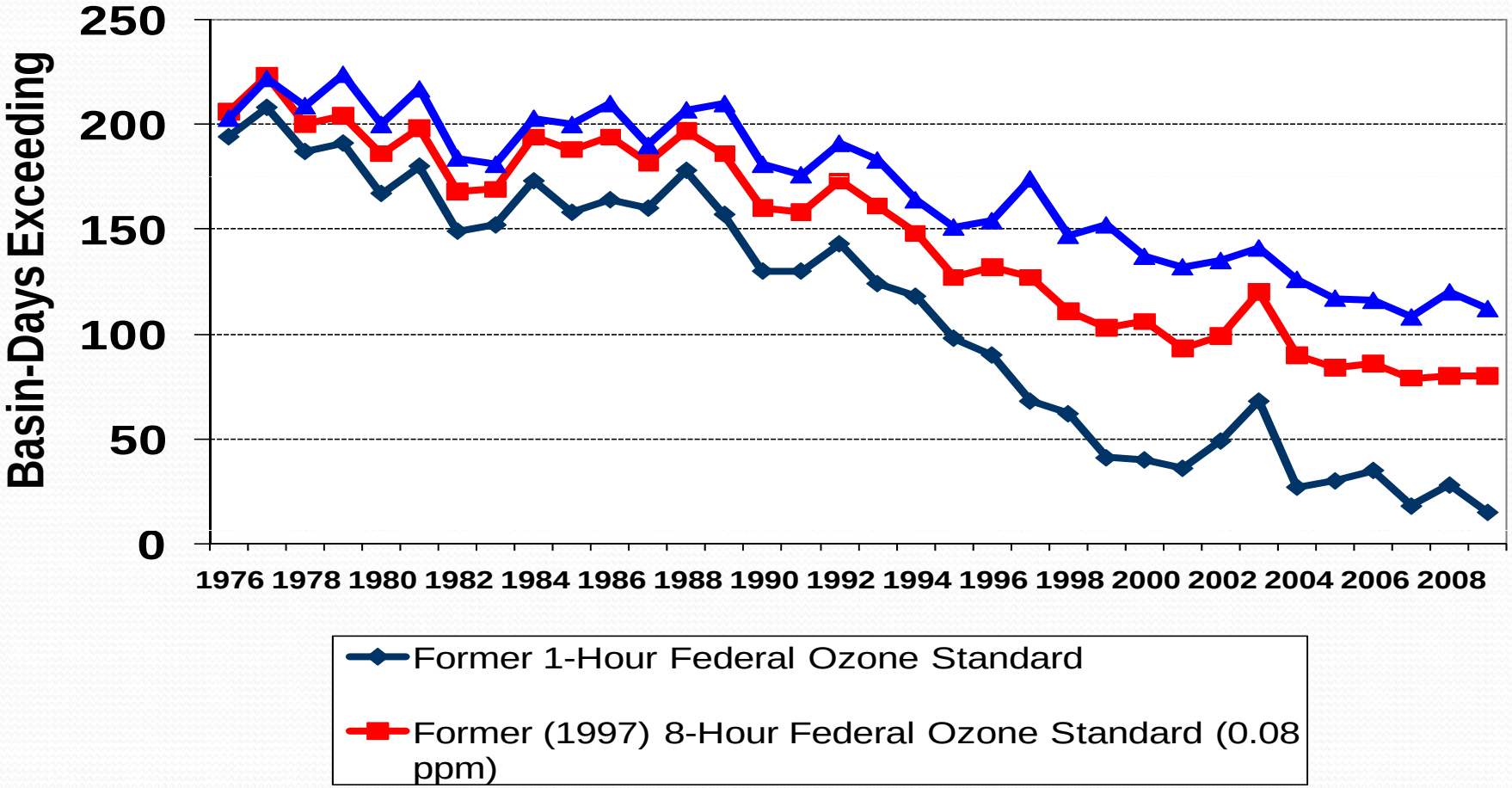
PAMS Perspective in the South Coast Basin

