



Texas Air Quality Study (TexAQS) II (2005-2006)

**CENRAP's RPO Meeting
March 31, 2004**

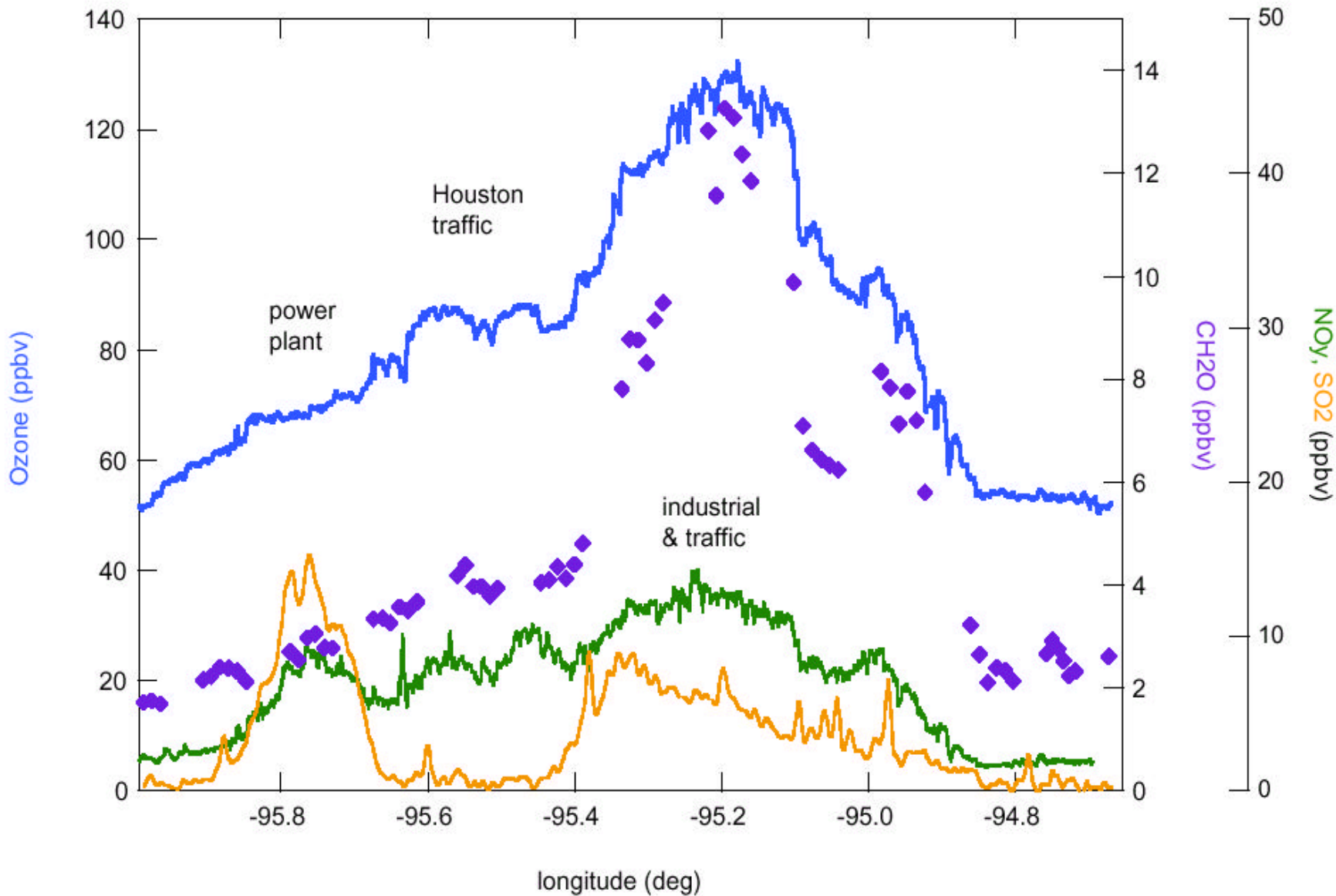
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Introduction to TexAQS II

- **TexAQS 2000 opened new doors to understanding air pollution and control**
 - Focus on Houston area
 - Gathered ground-level and airborne emissions and meteorology data
 - Scientific findings incorporated into air quality and meteorological models
 - Models used to develop regulatory ozone control strategies (such as NO_x and VOC rules in HGA)
 - Participation of over 200 scientists and numerous research institutions and government agencies

28 August 2000, transect 40 km downwind of Houston center





Introduction to TexAQS II

- **TexAQS II: bigger and better**
 - Larger area to be studied, and over longer period of time
 - Higher participation of contributors is expected:
NOAA, DOE, Universities, Contractors, Industry, EPA, TCEQ, others
 - Expertise and experience will be key to success of this **“Air Quality Super Bowl 2005-2006”**
- **TexAQS II co-leaders: Jim Thomas, Karen Olson**



TCEQ TexAQS II Lead Technical Team

- Karen Olson, Team Lead
- Jim Price, TCEQ Senior Scientist
- Laurel Carlisle, Project Support
- Mark Estes, Air Quality Modeling
- Bright Dornblaser, Met Modeling
- John Jolly, Data Analysis
- Russ Nettles, Industrial Point Source Emission Inventory
- Charlie Rubick, Area and Non-Road Emission Inventory
- Peter Ogbeide, On-Road Mobile
- David Westenbarger, On-Road Mobile
- Ashley Forbes, Policy
- Ken Rozacky, Monitoring Operations
- David Edge, Field Operation
- John Vermillion, Air Permits
- Other Participants from TCEQ...



Goals of TexAQS II

To develop improved scientific understanding to:

1. Improve regulatory analysis and prediction tools used for developing ozone State Implementation Plans
2. Continue evaluation of regional haze, and/or $PM_{2.5}$
3. Assess the effectiveness of air quality strategies that have already been implemented



Objectives of TexAQS II

- **Air pollution meteorology in all seasons.**

Enhanced meteorological measurements over an 18 months

- **Inventories of ozone and fine particulate (both primary and precursor):** Point, area, non-road, on-road and biogenic

- **Ozone transport into, within and out of Texas**

- **Formation and accumulation of ozone (both urban and regional)**

- **Associated Regional Haze, and Particulate Issues**



TexAQS II Planning Meeting Feb 3&4, 2004

- Further development of draft Science Plan for TexAQS II
- Current Scientific Understanding: Foundation for TexAQS II Plan
- Implementation Planning
 - Plenary Discussions: Large Group Input on Planning
 - Breakout Sessions: Small groups planning on emission inventory, meteorology, surface monitoring and aircraft monitoring
- Preliminary assessment of research needs: completed on Feb. 21 (received over 100 research project needs aligned with TexAQS II key objectives, that will require funding to exceed \$20M)



TexAQS II Next Steps

- TCEQ hosting Science Coordinating Committee workgroups meetings select key projects to be funded based on alignment with TexAQS II's key objectives (from 100+ projects list)
- Assessment of funding needs, availability and request for additional funding
- Initiate work on pre-study projects
 - Evaluation of technology and instruments for potential use in study (satellite, VOC measurements devices, less expensive ambient ozone and precursor monitors)
 - Aircraft flights, modeling, and/or data analysis for planning locations and sources for study focus
 - Development of a plan for real-time and repository access for communication/information/data during and after the study
 - Development of Hourly Inventory Guidance



TexAQS II Additional information

Visit our web site at:

www.tnrcc.state.tx.us/air/aqp/airquality_techcom.html#topic2b3