INTRODUCTION

Peanut States: Availability of Precision Ag. Harvest Tech. by Crop Acreage

Source: USDA NASS

Yield Monitors in peanut harvesting

- Yield Monitors have been researched by many numerous sources
- There will be a commercially available yield monitoring system in the near future.
- Current suggestions for calibrating yield monitors are to use 3-5 calibration loads.

Objectives

- Analyze current calibration protocols for commercially available yield monitors.
- Produce calibration protocols for peanut yield monitor.
METHODS AND MATERIALS

General setup and data collection
- Optical Yield Monitor
  - AgLeader
  - Amadas 2108
- Weight measurement
  - Richardton dump cart fitted with scales
- Data analyzed
  - 73 loads harvested
  - Post-process calibration applied
    - 3, 4, 5, 6, 7, 8, 9, 15, and 20 calibration loads used

RESULTS AND DISCUSSION

Full season loads

Half season loads

Full season loads
CONCLUSION

• More calibration loads = Better error
  – Suggest 6 loads instead of the standard 3-5
  – Loads should be taken from the middle of the season
  – Full season loads: 11.46% error using 6 loads
  – Half season loads: 11.36% error using 7 loads

Future work
• More data
  – More machines
  – More crops
  – Different yield monitor systems

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