Tall Timbers Ties to Fire Monitoring

SIPFIS Workshop

August 8, 2017



Past work:

- Florida Fish and Wildlife Cons. Comm. grant to develop and test fire monitoring system for Florida state lands (2006)
- JFSP grant to calibrate Landsat dNBR/NBR products for use by Monitoring Trends in Burn Severity in the South (2006)
- Collaboration with Hu et al. 2016 to test HMS products against Georgia burn authorizations
- Tall Timbers post burn evaluations tracking percentage of burn units burned under specific conditions (1994-present)
- PM_{2.5} emission factor research with Florida A&M University.



Current Work:

- Florida Fish and Wildlife Cons. Comm. grant to develop a fire monitoring system for whole state of Florida
- NASA grant with FSU to calibrate GFED products with Florida burn authorizations and test for bias in authorization data
- Southern Fire Exchange collaboration with SIPFIS
- Ground truthing for USGS-EROS products in development
- Fire and Smoke Model Evaluation Experiment (FASMEE)



Needs:

- Assist development in states currently without state-wide databases (or even burn authorization system)
- Equip database with filters for quality control and to identify outliers
- Calibration of authorization data using ground-recorded burned areas
- Calibration of high resolution remote sensing products using authorization data (for use in areas without good authorization data)
- Slight increase in information collected through authorizations time since fire, land cover category, timber stock