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Subject: Re: Coyote Graphics Update 29 Jan 2011  
Posted by [Gray](#) on Sun, 30 Jan 2011 00:41:28 GMT  
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On Jan 29, 5:27 pm, David Fanning <n...@dfanning.com> wrote:

- > Folks,
- >
- > There have been widespread updates to Coyote Graphics programs
- > today. I think 14 programs changed in exciting (to me anyway!)
- > ways that added additional functionality.
- >
- > <http://www.idlcoyote.com/programs/coyoteprograms.zip>
- >
- > Here are some of the highlights.
- >
- > All Coyote Graphics routines for displaying traditional
- > graphics commands now support a LAYOUT keyword that works
- > identically to the LAYOUT keyword in the IDL 8 function
- > graphics commands. Here, for example, is how you can
- > display four different kinds of plots in a display window:
- >
- > FSC\_Display
- > CTLoad, 33, RGB\_Table=palette
- > FSC\_Plot, LoadData(1), Layout=[2,2,3], Color='red'
- > FSC\_Contour, LoadData(2), NLevels=12, Layout=[2,2,1], Color='blue'
- > FSC\_Surf, LoadData(2), /Elevation, Layout=[2,2,4, Palette=palette
- > TVImage, Loaddata(19), Multimargin=4, /Axes, Layout=[2,2,2]
- >
- > Here is how you can display the same four plots in a resizable
- > graphics window:
- >
- > CTLoad, 33, RGB\_Table=palette
- > FSC\_Plot, LoadData(1), Layout=[2,2,3], Color='red', /Window
- > FSC\_Contour, LoadData(2), NLevels=12, Layout=[2,2,1], \$
- > Color='blue', /AddCmd
- > FSC\_Surf, LoadData(2), /Elevation, Layout=[2,2,4], \$
- > Palette=palette, /AddCmd
- > TVImage, Loaddata(19), Multimargin=4, /Axes, Layout=[2,2,2], /AddCmd
- >
- > The Histoplot program also has LAYOUT, WINDOW and ADDCMD keywords added.
- >
- > All Coyote Graphics routines are now defined with WINDOW and/or
- > ADDCMD keywords so these commands can be added easily to the
- > resizable graphics windows. A new FSC\_WControl (window control)
- > program has been written to allow you to easily set FSC\_Window
- > properties. (This is addition to FSC\_WSet and FSC\_WDelete.)
- >
- > CTLOAD and XCOLORS have been configured so that when the WINDOW

> keyword is set, the colors that are loaded with these commands  
> are sent directly to the current FSC\_Window (or to any FSC\_Window  
> you designate). For example, if you have displayed an image in  
> a resizable graphics window like this:  
>  
> TVImage, LoadData(7), /Keep\_Aspect, Margin=0.1, /Window  
>  
> Then, to change color tables and have your image immediately updated,  
> you must only do this:  
>  
> CTLoad, 5, /Window  
>  
> Or,  
>  
> XColors, /Window  
>  
> PALETTE keywords have been added to TVIMAGE, FSC\_SURF, and FSC\_Window  
> to allow these programs to load and maintain their own color table  
> vectors. With this functionality, you no longer have to worry about  
> color table contamination issues. (Other programs mucking with the color  
> table, loading drawing colors, etc.) Color tables will be loaded  
> immediately before image or surface display and returned to their  
> former state immediately after. This also makes it possible to use  
> multiple color tables in both normal and resizable graphics windows.  
>  
> The easiest way to get a color palette is with CTLOAD and the  
> RGB\_TABLE keyword. When this keyword is used, colors are not  
> loaded, but a 256 by 3 array is created that can be used with  
> the PALETTE keyword to these other routines.  
>  
> CTLoad, 33, RGB\_TABLE=palette  
> TVImage, LoadData(7), PALETTE=palette, /KEEP, /Window  
>  
> I'm sorry, but I can't program fast enough to keep up with all  
> the good ideas! I told my wife it seems like a programming  
> conspiracy. All the programs I've written in the past five years  
> are working together to create a completely new graphics system,  
> almost against my will. I want to get a book out the door, and these  
> damn programs are demanding to be written! Yikes! It's the Night of the  
> Body Snatchers. :-)  
>  
> At the very least they are demanding updates throughout the book  
> and another completely new chapter to explain their many features.  
> What a wild week this has been. :-)  
>  
> 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.")

Wow... David, you have really done some amazing things with this CG system. ITTVIS should hire you to write their NG programs!

