Subject: Re: Where() with multidimensional array?
Posted by David Fanning on Thu, 11 Apr 2002 14:04:52 GMT
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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 may matches there are with the COUNT parameter.

> 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
```

> 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) )
```

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.

Cheers,

David
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