Chapter 7 – SUBMITTING OBSERVATIONS TO THE AAVSO

In order for your observations to be included in the AAVSO International Database, you must submit them to AAVSO Headquarters. There are two ways to submit your observations to the AAVSO, both of which involve using the WebObs utility found on the AAVSO website. For visual observations you may choose between either the "Submit observations individually" or "Upload a file of observations" method.

Once you submit your observations, WebObs will automatically format them to AAVSO specifications. It will also perform various error checking procedures to make sure you entered the data correctly. If there is a problem, you will be notified and the problem observations will not be added to the database.

Immediately after submission, your observations will become part of the AAVSO International Database and available for use. You may view them using the "Light Curve Generator" (https://www.aavso.org/lcg). In addition, a complete listing of your own observations will be available so you can peruse and/or download your contributions to the AAVSO database at any time.

It is fun to look at the "Light Curve Generator" to see how well your observations compare with those made by other observers, but *under no circumstances* should you look at other people's observations until yours have been submitted. By doing so, you may be tempted to change an observation which could introduce a serious bias in the data.

If you belong to an astronomy club or make your observations in company with another variable star observer, please note that each person should make their observations independently and submit a separate report.

It is also important that you do not send the same observations more than once! If you submit your observations to a club or organization that collects observations, then sends them to the AAVSO, please do not submit them again on your own or duplicate observations may result.

Getting Started with WebObs

Before you can start using WebObs, you must be registered to use the AAVSO website and have an official AAVSO Observer Code.

To register for the website, click the "User login" button in the upper right corner of any page on the website and follow the instructions given.

If you have not yet been assigned an Observer Code, you should log on to the AAVSO website and click the link to "Request Observer Code" which you can find on the "My Account" page. Each AAVSO observer has a unique set of initials that will stay with their observations in the AAVSO International Database forever. These initials are assigned by AAVSO HQ to ensure that they are indeed unique. Most likely, they will be related to the spelling of your name, but this is not always the case.

When you are ready to begin sending in your observations, log onto the website and go to the WebObs page https://www.aavso.org/webobs. There you will be able to choose whether to submit observations individually or as a group in a file.
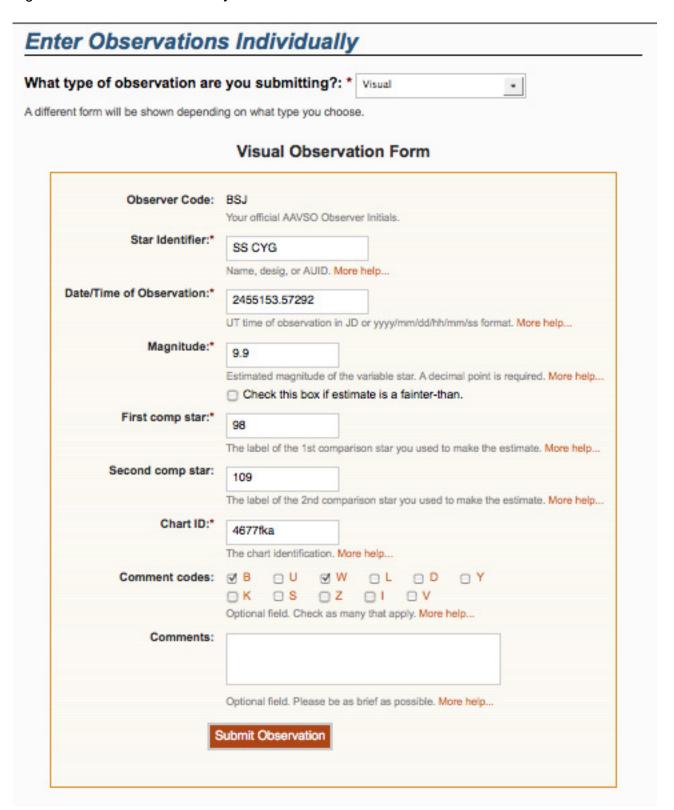
Submit Observations Individually

This option is good for people who are submitting only a few observations on a given night.

Start by selecting the "Submit observations individually" link. Now pick the type of observation you will be submitting using the drop-down list. For the purposes of this Manual only the "Visual" option will be explained.

