

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



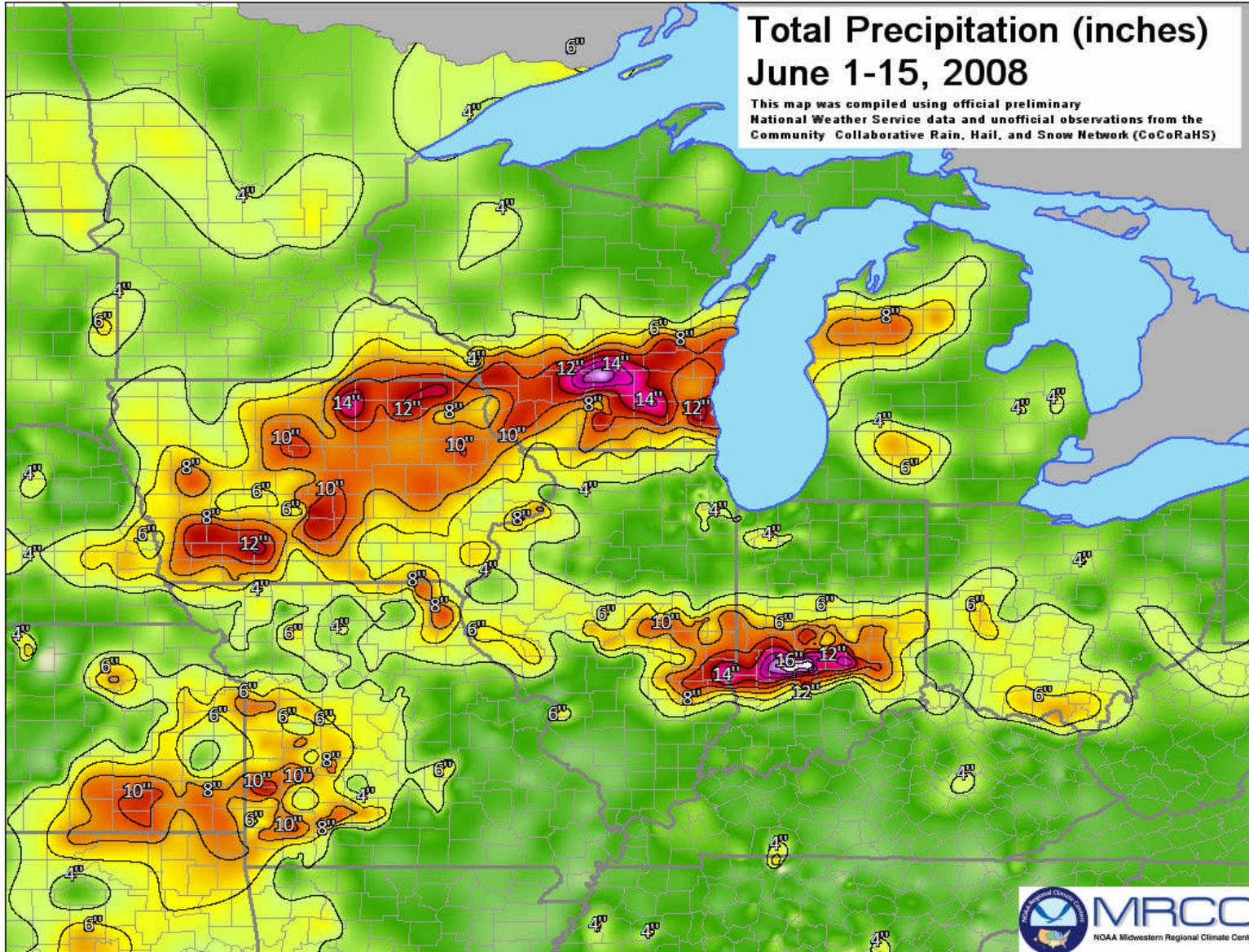
United States Department of Agriculture
National Agricultural Statistics Service
Research and Development Division
Spatial Analysis Research Section

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Mary Lindsey | UMD - Geography

