

Data for NGC 6633: imaging and spectroscopic:

Epoch1: very short exposures so brightest stars are not overexposed: useful for comparing with coude spectra of the same stars, but not suitable for a color magnitude diagram.

Epoch 2: longer exposures, but not centered on cluster. Western edge cut off. Reduction of 2 standard stars yield photometric constants consistent with those of M 26. (Future observations will hopefully replace these frames)

Spectra: available for 5 brightest stars, numbering as follows, as *.txt files

1. HD 170010, 18:27:05.4 +06:32:08 fcdb0029, fcdb0041
2. 18:26:53.5 +06:29:04 fcdb0032, fcdb0033
3. 18:26:52.9 +06:25:18 fcdb0035, fcdb0036
4. 18:26:33.5 +06:31:30 fcdb0037, fcdb0038
5. HD170054 18:27:14.3 +06:31:03 fcdb0039, fcdb0040

Procedure to convert *.txt files to *.ga3 files for analysis with Graphical analysis:
The *.txt files consist of about 30 or so lines of useful header information (What, when, where, why, who) followed by about 3000 lines, each consisting of two pieces of data: wavelength and flux:

BITPIX = 8 / 8-bit ASCII characters

NAXIS = 1 / Number of Image Dimensions

NAXIS1 = 3021 / Length of axis

ORIGIN = 'NOAO-IRAF: WTEXTIMAGE' /

IRAF-MAX= (etc)

To import a *.txt file into Graphical Analysis the file must be in a particular format. GA3 requires no header information and a comma between the wavelength and the flux. Our data is in *.txt format (see description below)

1. Open the *.txt file, in your favorite editor program (e.g. Word), delete the header lines and insert commas between the wavelength and flux.

(Under edit, >replace: replace the double space between the two numbers on each line with , (that's space comma) After the first, do a global replace to get all 3000 lines)

2. Save the file with a name that will identify the file as a modified *.txt file

3. Open graphical analysis. Import the modified *.txt file. (Under file > import> text file.)

4. Turn off the dots on every data point. (Pull down options, > graph options (or double click on the graph), turn off point protectors. click "done")

5. Add labels to the x axis. (Double click on col 1 for data options Under column definition set the name to "wavelength" and the units to "Angstroms." Under options set 6 sig. figures)

6. Add labels to the y axis. (Double click on col 2 for data options. Set the name to "Flux Density" and the units to "erg/cm²/sec/)

7. Save the file as a *.ga3 file (e.g., HD 242908_fcda0033.ga3)

This file can now be opened with GA3 on Mac or PC.