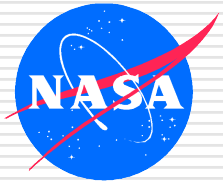
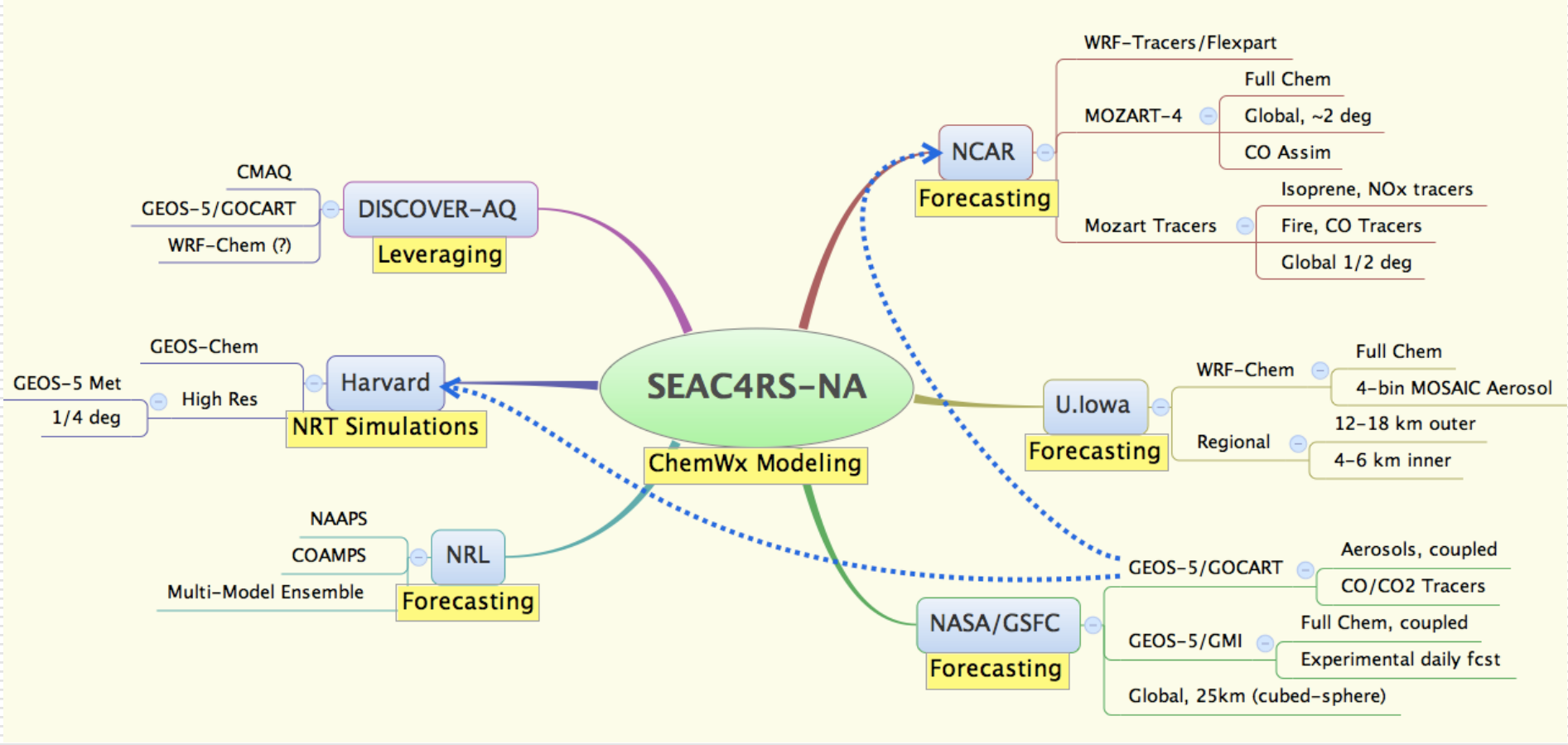


