

## **Ulysses hanging on valiantly**

## July 3 2008



Over more than 17 years of observations above and below the poles of the Sun, the ESA/NASA Ulysses mission has made fundamental contributions to our understanding of the Sun itself, its sphere of influence (the heliosphere), and our local interstellar neighbourhood. The mission provided the first-ever map of the heliosphere in the four dimensions of space and time. Ulysses was launched by Space Shuttle Discovery in October 1990. It headed out to Jupiter, arriving in February 1992 for the gravity-assist manoeuvre that swung the craft into its unique solar orbit. It orbited the Sun three times and performed six polar passes. The mission will be declared to have concluded on 1 July 2008 because of the declining capacity of the spacecraft to keep the onboard temperature optimal for functioning. Credits: ESA (image by C.Carreau)

The Ulysses spacecraft, whose mission was expected to end on 1 July 2008, is hanging on valiantly as spacecraft controllers wait for a sign of the fuel freeze that would end the mission. This could happen any time now.



Controllers will know that the fuel needed to keep the antenna pointing towards Earth has started to freeze when Earth-pointing manoeuvres become less efficient and the radio signals from the spacecraft grow weaker.

In the meantime, Ulysses is still providing important science data as it pursues its exploration of the heliosphere, the sphere of influence of our star.

Although the spacecraft can now transmit data only in real time, the amazing 17.5-year-old mission is using all the time it has left to add to the wealth of information collected so far.

Source: ESA

Citation: Ulysses hanging on valiantly (2008, July 3) retrieved 2 May 2024 from <u>https://phys.org/news/2008-07-ulysses-valiantly.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.