
Subject: Polar TV

Posted by [Brian Larsen](#) on Thu, 09 Oct 2008 18:40:03 GMT

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All,

I'll do my best to explain what I am trying to do.

I have computed occurrence probability at various radius and local time sectors around the earth and am displaying them using tv on axes of X:Radius, Y:local time, Color:value (the smoothing that contour does is not what I want here so I use TV). What I would really rather do is display this in a polar plot where you can see radius as just radial distance from the earth and local time is seen as angle around the circles, and color stays the same.

A smooth (my data is not smooth) example of the right kind of thing is:

<http://www-ssc.igpp.ucla.edu/gem/poster/weimer/ggcm/figure3.gif>
except for me the earth is in the center and all values are in space out from the earth.

In bullets the things I am trying to do:

- make the data that you would feed into contour (2-d array of values, 1-d x, 1-d y) polar but without the smoothing inherent in a contour plot
- the bins should be the right shape, meaning that they are little pie pieces with the tip missing

I have tried using polyfill for this by using cv_coord to change the x,y to r,theta and then plotting each with a color but I dont have it quite right and dont want to spend a bunch more time if someone has already done it better. Is there some other way I should be thinking about? Is there map projection function that can be tricked into doing what I want? Or has someone implemented the polyfill technique that is willing to share?

Thanks much and please ask for clarification if it is needed,

Brian

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