Subject: Re: interactive plotting and ps output.
Posted by davidf on Fri, 14 Apr 2000 07:00:00 GMT

View Forum Message <> Reply to Message

Brad Gom (b_gom@hotmail.com) writes:

> However, I have found that getting plots that are even close to the same
> quality as direct-graphics gets extremely tedious. If the output
> quality (ie the publishability of the titles and axes, etc.) is
> important to you, you might be better off with a direct-graphics
> solution (-that is unless you need fancy 3-d features and lighting
> effects as well).

This has certainly been my experience. For example, I wrote
a very nice direct graphics contour object that gives the
user complete interactivity with menus and forms, etc. to
display the graphic in any form they like. The huge advantage
of a direct graphics contour object (aside from the obvious
one of no contour labelling in object graphics) is that
printing and saving the file in various formats is trivially
easy.

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

Subject: Re: interactive plotting and ps output.
Posted by Brad Gom on Fri, 14 Apr 2000 07:00:00 GMT

View Forum Message <> Reply to Message

Hi Theo,

I've been working on a program that requires the same sort of plot
manipulation that you describe, and in the process have been forced to
build my own general-purpose object-graphics plot object-widget (that
is, an object-widget that draws customizable plots using object
graphics). Object graphics simplifies things like data-picking, which
is necessary in order to select components of the plot for modification.

However, I have found that getting plots that are even close to the same
quality as direct-graphics gets extremely tedious. If the output

quality (ie the publishability of the titles and axes, etc.) is
important to you, you might be better off with a direct-graphics
solution (-that is unless you need fancy 3-d features and lighting
effects as well).

good luck

Brad

Theo Brauers wrote:

> Hi:
>
> I followed the discussion about object graphics and real(vector)
> postscript files. After I realized that object graphics can write
> ps vector code I'd like to renovate a widget driven tool and I'd
> like to have a live_tools like functionality where you click on
> axis, data, ... with some more options like second y axis, all
> the things which we have in direct graphics. Is there anything
> out which can provide interactive changing of axis, title, ...
> with the full set of options of PLOT, OPLOT, AXIS, ... ?
>
> Thanks Theo
>
> ---
> Theo Brauers
> Institut fuer Atmosphaerische Chemie (ICG-3)
> Forschungszentrum Juelich
> 52425 JUELICH, Germany
> Tel. +49-2461-61-6646   Fax. +49-2461-61-5346
> http://www.kfa-juelich.de/icg/icg3/MITARBEITER/th.brauers.ht ml

---

Subject: Re: interactive plotting and ps output.
Posted by Patrick Broos on Fri, 14 Apr 2000 07:00:00 GMT
View Forum Message <> Reply to Message

<!doctype html public "-//w3c//dtd html 4.0 transitional//en">
<html>
Theo Brauers wrote:
<blockquote TYPE=CITE> Is there anything

out which can provide interactive changing of axis, title, ...

with the full set of options of PLOT, OPLOT, AXIS, ... ?

<a href=" http://www.kfa-juelich.de/icg/icg3/MITARBEITER/th.brauers.ht
ml"> </blockquote>
Theo,

```
<p>Several groups have, I believe, wrapped a GUI around RSI's direct graphics
<br>routines (plot, tv, surface, etc.).    I think there
are some such applications at the Astronomy User's Library (<A
HREF="http://idlastro.gsfc.nasa.gov/homepage.html">http://idlastro.gsfc.nasa.gov/homepage.html
</A>)
which is organized by Wayne Landsman.
<p>Our local efforts to do this kind of thing can be found as part of
<br>a large astronomical analysis package called TARA.  The GUI designs
are not
<br>nearly as slick as the Insight stuff, but I think our tools provide
more capabilities
<br>that are of interest to scientists.  Anyway, if you want to read
about them start
<br>with section 7 of <A HREF="
http://www.astro.psu.edu/xray/docs/TARA/TARA_users_guide/nod e1.html">
http://www.astro.psu.edu/xray/docs/TARA/TARA_users_guide/nod e1.html</A>
<br>and if you want to play with the code go to <A
HREF="http://www.astro.psu.edu/xray/docs/TARA/">http://www.astro.psu.edu/xray/docs/TARA/</
A>
<p>Caveats:
<br>*Since this code was _not_ written for the express purpose of sharing
with the IDL community, the header comments of the routines are not of
the quality you would expect from, say, Fanning Software Consulting.
<br>*TARA has never been tried under Microsoft Windows (as far as I know)
and I hope to
<br>avoid doing so for a long long time (I am happily ignorant about Windows
-- not a
<br>good career move).
<p>Good luck with your quest,
<br>Patrick Broos
<pre>-- 
 ============================================================ ========
Patrick S. Broos, Systems Analyst/Programmer   
patb@astro.psu.edu  

Department of Astronomy and Astrophysics  My office   814-863-5505
Penn State University
525 Davey  Lab    &nb sp;     &nb
sp;     &nb sp;     &nb
sp;      FAX     &nb sp;  
814-863-8686
University Park, PA   16802-6305     
      
<A HREF="http://www.astro.psu.edu">http://www.astro.psu.edu</A>
             
      Group office    863-9550 
 ============================================================ ======== </pre>
 </html>
```

