
Subject: Re: function graphics curiosity? bug?

Posted by [Markus Schmassmann](#) on Tue, 12 Dec 2017 10:37:33 GMT

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On 12/12/2017 02:44 AM, Jonathan wrote:

> Have a look at the following code:

```
>
> x = findgen(128)
> y = 1.0 + 0.1*randomn(seed,128)
> y2 = 1.0 + 0.2 randomn(seed,128)
> b = widget_base( xsize=480, xoffset=940, ysize=360, yoffset=0 )
> w = widget_window( b, x_scroll_size=470, y_scroll_size=350 )
> widget_control, b, /realize
> widget_control, w, get_value=d
> p = plot( x, y, current=d, xstyle=2, ystyle=2 )
> p2 = plot( x, y2, color='red', linestyle="", symbol='+', current=d, /overplot )
> d.uvalue = { x:x, y:y, y2:y2, b:b, p:p, p2:p2 }
> end
>
> This creates a widget window, w, under a base, b, and then places
> two overlapping plots within that window. Now, if the data changes for the
> second plot, I would like to do the following steps:
>
> y3 = 1.0 + 0.2 randomn(seed,128)      ; new data
> p2.delete                             ; erases the p2 data in the plot
> p2 = plot( x, y3, color='red', , linestyle="", symbol='+', current=d, /overplot )
> d.uvalue.p2 = p2      ; store the plot identifier in the window's uvalue structure
>
> The last line generates the following error message:
>      % Attempt to store into an expression: Structure reference.
>      % Execution halted at: $MAIN$
> What has happened is that IDL forgot the type of d.uvalue.p2, so
> when I try to put a new (identical) p2 there, it rejects the attempt.
>
> This turns out to be a huge hassle for me.
> My solution is a kludge, which is to create a new structure for
> d.uvalue and replace the whole thing, rather than just one element.
>
> Is there a better, simpler way?
```

; a simpler way:

```
p2.putData, y3
```

; ps: a '*' is missing in the definition of y2 & y3

```
y2 = 1.0 + 0.2 * randomn(seed,128)
```

```
y3 = 1.0 + 0.2 * randomn(seed,128)
```

```
;      |
```

Directly updating the values is also much faster than creating a new plot. I hope this help,

Markus
