Subject: Re: continuum normalized spectra
Posted by abc on Sun, 03 Feb 2013 08:09:20 GMT
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On Saturday, February 2, 2013 7:42:39 PM UTC+1, David Fanning wrote:
> idlhelp writes:
>
>
>
>> I want to write a program to fit a linear local continuum of absorption line, and plot the spectrum with continuum drawn and the spectrum normalized by the continuum. And than I want to Fit a local continuum using data in the wavelength ranges 1800-1820 and 2020-2040 angstroms.
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>>
>
>> Does anyone know that how can I do that
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>
> Yes, probably. But, not without a hell of a lot more information. :-)
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> Cheers,
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> David
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> --
>
> David Fanning, Ph.D.
>
> Fanning Software Consulting, Inc.
>
> Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
>
> Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Hi David,

ok so here is the information. This is how I am doing :-)

```
;    filename - the filename of the input spectrum
;    column - the number of columns in the file
;    row - the number of rows in the file
;    boxsize - the size of the boxcar for the smoothing function
;    dofit - the user keyword
;    dofityes - the variable containing the input parameter



data = fltarr(column, row)

; open the file as read only
openr,lun,filename,/get_lun

; read the data from the file into the array
readf,lun,data

; close the file
close,/all


wave=reform(data(0,*))
flux=reform(data(1,*))


; This creates a new array containing the results generate
; by the smooth function.
smoothed_flux = smooth(flux,boxsize)


; check to see if the user would like to fit the continuum
if keyword_set(dofityes) then begin  ; this check the dofit keyword

  ; fit velocity and smoothed_flux, using a 1st order polynomial.
  result = poly_fit(wave,smoothed_flux,1)

  ; generate the continuum with the results from the fit
  continuum = result(0) + result(1)*wave


end
```

But I am not sure that I am doing the continuum normalization to unity in a right way. Because when I make plots the contunum level is higher than the unity.