A NASA Mission to Touch the Sun

Capturing the Sun's particles and detecting its electric and magnetic fields.

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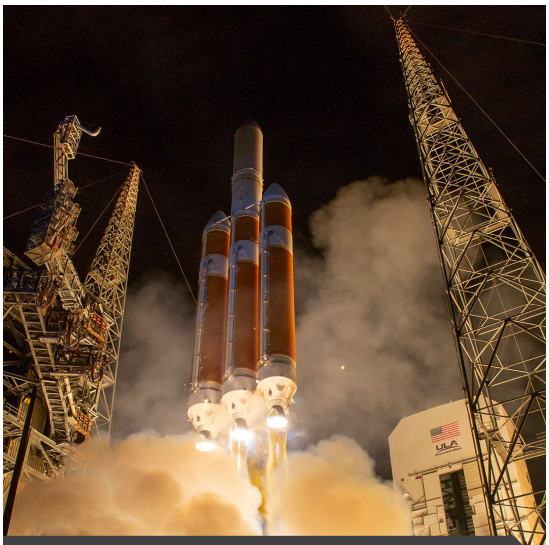
nasa.gov/content/goddard/parker-solar-probe

An illustration of NASA's Parker Solar Probe collecting particles and measuring fields from the Sun and solar wind.

The Sun emits both energy and charged particles. These particles, mostly protons and electrons, flow from the Sun together with a magnetic field out past the planets in our solar system. This flow of particles, magnetic fields, and electric energy is known as *solar wind.* The first scientific theories about solar wind were controversial until early spacecraft orbiting Earth made direct observations of flowing particles. Scientists still don't understand exactly what causes solar wind or what part of the Sun it comes from, but they have developed competing theories based on observations and mathematical representations of the Sun to explain the phenomenon. NASA sent the Parker Solar Probe very close to the Sun to help scientists collect the data they need to determine which theory is correct.



The rocket that took NASA's Parker Solar Probe to space.