Subject: Re: rescaling an image
Posted by marc on Fri, 06 Aug 1993 08:07:00 GMT
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In article <23p4il$jic@senator-bedfellow.MIT.EDU>, jabarone@athena.mit.edu (John A Barone) writes:
|> Hi,
|>
|> I'm trying to view a 3-D image in two different windows of two
|> different sizes. I would like the image to look aproximately the
|> same in both windows. The problem is that the two windows are
|> different sizes (specifically 608x486 and 576x792). Obviously when
|> I plot the data using SURFACE the results are quite different in each
|> window. I've been trying to fool around with the POSITION key word to
|> scale the plot so that it looks the same in both windows, but I haven't
|> come up with any satisfactory results. Does anyone know of a way to do this?
|> Any help would be greatly appreciated.
|>
|> Thanks in advance.
|>
|>
|> John Barone
|> jabarone@athena.mit.edu
|>
|>

--

You weren't specific enough about how different they looked, and what was
wrong, ie. what you want to fix about them.

If the problem is that one window has height/width ratio = 1.251, while
the other has ratio = .727, I think that !P.REGION is the right variable
to fart with.

Assuming you want the second to be like the first, and that "look
like" really means has same plotsize ratio, do the following:

```
;Backup previous region setting

tempRegion = !P.Region


;  draw the first plot in its window. Then get view sizes

dx1 = !D.X_Vsize
```

```
dy1 = !D.Y_Vsize
Ratio1 = float(!D.X_Vsize) / !D.Y_Vsize


;  Make new window and get new sizes, dx2, dy2, Ratio2, then

dx2New = dx2
dy2New = float( dx2 ) / ratio1

If dy2New GT dy2 Then Begin
 dx2New = dy2 * ratio1
 dy2New = dy2
Endif


normSizeX = float( dx2New ) / dx2
normSizeY = float( dy2New ) / dy2

!P.Region =  [ 0.5 - normSizeX/2., 0.5 - normSizeY/2., $
    0.5 + normSizeX/2., 0.5 + normSizeY/2.  ]

;  then plot in new window

!P.Region = tempRegion
```

This should work. You will have then to fart around with charsize, and ticklen, and all the other junk you put on the plots, because all this will probablyhave to be scaled to really make the second look like the first. Hope this helps.

M

Marc Day, graduate student
Institute of Plasma Fusion Research
44-139 Engineering IV
University of California
Los Angeles, CA 90024-1597
Internet: day@fusion.ucla.edu
...surf in peace, with your best friends
