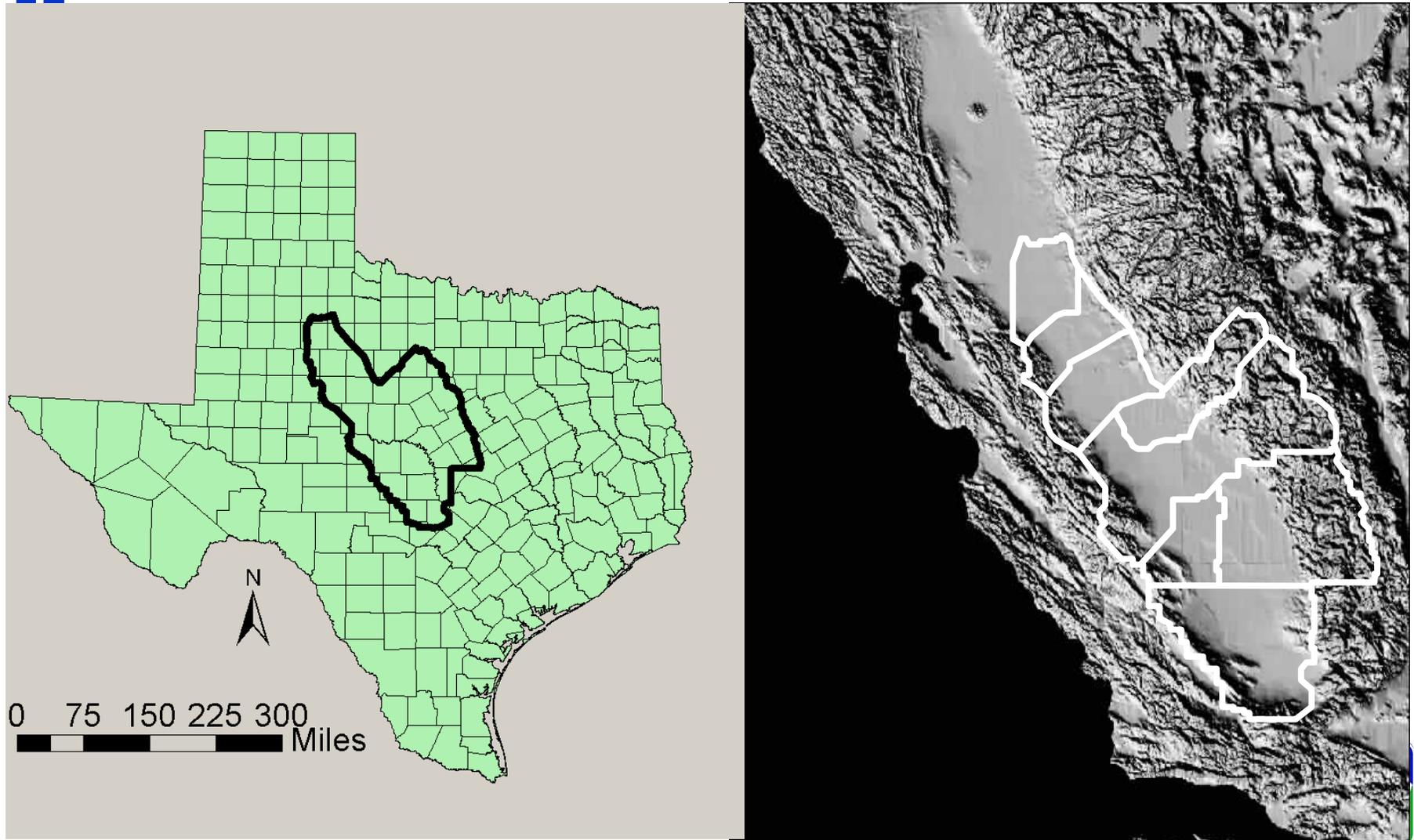


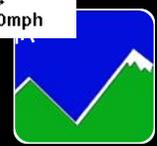
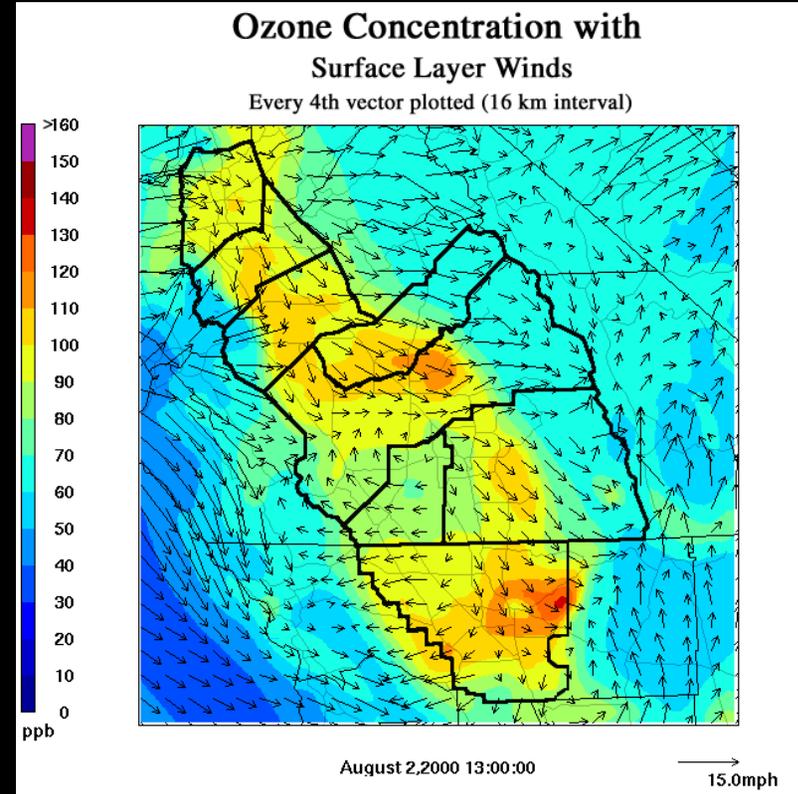
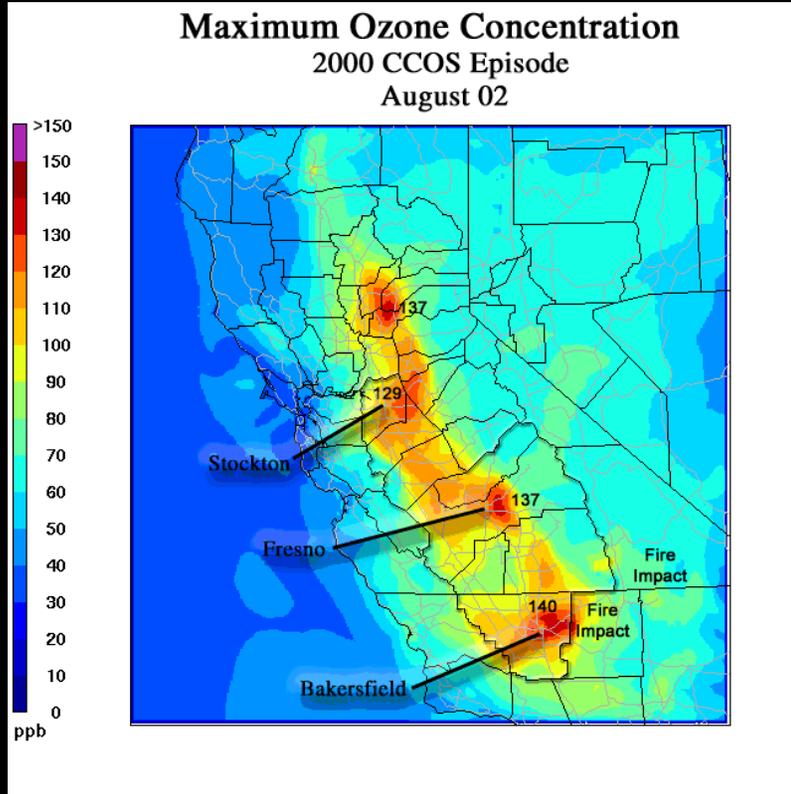
**SJVAPCD Assessment of
NOAA Ozone Modeling
on 5X Grid CMAQ**



