Subject: Re: contour discontinuity
Posted by Kenneth Bowman on Fri, 03 May 2013 13:46:28 GMT

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On 2013-05-03 10:35:07 +0000, Sam said:

> Hello,
>
> I have plotted a 2D latitude vs. Longitude contour. When I do it from
> -180 longitude to +180 longitude scale, it is coming perfect. Now I
> want the same plot to be shown in 0 to 360 latitude. But there is a
> white vertical band coming at 180 longitude (in the middle of the plot).
>
> I will be grateful for help.
>
> Thanks.

I suspect that you have the 'white stripe' in both cases, but it is
obvious in the second case because it is in the middle of the plot.

You need to duplicate the first or last 'column' of your data so that
it wraps all the way around the globe. Such as

    data = [data, data[0,*]]

You probably also want to convert your longitudes from the [-180, 180]
convention to [0, 360] and add an extra point at the end

    lon = (lon + 360.0) MOD 360.0
    lon = [lon, 359.999]

You can also avoid some map plotting artifacts by using SHIFT to shift
your data and coordinates by 180 degrees so that the storage matches
the plotting boundaries.

Ken Bowman