

Impacts of Biogenic Emissions on Summertime Ozone Formation in the Guanzhong Basin, China

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Xylenes [ppb]

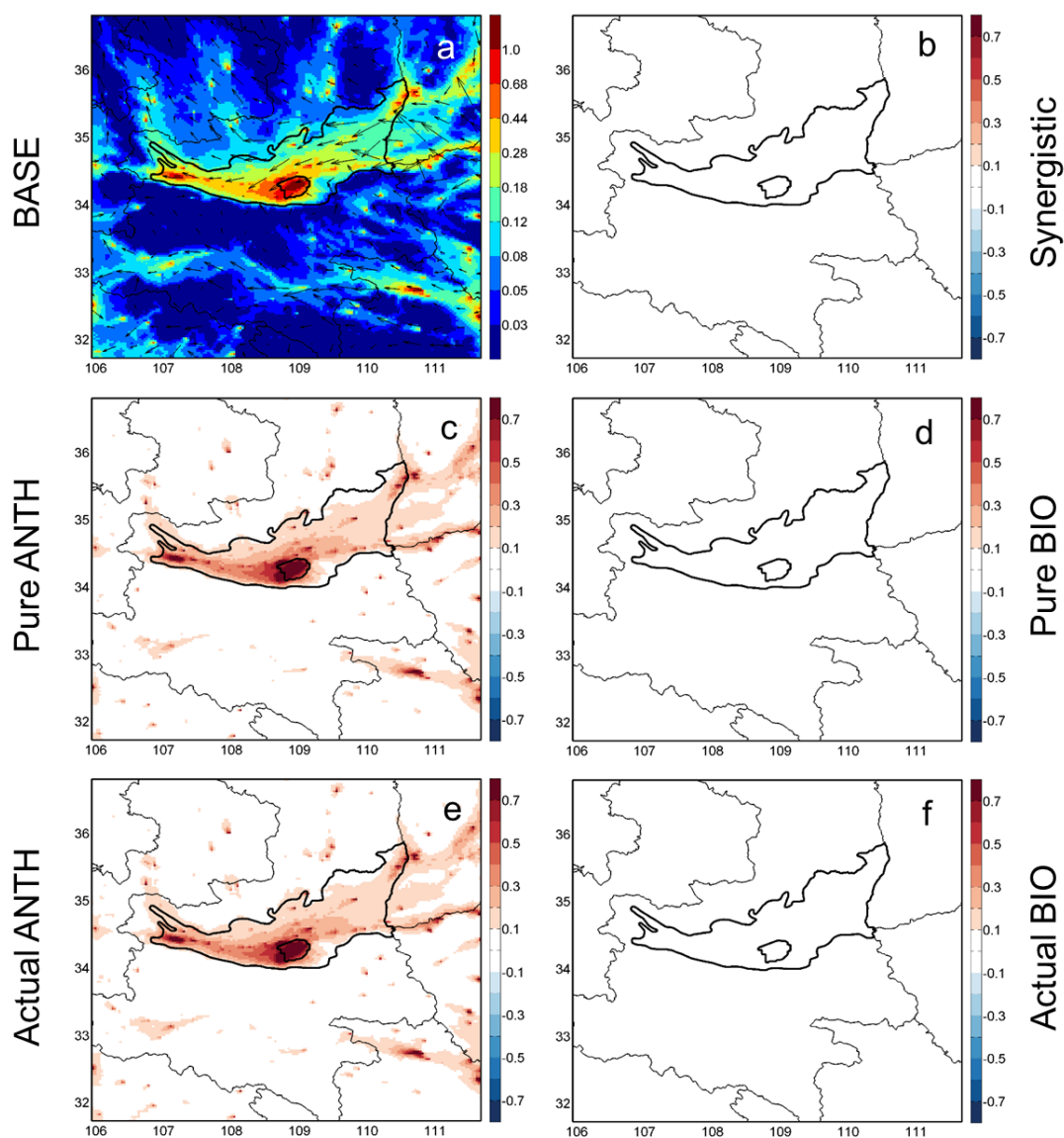


Figure S1. Spatial distributions of monthly mean concentrations of xylenes in August 2011. (a) is the result from the BASE simulation, overlaid with simulated wind vectors. (b)-(f) are simulated xylenes concentrations contributed from synergistic anthropogenic and biogenic, pure anthropogenic, pure biogenic, actual anthropogenic and actual biogenic sources, respectively.