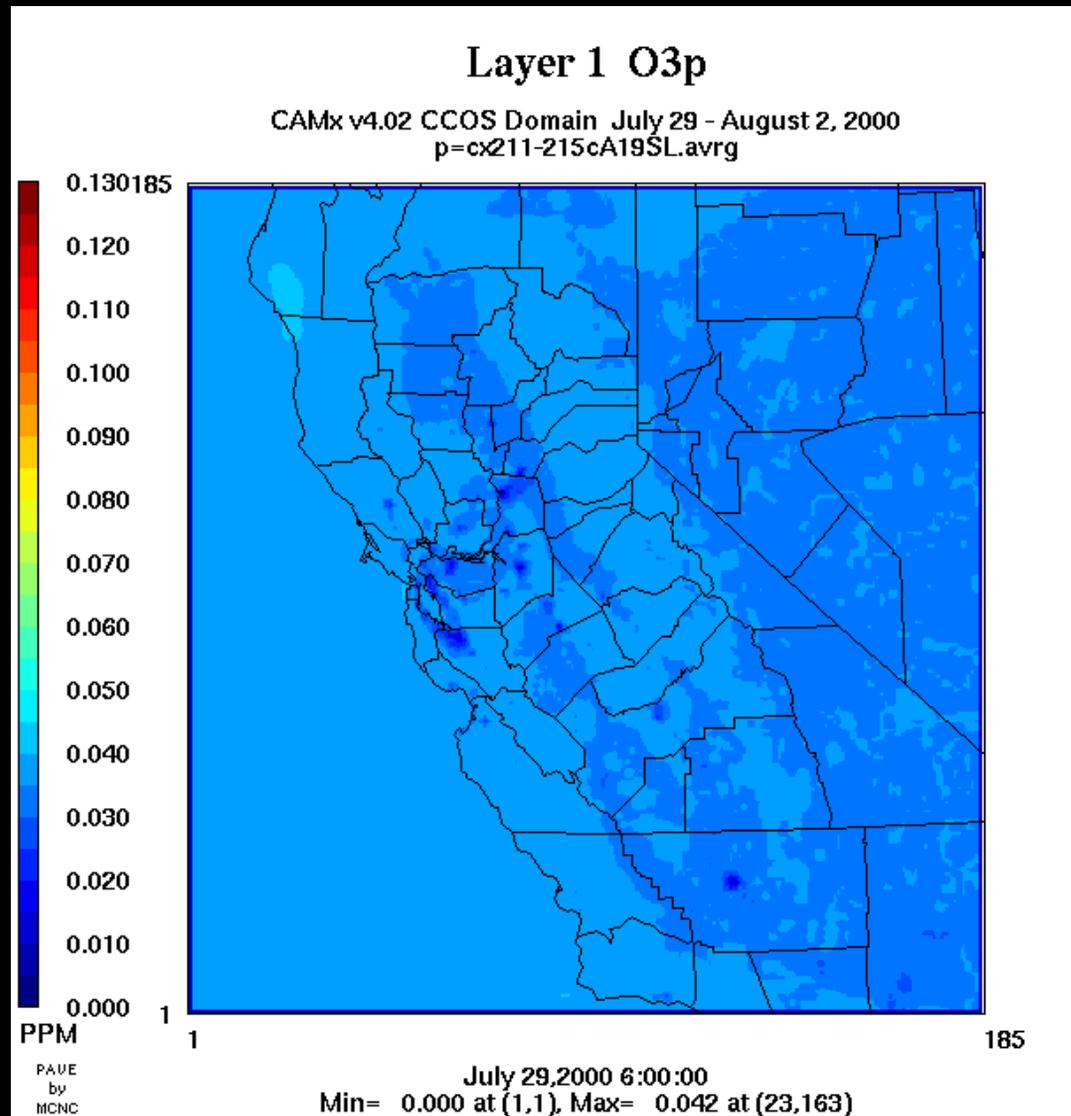
The San Joaquin Valley of California



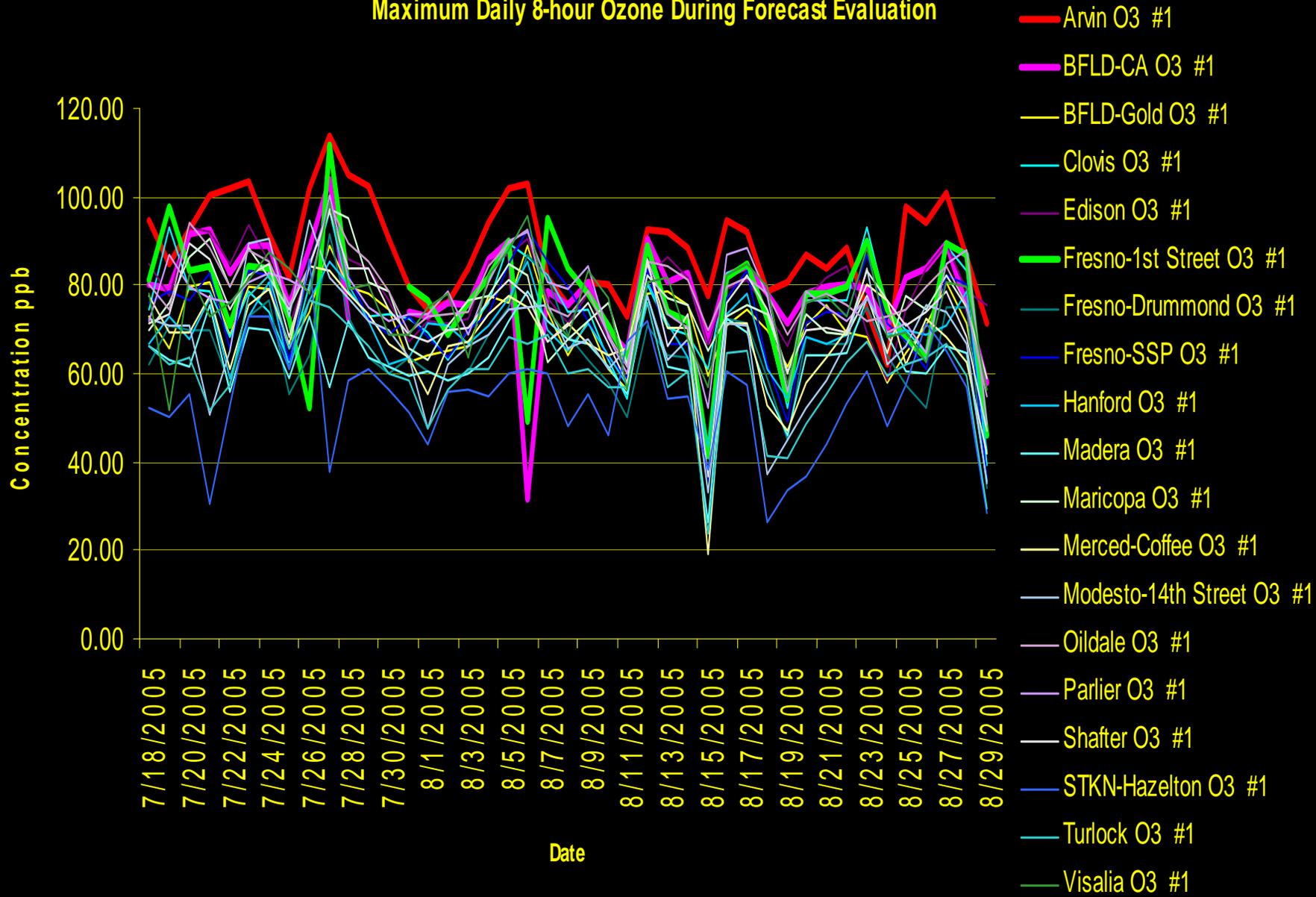
Example of 1- Hour Ozone Distribution and Winds in the San Joaquin Valley



