

NASA's Parker Solar Probe Makes Record Sun Flyby Christmas Eve

A NASA spacecraft is on track to provide astronomers with a **Remarkable** early Christmas gift with the closest-ever flyby of the sun on December 24. The Parker Solar Probe, a NASA spacecraft, is set to make history with a record-setting close **Encounter** with the sun on Christmas Eve. It will pass through the star's outer atmosphere at 6:53 a.m. EST (1153 GMT) and come within 3.8 million miles (6.1 million kilometers) of the sun's surface. This flyby is the final test for the Parker Solar Probe, which has conducted a series of increasingly closer approaches to the sun as part of its mission to unravel the **Mysteries** of our closest star.

Nick Pinkine, the Parker Solar Probe mission operations manager at the Johns Hopkins Applied Physics Laboratory (JHUAPL) in Maryland, expressed excitement about the upcoming mission. He stated, "No human-made object has ever passed this close to a star, so Parker will truly be returning data from uncharted territory. We're eager to receive the spacecraft's data upon its return."

The closest approach of the Parker Solar Probe to the sun will take place on Tuesday, December 24, at 6:53 a.m. EST (1153 GMT). During this time, the spacecraft will reach its nearest distance ever to the sun at 3.8 million miles. This flyby will mark the 22nd close **Encounter** between Parker and the sun since its launch in 2018, with the spacecraft traveling at an **Astounding** speed of about 430,000 mph (692,000 kph).

Despite the **Extreme** temperatures of up to 1,800 degrees Fahrenheit (980 degrees Celsius) that the Parker Solar Probe will experience during the flyby, its specially designed heat shield can **Withstand** these conditions. Additionally, detailed updates on the spacecraft's progress can be found on NASA's official Parker Solar Probe mission blog, website, and JHUAPL's Parker Solar Probe site.

Vocabulary List:

- 1. Remarkable /rɪˈmɑːrkəbl/ (adjective): Worthy of attention; extraordinary.
- 2. **Encounter** /ɪnˈkaʊntər/ (noun): An unexpected or casual meeting.
- 3. Mysteries /'mɪstəriz/ (noun): Things that are difficult or impossible to understand or explain.
- 4. Astounding /ə'staʊndɪŋ/ (adjective): Surprisingly impressive or notable.
- 5. Withstand /wɪθ'stænd/ (verb): To remain undamaged or unaffected by; to resist.
- 6. **Extreme** /ɪk'striːm/ (adjective): Very large in amount or degree; farthest from the center or a given point.

CATEGORY

1. Sci/Tech - LEVEL6

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