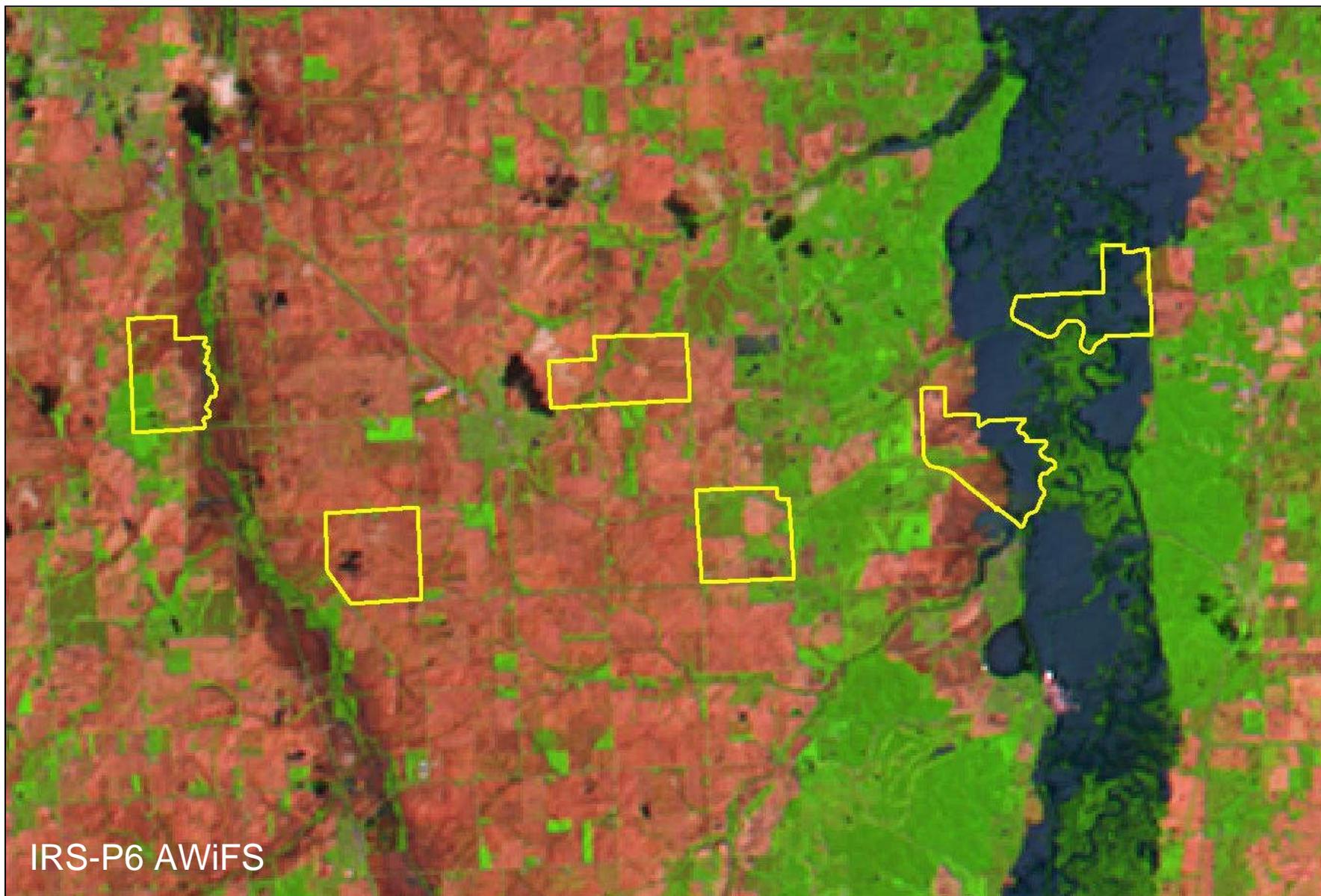




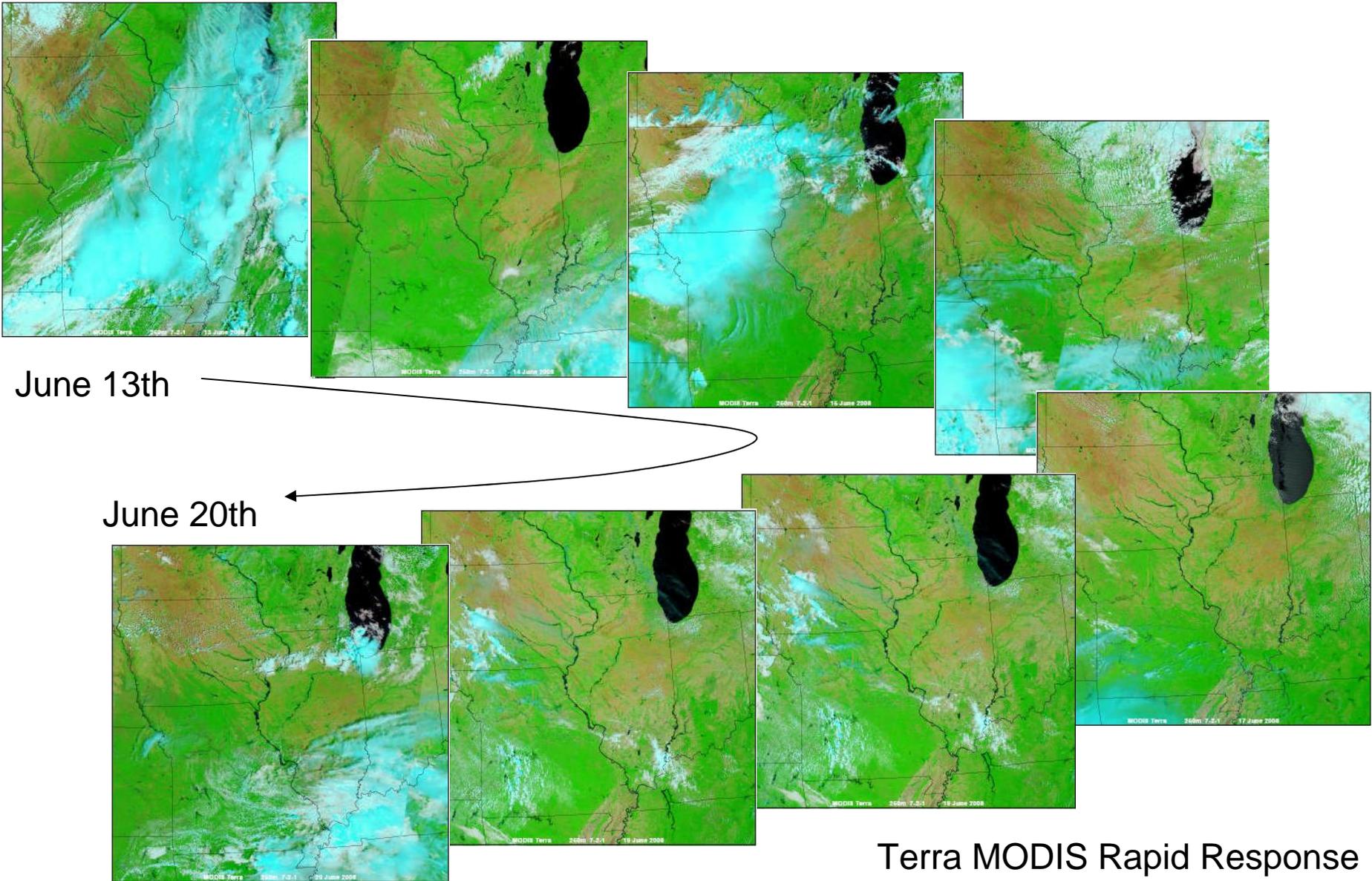
Rainfall Estimates



