
Subject: Re: obtaining modified data from object graphics
Posted by [Rick Towler](#) on Tue, 25 Apr 2006 23:41:52 GMT
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You can't really do this using object graphics.

Data that is manipulated by the set and get properties exists in your object's "object space". When that object is rendered, these data are transformed into "world space" by one or more IDLgrModels and finally into "view space" by IDLgrView. The problem is that this transformed data is inaccessible from within IDL. So while you see what you want, you can't "get" it.

You need to transform your data directly. For polygonal data, VERT_T3D will do this. For volume data, maybe something like this will work:

http://www.prl.ernet.in/~shashi/idl_info/Morisset/pro/turn_3d.pro

-Rick

CD wrote:

> hello all,
>
> i was recently introduced to the object graphics capability of IDL. i
> am very much impressed with its functionality. but i am facing a small
> problem. i will try to describe it as clearly as possible.
> i have a 3 dim data which is a representation of a cube such that if a
> point is inside the cube it is 1 otherwise the value at that point is
> zero. now i load this data into myvolume using idlgrvolume and display
> it using the object graphics. now i rotate the model about [1,1,1] axis
> by say 45 deg. the result is good and what i wanted. now i want this
> modified data to be stored back into a 3d variable such that now this
> array will have the 1's and 0's acc. to the rotated cube. how do i go
> about achieving this?
> because after this is i use getproperty on myvolume it returns the same
> data which i had entered not the rotated one.
>
> thanx
>
> cheers,
> -cd
>

Subject: Re: obtaining modified data from object graphics
Posted by [David Fanning](#) on Wed, 26 Apr 2006 03:13:45 GMT

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Rick Towler writes:

> For volume data, maybe something like this will work:
>
> http://www.prl.ernet.in/~shashi/idl_info/Morisset/pro/turn_3.d.pro

Here is a recommended volume rotation algorithm:

http://www.dfanning.com/math_tips/rotvolume.html

Cheers,

David

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David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: obtaining modified data from object graphics
Posted by [CD](#) on Wed, 26 Apr 2006 18:10:07 GMT

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thnx for the help. i appreciate it...

now i understand how object graphics works. can the transformation matrix which is generated by the IDLgrModel be used explicitly on the data in IDLgrVolume in a technique similar to the one suggested by the prog. on david's site? essentially i kind of need it for a series of rotations about a weird axis.

cheers,
-cd
