Subject: Re: rotate and transpose images in xobjviewer
Posted by Steven Houston on Tue, 03 Apr 2007 10:06:10 GMT
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Dick Jackson wrote:
> Hi vijay,
>
> "vijay" <vijayansiva@gmail.com> wrote in message
> news:1175343528.461497.166670@p15g2000hsd.googlegroups.com.. .
>> Hi, i am having a problem in rotating an image in the xobjviewer. the
>> problem is not with the rotate button but my image itself rotated and
>> transposed in the xobjviewer. So i want the image in the xobjviewer to
>> be transposed and rotated for 270 degrees. i can't able to do this
>> using the rotate command also. So tell me how to rotate and transpose
>> the image.
>
> The IDLgrImage object does not create a real 3D rotatable object, but what I
> think you want is a rectangular IDLgrPolygon object with an image as its texture
> map. (I'm guessing here, because you didn't give a lot of detail on what you had
> tried so far)
>
>
> ;; Get an image
>
> file = Filepath('rose.jpg', Subdir=['examples', 'data'])
> Read_JPEG, file, image
>
> ;; Make an IDLgrImage object
>
> oImage = Obj_New('IDLgrImage', image)
> XObjView, oImage, Title='oImage' ; Cannot really rotate the image
>
> ;; Make an IDLgrPolygon object with the image as its texture map
>
> oImage -> GetProperty, Dimensions=dims ; [width, height]
> oPoly1 = Obj_New('IDLgrPolygon', $
> [[0,0,0],[dims[0],0,0],[dims[0],dims[1],0],[0,dims[1],0]], $
> Color=[255,255,255], Texture_Map=oImage, $
> Texture_Coord=[[0,0],[1,0],[1,1],[0,1]])
> XObjView, oPoly1, Title='oPoly1', XOffset=300
>
> ;; Try with no lighting to avoid change in shading when rotated
>
> oHiddenLight = Obj_New('IDLgrLight', Type=0, Color=[255,0,0], /Hide)
> XObjView, oPoly1, Title='oPoly1 with no lighting', XOffset=600, $
> Stationary=oHiddenLight
>
> ;; Create polygon with coordinates for polygon rotated 270 degrees

>
> oPoly2 = Obj_New('IDLgrPolygon', $
> [[0,dims[0],0],[0,0,0],[dims[1],0,0],[dims[1],dims[0],0]], $
> Color=[255,255,255], Texture_Map=oImage, $
> Texture_Coord=[[0,0],[1,0],[1,1],[0,1]])
> XObjView, oPoly2, Title='oPoly2 with no lighting', XOffset=600, YOffset=300, $
> Stationary=oHiddenLight
>
>
> There are other subtle issues with image row order settings (the Order property
> to IDLgrImage) and resampling of image pixels (see the Texture_Map property of
> IDLgrPolygon), but is this what you were looking for?
>
> Cheers,
> -Dick
>
> --
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>
>

Hi,

As of IDL 6.2 you can apply 3D transforms to an IDLgrImage, but you need
to set TRANSFORM_MODE=1 (the default is to use the 2D transform mode for
backwards compatibility).

So in 6.2 and later you can do:

```
;;  Get an image
file = Filepath('rose.jpg', Subdir=['examples', 'data'])
Read_JPEG, file, image

;;  Make an IDLgrImage object
oImage = Obj_New('IDLgrImage', image, TRANSFORM_MODE=1)

;; Create a model to apply the 270 degree rotation
oModel = Obj_New('IDLgrModel')
oModel->Rotate, [0,0,1], 270
oModel->Add, oImage

XObjView, oModel, Title='oImage'
```

Cheers,
Steve.