Retrospective Ozone Episode Animation



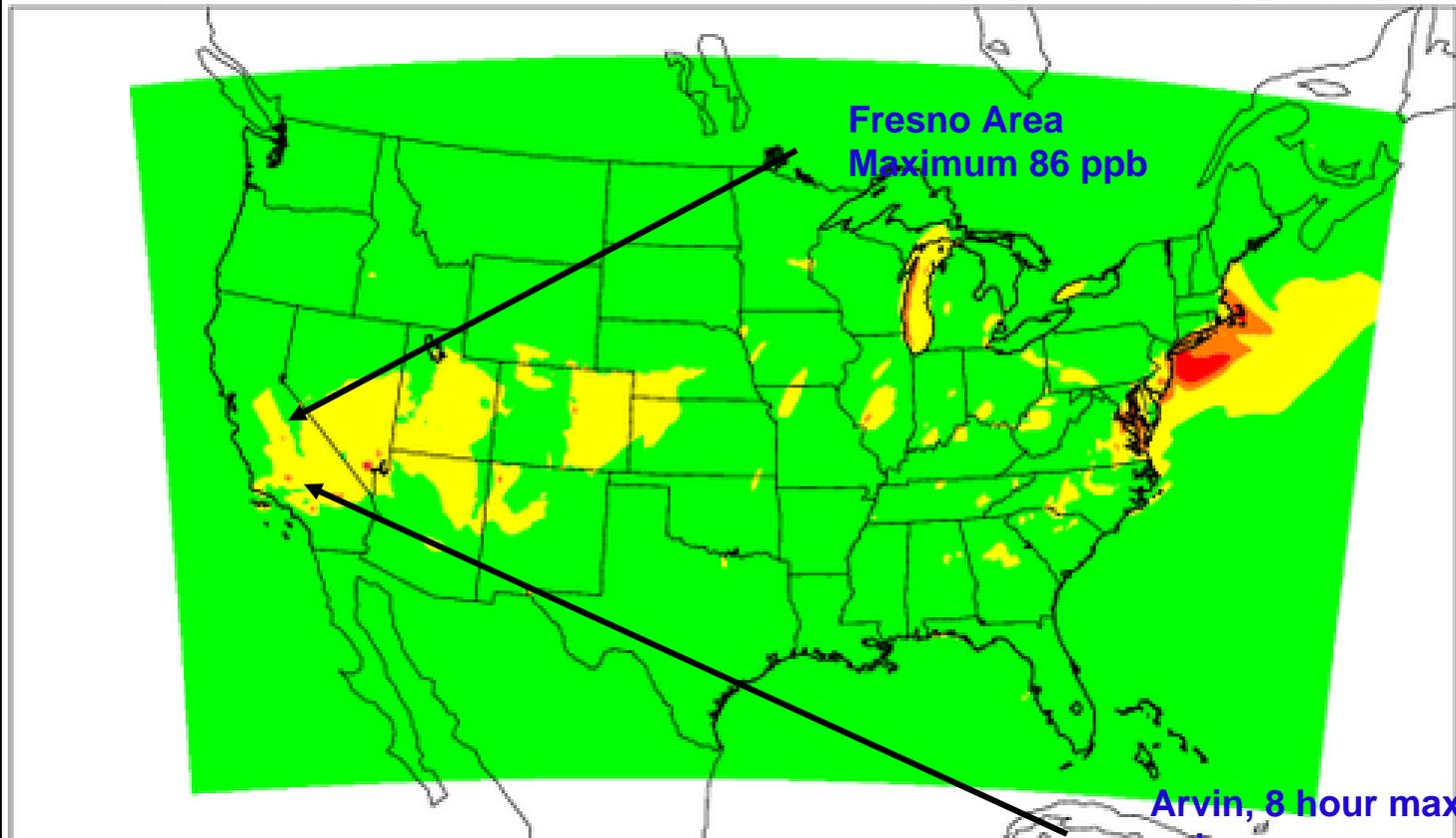
Maximum Daily 8-hour Ozone During Forecast Evaluation



