



## **The CIERA US Initiative on emissions**

Greg Frost (1,2), Claire Granier (1,2,3), Stefan Falke (4), Terry Keating (5), Jean-Francois Lamarque (6), Paulette Middleton (7), Gabrielle Petron (1,8), and Steven Smith (9)

(1) CIRES, University of Colorado, Boulder, CO, USA, (2) NOAA Earth System Research Laboratory, Chemical Sciences Division, Boulder, CO, USA, (3) CNRS and University Pierre and Marie Curie, LATMOS, Paris, France, (4) Wash U St Louis, Northrop Grumman, St Louis, MO, USA, (5) U.S. Environmental Protection Agency, Washington DC, USA, (6) NCAR, Boulder, CO, USA, (7) Panorama Pathways, Boulder, CO, USA, (8) NOAA Earth System Research Laboratory, Global Monitoring Division, Boulder, CO, USA, (9) Pacific Northwest National Laboratory, College Park, MD, USA

While emission inventories at a variety of spatial and temporal scales are critical inputs to the understanding and prediction of air quality and climate, inconsistencies in the methodology and structure of these inventories have hindered research progress. Systematic inventory evaluations and quantification of emission uncertainties and their impacts are crucial to establish confidence in these datasets.

We will present the Community Initiative for Emissions Research and Applications (CIERA), which is under development in the USA. The goals of the work planned within this multi-agency project are to harmonize global and regional emission inventory development, improve the exchange of emission inventory data, evaluate inventories using a variety of methods, investigate the impacts of emission uncertainties and changes, and facilitate use of findings by the community..

We will discuss the first steps taken in the organization of this initiative, including a workshop that took place in December 2009. We will discuss the motivation for organizing this collaborative initiative, the outcome of the first workshops and associated activities, and the work planned during the coming months. We will also encourage the international community to join the CIERA initiative.