
Subject: Re: screen capture of xplot3d
Posted by [penteado](#) on Fri, 24 Dec 2010 05:06:11 GMT
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On Dec 24, 2:22 am, kedmond <kedm...@gmail.com> wrote:
> Is there a function like tvrd() for xplot3d?
>
> My goal is to automatically produce an animation of a rotating object,
> saving each frame as an image or into a TIFF stack, so that I can make
> a movie to show others.
>
> I'm also interested in exporting the 3D data as a VRML file so that
> people can interact with it on the web.

It seems it would be easier with plot(), using the rotate and save methods to make tiffs, or rotate and copywindow to make the movie directly with IDLgrMPEG or IDLffMJPEG2000.

There is the IDLgrVRML class.

Subject: Re: screen capture of xplot3d
Posted by [David Fanning](#) on Fri, 24 Dec 2010 05:24:55 GMT
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kedmond writes:

> Is there a function like tvrd() for xplot3d?
>
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> saving each frame as an image or into a TIFF stack, so that I can make
> a movie to show others.

How familiar are you with object graphics? To do this automatically will take some modifications to the code. Basically, the TVRD() functionality is to use the IMAGE_DATA keyword to the object graphics window that the scene is rendered in. It might be a 10 minute job, if you understand object graphics at all. Otherwise, 10 days, probably. :-)

> I'm also interested in exporting the 3D data as a VRML file so that
> people can interact with it on the web.

VRML!? Wasn't that popular in the 1980s? There used to be a way to do that in IDL. I'd have to look it up.

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: screen capture of xplot3d
Posted by [Kenneth P. Bowman](#) on Fri, 24 Dec 2010 14:47:50 GMT
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In article
<386e0532-6b16-437a-96c8-360e26ec9f64@29g2000yqq.googlegroups.com>,
kedmond <kedmond@gmail.com> wrote:

> Is there a function like tvrd() for xplot3d?
>
> My goal is to automatically produce an animation of a rotating object,
> saving each frame as an image or into a TIFF stack, so that I can make
> a movie to show others.
>
> I'm also interested in exporting the 3D data as a VRML file so that
> people can interact with it on the web.
>
> Thanks.

If you can use the iTools for your 3-D plotting, I have some simple
routines to rotate views and capture a sequence of images.

You can also save an iTools graphic. Anyone with IDL can open it,
but it doesn't really solve the web sharing problem.

Ken Bowman

Subject: Re: screen capture of xplot3d
Posted by [kedmond](#) on Tue, 28 Dec 2010 16:34:49 GMT
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On Dec 24, 9:47 am, "Kenneth P. Bowman" <k-bow...@null.edu> wrote:
> In article
> <386e0532-6b16-437a-96c8-360e26ec9...@29g2000yqq.googlegroups.com> ,
>
> kedmond <kedm...@gmail.com> wrote:

>> Is there a function like tvrd() for xplot3d?
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> routines to rotate views and capture a sequence of images.
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> You can also save an iTools graphic. Anyone with IDL can open it,
> but it doesn't really solve the web sharing problem.
>
> Ken Bowman

iTools:

I have limited experience with iTools. But if iTools can be run from a command-line, to be automated, then I'd be happy to use iTools.

Using Plot instead:

The reason I'm not using the plot_3dbox function is because I like the 3D lighting/shading that you get with the 'orb' object type. I'd be happy to use plot_3dbox, or whatever other function, if I could recreate the cool shading and alpha-channel effects you can get with xplot3d. I really just want to make animations of xplot3d plots being rotated.

VRML:

Yeah, VRML is super old, but xplot3d can export to it. Maybe I shouldn't use it, and that's fine too. Ideally I'd create a 3D object in xplot3d that I could use in PowerPoint, or the web, or somewhere else, to share with my collaborators. It's not a big deal.

Thanks for the replies!

