

List of all comets predicted to reach perihelion in 2025.

Comet name	T	Q	P	No	H ₁	K ₁	Elong	Peak mag
3D/Biela	May 25.8	0.82	6.65	6	8.0	15.0	21	7.9?
18D/Perrine-Mrkos	Jan 1.7	1.64	7.83	5	11.5	20.0	79	16.7
21P/Giacobini-Zinner	Mar 25.4	1.01	6.52	16	9.4	15.4	4	11.0
25D/Neujmin	May 11.6	1.45	5.78	2	10.5	10.0	81	12.7?
40P/Vaisala	Nov 12.0	1.82	10.99	8	8.9	15.0	39	14.8
43P/Wolf-Harrington	Aug 4.5	2.44	9.02	12	6.7	16.5	108	15.4
47P/Ashbrook-Jackson	Oct 28.0	2.81	8.35	10	7.6	10.0	174	13.4
48P/Johnson	Mar 2.6	2.01	6.55	11	8.5	10.0	22	13.9
49P/Arend-Rigaux	Apr 10.6	1.43	6.75	11	9.6	10.0	46	12.6
60P/Tsuchinshan	Jul 20.6	1.65	6.63	9	6.5	31.8	5	15.5
65P/Gunn	Jun 16.4	2.93	7.68	9	7.8	9.3	172	13.6
105P/Singer Brewster	Jan 22.8	2.05	6.47	6	12.5	15.0	120	18.9
136P/Mueller	Jan 3.3	2.96	8.56	4	11.0	10.0	152	18.2
164P/Christensen	May 27.4	1.68	6.98	4	11.0	10.0	9	15.4
171P/Spahr	Sep 25.0	1.77	6.70	4	10.2	15.0	95	15.1
172P/Yeung	Nov 2.4	3.36	8.68	4	13.0	10.0	170	20.3
195P/Hill	Jul 28.4	4.47	16.58	2	8.5	10.0	147	17.9
198P/ODAS	Oct 9.7	2.00	6.82	4	9.0	10.0	157	12.4
210P/Christensen	Nov 22.7	0.53	5.62	4	13.5	10.0	10	9.1
217P/LINEAR	May 24.9	1.23	7.83	3	9.9	10.7	29	12.4
229P/Gibbs	Mar 5.8	2.44	7.77	3	13.0	10.0	60	19.2
235P/LINEAR	Dec 22.7	1.98	6.40	3	12.0	10.0	59	16.8
236P/LINEAR	Feb 3.8	1.83	7.19	3	14.0	10.0	46	18.6
240P/NEAT	Dec 20.0	2.12	7.59	3	12.0	10.0	165	15.6
242P/Spahr	Jan 1.8	3.96	12.84	2	8.0	10.0	120	16.6
248P/Gibbs	Sep 15.4	2.16	14.67	2	14.0	10.0	145	18.3
249P/LINEAR	Feb 1.7	0.50	4.60	4	18.5	10.0	3	16.3
250P/Larson	May 16.7	2.27	7.34	4	14.5	10.0	139	19.5
261P/Larson	Dec 27.4	2.01	6.52	3	14.0	10.0	144	18.1
289P/Blanpain	Apr 14.3	0.95	5.31	5	10.5	10.0	27	11.5
294P/LINEAR	Aug 11.2	1.27	5.70	3	15.5	10.0	28	18.1
302P/Lemmon-PANSTARRS	Mar 9.4	3.29	8.82	2	12.5	10.0	165	19.7
306P/LINEAR	Aug 1.6	1.27	5.52	4	19.0	10.0	95	19.3
313P/Gibbs	Dec 2.8	2.42	5.62	4	15.0	10.0	163	19.8
317P/WISE	Oct 31.7	1.27	5.10	4	17.5	10.0	19	20.2
323P/SOHO	Mar 14.5	0.04	4.15	6	20.0	10.0	3	7.3
331P/Gibbs	Dec 25.5	2.88	5.20	4	12.0	10.0	178	18.0
340P/Boattini	Aug 29.2	3.06	8.75	4	13.0	10.0	178	19.4
341P/Gibbs	Apr 22.7	2.51	8.87	2	12.5	10.0	150	18.2
351P/Wiegert-PANSTARRS	Mar 26.3	3.13	9.35	3	12.5	10.0	169	19.2
366P/Spacewatch	Jan 30.9	2.28	6.55	3	13.8	15.0	151	20.3
367P/Catalina	Jan 11.6	2.53	6.58	2	17.5	5.0	164	20.8
414P/STEREO	Sep 26.3	0.52	4.67	2	13.3	10.0	27	10.9
441P/PANSTARRS	Sep 9.5	3.33	8.40	2	13.5	10.0	179	20.5
456P/PanSTARRS	Apr 15.0	2.80	5.64	2	13.0	10.0	161	18.9
469P/PANSTARRS	Dec 8.4	3.01	9.05	2	15.5	10.0	158	22.5
486P/Leonard	Apr 3.8	2.31	6.91	2	14.5	10.0	150	19.6
495P/Christensen	Oct 22.5	3.46	10.4	2	11.5	10.0	162	18.9
496P/Hill	Mar 10.3	1.62	15.03	2	14.0	10.0	100	16.8
497P/Spacewatch-PANSTARRS	Feb 16.8	2.08	13.29	2	17.5	10.0	106	21.8
D/1886 K1 (Brooks)	Jun 18.0	1.89	6.70	1	8.0	15.0	164	12.0?
D/1895 Q1 (Swift)	Sep 4.8	1.39	7.18	1	11.4	10.0	162	10.9?

