
Subject: Re: usersym keywords -- why?

Posted by [David Fanning](#) on Tue, 11 Nov 2008 02:19:15 GMT

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Christopher Thom writes:

```
> Debugging some code today, I discovered what I would consider to be
> strange behaviour. Although...maybe this is a "feature". Consider the
> following:
>
> usersym, [ -1, 0, 1, -1 ], [ 1, -1, 1, 1 ], thick = 20
> plot, findgen(10), ps=8, thick = 2
>
> Is there any reason why usersym accepts thickness and color keywords? And,
> more importantly, why the keywords passed to plot/oplot don't over-ride
> them?
>
> I was using some symbols from the awesome symcat() library [thanks david!]
> when I discovered this. The only workaround I could come up with was to
> extend symcat() to accept and pass _extra keywords to usersym...which now
> gives me the even more confusing:
>
> plot, findgen(10), ps = symcat(11, thick = 20), thick = 2
>
> If anyone can see a sane or (better!) elegant solution to the thickness
> madness I've been having all afternoon, I'd love to hear of it.
```

I can't really make out what you think the problem is.
I think IDL is doing exactly the right and expected thing
here: if I make a user symbol, I don't want someone outside
messing around with it.

Why did you have to extend SYMCAT? It already takes the THICK
keyword.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: usersym keywords -- why?

Posted by [R.Bauer](#) on Tue, 11 Nov 2008 08:57:59 GMT

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David Fanning schrieb:

> Christopher Thom writes:

>

>> Debugging some code today, I discovered what I would consider to be
>> strange behaviour. Although...maybe this is a "feature". Consider the
>> following:

>>

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> here: if I make a user symbol, I don't want someone outside

> messing around with it.

>

> Why did you have to extend SYMCAT? It already takes the THICK
> keyword.

>

> Cheers,

>

> David

>

Just a quick question why isn't it passed by _EXTRA ?

Reimar

Subject: Re: usersym keywords -- why?

Posted by [David Fanning](#) on Tue, 11 Nov 2008 13:28:39 GMT

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Reimar Bauer writes:

> Just a quick question why isn't it passed by `_EXTRA` ?

Oh, ok, *now* I see the point of that discussion yesterday. Humm. Don't know. Let me go get some coffee and think about it some. :-)

Cheers,

David

--

David Fanning, Ph.D.

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Subject: Re: usersym keywords -- why?

Posted by [David Fanning](#) on Tue, 11 Nov 2008 15:13:24 GMT

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Reimar Bauer writes:

> Just a quick question why isn't it passed by `_EXTRA` ?

The keywords THICK and COLOR are not passed by `_EXTRA` because if you use them on the IDL command line, they are not "extra":

Plot, data, PSYM=SYMCAT(4), THICK=2, COLOR=200

Thus, I can't get them inside my program. But, that said, I can understand some of Chris's confusion, because the THICK keyword only applies to symbols I can create with USERSYM. (Any symbol where I have to "lift the pen" to draw cannot be created in USERSYM, such as a plus sign or an asterisk.)

In fooling around with this today, I realized that if I had added the COLOR keyword, too, I would have something that was even more powerful, so I have done that:

<http://www.dfanning.com/programs/symcat.pro>

This gives me the ability to independently set the thickness of the line, and the thickness of the symbols (at least for those symbols I can render with USERSYM):

```
Plot, findgen(11), THICK=1, PSYM=-SYMCAT(4, THICK=2)
```

and it gives me the opportunity to draw the line in one color
and the symbols with another, without having to do this on
two separate calls:

```
yellow = FSC_Color('yellow')  
green = FSC_Color('green')  
Plot, Findgen(11), Color=yellow, PSYM=-SYMCAT(4, COLOR=green)
```

Cheers,

David

--

David Fanning, Ph.D.

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