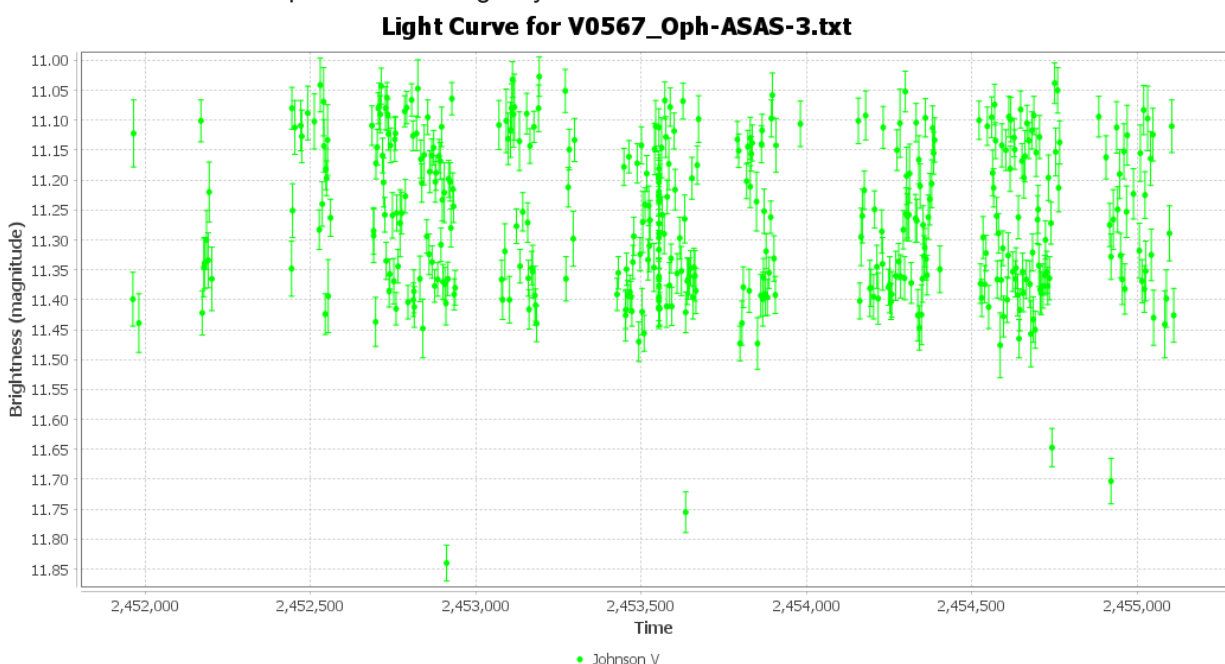


HJD Converter Plug-In

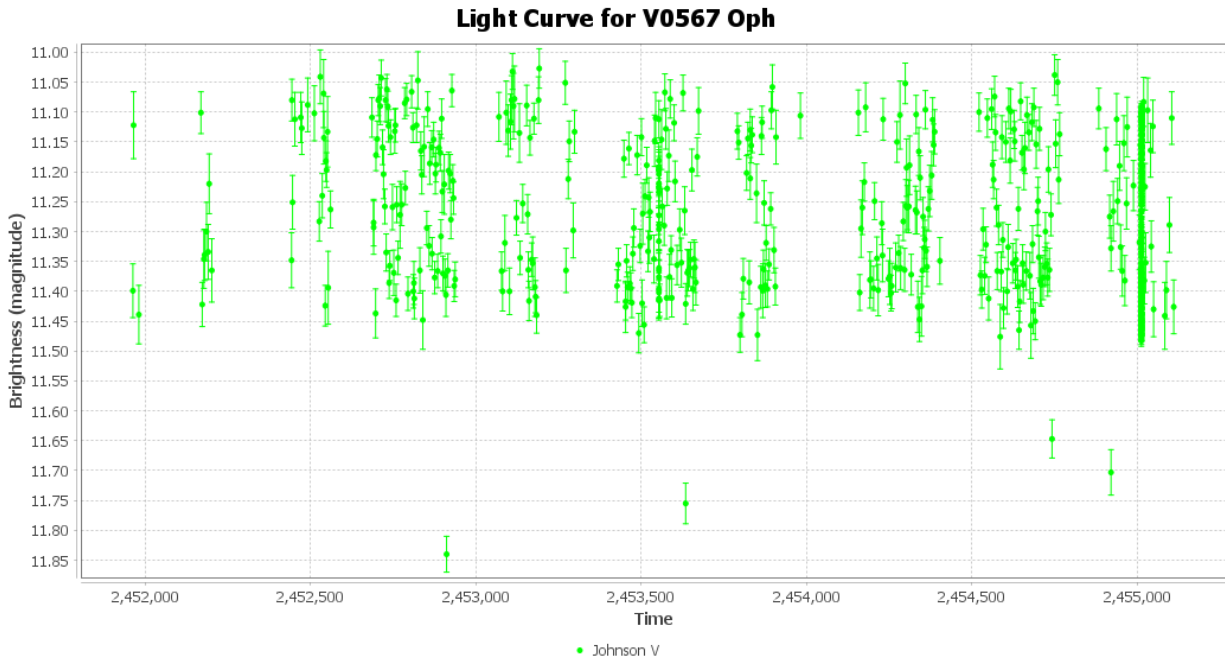
The Heliocentric JD (HJD) converter plugin allows observations in previously loaded non-Heliocentric datasets to be converted to HJD. **NOTE: The HJD conversion currently assumes JD only and does not convert BJD observations into HJD data.**

Install the HJD Converter plug-in by going to the *Tool* menu and selecting the *Plug-In Manager*. Scroll to and select