
Subject: Re: Proper Map Label Clipping
Posted by [jkeller](#) on Sat, 13 Mar 2010 10:02:17 GMT
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> Others who work with map projections may find this program
> helpful. :-)

Thanks for sharing this useful adjustment of MAP_GRID.

However, I'm still quite annoyed with the fact that for a non-rectangular projection (e.g. mollweide, stereographic) MAP_GRID produces grid lines only for a segment of the latitude ring and misses the upper and/or lower edges of the map plot. But if you use /BOX_AXES in the same plot, it borders the full rectangular map extent (which is "correct" as IDL plots the map for the rectangular area instead of the segment limits). Any ideas for this problem?

Example:

<http://img715.imageshack.us/img715/9490/mapexampleleg.jpg>

Regards,
Jan

Subject: Re: Proper Map Label Clipping
Posted by [David Fanning](#) on Sat, 13 Mar 2010 16:34:28 GMT
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jkeller writes:

> However, I'm still quite annoyed with the fact that for a non-
> rectangular projection (e.g. mollweide, stereographic) MAP_GRID
> produces grid lines only for a segment of the latitude ring and misses
> the upper and/or lower edges of the map plot. But if you use /BOX_AXES
> in the same plot, it borders the full rectangular map extent (which is
> "correct" as IDL plots the map for the rectangular area instead of the
> segment limits). Any ideas for this problem?

Humm. I guess I don't see this as a "problem". It is pretty much exactly what I would expect to happen when you set the LIMIT as you have to in order to get this output.

Maybe I'm missing something. Does other software handle this differently?

In any case, here is one way to fix your specify problem.
I just draw the map in a larger position in another window

(could be a pixmap window), then copy the contents over to the first window. This results in grid lines going to the edge of the box plot.

```
.*****  
,  
window, xsize=500, ysize=500  
m = obj_new('mapcoord', 110, center_lon=-115, center_lat=43, $  
    limit=[36, -130, 50, -100])  
c = obj_new('map_outline', /USA, color='grey', map_object=m)  
g = obj_new('map_grid', /auto, map_object=m, color='grey', box_axes=1)  
m -> setproperty, outline=c, grid=g, position=[0.1, 0.1, 0.9, 0.9]  
m -> draw, /overlay  
  
window, xsize=500, ysize=500, 1;, /pixmap  
g -> setproperty, box_axes=0  
m -> setproperty, position=[0.025, 0.025, 0.975, 0.975]  
m -> draw, /overlay  
wset, 0  
device, copy=[50, 50, 400, 400, 50, 50, 1]  
END  
.*****  
,
```

Of course, I am using the map projection objects from my Coyote and Catalyst Libraries, but you can do the same with the built-in IDL routines.

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Proper Map Label Clipping
Posted by [David Fanning](#) on Sat, 13 Mar 2010 16:38:57 GMT
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David Fanning writes:

- > In any case, here is one way to fix your specify problem.
- > I just draw the map in a larger position in another window
- > (could be a pixmap window), then copy the contents over
- > to the first window. This results in grid lines going

> to the edge of the box plot.

Well, now that I look at the result more closely, that's not working. I'll give this some more thought. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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