Evaluating a CONUS-wide disALEXI Evapotranspiration product

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Current sites produced by USDA
DisALEXI

- Crop-specific algorithm for ET estimation
- Developed at the USDA
- Takes advantage of LST changes throughout the morning (GOES)
- Highly sensitive to LST
- Well validated over original target sites
- Leverage existing UQ studies
- Enable community members to better measure agricultural water consumptive use over CONUS
Objectives

Our main goal is to **develop, validate and evaluate disALEXI ET products throughout CONUS**.

- Develop a 70m resolution disALEXI ET product for the entire CONUS.
- Evaluate the current disALEXI algorithm over agricultural field validation sites.
- Modify the algorithm if needed, especially over regions not covered by the current implementation.
- Assess its value over non-agricultural sites.
- Include an appropriate uncertainty quantification, based on leveraged existing research. Uncertainty may also be modified to reflect accuracies in different landcover types.
- Make the data publicly available through LP DAAC.
From left to right, top to bottom, the mean difference ET (bias), and the 5th, 25th, 50th, 75th, and 95th percentiles of the difference image in mm/day.
First images
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