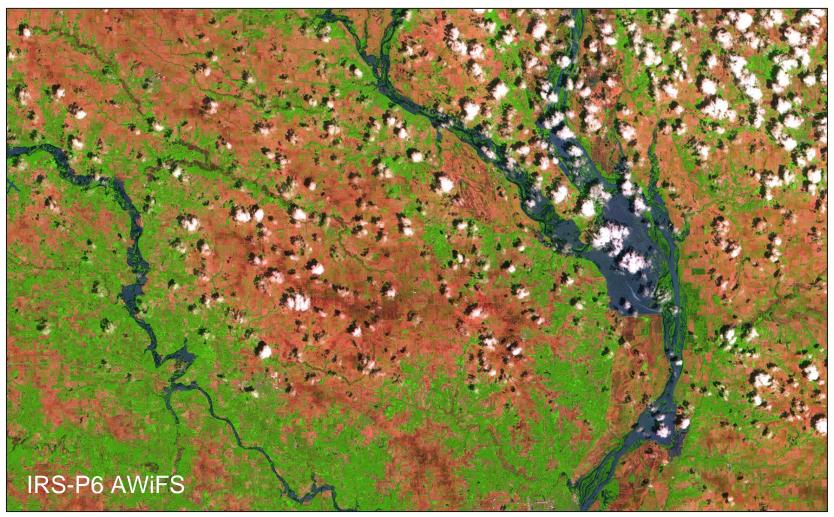
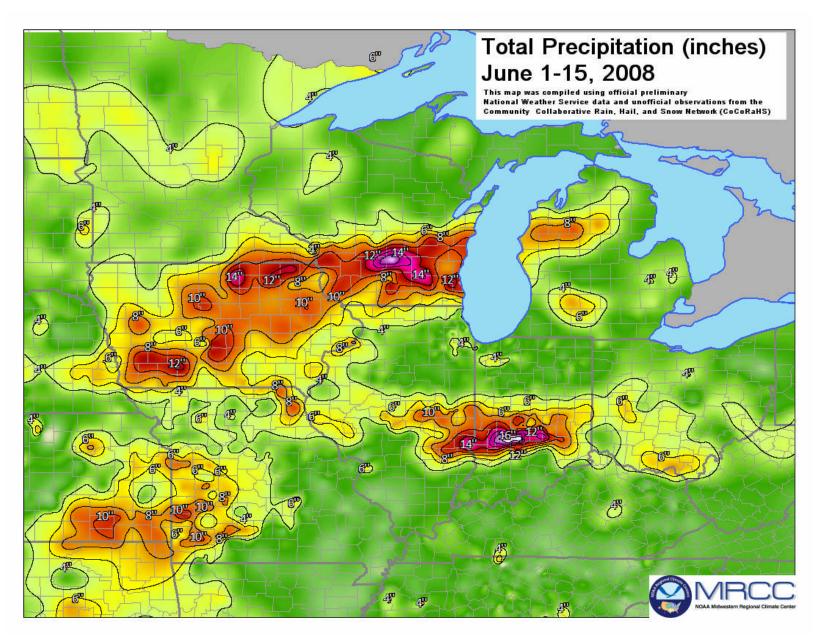
# AWiFS data: helping reinforce crop acreage statistics within June 2008's flooded areas



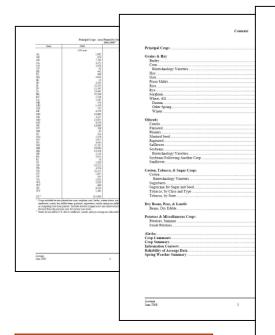




#### **Rainfall Estimates**



## **NASS** June acreage report



All wheat planted area is estimated at 63.5 million acres, up 5 46.6 million acres, is 4 percent above last year but down sight acres are Hard Red Winter, 11.0 million acres are Soft Red other spring wheat for 2008 is estimated at 14.2 million acres, are Hard Red Spring wheat. The Durum planted area for 2008

All Cotton plantings for 2008 are estimated at 9.25 million act Upland planted area is estimated at 9.04 million acres, down 1: all States except Oklahoma and Virginia. The largest percenta producers planted 44 percent fewer acres than last year at 110, cotton growers planted 202,000 acres, down 31 percent from 2

This report was approved on June 30, 200:

Edmand T. Schafe

Secretary of Agriculture Edward T. Schafer



June 200



#### **Acreage**

Released June 30, 2008, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, U.S. Department of Agriculture. For information on Acreage call (202) 720-2127, office hours 7:00 a.m. to 4:30 p.m. ET.

