

PUBLIC INFORMATION OFFICE
JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
PASADENA, CALIF. 91109. TELEPHONE (818) 354-5011

Contact: Diane Ainsworth

FOR IMMEDIATE RELEASE

March 10, 1995

ULYSSES SPACECRAFT MAKES CLOSEST APPROACH TO SUN

The Ulysses spacecraft will cross the Sun's equator March 12 and make its closest approach to that body on its way to the northern polar region of the Sun.

The spacecraft will pass within 200 million kilometers (124 million miles) of the Sun at 11:40 Universal Time (3:40 a.m. Pacific Standard Time), the closest it has ever been or ever will be to the Sun since it was launched on October 6, 1990, said Donald Meyer, Ulysses deputy mission operations manager at NASA's Jet Propulsion Laboratory. Distance from Earth at perihelion, or closest approach to the Sun, will be approximately 346 million kilometers (215 million miles).

Ulysses is crossing rapidly into the northern hemisphere now, traveling at a rate of about 0.8 degrees in latitude per day and a velocity of approximately 117,000 kilometers per hour (73,000 miles per hour), with respect to

the Sun.

For the last month the spacecraft has been collecting data on the equatorial region of the Sun. This will continue for the next month, until Ulysses begins to see features from the northern hemisphere of the Sun, said Peter Beech, mission operations manager from the European Space Agency.

All spacecraft operations and science experiments continue to go well. A radio science experiment is currently under way to measure the electron content of the Sun's fiery outer atmosphere, called the corona, as Ulysses passes in back of the Sun as seen from Earth.

The S-band transmitter was turned on February 22 to take advantage of Ulysses' unique position in space for the radio experiment. This transmitter, in conjunction with the X-band transmitter, will be beaming signals through the corona to provide measurements of the electron content through March 15.

As Ulysses crosses into the northern hemisphere of the heliosphere -- the region of space dominated by the forces of the solar wind -- it will begin its next phase of the primary mission to study that region at all solar latitudes. This phase will be highlighted when Ulysses reaches 70 degrees north of the Sun's equator and begins a four-month

pass over a second region of the Sun never before explored.

The Ulysses mission, managed jointly by NASA and the European Space Agency, was designed to study the regions above the Sun's poles. The Jet Propulsion Laboratory manages the U.S. portion of the mission for NASA's Office of Space Science, Washington, D.C.

#####

3/8/95 DEA

#9518