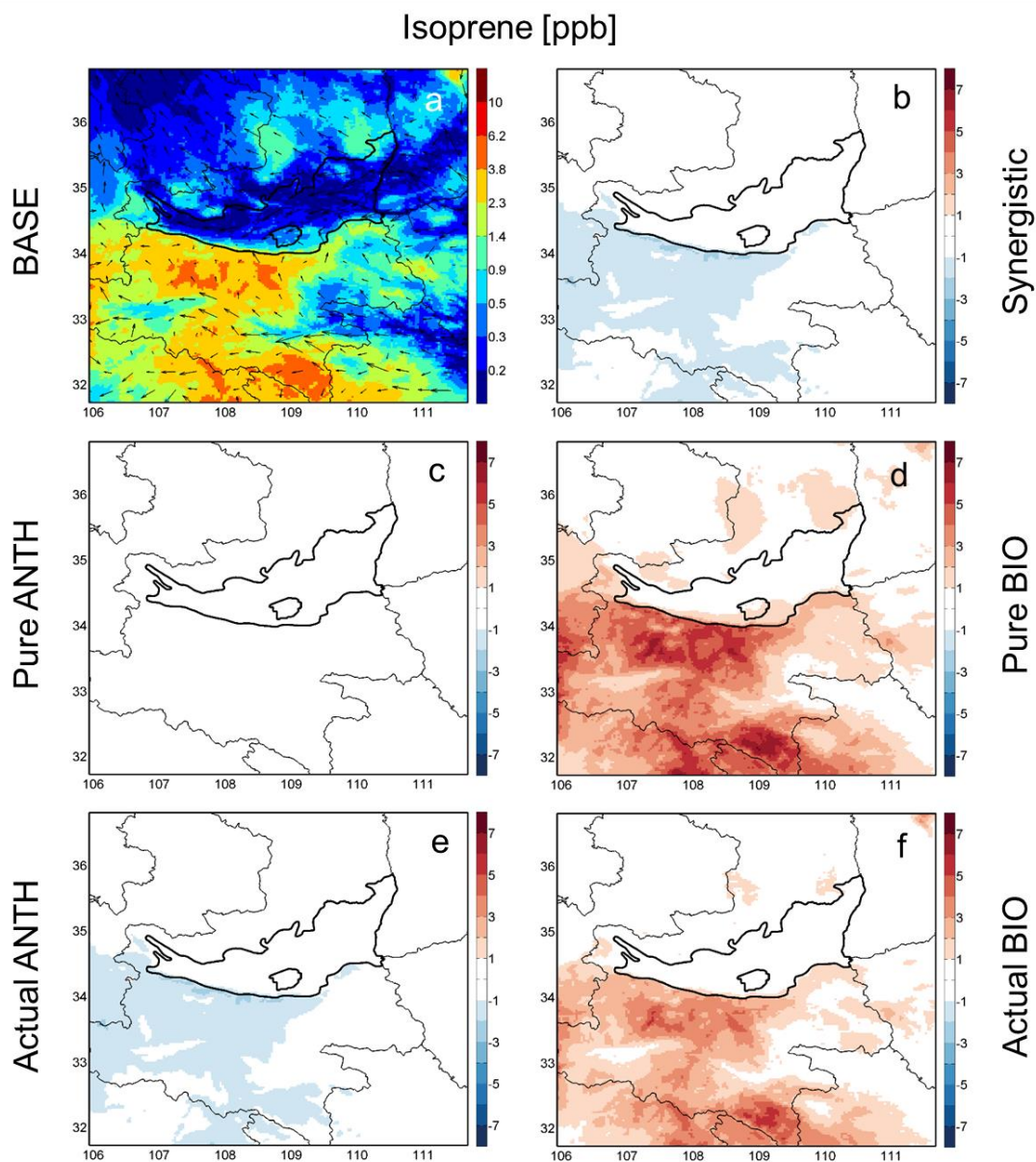


Figure S2. Spatial distributions of monthly mean concentrations of isoprene in August 2011. (a) is the result from the BASE simulation, overlaid with simulated wind vectors. (b)-(f) are simulated isoprene concentrations contributed from synergistic anthropogenic and biogenic, pure anthropogenic, pure biogenic, actual anthropogenic and actual biogenic sources, respectively.