30 Hour Forecast For July 21

08 hr Avg Ozone Concentration

Valid 0200 UTC Thu 21 Jul 2005

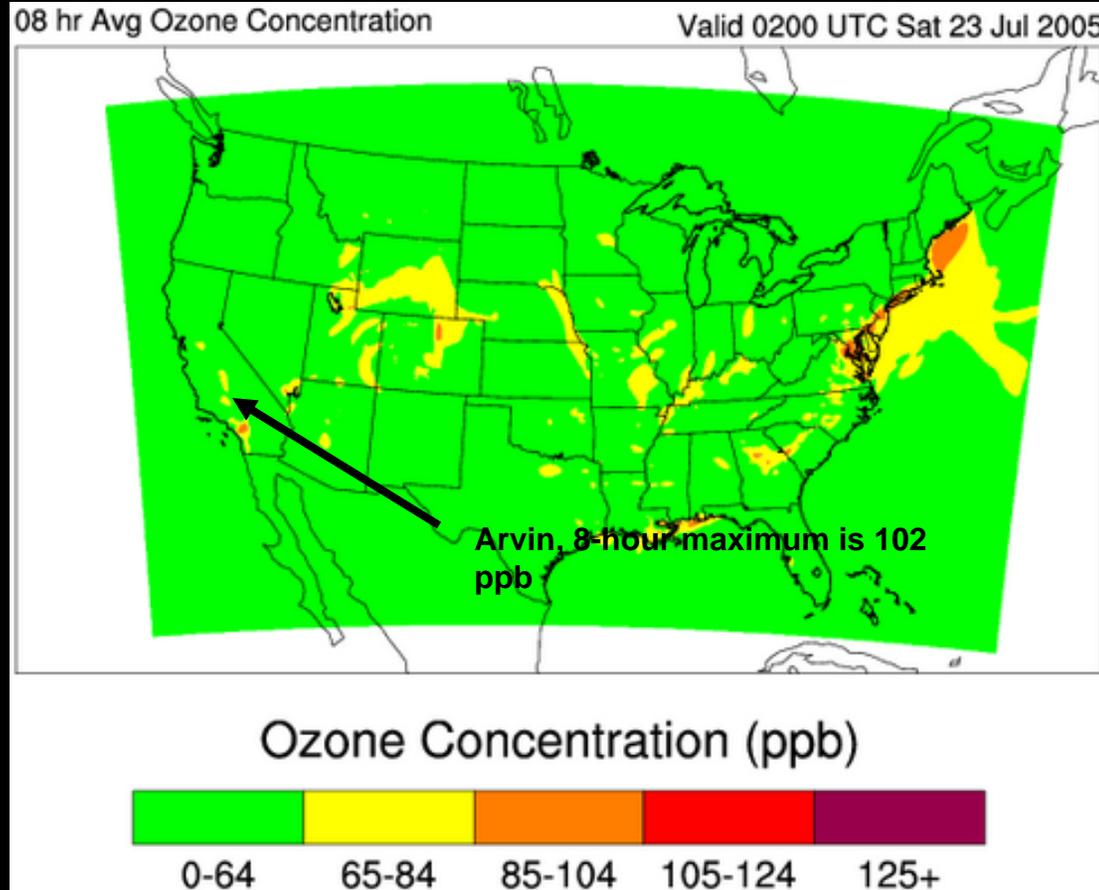


Ozone Concentration (ppb)



31 Hour Forecast, July 22, 2005

Arvin Peak



July 22, 2005

Air Quality Forecast for the San Joaquin Valley Air Basin:

