

The Catalina Surveys Data Release 2

Welcome to the second data release from the Catalina Surveys Team.

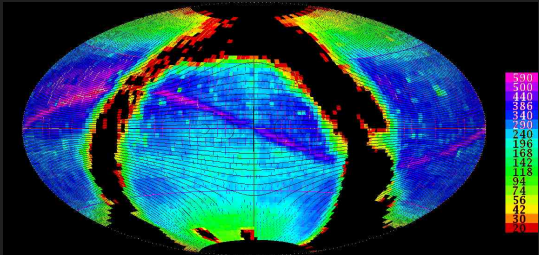
New (2018-06-27): Photometry for all 5540 CRTS-I transients discovered in CSS data.  
2017-11-15: Updated Catalina RR Lyrae Catalog (43,389 lightcurves).  
2017-05-24: Catalina Southern Periodic Variable Star Catalog.  
2014: Catalina Northern Periodic Variable Star Catalog.

Find out what's new about CSDR2.

Introduction

The Catalina Surveys consist of the Catalina Sky Survey (CSS) and the Catalina Real-time Transient Survey (CRTS).

The CSS project involves searches for rapidly moving Near Earth Objects (NEOs), while CRTS searches for stationary optical transients (OTs). Both surveys work collaboratively to extract the maximum scientific return from data from three telescopes operated by CSS. In this same collaborative spirit we are now providing an open-access to all the archival photometry.



An Aitoff projection of the sky region covered by this release in equatorial coordinates (centered at RA=0h). The colour key gives the number of epochs at each location (click for larger image).

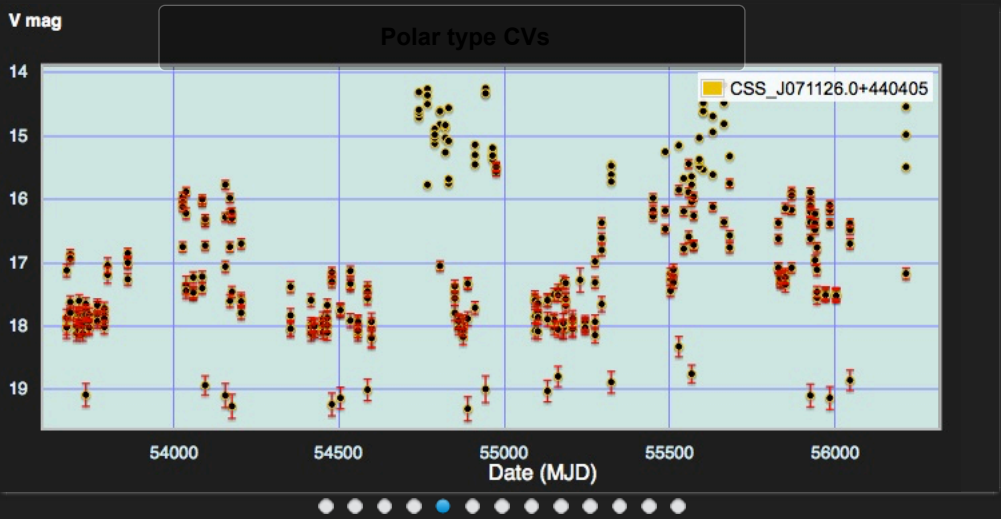
Data Available in CSDR2

Here you will find the second public data release (CSDR2) from the Catalina Surveys that consists of all photometry from seven years of photometry taken with the the CSS telescopes. This data release encompasses the photometry for 500 million objects (~40 billion measurements) with V magnitudes between 11.5 and 21.5 from an area of 33,000 square degrees. Catalina photometry covers objects in the range  $-75^{\circ} < \text{Dec} < 70^{\circ}$  and  $|b| > \sim 15^{\circ}$  with the number of observation epochs at each location is as shown above (see FAQ). Catalina images will be available in the third data release.

Data Access

- Data Query Services:
- Search for photometry in a single location.
  - Search for photometry in multiple locations.
  - Retrieve photometry by object name.
  - Check image coverage by location.
  - Extract photometry by Catalina db ID.
  - Search for a period by Catalina db ID.

Examples



More examples of Catalina Surveys [lightcurves](#) and [GCVS](#) variables. Links to 12,000 [RR Lyrae](#) from CSDR1.

### Usage

If you download and make use of these data in a publication, we request that you inform us via [email](#) including the name of the journal, authors, and publication status. This will allow us to keep track of the impact of our work and also inform you of any significant changes that might effect your work. We request that you adhere to proper scientific [attribution](#) methods whenever using Catalina Surveys data. A list of the publications using Catalina Surveys data is given [here](#).

### Additional details

## Database

Organisation of the data base follows this [DB Schemata](#).

## FAQ

What you should understand about the [data](#).

### Disclaimer, Conditions, and Limitations

This data is supplied with the intent of maximizing scientific utility. Although we have attempted to verify the integrity of the data, users should be cautious with interpretation of measurements (as outlined in the FAQ). Wherever possible and appropriate, discoveries made using this data should cite the Catalina Surveys ID given by the services.

This data is not being supplied by a data center. Therefore, we must limit queries by single users so that all users can benefit. Users wishing to run scripts with very large number of queries, or produce external services linking to the data, must contact us before doing so.



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