Subject: Ellipse in (lon, lat)
Posted by audrey.schaufelberger on Thu, 31 Jul 2014 15:31:09 GMT
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I have the following problem: I have an area of interest on my sphere (the Earth), that can be described by an ellipse, i.e., I have the center of the ellipse, the semi-major and semi-minor axes, and the rotation. The problem is, that the area is an ellipse per se, that is it is like an area on a ball where I don't have poles. Unfortunately, my ellipse is close to the south pole. If I now compute an ellipse in x,y coordinates, transform those to lon,lat coordinates and plot the ellipse, the ellipse becomes compressed towards the poles, because the coordinates converge. What I need, though, is the parametrization of an ellipse so that the ellipse keeps it's shape if I plot it in lon,lat. Does anyone know how to describe such an ellipse?

sorry for posting this here, but I am doing this in IDL, maybe someone already has a code for something like that?

best,
audrey