OVERVIEW

In Summer 2004 several coordinated experiments studied air quality, intercontinental transport, and radiation balance in air masses carried across the US, over the Atlantic, and onward to Europe. NASA organized the Intercontinental Chemical Transport Experiment - North America (INTEX-NA). NOAA organized the New England Air Quality Study - Intercontinental Transport and Chemical Transformation (NEAQS-ITCT) 2004. And Europeans (U.K., Germany, and France) organized coordinated studies under Intercontinental Transport of Pollution (ITOP). The International Consortium for Atmospheric Research on Transport and Transformation (ICARTT) was formed to enhance the synergy between INTEX, ITCT and ITOP by planning and executing a series of coordinated experiments to study the emissions of aerosol and ozone precursors their chemical transformations and removal during transport to and over the North Atlantic.

AATS-14 participated in INTEX and ITCT by flying on the twin turboprop Jetstream-31, based at Portsmouth, NH in July and August 2004. Its goal is to help characterize aerosol radiative properties and effects in flights that sample polluted and clean air masses in coordination with measurements by other INTEX-ITCT platforms, including aircraft and a ship.