

## Reporting CCD observations to the BAA Variable Star Section

Whenever you make CCD observations of a variable star, you should report these to one or more of the astronomical organisations which maintain a long-term database of variable star observations. They will then be available for future use. Professional astronomers frequently request the results of previous amateur observations of a specific object and this data often proves very helpful in supporting or disproving new theories about the object's behaviour.

So how should you report your results to the BAA Variable Star Section (BAA VSS)?

If you use the BAA VSS CCD photometry spreadsheet to analyse your results, this will produce a file which you can send directly to the BAA VSS at the email address below.

If you do not use this spreadsheet, there is a simple text file format which you can use to report the essential information which needs to be recorded. This format is not exhaustive of all the information which could be reported but has been kept to the essentials to make it easy to generate.

The file is in two parts separated by a blank line: a header section which contains information about the variable, the observer and the observing run; and a data section which contains the individual measurements. In the header section, each line contains a brief descriptor of the item followed by its value. The descriptor and value are separated by a tab character, denoted by <tab> in the format below. Assuming the magnitude of the variable is calculated using differential photometry, the Magnitude type should be given as Differential+Comparison. Any information which you think would be useful such as the observing conditions should be included in the comment field. The data section contains a line of column headings followed by one line for each measurement. Filters are normally given the values U, B, V, R, I, C (clear filter) or N (no filter). VarMag is the measured magnitude of the variable. VarErr is the estimated error in the variable magnitude. CmpStar is the identifier on the chart of the comparison star used. RefMag is the magnitude of the comparison star used. If any quantity, for example VarErr, is not available, then omit this column heading and the corresponding data values.

The format of the file is as follows:

```
Variable<tab>V1363 Cyg  
Chart ID<tab>BAAVSS CCD 002.01  
Observer code<tab>DDB  
Magnitude type<tab>Differential+Comparison  
Comment<tab>Conditions: moonlight and slight haze
```

```
JulianDate<tab>Filter<tab>VarMag<tab>VarErr<tab>CmpStar<tab>RefMag  
2453598.494630<tab>V<tab>15.600<tab>0.015<tab>6<tab>13.871  
2453598.495127<tab>V<tab>15.515<tab>0.014<tab>6<tab>13.871  
2453598.495613<tab>V<tab>15.490<tab>0.014<tab>6<tab>13.871  
2453598.496111<tab>V<tab>15.465<tab>0.014<tab>6<tab>13.871  
2453598.496597<tab>V<tab>15.453<tab>0.014<tab>6<tab>13.871  
.....  
.....  
.....
```

When you have created the file, email it to: [andyjwilson\\_uk@hotmail.com](mailto:andyjwilson_uk@hotmail.com).

If you intend to submit several files at the same time, it makes handling them easier if you create a zipped folder containing the files and send that.