
Subject: Averaging values in an array

Posted by [wdolan](#) on Tue, 21 Jul 2015 16:50:08 GMT

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

So I've got an array called 'topscans' which is [333,9], so I am looking through 9 different scans, and each scan has 333 spectral points. I want to average each spectral point for the 9 scans. For example I want to average the first spectral point for all 9 runs, then the 2nd, then the third etc. So that in the end I have a set of 333 spectral points which represents an average of all 9 scans.

Thanks for your help!

Subject: Re: Averaging values in an array

Posted by [a146397258](#) on Tue, 21 Jul 2015 16:56:43 GMT

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

Something like:

```
result=fltarr(333)
for i=0,332 do begin
result[i]=(array[i,0]+array[i,1]+...+array[i,8])/8
endfor
```

Maybe? I might have messed up something with zero indexing, but something that follows that general idea should work.

Subject: Re: Averaging values in an array

Posted by [wlandsman](#) on Tue, 21 Jul 2015 16:58:46 GMT

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

It sounds like you want

```
IDL> topscans_avg = mean(topscans,dimension=2)
```

On Tuesday, July 21, 2015 at 12:50:10 PM UTC-4, Wayana Dolan wrote:

> So I've got an array called 'topscans' which is [333,9], so I am looking through 9 different scans, and each scan has 333 spectral points. I want to average each spectral point for the 9 scans. For example I want to average the first spectral point for all 9 runs, then the 2nd, then the third etc. So that in the end I have a set of 333 spectral points which represents an average of all 9 scans.

>

> Thanks for your help!

Subject: Re: Averaging values in an array

Posted by [wdolan](#) on Wed, 22 Jul 2015 15:10:39 GMT

Great, thank you, it worked!

On Tuesday, July 21, 2015 at 9:58:48 AM UTC-7, wlandsman wrote:

> It sounds like you want

>

> IDL> topscans_avg = mean(topscans,dimension=2)

>

> On Tuesday, July 21, 2015 at 12:50:10 PM UTC-4, Wayana Dolan wrote:

>> So I've got an array called 'topscans' which is [333,9], so I am looking through 9 different scans, and each scan has 333 spectral points. I want to average each spectral point for the 9 scans. For example I want to average the first spectral point for all 9 runs, then the 2nd, then the third etc. So that in the end I have a set of 333 spectral points which represents an average of all 9 scans.

>>

>> Thanks for your help!
