# Yield Mapping Part 2: What do I do first?

So you have downloaded some yield data. Now what?
I recommend every user become familiar with the following basic functions.
1. Learn to bring data in and out of the main map window.
2. Look at the summary details as well as the map.
3. Change the legend to 'see' the data in different ways.
4. Learn to change from point view to region views.

1. In SMS highlight your data from the "Management Tree" also known as the list of what you have imported. It will be arranged by field name, year, type of data such as grain harvest and crop type. Everything you have brought into the program can be found by expanding this tree. Clicking on the Harvest data level will select this data, show you a little preview and allow you to CREATE NEW MAP. This action brings your selection from the preview window into the main map window. All of your viewing and editing functions happen from this venu. If you close the program your map is put back on the shelf and you have to repeat this 'Create New Map' to bring the data back into view. Practice data movement to become comfortable. This sounds trivial but it is a good exercise, like warming up before the game. Here is the main SMS screen after you bring a map into view.
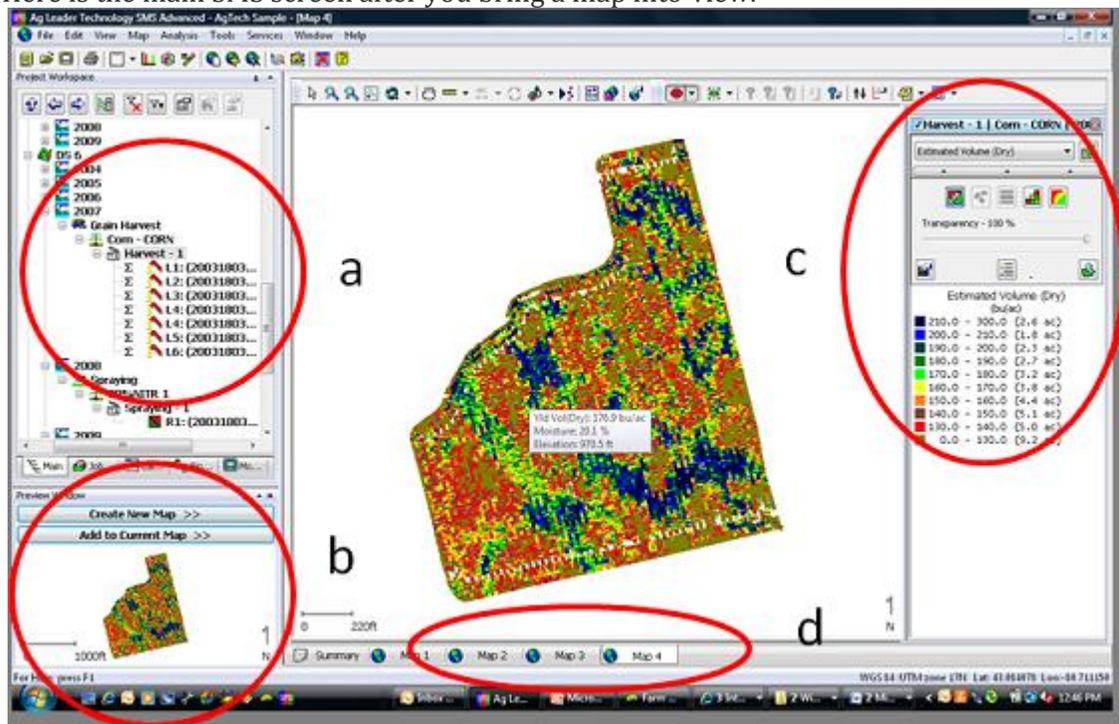
a) Your data, automatically ordered by Grower, Farm, Field, Year and data type as defined on import (mostly automatically)
b) Once data selected a mini-map is shown to preview what is contained by this selection and the create new map
c) The side bar is home to click on various views-points to regions and to change the legend

d) The map tab: a new map view is opened whenever "Create New Map" is selected. Multiple maps can be opened at the same time in their own view windows. The important SUMMARY view is located on this bar.

