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Subject: System Variable Behavior Changed in IDL 6.0  
Posted by [David Fanning](#) on Thu, 11 Mar 2004 05:32:23 GMT  
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Folks,

I wanted to display some images today in a !P.MULTI situation. It used to be that my TVIMAGE program could handle !P.MULTI events automatically. (Don't try this at home with TV.) But this appeared to be broken in IDL 6.0. No !P.MULTI behavior at all!

I traced the problem to a change in how system variables behave in IDL 6.0. Here is a sequence of plots in IDL 5.6. Notice now the !X and !Y window fields update the plot location as you go.

```
IDL> Print, !Version
{ x86 Win32 Windows Microsoft Windows 5.6 Oct 26 2002      32      64}
IDL> !P.Multi=[0,2,3]
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
   0.0823579  0.703035  0.475299  0.981823
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
   0.582358  0.703035  0.975299  0.981823
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
   0.0823579  0.369702  0.475299  0.648490
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
   0.582358  0.369702  0.975299  0.648490
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
   0.0823579  0.0363686  0.475299  0.315157
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
   0.582358  0.0363686  0.975299  0.315157
```

Here is the same sequence of commands in IDL 6.0. No updating of the system variables. :-(

```
IDL> print, !Version
{ x86 Win32 Windows Microsoft Windows 6.0 Jun 27 2003      32      64}
IDL> !P.Multi=[0,2,3]
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
   0.150000  0.125000  0.950000  0.950000
```

```
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
    0.150000   0.125000   0.950000   0.950000
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
    0.150000   0.125000   0.950000   0.950000
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
    0.150000   0.125000   0.950000   0.950000
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
    0.150000   0.125000   0.950000   0.950000
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
    0.150000   0.125000   0.950000   0.950000
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
    0.150000   0.125000   0.950000   0.950000
IDL> plot, findgen(11)
IDL> print, !X.Window[0], !Y.Window[0], !X.Window[1], !Y.Window[1]
    0.150000   0.125000   0.950000   0.950000
```

Is this a Windows thing? Collecting data for a call to RSI. :-)

Cheers,

David

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