

Instruction for using the SuperWASP FITS file VStar plugin (v2)

SuperWASP data can be downloaded via the site <https://wasp.cerit-sc.cz/form>

To get a light curve, enter object coordinates, the search radius and click [Search].

SuperWASP

Wide Angle Search for Planets ([Wikipedia](#), [Home page](#)) database contains 17,960,328 objects.

Hosted by [CERIT Scientific Cloud](#), Institute of Computer Science, on behalf of [Department of Theoretical Physics and Astrophysics](#), Faculty of Science, [Masaryk University, Brno, Czech Republic](#)

Position:

Object ID: (name for Sesame name resolver)

or

R.A.: (0.0-360.0 arc degree or 00:00:00.0-24:00:00.0 hours)

Declination: (-90.0 to +90.0 arc degree or [+/-]dd:mm:ss.sss arc degree)

Filter objects:

Radius:

Magnitude range: < V <

Only nearest objects.

Only objects with at least points

Data are available in two formats: FITS and CSV:

SuperWASP - found objects

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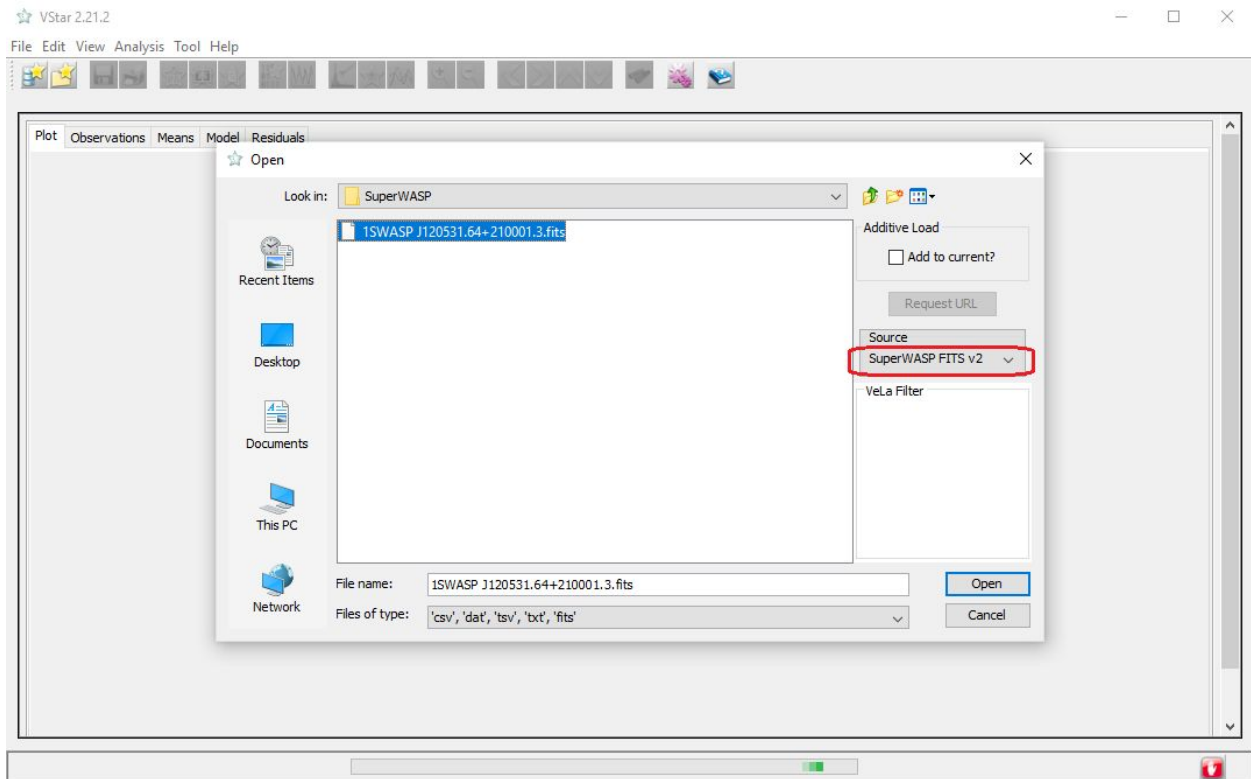
Results for $\alpha=181.38188$, $\delta=21.00036$, radius=10.0 arc sec, NPTS > 1, limit=10

