Comet Prospects for 2026

Although several comets are predicted to come within range of larger binoculars none are particularly well placed or bright. Perhaps the best will be 10P/Tempel.

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These predictions focus on comets that are likely to be within range of visual observers, though comets often do not behave as expected and can spring surprises. Members are encouraged to make visual magnitude estimates, particularly of periodic comets, as long term monitoring over many returns helps understand their evolution. Please submit your magnitude estimates in ICQ format. Guidance on visual observation and how to submit estimates is given in the BAA Observing Guide to Comets. Drawings are also useful, as the human eye can sometimes discern features that initially elude electronic devices.

Theories on the structure of comets suggest that any comet could fragment at any time, so it is worth keeping an eye on some of the fainter comets. Some BAA observers taking images are now reaching down to 20th magnitude and a large number of comets are within their range. Such observers are encouraged to report electronic visual equivalent magnitude estimates via COBS. When possible use a waveband approximating to Visual or V magnitudes. The measured magnitude must have a coma diameter to go with it, as this helps to put the observation into context. These estimates are being used to extend the visual light curves, and hence derive more accurate absolute magnitudes. Such observations of periodic comets are particularly valuable as observations over many returns allow investigation into the evolution of comets.

In addition to the information in the BAA Handbook and on the Section web pages, ephemerides for new and currently observable comets are on the JPL, CBAT and Seiichi Yoshida's web pages. The BAA Observing Guide to Comets is available on the Section web page.

10P/Tempel has a linear type light curve and should come into visual range towards the end of March. It could be within the range of large binoculars by late May, although there is then a full moon. It will be brightest in July at around 8th magnitude, but is at a southern declination so will be difficult if you have any light pollution. It continues moving south and UK observers will lose it in August, but observers elsewhere should be able to follow it as it fades. The comet passes within a degree of globular cluster NGC 6712 around April 21 and a similar distance from planetary nebula NGC 7009 around June 30. It is over a degree from the bright globular M30 around July 28.

24P/Schaumasse reaches perihelion in early January 2026 and will be at its brightest at the start of the year at around 8th magnitude. Unfortunately it is a morning object so visual observations are likely to be limited. It fades fairly quickly and it will be difficult to see after the end of March.

88P/Howell has a rather poor return, with a relatively small solar elongation until it has faded out of visual range. It may reach around 10th magnitude around the time of perihelion in March, but even for favourably placed observers there is only a short observing window in the early morning.

161P/Hartley-IRAS is making its third return since discovery in 1983 and on both previous returns it reached 10th magnitude. It should do so again this time round, although the circumstances are not quite as favourable as the last return when it passed nine degrees from the north celestial pole. It should come into telescopic range in September and is brightest in early October, when it is 0.5 au from the Earth. Although still approaching its perihelion in late November its distance from Earth rapidly increases and it slowly fades. It is however conveniently placed in the evening sky. Around October 27 the comet passes just over a degree from planetary nebula NGC 6891. It makes a more distant pass between M56 and M57 between January 15 and 28 in the new year.

29P/Schwassmann-Wachmann is an annual comet that has outbursts, which over the last few decades seem to have become more frequent, though this could just reflect more intense coverage. Richard Miles has developed a theory that suggests that these outbursts are in fact periodic, and

arise from at least four independent active areas on the slowly rotating nucleus. The activity of the active areas evolves with time. The comet is an ideal target for electronic observations and it should be observed at every opportunity, ideally using the methodology established by Richard. The comet begins the year in Leo and is at opposition in March. It becomes poorly placed between the end of August and October as it passes through solar conjunction and ends the year in Corvus. It passes some 15' from M104 around November 27.

The other periodic and parabolic comets that are at perihelion during 2026 are unlikely to become brighter than 11th magnitude or are poorly placed. Ephemerides for these can be found on the CBAT or other WWW pages. Several D/ comets have predictions for a return, though searches at favourable returns in the intervening period have failed to reveal the comets and the orbits will have been perturbed by Jupiter. There is however always a chance that they will be rediscovered accidentally by one of the Sky Survey patrols.

Looking ahead to 2027, the only comet currently predicted to be brighter than 14th magnitude is 7P/Pons-Winnecke, which only reaches magnitude 11.5. Some orbits for comets due to return in the future are yet to be published by the MPC.

With more and more discoveries and recoveries of periodic comets being made, the number of expected returns increases every year. A full list of returning comets is given as a supplement, but here only those comets expected to be brighter than 14th magnitude during the year are listed.