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Subject: Re: Coyote Graphics Update 29 Jan 2011  
Posted by [David Fanning](#) on Sun, 30 Jan 2011 01:32:59 GMT  
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Gray writes:

> Wow... David, you have really done some amazing things with this CG  
> system. ITTVIS should hire you to write their NG programs!

Well, that's pretty much my point. If I can do this in a couple of months WHILE I am spending all my time writing a book, why in the world are the NG programs so incomprehensibly complex!? The guts of the system, FSC\_Window, I wrote in two long days of programming.

It won't even be a contest when the Coyote Graphics system has to go up against the IDL 8 graphics system in a contest to actually write a new graphics program. I expect the Coyote Graphics system will win about 99 times out of a 100. :-)

Cheers,

David

P.S. Truthfully, I expect the Coyote Graphics system to never lose in such a contest, but I don't want to sound arrogant. ;-)

--

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.")

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Subject: Re: Coyote Graphics Update 29 Jan 2011  
Posted by [Gray](#) on Sun, 30 Jan 2011 11:43:29 GMT  
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On Jan 29, 8:32 pm, David Fanning <n...@dfanning.com> wrote:

> Gray writes:  
>> Wow... David, you have really done some amazing things with this CG  
>> system. ITTVIS should hire you to write their NG programs!  
>  
> Well, that's pretty much my point. If I can do this  
> in a couple of months WHILE I am spending all my time  
> writing a book, why in the world are the NG programs  
> so incomprehensibly complex!? The guts of the system,  
> FSC\_Window, I wrote in two long days of programming.  
>  
> It won't even be a contest when the Coyote Graphics  
> system has to go up against the IDL 8 graphics system  
> in a contest to actually write a new graphics program. I  
> expect the Coyote Graphics system will win about  
> 99 times out of a 100. :-)  
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> Cheers,  
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> David  
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> P.S. Truthfully, I expect the Coyote Graphics system  
> to never lose in such a contest, but I don't want to  
> sound arrogant. ;-)  
>  
> --  
> David Fanning, Ph.D.  
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> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

I have a request - can you include a legend program? This is something that NG has and CG doesn't. Or, can I use the ASTROLIB version (if I can find it on my computer)?

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Subject: Re: Coyote Graphics Update 29 Jan 2011  
Posted by [David Fanning](#) on Sun, 30 Jan 2011 13:59:38 GMT  
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Gray writes:

> I have a request - can you include a legend program? This is  
> something that NG has and CG doesn't. Or, can I use the ASTROLIB

> version (if I can find it on my computer)?

Yes, I have bits and pieces of a barplot and a legend sitting around here, but, sigh... Have I mentioned I am unemployed? Can I count on you to buy two or three books? :-)

Cheers,

David

P.S. As I point out to my wife nearly every day, the ten minutes I spend eating dinner with her is ten minutes more that book is not for sale. :-)

--

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.")

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Subject: Re: Coyote Graphics Update 29 Jan 2011

Posted by [Gray](#) on Sun, 30 Jan 2011 14:13:58 GMT

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On Jan 30, 8:59 am, David Fanning <n...@dfanning.com> wrote:

> Gray writes:

>> I have a request - can you include a legend program? This is

>> something that NG has and CG doesn't. Or, can I use the ASTROLIB

>> version (if I can find it on my computer)?

>

> Yes, I have bits and pieces of a barplot and a legend

> sitting around here, but, sigh... Have I mentioned I am

> unemployed? Can I count on you to buy two or three

> books? :-)

>

> Cheers,

>

> David

>

> P.S. As I point out to my wife nearly every day, the ten

> minutes I spend eating dinner with her is ten minutes

> more that book is not for sale. :-)

>

> --

> 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.")

I will DEFINITELY buy the book. I will also recommend it to other IDL users in my PhD program. :)

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Subject: Re: Coyote Graphics Update 29 Jan 2011  
Posted by [Gray](#) on Sun, 30 Jan 2011 14:14:20 GMT  
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On Jan 30, 8:59 am, David Fanning <n...@dfanning.com> wrote:

- > Gray writes:
- >> I have a request - can you include a legend program? This is
- >> something that NG has and CG doesn't. Or, can I use the ASTROLIB
- >> version (if I can find it on my computer)?
- >
- > Yes, I have bits and pieces of a barplot and a legend
- > sitting around here, but, sigh... Have I mentioned I am
- > unemployed? Can I count on you to buy two or three
- > books? :-)
- >
- > Cheers,
- >
- > David
- >
- > P.S. As I point out to my wife nearly every day, the ten
- > minutes I spend eating dinner with her is ten minutes
- > more that book is not for sale. :-(
- >
- > --
- > 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.")

And, don't forget about error bars! :/

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