Find or create an environmental or geological XYZ data set (any real or fictitious contourable parameter will do). Check the help files or explore the SURFER menu for a command or feature that we have not used in class, and apply the command or feature to your XYZ data. Turn in a written explanation of what you did, along with the results. In addition, please e-mail me your digital files. Integration of EXCEL with your example would be a great plus. Be creative!

Here's are how the points (in parentheses) will be distributed:
a. Is it original and not simply an application of something we already did in class? (10)
b. Show how it solves or helps to elucidate a geological or environmental spatial (or temporal) problem. (10)
c. Clarity of the write up, explanation and digital files are turned in complete. (10)
d. Can your work be replicated with the information provided? (5)
e. Does the result make sense? (10)
f. Uses EXCEL to solve at least part of the problem (not simply a three-column input to SURFER)? (5)

Hints – You can use any of the data sets in SURFER's samples if you want. Also, check the "Grid" menu item. There are a few interesting commands to choose from – math functions, terrain modeling, map calculus, Fourier / spectral analysis, filtering and smoothing, grid mosaic, grid slice, grid residuals, cross-sections.