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Supplement of

A large and ubiquitous source of atmospheric formic acid

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Supplemental Information

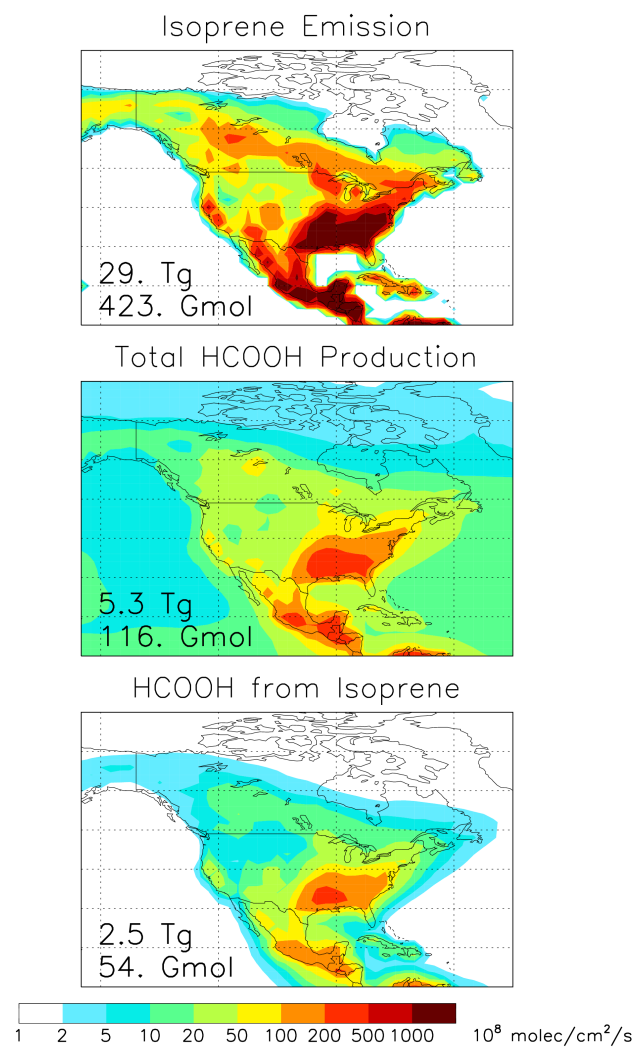


Figure S1. Isoprene emission, total photochemical production of HCOOH, and production of HCOOH from isoprene over North America in the GEOS-Chem base-case simulation. Note nonlinear color scale.

