Subject: weird behavior of Triangulate
Posted by envi35@yahoo.ca on Sat, 01 Sep 2012 04:08:55 GMT
View Forum Message <> Reply to Message

Hi, I'm trying to use GRIDDATA to convert two sets of regular grids (lat/lon) to a projected grid (Equal Area). The first set of lat/lon has dimensions of 180 and 720, and spacing of 0.5 deg, with values of the following:
lat1: 0.25,0.75,1.25, ...89.75;
lon1: -179.750, -179.250, -178.750, ...179.75

The second set of lat/lon has dimensions of 120 and 480, and spacing of 0.75 deg, with values of:
lat2: 0.75, 1.50, 2.25,...90.0
lon2: -180, -179.25, -178.5, -177.75, ...179.25

The first set works fine, however, I got co-linear error for the second set. which is weird, as the two sets of lat/lon look similar to me. (I did try to remove lat=90.0 in the secod set but with no luck!). Does anybody know why? Here is part of my code:

```
ysize = Size(lat, /DIMENSION)
xsize = Size(lon, /DIMENSION)
print,xsize,ysize
lats = Rebin(Reform(lat, 1, ysize), xsize, ysize)
lons = Rebin(lon, xsize, ysize)

 mapStruct = Map_Proj_Init(111,semimajor_axis=6371228,$
       semiminor_axis=6371228,CENTER_LONGITUDE=0.0,
center_latitude=90.0)

xy = Map_Proj_Forward(lons, lats, MAP_STRUCTURE=mapStruct)
x = Reform(xy[0,*], xsize, ysize)
y = Reform(xy[1,*], xsize, ysize)

Triangulate, x ,y, triangles, TOLERANCE=1.0
```

Thanks,
Jenny