
Subject: CG Elevation image + arbitrary discrete colorbar

Posted by [Matteo](#) on Fri, 30 Mar 2012 08:48:42 GMT

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Hallo,

I've checked many of David's links and I seem to find all pieces for a little problem I'm trying to solve...still I can't manage to glue them together properly.

I'm trying to scale an image between arbitrary min and max values, with an arbitrary number of levels, and getting the proper (discrete) colorbar associated with it. I'm trying to use the new OOB_* options to leave values < min in one color and values > max of another.

In the example below, I'd for example to have 10 levels between 0 and 3000m, and elevations <0 set to black and elevations > 2000 set to white.

I'm also trying to get the same result using bytscl and scale_vector.

Does anybody have any suggestions?

Many thanks,
Matteo

```
pro cbar
compile_opt idl2
```

```
nclrs=10
minelev=0.
maxelev=2000.
p = [0.02, 0.15, 0.98, 0.98]
```

```
cgLoadCT, 33, NColors=nclrs, Bottom=1
TVLCT, cgcolor('white',/Triple), nclrs+1
```

```
image=cgDemoData(7)
;scaledImage = Scale_Vector(image, 0, nclrs, MINVALUE=minelev,
MAXVALUE=maxelev, /nan)
scaledImage = bytscl(image, MIN=minelev, MAX=maxelev, top=nclrs+1, /
nan)
```

```
cgWindow, WXSize=700, WYSize=700
cgImage, scaledimage, position = p, MinValue=0, MaxValue=nclrs,
Top=nclrs-1, /Keep, /Add
cgColorbar, Position=[p[0], p[1]-0.1, p[2], p[1]-0.05], NColors=nclrs,
$
  Range=[minelev,maxelev], Divisions=10, bottom=1, $
```

```
/discrete, OOB_Low='black', OOB_High='white', /Add
```

```
end
```