Corn Planted Acreage Down 7 Percent from 2007 Soybean Acreage Up 17 Percent All Wheat Acreage Up 5 Percent All Cotton Acreage Down 15 Percent

#### Midwest Flood

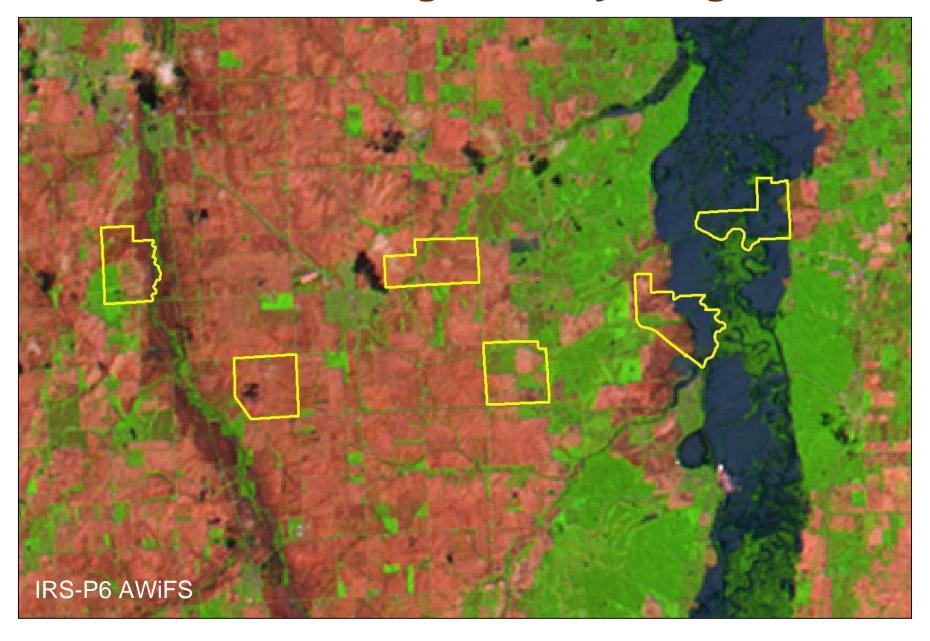
Extensive rains and flooding during June caused producers in several Midwestern States to change their harvesting intentions for crops already planted, modify planting decisions for the small percentage of acres not yet planted, and consider replanting options. NASS collected most of the data for the annual Acreage peport before the majority of the flooding occurred. In an effort to more accurately determine how many acres producers still intend to harvest for grain, NASS re-interviewed approximately 1,200 farmers June 23, 24, and 25 in the flood-affected areas. As a result, it was determined that U.S. farmers intend to harvest 90.4 percent of their planted acres of corn for grain. This is a change from 92.4 percent as measured during the first 2 weeks of June. U.S. farmers intend to harvest 96.8 percent of their planted acres of soybeans. Without this additional survey data, historical averages would have indicated 98.7 percent of soybean acres to be harvested. NASS will conduct a more extensive acreage update survey during July. Findings from this study will be incorporated in the August Crop Production report.

Corn planted area for all purposes is estimated at 87.3 million acres, down 7 percent from last year. Despite the decrease, corn planted acreage is the second highest since 1946, behind last year's total of 93.6 million acres. Growers expect to harvest 78.9 million acres for grain, down 9 percent from 2007. If realized, this would be the second highest since 1944, behind last year. Farmers increased corn plantings 1.31 million acres from their March intentions. Planting got off to a slow start across the Corn Belt, Ohio Valley, and the northern half of the Great Plains as frequent precipitation and cool temperatures during March and April prevented spring planting preparations. Corn planting was 27 percent complete on May 4, down 32 points from normal. Despite intermittent showers and below normal temperatures, producers were able to make rapid progress during May, particularly across the upper Midwest and northern Great Plains. Farmers reported that 97 percent of the intended corn acreage had been planted at the time of the survey interview compared with the average of 98 percent for the past 10 years.

