
Subject: Re: Animating slicer3 output?

Posted by [Rick Matthews](#) on Thu, 16 May 2002 12:48:35 GMT

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Thanks to David and Paul. I will give these a try.

Rick

David Fanning wrote:

>

> 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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> Phone: 970-221-0438, E-mail: david@dfanning.com
> Coyote's Guide to IDL Programming: http://www.dfanning.com/
> Toll-Free IDL Book Orders: 1-888-461-0155

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