Subject: Re: al_legend producing an unwanted circle Posted by David Fanning on Thu, 26 Jan 2012 16:34:21 GMT

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David Platten writes:

> I am using al_legend from the NASA astronomy library. I have a cgWindow and a regular IDL graphics window on my screen. When I send a legend to the cgWindow with the /Window switch an unwanted small circle appears on the IDL graphics window. The following code reproduces this on my computer:

>

- > cgWindow
- > window
- > al_Legend, ['Hello'], /Window

>

> I'm running IDL 6.3 on Windows XP.

>

> Does anyone know how I can stop the circle from appearing?

Oh, dear, this is one of those VERY strange ones!

If I run your example, I see the circle. If I set a breakpoint in AL_LEGEND and step through the code, no circle is ever produced!

I really don't know what that means at the moment. :-(

I'll keep looking into it.

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.

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

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

Subject: Re: al_legend producing an unwanted circle Posted by Brian Wolven on Thu, 26 Jan 2012 17:39:29 GMT View Forum Message <> Reply to Message

Generally when the observer influences the outcome it means that quantum mechanical phenomena are involved. ;)

Subject: Re: al_legend producing an unwanted circle Posted by David Fanning on Thu, 26 Jan 2012 18:45:13 GMT

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Brian Wolven writes:

> Generally when the observer influences the outcome it means that quantum mechanical phenomena are involved. ;)

Yes, I think that is what is going on here! ;-)

OK, I am not *exactly* sure what is going on here, but here is what I know about the problem.

The problem occurs on line 485 of AL_Legend, the second of two calls to cgText that are close to one another. If I put a breakpoint on that line and step over it, the circle appears. If I put a breakpoint on that line and step into cgText, the circle never appears. (One of the mysteries, I suppose!)

In any case, the "problem" appears to be in cgText on or about line 220 in which I am trying to return the normalized width of the text. I know this because if I take all those lines out and just return a fake width, the circle never appears.

OK, so. Following the directions in the IDL on-line help, I create a pixmap of the appropriate size and draw my text there to get the width. This works perfectly, but somehow causes a circle to appear in the current graphics window. This happens NO MATTER what window I make the current graphics window before I create the pixmap. I conclude from this that it is some kind of bug in the internal IDL code. I don't know what else it could be.

To fix this problem, I modified cgText so that I no longer create a pixmap. Rather, I just add the cgText command to the cgWindow and draw momentarily into the cgWindow. No harm is really done here, since this is not the command that will *actually* appear in cgWindow, and I am drawing it in the background color in any case, so it is even less intrusive. (I had to make a change in cgcmdwindow__define, since this tickled a typo bug there that was preventing me from obtaining the window background color.)

So, bottom line, you probably want to update your

Coyote Library, or (at the very least) your cgText program.
http://www.idlcoyote.com/programs/cgtext.pro http://www.idlcoyote.com/programs/zip_files/coyoteprograms.z ip
Cheers,
David
David Fanning, Ph.D. Fanning Software Consulting, Inc. Coyote's Guide to IDL Programming: http://www.idlcoyote.com/ Sepore ma de ni thui. ("Perhaps thou speakest truth.")
Subject: Re: al_legend producing an unwanted circle Posted by dplatten on Fri, 27 Jan 2012 09:27:39 GMT View Forum Message <> Reply to Message
Hi David,
Many thanks for your help - the circle is no more.

Regards,

David