as

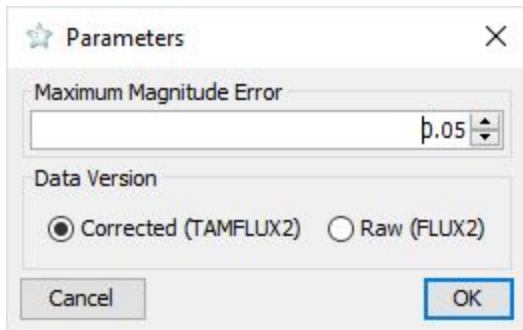
<input type="checkbox"/>	Object name	NPTS	download	graph	Observation start	Observation stop	R.A.	Declination	Magnitude	Distance in °
<input type="checkbox"/>	1SWASP J120531.64+210001.3	16213	FITS CSV	view1 view2	2004-05-02 21:06:19	2008-05-17 21:59:24	181.381869	21.000372	9.473011	0.00002

The plugin reads the FITS version of the data.

After downloading a FITS file, open it using VStar (select 'SuperWASP FITS v2' source):

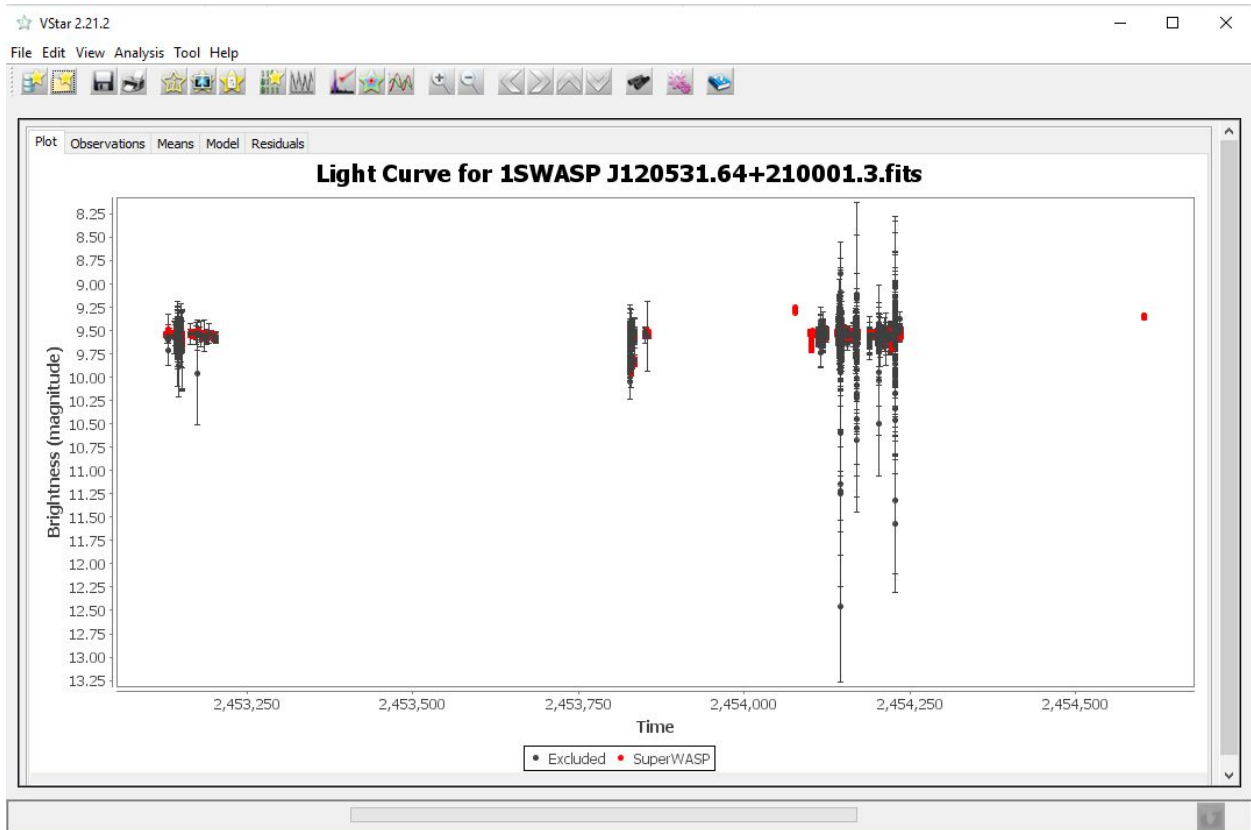


