

Red Sprite

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A European Space Agency (ESA) astronaut recently photographed an uncommon occurrence termed a red sprite.



[Ref: EOS.ORG]

About Red Sprite Phenomenon:

- Red sprite is an **extraordinary meteorological event**, classified as a **Transient Luminous Event (TLE)**, also sometimes referred to as red lightning.
- These events occur above thunderclouds, typically at altitudes between **40 and 80 kilometres** (25 - 50 miles) above the **Earth's surface**.
- Unlike conventional lightning that **travels downwards**, red sprites ascend into the atmosphere, **resembling reverse lightning**.

Observation Challenges:

- Red sprites last only about a **millisecond**, making them difficult to capture and study.
- Predominantly visible from space, they form above **thunderclouds**, hindering easy observation from Earth.

Other Related Phenomena

- **Blue Jets**: Similar to red sprites, **blue jets** are upward discharges of electricity occurring above thunderstorms.
 - They are **faint** and **blue**, making them hard to spot.
- **Elves**: Elves are another type of TLE, forming ring-shaped glows around **100 km** (about 62 miles) above the ground.
 - They are **fleeting and invisible** to the naked eye.