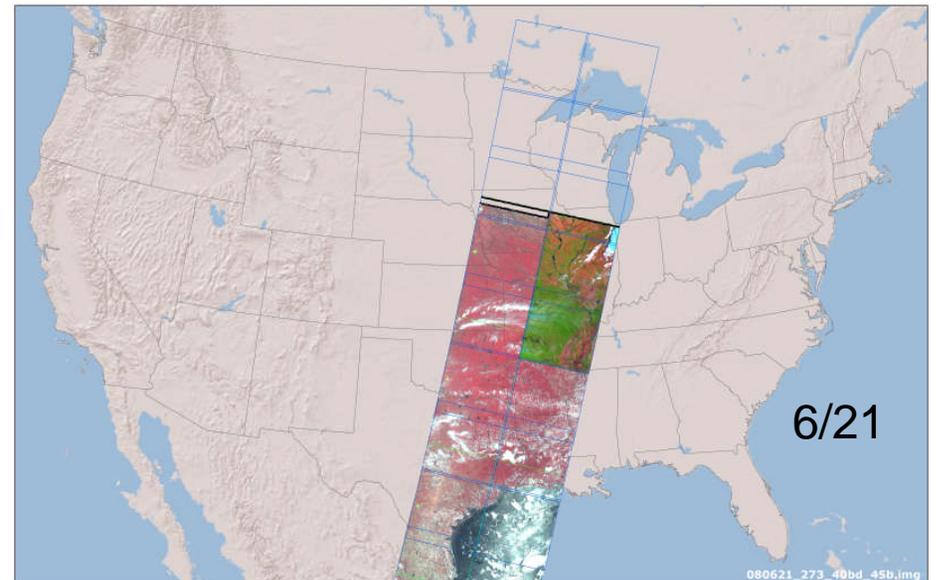
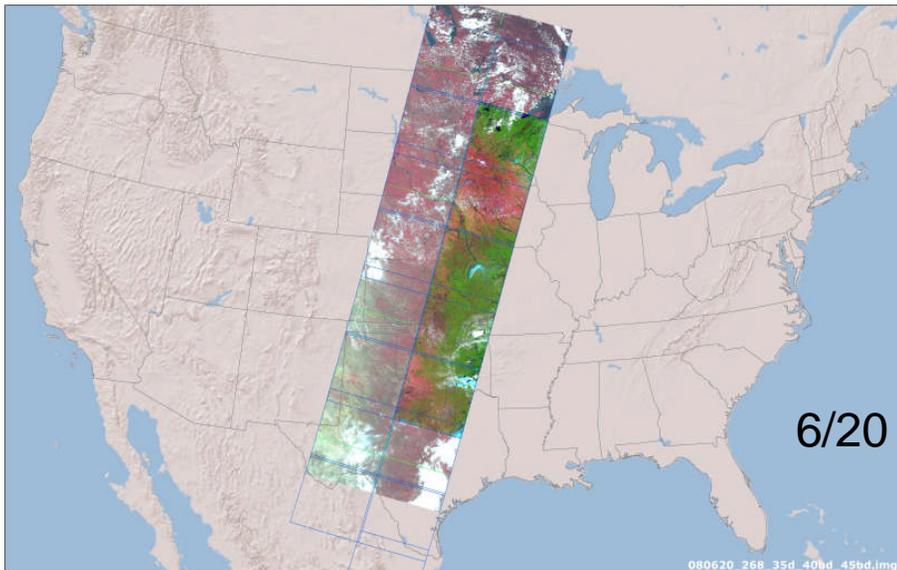