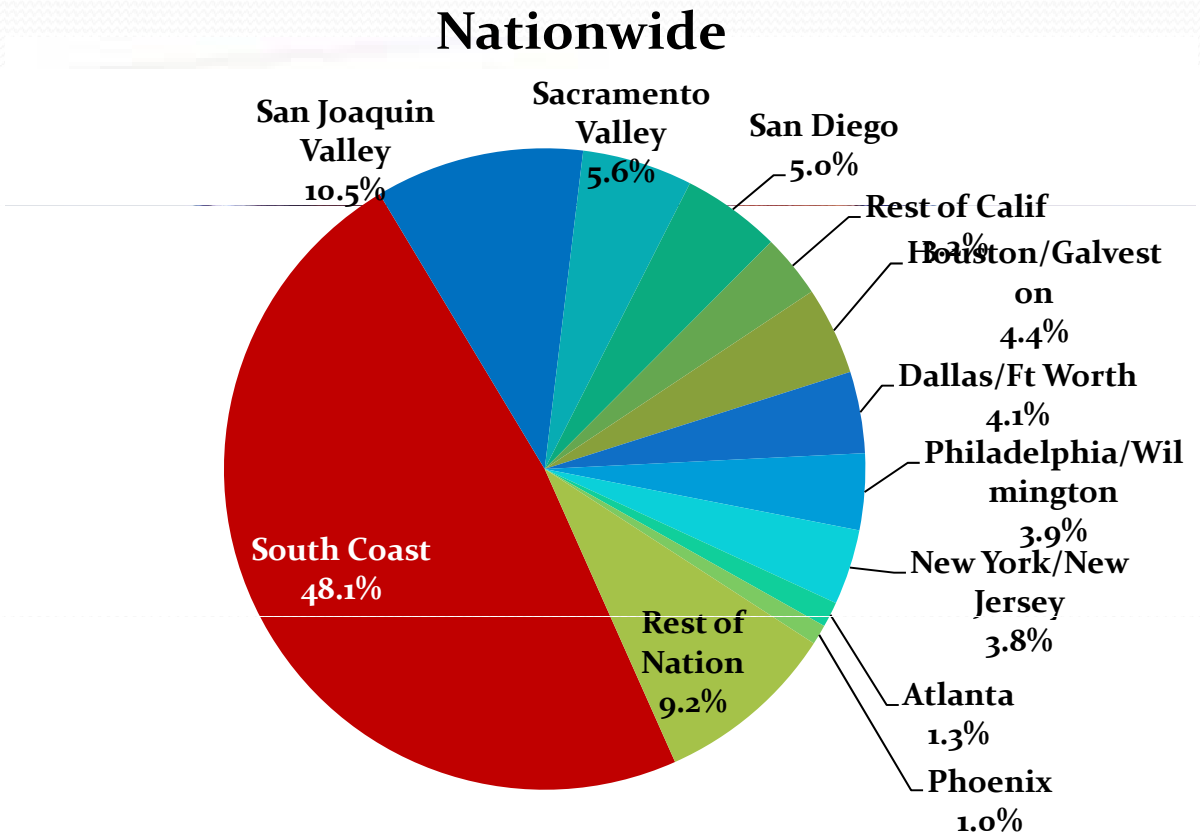
South Coast Air Quality Management
National Ambient Air Monitoring Conference
May 17th, 2012

South Coast Air Basin Days Exceeding Ozone Standards, 1976-2009*



*Based on preliminary data for 2009.

