**Requesting AAVSO Photometric/Spectroscopic Observations for an Observing Campaign**

The AAVSO can support your active research by providing simultaneous or longer-term optical observations. Observers are informed of a request for coverage via an AAVSO Alert Notice prepared by and distributed from AAVSO Headquarters. To enable us to plan an observing campaign that will utilize the skills of the AAVSO observers most appropriately for your research (see tables at end for summary of observer resources), the following information is required.

* PI. Please give name(s) and institutions(s) of researchers requesting AAVSO support. Include contact information for person with whom AAVSO will coordinate preparation, execution, and follow-up of campaign.
* Target(s). Please provide target name, coordinates, V mag (range, if possible), other colors as appropriate. Please check to see if target is in VSX (International Variable Star Index; <https://www.aavso.org/vsx>). If yes, use primary name given there. If it is not in VSX and it is variable, please add it to VSX. Please do not use Gaia names (e.g., Gaia DR2 4131587500273361280) unless nothing else is available (check ASASSN in addition to Simbad, etc). If multiple targets are not all of equal priority, give priority. If multiple targets should not be treated the same, indicate how each target is to be treated. If target is not a known or suspected variable, please indicate this.
* Purpose of campaign. Please give the purpose of the campaign (e.g., support of satellite or ground-based observations for correlation; simultaneous coverage; long term study; search for particular behavior; exoplanet/planetary system study; determination of variability type; follow-up to previous campaign; etc.).
* Background/justification. Please write a short statement (a few sentences to a few or several paragraphs) about why you are observing this object and how the AAVSO observations would be valuable. It will be included in the Alert Notice.
* Duration of campaign. Please give information on length of campaign. When does it start and end? Within this interval, when are professional observations scheduled? How many nights’ coverage on either side of these observations are requested?
* Cadences during campaign. a) Should cadence be the same throughout? If it should change during the campaign, how? Also, in the run-up to any scheduled observations and afterwards, for how many nights would you like coverage and at what cadence - nightly snapshots? a few times per night? b) If time series are requested, what is the cadence to be? What is the minimum SNR acceptable?
* CCD observations. Do you want CCD coverage?
* DSLR observations. Do you want DSLR coverage? DSLR observations are reported with DSLR BGR filters.
* PEP observations. Do you want photoelectric photometry coverage? This is ideal for studying small-amplitude behavior in very bright (V brighter than ~8) targets. AAVSO PEP observers have Johnson V, some also have B, Rc. Near-IR (H, J) photometry may be possible, depending on target declination.
* Visual observations. Do you want visual observations? Visual observations can be very valuable, especially for longer-period objects or longer-term monitoring. Also, in addition to supporting filtered data, visual observations can fill in gaps between filtered data to provide more complete coverage of the light curve.
* Filters. Specify bands of filters required. Most AAVSO CCD observers have Johnson V, many have Johnson B and Cousins R and I, and a few have Johnson U. A very few have Sloan filters. Specify if you have a priority of filters (e.g., V, then B, then Rc, Ic). If observers are carrying out time series, should they stay with one filter or alternate? Are unfiltered observations reduced to a V zeropoint (CV) or Rc zeropoint (CR) useful?
* Comparison and Check stars. A comparison star and a check star are required for CCD/DSLP/PEP photometry; a comparison star sequence is required for visual observations. If you have specific stars you want used for comparison/check, give names, coordinates, V magnitudes, B-V values. If you do not have specific stars, the AAVSO Sequence Team will choose appropriate comparison and check stars using reliable photometry (usually APASS).
* Spectroscopy. Is spectroscopy requested? If so, please give details. Also, where should these observations be reported, or whom should observers contact if they have spectroscopic data? Observers will also be asked to send spectroscopy reports to the AAVSO Spectroscopy Database (AVSpec, <https://www.aavso.org/apps/avspec/>) unless you request otherwise.
  + What is the wavelength range of interest in Angstroms?
  + If full coverage isn’t possible, are there specific lines which should be prioritized?
  + What is the Resolution required for your project?
  + What is the signal to noise ratio required for your project?
  + What cadence is required for spectroscopy (if different from photometry)?
* Any other input for observers. Please provide any other information needed (e.g., ephemeris, caveats, etc.).
* Submitting observations. Observers submit optical observations to the AAVSO International Database (<https://aavso.org/aavso-international-database-aid>) where they are immediately available for viewing/download. Do you want observations to be submitted to an additional location? See below (\*\*) for information on monitoring incoming data.
* Co-authorship. Will observers be considered for co-authorship? If an observer has made a significant contribution to your research through their data, will they be considered for co-authorship?
* Anything else you want us to know?