SEAC^{4}RS-NA Theory Breakout Group

SEAC4RS Science Team Meeting
April 29-May 1 2013

SEAC4RS-NA Modeling Capabilities at a Glance

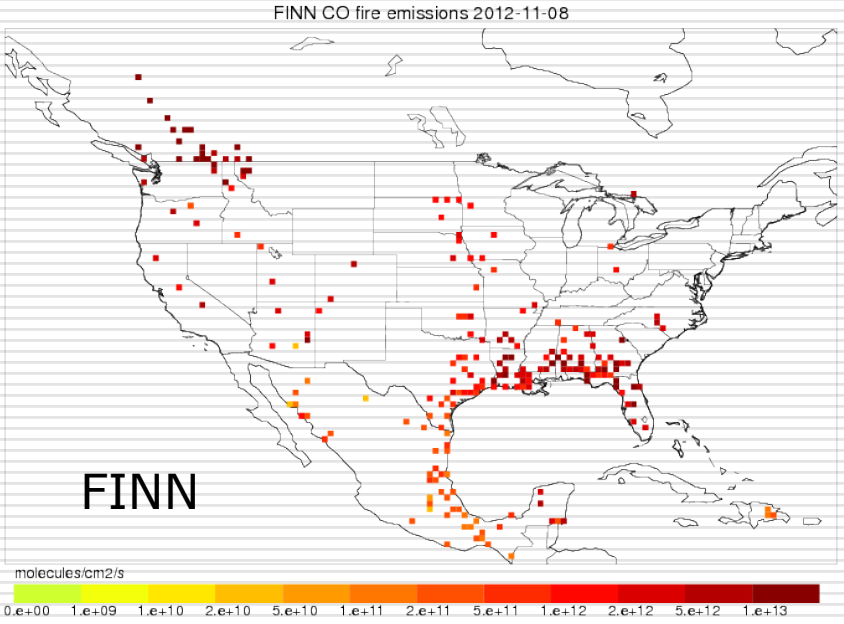


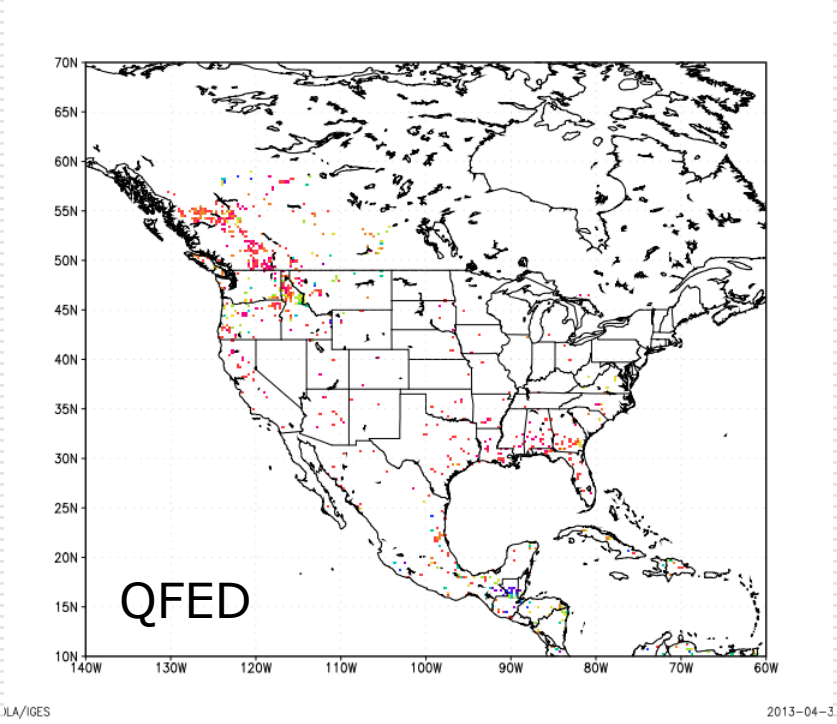
Theory (Modeling) Breakout Goals

- **Pre-mission activities**
  - Need score cards
  - Intercomparison of emissions, etc.
  - Assess analysis climatology
  - Assess forecast skill
  - Coordination D-AQ/HS3
- **On-line forecasting products**
  - Standardized plots
  - In-situ sampling (e.g., aerograms)
  - Integration into MTS
  - Data access
- **During-mission activities**
  - Daily ChemWx Briefings
  - Ad-hoc data analysis w/ teams
  - Analysis sampling along ER-2, DC-8 flight path (first look)
    - Archive, ICARTT format
- **Post-mission**

