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Subject: Re: Function Graphics overlaid objects on image()

Posted by [chris\\_torrence@NOSPAM](#) on Thu, 26 Feb 2015 22:17:22 GMT

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On Thursday, February 26, 2015 at 6:26:34 AM UTC-7, Helder wrote:

> Hi,

> I'm working with function graphics and I'm overlaying objects (lines, polygons) on images. I would like these objects to be linked to the underlying image (pinned if you wish), unless the user explicitly moves these objects with the mouse.

>

> I would like to avoid having to handle events from the object on my own (pick up event, process, send to all overlaid objects). I have the feeling that there might be an easy solution...

>

> I have so far tested three conditions (the test code is below):

> Data coordinates: in this case the overlays are anchored to the image (if the image is made smaller or moved, the objects are rescaled along). However, it is not possible to move the polylines. The only way is by clicking on the end-points and changing the line length and angle. However, after this clicking on the image results in a rotation in space of the image... very inconvenient

>

> Norm or relative coordinates: in this case the objects are unfortunately not anchored to the underlying image.

>

> Is there a trivial solution to this problem that I haven't picked up?

>

> Thanks,

> Helder

>

>

> pro testFGObjects

> ;data coordinates

> w1 = window(dimensions=[500,500], window\_title='Data coordinates')

> i1 = image(dist(500), current=w1)

> scale = [i1.xrange[1]-i1.xrange[0],i1.yrange[1]-i1.yrange[0]]

> l1 = polyline([0.25,0.75]\*scale[0],[0.25,0.75]\*scale[1], /data, target=i1)

>

> ;norm coordinates

> w2 = window(dimensions=[500,500], window\_title='Norm coordinates')

> i2 = image(dist(500), current=w2)

> l2 = polyline([0.25,0.75],[0.25,0.75], /norm, target=i2)

>

> ;relative coordinates

> w3 = window(dimensions=[500,500], window\_title='Relative coordinates')

> i3 = image(dist(500), current=w3)

> l3 = polyline([0.25,0.75],[0.25,0.75], /relative, target=i3)

>

> ;test widget interaction:

> ;data coordinates: it is not possible to move the line, only to change

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> ;           its size by moving the edges. After this the image
> ;           becomes 3d. The line rescales/moves with the underlying image
> ;norm coordinates: line responds to movements with the mouse. But the line
> ;           does not move when rescaling/moving the underlying image
> ;relative coordinates: same as norm coordinates
> end
```

Hi Helder,

You can see my reply to your other post. Right now, there are a couple of solutions for polylines - one is to hack your code to fix the bug. The other solution is to use norm or relative coordinates, but then override the event handler and do the scaling yourself. This is obviously more work.

-Chris

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