Subject: Re: IDL and 3D scattered data
Posted by davidf on Fri, 28 May 1999 07:00:00 GMT
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Todd Bowers (tbowers@nrlssc.navy.mil) writes:

> Anybody know
> of a routine(s) that'll do what triangulate/trigrid
> or sph_scat will do but in 3 spacial dimensions? BTW,
> when I say 3D scattered data, I mean *real* 3D
> scattered data. That means 3 independant variables
> and 1 dependant variable, as in x,y,z,f(xyz).

I presume you have looked at and dismissed GRID3,
which according to the documentation (usually reliable)
works like this:

```
  Result = GRID3(X, Y, Z, F)
```

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: IDL and 3D scattered data
Posted by T Bowers on Mon, 31 May 1999 07:00:00 GMT
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My fault, I should have been more clear in my oiginal post.
Grid3 uses Modified Shepard's Method, a simple inverse
distance weighted method. After alot of trial and reading,
I've determined that this method is adequate, but has problems
with certain aspects of our very non-uniformly dispersed
types of data. On the other hand, interpolation based on a
Delaunay triangulation is desireable for a few reasons, one
of which is that it is a very local method so local trends are
not affected by non-local trends.
So , does anybody know of a 3D Delaunay tetrahedralization
function?
Anybody also know how to implement natural neighbor interp.
based on the tetrahedralization?

Thanks,
Todd

--
Todd Bowers
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Stennis Space Center, MS
tbowers@nrlssc.navy.mil
David Fanning <davidf@dfanning.com> wrote in message
news:MPG.11b8f9eb2a21375c9897c4@news.frii.com...
> Todd Bowers (tbowers@nrlssc.navy.mil) writes:
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