Subject: Re: controlling plot appearance (was "line graph problems")
Posted by btt on Tue, 27 Mar 2001 17:33:18 GMT
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D

I knew we could smoke you out!

B

David Fanning wrote:
>
> Ben Tupper (btupper@bigelow.org) writes:
>
>> It would be relatively easy to create an plotting object for direct
>> graphics (I'm not volunteering for this until I get more than just red
>> colors on my display!) New graphics keywords could be added, like your
>> YTITLE_SHIFT keyword example. Once you figure out what to do with the
>> YTITLE given its SHIFT, you make it a method within the object to handle
>> that property. You could introduce other keywords like XSUBTITLE and
>> YSUBTITLE. Similar objects could be created for any kind of direct
>> graphics routine (I have started a direct graphics contour object a
>> number of times... someday I shall finish it... what? it's 2001
>> already?)
>>
>> Here's what it might look like:
>>
>> MyPlotObj = obj_new('DG_Plot', X, Y, YTITLESHIFT = [-0.1, 0],
>> OTHERKEYWORDS = ...)
>> MyPlotObj->Plot
>>   ;ah shoot, forgot to set these
>> MyPlotObj->SetProperty, Background = 3, isotropic = 1
>> MyPlot->Plot
>>   ;make a printout
>> devicename = !D.name
>> Set_plot, 'printer'
>> MyPlotObj->Plot
>> Device, /Close
>> Set_plot, devicename
>>
>> Obj_destroy, MyPlotObj
>>
>>
>> If it were that simple then would you still say, 'if I can't create a
>> plot in one or two lines of code then forget it'? I think that is a
>> really important question, (at least I find myself asking this over and
>> over before starting a new project.)
>

> Oh, I think it could be made a LOT easier than that!
>
> As Martin and I have alluded to, we have been trying
> to develop a program that gives the user a bit more
> control over how a plot looks on the display. I guess
> it might be time to reveal it and get user feedback.
> This is truly version 1.0 of the software. Even we
> have some ideas for things it still needs. :-)
>
> And it is not nearly as sophisticated as rotating
> axis labels or shifting labels by some small amount.
> But I can envision it becoming something like that.
> That is to say, I know how to do those kinds of things,
> and I believe I could implement it in the object
> oriented approach we have used here. But, alas, we
> are offering the software for free, so you pretty
> much have to take what you get and rely on the kindness
> of strangers for updates. :-)
>
> I'll put the program up on my web page for a limited
> time, if people want to try it out. The Max-Plank
> Institute of Meteorology has provided a small amount
> of funding to bring this software to you. I hope you
> extend your gratitude to those folks should you ever
> run into them.
>
> The program is here:
>
>   http://www.dfanning.com/programs/mpi_plot.zip
>
> The program uses a number of files from both the Coyote
> Library and Martin's Max-Plank library. I've included
> everything you need in the zip file. To try it out, I
> recommend you unzip the files in a local directory,
> then either CD into that directory from within IDL
> (highly recommended) or add the directory to your path
> (this could be a problem if you don't have the latest
> Coyote or Max Plank files in directories ahead of this
> one on the path). To run the program, just type MPI_PLOT.
> Or, you can use your own data. This is basically a wrapper
> routine for the PLOT command, although the output will
> appear in its own display window.
>
> All complaints, feature requests, etc. should be directed
> to Martin. :-)
>
> I particularly like the little gizmo for positioning
> the plot in the window. Users of PSConfig will be

> familiar with the concept. Let's just say I *knew* that
> code would be useful for something someday!
>
> I should mention that MPI_PLOT is really just an example
> plot to show off the underlying functionality that we
> have been working on. The real guts of the stuff we have
> been doing is to have an interactive way to set plot and
> axis keywords. What we imagine is that people will use
> the more fundamental programs to build their own graphics
> display routines, like MPI_PLOT. But all of this will
> be documented in an upcoming World Premier Release that
> will happen later this year.
>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting
> Phone: 970-221-0438 E-Mail: davidf@dfanning.com
> Coyote's Guide to IDL Programming: http://www.dfanning.com/
> Toll-Free IDL Book Orders: 1-888-461-0155

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Ben Tupper
Bigelow Laboratory for Ocean Sciences
180 McKown Point Rd.
W. Boothbay Harbor, ME 04575
btupper@bigelow.org