Subject: Re: How to average every nth data?
Posted by Chris W on Thu, 04 Nov 2010 18:14:21 GMT
View Forum Message <> Reply to Message

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