National Space and Aeronautics Administration

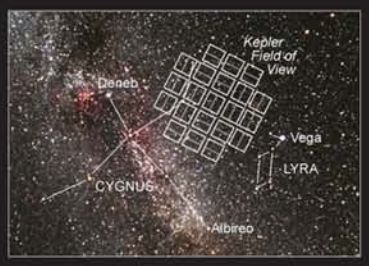
OPEN ANNUAL FUNDED OPPORTUNITIES

Kepler Guest Observer Program

Areas of Exploitation:

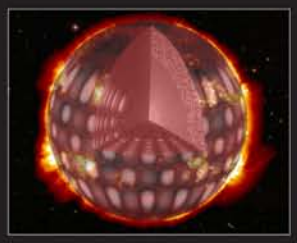
- Stellar sizes and masses (binary eclipses)
- Stellar age and rotation rate (open clusters)
- Asteroseismology (pulsations)
- Star spots (periodic dips)
- Flare stars (random eruptions)
- Stellar cycles (seasonal variations)
- Accreting stars (flickering)
- Active Galactic Nuclei (AGN day-scale variations)
- High/low-energy correlations (multi-mission)

Kepler Field of View



Binary Stars

Asteroseismology

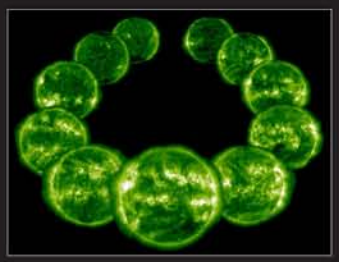


Stellar Accretion

Magnetic Activity

Stellar Cycles

Multi-mission Investigations

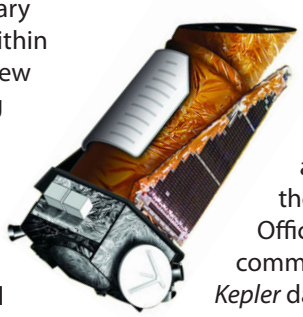


Active Galactic Nuclei

www.nasa.gov

The Kepler Guest Observer Program

The *Kepler* spacecraft, launched on Mar 6, 2009, monitors 150,000 stars with continuous 30-min temporal sampling, and a sub-sample at 1-min cadence. *Kepler*'s primary science objective is to detect terrestrial planets within habitable zones. The 115 square degree field of view is located within the Cygnus-Lyra region, 13.5 deg from the galactic plane, and will be continuously monitored throughout the mission. There is a nominal magnitude range for *Kepler* exoplanet science of R = 7–15 for the primary mission, but targets of interest as faint as R ≈ 20 will be available for guest observations. The instrumental bandpass is broad, from 420 to 900 nm and the point spread function is 12-30 arc seconds (95% encircled energy). Photometry is shot noise-limited for an R = 12 G2 V star; 30 minute integrations yield precision of 50 parts per million. With a baseline mission of ≥3.5 years, the resulting data archive will provide a unique combination of photometric precision, duration, contiguity and source number. The community has annual opportunities to both develop observing programs and mine a rich public archive for astrophysical results that are not included within the primary *Kepler* mission. The *Kepler* Guest Observer Office is dedicated to the service of the broad science community, with a charter to promote the exploitation of *Kepler* data and broaden the scientific impact of this mission.

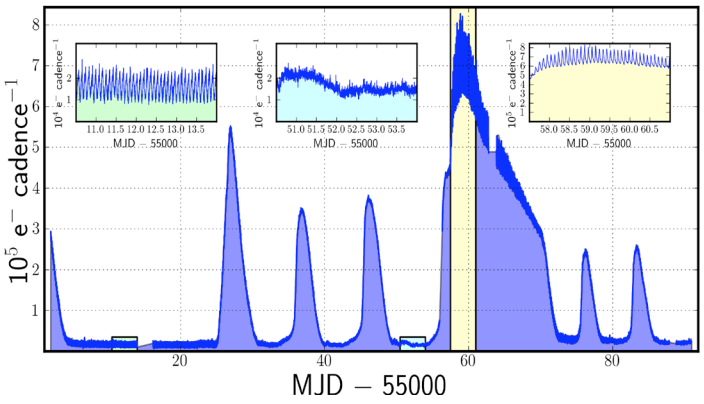


Visit **http://keplergo.arc.nasa.gov** for program details and opportunities.

