
Subject: How to control the lat-lon axis when using Google Static map as background?

Posted by [atmospheric physics](#) on Mon, 14 Apr 2014 09:55:16 GMT

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Hello,

I am trying to overlay some points on a google static map as background. I find a problem with the y-axis labels. I see 51.52, 51.52, 51.53, 51.54, 51.54 (repetitive values!!!) while for x-axis they are 12.91,12.92,12.93,12.94,12.95

Why I am getting these repetitive labels on the y-axis? Is there a way to control these axis labels? Can I provide the values I want to see on the labels?

Also, can anyone help me in putting a bar which indicates km scale along x-axis and y-axis?

Below is the code I am using:

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...

Subject: Re: How to control the lat-lon axis when using Google Static map as background?

Posted by [David Fanning](#) on Mon, 14 Apr 2014 12:40:32 GMT

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Madhavan Bomidi writes:

> I am trying to overlay some points on a google static map as background. I find a problem with the y-axis labels. I see 51.52, 51.52, 51.53, 51.54, 51.54 (repetitive values!!!) while for x-axis they are 12.91,12.92,12.93,12.94,12.95

>

> Why I am getting these repetitive labels on the y-axis? Is there a way to control these axis labels? Can I provide the values I want to see on the labels?

>

> Also, can anyone help me in putting a bar which indicates km scale along x-axis and y-axis?

Well, don't know. If you see labels on your plot, you have better eyes than I do. When I run your code, I see some yellow dots on a white background. The description of your problem, however, leads me to conclude that you need to change the format of your label output from f0.2 to f0.3.

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.")

Subject: Re: How to control the lat-lon axis when using Google Static map as background?

Posted by [atmospheric physics](#) on Tue, 15 Apr 2014 08:17:14 GMT

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Hello David,

Thanks for your response. How can change the format of the label while using cgPlotS function?

Sorry for inconvenience,

Thanks again,

Madhavan

On Monday, April 14, 2014 2:40:32 PM UTC+2, David Fanning wrote:

> Madhavan Bomidi writes:

>
>
>
>> I am trying to overlay some points on a google static map as background. I find a problem with the y-axis labels. I see 51.52, 51.52, 51.53, 51.54, 51.54 (repetitive values!!!) while for x-axis they are 12.91,12.92,12.93,12.94,12.95
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> Cheers,
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>
>
> David
>
> --
>
> David Fanning, Ph.D.
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> Fanning Software Consulting, Inc.
>
> Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>
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> Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: How to control the lat-lon axis when using Google Static map as background?

Posted by [David Fanning](#) on Tue, 15 Apr 2014 13:04:20 GMT

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Madhavan Bomidi writes:

> Thanks for your response. How can change the format of the label while using cgPlotS function?

Humm. Not sure I understand your question. With cgPlotS, one controls the "format" of the symbol by choosing one of the 50 or so symbols allowed, changing its size (SymSize) and color (SymColor) as needed.

But, I thought you were talking about numbers. If you are asking how do you format numbers that you put onto a plot with a command like cgText, then I would say it is done with the String function:

```
number = 123.4567
numberAsLabel = String(number, Format='(F0.2)')
cgText, lon, lat, numberAsLabel, Size=2.0
```

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.")

Subject: Re: How to control the lat-lon axis when using Google Static map as background?

Posted by [atmospheric physics](#) on Wed, 16 Apr 2014 10:17:42 GMT

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Hello Dave,

I wanted to control the x- and y- label format. I solved my problem.

Thanks ...

Madhavan
