Subject: Re: usersym keywords -- why? Posted by David Fanning on Tue, 11 Nov 2008 02:19:15 GMT View Forum Message <> Reply to Message

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:
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>
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>> strange behaviour. Although...maybe this is a "feature". Consider the
>> following:
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\rightarrow plot, findgen(10), ps=8, thick = 2
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>> more importantly, why the keywords passed to plot/oplot don't over-ride
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>
 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.
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 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. Fanning Software Consulting, Inc. Coyote's Guide to IDL Programming: http://www.dfanning.com/ Sepore ma de ni thui. ("Perhaps thou speakest truth.")