
Subject: Re: help array subscripting
Posted by [greg michael](#) on Sat, 24 Jun 2006 19:18:01 GMT
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I'm confused by your notation (I suspect you may also be). I'd guess you want to write something like:

```
x=[.1,.4,.2,1.2]
```

with similar expressions to define your y and z arrays. These represent values for certain times, which could be expressed as:

```
time=['1pm','2pm','3pm','4pm']
```

and you would access individual values like this:

```
i=0  
print,'The value of x at '+time[i]+' was '+strtrim(x[i],2)
```

changing i to select your time.

There are better ways to represent the time, but this should at least solve the indexing problem.

regards,
Greg

Subject: Re: help array subscripting
Posted by [David Fanning](#) on Sat, 24 Jun 2006 20:54:40 GMT
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pimpk24@hotmail.com writes:

```
> I am looking for a more efficient way to subscript various data arrays  
> to a time/index array  
>  
> Say I have data arrays : [x], [y], [z],  
>  
> and I have time arrays : [1pm] , [2pm], [3pm] , [4pm] etc.....  
>  
> Right now I am simply doing this by typing:  
>  
> x_1pm = x[1pm]  
> x_2pm=x[2pm]  
>  
> y_1pm=y[1pm] etc.....  
>
```

> This is very long and tedious, so I imagine (hope) there must be a
> better way.

Huh? Tedious!? I don't get it.

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: help array subscripting
Posted by [greg michael](#) on Sat, 24 Jun 2006 21:32:34 GMT
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1pm is a vector? Why? You have to explain more there...

Greg

Subject: Re: help array subscripting
Posted by [David Fanning](#) on Sat, 24 Jun 2006 21:36:52 GMT
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pimpk24@hotmail.com writes:

> it is such a repetitive excercise because there are many x,y,z etc..
> and many time arrays
> Usually loops are good for repetitive processes but I dont see how that
> would work in this case.

Me, either. :-)

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: help array subscripting

Posted by [JD Smith](#) on Mon, 26 Jun 2006 16:38:00 GMT

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On Sat, 24 Jun 2006 11:21:48 -0700, pimpk24 wrote:

> Hello all,
>
> I am looking for a more efficient way to subscript various data arrays to a
> time/index array
>
> Say I have data arrays : [x], [y], [z],
>
> and I have time arrays : [1pm] , [2pm], [3pm] , [4pm] etc.....
>
> Right now I am simply doing this by typing:
>
> x_1pm = x[1pm]
> x_2pm=x[2pm]
>
> y_1pm=y[1pm] etc.....
>
> This is very long and tedious, so I imagine (hope) there must be a better
> way.

You can either use higher-dimensional arrays (if 1pm, 2pm, 3pm etc. all have the same length), and index them all at once, like:

```
times=[ [1_pm], [2_pm], [3_pm] ]  
xt=x[times]  
yt=y[times]
```

or, if they are of different length, use an array of pointers, ala:

```
times=ptrarr(n_times)  
times[0]=ptr_new(...) ;; fill in the times pointer array
```

```
for i=0,n_elements(times)-1 do begin  
  xt=x[*times[i]]  
  yt=y[*times[i]]  
  ;; do something with xt, yt  
endfor
```

JD
