Subject: Re: difficulty using "linterp" command - need help making loop to exclude a value yet average others
Posted by Emily Anne Moravec on Sun, 14 Aug 2011 20:26:32 GMT
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On Aug 14, 2:47 pm, Emily Anne Moravec <mora...@stolaf.edu> wrote:
> On Aug 14, 3:49 am, Nikola <nikola.vi...@gmail.com> wrote:
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>
>
>> It seems like you haven't defined wgrid in the procedure
>> interpolatedsixteen.pro.
>
>> linterp is not a standard idl function. Why not use interpol instead
>> (for the difference see the header of linterp.pro)?
>
>>> Also, in each of our 8 data sets, there is an increment of wavelength
>>> values where the value of the flux is 0, which will make the average
>>> of all 8 messed up. Do you have any ideas how to write a loop that
>>> goes through all of the wgrid values and averages the values of the
>>> interpolated flux values, but skips the flux values that are 0 and
>>> continues to the next? Is there a skip command? Would a where command
>>> work the best?
>
>> If you need to find mean of an array excluding elements equal to some
>> variable x (in your case x = 0) you don't need a loop. Just do
>
>> mask = array NE x
>> y = TOTAL(array*mask)/TOTAL(mask)
>
> So the mask = array NE x will exclude the x value?
> What do I put in place of array? One value or all of the values 16
> values I am averaging? Is NE the command for excluding something?
> Thank you for you time!!!

Also, I just looked at linterp and interpol and it seems linterp is
exactly what we want to do. I really also don't see the difference
between them.
To linearly interpolate from a spectrum wavelength-flux pair
; WAVE, FLUX to another wavelength grid defined as:
; WGRID = [1540., 1541., 1542., 1543., 1544, 1545.]
;
; IDL> LINTERP, WAVE, FLUX, WGRID, FGRID
;
; FGRID will be a 6 element vector containing the values of
FLUX

; linearly interpolated onto the WGRID wavelength scale
This is exactly what we want to do…...