
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
```

```
; overlay extra x-axis for log water vapor
axis,0.5,12,/DATA,color=1,xax=1,xstyle=1,xrange=[100,20000.] ,/xlog,$
/SAVE,xtitle='H!L2!NO [ppmv]'
```

```
oplot,h2o,alt10,color=4,thick=4
```

; ps: aside from this, I still think that IDL is a great language !

--

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Subject: Re: Help !

Posted by [Ivan Zimine](#) on Thu, 01 Apr 1999 08:00:00 GMT

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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

--

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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 BTLload_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
> BTLload_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

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