

Observations and Modeling of HO_x Radicals during MILAGRO

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Peroxy radicals (HO₂ and the sum of HO₂ and RO₂) were measured aboard the NSF/NCAR C-130 by the technique of PerCIMS involving oxygen dilution modulation, chemical conversion and chemical ionization. Hydroxyl radicals were also measured using chemical conversion by reaction with sulfur-34 labeled SO₂ and chemical ionization. These observations were compared with the NASA Langley box model and the NCAR steady state box model.

Summaries of the observations and the measurement-model comparisons will be made. Notable differences between the model and the measurements will be emphasized and possible reasons for the discrepancies will be discussed.