## Subject: Re: Covote 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 resizeable
  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
> resizeable 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
```

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> 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 resizeable 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 resizeable 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 thoughout the book
> and another completely new chapter to explain their many features.
> What a wild week this has been. :-)
>
> Cheers,
> David
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- > --
- > 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!