Subject: Re: Minimum curvature surface problem
Posted by James Kuyper on Tue, 22 Oct 2002 00:04:26 GMT

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Med Bennett wrote:

>
> I'm having a problem using the min_curve_surf function. I am feeding it
> data where X and Y are in UTM coordinates (like 650000, 4073500) and Z
> ranges from 0.25 to 27,300. The result from min_curve_surf in IDL is a
> paraboloid looking surface with a minimum of 2.4E+10 and a max of
> 1.2E+15. Needless to say, this is dramatically wrong. I also tried
> subtracting off the minimums from the X and Y values to reduce the
> number of sig figs, but this does not seem to help. I can compute a
> minimum curvature surface with the same data in another software package
> (Surfer, Golden Software) and it gives me a reaasonable result. What's
> wrong with the IDL implementation, or what am I doing wrong?

If you're plotting geo-referenced data covering a significant portion of
the Earth, then you should probably be using the /SPHERE keyword. If you
are using /SPHERE, then X and Y need to be latitude and longitude in
degrees, rather than UTM coordinates.

Other than that, I can't think of anything obvious. It might help to
post your code.