## Online supplementary materials for BVOC-aerosol-climate interactions in the global aerosol-climate model ECHAM5.5-HAM2

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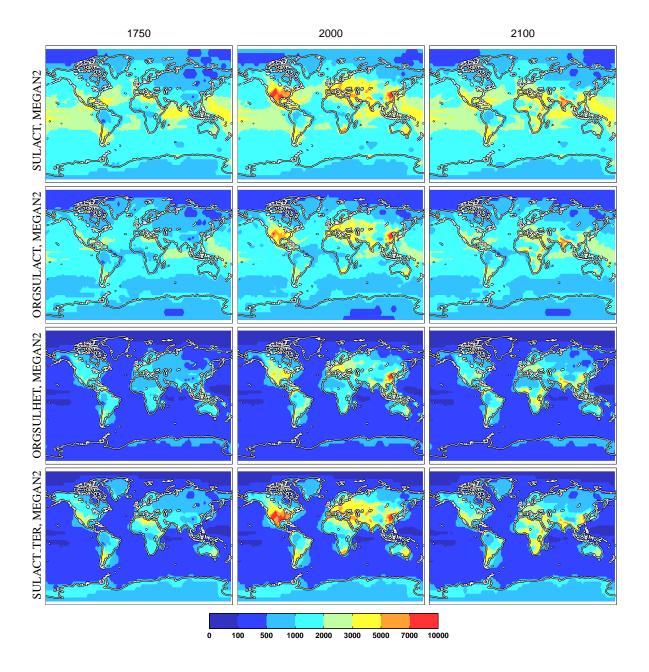


Fig. S1. 5-year average  $CN(d_p > 3nm)$  (cm<sup>-3</sup>) in the lowest model level in year 1750 (left panels), 2000 (center panels) and 2100 (right panels). The concentrations are from simulations with MEGAN2 BVOC emissions, and results for the year 2100 are averages over the 3 emission scenarios.

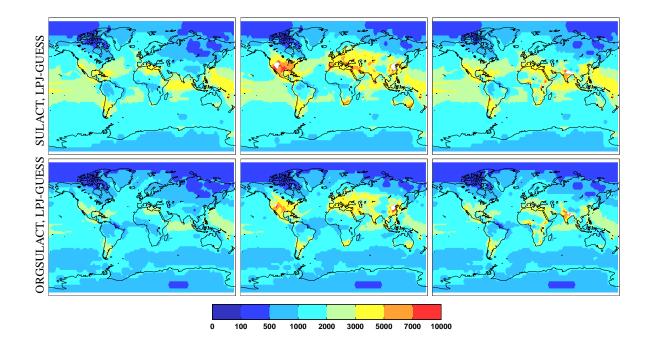
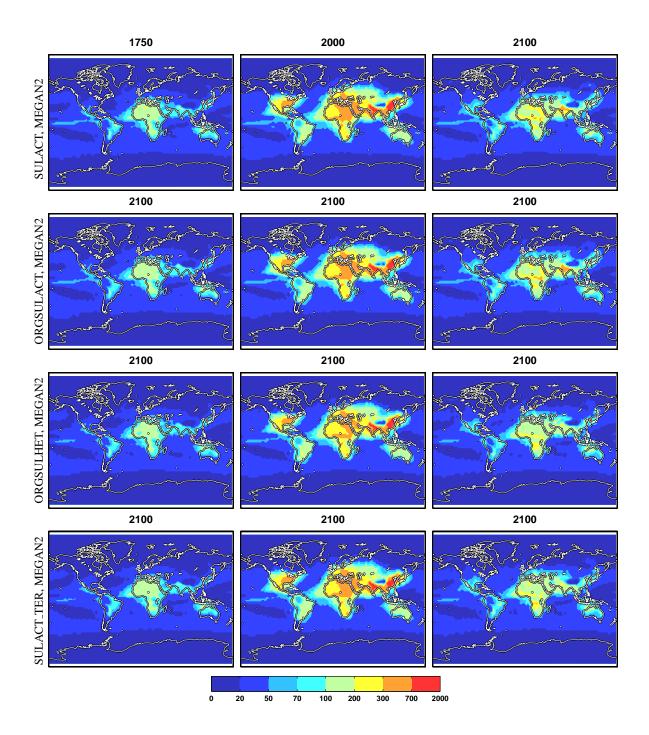
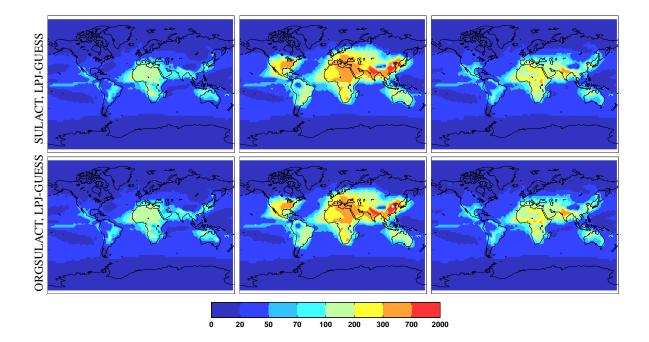


Fig. S2. 5-year average  $CN(d_p > 3nm)$  (cm<sup>-3</sup>) in the lowest model level in year 1750 (left panels), 2000 (center panels) and 2100 (right panels). The concentrations are from simulations with LPJ-GUESS BVOC emissions, and results for the year 2100 are averages over the 3 emission scenarios.



**Fig. S3.** 5-year average CCN(0.2%) (cm<sup>-3</sup>) in the lowest model level in year 1750 (left panels), 2000 (center panels) and 2100 (right panels). The concentrations are from simulations with MEGAN2 BVOC emissions, and results for the year 2100 are averages over the 3 emission scenarios.



**Fig. S4.** 5-year average CCN(0.2%) (cm<sup>-3</sup>) in the lowest model level in year 1750 (left panels), 2000 (center panels) and 2100 (right panels). The concentrations are from simulations with LPJ-GUESS BVOC emissions, and results for the year 2100 are averages over the 3 emission scenarios.