

# Use of Mid-Season CV's from Sensor Readings to Refine Wheat Yield Prediction. (S04-arnall232174-oral)

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## Abstract:

The use of by-plot coefficients of variation (CV) has not been used in precision agricultural work. Current methods of predicting mid-season yield potential could be improved if plant stand were included. This study evaluated the use of CV's determined from normalized difference vegetative index (NDVI) sensor readings collected from each 1m<sup>2</sup>. An average of 70 NDVI readings were collected from each 1m<sup>2</sup> area. A total of 150 plots, measuring 1m<sup>2</sup>, were randomly selected within four locations. Each plot was sensed at Feekes 5 and Feekes 7 using the Green Seeker® hand held sensor. Results indicated that CV did not correlate well with head count, or final grain yield. However, CV was a good predictor of early season plant stand. Conceptually, this work indicates that CV could be used to better predict the yield potential obtainable if added fertilizer N is added.

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