Amit (amit99@my-deja.com) writes:

> I have been trying to make contour plots where some of the levels are
> filled either with lines or with a solid color, with limited success.
>
> I am using map_set to define a grid and plot gridded data over the
> globe. My plotting instructions are as follows:
>
> contour,indata,lon,lat,/overplot,nlevels=3,c_orientation=[45 ,45,0]
>
> sometimes it works and sometimes I get the error message:
>
> Internal error: Border sort.
>
> With some of the datasets I try to plot, even though all my datasets
> have exactly the same format. I also get the same error message if I
> try to specify the levels I want to plot with levels=[...]
>
> Any Insights ?

All I know is that it is hopeless to get filled contour
plots to work correctly if you use the NLEVELS keyword. :-(

See these articles:

   http://www.dfanning.com/tips/nlevels.html
   http://www.dfanning.com/tips/contour_fill.html
   http://www.dfanning.com/tips/contour_hole.html

Cheers,

David

P.S. With filled contours and map projections it doesn't
ever hurt to have the very latest version of IDL, either. :-)

--
David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Problem: Filled contour Plots
Posted by amit99 on Wed, 04 Aug 1999 07:00:00 GMT

I have been trying to make contour plots where some of the levels are filled either with lines or with a solid color, with limited success.

I am using map_set to define a grid and plot gridded data over the globe. My plotting instructions are as follows:

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Any Insights ?

Amit amit@physics.utoronto.ca

Subject: Re: Problem: Filled contour Plots
Posted by amit99 on Thu, 05 Aug 1999 07:00:00 GMT

```
>
>     contour....., level=[min(data), 0], /fill, c_colors=[xxx]
>
> Cheers,
>
> David
```

Thanks David,

Subject: Re: Problem: Filled contour Plots
Posted by davidf on Thu, 05 Aug 1999 07:00:00 GMT
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Amit (amit99@my-deja.com) writes:

> Thanks, that solved part of the problem, except it was with my
> longitude values. It helped to limit them to (-180,+180), I had values
> like 180.01 causing problems.
>
> But, I still cannot get the result I want. I am making one contour, at
> the value `0'. I want to fill/shade only one level, of two (I want to
> shade all values below zero), but every permuation of c_colors always
> shades the values above zero.
>
> my command line looks like:
>
> contour....,level=[0],/fill,c_colors[xxx]
>
> where for [xxx] I tried [0,190], [190,0], [190], all giving the same
> (undesired) result.
>
> Any help appreciated.

Did you read the articles I suggested? :-)

  http://www.dfanning.com/tips/contour_hole.html

Something like this might help. Sigh...

  contour....., level=[min(data), 0], /fill, c_colors=[xxx]

Cheers,

David

--
David Fanning, Ph.D.
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Subject: Re: Problem: Filled contour Plots
Posted by amit99 on Thu, 05 Aug 1999 07:00:00 GMT
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> Caution
> Do not draw filled contours over the poles on Cylindrical map
> projections. In this case, the polar points map to lines on the map, and
> the interpolation becomes ambiguous, causing errors in filling. One
> possible work-around is to limit the latitudes to the range of -89.9
> degrees to + 89.9 degrees, avoiding the poles.
>
> R.Bauer
>
>
Thanks, that solved part of the problem, except it was with my
longitude values. It helped to limit them to (-180,+180), I had values
like 180.01 causing problems.

But, I still cannot get the result I want. I am making one contour, at
the value `0'. I want to fill/shade only one level, of two (I want to
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my command line looks like:

contour....,level=[0],/fill,c_colors[xxx]

where for [xxx] I tried [0,190], [190,0], [190], all giving the same
(undesired) result.

Any help appreciated.

Amit amit@physics.utoronto.ca