
Subject: disk with hole

Posted by jochem.verelst@gmail.com on Wed, 14 Nov 2007 11:52:23 GMT

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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?

Thanks, greetzz,

Jochem

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

--

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: disk with hole
Posted by [David Fanning](#) on Wed, 14 Nov 2007 16:12:06 GMT
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Craig Markwardt writes:

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

I knew if I waited long enough, someone would come up with that polygon solution! ;-)

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")
