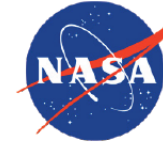




HAQAST Showcase



Meeting of the NASA Health and Air Quality Applied Sciences Team

January 28th, 2025

NASA Headquarters - Washington DC / Online via Webex

Increasing Public Engagement with NASA Data



Connecticut
Department of Energy &
Environmental Protection

Michael Geigert
Bureau of Air Management



DEEP Innovation Fair December 2024

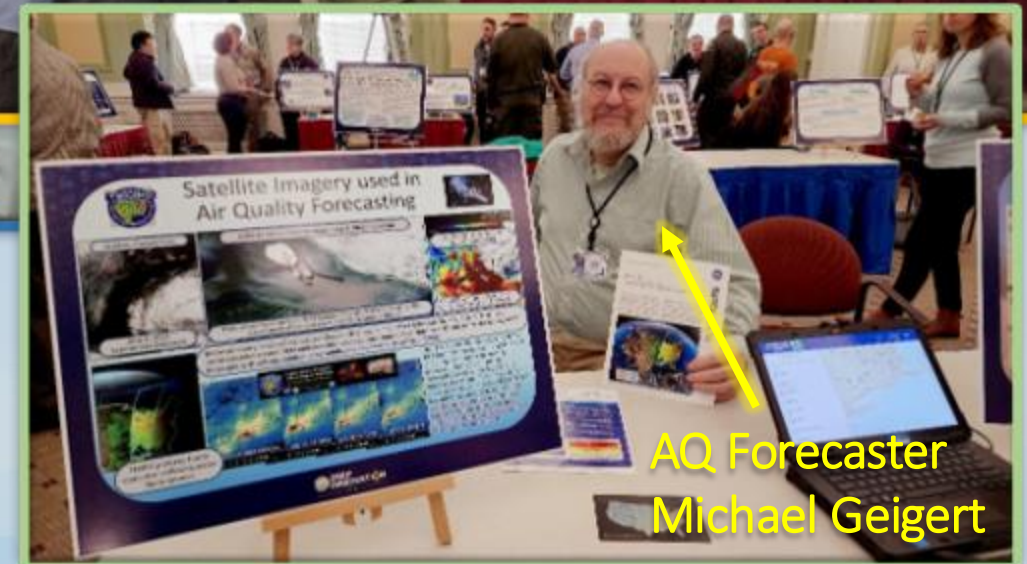


Governor
Lamont



Commissioner
Katie Dykes

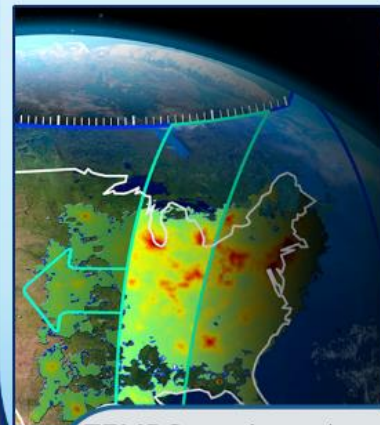
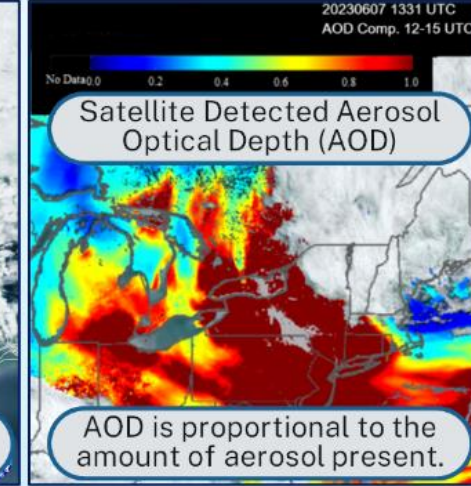
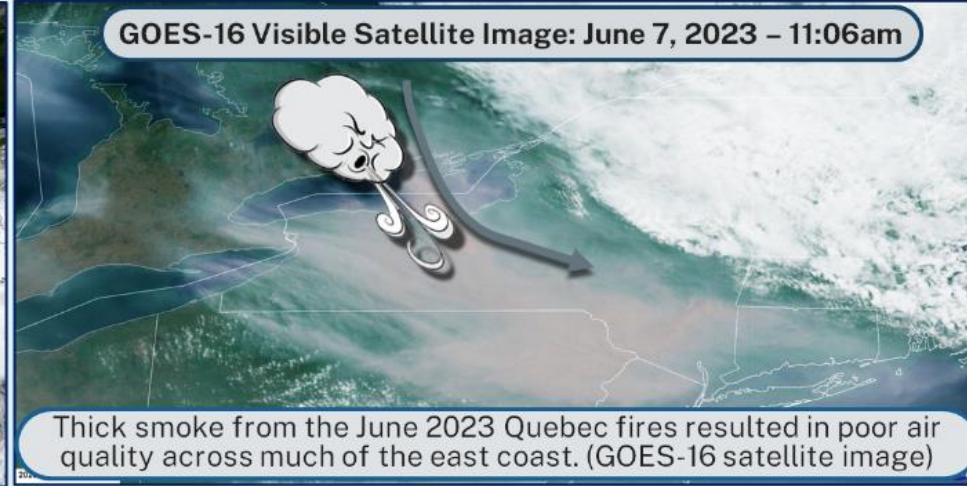
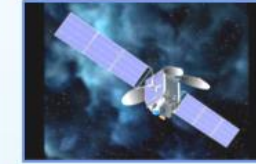
Members of the public were invited to view the 'innovative' CT DEEP activities on display. Commissioner Katie Dykes brought the Governor and conducted video interviews of selected programs. I have been actively involved with informing the Commissioner of air quality events and providing press release information.



