# Joe Santanello (NASA) and Tricia Lawston Parker (U of Maryland & NASA)

## **Research Questions**

- What are the major factors governing the timing/triggering of irrigation?
- amount?
- If the model reproduces the 'correct' irrigation amount and timing:  $\rightarrow$  Does it lead to more accurate simulation of fluxes? If not, why?

## <u>Tools/Equipment</u>

- NASA's Land Information System (LIS)
- NASA Unified Weather Research and Forecasting model (NU-WRF)

### <u>Strategy + Challenges</u>

- Incorporate *in-situ* and remote sensing datasets from LIAISE into LIS
- Evaluate offline and coupled simulations
- Refine irrigation schemes to more accurately reflect observations

### **Potential Interactions**

Participation in the model intercomparison

How can we use LIAISE observations to improve our model representation of timing/triggering and

Is the atmospheric response (temp, humidity, PBL, clouds, etc) consistent with observations?

Three irrigation schemes available in both offline and coupled modes (sprinkler, flood, drip)