

NOAA AC4 FY13 funded projects; Project period: August 1, 2013 - July 31, 2016

Investigators	Project title	Institution
1 Alvarado, Matt; Cady-Pereira, Karen; Henze, Daven	Sources, Formation, and Impacts of Ammonium Nitrate and Ammonium Sulfate Aerosols: A Modeling Analysis Constrained by Surface, Aircraft, and Satellite Data	Atmospheric & Environmental Research, Inc.; University of Colorado
2 Baker, David; Jacobson, Andrew	Towards Assimilation of Satellite, Aircraft, and Other Upper-air CO2 Data into CarbonTracker	Colorado State University, University of Colorado
3 Chen, Huilin; Jacobson, Andrew; Baker, Ian	Improving CarbonTracker Flux Estimates for North America using Carbonyl Sulfide (OCS)	University of Colorado, Colorado State University
4 Cohen, Ronald	Nitrogen Oxides, Ozone, and Aerosol Organic Nitrate: An Integrated Perspective Combining Observations during CalNex and ARCTAS-CA	University of California, Berkeley
5 De Wekker, Stephan; Jacobson, Andrew	Quantifying observational variability and inverse model biases of planetary boundary layer depths and their impact on the calculation of carbon fluxes in CarbonTracker	University of Virginia, University of Colorado
6 Turnbull, Jocelyn; Karion, Anna; Lauvaux, Thomas; Davis, Kenneth	Quantification of fossil fuel CO2 by source sector using multi-species trace gas measurements in the INFLUX experiment	University of Colorado; Pennsylvania State University
7 Surratt, Jason; Kroll, Jesse	Organic Nitrogen in Atmospheric Aerosols: Concentrations, Chemical Composition, and Properties	University of North Carolina, Chapel Hill; Massachusetts Institute of Technology
8 Jimenez, Jose-Luis; Day, Douglas; Brown, Steven; Fry, Juliane	Collaborative Research: Influence of NO3 on secondary aerosol formation: analysis and interpretation of real-time field observations	University of Colorado, NOAA/ESRL/CSD; Reed College
9 Keeling, Ralph; Jacobson, Andrew; Khatiwala, Samar	Improving Carbon Tracker by incorporating constraints from atmospheric O2 measurements and ocean biogeochemical tracer data	University of California, San Diego; University of Colorado; Columbia University

10	Laskin, Alexander; Laskin, Julia; Nizkorodov, Sergey	Combined Laboratory and Field Characterization of Nitrogen-Containing Light-Absorbing Organic Compounds	DOE/Pacific Northwest National Laboratory; University of California, Irvine
11	Lehman, Scott; Miller, John	Developing a ¹⁴ C-based fossil fuel CO ₂ emissions estimation capability for "CarbonTracker"	University of Colorado
12	Wakimoto, Ronald; Lin, John; Urbanski, Shawn	Improving biomass burning emissions in CarbonTracker: A high resolution emission inventory, constrained by multi-species atmospheric observations	University of Montana; University of Utah
13	Saikawa, Eri; Schlosser, Adam	Assessing the Terrestrial and Atmospheric Nitrogen Cycle	Emory University; Massachusetts Institute of Technology
14	Nevison, Cynthia; Saikawa, Eri	Evaluating the relative importance of direct and indirect agricultural N ₂ O emissions over the United States using forward modeling and atmospheric N ₂ O and river nutrient data.	University of Colorado; Emory University
15	Millet, Dylan; Griffis, Timothy; Henze, Daven	Constraining US and global sources of nitrous oxide based on field observations and the GEOS-Chem adjoint model	University of Minnesota; University of Colorado
16	Mao, Jingqiu; Horowitz, Larry	Impact of organic nitrate chemistry on air quality and climate: past, present and future atmospheres	Princeton University; NOAA/GFDL
17	Seinfeld, John	Analysis of Sources of Organic Aerosol in Los Angeles from Cal Nex Using a Next Generation Atmospheric SOA Model	California Institute of Technology
18	Montzka, Stephen; Lehman, Scott; Miller, John	Providing accurate and nationally-representative estimates of anthropogenic emissions of select trace gases affecting climate, ozone, and air quality	NOAA/ESRL/GMD; University of Colorado