Subject: (more) Efficient way to generate an array whose elements are the distance from the center
Posted by Mike F. on Fri, 06 Jul 2012 20:37:35 GMT
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Hello all.

I'm new to IDL (and coding in general), and I'm looking to find a more efficient way to generate an nxn array where each element is the distance from the center of the array.

3 x 3 Ex:  1.4  1  1.4
1  0  1
1.4  1  1.4

All I can think of on my own is a nested FOR loop as such:

```
FOR i = 0l, (n - 1) DO BEGIN
   FOR j = 0l, (n - 1) DO BEGIN

     plane[i,j] = SQRT( (i-n/2.)^2 + (j - n/2.)^2 )

   ENDFOR
ENDFOR
```

From what I've read on IDL forums, nested FOR loops are the pinnacle of sin, and I'd like to be a bit more pious if possible.

Any tips would be appreciated!