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Subject: Re: Volume visualization starting from 2d image  
Posted by [David Fanning](#) on Mon, 26 May 2008 19:10:14 GMT  
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elias writes:

> I have the following problem I try to solve: I have a 2d image in IDL  
> (eg. data=DBLARR(100,60)), along with the position coordinates (eg.  
> x=DBLARR(100), y=DBLARR(60)). I create a color coded plot in a 2D  
> projection. This 2D image is cylindrically symmetric around the  
> vertical axis (y axis) and what I want to try is to "rotate" this  
> dataset around the y-axis and create a 3D representation of this  
> dataset (not much more information added - just for outreach  
> purposes). It should result in a torus formation.  
>  
> Any idea on how to do this, starting from my current dataset, using  
> the volume visualization capabilities of IDL?

In outline form, I would say:

1. Use MESH\_OBJ to create a cylinder.
2. Pass the vertices obtained in (1) to IDLgrPolygon to create a cylindrical polygon structure.
3. Texture map your image onto the polygon. This article might help: [http://www.dfanning.com/oographics\\_tips/imgtex.html](http://www.dfanning.com/oographics_tips/imgtex.html).
4. Display your polygon with XOBJVIEW.

Cheers,

David

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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.")

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