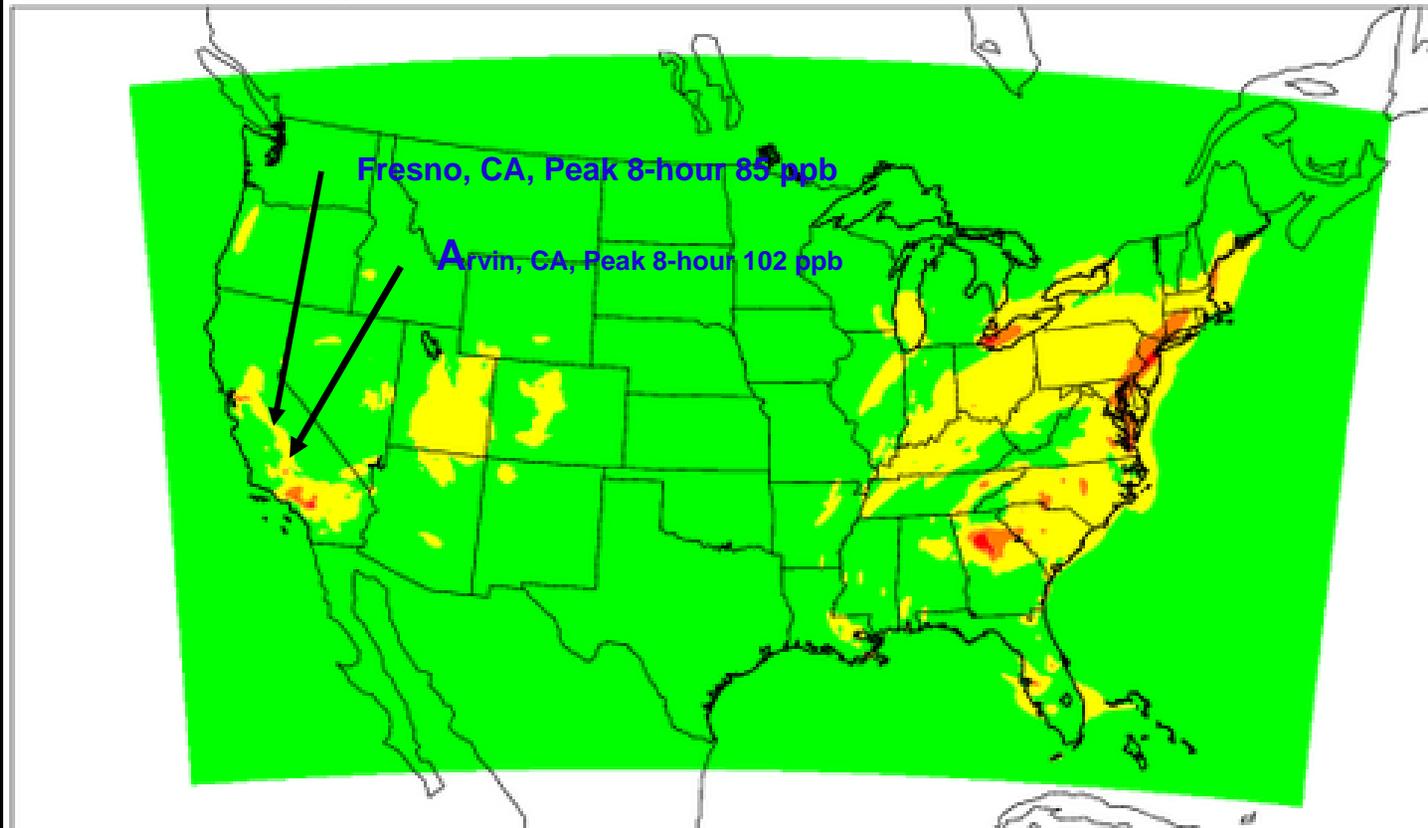
A refreshing breeze from the coast moved through the area last evening, lowering air pollution levels across most locations from central Kern County northward. The disturbance that created this breeze is moving rapidly out of the region leaving strong high pressure rebuilding over the area. High