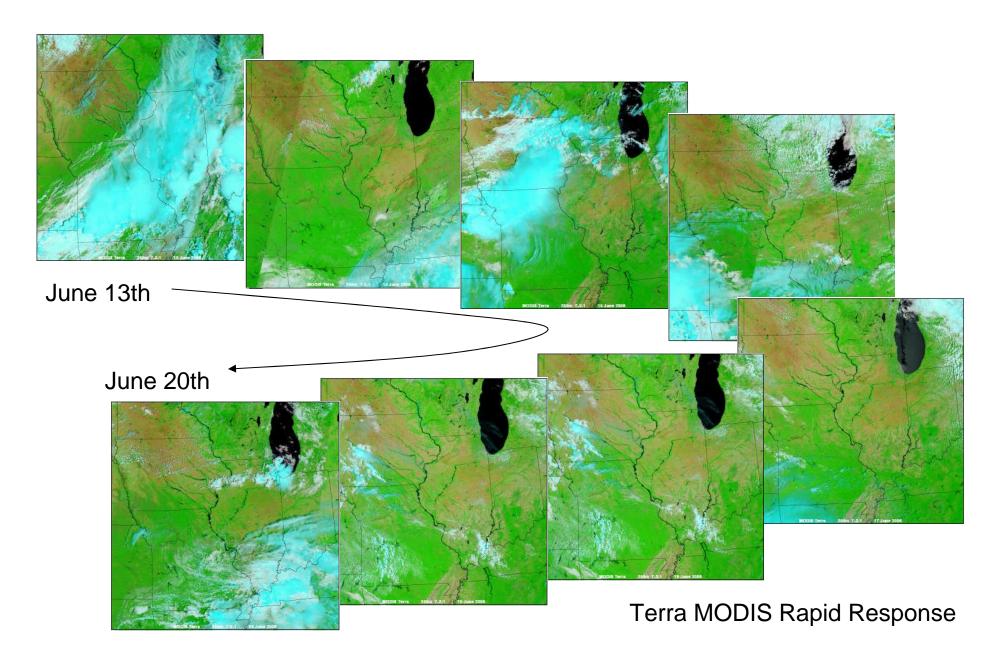
Soybean planted area for 2008 is estimated at 74.5 million acres, up 17 percent from last year but 1 percent below the record high acreage in 2006. Area for harvest, at 72.1 million acres, is up 15 percent from 2007. Compared with last year, planted acreage increases are expected in 2006. Area for harvest, and the U.S. planted area for soybeans is the third largest on record. The largest increase is expected in Nebraska, up 950,000 acres from 2007, followed by Illinois and South Dakota, both up 900,000 acres. Increases of at least 800,000 acres are also expected in Indiana, Iowa, and Minnesota. If realized, the planted acreage in Kansas, New York, and Pennsylvania will be the largest on record. Nationally, farmers reported that 79 percent of the intended soybean acreage had been planted at the time of the survey interview, which is the lowest since 1996.

Cr Pr 2-5 (6-08)

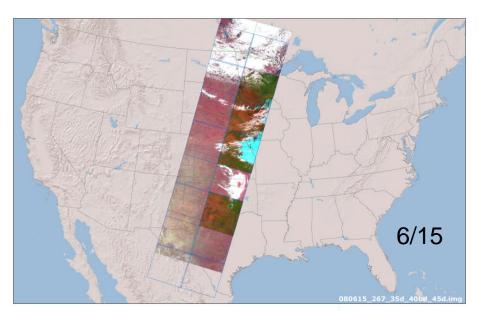
# NASS June Acreage Survey "Segments"

