



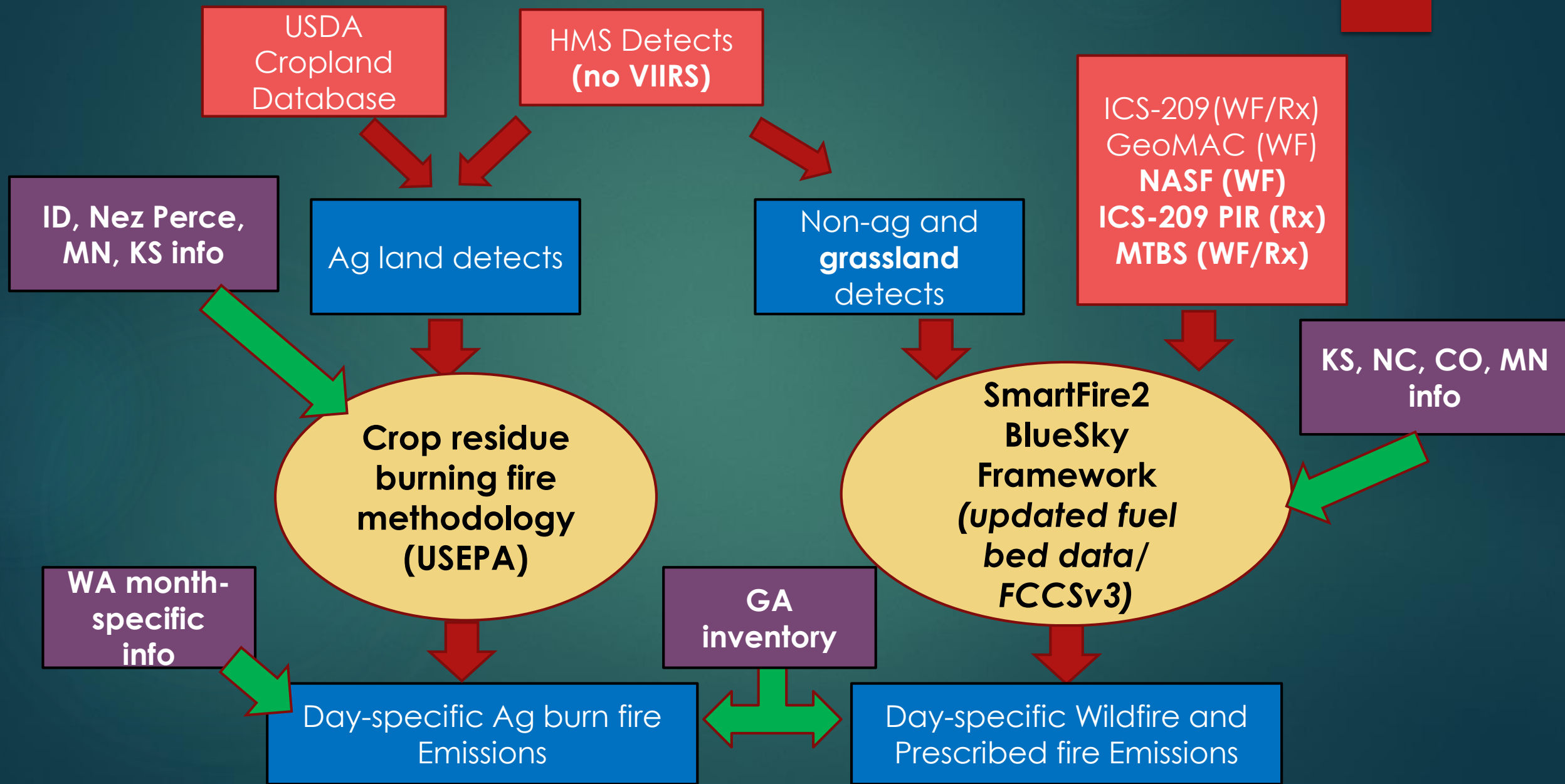
# Final summary of 2016 beta release for wildland fires, prescribed and agricultural burns for USA and outside USA

YEAR 2016 EMISSIONS MODELING PLATFORM PURPOSES

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# Fire Emissions Processing at High-Level for 2016 beta



# Final 2016 beta national totals

- ▶ Total acres burned ~ 18M (2016alpha ~ 25.5M)
  - ▶ Wildfire acres burned = 6.4M (NIFC has ~5.5M total, 2016alpha ~ 5.7M)
  - ▶ Prescribed burn acres = 9.6M (2016alpha ~ 15.5M)
  - ▶ Ag burn acres ~ 2M (2016alpha ~ 4.4M)
- ▶ Total emissions (WF and Rx)
  - ▶ PM2\_5 = 1.8M tons (2016alpha ~ 3.2M tons)
  - ▶ VOC = 4.9M tons (2016alpha ~ 9M tons)
  - ▶ NOX = 300K tons (2016alpha ~ 450K tons)
- ▶ Ag burn emissions
  - ▶ PM2\_5 = 25K tons, VOC=19K tons, NOX=11k tons

# International Fire inventory

- ▶ Fire Inventory from NCAR (FINN) global dataset
  - ▶ Recently discovered leap-year error (Feb 29-Dec 31 fires displaced one day)
  - ▶ FINN author corrected this error and EPA verified (in beta release)
  - ▶ FINN used for Mexico for all of 2016 and for some months in Canada
- ▶ Environment Canada inventory
  - ▶ Year 2016 inventory with some missing winter months
  - ▶ Use FINN to fill in missing time periods
  - ▶ Fort McMurray fire (1.5M acres; May-Aug)
- ▶ More analysis of these inventories in coming months

# Schedule post-2016 beta release for fires

- ▶ November and December
  - ▶ International fire analysis summary
  - ▶ QA of 2016 beta: reports by workgroup members
  - ▶ List of possible 2016v1 improvements
  - ▶ Finish up 2016 beta documentation
- ▶ January-February 2019
  - ▶ Possible pre-2016v1 emissions generated using improvements
  - ▶ More QA/feedback by workgroup
- ▶ March 2019
  - ▶ Final 2016v1 emissions generated
  - ▶ Final QA/tweaks?

# List of Possible Improvements for 2016v1

- ▶ National fire information datasets
  - ▶ Forest Service Activity Tracking System (FACTS) data from the USFS-USDA
    - ▶ WF and Rx fire info/shapefiles
  - ▶ US Fish and Wildlife Service database
    - ▶ WF and Rx fire info
  - ▶ National Fire Plan Operations and Reporting System (NFPORS) database from Dept of Interior
- ▶ More state-submitted data or changes
- ▶ Examine fuels defined as “Urban” (documentation indicates = urban, barren, and agriculture)
- ▶ Examine use of MODIS Collection 6 detects
- ▶ Possible interaction with USFS-AIRFIRE team and their latest BlueSky software tools?