

September 25, 2008

AGRO / MSYM / AGEN 431
Site-Specific Crop Management
Fall 2008

Assignment 6 (60 pts)
Due: November 20, 2008

Field Practice

In this assignment, the data collected during field trips should be processed. Maps of yield, soil sampling and electrical conductivity for the designated field at the Agricultural Research and Development Center (Mead, NE) should be printed out and commented on.

1. Import data layers collected during two field practices and overlay these data with imagery and soil survey data. The layers to be imported are:
 - a. Yield map
 - b. Soil laboratory analysis report
 - c. Field boundary
 - d. On-the-go sensing of soil EC
2. Prepare and turn in a report that would contain at least three different maps illustrating key aspects of field variability and three recommended variable rate treatment maps. Discuss the similarities and differences between the imported data layers. Provide XY scatter plots showing the relationships between yield, electrical conductivity and several soil test results.
3. Download and import to EXCEL your load from the yield data files. Compare the total yield (in pounds) with the values recorded from the yield monitor and measured by the scale wagon. Calculate the yield (in bu/acre) for each point, and then plot yield and moisture values versus trip time (for your load). Using the equation editor, illustrate your calculation for the fifth point.