
Subject: Re: Multi Plot and OverPlot

Posted by [Ken Knighton](#) on Thu, 04 Jan 1996 08:00:00 GMT

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chs11@bonjour.cc.columbia.edu (Carl H Sayres) wrote:

> In article <4cff1o\$fkj@mojo.eng.umd.edu>,

> Sanjay K <sanjay@windvane.umd.edu> wrote:

>>

>> I have two plots in a window, and I want to overplot

>> on each of them individually. Is there a way to do this

>> or am I wasting my time?.

>

> Each section of a multi-page window behaves like an individual plotting

> device. So for a two plot page,

>

> plot(...)

> oplot(...)

> oplot(...)

> plot(...)

> oplot(...)

> oplot(...)

>

> should do what you are asking. I don't believe that you can oplot

> to the previous plot once you've made the second plot call, though.

> I'd be happy if someone could demonstrate that I'm wrong about that.

>

Try:

```
!p.multi=[0,2,0,0,0]
```

```
sx=lx & sy=ly & sz=lz & sp=lp      ;Save to restore later on
```

```
plot,...
```

```
sx1=lx & sy1=ly & sz1=lz & sp1=lp   ;Save state of first plot
```

```
plot,...
```

```
sx2=lx & sy2=ly & sz2=lz & sp2=lp   ;Save state of second plot
```

```
!x=sx1 & !y=sy1 & !z=sz1 & !p=sp1   ;Restore context of first plot
```

```
oplot,...
```

```
oplot,...
```

I think that all you really need to save is !x.s, !y.s, and !p.clip to make this work, but I make it a practice of saving everything to prevent any problems.

When a plot is produced, a data coordinate system is established and the factors to convert between the data coordinate system and normalized coordinates is stored in the !x.s and !y.s arrays. The oplot command uses these values to plot the data over the current plot. When a

multiple plot is produced, the last plot command given is what sets up the !x.s and !y.s (and !z.s) vectors. This means that further oplot commands will be over the last plot produced unless these vectors are reset to values for a prior plot.

The !p.clip vector is set to contain the device coordinates of a clipping window that prevents data that maps outside of this window from being drawn, therefore it must be changed from one window from the next. You can also set !p.noclip=1 to prevent clipping from occurring.

I hope this helps.

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