

HOW TO SUBMIT VARIABLE STAR OBSERVATIONS TO THE BAA VSS

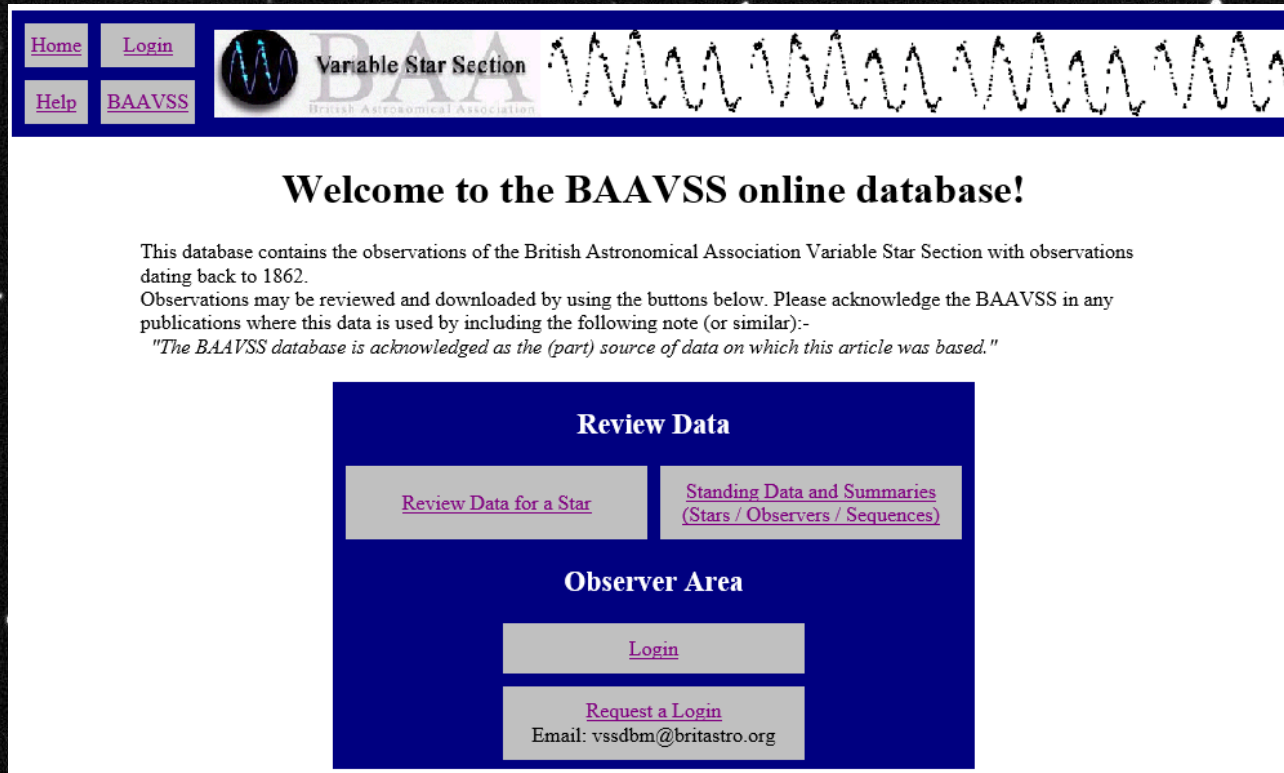
Andrew Wilson
BAA VSS Database Secretary

BAA Winchester Weekend
Saturday 8th April 2017

Sessions Overview


- BAA VSS Online Database
- Observation Entry Methods
- Spreadsheet Method
- Reviewing Observations
- Demo if time allows..

BAA VSS Online Database



The screenshot shows the website's header with navigation links: Home, Login, Help, and BAAVSS. The main content area features a welcome message and a 'Review Data' section with buttons for 'Review Data for a Star' and 'Standing Data and Summaries (Stars / Observers / Sequences)'. Below this is an 'Observer Area' with 'Login' and 'Request a Login' buttons, and the email address vssdbm@britastro.org.

[Home](#) [Login](#) [Help](#) [BAAVSS](#)

 Variable Star Section
British Astronomical Association

Welcome to the BAAVSS online database!

This database contains the observations of the British Astronomical Association Variable Star Section with observations dating back to 1862.

Observations may be reviewed and downloaded by using the buttons below. Please acknowledge the BAAVSS in any publications where this data is used by including the following note (or similar):-

"The BAAVSS database is acknowledged as the (part) source of data on which this article was based."

Review Data

[Review Data for a Star](#) [Standing Data and Summaries \(Stars / Observers / Sequences\)](#)

Observer Area

[Login](#)

[Request a Login](#)
Email: vssdbm@britastro.org

Allows you to upload and review observations

Observation Entry Methods

- Upload file of observations – Best approach!
 - Visual spreadsheet
 - CCD/DSLR
 - AIP4Win and the BAAVSS photometry spreadsheet
 - Or MuniWin
- Direct entry using a webpage - Slow
- On paper - Slow
 - Discouraged as there can be a delay of up to a few months or years while they are typed up and checked

Visual Spreadsheet

Enter your details on the "Observer Details" tab

BAAVSS Andy 2017-03 sample.xlsx - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View Developer

Normal Page Break Preview Custom Views Ruler Formula Bar Gridlines Headings Zoom 100% Zoom to Selection New Window Split Arrange All Hide Freeze Panes Unhide Save Workspace Switch Windows Macros

