



SOLAR PROBE: SCIENCE & TECHNOLOGY

NEWS: Why Parker Solar Probe completing closest-ever approach to Sun is significant

WHAT'S IN THE NEWS?

NASA's Parker Solar Probe made its closest approach to the Sun, providing groundbreaking data on solar wind, corona heating, and energetic particles. This mission aims to improve understanding of solar phenomena and enhance space weather predictions.

About Parker Solar Probe

- **Launched:** 2018 by NASA.
- **Objective:** Study the Sun's corona to understand the origins of solar wind and solar heating.
- **Key Instruments:**
 - **FIELDS** (Fields Experiment): Measures electric and magnetic fields.
 - **IS[⊙]IS** (Integrated Science Investigation of the Sun): Studies energetic particles.



Significance of the Flyby



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- **Study Solar Heating:** Understand why the corona is hotter than the Sun's surface.
- **Trace Solar Wind:** Identify the origin and acceleration mechanism of solar wind.
- **Explore Energetic Particles:** Analyze particles traveling at near-light speed in the Sun's atmosphere.
- **Valuable Insights:**
 - Improves predictions of space weather.
 - Enhances understanding of Sun-Earth energy interactions.

Source: <https://indianexpress.com/article/explained/explained-sci-tech/parker-solar-probe-closest-ever-sun-9749114/>