*Note: Please be sure to read the information below regarding AAVSO forums and feedback. Thanks!*

Please email this form to AAVSO ([aavso@aavso.org](mailto:aavso@aavso.org)). If you have questions, please contact campaign coordinator Elizabeth Waagen ([eowaagen@aavso.org](mailto:eowaagen@aavso.org)).

\*\* To monitor incoming observations on your target(s) by email, you may sign up for a MyNewsFlash on your star(s). This free AAVSO service will notify you by email when new observations of your star(s) are reported. You tailor the specifications of the MNF so you receive the information you want at the cadence you want. To sign up for a MNF:

* create a FREE AAVSO web account (on homepage <https://www.aavso.org> (see below under Forum threads) (note: do not request an observer code)
* log in to your AAVSO account and go to My account
* click the Profile tab
* click the MyNewsFlash tab
* fill out the form and
* save it.

**AAVSO Forum threads on campaigns and feedback**

The AAVSO creates a discussion thread on the campaign in the appropriate AAVSO discussion forum(s) to allow for feedback, questions, answers, updates, etc. among the PI, observers, and AAVSO HQ.

Please note that feedback from the PI is critical for the success of the campaign. This feedback helps the observers know if they are on the right track in terms of providing the needed data, and provides encouragement. We ask you to provide this to the observers via the forum thread(s) after a few days from the beginning of your campaign, and throughout your campaign as appropriate for the campaign length. Many thanks.

To post there, you need to have a FREE AAVSO web account and be subscribed to the forum thread.

* To **create a web account**, on the AAVSO homepage <https://www.aavso.org>
  + click on ‘Login’
  + click on ‘Create new account’
  + fill out the form and save – takes only a few minutes.
* To **subscribe to a forum thread**:
  + log in and go to the Campaigns forum page for the thread (it will be given in the Alert Notice)
  + click on the Subscribe link that shows at the bottom of the first post in the thread.

You will now receive emails of posts made to this thread and will be able to post there.

AAVSO Observers – Photometric Capabilities

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Instrument** | **Filters** | **Range [magnitudes]** | **Precision [magnitude]** | **Commonality of Resource** | **Principal Geographic Coverage** | **Notes** |
| Visual | Eye | 0 - 16+ | 0.1-0.2 | Abundant | Worldwide |  |
| CCD/CMOS | Johnson Cousins UBVRI | 2 - 19+ | 0.01-0.05 | Abundant | Worldwide | U filter very uncommon |
| CCD/CMOS | Sloan UGRIZ | 2 - 19+ | 0.01-0.05 | Rare | Worldwide | Mostly on AAVSOnet |
| PEP | Johnson Cousins UBVRI | U: -1 - 7 BVRI: -1 - 8 | 0.005-0.010 | Rare | North America, Europe |  |
| PEP | Optec JH | -4 - 4 | 0.010-0.020 | Very Rare | North America, Australia | Fewer than 20 exist. |

AAVSO Observers – Spectroscopic Capabilities

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Instrument** | **Type** | **Mag Limit** | **Resolution** | **Wavelengths [Angstroms]** | **Spectral Range [Angstroms]** | **Commonality of Resource** | **Principal Geographic Coverage** | **Notes** |
| SA 100/200 | Widefield Slitless | V= 10-14 | 100-200 | 3600-10,000 | Full | Common | Worldwide | Includes zero order. Stars can overlap. |
| Alpy 600 | Slit | V= 10-14 | 600-1000 | 3700-7500 | Full | Common | North America, Europe |  |
| LISA, LOWSPEC | Slit | V= 10-14 | 1000-4000 | 4000-7000 | 2000-3000 | Common | North America, Europe |  |
| eShel | Echelle | V= 6-8 | 10,000 | 4500-7000 | Full | Very Rare | North America, Europe |  |
| LHIRES III | Slit | V= 6-8 | 10,000-20,000 | 4000-7000 | 251-155 | Common | North America, Europe |  |
| Shelyak Whoppshel | Echelle | V= 9 | 30,000 | 3920-7500 | Full | Very Rare | North America, Europe | Fewer than 10 exist. |