Subject: Re: GRIDDATA woes
Posted by David Fanning on Tue, 04 Mar 2008 17:05:13 GMT
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Bill Gallery writes:

> Ben,
>
> 1. There is an error in your routine to generate longitude.
>
> ;;lon = FINDGEN(nLon)/(nLon-1) * PS[0] + lonRange[0]
> lon = fINDGEN(nLon) * PS[0] + lonRange[0]
>
> Otherwise, lon has only two unique points
>
> 2. Try using the first form of grid_data: without /sphere:
>
> ;filter and reorder the data
> ;;GRID_INPUT, lon, lat, zValue, xyz, newZ, /SPHERE, /DEGREES, EPSILON
> = PS[0]/2.0
> GRID_INPUT, lon, lat, zValue, x1, y1, newZ, /DEGREES, EPSILON = PS[0]/
> 2.0
>
> ;build the triangulation
> ;;QHULL, xyz[0,*], xyz[1,*], tr, /DELAUNAY
> QHULL, x1, y1, tr, /DELAUNAY
>
> ;interpolate
> ;;Z = GRIDDATA(xyz[0,*], xyz[1,*], newZ, /SPHERE,/DEGREES, $
> Z = GRIDDATA(x1, y1, newZ, /SPHERE,/DEGREES, $
> METHOD = "NaturalNeighbor", MISSING = !VALUES.F_NAN, $
> XOUT = oLon, YOUT = oLat, TRIANGLES = tr )
>
> You will no longer get the dreaded "Triangle 0 not in counterclockwise
> order" error.

Well, actually, I *did* still get the error. And I continued to
get it until I removed the SPHERE keyword from GRIDDATA, too.
Has anyone, anywhere, gotten spherical triangles to work on anything?

I don't know what to say about this in my article, except
not to ever use the SPHERE keyword if you expect to use
these routines successfully. Any ideas?

Cheers,

David
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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")