Subject: 3d polygon mesh for 3 independent variables x,y,z Posted by Guneshwar Thangjam on Wed, 18 Mar 2015 23:14:26 GMT

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Hi,

I am a new in IDL. And I need some help.

I have 3 independent variables. I plotted 3d polygon in MATLAB using 'convhull' and then 'trimesh' precedures. But I have to do in IDL. I already plotted a 3d scatter plot using 'plot3d' and then I go for 'ghull' for the delaunay triangulation. However, I am not able to plot the (bound) polygon mesh in my 3d plot. Or, is this triangulation not the way I should look for?

If anyone can help how to plot such a 3d-polygon, that will be a nice pleasure.

Thanks in advance.

Guni

Subject: Re: 3d polygon mesh for 3 independent variables x,y,z Posted by Guneshwar Thangjam on Thu, 19 Mar 2015 10:20:32 GMT View Forum Message <> Reply to Message

On Thursday, 19 March 2015 00:14:28 UTC+1, guni wrote:

- > Hi.
- > I am a new in IDL. And I need some help.
- > I have 3 independent variables. I plotted 3d polygon in MATLAB using 'convhull' and then 'trimesh' precedures. But I have to do in IDL. I already plotted a 3d scatter plot using 'plot3d' and then I go for 'ghull' for the delaunay triangulation. However, I am not able to plot the (bound) polygon mesh in my 3d plot. Or, is this triangulation not the way I should look for?
- > If anyone can help how to plot such a 3d-polygon, that will be a nice pleasure.
- > Thanks in advance.
- > Guni

Here is more in detail.

:3 indpendent variables

x=randomu(seed,100)

y=randomu(seed,100)

z=randomu(seed,100)

;3d scatter plot

p = PLOT3D(x, y, z, 'o' ,/SYM_FILLED,AXIS_STYLE=2,/PERSPECTIVE)

construct 3d triangulation

qhull,x,y,z,triangle,/delaunay,VDIAGRAM=vdiagram,\$

VVERTICES=vvertices,connectivity=connectivity

;?how to plot the polygon using the returned variables from the ghull procedure