Subject: Re: data interpolation
Posted by T Bowers on Thu, 03 Feb 2000 08:00:00 GMT
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Hi Dave,
See IDL's triangulate procedure and trigrid function. use 'em kinda like
this:

put your x coordinates (longitude?) in a variable, e.g. xData
put your y coordinates (latitude?) in a variable, e.g. yData
put your data values (population, etc.?) in a variable, e.g. zData
then do...

```
;//Create a mesh to interpolate to...
triangulate, xData, yData, angles, b

;//Use IDL's interpolation function, trigrid
minX = min(xData, max=maxX, /NaN) & minY = min(yData, max=maxY, /NaN)
limits = [minX, minY, maxX, maxY]
zGrid = trigrid(xData, yData, zData, angles, [0,0], limits, $
   XGRID=xGrid, YGRID=yGrid, MISSING=!Values.F_NaN)

;//Now you have gridded data, so see what it looks like...
surface, zGrid, xGrid, yGrid
```

good luck,
todd

"David Miller" <millerdo@erols.com> wrote in message
news:87a3de$i3g$1@bob.news.rcn.net...
> I have three data points (corresponding to three cities). I want to find
the
> interpolated value at a point within the triangle defined by the three
> cities. Is there an interpolation routine built into IDL for this task?
>
> Thanks,
> Dave
>
>
> --
> David O. Miller
> SSAI - NASA/Goddard Space Flight Center
>
>
>