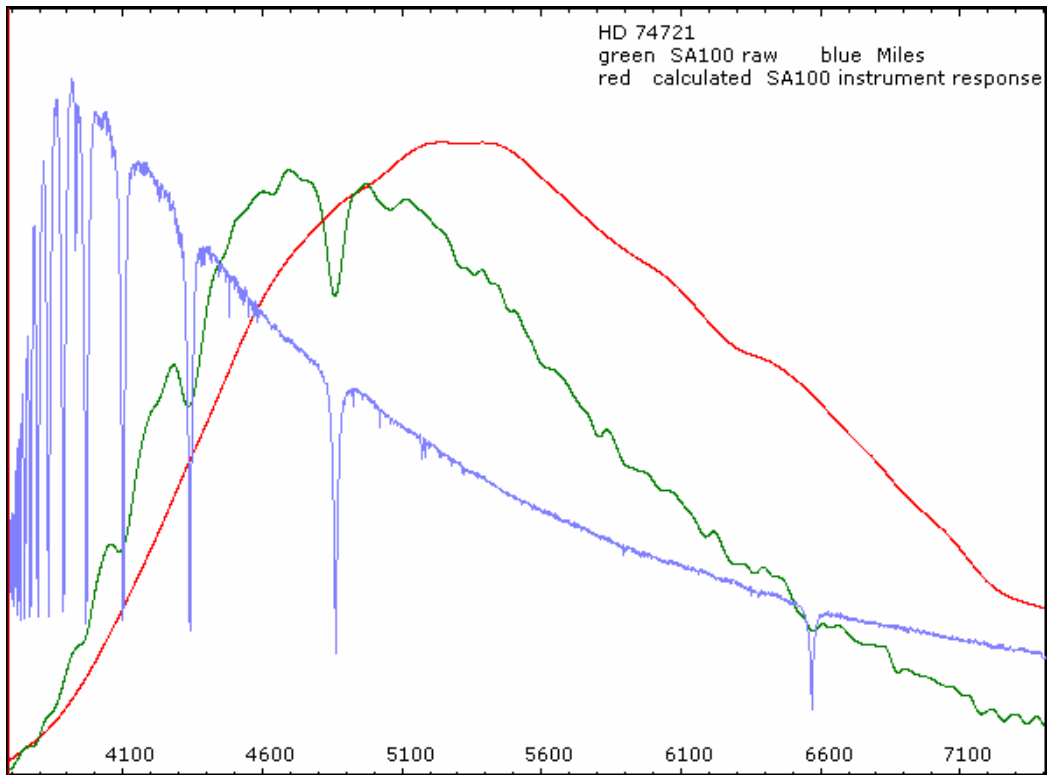


## Correcting spectra for instrument response using reference spectra from the Miles database

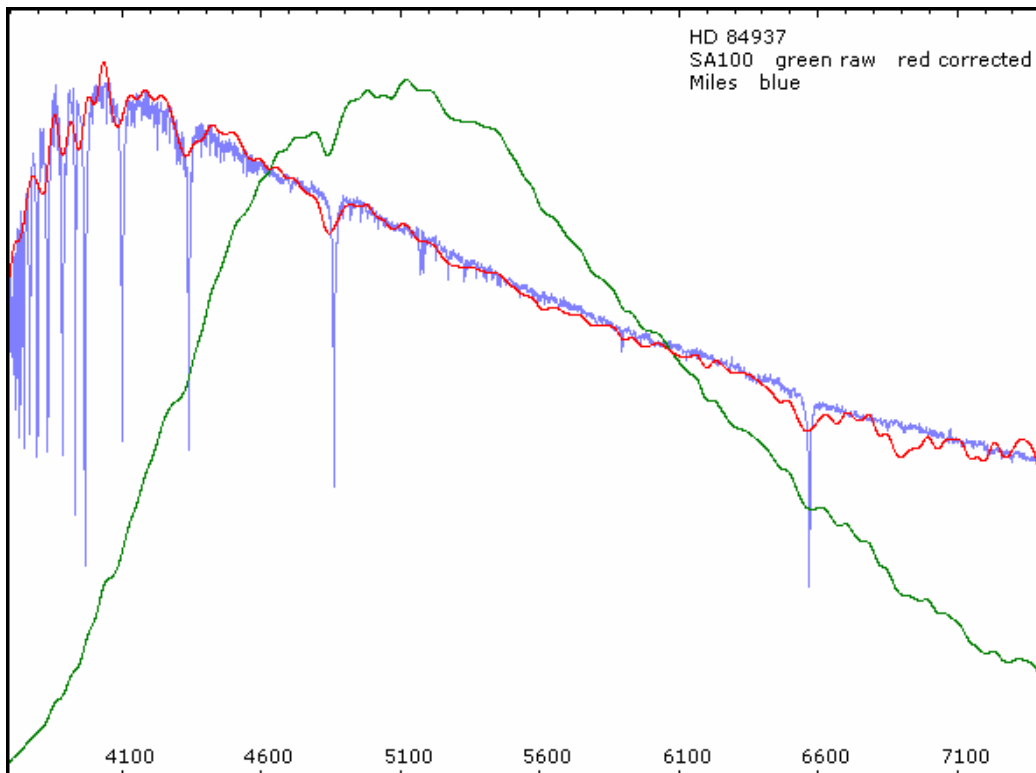
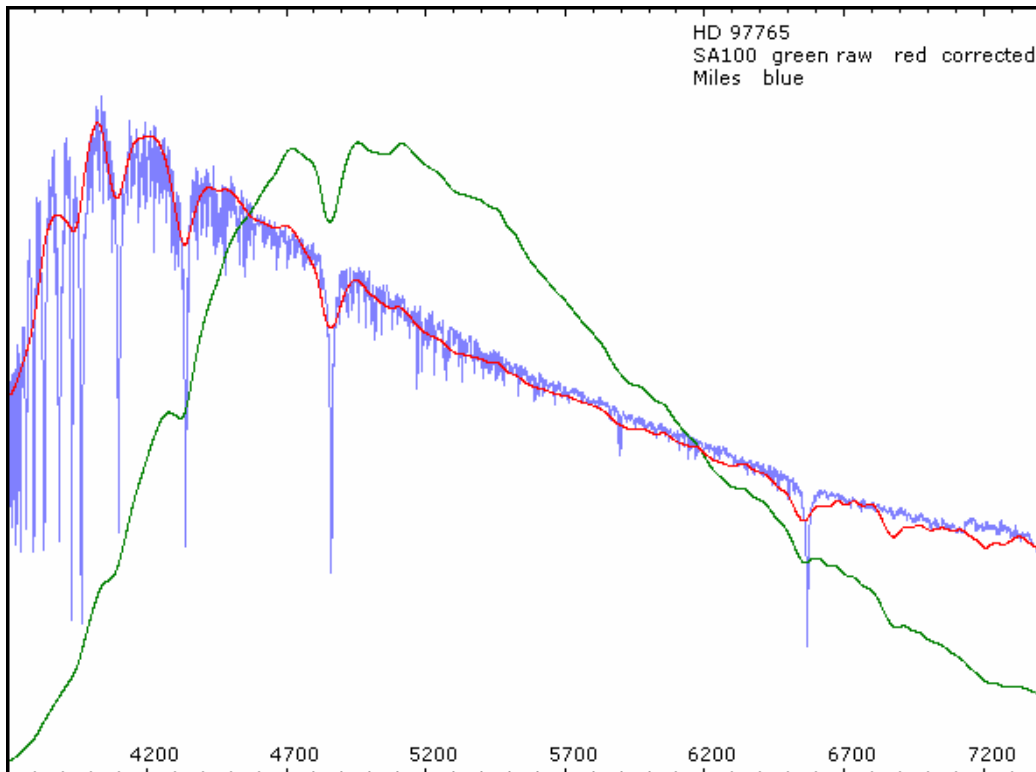
Robin Leadbeater Three Hills Observatory

