Subject: Re: Subscripting multidimensional arrays
Posted by R.G. Stockwell on Fri, 12 Dec 2003 16:57:18 GMT
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"Jonathan Greenberg" <greenberg@ucdavis.edu> wrote in message
news:nwfCb.37807$SU2.20541@newssvr29.news.prodigy.com...
> Hi all -- I was hoping to get some help with converting a vector which
> contains the x,y,z position for a value I want to exract from a
> multidimensional array -- I understand that using an array to subscript
> another array requires knowing the linear subscript position. For
example:
>
> a = 0 10 20
> 30 40 50
> 60 70 80
>
> 90 100 110
> 120 130 140
> 150 160 170
>
> I have a vector which is defined as:
> locationvector=[2,2,2]
>
> I want to extract the value at that position (e.g. a[2,2,2] = 170), but I
> can't do a:
> a[locationvector] --> I apparently have to convert the locationvector to
> that linear position. How do I do this? Does IDL have a built in
function
> that will do this conversion, or is there an easy formula for doing this
> conversion in ANY dimension? Thanks!
>
> --j
The straightforward way is:

result=a[locationvector[0],locationvector[1],locationvector[2]]

This will work if you always have a 3D array (or do you want to be able to
index with an array for an arbitary size array?)
Also, your location vector should be [2,2,1] in the above example.

Cheers,
bob