-Kazem

Subject: Re: screen capture of xplot3d
Posted by [Kenneth P. Bowman](#) on Thu, 30 Dec 2010 20:09:42 GMT
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In article
<c3ed5337-2ec7-49d1-ae6f-02ad0d87bbc5@39g2000yqa.googlegroups.com>,

kedmond <kedmond@gmail.com> wrote:

> I have limited experience with iTools. But if iTools can be run
> from a command-line, to be automated, then I'd be happy to use iTools.

Like all IDL commands, iTools can be run from the command line,

```
IDL> isurface, dist(50)
```

You can control them programmatically (if that is what you mean by 'from the command line'), but that is more difficult.

Next week, when our IT staff come back to work and get my web server (<http://idl.tamu.edu>) back on line, you can download `bowman_lib`, which has some examples of how to use the iTools.

Ken Bowman

Subject: Re: screen capture of xplot3d
Posted by [kedmond](#) on Fri, 31 Dec 2010 21:18:48 GMT
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Ken,

Thanks for the tip. Yeah, when I say from the command line I mean I want to be able to configure and control things without a mouse so that I can just copy-paste commands from a notes file into the CL. For example, to turn off the axes in xplot3d, you have to go to the View menu and select an Axes type from the sub-menu. Ideally, xplot3d would be like plot in that you could just define the axes type as a parameter.

-Kazem

On Dec 30, 3:09 pm, "Kenneth P. Bowman" <k-bow...@null.edu> wrote:

> In article
> <c3ed5337-2ec7-49d1-ae6f-02ad0d87b...@39g2000yqa.googlegroups .com >,
>
> kedmond <kedm...@gmail.com> wrote:
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> has some examples of how to use the iTools.
>
> Ken Bowman

Subject: Re: screen capture of xplot3d
Posted by [penteado](#) on Fri, 31 Dec 2010 21:25:46 GMT
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On Dec 31, 7:18 pm, kedmond <kedm...@gmail.com> wrote:
> Thanks for the tip. Yeah, when I say from the command line I mean
> I want to be able to configure and control things without a mouse so
> that I can just copy-paste commands from a notes file into the CL.
> For example, to turn off the axes in xplot3d, you have to go to the
> View menu and select an Axes type from the sub-menu. Ideally, xplot3d
> would be like plot in that you could just define the axes type as a
> parameter.

Those things can be done with iTools, but it will probably be easier with the new graphics (in this particular case, `plot3d()`). As I mentioned above, they have the rotate method, and the window contents can be either directly saved to files (save method) or copied to arrays (copywindow method). Or the graphics hierarchy could be retrieved and used to make a VRML file with IDLgrVRML, I suppose.

Subject: Re: screen capture of xplot3d
Posted by [kedmond](#) on Sun, 02 Jan 2011 02:36:14 GMT
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I agree, it's easier to do what I want in `plot3d.pro`, but the surface procedure that it uses to draw the plot symbols doesn't support IDL's graphical objects...unless I'm mistaken. For example, for the really nice image I can make in `xplot3d`, I do something like the following

```
oSphere1 = obj_new('orb', COLOR=coltet[*, 0], alpha_channel=alphaval)
...
oSymbol1 = obj_new('IDLgrSymbol', oSphere1)
...

xplot3d, x, y, z, symbol=[oSymbol1, oSymbol2 ...]
```

and I get the following: <http://picasaweb.google.com/kedmond/IDLImages?feat=directlink>

So, for example, it'd be nice if that group of spheres, the 'orb' object, could rotate in an animation. That's what I'm trying to do.

And I guess Ken Bowman is saying that I need to learn how to use iTools in order to be able to do this programmatically.

By the way, I really appreciate everyone's responses! Thanks.

-Kazem

On Dec 31 2010, 4:25 pm, Paulo Penteado <pp.pente...@gmail.com> wrote:

> On Dec 31, 7:18 pm, kedmond <kedm...@gmail.com> wrote:

>

>> Thanks for the tip. Yeah, when I say from the command line I mean

>> I want to be able to configure and control things without a mouse so

>> that I can just copy-paste commands from a notes file into the CL.

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