Data Sets Available to the Public:

Recent Additions to the NARSTO Permanent Data Archive at the Langley Atmospheric Science Data Center and the QSSC FTP Site.

5-Year Black Carbon Record for Fresno Supersite Released December 20, 2007

Fresno EPA Supersites Data

- ***NARSTO EPA_SS_FRESNO Aethalometer Multi-Wavelength Carbon Data***

A multiwavelength aethalometer (model AE30S) has been operated at the Fresno supersite from 5/12/1999 to 12/31/2006. The collected aerosol sample is illuminated with light from seven light emitting diodes at wavelengths of 370, 470, 520, 590, 660, 880, and 950 nm. Aerosol samples are collected for five minute periods. The air sample is collected through a sharp cut size-selective cyclone to limit the size of particles to aerodynamic diameters of 2.5 µm and less. The concentration of black carbon corresponds to the 880 nm measurement. The black carbon equivalents at the other six wavelengths are also determined.

5-Year Elemental Carbon Record for Fresno Supersite Released December 14, 2007

Fresno EPA Supersites Data

- ***NARSTO EPA_SS_FRESNO Elemental Carbon in 2.5 um Aerosol Fraction***

This data set contains the measurements taken with a single and dual wavelength aethalometer. The single wavelength aethalometer (model AE14) was operated at the Fresno supersite from 12/17/1999 to 9/27/2002. This instrument used a broad spectrum incandescent lamp to illuminate the collected aerosol. Aerosol samples were collected for five minute periods. The air sample was collected through a sharp cut size-selective cyclone to limit the size of particles to aerodynamic diameters of 2.5 µm and less. A single concentration of elemental carbon was determined for each five minute period.

A dual-wavelength aethalometer (model AE21) operated at the Fresno supersite from 2/25/2003 to 12/31/2006. The collected aerosol sample is illuminated with light from two light emitting diodes at wavelengths of 370 and 880 nm. Aerosol samples are collected for five minute periods. The air sample is collected through a sharp cut size-selective cyclone to limit the size of particles to aerodynamic diameters of 2.5 µm and less. The concentration of elemental carbon corresponds to the 880 nm measurement. The elemental carbon equivalent at the ultraviolet wavelength was also determined.

5-Year Meteorological Record for Fresno Supersite Released October 30, 2007

Fresno EPA Supersites Data

- ***NARSTO EPA_SS_FRESNO Meteorological Data***

This data set contains measurements taken by meteorological instruments operated at the Fresno Supersite from 5/24/2000 to 12/31/2006. Data include 5 minute average results for ambient temperature, relative humidity, wind speed, wind direction, barometric pressure, and solar radiation. Each data file reports 6 months of measurements. Time series plots of each parameter in a file are also available.

These measurements were sponsored initially by U.S. EPA Supersites Program and more recently by NOAA and CARB Long Term Monitoring--Fresno.

Baltimore EPA Supersites Data

- ***NARSTO EPA_SS_BALTIMORE Metal Conc of and Cytokines Induced by SEAS PM2.5 Samples***

The University of Maryland Semicontinuous Elements in Aerosol Sampler (SEAS) II employed at the Baltimore Supersite was a tremendous success. Thirty minute samples were collected at the 3 Baltimore monitoring locations for elemental analyses and samples were co-collected for cytokine assays. Data files of SEAS elemental results for Ponca Street (July to November 2002) and for Clifton Park (August to September 2001) and one data file of cytokine assay results for Ponca Street are archived.

New York EPA Supersites Data

- ***NARSTO EPA_SS_NY Air Chemistry, Particulate Matter, and Met Data***

  A second increment of 48 files has been added to this data set for a total of 156 files. **This completes archiving of NY data**.

Data files from all components of the **PM2.5 Technology Assessment and Characterization Study in New York State (PMTACS-NY) Supersite** program are archived in this single data set. Time-series plots are included for all of the numeric variables in each of the data files. These plots are useful for screening for outliers and visualization of values less than the detection limit and values with other quality flags. QA plans and the final PMTACS-NY Supersite report are included as documentation.