Monoterpenes [ppb]

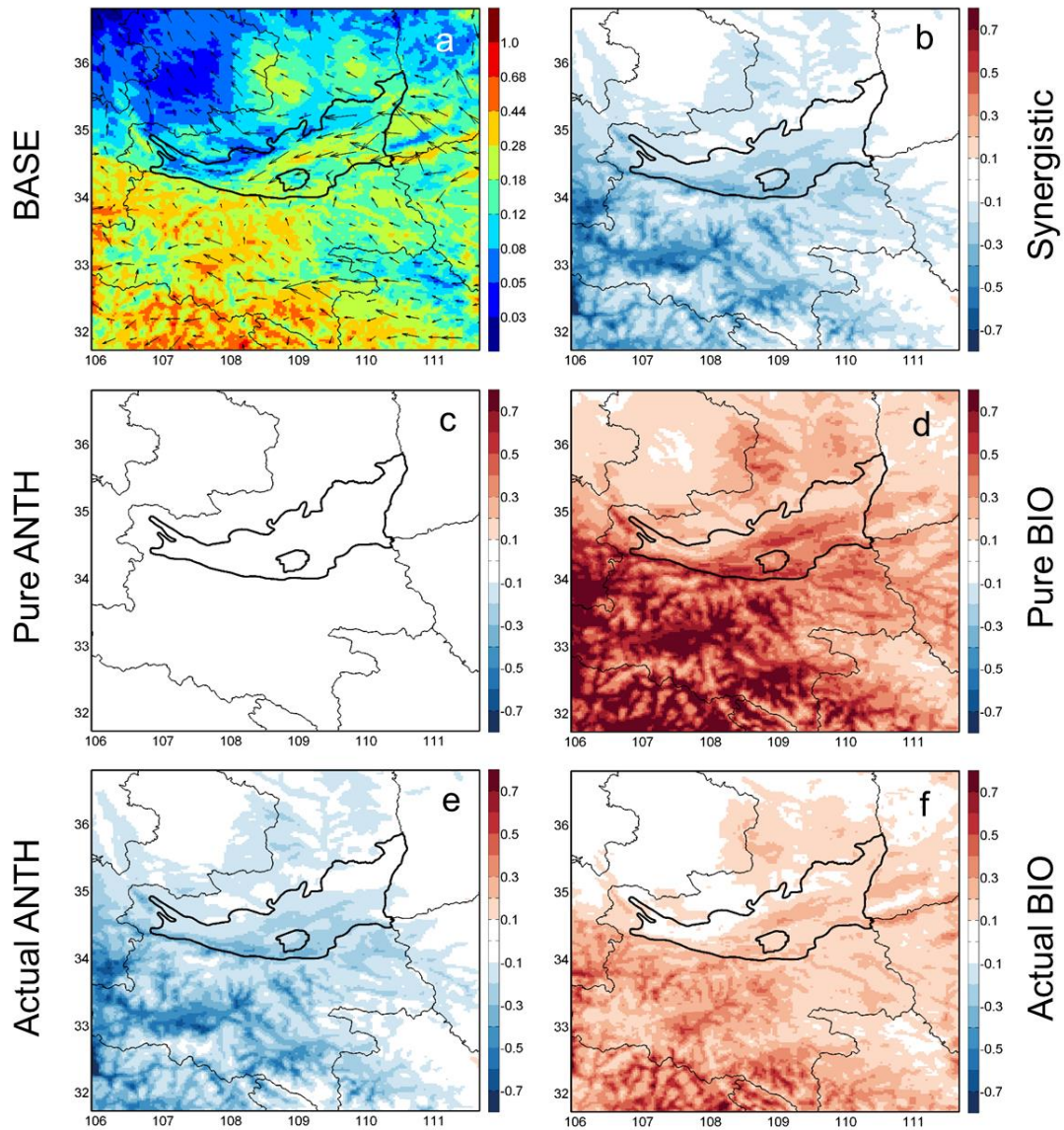


Figure S3. Spatial distributions of monthly mean concentrations of monoterpenes in August 2011. (a) is the result from the BASE simulation, overlaid with simulated wind vectors. (b)-(f) are simulated monoterpenes concentrations contributed from synergistic anthropogenic and biogenic, pure anthropogenic, pure biogenic, actual anthropogenic and actual biogenic sources, respectively.

