.72	+88	801	

Periodic comet de Vico (122P)

P/1846 D1	D 1846	Feb 20			0.72	1.08	-14		de Vico
	L 1846	May 20.16			1.54	1.48	+75	802	Bond
P/1995 S1	D 1995	Sep 17.79	12	7.0	0.76	1.19	-18		Y. Nakamura-Utsunomiya-Tanaka

L 1996	Jun	25.38	91	21.4	3.84	3.09	+263*	691	Scotti
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Periodic comet de Vico-Swift (54P)

P/1844 Q1	D 1844	Aug 23		7	1.19	0.19	-10		de Vico
	L 1844	Dec 31	38		1.81	1.12	+120*		Struve
P/1894 W1	D 1894	Nov 21	12		1.46	1.03	+40		Swift
	L 1895	Jan 30	30	14	1.81	1.85	+110		Barnard?
P/1965 M1	R 1965	Jun 30			1.71	1.15	-54		Klemola
	L 1965	Oct 15.16	102		18.0	1.70	0.71	+53	689 Roemer
	R 2002	Oct 04.33	100		19.5	2.20	1.26	+65	704 LINEAR
	L 2003	Feb 05.09	41	17.9	2.56	2.45	+189*	H43	Sherrod-Sherrod
	R 2009	Aug 15.73	36	18.8	20.6	2.31	1.30	-105#	415 Herald
	L 2009	Dec 20.43	25	19.2	2.18	2.23	+22	349	Kadota

Periodic comet Dubiago (D/1921 H1)

D/1921 H1	D 1921	Apr 24	16		1.13	1.16	-12		Dubiago
	L 1921	Jul 07			1.47	1.30	+63		

Periodic comet du Toit (66P)

P/1944 K1	D 1944	May 16	61	10	1.35	0.52	-32		du Toit
	L 1944	Nov 20		19.5	2.31	1.79	+156		Van Biesbroeck
P/1974 F2	R 1974	Mar 22.40		19.0	1.30	1.61	-10	805	Torres
	L 1974	Apr 22.41		18.5	1.32	1.62	+21	805	Torres
	R 2003	Mar 10.51	181	20.5	2.44	1.52	-171#	291	Scotti
	L 2003	Sep 08.40	25		16.1	1.28	1.13	+11	E14 Higgins

Periodic comet du Toit-Hartley (79P)

P/1945 G1	D 1945	Apr 09.72	61	10	1.25	0.29	-9	074	du Toit
	L 1945	Jun 06			1.37	0.48	+49		
P/1982 C1	R 1982	Feb 05.73	122	14	1.35	0.51	-53	413	Hartley

L 1982	Jun	23.49	60		17.5	1.55	0.54	+85*	474	Gilmore-Kilmartin
R 1986	Dec	27.34	91	19.3		2.17	1.19	-169	691	Scotti
L 1987	May	25.19	91	17.4		1.22	1.16	-20	691	Gehrels-Scotti
R 2003	Mar	05.35	46	17.4		1.25	1.03	+18	844	Artigue <i>et al.</i>
R 2007	Nov	18.42	150	20.3		2.33	1.70	-192#	G96	MLS
L 2008	Jul	14.89	30		18.3	1.35	1.06	+48	J47	Muler-Sostero
R 2012	Dec	08.41	150	21.1		2.87	1.88	-272	G96	MLS

Periodic comet du Toit-Neujmin-Delporte (57P)

P/1941 O1	D 1941	Jul	18	61		1.31	0.30	-3	074	du Toit
	L 1941	Oct	20			1.65	0.84	+91		
P/1970 N2	R 1970	Jul	06			1.88	1.10	-93		Kowal
	L 1970	Oct	05.13	229		1.67	1.61	-2	695	Roemer
	R 1983	May	20.45	122	19	1.71	1.47	-12	675	Gibson
	L 1983	Oct	08.17	150		2.06	1.09	+129	801	McCrosky <i>et al.</i>
	R 1989	May	22.26	150	18.5	2.17	1.16	-149	675	Gibson
	L 1989	May	26.58	60	19	2.15	1.15	-145	372	Seki
	R 1995	May	23.20	91	21.4	2.90	2.22	-288#	691	Scotti
	L 1997	Mar	05.78		19.8	3.29	3.68	+365*	118	Galád <i>et al.</i>
	R 2002	May	05.76	26	17.0	1.90	1.24	-86	367	Abe
	L 2002	Dec	06.12	100	18.9	2.07	1.96	+128	704	LINEAR
	R 2008	Apr	02.59	360	21.6	2.79	1.83	-267	568	Wiegert <i>et al.</i>
	L 2009	Nov	24.35	150	20.8	3.13	2.16	+333	G96	MLS

Periodic comet Encke (2P)

(Observed all around the orbit since 1971)

Periodic comet Faye (4P)

P/1843 W1	D 1843	Nov	23			1.73	0.79	+37		Faye
	L 1844	Apr	10			2.35	2.28	+176		
P/1850 W1	R 1850	Nov	28			2.07	2.07	-125		Challis
	L 1851	Mar	04			1.72	2.48	-29		
	R 1858	Sep	08			1.69	1.50	-5		Bruhns
	L 1858	Oct	17			1.73	1.24	+34		

R 1865	Aug 23			2.34	1.36	-175		Thiele
L 1866	Jan 19			1.70	1.87	-26		
R 1873	Sep 04			1.75	2.07	+48		Stephan
L 1873	Dec 24			2.25	1.50	+159		
R 1880	Aug 02			2.35	1.53	-174		Common <i>et al.</i>
L 1881	Mar 30.82			1.85	2.33	+67	522	
R 1888	Aug 10			1.75	1.98	-10		Perrotin
L 1889	Feb 08			2.35	1.45	+172		
R 1895	Sep 27			2.35	1.55	-174		Javelle
L 1896	Jan 15			1.84	2.19	-64		
R 1910	Nov 08			1.66	0.68	+6		Cerulli
L 1911	Mar 31			2.18	2.13	+149		
R 1925	Aug 29			1.63	1.81	+22		Baade
L 1926	Mar 14			2.59	1.88	+219		
R 1932	Aug 30			1.89	0.98	-98		Schwassman <i>et al.</i>
L 1933	Mar 24			1.94	2.03	+108		
R 1939	Nov 03			2.33	2.22	-173		Jeffers
L 1940	Jan 06			1.97	2.53	-109		
R 1947	Jun 19			1.93	2.15	-101		Jeffers
L 1948	Mar 28			2.38	2.08	+182		
R 1954	Jul 01			2.76	1.99	-246		Van Biesbroeck
L 1956	Mar 16.45			3.51	2.55	+378	662	
R 1961	Jul 05.27	102		19.7	3.17	2.19	-313	689 Roemer-Thomas
L 1963	Apr 16.27	102		20.9	3.30	2.75	+337	689 Roemer
R 1969	May 17.46	154	18		2.14	2.46	-143	693 Roemer
L 1970	Mar 08				2.19	1.75	+152	
R 1976	May 05.44	229		20.1	3.08	2.90	-298	695 Roemer-Heller
L 1978	Feb 15				3.39	2.45	+353	
R 1983	Aug 31.18			20.5	3.17	2.57	-314	675 Gibson
L 1985	Mar 26.08	150			2.85	2.19	+259	801
R 1991	Apr 16.80	60	18.5		2.56	2.99	-213	372 Seki
L 1993	May 27.23	91		22.0	4.40	4.07	+558*	691 Scotti
R 1998	May 24.40	91	20.5		3.35	2.79	-347#	691 Scotti
L 2000	Apr 28.56		17.4		3.42	3.03	+358	360
R 2006	Apr 20.81		16.8		2.52	2.97	-205	E12 McNaught-Garradd
L 2008	Apr 29.88	50		20.5	4.27	3.59	+531	A77 Rinner-Kugel

Periodic comet Finlay (15P)

P/1886 S1	D 1886 Sep 26		11		1.28	1.14	-57		Finlay
	L 1887 Apr 12	76			2.05	2.31	+141		Struve
P/1893 K1	R 1893 May 18		11		1.26	1.30	-55		Finlay
	L 1893 Sep 22.12				1.40	1.60	+72	020	
	R 1906 Jul 15				1.25	0.35	-55		Kopff
	L 1907 Jan 09				1.89	0.90	+123		
	R 1919 Oct 25		9		1.02	0.25	+10		Sasaki
	L 1920 Mar 09				2.09	1.81	+146		
	R 1926 Jul 21		11		1.09	0.86	-17		Stobbe
	L 1926 Nov 11				1.64	1.08	+96		
	R 1953 Dec 04		13.5		1.09	1.48	-21		Churms
	L 1954 Apr 01		17		1.65	2.09	+97		Van Biesbroeck
	R 1960 Jun 20				1.45	0.71	-73#		Gibson-Burnham
	L 1961 Jan 13.30			19.0	1.99	1.05	+134		Roemer
	R 1967 Jul 17.75		16		1.09	1.02	-11	387	Van Biesbroeck-Tomita
	L 1967 Nov 13				1.76	1.18	+108		
	R 1974 Jun 24	60			1.10	1.38	-9		Seki
	L 1975 Jan 07.30	229			2.44	1.48	+187	695	Roemer
	R 1981 May 07.88		16		1.25	1.64	-43	323	Jekabsons-Candy
	L 1981 Sep 10.48				1.54	1.82	+82	675	
	R 1988 Apr 21.73	60		17	1.25	1.81	-45	474	Gilmore-Kilmartin
	L 1988 Apr 22.74	60		17	1.25	1.81	-44	474	Gilmore-Kilmartin
	R 1995 Oct 26.47	91	20.2	22.5	2.35	2.44	+174	691	Scotti
	L 1996 Apr 19.19	91	22.1		3.65	3.40	+350*	691	Scotti
	R 2002 Jan 27.38	18	15.4		1.05	1.87	-11	349	Kadota
	L 2002 Mar 30.43	30	14.0		1.26	2.04	+51	340	Ezaki
	R 2008 Apr 27.79	25		17.4	1.26	1.48	-56	D90	Nicholson <i>et al.</i>
	L 2009 Mar 20.92	20		20.1	3.14	2.59	+271	A77	Rinner-Kugel-Klotz

Periodic comet Forbes (37P)

P/1929 P1	D 1929 Aug 01		10		1.57	0.57	+36		Forbes
	L 1929 Nov 22	102	16		2.11	1.79	+149		Van Biesbroeck
P/1942 L1	R 1942 Jun 15		14.5		1.66	1.42	+60		Van Biesbroeck
	L 1942 Oct 05	208	18		2.25	1.26	+172		Van Biesbroeck
	R 1948 May 14.29		17		1.97	1.03	-125		Jeffers

L 1948	Oct 02		15		1.55	1.59	+16		Van Biesbroeck
R 1961	Jan 16.50	102		20.2	2.36	2.41	-189	689	Roemer
L 1961	Dec 05.10	102		19.8	2.02	2.04	+133	689	Roemer
R 1974	Jan 19.51	229			1.94	2.33	-120	695	Roemer-Vaughn
L 1974	Nov 17				2.31	1.72	+181		
R 1980	Mar 12.27				2.40	1.51	-197	809	Schuster
L 1980	Sep 17.50				1.48	1.54	-7	323	Candy <i>et al.</i>
R 1986	Apr 08.26	150		20.5	2.84	1.95	-268	675	Gibson
L 1987	Oct 16.38	91	18.4		2.96	2.02	+288	691	Gehrels-Scotti
R 1993	Mar 21.85	33	14		1.45	2.01	+7	323	Candy-Lowe
L 1994	Jan 09.48		19.1		3.03	2.82	+301*	360	Nakamura
R 1999	Apr 14.50	155	13.5		1.46	1.42	-20	693	Hergenrother
L 1999	Nov 30.47		17.2		2.48	1.91	+210	360	Nakamura
R 2005	Jan 05.23	25		18.7	2.47	2.61	-209	A61	Fratev-Mihaylova
L 2006	Jan 23.76	44	18.3		2.27	2.85	+175	215	Hasubick
R 2011	Feb 08.64	41		21.4	3.03	2.28	-305#	D90	Hills
L 2012	Dec 09.51	25	19.4		3.35	2.59	+365	349	Kadota

Periodic comet Gale (34D)

P/1927 L1	D 1927	Jun 07			1.22	0.35	-7		Gale
	L 1927	Sep 02			1.60	0.65	+80		
P/1938 J1	R 1938	May 01			1.35	0.42	-48		Cunningham
	L 1938	Jul 29			1.31	0.41	+41		Johnson

Periodic comet Garradd 1 (186P)

	P 1975	May 31.38		15.5	4.36	3.79		260	
P/1977 O1	P 1977	Jul 18.58		18	4.44	3.47		413	
	P 1996	Feb 26.64		17.8	4.50	3.69		260	
P/2007 B3	D 2007	Jan 25.70		18.0	4.42	4.20	-420#	E12	Garradd
	L 2009	Aug 22.33	35	20.4	4.50	3.59	+520*	E85	McCormick
		(Perennial)							

Periodic comet Garradd 2 (P/2007 H3)

P/2007 H3	D 2007	Mar	28.47	50		18.5	2.18	1.34	-140	E12 Garradd
	L 2007	Sep	23.76	44	17.1		1.86	2.09	+39	215 Hasubick

Periodic comet Garradd 3 (P/2007 R4)

P/2007 R4	D 2007	Aug	12.70	50	19.7		1.98	1.28	-46	E12 Garradd
	L 2007	Dec	30.57	36		20.8	2.14	1.61	+94	415 Herald

Periodic comet Garradd 4 (259P)

P/2008 R1	P 2008	Jul	15.60	50	19.1		1.79	0.89	-10	E12 SSS
	A 2010	Apr	13.24	810	25.9		3.51	3.79	+627	568 Kleyna-Meech

(Observed all around the orbit since discovery)

Periodic comet Gehrels 1 (90P)

P/1972 T1	D 1972	Oct	11.44	122	19		3.03	2.03	-105#	675 Gehrels
	L 1973	Sep	23.48	229			3.38	3.63	+242*	695 Roemer
P/1987 Q2	R 1987	Aug	29.43	91	17.1		2.99	2.82	+19	691 Scotti
	L 1988	Mar	13.20	91	18.1	21.1	3.35	3.40	+216	691 Gehrels-Scotti
	R 2001	Aug	10.38	150	20.8		3.96	2.98	-317#	809 Hainaut <i>et al.</i>
	L 2003	Feb	19.79	60		18.4	3.41	3.00	+242	360 Nakamura

Periodic comet Gehrels 2 (78P)

P/1973 S1	D 1973	Sep	28	122	15.5		2.39	1.44	-64	Gehrels
	L 1975	Mar	07				3.71	2.82	+461	
P/1981 L1	R 1981	Jun	08.44		19.5		2.62	2.86	-163	711 Cochran
	L 1982	Jan	21.04	150			2.40	2.12	+63	801
	R 1989	Jun	14.46	150	19		2.55	2.79	-142	675 Gibson
	L 1989	Dec	29.03	150			2.38	1.75	+56	801 McCrosky <i>et al.</i>
	R 1996	Jun	18.35	60	20.3		3.52	2.64	-415#	709 Offutt

L 1999	Apr	12.35	155	19.5		4.29	3.41	+613*	693	Hergenrother
R 2004	May	12.38	36		16.9	2.41	2.91	-168	105	Masi-Mallia
L 2006	Feb	26.39	100	18.4		3.83	2.85	+487	704	LINEAR
R 2011	May	03.45	51	17.1		2.79	3.09	-255	H06	Sato

Periodic comet Gehrels 3 (82P)

P/1975 U1	D 1975	Oct	27.15	122		17	3.87	2.88	-544#	675	Gehrels
	L 1978	May	09.55				3.67	3.18	+381	323	
P/1984 P1	R 1984	Aug	07.46			20	3.60	4.07	-300	675	Gibson
	L 1987	May	24.30	91	19.5		4.11	3.21	+720*	691	Gehrels-Scotti
	R 1992	Sep	26.45	91	22.0		3.59	3.25	-302	691	Scotti
	L 1995	Jun	23.22	91	21.6	22.3	4.07	3.58	+698	691	Scotti
	R 2002	Jan	10.31	120		21	3.65	2.73	+129	644	NEAT
	L 2002	Mar	08.57	60	20.3		3.67	2.88	+187	360	Nakamura
	R 2009	Dec	28.98		21		3.63	2.65	-47	461	Sárneczky
	L 2011	Mar	23.97	60		21	3.86	2.91	+436	204	Buzzi

Periodic comet Gehrels 4 (270P)

P/1997 C1	D 1997	Feb	01.36	91	17.9		4.20	3.22	+369	691	Gehrels
	L 1998	Feb	02.54	91	22.6	23.2	5.45	4.71	+735	691	Scotti
P/2012 S5	S 2012	Sep	25.38	150	19.3		4.00	3.15	-286	G96	Grauer

Periodic comet Ge-Wang (142P)

P/1988 V1	P 1988	Oct	11.48	46	16.5		2.59	1.70	+141	675	Shoemaker
	L 1988	Dec	13.11	150			2.63	2.42	+203	801	McCrosky-Shao
P/1999 R2	R 1999	Sep	15.44	91	20.3	22.1	2.58	1.76	+86	691	Scotti
	L 1999	Oct	21.58	60	18.8		2.66	1.68	+122	402	Sugie
	R 2010	Jul	24.63				2.52	2.33	+55	C51	WISE
	L 2010	Nov	13.32	60		19.6	2.79	1.85	+167	H10	Buzzi

Periodic comet Giacobini (205P)

D/1896 R2	D 1896	Sep	04.84	40		1.57	1.12	-54		Giacobini
	L 1897	Jan	05.16			1.63	1.85	+69		Javelle
P/2008 R6	D 2008	Sep	10.57	60	13.5	1.53	0.61	+1	D89	Itagaki
	L 2009	Feb	28.80	44	18.3	2.26	2.66	+172	215	Hasubick

Periodic comet Giacobini-Zinner (21P)

P/1900 Y1	D 1900	Dec	20	40		0.99	0.88	+22		Giacobini
	L 1901	Feb	16			1.47	1.35	+80		
P/1913 U1	D 1913	Oct	23	26		0.99	0.58	-10		Zinner
	L 1913	Dec	27			1.25	0.77	+55		
	R 1926	Oct	06			1.36	1.45	-66		Schwassmann
	L 1927	Mar	04			1.51	1.66	+83		
	R 1933	Apr	23			1.51	1.63	-83		Schorr
	L 1933	Oct	18			1.63	1.59	+95		
	R 1939	Oct	15			1.90	2.44	-125		Van Biesbroeck
	L 1939	Oct	16			1.89	2.44	-124		
	R 1946	May	26			1.81	1.21	-115		Jeffers
	L 1947	Jan	24			1.93	1.25	+128		
	R 1959	May	08.42	102	20.0	2.34	1.61	-171	689	Roemer
	L 1960	Apr	25			2.43	2.57	+182		
	R 1965	Sep	17.14	102	19.8	2.52	2.98	-192	689	Roemer-Lloyd
	L 1965	Sep	25.13	102	20.5	2.46	2.99	-184	689	Roemer
	R 1972	Mar	11.47	229	18.8	2.10	2.29	-146	695	Roemer-McCallister
	L 1973	Feb	27.08			2.62	1.97	+206	821	
	R 1978	Apr	30			3.24	2.34	-288		Shao-Schwartz
	L 1978	Oct	03.03	150	18.5	1.97	2.42	-133	801	
	R 1984	Jan	28.33		25	4.83	4.82	-586#	809	Djorgovski <i>et al.</i>
	L 1987	Mar	31.30	210		4.78	3.94	+572*	695	Meech-Jewitt
	R 1991	Feb	16.53	220	22	4.06	3.90	-422	568	Meech
	L 1991	Mar	15.36			3.91	3.36	-395	807	Weller
	R 1998	Jan	20.54	122	21.9	3.34	3.79	-305	696	Hergenrother
	L 1999	Apr	30.46		16.0	2.22	2.61	+160	402	
	R 2004	Jun	21.40	220	21.3	3.80	3.21	-376	568	Pittichova-Bedient
	L 2006	Mar	26.47	36	19.9	3.07	2.59	+267	415	Herald
	R 2011	May	01.05	50	19.7	3.22	2.34	-287	A77	Rinner-Kugel

L 2012	Mar	28.44	26	12.4	1.21	2.01	+46	367	Abe
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Periodic comet Gibbs 1 (P/2006 W1)

P/2006 W1	D 2006	Nov	16.41	68	18.6	2.90	2.60	+232	703	Gibbs
	L 2007	Feb	17.25	68	19.5	3.55	2.64	+325	703	CSS

Periodic comet Gibbs 2 (263P)

P/2006 Y2	P 2006	Nov	10.48	181	21.1	1.37	1.09	-48	291	Spacewatch
	L 2007	May	11.32	68	19.1	1.91	0.96	+134	703	CSS
P/2012 K9	R 2012	May	16.14	51	20.1	1.26	1.75	-5	H06	Sato

Periodic comet Gibbs 3 (P/2007 K2)

P/2007 K2	P 2007	Apr	11.13	68	19.9	2.33	1.80	-58	703	CSS
	L 2007	Jul	11.34	100	19.5	2.29	2.67	+33	474	Gilmore

Periodic comet Gibbs 4 (P/2007 R2)

P/2007 R2	D 2007	Sep	10.41	68	18.2	1.47	0.70	+15	703	Gibbs
	L 2007	Dec	01.67	25	19.4	1.78	0.82	+97	349	Kadota

Periodic comet Gibbs 5 (P/2007 R3)

P/2007 R3	P 2007	Sep	10.33	91	19.0	2.54	1.59	+66	691	Spacewatch
	L 2007	Nov	10.80	30	19.5	2.65	1.85	+128	213	Naves-Campas

Periodic comet Gibbs 6 (P/2007 T4)

P/2007 T4	D 2007	Oct	12.46	68	18.4	2.16	2.45	+84	703	Gibbs
	L 2008	Apr	25.25	150	21.3	3.17	2.61	+280	G96	MLS

Periodic comet Gibbs 7 (P/2008 Y2)

P/2008 Y2	D 2008	Dec	01.47	150		19.3	1.72	1.07	-52	G96 Gibbs
	L 2009	Apr	30.90	60		19.2	1.89	1.23	99	204 Buzzi

Periodic comet Gibbs 8 (P/2009 K1)

P/2009 K1	P 2009	Apr	24.17	150	20.4		1.51	1.36	-63	G96 Gibbs
	L 2009	Sep	18.51	15		18.2	1.65	2.01	+85	D25 Chestnov <i>et al.</i>

Periodic comet Gibbs 9 (229P/2009 S1)

P/2001 Q1	P 2001	Aug	23.61	120		20.0	2.48	1.70		608 NEAT
	L 2001	Oct	27.30	120		19.7	2.44	1.57		644 NEAT
P/2009 S1	D 2009	Sep	20.38	68	18.6		2.45	1.82	+51	703 Gibbs
	L 2010	Feb	12.79	60		19.4	2.75	2.58	+193	204 Buzzi

Periodic comet Gibbs 10 (248P)

P/1996 TT ₆₅	P 1996	Sep	14.62	120		18.7	2.25	2.50		566 Haleakala-NEAT (Meyer)
	L 1996	Oct	06.50	91		18.8	2.31	2.34		691 Spacewatch
P/2010 W1	P 2010	Jun	26.18				2.95	2.79	-228	C51 WISE
	L 2011	Mar	21.81	44	18.5		2.18	2.65	+41	215 Hasubick

Periodic comet Gibbs 11 (P/2011 C2)

P/2011 C2	P 2011	Jan	30.46	150	19.6		5.54	4.60	-344	G96 MLS
	L 2012	Jul	21.37	40		20.8	5.44	5.85	+196	E07 Herald

Periodic comet Gibbs 12 (P/2011 S1)

P/2011 S1	P 2011	Sep	06.56	180	21.8	7.55	6.55	-1085	F51	Pan-STARRS
	L 2012	Nov	18.78	40	20.2	7.14	6.44	-646	C32	Gerke-Novichonok-Plaksa

Periodic comet Gibbs 13 (P/2012 F5)

P/2012 F5	D 2012	Feb	20.40	68	19.4	3.09	2.19	+698	703	Gibbs
	L 2012	Jul	07.45	40		21.1	3.12	3.31	+837	E07 Herald

Periodic comet Gibbs 14 (P/2012 K3)

P/2012 K3	D 2012	May	21.35	150	18.3	2.31	1.35	-132	G96	Gibbs
	L 2012	Sep	09.41	40		19.7	2.08	1.75	-21	E07 Herald

Periodic comet Giclas (84P)

P/1931 R1	D 1931	Sep	12.31	30	15.0	1.75	0.75	-68	690	Tombaugh
	L 1931	Sep	21.35	30		1.72	0.73	-59	690	Tombaugh
P/1978 R2	D 1978	Sep	03.33		15.6	1.88	0.90	-79	688	Giclas
	L 1979	Mar	28.03	150		2.08	2.42	+127	801	
P/1985 M1	R 1985	Jun	22.39		20	2.04	1.98	-101#	707	Everhart
	L 1986	Jan	19.23	91	16.9	2.07	1.48	+110	691	Gehrels-Scotti
	R 1992	Jun	30.78	60	18	1.96	1.97	-74	372	Seki
	L 1993	Mar	20.45	60	17.6	2.43	2.41	+188	360	Nakamura
	R 1999	Sep	12.74	60	17.4	1.85	1.38	+19	360	Nakamura
	L 2000	May	01.14		19.4	2.72	3.12	+250*	695	
	R 2006	Jul	23.06	25	17.6	1.86	1.98	-15	A79	Fratev <i>et al.</i>
	L 2007	Mar	17.91	30		19.6	2.60	2.37	+223	213 Naves-Campas

Periodic comet Gilmore (P/2007 Q2)

P/2007 Q2	P 2007	Aug	22.27	100		19.8	1.84	0.84	-2	704	LINEAR
	L 2007	Oct	15.78	106			1.92	1.04	+53	246	Ticha-Tichy

Periodic comet Grigg-Skjellerup(26P)

P/1808 C1	D 1808 Feb 06								-40	Pons
	L 1808 Feb 09								-37	
P/1902 O1	D 1902 Jul 23	09			0.82	0.82			+20	Grigg
	L 1902 Aug 03		09		0.91	0.75			+31	Grigg
P/1922 K1	D 1922 May 17	7.5	11.5		0.89	0.39			+2	Skjellerup
	L 1922 Aug 19	61	16		1.59	0.83			+96	Barnard
P/1927 F1	R 1927 Mar 21		13		1.15	0.66			-50	Delporte
	L 1927 Jul 28				1.43	0.58			+79	Van Biesbroeck
	R 1932 Apr 28	61	11		0.93	0.47			-14	Van Biesbroeck
	L 1932 Jul 16		16		1.27	0.46			+65	Schorr
	R 1937 Mar 29		13		1.20	0.87			-55	Cunningham
	L 1937 Jul 02		13		1.08	0.40			+40	Van Biesbroeck
	R 1942 Apr 11		15.5		1.07	0.85			-42	Van Biesbroeck
	L 1942 Jul 12				1.14	0.39			+50	
	R 1947 Mar 11		11		1.03	0.33			-38	Giclas-Johnson
	L 1947 Jul 14		16		1.50	0.68			+87	Van Biesbroeck
	R 1952 Mar 06		12.5		0.86	0.63			-5	Brouwer
	L 1952 Apr 24	208	14		1.09	1.02			+44	Van Biesbroeck
	R 1956 Dec 29		14		1.01	1.07			-35	Tomita
	L 1957 Feb 06				0.86	1.20			+4	
	R 1961 Nov 09				1.16	1.62			-52	Tomita
	L 1962 Jan 15				0.89	1.62			+15	
	R 1966 Dec 10				1.12	1.53			-37	Rudnicki
	L 1966 Dec 19.54		16.5		1.08	1.49			-28	675
	R 1972 Jan 13				1.20	0.93			-49	675 Gibson
	L 1972 Aug 14.33	229			2.19	1.28			+165	695 Roemer
	R 1977 Jan 21.73	33	18		1.45	0.69			-79	323 Jekabsons
	L 1977 Aug 10.18	150			1.82	0.95			+121	801 McCrosky-Shao
	R 1982 Jan 15.29	150	19		1.80	0.95			-120	675 Gibson
	L 1982 Aug 18.11	150			1.58	0.92			+95	801
	R 1986 Aug 12.16	350		22	3.22	3.74			-310	493 Birkle
	A 1989 Dec 27.40		24		4.93	4.58			+923*	568
	1991 Sep 09.18		22		3.27	3.36			-317#	493 Birkle
	L 1993 Sep 17.17				3.82	2.86			+422	493 Birkle
	R 1996 Dec 14.31	229	21.1		2.90	1.97			-259	695 Hergenrother-Larson
	L 1997 Oct 27.38		16.5		1.27	1.95			+58	897
	R 2007 Dec 19.17	60		19.1	1.61	1.29			-96	204 Buzzi
	L 2008 Aug 09.87	60		18	1.96	1.10			+139	204 Buzzi

