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Subject: Re: Resizeable Graphics window

Posted by [David Fanning](#) on Thu, 17 Feb 2011 21:13:17 GMT

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wlandsman writes:

> Another resizeable window question:

>

> Do device coordinates make any sense in a resizeable window (when the size of your "device" is always changing)?

>

> Below I give a test program that displays error bars, but first converts the data to device units. It works fine in a normal window, but if I create a resizeable window (i.e. test,/window) the lines are plotted incorrectly.

>

> In this case, the use of device coordinates is perverse, but they are sometimes useful for "ornamental" figures. For example, setting the size of an arrow or the "hat" on an error bar to one-fiftieth of the screen size.

The problem here is that cgWindow is "hiding" itself from the rest of IDL. That is to say, you are going to have to go to some trouble to write into a cgWindow graphics window accidentally. This is probably why you can't calculate the device coordinates correctly. The "current" graphics window is not the cgWindow graphics window when you are doing the calculations. (Although it probably looks like it might be.)

To do the calculations properly, you are going to have to make the cgWindow graphics window the "current" graphics window, do the calculations based on that window, add your commands, etc.

```
cgWindow
WSet, cgQuery(/Current)
deviceCoords = Convert_Coord(dataCoords, /To_Device)
etc.
```

Maybe cgWindow needs a CoordConvert method. Let me give this some thought. This would make it possible to know where you are in the window, so we could report it. But, again, we are going in the direction of Coyote Graphics 2.0.

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

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