Summary of Selected General Management Information

Summary Type   User Defined ▾

Grower	Sample Grower
Farm	Sample Farm
Field	DS 6
Year	2007
Operation	Grain Harvest
Product	Corn – CORN
Operational Instance	Harvest – 1

Dataset	Area	Avg. Moisture	Est. Weight (Wet)	Est. Volume (Dry)	Avg. Yield (Dry)	Actual Weight (Wet)	Error	GPS Count	Marks Count	Date Logged	Cal File	GPS File
L1: (2003180358)	16.5 ac	22.4 %	140258.3 lb	2300.1 bu	139.6 bu/ac	N/A	N/A	11357	0	19/10/2007	07111001.YLD	07101901.YLD, 07102001
L2: (2003180358)	12.3 ac	20.6 %	106340.4 lb	1784.3 bu	145.5 bu/ac	N/A	N/A	7863	0	24/10/2007	07111001.YLD	07102401.YLD, 07103101
L3: (2003180358)	1.9 ac	21.8 %	18300.9 lb	302.4 bu	159.8 bu/ac	N/A	N/A	1286	0	31/10/2007	07111001.YLD	07103101.YLD
L4: (2003180358)	0.8 ac	23.2 %	7010.5 lb	113.8 bu	149.8 bu/ac	6645.0 lb	5.5 %	503	0	24/10/2007	07111001.YLD	07102401.YLD
L4: (2003180358)	2.3 ac	20.4 %	20269.1 lb	341.0 bu	149.1 bu/ac	N/A	N/A	1662	0	31/10/2007	07111001.YLD	07103101.YLD
L5: (2003180358)	0.8 ac	21.6 %	6486.5 lb	107.5 bu	141.4 bu/ac	N/A	N/A	465	0	24/10/2007	07111001.YLD	07102401.YLD
L6: (2003180358)	10.7 ac	20.4 %	90537.0 lb	1523.0 bu	142.1 bu/ac	N/A	N/A	6677	0	03/11/2007	07111001.YLD	07110301.YLD

2. The summary window holds pertinent information and offers up either the field summary or the load by load references.

Grower	Sample Grower
Farm	Sample Farm
Field	DS 6
Year	2007
Operation	Grain Harvest
Product	Corn – CORN

| Operational Instance	Area	Avg. Moisture	Est. Weight (Wet)	Est. Volume (Dry)	Avg. Yield (Dry)	Actual Weight (Wet)	Error	GPS Count	Marks Count	Date Logged	Cal File	GPS File
Harvest – 1	45.2 ac	21.3 %	389202.7 lb	6472.0 bu	143.3 bu/ac			29813	0	19/10/2007 – 03/11/2007	07111001.YLD	Multiple

