Subject: Irregular gridding
Posted by sanjay on Thu, 01 Apr 1993 20:34:02 GMT

I have specific problem regarding irregular gridding. I have a visualization
code which does contour plots. I do software zooming by user choosing
domain of interest and plotting contours only in that area. So far, I
have been changing the xrange and yrange only. Now I feel it is not
necessary to do contours in the area which is not in the area of interest.
What I did was to select the data only in the area,
 s=where((x ge xl and x le xu) and $
          (y ge yl and y le yu),count)
S is an array of subscripts, y and x are two dimensional arrays.
Since, contour requires z to be two dimensional, I used triangulate
and trigrid to get two dimensional array. This works well for rectangular
region. If I have multiply connected regions, this behaves weirdly.
Since trigrid interpolates values on a regular grid it fills up the hole
where I am not suppose to have data at all. I think I can not go any
further in this direction.
If I can get s to be double subscript pointer array , I think (I am not sure)
I can save all the trouble of triangulate and trigrid.

Any body has any suggestion?

-sanjay