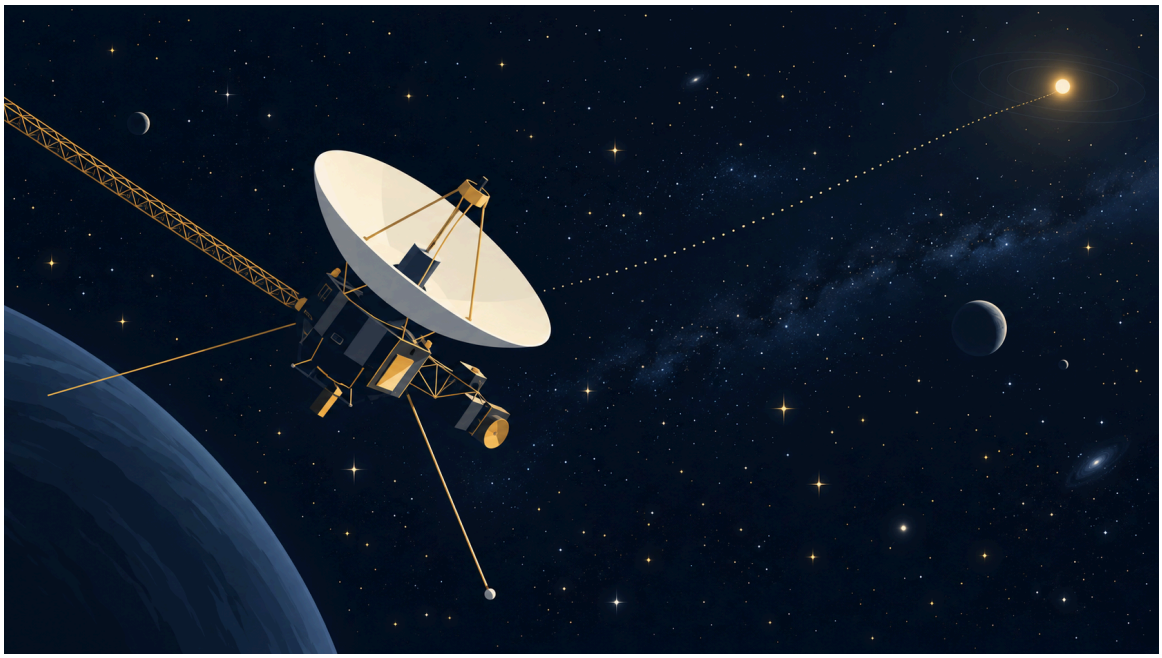
Voyager 1 to be one light-day from Earth on 18 November

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Original symbolic illustration: pcsmantra.com

16 November 2026: On Wednesday, 18 November, NASA's **Voyager 1** will have travelled **one light-day** from Earth - more than **16 billion miles (25.9 billion kilometres)**. Light from Earth now takes **24 hours** to reach the spacecraft. It remains the **most distant human-made object** ever. NASA is marking the milestone with "Shine Bright for Voyager's Light-Day" on 17 November and a JPL panel on 19 November.

What is a light-day?

- **Definition:** the distance light (~300,000 km/s) covers in 24 hours - about 25.9 billion km.
- **Scale:** the Earth-Sun distance (1 AU) is just ~8.3 light-minutes; Voyager 1 is roughly 173 times farther.
- **Communication:** one-way radio time is ~24 hours, so a command-answer round trip takes ~48 hours; only NASA's **Deep Space Network (DSN)** stays in touch.

Mission facts

- **Launch:** 1977; the twin probes were designed to exploit a planetary alignment that occurs **once every 176 years** - the "grand tour" of the outer planets.

- **Interstellar space:** Voyager 1 crossed the heliosphere in **2012**, Voyager 2 in **2018**; both still return unique data from beyond the Sun's protective bubble.
- **Management:** NASA's Jet Propulsion Laboratory (operated by Caltech); funded by the **Heliophysics Division**; DSN, also JPL-managed, handles communications.
- **50th anniversary (2027):** a NASA+ Voyager documentary is planned.

Scientific significance

- **Heliosphere:** the solar-wind bubble shielding the solar system from interstellar radiation; the Voyagers are its only in-situ sentinels beyond the boundary.
- **Interstellar medium:** direct measurements of plasma density, magnetic fields and cosmic rays - impossible from Earth.
- **Golden Record:** each probe carries a copper disc of Earth's sounds and images - a message from human civilisation.

Quiz: Test your knowledge

▶ Q1: Consider: 1. Voyager 1 was launched in 1977 2. It entered interstellar space in 2018 3. In November 2026 it will be one light-day from Earth. Which are correct?

▶ Q2: Which network communicates with the Voyager probes?

Frequently Asked Questions (FAQ)

In short: On 18 November 2026 Voyager 1 will be one light-day (~16 billion miles / 25.9 billion km) from Earth; launched in 1977 and in interstellar space since 2012, it is the most distant human-made object.

Question: How far is one light-day?

The distance light travels in 24 hours - about 25.9 billion km or 16 billion miles; a radio signal takes ~24 hours one way.

Question: When did Voyager 1 reach interstellar space?

In 2012 it crossed the heliosphere; on 18 November 2026 it becomes one light-day from Earth - the most distant human-made object.

Question: Who manages the Voyager mission?

NASA's Jet Propulsion Laboratory, operated by Caltech; communications via the Deep Space Network and funding from NASA's Heliophysics Division.

Sources:

- https://www.nasa.gov/news-release/nasa-invites-media-public-to-join-voyager-1-one-light-day-activities/ (official: NASA, 10 November 2026)
- https://www.thehindu.com/sci-tech/science/nasas-voyager-1-closes-in-on-a-light-day-in-interstellar-space-for-new-distance-record/article71704036.ece