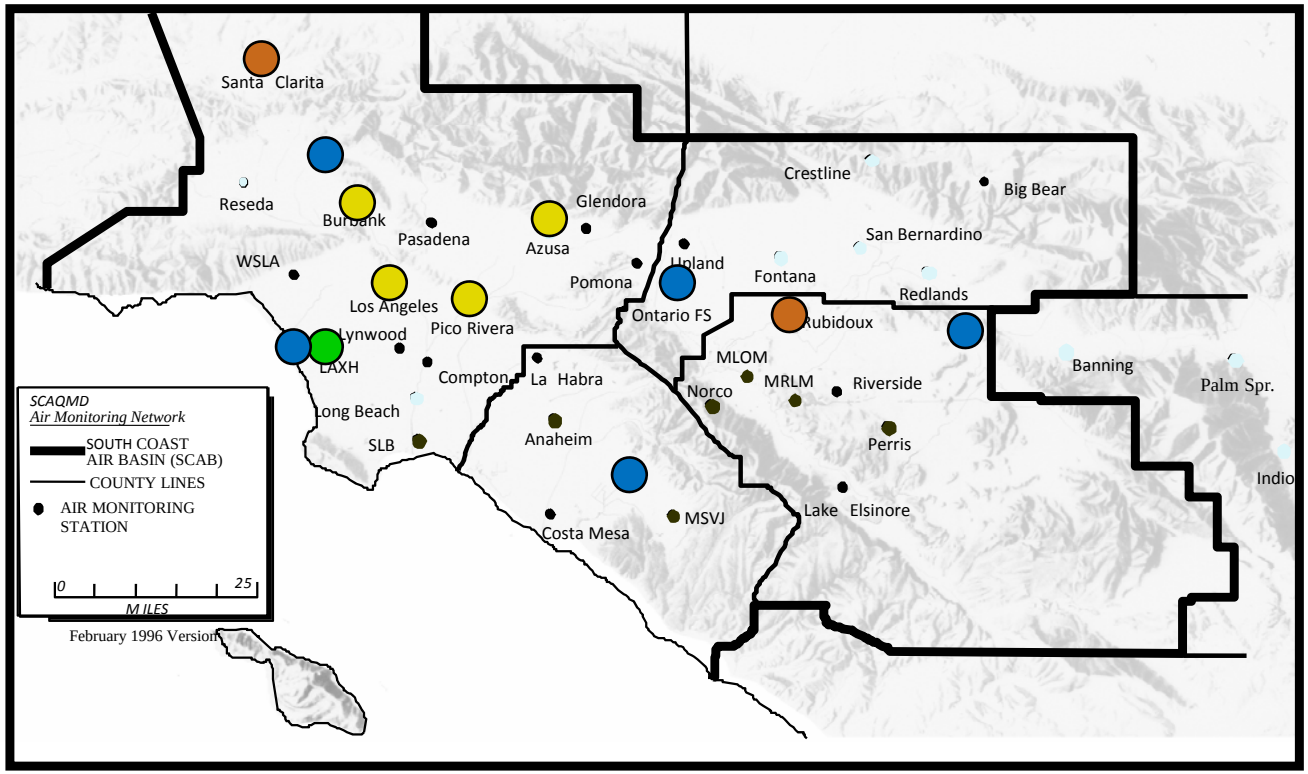
Ozone Exposures
8-Hour NAAQS = 75 ppb



* Population-weighted incremental exposure to ozone above the 8-Hour NAAQS (> 75 ppb), based on 2008-2010 design values

SCAQMD PAMS Measurements

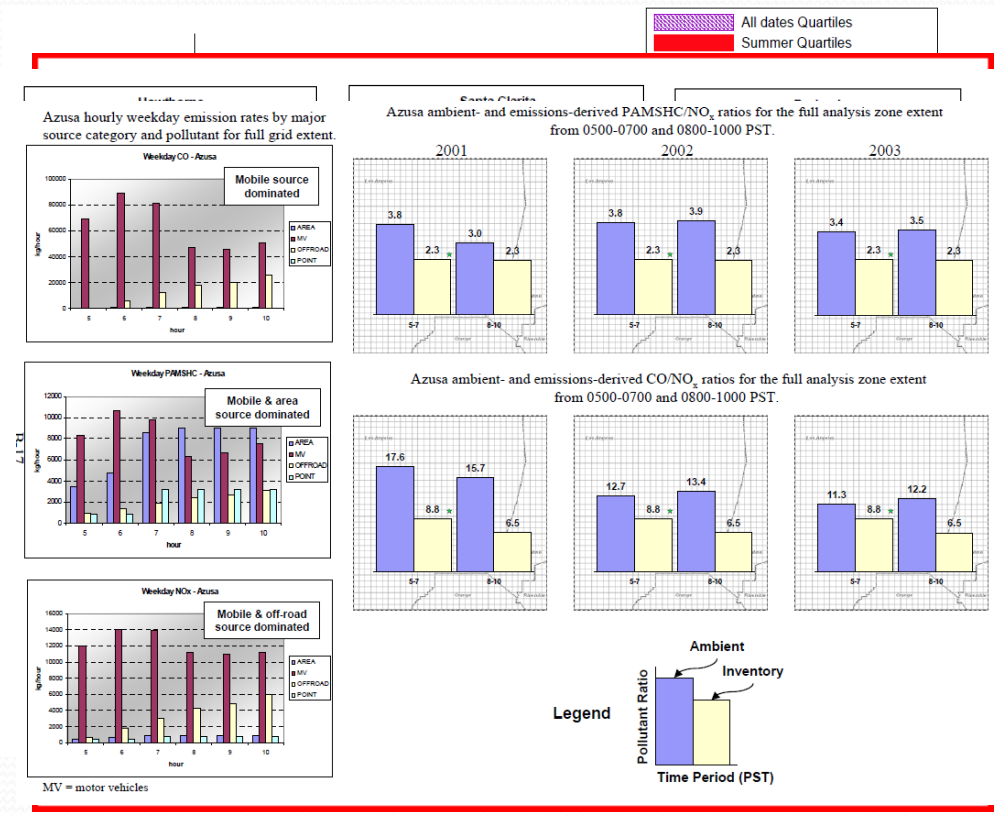
Type I Type II Type III Upper Air Meteorology



