
Subject: Re: circles

Posted by [Kevin Reardon](#) on Fri, 11 Jul 1997 07:00:00 GMT

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lady of the elves wrote:

>
> I would really like to have a circularly-filled array; if anyone has
> better knowledge, please let me know :)
> Thanks.

The most direct way get an array of distances from some central point in IDL is:

```
;for a circle centered at (150,50)  
xx = rebin(findgen(201,201) - 150,201,201)  
yy = rebin(findgen(1,201) - 50,201,201)
```

```
radial_distance = sqrt(xx^2 - yy^2)
```

```
tvsc1,radial_distance le 50 ; displays a white filled circular mask
```

The previous suggestion by Peter Suetterlin (pit@uni-sw.gwdg.de) of:

```
img = (shift(dist(X,Y),x0,y0)) LT R
```

doesn't seem to work if x0 and y0 are not equal to X/2 and Y/2 (i.e. the circle is not centered) because of wrapping problems when the array is shifted.

kevin

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