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Subject: Re: PLOT keywords vs System Variables  
Posted by [zawodny](#) on Mon, 19 Apr 1993 12:45:54 GMT  
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In article <1qmd1hINnc6o@golem.wcc.govt.nz> hadfield\_m@kosmos.wcc.govt.nz writes:

```
>
> Consider the following
>
> plot,indgen(10)
>
> As you'd expect, a graph of a straight line appears on the graphics output
> device. But this:
>
> plot,indgen(10),position=!P.position
>
> gives a blank screen and the message:
>
> % PLOT: Data coordinate system not established.
> % Execution halted at $MAIN$ (PLOT).
>
> Just to make sure there's nothing strange about the setting of !P.position
> system variable we type:
>
> help,!P.position & print,!P.position
> <Expression>  FLOAT    = Array(4)
>  0.000000    0.000000    0.000000    0.000000
>
```

But this is strange! You have asked PLOT to draw a plot with dimensions of zero. PLOT has to do some division by zero to set up the coordinate system. My understanding is that if plot goes off and finds a !p(x or y).aaaa system variable and finds it filled with zeros or null stings then it will use some default value. When you specify a keyword though, IDL says "Hey, this guy must know what he is doing" and uses it directly (no checking whether to use defaults).

I do agree though that the behavior you would like to see should be the way that it works. It would make a lot of programs easier to write. But for now that is the way it is.

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