Subject: Re: interactive plotting and ps output.
Posted by davidf on Fri, 14 Apr 2000 07:00:00 GMT

Theo Brauers (th.brauers@fz-juelich.de) writes:

> I followed the discussion about object graphics and real(vector)
> postscript files. After I realized that object graphics can write
> ps vector code I'd like to renovate a widget driven tool and I'd
> like to have a live_tools like functionality where you click on
> axis, data, ... with some more options like second y axis, all
> the things which we have in direct graphics. Is there anything
> out which can provide interactive changing of axis, title, ...
> with the full set of options of PLOT, OPLOT, AXIS, ... ?

And your budget is how much? :-)

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

Subject: Re: interactive plotting and ps output.
Posted by davidf on Mon, 17 Apr 2000 07:00:00 GMT

Theo Brauers (th.brauers@fz-juelich.de) writes:

> Thanks for your advice. I better stick with direct graphics for
> simple xy scatter plots of larger data sets. However, re-plotting
> the whole thing after having changed the size of an axis title
> doesnt sound like a good idea.

I suspect you will like it less in object graphics, where
the re-display is just as necessary, and often a whole LOT
slower. :-)

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

Subject: Re: interactive plotting and ps output.
Posted by Theo Brauers on Mon, 17 Apr 2000 07:00:00 GMT
View Forum Message <> Reply to Message

Hi David and Brad:

Thanks for your advice. I better stick with direct graphics for
simple xy scatter plots of larger data sets. However, re-plotting
the whole thing after having changed the size of an axis title
doesnt sound like a good idea.

Theo

David Fanning wrote:
>
> Brad Gom (b_gom@hotmail.com) writes:
>
>> However, I have found that getting plots that are even close to the same
>> quality as direct-graphics gets extremely tedious. If the output
>> quality (ie the publishability of the titles and axes, etc.) is
>> important to you, you might be better off with a direct-graphics
>> solution (-that is unless you need fancy 3-d features and lighting
>> effects as well).
>
> This has certainly been my experience. For example, I wrote
> a very nice direct graphics contour object that gives the
> user complete interactivity with menus and forms, etc. to
> display the graphic in any form they like. The huge advantage
> of a direct graphics contour object (aside from the obvious
> one of no contour labelling in object graphics) is that
> printing and saving the file in various formats is trivially
> easy.
>
> Cheers,
>
> David

Subject: Re: interactive plotting and ps output.
Posted by Theo Brauers on Mon, 17 Apr 2000 07:00:00 GMT

David:

I want it for free :-) . Best solution (for me perhaps not for
you): RSI provides a full set of live_** functions which gives
me and all the other a simple interface to obj-graphics. With
source code included. Some users of my idl programs like to have
this "Origin" like features.
I called Creaso (german RSI sales rep) on friday but they said
the IDL source of live_** and insight was not available.

Best,

 Theo

David Fanning wrote:
>
> Theo Brauers (th.brauers@fz-juelich.de) writes:
>
>> I followed the discussion about object graphics and real(vector)
>> postscript files. After I realized that object graphics can write
>> ps vector code I'd like to renovate a widget driven tool and I'd
>> like to have a live_tools like functionality where you click on
>> axis, data, ... with some more options like second y axis, all
>> the things which we have in direct graphics. Is there anything
>> out which can provide interactive changing of axis, title, ...
>> with the full set of options of PLOT, OPLOT, AXIS, ... ?
>
> And your budget is how much? :-)
>
> Cheers,
>
> David

--
Theo Brauers
Institut fuer Atmosphaerische Chemie (ICG-3)
Forschungszentrum Juelich
52425 JUELICH, Germany
Tel. +49-2461-61-6646   Fax. +49-2461-61-5346
 http://www.kfa-juelich.de/icg/icg3/MITARBEITER/th.brauers.ht ml