# A Fire Weather Intelligence Portal for the Southeast US

#### Corey Davis State Climate Office of North Carolina November 3, 2017



# Background

- 2005ish: Discussions began between SCO and NC Forest Service
- Goal: A realtime monitoring tool for weather and fire risk info.



Evans Road fire, from US F&WS



# **Portal History**

- 2011: Portal development began

   Iterative design process with NCFS
   Adding NC stations to WIMS Database
- June 2013: Portal officially released for NC
- Since then: Maintenance supported by NCFS



### **Portal Successes**

- One-stop shop for weather and fire risk information
- Established a strong relationship between SCO, NCFS
- North Carolina became a pioneer for providing this sort of information

   "How can I get this for my state?!"



# **Portal Expansion**

 Funding from SERCH to add data for the 13-state southern region Rebuild of the Portal backend Reduce load times - Add mobile compatibility Use latest mapping technology



**NC STATE UNIVERSITY** 

#### **Portal Demo**





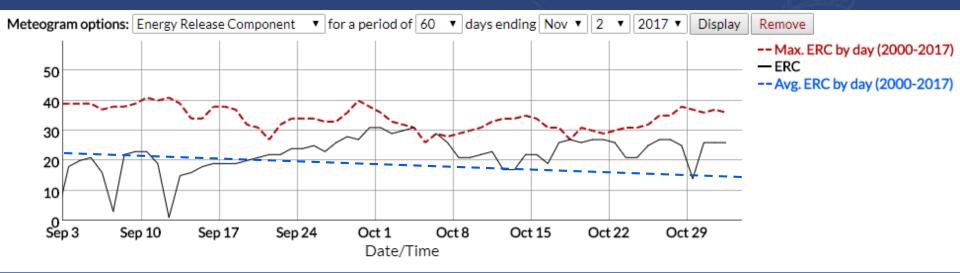
### **New Datasets**

- CPC outlook, WPC QPF, US Drought Monitor overlays
- Regional/national fire and smoke products
  - Ventilation rate, Burning Category, ADI
- NFDRS2016 data
  - Including gridded datasets



### **Added Features**

- Retrieving gridded values and point histories on click
- More historical context for meteograms



#### Alerts

 Portal data will be incorporated into SERCH LIGHTS

 Currently for monthly drought outlooks, cattle heat stress index

- KBDI alert is in development
- Eventually, other gridded fire risk parameters



## **Fire Research**

 Prescribed burn day climatology and future projections - Similar to climatological analysis by Southern **Climate Impacts Planning Program** 

Number of days per year 300 Mile

Average Yearly Frequency of Suitable Burn Days (1996-2015)



# **Questions or Suggestions?**

# https://climate.ncsu.edu/fwip

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