
Subject: Re: Display and Navigate Image in IDL 8.2
Posted by [lecacheux.alain](#) on Fri, 07 Sep 2012 12:47:30 GMT
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Le vendredi 7 septembre 2012 11:40:10 UTC+2, Klemen a écrit :

> David, I have jsut upgraded to IDL 8.2 so I can test it...

>

>

>

> The code is, I think, ok (I haven't so much experience with Image). The only problem is your definition of you georeference. I think that your ranges are defined for a usual Mercator projection with origin in 0N, 0E. But you have moved your origin to 105.1W, 40.6N. This point should have in map coordinates values 0, 0. This means that below defined range is false:

>

>

>

> XRange: [-11711131.0, -11688226.0] (meters)

>

> YRange: [4914254.0, 4937159.5] (meters)

>

>

>

> You could redefine your range as:

>

> n = 600

>

> res = 38.1757

>

> x = findgen(n)* res - n*res*0.5

>

> y = reverse(x)

>

> xrange = [min(x), max(x)]

>

> yrange = [min(y), max(y)]

>

>

>

> Well, then I get at least something, I am not sure if this is exactlly what you are looking for, but right mouse click gives me at least the proper longitude when I scroll over the image.

>

>

>

> Cheers, Klemen

Hi David,

Here is my solution:

1st step: define the size of the image in decimal degrees, by using your "magic" resolution number. I guess that it might be retrieved by another way.

```
centerlat = 40.6000d
centerlon = -105.1000d
res = 38.1757
map = Map_Proj_Init('mercator', /gctp, ELLIPSOID='wgs 84')
cm = map_proj_forward(centerlon, centerlat, MAP=map)
xrange = cm[0] + [-300,300]*res
yrange = cm[1] + [-300,300]*res
xr = map_proj_inverse(xrange, yrange, MAP=map)
print,xr
;  -105.20288    40.521535
;  -104.99712    40.678372
```

As you can see, numbers are slightly different from yours (in latitude).

2nd step: draw the image and add the grid map

```
obj = IMAGE(googleimage, $
  GRID_UNITS=2,
  MARGIN=[0.05,0.15,0.05,0.05], $
  IMAGE_LOCATION=xr[0:1,0],$
  IMAGE_DIMENSIONS=[xr[0,1]-xr[0,0],xr[1,1]-xr[1,0]], $
  MAP_PROJECTION='Mercator')
obj.mapprojection.mapgrid.BOX_AXES = 1
obj.mapprojection.mapgrid.BOX_THICK = 10
obj.mapprojection.mapgrid.LINESTYLE = 1
obj.mapprojection.mapgrid.GRID_LONGITUDE = 0.04
obj.mapprojection.mapgrid.GRID_LATITUDE = 0.03
obj.mapprojection.mapgrid.LABEL_POSITION = 0
```