C4 1 Astronomy Drive, Bristol, BS1 1AB

	A	B	C	D	E	F	G	H	I	O	P	
1												
2		Name :	AJW									
3		Year :	2017									
4		Address :	1 Astronomy Drive, Bristol, BS1 1AB									
5		Location :	<i>Latitude</i>			<i>Longitude</i>						
6			<i>deg</i>	<i>min</i>	<i>N/S</i>	<i>deg</i>	<i>min</i>	<i>E/W</i>				
7			51	2	N	2	28	W				
8		Instruments :	<i>Type</i>	<i>Size /mm</i>	<i>Focal length /mm</i>	<i>Filter</i>	<i>Camera</i>					
9		Instrument 1 :	NE									
10		Instrument 2 :	B	7x42								
11		Instrument 3 :	B	22x60								
12		Instrument 4 :	G	66								
13		Instrument 5 :	R	200								
14		Instrument 6 :										
15		Instrument 7 :										
16		Instrument 8 :										
17		Instrument 9 :										
18		Instrument 10 :										
19		Instrument 11 :										

Instructions :

- 1 Enter your details on this sheet.
- 2 Enter your observations on the "Observation Entry" tab.
- 3 The sheet is limited to 6000 observations. For >6000 observations make extra copies.
- 4 When ready to submit the observations of the night, save the "Output Page" as type Text (UTF-8) and email the text file to visual.variables@britastro.org.

If there any problems:

email the entire spreadsheet to the address above.

Please do not change the spreadsheet
Please do not leave blank lines

Observer Details Observation Entry Stars Sequences Output Page

Ready 115%

Visual Spreadsheet

Enter your observations on the “Observation Entry” tab

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Star	Date	Time (UT)	Estimates (as many as 5 can be used)					Calculated mags					Mag	Class	Sequence	Instrument #
2				1	2	3	4	5	1	2	3	4	5				
3	Rho Cas	2017-03-25	20:32	E(1)V(4)H					5.0					5.0	3	64.01	3
4	WZ Cas	2017-03-25	20:45	B(3)V(1)C					7.1					7.1	2	323.01	2
5	V465 Cas	2017-03-25	21:04	=C					6.4					6.4	2	233.02	2

You only need to enter 1 light estimate per observations. However you can enter up to 5 separate light estimates for a single observation.

Q	R	S	AA	AB	AC	AD	AE	AF
Instrument #	Notes	Errors						
		Date	Maths	Class	Inst't	Sequence	Star	
3		OK	OK	OK	OK	OK	OK	
2		OK	OK	OK	OK	OK	OK	
2		OK	OK	OK	OK	OK	OK	

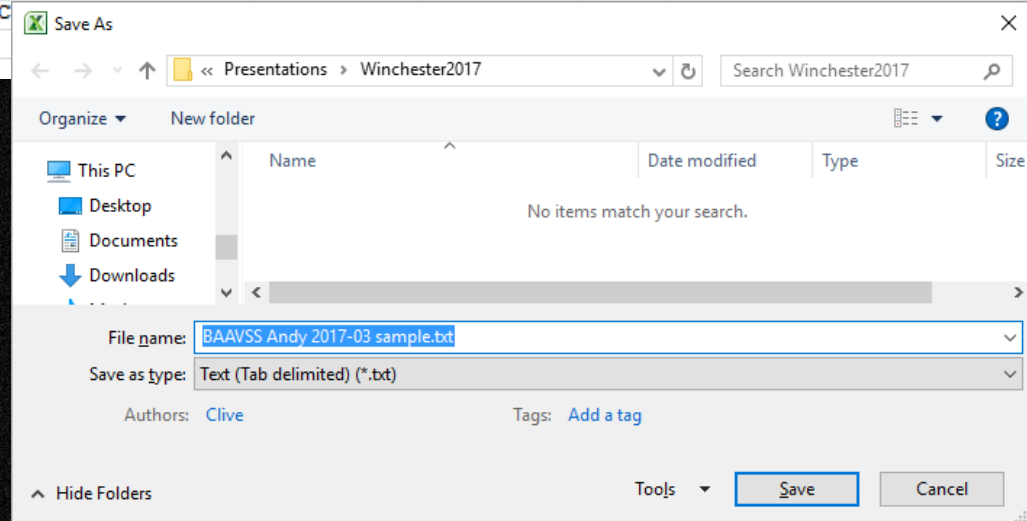
Check columns on the right hand side

Visual Spreadsheet

The “Output Page” tab is automatically populated with your observations.

