

Multiscale CO budget estimates across South America: quantifying local sources and long range transport

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Introduction

This supplemental information contains a figure to analyze the biases of the monthly CO dry-column averaged mole fraction for the ne30x4 and ne30 simulations compared to MOPITT (Figures S1 and S2) . Figures S3 and S4 contain maps to compare the yearly mean of the CO and OH dry-air column averaged mole fraction in the ne30x4 and ne30 simulations. Figure S5 shows the difference in MEGAN isoprene emissions in both simulations.

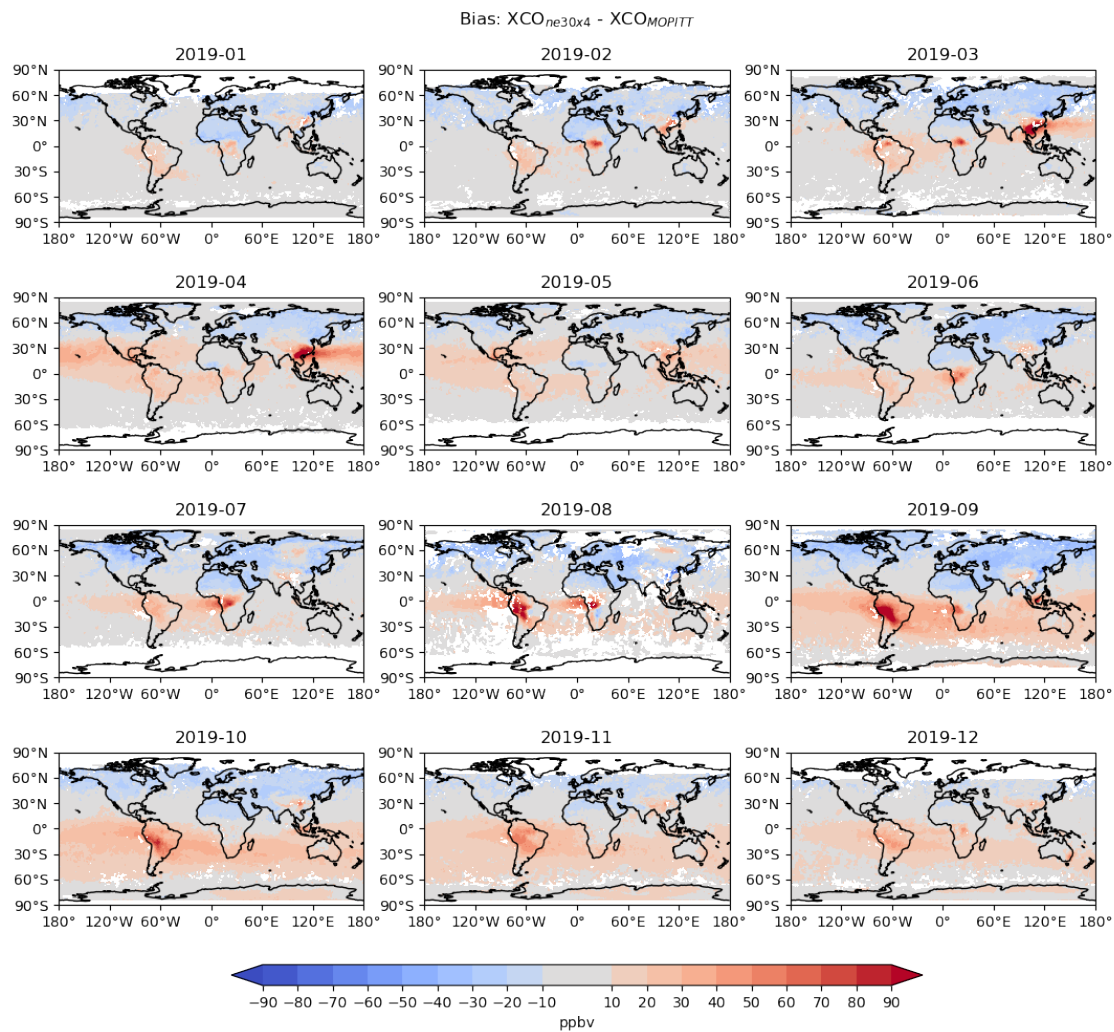


Figure S1. Comparison of the dry-air column averaged mole fraction monthly mean of the ne30x4 run with MOPITT output.