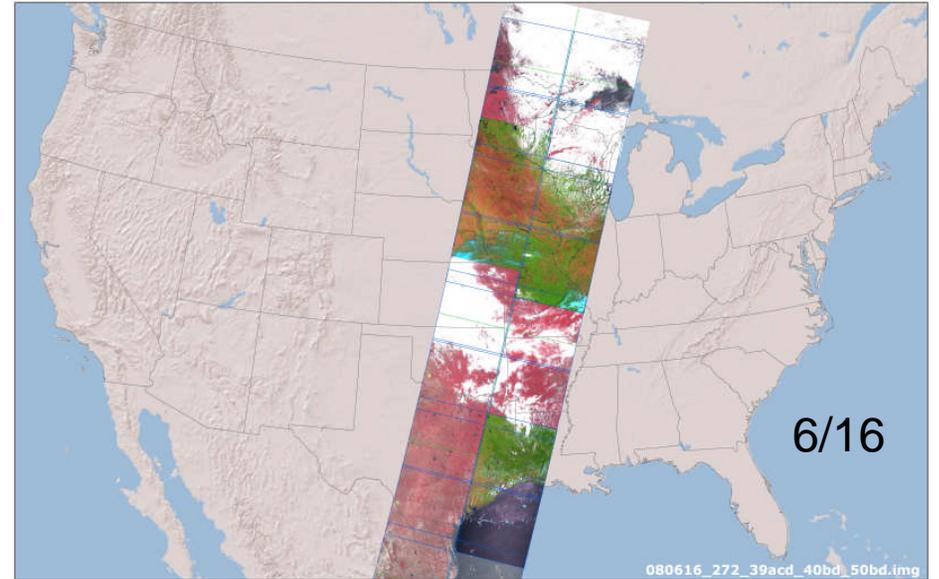
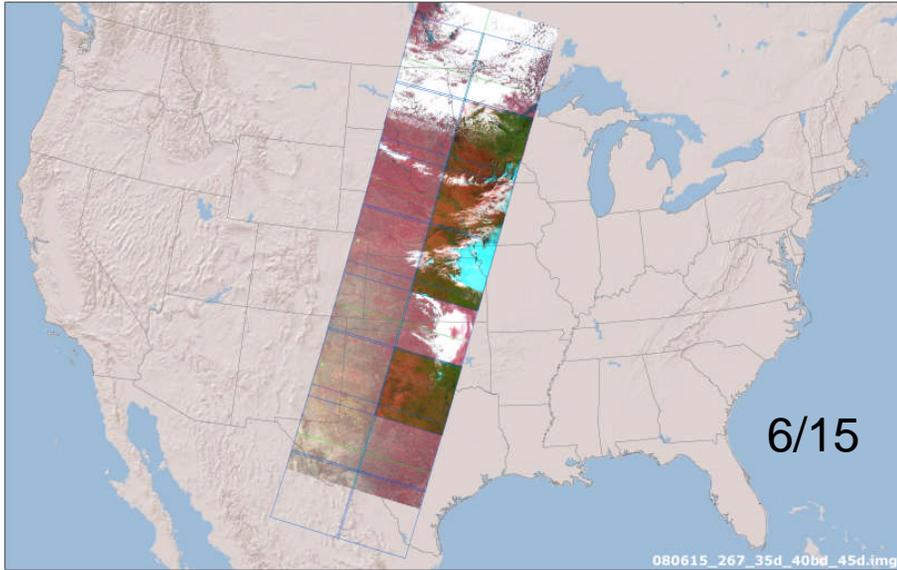
NASS June Acreage Survey “Segments”



