Subject: Re: Problem with IDLgrROI and normalization.
Posted by davidf on Fri, 25 Feb 2000 08:00:00 GMT
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I wrote earlier today:

> I don't think there is anything wrong with *your* code.
> I believe you have discovered a bug in the IDLgrROI
> code. :-)

RSI confirms my suspicion. Here is the message
I received late today:

> Yes, this is a bug in 5.3. But, is has been fixed and
> will be released with 5.4. Essentially, the xcoord_conv,
> etc. keywords are being ignored which is why the roi
> is not being drawn correctly.

Cheers,

David

--
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Subject: Re: Problem with IDLgrROI and normalization.
Posted by davidf on Fri, 25 Feb 2000 08:00:00 GMT
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Erik Hummel (erik.hummel@philips.com) writes:

> In the program added an IDLgrPolyLine and IDLgrROI object are drawn. The
> results of the
> program is that only the IDLgrPolyLine is drawn. Important is that
> normalized coordinates are used,
> otherwise both objects are correctly drawn.
> What is wrong here?

I don't think there is anything wrong with *your* code.
I believe you have discovered a bug in the IDLgrROI
code. :-)

Here is an example. Two windows, produced with identical

code. However, the viewport rectangle in one window uses
a "device" coordinate system (0 to 500), whereas the
viewport rectangle in the second window uses a
"normalized" coordinate system (0 to 1). The ROI appears
in the first window, but not in the second.

I'll report this to RSI and see what they have to say.

Cheers,

David
--
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```
FUNCTION Normalize, range, Position=position

On_Error, 1
IF N_Params() EQ 0 THEN Message, 'Please pass range vector as argument.'

IF (N_Elements(position) EQ 0) THEN position = [0.0, 1.0] ELSE $
   position=Float(position)
range = Float(range)

scale = [((position[0]*range[1])-(position[1]*range[0])) / $
   (range[1]-range[0]), (position[1]-position[0])/(range[1]-range[0])]

RETURN, scale
END


PRO ROI_TEST

; Draw using viewport with device coordinates.


   top_wid  = Widget_Base(XSize = 500, YSize = 500, Title='Device
Coordinates')

   draw_wid =  Widget_Draw(top_wid, XSize = 500, YSize = 500,$
     Graphics_Level = 2, Retain=2)

   Widget_Control, top_wid, /REALIZE;
   Widget_Control, draw_wid, Get_Value = window
```

```
    view = Obj_New('IDLgrView', Color = [100, 100, 100])
    view->SetProperty,Viewplane_rect = [0,0,500,500]

    model = Obj_New('IDLgrModel')
    view->Add, model

    ; The IDLgrROI Object.
    gfxROI = OBJ_New('IDLgrROI', [50, 400, 400, 50, 50], $
       [50, 50, 400, 400, 50], Color=[255,255,0])
    model->Add, gfxROI
    gfxROI->GetProperty, xrange=xrange, yrange=yrange
    Print, 'XRange for Device Coordinates: ', xrange
    Print, 'YRange for Device Coordinates: ', yrange
    xs = Normalize(xrange, Pos=[50,400])
    ys = Normalize(yrange, Pos=[50,400])
    gfxROI->SetProperty, XCoord_Conv = xs, YCoord_Conv = ys

    window->Draw, view

; Draw using veiwport with normalized coordinates.

    top_wid  = Widget_Base(XSize = 500, YSize = 500, $
      XOffset=500, YOffset=0, Title='Normalized Coordinates')

    draw_wid =  Widget_Draw(top_wid, XSize = 500, YSize = 500,$
      Graphics_Level = 2, Retain=2)

    Widget_Control, top_wid, /REALIZE;
    Widget_Control, draw_wid, Get_Value = window


    view = Obj_New('IDLgrView', Color = [100, 100, 100])
    view->SetProperty,Viewplane_rect = [0,0,1,1]

    model = Obj_New('IDLgrModel')
    view->Add, model

    ; The IDLgrROI Object.
    gfxROI = OBJ_New('IDLgrROI', [50, 400, 400, 50, 50],$
      [50, 50, 400, 400, 50], Color=[255,255,0])
    model->Add, gfxROI
    gfxROI->GetProperty, xrange=xrange, yrange=yrange
    Print, 'XRange for Normalized Coordinates: ', xrange
    Print, 'YRange for Normalized Coordinates: ', yrange
    xs = Normalize(xrange, Pos=[0.1,0.8])
    ys = Normalize(yrange, Pos=[0.1,0.8])
```

```
    gfxROI->SetProperty, XCoord_Conv = xs, YCoord_Conv = ys

    window->Draw, view
end
```