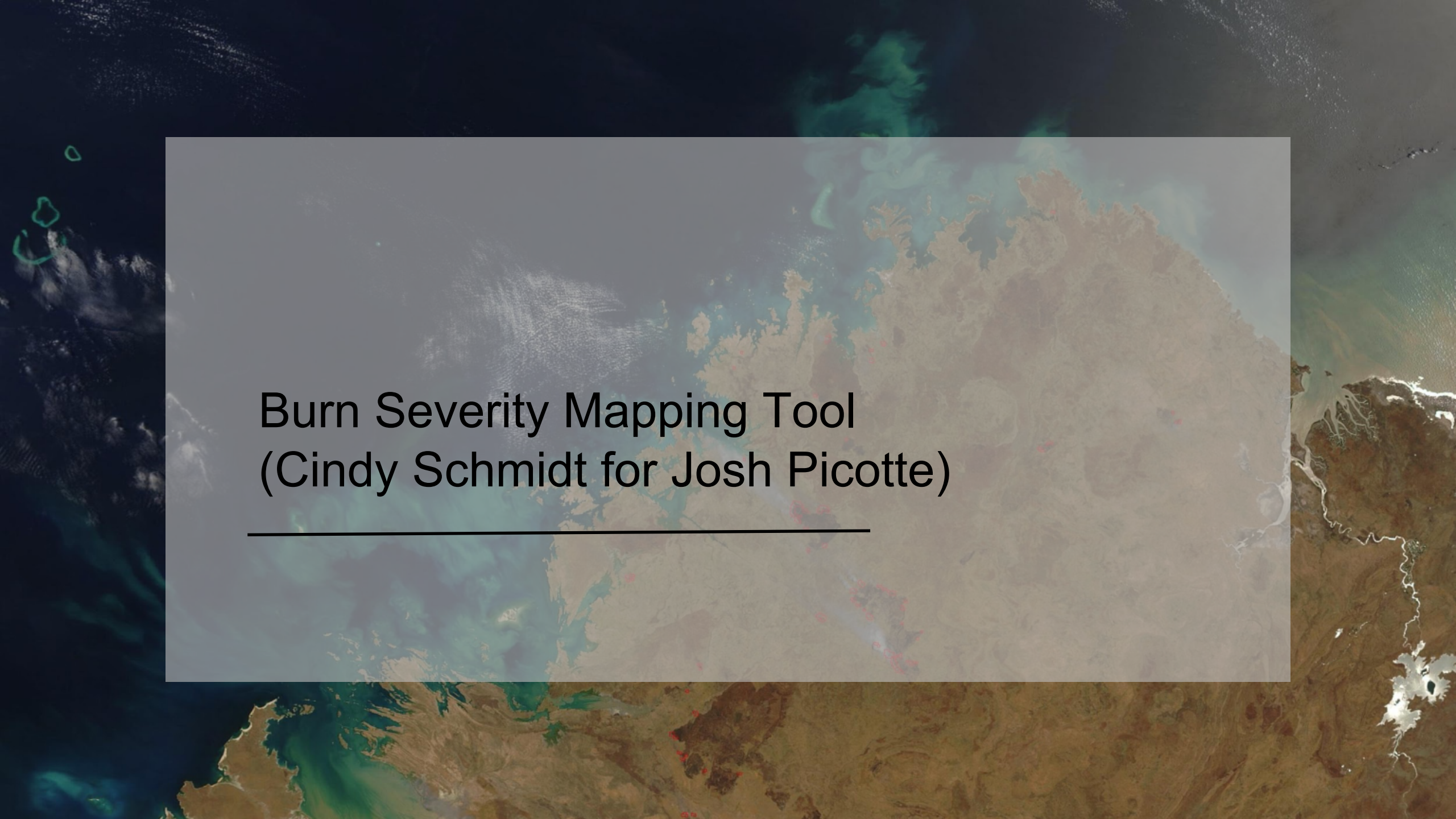
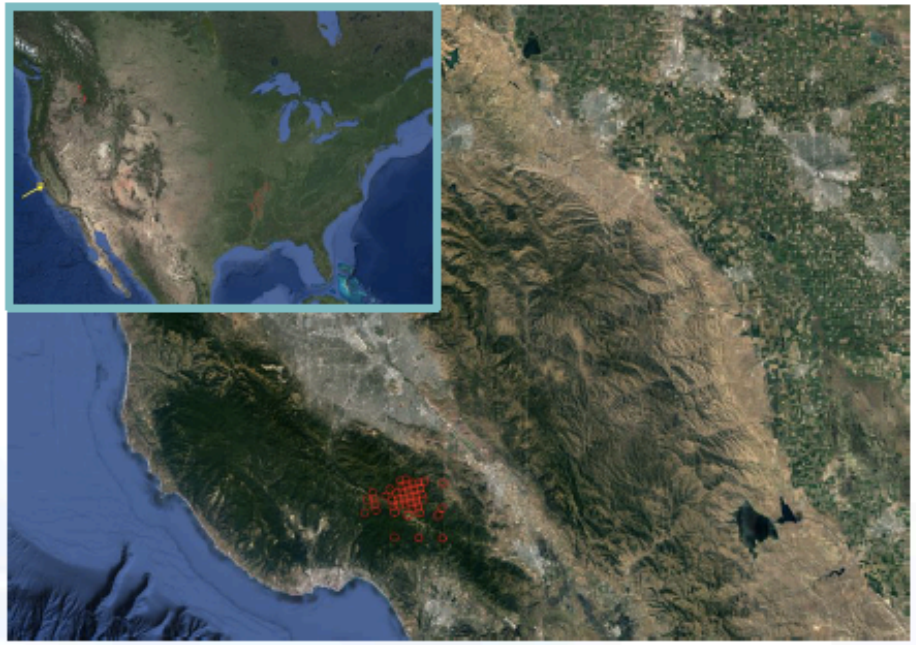