pressure will dominate over the region and persist until early next week, with strong stability and light diurnally driven wind flow.



31 Hour Forecast Producing Arvin 8- Hour Peak on July 26, 2005

24hr Max 08 hr Avg Ozone Concentration

Ending 0300 UTC Wed 27 Jul 2005



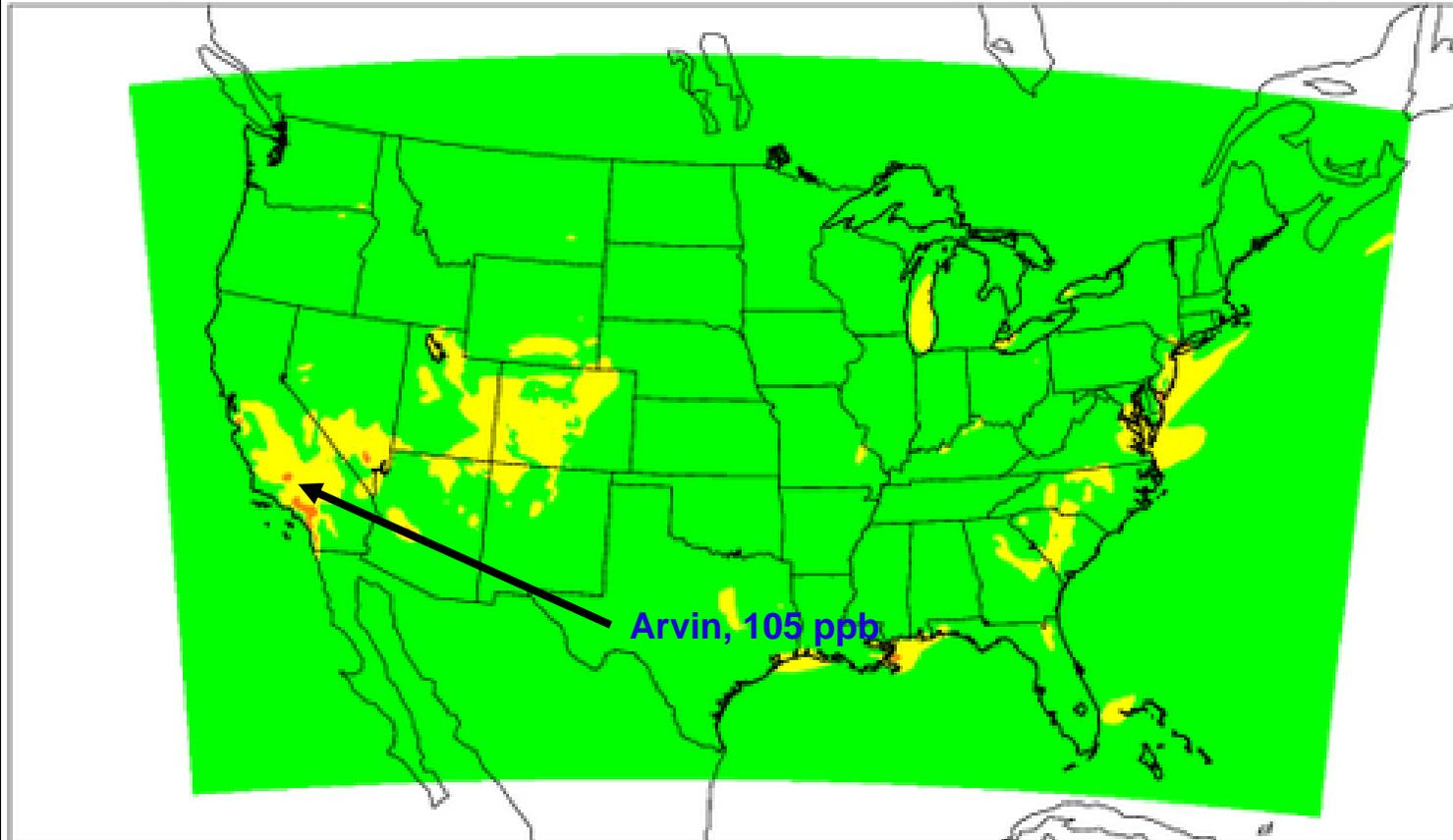
Ozone Concentration (ppb)



