



Equipment Technology Enabling Agricultural Resilience

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Indicators Contributing to Soil Resilience

Organic Matter Content

Aggregate Stability

Water Infiltration

Water Holding Capacity

Nutrient Cycling

Soil Biology



Residue

Seedbed

Compaction

Incorporation

Weed Control

Primary Goals of Tillage



Managing and Protecting the Surface...

Anchoring residue and leaves a cover that protects the soil from water impact and temperature extremes...



Eliminates weeds, incorporates nutrients and leaves the soil profile in excellent shape for the next operation...

Leaving 70% of Field Undisturbed...

Moves residue off the row

Soil protecting mulch in row middle

Alleviates in-row compaction



Injects nutrients into the root zone

Mixes soil and nutrients

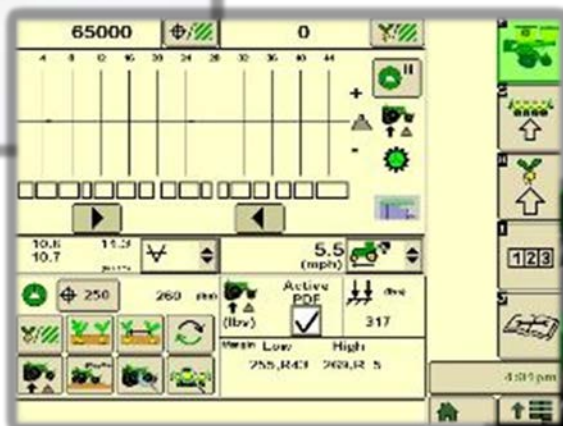
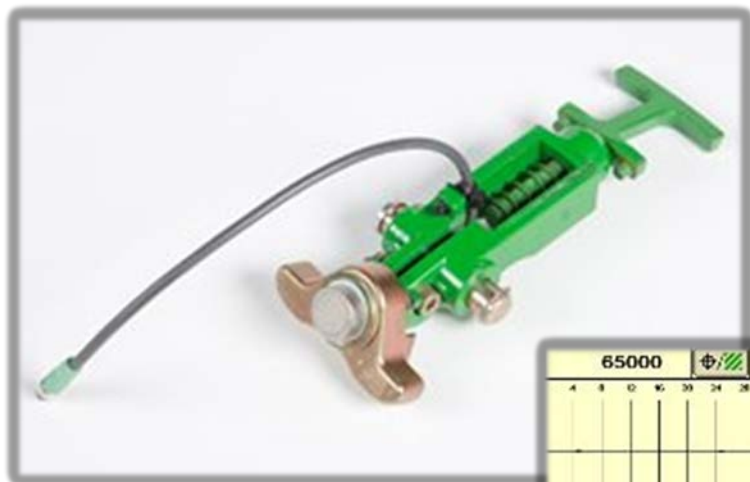
Leaves a very favorable seedbed

RTK Coverage



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Sensing and Responding to Varying Field Cond's



4R Consistent Nutrient Application...



Establishing and Terminating Cover Crops...



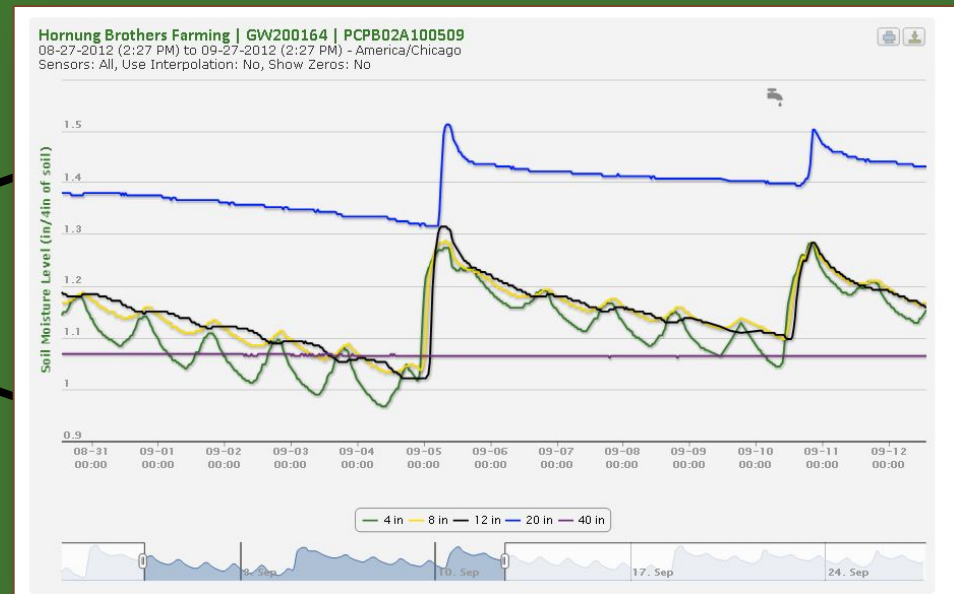
Deere offerings limited to
Conventional Equipment



