Subject: Using where to create new variables of data
Posted by morganlsilverman on Fri, 29 Mar 2013 16:09:06 GMT
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Hello,

I noticed that when I use where to find locations and then create a variable using those locations such as below, I get a 1D array for adatea and a 3D array for atempa. I was expecting a 2D array for adatea. I can see how its putting the matching columns and rows into the 1D array but it makes it more complicated when I want to plot the temperature profile for that corresponding date. Is there another way to do this?

```
acitya = where(strmatch(airport.orig,'PHL  ') eq 1,acounta)
s = size(airport.orig)
ncol = s(1)
cola = acitya mod ncol
rowa = acitya/ncol
atempa = airport.temp(cola,rowa,*)
adatea = airport.date(cola,rowa)
```

Thank you.
Sincerely,
Morgan

Subject: Re: Using where to create new variables of data
Posted by Russell[1] on Fri, 29 Mar 2013 22:10:34 GMT
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Again, I'm really not trying to be a jerk. But it's very hard to answer your question without knowing the details of the data. As a general rule, no one will look at a segment of code that they can't immediately dissect in the time it takes to drink a gulp of coffee (and that's killing your other questions). Here I can see what you want. But, I don't know what the structure airport looks like. Give us the output of the following two commands:

help,airport

and

help,airport,/structure

Then we have a good idea how to help you...

Russell

On Friday, March 29, 2013 12:09:06 PM UTC-4, morganls...@gmail.com wrote:

> Hello,
>
>
>
> I noticed that when I use where to find locations and then create a variable using those locations such as below, I get a 1D array for adatea and a 3D array for atempa. I was expecting a 2D array for adatea. I can see how its putting the matching columns and rows into the 1D array but it makes it more complicated when I want to plot the temperature profile for that corresponding date. Is there another way to do this?
>
>
>
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>
> s = size(airport.orig)
>
> ncol = s(1)
>
> cola = acitya mod ncol
>
> rowa = acitya/ncol
>
> atempa = airport.temp(cola,rowa,*)
>
> adatea = airport.date(cola,rowa)
>
>
>
> Thank you.
>
> Sincerely,
>
> Morgan

Your question doesn't make a lot of sense without knowing more about the data, parituclarly the structure: airport.  In any event, look at array_indices, it's a way of

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Subject: Re: Using where to create new variables of data
Posted by Craig Markwardt on Fri, 29 Mar 2013 23:36:49 GMT
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On Friday, March 29, 2013 12:09:06 PM UTC-4, morganls...@gmail.com wrote:
> Hello,
>
>
>
> I noticed that when I use where to find locations and then create a variable using those

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You can use REFORM() to change a 2D array or 3D array into a 1D array.

Craig

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Subject: Re: Using where to create new variables of data
Posted by Phillip Bitzer on Sat, 30 Mar 2013 00:12:02 GMT
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Just piggy-backing on Russell's answer....

ARRAY_INDICES is something to look into:

http://www.exelisvis.com/docs/ARRAY_INDICES.html

It will take the 1D array of indices from WHERE and give a 2D array to access your data. See the example in the documentation - it uses MAX, but the concept is similar.

It's also perfectly valid to use the 1D array to access the array - you will lose the dimensionality though.

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