Comets brighter than magnitude 14 in 2026

Comet	T	q	P	N	H_1	K_1	Elong at peak	Peak mag
At perihelion in 2025								
198P/ODAS	Oct 9.7	2.00	6.82	4	9.0	10.0	177	12.5
210P/Christensen	Nov 22.7	0.53	5.62	4	13.5	10.0	55	13.6
				1			161	
At perihelion in 2026								
10P/Tempel	Aug 2.1	1.42	5.37	24	6.8	16.6	163	7.4
24P/Schaumasse	Jan 8.3	1.18	8.18	12	7.8	17.8	93	8.0
63P/Wild	Jul 6.1	1.97	13.4	5	6.2	18.5	55	13.7
69P/Taylor	Nov 12.6	2.27	7.64	8	7.3	10.0	169	11.5
78P/Gehrels	Jun 25.1	2.00	7.21	7	4.6	17.1	51	11.9
88P/Howell	Mar 18.7	1.36	5.48	8	5.4	18.3	38	10.3
161P/Hartley-IRAS	Nov 28.6	1.27	21.4	2	8.5	15.0	142	9.6
168P/Hergenrother	May 18.5	1.36	6.78	4	10.3	6.7	28	12.9
169P/NEAT	Sep 21.4	0.60	4.20	9	16.0	5.0	49	11.9
252P/LINEAR	Nov 9.2	1.00	5.34	5	10.7	20.0	26	12.0
260P/McNaught	Aug 5.0	1.42	6.90	3	11.3	10.0	84	13.1
C/2023 R1 (PANSTARRS)	Apr 17.8	3.57		0	6.0	10.0	161	13.7

The date of perihelion (T), perihelion distance (q), period (P), the number of previously observed returns (N), the magnitude parameters H_1 and K_1, the brightest magnitude (which must be regarded as uncertain) and the approximate elongation at which this occurs are given for each comet. In most cases the comet will be brightest at around the time of perihelion.

Note: $m_1 = H_1 + 5.0 * \log(d) + K_1 * \log(r)$

Appendix: Note that this table has not yet been formatted.

List of all comets predicted to reach perihelion in 2026

Comet	T	q	P	N	H_1	K_1	Elong at peak	Peak mag
10P/Tempel	Aug 2.1	1.42	5.37	24	6.8	16.6	163	7.4
14P/Wolf	Sep 19.0	2.74	8.78		10.0	15.0	167	17.8
24P/Schaumasse	Jan 8.3	1.18	8.18	12	7.8	17.8	93	8.0
42P/Neujmin	Jan 14.9	2.03	10.78		13.0	15.0	4	20.0
63P/Wild	Jul 6.1	1.97	13.44	5	6.2	18.5	55	13.7
69P/Taylor	Nov 12.6	2.27	7.64	8	7.3	10.0	169	11.5
76P/West-Kohoutek-Ikemura	Apr 13.6	1.60	6.46		12.0	21.0	43	18.0
78P/Gehrels	Jun 25.1	2.00	7.21	7	4.6	17.1	51	11.9
82P/Gehrels	Nov 14.6	3.62	8.42		7.5	15.0	163	18.0
88P/Howell	Mar 18.7	1.36	5.48	8	5.4	18.3	38	9.3
93P/Lovas	May 3.4	1.70	9.17		10.1	10.7	11	14.7
112P/Urata-Niijima	Sep 21.9	1.44	6.61		14.0	15.0	86	16.7
114P/Wiseman-Skiff	Sep 15.0	1.57	6.66		11.5	15.0	62	15.8
123P/West-Hartley	Sep 21.9	2.16	7.66		3.1	30.0	28	15.5
124P/Mrkos	Jun 23.6	1.73	6.21		13.1	15.0	89	17.9
128P/Shoemaker-Holt	Jul 17.3	3.05	9.52		8.5	10.0	164	15.2
131P/Mueller	Feb 15.7	2.41	7.04		13.0	10.0	76	18.8
138P/Shoemaker-Levy	Mar 24.3	1.69	6.88		15.0	10.0	34	19.3
141P/Machholz	Apr 23.1	0.81	5.34		14.0	10.0	3	14.4
143P/Kowal-Mrkos	Dec 28.5	2.96	10.32		14.0	5.0	159	18.8
145P/Shoemaker-Levy	Jan 31.9	1.89	8.39		13.5	10.0	73	17.8
149P/Mueller	Dec 19.2	2.78	8.37		11.5	10.0	86	18.1
161P/Hartley-IRAS	Nov 28.6	1.27	21.46	2	8.5	15.0	142	9.6
162P/Siding Spring	May 17.8	1.29	5.43		14.0	10.0	16	16.9
163P/NEAT	Nov 24.0	2.05	7.29		14.5	10.0	167	17.9
168P/Hergenrother	May 18.5	1.36	6.78	4	10.3	6.7	28	12.9
169P/NEAT	Sep 21.4	0.60	4.20	9	16.0	5.0	49	11.9
175P/Hergenrother	Sep 3.3	2.31	7.08		14.0	10.0	147	19.5
188P/LINEAR-Mueller	Apr 13.3	2.55	9.11		5.6	15.0	128	14.3
218P/LINEAR	Mar 3.9	1.13	5.35		14.0	10.0	58	15.1
220P/McNaught	Jun 14.1	1.56	5.51		15.0	10.0	94	17.6
233P/La Sagra	Jan 8.1	1.78	5.27		15.0	10.0	168	17.0
243P/NEAT	Feb 25.6	2.45	7.48		12.5	10.0	55	18.7
245P/WISE	Mar 31.1	2.21	8.16		14.0	10.0	151	18.5
247P/LINEAR	Oct 26.0	1.48	7.89		17.5	5.0	93	19.0
252P/LINEAR	Nov 9.2	1.00	5.34	5	10.7	20.0	26	12.0
260P/McNaught	Aug 5.0	1.42	6.90	3	11.3	10.0	84	13.1
266P/Christensen	Dec 7.4	2.32	6.63		12.0	10.0	161	16.4
275P/Hermann	Oct 27.9	1.66	13.98		15.0	10.0	37	19.1
295P/LINEAR	Jul 22.8	2.03	12.19		12.0	10.0	41	17.3
303P/NEAT	Feb 19.9	2.47	11.31		12.0	10.0	36	18.5
304P/Ory	Mar 18.1	1.26	5.59		16.5	10.0	21	19.1
324P/La Sagra	Oct 14.3	2.62	5.45		13.0	10.0	158	18.3
346P/Catalina	Aug 1.3	2.22	9.44		14.0	10.0	133	19.2
350P/McNaught	Mar 18.1	3.69	8.25		14.0	10.0	174	21.8
353P/McNaught	Jul 1.4	2.21	8.51		14.0	10.0	122	18.6
356P/WISE	Jun 12.5	2.67	8.45		13.0	10.0	154	19.0
373P/Rinner	Sep 5.0	2.30	7.40		13.0	10.0	129	18.1
379P/Spacewatch	Feb 22.9	2.26	6.50		15.0	10.0	156	19.3
383P/Christensen	Jul 2.6	1.43	6.69		17.5	10.0	79	19.6
398P/Boattini	Jul 8.0	1.30	5.52		12.0	20.0	10	16.1
407P/PANSTARRS-Fuls	Jul 25.4	2.18	6.53		14.0	10.0	145	18.9