(Perennial)

Periodic comet Gunn (65P)

P	1954	Aug	08.37	122	19	3.70	2.73	+445	675		
A	1972	Dec	03.26	154		4.72	3.82	-1165	693	Roemer	
	1978	Nov	30.35		19.0	4.63	3.65	+1023	675		
	1980	Dec	07.43	150		4.16	3.69	-719	801		
	1985	Oct	19.50	91	19	4.66	4.01	+1058	691	Gehrels-Scotti	
	1986	Dec	02.38	91	18.6	4.64	3.85	-1028	691	Scotti	
A	1993	Jan	24.19	91	19.0	21.4	4.74	4.05	+1217	691	Scotti
	1993	Oct	27.80	60	19.3		4.61	4.38	-1001	360	Nakamura

(Observed all around the orbit since discovery)

Periodic comet Halley (1P)

R	1982	Oct	16.47	508	25	11.04	10.92	-1212#	675	Jewitt-Danielson
L	2003	Mar	08.09		28.2	28.10	27.31	+6236*	309	

Periodic comet Haneda-Campos (D/1978 R1)

D/1978 R1	P	1978	Jul	30.61	16	1.43	0.41	-71	414	
	L	1978	Nov	29.22	150	18	1.29	0.33	+51	801

Periodic comet Harrington (51P)

P/1953 P1	D	1953	Aug	05	122	15.5	1.75	0.84	-48	Harrington	
	L	1953	Dec	10		18.8	1.86	1.31	+79	Roemer	
P/1960 P1	R	1960	Aug	03.45	102	19.0	1.62	1.48	+36	689	Roemer
	L	1960	Oct	26.46	102	19.6	1.98	1.14	+120	689	Roemer
	R	1980	Sep	04.50		18.5	1.94	1.48	-111	323	Jekabsons
	L	1980	Oct	06.50			1.79	1.65	-79	323	Jekabsons
	R	1987	May	01.45	91	20.0	2.35	1.84	-183#	691	Gehrels-Scotti
	L	1987	Nov	24.60			1.61	1.33	+24	323	Candy-Johnston-Lowe

R 1994	May	01.46	91	18.5	1.93	1.86	-114	691	Scotti
L 1995	Jan	28.14	91	19.3	2.19	1.86	+158	695	
R 2001	Jul	01.73	18	15.1	1.59	1.87	+26	349	Kadota
L 2002	Mar	10.82	50	19	2.92	2.75	+278*	587	Manca <i>et al.</i>
R 2008	Jul	28.43	68	15.8	1.73	1.67	+40	703	CSS
L 2009	Feb	21.12	150	19.3	2.75	2.48	+248	G96	MLS

Periodic comet Harrington-Abell (52P)

P/1955 F1	D 1955	Mar	22.30	122		1.99	1.05	+100	675	Harrington-Abell
	L 1955	May	18.32			2.26	1.74	+157	662	
P/1962 B1	R 1962	Jan	26			1.80	0.92	-28		McClure
	L 1962	May	26.20	102		1.97	2.01	+91	689	Roemer
	P 1968	Oct	27			2.46	1.56	-195		
	L 1969	Apr	20.14	154		1.78	2.12	-21	693	Roemer
	R 1975	Oct	06.40	229	21	2.50	1.64	-198	695	Roemer-Daniel
	L 1976	Mar	25			1.80	1.95	-27		
	R 1983	Sep	17.47		20.5	1.92	2.09	-75	675	Gibson
	L 1984	Apr	02.14	150		2.11	1.23	+123	801	
	P 1990	Sep	18.28	150	22	3.02	2.11	-292	675	Gibson
	L 1990	Oct	23.94		20.3	2.82	1.85	-256	586	
	R 1998	Jul	21.09		14.5	2.45	2.79	-191	910	Maury
	L 1999	Jun	05.19	16.3		2.12	2.17	+128	703	
	R 2005	Oct	01.21	181	21.3	3.13	2.14	-318#	291	Scotti
	L 2007	Mar	14.65	50	19.9	2.60	1.79	+212*	E12	McNaught <i>et al.</i>

Periodic comet Harrington-Wilson (D/1952 B1)

D/1952 B1	D 1952	Jan	30	122		1.87	1.12	+92	675	Harrington-Wilson
	L 1952	Apr	19	122		2.27	1.44	+172	675	Harrington-Wilson

Periodic comet Hartley 1 (100P)

P/1985 L1	D 1985	Jun	13.38	122	16	1.54	1.11	+2	413	Hartley
	L 1985	Aug	14.37	60		1.66	1.64	+64	474	Gilmore-Kilmartin
P/1991 E1	R 1991	Mar	12.49	46	16.5	1.90	1.05	-66	675	Shoemaker-Levy

L 1991	Jun	14.10	150		1.83	1.13	+27	801	
R 1997	Jan	12.17	60	19.5	2.14	1.74	-136	118	Galád, Kolény, Kornoš, Pravda
L 1997	Jun	29.53	60	16.3	1.84	1.35	+32	360	Nakamura
R 2003	Jan	15.46	41	19.9	2.54	1.88	-215#	H43	Sherrod-Sherrod
L 2003	Jun	22.18	30	19.1	2.03	1.98	-57	448	Stevens
R 2010	Apr	16.54			2.24	2.02	+135*	C51	WISE
L 2010	Jul	12.31	215		2.57	1.72	+222	829	Gil Hutton

Periodic comet Hartley 2 (103P)

P/1986 E2	D 1986	Mar	15.59	122	17.5	3.22	2.23	+284	413	Hartley
	L 1986	Jun	07.22	91		3.76	3.59	+367	691	Scotti
P/1991 N1	R 1991	Jul	09			1.33	0.94	-65		Kryachko
	L 1992	May	04.09	150		2.86	2.44	+235	801	
	R 1997	May	02.47	120	19.6	2.81	2.40	-234	696	Hergenrother
	L 1999	Apr	12.37	155	19.2	4.31	3.35	+476*	693	Hergenrother
	R 2004	Sep	20.40		16.9	1.90	2.72	+125	I05	
	A 2008	May	05.25	800		5.62	4.62	-906#	309	Gilmour-Snodgrass
										(Perennial)

Periodic comet Hartley 3 (110P)

P/1988 D1	P 1988	Feb	19.39	46		2.78	1.81	+219	675	
	L 1988	May	19.37			3.03	2.77	+309	568	
P/1993 M1	R 1993	Jun	23.44	91	19.5 22.1	3.10	3.46	-331#	691	Scotti
	L 1995	Apr	19.58		17.8	3.11	2.33	+334	897	
	R 1998	May	30.43	360	22.7	4.65	3.99	-1026#	568	Veillet
	L 2002	Apr	08.25		19.7	3.26	2.32	+383	644	
	R 2006	Aug	18.05	60	20.5	3.71	2.78	-534	461	Sárneczky-Kuli
	L 2009	Apr	29.87	50	19.8	3.47	2.60	+451*	A77	Klotz-Kugel-Rinner

Periodic comet Hartley-IRAS (161P)

P/1983 V1	D 1983	Nov	04.47	122		1.56	1.02	-65	413	Hartley
	L 1984	Jun	04.11	150		2.28	2.23	+148	801	McCrosky-Schwartz-Shao
P/2004 V2	R 2004	Nov	03.68	100	19.5	3.04	2.74	-229	413	McNaught

L 2005	Oct	12.76	36	18.2	1.97	2.66	+114	A32	Denzau
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Periodic comet Helfenzrieder (D/1766 G1)

D/1766 G1	D 1766	Apr 01	NE	0.73	0.51	-26		Helfenzrieder
	L 1766	May 13		0.55	1.10	+16		de la Nux

Periodic comet Helin (151P)

P/1987 Q3	D 1987	Aug 24.43	46	16.5	2.56	1.83	+12	675	Helin
	L 1988	Feb 13.14	91	19.8	2.98	3.18	+185	691	Gehrels-Scotti
P/2001 M1	R 2001	Jun 20.14	123	20	2.65	2.34	-96	493	Szabó-Csák-Sárneczky
	L 2001	Dec 17.17	59	18.7	2.62	2.31	+85	699	LONEOS

Periodic comet Helin-Lawrence (152P)

P/1993 K2	D 1993	Apr 21.49	46		3.11	2.31	-70	675	Helin-Lawrence
	L 1997	Dec 30.48			5.84	4.98	+1644*	568	
P/2001 Y1	R 2001	Jan 23.39	230	21.5	4.49	3.62	-698#	695	Hergenrother
	L 2004	Dec 01.46	60	18.5	4.52	4.20	+710	360	Nakamura
	R 2011	Feb 01.39	61	20.1	4.04	3.30	-524	G68	Dymock-Camilleri
	L 2012	Sep 16.47	25	16.4	3.14	3.19	+69	349	Kadota

Periodic comet Helin-Roman-Alu 1 (117P)

P/1989 T2	P 1988	Aug 10.38	46		3.87	2.92	+303	675	
	L 1989	Dec 01.15	150	17.5	4.50	3.78	+780	675	
	A 1993	Jan 24.34	91	21.2	5.25	4.28	-1523	691	Scotti

(Observed all around the orbit since discovery)

Periodic comet Helin-Roman-Alu 2 (132P)

P/1989 U1	D 1989	Oct 26.37	46	16.0	1.93	0.96	-5	675	Helin-Roman-Alu
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	L 1990	Feb	27.09	150		2.19	2.00	+119	801	
P/1997 N2	R 1997	Jul	13.46	120	19.6	2.18	1.86	-120	696	Hergenrother
	L 1998	May	03.14	120	21.1	2.43	3.01	+174	696	Hergenrother
	R 2005	Aug	04.06	30	20.5	2.55	1.59	-195	213	Naves-Campas
	L 2006	Jan	22.11	68	17.7	1.94	2.22	-24	703	CSS

Periodic comet Helin-Roman-Crockett (111P)

P/1989 A2	D 1989	Jan	02.43	46	15.5	3.49	2.58	+110	675	Helin-Roman-Crockett
	L 1989	May	08.06	150		3.56	3.66	+237	801	
	A 1993	Jun	25.42	91	23.2	4.55	3.73	-1224	691	Scotti

(Observed all around the orbit since discovery)

Periodic comet Hergenrother 1 (168P)

P/1998 W2	D 1998	Nov	21.10	41	17.3	1.43	1.26	-15	703	Hergenrother
	L 1999	Apr	15.14	150	20.2	1.98	2.59	+130*	693	Hergenrother
P/2005 N2	R 2005	Jul	04.56	36	20.3	1.92	1.10	-121#	415	Herald
	L 2006	Feb	02.15	68	20.0	1.74	1.63	+92	703	CSS
	R 2012	Jul	15.42		18.4	1.66	0.93	-79	H06	RAS Obs

Periodic comet Hergenrother 2 (175P)

P/2000 C1	P 2000	Jan	04.45	100	18.7	2.17	1.65	-75	704	LINEAR
	L 2000	Jun	06.51	60	17.4	2.18	1.69	+79	360	Nakamura
P/2006 A3	R 2006	Jan	06.22	150	21.4	2.96	2.05	-305#	G96	Christensen
	L 2007	Jun	18.22	181		2.63	1.68	+224*	291	Spacewatch
	R 2012	Oct	17.04	40		2.56	2.54	-219	C32	Gerke-Plaksa-Novichonok

Periodic comet Hermann (275P)

P/1999 D1	P 1999	Feb	15.69	41	18.5	1.65	0.75	-2	411	Kobayashi
	L 1999	Apr	14.59	60	18.6	1.77	0.83	+56	360	Nakamura
P/2012 Y2	D 2012	Dec	22.61	180	20.2	1.64	1.59	-5	F51	Pan-STARRS

Periodic comet Herschel-Rigollet (35P)

P/1788 Y1	D 1788	Dec 21	16		0.95	1.04	+31		Herschel
	L 1789	Feb 05			1.56	1.18	+77		
P/1939 O1	D 1939	Jul 28	06		0.78	0.83	-12#		Rigollet
	L 1940	Jan 16			2.65	2.17	+160*		

Periodic comet Hill 1 (P/2006 D1)

P/2006 D1	P 2005	Dec 05.47	68	18.7	1.94	1.80	+41	703	CSS
	L 2006	Apr 07.24	60	20.6	2.47	1.51	+163	673	Young

Periodic comet Hill 2 (P/2006 S6)

P/2006 S6	P 2005	Aug 29.39	68	19.2	2.43	1.91	-50	703	CSS
	L 2007	Jan 17.18	150		2.49	2.00	+91	G96	MLS

Periodic comet Hill 3 (195P)

P/1993 D1	P 1993	Feb 26.53	120		4.56	5.25	+250	260	Foglia-Matson-Tombelli
	L 1994	Apr 05.62	120		5.25	4.59	+653*	260	Foglia-Matson-Tombelli
P/2006 W4	P 2006	Nov 19.26	100	19.7	5.57	4.59	-793#	704	LINEAR
	L 2012	Jun 08.55	40	21.4	6.54	5.57	+1235	E07	Herald

Periodic comet Hill 4 (211P)

P/2003 F6	P 2003	Mar 24.36	120	19.8	2.74	1.81		644	NEAT
	L 2003	Apr 01.34	59	19.2	2.76	1.84		699	LONEOS
P/2008 X1	P 2008	Dec 04.16	100	18.2	2.56	1.61	-159	704	LINEAR
	L 2010	Jan 24.95			2.86	2.67	+262	C51	WISE

Periodic comet Hill 5 (P/2007 V2)

P/2007 V2	P 2007	Oct	14.32	91	20.3	2.81	1.87	+75	691	Spacewatch
	L 2008	Feb	10.16	150	21.5	2.99	2.93	+194	G96	MLS

Periodic comet Hill 6 (P/2008 L2)

P/2008 L2	D 2008	Jun	12.44	68	18.3	2.39	2.39	-67	703	Hill
	L 2009	Jan	29.09	68	18.2	2.71	2.71	+164	703	CSS

Periodic comet Hill 7 (P/2008 T4)

P/2008 T4	P 2008	Sep	28.28	100	19.3	2.59	1.64	-87	704	LINEAR
	L 2009	Feb	27.13	68	17.6	2.55	2.80	+65	703	CSS

Periodic comet Hill 8 (P/2009 O3)

P/2009 O3	P 2009	Jul	24.39	100	19.5	2.52	2.18	+67	704	LINEAR
	L 2010	Jan	03.76	44	19.2	3.17	2.86	+230	215	Hasubick

Periodic comet Hill 9 (P/2009 Q1)

P/2009 Q1	P 2009	Aug	16.32	91	19.7	2.86	1.94	+28	691	Spacewatch
	L 2009	Nov	11.81	50	20.2	2.94	2.35	+131	A77	Rinner-Kugel

Periodic comet Hill 10 (232P)

P/1999 XO ₁₈₈	P 1999	Dec	12.34	100	18.6	3.05	2.08		704	LINEAR
	L 2000	Jan	02.33	100	18.1	3.03	2.10		704	LINEAR
P/2009 W1	P 2008	Nov	08.23	150	20.6	3.49	2.50	-327	G96	MLS
	L 2010	May	02.12			3.22	2.98	+213	C51	WISE

Periodic comet Hill 11 (P/2010 A1)

P/2010 A1	D 2010	Jan 06.46	68	17.7	2.37	1.46	+153	703	Hill
	L 2010	Mar 17.14	61		20.2	2.73	2.05	+222	H21 Holmes-Foglia-Devore

Periodic comet Hill 12 (P/2010 A3)

P/2010 A3	P 2009	Oct 14.88	45		18.7	2.46	1.50	-171	J75 Meyer <i>et al.</i>
	L 2010	Jun 12.49	25	16.3		1.81	2.40	+70	349 Kadota

Periodic comet Hill 13 (P/2010 U2)

P/2010 U2	P 2010	Oct 01.08	45	17.8	2.57	1.69	-39	J75	La Sagra
	L 2011	Mar 08.81	60		21.1	2.68	2.91	+120	561 Kelemen

Periodic comet Holmes (17P)

P/1892 V1	D 1892	Nov 07			2.40	1.52	+147		Holmes
	L 1893	Apr 06			2.96	3.57	+297		
P/1899 L1	R 1899	Jun 11	16		2.15	2.54	+44		Perrine
	L 1900	Jan 21	16		2.84	2.42	+268		Barnard
	R 1906	Aug 29	15.5		2.45	2.29	+168		Wolf
	L 1906	Dec 07	16		2.84	1.95	+268		
P/1964 O1	R 1964	Jul 16.31	102	19.2	2.49	1.59	-123	689	Roemer-Lloyd
	L 1965	Jan 02.13	102	18.8	2.37	2.66	+47	689	Roemer
	R 1971	Jun 20.39	154		2.69	1.76	-224	693	Roemer-Ferguson
	L 1973	Jan 30.25	229		3.25	2.60	+365	695	Roemer
	R 1979	Jul 20.30	150	19.5	2.42	2.83	+148	801	Shao-Schwartz
	L 1980	Feb 11.10	150		3.21	2.74	+353	801	
	R 1986	Jun 09.46	150	18	2.26	2.92	+87	675	Gibson
	L 1986	Dec 29.33	91	18.2	2.95	2.12	+290	691	Scotti
	R 1993	May 24.77	60	18	2.20	2.86	+44	372	Seki
	L 1993	Oct 20.41			2.58	1.81	+193	657	Balam
	R 1999	Jun 07.21		20.9	3.17	2.22	-340#	809	
	L 2001	Feb 20.53		18.6	2.93	2.86	+285	867	
	R 2007	May 13.45		15.9	2.05	2.71	+9	H06	Guido <i>et al.</i>

A 2011	Jan	04.51	200		23.0	5.16	4.93	+1342*	F65 Miles
									(Perennial)

Periodic comet Holt-Olmstead (127P)

P/1990 R2	D 1990	Sep	14.35	46	17.2		2.05	1.14	-20	675	Holt-Olmstead
	L 1990	Dec	14.04	150			2.11	1.47	+71	801	
P/1996 S1	P 1996	Jun	16.55		21.2		2.67	2.06	-235#	568	
	L 1996	Sep	20.24	91	20.5		2.36	1.52	-139	691	Scotti
	R 2003	Sep	05.11	60	19.7		2.24	2.08	+85	204	Buzzi
	L 2003	Nov	23.62	60	19.6		2.44	1.53	+164*	360	Nakamura
	R 2009	Jun	03.61	200		21.2	2.39	2.46	-140	F65 Miles	
	L 2010	Feb	14.14	150	19.2		2.34	2.48	+116	G96	MLS

Periodic comet Honda-Mrkos-Pajdušáková (45P)

P/1948 X1	D 1948	Dec	03		15		0.65	0.56	+16		Honda
	L 1949	Jan	10				1.14	0.86	+54		
P/1954 C1	R 1954	Jan	28				0.58	1.18	-8		Mitani
	L 1954	Apr	01				1.17	0.69	+55		
	R 1964	Jun	14.44	102			0.71	1.29	-22	689	Roemer
	L 1964	Jun	15.44	102		16.0	0.70	1.30	-21	689	Roemer
	P 1969	Aug	09				1.01	0.30	-44	370	
	L 1969	Oct	15				0.72	1.28	+23		
	R 1974	Nov	10.07	229			1.06	1.33	-48	695	Roemer-Vaughn
	L 1975	Mar	13.34	154			1.42	0.51	+75	693	Roemer
	R 1980	May	01.45	60	14.5		0.71	1.42	+20	372	Seki
	L 1980	May	14.25				0.86	1.45	+33	568	
	R 1985	Apr	18				0.89	1.67	-37		Clark-Pearce-Athanasou
	L 1985	Apr	20				0.86	1.65	-35		Clark-Pearce-Athanasou
	R 1990	Jun	17.42	91	19.5		1.59	0.90	-87	691	Scotti
	L 1990	Sep	21.51				0.57	1.11	+8	657	Balam
	R 1995	Sep	21.26		21.3		1.70	1.55	-96	568	Tholen
	L 1997	Apr	15.56		22.5		4.53	3.55	+477*	568	
	R 2000	Jul	27.17				3.17	2.43	-246	809	
	L 2001	May	17.47	60	12.6		1.07	1.40	+49	402	Sugie
	R 2006	May	30.77	25	13.5		0.81	1.30	-30	349	Kadota

L 2006	Jun	06.87	28		11.4	0.71	1.29	-23	D87	Mattiazzo
R 2011	Jun	05.39	154	21.9		1.94	1.23	-115#	693	Hergenrother
L 2012	Apr	12.39	180	21.7		2.76	1.76	+197	F51	Pan-STARRS

Periodic comet Howell (88P)

	P 1955	May	22.28	122	18.8		2.19	1.19	-131	675	
P/1981 Q1	D 1981	Aug	29.35	122	15		1.95	1.02	+117	675	Howell
	L 1982	Jan	16.10	122			2.71	2.78	+257	675	
P/1987 E1	R 1987	Mar	06.68	60		18	1.65	2.10	-39	474	Gilmore-Kilmartin
	L 1988	Jan	13.21	150			2.80	2.74	+274	675	
	R 1992	Mar	05.45	229	20.8		3.29	2.30	-358	695	Larson-Scotti
	L 1994	Feb	11.15	91	18.1	20.9	3.25	3.29	+350	691	Scotti
	R 1997	Dec	31.53	91	20.0	21.6	2.80	2.79	-270	691	Scotti
	L 1999	Dec	08.30	100	19.4		3.67	2.69	+437	704	LINEAR
	R 2003	Jan	31.39	181	22.5		3.68	2.80	-437#	291	Scotti
	L 2006	Jan	27.23	150	20.3		4.43	3.69	+655*	G96	MLS
	R 2008	Dec	30.53	91	20.3		2.91	2.82	-286	691	Spacewatch
	L 2011	Feb	06.83	50		18.8	3.87	3.51	+482	A77	Rinner-Kugel

Periodic comet Hug-Bell (178P)

P/1999 X1	P 1999	Oct	10.43	100		19.2	2.15	2.04	+112	704	LINEAR
	L 2000	Feb	07.12	30	20.3		2.66	1.74	+231	734	Hug-Bell
P/2006 O1	R 2006	Jul	16.41	70	18.6		1.95	2.50	+10	734	Tibbets-Hug
	L 2007	Apr	09.12	30	20.1		2.88	2.67	+277*	H36	Hug

Periodic comet Ikeya-Murakami (P/2010 V1)

P/2010 V1	F 2010	Nov	03.85	60	10.5		1.59	2.34	+22	D89	Itagaki
	L 2011	Jan	22.86	25	16.3		1.84	2.07	+102	349	Kadota

Periodic comet Ikeya-Zhang (153P)

P/2002 C1	P 2001	Aug 25.36	120	18.0	3.37	2.58	-206	644	NEAT
	L 2002	Oct 02.42	60	15.7	3.27	3.66	+197	360	Nakamura

Periodic comet IRAS (126P)

P/1983 M1	D 1983	Jun 28			1.81	1.56	-56		IRAS
	L 1984	Feb 22.16	150		2.54	2.67	+182	801	
P/1996 P1	R 1996	Aug 08.71	122	13	1.92	1.19	-82	413	McNaught-Parker
	L 1997	Mar 01.81		16.7	2.15	2.67	+123	118	Galád <i>et al.</i>
	R 2009	May 27.59	18		19.2	3.16	2.55	-271#	D25 Beck-Elenin-Farmer
	L 2011	Feb 07.92	60		20.4	3.71	3.19	+350*	204 Buzzi

Periodic comet (ISON) (P/2011 NO₁)

P/2011 NO ₁	D 2011	Jul 07.30	45	19.4	2.40	1.41	+168	H15	Elenin
	L 2011	Jul 29.33		18.8	2.59	1.58	+190	H06	Sato-Guido-Sostero-Howes-Ligust

Periodic comet Jackson-Neujmin (58P)

P/1936 S1	D 1936	Sep 09		12	1.50	1.52	-24		Jackson
	L 1936	Nov 05		17.5	1.51	0.68	+33		Van B?
P/1970 R1	R 1970	Sep 06			1.47	0.93	+31		Kowal
	L 1970	Nov 25.33	229		1.89	0.97	+111	695	Roemer
	R 1978	Nov 28.12	122	19.5	1.46	1.71	-28	675	Kowal
	L 1978	Nov 29.12	122	19.5	1.46	1.71	-27	675	Kowal
	R 1987	Jul 25.48	150		1.60	2.03	+62	675	Gibson
	L 1987	Sep 20.51	91		1.95	1.93	+119	691	Gehrels-Scotti
	R 1995	May 22.42	91	21.3	2.06	1.45	-137#	691	Scotti
	L 1996	Feb 18.01	150		2.04	1.92	+134*	801	

Periodic comet Jäger (P/1998 U3)

P/1998 U3	D 1998	Oct 23.93	25	12.5	2.48	1.94	-137		Jäger
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L 1999	May	11.50	25	13.9	2.21	2.31	+62	900	Ikari
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Periodic comet Jarnac (P/2010 E2)

P/2010 E2	P 2010	Feb	17.47	150	20.6	2.44	1.56	-50	G96	MLS
	L 2010	Jun	25.75			2.51	2.23	+79	C51	WISE

Periodic comet Jedicke 1 (179P)

P/1995 A1	D 1995	Jan	08.39	91	19.3	21.5	4.69	3.71	+509	691	Jedicke
	L 1996	Jan	21.40	229	22.6		5.53	4.69	+887*	695	Hergenrother-Larson
P/2006 U2	R 2006	Oct	22.19	181	20.7		4.49	3.72	-407#	291	Scotti
	L 2009	Apr	21.19	181	20.8		4.68	4.91	+505	291	Scotti

Periodic comet Jedicke 2 (269P)

P/1996 A1	P 1993	Oct	12.27	91	19.3		5.38	4.43	-673	691	Spacewatch
	L 1998	Jun	23.19	91	21.3	22.5	6.52	5.98	+1042	691	Scotti
P/2012 R2	R 2012	Sep	11.86	150	20.9		5.79	5.01	-794	188	Novichonok-Burhonov

Periodic comet Johnson (48P)

P/1949 Q1	P 1949	Aug	15	25			2.26	1.27	-32		Johnson
	L 1949	Nov	19				2.29	2.20	+64		
P/1956 P1	R 1956	Aug	06				2.26	1.31	+11		Bruwer
	L 1956	Oct	28				2.35	1.74	+94		
	R 1963	Apr	24.47	102		17.5	2.27	2.56	-46	689	Roemer
	L 1964	Jan	09.11	102		19.2	2.67	2.66	+214	689	Roemer
	R 1969	May	17.36	154			3.03	2.05	-317	693	Roemer-Elliott
	L 1970	Oct	03.43	229			2.56	1.65	+187	695	Roemer
	R 1976	May	05.35	229			2.77	1.93	-248	695	Roemer-Heller
	L 1977	Dec	11.10	160			3.10	2.24	+337	801	
	R 1983	Jun	07.61	60		19	2.59	1.64	-179	474	Gilmore-Kilmartin
	L 1984	Dec	24.10	150			3.30	2.51	+387	801	

P 1990	May	26.72	60		19	2.59	1.77	-176	372	Seki
L 1991	Oct	16.52	91	19.7		3.11	2.33	+332	691	Scotti
R 1996	Mar	16.32	60	20.9		3.98	3.14	-595#	709	Offutt
L 1999	Feb	13.21	155	19.9		3.59	3.36	+469*	693	Hergenrother
R 2003	Apr	01.44	250	20.5		3.88	2.95	-560	705	Apache Point
L 2005	Nov	10.45	68	18.2		3.33	2.42	+395	703	CSS
R 2010	Jul	08.52				3.51	3.26	-448	C51	WISE
L 2012	Jan	14.47	41	17.3		2.41	2.96	+107	D90	Hills

Periodic comet Kearns-Kwee (59P)

P/1963 Q1	D 1963	Aug 17	122			2.38	2.50	-112		Kearns-Kwee
	L 1965	Apr 24.28	102		19.6	4.06	3.11	+504*	689	Roemer
P/1971 O1	R 1971	Jul 26.36	229			4.01	3.21	-491#	695	Roemer-Vaughn
	L 1973	Apr 06				2.45	2.24	+129		
	P 1981	Jun 29.77	60	18		2.53	3.13	-154		Seki
	L 1982	Feb 26.10	150			2.33	1.68	+88	801	
	R 1989	Sep 10.29	150	19.9		3.78	2.78	-438	675	Gibson
	L 1992	Jan 31.53	91	22.2		3.76	3.40	+435	691	Scotti
	R 1998	Jul 27.47	120	20.5		3.70	2.97	-416	696	Hergenrother
	L 2000	Mar 09.59	60	17.2		2.69	1.97	+175	360	Nakamura
	R 2008	Jul 09.14	20		18.2	2.95	3.04	-242	J40	Ruiz
	L 2010	Apr 14.95	53		18.7	3.65	2.82	+403	A32	Denzau

