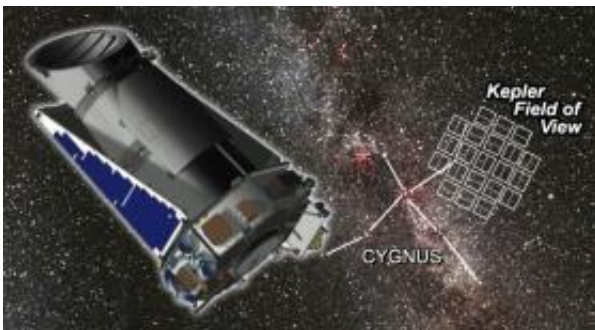


# Kepler mission team completes quarterly contact with the spacecraft

October 5 2010

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Artist concept of Kepler in space. Image credit: NASA/JPL

The Kepler Project Team completed another quarterly roll of the spacecraft Sept. 22-23, 2010. The roll will keep Kepler spacecraft power generation nominal for the fall season with proper alignment of the solar arrays toward the sun. During the contact with the spacecraft, engineers also downloaded another month of science data, marking the end of Quarter 6 science data collection. Quarter 7 science data collection has begun and the first month of Quarter 7 science data is expected to be downloaded approximately Oct. 22-23, 2010.

Science team members are preparing to announce the mission's latest discovery in early November. Additionally, the science team is expected to validate the Kepler 9d planet in the near future. Kepler 9d, which is about one and a half times larger than Earth, was announced as a planetary candidate at a media telecon held Aug. 26, 2010.

The Kepler Science Working Group recently convened at NASA Ames Research Center for a project review. Many topics were discussed, including an overview of the program status; a review of Kepler 9b, 9c, and 9d; an update on Kepler planetary candidates; the status of Kepler's Follow-on Observation Program and the progress on planetary candidate confirmation and validation; and future venues for Kepler Science Team member participation. Many Kepler Science Team members are planning to attend the American Astronomical Society Meeting in early January 2011 in Seattle, Wash.

In addition to its prime goal of planet hunting, the Kepler Mission puts such discoveries in proper context by determining properties of the stars hosting planets. A primary technique making use of the Kepler data for this utilizes the detection of small oscillations on the star and is known as asteroseismology. Using asteroseismology, scientists are able to make, relative to other techniques, very accurate measurements of the stellar radius, and stellar age. Applications of asteroseismology are supporting current planet detection publications, and many independent science results from the Kepler Asteroseismic Science Consortium (KASC), which operates under the auspices of the [Kepler Mission](#), facilitate optimal use of asteroseismology data.

The KASC submitted a total of 16 papers during June 2010, most of which are now accepted for publication in international, peer-reviewed journals. The KASC is preparing a larger number of papers for submission in October 2010. These topics of these papers range from statistical analyses of stellar properties for several hundred dwarf stars of the solar type that allow detailed testing of Kepler Input Catalog values, to independent study of individual oscillating stars.

Provided by JPL/NASA

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