- Ozone
- NO/ NO2/ NOy
- CO
- Speciated VOC
- Carbonyl
- Meteorology

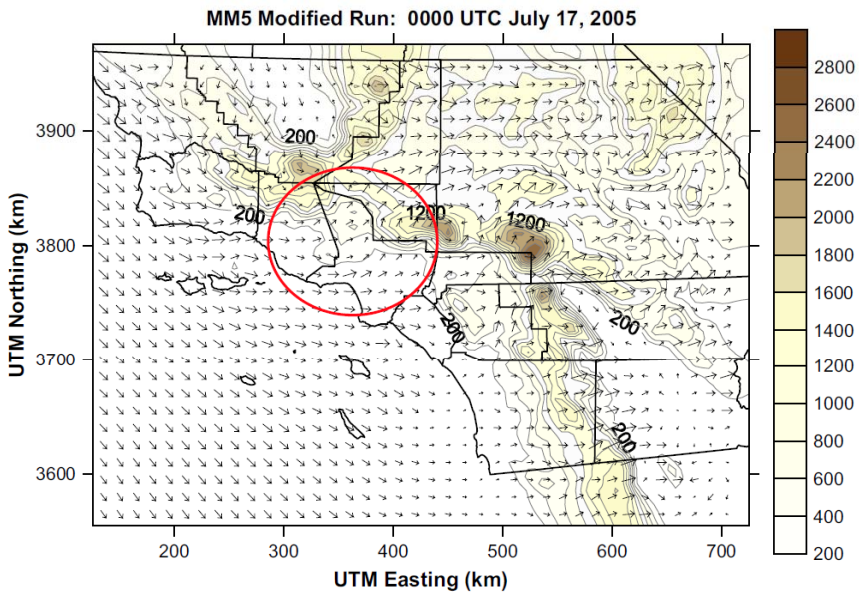
PAMS Air Quality Data Usage

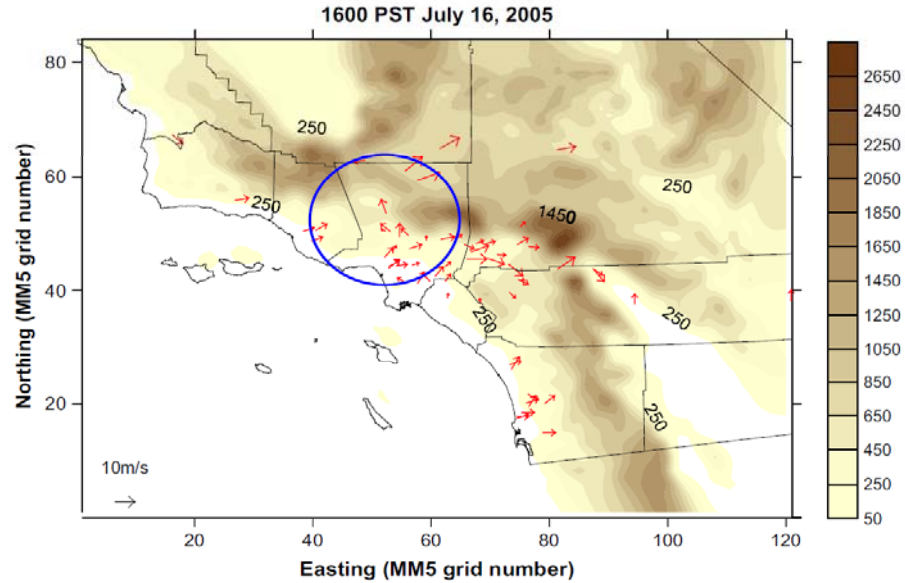
- Ozone precursor assessment
  - Comparisons
  - Trends
  - Control evaluation
  - Source categories
- Source Apportionment
- Emission Inventory Evaluation/Reconciliation



