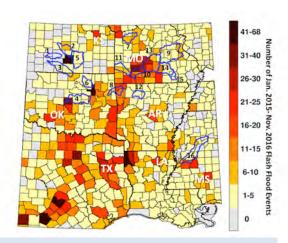


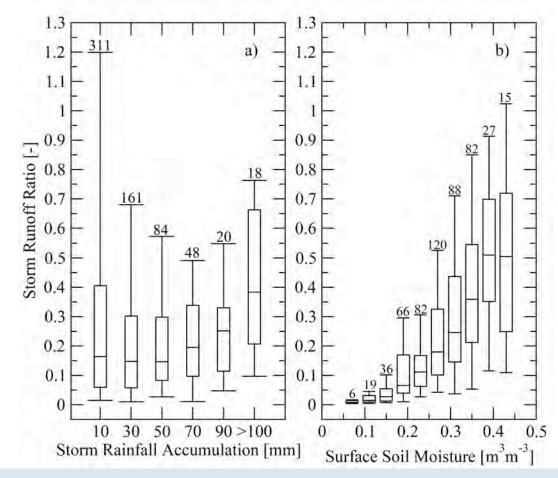
## SMAP Improves the Representation of Pre-Storm Conditions for Hydrologic Forecasting



**Problem:** Runoff ratio not well-predicted using current approaches to rainfall-runoff transformation.



**Finding:** Pre-storm SMAP estimates of soil moisture are better predictors of runoff ratio that traditional storm volume-based indices.



**Impact:** Flood predictions can be made more accurate in the era with SMAP soil moisture and precipitation information

Crow, Chen, Reichle, Liu, 2017: L-band microwave remote sensing and land data assimilation improve the representation of prestorm soil moisture conditions for hydrologic forecasting, *Geophysical Research Letters*.