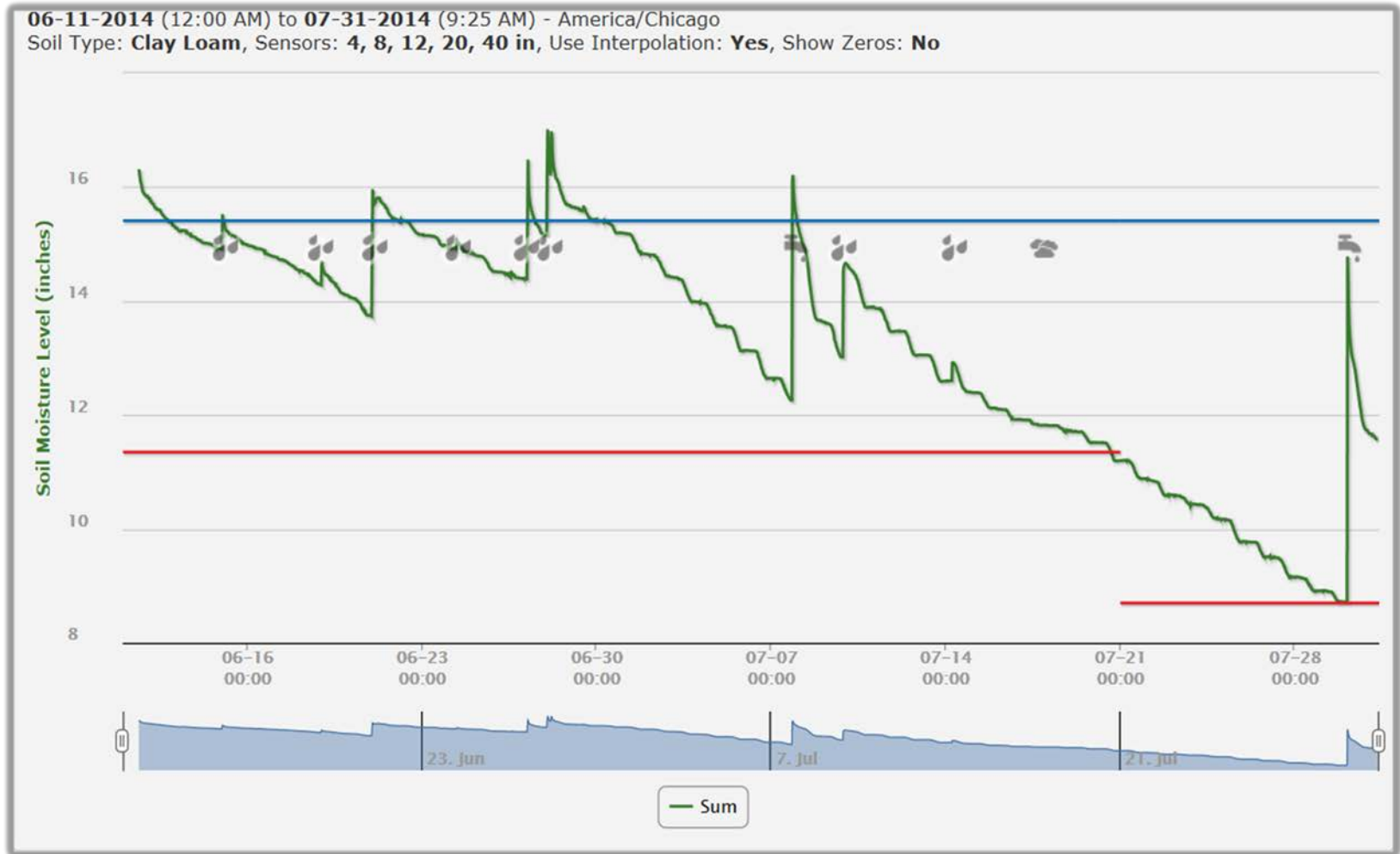
Evaluation of Resilient Systems with Data...