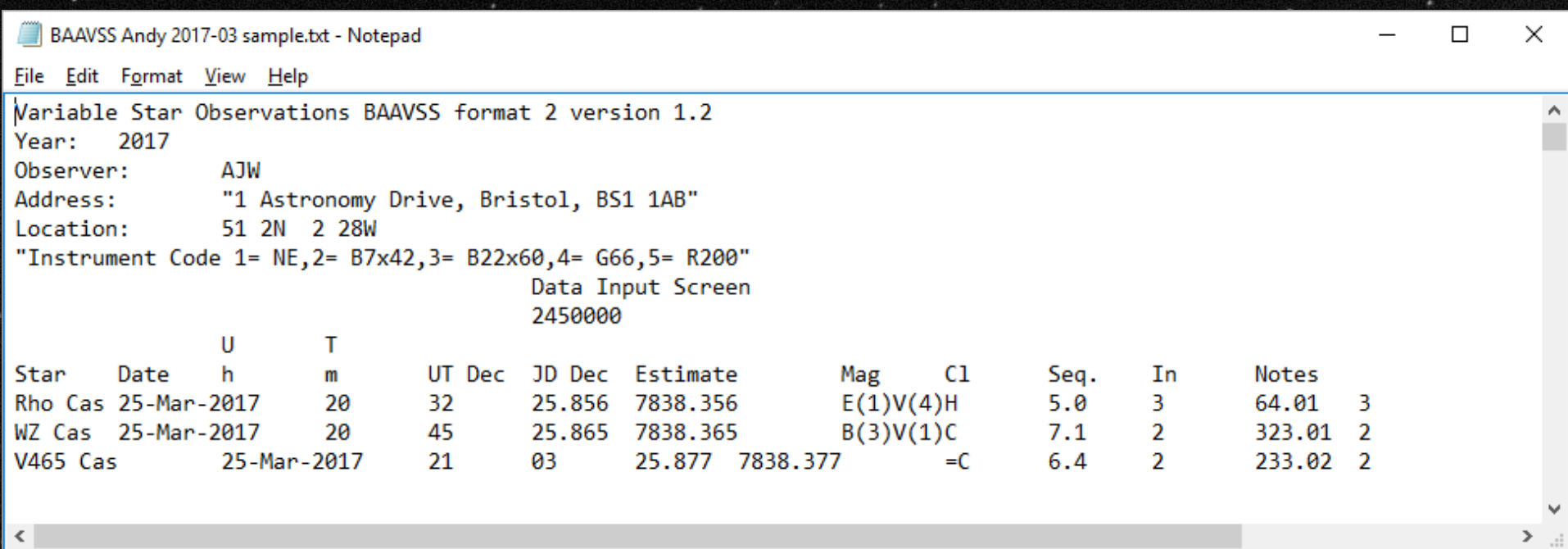
Star	Date	h	m	UT Dec	JD Dec	Estimate	Mag	Cl	Seq.	In	Notes
Rho Cas	25-Mar-2017	20	32	25.856	7838.356	E(1)V(4)H	5.0	3	64.01	3	
WZ Cas	25-Mar-2017	20	45	25.865	7838.365	B(3)V(1)C					
V465 Cas	25-Mar-2017	21	03	25.877	7838.377	=C					

Save this tab as a
“Text (Tab delimited) (*.txt)”
file with an appropriate name



Visual File Layout

This text and tab file can then be uploaded into the database.



The screenshot shows a Notepad window titled "BAAVSS Andy 2017-03 sample.txt - Notepad". The text content is as follows:

```
Variable Star Observations BAAVSS format 2 version 1.2
Year: 2017
Observer: AJW
Address: "1 Astronomy Drive, Bristol, BS1 1AB"
Location: 51 2N 2 28W
"Instrument Code 1= NE,2= B7x42,3= B22x60,4= G66,5= R200"
Data Input Screen
2450000
```

Star	Date	U h	T m	UT Dec	JD Dec	Estimate	Mag	Cl	Seq.	In	Notes
Rho Cas	25-Mar-2017		20	32	25.856	7838.356	E(1)V(4)H		5.0	3	64.01 3
WZ Cas	25-Mar-2017		20	45	25.865	7838.365	B(3)V(1)C		7.1	2	323.01 2
V465 Cas	25-Mar-2017			21	03	25.877 7838.377	=C		6.4	2	233.02 2

Photometry Spreadsheet

For CCD and DSLR photometry there is the BAA VSS Photometry spreadsheet.

VSS CCD Photometry Spreadsheet B2.03.xls [Read-Only] [Compatibility Mode] - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View Developer

Clipboard Font Alignment Number Styles Cells Editing

R7

Select Photometry Import File
Directory: C:\Documents and Settings\Andrew Wilson\My Astronomy Images\Processed\3C66A\051204
File name: 3C66A 051204 AIPv2.1.10.txt Type: AIP4Win v2 - Ensemble Photometry

Select Export Directory
Export directory: C:\Users\User\Documents\Astronomy\VSS\Photometry Spreadsheets\AIP4WINv2
BAA VSS report file name: BAAVSS 3C66A 051204 B2.03 CCD.txt
AAVSO report file name: AAVSO 3C66A 051204 B2.03.txt

Select Equipment/Object Settings File or Old Version of Spreadsheet
Directory: C:\Users\User\Documents\Astronomy\VSS\Photometry Spreadsheets
File name: 3C66A Template B2.03.xls Optional

Import Photometry File Create BAA VSS Report File Create AAVSO Report File Load Equipment/Object Settings Save Equipment/Object Settings

Instructions
Files must be processed using AIP4Winv2 (version 2.1.9, 2.1.10 or 2.2.0) 'Ensemble Photometry', with Tab as the 'Column Separation Character' and the file must be saved with a .txt extension. (See below for AIP4WinV2 settings). Each AIP file must be for a single filter.
Use the Select buttons to pick the files and directories. The Select buttons do not work in some older versions of Excel, in which case the file names and paths must be typed/copied into the above boxes. The path must include the drive letter. Eg C:\My Documents