Kepler Data Publicly Available Now!

The *Kepler* archive is hosted at the Multi-mission Archive at STScI (MAST; archive.stsci.edu/kepler). Guest Observers retrieve their data from this portal, while targets dropped from the exoplanet campaign due e.g. to intrinsic variability are released here to the public on a quarterly fast-track, and Guest Observer/primary-mission data is made publicly available on separate proprietary schedules. Data from the *Kepler* commissioning period, dropped from the primary exoplanet program are already available for the public to analyze! The dropped target public release schedule over the near-term is:

Nov 2, 2009	Commissioning May 2-11, 2009
Nov 23, 2009	Quarter 1 May-Jun, 2009
Jan 15, 2010	Quarter 2 Jun-Sep 2009
Apr 15, 2010	Quarter 3 Sep-Dec 2009

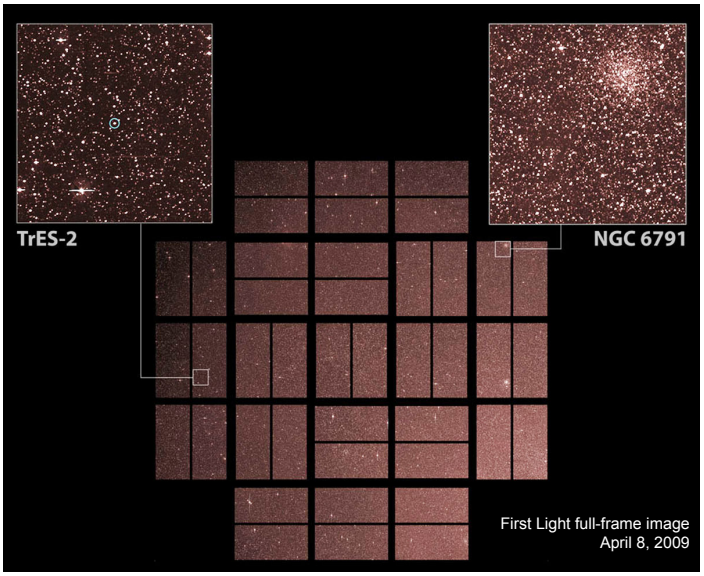


Quarter 2 data of an R = 19 dwarf nova within the Kepler field of view. Three insets reveal fine structural detail.

Program Summary

The *Kepler* Guest Observer Office administers an annual, worldwide call for scientific proposals from the community. 3,000 long-cadence (30-min) targets are available to Guest Observers per 3-month season. Additionally, 25 short-cadence (1-min) targets are available each month. Both long- and short-cadence targets can be observed for a full year each observing cycle.

US proposers will be funded annually using a program budget of $1.2M per year. Archive investigators can also request funding through the annual ADP program.



Guest Observer Timeline

Dec 4, 2009	Cycle 2 Notices of Intent
Jan 15, 2010	Cycle 2 proposal deadline
Feb, 2010	Cycle 3 Announcement of Opportunity
Mar, 2010	Cycle 2 proposal review
Jun, 2010	Cycle 2 begins (1 yr duration)
Nov, 2010	Cycle 3 Notices of Intent
Dec 2010	Cycle 3 proposal deadline

Guest Observer Portals

GO Website:
http://keplergo.arc.nasa.gov

GO helpdesk:
keplergo@mail.arc.nasa.gov

GO News:
keplergonews-request@arc.lists.nasa.gov

Data Archive: http://archive.stsci.edu/kepler

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NP-2009-11-04-ARC