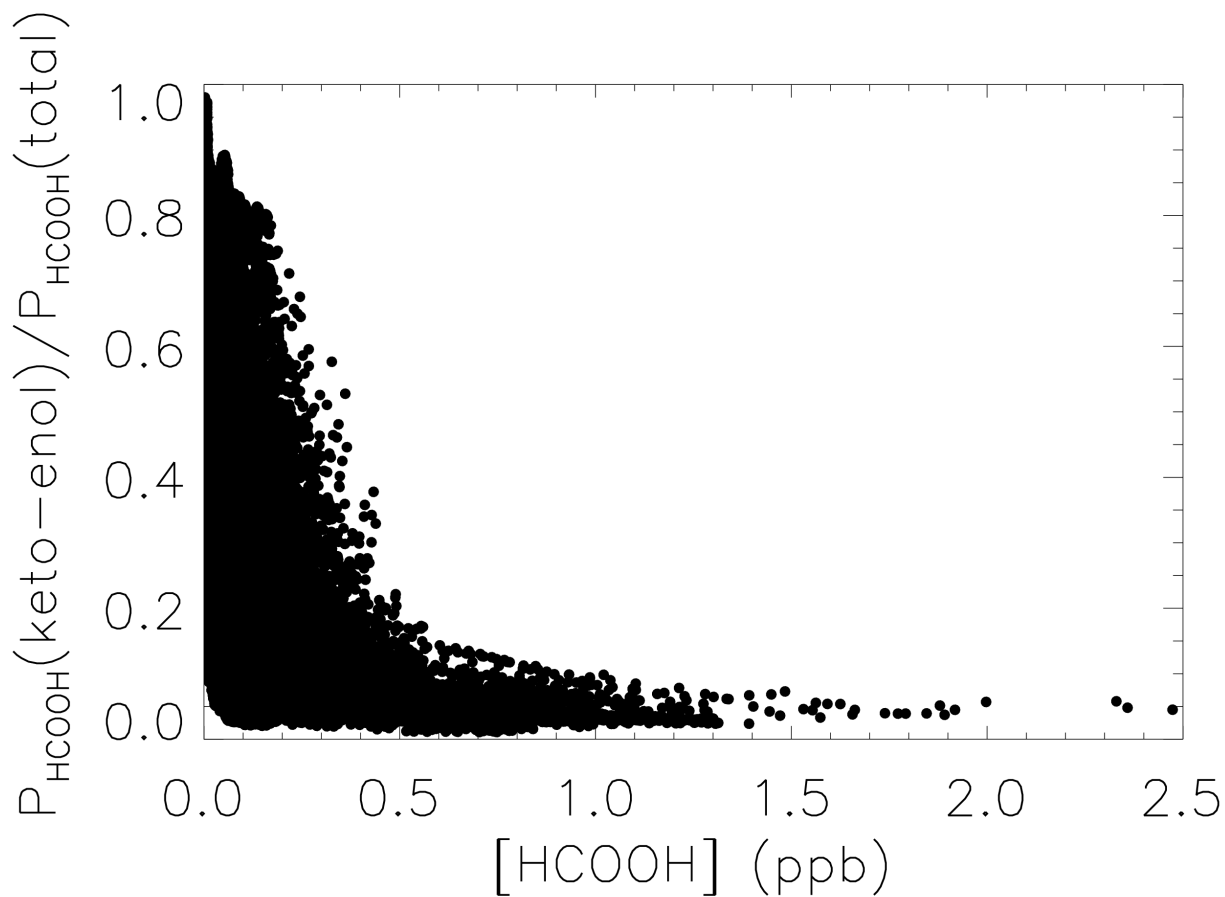


Figure S2. Fraction of the total photochemical HCOOH source in GEOS-Chem that is due to the keto-enol tautomerization of acetaldehyde, as a function of the HCOOH mixing ratio.

