Subject: Re: Plotting to more than one window Posted by David Fanning on Fri, 21 Feb 2003 17:58:36 GMT View Forum Message <> Reply to Message

Matt Feinstein (notspecified@dev.null) writes:

- > I'm trying to plot data alternately, back and forth, to more than one
- > window, and have discovered, to my horror, that OPLOT uses the
- > coordinate conversion parameters for the -last- 'PLOT' procedure,
- > regardless of what the current window you're plotting in happens to
- > be. I can think of various messy and unpleasant ways to get the
- > plotting coordinate parameters I want in the windows I want, when I
- > want them-- but it would be nice if there was a neat and pleasant way
- > to do it-- is there?

Do you mean without using an object? Then, no, there is no neat and pleasant way to do it. :-)

The messy way, of course, is just to save the appropriate system variables:

```
Window, 1
Plot, data
p1 = !P
x1 = !X
y1 = !Y
z1 = !Z
m1 = !Map
Window, 2
Plot, moredata
p2 = !P
x2 = !X
y2 = !Y
z2 = !Z
m2 = !Map
```

Then, when you want to overplot, restore everything:

```
WSet, 1
!P = p1
!X = x1
!Y = y1
!Z = z1
!Map = m1
OPlot, somedataOn1
```

Cheers,

## David

P.S. I can think of several interesting ways to do this with an object. And it would be neat and pleasant, but you would have to remember to destroy the object when you were done with it. If your mama trained you right, this probably wouldn't be a problem. :-)

--

David W. Fanning, Ph.D.

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Coyote's Guide to IDL Programming: http://www.dfanning.com/

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Plotting to more than one window Posted by notspecified on Fri, 21 Feb 2003 18:41:28 GMT View Forum Message <> Reply to Message

On Fri, 21 Feb 2003 10:58:36 -0700, David Fanning <david@dfanning.com> wrote:

```
> Do you mean without using an object? Then, no, there
> is no neat and pleasant way to do it. :-)
> The messy way, of course, is just to save the appropriate
> system variables:
>
   Window, 1
>
   Plot, data
   p1 = !P
>
   x1 = !X
   v1 = !Y
   z1 = !Z
>
   m1 = !Map
>
>
   Window, 2
>
   Plot, moredata
>
   p2 = !P
>
   x^2 = !X
   v2 = !Y
   z^2 = !Z
>
   m2 = !Map
>
```

> Then, when you want to overplot, restore everything:

```
> WSet, 1
> !P = p1
> !X = x1
> !Y = y1
> !Z = z1
> !Map = m1
> OPlot, somedataOn1
> Cheers,
```

Neat-- I hadn't realized I could change 'system' variables like that. Opens the door to all sorts of mischief.

Matt Feinstein does not include his email address in the text of usenet postings.

-----

Harvard Law of Automotive Repair: Anything that goes away by itself will come back by itself.

Subject: Re: Plotting to more than one window Posted by btupper on Sat, 22 Feb 2003 01:49:40 GMT View Forum Message <> Reply to Message

On Fri, 21 Feb 2003 18:41:28 GMT, notspecified@dev.null (Matt Feinstein) wrote:

```
> On Fri, 21 Feb 2003 10:58:36 -0700, David Fanning <david@dfanning.com>
> wrote:
>
>> Do you mean without using an object? Then, no, there
>> is no neat and pleasant way to do it. :-)
>> snipped
> Neat-- I hadn't realized I could change 'system' variables like that.
> Opens the door to all sorts of mischief.
> Hi.
```

Before computers had keyboards and monitors, Liam Gumley had prepared a neato solution to this multiple 'frames' problem using an IDL dodad called handles (I think these are widget IDs.) It is a really slick setup that allows you to save a 'frame' (e.g. the plotting parameters, etc.) for a window, and then come back to it with having to replot. You could move back and forth among different frames. I don't think

these tools (sf.pro, af.pro, lf.pro, bf.pro) are at www.gumley.com. Try a google search.

I have adapted this idea to an object based frame tool that can be used from the command line or within an application. Like Liam's setup, it is for direct graphics routines. Each frame is stored in a container and can be retrieved by name or position index. Frames can be accessed randomly. It saves the system variables (and other things) as David describes. It is available at www.tidewater.net/~pemaquid

Cheers, Ben

Subject: Re: Plotting to more than one window Posted by R.Bauer on Sat, 22 Feb 2003 14:32:14 GMT View Forum Message <> Reply to Message

## David Fanning wrote:

```
> Matt Feinstein (notspecified@dev.null) writes:
>> I'm trying to plot data alternately, back and forth, to more than one
>> window, and have discovered, to my horror, that OPLOT uses the
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>> plotting coordinate parameters I want in the windows I want, when I
>> want them-- but it would be nice if there was a neat and pleasant way
>> to do it-- is there?
> Do you mean without using an object? Then, no, there
 is no neat and pleasant way to do it. :-)
>
>
  The messy way, of course, is just to save the appropriate
 system variables:
>
>
    Window, 1
>
    Plot, data
>
    p1 = !P
>
    x1 = !X
    y1 = !Y
>
    z1 = !Z
    m1 = !Map
>
```

There are two routines of our library which saves and restores these system

variables.

http://www.fz-juelich.de/icg/icg-i/idl\_icglib/idl\_source/idl \_html/dbase/download/savesysvar.tar.gz http://www.fz-juelich.de/icg/icg-i/idl\_icglib/idl\_source/idl \_html/dbase/download/restsysvar.tar.gz

regards

Reimar

be a problem. :-)

>

\_\_

Forschungszentrum Juelich email: R.Bauer@fz-juelich.de http://www.fz-juelich.de/icg/icg-i/

\_\_\_\_\_\_

a IDL library at ForschungsZentrum Juelich http://www.fz-juelich.de/icg/icg-i/idl\_icglib/idl\_lib\_intro. html

Subject: Re: Plotting to more than one window Posted by Pavel Romashkin on Mon, 24 Feb 2003 19:19:44 GMT View Forum Message <> Reply to Message

I use DISPLAY to do this. It is object based but you don't have to think of it this way - it is command-line driven. You can specify to keep the coordinate system for each Display window, and you can have as many open at the same time as your screen will fit. Plus, you get legends, colors, mouse-click for plot deletion, moveable text labels, and ROI.

Disclaimer: 2D plotting only.

http://www.ainaco.com/idl/idl\_library/display.html

Cheers, Pavel

Matt Feinstein wrote:

>

> Hi all--

>

- > I'm trying to plot data alternately, back and forth, to more than one
- > window, and have discovered, to my horror, that OPLOT uses the
- > coordinate conversion parameters for the -last- 'PLOT' procedure,
- > regardless of what the current window you're plotting in happens to
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- > -----
- > Harvard Law of Automotive Repair: Anything that goes away
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