



CFOP: the Kepler Community Follow-up Observing Program website

cfop.ipac.caltech.edu

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What is CFOP?

CFOP is a PHP/MySQL web database application with the principal aim to facilitate collaboration in follow-up studies of Kepler planet candidates, or Kepler Objects of Interest (KOIs). CFOP is synchronized with the NASA Exoplanet Archive and contains publicly available planetary and stellar parameters, finder charts, multiplicity information, and links to analysis tools at the Exoplanet Archive. In addition, CFOP serves as a repository for community-gathered data by allowing upload and display of files, derived astrophysical parameters, and observing notes for registered users.

Bottom left: list of all KOIs on CFOP, as delivered by the Kepler project. Bottom middle: observing notes for a KOI. Bottom right: individual KOI page.

Current holdings:
4,800 stars, 5,785 planets
145 confirmed planets
3,457 planet candidates
2,183 false positives

Uploading Data to CFOP

Users may upload data either at the individual KOI page or in bulk. Stellar or planet parameters, files, observing notes, and imaging or spectroscopic observations may be uploaded as text files or tar files, and the user will receive email confirmation regarding the success of their upload.

Current holdings:
90,031 files
15,957 parameters
5,493 observing notes
uploaded by CFOP users

Searching CFOP

Users can search for KOIs by KOI name (star or planet), RA/Dec, file availability, any of the stellar or planet parameters, or availability of spectroscopic or imaging observations. Separately, the observing notes can be searched by KOI name, username, date range, or keyword. Search results can be filtered by KOI disposition, sorted by any column, and downloaded to a text or tar file.

Bottom left: KOI search page. Bottom right: Observing notes search page.



CFOP video tutorials are available on the NASA Exoplanet Archive YouTube channel: www.youtube.com/user/NASAExoplanetArchive/videos

MyKOIs

MyKOIs is a personalized list of KOIs in which a user is interested, or “following”. If any of the KOIs on the list are updated, the user will receive an optional email describing the update and providing a direct link to the relevant KOI page. KOIs may be added to the list individually, bulk uploaded, or downloaded from Search results.

Bottom left: MyKOIs management page. Bottom right: example of email notification.

Observation Summary Tables

The spectroscopic and imaging summary tables are intended to provide users with a summary of what observations have been taken on a KOI, including telescope and instrument configurations used. These tables aid CFOP users in planning their own observations so as not to duplicate efforts and to obtain observations that are either new or complementary to observations already made by other members of the astronomical community.

Bottom left: spectroscopic observations table. Bottom right: imaging observations table.

Current holdings: 4,025 spectroscopic observations, 2,507 imaging observations

Change Log

All changes made to CFOP are recorded in the change log, and may be sorted by date, action, or user. All registered users have a profile page which may be accessed by clicking on the username, which facilitates user collaboration. Users are listed in a directory which includes contact information along with preferred science topics and techniques.

Bottom left: change log. Bottom right: example of user profile page.