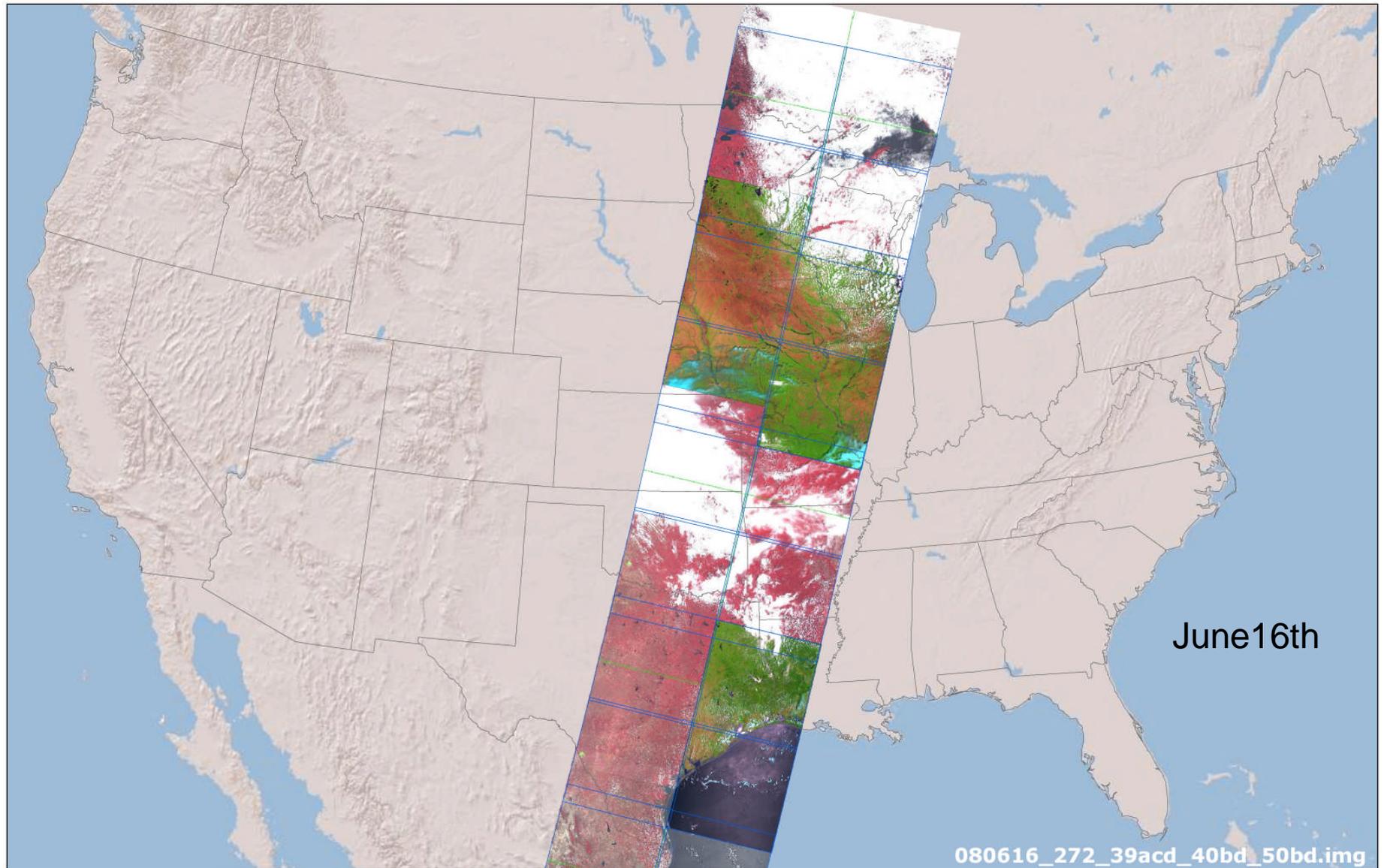
Time series of cloud cover



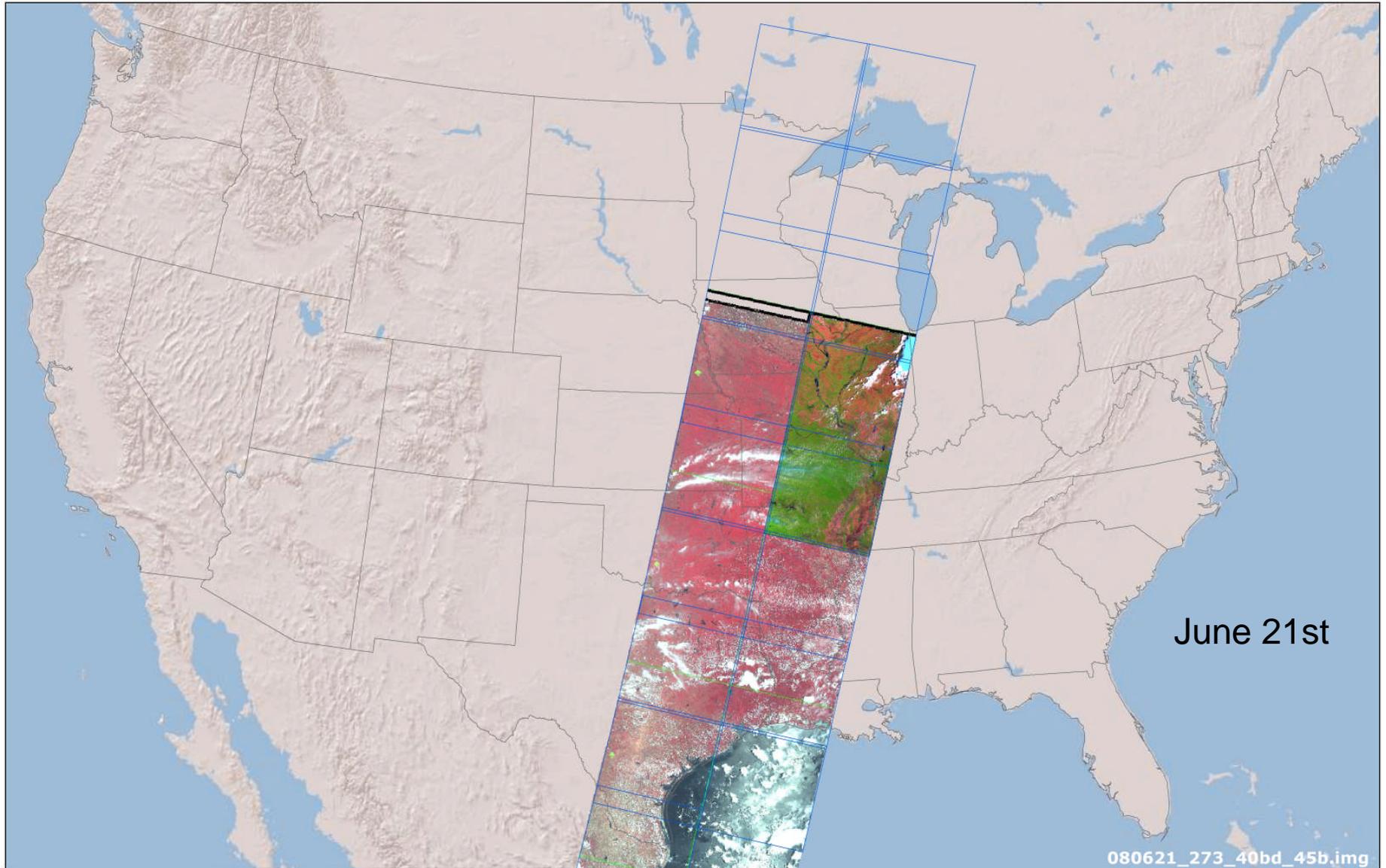
Time series of relevant AWiFS data



“Money” shot



