Large-scale UAS Data Collection, Processing and Management for Crop Management

- Hillsboro Airport
- Collect Imagery Each Week During May and June 2016
  - Large UAS: Entire Area 3,000’ 5,000’ 8,000’
  - Small UAS: Selected Fields 400’
- Collect Ground Data from Collaborating Producers
- Evaluate Usefulness and Economics of Imagery for Crop and Livestock Management
  - Crop Plant Stand Counts
  - Nutrient Deficiencies in Corn, Wheat, Sugarbeets
  - Yield Predictions
  - Weed Identification and Mapping
  - Crop Disease Identification and Mapping
  - Herbicide-resistant Weed Identification
  - Beef Cattle Inventory, Locations
- Research ND Project
  - ND Department of Commerce
  - Elbit Systems of America
- Imagery Securely Stored on NDSU Server, Available to
  - Researchers
  - Landowners/Farmers
  - Collaborating Producers
Image Collection Corridor

4 x 40 Miles – 160 Sq Mi - 102,400 Acres

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