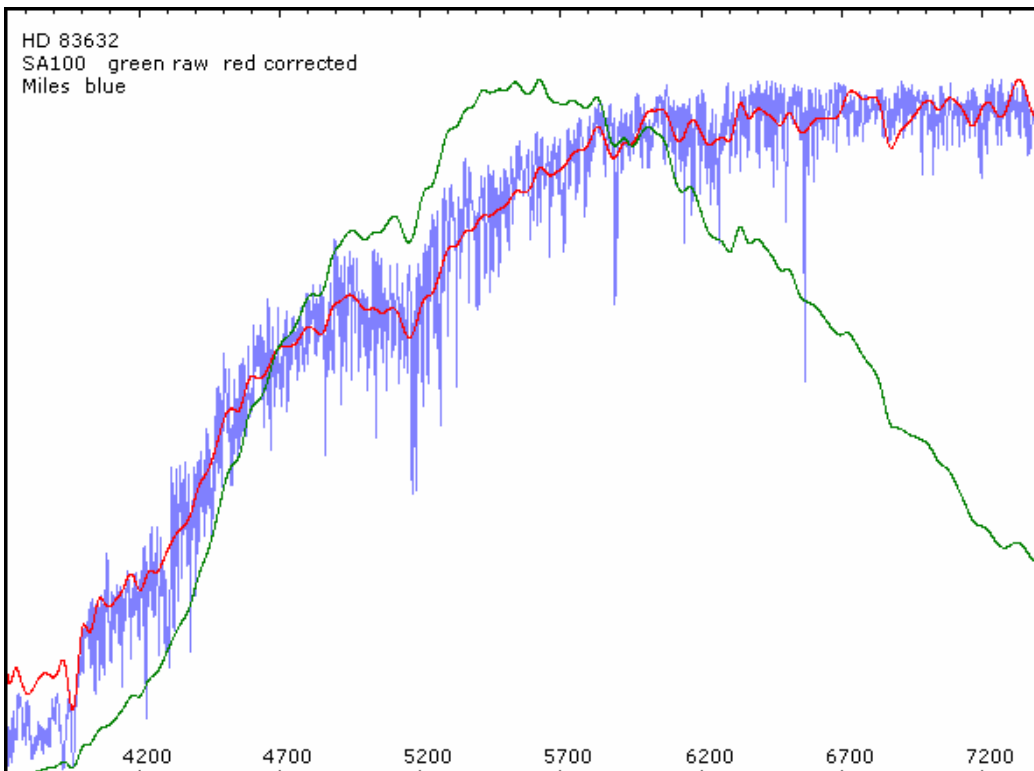
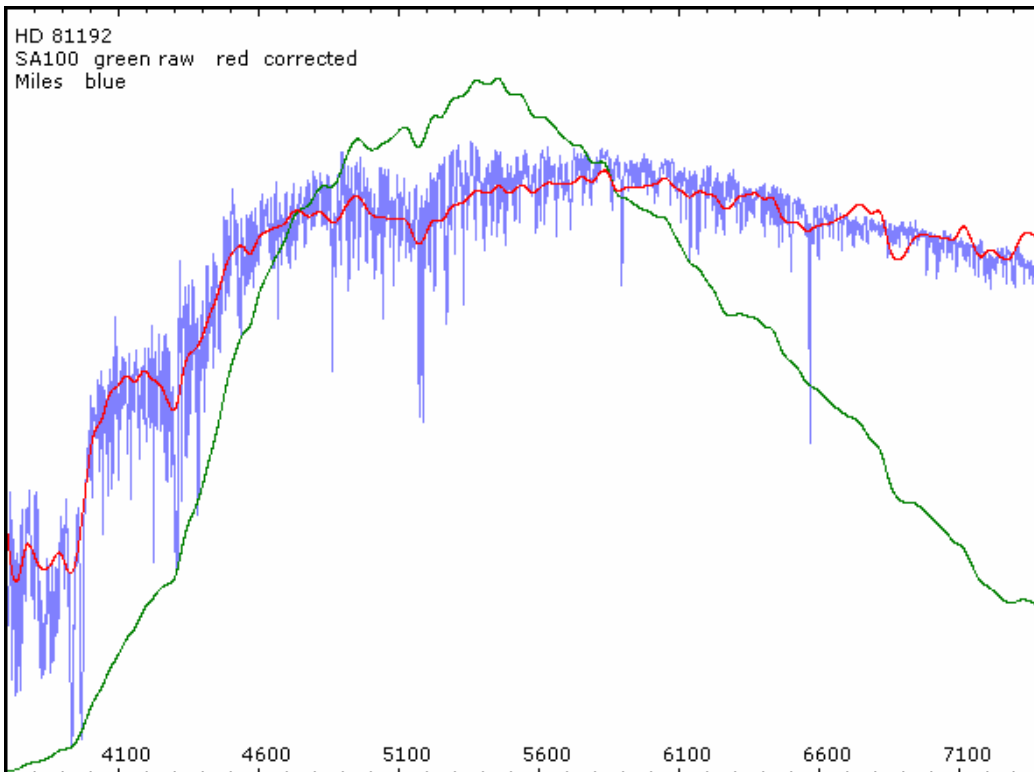
On 25<sup>th</sup> April 2013, low resolution spectra of 6 stars listed in the Miles database, covering a wide range of spectral types were recorded using a Star Analyser, ATIK 16IC-S camera and Celestron C11 telescope. Conditions were not ideal with thin variable cloud and a full moon but to minimise atmospheric effects all spectra were taken within 30 minutes in broadly the same area of the sky at elevations between 45 and 55 deg.