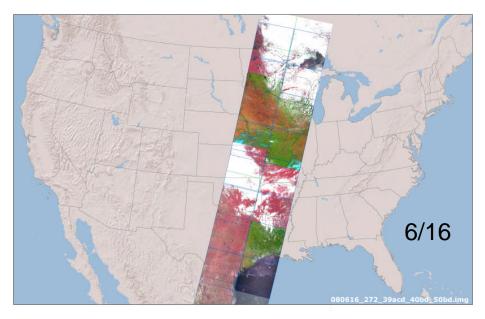


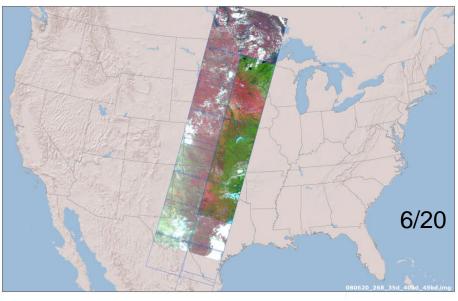
### Time series of cloud cover

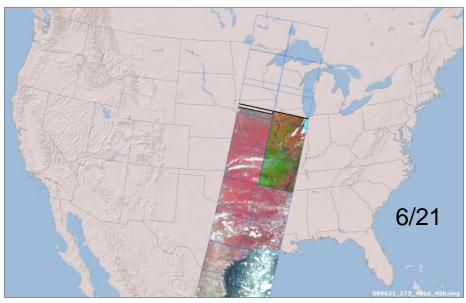


### Time series of relevant AWiFS data

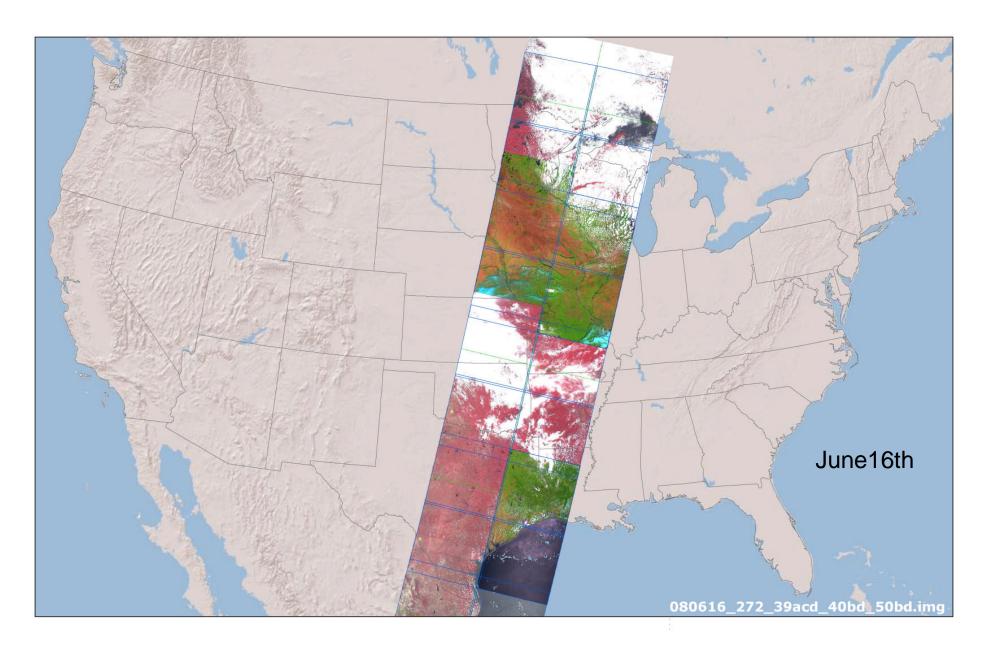




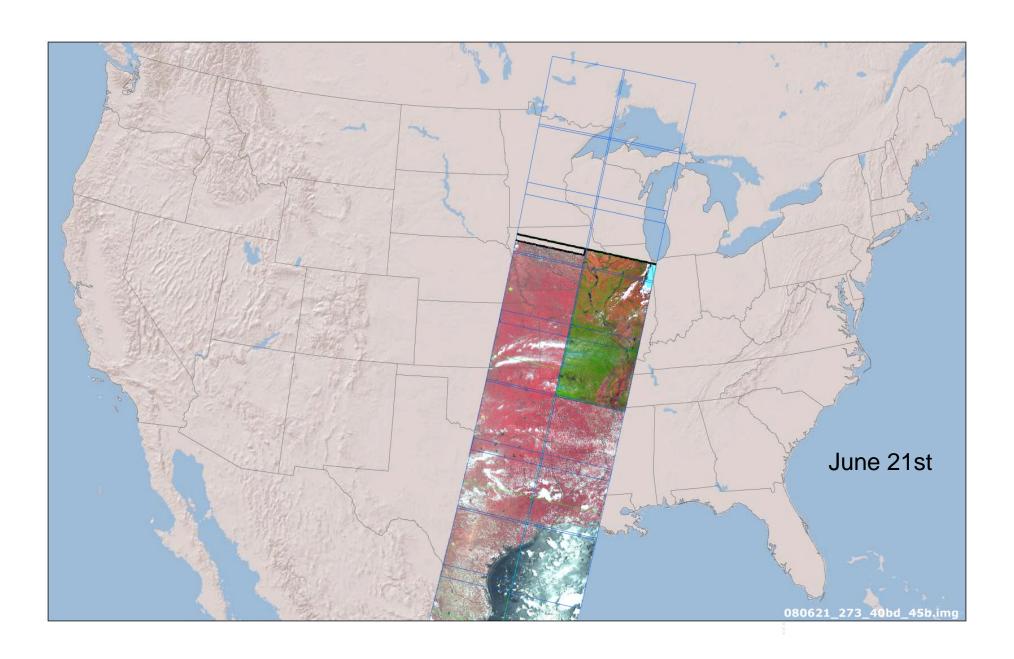


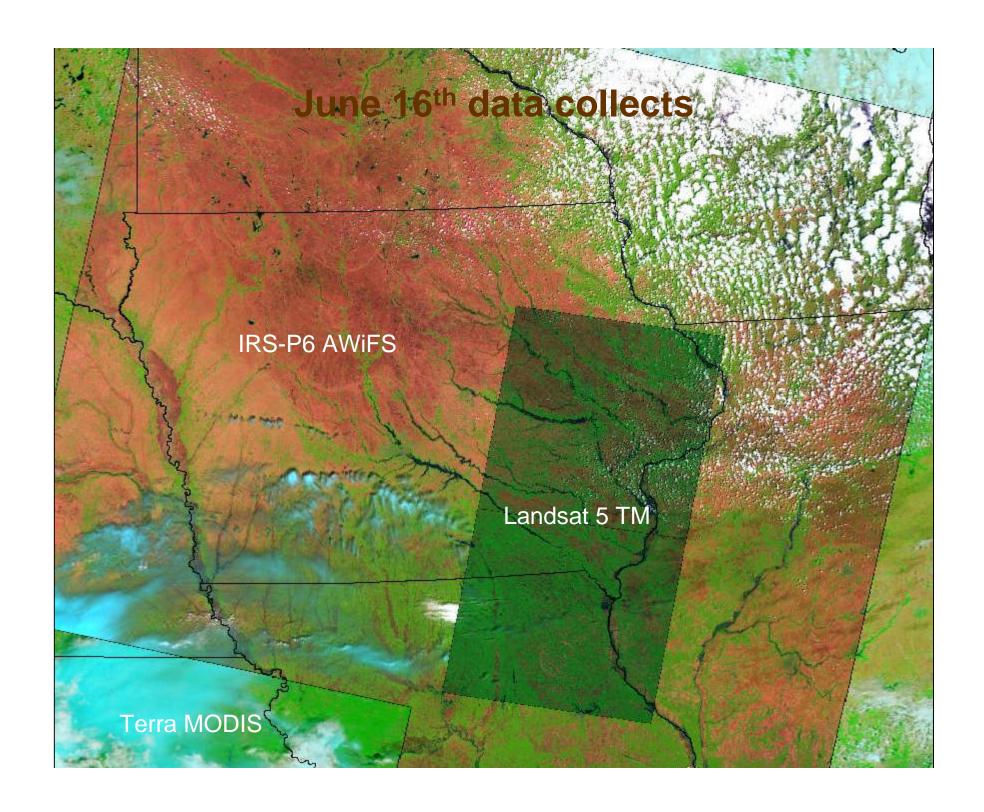


# "Money" shot

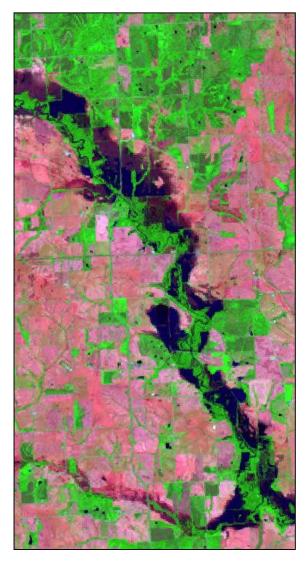


### **Frustration shot**

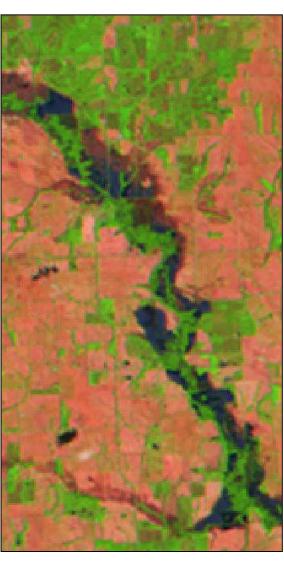




### **Imagery Comparison – June 16th**



Landsat 5 TM

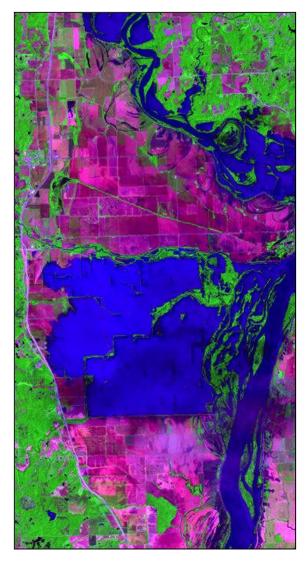


IRS P6 AWiFS



Terra MODIS (Rapid Response)