List: seac4rs-models@lists.nasa.gov

Biomass Burning Emission Intercomparison

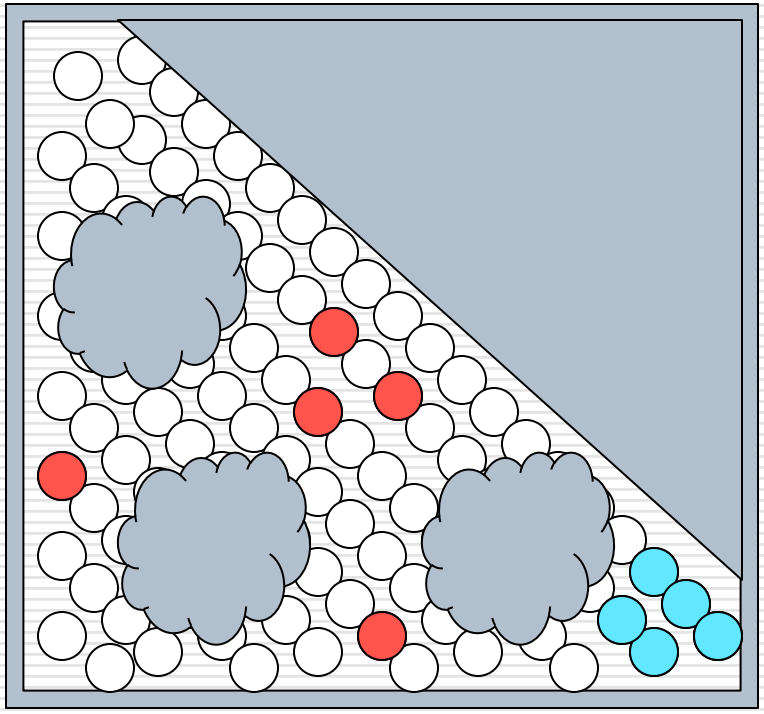




Gridding Biomass Burning Emissions

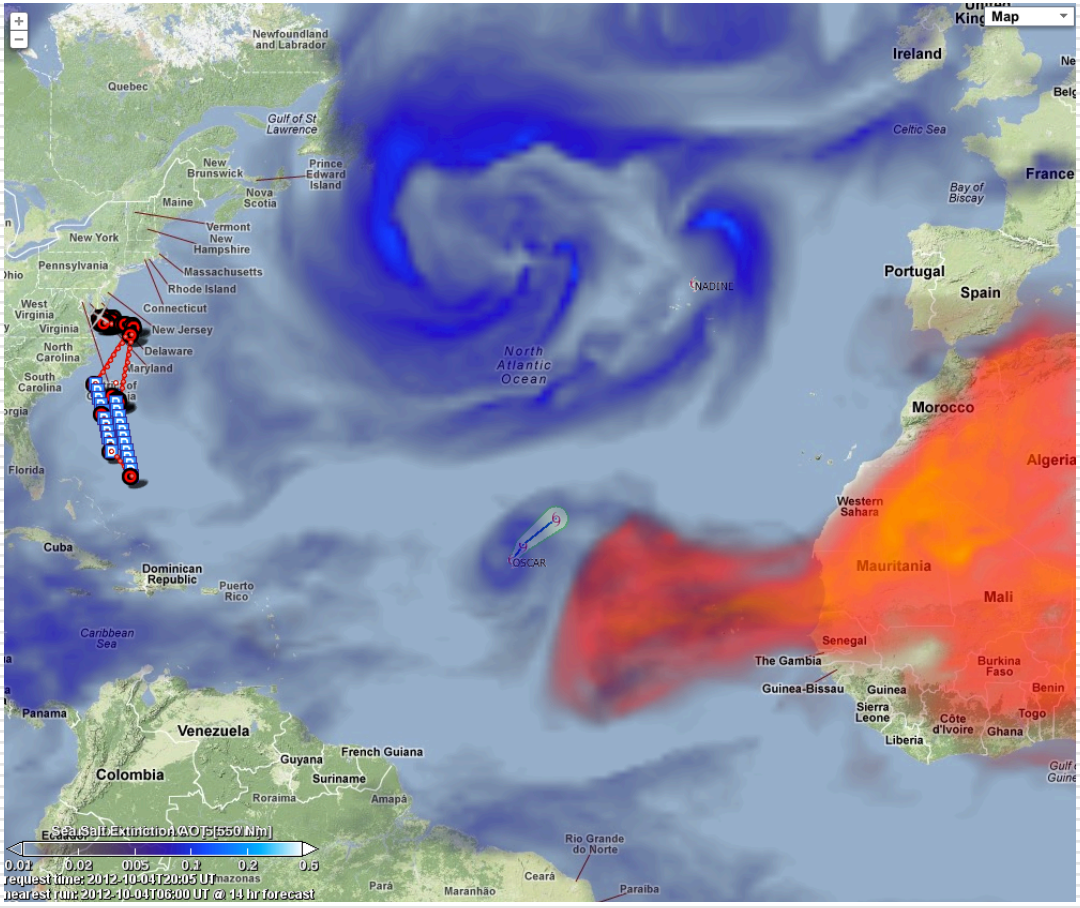
- Intercompare both
  - Pixel level emissions
  - Grid-box emissions