Frustration shot

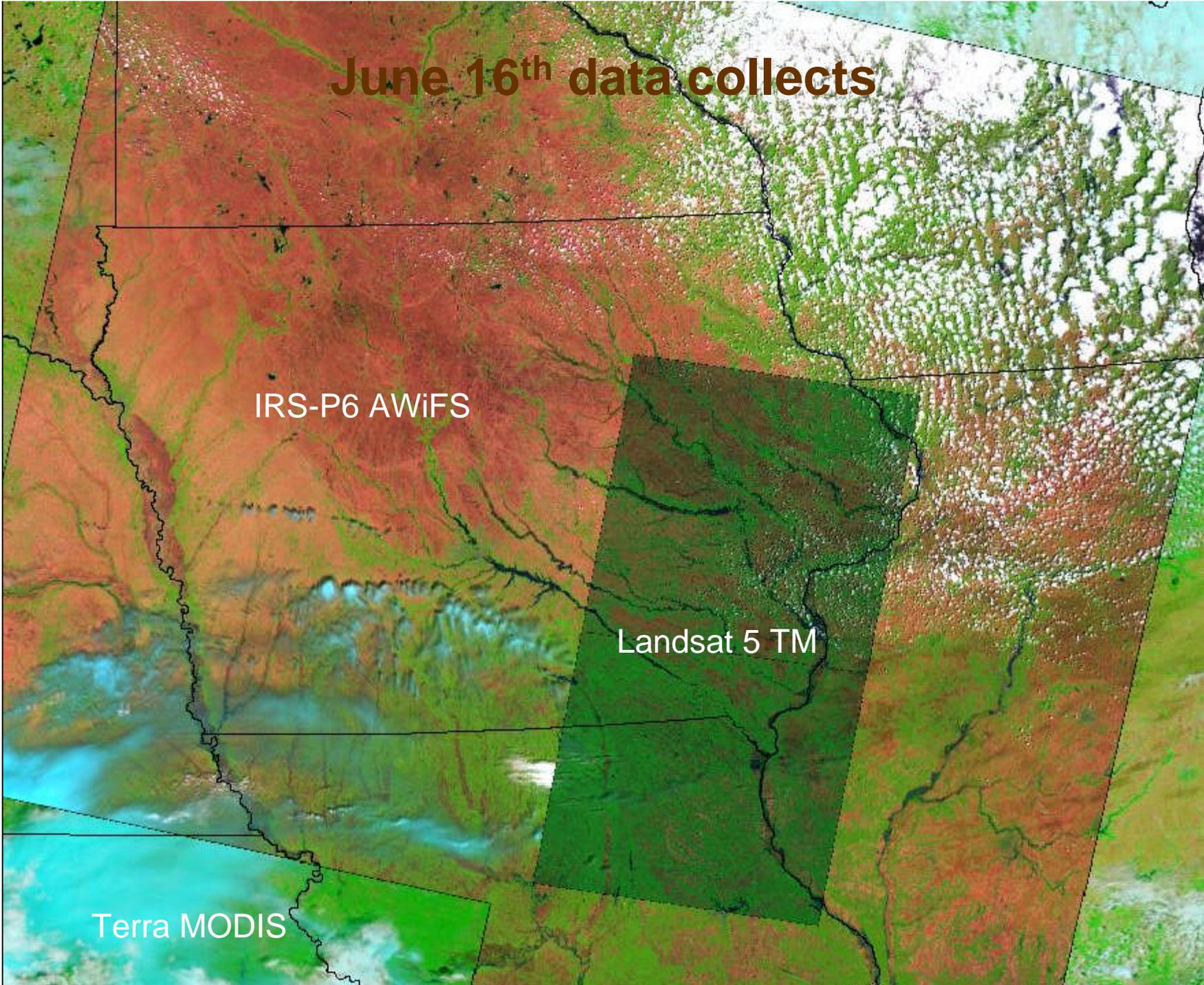


June 16th data collects

IRS-P6 AWiFS

Landsat 5 TM

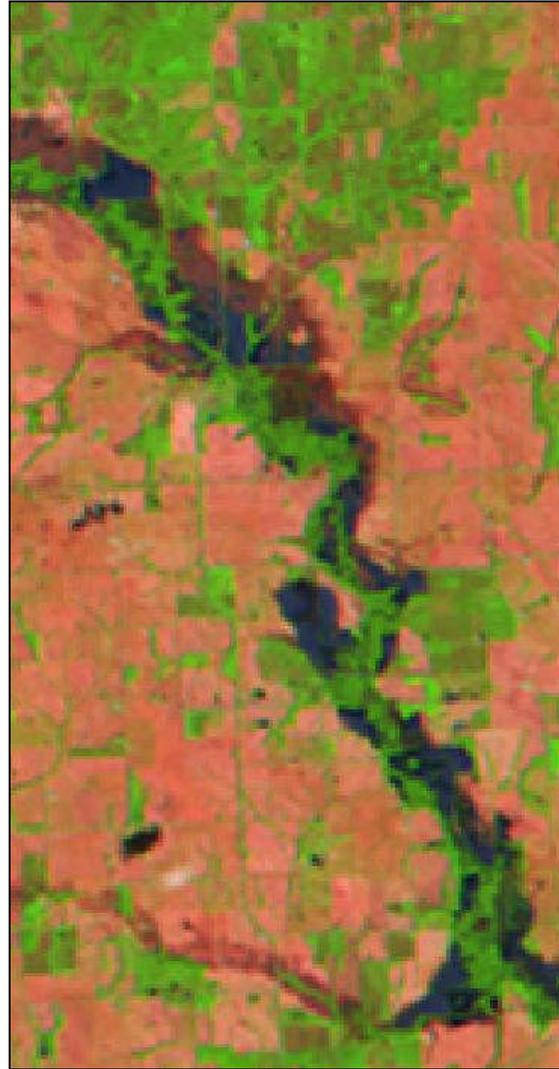
Terra MODIS