As you can see from the screen shot of the WebObs individual observation entry form (see Figure 7.1), using this program is fairly simple. Just type your data carefully into the appropriate boxes on the form and click on the button marked "Submit Observation". If you have questions about how to enter data on any field in WebObs, simply click on the "More help..." label associated with that field and an explanation will be given in a separate window.

Figure 7.1 — *WebObs Data Entry Form*

Enter Observations Individually

What type of observation are you submitting?: * `Visual ▾`

A different form will be shown depending on what type you choose.

Visual Observation Form

Observer Code:	BSJ
	Your official AAVSO Observer Initials.
Star Identifier:*	SS CYG
	Name, desig, or AUID. More help...
Date/Time of Observation:*	2455153.57292
	UT time of observation in JD or yyyy/mm/dd/hh/mm/ss format. More help...
Magnitude:*	9.9
	Estimated magnitude of the variable star. A decimal point is required. More help...
	☐ Check this box if estimate is a fainter-than.
First comp star:*	98
	The label of the 1st comparison star you used to make the estimate. More help...
Second comp star:	109
	The label of the 2nd comparison star you used to make the estimate. More help...
Chart ID:*	4677fka
	The chart identification. More help...
Comment codes:	☑ B ☐ U ☑ W ☐ L ☐ D ☐ Y ☐ K ☐ S ☐ Z ☐ I ☐ V
	Optional field. Check as many that apply. More help...
Comments:	
	Optional field. Please be as brief as possible. More help...

Submit Observation

Once you have submitted an observation, it will appear in the list below the form. It is wise to check this over carefully to ensure that your did not make any typographical errors. If you find a mistake, you can click on "edit" to fix it or "delete" to remove it from the database. If you have a slow internet connection or you suspect that your observation did not get into the AAVSO database, please wait a few minutes then look for your observation using the WebObs search feature and be sure it is not there before you assume something went wrong and attempt to send it again. Many duplicate observations have been sent to the database this way!

Upload a File of Observations

The second way to submit data is to create a text file in standard AAVSO format then upload it using the WebObs "Upload a file of observations" option. This option is often a good choice for people who do not wish to stay connected to the internet very long and/or have a large file of observations to submit. Once your file has been uploaded, the observations you just sent can be displayed if desired.

There are a number of ways to produce the text file of data for submission. What is very important is that it has to be in the "AAVSO Visual Format" which is described on the AAVSO website and will be examined in detail in the section which follows.

To help you create a file of observations in the approved format, a few software tools have been developed (and continue to be developed) by other AAVSO observers which you are welcome to use. These programs can be found on the AAVSO website here: https://www.aavso.org/software-directory

AAVSO Visual Format

No matter which method you decide to use for creating your variable star reports, it is required that the data adhere to AAVSO report formatting standards. Specifically, for visual observations, you should use the "AAVSO Visual Format". The description which follows comes from the AAVSO website (https://www.aavso.org/aavso-visual-file-format).

Note: For CCD and PEP observations you must use the "AAVSO Extended File Format" for your reports.

General

The visual format has two components; *parameters* and *data*. The format is not case sensitive.

Parameters

The parameters are specified at the top of the file and are used to describe the data that follow. Parameters must begin with a pound/hash symbol (#) at the start of the line. There are six specific parameters that are required to exist at the top of the file. Personal comments may also be added as long as they follow a pound/hash symbol (#). These comments will be ignored by the software and are not loaded into the database. However, they will be retained when the complete file is stored in the AAVSO permanent archives.

The six required parameters are:

#TYPE=Visual
#OBSCODE=
#SOFTWARE=
#DELIM=
#DATE=
#OBSTYPE=

TYPE: Should always say Visual for this format.

OBSCODE: The official AAVSO Observer Code which was previously assigned to you by the AAVSO.

SOFTWARE: Name and version of software you used to create your report. If it is private software, put some type of description here. For example: "#SOFTWARE=Excel Spreadsheet by Gary Poyner."

DELIM: The delimiter used to separate fields in the report. Suggested delimiters are: comma (,) semi-colon(;), exclamation point(!), and pipe(|). The only character that cannot be used is the pound/hash (#) and the " " (space). If you want to use a tab, use the word "tab" instead of an actual tab character. Note: Excel users who want to use a comma will have to type "comma" here instead of a ",". Otherwise Excel will export the field incorrectly.

