

## **The Atmospheric InfraRed Sounder (AIRS) Views of Mexico City and the Southeastern United States during MILAGRO/INTEX-B**

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Utilizing the Atmospheric InfraRed Sounder's (AIRS) unique spatial and temporal coverage, we present observations of anthropogenic and biomass burning CO emissions as observed by AIRS during the 2006 field experiment INTEX-B/MILAGRO. AIRS daily CO maps covering more than 75% of the planet demonstrate the near global transport of these emissions. AIRS day/night coverage of significant portions of the Earth often show substantial changes in 12 hours or less. However, the coarse vertical resolution of AIRS retrieved CO complicates its interpretation. Generally, extremely large CO concentrations in the boundary layer are required in order for AIRS have much sensitivity to the lowest few kilometers of the troposphere. However, Mexico City's elevation and large CO emissions (both urban and domestic biomass burning) presents an interesting and challenging target, especially with outflow often occurring over lower elevation areas. We will present both our field near-real-time CO retrievals as well as more detailed re-analyses with the latest AIRS retrieval algorithm. The new algorithm features improved temperature and water vapor retrievals as well as CO retrievals with more vertical specificity.