
Subject: Re: GRIDDATA woes

Posted by [wgallery](#) on Tue, 04 Mar 2008 17:43:26 GMT

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On Mar 4, 12:05 pm, David Fanning <n...@dfanning.com> wrote:

> 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 = flNDGEN(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

> --

- > David Fanning, Ph.D.
- > Fanning Software Consulting, Inc.
- > Coyote's Guide to IDL Programming:<http://www.dfanning.com/>
- > Sepore ma de ni thui. ("Perhaps thou speakest truth.")

My mistake: I removed /sphere everywhere except in the posted article.