3. Changing the legend, changes how we see the data and guides the program to group data, such as into regions. Changing legend ranges often illuminates or sharpens our understanding of the numbers represented by the maps. The first lesson is to look at the legend itself with the same scrutiny as the coloured areas. Are the breaks meaningful? Can these groupings help us see patterns with the mind to find associations with the underlying field characteristics?
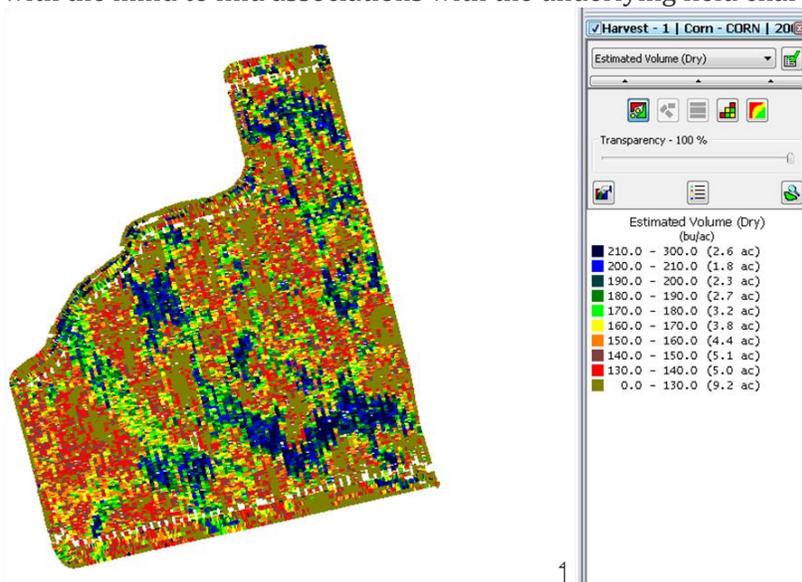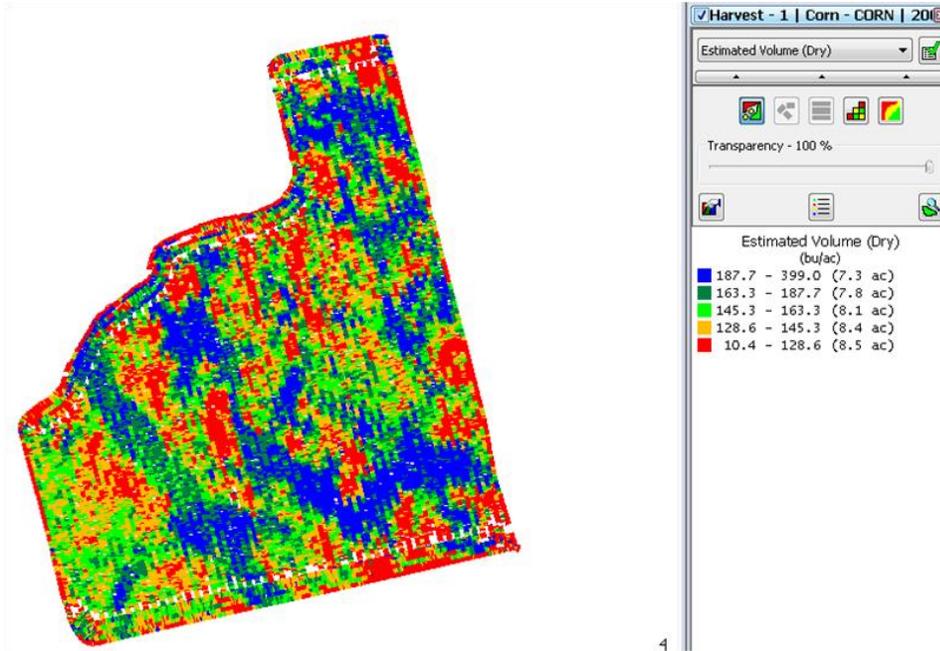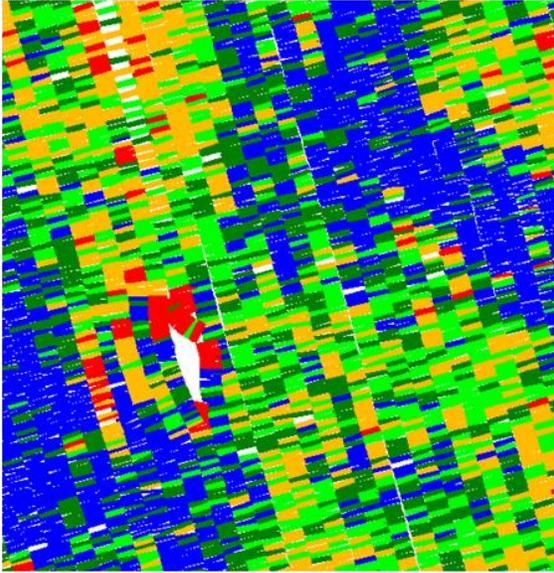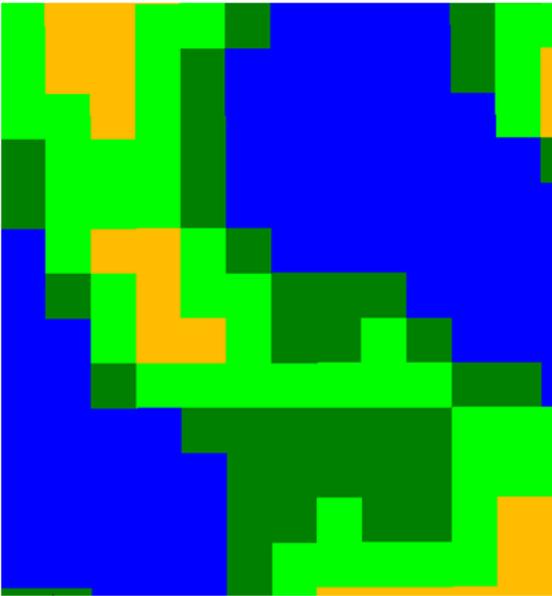
4. SMS offers 4 basic views for each yield map:
a) point, which is the raw or spatial data,
b) smart rectangle, which shows swath width and distance travelled,
c) grid or interpolated data and
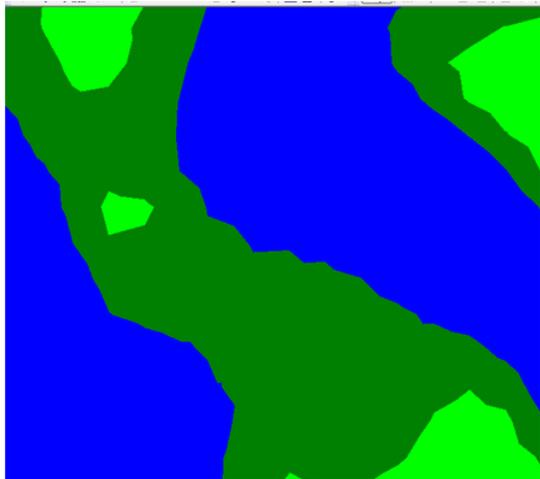d) contour or region data.