Periodic comet Klemola (68P)

P/1965 U1	D 1965	Oct 28				1.91	1.14	+71		Klemola
	L 1965	Dec 13.08	51			2.12	1.77	+117	808	Klemola
P/1976 P1	R 1976	Aug 06				1.77	0.84	-4		Sause
	L 1977	Jan 21.03	150			2.39	2.42	+164	801	
	R 1987	Feb 16.56	150		19	2.35	2.91	-156	675	Gibson
	L 1988	Dec 10.45				4.49	3.57	+507*	568	
	R 1997	Mar 29.41	120	21.4		3.87	3.03	-398#	696	Hergenrother
	L 1998	Dec 17.56	60	19.1	19.8	2.81	2.01	+230	360	Nakamura
	R 2008	Apr 13.07	30		19.2	3.15	2.33	-283	J47	Muler
	L 2010	Jan 15.88	60			3.64	2.94	+360	204	Buzzi

Periodic comet Kobayashi (P/1997 B1)

P/1997 B1	D 1997	Jan 30.71		18	2.08	1.11	-31	411	Kobayashi
	L 1997	May 28.52	60	19.0	2.24	1.94	+87	402	Sugie

Periodic comet Kohoutek (75D)

P/1975 C1	D 1975	Feb 09.77		14	1.58	1.10	+23	029	Kohoutek
	L 1976	Apr 29.32	229	21.5	3.82	2.82	+467*	695	Roemer
P/1980 P1	R 1980	Aug 06.27		19	2.73	1.89	-254	809	Schuster
	L 1981	Jan 31.99	150		1.74	2.02	-75	801	Shao-Schwartz
	R 1986	Jul 30.35	91	19.5	3.72	2.75	-457#	691	Gehrels-Scotti
	L 1988	May 19.33			2.47	2.37	+202	568	

Periodic comet Kojima (70P)

P/1970 Y1	D 1970	Dec 27.79		14	1.81	1.87	+82	380	Kojima
	L 1971	Jun 27.20	229	19.0	2.76	2.14	+263*	695	Roemer
P/1977 X1	P 1977	Nov 12.34	150		2.73	2.04	-193	801	
	L 1978	Mar 13.04	150		2.45	1.99	-72	801	
	R 1985	Oct 19.50	91	20	2.67	2.48	-167	691	Gehrels-Scotti
	L 1986	Feb 11.31	91	18.1	2.44	1.51	-52	691	Gehrels-Scotti
	R 1992	Oct 21.41	91	22.1	3.77	2.78	-485#	691	Scotti
	L 1994	Jun 14.19	91	19.7	2.53	2.63	+116	691	Scotti
	R 1999	Nov 12.26		20.3	3.02	2.15	-308	695	
	L 2001	May 16.57	60	17.7	2.73	1.97	+244	360	Nakamura
	R 2006	Sep 11.38	250	22.3	3.39	2.52	-390	705	Becker <i>et al.</i>
	L 2008	Jun 01.21	100	19.9	2.71	2.20	+239	704	LINEAR

Periodic comet Kopff (22P)

P/1906 Q1	P 1906	Aug 20	40		1.98	1.02	+109		Kopff
	L 1906	Dec 16			2.59	2.43	+227		
P/1919 O1	R 1919	Jul 30			1.73	0.74	+32		Wolf
	L 1919	Dec 11			2.26	2.32	+166		
	R 1926	Jul 13			2.26	2.10	+166		Wolf

L 1926	Nov 02			2.87	1.94	+278	
R 1932	May 25			1.88	0.88	-88	Bobone
L 1933	Jan 24			2.20	2.92	+156	
R 1939	Apr 21			1.72	2.06	+39	Van Biesbroeck
L 1939	Nov 17			2.71	1.98	+249	
R 1945	May 07			1.79	0.78	-96	Giclas
L 1946	Jun 02			2.99	3.88	+295	
R 1951	Apr 12.40			2.35	1.38	-191	Jeffers
L 1951	Nov 29			1.55	2.17	+40	
R 1958	Jun 25.42	102		2.15	2.36	+156	689 Roemer
L 1958	Dec 04.27	102	21.6	3.12	2.36	+318	689 Roemer
R 1963	Dec 18.53	102	18.6	2.11	2.73	-150	689 Roemer
L 1965	Jan 31.14	102	19.0	2.79	3.14	+260	689 Roemer
R 1970	Feb 07.48	154		2.65	2.09	-237	693 Roemer-Elliott
L 1970	Nov 23.52			1.65	2.15	+52	323
R 1976	Feb 25.35	229	20.5	3.42	2.44	-377	695 Roemer-Heller
L 1977	Dec 13.57			2.90	2.40	+281	323
R 1982	Dec 20.51	20		2.62	2.92	-233	711 Barker-Odenwahn
L 1984	Nov 01			3.77	2.83	+449	
R 1988	Feb 11.24		21	4.72	3.75	-709#	568 Alvarez-Belton-Meech
L 1991	Jan 15.10	18.2		3.33	3.16	+360	688
R 1994	Nov 30.50	154	22.8	4.31	4.12	-580	693 Hergenrother-Larson
L 1998	Jan 30.15	91	21.5	4.30	3.96	+577*	691 Scotti
R 2001	Dec 19.42	18.8		3.32	3.25	-358	699
L 2003	Dec 18.85		17.3	3.40	2.74	+372	A32
R 2008	Jan 30.40	68	19.5	3.91	3.01	-481	703 CSS
L 2010	Dec 02.27	150	20.6	4.22	3.24	+556	G96 MLS

Periodic comet Korlevič (203P)

P/1999 WJ ₇	P 1999	Nov 03.41	100	19.0	3.22	2.35	-104	704 LINEAR
	L 2002	Apr 12.35	100	20.1	4.78	3.78	+787*	704 LINEAR
P/2008 R4	S 2008	Sep 03.24	91	20.3	4.10	3.16	-523#	691 Williams-Scotti
	L 2011	May 31.19	45	18.7	3.98	4.00	+477	H15 Elenin-Molotov

Periodic comet Korlevič-Jurić (183P)

	P 1954	Feb	26.17			3.41	2.75	-339	261	
	P 1989	Apr	07.22			3.89	3.01	+42	261	
P/1999 DN ₃	D 1999	Feb	18.97	41	18.7	3.93	3.19	+141	120	Korlevič-Jurić
	L 1999	Jul	07.51	60	17.9	4.01	3.98	+280	360	Nakano
P/2006 Y1	R 2006	Dec	16.36	150	20.0	4.19	3.33	-510#	G96	MLS
	L 2009	Jun	13.85	60	18.2	4.09	3.44	+401*	204	Buzzi

Periodic comet Kowal 1 (99P)

P/1977 H2	D 1977	Apr	24.39	122		4.68	3.67	+113	675	Kowal
	L 1977	Jun	17.11	150	19	4.70	4.07	+167	801	
P/1991 D2	P 1991	Feb	20.72		18	4.89	3.93	-386	413	
	L 1995	Jun	21.44	91	20.5	22.0	6.13	5.38	+1195	691 Scotti
	R 2004	Oct	21.79	113	19.5		5.52	5.69	-816#	D74 Hori-Maeno
	L 2010	Jul	13.31	215		6.26	5.31	+1275*	829	Gil-Hutton

Periodic comet Kowal 2 (104P)

P/1979 B1	D 1979	Jan	27.11	122	17	1.53	1.03	+13	675	Kowal
	L 1979	Mar	28.08	150		18.5	1.70	1.59	+73	801
P/1991 X1	R 1991	Dec	12.80			1.55	0.75	+38	875	Ishikawa
	L 1992	Apr	30.07	150		2.28	1.92	+178*	801	
	R 1997	May	14.47	120	19.3	3.01	3.12	-292#	696	Hergenrother
	L 1998	Mar	22.79		14.8	1.42	1.72	+21	118	Galád <i>et al.</i>
	R 2003	Aug	31.20	181	21.7	2.76	1.83	-252	291	Scotti
	L 2004	Feb	20.76	50		18.1	1.64	2.34	-78	A33 Brinkmann

Periodic comet Kowal-LINEAR (158P)

P/1979 O1	D 1979	Jul	24.21		19	4.74	3.74	-783	675	Kowal
	L 1979	Jul	27.22		19	4.74	3.75	-780	675	Kowal
	P 1990	Sep	23.42			4.68	3.98	-525	260	
	P 1993	Nov	09.36			4.70	3.84	+618	261	
P/2001 RG ₁₀₀	D 2001	Aug	25.25	100		18.5	4.62	3.62	-334	704 LINEAR

(Perennial)

Periodic comet Kowal-Mrkos (143P)

P/1984 H1	D 1984	Apr 23.30	122	15	1.99	1.00	-45	675	Kowal
	L 1984	May 19.93		16.0	1.96	1.07	-19	046	Mrkos
P/2000 ET ₉₀	R 2000	Feb 07.42	100	19.2	2.73	1.92	-145#	704	LINEAR
	L 2001	Jul 22.60	60	18.8	3.52	2.52	+386*	360	Nakamura
	A 2004	Sep 24.20	181	21.8	6.06	5.13	+1545*	291	Scotti

(Perennial)

Periodic comet Kowal-Vávrová (134P)

P/1983 J3	D 1983	May 08.23	122	16	2.58	1.57	+36	675	Kowal
	L 1983	Sep 28.42		18	2.97	3.21	+179	413	
P/1997 X2	P 1997	Dec 03.78	60	20.5	3.72	3.49	-350#	372	Seki
	L 2000	Jul 31.39		20.8	5.05	4.13	+621*	807	2MASS South

Periodic comet Kowalski 1 (P/2005 W3)

P/2005 W3	P 2005	Sep 30.46	68	18.9	3.02	2.53	+38	703	Kowalski
	L 2006	Mar 24.13	150	20.2	3.37	2.47	+213	G96	MLS

Periodic comet Kowalski 2 (P/2006 F1)

P/2006 F1	P 2005	May 10.35	250	21.9	4.84	4.07	-1016	645	SDSS
	L 2007	Sep 01.89	60	18.8	4.15	3.55	-171	204	Buzzi-Aletti-Sambo

Periodic comet Kowalski 3 (P/2007 T2)

P/2007 T2	P 2007	Aug 11.38	50	18.7	0.97	0.45	-39	E12	SSS
	L 2008	Jan 18.34	150	20.8	1.92	0.96	+121	G96	MLS

Periodic comet Kowalski 4 (P/2009 Y2)

P/2009 Y2	D 2009	Dec	20.12	68	18.9	2.51	1.97	-101	703	Kowalski
	L 2010	Apr	02.81	44	19.2	2.34	2.93	+3	215	Hasubick

Periodic comet Kushida (144P)

P/1994 A1	P 1994	Jan	07.49	46	13	1.40	0.50	+26	675	
	L 1994	Jul	09.18	91	19.4	22.7	2.55	2.67	+208*	691
P/2000 O2	R 2000	Jul	25.33			3.41	2.70	-337	809	Hainaut <i>et al.</i>
	L 2000	Jul	27.33	360?		3.40	2.66	-335	809	Hainaut <i>et al.</i>
	R 2007	Jun	18.51	800		4.70	4.15	-588#	568	Meech-Pittichová
	L 2009	Jun	19.91	40	16.9	2.10	2.29	+144	J24	Hernandez

Periodic comet Kushida-Muramatsu (147P)

P/1993 X1	D 1993	Dec	07.66		15.6	2.75	1.77	-3	902		
	L 1995	Jun	23.19	91	21.2	22.6	3.81	3.81	+560*	691	Scotti
P/2000 T2	R 1999	Sep	13.24			21.7	3.89	2.96	-594#	695	Hergenrother?
	L 2002	Mar	20.17	91	21.2		3.22	2.38	+325	691	Spacewatch
	P 2007	Sep	05.34	250	21.7		3.37	2.43	-384	705	Sárneczky <i>et al.</i>
	L 2009	Feb	28.03	44	20		2.86	2.26	+159	215	Hasubick

Periodic comet La Sagra 1 (P/2009 QG₃₁)

P/2009 QG ₃₁	D 2009	Aug	16.05	45		19.3	2.19	1.20	-55	J75	La Sagra
	L 2009	Nov	17.13	150	20.6		2.17	1.69	+38	G96	MLS

Periodic comet La Sagra 2 (P/2009 T2)

P/2009 T2	P 2009	Sep	18.31	68		19.0	2.18	1.32	-117	703	CSS
	L 2010	Mar	19.13	51		18.7	1.90	1.92	+65	H45	Sherrod

Periodic comet La Sagra 3 (233P/2009 WJ₅₀)

2005 JR ₇₁	P	2002	Feb	09.26	150	20.2	1.89	0.95		G96	MLS
	L	2005	May	10.18	100	18.6	2.20	1.89		704	LINEAR
2009 WJ ₅₀	P	2009	Nov	14.27	100	19.4	2.03	1.04	-118	704	LINEAR
	L	2010	Feb	18.20	240	20.3	1.80	1.53	-22	H01	Ryan-Ryan

Periodic comet La Sagra 4 (P/2010 R2)

P/2010 R2	D	2010	Aug	12.99	45	18.7	2.63	1.81	+48	J75	La Sagra
	L	2011	Aug	29.63	224	23.6	3.07	3.25	+430	568	Tholen-Micheli-Elliott

Periodic comet La Sagra 5 (P/2012 NJ)

P/2012 NJ	D	2012	Jul	13.03	45	14.6	1.36	0.63	+30	J75	La Sagra	
	L	2012	Dec	08.72	20		16.8	2.59	2.83	+179	C23	Diepvens

Periodic comet La Sagra 6 (P/2012 S2)

P/2012 S2	D	2012	Sep	23.07	45	18.0	1.44	0.79	+35	J75	La Sagra
	L	2012	Dec	18.32	51	17.8	1.96	1.00	+121	H45	Sherrod

Periodic comet Lagerkvist (P/1996 R2)

P/1996 R2	P	1996	Aug	12.50	100	18.1	2.77	1.80	-160	566	NEAT
	L	1997	Jan	12.73	50		2.61	2.93	-7	587	Sicoli <i>et al.</i>

Periodic comet Lagerkvist-Carsenty (P/1997 T3)

P/1997 T3	P	1997	Oct	01.24	100		4.32	3.33	-161	809	Lagerkvist-Hahn
	L	1999	Feb	13.24	155	19.4	4.56	4.23	+339	693	Hergenrother

Periodic comet Larsen 1 (200P)

P/1997 V1	D 1997	Nov	03.23	91	16.6	19.2	3.30	2.43	+49	691	Larsen
	L 1998	Feb	19.78	60	16.9		3.40	3.90	+158	118	Galád <i>et al.</i>
P/2008 L1	R 2008	Jun	09.44	181	20.2		3.30	3.54	-77	291	Scotti
	L 2009	Jan	21.86	60		19.1	3.37	3.42	+150	204	Buzzi

Periodic comet Larsen 2 (P/2004 H2)

P/2004 H2	D 2004	Apr	19.41	91	21.4		2.62	1.75	-22	691	Larsen
	L 2004	Jul	09.95	30			2.65	1.92	+60	213	Naves-Campas

Periodic comet Larsen 3 (264P)

P/2004 H3	D 2004	Apr	22.33	91	19.2		2.45	1.46	+40	691	Larsen
	L 2004	Jun	13.56	60	19.7		2.51	1.71	+93	360	Nakamura
P/2012 L4	R 2012	Jun	15.92	60	19.7		2.79	1.85	+207	461	Sarneczky

Periodic comet Larson 1 (261P)

P/2005 N3	D 2005	Jul	03.40	150		19.9	2.47	1.58	-160	G96	Larson
	L 2005	Dec	02.11	100	19.5		2.20	2.18	-9	704	LINEAR
P/2012 K4	R 2012	May	22.57	200	20.3		2.37	2.27	-130	F65	Guido-Sostero-Howes

Periodic comet Larson 2 (P/2007 R1)

P/2007 R1	D 2007	Sep	04.37	150	18.2		4.35	3.40	+12	G96	Larson
	L 2009	Feb	16.78	50		20.4	4.91	5.01	+544	A77	Rinner-Kugel-Klotz

Periodic comet Larson 3 (P/2007 V1)

P/2007 V1	P 2007	Sep	10.42	68		19.0	2.75	2.21	-89	703	CSS
	L 2008	Mar	03.15	150	19.6		2.74	2.786	+86	G96	MLS

Periodic comet Larson 4 (250P)

	P	1995	Dec	22.08	91	20.6	2.55	1.74		691	Spacewatch
	P	2002	Oct	09.35	120		3.11	2.17		644	Palomar-NEAT
	L	2004	Feb	29.53	91	20.5	2.57	1.68		691	Spacewatch
P/2011 A1	P	2010	Dec	11.47	68	19.7	2.22	1.75	+27	703	CSS
	L	2011	Apr	29.24	68	19.6	2.51	1.97	+166	703	CSS

Periodic comet Lemmon 1 (P/2008 CL₉₄)

P/2008 CL ₉₄	D	2008	Feb	08.40	150		20.7	5.63	4.75	+579	G96	MLS
	L	2009	Jun	13.93	60		19.6	5.99	5.63	+1071	204	Buzzi

Periodic comet Lemmon 2 (P/2011 VJ₅)

P/2011 VJ ₅	D	2011	Nov	03.46	150	20.3	1.55	1.39	-35	G96	MLS
	L	2012	Mar	30.37	150	18.6	1.88	0.89	+113	G96	MLS

Periodic comet Lemmon 3 (P/2011 FR₁₄₃)

P/2011 FR ₁₄₃	P	2011	Mar	05.27	91		20.7	3.74	2.80	-5	691	Spacewatch
	L	2012	Jun	10.53	40		20.0	4.57	3.62	+458	E07	Herald

Periodic comet Lemmon 4 (P/2012 SB₆)

P/2012 SB ₆	P	2012	Sep	14.38	68	19.2	2.43	1.49	-48	703	CSS
	L	2012	Dec	11.20	68	18.8	2.42	1.86	+40	703	CSS

Periodic comet Lemmon-PANSTARRS (P/2012 WA₃₄)

P/2012 WA ₃₄	P	2011	Sep	26.44	180	21.9	4.06	3.07	-486	F51	Pan-STARRS
	L	2013	Jan	18.22	150	20.2	3.17	2.39	-7	G96	MLS

Periodic comet Levy 1 (P/1991 L3)

P/1991 L3	D	1991	Jun	14	40	7.9	1.06	1.28	-24		Levy
	L	1993	Jan	21.51	91		21.8	6.22	5.37	+563	691 Scotti

Periodic comet Levy 2 (255P)

P/2006 T1	F	2006	Oct	02.50	36	10.9	0.99	1.34	-5	G92	Levy
	L	2006	Dec	01.84	25	16.8	1.25	1.58	+55	349	Kadota
P/2011 Y1	S	2011	Dec	17.06	150	19.8	1.08	0.39	-29	G96	MLS
	L	2012	Feb	15.15		19.6	1.10	0.29	+31	H06	Sato-Guido-Sostero-Howes

Periodic comet Lexell (D/1770 L1)

D/1770 L1	D	1770	Jun	14	06		1.23	0.21	-61		Messier
	L	1770	Oct	03			1.10	1.20	+50		Messier

Periodic comet Li (P/1998 Y2)

P/1998 Y2	P	1998	Sep	23.36	41		2.62	1.87	-85	703	Spahr
	L	1999	Apr	08.45	60	17.0	2.68	3.21	+112	402	Sugie-Ikari

Periodic comet LINEAR 1 (P/1998 G1)

P/1998 G1	D	1998	Apr	02.13	100	18.9	3.15	2.34	-228	704	LINEAR
	L	1998	Jun	17.16	122	18.5	2.66	3.08	-153	696	Hergenrother

Periodic comet LINEAR 2 (P/1998 VS₂₄)

P/1998 VS ₂₄	P 1998	Oct	14.38		18.5		3.41	2.49	-19	699
	L 1999	Jan	14.17	150	19.1		3.42	3.01	+73	693 Larson-Hergenrother

Periodic comet LINEAR 3 (187P)

P/1999 J5	D 1999	May	12.36	100		19.0	3.71	2.76	-1	704 LINEAR
	L 1999	Jul	31.59	60	18.7		3.72	3.19	+80	402 Sugie
P/2007 E3	R 2007	Mar	09.38	150	21.2		4.19	3.22	-577#	G96 Christensen
	L 2008	Aug	28.84	50		18.2	3.70	3.94	-39	A77 Rinner-Kugel

Periodic comet LINEAR 4 (241P)

P/1999 U3	D 1999	Oct	30.32	100		18.5	1.86	1.03	-19	704 LINEAR
	L 2000	Feb	29.45	60	17.1		2.10	1.72	+103	360 Nakamura
P/2010 P2	R 2010	Aug	12.44	25	17.6		1.92	2.46	+25	H06 Sato
	L 2011	Apr	26.20	25	20.7		3.14	2.94	+282	H06 Sato

Periodic comet LINEAR 5 (239P)

P/1999 XB ₆₉	D 1999	Nov	14.43	100		19.1	1.91	0.98	-95	704 LINEAR
	L 2000	May	01.22	230	18.8		1.82	1.65	+74	695 Hergenrother
P/2010 C2	P 2008	Oct	31.24	150		21.2	3.01	2.13	-267#	G96 MLS
	L 2010	Feb	02.56				2.51	2.32	+192*	C51 WISE

Periodic comet LINEAR 6 (194P)

P/2000 B3	D 2000	Jan	27.24	100		18.9	1.71	0.81	-18	704 LINEAR
	L 2000	May	29.49	60	17.6		1.99	1.95	+105	360 Nakamura
P/2007 W2	R 2007	Nov	17.07	60		19.5	1.97	1.10	-101	204 Buzzi-Luppi
	L 2008	May	06.18	100	19.4		1.84	1.71	+70	704 LINEAR

Periodic comet LINEAR 7 (165P)

P/2000 B4	D 2000	Jan	02.35	100		19.1	6.88	5.97	-164	704	LINEAR
	L 2003	Apr	25.21	91	21.5		8.60	7.70	+1044	691	Spacewatch

Periodic comet LINEAR 8 (252P)

P/2000 G1	D 2000	Apr	07.45	100	17.9		1.08	0.22	+29	704	LINEAR
	L 2000	Jul	07.30	230			1.81	0.90	+120	695	Hergenrother-Larson
P/2011 L5	R 2011	Jun	09.42	181	22.7		2.55	1.86	+208	291	Scotti
	L 2011	Jun	10.45	181			2.55	1.86	+209	291	Scotti

Periodic comet LINEAR 9 (P/2000 QJ₄₆)

P/2000 QJ ₄₆	D 2000	Aug	24.27	100		18.5	2.21	1.21	-108	704	LINEAR
	L 2000	Nov	19.19	59		16.5	1.95	1.45	-21	699	LONEOS

Periodic comet LINEAR 10 (P/2000 R2)

P/2000 R2	D 2000	Sep	03.15	100		18.7	1.39	0.48	-10	704	LINEAR
	L 2000	Nov	29.46	60			1.63	1.08	+78	360	Nakamura

Periodic comet LINEAR 11 (216P)

P/2001 CV ₈	D 2001	Feb	01.35	100		19.0	2.15	1.24	-11	704	LINEAR
	L 2001	May	16.54	60	19.3		2.27	1.81	+93	360	Nakamura
P/2009 D1	R 2009	Feb	19.53	181	20.9		2.38	1.84	+132	291	Scotti
	L 2009	Apr	29.94	50		19.2	2.63	1.63	+201	A77	Klotz-Kugel-Rinner

Periodic comet LINEAR 12 (217P)

P/2001 MD ₇	D 2001	Jun	21.31	100		17.6	2.24	1.26	-162	704	LINEAR
	L 2002	Apr	06.82		16.9		1.96	2.33	+128	215	

P/2009 F3	R 2009	Mar 17.50	25		18.2	2.35	2.65	-176	H06 Guido-Sostero-Camilleri
	L 2010	Apr 05.85	35		20.1	2.62	2.56	+209	160 Prosperi <i>et al.</i>

Periodic comet LINEAR 13 (228P)

P/2001 YX ₁₂₇	D 2001	Dec 09.26	100		20.4	3.82	2.84	-453	704 LINEAR
	L 2004	May 29.25	91	21.5		3.81	2.99	+449	691 Spacewatch
P/2009 U2	R 2009	Oct 18.45	181	20.9		4.15	3.25	-674	291 Scotti
	L 2012	May 17.92	44	19.1		3.58	2.99	+268	215 Hasubick

Periodic comet LINEAR 14 (P/2002 AR₂)

P/2002 AR ₂	D 2002	Jan 06.15	100		18.9	2.07	1.39	-10	704 LINEAR
	L 2002	Apr 07.88	60	19.0		2.20	2.30	+81	118 Gajdos-Toth

Periodic comet LINEAR 15 (214P)

P/2002 CW ₁₃₄	P 2002	Jan 15.53	120		19.9	1.88	1.33	-44	608 NEAT
	L 2002	May 12.57	60	19.0		1.95	1.09	+73	360 Nakamura
P/2009 B4	R 2009	Jan 31.49	56		19.6	1.86	1.63		H36 Hug
	L 2009	May 03.71	36		20.1	2.11	1.16	+118	415 Herald

Periodic comet LINEAR 16 (P/2002 EJ₅₇)

P/2002 EJ ₅₇	P 2002	Feb 16.42	120		19.5	2.68	1.70	+59	644 NEAT
	L 2002	May 12.50	60	19.5		2.88	2.44	+144	360 Nakamura

Periodic comet LINEAR 17 (221P)

P/2002 JN ₁₆	P 2002	Apr 14.55	120		18.8	2.01	1.09	-104	608 NEAT
	L 2002	Sep 01.20	36	16.5		1.82	1.44	+36	848 Holvorcem-Schwartz
P/2009 L1	R 2009	Jun 01.40	36		20.2	2.10	2.11	+128	H10 Elenin-Schwartz
	L 2009	Sep 27.99	60		20.9	2.68	1.70	+246	204 Buzzi

Periodic comet LINEAR 18 (219P)

P/2002 LZ ₁ 1	D	2002	Jun	05.30	100	18.1	2.95	1.96	-283	704	LINEAR
	L	2004	Jan	13.48	60	19.0	3.02	2.56	+304	372	Seki
P/2009 H1	R	2009	Apr	17.45	25	18.8	3.08	2.51	-322	H06	Guido-Sostero-Camilleri-Prosperi
	L	2011	Jan	09.91	30	20.6	3.04	2.51	+310	J47	Muler-Ruiz-Naves

Periodic comet LINEAR 19 (225P)

P/2002 T1	P	2002	Sep	29.42	120	16.3	1.20	0.21	-9	608	NEAT
	L	2003	Jan	05.94	30	19.9	1.62	0.87	+90	J95	Birtwhistle
P/2009 Q3	R	2009	Aug	28.49	181	21.1	1.32	0.93	+3	291	Scotti
	L	2009	Nov	24.47	68	19.9	1.68	0.92	+91	703	CSS

Periodic comet LINEAR 20 (P/2002 T5)

P/2002 T5	D	2002	Oct	05.39	100	18.4	4.21	3.65	-266	704	LINEAR
	L	2005	Apr	05.62	60	18.6	5.24	4.48	+648	360	Nakamura

Periodic comet LINEAR 21 (247P)

P/2002 VP ₉₄	P	2002	Nov	05.31	100	18.8	1.84	0.85		704	LINEAR
	L	2003	Jan	21.28	100	18.2	1.51	0.92		704	LINEAR
P/2010 V3	D	2010	Nov	15.39	100	18.3	1.58	0.68	-50	704	LINEAR
	L	2011	Apr	05.95	30	18.7	1.79	1.20	+92	B54	Bel

Periodic comet LINEAR 22 (218P)

P/2003 H4	D	2003	Apr	29.33	100	19.0	1.71	0.74	-15	704	LINEAR
	L	2003	Aug	02.90	60		1.85	1.19	+81	118	Galád <i>et al.</i>
P/2009 F7	P	2009	Mar	31.30	100	19.6	1.86	0.90	-83	704	LINEAR
	L	2009	May	24.91		18.7	1.72	0.86	-28	204	Buzzi

Periodic comet LINEAR 23 (256P)

P/2003 HT ₁₅	P 2003	Jan	27.48	100		19.8	2.73	2.43	-80	704	LINEAR
	L 2003	Jul	10.89	60		19.7	2.73	2.36	+84	204	Buzzi
P/2012 B2	R 2012	Jan	26.53	70		19.8	3.73	2.82	-416	372	Seki-Shimomoto-Sato
	L 2012	Feb	19.69	25	20.0		3.64	2.90	-392	349	Kadota