DATE: The format of the date used in the report. There are two options for this entry; JD or EXCEL. The EXCEL format gives the time in UT and looks like this: MM/DD/YYYY HH:MM:SS AM (or PM). Seconds are optional.

OBSTYPE: The type of observation in the data file. It can be Visual or PTG (for Photographic). If absent, it is assumed to be Visual. If PTG, place a description of your film response and any filter(s) used in the notes field of each observation.

Data

After the parameters come the variable star observations themselves. There should be one observation per line and the fields should be separated by the same character that is defined in the DELIM parameter field. The list of fields are:

NAME: The star's identifier. This can be any of the names for a star listed in VSX. See Chapter 4, page 22 for more on variable star names.

DATE: The date of the observation, in the format specified by the DATE parameter. See Chapter 5 for an explanation on how to compute UT and JD.

MAGNITUDE: The magnitude of the observation. Put a "<" symbol in front of the magnitude if the observation is a "fainter-than".

COMMENTCODE: A one-letter code or series of codes you can use to describe any special circumstances associated with your observation. If you have no comment to make, please type "na" in this field. Possible codes are listed in Table 7.1, page 45.

Multiple comment codes should be separated by spaces or not separated at all. (Ex: "A Z Y" or "AZY").

COMP1: The label of the first comparison star used. Could be the magnitude label on the chart, an auid, or the star's name.

COMP2: The label of the second comparison star used. Could be the magnitude label on the chart, an auid, etc. (if none, use "na".)

CHART: This should be the "chart ID" given in the upper right-hand corner of your chart.

NOTES: Comments or notes about your observation. This field has a maximum length of 100 characters.

Please double-check your report before submitting it to AAVSO Headquarters!

Some examples of properly formatted reports which are ready for upload:

Example 1:

```
#TYPE=VISUAL
#OBSCODE=TST01
#SOFTWARE=WORD
#DELIM=,
#DATE=JD
SS CYG,2454702.1234,<11.1,U,110,113,070613,Partly cloudy
```

Example 2:

```
#TYPE=VISUAL
#OBSCODE=TST01
#SOFTWARE= TextMate
#DELIM=,
#DATE=JD
#NAME,DATE,MAG,COMMENTCODE,COMP1,COMP2,CHART,NOTES
SS CYG,2454702.1234,10.9,na,110,113,070613,na
SS CYG,2454703.2341,<11.1,B,111,na,070613,na
```

Note the existence of the #NAME,DATE,MAG,COMMENTCODE,COMP1... line in the above format. Since it is prepended with a pound sign and doesn't start with any of the special parameter keywords, it will be ignored by the software as a comment. Feel free to do this if it makes writing and reading the format easier for you.

Example 3:

```
#TYPE=VISUAL
#OBSCODE=TST01
#SOFTWARE=WORD
#DELIM=;
#DATE=JD
#OBSTYPE=Visual
OMI CET;2454704.1402; 6.1;na;59;65;1755eb;na
EPS AUR;2454704.1567;3.3;IZ;32;38;1755dz;my first observation of this star
SS CYG;2454707.1001;9.3;Y;93;95;070613;OUTBURST!
#DELIM=|
#DATE=EXCEL
SS CYG|1/1/2010 11:59 PM|9.3|L|90|95|070613|first obs using UT
SS CYG|1/2/2010 06:15 AM|9.3|na|90|95|070613|na
```

In this example, the observer changes the delimiter and the date format in the middle of the report.

Table 7.1 – *Abbreviations for Comments on AAVSO Reports*

These comment letters go in the "Comment Codes" field on WebObs or in the "COMMENTCODE" field if you are creating your own report for upload. If needed, use more than one letter, keeping them in alphabetical order. The letters should serve as a general guide to your comment; they needn't be an exact representation of what's in the report. For example, if you write "a 12-day moon nearby" in the "Notes" field, just put an "B" (for bright sky) in the "Comment Codes" field.

B   *Sky is bright, moon, twilight, light pollution, aurorae*
D   *Unusual Activity (fading, flare, bizarre behavior, etc.)*
I   *Identification of star uncertain*
K   *Non-AAVSO chart*
L   *Low in the sky, near horizon, in trees, obstructed view*
S   *Comparison sequence problem*
U   *Clouds, dust, smoke, haze, etc.*
V   *Faint star, near observing limit, only glimpsed*
W   *Poor seeing*
Y   *Outburst*
Z   *Magnitude of star uncertain*