Subject: Re: difficulty using "linterp" command - need help making loop to exclude a value yet average others

Posted by Nikola on Mon, 15 Aug 2011 08:17:49 GMT

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On Aug 14, 3:47 pm, Emily Anne Moravec <mora...@stolaf.edu> wrote:
> On Aug 14, 3:49 am, Nikola <nikola.vi...@gmail.com> wrote:
>
>
>
>> 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!!!

NE means Not Equal

So,
mask = array NE x
makes a new array of the same size as array, but with 1 where array is
not equal x and with zero in the opposite case. In place of array you
put the array you wish to average.

If you're going to use IDL extensively, I strongly recommend you to
read the part of the manual on arrays.