## Subject: Re: Another simple one Posted by snudge42 on Thu, 09 Aug 2007 04:43:48 GMT

View Forum Message <> Reply to Message

```
On Jul 31, 2:19 am, "Jean H." < ighas...@DELTHIS.ucalgary.ANDTHIS.ca>
wrote:
>> Is that possible? Or does my array have to be square so have to
>> truncate the whole thing at element 4 for example?
>> Cheers,
>
>> Snudge42
>
> Hi,
> You can also use a 1D array containing all of your data... then you
> should know which entries correspond to which line...
> ex: a = [1,2,3,4,5,6]
> you can think of A as
> 1,2,3
   ,4,5
   , ,6
>
> So, but this starts to be useful with big arrays, you can have a 2D
  array that indexes the 1D array...
>
> ex:
 indices2Dto1D = [[0,1,2],[-1,3,4],[-1,-1,5]]
       print, "value of 2,2 = ", a[indices2Dto1D[2,2]] ==> 6
> and
> indices1Dto2D = [0,1,2,4,5,8]
       print, "2D coords of the value 6 = ", indices1Dto2D[where(a eq 6)] ==>
> 8 (this is the 1D coordinate in the 2D array... you can transform it
 back to 2,2)
>
> Jean
> PS: I use this all the time to keep satellite images covering a study
> area having a crazy shape... I save about 75% of the otherwise required
> memory! ... I have to keep only 1 array covering the entire area, and
> all the other arrays cover only the study area!
```

Lots to think about there, thanks everyone. =)