
Subject: Re: Idlgrsymbol size?

Posted by [David Fanning](#) on Thu, 17 May 2007 19:57:53 GMT

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adisn123@yahoo.com writes:

- > I'm trying to plot scattered points in a threed plot, but wish that
- > those scattered points are properly scaled in size relative to the
- > plot coordinate system.
- > So, if my plot coordinate goes by cm, I'd like my each data point is
- > as big as 0.1 cm in its radius, assuming a sphere point.
- > How do I scale those points in that way?

Here is an example of a 3D scatter plot in which I use the ORB object as points.

http://www.dfanning.com/tip_examples/scatter_surface.pro

The ORB object is hard to find. I located it here:

[IDL_DIR/examples/doc/objects/orb__define.pro](#)

The ORB object has a radius that you can set in the data coordinate space.

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.")

Subject: Re: Idlgrsymbol size?

Posted by [adisn123](#) on Thu, 17 May 2007 20:41:51 GMT

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On May 17, 12:57 pm, David Fanning <n...@dfanning.com> wrote:

- > adisn...@yahoo.com writes:
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The data points that I use are enormously large, so If I use 'orb'
object, it seems taking forever with my computer speed.
Is there any way to set a radius for idlgrsymbol =3 (period)?

Subject: Re: Idlgrsymbol size?

Posted by [David Fanning](#) on Thu, 17 May 2007 21:16:31 GMT

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adisn123@yahoo.com writes:

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> Is there any way to set a radius for idlgrsymbol =3 (period)?

Well, you can certainly set a "size" for the symbol,
but this probably doesn't give you what you are looking
for, as the period symbol is not a "filled" symbol. I think
you need some kind of polygon to get a 3D effect, anyway.
Maybe you could render a pyramid shape or something faster.

Cheers,

David

--

David Fanning, Ph.D.
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Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Idlgrsymbol size?

Posted by [Rick Towler](#) on Mon, 21 May 2007 23:16:44 GMT

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adisn123@yahoo.com wrote:

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```

Not in world units like you want to do. With some experimentation you could probably figure out the relationship between the SIZE keyword and

the size of the symbol on the screen but it might be easier to use something else like the orb.

You can try a couple of things to minimize your polygon count. Set the DENSITY keyword on the ORB object to a very small number, say 0.1 or smaller (if possible). You can use my platonic solids object to create a tetrahedron that gets you down to 4 polygons per point. Or you can create your own 2d symbol, but you would have to worry about the symbol's orientation relative to the viewer if you transform your axes.

[http://www.acoustics.washington.edu/~towler/programs/rhtgrps olid__define.pro](http://www.acoustics.washington.edu/~towler/programs/rhtgrps%20olid__define.pro)

-Rick
