



Status of 2016v1 fire inventory

YEAR 2016 EMISSIONS MODELING PLATFORM PURPOSES

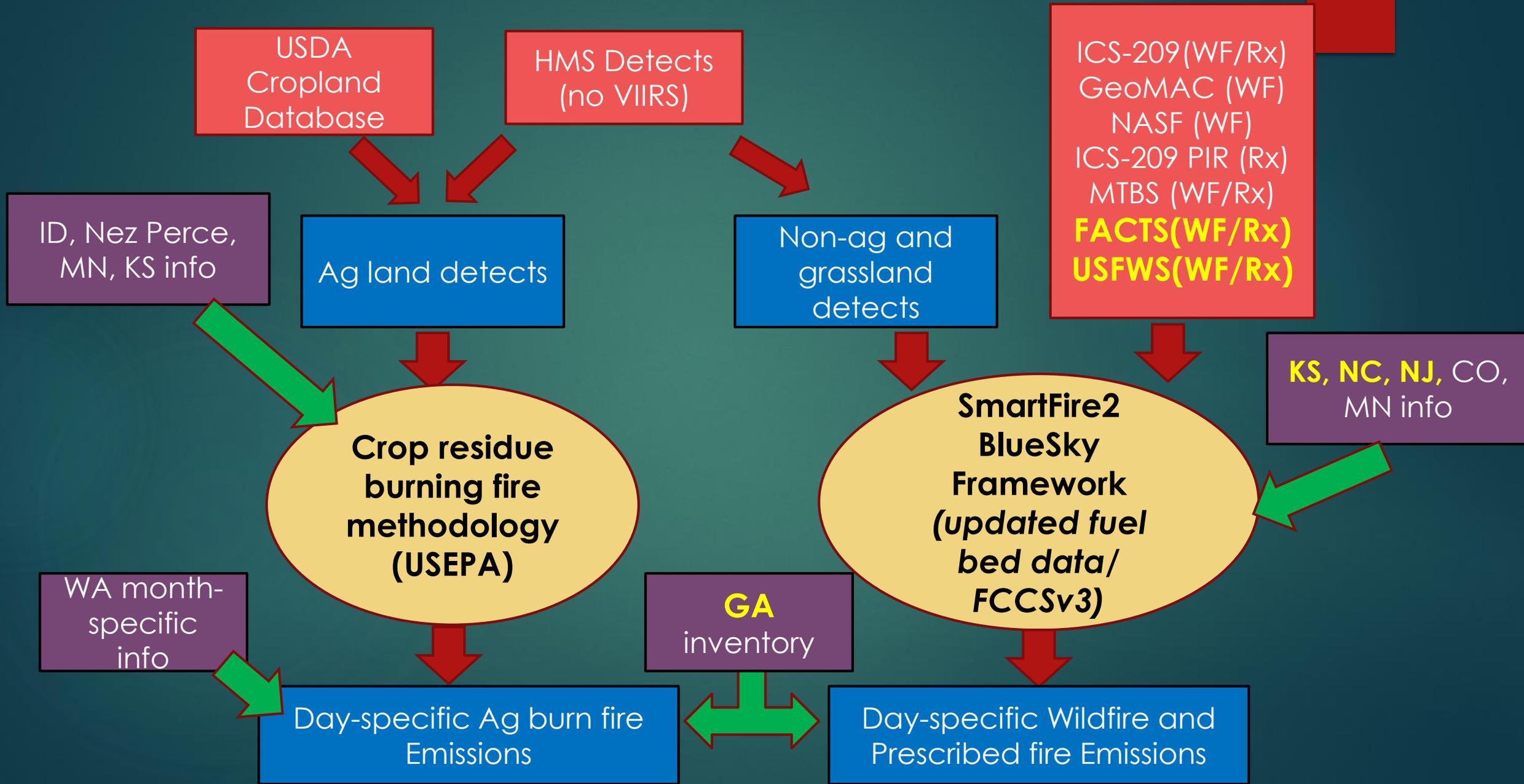
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New and improved data used in 2016v1

- ▶ Fire information databases
 - ▶ USFS FACTS: prescribed [*shapefiles*]
 - ▶ US Fish and Wildland Service (USFWS): wildfire and prescribed
 - ▶ New Jersey: wildfire and prescribed
 - ▶ Georgia: day-specific ag burns
- ▶ State data used in different manner in 2016v1
 - ▶ NC: Using as input to SmartFire2 instead of input into BlueSky
 - ▶ KS: Better spatial allocation of acres burned
- ▶ Cleaned up bad or duplicate fire information, better end dates
- ▶ **Changes to Soberanes fire (CA) for July 26th only**

Fire Emissions Processing at High-Level for 2016v1



2016v1 acres burned

▶ CONUS

- ▶ Prescribed burn total ~11.9M (11.3M in beta; +5%)
- ▶ Wildfire total ~ 4.73M (4.87M in beta; -3%)
- ▶ Wildfire + Rx total ~ 16.7M (16.2M in beta; +3%)
- ▶ Prescribed acres burned up because of USFS FACTS and USFWS databases added
- ▶ Wildfire acres burned down slightly
 - ▶ Deleted bad or duplicate fire information for major fires
 - ▶ Largest impacts in CA, CO, SD, and OR
 - ▶ Minor changes to some end dates of events in some databases for better consistency and better characterization

2016v1 emissions

- ▶ CONUS
 - ▶ PM2.5 total ~ 1.23M tons (1.3M tons in beta; 5% decrease)
 - ▶ VOC total ~ 3.1M tons (3.3M tons in beta; 6% decrease)
 - ▶ NOx total ~ 227K tons (232K tons in beta; 2% decrease)
- ▶ CA wildfire PM2.5 now 85K tons (120K tons in beta)
- ▶ KS wildfire PM2.5 now 26K tons (30K tons in beta)
- ▶ CO wildfire PM2.5 now 25K tons (35K tons in beta)
- ▶ SD wildfire PM2.5 now 2K tons (20K tons in beta)
- ▶ WA wildfire PM2.5 now 19K tons (26K tons in beta)
- ▶ Rx burn total PM2.5 now 655K tons (640K tons in beta)

Work completed recently for 2016v1

- ▶ CONUS emissions
 - ▶ Implemented GA day-specific ag fire info and other minor changes to agricultural fires
 - ▶ KS approach to better allocation of Flint Hills fires in late-Feb-early May was approved by Kansas; approach implemented
 - ▶ NC submitted feedback based on draft v1 and changes implemented
 - ▶ Changes to Soberanes fire (CA) for July 26th only
 - ▶ Generate QA reports for Workgroup
 - ▶ Generate SMOKE-ready FF10 inventory files
- ▶ Alaska v1 emissions almost completed

Remaining steps for Workgroup

- ▶ Finish Alaska v1 fires
- ▶ Generate SMOKE-ready FF10 inventory files
- ▶ Continue QA process (still time to make corrections/tweaks if issues found)
- ▶ Generate 2016v1 specification sheet documentation for the fire sectors (wildfire, Rx and ag burns)