Subject: Problem with IDLgrROI and normalization.
Posted by Erik Hummel on Fri, 25 Feb 2000 08:00:00 GMT
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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'll work with IDL5.3 on a PC.
Regards,
Erik

```
Function _Normalize, range, Position=position
   scale = [((position[0]*range[1])-(position[1]*range[0])) / $
      (range[1]-range[0]),
(position[1]-position[0])/(range[1]-range[0])]
   return, scale
end

;    Calculate the normalization vector of pixel coordinates to
normalized
;    coordinates.
;
Pro Normalization, Region = region, Xs = xs, Ys = ys
   pos = [-1.0, -1.0, 1.0, 1.0]
   xs = _Normalize([0, region[0]], Position=[pos[0], pos[2]])
   ys = _Normalize([0, region[1]], Position=[pos[1], pos[3]])
end


; Main
;
; With Object Graphics a IDLgrPolyLine and IDLgrROI is drawn.
; Use are normalized coordinates.
;

   top_wid  = Widget_Base(XSize = 500, YSize = 500)

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

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

```
   view = Obj_New('IDLgrView', Color = [0, 0, 0])
   view->SetProperty, Location = [0, 0],  Dimensions = [500, 500],
Viewplane_rect = [-1.0, -1.0, 2.0, 2.0]

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

   ; Calculate the normalization vectors for conversion
   ; of pixel coordinates to normalized units.
   Normalization, Region = [500, 500], Xs = xs, Ys = ys

   ; The IDLgrPolyLine Object.
   gfxPL = OBJ_New('IDLgrPolyLine', Color = [255, 0, 0])
   model->Add, gfxPL
   gfxPL->SetProperty, Data = [[200, 200, 0], [400, 400, 0]]
   gfxPL->SetProperty, XCoord_Conv = xs, YCoord_Conv = ys

   ; The IDLgrROI Object.
   gfxROI = OBJ_New('IDLgrROI', Color = [255, 255, 255])
   model->Add, gfxROI
   gfxROI->SetProperty, Data = [[50, 400, 0], [400, 50, 0]]
   gfxROI->SetProperty, XCoord_Conv = xs, YCoord_Conv = ys

   window->Draw, view
end
```