Before opening, the plugin asks for a maximum magnitude error allowed and for a version of the data:

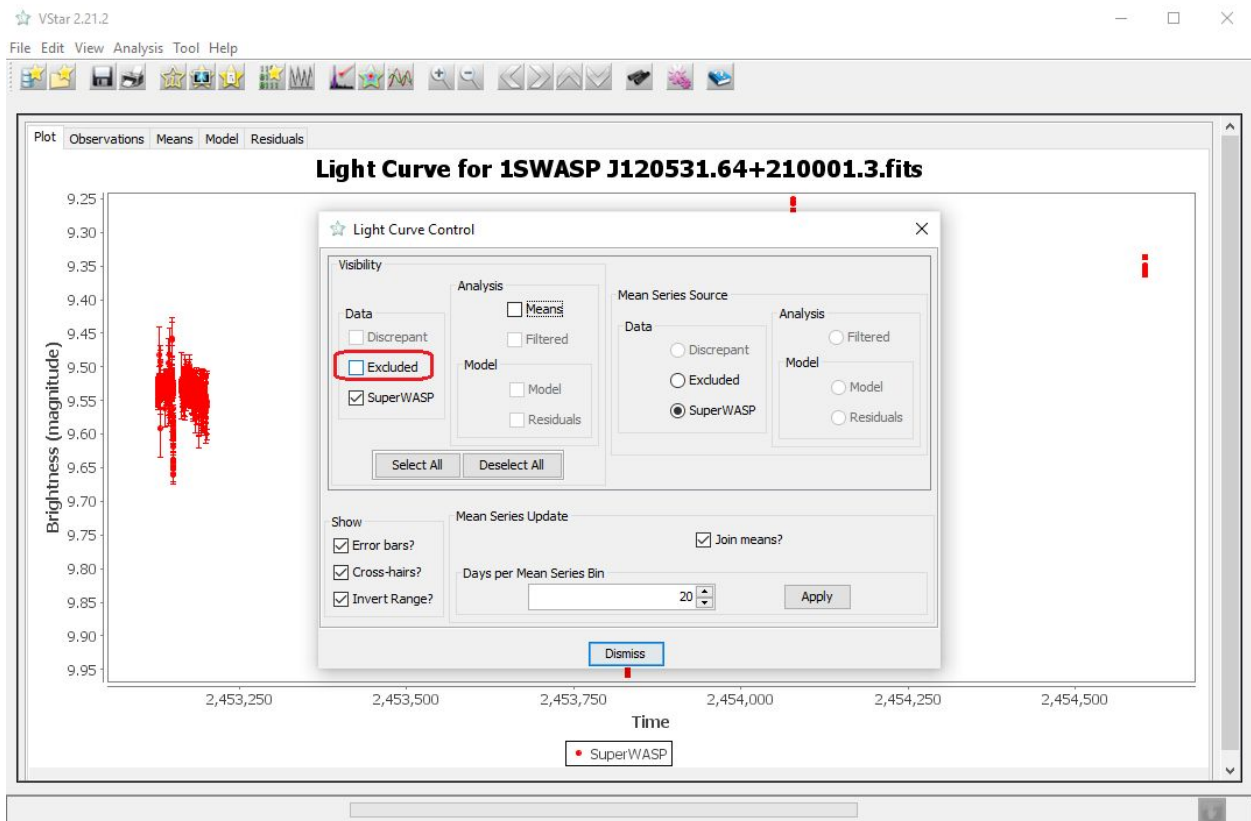


There are two versions of data in the SuperWASP FITS file: FLUX2 and TAMFLUX2 (<https://exoplanetarchive.ipac.caltech.edu/docs/SuperWASPProcessing.html>). The first data set is 'raw', the second one is 'corrected' (TAMFLUX2 = 'SYSREM corrected fluxes', see above link for details). Corrected data set is identical to the CSV version of SuperWASP data (see above).

