

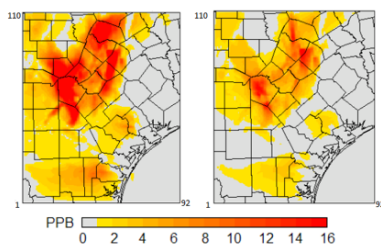


**Trinity Consultants** is a leading global environmental consulting firm that brings 50 years of experience providing services and solutions in the EHS Regulatory Compliance, Built Environment, Life Sciences, and Water & Ecology markets. Trinity has the technical expertise, industry depth, and specialized capabilities to help clients achieve their goals across the natural and built environments.

The U.S. Environmental Protection Agency (EPA) widely recognizes and routinely utilizes Photochemical Grid Models (PGM) for regulatory analysis and attainment demonstrations. PGMs simulate the impacts from single/all source(s) by estimating pollutant concentrations and deposition of both inert and chemically reactive pollutants over large spatial scales. Trinity provides comprehensive regional air quality modeling services to our clients nationally and internationally. For more than 10 years, experts at Trinity have been supporting clients with PGM services.

Trinity's dedicated team of regional modeling experts in the U.S. and Asia provide the following services:

- Emissions processing: Emission Preprocessing System, version 3 (**EPS3**), Sparse Matrix Operator Kernel Emissions (**SMOKE**), and Model for Emissions and Gases from Nature (**MEGAN**)
- Meteorological data processing: Weather Research & Forecast (**WRF**) and 5th Generation Mesoscale Model (**MM5**)
- Photochemical grid modeling: Comprehensive Air Quality Model with extensions (**CAMx**) and Community Multiscale Air Quality (**CMAQ**) modeling system
- Post Processing and data visualization: Modeled Attainment Test Software (**MATS**) and Visualization Environment for Rich Data Interpretation (**VERDI**)
- Data analysis: Statistical data analysis, Hybrid Single Particle Lagrangian Integrated Trajectory Model (**HYSPLIT**), wind rose, and pollution rose



Impact of Anthropogenic (left) and Biogenic (right) Emissions Reductions on Ozone

## Key Application Areas

Trinity has utilized PGMs in key application areas including, but not limited to, the following:

- Single source impact evaluations for Prevention of Significant Deterioration (PSD) and Federal Energy Regulatory Commission (FERC) permitting
- Visibility Studies for Regional Haze Best Available Retrofit Technology (BART) and Reasonable Progress (RP) analyses and control strategy evaluations
- State attainment and planning modeling
- Control measure evaluations
- Source apportionment analyses including Ozone

## High Performance Computing Solutions

Trinity has high performance computing (HPC) clusters that are run using state-of-the-art processors supported by high speed networks and high performance storage. The HPC's computational nodes utilize Intel processors with Linux operating environment. Trinity's HPC clusters can simultaneously run several scenarios of resource intensive PGM that has saved an incalculable number of computer processing hours, enabling more in-depth analyses and faster project completion. Trinity periodically upgrades the clusters to maintain the speed and efficiency in meeting clients needs.

## Why Chose Trinity

Our experience is multi-faceted and extensive. Our strategies are innovative, time saving, and cost-effective. Our staff and tools are the best in the business.

*ISO 9001:2015 certified at our corporate office in Dallas, Texas*

### CONTACT OUR TEAM!

For more information about how we can help your organization, please contact us.

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