Subject: From tvscale to cgImage, puzzling feature in the plot
Posted by DAVIDE LENA on Tue, 05 Mar 2013 23:21:45 GMT
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Hi IDL gurus,
I am trying to rewrite a code that was using tvscale to a new one using cgImage and other new functions.
While using cgImage I run into a problem that was absent into the previous version of my code and I can't figure what is going on. This is what happens:
I am making "channel maps" for a galaxy (so I read a 'cube' with two spatial dimensions and a frequency dimension, from that I read a spectrum with an emission line, I slice the emission line and make a plot so that each plot shows the distribution of gas with a given velocity. The entire thing goes through a for cycle):

nx = x dimension of the image (spatial)
ny = y dimension of the image (spatial)

; Print on the screen:
```
   erase
   cgIMAGE, rebin(alog10(image),8*(1+nx),8*(1+ny)), POSITION = p, /KEEP_ASPECT_RATIO,
         MINVALUE = -2, /SCALE, /AXES, AXKEYWORDS={TICKLEN:-0.0075}
   cgCONTOUR, image, COLOR = 'black', NLEVELS=4, LABEL=0, /OnImage
   cgColorbar, RANGE = [-2,0], position = [0.9, 0.1, 0.915, 0.9], /VERTICAL, /RIGHT,
FORMAT='(F4.1)'
   wait, 0.5
```

The first plot looks fine. All the other plots show some sort of isocontour of white pixels. This 'isocontour' changes with the keyword MAXVALUE in cgImage. Though all the data in the image are within reasonable values. It doesn't seem that the problem relates to the presence of cgContours or cgColorbar, nor rebinning. It shows up with whatever mage I plot. Still it seems related to the presence of the FOR cycle. Something happens after the first run.

I hope I have been decently clear.
Any suggestion?