the “Heliocentric JD Converter” and click Install. It is also recommended to install “Filter for Julian Date Observations” plug-in. After installation, restart VStar.

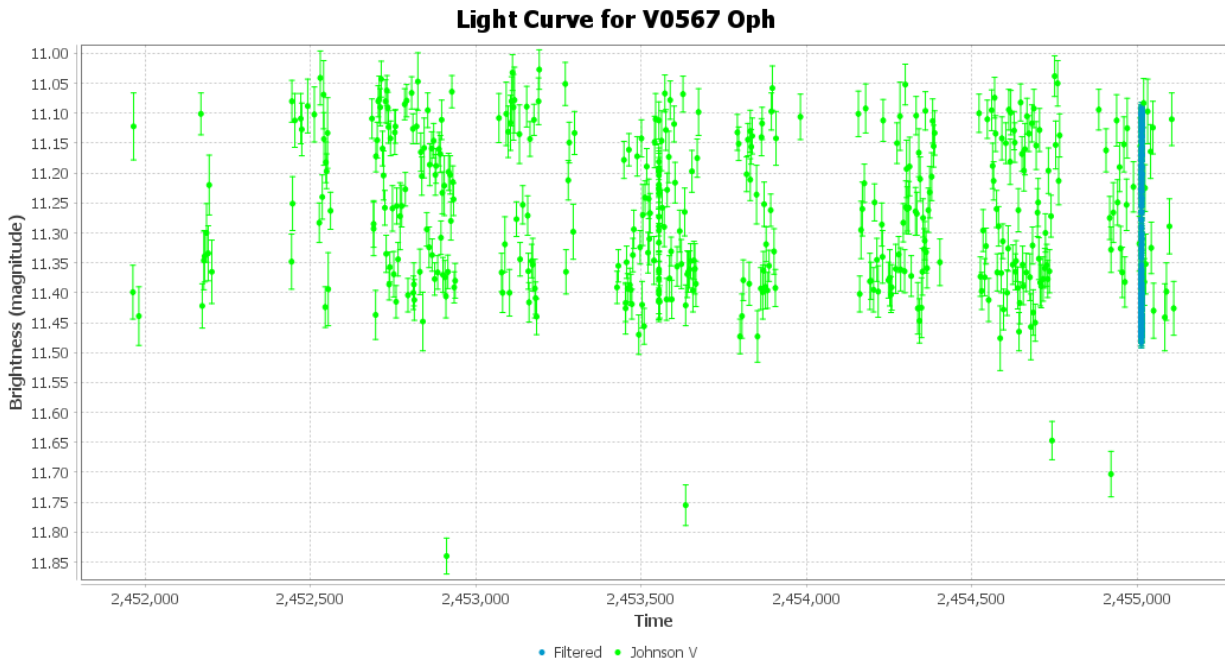
As an example, go to VSX (<http://aavso.org/vsx>) and download ASAS data for V0567 Oph. This will be a .txt file. Go to the VStar *File* drop-down tab, select “New Star File...” then select ASAS source and open the downloaded V0567 Oph file. This will give you:



