Subject: How to reform a 3-D array?
Posted by atmospheric physics on Fri, 13 Mar 2015 16:20:28 GMT

Hello,

I have a data array in 3-dimensions i.e., X -> BYTE = [3,360,2167]. I want to transform the data array retaining the same dimensions as X' -> BYTE = [3,2167,360]. Is there a simple function in IDL which can automatically rearrange the data to the new dimensions?

Any suggestions would be of great help.

Thanking you in advance,
Regards,
Madhavan

Subject: Re: How to reform a 3-D array?
Posted by Helder Marchetto on Fri, 13 Mar 2015 16:24:56 GMT

On Friday, March 13, 2015 at 5:20:29 PM UTC+1, Madhavan Bomidi wrote:
> Hello,
>
> I have a data array in 3-dimensions i.e., X -> BYTE = [3,360,2167]. I want to transform the data array retaining the same dimensions as X' -> BYTE = [3,2167,360]. Is there a simple function in IDL which can automatically rearrange the data to the new dimensions?
>
> Any suggestions would be of great help.
>
> Thanking you in advance,
> Regards,
> Madhavan

Would this do:
IDL> a = bytarr(3,50,100)
IDL> help, transpose(a,[0,2,1])
<Expression>   BYTE   = Array[3, 100, 50]

Cheers,
Helder

Subject: Re: How to reform a 3-D array?
Posted by Helder Marchetto on Fri, 13 Mar 2015 16:27:41 GMT

On Friday, March 13, 2015 at 5:24:58 PM UTC+1, Helder wrote:
> On Friday, March 13, 2015 at 5:20:29 PM UTC+1, Madhavan Bomidi wrote:
>> Hello,
>>
>> I have a data array in 3-dimensions i.e., X -> BYTE = [3,360,2167]. I want to transform the data array retaining the same dimensions as X' -> BYTE = [3,2167,360]. Is there a simple function in IDL which can automatically rearrange the data to the new dimensions?
>>
>> Any suggestions would be of great help.
>>
>> Thanking you in advance,
>> Regards,
>> Madhavan
>
> Would this do:
> IDL> a = bytarr(3,50,100)
> IDL> help, transpose(a,[0,2,1])
> <Expression>   BYTE   = Array[3, 100, 50]
>
> Cheers,
> Helder

Here is a better example:
IDL> file1 = FILEPATH('Night.jpg', SUBDIRECTORY=['examples','data'])
IDL> read_jpeg, file1, a
IDL> help, a
A   BYTE   = Array[3, 1024, 512]
IDL> image(transpose(a,[0,2,1]))

This way the image is...weel, transposed.

Cheers,
Helder