(STI, August 2005)

PAMS Data Usage (Cont.)





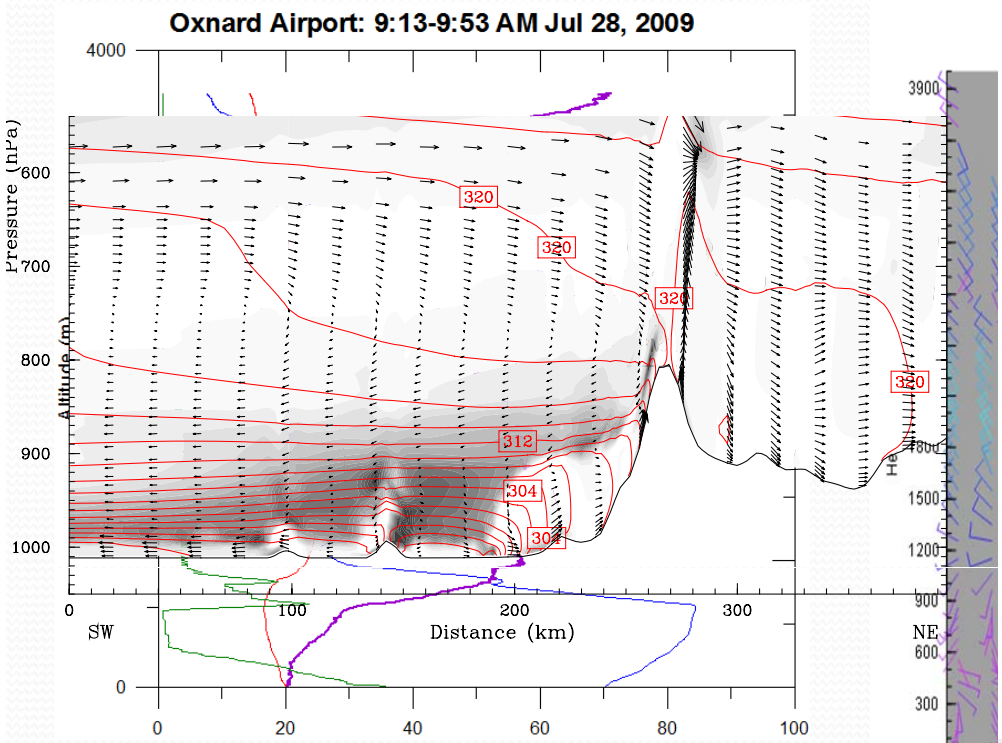
Lee, et. al, *Atmospheric Measurements* (2009)