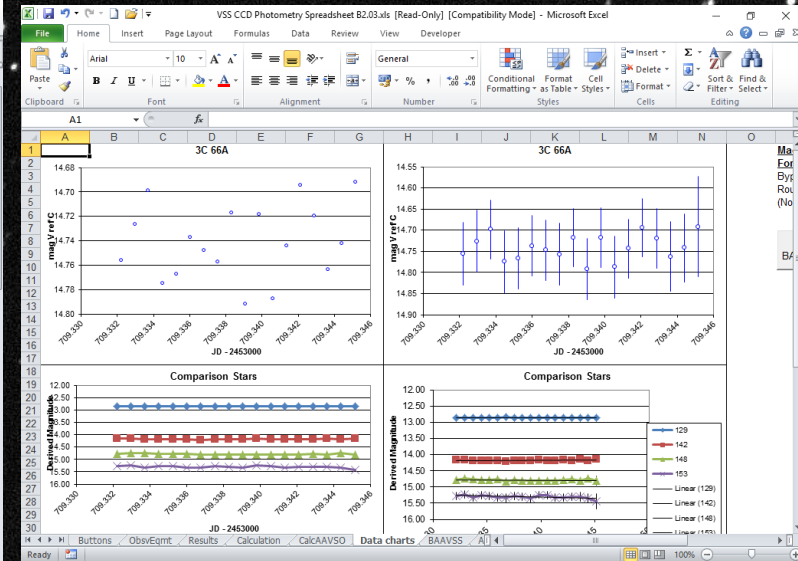
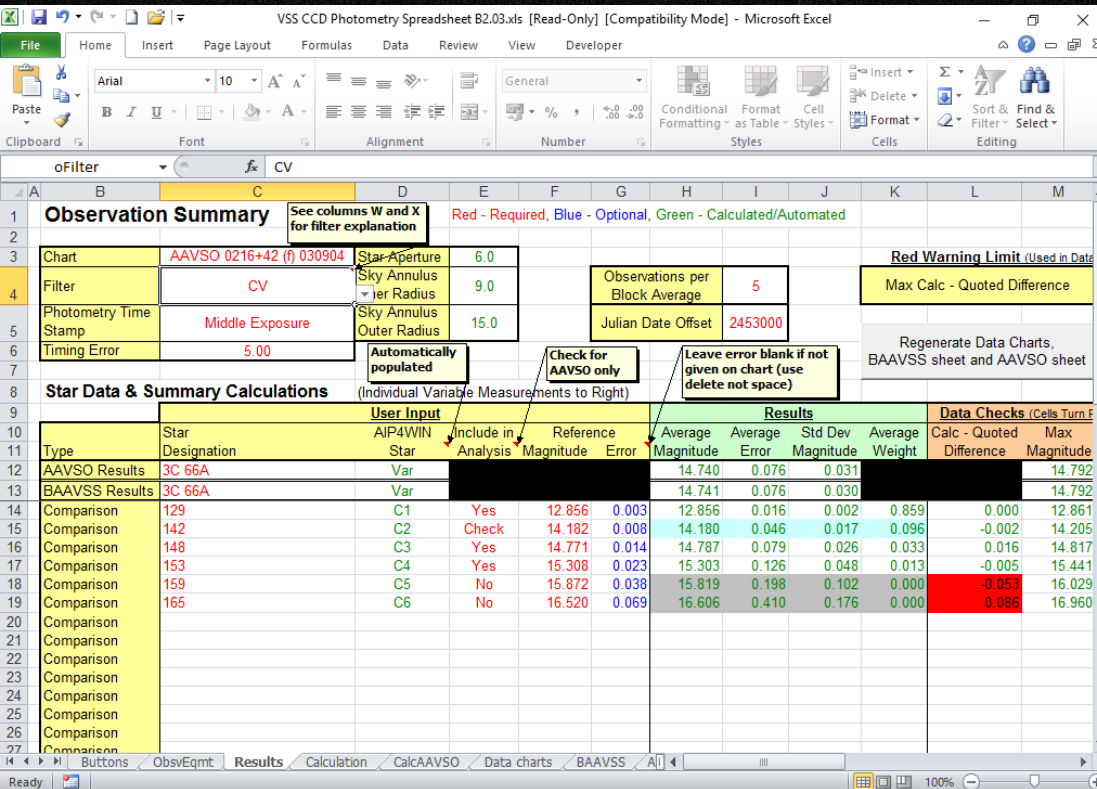
Multi-Image Photometry

Buttons ObsEqmt Results Calculation CalcAAVSO Data charts BAAVSS AIP

Ready 100%

Photometry Spreadsheet

This takes photometry files created by AIP4Win, calculates the variable star magnitude.



Photometry Spreadsheet

It creates files of the required output format at the touch of a button.

VSS CCD Photometry Spreadsheet B2.03.xls [Read-Only] [Compatibility Mode] - Microsoft Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	File Format	CCD/DSLR v2.01												
2	Observation Method	CCD												
3	Variable	3C 66A												
4	Chart ID	AAVSO 0216+42 (f) 030904												
5	Observer code	AJW												
6	Location	51 11 42N 0 23 0E H25m												
7	Telescope	LX200-8												
8	Camera	MX916USB												
9	Magnitude type	Instrumental												
10	Timing uncertainty	5.00												
11	Phot star rad (arcsec)	7.05												
12	Phot inner ann (arcsec)	10.58												
13	Phot outer ann (arcsec)	17.63												
14	Photometry software	AIP4Win v2 - Ensemble Photometry												
15	Analysis software	VSS CCD Photometry Spreadsheet 2.03												
16	Comment													
17														
18	JulianDate	Filter	VarAbsMag	VarAbsErr	VarMag	VarErr	ExpLen	FileName	CmpStar	RefMag	RefErr	CMMag	CmpErr	CmpStar
19	2453709.33219	CV	14.756	0.074	20.712	0.074	60	051204 3C66A 60-001-DF.fit	129	12.856	0.003	18.814	0.015	142
20	2453709.33294	CV	14.726	0.073	20.682	0.073	60	051204 3C66A 60-002-DF.fit	129	12.856	0.003	18.817	0.015	142
21	2453709.33370	CV	14.698	0.070	20.653	0.070	60	051204 3C66A 60-003-DF.fit	129	12.856	0.003	18.809	0.015	142
22	2453709.33447	CV	14.775	0.073	20.704	0.073	60	051204 3C66A 60-004-DF.fit	129	12.856	0.003	18.784	0.015	142
23	2453709.33523	CV	14.767	0.073	20.701	0.073	60	051204 3C66A 60-005-DF.fit	129	12.856	0.003	18.790	0.014	142
24	2453709.33600	CV	14.737	0.072	20.681	0.072	60	051204 3C66A 60-006-DF.fit	129	12.856	0.003	18.799	0.015	142
25	2453709.33676	CV	14.747	0.072	20.682	0.071	60	051204 3C66A 60-007-DF.fit	129	12.856	0.003	18.786	0.015	142
26	2453709.33752	CV	14.757	0.073	20.690	0.073	60	051204 3C66A 60-008-DF.fit	129	12.856	0.003	18.789	0.015	142
27	2453709.33829	CV	14.717	0.069	20.641	0.069	60	051204 3C66A 60-009-DF.fit	129	12.856	0.003	18.779	0.014	142
28	2453709.33905	CV	14.792	0.073	20.710	0.073	60	051204 3C66A 60-010-DF.fit	129	12.856	0.003	18.772	0.014	142
29	2453709.33980	CV	14.718	0.071	20.651	0.071	60	051204 3C66A 60-011-DF.fit	129	12.856	0.003	18.792	0.015	142
30	2453709.34057	CV	14.787	0.073	20.712	0.073	60	051204 3C66A 60-012-DF.fit	129	12.856	0.003	18.779	0.014	142

