Subject: weighting: irregular grid
Posted by astroboy2k on Fri, 05 Sep 2008 15:23:16 GMT
View Forum Message <> Reply to Message

Hello.

I'm sure someone has come up with code to do this, so rather than re-invent the wheel:

I have a dataset: f(x,y),x,y, where the x and y grids are somewhat irregular. I can use trigrid and triangulate to get an image of f, of course, but what I really need is f weighted by the area each data point occupies.

One can define the area that a data point occupies by drawing lines perpendicular to the line connecting the point with neighboring points: eventually one will have some sort of polygon enclosing the point. One can then weight the f-value by the area of the polygon. Something like this would work very well for me.

Does anyone know of code that accomplishes something like this before I kill a day or two trying to write it myself? No doubt IDL has a canned routine that does this but I haven't been able to find it....

Thanks very much,

Mark