→ CAFS FOR (152637) 1997 NC1

ESA's NEO Coordination Centre

Close approach fact sheet for asteroid (152637) 1997 NC1

The large asteroid (152637) 1997 NC1 will have a close approach with the Earth on 27 June 2026. The estimated impact probability is 0.

Fly-by date	2026-06-27
Closest approach time	11:14:47 UTC (± 1 s)
Fly-by distance from Earth surface	2 559 461 km (± 6 km), 6.66 Lunar Distances
Fly-by speed	8.9 km/s
Size range	750-1650 m*
Discovery date	1997-07-05
Discovery site	Haleakala-NEAT/GEODSS

All error bars quoted in this table correspond to one standard deviation.

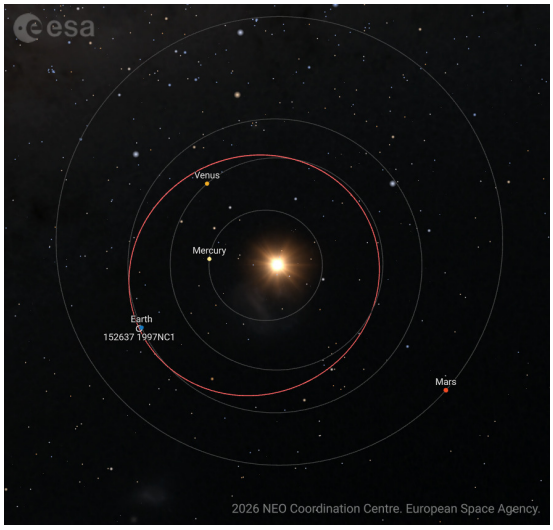
*Size values in the literature are conflicting. The stated sizes assume a 5% to 25% albedo range. Some sources report an albedo as high as 60%, thus indicating a likely smaller object.

Orbit information

As the approach distance of the nominal trajectory to the Earth is relatively large, changes in its orbital elements due to the Earth's gravity are only marginal.

Date before and after fly-by	Orbital period (year/day)	Aphelion distance (au)	Perihelion distance (au)	Eccentricity	Inclination (deg)
2026-05-28	0.804/294	1.045	0.685	0.209	16.724
2026-07-27	0.805/294	1.045	0.686	0.208	16.745

All orbital elements in this table are referred to the ecliptic at the epoch of J2000.0



Ecliptic projection of the asteroid orbit (in red). Credit: ESA / PDO

Physical and mitigation information

Days to closest approach	Impact probability	Composition	Rotation period (hours)
15 days	0	Q	Unknown

Observational information

Peak brightness	Visual observability	Geometric observability
~ 10	Theoretically observable with small-sized telescopes, or even large binoculars under dark skies. However, the bright nearby Moon might interfere with its observability.	Observable from Northern locations during the incoming part of the approach, nearly globally during closest approach, and only from the Southern hemisphere while receding from Earth.

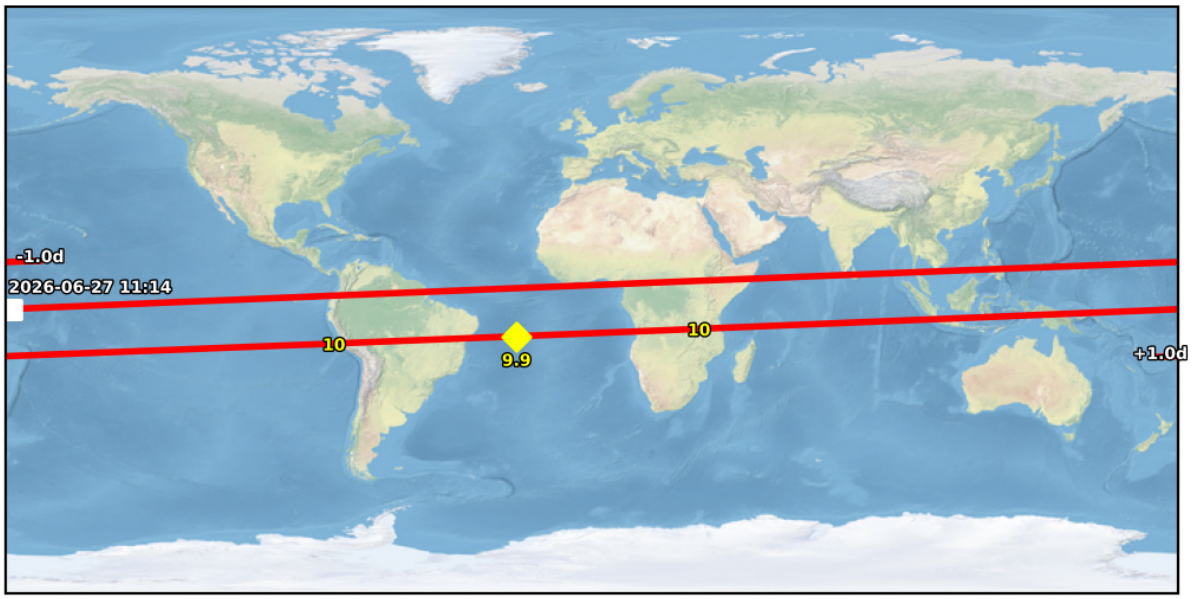
Other information

Encounter peculiarities	Previous encounter	Next encounter
None	1993-06-29	2088-06-27

Only encounters within 0.05 au are considered.

Asteroid ground track

The following figure gives a representation of the sub-asteroid point groundtrack over the Earth. The plot provides an indication of the closest approach point and of the visual magnitudes at different points in the path as observed from the surface of the Earth. In the plot, the white square represents the closest approach point, and the yellow diamond indicates the brightest visual magnitude point.



Links

NEO information:
https://neo.ssa.esa.int/search-for-asteroids?sum=1&des=152637
Orbit visualiser:
https://neotools.neo.s2p.esa.int/ovt?object=152637
Close approaches page:
https://neo.ssa.esa.int/close-approaches