Buttons | ObsvEqmt | Results | Calculation | CalcAAVSO | Data charts | BAAVSS | A |

Ready | Average: 0.126 | Count: 18 | Sum: 2.263 | 100%

Photometry File Layout

It is also possible to produce files of the right formatting using a spreadsheet.

More recently the free software MuniWin can process your images and create data ready for uploading into the database.

<http://c-munipack.sourceforge.net/>

```
File Format      CCD/DSLR v2.01
Observation Method  CCD
Variable        QQ Vul
Chart ID        AAVSO 12652H
Observer code    AJW
Location        51 25 40N 2 43 15W H50m
Telescope       Meade 10 LX200
Camera          SXVR-H694
Magnitude type   Instrumental
Timing uncertainty 30.00
Phot star rad (arcsec) 7.55
Phot inner ann (arcsec) 11.33
Phot outer ann (arcsec) 15.10
Photometry software  AIP4Win v2 - Ensemble Photometry
Analysis software  VSS CCD Photometry Spreadsheet 2.03
Comment
```

JulianDate	Filter	VarAbsMag	VarAbsErr	VarMag	VarErr	ExpLen	FileName	CmpStar	RefMag	RefErr	CMMag
2456572.28789	V	15.029	0.043	17.749	0.043	60	Autosave Image -001V-DF.fit	140	13.987	0.008	16.703
2456572.28863	V	15.025	0.044	17.737	0.042	60	Autosave Image -002V-DF.fit	140	13.987	0.008	16.688
2456572.28936	V	15.051	0.045	17.762	0.043	60	Autosave Image -003V-DF.fit	140	13.987	0.008	16.703
2456572.29010	V	15.069	0.045	17.788	0.044	60	Autosave Image -004V-DF.fit	140	13.987	0.008	16.706
2456572.29084	V	15.084	0.047	17.814	0.045	60	Autosave Image -005V-DF.fit	140	13.987	0.008	16.719


Uploading Observations

- The first step to uploading observations is to request a login from vssdbm@britastro.org
- Once logged in the “Observer Area” will become accessible.

Welcome to the BAAVSS online database!

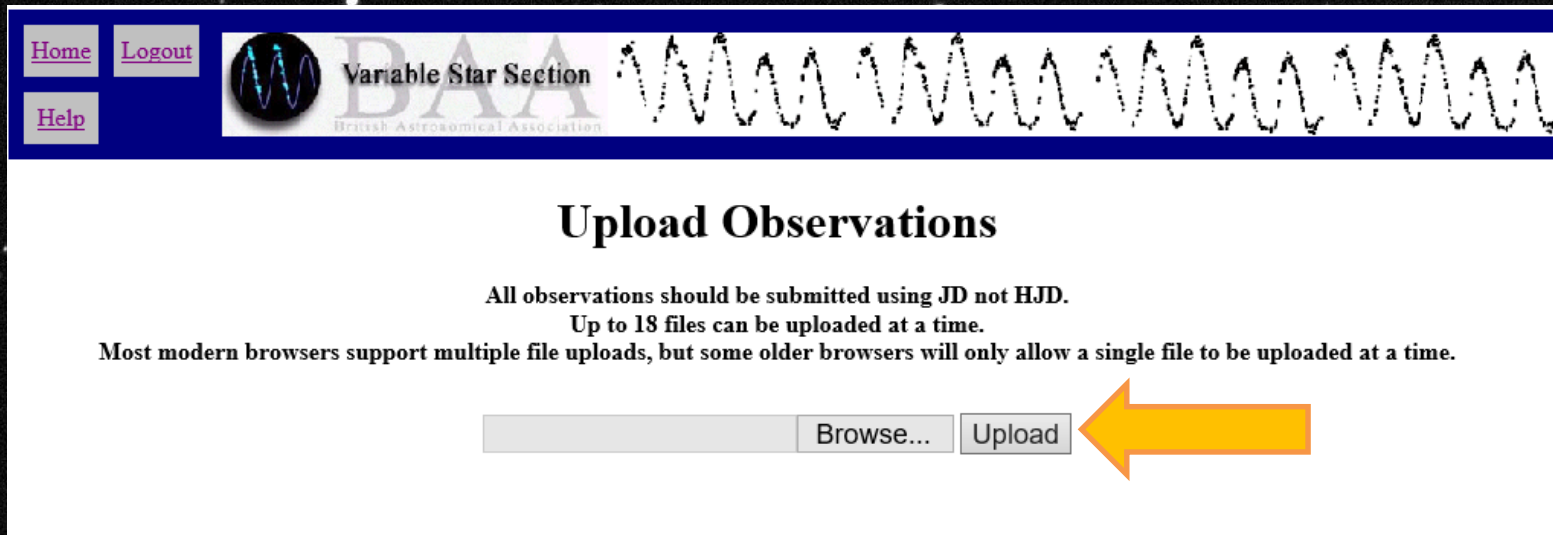
This database contains the observations of the British Astronomical Association Variable Star Section with observations dating back to 1862.
Observations may be reviewed and downloaded by using the buttons below. Please acknowledge the BAAVSS in any publications where this data is used by including the following note (or similar):-
"The BAAVSS database is acknowledged as the (part) source of data on which this article was based."

