
Subject: CGMAP_GRID: Latitude lines
Posted by [Oliver Angelil](#) on Thu, 27 Mar 2014 12:27:38 GMT
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I cannot get my latitude lines to run all the way through my map (from left to right borders). They seem to just run along the middle of the image. Anyone have any ideas?

Thank you in advance.

Oliver

Subject: Re: CGMAP_GRID: Latitude lines
Posted by [Oliver Angelil](#) on Thu, 27 Mar 2014 12:45:37 GMT
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btw, i'm working with MODIS sinusoidal data. Basically working from this:
https://www.idlcoyote.com/map_tips/modis_overlay.html

Subject: Re: CGMAP_GRID: Latitude lines
Posted by [David Fanning](#) on Thu, 27 Mar 2014 13:14:36 GMT
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Oliver Angelil writes:

> I cannot get my latitude lines to run all the way through my map (from left to right borders).
They seem to just run along the middle of the image. Anyone have any ideas?

Does your command look like this:

```
cgMap_Grid, /Label, /cgGrid, Map=mapObj
```

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: CGMAP_GRID: Latitude lines
Posted by [Oliver Angelil](#) on Thu, 27 Mar 2014 13:30:28 GMT
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When using:
cgMap_Grid, /Label, /cgGrid, Map=mapObj

I see the error: 'Current plotting device must have map coordinates'

Cheers,

Oliver

Subject: Re: CGMAP_GRID: Latitude lines
Posted by [Oliver Angelil](#) on Thu, 27 Mar 2014 13:42:32 GMT
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And my original command was:
cgMap_Grid, MAP_STRUCTURE=map, COLOR='white', LATDELTA=2, LONDELTA=2,
THICK=2, /CGGRID

Subject: Re: CGMAP_GRID: Latitude lines
Posted by [David Fanning](#) on Thu, 27 Mar 2014 13:54:38 GMT
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Oliver Angelil writes:

> When using:
> cgMap_Grid, /Label, /cgGrid, Map=mapObj
>
> I see the error: 'Current plotting device must have map coordinates'

When was the last time you updated your Coyote Library? This morning?

http://www.idlcoyote.com/code_tips/fixcoyoteprogram.php

Cheers,

David

--

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Subject: Re: CGMAP_GRID: Lattitude lines
Posted by [Oliver Angelil](#) on Thu, 27 Mar 2014 14:00:48 GMT
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Roughly 4 months ago.

Subject: Re: CGMAP_GRID: Lattitude lines
Posted by [David Fanning](#) on Thu, 27 Mar 2014 14:04:58 GMT
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Oliver Angelil writes:

> Roughly 4 months ago.

Ah. Could explain it. :-)

Cheers,

David

--

David Fanning, Ph.D.

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

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Subject: Re: CGMAP_GRID: Lattitude lines
Posted by [Oliver Angelil](#) on Thu, 27 Mar 2014 14:28:58 GMT
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I just updated the coyote library - and it seems to not have helped.

If you have the patience to look into this issue a bit further, here's the relevant part of the code:

```
cgIMAGE, data, /KEEP, POSITION=Position
map = Obj_New('cgMap', 'sinusoidal', /GCTP, SPHERE_RADIUS=6371007.181D, /OnImage)
uv = Map_Proj_Forward([lslon, tslon, rslon, bslon], [lslat, tslat, rslat, bslat],
MAP_STRUCTURE=map->GetMapStruct())
map -> SetProperty, XRANGE=[uv[0,0], uv[0,2]], YRANGE=[uv[1,3], uv[1,1]], /Draw
cgMap_Continents, MAP_STRUCTURE=map, /Countries, /Continents, COLOR='white', /HIRES

cgMap_Grid, /cgGrid, Map=mapObj, color='white', thick=2

void = cgSnapshot(FILENAME=output_dir+'MOD10A1_'+date+'.png', /NODIALOG)
```

On Thursday, 27 March 2014 15:04:58 UTC+1, David Fanning wrote:

> Oliver Angelil writes:

>
>
>
>> Roughly 4 months ago.
>
>
>
> Ah. Could explain it. :-)
>
>
>
> Cheers,
>
>
>
> David
>
> --
>
> David Fanning, Ph.D.
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> Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: CGMAP_GRID: Latitude lines
Posted by [David Fanning](#) on Thu, 27 Mar 2014 14:39:08 GMT
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Oliver Angelil writes:

> cgMap_Grid, /cgGrid, Map=mapObj, color='white', thick=2

Can you try this using *your* map object. :-)

cgMap_Grid, /cgGrid, Map=map, color='white', thick=2

Does that help?

David

--

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

Subject: Re: CGMAP_GRID: Latitude lines

Posted by [Oliver Angelil](#) on Thu, 27 Mar 2014 14:53:28 GMT

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Yes I tried that, but it gives me exactly the same image produced when using my original line:

```
cgMap_Grid, /cgGrid, Map_structure=map, color='white', thick=2
```

I have emailed you the image so you can see what exactly about the latitude lines I am trying to correct.

Oliver

On Thursday, 27 March 2014 15:39:08 UTC+1, David Fanning wrote:

> Oliver Angelil writes:

>

>

>

>> cgMap_Grid, /cgGrid, Map=mapObj, color='white', thick=2

>

>

>

> Can you try this using *your* map object. :-)

>

>

>

> cgMap_Grid, /cgGrid, Map=map, color='white', thick=2

>

>

>

> Does that help?

>

>

>

> David

>

>

>

> --

>

> David Fanning, Ph.D.

>

> Fanning Software Consulting, Inc.

>

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

>
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Subject: Re: CGMAP_GRID: Lattitude lines
Posted by [David Fanning](#) on Thu, 27 Mar 2014 15:20:51 GMT
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Oliver Angelil writes:

>
> Yes I tried that, but it gives me exactly the same image produced when using my original line:
>
> cgMap_Grid, /cgGrid, Map_structure=map, color='white', thick=2
>
> I have emailed you the image so you can see what exactly about the latitude lines I am trying to correct.

cgMap_Grid tries to figure out which latitude and longitude lines are passing through the image "scene" by sampling the image at 25 points around its perimeter. When the lines are at angles, as these are, the algorithm can become confused about the lat and lon range that it uses to create default grid lines. In these cases, you pretty much have to abandon the automatic grid lines and define them specifically yourself. Pass them into the program with LONS and LATS keywords.

Cheers,

David

--

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