
Subject: Re: the sky is falling down again
Posted by [JD Smith](#) on Wed, 31 Jan 2007 20:15:14 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Wed, 31 Jan 2007 11:52:06 -0700, R.G. Stockwell wrote:

Bob C. offers a good case where this could actually get you. Imagine a free form plotting widget which allows you to zoom in arbitrarily. Now imagine a very irregular data set being plotting, with spacings along the abscissa down at the 10^{-7} range, and up to 10. Zooming in to very small ranges will cause this bug to bite, if you simply replot the entire data set without trimming.

```
a=(b=[indgen(10)*1D-7,5,6,10.])  
window,xsize=800,ysize=300  
plot,a,b,PSYM=-4,XRANGE=[0.,1.e-6]
```

I'm surprised they round trip the plotting code through device (integer) coordinates in this way first, rather than sticking with double for all plot layout calculations until the very last stage, at which point they could detect and clip off floating numbers that are out of range in device coordinates system. Seems like asking for trouble.

JD
