
Subject: Re: How to average every nth data?
Posted by [Chris W](#) on Thu, 04 Nov 2010 18:14:21 GMT
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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;
>
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> 2500 0.0004311
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> What I've been trying to do is averaging every nth data values and
> rewrite into a new array.
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> Thanks,
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put the data into separate arrays
then reform them

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rw = reform(w, 3, n_elements(w)/3) ; make sure w has a multiple of 3  
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rd = reform(d, 3, n_elements(d)/3)
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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

Subject: Re: How to average every nth data?

Posted by [Juggernaut](#) on Thu, 04 Nov 2010 19:24:07 GMT

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On Nov 4, 1:53 pm, go cats <beardown...@gmail.com> wrote:

> Dear Gurus,

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You can also do something like this.

```
x = indgen(50)
```

```
mean_1 = mean(x)
```

```
mean_2 = mean(x[0:*:2])
```

```
mean_3 = mean(x[0:*:3])
```

The third element in your indexing indicates a skipping parameter.

Subject: Re: How to average every nth data?

Posted by [beardown911](#) on Thu, 04 Nov 2010 20:12:25 GMT

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

On Nov 4, 1:14 pm, Chris W <cwood1...@gmail.com> wrote:

> On Nov 4, 12:53 pm, go cats <beardown...@gmail.com> wrote:

>

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> result_d = mean(rd,dimension = 1)
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> result_w = min(rw, dimension = 1)
>
> Chris- Hide quoted text -
>
> - Show quoted text -

```

Thanks Chris,

That works perfectly.

Kim

Subject: Re: How to average every nth data?
 Posted by [beardown911](#) on Thu, 04 Nov 2010 20:13:18 GMT
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On Nov 4, 2:24 pm, Bennett <juggernaut...@gmail.com> wrote:
 > On Nov 4, 1:53 pm, go cats <beardown...@gmail.com> wrote:
 >
 >
 >
 >
 >
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>
> - Show quoted text -
```

Bennet,

Thanks for the tips.

Kim

Subject: Re: How to average every nth data?

Posted by [beardown911](#) on Thu, 04 Nov 2010 20:31:39 GMT

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

On Nov 4, 1:14 pm, Chris W <cwood1...@gmail.com> wrote:

> On Nov 4, 12:53 pm, go cats <beardown...@gmail.com> wrote:

>
>
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>
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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

Subject: Re: How to average every nth data?

Posted by [Michael Galloy](#) on Thu, 04 Nov 2010 20:55:57 GMT

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On 11/4/10 2:31 PM, go cats wrote:

> On Nov 4, 1:14 pm, Chris W<cwood1...@gmail.com> wrote:

>> On Nov 4, 12:53 pm, go cats<beardown...@gmail.com> wrote:

>>

>>

>>

>>

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```

IDL 8.0 added the DIMENSION keyword for MEAN.

Mike

--

www.michaelgalloy.com
Research Mathematician
Tech-X Corporation

Subject: Re: How to average every nth data?
Posted by [rogass](#) on Thu, 04 Nov 2010 23:23:25 GMT
[View Forum Message](#) <> [Reply to Message](#)

On 4 Nov., 18:53, go cats <beardown...@gmail.com> wrote:

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Hi Kim,

you could also use this:

```
range=3
```

```
new_w = total(reform(w,range,n_elements(w)/range),1)/range
```

or if you have missing values:

```
missing=0
```

```
new_w = total(((rr=reform(w,range,n_elements(w)/range),1)))/total(rr  
ne missing,1)
```

Cheers

CR

Subject: Re: How to average every nth data?
Posted by [Jeremy Bailin](#) on Fri, 05 Nov 2010 13:54:52 GMT
[View Forum Message](#) <> [Reply to Message](#)

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:

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> 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.

Subject: Re: How to average every nth data?
 Posted by [beardown911](#) on Fri, 05 Nov 2010 15:09:30 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Nov 5, 8:54 am, Jeremy Bailin <astroco...@gmail.com> wrote:

> 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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> -Jeremy.- Hide quoted text -
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```

Hi all,

Thank you all for your invaluable tips and code examples.

Kim
