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Subject: Re: disk with hole

Posted by [Craig Markwardt](#) on Wed, 14 Nov 2007 16:08:36 GMT

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"jochem.verelst@gmail.com" <jochem.verelst@gmail.com> writes:

- > Hi IDL gurus,
- >
- > Has anybody an idea on how to create a disk with hole? So to say, it
- > is a circle within another circle and that surface should be filled.
- > Thanks to the great website of DF drawing 2 cricles is the easy part.
- > But filling the space in between seems to be the hard part. Anyone can
- > guide me further?

It's not that hard if you approximate a circle with a polygon.

```
IDL> th = dindgen(1001)*2d*!dpi/1000d
IDL> c = cos(th) & s = sin(th)
IDL> r1 = 1d & r2 = 2d
IDL> x = [r1*c, r2*reverse(c)]
IDL> y = [r1*s, r2*reverse(s)]
```

```
IDL> plot, [-5,5], [-5,5], /nodata
IDL> polyfill, x, y
```

Also, I think there's nothing stopping you from making this the USERSYM, and then overplotting it to your heart's content.

Good luck!  
Craig

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