P/1999 RO ₂₈ (LONEOS)	Oct 30.3	1.12	6.34	1	18.0	5.0	91	16.8
D/1999 XN ₁₂₀ (Catalina)	Dec 21.2	3.30	8.58	1	13.5	5.0	178	17.9
P/2000 R2 (LINEAR)	Dec 2.3	1.63	6.46	1	18.0	10.0	74	21.4
P/2002 R5 (SOHO)	Jul 18.7	0.04	5.63	1	15.0	10.0	3	3.2?
P/2002 S5 (SOHO)	Oct 26.3	0.05	5.77	2			2	
P/2002 S5 (SOHO)	Nov 9.8	0.05	5.78	2			2	
P/2002 S7 (SOHO)	Nov 4.9	0.05	5.78	2			3	
P/2003 QX ₂₉ (NEAT)	Aug 6.9	4.23	22.67	1	8.5	10.0	171	17.3
D/2005 J1 (McNaught)	Jul 11.1	1.54	6.76	1	16.5	10.0	108	18.2
P/2005 R5 (SOHO)	Jul 19.3	0.04	5.63	2			1	87.4
P/2005 T5 (Broughton)	Jun 14.5	3.26	19.62	1	11.0	10.0	156	18.2
P/2010 H2 (Vales)	Mar 10.0	3.08	7.51	1	6.0	10.0	165	12.5
P/2012 O1 (McNaught)	Nov 1.6	1.44	6.67	1	17.5	10.0	76	19.8
P/2015 R2 (PANSTARRS)	Jan 14.8	2.46	9.57	1	14.5	10.0	133	21.0
P/2015 TO ₁₉ (Lemmon- PANSTARRS)	Nov 23.6	2.91	9.70	1	14.0	10.0	170	20.1
P/2015 X6 (PANSTARRS)	May 11.1	2.27	4.57	1	16.0	10.0	91	21.3
P/2016 G1 (PANSTARRS)	May 16.1	2.04	4.15	1	14.0	10.0	159	17.6
P/2017 B4 (PANSTARRS)	Dec 2.4	2.82	9.13	1	14.5	10.0	127	20.6
P/2018 L1 (PANSTARRS)	Nov 5.7	1.90	7.00	1	15.0	10.0	116	19.4
P/2019 A8 (PANSTARRS)	Feb 4.4	2.02	6.10	1	16.0	10.0	170	19.2
P/2019 S3 (PANSTARRS)	Dec 19.0	1.81	6.31	1	16.0	15.0	114	20.9
P/2019 Y3 (Catalina)	Mar 4.1	0.93	5.24	1	18.5	10.0	71	15.8
P/2022 B2 (PANSTARRS)	Sep 7.8	3.33	8.41	0	13.5	10.0	180	20.5
C/2022 N2 (PANSTARRS)	Jul 13.4	3.76		0	6.0	10.0	155	14.3
C/2022 QE ₇₈ (ATLAS)	Sep 9.9	5.48		0	5.0	10.0	143	15.8
C/2022 R6 (PANSTARRS)	Aug 26.2	6.57		0	5.0	10.0	134	17.1
C/2023 F3 (ATLAS)	Feb 2.9	5.19		0	6.0	10.0	138	16.4
C/2023 H5 (Lemmon)	Jun 30.1	4.31		0	7.0	10.0	127	16.3
P/2023 S1	Feb 23.3	2.62	7.58	0	11.5	10.0	177	16.8
C/2023 T3 (Fuls)	Jan 28.7	3.45		0	8.5	10.0	152	16.0
C/2023 V1 (Lemmon)	Jul 13.2	5.09		0	8.5	10.0	93	19.0
C/2023 X2 (Lemmon)	Dec 26.2	5.10		0	7.0	10.0	109	17.4
C/2023 X7 (PANSTARRS)	May 14.8	4.82			9.0	10.0	152	18.9
C/2024 A1 (ATLAS)	Jun 13.9	3.88			7.0	10.0	133	15.6
C/2024 C2 (PANSTARRS)	Mar 18.0	8.99	65.1		6.0	10.0	150	20.1
C/2024 G2 (ATLAS)	Jun 13.9	5.34			7.0	10.0	141	17.6
C/2024 G3 (ATLAS)	Jan 13.4	0.09			6.0	10.0	5	-4.3