412P/WISE	May 30.5	1.62	5.49		17.0	10.0	78	20.4
432P/PANSTARRS	Dec 15.3	2.31	5.30		15.0	10.0	158	19.6
435P/PANSTARRS	Oct 26.6	2.06	5.25		17.0	10.0	155	20.6
460P/PANSTARRS	Sep 21.6	1.02	5.27		21.0	10.0	3	22.6
P/2007 C2 Catalina	Mar 22.4	3.69	18.54		10.0	10.0	154	18.0
P/2007 K2 Gibbs	Dec 24.7	2.32	20.10		14.0	10.0	78	19.5
P/2009 B1 Boattini	Jun 30.4	2.45	17.48		13.0	10.0	131	19.1
P/2009 Y2 Kowalski	Dec 1.9	2.38	16.76		13.0	10.0	175	17.5
P/2010 B2 WISE	May 30.5	1.62	5.49		17.0	10.0	78	20.4
P/2010 R2 La Sagra	Oct 14.4	2.62	5.45		13.0	10.0	158	18.3
P/2010 U1 Boattini	Sep 9.9	4.88	16.50		9.5	10.0	169	19.3
P/2011 V1 Boattini	Apr 30.8	1.74	7.58		15.5	10.0	75	19.4
P/2012 K3 Gibbs	Jul 15.8	2.10	6.91		15.0	10.0	177	18.4
P/2012 O2 McNaught	Apr 1.3	1.70	6.91		17.0	10.0	57	21.0
P/2013 T2 Schwartz	Jun 10.7	1.74	6.53		16.0	10.0	111	19.6
P/2015 X3 PANSTARRS	Oct 23.9	2.80	11.16		15.0	10.0	150	20.9
P/2018 VN2 Leonard	Aug 15.1	2.12	8.19		15.0	10.0	158	18.8
P/2019 U4 PANSTARRS	Apr 28.6	1.84	6.60		16.0	15.0	13	22.2
P/2019 X2 PANSTARRS	Nov 15.3	1.81	6.93		17.0	12.0	125	20.5
P/2021 A5 PANSTARRS	Mar 11.5	2.62	5.31		15.0	10.0	156	20.9
C/2023 R1 PANSTARRS	Apr 17.8	3.57			6.0	10.0	161	13.7
D/1996 R2 Lagerkvist	Jun 14.9	2.59	7.33		11.5	10.0	160	17.1
P/2005 SBM6 (LONEOS)	Jan 14.9	3.83	19.12		12.0	5.0	140	17.3
P/2005 T3 Read	Aug 14.6	6.26	20.90		9.0	10.0	177	20.6

The date of perihelion (T), perihelion distance (q), period (P), the number of previous returns (N), the magnitude parameters H_1 and K_1 and the brightest magnitude (which must be regarded as uncertain) and the elongation at which it occurs are given for each comet. The magnitudes, orbits, and in particular the time of perihelion of the D/ comets are uncertain. The SOHO comets are only likely to be observed by satellite and some of the linkages are uncertain so that for a few alternative linkages give a different perihelion date.

Note: $m_1 = H_1 + 5.0 * \log(d) + K_1 * \log(r)$

References and sources

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