Periodic comet LINEAR 24 (197P)

P/2003 KV ₂	D 2003	May	23.16	100		18.4	1.24	0.75	-49	704	LINEAR
	L 2003	Aug	02.39	25		17.7	1.10	0.63	+23	E14	Higgins
P/2008 E2	R 2008	Mar	03.47	68		18.7	1.43	0.79	-77	703	Hill
	L 2008	Oct	23.64	36		19.9	2.09	1.40	+158	415	Herald
	R 2013	Jan	20.52		19.7		1.34	1.46	-63	H06	iTelescope

Periodic comet LINEAR 25 (265P)

P/2003 O2	D 2003	Jul	29.38	100	18.6		1.57	1.13	-38	704	LINEAR
	L 2003	Dec	15.89	30		18.1	1.87	0.96	+101	620	Sanchez-Stoss-Nomen
P/2012 M1	R 2012	Jun	18.44	51	19.3		1.50	2.13	+8	H06	Sato

Periodic comet LINEAR 26 (P/2003 O3)

P/2003 O3	D 2003	Jul	30.39	100		18.9	1.26	0.51	-15	704	LINEAR
	L 2003	Dec	15.02	30		20.7	1.85	0.98	+123	J95	Birtwhistle

Periodic comet LINEAR 27 (P/2003 U2)

P/2003 U2	P 2003	Sep	19.17	100		18.3	1.88	1.181	-77	704	LINEAR
	L 2004	Jan	05.83	60	19.6		1.74	1.92	+32	204	Buzzi-Sambo-Di Filippo

Periodic comet LINEAR 28 (236P)

P/2003 UY ₂₇₅	D 2003 Sep	27.37	100		19.7	2.01	1.48		704 LINEAR
	L 2003 Dec	28.58	60	19.8		2.43	1.52		360 Nakamura
P/2010 K1	P 2010 May	18.40		18.8		2.09	2.10	-113	H06 Sato-Guido-SOstero-Suzuki
	L 2011 Feb	06.80	44	19.5		2.25	2.11	+151	215 Hasubick

Periodic comet LINEAR 29 (209P)

P/2004 CB	P 2003 Dec	03.41	100		19.4	1.82	1.29	-121	704 LINEAR
	L 2004 Aug	25.59	50	20.4		2.05	1.15	+145	E12 Siding Spring Survey
P/2008 X2	R 2008 Dec	04.39	56		19.7	1.93	1.29	-133	H36 Hug
	L 2009 Aug	15.67	36		19.7	1.83	0.93	+122	415 Herald

Periodic comet LINEAR 30 (P/2004 FY₁₄₀)

P/2004 FY ₁₄₀	D 2004 Mar	27.33	100		18.1	4.13	3.14	-133	704 LINEAR
	L 2004 Jul	12.40	50		18.8	4.11	4.17	-26	E12 SSS

Periodic comet LINEAR 31 (251P)

P/2004 HC ₁₈	D 2004 Apr	17.35	100		19.1	1.81	0.84	-62	704 LINEAR
	L 2004 Oct	12.44	60	19.1		2.01	1.99	+116	360 Nakamura
P/2011 J1	R 2011 May	01.47	181	21.5		2.04	2.26	+123	291 Scotti
	L 2011 May	05.48	181			2.06	2.24	+127	291 Scotti

Periodic comet LINEAR 32 (160P)

	P 1996 Sep	08.44				2.13	1.19	-62	566
P/2004 NL ₂₁	D 2004 Jul	15.34	100		17.0	2.21	1.40	-90	704 LINEAR
	L 2005 Jan	04.89	44	19.1		2.19	2.22	+84	215 Hasubick
	R 2012 May	27.42		20.0		2.27	2.09	-114	H06 Sostero <i>et al.</i>

Periodic comet LINEAR 33 (P/2004 WR₉)

P/2004 WR ₉	D 2004	Nov 22.32	100		18.7	1.98	1.04	-50	704	LINEAR
	L 2005	Mar 30.52		19.2		2.07	1.77	+78	360	

Periodic comet LINEAR 34 (222P)

P/2004 X1	D 2004	Dec 07.08	100	18.7		0.97	0.44	+35	704	LINEAR
	L 2005	Feb 06.84	60			1.61	1.11	+97	118	Gajdos-Vilagi
P/2009 MB ₉	R 2009	Jun 29.47	50		18.3	1.25	0.32	-64	E12	McNaught
	L 2009	Dec 17.79	25	20.2		1.72	0.81	+108	349	Kadota

Periodic comet LINEAR 35 (P/2005 Q4)

P/2005 Q4	D 2005	Aug 31.40	100		19.1	1.78	1.69	-28	704	LINEAR
	L 2006	May 01.21	180	21.5		2.67	2.56	+215	290	Hergenrother-Keller

Periodic comet LINEAR 36 (277P)

P/2005 YQ _{127P}	2005	Sep 15.42	100		19.0	1.97	1.64	-50	704	LINEAR
	L 2006	Mar 19.87	44	18.0		2.24	1.88	+136	215	Hasubick
P/2013 A3	R 2013	Jan 07.10	181		21.4	2.30	2.62	-150	291	Scotti

Periodic comet LINEAR 37 (176P=(118401)=P/1999 RE₇₀)

P/1999 RE ₇₀	P 1999	Aug 17.37	91	19.7		2.70	1.75	-174	691	Spacewatch (Perennial)
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Periodic comet LINEAR 38 (249P)

P/2006 U1	P 2006	Oct 19.40	100		17.3	1.12	0.40	+52	704	LINEAR
	L 2007	Jan 13.78	44	19.0		2.17	1.46	+138	215	Hasubick

P/2011 A4	P 2011	Jan	13.49		20.0		1.66	1.61	-93	H06 Sostero <i>et al.</i>
	L 2012	Jan	03.27	150	20.6		3.23	2.27	+262	G96 MLS

Periodic comet **LINEAR 39 (P/2008 A2)**

P/2008 A2	D 2008	Jan	13.22	100		20.1	2.06	1.15	-151	704 LINEAR
	L 2008	Mar	06.86	70	19.6		1.69	1.21	-97	585 Baransky-Zhdanov

Periodic comet **LINEAR 40 (P/2008 WZ₉₆)**

P/2008 WZ ₉₆	D 2008	Nov	30.06	100		18.3	1.73	1.53	-55	704 LINEAR
	L 2009	Apr	13.82	60		18.5	1.81	2.52	+80	204 Buzzi

Periodic comet **LINEAR 41 (230P/2009 U6)**

P/1997 A2	P 1997	Jan	10.52	100		17.2	1.50	1.31		566 NEAT
	L 1997	Jan	11.49	100		18.3	1.49	1.32		566 NEAT
P/2002 Q15	P 2002	Jul	24.49	120		18.3	2.93	1.93		644 NEAT
	L 2002	Sep	16.29	120		17.8	2.60	1.86		644 NEAT
P/2009 U6	P 2009	Oct	19.80	25	16.8		1.66	1.79	+72	349 Kadota
	L 2011	Apr	30.44	180	21.5		4.51	3.55	+630	F61 Pan-STARRS

Periodic comet **LINEAR 42 (P/2010 A2)**

P/2010 A2	P 2009	Dec	10.32	100			2.01	1.11	+6	704 LINEAR
	L 2010	Apr	17.84	30		19.8	2.08	1.91	+135	B82 Häusler

Periodic comet **LINEAR 43 (P/2010 A5)**

P/2010 A5	D 2010	Jan	14.45	100		17.8	1.98	1.75	-95	704 LINEAR
	L 2010	Aug	07.87	35		19.0	2.06	1.37	+111	235 Ligustri-Brunato

Periodic comet LINEAR 44 (234P)

P/2002 CF ₁₄₀	P 2001	Dec	26.51	120		19.6	3.02	2.38		608	Haleakala-NEAT
	L 2002	May	06.17	100	19.0		2.88	2.55		704	LINEAR
P/2010 E4	P 2010	Jan	15.62				2.86	2.66	+23		C51 WISE
	L 2010	Jul	08.59				3.03	2.77	+197		C51 WISE

Periodic comet LINEAR 45 (235P)

P/2002 FA ₉	P 2001	Dec	26.56	120		20.0	2.79	2.52		608	Haleakala-NEAT
	L 2002	May	25.22	120		19.3	2.78	2.22		644	Palomar-NEAT
P/2010 F2	P 2010	Mar	12.34	68		18.0	2.75	1.76	-10	703	CSS
	L 2010	Jul	04.19	181	20.7		2.81	2.79	+104	291	Scotti

Periodic comet LINEAR 46 (237P)

P/2002 LN ₁₃	D 2002	May	17.32	100		18.9	2.54	3.11		704	LINEAR
	L 2002	Aug	09.27	120		19	2.43	3.43		608	Haleakala-NEAT
P/2010 L2	D 2010	Jun	10.30				2.70	2.16	+190		C51 WISE
	L 2011	Nov	02.34	150	21.4		4.27	3.30	+700		G96 MLS

Periodic comet LINEAR 47 (P/2010 WK = P/2010 PB₅₇)

P/2010 PB ₅₇	P 2010	Aug	10.39	91			1.92	1.63	-70	691	Spacewatch
	L 2011	Apr	21.84	35		19.0	2.57	2.63	+184	160	Prosperi <i>et al.</i>

Periodic comet LINEAR-Catalina (P/2003 WC₇)

P/2003 WC ₇	D 2003	Nov	18.14	100		19.6	1.87	1.16	-80	704	LINEAR
	L 2004	Apr	11.47	60	17.9		1.80	2.14	+66	360	Nakamura

Periodic comet LINEAR-Grauer (P/2010 TO₁₀)

P/2010 TO ₁₀	D	2010	Oct	01.31	100	19.4		5.38	4.39	+708	704	LINEAR
	L	2012	Nov	17.89	40	21		5.82	4.84	+1486	C32	Arkhyz-Novichonok-Plaksa

Periodic comet LINEAR-Hill 1 (P/2004 V5-A)

P/2004 V5-A	P	2004	Nov	10.47	68	17.6		4.45	4.27	-110	703	CSS
	L	2006	May	25.89	30		18.9	5.02	4.52	+451	213	Naves-Campas

Periodic comet LINEAR-Hill 1 (P/2004 V5-B)

P/2004 V5-B	P	2004	Nov	10.47	68	17.6		4.45	4.27	-110	703	CSS
	L	2006	May	25.89	30		18.9	5.02	4.53	+452	213	Naves-Campas

Periodic comet LINEAR-Hill 2 (P/2008 QP₂₀)

P/2008 QP ₂₀	D	2008	Aug	25.40	100		20.7	1.84	1.08	-69	704	LINEAR
	L	2009	Feb	21.13	100	19.8		1.99	1.76	+110	704	LINEAR

Periodic comet LINEAR-Mueller (188P)

P/1998 S1	P	1998	Sep	17.45	59		17.3	2.57	1.64	-46	699	LONEOS
	L	2001	Mar	20.58	103			5.15	4.22	+869*	867	Oribe
P/2007 J7	R	2007	May	13.79	50	18.2		2.94	3.22	-216#	E12	McNaught
	L	2009	Apr	21.18	181	19.7		3.84	3.85	+492	291	Scotti

Periodic comet LINEAR-NEAT 1 (P/2001 BB₅₀)

P/2001 BB ₅₀	D	2001	Jan	21.47	100		18.6	2.35	2.05	-9	704	LINEAR
	L	2001	Jun	18.60	30	18.2		2.63	1.94	+139	320	Clark

Periodic comet LINEAR-NEAT 2 (193P)

P/2001 Q5	D 2001	Aug	17.40	100	18.8	2.11	1.55	+67	704	LINEAR
	L 2002	Jan	13.52	60	19.4	2.58	2.23	+216	360	Nakamura
P/2007 U2	R 2007	Oct	21.45	102	19.8	2.33	2.47	-122	413	Sárneczky-Kiss
	L 2009	Jan	29.77	40	20.8	3.13	2.63	+344	130	Casali <i>et al.</i>

Periodic comet LINEAR-NEAT 3 (204P)

P/2001 TU ₈₀	D 2001	Oct	13.44	100	19.8	1.99	1.71	-58	704	LINEAR
	L 2002	Apr	17.82	26	18.2	2.21	1.77	+129	170	Manteca
P/2008 R5	R 2008	Sep	08.43	181		2.09	2.15	-92	291	Scotti
	L 2009	Apr	28.91	70	19.1	2.26	1.94	+141	585	Baranskyy-Ponomarenko-Churyu

Periodic comet LINEAR-NEAT 4 (231P)

P/2003 CP ₇	P 1950	Apr	20.27	120	15.6	4.91	5.54		261	DSS (Meyer)
	D 2003	Feb	01.39	100	19.0	3.05	2.20	-87	704	LINEAR
	L 2003	Jun	26.17	30	19.6	3.03	3.14	+58	448	Stevens
P/2009 X1	R 2009	Dec	11.32	56	20.0	3.81	2.85	-521	H36	Hug
	L 2012	Jul	20.70	150	21.1	3.61	2.97	+431	188	Sergeyev-Novichonok

Periodic comet LINEAR-NEAT 5 (224P)

P/2003 XD ₁₀	D 2003	Nov	20.45	100	19.5	1.95	1.13	+65	704	LINEAR
	L 2004	Feb	15.04		20.8	2.23	1.53	+151	204	
P/2009 Q2	R 2009	Aug	27.39	181	21.5	2.32	1.48	-157	291	Scotti
	L 2009	Nov	11.84	40	20.0	2.09	1.27	-81	130	Marinello <i>et al.</i>

Periodic comet LINEAR-NEAT 6 (P/2004 R3)

P/2004 R3	D 2004	Sep	10.30	100	20.1	2.30	1.36	+109	704	LINEAR
	L 2004	Nov	16.99	60	20.4	2.52	1.77	+177	204	Buzzi

Periodic comet LINEAR-NEAT 7 (P/2004 T1)

P/2004 T1	P 2004	Jul	16.38	100	18.4	2.00	1.38	-114	704	LINEAR
	L 2005	Mar	07.47	60	19.0	2.03	2.13	+120	360	Nakamura

Periodic comet LINEAR-Skiff (P/2001 R6)

P/2001 R6	D 2001	Aug	19.40	100	18.9	2.19	1.40	-69	704	LINEAR
	L 2002	Feb	01.44	60	19.4	2.26	2.28	+97	360	Nakamura

Periodic comet LINEAR-Spacewatch (P/2000 S4)

P/2000 S4	D 2000	Sep	01.19	100	19.0	2.31	1.35	-48	704	LINEAR
	L 2000	Nov	21.10	91	21.0	2.29	1.99	+33	691	Spacewatch

Periodic comet LONEOS 1 (201P)

P/2001 R1	P 2001	Aug	09.42	120		2.39	1.40	-192	644	NEAT
	L 2002	Mar	11.81	44	16.2	1.38	1.76	+22	215	Hasubick
P/2008 Q4	R 2008	Aug	31.09	20	16.5	1.38	1.88	+22	A71	Jäger-Vollmann
	L 2009	Mar	25.87	30	20.8	2.68	1.75	+233	B42	Nevski

Periodic comet LONEOS 2 (P/1999 RO₂₈)

P/1999 RO ₂₈	D 1999	Sep	07.33	59	18.4	1.27	0.27	-25	699	LONEOS
	L 1999	Nov	13.28	230	18.9	1.34	0.40	+42	695	Hergenrother

Periodic comet LONEOS 3 (150P)

	P 1978	Mar	06.61			1.83	1.00	+44	413	
	P 1986	Mar	14.73	18		2.22	1.76	+143	413	
P/2000 WT ₁₆₈	P 2000	Sep	27.45		18.9	2.38	2.40	-177	704	LINEAR
	L 2001	May	14.39	25	18.4	1.83	1.44	+52	428	Broughton

R 2007	Nov	12.39	68	19.7	3.50	2.56	-380#	703	CSS
L 2010	Apr	20.96			4.14	4.00	+511*	C51	WISE

Periodic comet LONEOS 4 (182P)

P/2001 WF ₂	P 2001	Oct	26.53	120	19.9	1.57	0.64	-95	608	NEAT
	L 2002	May	14.36	120	21.3	1.67	0.76	+105	644	NEAT
P/2006 W2	R 2006	Nov	18.27	68	19.6	1.45	0.51	-80	703	CSS
	L 2007	Apr	26.17	154	19.9	1.44	0.55	+79*	693	Hergenrother
	R 2011	Nov	17.13	51	20.4	1.71	0.86	-109	H06	Sato <i>et al.</i>
	L 2012	Apr	10.21		19.6	1.12	0.66	+36	H06	Sato-Bryssinck

Periodic comet LONEOS 5 (159P)

	P 1989	Dec	17.18			3.66	2.74	+56	261	
	P 1991	Feb	19.25			4.46	3.64	+485	261	
P/2003 UD ₁₆	D 2003	Oct	16.407	59	18.8	3.73	2.80	-139	699	LONEOS
	L 2006	Feb	18.08	36		5.12	4.23	+717*	941	Ferrando-Ferrando

Periodic comet LONEOS 6 (P/2004 A1)

P/2004 A1	P 2003	Oct	25.45	91	20.4	5.60	5.65	-305	691	Spacewatch
	L 2007	Aug	07.36	100	20.3	6.82	6.85	+1077	474	Gilmore

Periodic comet LONEOS 7 (P/2004 VR₈)

P/2004 VR ₈	D 2004	Nov	03.35		17.6	3.28	2.34	-303	699	LONEOS
	L 2006	Jun	30.93	44	18.1	3.27	2.98	+301	215	Hasubick

Periodic comet LONEOS 8 (P/2005 GF₈)

P/2005 GF ₈	D 2005	Apr	02.43	59	17.8	3.00	2.05	-137	699	LONEOS
	L 2005	Sep	15.41	50	17.7	2.84	3.24	+29	E12	SSS

Periodic comet LONEOS 9 (P/2005 SB₂₁₆)

P/2005 SB ₂₁₆	P	2005	Sep	23.23	91	20.2	4.79	3.83	-506	691	Spacewatch
	L	2009	Jun	23.18	181	21.8	5.97	6.03	+863	291	Scotti

Periodic comet LONEOS 10 (267P)

P/2006 Q2	D	2006	Aug	29.27	59	18.2	1.34	0.35	-5	699	LONEOS
	L	2006	Oct	17.28	68	20.7	1.43	0.47	+44	703	CSS
P/2012 R1	R	2012	Sep	11.94	40	20.1	1.36	0.41	+20	D00	Nevski <i>et al.</i>

Periodic comet LONEOS-Christensen (P/2005 RV₂₅)

P/2005 RV ₂₅	D	2005	Sep	11.28	59	17.7	3.90	3.07	-422	699	LONEOS
	L	2006	Jan	28.13	150	20.6	3.75	3.91	-283	G96	MLS

Periodic comet LONEOS-Hill (P/2005 XA₅₄)

P/2005 XA ₅₄	D	2005	Dec	04.38	59	18.5	2.04	1.48	-94	699	LONEOS
	L	2006	Jun	29.89	25	18.6	2.15	1.97	+114	J97	Climent

Periodic comet LONEOS-Tucker (P/1998 QP₅₄)

P/1998 QP ₅₄	P	1998	Aug	02.41	59	17.8	1.98	1.24	-65	699	LONEOS
	L	1999	Feb	14.15	150	19.6	2.22	2.24	+131	693	Larson-Hergenrother

Periodic comet Longmore (77P)

P/1975 L1	D	1975	Jun	10.65	17	19.0	2.76	1.91	+218	413	Longmore
	L	1975	Oct	04.13			3.12	3.01	+334	807	
P/1981 A1	R	1981	Jan	02.80	60	18	2.99	2.32	-292	372	Seki

L 1982	Jul	26.52	60		18.7	2.94	2.12	+278	474	Gilmore-Kilmartin
R 1986	Dec	29.38	91	20.5		4.09	3.25	-653#	691	Scotti
L 1988	May	19.42				2.58	2.40	-146	568	
R 1994	Sep	27.48	91	20.5		3.26	3.78	-377	691	Scotti
L 1998	Nov	22.27	155	21.0		4.87	4.14	+1140*	693	Hergenrother
R 2001	Dec	21.44	100	18.3		2.84	2.40	-257	704	LINEAR
L 2003	Aug	02.61	25		17.7	3.09	2.22	+332	E14	Higgins
R 2008	Jan	07.92	50		20.2	3.81	2.98	-547	A77	Rinner-Kugel
L 2011	Sep	27.18	45	19.9		4.47	3.48	+811	H15	Elenin-Molotov

Periodic comet Lovas 1 (93P)

P/1980 X1	D 1980	Dec	05.06	60	17		1.92	1.22	+93	561	Lovas
	L 1981	Apr	03.08	150		19.5	2.63	2.13	+212	801	
P/1989 N2	R 1989	Jul	05.77	60	18		1.95	2.06	-97	372	Seki
	L 1990	Jan	24.49		15.0		1.99	1.09	+106	892	
	R 1998	Jun	17.44	120	17.7		2.07	2.30	-119	696	Hergenrother
	L 2000	May	01.26		21.5		4.65	3.87	+565*	695	
	R 2007	Jul	13.40	100	18.2		2.30	1.87	-157#	704	LINEAR
	L 2009	Apr	02.24	155	20.9		4.18	3.22	+472	G96	MLS

Periodic comet Lovas 2 (184P)

P/1986 W1	D 1986	Nov	28				1.73	0.83	+87		Lovas
	L 1987	Mar	03.16	91	20		2.33	2.31	+182	691	Gehrels-Scotti
P/2007 A1	R 2007	Jan	09.07	68	16.8		1.43	1.76	+28	703	CSS
	L 2007	Jan	20.82	40		19.6	1.46	1.84	+39	J76	Reyes

Periodic comet Machholz 1 (96P)

P/1986 J2	D 1986	May	12	13	11		0.66	0.63	+19		Machholz
	1988	May	17.40				21.1	5.74	5.07	+755	809
	A 1989	Apr	06.33				22.5	5.85	5.87	-837	807
											(Perennial)

Periodic comet Machholz 2 (141P)

P/1994 P1	D 1994 Aug 13.43	25	10	0.97	0.32	-36	Machholz
	L 1995 Mar 30.39			2.55	1.72	+192	413 McNaught
P/1999 P1	P 1999 Aug 03.55		20.8	1.95	1.23	-128	413 McNaught
	L 2000 Feb 11.47	60	15.6	1.26	0.52	+64	360 Nakamura
	R 2005 Feb 27.76	20		14.3	0.75	1.54	-1 A71 Jäger-Meyer
	L 2005 Apr 13.84	30		1.05	1.56	+45	213 Naves-Campas

Periodic comet Maury (115P)

P/1985 Q1	D 1985 Aug 16.30	122	16	2.10	1.10	+69	675 Maury
	L 1986 Jan 07.14	91	18.9	2.68	2.94	+213	691 Scotti
P/1994 J1	R 1994 May 03.46	91	17.9	2.07	2.35	+46	691 Scotti
	A 1997 Dec 30.53			6.37	5.43	+1383*	568
	R 2002 May 12.60	60	19.5	2.75	1.79	-225#	360 Nakamura
	L 2003 Oct 25.98	60		3.16	2.18	+306	204 Buzzi-Aletti
	R 2011 Mar 03.20	26		19.9	2.71	2.38	-218 C10 Soulier
	L 2011 Dec 16.63	40		18.3	2.12	2.73	+71 C32 Gerke-Plaksa-Novichonok-Chestn

Periodic comet McMillan 1 (208P)

P/2000 S7	P 2000 Sep 23.20	59		18.1	2.76	2.00	699 LONEOS
	L 2000 Oct 02.25	59		18.3	2.78	1.94	699 LONEOS
P/2008 U1	P 2008 Sep 20.36	91			2.78	1.94	+130 691 Spacewatch (<i>Check details</i>)
	L 2009 Jan 30.79	60		19.9	3.02	2.97	+263 204 Buzzi

Periodic comet McMillan 2 (P/2010 J3)

P/2010 J3	P 2010 Feb 03.02			3.06	2.93	-202	C51 WISE
	L 2011 Sep 20.43	180	21.1	4.17	3.20	+393	F51 Pan-STARRS

Periodic comet McNaught 1 (220P)

P/2004 K2	D 2004 May 20.80	50	17.7	1.58	1.63	-27	E12 McNaught
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	L	2004	Dec	11.85	60	20.4		2.23	1.41	+178	561	Kelemen
P/2009 H2	S	2009	Apr	28.37	91			2.53	1.56	-228	691	Williams-Bressi
	L	2009	Sep	22.12	181	20.8		1.75	1.80	-84	291	Scotti

Periodic comet McNaught 2 (P/2004 R1)

P/2004 R1	D	2004	Sep	02.42	50	17.6		0.99	0.67	+3	E12	McNaught
	L	2004	Nov	09.46	100		20.6	1.38	0.86	+71	413	McNaught

Periodic comet McNaught 3 (P/2005 J1)

P/2005 J1	D	2005	May	03.72	50	17.6		1.54	0.95	+16	E12	McNaught
	L	2005	Aug	09.92	50		18.4	1.92	1.07	+115	A33	Brinkmann

Periodic comet McNaught 4 (260P)

P/2005 K3	D	2005	May	20.79	50	17.3		1.74	1.84	-83	E12	McNaught
	L	2006	Feb	04.42	25	18.2		2.31	1.73	+177	349	Kadota
P/2012 K2	R	2012	May	15.38	30	17.8		1.95	1.81	-120	I47	Masek

Periodic comet McNaught 5 (P/2005 L1)

P/2005 L1	P	2005	May	16.29	100		17.6	3.27	2.31	-211	704	LINEAR
	L	2005	Sep	15.46	50	16.6		3.17	3.18	-89	E12	SSS

Periodic comet McNaught 6 (P/2005 Y2)

P/2005 Y2	P	2003	May	30.18	250	22.1		4.78	4.16	-578	645	SDSS
	L	2009	Dec	11.34	150	19.4		8.28	7.30	+1809	G96	MLSS

Periodic comet McNaught 7 (P/2006 G1)

P/2006 G1	D 2006	Apr	05.70	50	18.0		2.80	1.98	-135	E12 McNaught
	L 2006	Aug	29.44	36		20.8	2.63	2.62	+11	415 Herald

Periodic comet McNaught 8 (P/2006 H1)

P/2006 H1	D 2006	Apr	29.79	50	17.9		2.38	2.57	-8	E12 McNaught
	L 2006	Nov	26.79	40		19.5	2.91	2.47	+203	151 Griesser

Periodic comet McNaught 9 (278P)

P/2006 K2	P 2006	May	22.16	46		17.9	2.11	1.10	-36	735 Dillon <i>et al.</i>
	L 2006	Aug	20.41	50		19.0	2.13	1.72	+54	E12 McNaught-Burton-Garradd
P/2013 B1	R 2013	Jan	19.53	181		21.8	2.55	2.37	-195	291 Scotti

Periodic comet McNaught 10 (P/2007 H1)

P/2007 H1	P 2006	Apr	25.44	91			3.64	2.75	-479	691 Spacewatch
	L 2009	Jan	31.87	25	17.9		3.82	2.98	+533	J79 Montalban

Periodic comet McNaught 11 (191P)

P/2000 P3	P 2000	Aug	05.35	120		17.3	2.40	1.43	-160	608 NEAT (Meyer-Bouma)
	L 2002	Jan	21.30	100		20.0	3.25	2.27	+374	704 LINEAR
P/2007 N1	D 2007	Jul	10.73	50	17.7		2.11	1.96	-64	E12 McNaught
	L 2008	Apr	07.82	44	19.6		2.56	3.00	+208	215 Hasubick

Periodic comet McNaught 12 (P/2008 J3)

P/2008 J3	D 2008	May	10.69	50	18.4		3.07	2.80	-304	E12 McNaught
	L 2010	Mar	16.82	50		21.1	3.34	3.12	+371	A77 Rinner-Kugel

Periodic comet McNaught 13 (P/2008 O2)

P/2008 O2	D 2008	Jul	28.69	50	17.7		3.91	2.92	-267	E12 McNaught
	L 2009	Dec	09.80	40		19.4	3.89	3.38	+232	130 Marinello <i>et al.</i>

Periodic comet McNaught 14 (P/2008 Y3)

P/2008 Y3	P 2007	Dec	18.76	10		17.8	4.90	3.94	-390	D35 Nakano
	L 2010	Jul	02.63				5.26	5.10	+537	C51 WISE

Periodic comet McNaught 15 (P/2009 Q5)

P/2009 Q5	P 2009	Aug	31.63	50	16.9		2.92	2.09	-8	E12 McNaught
	L 2010	Feb	18.76	44	17.1		3.18	3.56	+163	215 Hasubick

Periodic comet McNaught 16 (P/2009 S2)

P/2009 S2	P 2008	May	30.36	150		21.2	3.51	2.60	-389	G96 MLS
	L 2010	Jan	26.70				2.75	2.52	+217	C51 WISE

