Subject: Re: How to average every nth data?
Posted by Jeremy Bailin on Fri, 05 Nov 2010 13:54:52 GMT
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On Nov 4, 4:55 pm, Michael Galloy <mgal...@gmail.com> wrote:
> On 11/4/10 2:31 PM, go cats wrote:
>
>
>
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>
>
>> On Nov 4, 1:14 pm, Chris W<cwood1...@gmail.com> wrote:
>>> On Nov 4, 12:53 pm, go cats<beardown...@gmail.com> wrote:
>
>>>> Dear Gurus,
>
>>>> Hope someone will help me how to figure this out.
>>>> I've been keep trying to do some spectral resampling (just simple
>>>> average) with ASD data.
>>>> ASD data is a two dimensional array;
>
>>>> wavelength data
>>>> 350 0.001146
>>>> 351 0.001176
>>>> 352 0.001147
>>>> . .
>>>> . .
>>>> . .
>>>> 2500 0.0004311
>
>>>> What I've been trying to do is averaging every nth data values and
>>>> rewrite into a new array.
>>>> For example, if I want to average every 3rd data values, the resulting
>>>> array will be
>
>>>> 350 0.001150
>>>> 353 0.001147
>>>> and so on.
>
>>>> MS excel seems to be able to handle it, but it wouldn't be a good idea
>>>> for processing several hundres files.
>
>>>> I really appreciate if someone could give me tip(s).
>

>>>> Thanks,
>>>> Kim
>
>>> put the data into separate arrays
>>> then reform them
>
>>> rw = reform(w, 3, n_elements(w)/3) ; make sure w has a multiple of 3
>>> length
>>> rd = reform(d, 3, n_elements(d)/3)
>
>>> get the mean across the 1st dimension for the average
>>> result_d = mean(rd,dimension = 1)
>>> get the minimum across the wavelengths
>>> result_w = min(rw, dimension = 1)
>
>>> Chris- Hide quoted text -
>
>>> - Show quoted text -
>
>> Hi Chris,
>
>> The "dimension" flag may not be used in the "mean" function.
>> wavelength sorting was successful, but only one (total) mean value was
>> calculated.
>> I am digging out what I did wrong.
>
>> Thanks,
>> Kim
>
> IDL 8.0 added the DIMENSION keyword for MEAN.
>
> Mike
> --www.michaelgalloy.com
> Research Mathematician
> Tech-X Corporation

If you're on pre-8, you can use the modifications of the intrinsic
routines here:

http://web.astroconst.org/jbiu/#MOMENTDIMEN

-Jeremy.