Pittsburgh EPA Supersites Data

- ***NARSTO EPA_SS_PITTSBURGH Gas Conc and PM Physical Properties Data*** **(26 data files with plots)**

- ***NARSTO EPA_SS_PITTSBURGH Particulate Matter Composition Data*** **(29 data files with plots)**

These two data sets provide Gas Concentration and Particulate Matter Physical Properties and Composition Data from the **Pittsburgh Air Quality Study (PAQS).**

The **PAQS** was a comprehensive, multi-disciplinary investigation to characterize the ambient PM in the Pittsburgh region. The measurement campaign lasted for 14 months (July 2001-September 2002). Baseline measurements included daily filter samples for fine particle mass and composition (OC/EC, major ions, elemental composition). QA plans and the final PAQS Supersite report are included as documentation. These data sets join the previously archived **Meteorological Data** and **Single-Particle Mass Spectrometer Data**

Los Angeles EPA Supersites Data

- ***NARSTO EPA_SS_LOS_ANGELES Aethalometer Elemental Carbon Data*** **(6 data files with plots)**

A dual beam aethalometer was used in a mobile trailer to collect mass concentrations of optically absorbing black carbon particles in the submicron size range during the period of September 15, 2000 to October 16, 2003 at several Los Angeles locations. The final LA Supersite report is included in the archive as documentation.

The overall objective of the **Los Angeles EPA Supersite** project was to conduct monitoring and research that contributes to a better understanding of the measurement, sources, size distribution, chemical composition and physical state, spatial and temporal variability, and linkages to health effects of airborne particulate matter in the Los Angeles Basin.

We expect to add additional LA data sets in coming months.

Data Archive Link: http://eosweb.larc.nasa.gov/PRODOCS/narsto/table_narsto.html

Published on QSSC FTP Site and Available to the Public for Downloading

MILAGRO MAX-Mex 2006 DOE G-1 Data

- ***NARSTO MILAGRO MAX-Mex 2006 DOE G-1 Aerosol, Air Chem, Radiometric, and Met Data***

The DOE Gulfstream G-1 aircraft participated in the Megacity Initiative: Local And Global Research Observations (MILAGRO), Megacities Aerosol eXperiment-Mexico (MAX-Mex) during March, 2006. Thirty (30) data files with time series plots have been published on QSSC FTP Site (ftp://narsto.esd.ornl.gov/pub/MILAGRO/) in the NARSTO DES format.

The G-1 operated out of Veracruz, MX and flew research flights in and around the Mexico City airspace during the month of March 2006. There were a total of 15 research flights on eleven different days. Data are reported for both 1 second and averaged 10 second sampling intervals.

Measurements were obtained to characterize regional differences in aerosol distribution, composition, and microphysics in relation to aerosol sources and processing history and to characterize the contribution of urban sources of aerosols and their precursors to aerosol burdens downwind of Mexico City.

New on the QSSC Web Site:

A new data file search application (in test mode) will identify data files containing data for the parameters that you select. The search returns the names of the data files, data set names, and links to their locations on the Permanent Data Archive and the QSSC FTP Site.

> **All of these resources are found on the NARSTO Quality Systems Science Center (QSSC) web site at http://cdiac.ornl.gov/programs/NARSTO/.**

More Resources for Managing and Archiving Your Data

Guidelines for Archiving Data in the NARSTO Permanent Data Archive

- Outlines how data are selected for archiving; identifies ways that Projects can foster archiving; lists items to consider when preparing data for archiving; and describes the archiving process.

Data Management Planning Guide

- A compilation of data management policy and guidance modules for program, project, and investigator use in developing and implementing data management plans.

Archive Data File Format Template

- Data Exchange Standard (DES) format and Site Information templates with picklists for standardized metadata fields.

Standardized Variable Names and Metadata Values for both NARTSO and ICARTT Data File Formats

- Find consistent values for names and units that can be used to report measurements and metadata for various data types across multiple platforms. ICARTT values have been specifically constructed to be friendly to most data user software and data systems.

Need Additional Information?

Please contact Les Hook at the QSSC, Oak Ridge National Laboratory, by either e-mail (hookla@ornl.gov) or phone (865-241-4846) for more information.