## Subject: Explicit text formatting for Object Axes Posted by Ben Tupper on Tue, 24 Aug 1999 07:00:00 GMT

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```
<!doctype html public "-//w3c//dtd html 4.0 transitional//en">
<html>
I must be missing something important - but haven't a clue about how to 'get it'.
 
I think that I am explicitly formatting the text style for Object Axis annotation as follows
...
oHelvetica10 = obj_new('IDLgrFont', 'Helvetica',size = 10.)
oOrigXAxis1 -> getProperty,$
       TickText = oTickText
oTickText -> SetProperty, Font= oHelvetica10
oOrigXaxis1 ->setProperty, Ticktext = oTicktext
To my great surprise the text is scaled to different sizes when displayed (and frequently)
illegible).
It looks like the scaling is related to the axis data range (big ranges yield small text
sizes).
Shouldn't Helvetica 10pt be sized to 10pt?
-- 
Ben Tupper
Bigelow Laboratory for Ocean Science
tupper@seadas.bigelow.org
Pemaguid River Company
pemaguidriver@tidewater.net
 </html>
```

Subject: Re: Explicit text formatting for Object Axes

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Ben Tupper (tupper@seadas.bigelow.org) writes:

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Uh, no. Well, perhaps in a print shop. But certainly not on a computer display screen. On a computer, when you select something like Helvetica 12 point what you mean is "something that looks about right when I use a computer with this resolution and an axis about this long". If the designer of the "display type" was any good, you'll get something that looks reasonable. But is it 12 point? No, not likely.

And in object graphics, we normally want the "size" of the font to change. That is to say, when we expand our window to the full size of the display, it would be nice if the type on the axes was sized proportionally. In fact, it does this. Small windows give a "small" size 12 font. Large windows give a "large" size 12 font. Think of the work you would have to go to otherwise, or what a nightmare it would be to calculate the "appropriate" size font for every viewplane rectangle, on every display, in every resolution that you might encounter. :-(

I would just make sure your axes are scaled into your view before you muck around with your fonts. This will ensure that they are scaled "proportionally" to the axis they are attached to. Then, as you change axis scaling, these will change too. :-)

Cheers.

David

--

David Fanning, Ph.D.

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Coyote's Guide to IDL Programming: http://www.dfanning.com/

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Explicit text formatting for Object Axes Posted by davidf on Wed, 25 Aug 1999 07:00:00 GMT

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Ben Tupper (tupper@seadas.bigelow.org) writes:

- > I've combed through my code regarding axis scaling and can't figure out what
- > is going on. The first time I launch the application, the fonts are
- > 'proportional and quite readable'. If I load a new differently sized image
- > into the application the fonts are scaled badly. Now, if I load a third image of identical size to the
- > very first image the font scaling returns to its 'proportional and quite readable' scaling.
- > So, I think I'm setting the axis scaling correctly ... but, clearly, I am not.
- > It seems that IDL has developed a scaling memory that I can't override. gak!

I think you have your text objects in a "never recompute dimensions" state. :-)

Try changing the setting on the RECOMPUTE\_DIMENSIONS keyword when you create the text object.

Cheers,

David

--

David Fanning, Ph.D.

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Subject: Re: Explicit text formatting for Object Axes Posted by Ben Tupper on Wed, 25 Aug 1999 07:00:00 GMT

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<html>
David Fanning wrote:
<blockquote TYPE=CITE>&nbsp;
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<br>view before you muck around with your fonts. This will
<br>ensure that they are scaled "proportionally" to the
<br/>dr>axis they are attached to. Then, as you change axis
<br>scaling, these will change too. :-)
<br/>

<br/><br>&nbsp;</blockquote>
Oops, I thought that vector drawn fonts were scaled but hardware fonts
<br>were 'hard'.&nbsp;&nbsp; I tinkered with Xplot and can see what you
mean about
<br/>br>needing to have scaleable fonts.&nbsp; Duh!
l've  combed through my code regarding axis scaling and can't figure
out what
<br/> <br/> <br/> dr>is going on.&nbsp; The first time I launch the application, the fonts
<br>'proportional and quite readable'.&nbsp;&nbsp; If I load a new differently
sized image
<br>into the application the fonts are scaled badly.&nbsp; Now, if I load
a third image of identical size to the very first image the font scaling
returns to its 'proportional and quite readable' scaling.
>Below is the code embedded in the event handler that loads a new image.
;
<br>;<
<br>>:
<br/><br>%nbsp;
<br/><br>%nbsp;
 ;get the dimensions of the new image called Value
<br>info.Origsz = SIZE(*info.Value, /dimensions)
<br/><br>&nbsp;
<br>&nbsp;; establish the range of values
<br>Xrange = [0,info.Origsz[0]]
<br>Yrange = [0,info.Origsz[1]]
 ;normalize the range
<br/>continuous continuous c
<br/>continuous continuous c
 ; make the window slightly larger than the dimensions of the image
<br>xsize = info.Orig rect[2]*info.Origsz[0]
<br>ysize = info.Orig_rect[3]*info.Origsz[1]
<br>widget_control, info.OrigDrawID, $
<br>&nbsp;xsize =xsize , $
<br/><br/><br/>%nbsp;ysize = ysize
 ; load the new data into the image object with
<br>&nbsp;; the normalized X and Y scaling
<br>info.oOrig -> setProperty, $
```

```
<br>&nbsp;Data = *info.image, $
<br>&nbsp;Xcoord conv = info.OrigXscale, $
<br/><br>&nbsp;Ycoord_conv = info.OrigYscale
  ; change the data range and scaling for the X axis
<br>&nbsp;; the Exact keyword has already been set to 1
<br>info.oOrigXaxis1 ->setProperty, $
<br>&nbsp;range = xrange, $
<br>&nbsp;Xcoord_conv = info.OrigXscale
<br/><br>%nbsp;
;
<br>;
<br>:
So, I think I'm setting the axis scaling correctly ... but, clearly,
I am not.
<br/>chr>It seems that IDL has developed a scaling memory that I can't override.&nbsp;
gak!
Thanks.
<br/>

Ben
<br/>

<-re>--&nbsp;
Ben Tupper
```

Bigelow Laboratory for Ocean Science tupper@seadas.bigelow.org

Pemaguid River Company pemaquidriver@tidewater.net </html>