## **Imagery Comparison II – June 16th**



Landsat 5 TM



**IRS P6 AWiFS** 



Terra MODIS (Rapid Response)

# Produced for NASS Agricultural Statistics Board and Secretary of Agriculture

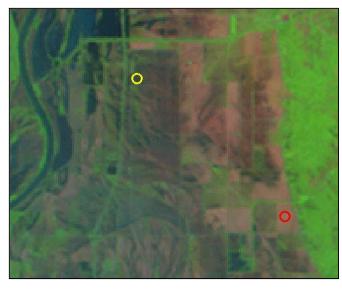
#### Maps

- June segments (visited areas for enumeration) overlaid on imagery
- Reinterviewed farmer response rates overlaid on imagery
- Grain storage bins locations overlaid on imagery

#### Statistics

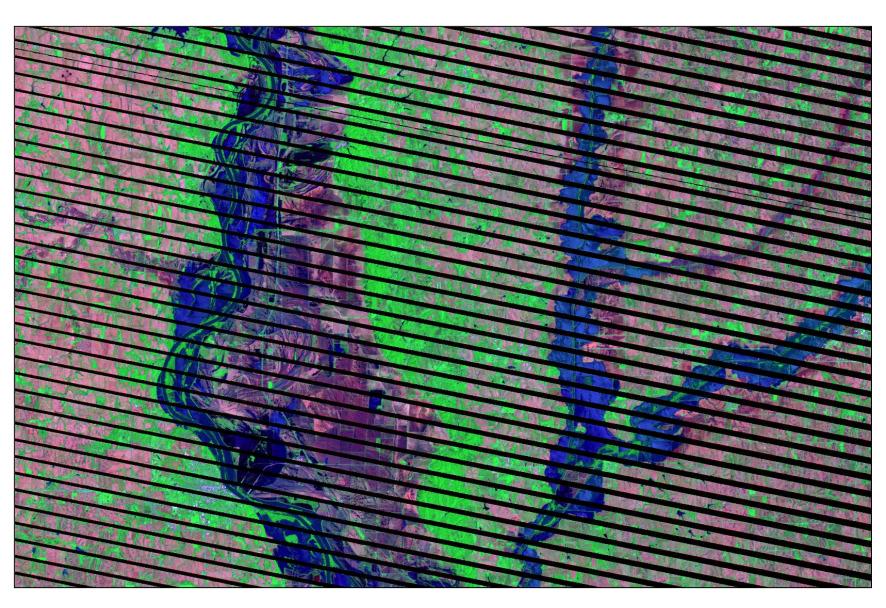
- Percent cropland inundated
- Percent cropland saturated





**IRS P6 AWIFS** 

### Landsat 7 ETM+



#### **Final comments about AWiFS**

- An excellent compromise between TM and MODIS for assessing flooding impacts on crop lands
  - TM and ETM+ not frequent enough because of narrow swath
  - ETM+ scan gaps are even more problematic
  - MODIS resolution marginally useable for land cover analysis, helpful for cloud cover checking
- Useful for both qualitative and quantitative analysis
  - Reference mapping
  - Percentage of cropland inundated
- Hobbled for rapid response uses by USDA speculatively collecting/purchasing only on east camera
- Not useful during hurricane events this year
  - Too cloudy
  - Few speculative collects

### The end





