

Mars Odyssey Orbiter Puts Itself Into Safe Standby

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Artist's concept of Odyssey. Image credit: NASA/JPL

(PhysOrg.com) -- NASA's Mars Odyssey orbiter put itself into a safe standby mode on Saturday, Nov. 28, and the team operating the spacecraft has begun implementing careful steps designed to resume Odyssey's science and relay operations within about a week.

Engineers have diagnosed the cause of the Nov. 28 event as the spacecraft's proper response to a memory error with a known source. The likely cause is an upset in the orbiter's "memory error external bus," as was the case with a similar event in June 2008.

In <u>safe mode</u> over the weekend, Odyssey remained in communication with ground controllers and maintained healthy temperatures and power. To clear the memory error, the team commanded Odyssey today to perform a cold reboot of the orbiter's onboard computer. The spacecraft



reported that the reboot had been completed successfully.

"This event is a type we have seen before, so we have a known and tested path to resuming normal operations," said Odyssey Project Manager Philip Varghese of NASA's Jet Propulsion Laboratory, Pasadena, Calif.

Odyssey has been orbiting Mars since 2001. In addition to its own major scientific discoveries and continuing studies of the planet, the Odyssey mission has played important roles in supporting the missions of the <u>Mars rovers</u> Spirit and Opportunity and the <u>Phoenix Mars Lander</u>.

Until Odyssey is available again as a communications relay, Spirit and Opportunity will be operating with direct communications to and from Earth.

Provided by JPL/NASA (<u>news</u> : <u>web</u>)

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