
Subject: problem with output on PS device / TVREAD
Posted by on Thu, 25 Mar 2010 14:57:22 GMT
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Hi all,

I want to do something quite simple, but i'm on it since three days...need help !

I have a structure like this : `geo={lon:FLTARR(Nlon),
lat:FLTARR(Nlat) , amp:FLTARR(Nlon,Nlat), pha:FLTARR(Nlon,Nlat)}`

Where "amp" and "pha" are tidal wave amplitude and phase.

I would like to plot these data on a geographical map and display the output in my X window for a preview, and save this image as a PS (or PNG).

FIRST PROBLEM :

The display in the X window finally works, not so bad, but things get worse with the postscript....

It's not a problem with COLORS, neither POSITION, but my RESOLUTION is crude in the Postscript, whereas the image is quite good quality on the display window.

SECOND PROBLEM :

PS doesn't works ? Ok i'm gonna save it as a PNG, using TVREAD.
And my PNG only contains the map grid, titles, etc... but no image. Worse, the titles, axes, etc. are in purple (the first color of my color table).

If it can help, my display is 16bits.

Any (good) idea ?
Thanks a lot !

HERE IS MY CODE :

PRO test_map_geomat, ps=ps, png=png

```
    DEVICE, decomposed=0                ;(this is actually in  
my startup file)  
    file=!model_path+'mertz/K1.nc'      ; define the  
file_path
```

```
;load the file and put the data in a structure :
```

```

GEO.amp(fltarr(lon,lat), GEO.pha(fltarr(lon,lat), GEO.LON, GEO.LAT
geo=tugo2geomat_cl(file,/TIDE)

; get geographical limits
minlon=MIN(geo.lon, /NAN, MAX=maxlon)
minlat=MIN(geo.lat, /NAN, MAX=maxlat)
limit=[minlat,minlon,maxlat,maxlon]

; Define colors
ncolors=50
pal_num=25

white = GetColor('white', ncolors)
black = GetColor('black', ncolors+2)

missing=white

; Load colors for display.
!P.Background = white
!P.Color      = black
erase

; Load Color table
loadct,pal_num, NCOLORS=ncolors

; For PS output Only
IF KEYWORD_SET(ps) THEN BEGIN
  rightsize = PSWINDOW(/CM)
  this_device = !D.name
  SET_PLOT,
'PS'
  device, color=1, bits_per_pixel=8 , _EXTRA=rightsizedevice, filename=!idl_output+'toto.ps'
ENDIF

; FIRST PLOT : tide PHASE
; SET the plot position
pos=[0.1,0.2,0.45,0.8]

; Set the MAP
MAP_SET,/NOERASE, /MERCATOR, /ISOTROPIC, /NOBORDER, XMARGIN=[3,3],
YMARGIN=[3,3], LIMIT=limit, TITLE='Phase (deg) !C', POSITION=pos,
color=black

; compute min and max for appropriate scaling
minpha=MIN(geo.pha, /NAN, max=maxpha)

```

```

; Scaling (scale all the values between MIN and MAX from 0 to TOP,
Nan are set to 'missing')
pha_scaled = arrscl(geo.pha, min_value=minpha, max_value=maxpha,
top=(ncolors-1), missing=missing)
; wrap image to the map, returns positions and sizes
pha_img = MAP_IMAGE(pha_scaled,x_offset, y_offset,xsize,ysize, /
BILINEAR, COMPRESS=1, LONMIN=limit[1], LONMAX=limit[3],
LATMIN=limit[0], LATMAX=limit[2])
;DISPLAY on TV
tv,pha_img, x_offset, y_offset, XSIZE=xsize,YSIZE=ysize
; display the geographical grid
MAP_GRID,/BOX_AXES, _EXTRA=_EXTRA, COLOR=black

pos=[0.1,0.05,0.45,0.08]
COLORBAR, ncolors=ncolors, range=[minpha, maxpha], POSITION=pos

; SECOND PLOT : tide amplitude

pos=[0.55,0.2,0.9,0.8]
MAP_SET, /NOERASE, /MERCATOR, /ISOTROPIC, /NOBORDER, /GRID,
E_GRID={BOX_AXES:1}, XMARGIN=[3,3], YMARGIN=[3,3], LIMIT=limit,
TITLE='Amplitude (cm) !C', POSITION=pos, color=black
minamp=MIN(geo.amp, /NAN, max=maxamp)
amp_scaled = arrscl(geo.amp, min_value=minamp, max_value=maxamp,
top=(ncolors-1), missing=missing)
amp_img = MAP_IMAGE(amp_scaled,x_offset, y_offset,xsize,ysize, /
BILINEAR, COMPRESS=1, LONMIN=limit[1], LONMAX=limit[3],
LATMIN=limit[0], LATMAX=limit[2])
tv,amp_img, x_offset, y_offset, XSIZE=xsize,YSIZE=ysize
MAP_GRID,/BOX_AXES, _EXTRA=_EXTRA, color=black

pos=[0.55,0.05,0.9,0.08]
COLORBAR, ncolors=ncolors, range=[minamp*100, maxamp*100],
POSITION=pos

; CLOSE THE PS file and Display with GV
IF KEYWORD_SET(ps) THEN BEGIN
device, /close_file
set_plot, this_device
spawn, 'gv '+!idl_output+'toto.ps'
ENDIF

IF KEYWORD_SET(png) THEN BEGIN

toto=TVREAD()

```

```
erase  
TVIMAGE, TOTO
```

```
    ;spawn, 'display '+!idl_output+'toto'  
ENDIF
```

```
END
```