Periodic comet McNaught 17 (P/2009 U4)

P/2009 U4	P 2009	Oct	11.48	50	16.8		1.69	1.19	+32	E12 McNaught
	L 2010	Jan	16.41	25	19.2		2.14	2.44	+129	349 Kadota

Periodic comet McNaught 18 (P/2010 J5)

P/2010 J5	P 2005	Nov	01.24	91		20.9	4.47	3.48	-1466	691 Spacewatch
	L 2011	Aug	26.53	40		20.8	4.06	3.23	+678	E07 Herald

Periodic comet McNaught 19 (254P)

	P 1980	Oct	05.51		18.8	3.29	2.47		260	Meyer (DSS)
	P 2001	Oct	23.49		19.4	3.84	3.22		608	NEAT
P/2010 T1	P 2010	Sep	11.49	50	18.7		3.22	2.30	-44	E12 McNaught
	L 2012	Jan	27.19	68	18.1		3.95	3.54	+458	703 MLS

Periodic comet McNaught 20 (P/2011 P1)

P/2011 P1	D 2011	Aug	01.76	50	18.5		5.27	5.21	+380	E12 McNaught
	L 2012	Jan	25.85	44	18.9		5.55	5.46	+557	215 Hasubick

Periodic comet McNaught 21 (P/2011 Q3)

P/2011 Q3	D 2011	Aug	29.74	50	18.7		2.37	1.42	+15	E12 McNaught
	L 2011	Dec	24.12	150	20.2		2.59	2.35	+132	G96 MLS

Periodic comet McNaught 22 (P/2012 O1)

P/2012 O1	D 2012	Jul	18.74	50	18.7		1.50	0.86	-5	E12 McNaught
	L 2012	Nov	18.82	40	20.4		1.92	1.05	+118	C32 Gerke-Novichonok-Plaksa

Periodic comet McNaught 23 (P/2012 O2)

P/2012 O2	P 2012	May	20.45	150	21.9		1.70	1.23	-36	G96 MLS
	L 2012	Sep	21.76	41		19.0	1.87	1.00	+89	D90 Hills

Periodic comet McNaught 24 (P/2012 O3)

P/2012 O3	D 2012	Jul	23.69	50	17.9		1.62	0.65	-23	E12 McNaught
	L 2012	Dec	12.16	150	20.9		2.03	1.74	+118	G96 MLS

Periodic comet McNaught-Hartley (P/1994 N2)

P/1994 N2	D 1994	Jul	05.67	122	16		2.84	1.96	-156	413	McNaught-Hartley
	L 1996	Jan	21.22	229	21.8		4.16	3.53	+409*	695	Hergenrother-Larson

Periodic comet McNaught-Hughes (130P)

P/1991 S1	P 1991	Sep	14.31	46	17.0		2.23	1.24	+90	675	
	L 1993	Jun	22.20	91		22.0	4.00	3.29	+586*	691	Scotti
P/1997 H1	R 1997	Apr	16.45	91	20.6		3.00	2.07	-313	691	Scotti
	L 1999	Jan	15.12	155	20.5		3.05	2.81	+325	693	Hergenrother
	P 2003	Apr	01.37		21.7		3.95	2.97	-571#	645	SDSS
	L 2006	Jan	26.15	150	16.2		3.57	3.14	+460	G96	MLS
	R 2010	Mar	13.44	181	21.1		3.60	2.75	-468	291	Scotti
	L 2012	Jan	15.75	44	18.3		2.57	2.78	+205	215	Hasubick

Periodic comet McNaught-Russell (262P)

P/1994 X1	P 1994	Oct	13.06		15		1.36	0.86	+35	607	
	L 1995	Apr	17.38		19		2.93	2.83	+221	413	
P/2012 K6	D 2012	May	29.61	200		19.9	2.64	2.09	-189	F65	Guido-Howes-Sostero

Periodic comet Mellish (D/1917 F1)

D/1917 F1	D 1917	Mar	20		13		0.71	1.21	-23		Mellish
	L 1917	Jun	25				1.78	1.87	+75		

Periodic comet Metcalf-Brewington (97P)

P/1906 V2	D 1906	Nov	15		18		1.67	0.72	+36		Metcalf
	L 1907	Jan	16.93				1.91	1.19	+98*	020	Simonin
P/1991 A1	D 1991	Jan	05				1.59	1.55	-0		Brewington
	L 1991	Apr	03.47	60	16		1.83	2.34	+88	372	Seki
	R 2000	Sep	01.26	100		19.2	3.05	2.13	-226#	704	LINEAR

L 2000	Dec	23.13	100	19.1		2.73	2.52	-113	704	LINEAR
R 2011	Sep	03.08	26		19.0	2.60	2.55	+13	C10	Soulier
L 2012	Jan	28.57	40		21.9	2.84	2.12	+161	E07	Herald

Periodic comet Montani (P/1997 G1)

P/1997 G1	D 1997	Apr	09.14	91	19.1	21.4	4.21	4.12	+2	691	Montani
	L 1998	Jun	18.18	120	19.3		4.80	4.93	+437	696	Hergenrother

Periodic comet Mrkos (124P)

P/1991 F1	D 1991	Mar	15.60			15.5	1.41	0.43	-3	400	Mrkos
	L 1991	Jul	10.42			19.5	1.83	1.37	+113	474	
P/1995 S3	R 1995	Sep	20.42	229		21.7	3.58	3.04	-416#	695	Hergenrother-Larson
	A 1999	Nov	13.25		22.4		4.94	4.29	-987*	695	
											(Perennial)

Periodic comet Mueller 1 (120P)

P/1987 U2	D 1987	Oct	18.34	122	17.5		2.76	1.77	-47	675	Mueller
	L 1988	Feb	13.17	91	18.4		2.78	2.98	+71	691	Scotti
P/1995 O2	R 1995	Jul	30.44	91	22.2		3.15	2.29	-269	691	Scotti
	L 1996	Dec	14.35	91	19.6		3.06	2.10	+234*	691	Scotti
	R 2003	Nov	19.24	220		21.0	3.29	3.45	-316#	568	Pittichova-Bedient
	L 2004	Dec	08.50	60	19.4		2.78	1.94	+69	360	Nakamura
	R 2012	Jul	24.90	150	21.2		3.00	2.35	-213	188	Burhonov-Novichonok

Periodic comet Mueller 2 (131P)

P/1990 R1	D 1990	Sep	15.35	122	17		2.14	1.18	-66	675	Mueller
	L 1991	Feb	09.99	150			2.17	2.23	+82	801	
P/1997 M2	R 1997	Jun	29.75		18.9		2.58	2.50	-145	402	Sugie
	L 1999	Feb	14.35	155	22.2		3.51	2.55	+449*	693	Hergenrother
	R 2004	Jul	22.00	30		20.0	2.60	2.13	-149	J87	Lacruz

L 2004	Dec	14.16	181	20.1		2.42	1.93	-3	291	Scotti
R 2011	Jul	05.05	26		20.7	2.69	2.33	-186#	C10	Soulier
L 2012	Jan	25.79	44	19.4		2.42	2.55	+18	215	Hasubick
L 2012	Jan	25.79	44	19.4		2.42	2.55	+18	215	Hasubick

Periodic comet Mueller 3 (136P)

P/1990 S1	D 1990	Sep	17.42	122	17.5		3.01	2.10	+46	675	Mueller
	L 1990	Dec	15.06	150			3.08	2.58	+135	801	
P/1998 K4	R 1998	May	24.43	91		21.1	3.38	3.03	-300#	691	Scotti
	L 1999	Dec	26.56		18.3		3.34	2.61	+281	897	
	R 2007	Jul	21.06	45		18.9	3.00	2.38	-93	473	Donato <i>et al.</i>
	L 2009	Mar	24.21	181			3.89	3.98	+519*	291	Scotti

Periodic comet Mueller 4 (149P)

P/1992 G3	D 1992	Apr	09.38	122	17.5		2.66	1.80	+52	675	Mueller
	L 1992	Jul	02.10	150			2.78	2.48	+137	801	
P/2000 Y10	R 2000	Dec	22.85		20.5		2.66	2.71	-47	867	Oribe
	L 2001	Jun	28.88	26	18.0		2.80	2.43	+141	170	Manteca
	R 2010	Jan	16.50	25	20.0		2.65	2.38		H06	Guido <i>et al.</i>
	L 2010	Jul	07.95	44	18.6		2.81	2.54		215	Hasubick

Periodic comet Mueller 5 (173P)

P/1993 W1	P 1992	Dec	18.12		17		4.95	4.11	-633	303	
	L 1995	Feb	01.52	91	21.3	21.6	4.29	3.38	+142	691	Scotti
P/2005 T1	P 2005	Oct	04.99	25		18.6	5.55	4.66	-957	A79	Fratev <i>et al.</i>
	L 2009	Apr	25.85	30		20.9	4.45	3.82	+342	B42	Nevski

Periodic comet Mueller 6 (190P)

P/1998 U2	P 1998	Sep	14.41	59	17.2		2.05	1.15	-36	699	LONEOS
	L 1999	Feb	14.16	155	19.9		2.26	2.20	+116	693	Hergenrother

P/2007 U2	R 2007	Jul	26.09	60		19.5	2.04	2.29	+18	204	Buzzi-Luppi
	L 2008	Feb	08.00	60		20.0	2.69	2.03	+215	204	Buzzi-Luppi

Periodic comet NEAT 1 (P/2001 F1)

P/2001 F1	P 2001	Feb	24.59	120		19.3	4.18	3.42	+94	608	NEAT
	L 2002	Jul	22.20	120		19.7	5.06	4.53	+607	644	NEAT

Periodic comet NEAT 2 (P/2001 H5)

P/2001 H5	P 2001	Mar	20.42	100		18.4	2.44	1.68	+51	704	LINEAR
	L 2001	Jun	26.43	100	19.6		2.71	1.97	+149	413	McNaught

Periodic comet NEAT 3 (207P)

P/2001 J1	P 2000	Oct	07.20	91	21.5		2.26	1.31	-158	691	Spacewatch (Gleason)
	L 2001	May	27.19	180			1.43	1.20	+74	290	Hergenrother-Spahr-Nelson
P/2008 T5	R 2008	Oct	15.78	25	16.4		1.00	1.00	-22	349	Kadota
	L 2009	May	22.99	60		21.6	2.63	1.65	+198	204	Buzzi

Periodic comet NEAT 4 (180P)

	P 1955	May	14.22				2.71	1.79	+143	261	
P/2001 K1	P 2001	Feb	02.51	59		17.0	2.54	2.44	+88	699	LONEOS
	L 2001	Jul	22.53	60	19.5		2.95	2.46	+258*	360	Nakamura
P/2006 U3	R 2006	Oct	23.13	250		22.4	4.00	3.23	-582#	950	Ortiz-Mora-Stoss
	L 2008	Aug	03.86	44	18.0		2.51	3.01	+69	215	Hasubick

Periodic comet NEAT 5 (P/2001 Q6)

P/2001 Q6	P 2001	Aug	18.48	120		19.2	1.76	1.36	-73	644	NEAT
	L 2002	Mar	24.36	100	19.4		2.19	1.73	+135	704	LINEAR

Periodic comet NEAT 6 (166P)

P/2001 T4	P 2001	Aug 27.42	59		8.62	7.90	-266	699	LONEOS
	L 2009	Feb 28.82	60	21.5	11.85	11.19	+2476	461	Sárneczky

Periodic comet NEAT 7 (169P)

	P 1989	Mar 07.14			1.57	0.69	+90	261	
	P 1998	Apr 03.35	91	20.9	3.58	2.59	+345	691	Spacewatch
P/2002 EX ₁₂	D 2002	Mar 15.27	120	19.8	3.01	2.03	+250	644	NEAT
	L 2003	Apr 26.31	120		4.54	3.55	+658	696	Hergenrother
	R 2005	May 10.49	200		2.00	1.37	-130	F65	Fitzsimmons-Lowry-Snodgrass
	L 2006	May 25.21	150	21.5	3.00	2.69	+249	G96	MLS
	R 2009	May 19.41	40	19.7	2.59	1.67		H10	Elenin-Schwab
	L 2010	May 07.80			2.28	1.96		C51	WISE
	R 2012	May 21.39	180	22.0	4.51	3.59	-635	F51	Pan-STARRS
		(Perennial)							

Periodic comet NEAT 8 (P/2001 T3)

P/2001 T3	P 2001	Aug 20.41	120	20.3	2.86	2.21	-165	644	NEAT
	L 2002	Feb 07.14	100	18.5	2.51	2.59	+6	704	LINEAR

Periodic comet NEAT 9 (189P)

P/2002 O5	P 2002	Jul 30.25	120	17.2	1.18	0.32	-4	608	NEAT
	L 2002	Nov 07.84	30	19.5	1.62	1.04	+97	J95	Birtwhistle
P/2007 N2	P 2007	Jul 05.64	25	15.8	1.20	0.21	-20	349	Kadota
	L 2007	Oct 28.82	30	19.3	1.51	0.91	+95	213	Naves-Campas
	R 2012	May 27.59	40	18.4	1.34	0.41	-54	E07	Herald
	L 2012	Oct 15.73	40	18.7	1.56	0.78	+87	C32	Gerke-Plaksa-Novichonok

Periodic comet NEAT 10 (215P)

	P 1994	Sep 11.53	120	18.6	3.30	2.42		260	Siding Spring-DSS (Meyer)
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	L 1994	Oct	10.48	120	18.4		3.33	2.73		260	Siding Spring-DSS (Meyer)
P/2002 O8	P 2001	May	22.32	91		20.8	3.54	2.54	-351	691	Spacewatch
	L 2003	Nov	19.93	60	19.5		3.89	3.06	+560	204	Buzzi-Aletti
P/2009 B5	R 2009	Jan	22.49	56		20.3	3.79	3.95			H36 Hug
	L 2012	Jan	20.12	100	19.8		3.93	3.98	+591	704	LINEAR

Periodic comet NEAT 11 (240P)

P/2002 X2	P 2002	Oct	05.32	100	19.3		2.77	1.93	-175	704	LINEAR
	L 2004	Mar	16.11	60	20.1		3.32	2.53	+353	204	Buzzi
P/2010 P1	R 2010	Aug	10.43	25	16.9		2.17	2.40	-25	H06	Sato
	L 2012	May	16.31	68	18.2		4.22	3.56	+590	703	CSS

Periodic comet NEAT 12 (P/2003 F2)

P/2003 F2	D 2003	Mar	27.20	120		20.4	2.98	1.98	-19	644	NEAT
	L 2003	May	28.41	220		20.5	2.99	2.41	+44	568	Pittichova

Periodic comet NEAT 13 (P/2003 QX₂₉)

P/2003 QX ₂₉	P 2002	Jun	11.39	120		19.4	4.31	3.40	-137	644	NEAT
	L 2003	Oct	20.88	30	19.9		4.70	4.00	+359	213	Naves-Campas

Periodic comet NEAT 14 (P/2003 S1)

P/2003 S1	P 2003	Jul	29.61	120		19.1	3.07	2.54	-242	608	NEAT
	L 2005	Mar	12.16	250		21	3.44	2.69	+349	705	Sarneczky <i>et al.</i>

Periodic comet NEAT 15 (243P)

P/2003 S2	P 2003	Aug	01.41	100		19.4	2.47	2.02	-37	704	LINEAR
	L 2004	Feb	18.47	60	19.1		2.68	2.86	+164	360	Nakamura
P/2010 P5	R 2010	Aug	15.31	25	18.9		2.77	1.77	-200	H06	Guido-Sostero

L 2012 Jan 26.78 44 20.0 3.17 2.41 +330 215 Hasubick

Periodic comet NEAT 16 (P/2003 U3)

P/2003 U3 P 2003 Oct 17.46 59 19.0 2.84 1.87 +178 699 LONEOS
L 2004 Jan 17.53 60 19.9 3.19 2.88 +270 360 Nakamura

Periodic comet NEAT 17 (272P)

P/2004 F1 P 2003 Dec 01.49 100 19.4 2.47 2.52 +43 704 LINEAR
L 2004 Apr 21.06 60 19.6 2.79 1.95 +184 204 Buzzi
P/2012 V3 R 2012 Nov 12.49 150 20.6 2.54 2.13 -107 G96 Christensen

Periodic comet NEAT 18 (246P)

P/2004 F3 P 2004 Jan 29.40 100 18.8 3.36 2.96 -341 704 LINEAR
A 2008 Jan 26.90 60 19.3 4.97 4.83 +1118 204 Buzzi-Luppi
P/2010 V2 R 2010 Nov 02.00 50 20.5 4.51 4.54 -819 C20 Romas-Novichonok-Chestnov

Periodic comet NEAT 19 (163P)

P 1990 Oct 24.43 19.8 2.06 1.26 -81 261
P 1997 Nov 26.64 17.9 1.98 1.01 -57 566
P/2004 V4 P 2004 Oct 09.34 59 19.5 2.14 1.37 -114 699 LONEOS
L 2005 Mar 10.16 100 20.0 1.95 1.72 +38 704 LINEAR
R 2011 Sep 22.06 40 20.3 2.58 1.75 -204 C32 Gerke-Novichonok-Plaksa

Periodic comet NEAT 20 (P/2005 R1)

P/2005 R1 P 2005 Jul 05.36 68 19.4 2.23 1.87 -95 703 CSS
L 2006 Jan 28.14 100 20.2 2.30 2.10 +112 704 LINEAR

Periodic comet NEAT 21 (212P)

P/2000 YN ₃₀	P	2000	Dec	01.44	120	18.4	1.84	0.89		608	NEAT
	L	2001	Feb	21.16	100	19.8	1.65	1.08		704	LINEAR
	S	2008	Oct	30.48	91	20.5	1.69	1.43	-34	691	Spacewatch
	L	2009	Mar	02.29	68	18.7	1.88	1.00	+89	703	CSS

Periodic comet NEAT 22 (P/2001 Q11)

P/2001 Q11	D	2001	Aug	18.47	120	18.9	1.91	1.48	+57	644	NEAT
	L	2001	Dec	13.14	120	19.4	2.32	1.55	+174	644	NEAT

Periodic comet NEAT-LINEAR (P/2002 T6)

P/2002 T6	D	2002	Sep	15.59	120	20.0	3.90	3.01	-285	644	NEAT
	L	2004	Apr	15.17	100	18.9	3.93	4.00	+293	704	LINEAR

Periodic comet NEAT-LONEOS (P/2003 SQ₂₁₅)

P/2003 SQ ₂₁₅	D	2003	Sep	18.19	120	19.4	2.79	1.87	-188	644	NEAT
	L	2004	Feb	20.77	50	18.3	2.32	3.03	-33	A33	Brinkmann

Periodic comet Neujmin 1 (28P)

P/1913 R2	D	1913	Sep	04	12		1.54	0.55	+19		Neujmin
	L	1913	Dec	31			2.21	1.82	+137		
P/1931 S1	R	1931	Aug	20			2.02	1.95	+112		Nicholson
	L	1932	Jan	10			3.16	2.45	+255		
	R	1948	May	06			2.90	1.98	-223		
	L	1948	Dec	03			1.55	2.05	-12		
	R	1966	May	16.85			2.77	1.82	-207	074	
	L	1967	Aug	07			3.05	3.61	+241		
	R	1984	Feb	26.64	60	18	2.92	2.95	-225	474	Gilmore-Kilmartin
	L	1989	Dec	27.62			10.70	10.00	+1906*	568	

P 1997	Dec	30.50			10.50	10.25	-1823#	568	Meech
L 2004	Feb	12.52	60	19.2	4.34	3.81	+412	360	Nakamura

Periodic comet Neujmin 2 (25D)

D/1916 D1	D 1916	Feb 24	12		1.35	0.38	-16		Neujmin
	L 1916	Jun 05.89			1.63	1.00	+86	008	
D/1926 V2	R 1926	Nov 05			1.55	1.50	-72		Neujmin
	L 1927	Mar 09			1.46	0.83	+52		Van Biesbroeck

Periodic comet Neujmin 3 (42P)

P/1929 P2	D 1929	Aug 02	12		2.07	1.06	+35		Neujmin
	L 1929	Sep 09			2.15	1.22	+73		
P/1951 J1	R 1951	May 04			2.04	1.91	-22		Cunningham
	L 1951	Nov 26			2.60	2.22	+184*		
	R 1972	Apr 17.48	229		2.00	2.02	-29	695	Roemer
	L 1972	Oct 03			2.35	1.43	+140		
	R 1993	May 25.35	91 21.0		2.52	1.54	-172	691	Scotti
	L 1993	Aug 16.17	91 21.0		2.16	1.93	-89	691	Scotti
	R 2003	Mar 12.52	220 23.5		4.27	3.30	-491#	568	Meech <i>et al.</i>
	L 2004	Nov 07.46	60 18.1		2.27	2.00	+115	360	Nakamura

Periodic comet Novichonok-Gerke (P/2011 R3)

P/2011 R3	D 2011	Sep 07.02	40 18.9		3.69	2.69	-209	C32	Novichonok-Gerke
	L 2013	Jan 16.56	40 19.1		3.80	2.93	+289	E07	Herald

Periodic comet ODAS (198P)

P/1998 X1	D 1998	Dec 15.17	91 18.3		2.29	1.69	+147	910	ODAS
	L 1999	Apr 14.23	150 19.4		2.81	2.27	+267	693	Hergenrother
P/2006 B7	S 2005	Oct 07.50	150 20.1		2.34	2.88	+157	G96	MLS
	L 2006	Mar 24.25	150 20.6		3.08	2.14	+325	G96	MLS

R 2011	Jul	30.15		18.6	2.52	2.02	-201	958	Dupouy-Mahe
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Periodic comet Olbers (13P)

P/1815 E1	D 1815	Mar 06		1.43	1.41	-51			Olbers
	L 1815	Sep 25		2.42	2.96	+152			
P/1887 Q1	D 1887	Aug 25	23	1.37	2.14	-44			Brooks
	L 1888	Jul 06		3.63	2.71	+272*			
P/1956 A1	R 1955	Nov 12		3.12	2.30	-220#			Mrkos
	L 1956	Sep 25		1.85	2.54	+98			

Periodic comet Ory (P/2008 Q2)

P/2008 Q2	D 2008	Aug 27.09	51	17.6	1.50	0.63	-53	185	Ory
	L 2009	Mar 24.22	181		2.11	1.94	+156	291	Scotti

Periodic comet Oterma (39P)

P/1943 G1	P 1942	Feb 17	50	3.45	2.63	-185			Oterma
	(Observed all around the orbit between discovery and 1962)								
	L 1962	Aug 07.43	102	4.53	3.62	+1519	689		Roemer
	(Ejected to larger orbit)								
P/2001 P3	P 1998	May 01.59		7.54	6.99	-1696	568		Meech
	L 2001	Sep 19.32	150 22.5	5.71	4.72	-459	809		Hainaut <i>et al.</i>

Periodic comet PANSTARRS 1 (P/2010 T2)

P/2010 T2	D 2010	Oct 06.43	180 21.4	4.00	3.00	-278	F51		Pan-STARRS
	L 2011	Jan 02.82	50 20.5	3.87	3.73	-189	A77		Rinner-Kugel

Periodic comet PANSTARRS 2 (253P)

P/1998 RS ₂₂	P 1998	Sep 14.15	100 18.1	2.16	1.17		704		LINEAR
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	P 2005	Dec	01.34	91	19.7	2.44	1.50		691	Spacewatch
P/2011 R2	D 2011	Sep	04.51	180	18.7	2.13	1.13	-81	F51	Pan-STARRS
	L 2012	Feb	23.12	150	19.2	2.15	2.53	+91	G96	MLS

Periodic comet PANSTARRS 3 (P/2011 U1)

P/2011 U1	P 2004	Feb	14.40			20.0	2.58	1.59	+55	608	NEAT
	L 2004	Feb	19.52			19.2	2.58	1.61	+60	608	NEAT
P/2011 U1	D 2011	Oct	23.45	180	21.2	3.12	2.32	-281	F51	Pan-STARRS	
	L 2012	Jan	26.80	44	19.9	2.83	2.33	-185	215	Hasubick	

Periodic comet PANSTARRS 4 (P/2011 W1)

P/2011 W1	P 2011	Nov	23.22	91	18.9	3.33	2.38	-60	691	Spacewatch
	L 2012	Mar	22.18	150	18.8	3.33	3.41	+60	G96	MLS

Periodic comet PANSTARRS 5 (P/2012 B1)

P/2012 B1	P 1997	Jun	01.31	100	16.2	3.91	3.08	+146	566	NEAT
P/2012 B1	P 2011	Dec	31.89	60	19.2	4.87	4.00	-569	461	Szing-Sarneczky
	L 2013	Jan	18.85	26	16.4	3.96	3.44	-185	900	Ikari

Periodic comet PANSTARRS 6 (P/2012 C3)

P/2012 C3	P 2012	Jan	26.47	150	21.0	3.69	2.75	+112	G96	MLS	
	L 2012	Mar	24.49	40		21.3	3.80	3.03	+170	E07	Herald

Periodic comet PANSTARRS 7 (P/2012 F2)

P/2012 F2	D 2012	Mar	16.49	180	19.8	3.98	3.02	-390	F51	Pan-STARRS	
	L 2012	Jul	06.45	40		19.4	3.52	3.55	-278	E07	Herald

Periodic comet PANSTARRS 8 (P/2012 G1)

P/2012 G1	D 2012	Apr 13.35	180	21.0	2.60	1.65	-49	F51 Pan-STARRS
	L 2012	Apr 16.45	200	20.0	2.60	1.66	-46	F65 Sostero-Guido-Howes

Periodic comet PANSTARRS 9 (258P)

P/2012 H1	P 2002	Mar 11.34	120	20.7	3.49	2.51		644 NEAT
	L 2003	May 27.32	91	20.7	4.03	3.07		691 Spacewatch
	P 2011	Feb 07.40	150	20.5	3.48	2.51	-39	G96 MLS
	L 2012	May 21.39	180	22.0	3.88	2.98	+430	F51 Pan-STARRS

Periodic comet PANSTARRS 10 (P/2012 T1)

P/2012 T1	D 2012	Oct 06.53	180	20.6	2.41	1.54	+26	F51 Pan-STARRS
	L 2013	Jan 15.05	800		2.50	2.05	+126	309 Schmidtbreick-Rivinius-Snodgrass

Periodic comet PANSTARRS 11 (P/2012 T2)

P/2012 T2	D 2012	Oct 10.36	180	21.1	4.85	3.91	-192	F51 Pan-STARRS
	L 2012	Nov 13.18		20.6	4.84	4.18	-158	H06 Sato <i>et al.</i>

Periodic comet PANSTARRS 12 (P/2012 T3)

P/2012 T3	D 2012	Oct 10.35	180	21.4	2.77	1.85	+169	F51 Pan-STARRS
	L 2012	Oct 22.85	30	19.8	2.83	1.99	+181	C10 Soulier

Periodic comet PANSTARRS 13 (P/2012 U2)

P/2012 U2	P 2012	Oct 20.35	150	19.5	3.64	2.74	-45	G96 MLS
	L 2012	Dec 12.78	44	19.4	3.63	2.77	+9	215 Hasubick

Periodic comet Parker-Hartley (119P)

P/1989 E1	P 1986 Sep 29.84	16.5		3.44	2.45	-320	046	
	L 1989 Mar 26.85	17.2		4.11	3.20	+589	046	
P/1995 M2	R 1995 Jun 23.43	91	19.2	20.5	3.56	3.61	-367	691 Scotti
	L 1998 Mar 02.65	60	18.9		4.18	3.20	+616*	402 Sugie
	R 2003 Aug 02.68	60	20.0		4.29	3.30	-661#	360 Nakamura
	L 2006 Apr 09.17	150	18.6		3.45	3.29	+320	G96 MLS
	R 2012 Jul 17.83	150	20.1		4.20	3.32	-624	188 Sergejev-Novichonok

Periodic comet Perrine-Mrkos (18D)

D/1896 X1	D 1896 Dec 09	30			1.13	0.26	+14	Perrine
	L 1897 Mar 04				1.67	1.05	+99	
D/1909 P1	R 1909 Aug 12				1.54	0.81	-81	Kopff
	L 1909 Nov 21				1.20	0.29	+20	
D/1955 U1	D 1955 Oct 19	10			1.19	0.89	+22	Mrkos
	L 1956 Jan 09				1.72	0.94	+104*	
	R 1961 Nov 11				1.68	1.64	-93#	Roemer
	L 1962 Apr 05.14	102	17.9		1.41	1.96	+51	689 Roemer
	R 1968 Oct 24.75	17			1.28	0.36	-8	370 Tammann
L 1969 Jan 17				1.57	0.70	+77		

Periodic comet Peters-Hartley (80P)

