
Subject: Re: Q: square plots in IDL
Posted by [bowman](#) on Mon, 28 Nov 1994 14:46:19 GMT
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In article <3bc67s\$6em@info.estec.esa.nl>, gvacanti@ests2.estec.esa.nl
(Giuseppe Vacanti) wrote:

> Hello-
>
> I would like to plot data so that the aspect ratio of the plot is
> equal to 1 (a circle would actually be a circle on paper, and not
> an ellipse, as it is in my IDL documentation). I have played with
> various key-words but I don't seem able to get it right.
>
> Any input is welcome.
> Thanks,

This works for me:

```
PRO SET_ASPECT, aspect, MARGIN = margin
```

```
; This program sets the plot position, !P.POSITION  
; to ensure the desired aspect ratio for the final  
; plot with a margin on each side.
```

```
;Find the aspect ratio of the current window  
daspect = FLOAT(!D.Y_SIZE)/FLOAT(!D.X_SIZE)  
IF NOT KEYWORD_SET(margin) THEN margin = 0.05
```

```
IF(aspect LE daspect) THEN BEGIN  
  x0 = margin  
  y0 = 0.50 - (0.5 - margin)*(aspect/daspect)  
  x1 = 1.0 - margin  
  y1 = 0.50 + (0.5 - margin)*(aspect/daspect)  
ENDIF ELSE BEGIN  
  x0 = 0.50 - (0.5 - margin)*(daspect/aspect)  
  y0 = margin  
  x1 = 0.50 + (0.5 - margin)*(daspect/aspect)  
  y1 = 1.0 - margin  
ENDELSE  
!P.POSITION = [x0, y0, x1, y1]  
  
RETURN  
END
```

Call it with aspect = 1.0. You can vary the margin as you wish.

Ken Bowman

P.S. As always, bug reports welcome.

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