
Subject: Re: Overlaying axes on an image?

Posted by [sbarrkum](#) on Fri, 13 Jan 1995 17:48:48 GMT

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Heres a procedure for creating image overlaid with plot area and a color bar based on data.

1) Note if a image s placed after the plot it will erase the plot. Therefore place image first and then the plot(axes).

2)If a window device is used (non strechable/scalable) pixels the image has to be first resized to size require. I've defined the size required in normal coordinates

3) Windows does not allow values more than 234 0-234 color. Hence the scaling of the image to a top value of 234.

Hope this helps

barr-kum

-=====

```
pro mak_plot, filename, x1,y1,x2,y2
```

```
; A procedure to resize a image to specified size x1, y1..
```

```
; in normal coordinates and put a plot around it
```

```
; and a color bar
```

```
pict=bytarr(26,14) ; array to hold the image
```

```
openr, unit1, filename, /get_lun
```

```
; Read the array
```

```
readu,unit1, pict
```

```
close, unit1 & free_lun, unit1
```

```
tmin=min(pict)
```

```
tmax=max(pict)
```

```
arr_size=convert_coord(x2-x1,y2-y1,/Normal, /To_device)
```

```
if arr_size(0) gt 1000.0 then arr_size(0)=26.0 * 50.0 ; this in case postscript
```

```
if arr_size(1) gt 700.0 then arr_size(1)=14.0 * 20.0 ; which will give really large sizes
```

```
img=congrid(pict,arr_size(0),arr_size(1))
```

```
tv, bytscl(img, tmin, tmax, top=255),x1, y1, /Normal, $
```

```
      xsize = x2-x1, ysize = y2-y1
```

```
;Plot lat long grid and Manus coast line
```

```

plot,[140.5, 164.5], [-5.5,6.5], /Nodata, Xrange=[140.5, 164.5],YRange = [-5.5,6.5],    $
    /NOERASE, Linestyle=0, thick =3, XStyle=1 , Ystyle=1, color=backcolor, $
    position=[x1,y1,x2,y2], charsize=0.6

```

```

;Place color bar

```

```

x1=x2+0.07 & y1=y1
x2=x2+0.14 & y2=y2

```

```

x = findgen(255) ; was 246
colour_bar=intarr(2,255)
colour_bar(0,0:*)=x
colour_bar(1,0:*)=x
arr_size=convert_coord(x2-x1,y2-y1,/Normal, /To_device)
if arr_size(0) gt 1000.0 then arr_size(0)=24.0 * 20.0
if arr_size(1) gt 700.0 then arr_size(1)=12.0 * 20.0
colour_bar=congrid(colour_bar,arr_size(0),arr_size(1))

```

```

tv, bytscl(color_bar, tmin, tmax, top=255), x1, y1, /Normal, xsize = x2-x1, ysize = y2-y1

```

```

plot,[0.0,1.0], [tmin, tmax], /Nodata, Xrange=[0.0,1.0],YRange = [tmin, tmax],    $
    /NOERASE, Linestyle=0, thick=3, XStyle=1, Ystyle=1, color=backcolor, $
    position=[x1,y1,x2,y2], xticks=1, xcharsize=.001, YTitle=bar_YTitle, $
    charsize=0.8

```

```

end

```

```

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```

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