AQ Forecaster
Michael Geigert

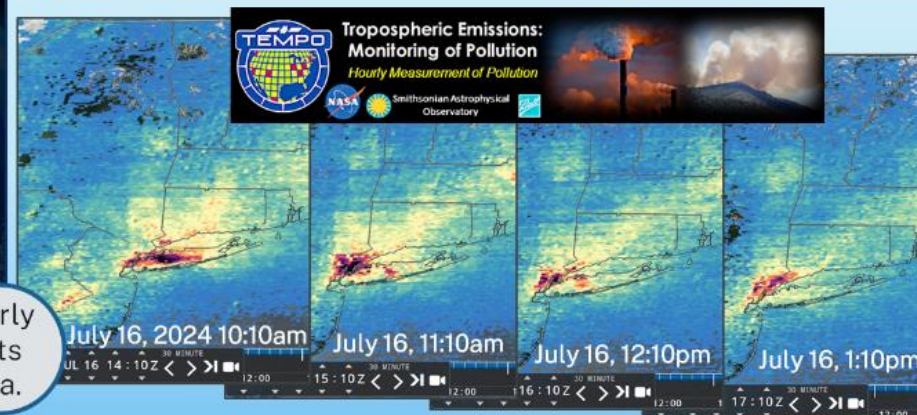


Satellite Imagery used in Air Quality Forecasting



TEMPO produces hourly scans of air pollutants across North America.

Below are hourly images of the nitrogen dioxide (NO₂) column from the TEMPO satellite on July 16, 2024, during an ozone exceedance event. **NO₂ emissions form ground level ozone that can inflame and damage the airways, especially for people with asthma, children, older adults, and people who are active outdoors.**



The TEMPO satellite time sequence shows NO₂ from NYC moving over Long Island and CT during the morning and moving northward during the afternoon. Forecasters had issued air quality alerts for ozone over western CT on this day due to the weather pattern blowing NO₂ emissions towards CT and producing ozone. **These satellite imagery tools can confirm AQ forecasts, help the public visualize air pollution and improve models that DEEP uses to predict when AQ will be unhealthy.**

Interview with Commissioner Katie Dykes



Connecticut has challenges with air quality.

Interview with Commissioner Katie Dykes



Using TEMPO NO2 products to track air pollution.

Interview with Commissioner Katie Dykes



Using satellite products during the 2023 Quebec fires.

Interview with Commissioner Katie Dykes



I know that when we are able to have
that information really quickly,

Keeping the public informed.

Thank You HAQAST!