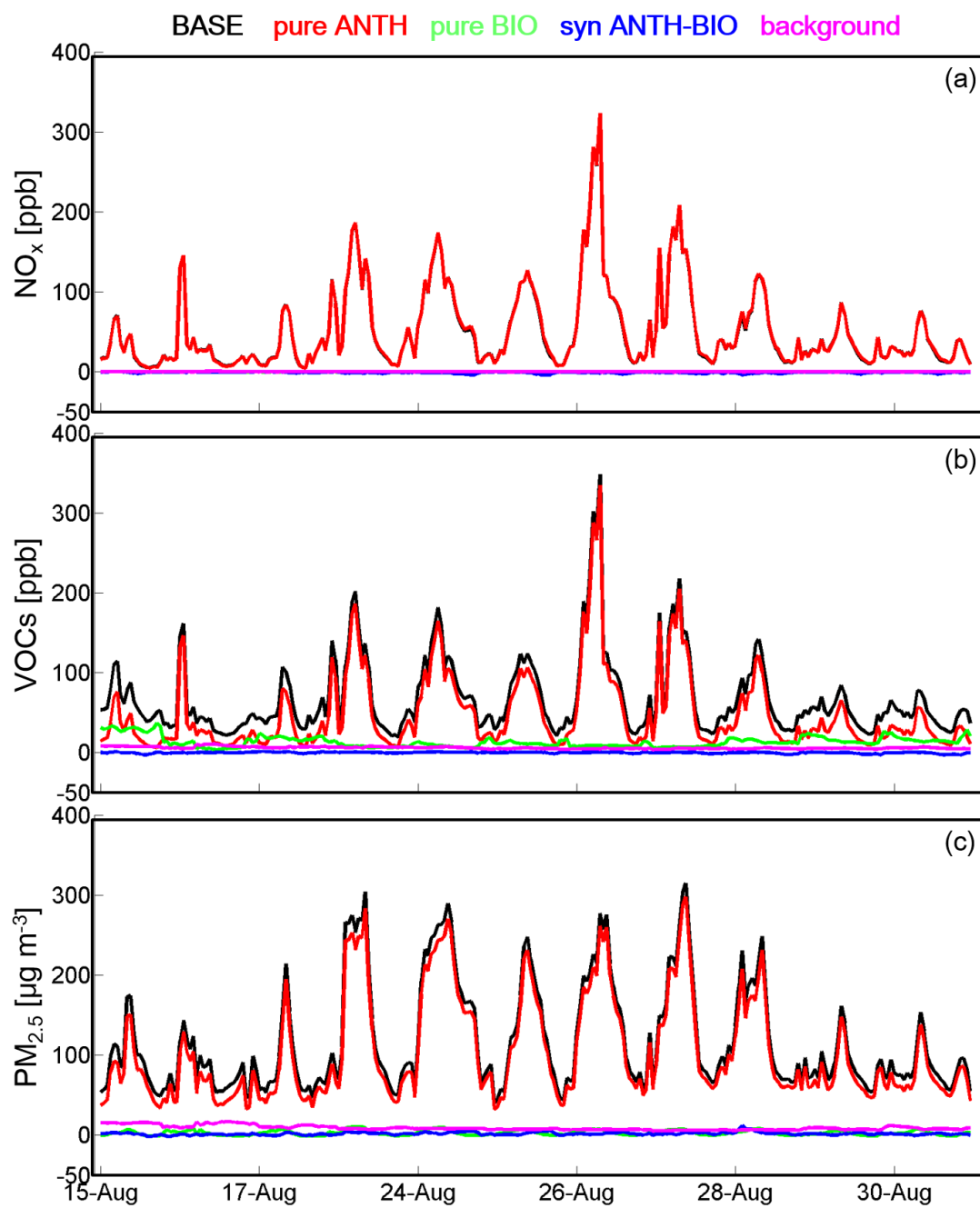


Figure S4. Temporal patterns of the simulated concentrations of NO_x, VOCs and PM_{2.5} and the various contribution components during the period from 15th to 30th August 2011, excluding the rainy days (18th -22nd August).