I did attempt to write IDL code by using your graphics tools. My goal was to overlay the points on Google static map with the link:
 http://maps.googleapis.com/maps/api/staticmap?center=51.5255
17,12.927633&zoom=14&size=1200x1200&maptype=sate llite&sensor=true

Below is my code:

```
; ---------------------------
PRO Melpitz_GooglePlot

CLOSE,/ALL

; Set up variables for the plot
centerLat= 51.525517D   ; (Max(Lats) + Min(Lats)) / 2.0  deg. N
centerLon= 12.927633D   ; (Max(Lons) + Min(Lons)) / 2.0  deg. E
zoom=14
scale=cgGoogle_MetersPerPixel(zoom)
; resolution = (2*!DPI*Re)/(256*2D^zoom)
; Re = 6378137D - radius of Earth
PRINT, scale
googleImageFilename='melpitzgoogleimg.png'

 IF FILE_TEST(googleImageFilename) THEN BEGIN
   googleImage = READ_PNG(googleImageFilename)
 ENDIF ELSE BEGIN

  ; Gather the Google Map using the Google Static Map API
  googleStr="http://maps.googleapis.com/maps/api/staticmap?" + $
     "center=" + StrTrim(centerLat,2) + ',' + StrTrim(centerLon,2) + $
     "&zoom=" + StrTrim(zoom,2) + "&size=1200x1200" + $
     "&maptype=satellite&sensor=true&format=png32"  ; terrain/satellite/hybrid

   netObject = Obj_New('IDLnetURL')
   void = netObject -> Get(URL=googleStr, FILENAME=googleImageFilename)
   Obj_Destroy, netObject
   googleImage = Read_PNG(googleImageFilename)
   s=SIZE(googleImage,/DIMENSIONS)
   ;googleImage = Read_Image('melpitzgoogleimg.png')
 ENDELSE

  ; Set up the map projection information to be able to draw on top
  ; of the Google map.

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

```
xy = mapCoord -> Forward(centerLon, centerLat)
xrange = [xy[0,0] - (1200*scale), xy[0,0] + (1200*scale)]
yrange = [xy[1,0] - (1200*scale), xy[1,0] + (1200*scale)]
mapCoord -> SetProperty, XRANGE=xrange, YRANGE=yrange
PRINT, xrange, yrange

; Open display window - Google Image with a map grid
cgDisplay, 720, 800

; Show the Google image on the track
cgImage, googleImage[0:2,*,*],Position=[50, 50, 550, 550]/600.
cgMap_Grid, MAP=mapCoord,LINESTYLE=0,THICK=2,/BOX_AXES,/CGGRID,/LABEL

; Overlay the points on the map
  geo_lon=[  12.928891,12.926434,12.925875,12.922277,12.913507,12.925407, $
    12.927663,12.927191,12.928041,12.926399,12.925676,12.926233, $
    12.942073,12.927199,12.927197,12.927209,12.941039,12.922861, $
    12.925361,12.928772,12.937340,12.927910,12.926749,12.929081, $
    12.930733,12.917927,12.937282,12.940540,12.931345,12.920242, $
    12.927734,12.934965,12.913434,12.926365,12.925563,12.925388, $
    12.926150,12.927432,12.928548,12.925627,12.928129,12.927163, $
    12.928032,12.929043,12.919992,12.931943,12.927277,12.928178, $
    12.916696,12.926318]


  geo_lat=[51.525643,51.528963,51.529627,51.526104,51.526895, $
    51.525046,51.525569,51.525998,51.529957,51.526427,51.525457, $
    51.525176,51.527107,51.525662,51.525315,51.524935,51.520126, $
    51.522013,51.525613,51.526004,51.525096,51.526548,51.525709, $
    51.518588,51.522657,51.525658,51.519825,51.536149,51.526332, $
    51.519956,51.535018,51.531251,51.518749,51.525994,51.525979, $
    51.524687,51.525668,51.521689,51.526567,51.526391,51.525455, $
    51.526486,51.525986,51.525204,51.528715,51.527705,51.522675, $
    51.525066,51.534141,51.524814]

  PRINT, MAX(geo_lon),MIN(geo_lon),MAX(geo_lat),MIN(geo_lat)

  cgPlotS, geo_lon, geo_lat, COLOR='yellow', $
      PSYM=16, SYMSIZE=1.2,MAP_OBJECT=mapCoord



 END  ;*********************************************************** ******
; This main program shows how to call the program and produce
; various types of output.

; Display the plot in a graphics window.
  Melpitz_GooglePlot
```

```
; Display the plot in a resizeable graphics window
  cgWindow,'Melpitz_GooglePlot',WXSIZE=600,WYSIZE=600,WASPECT= 600./600, $
 WTitle='Melpitz',WBackground='white'

 ; Create a PostScript file.
 PS_Start, 'melpitz_googleplot.ps'
 Melpitz_GooglePlot
 PS_End

 ; Create a PNG file with a width of 600 pixels.
 cgPS2Raster, 'melpitz_googleplot.ps', /PNG, /Portrait

END
;-------------------------------------------
```

The problems I noticed are ...

(1) The google static map link provided top of my code shows a high resolution map while the lat-lon axis overlaying google map in the code is at a low resolution. I wanted to have the map at a high resolution because my overlaying points are very close by. Can you where I am going wrong?

(2) I guess I am doing something wrong with cgDisplay and cgImage while providing the dimensions. How to provide these dimensions for any google static map while overlaying the axis?

(3) Can anyone provide me an example to include different colors for my points with CgPlots and also text / label near the point?

Please help understand properly if I am going wrong in my code.

Thanks and regards

On Wednesday, November 27, 2013 3:02:18 PM UTC+1, David Fanning wrote:
> Madhavan Bomidi writes:
>
>
>
>> I get the same error message ...
>
>> % Attempt to call undefined method: 'MAPPROJECTION::MAPFORWARD'.
>
>> % Execution halted at: MELPITZ_GOOGLE_PLOT   38
>
>>
>
>> I don't have any clue now!!! Any help to solve this issue will be of great help.
>

>

>

> Well, you have IDL 8.0, which was the absolute buggiest version of IDL

>

> ever when it came to these new function graphics routines. If you want

>

> to use function graphics I think you will have to upgrade to the latest

>

> version, which is quite a bit better. (Your code ran in IDL 8.2.3.)

>

>

>

> The other alternative is to use Coyote Graphics to make your Google map.

>

> (It will probably look better, too.) You can find an example of what you

>

> are trying to do and code to do this in the Coyote Plot Gallery:

>

>

>

>   http://www.idlcoyote.com/gallery/index.html

>

>

>

> 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.")