P/1846 M1	D 1846 Jun 26	09			1.55	0.65	+25	Peters
	L 1846 Jul 21				1.63	0.88	+50	
P/1982 N1	D 1982 Jul 11.47	122			1.75	0.84	+64	413 Hartley
	L 1982 Sep 11.28				2.06	1.65	+126	675
	R 1990 May 26.44	122	15		1.65	0.87	-28	413 McNaught
	L 1990 Jul 20.39	16			1.65	1.13	+27	474
	R 1998 Feb 16.47	20.4			2.36	1.59	-176#	568 Veillet
L 1998 Apr 25.44	18.5			1.96	1.39	-108	426	

Periodic comet Petriew (185P)

P/2001 Q2	F 2001	Aug	19.46	30	13.2	0.97	0.86	-14	921	Hale
	L 2002	Mar	08.60	60	18.5	2.43	1.50	+188	360	Nakamura
P/2007 A3	R 2007	Jan	11.69	25	16.1	1.13	1.90	-44	A79	Fratev <i>et al.</i>
	L 2007	Apr	29.44	25	15.0	1.30	1.91	+64	349	Kadota
	R 2012	May	27.41		18.6	1.43	1.43	-78	H06	Bryssinck <i>et al.</i>

Periodic comet Pigott-LINEAR(21)-Kowalski (226P)

D/1783 W1	D 1783	Nov	19			1.46	0.49	-1		Pigott
	L 1783	Dec	21			1.50	0.73	+31		Méchain
	P 1995	Oct	29.59	120		1.99	1.12		260	Siding Spring-DSS (Meyer)
P/2003 A1	D 2003	Jan	05.07	100	18.4	1.93	1.68	-27	704	LINEAR
	L 2003	Apr	06.45	60	16.7	1.99	2.65	+64	360	Nakamura
P/2009 R2	D 2009	Sep	10.46	68	18.3	2.09	2.39	+122	703	Kowalski
	L 2010	Apr	12.54			3.24	3.02	+336	C51	WISE

Periodic comet Pons-Brooks (12P)

P/1812 O1	D 1812	Jul	21	12		1.28	1.78	-56		Pons
	L 1812	Sep	28			0.81	1.23	+13		
P/1883 R1	D 1883	Sep	02	23		2.44	2.36	-146		Brooks
	L 1884	Jun	02			2.22	1.77	+128*		
P/1953 M1	R 1953	Jun	20			4.49	4.11	-336#		Roemer
	L 1954	Sep	04			1.92	2.33	+105		

Periodic comet Pons-Gambart (273P)

D/1827 M1	D 1827	Jun	21			0.85	0.53	+14		Pons-Gambart
	L 1827	Jul	21			1.13	1.24	+44		Pons
P/2012 V4	F 2012	Nov	29.40	20	11.5	0.89	1.39	-20	E27	Lovejoy

Periodic comet Pons-Winnecke (7P)

P/1819 L1	D 1819	Jun	12	12		0.99	0.80	-37		Pons
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P/1858 E1	L 1820	Jul 22			3.82	4.48	+369*		
	D 1858	Mar 09	11		1.16	0.60	-54	Winnecke	
	L 1858	Jun 23			1.14	1.38	+52		
		.							
	R 1951	Feb 03.38			2.61	1.75	-217	672	Cunningham
	L 1951	Oct 30			1.33	1.61	+52		
	R 1964	Feb 19.51	102		17.7	1.30	1.59	-34	689 Roemer
	L 1964	Oct 08.40	102		18.8	2.45	1.57	+198	689 Roemer
	R 1970	Jan 11			2.39	1.96	-191		Roemer-McCallister?
	L 1970	Nov 01.12	155		1.73	1.56	+103	693	Roemer
	R 1976	Mar 25.21	229		2.81	2.15	-248	695	Roemer-Heller
	L 1976	May 28			2.35	2.47	-184		
	R 1983	Jan 12.51	40	19	1.60	1.90	-85	707	Everhart
	L 1983	Oct 06.65	122	19	2.33	1.46	+182	413	
	R 1989	Jan 17.47	150		20.5	2.57	1.96	-214	675 Gibson
	L 1989	Oct 03.15		12	1.37	1.38	+44	675	
	R 1994	Dec 31.45	154	20.1	3.55	2.80	-367#	693	Hergenrother-Larson
	L 1996	Nov 19.21	91	19.9	22.0	3.29	2.48	+322	691 Scotti
	R 2002	Jan 11.20		19.2	1.89	1.88	-125	461	Sárneczky-Meszaros
	L 2004	Jan 22.11		23	4.69	4.32	+616*	809	
	R 2006	Dec 26.33	91	21.5	4.78	3.85	-643#	691	Spacewatch
		(Perennial)							

Periodic comet Read 1 (P/2005 S3)

P/2005 S3	D 2005	Sep 30.41	91	19.2	2.92	2.03	-100	691	Read
	L 2006	Feb 24.15	100	19.1	2.86	3.02	+47	704	LINEAR

Periodic comet Read 2 (P/2005 T3)

P/2005 T3	P 2005	Sep 30.34	150		20.4	6.21	5.29	-105	G96 MLS
	L 2005	Nov 26.92	30		21.3	6.20	5.39	-47	213 Naves-Campas

Periodic comet Read 3 (238P)

P/2005 U1	P 2005 Oct 23.45	68	19.7	2.41	1.47	+88	703	CSS
	L 2007 Jan 27.56	224	24.8	3.43	2.49	+549	568	Bernardi <i>et al.</i>
P/2010 N2	R 2010 Jul 07.43	224	23.6	2.70	1.82	-246	568	Pittichová <i>et al.</i>
	L 2010 Jul 20.59	224	23.9	2.67	1.71	-233	568	Pittichová <i>et al.</i>

Periodic comet Reinmuth 1 (30P)

P/1928 D1	D 1928 Jan 26		12.5	1.86	0.89	-4		Reinmuth	
	L 1928 Jun 15		17	1.87	0.93	+137		Crawford	
P/1934 V1	R 1934 Nov 05		16	2.38	1.52	-175		Jeffers	
	L 1935 Apr 07		16.5	1.87	1.85	-22		Van Biesbroeck	
	P 1949 Oct 27.51	61	18	2.89	1.98	-268	662	Jeffers	
	L 1949 Nov 29.46		17.6	2.74	1.78	-235	662	Jeffers	
	R 1957 Sep 20.36	102	20	2.52	2.43	-187	689	Roemer	
	L 1958 May 15.19	102	18.8	2.07	2.09	+50	689	Roemer	
	R 1965 Jan 06			2.62	2.14	-214		Tomita	
	L 1965 Mar 04.19	102	19.3	2.37	2.60	-157	689	Roemer	
	R 1972 Sep 12.44	229		2.52	2.42	-190	695	Roemer-Gonzalez	
	L 1973 Apr 06			2.00	1.71	+16			
	R 1979 Oct 22.15	150	20.5	3.39	2.41	-374	801	Shao-Schwartz	
	L 1981 Apr 08.30	150		2.38	1.41	+161			
	R 1987 Jul 22.44	91	19.6	2.99	3.27	-293	691	Gehrels-Scotti	
	L 1988 Apr 14.06	150		1.88	2.04	-26	801		
	R 1994 Sep 01.68	60	19.9	3.36	2.75	-367	360	Nakamura	
	L 1996 Jun 16.24	91	19.1	22.1	2.96	2.24	+287*	691	Scotti
	R 2001 Sep 22.69		20.3	3.78	2.83	-458#	867		
	L 2003 Jun 28.25		18.0	2.44	2.32	+186	699		
	R 2009 Aug 20.39	100	19.4	2.74	2.74		704	LINEAR	
	L 2011 Jun 25.25	150	19.8	3.66	2.76		G96	MLS	

Periodic comet Reinmuth 2 (44P)

P/1947 R1	D 1947 Sep 10	40	12.5	1.88	0.89	+22		Reinmuth
	L 1948 Feb 01		17.7	2.31	2.41	+166		Jeffers
P/1953 N1	R 1953 Jul 05		19	2.78	2.02	-265		Van Biesbroeck

L	1954	Nov	25	18		2.68	1.71	+243		Van Biesbroeck
R	1960	May	22.35	102	19.3	2.44	1.65	-186	689	Roemer
L	1961	Jan	13.11	102	18.8	1.98	2.48	+49	689	Roemer
R	1967	Jun	05.72	18		2.03	1.70	-74	387	Tomita
L	1967	Nov	04.16	154		2.05	1.25	+78	693	Roemer
R	1973	Apr	26			3.31	2.37	-377		Roemer-Reskin
L	1975	Feb	05.22	229		2.84	2.55	+273	695	Roemer
R	1980	Sep	10.50	18		2.26	1.99	-141	323	Jekabsons
L	1981	Dec	30.23	150		3.12	2.18	+334	801	
R	1987	Apr	11.49	150	19	2.48	2.31	-197	675	Gibson
L	1987	Nov	24.97	150		1.95	1.81	+30	801	
R	1993	Feb	26.46	91	21.9	3.78	3.38	-488	691	Scotti
L	1996	Jan	21.31	229	18.1	4.09	3.11	+571	695	Hergenrother-Larson
R	1999	Feb	14.48	155	22.1	4.58	4.00	-736#	693	Hergenrother
L	2003	Feb	03.56	60	19.4	4.52	3.54	+714	360	Nakamura
R	2007	Jun	18.32	25	16.8	2.76	1.74	-245	H06	Suzuki <i>et al.</i>
L	2010	Feb	20.98	60	20	4.54	3.67	+734*	204	Buzzi

Periodic comet Rinner (P/2011 W2)

P/2011 W2	D	2011	Nov	28.13	50	17.9	2.31	1.61	+22	J43	Rinner
	L	2012	Mar	24.41	40		21.1	2.50	1.99	+139	E07 Herald

Periodic comet Russell 1 (83D)

P/1979 M2	D	1979	Feb	27.71	122		1.82	1.10	-88	413	Russell
	L	1979	Aug	14.07	150		1.78	1.38	+79	801	
P/1985 G1	R	1985	Apr	09.24	150	19.5	1.81	0.95	-87	675	Gibson
	L	1985	Jun	17.18	91		1.62	1.15	-18	691	Gehrels-Scotti

Periodic comet Russell 2 (89P)

P/1980 S1	D	1980	Aug	09.62	122	16	2.25	1.28	+83	413	Russell
	L	1980	Oct	07.53			2.40	1.70	+141	323	
P/1987 N1	R	1987	Jul	01.79		20	2.15	1.20	-2	323	Candy-Jekabsons-Johnson
	L	1987	Aug	28.63			2.19	1.37	+56	323	Candy-Jekabsons-Johnson

R 1994	Apr	05.48	91	21.1		2.68	1.94	-205	691	Scotti
L 1995	Sep	03.47	91	20.4	22.3	3.07	2.34	+311*	691	Scotti
R 2001	Apr	26.20	215			3.15	2.18	-331#	829	Gil-Hutton, Benavidez
L 2002	Nov	28.46	60	19.2		2.85	2.54	+251	360	Nakamura
R 2009	May	24.73	15?		17.9	2.38	1.46	-90	D25	Beck-Elenin-Farmer
L 2009	Oct	19.46	50	16.8		2.33	2.29	+58	E12	SSS

Periodic comet Russell 3 (91P)

P/1983 L1	D 1983	Jun	14.71	122	16		2.81	2.04	+203	413	Russell
	L 1983	Oct	31.97	150			3.22	3.11	+343	801	
P/1989 A4	R 1989	Jan	01.45	150		20	3.73	3.00	-501#	675	Gibson
	L 1990	May	28.66	60	16		2.52	1.51	+11	372	Seki
	R 1996	Nov	18.52	91	21.3		3.30	3.59	-366	691	Scotti
	L 1998	Sep	16.20	155	17.3		3.09	2.39	+301	693	Hergenrother
	R 2004	Mar	18.86	30		18.1	3.63	2.89	-465	J87	Lacruz
	L 2006	Aug	23.06	60		19.1	3.50	2.53	+422*	204	Buzzi-Luppi
	R 2012	Jan	17.60	40		21.5	3.46	2.76	-409	E07	Herald

Periodic comet Russell 4 (94P)

P/1984 E1	D 1984	Mar	02.74	122	13		2.16	1.31	+57	413	Russell
	L 1984	May	07.22	150			2.30	1.40	+122	801	
P/1989 X2	R 1989	Dec	11.35	150		19	2.62	1.73	-207	675	Gibson
	L 1989	Dec	12.39	150			2.62	1.72	-206	675	Gibson
	R 1995	Oct	21.46	91	21.4		3.54	2.67	-471#	691	Scotti
	L 1997	Jul	23.48	60	18.5		2.51	2.57	+170*	360	Nakamura
	R 2002	Oct	03.44	380		19.9	3.05	2.76	-330	695	Lowry <i>et al.</i>
	L 2004	Jun	09.56	50	18.5		2.89	1.92	+285*	E12	McNaught <i>et al.</i>
	R 2008	Oct	06.42	150	20.4		3.76	2.93	-539	G96	MLS
	L 2011	Jun	07.47	180	20.8		3.42	2.45	+435	F51	Pan-STARRS

Periodic comet Russell-LINEAR (156P)

P/1986 R1	D 1986	Sep	03.64	122	17		1.84	0.93	-92	413	Russell
	L 1986	Sep	25.65	122			1.74	0.81	-70	413	

P/1993 WU	P 1993	Nov	19.40		17.5	1.65	0.68	+39	675	
	L 1993	Nov	20.44		17.5	1.65	0.69	+40	675	
P/2000 QD ₁₈₁	D 2000	Aug	31.42	100	17.5	1.60	1.52	+14	704	LINEAR
P/2000 XV ₄₃	D 2000	Nov	06.41	100	19.3	1.79	1.18	+81	704	LINEAR
	L 2001	Jan	19.31	100	18.7	2.18	1.31	+155	704	LINEAR
	R 2007	Sep	11.49	150	20.0	1.81	2.14	+86	G96	MLS
	L 2008	Apr	02.03	36	20.0	2.99	2.47	+290*	204	Buzzi-Marinelli

Periodic comet Sanguin (92P)

P/1977 T2	P 1977	Sep	13.27	122	14.5	1.81	0.83	-4	675	Gibson-Bus
	L 1978	Jan	31.99	150		2.27	2.44	+136	801	
P/1990 J1	R 1989	May	09.30		22	3.50	2.58	-328#	807	Weller-Coker-Meech
	L 1989	May	11.25			3.49	2.56	-326	807	Weller-Coker-Meech
	R 2002	Apr	07.60	820	20.6	2.46	2.46	-169	568	Kinoshita-Yamamotoao-Miyasaka
	L 2004	Jan	22.17	100	22	4.46	3.59	+486*	809	Lagerkvist <i>et al.</i>

Periodic comet Schaumasse (24P)

P/1911 X1	D 1911	Dec	01	40		1.25	1.53	+18		Schaumasse	
	L 1912	Feb	19			1.72	1.55	+98			
P/1919 U1	R 1919	Oct	30			1.18	1.77	+10		Schaumasse	
	L 1920	Jan	02			1.51	1.92	+74			
	R 1927	Sep	23			1.18	1.96	-8			
	L 1928	Jan	22			1.83	2.21	+113			
	R 1944	Mar	24			1.89	1.28	+119			
	L 1944	Jul	20			2.86	2.27	+237*			
	R 1951	Sep	30.46			2.01	1.46	-133	672		
	L 1952	Jun	24			2.02	1.49	+135			
	R 1959	Sep	08.40	102	20.0	2.75	2.13	-223#	689	Roemer	
	L 1960	Jul	15.19	102	18.5	1.63	1.84	+88	689	Roemer	
	R 1976	Dec	27.54	229	18.5	1.84	2.52	+113	695	Roemer	
	R 1984	Sep	05.49	150	19	1.67	1.88	-92	675	Gibson	
	L 1985	Apr	25.31	150		2.07	1.13	+140	801		
	P 1992	Sep	24.48	91	19.9	2.24	1.62	-160	691	Scotti	
	L 1993	Jul	24.19	91	19.5	22.6	2.09	2.00	+142	691	Scotti
	R 2000	Oct	07.16	220	20.5	2.63	1.71	-208	809	Wolf-Kranz	

L 2001	Jul	23.48	60	14.9	1.59	1.99	+82	360	Nakamura
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Periodic comet Schorr (D/1918 W1)

D/1918 W1	D 1918	Nov 23	100		1.94	0.96	+54	029	Schorr
	L 1918	Dec 31			2.04	1.19	+92	029	Schorr

Periodic comet Schuster (106P)

P/1977 T1	P 1977	Sep 05.21	100	17.5	2.03	1.13	-124#	809	Schuster
	L 1978	Jan 08.05			1.63	1.44	+1	809	Schuster
P/1992 O1	R 1992	Jul 28.74	60	18	1.60	1.69	-40	372	Seki
	L 1992	Dec 18.97		16.0	1.87	1.04	+104*	596	
	R 1999	Sep 01.55			1.89	1.01	-106	413	
	L 2000	Mar 01.46		15.2	1.74	1.71	+76	900	
	R 2006	Dec 15.45	50		1.91	2.22	-108	E12	Garradd-McNaught
	L 2007	Jan 27.41	25	16.4	1.70	2.32	-65	349	Kadota

Periodic comet Schwassmann-Wachmann 1 (29P)

(Observed all around the orbit)

Periodic comet Schwassmann-Wachmann 2 (31P)

P/1929 B1	D 1928	Dec 08		11.0	2.23	1.27	-105		Schwassmann-Wachmann
	L 1929	Jun 06	61	14.5	2.16	2.59	+75		Van Biesbroeck
P/1934 X1	R 1934	Dec 11		16	2.76	2.05	-260		Van Biesbroeck
	L 1936	Jun 10		17.5	2.87	2.32	+287		Jeffers
	R 1941	Sep 20		17	2.38	2.36	-146		Jeffers
	L 1942	Jun 15			2.31	2.64	+122		Van Biesbroeck
	R 1947	Oct 20		16	2.96	1.99	-308		Van Biesbroeck
	L 1949	Jun 26.28		18	2.96	2.63	+307		Jeffers
	R 1954	Jul 27		17	2.61	3.13	-215		Jeffers-Roemer
	L 1956	May 29.27			3.52	2.53	+457	662	

R 1960	Aug	18.32	102	19.0	3.25	2.81	-383	689	Roemer
L 1962	May	27			2.80	2.15	+264		
P 1967	Aug	08			2.63	2.96	-219		
L 1969	May	18.29	154		3.42	2.41	+430	693	Roemer
R 1973	Aug	05			3.32	3.03	-403		Antal?
L 1975	Jun	11.10	150		2.82	2.37	+272	801	
R 1979	Dec	14.98	150	20.5	3.52	3.37	-458	801	Schwartz
L 1982	May	18.37	150	19.2	3.41	2.40	+427	675	Gibson
R 1986	Jun	26.46	150 20		3.42	3.68	-430	675	Gibson
	1989	Aug	02.39		4.26	3.58	+703*	568	
	1991	Sep	12.32	20.9	4.58	3.67	-865#	695	
	1995	Jul	04.22	18.2	3.76	2.95	+526	693	Hergenrother-Larson
	2000	Nov	24.66	18.3	3.78	2.80	-420	867	
	2003	May	05.55	19.1	3.86	2.93	+472	360	
									(Perennial)

Periodic comet Schwassmann-Wachmann 3 (73P)

P/1930 J1	D 1930	Apr	27	30		1.20	0.29	-48		Schwassmann-Wachmann
	L 1930	Aug	24			1.39	0.55	+71		
P/1979 P1	P 1979	Aug	13.47	13		0.99	1.27	-20	323	Johnston-Buhagiar?
	L 1979	Nov	14.52			1.38	1.34	+73	323	
	R 1989	Dec	05.59		19.9	2.23	2.29	-165	568	Luu-Jewitt
	L 1990	Oct	21.22	150		2.14	1.18	+155	801	
	R 1994	Dec	28.03	22		3.03	2.36	-269	493	Birkle-Bohnhardt-Schwehm
	L 1996	Dec	14.25	229 22.3		4.05	3.16	+448*	695	Hergenrother-Larson
	R 2000	Jan	05.15			3.76	2.85	-389	493	
	L 2001	Nov	20.62	103 18.3		3.22	2.26	+296	867	Oribe
	R 2005	Oct	13.50	150 19.6		2.79	3.39	-235	G96	MLS
	L 2006	Dec	12.20	68 19.1		2.42	1.96	+188	703	CSS
	R 2010	Nov	28.92	150		3.39	3.06	-324#	188	Sergeyev-Novichonok-Chestonv

Periodic comet Scotti 1 (244P)

P/2000 Y3	P 2000	Nov	29.38	100	18.2	4.05	3.14	+27	704	LINEAR
	L 2002	May	14.21	100 19.1		4.53	4.48	+558	704	LINEAR
P/2010 Q1	P 2009	Sep	18.29	181	21.8	4.88	3.89	-854	291	Spacewatch

Periodic comet Scotti 2 (202P)

P/1929 WW	P 1929	Nov	27.26	33	16.5	3.88	4.66		690	Tombaugh <i>et al.</i>
	P 1929	Dec	03.24	33		3.89?	4.62?		690	Tombaugh <i>et al.</i>
P/2001 X2	P 2001	Dec	10.61	120	19.0	2.55	1.74	+57	608	NEAT
	L 2002	Mar	18.18	91	20.9	21.4	2.70	2.11	+154	691 Scotti
P/2008 R2	P 2007	Sep	13.24	150		21.7	3.73	2.73	-513#	G96 MLS
	L 2009	Mar	21.20	181	20.3		2.54	2.54	+42	291 Scotti

Periodic comet Scotti 3 (P/2003 L1)

P/2003 L1	P 2002	Apr	05.29	120		20.3	5.17	4.18	-336	644 NEAT
	L 2003	Jun	20.54	60	19.0		5.03	4.26	+105	360 Nakamura

Periodic comet Scotti 4 (P/2010 C1)

P/2010 C1	P 2008	Dec	30.29	150		21.6	5.39	4.46	-337	G96 MLS
	L 2011	May	03.23	181	21.4		5.58	4.76	+517	291 Scotti

Periodic comet Scotti 5 (P/2010 H4)

P/2010 H4	D 2010	Apr	20.27	91	21.0		4.84	3.85	-61	691 Scotti
	L 2010	Jun	13.45	100		20.7	4.83	4.08	-6	474 Gilmore-Kilmartin

Periodic comet Scotti 6 (P/2010 H5)

P/2010 H5	P 2010	Mar	18.30	91	21.3		6.03	5.11	-31	691 Spacewatch
	L 2011	Apr	11.41	181	22.3		6.11	5.21	+359	291 Scotti

Periodic comet Scotti 7 (P/2011 A2)

P/2011 A2	D 2011	Jan	11.46	91	20.1	1.57	1.22	+20	691	Scotti
	L 2011	May	12.29	150	18.3	2.03	1.05	+141	G96	MLS

Periodic comet Scotti 8 (P/2013 A2)

P/2013 A2	D 2013	Jan	06.29	91	19.8	2.19	1.26	-33	691	Scotti
	L 2013	Jan	22.94	50	19.5	2.18	1.20	-16	A13	Kocher

Periodic comet Shajn-Schaldach (61P)

P/1949 S1	D 1949	Aug	28			2.33	1.40	-90		Shajn-Schaldach	
	L 1950	Jan	11			2.26	2.17	+46			
P/1971 S2	P 1971	Jun	28.46	122		2.33	2.27	-96	675		
	L 1972	Jan	20.15	154	19.8	2.37	2.05	+110	693	Roemer	
	R 1978	Jul	02			2.60	1.98	-190			
	L 1978	Oct	31.08	150		2.28	1.63	-70	801		
	R 1985	Jul	25.35	91	19.1	3.07	2.06	-306	691	Gehrels-Scotti	
	L 1987	Jan	29.28	91		2.85	2.14	+247	691	Gehrels-Scotti	
	R 1993	May	27.43	91	19.8	22.4	2.62	2.74	-173	691	Scotti
	L 1994	Feb	10.12	91	18.4	21.7	2.42	2.62	+86	691	Scotti
	R 2000	Apr	22.35			3.37	3.28	-382#	809		
	L 2001	Dec	11.37		18.9	2.75	1.79	+216	704	LINEAR	
	R 2008	Jun	06.45	25	18.4	2.22	2.52	-92	H06	Guido <i>et al.</i>	
	L 2010	May	10.17	150	21.5	4.18	4.01	+611*	G96	MLS	

Periodic comet Shoemaker 1 (102P)

P/1984 S2	P 1984	Sep	01.25	150		1.98	1.02	-15	801	
	L 1985	Feb	19.99	150		2.35	2.61	+156	801	
P/1991 L2	R 1991	Jun	08.71	60	18	2.51	1.84	-193#	474	Kilmartin-Gilmore
	L 1992	Dec	02.34	91	22.2	3.24	2.56	+350*	691	Scotti
	R 1999	Dec	31.89		20.5	2.96	2.11	+290	461	Sárneczky-Meszáros
	L 2000	Jan	01.92		20	2.97	2.12	+291	461	Sárneczky-Meszáros
	R 2006	Jul	24.06	40	20.4	2.01	2.01	+47	J95	Birtwhistle

L 2006	Nov	30.99	60		19.9	2.44	1.61	+177	204	Buzzi-Luppi
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Periodic comet Shoemaker-LINEAR (146P)

P/1984 W1	P 1984	Nov	18.25		15.0		1.46	0.48	+53	688
	L 1984	Dec	20.28	40	19		1.66	0.78	+85	707 Everhart
P/2000 S2	D 2000	Sep	27.45	100	18.6		1.59	1.45	+75	704 LINEAR
	L 2001	Feb	20.59	103	19.6		2.69	2.02	+221	867 Oribe
	R 2008	Aug	21.09	60	19.5		1.64	2.11		461 Sárneckzy
	L 2008	Sep	09.11	44	18.6		1.77	2.10		215 Husabick

Periodic comet Shoemaker 3 (155P)

P/1986 A1	D 1986	Jan	10.47	46	12		1.81	0.89	+23	675 Shoemaker
	L 1986	May	14.20	91			2.37	2.00	+148	691 Gehrels-Scotti
P/2002 R2	P 2002	Sep	04.80	60	19.1		2.11	2.21	-101	372 Seki
	L 2003	May	23.52	60	19.9		2.46	2.18	+160	360 Nakamura

Periodic comet Shoemaker 4 (199P)

P/1994 J3	D 1994	May	14.41	46	17.3		3.14	2.22	-153	675 Shoemaker-Levy-Spahr
	L 1994	Sep	18.48				2.95	2.90	-26	413
P/2008 G2	R 2008	Apr	01.44	68		19.2	3.87	3.05	-373	703 CSS
	L 2009	Nov	22.04	50		18.2	3.33	3.44	+226	I10 Masi-Mallia

Periodic comet Shoemaker-Holt 1 (128P)

P/1987 U1	D 1987	Sep	24.38	46			3.32	2.37	-240	675 Shoemaker-Holt
	L 1989	Feb	06.56		16.5		3.37	2.48	+261	897
P/1996 S2	P 1996	Sep	16.37				3.78	2.79	-430#	568
	L 1999	Apr	16.25	155	19.5		4.01	3.48	+512*	693 Hergenrother
	R 2006	Aug	22.14	40		20.2	3.45	2.74	-296	J95 Birtwhistle
	L 2008	Apr	28.14	150	19.8		3.51	3.69	+320	G96 MLS

Periodic comet Shoemaker-Holt 2 (121P)

P/1989 E2	P 1989	Mar	04.89		14		2.93	2.00	+209	026
	L 1989	May	29.11				3.16	3.05	+294	293
P/1995 Q3	R 1995	Aug	29.48	91	21.1		3.35	2.87	-357#	691 Scotti
	L 1998	Mar	29.04	40	19.0		4.04	3.25	+586	504 Merlin
	R 2003	Sep	22.11	60	20		3.31	2.54	-346	461 Sárneckzy
	L 2006	May	26.23	90	21.1		4.17	3.29	+632*	691 Spacewatch
	R 2012	Oct	22.01	60	19.9		3.94	3.18	-321	461 Sarneckzy-Csak-Hodosan

Periodic comet Shoemaker-Levy 1 (192P)

P/1990 V1	P 1990	Oct	24.60		14		1.59	0.63	+36	897
	L 1991	Jan	18.06	150			2.09	1.62	+121	801
P/2007 T3	P 2007	Oct	12.44	50	18.2		1.67	1.49	-66	E12 McNaught
	L 2008	Mar	09.45	25	16.6		1.78	2.33	+83	349 Kadota

Periodic comet Shoemaker-Levy 2 (137P)