Burn Severity Mapping Tool
(Cindy Schmidt for Josh Picotte)

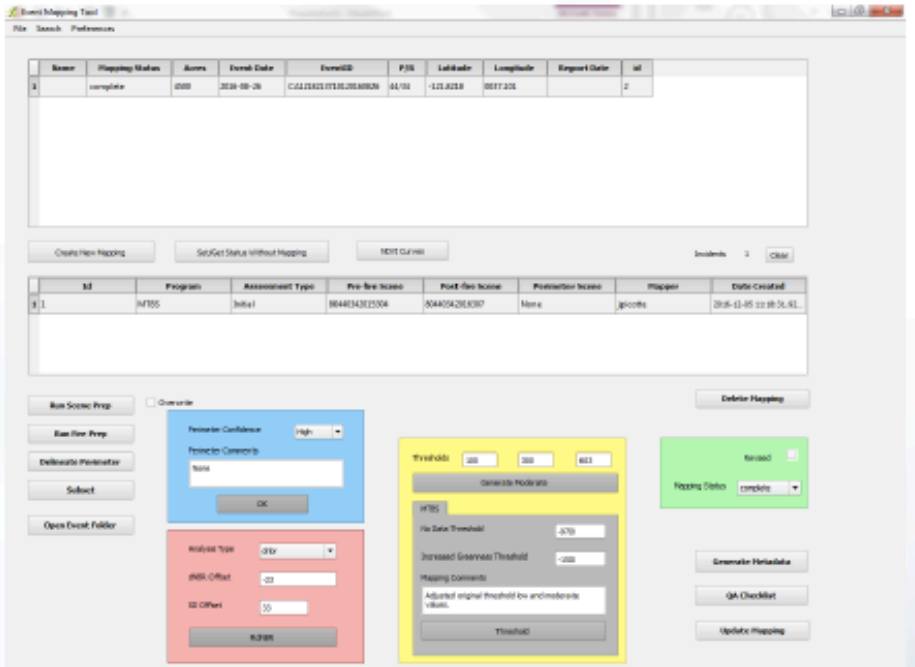
Utilization of Multi-Sensor Active Fire Detections to Map Fires in the US

- Project PI: Joshua Picotte (*Stephen Howard – retired*)
- Development Team: Michelle Anthony, Cheryl Holen, and Karthik Vanumamalai
- Partners: USDA Forest Service Forest of Florida, LANDFIRE, MTBS, St. John's Water Management District, and USGS EROS
- Project Summary:
  - Developed open source tools to incorporate Landsat imagery and fire detections to map fire perimeters and burn severity
  - Enables any user any where in the world to quickly assess fires in their area of interest
- Earth Observations applied: AVHRR, GOES, Landsat, MODIS, and VIIRS

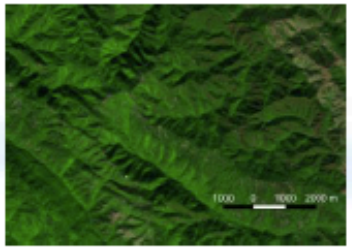
Biggest Achievement or Advancement to Date

