

Voyager 2 discovers solar system is bent

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Story Highlights

- Data from Voyager 2 spacecraft shows the solar system is asymmetrical
- It's likely from disturbances in the interstellar magnetic field
- Researchers have long suspected the solar system was bent

LOS ANGELES, California (AP) -- New observations from NASA's long-running Voyager 2 spacecraft show the solar system is asymmetrical, likely from disturbances in the interstellar magnetic field, scientists reported Monday.

The discovery came after the 30-year-old unmanned probe sailed near the edge of the solar system this past summer following its twin, Voyager 1, which reached that part of space in 2004.

Researchers have long suspected the solar system was bent, but never had direct evidence until now, said Voyager mission scientist Edward Stone of the California Institute of Technology.

Voyager 2 crossed a barrier in the solar system known as the termination shock in August, some 10 billion miles from where Voyager 1 passed through. The termination shock is the region where charged particles from the sun abruptly slow down as they collide with other particles and a magnetic field in interstellar gas.

Scientists believe the unevenness is caused by the interstellar magnetic field that is pitched at an angle to the plane of the Milky Way.

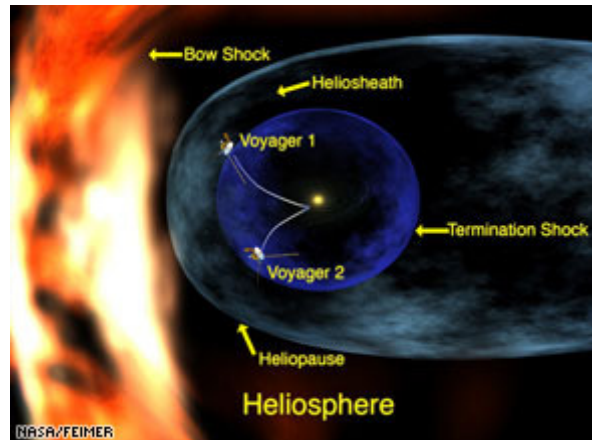
"The magnetic field is disturbing an otherwise spherical surface," Stone said at a meeting of the American Geophysical Union in San Francisco.

Although Voyager 2 was the second probe to zip past the termination shock, scientists were nonetheless excited about the milestone. Unlike its twin, Voyager 2 had a working instrument that made the first direct measurements of the speed and temperature of the solar wind.

The nuclear-powered Voyager spacecraft, launched in 1977, are hurtling toward an uncharted region of space where the sun's influence wanes.

Voyager 1, the most distant of any manmade object, is traveling at 10 miles per second with its twin trailing close behind.

It will take about a decade before the probes reach the heliopause, marking the beginning of interstellar space and the end of our solar system.



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