

Proximal Sensor Technologies

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Proximal Sensing Technology (PST) involves small sensor-target distances, especially when the sensor is in direct contact with the target - often referred to as on-ground sensing systems. The key aspect of PST is that it uses one or a number of instruments to provide a verifiable spatial data point. The addition of a GPS coordinate locates its surface position for comparison with large scale remote sensing technology. Having a large range of data points that can calibrate remote sensing data allows for comparative analysis with a certain degree of confidence using replications over large populations.

It can also be supported by an increasing range of objective measurement tools as simple as temperature probes to more complex gamma ray or NIS spectrophotometers. The question from landholders is relation to PST data such as yield monitors is '*So what*'? How does the information relate to what I doing? The presentation outlines examples of supporting PST in determining potential improvements in crop production efficiency, reduced emission and climate adaptation. The combining of proximal and remote sensing provides a new platform for future production research. However identifying the 'production issue' is still a precursor to the deployment of technology. The challenge is integrating the research question and available technology in simple workable formats.

The question for consideration is how do we most effectively use proximal and remote sensing technologies to improve agricultural and resource management efficiency? And possibly answer the question 'so what'?