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Subject: Re: Animating slicer3 output?

Posted by [David Fanning](#) on Tue, 14 May 2002 16:32:52 GMT

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Rick Matthews (matthews@wfu.edu) writes:

> I am rather new to IDL. I have generated 3-D isosurfaces  
> using Slicer3. I would like to step through one rotation angle,  
> saving each image for inclusion in a video.  
>  
> Is there a way to automate the rotate/save cycle in slicer3?  
> If not, can someone point me in another direction to achieve the  
> same result?  
>  
> I am trying to make a video showing a rotating isosurface.

Here is a little program that animates an isosurface in XInterAnimate. You can create a MPEG movie by just clicking the MPEG button on the XInterAnimate interface. Or, if you would prefer to save the frames as a series of JPEG files, you can set the JPEG keyword:

```
IDL> Rotating_Isosurface, /JPEG
```

You will need the TVRead program from my web page to run the program:

<http://www.dfanning.com/programs/tvread.pro>

Cheers,

David

```
***** *
```

```
PRO Rotating_Isosurface, JPEG=jpeg
```

```
; Set the JPEG keyword to generate JPEG output.
```

```
; Load volumetric data.
```

```
head = BytArr(80, 100, 57)  
filename = Filepath(Subdir=['examples', 'data'], 'head.dat')  
OpenR, lun, filename, /Get_Lun  
ReadU, lun, head  
Free_Lun, lun
```

```
; Set up 3D coordinate space.
```

```

d = Size(head, /Dimensions)
Scale3, XRange=[0, d[0]], YRange=[0, d[1]], ZRange=[0, d[2]]

; Create vertices and polygons describing isosurface.

Shade_Volume, head, 50, vertices, polygons, /Low

; Animate it.

XInterAnimate, Set=[256, 256, 36], /Showload
FOR j=0,35 DO BEGIN
    Scale3, XRange=[0, d[0]], YRange=[0, d[1]], ZRange=[0, d[2]], AZ=10*j
    TV, Polyshade(vertices, polygons, /T3D, XSize=256, YSize=256)
    XInterAnimate, Frame=j, Window=!D.Window

; Want to save as JPEG files?

IF Keyword_Set(jpeg) THEN BEGIN
    filename = 'isosurface_' + String(j, Format='(I3.3)') + '.jpg'
    ok = TVRead(/JPEG, Filename=filename, /NoDialog)
ENDIF
END
XInterAnimate, 50
END
*****

```

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