

Solar Orbiter Mission

September 4, 2025 • vajiramandravi.com



Solar Orbiter Mission Latest News

According to a new study the European Space Agency's (ESA) Solar Orbiter Mission has traced the origin of Solar Energetic Electrons (SEEs) emerging from the Sun.

About Solar Orbiter Mission

- It is a joint project of the European **Space Agency** and **NASA** which was **launched in 2020**.
- **Objective:** It explores the **Sun and heliosphere** from close up and out of the ecliptic plane.
- **Payload:** It carries **six remote-sensing instruments** to observe the **Sun and the solar corona**, and **four in-situ instruments** to measure the **solar wind, energetic particles, and electromagnetic fields**.

What are Solar Energetic Electrons (SEE)?

- These are high-energy particles **produced by the Sun**.
- These particles play a key role in shaping the **cosmic environment**.
- **Sources:** They can be emitted during **solar flares or coronal mass ejections**

- **Recent findings:** It is observed that one type of **SEE is tied to intense solar flares**, explosive bursts from smaller patches of the Sun's surface, while another stems from **coronal mass ejections (CMEs)**.
- Between November 2020 and December 2022, the Solar Orbiter observed more than 300 bursts of SEEs.
- **Significance:** It will deepen **understanding of space weather**.

Source: DTE

Source: <https://vajiramandravi.com/current-affairs/solar-orbiter-mission/>

© Vajiram & Ravi. For personal use only.