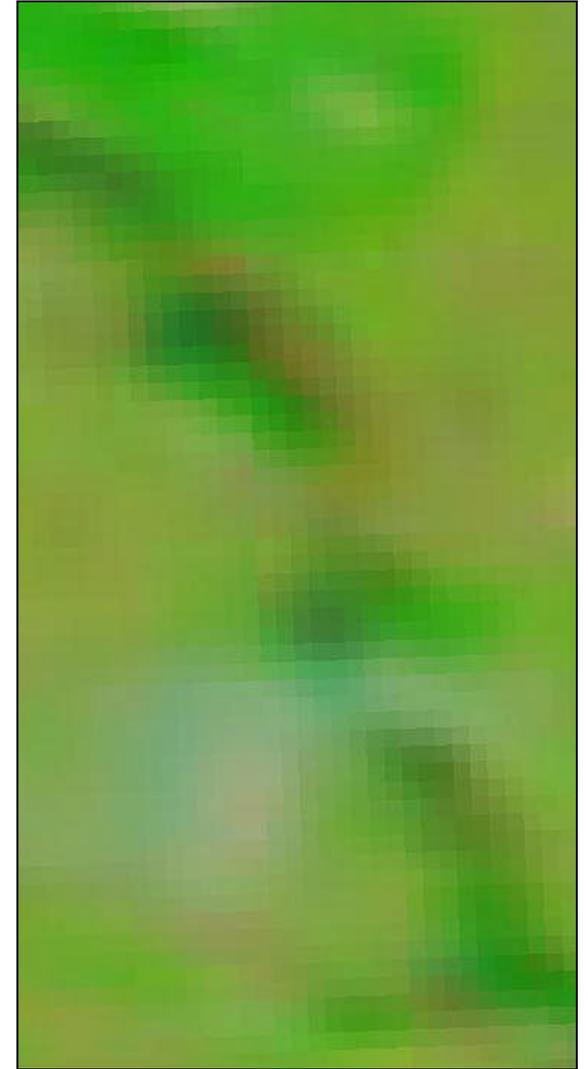
Imagery Comparison – June 16th



Landsat 5 TM

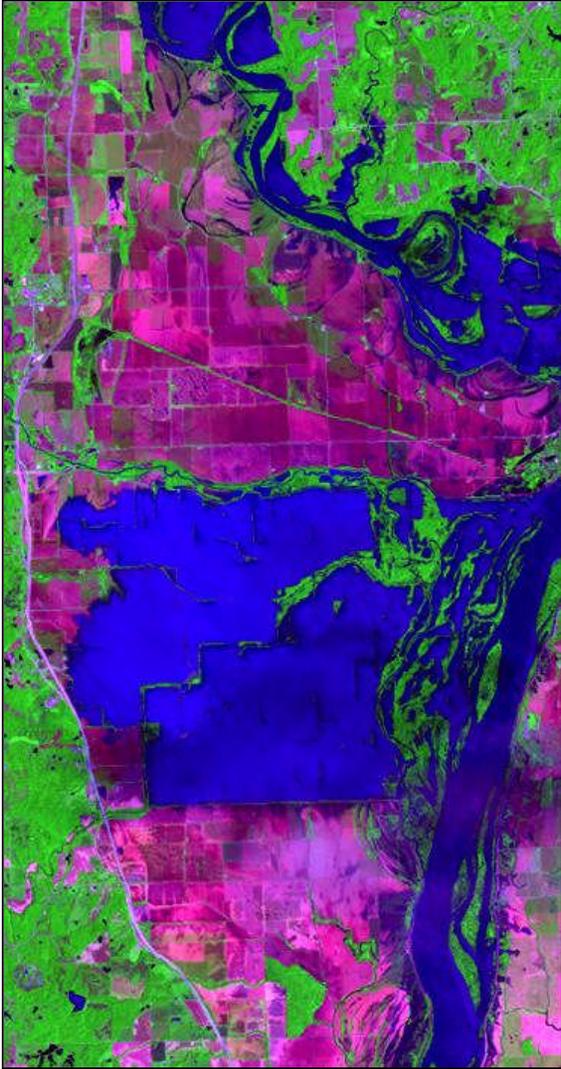


IRS P6 AWiFS



Terra MODIS
(Rapid Response)

