
Subject: Re: changing matrix size using interpolation
Posted by [David Fanning](#) on Mon, 17 Jan 2011 14:57:08 GMT
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geoff writes:

```
> I think this might not be too hard but it would be great to have a
> pointer to the routines...
>
> I have a x by y matrix (of elevations for a topographic map)
>
> I want to turn it into a new matrix which is n by m where n and m
> could be greater or less than x or y and not necessarily an integer
> multiple or fraction.
>
> I have tried this...
>
> x=4.0
> y=4.0
>
> a=findgen(x,y)
>
> m=7.0
> n=7.0
>
> b=interpolate(a,findgen(m)*(x-1)/(m-1),findgen(n)*(y-1)/(n-1 ),/
> GRID,missing=-1)
>
> print,a
> print,b
>
> and it seems to work, but this must have been done many times before
> and just wanted to check I'm right?
```

I think most people use the CONGRID command, with the INTERP keyword set.

```
b = Congrid(a, 7, 7, /INTERP)
```

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")
