→ NEWSLETTER AUGUST 2026

ESA's NEO Coordination Centre

Current NEO statistics

During the month of July we crossed the threshold of 42 000 known NEOs. We also briefly crossed the threshold of 2000 NEOs in our risk list, but the total is now lower due to some removals at the end of the month.

- Known NEOs: 42 075 asteroids and 124 comets
- NEOs in risk list*: 1997
- NEOs designated during last month: 110
- NEOs discovered since 1 January 2026: 1546

Focus on

Our risk list is not static: new objects join it every month as soon as preliminary orbits reveal a non-zero impact probability, while others are removed once follow-up observations rule out any risk. However, the "removals" generally are less than the "additions". This growing trend does not mean that the real risk is increasing: it simply reflects the fact that current follow-up capabilities are not sufficient to keep pace with the rate at which new potential impactors objects are being discovered.

A recent and notable example is 2026 MT1. Discovered on the 20 June this year, it entered the risk list on 22 June. Thanks largely to the regular follow-up from the observation campaign coordinated by NEOCC, and in particular to the observations gathered from Tautenburg, ESA's OGS and the Danish telescope at La Silla, 2026 MT1's impact probability was driven down enough to be removed from the risk list on 29 July. Additionally, within the PDO activities, colour observations conducted with the LCO network had provided a best fit with a Q-type taxonomic classification.

Upcoming interesting close approaches

Three close approaches of moderately large and bright objects will happen in August.

- 2025 AL2 is a moderately large object, with a diameter between 70 and 160 metres, which will have a close approach at about 2 lunar distances on 16 August, reaching magnitude 14.
- (173561) 2000 YV137 and (221455) 2006 BC10 will also become brighter than magnitude 14 during their closest approach this month. They are larger objects, about 500 metres in diameter, but they will pass much farther away, 13 and 9 lunar distances respectively.

Recent interesting close approaches

None of the close approaches in July were particularly significant, with no approachers becoming brighter than magnitude 15.

News from the risk list

One object exited the list, another entered with high rating but is now on its way down.

- 2026 MT1, as mentioned above, was finally removed from the risk list thanks to follow-up observations.
- 2026 OD also reached a moderately high rating in July, but it is now ranked significantly lower thanks to new follow-up.

*The risk list of all known objects with a non-zero (although usually very low) impact probability can be found at https://neo.ssa.esa.int/risk-list

ESA UNCLASSIFIED – Releasable to the Public

In other news

- Beyond individual follow-up and physical characterisation, ESA is also planning for faster risk mitigation in the future. The upcoming RAMSES mission will reach asteroid Apophis just 3.5 years after construction begins. In parallel, ESA has launched the SysNova challenge for novel, fast asteroid reconnaissance concepts with development timelines in months and costs well below current standards, with proposals collected via the Open Space Innovation Platform (OSIP).

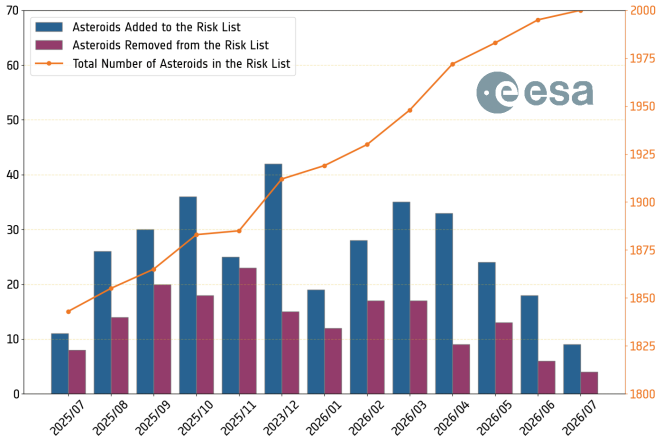
Upcoming events

- Europlanet Science Congress (EPSC) 2026, 6-11 September 2026, The Hague, Netherlands
  https://www.epsc2026.eu/
- 1st NEOMIR Conference: Hunting Asteroids near the Sun, 15-16 September 2026, Nice, France
  https://neomir-nice.sciencesconf.org
- International Meteor Conference (IMC) 2026, 24-27 September 2026, Barcelonnette, France
  https://imc2026.imo.net/
- 58th Annual Meeting of the AAS Division for Planetary Sciences (DPS), 25-30 October 2026, Spokane, USA
  https://aas.org/meetings/58th-dps-meeting
- EU-ESA Workshop on Meteor Observations for Planetary Defence, 3-5 November 2026, Petralia Sottana, Sicily, Italy
  https://indico.esa.int/event/658/

Largest objects recently removed from the risk list

The table below lists the largest objects with a maximum impact probability greater than 1/1 000 000 that entered our risk list and were subsequently removed over the past two years.

Designator	Removal date	Size range in m	Max IP	Max PS
2026 BK2	2026-01-22	180-400	1 / 250 000	-2.52
2024 RV4	2024-09-24	170-400	1 / 900 000	-3.82
2025 WG4	2025-12-17	160-400	1 / 240 000	-3.05
2020 FA5	2025-10-28	150-300	1 / 550 000	-3.73
2026 GK2	2026-05-06	140-300	1 / 860 000	-3.69
2026 MT1	2026-07-30	120-280	1 / 65 000	-3.27
2025 FA22	2025-05-17	120-270	1 / 16 000	-2.67
2024 RF13	2024-10-01	120-260	1 / 340 000	-4.21
2015 JJ	2026-06-17	100-230	1 / 260 000	-4.34
2022 VF1	2025-11-05	100-220	1 / 370 000	-4.09



The histogram presents how many asteroids have been added (blue) and removed (red) from our risk list in each of the past 12 months. The orange cumulative total of risk-list objects shows that, overall, removals lag behind additions, so the number of objects remaining on the list generally rises over time.

At the same time, the majority of remaining objects carry very low risk ratings. In general, our follow-up capability is adequate to monitor high-risk targets effectively and to resolve their risk status promptly.

[Credits: ESA / PDO]

Links for more information

Website: https://neo.ssa.esa.int
Close approaches page: https://neo.ssa.esa.int/close-approaches
Risk List: https://neo.ssa.esa.int/risk-list

