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Subject: Re: Where() with multidimensional array?  
Posted by [Olaf Stetzer](#) on Thu, 11 Apr 2002 14:31:01 GMT  
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David Fanning wrote:

> Olaf Stetzer (olaf.stetzer@imk.fzk.de) writes:  
>  
>  
>> I have a problem with the where() function in IDL. It seems,  
>> that the function returns -1 when confronted with a multidimensional  
>> array.  
>  
>  
> Uh, I don't think so. A -1 is returned when there is nothing  
> in the array that meets the criteria. You can obtain a count  
> of how many matches there are with the COUNT parameter.

Yes, it seems that all data were failvalues in my testcase.

>> I am trying the following but get an error message:  
>>  
>> valid=where(data ne failvalue)  
>> plot.yrange[0]=min(data[valid])  
>> plot.yrange[1]=max(data[valid])

> To avoid this error, I would write the code like this:  
>  
> valid=where(data ne failvalue, count)  
> IF count GT 0 THEN BEGIN  
> plot.yrange[0]=min(data[valid])  
> plot.yrange[1]=max(data[valid])  
> ENDIF

Thanks, this should work!

>  
>> What I want is the max and min values within data (twodimensional)  
>> but I want to exclude all values which are equal failvalue). Maybe there  
>> is an easy way to do this?  
>  
>  
> valid = Where( ( (data EQ Max(data)) OR (data EQ Min(data)) ) AND \$  
> (data NE failvalue) )

Uhhh, but that returns wrong values if failvalue is the max or min itself?

> Be aware that if you use these Boolean operators with floating point  
> data that you may not get what you expect. With floats we usually

> look for values within some small delta value of the target.

In my case its exactly the value defined in failvaue. I get my data from a mysql database and convert all NULL-values (=missing data) into a predefined value, in this case -99999. This is in all cases below the minimum of my data, but min(data) should return the minimum of the valid data only!

Thanks,

Olaf

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