Subject: Re: GRID3
Posted by David Fanning on Tue, 14 Dec 2010 16:59:59 GMT
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Fourier writes:

> Hello, I am trying to use the GRID3 routine for a set of volume
> emission rates for a given altitude, latitude, and longitude. The alt,
> lat, and lon data are initially in three 1D arrays so I converted them
> into three 3D arrays, matching in size to the volume emission rate 3D
> array. When I run the GRID3 rountine on the arrays the compiler
> returns the error message
>
> Ill-conditioned matrix or all nodes co-planar
>
> I am not really sure what is going on. I have tried increasing the
> value of DTOL, but this does not seem to help. I have compared the
> arrays I am using as input into GRID3 with another program that has a
> working example of GRID3 and things seem to match up. Does anyone know
> of a trick of getting GRID3 to work?

I think GRID3 is designed to work with "scattered nodes".
I don't think it is going to like the sort of regularly
gridded data it sounds like you are giving it. Do you have
anything you are really trying to grid here, or are you
just trying to get these arrays into Slicer?

If you really want to grid something, I would try giving
your Grid locations a "shake" and adding a little bit of
random noise to their positions.

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")