space situational awareness

→ NEAR-EARTH OBJECTS

Close approach fact sheet for asteroid 2018 WV1

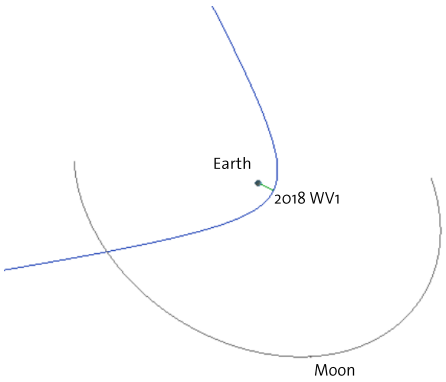
A small asteroid will close approach the Earth on 02 December 2018.

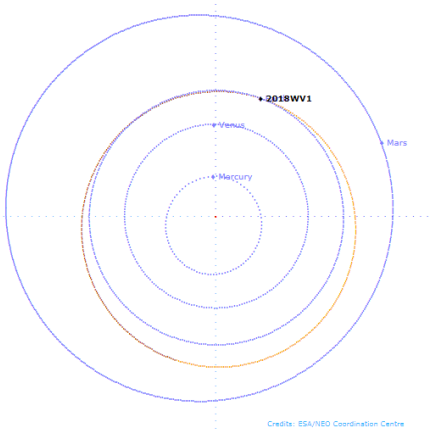
Fly-by date	2018-12-02
Closest approach time	03:09:30 UTC (± 90 s)
Minimum distance from Earth surface	26 690 km, 0.069 Lunar Distances 0.0002 au (± 13 km)
Fly-by speed	5.2 km/s
Size range	2-6 m

Orbit information

The orbit is significantly changed by the close approach, due to the small distance and low relative velocity.

Date before and after fly-by	Orbital period years (days)	Aphelion Distance au	Perihelion distance au	Eccentricity	Inclination deg	Rotation Period hours
2018-11-02 2019-01-02	1.13 (412) 1.06 (387)	1.194 1.103	0.973 0.975	0.102 0.061	0.576 1.667	Not known





Mitigation info

No mitigation actions needed for this pass.

Discovery date	Time to closest approach	Impact Probability	Composition
2018-11-29	2 days	0	Not known

CLOSE APPROACH FACT SHEET: Asteroid 2018 WV1. Release 1 (2018 November 30 14:51 UTC)

European Space Agency

Observational information

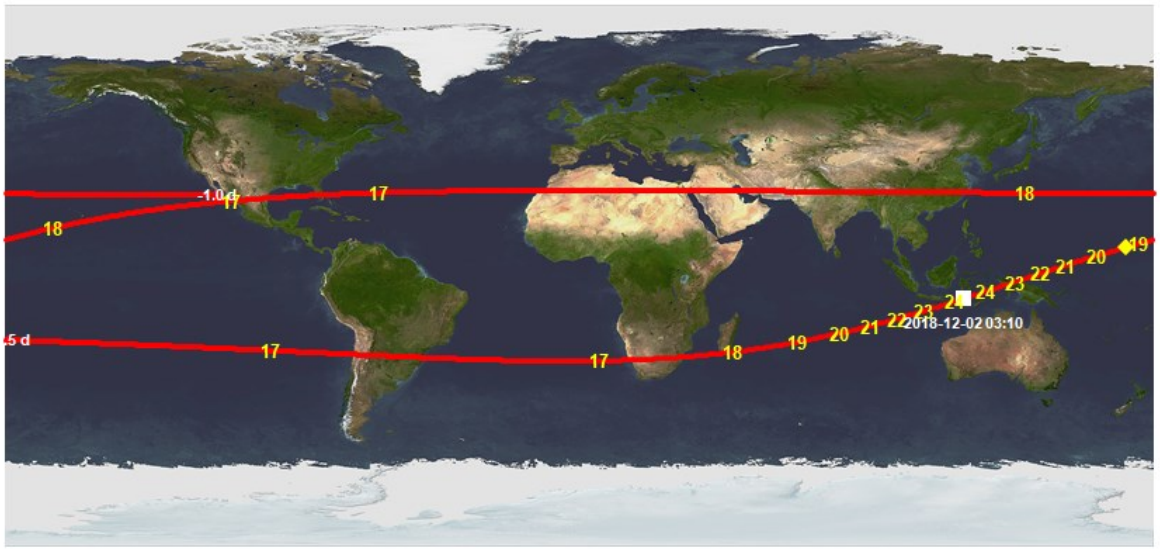
Discovery site	Peak brightness	Observability	Visibility
Catalina Sky Survey	~17	Not visually observable	Observable only before and after close approach. Low elongation during close approach.

Other information

Encounter peculiarities	Previous encounter	Next encounter
Low relative velocity	2010-05-14	2035-07-31

Asteroid ground track

The asteroid ground track is provided below starting one day before the closest approach and extending for 1.5 days. The curve represents the movement of the sub-asteroid point over the Earth along the mentioned time interval. The track starts in over the west coast of the USA, with the object fainter than magnitude 18, and progresses westwards, reaching roughly the same point a day later, with the object being only a magnitude brighter. Then the object goes towards solar conjunction, and becomes progressively fainter due to a phase effect. At the time of close approach (white square), the object will be unobservable, being at just 17° away from the Sun. It will then emerge from solar conjunction and become brighter again, while flying away over the Southern hemisphere.



Links

NEO information:
http://neo.ssa.esa.int/search-for-asteroids?sum=1&des=2018WV1

Priority list page:
http://neo.ssa.esa.int/priority-list

Close approaches page:
http://neo.ssa.esa.int/close-approaches