Subject: Re: gaussfold
Posted by wlandsman on Fri, 26 Aug 2011 01:15:10 GMT
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I am not sure that I understand your question, but my guess is that you are confusing resolution with wavelength sampling.

I assume that you are using gaussfold.pro from the Tübingen library (http://astro.uni-tuebingen.de/software/idl/aitlib/misc/gauss fold.html). (Note that in IDL 8.1 there is an intrinsic function GAUSS_SMOOTH to do the same thing.) GAUSSFOLD does not change the number of points in the spectrum, but "blurs" the spectrum by convolving with a Gaussian. Thus one keeps the same wavelength vector.

If for some reason, you really want to reduce the number of points then I would average points together using REBIN() and resample the wavelength vector. For example, to change the wavelength sampling from 0.3 A to 1.5 A

```
n = N_elements(flux)
fsmooth = REBIN( flux, n/5)
wsmooth = wavelength[ 5*indgen(n/5) + 2 ]
```

where I select the middle wavelength of the 5 pixels being averaged. --Wayne

On Thursday, August 25, 2011 5:33:27 PM UTC-4, idlhelp wrote:
> Dear all,

> problem:
> 1) The index value of "wavelength" and "flux" which is input is 1000
> but the index value of fsmooth should be less then 1000 but when i
> print the index value it is same as index value of "wavelength" and
> "flux"
> 2) how can i print "wavelength" corresponding " fsmooth" i.e
> corresponding to 1.5 A resolution.
>
> Any help will be appreciable.
>
> thanks in advance