CATALOGS
AAVSO Areas of Interest

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Overview

The American Association of Variable Star Observers (AAVSO) is an international non-profit organization dedicated to variable star research.

There are literally hundreds of thousands of variable stars and professional astronomers do not have the time or resources to observe even a fraction of them. This is where individual observers bring value to the AAVSO.

The role of the AAVSO is:

- Observe, study and analyze variable stars
- Collect and archive variable star data for scientists, educators and the public to use
- Enable amateur astronomers to collaborate with professional astronomers
- Promote scientific education and research
CATALOGS - AAVSO Areas of Interest

Main Page
Variable Star Main Page

Variable Stars Main

- What Are They & Why Observe Them?
- The Stories Variables Tell
- Types of Variables
- Variable Star of the Season
- Educational Materials
  - CHOICE Online Institute
  - CCD School Videos
  - Student Projects
  - Two Eyes, 3D
  - Variable Star Astronomy
  - H-R Diagram Plotting Activity
- Reporting Variable Star Discoveries
- Variable Star Index (VSI)
- AAVSO in Print - Publications Using AAVSO Data

Tags:
variable stars

Submitted by owentocke on Thu, 08/24/2017 - 15:16

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How to Observe Variable Stars

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Obtaining Data for your Variable Star

Data Main

- AAVSO International Database (AID)
- Portal for Researchers
- Historic Light Curves
- Eggen Card Project
- WebObs (Submit/Search Data)
- Data Access
  - Download Data in ASCII Form
  - Light Curve Generator (LCGv2)
  - Light Curve Generator (LCGv1)
  - MyNewsFlash - Real-Time Data Delivery
  - WebObs Search (Search the AID)
- Data Analysis
  - Transformation
  - VPHOT - Online Photometry Tool
  - Zapper - Help Validate Data
  - VSStar - Java Visualization & Analysis Tool
- The AAVSO Photometric All-Sky Survey (APASS)
- AAVSOnet Epoch Photometry Database
- AAVSOnet

Tags:
- data

Submitted by cerantocito on Mon, 03/02/2017 - 16:25
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Variable Star Tutorials

Getting Started

- What Are Variable Stars?
- Things to Do
- Find a Mentor
- Online Forum for Help and Advice
- Observing Tutorials
  - 10-Star Tutorial (Visual Observations of Variable Stars)
  - 5-Star Tutorial (Data Analysis)

Submitted by owenooke on Mon, 10/02/2017 - 16:10

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Variable Star Index (VSX)

Main database for retrieving Variable Star data
Variable Star Plotter (VSP)

**PLOT A QUICK CHART**

**WHAT IS THE NAME, DESIGNATION OR UID OF THE OBJECT?**

Required if no coordinates are provided below:

**RIGHT ASCENSION**

Allowed Formats: HH:MM:SS, HH:MM:SS, DDD.XXXX. Required if no name is given above.

**DECLINATION**

Allowed Formats: DDD:MM:SS, DDD MM:SS, DDD.XXXX. Required if no name is given above.

**CHOOSE A PREDEFINED CHART SCALE**

Select one...

A is larger, slower; G is smaller, faster.

**CHOOSE A CHART ORIENTATION**

* Visual
  * Reversed
  * CCD

**PLOT A FINDER CHART OR A TABLE OF FIELD PHOTOMETRY?**

* Chart
  * Photometry

**CHART ID**

A Chart ID will allow you to reproduce prior charts. Overides all other fields in this form.

---

**ADVANCED OPTIONS**

**FIELD OF VIEW**

In Arcminutes. Must be between 0 and 1200

**MAGNITUDE LIMIT**

Stars fainter than this magnitude will not be displayed

**RESOLUTION**

150

Resolution in px to render the chart (default 150)
AAVSO Target Tool

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<th>RA (J2000.0)</th>
<th>Dec (J2000.0)</th>
<th>Constellation</th>
<th>Var. Type</th>
<th>Min Mag</th>
<th>Max Mag</th>
<th>Period (d)</th>
<th>Observing Cadence (d)</th>
<th>Observing Section</th>
<th>Filter/Mode</th>
<th>Last Observed</th>
<th>High Priority</th>
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<td>+37° 56' 33&quot;</td>
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<td>11.0</td>
<td>0.163</td>
<td>5.0</td>
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<td>All</td>
<td>1 day ago</td>
<td></td>
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<td>20.2 B</td>
<td>11.7 B</td>
<td></td>
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Observation Planning

Observation Planner Tool

- Variable type (Use "%" for wildcard):
- Faint limit of equipment:
- Local standard time (integer hour from 0 to 24; e.g. 9PM = 21):
- Maximum hours east or west of meridian:
- Declination (southernmost):
- Declination (northernmost):
- Web page:
- CSV file:
- Submit

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Data Access Portal

The AAVSO Data Access portal

Go to Data Download.
Go to WebObs (search observations).
Go to Light Curve Generator.
Go to Data Usage Guidelines.
Go to Information about AAVSO Data.

AAVSO Data

The AAVSO holds a data archive of over 34 million variable star observations collected by thousands of observers over more than a century. This archive is known as the AAVSO International Database, or AID. These data come from a number of sources, including:

- visual magnitude estimates
- photographic plate estimates and plate measurements
- CCD photometry
- Photoelectric photometry
- DSLR photometry
- visual magnitude estimates made from digital images
APASS Data Release 9 Query Results

Notes are available at the bottom of the table.

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<th>Berr</th>
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Summary

The AAVSO, whose origin extends beyond 100 years ago, is dedicated to research and outreach.

Professionals and amateurs can contribute to the field of Variable Stars.

Beyond their suite of tools, there are many active groups to become a part of:

Exoplanets
Cataclysmic Variables
Eclipsing Binaries
Short Period Pulsators (ex. RR Lyrae)
Long Period Variables (ex. Mira)
Young Stellar Objects (ex. T Tauri)
High Energy (ex. Novae, supernova, Gamma ray bursts)
Questions?