Model grid-box

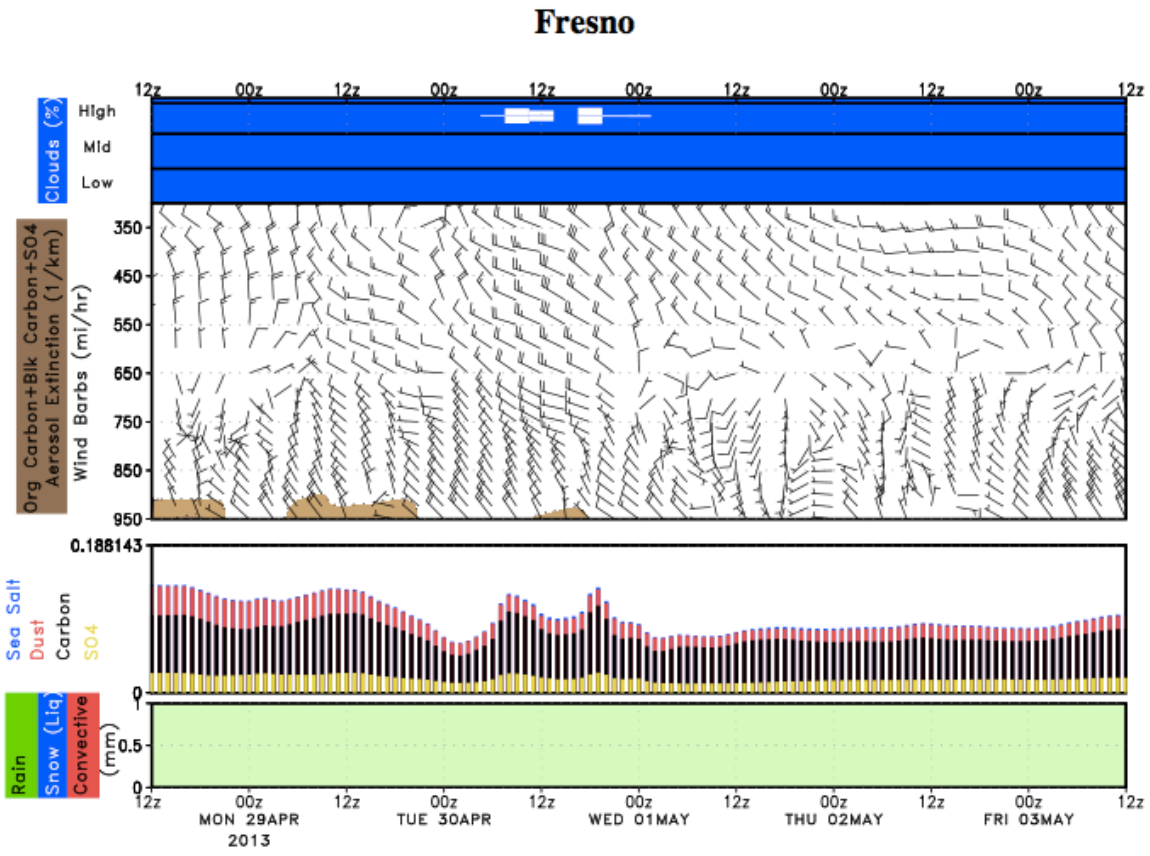


burning not burning obscured water

MTS Integration



Aerograms



GEOS-5 Aerograms

National	International
Fresno	Select

- OC Organic Carbon Extinction
- BC Black Carbon Extinction
- ALL (OC + BC + SU) Extinction
- SS Sea Salt
- DU Dust
- SU Sulfate Extinction
- CO Concentration