P/1990 UL3	D 1990	Sep	17.44	46	17.6		1.85	0.94	-8	675 Shoemaker-Levy
	L 1991	Jan	15.12			18.2	2.12	1.65	+112	688
P/1998 K6	R 1998	May	19.36	120		21.0	4.84	3.84	-628#	696 Hergenrother
	L 2001	Feb	20.62	103	19.7		3.63	2.78	+381*	867 Oribe
	R 2009	Aug	05.45	41	18.8		1.92	2.09		H10 Novichonok <i>et al.</i>
	L 2011	Mar	02.31	150	21.1		4.80	3.84		G96 MLS

Periodic comet Shoemaker-Levy 3 (129P)

P/1991 C1	D 1991	Feb	07.34	46	16.5		2.83	1.84	+56	675 Shoemaker-Levy
	L 1991	May	05.52	60	19		2.90	2.66	+143	372 Seki
P/1996 U1	R 1996	Oct	18.00		18.4		3.62	2.64	-503	910 Hahn-Maury-Lundstrom
	L 1999	Apr	20.25	100	18.7		3.42	2.42	+411*	704 LINEAR
	R 2002	Nov	04.82	250	23		4.43	4.10	-943#	950 Fitzsimmons <i>et al.</i>
	L 2006	Jun	20.19	68	18.4		3.34	3.05	+381	703 CSS
	A 2010	Sep	04.35	150	20.8		4.59	3.59	-1256	G96 MLS

(Observed all around the orbit)

Periodic comet Shoemaker-Levy 4 (118P)

P/1991 C2	D 1991 Feb 09.46	46	17		2.55	1.73	+210	675 Shoemaker-Levy
	L 1991 Apr 19.14	150			2.84	1.99	+279	801
P/1995 M1	R 1995 Jun 22.45	91		21.9	3.96	3.44	-570#	691 Scotti
	L 1999 May 23.33	150			4.68	3.70	+861*	693 Hergenrother
	R 2002 Aug 19.69	60	18.6		3.06	2.23	-331	360 Nakamura
	L 2004 Jun 18.21	100	19.5		3.09	2.96	+337	704 LINEAR
	R 2008 Sep 20.20	150	21.1		3.62	2.74	-469	G96 MLS
	L 2012 Jul 19.68	150	21.7		4.79	4.07	+929	188 Burhonov-Novichonok

Periodic comet Shoemaker-Levy 5 (145P)

P/1991 T1	D 1991 Sep 12.37	46	16.5		2.14	1.17	-92	675 Shoemaker-Levy
	L 1992 Jan 02.12	91	17.1		1.99	1.68	+19	691 Scotti
P/2000 R1	R 2000 Jul 01.77		18.5		2.03	2.37	-46	372 Seki
	L 2001 Feb 16.92	50	18.4		2.53	1.98	+184	587 Vospini-Pansecchi-Cavagna
	R 2008 Aug 04.55	50	19.9		2.93	1.95		E12 Garradd-McNaught
	L 2010 Apr 28.94				3.48	3.42		C51 WISE

Periodic comet Shoemaker-Levy 6 (181P)

P/1991 V1	D 1991 Nov 03.21	46	13		1.17	0.23	+20	675 Shoemaker-Levy
	L 1992 Jan 08.04	150			1.59	0.85	+86	801
P/2006 U4	R 2006 Oct 26.47	50	18.2		1.20	0.98	-30	E12 McNaught-Burton
	L 2007 Jan 27.88	60		18.8	2.41	1.23	+64	204 Buzzi-Luppi

Periodic comet Shoemaker-Levy 7 (138P)

P/1991 V2	D 1991 Nov 13.35	46	16.5		1.64	0.69	+16	675 Shoemaker-Levy
	L 1992 Jan 06.05	150			1.77	0.93	+70	801
P/1998 O1	R 1998 Jul 25.43	91	20.7	22.5	1.72	1.94	-30	691 Scotti
	L 1999 Feb 12.30	155			2.30	1.44	+172	693 Hergenrother

R 2005	Oct	28.45	150	20.2		1.95	1.70	+101	G96	MLS
L 2006	Feb	24.26	150	20.9		2.57	1.70	+219	G96	MLS
R 2012	Aug	24.46		20.4		1.84	2.41	+74	H06	iTelescope

Periodic comet Shoemaker-Levy 8 (135P)

P/1992 G2	P 1992	Mar	30.72			2.74	1.91	-75	413	
	L 1993	Sep	16.17	91	19.9	22.0	3.57	2.68	+460	691 Scotti
P/1998 B1	R 1998	Jan	22.23	120	21.8		4.14	3.18	-687	696 Hergenrother
	L 1999	Jun	09.51	60	18.4		2.90	2.66	-184	360 Nakamura

Periodic comet Shoemaker-Levy 9 (D/1993 F2)

D/1993 F2 P 1993 Mar Lindgren
 (Impacted Jupiter, 1994 July)

Periodic comet Siding Spring 1 (162P)

	P 1990	Mar	23.26			3.92	2.98	+477	261	
	P 2000	Mar	15.13	100		18.7	2.67	1.97	+241	704 LINEAR
P/2004 TU ₁₂	D 2004	Oct	10.55			14.1	1.28	0.48	-31	E12 Siding Spring
	A 2007	Apr	25.19	91	20.9		4.85	3.86	+896	691 Spacewatch

(Perennial)

Periodic comet Siding Spring 2 (P/2004 V3)

P/2004 V3	D 2004	Nov	03.40	50		18.8	3.94	3.80	-8	E12 SSS
	L 2005	Oct	24.55	100			4.40	3.57	+347	413 McNaught

Periodic comet Siding Spring 3 (P/2006 HR₃₀)

P/2006 HR ₃₀	P 2005	Jul	06.65	50		19.0	5.56	4.58	-545	E12 SSS
	L 2008	May	05.49	50	19.8		5.17	4.45	+489	E12 Garradd-McNaught

Periodic comet Siding Spring 4 (P/2006 R1)

P/2006 R1	D 2006 Sep	01.49	50	17.7	1.67	0.80	-2	E12 SSS
	L 2006 Sep	26.47	50		1.69	1.30	+23	E12 SSS

Periodic comet Siding Spring 5 (P/2012 US₂₇)

P/2012 US ₂₇	D 2012 Oct	17.58	50	18.8	2.15	1.45	-114	E12 SSS
	L 2013 Jan	20.08	51	17.6	1.83	1.88	-20	H45 Sherrod

Periodic comet Singer Brewster (105P)

P/1986 J1	D 1986 May	03.34	46	15	1.98	0.98	-37	675 Singer Brewster	
	L 1986 Sep	06.14	91		2.08	1.95	+89	691 Gehrels-Scotti	
P/1992 G1	R 1992 Apr	01.35	91	20.4	2.54	1.69	-209	691 Scotti	
	L 1993 Sep	16.25	91	20.1	22.6	3.02	2.08	+324	691 Scotti
	R 1999 Feb	13.51	150	18.2	2.07	2.03	-52	693 Hergenrother	
	L 1999 Jun	14.35	100	20.1	2.10	1.11	+69	704 LINEAR	
	R 2005 Mar	04.27	91	20.0	2.48	1.51	-191	691 Spacewatch	
	L 2006 Sep	28.01	60		19.0	3.26	2.34	+382*	204 Buzzi-Luppi
	R 2011 Feb	04.29	61		20.8	3.28	2.31	-387#	G68 Dymock-Camilleri
	L 2012 Nov	06.23	180	20.8	2.73	2.79	+254	F51 Pan-STARRS	

Periodic comet Skiff 1 (P/2000 S1)

P/2000 S1	P 2000 Aug	26.42	100		18.6	2.54	1.66	+43	704 LINEAR
	L 2000 Dec	22.45	60	18.1	2.85	2.62	+161	360 Nakamura	

Periodic comet Skiff 2 (223P)

P/2002 S1	P 2001 Jul	27.34	120		19.0	2.86	1.93	-241	608 NEAT
	L 2003 Apr	07.90	30		19.8	3.42	3.34	+379*	J95 Birtwhistle

P/2009 L18	R 2009 Jun 15.61	35		20.0	3.62	2.84	-425#	E16 Sostero-Guido-Camilleri-Prosperi
	L 2012 Feb 13.92	40	20.3		4.08	3.13	+548	C32 Gerke-Plaksa-Novichonok-Chestn

Periodic comet Skiff 3 (P/2004 V1)

P/2004 V1	P 2004 Oct 07.17	100		19.4	1.60	0.93	-63	704 LINEAR
	L 2005 Feb 28.16	64	19.2		1.71	1.80	+81	G92 Levy-Levy-Glinos

Periodic comet Skiff 4 (P/2005 S2)

P/2005 S2	P 2004 Sep 07.35	91		20.4	6.69	5.68	-660	691 Spacewatch
	L 2005 Nov 08.96	36		19.6	6.44	5.61	-232	A32 Denzau

Periodic comet Skiff-Kosai (D/1977 C1)

D/1977 C1	D 1977 Feb 13.43		17.5		3.01	2.04	+193	688 Skiff
	L 1977 Mar 12		17		3.06	2.13	+221	Kosai

Periodic comet SOHO 1 (P/1999 R1)

P/1999 R1	D 1999 Sep 04.85				0.07	0.94	-0.7	249 SOHO
	L 1999 Sep 06.26				0.08	1.06	+0.7	249 SOHO
P/2003 R5	D 2003 Sep 08.19				0.07	0.94	-0.6	249 SOHO
	L 2003 Sep 09.57				0.08	1.05	+0.8	249 SOHO
P/2007 R5	D 2007 Sep 10.29				0.09	0.92	-1	249 SOHO
	L 2007 Sep 12.26				0.08	1.07	+1	249 SOHO
P/2010 H3	D 2010 Apr 18.94				0.08	1.08	-1.0	249 SOHO
	L 2010 Apr 22.43				0.17	0.85	+2.5	C49 STEREO

Periodic comet SOHO 2 (P/2000 O3)

P/2000 O3	D 2000 Jul 30.22				0.08	1.02	-0.7	249 SOHO
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L 2000	Jul	31.50		0.07	1.07	+0.6	249 SOHO
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Periodic comet SOHO 3 (P/2003 T12)

P/2003 T12	D 2003	Oct	09.43		0.60	0.40	-6.9	249 SOHO
	L 2003	Oct	11.40		0.60	0.41	-4.9	249 SOHO
P/2003 T12	R 2012	Jan	30.06	15.2	0.60	1.07		H06 Sato-Guido-Sostero-Howes
	L 2012	Mar	04.83	40	20.1	0.94	0.80	J95 Birtwhistle

Periodic comet SOHO 4 (P/2012 A3)

P/2012 A3	D 2012	Jan	13.31		0.63	1.38	-13.1	249 SOHO
	L 2012	Jan	21.46		0.58	1.24	-5.0	C50 STEREO-B

Periodic comet Slaughter-Burnham (56P)

P/1958 B1	D 1958	Dec	10	33	2.65	1.76	+96	Slaughter-Burnham
	L 1959	Apr	09.16	102	20.1	3.01	3.48	+216 689 Roemer
P/1969 V1	R 1969	Nov	04.15	229	20.1	2.81	2.40	-160 695 Roemer
	L 1971	Apr	21		3.66	3.88	+373	
	R 1981	Jul	09.39	150 20	2.74	2.50	-133	801
	L 1982	Jan	20.76		2.59	2.47	+63	010
	R 1992	Sep	24.18	154 21.5	3.22	2.53	-271#	693 Larson-Slaughter
	L 1994	Mar	02.49	60 18.9	3.15	2.90	+253	360 Nakamura
	A 1997	Dec	30.63		7.43	7.59	+1652*	568 Meech
	R 2004	Jul	15.39	100 19.7	2.88	2.31	-184	704 LINEAR
	L 2006	Jan	18.26	68 18.4	3.64	2.66	+368	703 CSS

Periodic comet Smirnova-Chernykh (74P)

	D 1975	Mar	04.78	15.2	3.61	2.70	-154	095
	A 1979	Sep	17.15	150 19	4.78	3.80	+1503	801
	A 1980	Nov	28.25	19.5	4.65	4.01	-1180	675
	A 1987	Jun	30.82	18	4.68	3.97	+1225	413

A 1988	Sep	10.42	18.0	4.79	3.81	-1425	675	
A 1996	Oct	16.54	60	18.1	4.81	4.10	+1533	360 Nakamura

(Observed all around the orbit)

Periodic comet Spacewatch 1 (125P)

P/1991 R2	D 1991	Sep	08.26	91	21.1	2.70	1.70	+260	691 Gehrels
	L 1991	Nov	09.20	210	22.0	3.03	2.50	+322*	695 B. Mueller
P/1996 F1	P 1996	Mar	11.58	60	17.8	1.94	0.95	-125	372 Seki
	L 1996	Sep	02.45	60	16.0	1.62	1.57	+50	360 Nakamura
	R 2002	Mar	12.84	30	18.0	1.59	1.96	+44	340 Ezaki
	L 2002	Sep	16.25	120	19.1	2.54	1.57	+231	644 NEAT
	R 2007	Jan	26.15	60	20	2.35	1.49	-197#	461 Sárneczky
	L 2007	Oct	06.40	25	16.3	1.62	2.00	+57	349 Kadota
	R 2012	Dec	08.53	18.3	1.68	2.33	-72	H06	Sato <i>et al.</i>

Periodic comet Spacewatch 2 (P/2005 JN)

P/2005 JN	P 2005	Apr	04.37	68	19.4	2.33	1.35	-77	703 CSS
	L 2005	May	25.88	30		2.28	1.48	-26	213 Naves-Campas

Periodic comet Spacewatch 3 (P/2006 F4)

P/2006 F4	D 2006	Mar	26.36	91	19.9	2.35	1.44	-38	691 Spacewatch
	L 2006	May	31.89	60	19.5	2.35	1.52	+28	561 Kelemen

Periodic comet Spacewatch 4 (P/2006 XG₁₆)

P/2006 XG ₁₆	P 2006	Nov	15.36	150	20.6	2.20	1.50	-87	G96 MLS
	L 2007	Apr	14.85	60	17.7	2.16	1.89	+64	561 Kelemen

Periodic comet Spacewatch 5 (P/2010 UH₅₅)

P/2010 UH ₅₅	P	2010	Sep	12.18	100	21.1	3.32	2.80	-240	J04	ESA Optical Ground Station
	L	2012	Mar	23.99	40	18.5	3.65	2.72	+319	J24	Hernandez

Periodic comet Spacewatch-Boattini (P/2011 JB₁₅)

P/2011 JB ₁₅	P	2010	May	13.19	150	21.5	5.65	4.80	-618	G96	MLS
	L	2012	Aug	15.18		19.7	5.10	4.35	+207	H06	Suzuki-Urbanik-Sato

Periodic comet Spacewatch-Hill (P/2009 SK₂₈₀)

P/2009 SK ₂₈₀	D	2009	Sep	17.30	91	20.9	4.21	3.33	+116	691	Spacewatch
	L	2011	Dec	23.15	250	21.6	4.84	3.94	+943	950	Karami-Fathivavsari-Vaduvescu

Periodic comet Spacewatch-LINEAR (P/2004 DO₂₉)

P/2004 DO ₂₉	P	2004	Feb	11.39	59	19.1	4.32	3.37	-241	699	LONEOS
	L	2005	Jul	10.23	61	19.5	4.38	4.01	+274	673	Young <i>et al.</i>

Periodic comet Spacewatch-PANSTARRS (P/2011 UA₁₃₄)

P/2011 UA ₁₃₄	D	2011	Oct	24.43	91	20.4	2.09	1.25	-44	691	Spacewatch
	L	2012	Jan	27.77	60	19.4	2.11	1.40	+52	561	Kelemen

Periodic comet Spahr 1 (242P)

P/1998 U4	P	1997	Oct	29.31	100	18.6	4.46	3.62	-485	566	NEAT
	L	2001	Apr	15.25	120	19.9	5.14	4.38	+779	608	NEAT
P/2010 P3	R	2010	Aug	14.41	56	20.0	4.73	3.93	-598	H36	Hug
	L	2013	Jan	11.97	40	17.8	4.18	3.37	+283	B96	Bryssinck

Periodic comet Spahr 2 (171P)

P/1998 W1	P 1998	Nov 13.20	130		16.1	1.83	0.93	-66	I02	2MASS
	L 2000	May 01.38	400	22.1		3.79	2.87		695	Buie <i>et al.</i>
P/2005 R3	P 2005	Sep 01.81	60	18.3		1.73	2.28	-1	372	Seki
	L 2006	Feb 06.07	36			2.22	1.40	+156	941	Ferrando-Ferrando
	R 2011	Oct 19.55	200	20.5		2.43	1.60	-194	E10	Faulkes South
	L 2012	Apr 12.13		17.3		1.77	2.45	-18	H06	Sato-Bryssinck

Periodic comet Spitaler (113P)

P/1890 W1	D 1890	Nov 17.13	68			1.82	0.90	+21	045	Spitaler
	L 1891	Feb 04.77	68			2.01	1.30	+100	045	Spitaler
P/1993 U2	P 1993	Oct 09.53		17		2.29	1.31	-111	374	
	L 1994	Apr 05.15	91	19.9	21.9	2.19	2.65	+67	691	Scotti
	R 2000	Aug 25.43	91	20.2		2.53	1.73	-184	691	Scotti
	L 2002	Mar 12.25		22.1		3.32	2.33	+379*	645	SDSS
	R 2007	Sep 05.73	102	19		2.58	1.64	-200#	413	Sárneczky-Kiss
	L 2009	Mar 23.03	60		21.0	3.26	2.34	+365	204	Buzzi

Periodic comet Stephan-Oterma (38P)

P/1867 B1	D 1867	Jan 22	16			1.58	1.12	+2		Coggia
	L 1867	Apr 04				1.83	1.84	+74		
P/1942 V1	P 1942	Nov 05				1.69	0.74	-44		Whipple
	L 1943	May 02				2.28	2.27	+134*		
P/1980 L2	P 1980	Jun 10.88				2.63	2.89	-177#	323	Candy <i>et al.</i>
	L 1981	Apr 04.07	150			2.15	1.77	+120	801	McCrosky <i>et al.</i>

Periodic comet SWAN (P/2005 T4)

P/2005 T4	P 2005	Oct 14.43	28		11.9	0.69	1.04	+4	427	Mattiazzo
	L 2005	Oct 31.40	60		17.6	0.77	1.38	+21	372	Seki

Periodic comet Swift (D/1895 Q1)

D/1895 Q1	D 1895	Aug 21	12		1.30	0.35	0		Swift
	L 1896	Feb 06			2.27	2.03	+169		Barnard

Periodic comet Swift-Gehrels (64P)

P/1889 W1	D 1889	Nov 16	12		1.37	0.66	-14		Swift
	L 1890	Jan 22			1.50	1.03	+53		
P/1973 C1	D 1973	Feb 08.29	122 19		2.27	1.31	+161	675	Gehrels
	L 1973	Mar 26.24	229		2.62	2.06	+207	695	Roemer
	R 1981	Jul 11.29	150	19.5	2.09	1.29	-139#	801	
	L 1982	Feb 21			1.70	1.38	+86		
	R 1991	Jan 07.39	60 16.5		1.47	1.95	-46	372	Seki
	L 1991	Apr 02.45	60 16		1.44	2.14	+39	372	Seki
	R 2000	Dec 22.44	122 20		2.91	2.50	+245	696	Hergenrother
	L 2001	Feb 26.73	103 19.4		3.39	2.41	+311	867	Oribe
	R 2009	Jun 26.76	25 13.9		1.39	2.19	+12	349	Kadota
	L 2010	May 04.89			3.48	3.25	+325*	C51	WISE

Periodic comet Swift-Tuttle (109P)

P/1737 N1	D 1737	Jul 02.7			1.02	0.64	+17	324	Kegler
	L 1737	Jul 15					+30		
P/1862 O1	D 1862	Jul 16	12		1.16	1.49	-38		Swift
	L 1862	Oct 31			1.49	1.92	+69		MacLear
P/1992 S2	P 1992	Jan 03.08	40 17.5		4.51	3.75	-344#	098	Haver
	L 1995	Apr 05.24		21.5	8.58	8.07	+844*	809	

Periodic comet Takamizawa (98P)

P/1984 O1	D 1984	Jul 06.03	16		1.65	0.70	+42	026	Takamizawa
	L 1984	Nov 25.52			2.38	2.19	+185*	474	
P/1991 D1	P 1991	Feb 12.84	60 20		2.36	1.81	-181	372	Seki
	L 1991	Sep 13.01	150		1.61	1.43	+26	801	
	R 1998	Mar 02.75	103 20.6		2.78	1.83	-250#	867	Yamanishi, Miyamoto, Aimoto, C

L 1998	Jun	19.21	120	20.2		2.11	1.96	-142	696	Hergenrother
R 2006	Mar	24.51	150	15.9		1.70	2.42		G96	MLS
L 2006	Sep	25.68	36		20.1	2.76	1.79		415	Herald

Periodic comet Taylor (69P)

P/1915 W1	D 1915	Nov 26	25			1.69	0.77	-66#		Taylor
	L 1916	May 28				1.94	1.95	+118		
P/1976 X1	P 1976	Nov 20.17				2.00	1.20	-52	805	
	L 1977	Apr 16.08	150			2.10	1.90	+95	801	
	R 1983	Nov 03.40	40			2.03	1.42	-64	707	Everhart
	L 1984	May 03.06	150			2.18	2.13	+118	801	
	R 1990	Nov 11.51	91	19.7		1.99	1.34	-47	691	Scotti
	L 1991	Mar 21.02	150			2.07	1.51	+82	801	
	R 1997	Oct 08.79	60	17.8		2.02	1.81	-64	402	Sugie
	L 1999	Apr 15.47	155	19.3		3.82	2.98	+489*	693	Hergenrother
	R 2004	Sep 24.43	100	18.6		2.02	2.02	-67	704	LINEAR
	L 2005	Apr 24.90	30		18.8	2.28	1.91	+145	213	Naves-Campas
	R 2011	Oct 28.09	40	18.9		2.39	2.54	+103	C32	Gerke-Novichonok-Plaksa-Chestn
	L 2012	Mar 03.30	150	20.9		2.78	1.88	+230	G96	MLS

Periodic comet Tempel 1 (9P)

P/1867 G1	D 1867	Apr 03				1.64	0.71	-51		Tempel
	L 1867	Aug 27				1.81	1.29	+95		
P/1873 G1	R 1873	Apr 04				1.80	1.01	-36		Stephan
	L 1873	Jul 01				1.83	0.90	+52		
	R 1879	Apr 25				1.77	0.88	-12		Tempel
	L 1879	Jul 08.90				1.85	0.94	+62	030	
P/1967 L1	R 1967	Jun 08.42	154	18.2		2.05	1.92	+147	693	Roemer
P/1972 A1	R 1972	Jan 11.48	229			2.28	1.78	-186	695	Roemer-Vaughn
	L 1972	Jul 10.01				1.50	1.03	-5	821	
	R 1977	Apr 12.07	150		20.4	2.79	2.54	-274	801	Shao-Schwartz
	L 1978	Oct 30.58				2.89	2.16	+293	323	
	R 1982	Dec 11.84	60	19		2.42	2.31	-210	372	Seki
	L 1983	Oct 01				1.71	1.65	+84		
	R 1987	Oct 27.44	91	20.9		3.58	3.53	-435	691	Scotti

L 1989	Oct	21.49		17.5		2.87	2.05	+290	413
R 1993	Jan	21.20	91		20.7	3.93	3.02	-528#	691 Scotti

(Perennial)

Periodic comet Tempel 2 (10P)

P/1873 N1	D 1873	Jul	03		9		1.35	0.70	+8	Tempel
	L 1873	Oct	20				1.81	0.88	+117	
P/1878 O1	R 1878	Jul	19				1.45	0.73	-50	Tempel
	L 1878	Dec	21				1.74	1.76	+105	
	R 1894	May	09		11		1.36	1.69	+16	Finlay
	L 1894	Aug	09	76	13.5		1.76	1.52	+108	Javelle
	R 1899	May	07.41		15		1.64	0.87	-83	662 Perrine
	L 1899	Dec	02		15		1.89	1.45	+126	Perrine
	R 1904	Nov	30		12		1.40	1.94	+20	Javelle
	L 1905	Jan	03	51			1.50	2.15	+54	Howe
	R 1915	May	17	43	12		1.37	1.80	+33	Delavan
	L 1915	Sep	13.08		14		2.04	1.56	+152	029 Thiele
	R 1920	May	25		11		1.33	1.04	-16	Kudara
	L 1920	Nov	17		15		2.09	1.21	+160	
	R 1925	Jun	11		12.0		1.45	0.48	-57	Delporte
	L 1925	Dec	13		16		1.88	1.53	+128	Van Biesbroeck
	R 1930	Aug	26		12		1.39	1.18	-40	Wood
	L 1931	Feb	14		14		1.90	2.49	+132	Van Biesbroeck
	R 1946	May	01	61	17		1.54	1.14	-62	Van Biesbroeck
	L 1947	Jan	15		17		2.34	2.13	+197	Van Biesbroeck
	R 1951	Feb	03.53	152	19.7		2.74	2.46	-264	672 Cunningham
	L 1951	Nov	25		12		1.43	1.73	+31	Van Biesbroeck
	R 1956	May	05	208	19		2.82	2.06	-276	Van Biesbroeck
	L 1956	May	09				2.79	2.07	-272	
	R 1961	Mar	19.22	102		20.4	3.55	2.58	-419	689 Roemer
	L 1963	Jan	17				2.67	2.23	+250	
	R 1967	Feb	12.49	154			2.25	2.15	-183	693 Roemer
	L 1968	Jan	01				1.97	1.84	+140	
	R 1972	Jan	10.53	229			2.94	2.73	-310	695 Roemer-Latta
	L 1973	Dec	30.28	229			3.51	2.56	+410*	695 Roemer
	R 1977	Mar	27.23	150		19.5	3.12	2.15	-330	801 Shao-Schwartz
	L 1979	Feb	24				3.01	2.15	+386	

R 1982	Feb	03.46			20.5	3.80	3.03	-483	675	Gibson
L 1983	Dec	09.14	150			2.30	1.53	+191	801	
R 1986	Dec	29.46	91	20.4		4.26	3.81	-627#	691	Scotti

(Perennial)

Periodic comet Tempel-Swift (11P)

D/1869 W1	D 1869	Nov 27	16			1.07	0.26	+8		Tempel
	L 1870	Jan 04				1.23	0.34	+46		
D/1880 T1	D 1880	Oct 11	12			1.13	0.20	-28		Swift
	L 1881	Jan 26				1.47	0.54	+79		
	R 1891	Aug 28				1.50	0.50	-81		Barnard
	L 1892	Jan 21				1.37	0.51	+65		
	R 1908	Sep 30				1.15	0.63	-5		
	L 1908	Dec 30				1.56	0.68	+86*		Barnard
	D 2001	Sep 10.26			20.1	1.92	0.97	-112#	704	LINEAR
	L 2002	Feb 07.46	60	18.8		1.63	1.61	+39	360	Nakamura

Periodic comet Tempel-Tuttle (55P)

P/1366 U1	D 1366	Oct 25								
	L 1366	Oct 30								
P/1699 U1	D 1699	Oct 26								Kirch
P/1865 Y1	D 1865	Dec 19	16			1.05	0.21	-23		Tempel
	L 1866	Feb 09				1.09	1.76	+29		
P/1965 M2	R 1965	Jun 30.14				1.38	1.54	+61	074	Schubart-Bester
	L 1965	Sep 01				2.09	1.21	+124		
P/1997 E1	P 1996	May 12.09			23.5	6.74	5.85	-657#	809	
	L 1998	Jul 05.74		16.5		2.13	1.57	+128*	402	

Periodic comet Tenagra (P/2012 TK₈)

P/2012 TK ₈	D 2012	Oct 06.32	41	19.6		3.27	2.28	-216	926	Tenagra
	L 2012	Nov 25.83	30		20.4	3.20	2.51	-166	C10	Soulier

Periodic comet Tichy (196P)

P/2000 U6	P 2000	Sep	24.38	59	18.9		2.16	1.39	-10	699	LONEOS
	L 2001	Feb	16.88	50		20.2	2.38	2.20	+135	587	Vospini-Pansecchi-Cavagna
P/2008 C2	R 2008	Jan	11.71	106	19.4		2.15	2.28	-26	246	Ticha-Tichy
	L 2008	Feb	24.78	44	19.5		2.14	2.70	+18	215	Hasubick

Periodic comet Tombaugh-Tenagra (274P)

P/1931 AN	D 1931	Jan	11.26				1.67	0.70	-83	690	Tombaugh
	L 1931	Jan	13.29				1.64	0.68	-81	690	Tombaugh
	P 2003	Nov	21.39	100	19.2		2.48	1.89		704	LINEAR
	P 2003	Dec	18.44	91	18.0		2.45	1.62		691	Spacewatch
P/2012 WX ₃₂	D 2012	Nov	27.50	41	18.2		2.52	1.71	-88	926	Schwartz-Holvorcem