Review Data	
Review Data for a Star	Standing Data and Summaries (Stars / Observers / Sequences)
Observer Area	
Uploading Observations	Live Observations
Upload Observations	Manually Enter Observations
Review and Commit Uploaded Observations	Edit Live Observations One at a Time
Edit Uncommitted Observations	Bulk Edit Live Observations




Uploading Observations

Clicking on the “Upload Observations” link will take you to a screen where you can upload observation files.



[Home](#) [Logout](#) [Help](#)

 Variable Star Section
British Astronomical Association

Upload Observations

All observations should be submitted using JD not HJD.
Up to 18 files can be uploaded at a time.
Most modern browsers support multiple file uploads, but some older browsers will only allow a single file to be uploaded at a time.

Uploading Observations

- The screen will show you whether you have successfully uploaded your observation file.
- It will give an explanation if the upload was unsuccessful.
- The next step is to press the “Review and Commit Observations” button.

Upload Observations

All observations should be submitted using JD not HJD.
Up to 18 files can be uploaded at a time.
Most modern browsers support multiple file uploads, but some older browsers will only allow a single file to be uploaded at a time.

Errors and Warnings
Any errors will prevent the data from being uploaded.
Warnings should be reviewed. Particular attention should be given to star names that generate a warning to ensure they are correct.

Filename	Type	Size KB	Upload Summary				
Andy Wilson_20170115_BAAVSS Spreadsheet Andy 2014-08_Dummy.txt	.txt	77	Processing...				
			File Format	Observations	Errors	Warnings	Empty Rows
			VISUAL 1.00	2	0	0	5990

Please avoid using your browsers back button as this can trigger files to be reloaded.

Processing...

File Format	Observations	Errors	Warnings	Empty Rows
VISUAL 1.00	2	2	0	5990

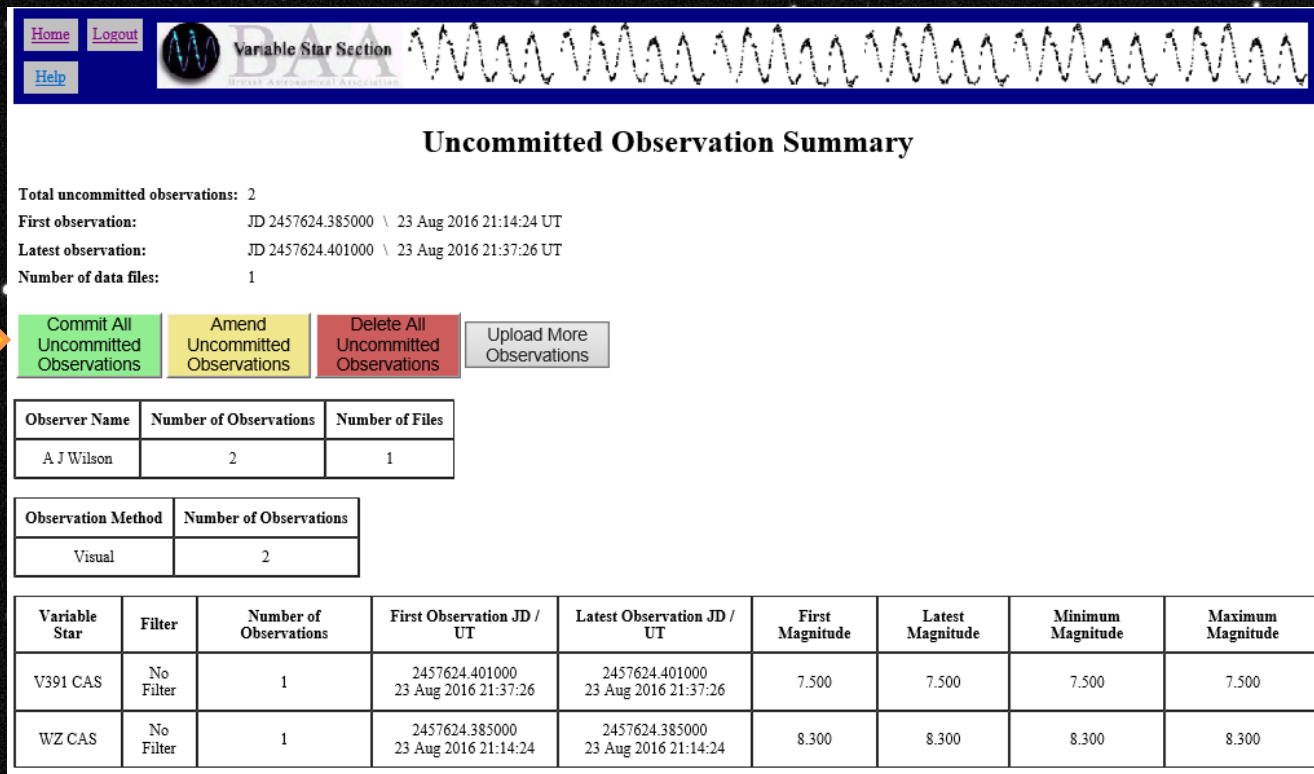
Upload aborted due to errors.

