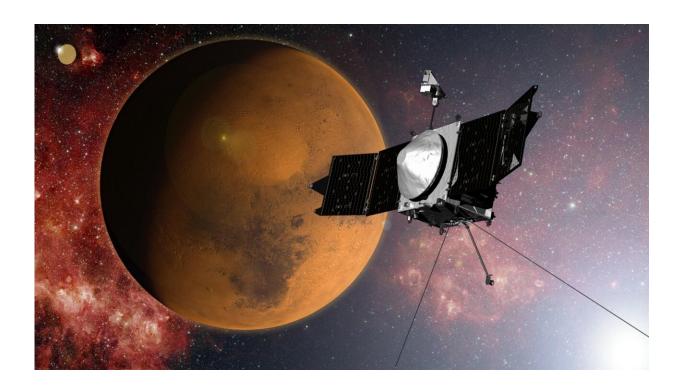


MAVEN status update

February 24 2023



Credit: NASA

NASA's MAVEN spacecraft entered safe mode on Feb. 16 after encountering an issue with its Inertial Measurement Unit (IMU), which measures the spacecraft rate of rotation for use in determining its pointing. The IMU had been powered up in preparation for a minor maneuver targeted to reduce eclipse durations in 2027.

On Feb.17, MAVEN exited <u>safe mode</u> and is currently operating in all



stellar mode, a mode that does not rely on IMU measurements such that the IMU can be powered off to conserve its lifetime. The maneuver will be waived as the team evaluates the path forward. Relay activities and nominal science operations are scheduled to resume on Feb. 23.

MAVEN launched in November 2013 and entered Mars' orbit in September 2014. The mission's goal is to explore the planet's upper atmosphere, ionosphere, and interactions with the Sun and <u>solar wind</u> to explore the loss of the Martian atmosphere to space. Understanding atmospheric loss gives scientists insight into the history of Mars' atmosphere and climate, <u>liquid water</u>, and planetary habitability.

Provided by NASA's Goddard Space Flight Center

Citation: MAVEN status update (2023, February 24) retrieved 26 April 2024 from <u>https://phys.org/news/2023-02-maven-status.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.