Subject: Re: weird behavior of Triangulate
Posted by David Fanning on Mon, 17 Sep 2012 12:56:47 GMT
View Forum Message <> Reply to Message

Yngvar Larsen wrote a few days ago:

> From my point of view, GRIDDATA is for gridding _irregular_ data,
> which is a hard problem. If your data is already on some regular
> grid, why would you want to triangulate? Regular interpolation
> is all that is needed if you do it the right way.

Since I don't really understand something until and unless
I write it down (and you thought I maintain this web page
for you!), I have modified my article on this topic to
include (thanks to Yngvar's invaluable help) the fast
way to do this interpolation.

I even managed to reason my way out of a problem that caused
my gridded data to be an upside-down mirror image of what
I expected and wanted. In the process, I think I actually
came to understand what I was doing when I was creating
the fractional indices necessary to do interpolation
correctly.

And, since interpolation is orders of magnitude faster
than gridding the data (which may NEVER finish, as far
as I know, when using real-world satellite data), the
pain of learning this new (for me, anyway) technique
is more than offset by the benefits.

You can learn more about it at the end of this article:

http://www.idlcoyote.com/code_tips/usegriddata.html

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")