
Subject: colorbar help

Posted by [rickeym](#) on Sun, 28 Sep 1997 07:00:00 GMT

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Does IDL have a generic procedure to output a colorbar on a contour plot?

I found a procedure on the web, and it works great when device is set to the display but it doesn't look the same when device is set to PS. Here's my procedure to read in a data file, call a procedure to calculate the wavelet transform, and plot the results:

```
*****
READCOL, 'oct30.dat', time1, data ; reads in the data file
wave = WAVELET(data,0.0155,PERIOD=period,COI=coi,/PAD,SIGNIF=signif ,SCALE=scale)
freq = 6/(scale)
LOADCT,39

!P.font = 0 ;i want hardware fonts

mydevice = !D.NAME
set_plot, 'PS'

device, filename = 'oct30.ps', /COLOR, /inches

CONTOUR,ABS(wave)^2,time1,freq,xtickformat='xticks',$
XSTYLE=1,XTITLE='Time',YTITLE='Frequency (Hz)', $
TITLE='Oct30 Wavelet Power Spectrum',YRANGE=[MIN(freq), 10], $
pos = [0.2, 0.2, 0.9, 0.9], /YLOG, YSTYLE=1, NLEVELS=25,/FILL

dispbar,250,10,200,5,/Border ; display the color bar, see below

device, /close

set_plot, mydevice
*****
```

Here's the procedure to display the colorbar:

```
*****
pro dispbar,cblx,cblly,cbx,cby,Border=Border
;+
; NAME:
; DISPBAR
; DESCRIPTION:
; This procedure creates and displays a color bar on the screen.
; CALLING SEQUENCE:
; DISPBAR,cblx,cblly,cbx,cby,Border=Border,Vertical=Vertical
; INPUT:
```

```

; CBLX    Color Bar Lower Left hand X coordinate
; CBLY    Color Bar Lower left hand Y coordinate
; CBX     Color Bar X length
; CBY     Color Bar Y height
; OUTPUT:
; Screen output only. All passed variables remain unchanged.
; OPTIONAL FLAGS:
; BORDER   Puts a white (BLACK in PS) border around the color bar.
; HISTORY:
; 30-MAY-90 Version 1 written by Eric W. Deutsch
; 24-AUG-91 Added /Border Keyword   (E. Deutsch)
;-

if (n_params(0) lt 4) then begin
  print,'Call: IDL> DISPBAR,lwrlft_X,lwrlft_Y,X_length,Y_height,[/Border]'
  print,'e.g.: IDL> dispbar,120,30,100,10,/Border'
  return
endif

if (n_elements(Border) eq 0) then Border=0

if (cby eq 0) or (cbx eq 0) then return

bar=byte(indgen(cbx)*(!d.n_colors*1./cbx<255))

for i=0,cby-1 do tv,bar,cblx,cblly+i

if (Border eq 1) then plots,[cblx,cblx+cbx,cblx+cbx,cblx,cblx], $
  [cblly,cblly,cblly+cby-1,cblly+cby-1,cblly],/device

return
end
*****

```

Any help appreciated.

Rick McDaniel

Subject: Re: colorbar help
 Posted by [davidf](#) on Sun, 28 Sep 1997 07:00:00 GMT
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Rick McDaniel writes:

> Does IDL have a generic procedure to output a colorbar on a contour plot?
 >

- > I found a procedure on the web, and it works great when device is set to
- > the display but it doesn't look the same when device is set to PS.

There are various colorbar routines around on the web. I have one (called COLORBAR) on my web page that is specifically designed to work the same on the display and in PostScript output.

You might have a look at some of the Perfect PostScript articles there as well. Many things can cause your PostScript output to look different from your display output. The articles will show you how to sort it all out and produce pretty much WYSIWYG output.

Cheers,

David

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