Subject: Plotting a compass
Posted by DAVIDE LENA on Fri, 09 Nov 2012 19:01:18 GMT
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Hi guys, I am trying to plot something like a compass on top of an image (a 2D matrix filled with floats. It is supposed to be a flux map for an astronomical object. No reliable wcs system inside). So I ended up using "arrow".
I am having difficulties plotting two orthogonal arrows. The code (see below) seems fine to me. Is that something related to some rescaling? (Or maybe I made some awkward mistake).
Also, can you suggest something more up to date than tvscale? Consider that my goal is have maps with a color bar and spatial scales along x and y.

Thanks in advance. Cheers.
Davide

```
  p = [0.2,0.25,0.9,0.9]        ; positions, put the image in a specific place in the window

  ; Arrows coordinates:
  x0 = 0.8
  y0 = 0.75
  x1 = 0.85
  y1 = 0.77

  ; slope of the first arrow:
  m1 = (y1 - y0)/(x1 - x0)

  x2 = 0.78
  y2 = y0 - 1./m1 * (x2 - x0)

  SET_PLOT, 'ps'
  DEVICE, BITS_PER_PIXEL=8, /encapsulated, FILENAME = 'awesomeplot.eps', /portrait,
FONT_SIZE=10, /color, xsize=24, ysize=42
  erase
  loadct, 3   ; "red temperature" table.
  tvscale, f, /KEEP_ASPECT_RATIO, minvalue=minc, maxvalue=maxc, position=p, /scale, /axis,
$
        AXKEYWORDS={CHARSIZE:3, XTITLE:'x [arcsec]', YTITLE:'y [arcsec]', COLOR:0,
yrange:[crpix2, (crpix2 - ny)]*cd1_1, xrange:[crpix1, (crpix1 - nx)]*cd2_2}
  fsc_arrow, x0, y0, x1, y1, normal=1, COLOR = 'green'
  fsc_arrow, x0, y0, x2, y2, normal=1, COLOR = 'green'
  cgColorbar, FORMAT='(F2.0)', Position=[p[2], p[1], p[2]+0.015, p[3]], ncolors=256, /vertical,
/right, Divisions=4, CHARSIZE=3, Range=[minc, maxc]

  device, /close
```