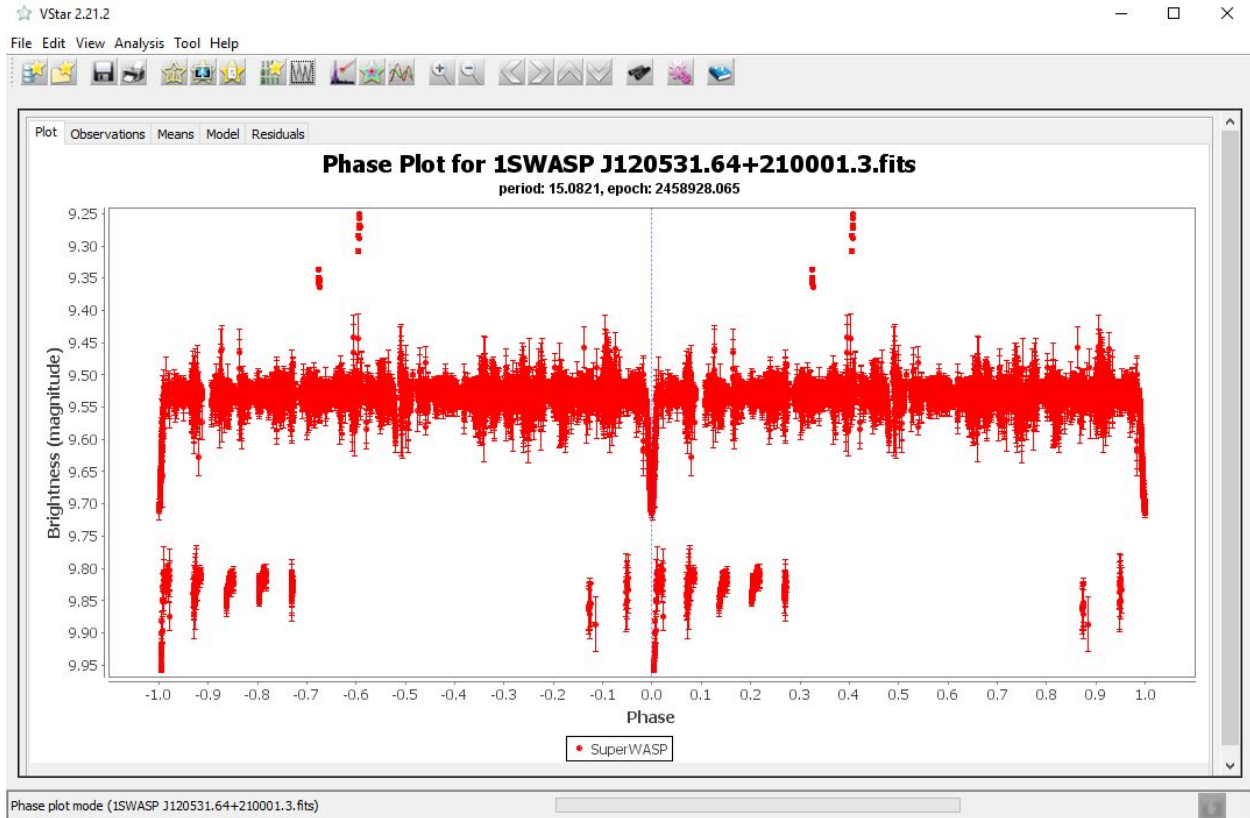
After opening, VStar shows observations having an error that exceeds the specified limit as 'excluded':



Use 'Plot Control..' menu (or toolbar) command to hide them:



The star used in this example is an eclipsing variable with a period of 15.0821 days:



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Rev A

2020-10-23

Revision History

Rev	Date	Description
A	2020-10-23	Initial Release