Periodic comet Tritton (157P)

P/1978 C2	D 1978	Feb	11	122			1.82	0.87	+106	413	Tritton
	L 1978	Mar	14.21				2.02	1.05	+137	801	
P/2003 T1	R 2003	Sep	22.46	50	14.6		1.42	1.71	-2	678	Juels-Holvorcem
	L 2004	Mar	20.96	30		19.6	2.29	1.31	+179*	J87	Lacruz
	R 2009	Aug	07.11	30		19.0	2.42	1.69	-197#	212	Almendros
	L 2010	Jun	02.87	50		17.9	1.76	2.31	+102	A77	Rinner-Kugel

Periodic comet Tsuchinshan 1 (62P)

P/1965 A1	D 1965	Jan	01.69	40	15		1.51	0.53	-27	330	
	L 1965	Apr	24.21	102		19.0	1.74	1.22	+86	689	Roemer
P/1971 Y1	R 1971	Dec	20.52	229			1.79	2.01	+95	695	Roemer-Vaughn
	L 1972	Mar	10.49	229			2.29	1.62	+176	695	Roemer
	R 1978	Feb	04.05	150	20.1		1.78	1.72	-92	801	
	L 1978	Mar	08.04	150	19.5		1.63	1.85	-60	801	
	R 1984	Sep	04.76	60		20.5	1.94	1.87	-120	372	Seki
	L 1985	Apr	21.13	150			1.87	1.14	+109	801	
	R 1991	Nov	08.84	60	17		1.67	2.29	+70	372	Seki
	L 1991	Nov	12.83	60	18		1.69	2.29	+74	372	Seki

R 1997	Oct	12.40	91	21.1	2.37	1.42	-189#	691	Scotti
L 1998	May	26.46			1.55	2.01	+37	402	
R 2004	Sep	14.78	113	18.2	1.73	1.78	-84	D74	Hori-Maeno
L 2005	Jun	07.24	68	18.6	2.32	1.82	+181*	703	CSS

Periodic comet Tsuchinshan 2 (60P)

P/1965 A2	D 1965	Jan	11.84	40	15	1.79	0.81	-29	330	
	L 1965	May	31.23	102		19.1	2.03	1.88	+111	689 Roemer
P/1971 S1	R 1971	Sep	19.48	154		1.89	2.29	-71	693	Roemer
	L 1972	Jul	09			2.58	2.43	+223*		
	R 1978	Oct	29.82	60	17.5	1.82	2.41	+39	372	Seki
	L 1978	Dec	01.43	150		1.90	2.24	+71	801	
	R 1985	Apr	10.17	150	22	2.01	2.61	-102	675	Gibson
	L 1985	May	08.17	150	21.5	1.91	2.69	-74	675	Gibson
	R 1991	Dec	03.21	91	21.2	2.31	1.36	-169#	691	Scotti
	L 1992	Jan	29.14	91	19.7	2.04	1.58	-112	691	Scotti
	R 1998	Nov	15.73	60	20.3	2.04	1.23	-112	360	Nakamura
	L 1999	May	15.22	155		1.88	1.79	+68	693	Hergenrother
	R 2005	Oct	05.09	25	19.5	1.91	2.01	-80	A79	Fratev <i>et al.</i>
	L 2006	Apr	21.27	59	18.8	2.06	1.23	+118	699	Van Ness-Skiff
	R 2011	Oct	29.76	40	20.4	2.42	1.43	-197	C32	Gerke-Novichonok-Plaksa-Chestn
	L 2012	May	28.88	25	15.8	1.63	2.25	+15	J38	Garcia

Periodic comet Tubbiolo (P/2005 E1)

P/2005 E1	D 2005	Mar	03.26	91	20.9	4.45	3.48	-14	691	Tubbiolo
	L 2005	May	09.23	61	19.8	4.45	3.84	+53	673	Young <i>et al.</i>

Periodic comet Tuttle (8P)

P/1790 A2	D 1790	Jan	09			1.10	0.39	-22		Méchain
	L 1790	Feb	01			1.04	0.61	+1		
P/1858 A1	D 1858	Jan	05	10		1.27	0.80	-50		Tuttle
	L 1858	Mar	24			1.11	1.09	+28		
P/1871 T1	R 1871	Oct	13			1.27	1.09	-50		Borrelly

L 1872	Jan 30			1.35	1.32	+59	
R 1885	Aug 09.13			1.15	1.91	-34	020
L 1885	Sep 17			1.03	1.70	+6	
R 1899	Mar 05.82			1.35	1.78	-60	024
L 1899	Jul 10			1.42	1.82	+67	
R 1912	Oct 19			1.04	1.21	-9	
L 1913	Jan 19			1.58	1.81	+83	
R 1926	Jan 12			1.82	1.83	-106	
L 1926	Jun 09			1.21	1.69	+42	
R 1939	Aug 12			1.65	1.96	-90	
L 1939	Dec 21			1.20	1.33	+41	
R 1966	Dec 02			1.95	1.62	-119	
L 1967	Jun 07.74			1.44	1.55	+68	076
R 1980	Jul 14.29	150	20	2.31	2.52	-153	801
L 1981	May 02.42	60		2.16	1.56	+139*	474
R 1992	Jul 29.06		21.2	6.29	5.60	-696#	950 Tancredi-Lindgren
R 1992	Jul 31.20		21.4	6.28	5.59	-694	950 Tancredi-Lindgren
R 2007	Apr 22.46		20.3	3.47	4.00	-280	693
L 2008	Jun 10.40		17.2	2.12	1.64	+135	472 Gilmore-Kilmartin

Periodic comet Tuttle-Giacobini-Kresák (41P)

P/1858 J1	D 1858	May 03	10		1.14	0.46	+0		Tuttle
	L 1858	Jun 02			1.20	0.54	+30		
P/1907 L1	D 1907	Jun 01	40		1.17	0.85	+3		Giacobini
	L 1907	Jun 14			1.18	0.86	+16		
P/1951 H1	D 1951	Apr 24	10		1.13	0.51	-15		Kresák
	L 1951	Aug 09			1.59	1.00	+92		
	R 1962	Jan 28.23	102	19	1.54	0.59	-86	689	Roemer
	L 1962	Aug 05.30	102	20.3	1.68	0.93	+103	689	Roemer
	R 1973	Jan 08.37	229		1.99	1.05	-142	695	Roemer
	L 1973	Sep 23.16	229		1.79	1.73	+116*	695	Roemer
	R 1978	Nov 08.84	60	17	1.27	1.88	-47	372	Seki
	L 1979	Jan 07.86	60	15.5	1.14	1.73	+13	372	Seki
	R 1989	Nov 09.50	150	19.5	1.57	1.66	-91	675	Gibson
	L 1990	Jan 25.87	14		1.08	1.07	-13	897	
	R 1995	Jan 28.19	229	21.2	2.32	1.64	-182#	695	Hergenrother-Larson
	L 1995	Oct 29.41			1.58	2.16	+93	413	

R 2000	Nov	07.82		16.7		1.32	1.74	-60	897
L 2001	Apr	06.81			19	1.56	1.79	+90	413
R 2006	Feb	03.19	100	19.1		1.89	1.11	-129	704 LINEAR
L 2006	Aug	27.87	40		17.0	1.45	1.26	+77	J76 Pastor-Reyes

Periodic comet Urata-Niijima (112P)

P/1986 UD	P 1986	Oct	04.39	46	18.5		1.55	0.59	-50#	675
	L 1987	Mar	27.17	91	19.5		1.94	1.75	+124	691 Gehrels-McCarty
P/1993 U1	R 1993	Oct	20.49	91	19.4	22.7	1.79	1.99	+99	691 Scotti
	L 1994	Apr	06.16	91	21.8		2.87	2.14	+267*	691 Scotti
	R 1999	Sep	08.61				2.30	1.50	-178	250
	L 1999	Nov	13.10		21.5		1.87	1.66	-112	695
	R 2006	Aug	02.11	40		20.7	1.73	1.37		J95 Birtwhistle
	L 2007	Mar	23.51	35	19.9		2.09	1.68		408 Urata

Periodic comet Väisälä 1 (40P)

P/1939 CB	P 1939	Jan	18.99	50			2.02	1.09	-97	062 Väisälä
	L 1939	Jun	08				1.82	1.49	+43	
P/1949 Y1	R 1949	Dec	19				1.80	2.35	+38	Mrkos
	L 1950	Jun	18				2.73	1.73	+86	
	R 1959	Nov	11.51		19.5		2.49	2.09	-181	662
	L 1960	Jun	18.22	102		17.5	1.79	1.68	+38	689 Roemer
	R 1970	Dec	25.31	229		21.0	3.03	2.06	-261#	695 Roemer
	L 1971	Apr	20.17	229			2.33	2.47	-145	695 Roemer
	R 1981	Dec	07.48		20.5		2.85	1.97	-235	675 Gibson
	L 1982	Apr	22.05	150			2.06	2.06	-99	801
	R 1992	Sep	26.47	91	21.7		2.71	2.99	-215	691 Scotti
	L 1993	Sep	05.45	60	18.0		2.20	2.59	+129	360 Nakamura
	R 2003	Sep	25.14	35	17.4		2.15	2.85	-120	235 Ligustri <i>et al.</i>
	L 2004	Jul	22.89	106			2.51	1.92	+182*	246 Ticha <i>et al.</i>

Periodic comet Väisälä 2 (D/1942 EA)

D/1942 EA	D 1942	Mar	11	50			1.33	0.34	+24	062 Väisälä
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L 1942	Apr 17				1.55	0.72	+61		
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Periodic comet Väisälä-Oterma (139P)

P/1939 TN	D 1939	Oct 07.91	50	15.8		3.41	2.45	-84	062	Väisälä
	L 1939	Nov 11.74				3.40	2.46	-49	062	
P/1998 WG ₂₂	D 1998	Nov 18.26	100	19.0		3.39	2.40	+50	704	LINEAR
	L 1999	Mar 16.14	91	19.8	21.9	3.47	3.74	+168	691	Scotti
	R 2007	Aug 13.03	44	19.5		3.59	2.97	-250#	215	Hasubick
	L 2009	Mar 21.22	181	21.4		3.72	3.63	+336*	291	Scotti

Periodic comet Vales (P/2010 H2)

P/2010 H2	D 2010	Apr 16.01	60		12.5	3.11	2.13	+38	106	Vales
	L 2010	Jul 14.84	35		19.1	3.15	3.01	+128	160	Jäger-Prosperi-Vollmann

Periodic comet Van Biesbroeck (53P)

P/1954 R1	D 1954	Sep 01				2.86	1.85	+193		Van Biesbroeck
	L 1955	Nov 13	91	19.5		4.91	3.95	+631		Roemer
P/1965 J1	R 1965	Mar 27				4.20	3.21	-477		Roemer-Lloyd
	L 1966	Nov 12				2.59	2.77	+118		
	R 1977	Dec 17.41	150			3.58	4.05	-351	801	McCrosky
	L 1979	Sep 24.90		15.5		3.32	2.32	+296	095	
	R 1989	Dec 09.52	150		21	4.32	4.61	-501	675	Gibson
	L 1993	Oct 21.46	91	20.7	23.1	6.04	5.19	+911*	691	Scotti
	R 2001	Feb 20.11	250	21.3		6.22	5.23	-961#	950	Vuijsje
	L 2005	Dec 05.89	36		19.6	5.58	4.71	+789	442	Sánchez

Periodic comet van Houten-Lemmon (271P)

D/1960 S1	D 1960	Sep 24	122			4.11	3.11	-214	675	Van Houten
	L 1960	Oct 26	122			4.07	3.17	-182	675	Van Houten
P/2012 TB ₃₆	D 2012	Sep 17.35	150	20.8		4.51	3.53	-292	G96	MLS

Periodic comet Van Ness 1 (P/2002 Q1)

P/2002 Q1	D 2002	Aug	17.44	59	16.9	1.56	1.24	+33	699	Van Ness
	L 2002	Oct	14.79	60	17.4	1.78	1.18	+91	360	Nakamura

Periodic comet Van Ness 2 (213P)

P/2005 R2	P 2005	Aug	04.39	100		18.5	2.46	2.19	+175	704	LINEAR
	L 2007	Jan	27.93	25		18.8	4.23	3.39	+717	232	Reina
P/2009 B3	R 2009	Jan	31.36	56		20.7	4.51	3.66	-866	H36	Hug
											(Perennial)

Periodic comet Vorobjov (276P)

	P 2000	Dec	19.53	120		19.7	4.00	3.04		608	NEAT
	L 2001	Jan	20.24	120		20.4	4.03	3.26		608	NEAT
P/2012 T7	P 2011	Nov	01.10	150	21.6		4.37	3.63	-442	G96	MLS

Periodic comet West-Hartley (123P)

P/1989 E3	D 1989	Mar	14.32			2.45	1.69	+159	809	West	
	L 1989	Jun	30.46			2.89	2.34	+267*	474		
P/1995 S2	R 1995	Sep	21.47	91	18.8	21.1	2.75	2.70	-234	691	Gehrels-Scotti
	L 1996	Aug	05.48		14.2		2.23	2.99	+85	367	
	P 2002	Sep	14.37	380	20.5		3.68	3.09	-451#	695	Lowry <i>et al.</i>
	L 2004	Jul	20.45	50	17.1		2.71	2.66	+224	E12	McNaught <i>et al.</i>
	R 2010	Sep	12.04	25		19.8	3.02	2.88	-295	B90	Sostero <i>et al.</i>
	L 2012	Jun	16.02	40		18.0	3.24	2.32	+348	J24	Hernandez

Periodic comet West-Kohoutek-Ikemura (76P)

P/1975 D1	D 1974	Oct	15.13			1.97	1.26	-134	809	West
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P/1980 V2	L	1975	May	30.14	150		1.72	2.23	+93	801		
	R	1980	Oct	09.64			2.31	1.67	-183#	323	Schuster	
	L	1981	Feb	15.13			1.52	1.92	-55	675		
	R	1987	Sep	27.48	91	17	1.69	2.26	+62	691	Scotti	
	L	1988	Apr	12.38	91		21.3	2.78	2.01	+260*	691	Gehrels-Scotti
	R	1993	Jul	20.47	91	20.1		2.17	2.12	-158	691	Scotti
	L	1994	Mar	30.51	60	18.1		1.83	1.59	+95	360	Nakamura
	R	2006	Aug	25.14	40		18.8	1.81	1.76	-87	J95	Birtwhistle
	L	2007	Apr	06.84	31		18.8	2.07	1.66	+138	442	Sánchez
R	2013	Jan	01.45		19.7		2.03	2.12	-131	Q62	iTelescope	

Periodic comet Westphal (20D)

D/1852 O1	D	1852	Jul	24			1.70	1.13	-81#		Westphal
	L	1853	Feb	09			2.07	1.29	+119*		
D/1913 S1	D	1913	Sep	27			1.53	0.60	-60		Delavan
	L	1913	Nov	23			1.25	0.83	-3		Schorr

Periodic comet Whipple (36P)

P/1925 QD	P	1925	Aug	21.01		13.0	2.70	1.70	-167	094		
	L	1925	Aug	24.96		13.0	2.69	1.69	-163	094		
P/1933 U1	D	1933	Oct	15	41	13	2.54	1.64	+75		Whipple	
	L	1935	Mar	28		19	4.04	3.47	+604			
P/1940 R1	R	1940	Sep	01		15	2.65	1.64	-143		Cunningham	
	L	1941	Nov	22		17	3.09	2.37	+304		Van Biesbroeck	
	R	1947	Jun	21	91	18	3.30	2.39	-370		Jeffers	
	L	1949	Jan	27.29		16.5	2.80	2.31	+216	662	Jeffers	
	R	1955	May	25.46		18	2.73	2.80	-188	662	Roemer	
	L	1956	Feb	06		18	2.49	2.80	+69		Van Biesbroeck	
	R	1962	May	04.42	102		20.5	3.27	3.06	-359	689	Roemer
	L	1964	Apr	12.17	102		19.1	3.24	3.53	+349	689	Roemer
	R	1969	Jul	06	154	19.0		3.56	2.63	-446		Pereyra
	L	1971	Dec	21				3.53	2.72	+438		
P	1977	May	16.32	150		19.5	3.12	2.85	-315	801		
L	1978	Dec	28.22	150			2.99	2.04	+276	801		
R	1985	Jul	10.31		20		3.50	2.69	-350	675	Gibson	

L 1988	Mar	14.22	91	20.4	4.12	3.51	+628*	691	Scotti
R 1993	Jun	25.39	91	21.5	3.94	3.01	-545	691	Scotti
L 1997	Feb	01.38	122	22.0	4.43	3.47	+772	696	Hergenrother
A 1999	Apr	15.31	154	22.9	5.25	4.25	-1543#	693	Hergenrother
L 2004	Feb	20.83	50	19.4	3.28	3.30	+229	A33	Brinkmann
R 2010	Jul	11.21	215		3.92	2.93	-536	829	Gil-Hutton
L 2013	Jan	10.58	40	20.4	3.57	2.66	+378	E07	Herald

(Perennial)

Periodic comet Wild 1 (63P)

P/1960 G1	D 1960	Mar	26	40		1.93	1.00	+9		Wild
	L 1960	Jun	27.19	102	19.5	2.17	2.01	+102	689	Roemer
P/1973 A2	R 1973	Jan	08.31	229		2.58	1.70	-175	695	Roemer-Latta
	L 1973	Jun	05.19	229		2.00	2.38	-28	695	Roemer
	R 1999	Feb	14.18	155	22.4	3.43	3.32	-316#	693	Hergenrother
	L 2000	Apr	28.59		15.2	2.30	1.33	+124*	360	Nakamura
	R 2012	Sep	17.98	150	20.5	2.74	3.03	-205	188	Burhonov-Novichonok
	L 2013	Jan	22.92	20	15.5	2.10	1.20	-78	C36	Shurpakov

Periodic comet Wild 2 (81P)

P/1978 A2	D 1978	Jan	06.83	40	13.8	2.16	1.22	-160	026	Wild
	L 1979	Jun	27.27	150		3.43	2.56	+376	801	
P/1983 S1	R 1983	Sep	18.44		20	3.22	2.88	-337	675	Gibson
	L 1986	Sep	26.21	91		4.84	3.98	+767*	691	Gehrels-Scotti
	R 1988	Sep	09.50		23	4.97	4.13	-828#	568	Meech
	L 1991	Sep	13.03	150		2.83	2.61	+270	801	
	R 1995	Aug	26.20		22.0	4.42	4.00	-619	950	Fitzsimmons-Cartright
	L 1998	Sep	16.23	155	18.2	3.97	3.26	+598	693	Hergenrother
	R 2002	Sep	05.44	100	19.1	3.46	3.30	-386	704	LINEAR
	L 2005	Sep	09.86	25	20.4	4.71	3.75	+715	A79	Fratev <i>et al.</i>
	R 2008	Oct	20.25	91	20.0	3.94	3.00	-490	691	Spacewatch
	L 2012	Sep	18.82	150	21.5	5.16	4.18	+939	188	Burhonov-Novichonok

Periodic comet Wild 3 (86P)

P/1980 G1	D 1980	Apr 11.08	40	15.5	2.58	1.62	-177*	026	Wild
	L 1980	Aug 11.49		16	2.32	2.44	-55	323	
P/1987 B3	R 1987	Jan 29.46	91	19.5	2.69	2.38	-215	691	Gehrels-Scotti
	L 1988	Sep 11.46		21	3.26	2.30	+376	568	
	R 1994	Feb 10.49	91	20.7	2.54	2.26	-161	691	Scotti
	L 1997	Dec 30.32			4.96	4.10	+1258*	568	Meech
	R 2001	Apr 06.73			2.36	1.61	-73	413	
	L 2001	Jun 17.68	30	18.5	2.31	1.35	-1	320	Clark
	R 2008	May 10.12	40		19.0	2.30	1.39	-10	J24 Hernandez
	L 2008	Jun 03.06	40		17.4	2.30	1.29	+14	J24 Hernandez

Periodic comet Wild 4 (116P)

P/1990 B1	D 1990	Jan 21.58		13.0	2.33	1.38	-162	875	Wild	
	L 1990	Aug 18.38			2.02	2.60	+47	413		
P/1994 V1	R 1994	Nov 09.43	91	20.7	4.14	3.16	-660#	691	Scotti	
		(Perennial)								

Periodic comet Wilk (D/1937 D1)

D/1937 D1	D 1937	Feb 27		05	0.63	0.85	+6		Wilk
	L 1937	May 12			1.63	1.05	+80		

Periodic comet Wirtanen (46P)

P/1948 A1	D 1948	Jan 15		51	1.69	0.83	+44		Wirtanen
	L 1948	Mar 11			1.90	1.46	+100		
P/1954 R2	R 1954	Sep 08			1.65	2.07	+26		Wirtanen
	L 1954	Oct 28			1.79	1.84	+76		
	R 1960	Oct 26.22	102		21.0	2.27	1.70	-171	689 Roemer
	L 1961	Mar 09			1.66	2.31	-37		
	R 1967	Oct 05.73		15	1.76	0.91	-71	371	Tomita
	L 1968	Mar 24.15	154		1.88	1.65	+100	693	Roemer
	R 1974	Dec 20.51	229		21.5	2.20	2.32	+168	695 Roemer-Vaughn

L 1975	Feb	06.51	229		2.54	2.04	+216	695	Roemer
R 1985	Nov	13.43	60	19	1.86	1.73	-126	474	Gilmore-Kilmartin
L 1986	Apr	01.87			1.10	1.59	+14	984	Ridley-Buczynski
R 1991	Jul	08.77	60	17	1.44	1.68	-74	372	Seki
L 1991	Dec	06.84			1.46	1.52	+77	411	
R 1995	Jun	26.23			24.2	4.62	3.61	-627#	809
A 1999	May	17.29			4.98	4.00	+794*	309	

(Perennial)

Periodic comet WISE 1 (P/2010 B2)

P/2010 B2	D 2010	Jan	22.64		1.64	1.31	+32	C51	WISE
	L 2010	Apr	07.51	35	19.6	1.89	0.96	+107	E85 McCormick

Periodic comet WISE 2 (P/2010 D1)

P/2010 D1	P 2009	Nov	09.42	68	17.9	2.80	1.88	+137	703	CSS
	L 2010	Feb	20.39	224	21.1	3.04	2.81	+240	568	Tholen <i>et al.</i>

Periodic comet WISE 3 (P/2010 D2)

P/2010 D2	D 2010	Feb	25.69		3.66	3.47	-7	C51	WISE	
	L 2011	Apr	29.17	51	20.9	4.40	4.29	+420	H06	Sato

Periodic comet WISE 4 (P/2010 K2)

P/2010 K2	D 2010	May	27.18		1.30	0.73	-41	C51	WISE	
	L 2010	Jul	21.40	41	18.9	1.21	0.70	+14	D90	Sato <i>et al.</i>

Periodic comet WISE 5 (245P/2010 L1)

P/2002 Q16	P 2002	Aug	27.46	120	20.5	2.68	1.71		644	Palomar/NEAT
	L 2002	Sep	12.32	120	20.3	2.75	1.77		644	Palomar/NEAT

P/2010 L1	D 2010 Jun 02.50				2.33	2.13	+118	C51 WISE
	L 2010 Oct 11.76	44	20.3		2.85	2.02	+249	215 Hasubick

Periodic comet WISE 6 (P/2010 N1)

P/2010 N1	P 2010 Apr 13.26	68		20.0	1.93	0.99	-125	703 CSS
	L 2010 Aug 09.86	44	18.3		1.50	1.22	-6	215 Hasubick

Periodic comet WISE 7 (P/2010 P4)

P/2010 P4	D 2010 Aug 06.59				1.88	1.57	+32	C51 WISE
	L 2011 Jan 02.53	70		19.8	2.40	1.78	+180	372 Seki <i>et al.</i>

Periodic comet WISE 8 (P/2010 JC₈1)

P/2010 JC ₈ 1	D 2010 May 10.62				3.91	3.77	-351	C51 WISE
	L 2012 May 31.23	181		20.0	4.26	4.41	+401	291 Scotti

Periodic comet Wiseman-Skiff (114P)

P/1986 Y1	D 1986 Dec 28.29		14		1.55	0.61	+36	688 Wiseman-Skiff
	L 1987 May 25.17	91	19.4		2.33	2.25	+183	691 Gehrels-Scotti
P/1993 X2	R 1993 Feb 02.08	120			1.95	2.53	-122#	696 Schmidt
	L 1993 Dec 16.55	91	20.8	22.6	2.40	2.60	+195	691 Scotti
	R 1999 Sep 13.48		18.6		1.97	1.27	-120	695
	L 2000 May 01.16		16.2		1.91	1.98	+110	695
	R 2006 Jul 21.06	25	16.8		1.65	2.29	-54	A79 Fratev <i>et al.</i>
	L 2007 Apr 18.55	36		21.9	2.55	1.82	+217*	415 Herald
	R 2012 Aug 15.80	150	21.1		2.87	1.97	-271	188 Burhonov-Novichonok

Periodic comet Wolf (14P)

P/1884 S1	D 1884 Sep 17	15			1.69	0.82	-62	Wolf
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P/1891 J1	L 1885	Apr 07			2.08	2.58	+140	
	R 1891	May 02			2.00	2.31	-65	Spitaler
	L 1892	Mar 31			2.51	2.57	+210	
	.							
	.							
	R 1975	May 17.30	150	21	3.00	2.78	-253	801
	L 1976	Nov 28			3.19	2.34	+308*	
	R 1983	Aug 01.23		20	3.14	2.37	-305#	675
	L 1984	Nov 23.22	40		2.70	1.77	+175	707 Everhart
	R 1992	Jul 10.75	60	20	2.45	2.25	-48	372 Seki
	L 1993	Jan 25.13	91	20.6	2.64	2.62	+150	691 Scotti
	R 1999	Apr 15.48	155	21.5	4.20	3.55		693 Hergenrother
	A 2004	Jan 22.34	358	23	5.51	4.95	+1157	809 ESO

(Perennial)

Periodic comet Wolf-Harrington (43P)

P/1924 Y1	D 1924	Dec 22	40		2.43	1.51	-20	Wolf
	L 1925	Feb 14			2.44	2.05	+34	
P/1952 T2	D 1951	Oct 04	122		2.00	1.09	-125	675 Harrington
	L 1952	Apr 24			1.77	2.05	+78	
	R 1957	Nov 18.10	102	20.5	2.82	2.79	-266	689 Roemer
	L 1959	Apr 10.29	102	19.3	2.68	1.83	+242	689 Roemer
	R 1964	Jun 11.38	102	20.7	2.72	2.77	-249	689 Roemer
	L 1965	Apr 23.17	102	17.2	1.74	2.09	+67	689 Roemer
	R 1970	Nov 25.18	229		2.90	3.01	-280	695 Roemer
	L 1972	Apr 19.05			2.61	1.90	+231	805
	R 1977	Jul 11.29	150	19.5	2.71	2.30	-248	801
	L 1978	Jan 17.00	150		1.71	1.61	-58	801
	R 1984	Jun 04.46		17	1.93	2.70	-110	675 Gibson
	L 1985	Mar 26.69			2.34	1.53	+185	323
	R 1990	Jun 14.38	91	19.3	2.98	2.81	-294	691 Scotti
	L 1991	Mar 03.45			1.64	2.05	-32	897
	R 1996	Jun 15.56		22.1	3.87	3.23	-471#	568
	L 1998	May 26.17	91	17.3	2.66	2.41	+239	691 Scotti

R 2003	Jun	17.12	30		18.0	2.87	2.72	-275	620	Sanchez <i>et al.</i>
L 2005	Jul	02.44	36		20.0	3.87	3.56	+472*	415	Herald
R 2009	May	24.41	40?		20.0	3.84	3.55	-463?	H10	Elenin-Schwab
L 2011	Jun	26.45	36		20.4	3.01	3.02	+299	E07	Herald

Periodic comet Yang-Gao (P/2009 L2)

P/2009 L2	D 2009	Jun	15.81	7	14.2		1.33	0.32	+25	C42 Yang-Gao
	L 2009	Oct	11.81	50		19.8	2.03	1.55	+143	A77 Rinner-Kugel-Klotz

Periodic comet Yeung (172P)

	P 1993	Oct	20.46			20.1	4.11	3.65		261
	P 1998	Oct	12.40	91		20.8	4.78	3.83		691 Spacewatch
P/2002 BV	D 2002	Jan	21.49	45		20.4	2.27	2.31		333 Yeung
	A 2005	Dec	06.20	150	20.6		4.72	3.84		G96 MLS
										(Perennial)

Periodic comet Zhao (P/2007 S1)

P/2007 S1	P 2007	Sep	08.41	59		18.1	2.56	1.62	-89	699 LONEOS
	L 2007	Oct	16.85	50		18.6	2.52	1.55	-51	A77 Rinner-Kugel