Subject: HELP !!!
Posted by Martin Schultz on Wed, 03 Dec 1997 08:00:00 GMT
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Hi,

after spending more than 1 hour on this, I finally decided that this should definitively get improved in a future release of IDL (I guess I should put together some kind of a wishlist for the people at RSI):

problem is, I want to produce a plot with two x-axis, one on the bottom (easy of course :-) and one on the top. The little code piece I attached works fine \*except\* the title of the top axis is too low and interferes with the axis labels. I tried several things:

- append a sequence of !C's at the end of xtitle ==> no effect at all
- add another axis statement shifted somewhat higher and suppress the axis itself using xstyle=4 and xticks=1 ==> title comes out fine now, but the axis is \*not\* suppressed
- use a title parameter in the call to plot ==> font is larger (hence ugly)

I browsed around the help pages for at least 1/2 hour and could not find \*anything\* about this issue, so i guess that's the minimum that would need improvement!

Here's the code:

```
; produce some dummy data as a demo
  alt10=findgen(20)*0.6
 o3=alt10*10
  co = o3/2.
 h2o=exp((alt10+2)/2)
 co_ok=indgen(20)
 !p.thick=3
 !p.position = [0.2, 0.3, 0.8, 0.8]
  ; produce profile plot
  plot,o3,alt10,/nodata,color=1,xstyle=9,xrange=[0,140], $
      ystyle=1,yrange=[0,12], $
      xtitle='O!L3!N, CO [ppb], C!L2!NH!L2!N [ppt]', $
      ytitle='altitude [km]' ;, $
      title='H!L2!NO [ppmv]!C!C'
 oplot,o3,alt10,color=7,thick=4
 oplot,co(co_ok),alt10(co_ok),color=2,thick=4
```

Subject: Re: Help!
Posted by Ivan Zimine on Thu, 01 Apr 1999 08:00:00 GMT
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; overlay extra x-axis for log water vapor

```
VU KHAC Tri wrote:
>
> Hi folks,
> I write a procedure which reads an image when a button pressed.
>
 pro BTLoad Event, event
>
      WIDGET_CONTROL, event.id, GET_UVALUE = info
>
      fname = DIALOG_PICKFILE(FILE = info.filename, /READ, FILTER = '*.hdr',
>
 $
>
          /MUST_EXIST, /FIX_FILTER, PATH = path, /NOCONFIRM)
>
      IF fname NE "" THEN BEGIN, info.image
>
           >
      ENDIF
>
> end
 pro Read_Analyze, File, Image
      ;it reads some data from the file and modifies some fields in Image
> end;
```

```
> I see that in the Read_Analyze, data is read correctly, but in
> BTLoad Event, info.image is not modified. Anyone can tell me why?
> Best regards,
> Tri.
Since, info.image is a structure de-reference it is passed to
Read_Analyze by value and not by reference (IDL Programming Techniques
p.207:-)) which means that when you exit from Read Analyze, info.image
is not changed.
You can do the following:
 IF fname NE "" THEN BEGIN
  Read_Analyze, fname, tmp
  info.image=tmp
 endif
 WIDGET_CONTROL, event.top, SET_UVALUE=info
but i think that Read_Analyze would work better if it was a function.
then you could do
info.image=Read_Analyze(fname)
Also look at pointers to pass image data between event handlers...
cheers
Ivan Zimine
Dpt. of Radiology (MRI), Geneva University Hospitals
email: ivan.zimine@physics.unige.ch
tel.: (+41 22) 372 70 70
Subject: Re: Help!
Posted by William Daffer on Thu, 01 Apr 1999 08:00:00 GMT
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VU KHAC Tri <tvk@info.fundp.ac.be> writes:
> Hi folks,
> I write a procedure which reads an image when a button pressed.
>
> pro BTLoad Event, event
> WIDGET CONTROL, event.id, GET UVALUE = info
> fname = DIALOG_PICKFILE(FILE = info.filename, /READ, FILTER = '*.hdr',
```

/MUST\_EXIST, /FIX\_FILTER, PATH = path, /NOCONFIRM)

- > IF fname NE "" THEN BEGIN
- > Read\_Analyze, fname, info.image
- > :^^^^^
- > ENDIF
- > end

>

- > pro Read\_Analyze, File, Image
- > ;it reads some data from the file and modifies some fields in Image
- > end:

>

- > I see that in the Read\_Analyze, data is read correctly, but in
- > BTLoad\_Event, info.image is not modified. Anyone can tell me why?

>

- > Best regards,
- > Tri.

info.image is passed by value, or as a reference to a temporary variable, I'm not sure which. I think if you change it in the following manner, it'll work.

IF fname NE "" THEN BEGIN image=info.image Read\_Analyze, fname, image info.image =image ENDIF

or, maybe pointers?

whd

--

My mail address has been mangled by my mailer. Send replies to... daffer@primenet.com

--

Outside of a dog, a book is man's best friend Inside of a dog, it's too dark to read.

Groucho Marx.

Subject: Re: Help!

Posted by davidf on Thu, 01 Apr 1999 08:00:00 GMT

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VU KHAC Tri (tvk@info.fundp.ac.be) writes:

```
> I write a procedure which reads an image when a button pressed.
> pro BTLoad_Event, event
 WIDGET_CONTROL, event.id, GET_UVALUE = info
 fname = DIALOG_PICKFILE(FILE = info.filename, /READ, FILTER = '*.hdr',
> $
  /MUST_EXIST, /FIX_FILTER, PATH = path, /NOCONFIRM)
 IF fname NE "" THEN BEGIN
   Read Analyze, fname, info.image
  ENDIF
> end
>
> pro Read_Analyze, File, Image
  ;it reads some data from the file and modifies some fields in Image
> end;
```

> I see that in the Read Analyze, data is read correctly, but in > BTLoad Event, info.image is not modified. Anyone can tell me why?

Because info is a LOCAL variable in this procedure. (You copied the information in the User Value of the top-level base into the LOCAL variable info.) If you make changes, you have to be sure to put it back in the UVALUE before you exit the event handler:

WIDGET CONTROL, event.id, SET UVALUE = info END;

I still have two cheap IDL Programming books left. Lot's of information about widget programming there. :-)

Cheers,

David

David Fanning, Ph.D. Fanning Software Consulting

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

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