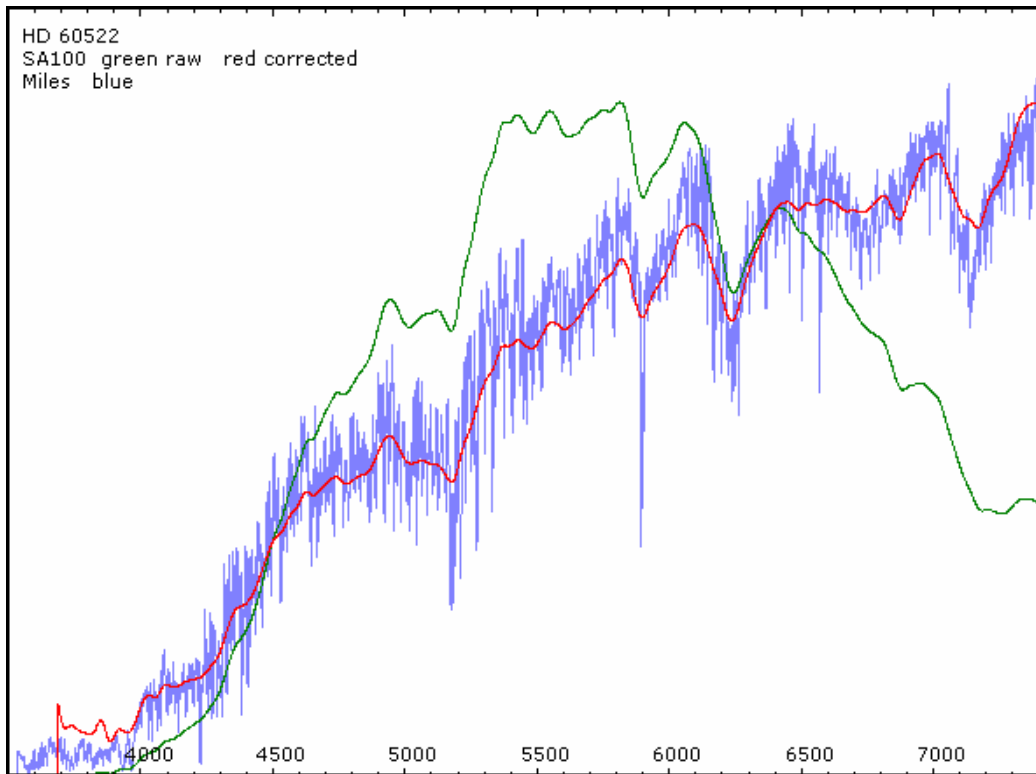
One of the spectra (HD 74721, catalogued as spectral type A0v) was used to calculate the instrument response of the system (The raw spectrum was divided by the reference spectrum of the same star in the Miles database and the result smoothed to remove the effect of the imperfect division of the stellar lines due to the different resolution)



The other 5 raw spectra were then corrected using this single instrument response and the results compared with the corresponding reference spectrum for each star in the miles database.







The agreement between the corrected spectra measured using the SA100 and the reference spectra in the miles database is excellent for all spectral types confirming that a single instrument response can be used for all types of object