Subject: Clipping IDLgrPolyLine objects?
Posted by dEdmundson on Thu, 17 Dec 1998 08:00:00 GMT
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I've created my own Plot2D object that contains axes and
any number of line plots. The user sets the axes range
via a keyword parameter. Plots are then added via an
object method, e.g.

```
p = Obj_New('Plot2D', xrange=[0.0,50.0], yrange=[-0.5,0.5])
x=findgen(100)
p->addplot,x,sin(x)
```

The problem is that the polyline object is not clipped to
the box defined by the Plot2D range. If x spans a larger
range (as it does above), the line crosses the boundary.
While I can deal with clipping at the x endpoints easily
enough, I can't think of a simple way to clip pieces of
the polyline that go over the top or bottom. Is there
a simple method of clipping polylines?

Cheers,
Darran.

Subject: Re: Clipping IDLgrPolyLine objects?
Posted by Struan Gray on Fri, 18 Dec 1998 08:00:00 GMT
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dEdmundson@Bigfoot.com wrote in message

> ...Is there a simple method of clipping polylines?

Put them in their own IDLgrView object, and set that view's
location, dimension and viewplane rectangle properties so that it
matches the plotting area in both device and real-world coordinates.
Then put the axes, annotations, etc in a second, larger view object
which encloses and overlays the first. Put both views into an
IDLgrScene in the order given above so that annotations overlay the
plot and not vice versa, and set the second view to be transparent so
that it doesn't erase the first.

Struan

Subject: Re: Clipping IDLgrPolyLine objects?
Posted by Mark Hadfield on Fri, 18 Dec 1998 08:00:00 GMT
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dEdmundson@Bigfoot.com wrote in message <75agu3$74b$1@nnrp1.dejanews.com>...
> ...Is there
> a simple method of clipping polylines?

Draw something in front of it!

I have found the simplest way of controlling clipping/overlap in Object Graphics is to use vertical separation. The smallest vertical separation recognised by IDL for this purpose is equal to the distance between the view's front and rear clipping planes divided by 2^16.

Eg see the Mask method in

http://katipo.niwa.cri.nz/~hadfield/gust/software/idl/mghgrg raph__define.pro

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