
Subject: Geometric mismatch using cgImage and cgDrawShapes

Posted by [Jonas Ardo](#) on Fri, 02 Oct 2015 21:10:19 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi

I have shape file (covering Senegal) in Sinusoidal projection I like to overlay on an image with the same projection.

Plotting the shape file only using cgDrawShapes works fine

(<http://postimg.org/image/8ax6pgm3x/>) but when first using

cgImage to draw an image with the shape file on top, the data sets don't line up correctly and there is a geometric

mismatch (<http://postimg.org/image/s796ijbji/>).

The image and the shape file fit perfectly when displayed using ENVI.

What have I missed in order to get a good geometric match between the shape file and the image?

Code used:

```
pro mapmap
compile_opt idl2
```

```
e = ENVI(/HEADLESS)
file1 = 'D:\forskning\2015\MOD09A1\XPP\Senegal\MEAN_NPP_SENEGAL.img'
raster1 = e.OpenRaster(file1)
meannpp = raster1.GetData()
```

```
cgWindow, WAspect=1
```

```
shapefile = 'D:\forskning\2015\MBOW_etal\Brandt\data\Senegal_long_rot.sh p'
```

```
mapCoord = Obj_New('cgMap', 'SINUSOIDAL', LIMIT=[12, -18, 17, -11], $
  Position=[0.05, 0.05, 0.95, 0.95], CENTER_LATITUDE=0, CENTER_LONGITUDE=0, $
  FALSE_EASTING=0, FALSE_NORTHING = 0, SPHERE_RADIUS=6371007.181 )
```

```
mapCoord -> AddCmd
```

```
cgloadct,53, /Window, /Addcmd
```

```
cgImage, meannpp, /KEEP_ASPECT_RATIO, /ORDER,
/WINDOW,MINVALUE=1,maxvalue=2000, /addcmd
```

```
cgDrawShapes, shapefile, Colors='black', MapCoord=mapCoord, /projected_XY, /AddCmd
```

```
cgMap_Grid, LatDel = 1.0, LonDel = 1.0, /Box_Axes, Color=cgColor('blue'), $
  Map_Structure=mapCoord, /AddCmd
```

END

--

Jonas Ardö
Lund University, Sweden