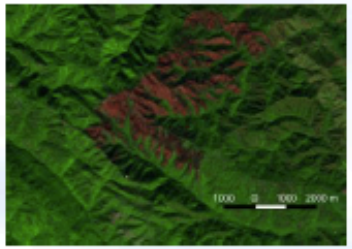


Step 1: Identify a fire using sensor detections or another data source

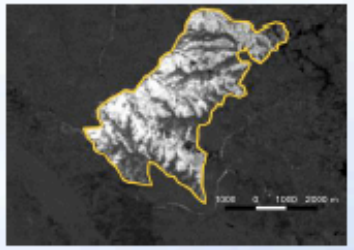


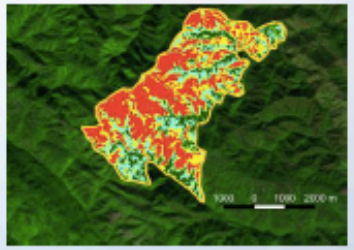
Step 2: Use QGIS tool to enter fire information and order imagery



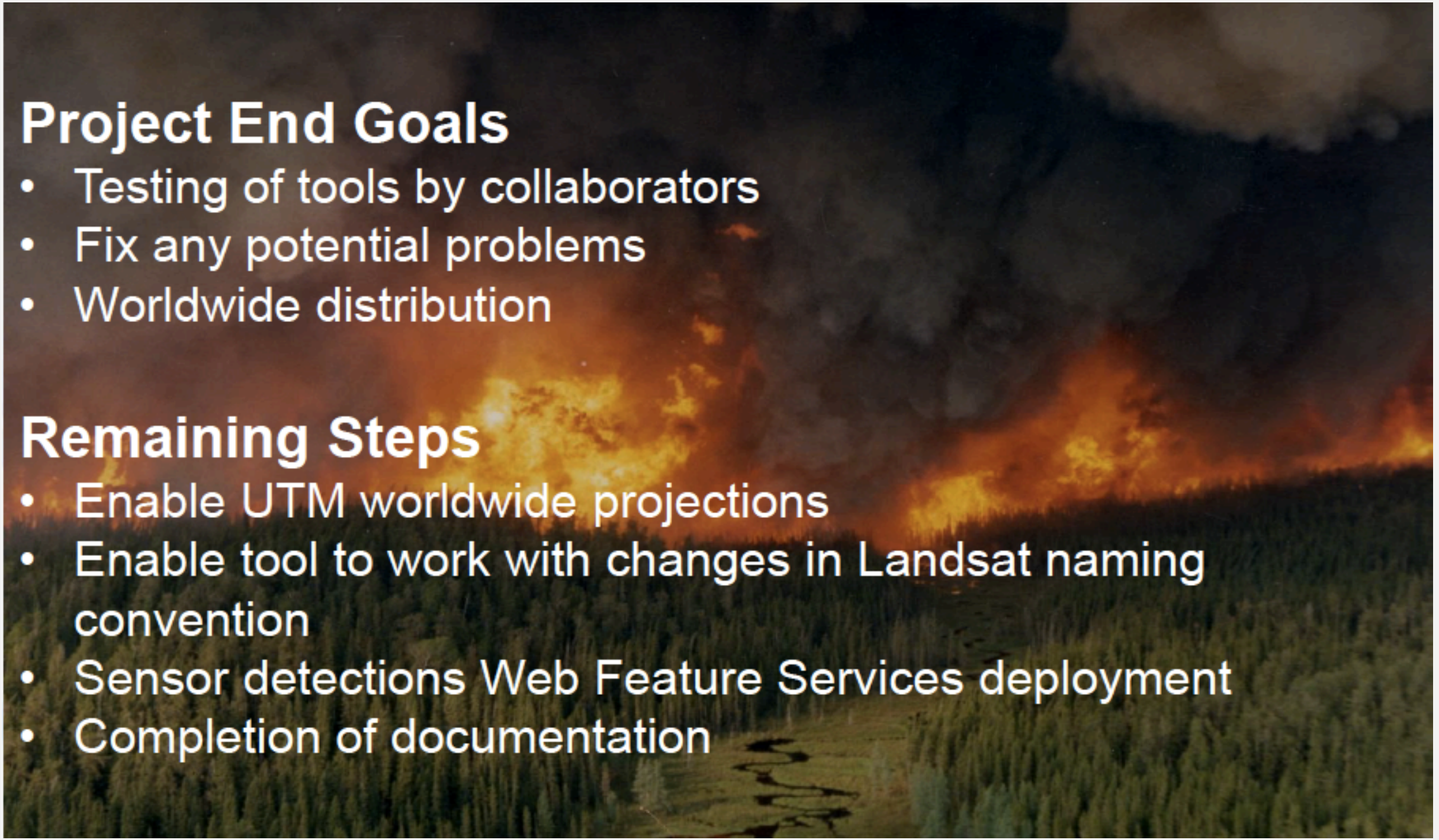


Step 3: Identify pre- (left) and post- (right) fire Landsat Scenes





Step 4: Map fire perimeter and burn severity

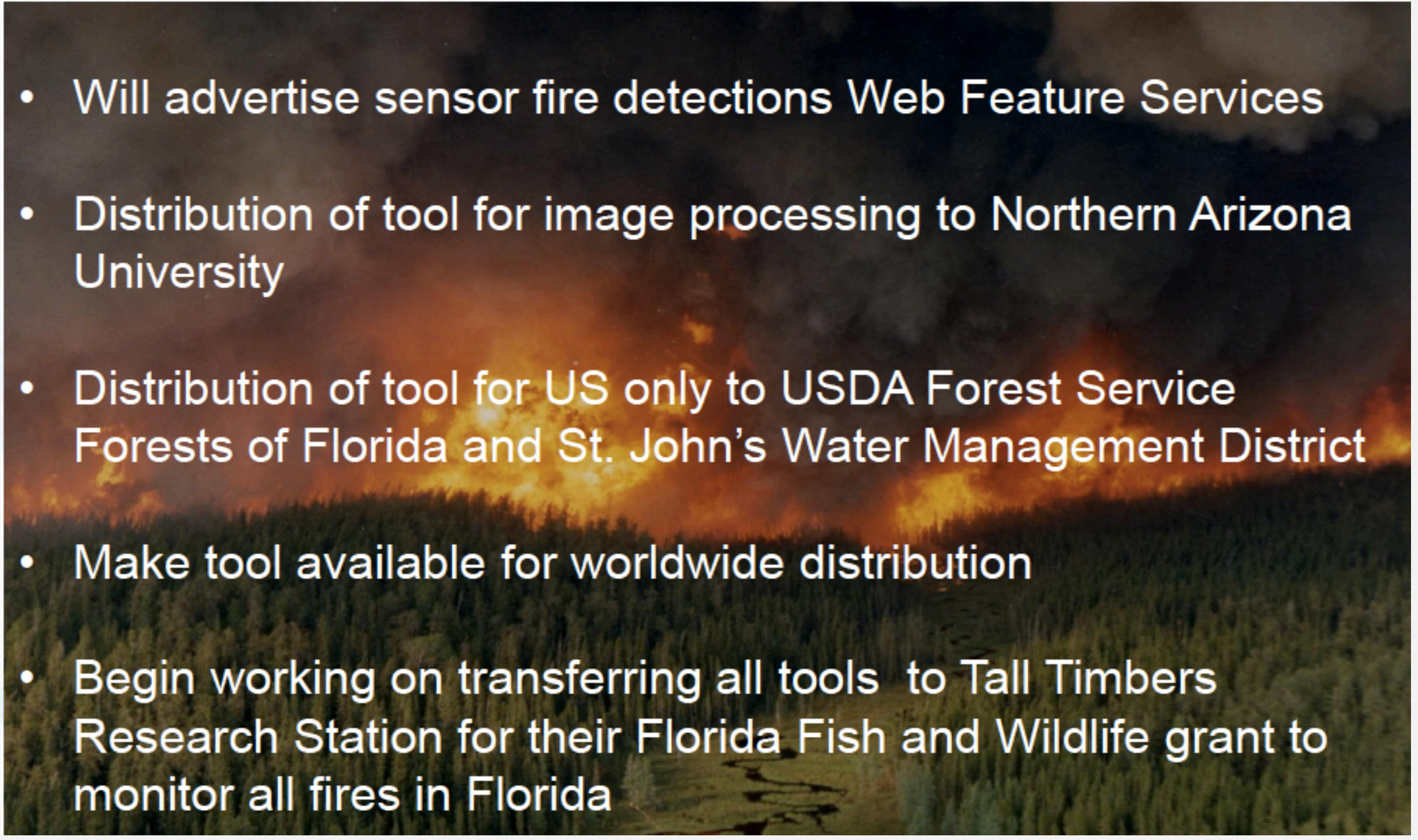


Project End Goals

- Testing of tools by collaborators
- Fix any potential problems
- Worldwide distribution

Remaining Steps

- Enable UTM worldwide projections
- Enable tool to work with changes in Landsat naming convention
- Sensor detections Web Feature Services deployment
- Completion of documentation



- Will advertise sensor fire detections Web Feature Services
- Distribution of tool for image processing to Northern Arizona University
- Distribution of tool for US only to USDA Forest Service Forests of Florida and St. John's Water Management District
- Make tool available for worldwide distribution
- Begin working on transferring all tools to Tall Timbers Research Station for their Florida Fish and Wildlife grant to monitor all fires in Florida