Click to Toggle Error Summary/Detail

Error Type	Count
Duplicate	2

Committing Observations

- Your observations are not in the database until you press “Commit All Uncommitted Observations”.



Home Logout Variable Star Section BAA Help

Uncommitted Observation Summary

Total uncommitted observations: 2
 First observation: JD 2457624.385000 \ 23 Aug 2016 21:14:24 UT
 Latest observation: JD 2457624.401000 \ 23 Aug 2016 21:37:26 UT
 Number of data files: 1

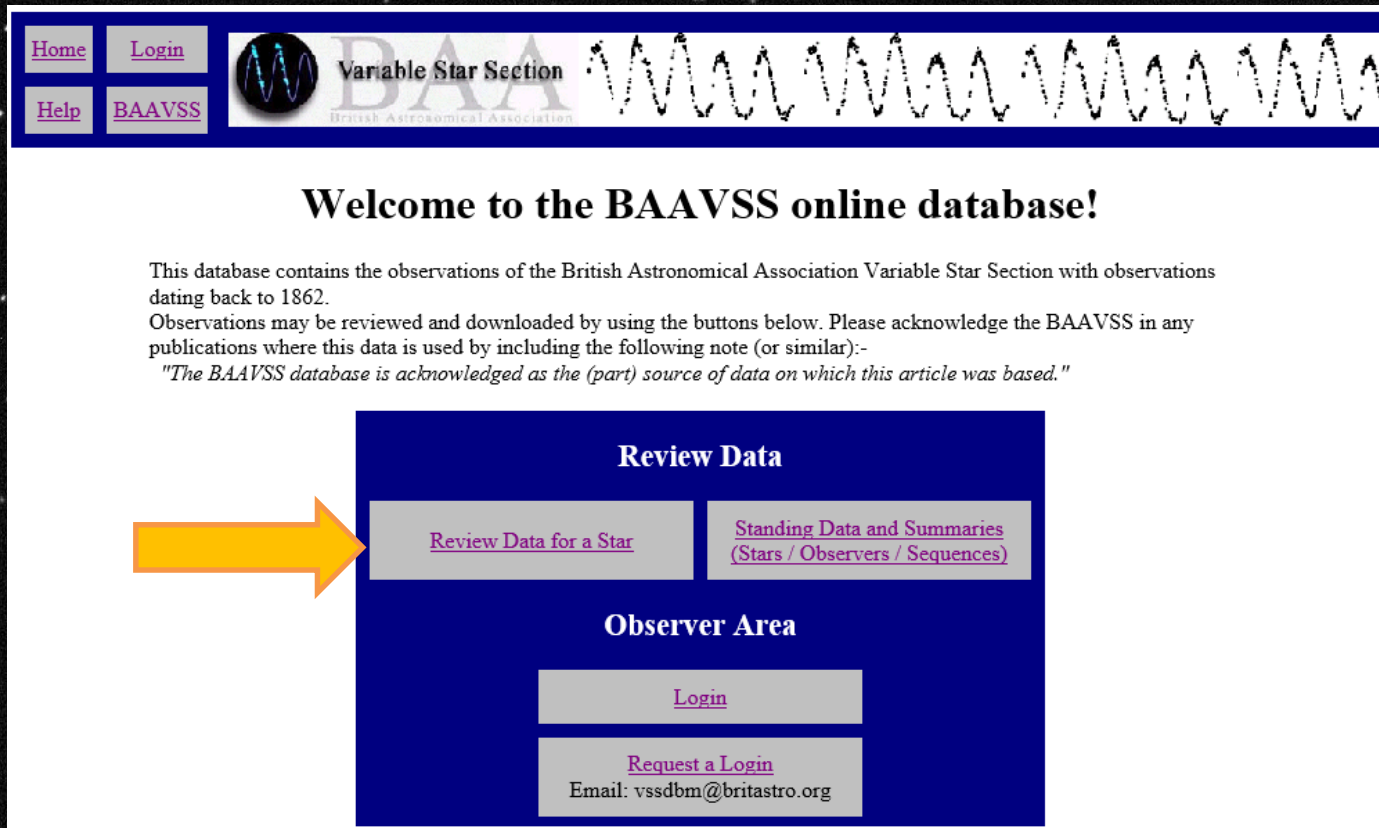
Observer Name	Number of Observations	Number of Files
A J Wilson	2	1



Observation Method	Number of Observations
Visual	2

Variable Star	Filter	Number of Observations	First Observation JD / UT	Latest Observation JD / UT	First Magnitude	Latest Magnitude	Minimum Magnitude	Maximum Magnitude
V391 CAS	No Filter	1	2457624.401000 23 Aug 2016 21:37:26	2457624.401000 23 Aug 2016 21:37:26	7.500	7.500	7.500	7.500
WZ CAS	No Filter	1	2457624.385000 23 Aug 2016 21:14:24	2457624.385000 23 Aug 2016 21:14:24	8.300	8.300	8.300	8.300

Reviewing Observations

To review observations click “Review Data for a Star” from the BAA VSS Database homepage.



[Home](#) [Login](#)  **Variable Star Section** 
[Help](#) [BAAVSS](#) British Astronomical Association

Welcome to the BAAVSS online database!

This database contains the observations of the British Astronomical Association Variable Star Section with observations dating back to 1862.
Observations may be reviewed and downloaded by using the buttons below. Please acknowledge the BAAVSS in any publications where this data is used by including the following note (or similar):-
"The BAAVSS database is acknowledged as the (part) source of data on which this article was based."