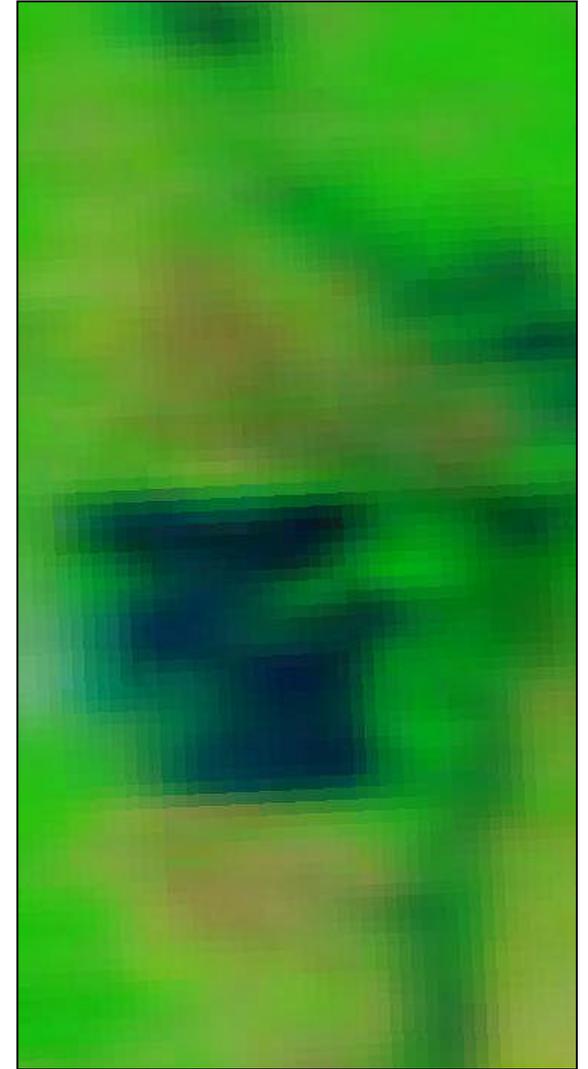
Imagery Comparison II – June 16th



Landsat 5 TM



IRS P6 AWiFS



Terra MODIS
(Rapid Response)

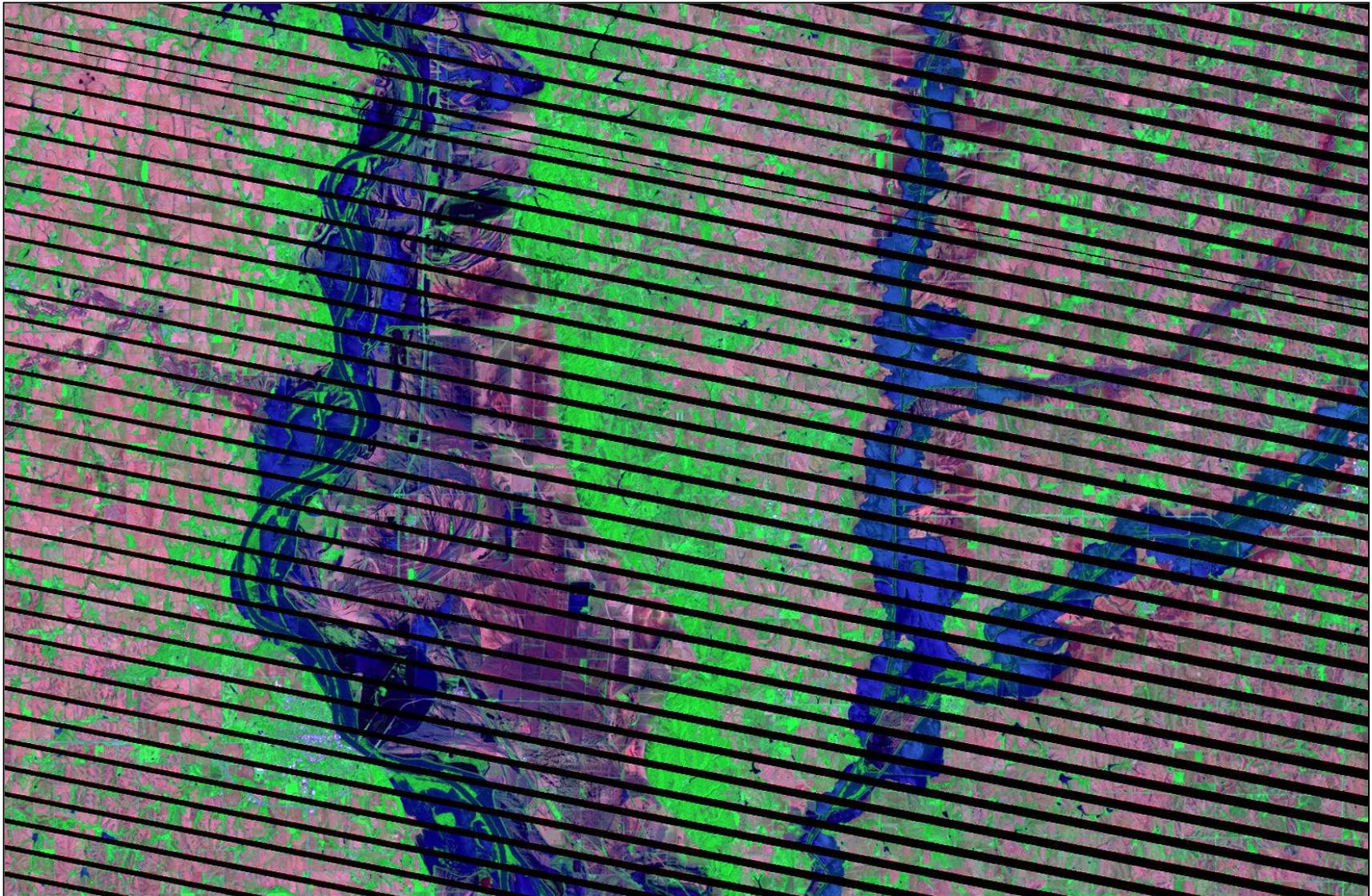
Produced for NASS Agricultural Statistics Board and Secretary of Agriculture

- 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

