
Subject: Recalibration of observed spectrum

Posted by [Kaushal Sharma](#) on Tue, 13 Aug 2013 05:48:21 GMT

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Hello,

I am trying to recalibrate an empirical spectrum with a synthetic spectrum. For that, first I need to bring the synthetic spectrum at the resolution of observed spectrum. Synthetic spectrum has a resolution of 0.02 AA while the observed one has 0.88 A. So I am using gaussfold.pro to convolve the synthetic spectrum with $\text{fwhm} = \sqrt{0.88^2 - 0.02^2}$ AA.

I am using the following steps for the convolution:

```
> fwhm=sqrt(0.88^2-0.02^2)
> smflux=gaussfold(wavel,flux,fwhm)
```

The problem is that it causes a significant dip in the the continuum of the smoothed flux (convolved) at the blue end of the spectrum. I do not know is it because of some error, or it usually happens after degrading the spectrum. Does anyone have any idea?