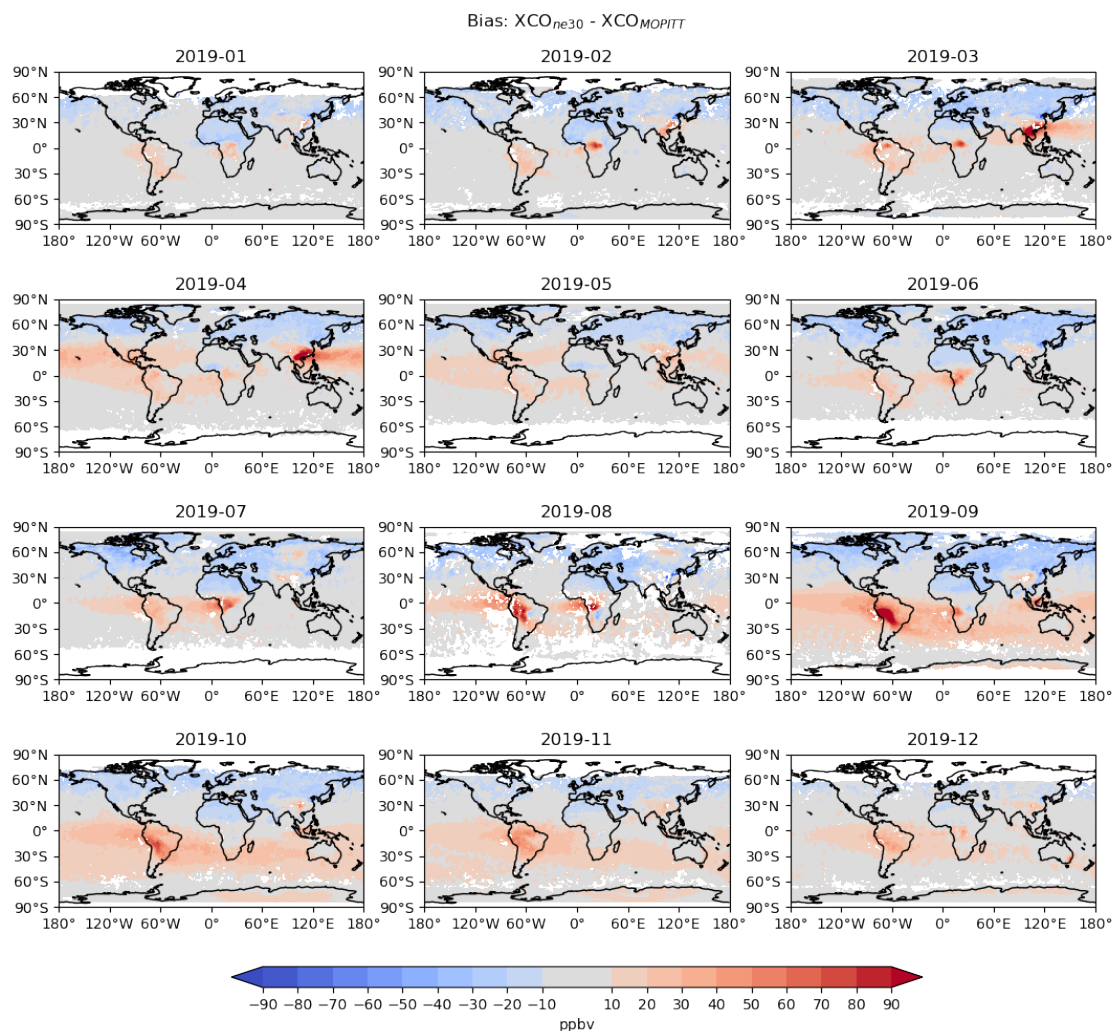


Figure S2. Comparison of the dry-air column averaged mole fraction monthly mean of the control simulation ne30 with MOPITT output.

