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:
>
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>
        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.
>
>>
>
>> Does anyone know that how can I do that
>
>
  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,
```

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
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when I make plots the contunum level is higher than the unity.