Monitoring Water Flow in the Soil....

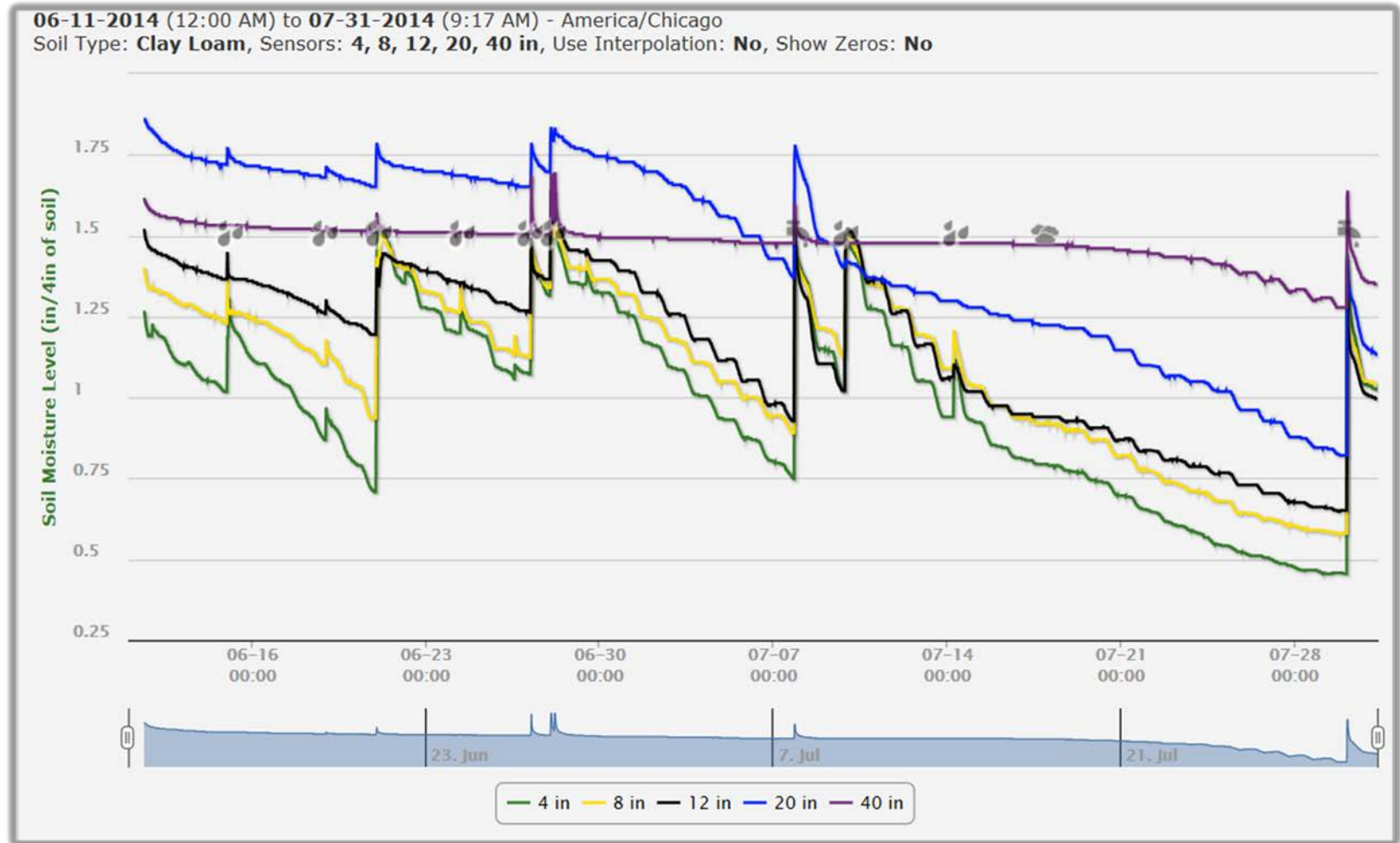
- Lets the producer have a “window into the soil” to view changes in the soil profile