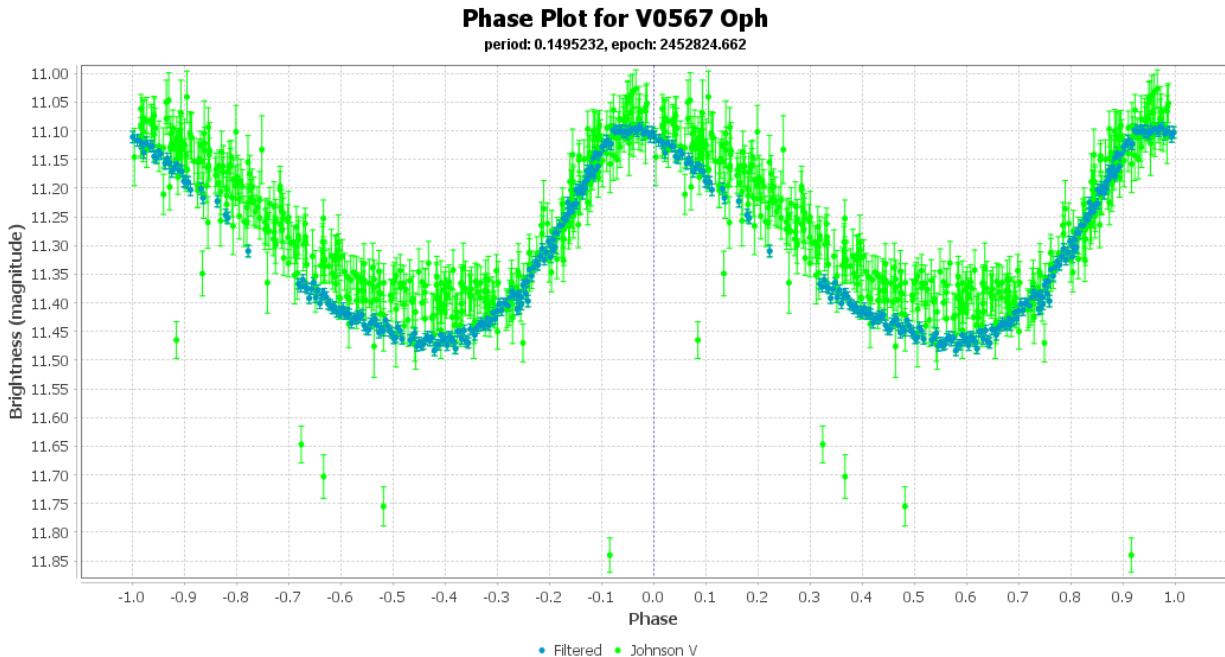
Next select “New Star from AAVSO Database...”. Enter V0567 Oph in the “Star” field and replace Minimum JD with 2455012 and Maximum JD with 2455014. Check “Add to Current?” and click OK. This will yield the combined light curve:



