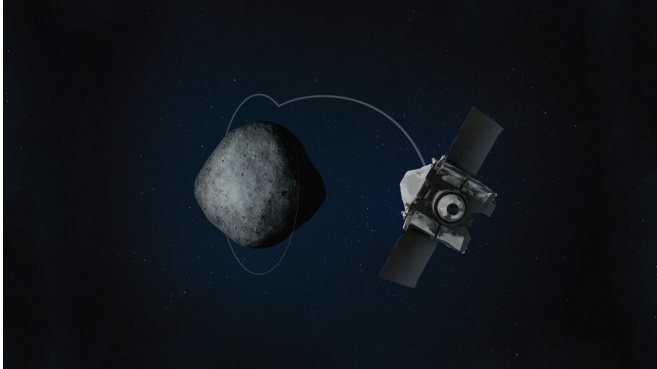


Status update: OSIRIS-REx Osprey Flyover

14 February 2020, by Nancy Neal Jones



OSIRIS-REx orbit the asteroid Bennu. Credit: University of Arizona

NASA's OSIRIS-REx spacecraft safely executed a 0.4-mile (620-m) flyover of the backup sample collection site Osprey as part of the mission's Reconnaissance B phase activities. Preliminary telemetry, however, indicates that the OSIRIS-REx Laser Altimeter (OLA) did not operate as expected during the 11-hour event. The OLA instrument was scheduled to provide ranging data to the spacecraft's PolyCam imager, which would allow the camera to focus while imaging the area around the sample collection site. Consequently, the PolyCam images from the flyover are likely out of focus.

The other [science instruments](#), including the MapCam imager, the OSIRIS-REx Thermal Emissions Spectrometer (OTES), and the OSIRIS-REx Visual and InfraRed Spectrometer (OVIRS), all performed nominally during the flyover. These instruments and the spacecraft continue in normal operations in orbit around asteroid Bennu.

The mission team is currently reviewing the available [data](#) from the flyover in order to fully assess the OLA instrument. The entire data set from the flyover, including the PolyCam images, will be completely downlinked from the spacecraft next week and will provide additional insight into

any impact that the loss of the OLA data may have.

OLA has already completed all of its principal requirements for the OSIRIS-REx mission. Last year, OLA's scans of Bennu's surface were used to create the high-resolution 3D global maps of Bennu's topography that were crucial for selecting the primary and backup sample collection sites last fall.

Provided by NASA's Goddard Space Flight Center

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