Trace Gas Observations from Small Research Aircraft over the Mid Atlantic States and Hebei, China

R.R. Dickerson¹, R. Salawitch², X. Ren^{1,3}, H. He¹, and S. Benish¹

¹University of Maryland, Department of Oceanic and Atmospheric Science, College Park, MD 20742; 301-405-5364, Email: rrd@umd.edu ²University of Maryland, College Park, MD 20742 ³NOAA Air Resources Laboratory (ARL), Silver Spring, MD 20910

The University of Maryland has been making airborne measurements of aerosols and trace gases including CO_2 , CH_4 , and CO, both over the Mid Atlantic States and over China during the NASA-sponsored Korea-United States Air Quality Study (KORUS-AQ) campaign. These programs, supported by the National Institute of Standards and Technology (NIST), National Science Foundation (NSF), and other agencies, aim to advance our understanding of chemistry and fluxes of greenhouse gases, short-lived pollutants, and chlorofluorocarbons. Results will be compared to emissions inventories and in context of global budgets as well as the Montreal Protocol.



Emission Identification: CO to CO₂ ratios in Hebei

Figure 1. Trace gases observed over Hebei Province, China demonstrating the wide variety of sources present locally, including biomass burning, high-tech coal combustion, low-tech coal combustion, and vehicles.

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