
Subject: How to include a scale bar (distance bar) on the Google Map Plot?

Posted by [atmospheric physics](#) on Wed, 20 May 2015 14:29:30 GMT

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Hello,

How can I include a scale bar within the Google Map plot below? (For example, I wanted something like the one at the following link:

<http://www.androidcentral.com/google-maps-update-brings-back-scale-bar>).

Assume the Google Map plot is something similar to the following:

http://www.idlcoyote.com/gallery/google_map_plot.png

Can anyone suggest me how I can do that?

My program is as below:

PRO test_GooglePlot

CLOSE,/ALL

Lats=[51.51D,51.55D] ; deg.N

Lons=[12.91D,12.95D] ; deg E

centerLat=(MAX(Lats) + MIN(Lats)) / 2.0 ; deg. N

centerLon=(MAX(Lons) + MIN(Lons)) / 2.0 ; deg. E

zoom=14

scale=cgGoogle_MetersPerPixel(zoom)

xsize= 600 < 640 ; Max size of Google image with this Google API

ysize= 600 < 640 ; Max size of Google image with this Google API

resolution = STRTRIM(xsize,2) + 'x' + STRTRIM(ysize,2)

googleImageFilename='testgoogleimg.png'

googleStr="http://maps.googleapis.com/maps/api/staticmap?" + \$

"center=" + StrTrim(centerLat,2) + ',' + StrTrim(centerLon,2) + \$

"&zoom=" + StrTrim(zoom,2) + "&size=" + resolution + \$

" &scale=2&maptype=satellite&sensor=true&format=png32 "

netObject = Obj_New('IDLnetURL')

void = netObject -> Get(URL=googleStr, FILENAME=googleImageFilename)

Obj_Destroy, netObject

googleImage = Read_Image(googleImageFilename)

mapCoord = Obj_New('cgMap', 'Mercator', ELLIPSOID='WGS 84') ; ,/OnImage

uv = mapCoord -> Forward(centerLon, centerLat)

```
uv_xcenter = uv[0,0]
uv_ycenter = uv[1,0]
xrange = [uv_xcenter - (xsize/2.0D*scale), uv_xcenter + (xsize/2.0D*scale)]
yrange = [uv_ycenter - (ysize/2.0D*scale), uv_ycenter + (ysize/2.0D*scale)]
mapCoord -> SetProperty, XRange=xrange, YRange=yrange
PRINT, xrange, yrange
```

```
geo_lat=[51.5256, 51.5290, 51.5296, 51.5261, 51.5269, 51.5250, 51.5256, $
51.5260, 51.5300, 51.5264, 51.5255, 51.5252, 51.5271, 51.5257, $
51.5253, 51.5249, 51.5201, 51.5220, 51.5256, 51.5260, 51.5251, $
51.5265, 51.5257, 51.5186, 51.5227, 51.5257, 51.5198, 51.5361, $
51.5263, 51.5200, 51.5350, 51.5312, 51.5187, 51.5260, 51.5260, $
51.5247, 51.5257, 51.5217, 51.5266, 51.5264, 51.5255, 51.5265, $
51.5260, 51.5252, 51.5287, 51.5277, 51.5227, 51.5251, 51.5341, $
51.5248]
```

```
geo_lon=[12.9289, 12.9264, 12.9259, 12.9223, 12.9135, 12.9254, 12.9277, $
12.9272, 12.9280, 12.9264, 12.9257, 12.9262, 12.9421, 12.9272, $
12.9272, 12.9272, 12.9410, 12.9229, 12.9254, 12.9288, 12.9373, $
12.9279, 12.9267, 12.9291, 12.9307, 12.9179, 12.9373, 12.9405, $
12.9313, 12.9202, 12.9277, 12.9350, 12.9134, 12.9264, 12.9256, $
12.9254, 12.9262, 12.9274, 12.9285, 12.9256, 12.9281, 12.9272, $
12.9280, 12.9290, 12.9200, 12.9319, 12.9273, 12.9282, 12.9167, $
12.9263]
```

```
cgPlotS, geo_lon, geo_lat, PSYM=16, SYMSIZE=2.0, MAP=mapCoord, $
THICK=2.5, COLOR='yellow'
```

END

test_GooglePlot

```
cgPS_Open,'test_googleplot.ps'
test_GooglePlot
cgPS_Close
```

```
cgPS2Raster,'test_googleplot.ps',/PNG,/Portrait, $
Width=600, DENSITY=300, RESIZE=100
```

END

Thanks in advance,
Regards,
Madhavan

Subject: Re: How to include a scale bar (distance bar) on the Google Map Plot?
Posted by [David Fanning](#) on Wed, 20 May 2015 15:27:40 GMT
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Madhavan Bomidi writes:

- > How can I include a scale bar within the Google Map plot below? (For example, I wanted something like the one at the following link:
<http://www.androidcentral.com/google-maps-update-brings-back-scale-bar>).
- >
- > Assume the Google Map plot is something similar to the following:
- > http://www.idlcoyote.com/gallery/google_map_plot.png
- >
- > Can anyone suggest me how I can do that?

You know how many meters/pixel you have in your image (it is in the "scale" variable). Do some simple math to figure out how many pixels would be required to display the range you want (maybe 500 meters in this image). Then just draw an arrow or whatever that long on your image with `cgPlotS`. Use `cgText` to label it.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thue. ("Perhaps thou speakest truth.")