31 Hour Forecast for July 28, 2005

08 hr Avg Ozone Concentration

Valid 0300 UTC Fri 29 Jul 2005



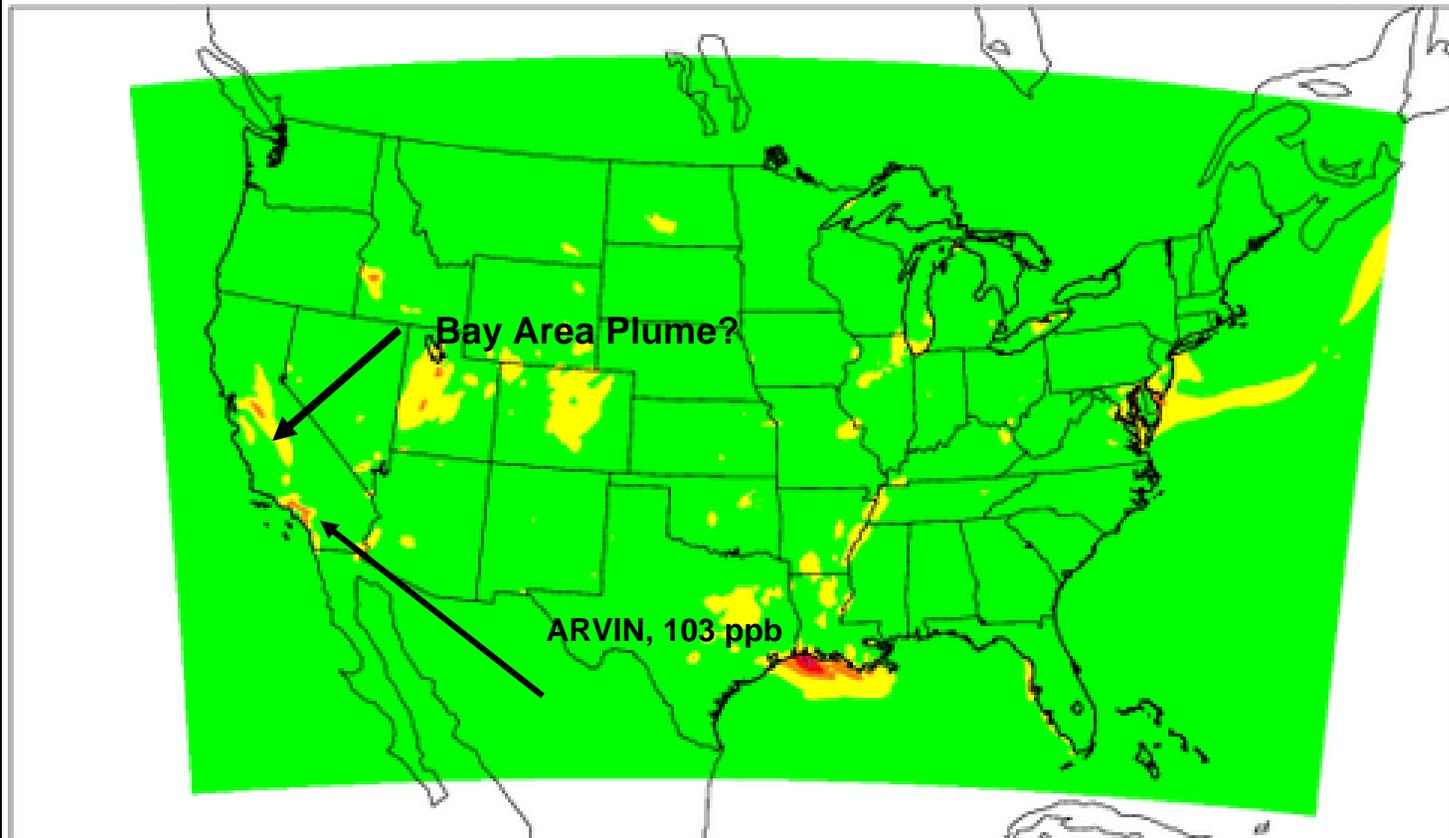
Ozone Concentration (ppb)



