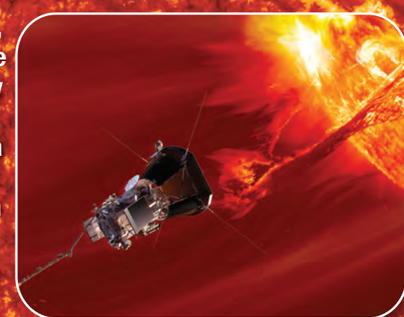
National Aeronautics and Space Administration

Die Cut Image Area
(Do Not Print)

Parker Solar Probe

A Mission to Touch the Sun

Launched in 2018, Parker Solar Probe is giving humanity our first-ever close-up view of a star, facing brutal heat and radiation as it plunges through the Sun's atmosphere.



Remove the image of the Earth at the perforations. To demonstrate the distance between the Sun and Earth at this scale, place the images 75 feet (23 meters) apart. This represents approximately 93 million miles (150 million kilometers). At this scale, Parker Solar Probe will be 3 feet (0.9 meters) away from the Sun at closest approach, representing 3.9 million miles (6.2 million kilometers).

The punch-out also makes this card a pinhole projector! With your back to the Sun, hold this card about 1 foot above the ground or a smooth surface, then slowly pull it back until the square-shaped projection changes to a circle.

EARTH *PRESS ALONG THE PERFORATED EDGES TO REMOVE THE EARTH.*

PSP Facts

- *How do Earth and the Sun compare on size? It takes about 109 Earths lined up end to end to stretch across the diameter of the Sun. And, if you pretend the Sun is a hollow ball, it would take 1 million Earths to fill it!*
- *The Sun is 93 million miles (150 million kilometers) away from Earth. If we could ride in a car to the Sun traveling 60 miles per hour (96 kilometers per hour), it would take about 175 years to get there.*
- *At closest approach, Parker will zoom around the Sun at approximately 430,000 miles per hour (700,000 kilometers per hour). That's fast enough to get from Philadelphia to Washington, D.C., in one second.*
- *The front of Parker's revolutionary solar shield, when closest to the Sun, will face temperatures approaching 2,500 degrees Fahrenheit (1,377 degrees Celsius), but the spacecraft's payload will be near room temperature.*

To view the Sun as Parker will see it on its closest approaches, hold this Sun image 3 feet (0.9 meters) from your eyes. This demonstrates that at Parker's closest flybys, the Sun will have an angular size of 12.5 degrees (25 times the 0.5 degrees that it is from Earth). That's really close!

nasa.gov/parkersolarprobe

parkersolarprobe.jhuapl.edu

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8.5" x 8.5"