EARTH SCIENCE WEEKLY

October 31, 2016

Volume 8 Mr. Tarbert

A Letter from the Editor:

Dear Students.

Happy Halloween! Watch out for cavities and gross cheap candy.

This week you have a Lab Report Due and we will be finishing up sections 4 and 5 in Chapter 1. Earth Science Study will be held on Wednesday this week from 3 to 4:00. If you want to utilize the late bus you need to sign up in the main office by the end of the day Tuesday.

We will also have another celebration to demonstrate what you have learned from sections 2 and 4 for Chapter 1.

Sincerely, Mr. Tarbert

NASA's Juno Mission Exits Safe Mode, Performs Trim Maneuver

Mission Status Report

NASA's Juno spacecraft at Jupiter has left safe mode and has successfully completed a minor burn of its thruster engines in preparation for its next close flyby of Jupiter.

Mission controllers commanded Juno to exit safe mode Monday, Oct. 24, with confirmation of safe mode exit received on the ground at 10:05 a.m. PDT (1:05 p.m. EDT). The spacecraft entered safe mode on Oct. 18 when a software performance monitor induced a reboot of the spacecraft's onboard computer. The team is still investigating the cause of the reboot and assessing two main engine check valves.

"Juno exited safe mode as expected, is healthy and is responding to all our commands," said Rick Nybakken, Juno project manager from NASA's Jet Propulsion Laboratory in Pasadena, California. "We anticipate we will be turning on the instruments in early November to get ready for our December flyby."

In preparation for that close flyby of Jupiter, Juno executed an orbital trim maneuver Tuesday at 11:51 a.m. PDT (2:51 p.m. EDT) using its smaller thrusters. The burn, which lasted just over 31 minutes, changed Juno's orbital velocity by about 5.8 mph (2.6 meters per second) and consumed about 8 pounds (3.6 kilograms) of propellant. Juno will perform its next science flyby of Jupiter on Dec. 11, with time of closest approach to the gas giant

occurring at 9:03 a.m. PDT (12:03 p.m. EDT). The complete suite of Juno's science instruments, as well as the JunoCam imager, will be collecting data during the upcoming flyby.

"We are all excited and eagerly anticipating this next pass close to Jupiter," said Scott Bolton, principal investigator of Juno from the Southwest Research Institute in San Antonio. "The science collected so far has been truly amazing."



The Juno spacecraft launched on Aug. 5, 2011, from Cape Canaveral, Florida, and arrived at Jupiter on July 4, 2016. During its mission of exploration, Juno soars low over the planet's cloud tops -- as close as about 2,600 miles (4,100 kilometers). During these flybys, Juno probes beneath the obscuring cloud cover of Jupiter and studies its auroras to learn more about the planet's origins, structure, atmosphere and magnetosphere.



Student of the week!



Noah Brewster

Noah has been named Earth Science Student of the week for his outstanding performance in the first marking period! "Always strive to be better than you were yesterday"