a:
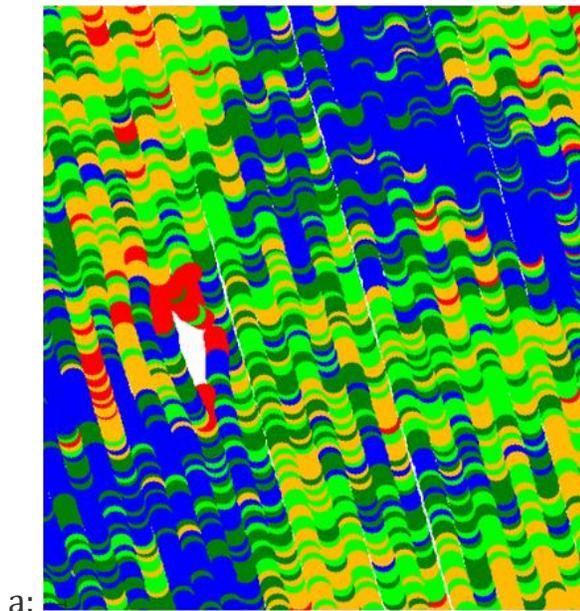
b:

c:

d:

Summary:
In SMS, there is only a one click journey from the first raw data view into the more generalized region view. Each view has value to the user who wishes to become familiar with the rich information. The raw data is ripe for examining combine settings, GPS performance or any in-field minute details. The smart rectangle map is the best coverage representation targeting skips, gaps or overlaps as well as pass by pass comparisons. The grid map is the same style used for analysis, each grid or averaged area can be compared with the same from other data sets such as other crop years. Finally, the contour or region layer is the data trend layer, offering a generalization of the most prominent highs and lows of the data.
Karon from 2011