
Subject: plotting tool

Posted by [craig stevens](#) on Tue, 26 Nov 1996 08:00:00 GMT

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Apologies up-front for the stupid question but somewhere in my IDL/PVwave travels I have come across a simple plotting tool for XY plots with labels etc that seemed to be good for those quick plots that are sometimes needed.

However this was some months ago & I can't remember where I found it...I can't recall if it was Wave or IDL, official lib or a user file.

If someone could suggest what routine I was looking at I would be v. happy. thanks

Craig

--

Craig Stevens: Air-Sea Interaction
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po box 14-901 Kilbirnie WGTN New Zealand
fx 64 (0)4 386 2153 ph 64 (0)4 386 0476

Subject: Re: plotting tool

Posted by [Robert Moss](#) on Tue, 03 Dec 1996 08:00:00 GMT

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Craig Stevens wrote:

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You are probably thinking of the program called PWIDGET. You can find it in idl/lib/obsolete/pwidget.pro

--
Robert M. Moss, Ph.D. - mossrm@texaco.com - FAX (713)954-6911

This does not necessarily reflect the opinions of Texaco Inc.

Subject: Re: plotting tool

Posted by [James Tappin](#) on Thu, 05 Dec 1996 08:00:00 GMT

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Craig Stevens wrote:

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For IDL I would recommend you try GRAFFER which is a widget-based XY plotting tool that can plot either data or functions.
for more details see:

http://www.sr.bham.ac.uk/~sjt/graffer

to get a copy:

ftp://ftp.sr.bham.ac.uk/pub/sjt/graffer-1.05.tar.gz

```
+-----+
| James Tappin,      | School of Physics & Space Research | O__ |
| sjt@star.sr.bham.ac.uk | University of Birmingham      | -- V^ |
| Ph: 0121-414-6462. Fax: 0121-414-3722      | |
+-----+-----+
```

Subject: Re: plotting tool

Posted by [Mark Hadfield](#) on Thu, 05 Dec 1996 08:00:00 GMT

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Robert Moss <mossrm@texaco.com> wrote in article
<32A45EB8.41C67EA6@texaco.com>...

> Craig Stevens wrote:

>>

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>> ...

>>

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>>

> You are probably thinking of the program called PWIDGET. You can find
> it in idl/lib/obsolete/pwidget.pro

>

Or maybe GRAFFER (README below). If you walk 3 doors down the corridor,
Craig, I'll show you my copy.

GRAFFER

Author: James Tappin (sjt@star.sr.bham.ac.uk)

Version 1.03 -- January 1996

GRAFFER is an X-Y plot generating package written in IDL. It needs a

workstation or terminal supporting IDL widgets and at least version 4.0 of IDL.

The approach of GRAFFER is an essentially pragmatic one. It aimed to fill the gap between the kind of simple plots that are trivial to do in IDL just by using the plotting procedures from the IDL> prompt and the sort of complex and specialised plots where it's worthwhile to write a specific program.

The main features are:

- * Can plot X-Y data with optional error bars (only vertical bars at present): from a file, or from a simple text-widget editor, or from arrays accessible at the \$MAIN\$ level in IDL.
- * Can plot functions: $y=f(x)$, $x=f(y)$ or $x=f(t)$ & $y=g(t)$.
- * Easy to change axis ranges, switch between log & linear plots and other XSTYLE & YSTYLE options.
- * Add text at arbitrary locations, orientations, fonts etc.
- * Can put multiple plots on one set of axes - with different colours, linestyles symbols etc. to distinguish them.
- * Saves plots to an ASCII file which can be re-read & modified.
- * Print to PostScript or save to EPS with customizable size & orientation. (Also GIF, TIFF & NRIF dumps available).

GRAFFER has been tested on a Sparc 5 running Solaris 2.4 - it ought to work on other unix systems and on VMS. Windows & Mac I'm much less certain about -- all I can suggest is try it & see.

Usage:

GRAFFER may be freely used, copied & distributed but please:

- 1) Don't claim you wrote it.
- 2) If you change it make it clear which bit you've changed and don't say I made the changes.
- 3) Let me know of you improvements.

Warranty: NONE - You didn't pay any money so you take your chance if it's useful: GOOD, if it isn't you got what you paid for.

Maintenance: I'll try to fix bugs, but don't expect any new features.

S.J. Tappin sjt@star.sr.bham.ac.uk
School of Physics & Space Research

Subject: Re: plot
Posted by [Andy Loughe](#) on Fri, 10 Jan 1997 08:00:00 GMT
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Mark A. Collier wrote:

>
> Hi there,
>
> IDL is new to me. Recently I tried to generate a filled contour plot
> with labels on southern hemisphere by using map_set and contour

<snip>

Try this sample code...

```
data = dist(46)          ; create data
lons  = indgen(46)*8.    ; longitudes
lats  = indgen(46)*4 - 90. ; latitudes
colors = indgen(25)+161  ; or whatever works for your color table
```

```
y1 = total(where(lats eq min(lats))) ; SH point
y2 = max(where(lats le 0))          ; Nearest-Equatorial point
```

```
map_set, -90, 0, 0, /stereo, limit=[-90,-180,0,180], /iso
contour, data(*,y1:y2), lons, lats(y1:y2), nlevels=25, /follow, /over
contour, data(*,y1:y2), lons, lats(y1:y2), nlevels=25, c_colors=colors,
$
    /cell_fill, /over
map_continents
map_grid, latdel=30, lonel=30, glinethick=1, lonlab=0
```

This is not a "perfect" plot, but those are VERY HARD to come by using IDL mapping routines and with the cheesy contour program they provide. Very unlike NCAR Graphics, at at 10 times the price!! What a bargain. ;-(

Analysis? Yes.
Visualization? Maybe.

--

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University of Colorado, CIRES | http://cdc.noaa.gov/~afl
Campus Box 449 | phn:(303)492-0707 fax:(303)497-7013

Boulder, CO 80309-0449 | "If you are going to be blue, be bright
blue!"