C/2024 G7 (ATLAS)	Feb 8.8	6.03			7.0	10.0	132	18.5
C/2024 J2 (Wierzchos)	Mar 19.7	1.81			11.5	10.0	34	16.2
C/2024 J4 (Lemmon)	Apr 27.7	5.69			8.0	10.0	129	19.0
C/2024 L1 (PANSTARRS)	Apr 23.4	5.35	38.8		10.0	10.0	172	20.5
C/2024 L2 (PANSTARRS)	Jun 19.7	8.32			7.5	8.0	170	19.2
C/2024 L5 (ATLAS)	Mar 10.4	3.43			9.0	10.0	163	16.3
C/2024 N1 (PANSTARRS)	Oct 23.5	4.32			10.5	10.0	88	20.1
C/2024 N3 (Sarneczky)	Apr 11.3	5.02			8.0	10.0	93	18.5
C/2024 N4 (Sarneczky)	Jan 8.5	5.41			7.5	10.0	129	18.2
C/2024 Q3 (PANSTARRS)	Mar 5.2	2.09			15.0	10.0	90	19.8
C/2024 T3 (PANSTARRS)	Mar 16.1	3.71			11.5	10.0	109	19.9
C/2024 V1 (Borisov)	Apr 4.3	2.31			14.8	10.0	130	19.5
C/2024 W1 (PANSTARRS)	Mar 19.3	2.56			15.0	10.0	95	21.0
A/2024 W2	Feb 27.7	3.72			15.6	5.0	134	20.9
C/2024 X1 (Fazekas)	Jul 31.5	3.84	28.9		11.3	10.0	128	19.9
C/2024 X2 (ATLAS)	Jul 5.9	3.68	273		9.6	10.0	101	18.0
C/2024 X4 (PANSTARRS)	Sep 1.9	3.60	31.9		12.6	10.0	166	20.4

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