Review Data

Review Data for a Star	Standing Data and Summaries (Stars / Observers / Sequences)
--	---

Observer Area

Login
Request a Login Email: vssdbm@britastro.org

Reviewing Observations

- Type the name of the star in the “Filter by” box and click “Apply Filter”
- Add optional parameters like start and end date.

Review Data for a Variable

Select Object: Filter by (inc. alias):

Light Curve x-axis: JD UT

Optional Parameters

	Julian Date	UT (dd/mm/yyyy)
Start Date	<input type="text" value="2457388.5"/>	<input type="text" value="1/1/2016"/>
End Date	<input type="text" value="2457754.5"/>	<input type="text" value="31/12/2016"/>

(Works out JD from UT and vice versa)

End JD is midnight of following day

Negative Observations Fainter (<) Brighter (>) Normal (Equal)

Observation Methods: Visual CCD DSLR Photographic PEP (none)

Filters

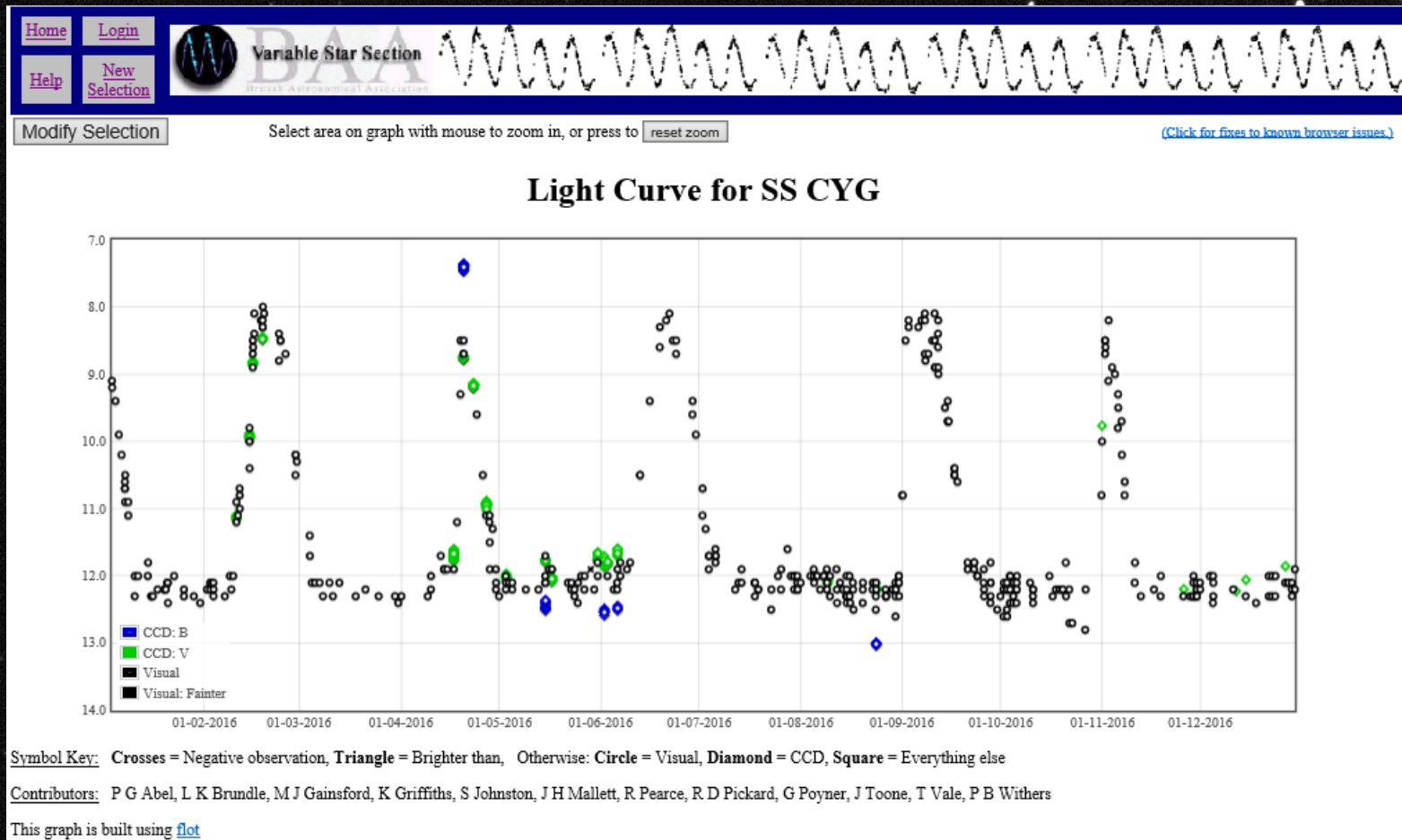
- All
- N - No Filter
- V - Johnson V
- B - Johnson B
- I - Cousins I
- R - Cousins R
- U - Johnson U
- BesB - Bessell-B
- BesV - Bessell-V
- CE - Clear (unfiltered) B-band comp star mag

Observers

- All
- Aanensen C J M
- Abel C J
- Abel P G
- Abrol S K
- Adames H B
- Adamson M A
- Addey F
- Agar J E
- Angillio M A

Reviewing Observations

Now click on "Light Curve" or "Data Table"



Further Information

- BAA VSS Online Database

<http://britastro.org/vssdb/index.php>

- BAA VSS main web pages

<http://www.britastro.org/vss/>

- Information on file formats and uploading observations

http://www.britastro.org/vss/data_submission.htm

- MuniWin

<http://c-munipack.sourceforge.net/>