Remote Sensing Uses in Agriculture at the National Agricultural Statistics Service

Jeffrey T. Bailey and Claire Boryan

United States Department of Agriculture/National Agricultural Statistics Service

Email: Jeff_Baiely@nass.usda.gov; Claire_Boryan@nass.usda.gov

Address: USDA/NASS, RDD DIVISION 3251 Old Lee Highway, Room 305 Fairfax, VA 22030

Abstract N. 48

The United States Department of Agriculture's (USDA) National Agricultural Statistics Service (NASS) has researched and used remote sensing since the early 1970s. Significant advancements in recent years have enabled NASS to move the use of remote sensing from primarily a research activity to an integral part of the agency's crop acreage estimation program covering all major crops and major states in the United States. These accomplishments were achieved in part because of 1) enhanced data partnerships, 2) improved methodologies, 3) increased availability of commercial software, and 4) improved imagery and ancillary data. With acreage estimation now in a production mode, the Agency is focusing efforts to move yield research to an operational mode. Currently yield indications for 6 major corn and soybean states are being created. The estimates for yield are good, but with more experience, improvements are expected. Looking to the future NASS has started research on measuring crop progress and plan to also work on quantifying crop condition, mapping soil moisture and improving disaster assessments and monitoring.