Subject: basic 3D data manipulation question
Posted by judy.karpen on Wed, 07 Nov 2001 18:28:16 GMT
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Hi,

Sorry for posting if this is an easy question to answer, but so far I've combed the manuals and the netgroup archives without finding one. I don't use IDL all the time, so I am a perpetual beginner unfortunately.

I am trying to visualize 3D magnetic field lines, by updating an IDL program written by a colleague that assumes uniformly gridded data. My "data" (simulation results, actually) are on a nonuniform cartesian grid (250x95x95), so my first step is to project the field components onto a uniform grid in all directions. I've found a number of routines that do the opposite --- that is, interpolate a regularly gridded function onto an irregular set of points -- but nothing appropriate. Perhaps I am misunderstanding something in the GRID3 documentation, but it says that the input arrays x,y,z, and f have to have the same number of elements, which rules out having different numbers of points in each direction.Of course I can do the interpolation manually but I can't believe there isnt a more efficient preexisting routine out there..... Note that this is a true 3D dataset, not this nonsense of 2D datasets with a dependent function being called 3D!

Thanks very much for your help! (and greetings to my solar colleagues out there)