Subject: Re: questions regarding using cgWindow, cgLoadCT, and something else Posted by Jeremy Bailin on Thu, 27 Oct 2011 17:24:24 GMT

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```
On 10/27/11 12:32 PM, Bill Murong wrote:
```

- > Hi,
- >
- > I'm a beginner of using David's cgWindow. I'm wondering how to
- > display two images using two different color tables in a cgWindow?
- > I've tried a few things, but all failed.

>

- > A second quesiton I'm having is when I issue the command: "cgloadct,
- > 13, /addcmd". It will pop up two resizable windows: one with black
- > background and one with white background.

>

- > My final question is regarding using postscript font in IDL 7.0. When
- > I generate a postscript file with ps font, the "multiple" sign cannot
- > be displayed correctly (displayed as a "dot"); e.g., 6x10^5 will be
- > displayed as 6*10^5. I have tried this on various computers with both
- > Win and Mac. All give the same results.

>

- > I'm wondering whether someone can help me with these IDL questions.
- > Many thanks in advance.

>

> Bill

The easiest way is using the RGB_TABLE keyword to cglaodct to get the table out, and the PALETTE keyword in cgimage to display it:

```
image = cgdemodata(18)
cgwindow
cgloadct, 4, rgb_table=table1
cgloadct, 13, rgb_table=table2
cgimage, image, palette=table1, /window, layout=[2,1,1]
cgimage, image, palette=table2, /addcmd, layout=[2,1,2]
```

-Jeremy.

Subject: Re: questions regarding using cgWindow, cgLoadCT, and something else Posted by David Fanning on Thu, 27 Oct 2011 17:25:23 GMT

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Bill Murong writes:

- > I'm a beginner of using David's cgWindow. I'm wondering how to
- > display two images using two different color tables in a cgWindow?
- > I've tried a few things, but all failed.

```
cgLoadCT, 5, RGB_TABLE=pal_1
cgLoadCT, 33, RGB_TABLE=pal_2
cgWindow, WMulti=[0,2,1]
cqControl, Execute=0
cglmage, cgDemoData(5), PALETTE=pal_1, /AddCmd
cqlmage, cqDemoData(7), PALETTE=pal_2, /AddCmd
cgControl, Execute=1
```

- > A second quesiton I'm having is when I issue the command: "cgloadct,
- > 13, /addcmd". It will pop up two resizable windows: one with black
- > background and one with white background.

That's weird. I'll look into that. :-)

It is probably because there is no cgWindow at first, so it has to create one to "add itself to", then, cgLoadCT actually sends a command to a window to "load colors". This is probably generating a second window because it didn't realize it had just created one!

Anyway, it sounds broken. I'll fix it. :-)

- > My final question is regarding using postscript font in IDL 7.0. When
- > I generate a postscript file with ps font, the "multiple" sign cannot
- > be displayed correctly (displayed as a "dot"); e.g., 6x10^5 will be
- > displayed as 6*10^5. I have tried this on various computers with both
- > Win and Mac. All give the same results.

I guess I'm not sure what you mean. I tried this:

```
cgplot, cgdemodata(1), title='Something 6x10^5', /window
```

And it seemed to work perfectly in PostScript when I created the PostScript file. Can you provide an example that is failing for you?

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: questions regarding using cgWindow, cgLoadCT, and something else Posted by David Fanning on Thu, 27 Oct 2011 17:52:08 GMT

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Bill Murong writes:

- > A second quesiton I'm having is when I issue the command: "cgloadct,
- > 13, /addcmd". It will pop up two resizable windows: one with black
- > background and one with white background.

This turned out to be a typo on line 231, in which I forgot to add a line continuation character. Fixed now:

http://www.idlcoyote.com/programs/cgloadct.pro

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: questions regarding using cgWindow, cgLoadCT, and something else Posted by Brian Wolven on Thu, 27 Oct 2011 19:58:02 GMT

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Sometimes software problems stem from a simple lack of \$s.

Subject: Re: questions regarding using cgWindow, cgLoadCT, and something else Posted by Bill Murong on Thu, 27 Oct 2011 21:39:41 GMT View Forum Message <> Reply to Message

Thank you very much for the help and the fix.

About the PS font problem, you can find a figure converted from a ps file from

https://lh4.googleusercontent.com/-NKII5Se06t0/TqnN3NYCkRI/AAAAAAAAABU/2xbcSNP1zRA/s800/ps.jpg

The corresponding command to generate the figure is:

cgplot, [1e-10, 1], /ystyle, /ylog, ytickv = [6e-9, 7e-4], yticks = 1, /window

and then save the window as jpeg via ImageMagick. You can note the tick marks of y axis are not displayed correctly. There is no problem with the Heyshey font or TrueType fonts.

Bill

