

Measurement of SO₂, NO and HO₂NO₂ during INTEX-B Phase I on NASA DC-8

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INTEX-B (Phase I) was performed over the Gulf area and Mexico to examine source characteristics of Mexico City and the chemical evolution of its outflow during March 2006. Our group measured SO₂, HO₂NO₂ (CIMS) and NO (chemiluminescence) from the NASA DC-8 over a wide altitude range ($z = 0 - 12$ km) during 6 science flights including 4 boundary layer runs over Mexico City. We will present SO₂ and NO data measured in the boundary layer of Mexico City to assess source characteristics. Some of the interesting outflow features sampled in the free troposphere will be analyzed as case studies. Typical vertical and horizontal distributions of the measured species over the Gulf of Mexico will also be presented.