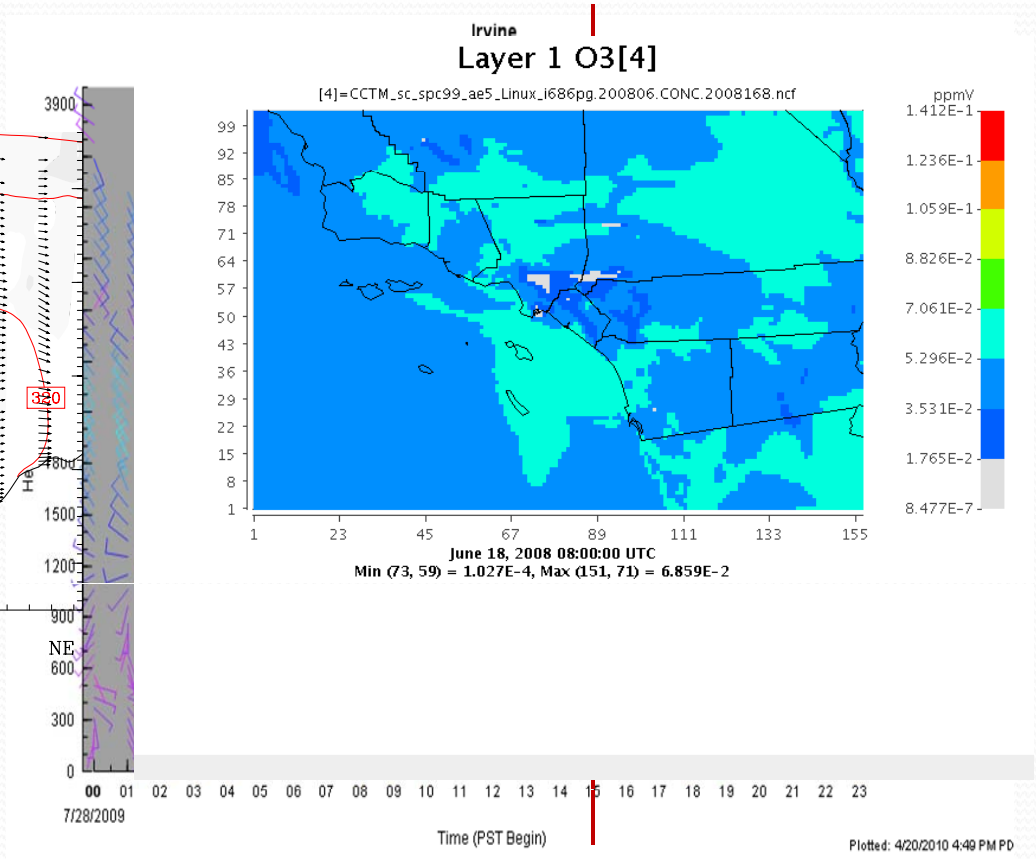
Data Quality

Analytical Methods

Standards

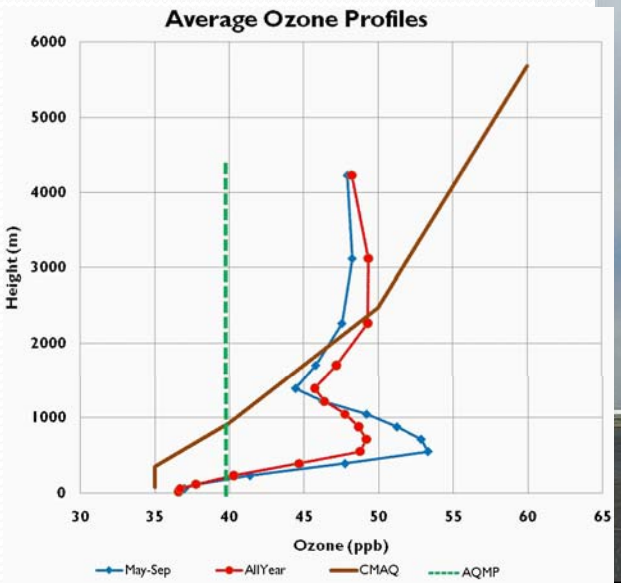
Enhancing Regional Knowledge

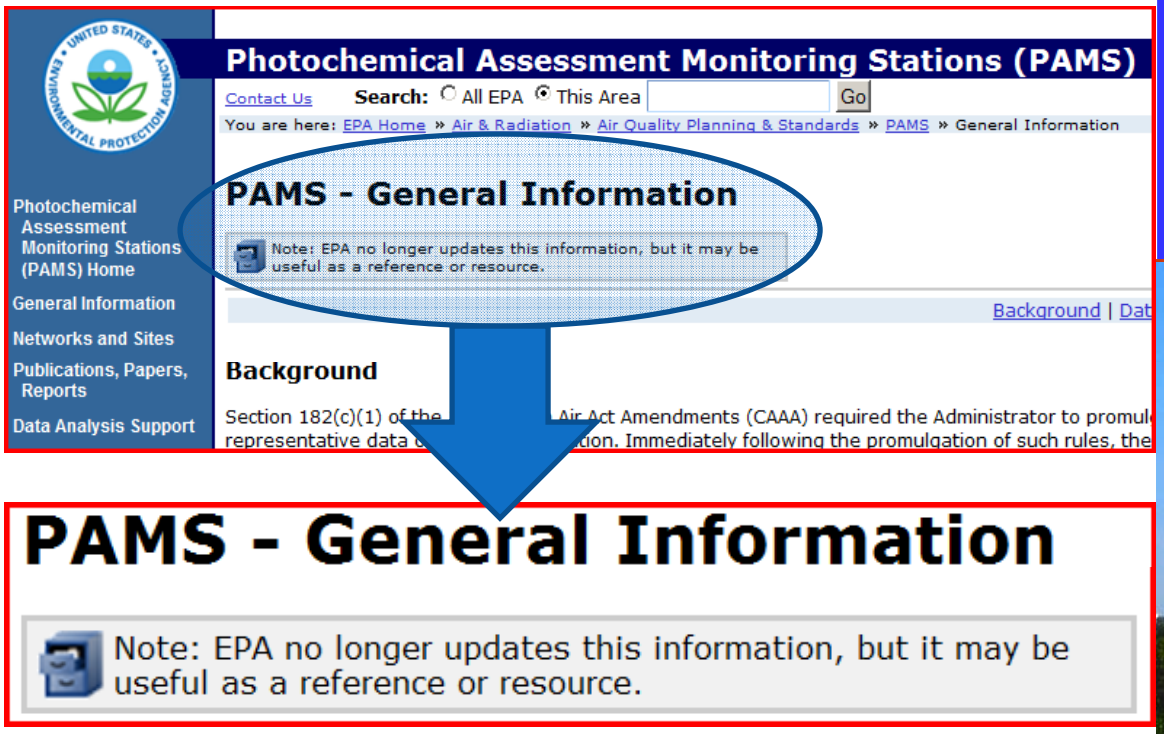
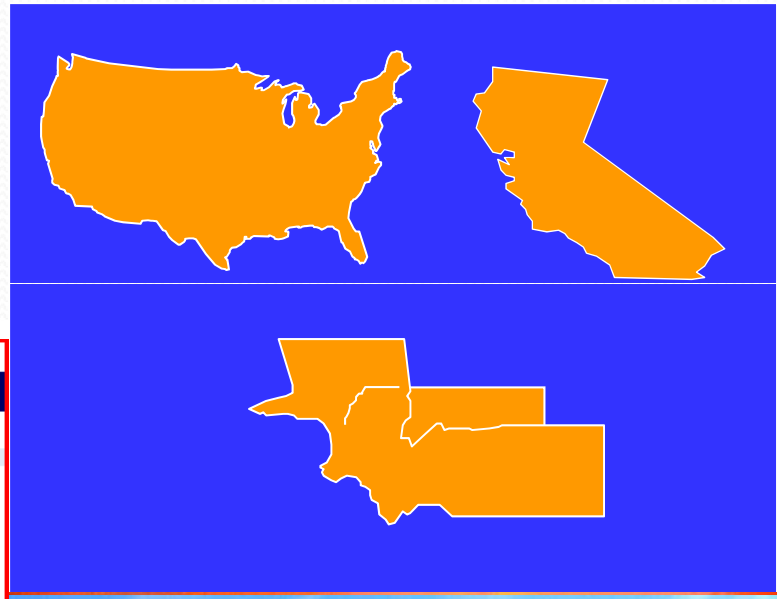




Aloft Air Pollutant Study

- Ozonesondes and Aircraft Measurements
  - Evaluated offshore regional air quality model boundary conditions
  - Shipping lane emissions assessment
  - Aloft Ozone, Hydrocarbons, Sulfur Compounds, PM and Met throughout a year
    - 24 Flights
  - Catalina Island ozone transport assessment
  - Evaluated portable monitoring platform on light, unmodified aircraft (relatively low cost)



Next Steps

- Re evaluate Objectives