
Subject: plotting function will not compile

Posted by [Brian McNoldy](#) on Thu, 11 Aug 2016 12:43:29 GMT

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This is truly baffling me... I was working on some code and adding a contour plot. I was playing with the CONTOUR procedure and function at the command line to get the result I wanted. I decided on the function.

But when I added it to the code, it would not compile. The exact same line of code that worked at the command line was throwing a syntax error when trying to compile code with it included.

The procedural CONTOUR works in the code, and both still work at the command line. The syntax error points to the first "O" in CONTOUR, and "CO" is underlined in red in my code (if that helps at all).

```
CONTOUR(z,x,y,/fill,c_value=findgen(11))
```

```
^
```

```
% Syntax error.
```

I wasn't messing with anything else while doing this... and haven't changed paths, etc. I'm using IDL 8.4 on Linux.

Thanks,
Brian

Subject: Re: plotting function will not compile

Posted by [Helder Marchetto](#) on Thu, 11 Aug 2016 13:11:43 GMT

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On Thursday, August 11, 2016 at 2:43:32 PM UTC+2, Brian McNoldy wrote:

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>

> Thanks,

> Brian

Hi Brian,
here is my guess.
I took a the example from IDL's countour function. Reset the command line session (first command below) and run it:

```
.reset_session  
file = FILE_WHICH('globalwinds.dat')  
RESTORE, file, /VERBOSE  
s = SQRT(u^2 + v^2)  
conversion = IDLUNIT('1 mile / hour') / IDLUNIT('meter / second')  
s *= conversion.quantity  
m = MAP('Robinson')  
ct = COLORTABLE(72, /reverse)  
c = CONTOUR(s, x, y, /FILL, OVERPLOT=m, GRID_UNITS='degrees', RGB_TABLE=ct,  
TITLE='Global Surface Wind Speeds')  
mc = MAPCONTINENTS()  
cb = COLORBAR(TITLE='Speed ($m s^{-1})$')
```

You should see a map and everything should be fine...
Now try this one:

```
.reset_session  
file = FILE_WHICH('globalwinds.dat')  
RESTORE, file, /VERBOSE  
s = SQRT(u^2 + v^2)  
conversion = IDLUNIT('1 mile / hour') / IDLUNIT('meter / second')  
s *= conversion.quantity  
m = MAP('Robinson')  
ct = COLORTABLE(72, /reverse)  
CONTOUR = 0  
c = CONTOUR(s, x, y, /FILL, OVERPLOT=m, GRID_UNITS='degrees', RGB_TABLE=ct,  
TITLE='Global Surface Wind Speeds')
```

I skipped the last two instructions the second time, because the last call to countour() will cause a syntax error...

You see the problem? I hope it helps.
Maybe put a
help, countour
just before the call to countour...

Cheers,
Helder

Subject: Re: plotting function will not compile
Posted by [Brian McNoldy](#) on Thu, 11 Aug 2016 13:27:59 GMT

It was indeed something stupid. On the command line, a call to `CONTOUR(z,x,y)` works. But in the code, a simple copy and paste fails because it needs to be assigned to a variable: `c=CONTOUR(z,x,y)`. That was it.
Note to self: just because a command works at the prompt does not mean it works in the source code!

On Thursday, August 11, 2016 at 9:11:46 AM UTC-4, Helder wrote:

> On Thursday, August 11, 2016 at 2:43:32 PM UTC+2, Brian McNoldy wrote:

>> This is truly baffling me... I was working on some code and adding a contour plot. I was playing with the `CONTOUR` procedure and function at the command line to get the result I wanted. I decided on the function.

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> `conversion = IDLUNIT('1 mile / hour') / IDLUNIT('meter / second')`

> `s *= conversion.quantity`

> `m = MAP('Robinson')`

> `ct = COLORTABLE(72, /reverse)`

> `c = CONTOUR(s, x, y, /FILL, OVERPLOT=m, GRID_UNITS='degrees', RGB_TABLE=ct, TITLE='Global Surface Wind Speeds')`

> `mc = MAPCONTINENTS()`

> `cb = COLORBAR(TITLE='Speed ($m s^{-1})$')`

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```
> You should see a map and everything should be fine...
> Now try this one:
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> Cheers,
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