```
>> My final question is regarding using postscript font in IDL 7.0. When
>> I generate a postscript file with ps font, the "multiple" sign cannot
>> be displayed correctly (displayed as a "dot"); e.g., 6x10^5 will be
>> displayed as 6*10^5. I have tried this on various computers with both
>> Win and Mac. All give the same results.
>
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>
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>
> And it seemed to work perfectly in PostScript when I created the
> PostScript file. Can you provide an example that is failing
> for you?
>
 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: questions regarding using cgWindow, cgLoadCT, and something else Posted by David Fanning on Thu, 27 Oct 2011 22:44:36 GMT View Forum Message <> Reply to Message

Bill Murong writes:

```
    About the PS font problem, you can find a figure converted from a ps file from
    https://lh4.googleusercontent.com/-NKII5Se06t0/TqnN3NYCkRI/A
    AAAAAAAABU/2xbcSNP1zRA/s800/ps.jpg
    The corresponding command to generate the figure is:
    cgplot, [1e-10, 1], /ystyle, /ylog, ytickv = [6e-9, 7e-4], yticks = 1, /window
```

> and then save the window as jpeg via ImageMagick. You can note the tick marks of y axis are not displayed correctly. There is no problem with the Heyshey font or TrueType fonts.

Ah, yes, the proper labeling of logarithmic axes has been a problem since the beginning of time. Or, at least, the beginning of IDL:

http://www.idlcoyote.com/graphics_tips/minorlog.html

You may wish to use the LogLevels function described in the article above. Something like this, probably:

cgplot, [1e-10, 1], /ystyle, /ylog, ytickv = LogLevels(), /window

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
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Subject: Re: questions regarding using cgWindow, cgLoadCT, and something else Posted by David Fanning on Thu, 27 Oct 2011 22:59:47 GMT

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Bill Murong writes:

- > About the PS font problem, you can find a figure converted from a ps file from
- > https://lh4.googleusercontent.com/-NKII5Se06t0/TqnN3NYCkRI/A AAAAAAABU/2xbcSNP1zRA/s800/ps.jpg
- > The corresponding command to generate the figure is:
- > cgplot, [1e-10, 1], /ystyle, /ylog, ytickv = [6e-9, 7e-4], yticks = 1, /window
- > and then save the window as jpeg via ImageMagick. You can note the tick marks of y axis are not displayed correctly. There is no problem with the Heyshey font or TrueType fonts.

This will work for your original question:

t = ['6x10!A-4!x', '7x10!A-4!x']

```
cgplot, [1e-10, 1], /ystyle, /ylog, ytickv = [6e-9, 7e-4], $
  yticks = 1, ytickname=t, /window
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: questions regarding using cgWindow, cgLoadCT, and something else Posted by Bill Murong on Thu, 27 Oct 2011 23:51:37 GMT View Forum Message <> Reply to Message

I think I would prefer to have IDL do this kind of low-level job automatically for us. :)

Thanks,

Bill

```
On Oct 27, 3:59 pm, David Fanning <n...@dfanning.com> wrote:

> Bill Murong writes:

>> About the PS font problem, you can find a figure converted from a ps file from

> https://lh4.googleusercontent.com/-NKII5Se06t0/TqnN3NYCkRI/A AAAAAAAAB...

>> The corresponding command to generate the figure is:

>> cgplot, [1e-10, 1], /ystyle, /ylog, ytickv = [6e-9, 7e-4], yticks = 1, /window

>> and then save the window as jpeg via ImageMagick. You can note the tick marks of y axis are not displayed correctly. There is no problem with the Heyshey font or TrueType fonts.

> This will work for your original question:

> t = ['6x10!A-4!x', '7x10!A-4!x']

> cgplot, [1e-10, 1], /ystyle, /ylog, ytickv = [6e-9, 7e-4], $

> yticks = 1, ytickname=t, /window

> 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: questions regarding using cgWindow, cgLoadCT, and something else Posted by David Fanning on Fri, 28 Oct 2011 01:59:45 GMT View Forum Message <> Reply to Message

Bill Murong writes:

- > I think I would prefer to have IDL do this kind of low-level job
- > automatically for us. :)

Yeah, well, then every Joe Shmo could be a programmer, and some of us would have to get real jobs. :-)

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: questions regarding using cgWindow, cgLoadCT, and something else Posted by ben.bighair on Fri, 28 Oct 2011 14:31:22 GMT View Forum Message <> Reply to Message

> Sometimes software problems stem from a simple lack of \$s.

Whoa! If that doesn't get a coder a lifetime membership in IDL's EPA then what does it take?