Subject: Re: Horrible map reprojections
Posted by Martin Schultz on Thu, 07 Sep 2000 14:53:27 GMT
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Ben Marriage wrote:
>
> Martin Schultz wrote:
>
>> (1) make sure that the "center" longitude is at the center of your
>> LIMIT (or at least within and not at the border)
>> (2) you can get rid off the silly lines if you omit the clip=0
>> keyword.
>>
>> The following looks ok to me (same version and platform as you have):
>> map_set,0,180,limit=,xmar=0,$
>> ymar=0,noborder=1,/grid,/iso,/mercator
>> map_continents,/hires
>>
>
> Thanks Martin, that kinda solves one problem. However, the contour
> problem still remains. Take a look at
> http://www.met.ed.ac.uk/~aaron/funny_lines.gif. There are lines drawn
> from one edge of the plot to the other (the data when filled with the
> /cell_fill keyword looks OK), just when a line contour is drawn over the
> top, these parallel lines appear. They look to be where the data is
> trying to connect one point to the same point, but in a different region
> of the plot window?
>
> Thanks,
> Ben

Yeah. That's the big problem I still haven't solved in a satisfactorily general manner (admitting that I haven't tried too hard). It would be very nice, if you could contact support@rsinc.com with your problem and request that they finally improve the stability and functionality of the mapping tools in IDL. Sure, most of the time you can get them to work, but it's always a pain and not very user-friendly at all.

What you are facing with these contours somehow has to do with how map_set treats out-of-bounds data (sloppy formulation). There are two things you should check:
(1) don't pass (much) more data than you need to display (i.e. cut off all data north and southwards of 35 deg latitude before drawing the contour
(2) make sure that your data is arrange din the correct order. If the data is from -180 to 180, but you rmap projection (as it is now) is set up from 0 to 360, you will have to shuffle the data with somethin

glike this (assuming a 1x1 degree grid):
    newdata = [data, data[180:*,*]]

Hope this helps,
Martin

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