31 Hour Forecast for 8/6/2005

08 hr Avg Ozone Concentration

Valid 0300 UTC Sun 07 Aug 2005

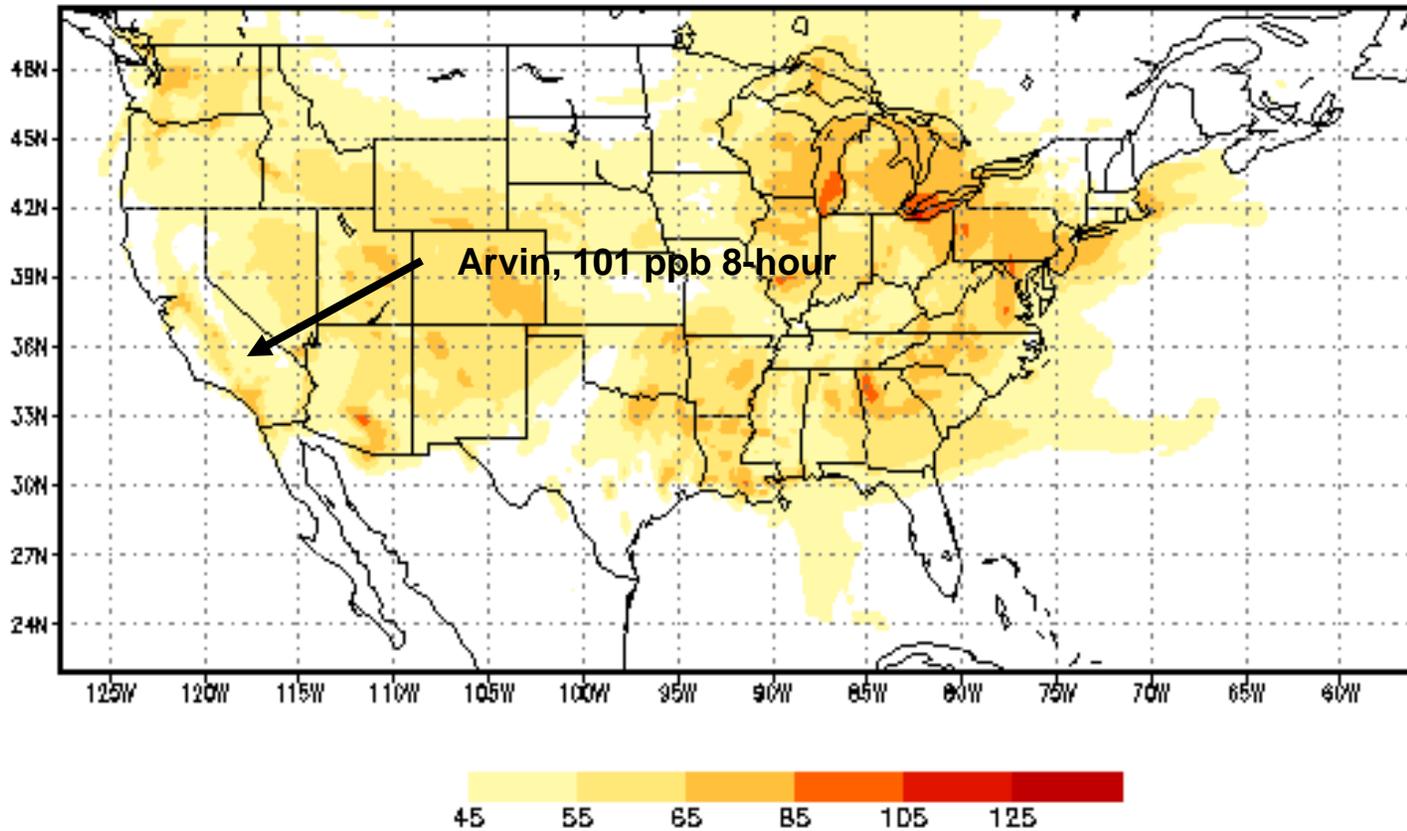


Ozone Concentration (ppb)



2 Day Forecast for 8/27/2005

25-48h 8h max sfc O3 (ppb) 48H VALID 12Z 27 AUG 2005



SJVAPCD Issues and Questions

- Emissions, temporal, spatial, seasonal?
- Calculation and use of fire emissions?
- Could MOS guidance be used?
- Investigate why some days are forming ozone in SJV and some with meteorology conducive to high concentrations are not



More Questions

- Initialization with ozonesondes
- Use of real-time VOC, NO_x, NO_y
- Temperature adjustment for EI
- Use all data? Data thinning?
- Archive of output for evaluation and SIP's
- Biogenics, BEGIS, BEIS
- MOS Algorithm
- Calculation of 8-hour averages
- Meteorological forecast archive for diagnostics
- Outputs for jurisdictions
- Relative ozone change day to day output
- Daily carrying capacity diagrams by 3 p.m. for daily source sector emissions curtailment!?