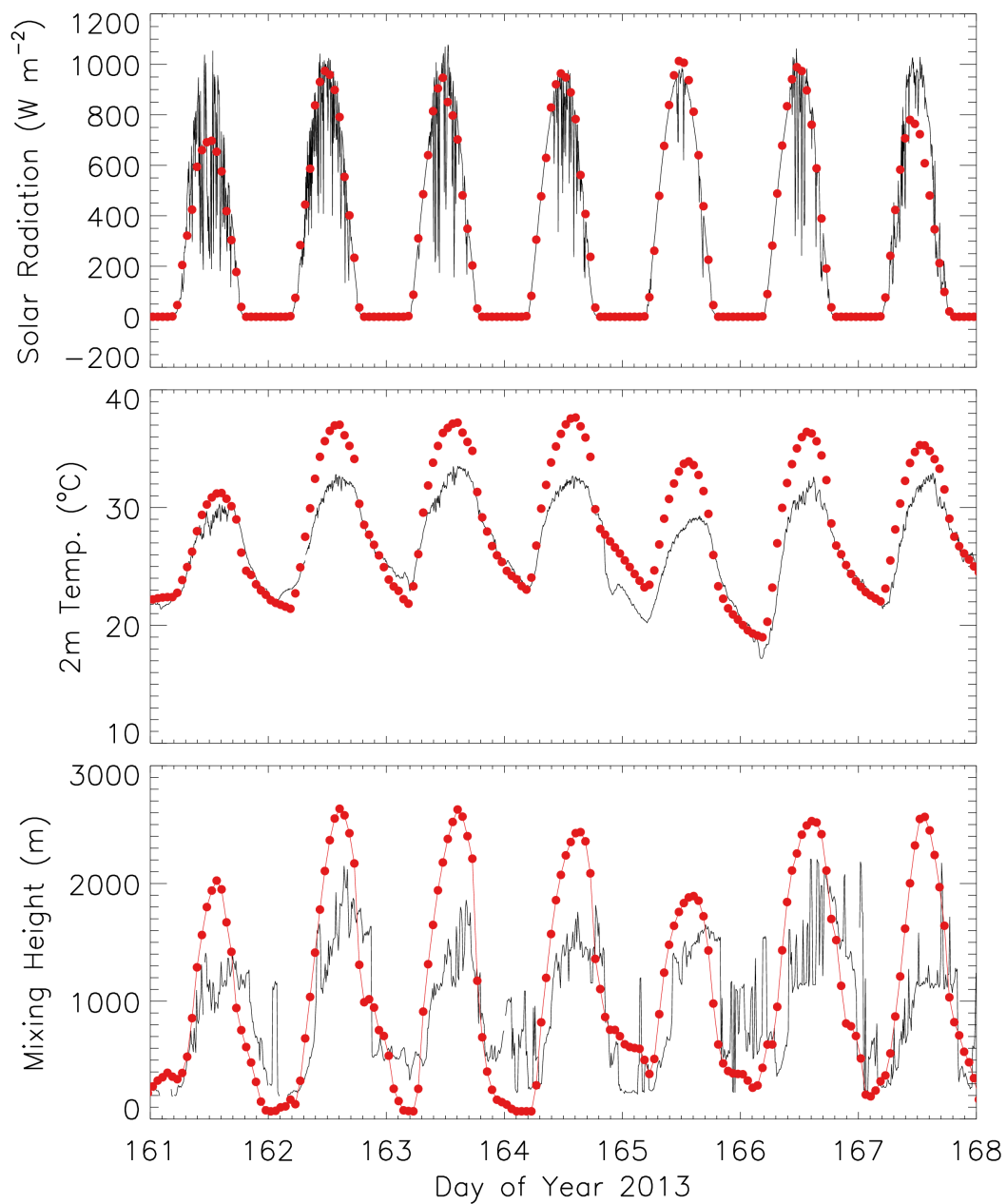


Figure S3. Solar radiation, air temperature, and ceilometer measurements during a subset of the SOAS campaign. Measured values (in black) are compared to the GEOS-FP values (in red) used in GEOS-Chem.

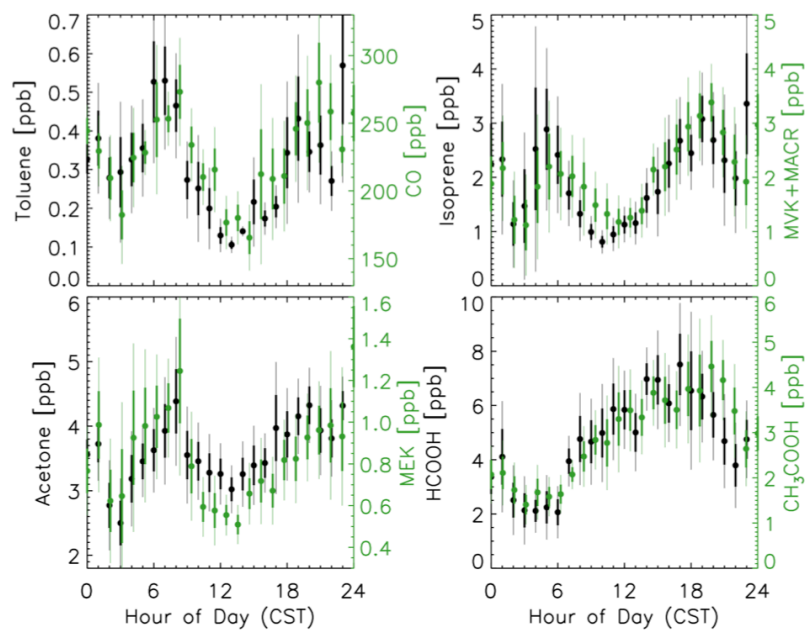


Figure S4. Diurnal cycle of HCOOH, CH₃COOH, and related biogenic and anthropogenic compounds as measured during SLAQRS. Data shown include only non-stagnant (wind speed $> 0.5 \text{ m s}^{-1}$) periods with southwesterly winds (180° - 270°). Error bars indicate ± 1 (thick) and ± 2 (thin) standard errors about the mean (points).