# Comet Prospects for 2025

*There are few comets that offer much prospect for the visual observer in 2025. The best short period comet on offer is 24P/Schaumasse, which reaches perihelion in early 2026. Two long period comets may be visible.*

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 or visual equivalent 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, which are often ignored. They would make useful targets for those making electronic observations, especially those with time on instruments such as the Faulkes telescopes. Such observers are encouraged to report electronic visual equivalent magnitude estimates via COBS. When possible use a waveband approximating to Visual or V magnitudes. These estimates can be 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.

**24P/Schaumasse** does not reach perihelion until early January 2026, however it is currently the brightest comet on offer in 2025. It has been observed over six returns by the Section and the analysis suggests that the comet shows no secular trend in brightness. On this basis it should be around $8^{th}$ – $9^{th}$ magnitude, so visible in large binoculars, though it will be best seen in the morning sky. The comet passes close to the Beehive Cluster (M44) on November 11, though the nearby Moon is likely to spoil any imaging opportunities. Twelve days later it passes NGC 2903, which may be a little brighter than the comet. At the end of the year it forms an approximately equilateral triangle with M60 and M87.

**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 February. It becomes poorly placed between May and October as it passes through solar conjunction and ends the year in Leo.

**2024 E1 (Wierzchos)** may come within visual range in the autumn and brightens to around $10^{th}$ magnitude in late November. It is then lost in the evening twilight. It may be visible in the SOHO C3 or GOES-19 CCOR-1 fields as it passes through solar conjunction in late December and early January 2026.

**2024 G3 (ATLAS)** is probably not going to be a comet for northern hemisphere observers, but you never know. Its orbit makes it an object that mostly requires a Southern Hemisphere location for observation. It is currently brightening more rapidly than expected and may be large enough to survive its perihelion passage of only 0.09 au on January 13. The current rate of brightening gives it an unlikely brilliance at perihelion and there are lessons to be learnt from recent comets. Some

pundits expected 2023 A3 to disintegrate prior to perihelion, but it didn't and is described in the article by Nick James. By contrast, 2024 S1 was identified as a Kreutz comet that might become spectacular, but fizzled when close to the Sun. What 2024 G3 will do can only be found by observation and mostly from the Southern Hemisphere; we may know better by late December, though it remains at a fairly small elongation from the Sun until well after perihelion. It may brighten sufficiently for visual observations from near the solstice into January and then again after perihelion. It may be a bright object in the SOHO C3 field between January 9 and 16. If it does get very bright (and it is a big if) then it might be possible to view the long tail from northern hemisphere locations as it rounds the Sun over January 12 to 16.

The other periodic and parabolic comets that are at perihelion during 2025 are unlikely to become brighter than 11$^{th}$ 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 2026, the year starts well with 24P/Schaumasse near perihelion and three other periodic comets are likely to be visible in larger binoculars during the year. 2024 E1 may be a binocular object in late February and early March as it fades after perihelion. 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 14$^{th}$ magnitude during the year are listed.

**Comets brighter than magnitude 14 in 2025**

| Comet | T | q | P | N | $H_1$ | $K_1$ | Elong at peak | Peak mag |
|---|---|---|---|---|---|---|---|---|
| **At perihelion in 2024** | | | | | | | | |
| 33P/Daniel | Nov 11.0 | 2.24 | 8.29 | 11 | 7.3 | 10.0 | 156 | 11.5 |
| 333P/LINEAR | Nov 29.3 | 1.11 | 8.67 | 2 | 10.7 | 20.0 | 75 | 12.4 |
| 2022 E2 (ATLAS) | Sep 13.5 | 3.67 | | 0 | 5.0 | 10.0 | 132 | 13.4 |
| 2023 A3 (Tsuchinshan-ATLAS) | Sep 28.2 | 0.39 | | 0 | 6.5 | 8.0 | 32 | 11.1 |
| 2023 C2 (ATLAS) | Nov 16.8 | 2.37 | | 0 | 7.0 | 10.0 | 22 | 13.4 |
| | | | | | | | | |
| **At perihelion in 2025** | | | | | | | | |
| 21P/Giacobini-Zinner | Mar 25.4 | 1.01 | 6.52 | 16 | 9.4 | 15.4 | 4 | 11.0 |
| 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 |
| 65P/Gunn | Jun 16.4 | 2.93 | 7.68 | 9 | 7.8 | 9.3 | 172 | 13.6 |
| 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 |
| 289P/Blanpain | Apr 14.3 | 0.95 | 5.31 | 5 | 10.5 | 10.0 | 27 | 11.5 |
| 323P/SOHO | Mar 14.5 | 0.04 | 4.15 | 6 | 20.0 | 10.0 | 3 | 7.3 |
| 414P/STEREO | Sep 26.3 | 0.52 | 4.67 | 2 | 13.3 | 10.0 | 27 | 10.9 |
| 2010 H2 (P/Vales) | Mar 10.0 | 3.08 | 7.51 | 1 | 6.0 | 10.0 | 165 | 12.5 |
| 2024 G3 (ATLAS) | Jan 13.4 | 0.09 | | | 6.0 | 10.0 | 5 | -4 ? |
| | | | | | | | | |
| **At perihelion in 2026** | | | | | | | | |
| 24P/Schaumasse | Jan 8.3 | 1.18 | 8.18 | 12 | 7.8 | 17.8 | 94 | 8.0 |
| 78P/Gehrels | Jun 25.1 | 2.00 | 7.21 | 7 | 4.6 | 17.1 | 43 | 13.6 |
| 88P/Howell | Mar 18.7 | 1.36 | 5.48 | 8 | 5.4 | 18.3 | 25 | 11.0 |
| 2024 E1 (Wierzchos) | Jan 20.3 | 0.56 | | | 7.0 | 10.0 | 6 | 6.5 |

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

---

References and sources


*BAA Observing Guide to Comets*, 6th edition (2020) at https://britastro.org/wp-content/uploads/2017/05/Comet-Observing-Guide-2020-November-rev-6.pdf (Accessed 2022 October)
Belyaev, N. A., Kresak, L., Pittich, E. M. and Pushkarev, A. N., *Catalogue of short Period Comets*, Bratislava (1986).
Comet Observations Database (COBS) http://www.cobs.si/ (Accessed 2024 November)
Comet Orbit Home Page (Kazua Kinoshita) at http://jcometobs.web.fc2.com/index.html (Accessed 2023 June, but no longer updated)
Jenniskens, P. *Meteor Showers and their Parent Comets.* Cambridge University Press (2006).
JPL Small-Body Database Browser https://ssd.jpl.nasa.gov/tools/sbdb_lookup.html#/ (Accessed 2024 November)
Kozlov, E. A., Medvedev, Y. D., Pittichova, J., and Pittich, E. M. *Catalogue of short Period Comets, 2nd edition,* (http://astro.savba.sk/cat/ ) (2003).
Kronk, G. W., *Cometographia*, Cambridge University Press, (1999, 2004, 2007, 2009, 2010, 2017) and http://www.cometography.com (Accessed 2023 July).
Marsden, B. G. and Williams, G. V. *Catalogue of Cometary Orbits*, 17th edition, IAU MPC/CBAT, (2008).
Minor Planet Electronic Circulars
Nakano Notes at http://www.oaa.gr.jp/~oaacs/nk.htm (Accessed 2023 December)


Jonathan Shanklin

---

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