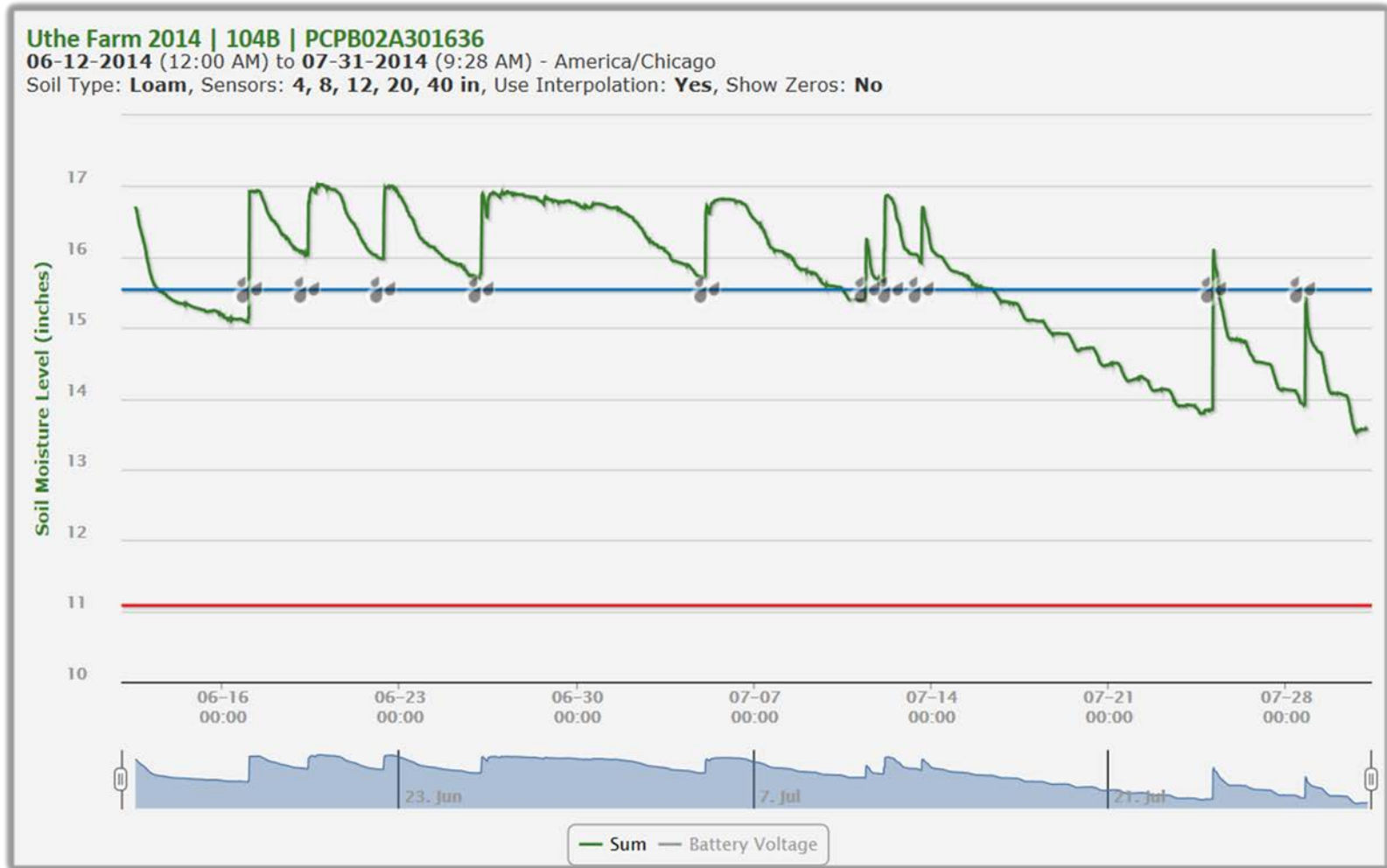
Iowa - Sum Graph



Iowa – Line Graph



Nebraska – Sum Graph



Nebraska – Line Graph

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06-12-2014 (12:00 AM) to 07-31-2014 (9:37 AM) - America/Chicago

Soil Type: Loam, Sensors: 4, 8, 12, 20, 40 in, Use Interpolation: No, Show Zeros: No

