
Subject: How to average every nth data?

Posted by [beardown911](#) on Thu, 04 Nov 2010 17:53:25 GMT

[View Forum Message](#) <> [Reply to Message](#)

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

Subject: Re: How to average every nth data?

Posted by [MC](#) on Sat, 06 Nov 2010 13:37:38 GMT

[View Forum Message](#) <> [Reply to Message](#)

Just a thought, is there an aliasing risk in the resulting decimated spectrum (decimation can break the Nyquist sampling theorem)? If you just want to reduce data size/spectral resolution, rebin (or congrid) could be used which will also reduce noise.

Cheers

On Nov 5, 6:53 am, 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