

## Testing the spectral transmission of the Canon front filter

The Front filter element removed from a Canon 1000D camera was tested using the sun.



Canon 1000D front filter element.

An MG80 spectroscope (dispersion 2.78Å/pixel) was used.



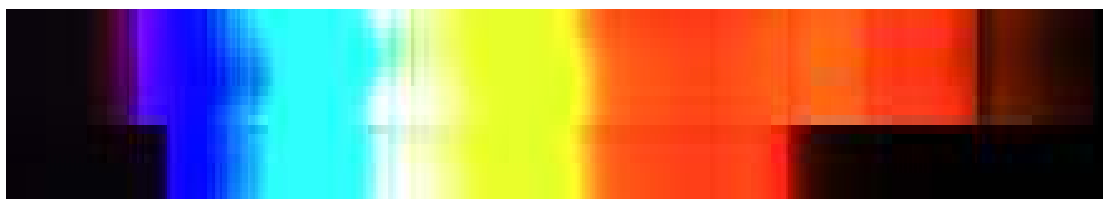
MG80 spectroscope with front filter drawer for testing.

The results are shown below:

The same camera settings and exposures were used for both spectra.

The Calcium H&K lines and the deep Atmospheric Telluric lines in the NIR can clearly be seen without the filter

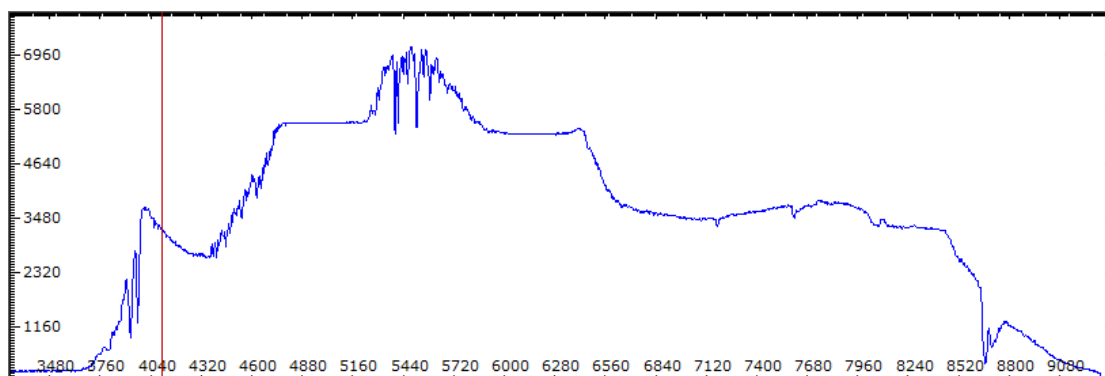
The filter element shows a very clean and definite cut-off at 400nm and again at 750nm



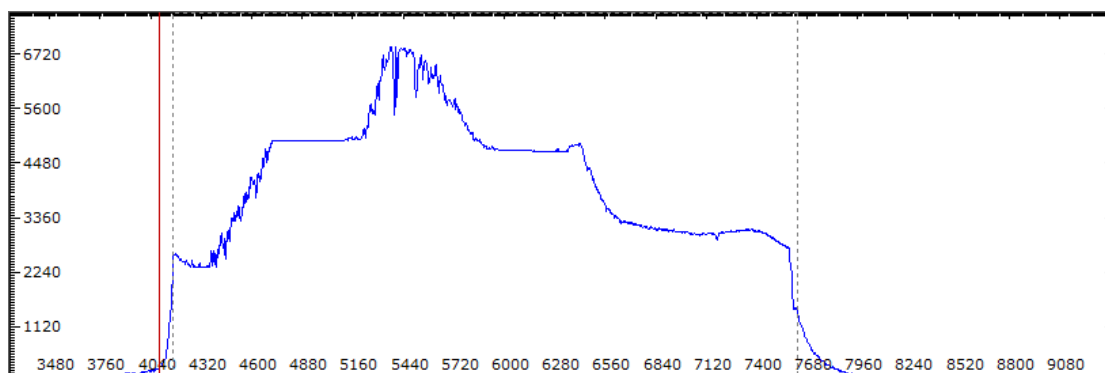
Top spectrum: Solar spectrum Canon 1000D (full mod –both filters removed)

Bottom spectrum: Solar Spectrum Canon front filter (anti-alias/dust shake)

NB Both over exposed to push the UV-IR limits



Profile, calibrated in wavelength of the Solar spectrum Canon 1000D (full mod –both filters removed)



Profile, calibrated in wavelength of the Solar spectrum Canon front filter (anti-alias/dust shake)

Results: The front filter in the recent Canon camera acts as a very effective UV-IR cut-off. Below 400nm and above 750nm

Ken M Harrison  
Maribyrnong, Australia  
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