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Subject: Re: Filtering data in multidimensional arrays  
Posted by [davidf](#) on Thu, 01 Jun 2000 07:00:00 GMT  
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Simon de Vet ([simon@mathstat.dal.ca](mailto:simon@mathstat.dal.ca)) writes:

> I have a 3 dimensional array, of size (20,40,13). This represents  
> (Flight Number, Point Number, Data Type). The flights range from 3-19.  
> Each flight has between 10 and 40 points. They all have the same number  
> of data types. Using the replicate command, I have filled the empty  
> array locations with -1111.  
>  
> Now, I want to plot this data, with all the negative values in the first  
> two dimensions ('Bad Data') removed entirely. I have fooled around a bit  
> with WHERE, but I can only understand it when it's applied to one  
> dimensional arrays.  
>  
> How can I use it in my particular case? Is there another solution?

Oh, the WHERE function applies equally well to multidimensional arrays. And the beauty of it is, you don't have to understand it. You just have to use it. :-)

The secret is that you can use one-dimensional subscripts to subset multi-dimensional arrays. If you really do want to know how this works (and I wouldn't bother, probably) here is an article on my web page that shows you how to convert 1D subscripts of the type returned by WHERE to multidimensional coordinates:

[http://www.dfanning.com/tips/where\\_to\\_2d.html](http://www.dfanning.com/tips/where_to_2d.html)

Cheers,

David

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David Fanning, Ph.D.  
Fanning Software Consulting  
Phone: 970-221-0438 E-Mail: [davidf@dfanning.com](mailto:davidf@dfanning.com)  
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>  
Toll-Free IDL Book Orders: 1-888-461-0155