Subject: Re: more log-scaled images
Posted by Wout De Nolf on Wed, 17 Dec 2008 10:31:22 GMT
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On Tue, 16 Dec 2008 10:23:08 -0800 (PST), "ben.bighair"
<ben.bighair@gmail.com> wrote:

> Here is what I came up with: http://www.tidewater.net/~pemaquid/hbb_logimage.pro

I always get very depressed when doing this type of plotting :-). It's
all in the details, half pixel shifts etc. I tried to compare your's
with Paolo Grigis' procedure and it's different (see below).

I think you need to set xrange=[min(x),max(x)] and
yrange=[min(y),max(y)] (don't ask me why). Furthermore you have the
half-pixel difference and additionally some small aberration in your
case (check xaxis at 3).

```
PRO TEST_LOGIMAGE
 nx = 300
 ny = 1000
 image = rebin(lindgen(1,ny),nx,ny,/sample)
 image[*,0:4] = rebin(lindgen(nx)*4,nx,5,/sample)
 image = bytscl(image)

 print,'First color x:',min(where(image[*,0] ne 0))
 print,'First color y:',min(where(image[0,*] ne 0))

 loadct,38

 window,0
 x = FINDGEN(nx)+1
 y = FINDGEN(ny)+1
 PLOT, x,y, /XLOG, /YLOG, /NODATA, XSTYLE = 1, YSTYLE = 1
 logimage = HBB_LOGIMAGE(image, x,y, /XLOG, /YLOG, $
   ODIM = odim, TRUE = true, START = start)
 TV, logimage, start[0],start[1], XSIZE = odim[0], YSIZE = odim[1]
 PLOT, x,y, /XLOG, /YLOG, /NODATA, /NOERASE, XSTYLE = 1, YSTYLE = 1

 window,1
 x = FINDGEN(nx)+1
 y = FINDGEN(ny)+1
 pg_plotimage,image,x,y,/xlog,/ylog,/xs,/ys
END
```