
Subject: Routine to return indices for circle in R2
Posted by [David Foster](#) on Mon, 08 Sep 1997 07:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

Has someone written, seen or heard of a routine that will return the indices of a circle within an image of given dimensions, given the radius and center coordinate of the circle? I vaguely remember seeing this in a newsgroup post some time ago.

For an image of size NX x NY, with the circle at coordinate (Cx,Cy) and radius R, I came up with:

```
indices = lindgen(long(NX)*NY)
yc = indices / NY
xc = indices - (yc * NY)
circle = where( sqrt( (xc - Cx)^2 + (yc-Cy)^2 ) le R )
```

Can anyone suggest a method that is (a) faster, (b) more clever, (c) more elegant, or (d) uses less memory. I'd be willing to settle for just one of the above!

Thanks!

Dave

--

~~~~~  
David S. Foster      Univ. of California, San Diego  
Programmer/Analyst   Brain Image Analysis Laboratory  
foster@bial1.ucsd.edu   Department of Psychiatry  
(619) 622-5892      8950 Via La Jolla Drive, Suite 2240  
La Jolla, CA 92037  
~~~~~