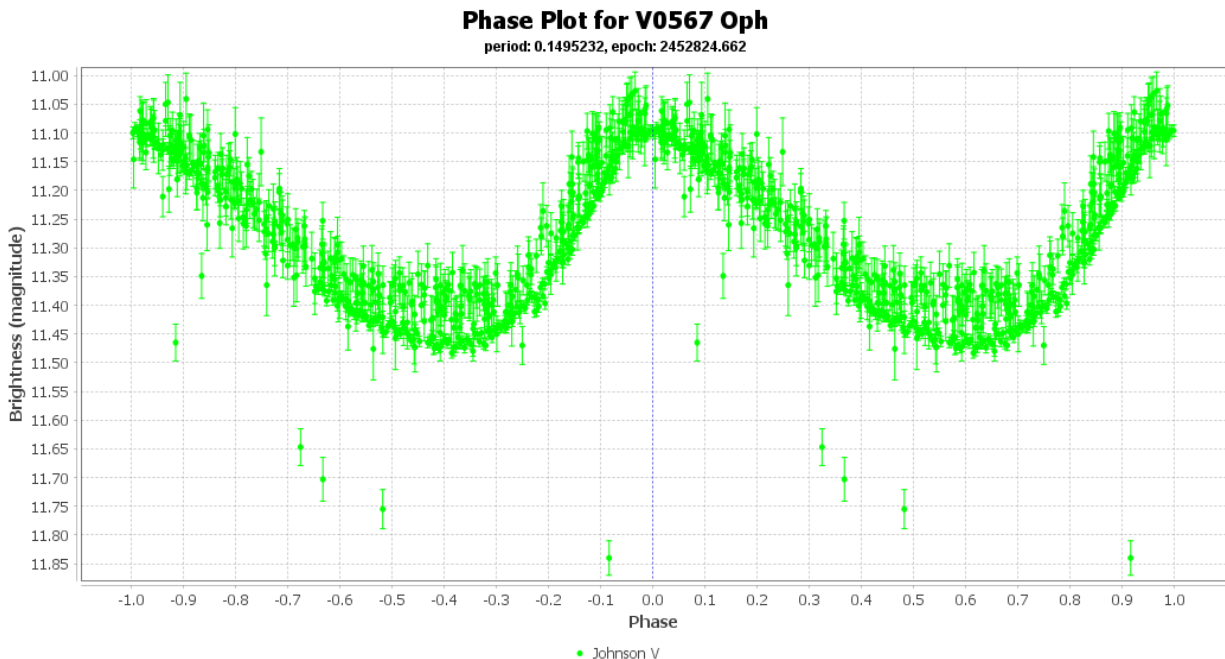
Note that both data sets contain Johnson V data. However, ASAS data are HJD-based while the time scale for AAVSO data is JD. You can visualize it with the *Julian Date Observations Filter* command (View drop-down tab):



You may select Phase Plot representation (Analysis->Phase Plot..., Period= 0.1495232, Epoch= 2452824.662) for a better representation:



Unselect the filter¹ (View->No filter), go to the *Tool* drop-down tab and select the “Heliocentric JD Converter...” option. This yields the “Non-Heliocentric Observations” window. Click YES. The “HJD Conversion” window will appear with the message “217 observations converted”. Click OK. Note that if Phase Plot was active before the conversion, the view mode would switch to the Raw Data. Click the Phase Plot toolbar button to return back to the corresponding representation:



You may notice that now both data sets (ASAS and AAVSO) are better aligned.

¹It is not necessary to unselect the filter. However, currently, the filtered points (the *copy* of the original data) will not be converted, which could be confusing. Regardless of the state of the filter, the original data points *will* be converted.

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Rev B
2022-05-05

Revision History

Rev	Date	Description
A		Initial Release
B	2022-05-05	Updated along with plugin changes. R Car sample star (long-period variable) replaced by a short-period V0567 Oph.