Nonmethane Hydrocarbons in Mexico City Outflow during INTEX-B

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INTEX-B airborne measurements of Mexico City outflow revealed a distinctive Mexico City NMHC emission signature that was dominated by extremely elevated propane mixing ratios. Values in samples collected from the DC-8 during Mexico City fly-bys were as high as 40 ppbv for propane, typically 10 times greater than those for ethane. We compare these source ratios to aged Mexico City plumes, various NMHC sources in the region such as biomass burning and Southern US outflow, and employ model products to characterize and quantify the outflow and evolution of trace gases from the Mexico City Megaplex.