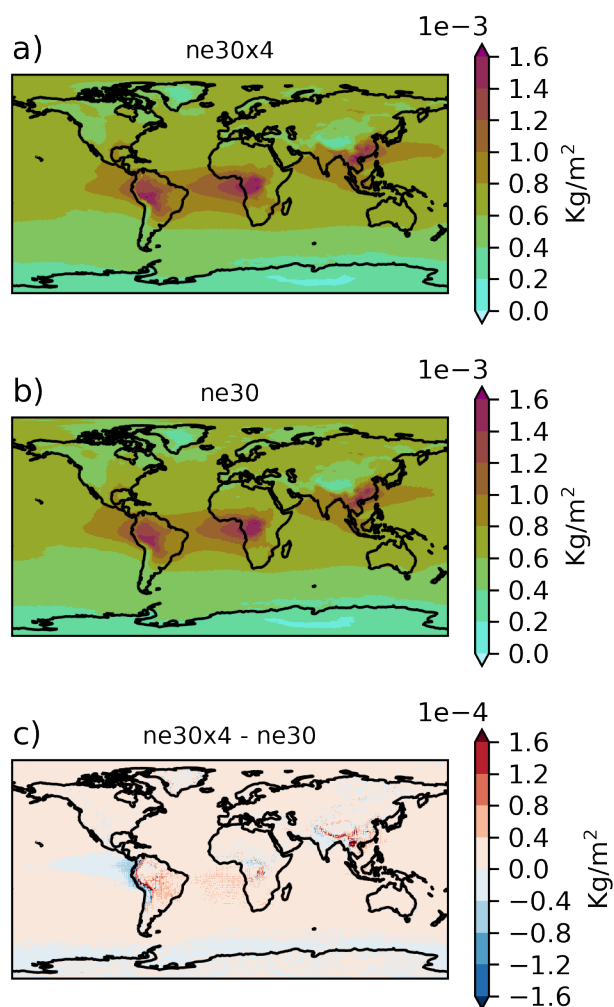


Figure S3. Comparison of the dry-air column averaged mole fraction of CO monthly mean of a) the refined, ne30x4 and b) the control ne30 runs. The difference is represented in c)

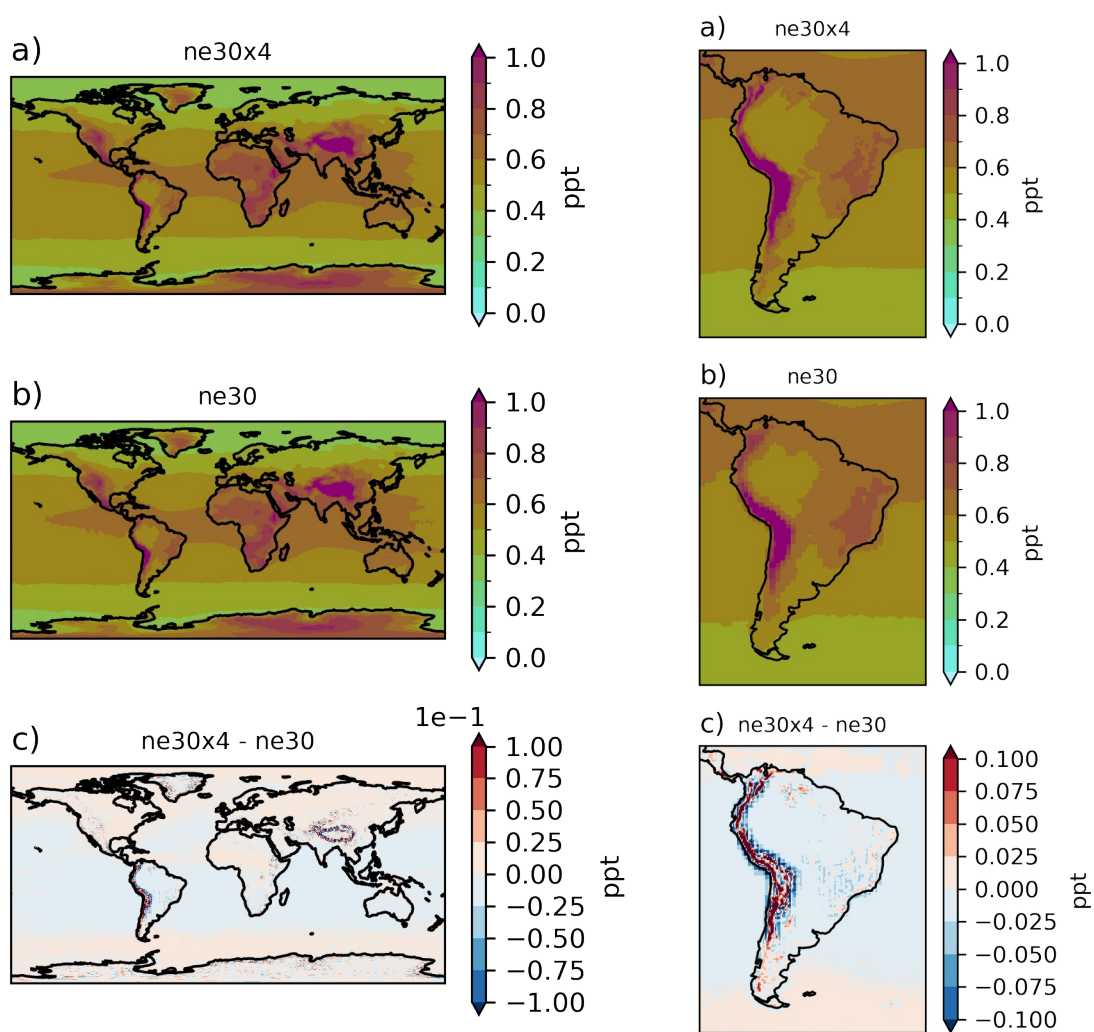


Figure S4. Comparison of the dry-air column averaged mole fraction of OH monthly mean of a) the refined, ne30x4 and b) the control ne30 runs. The difference is represented in c).

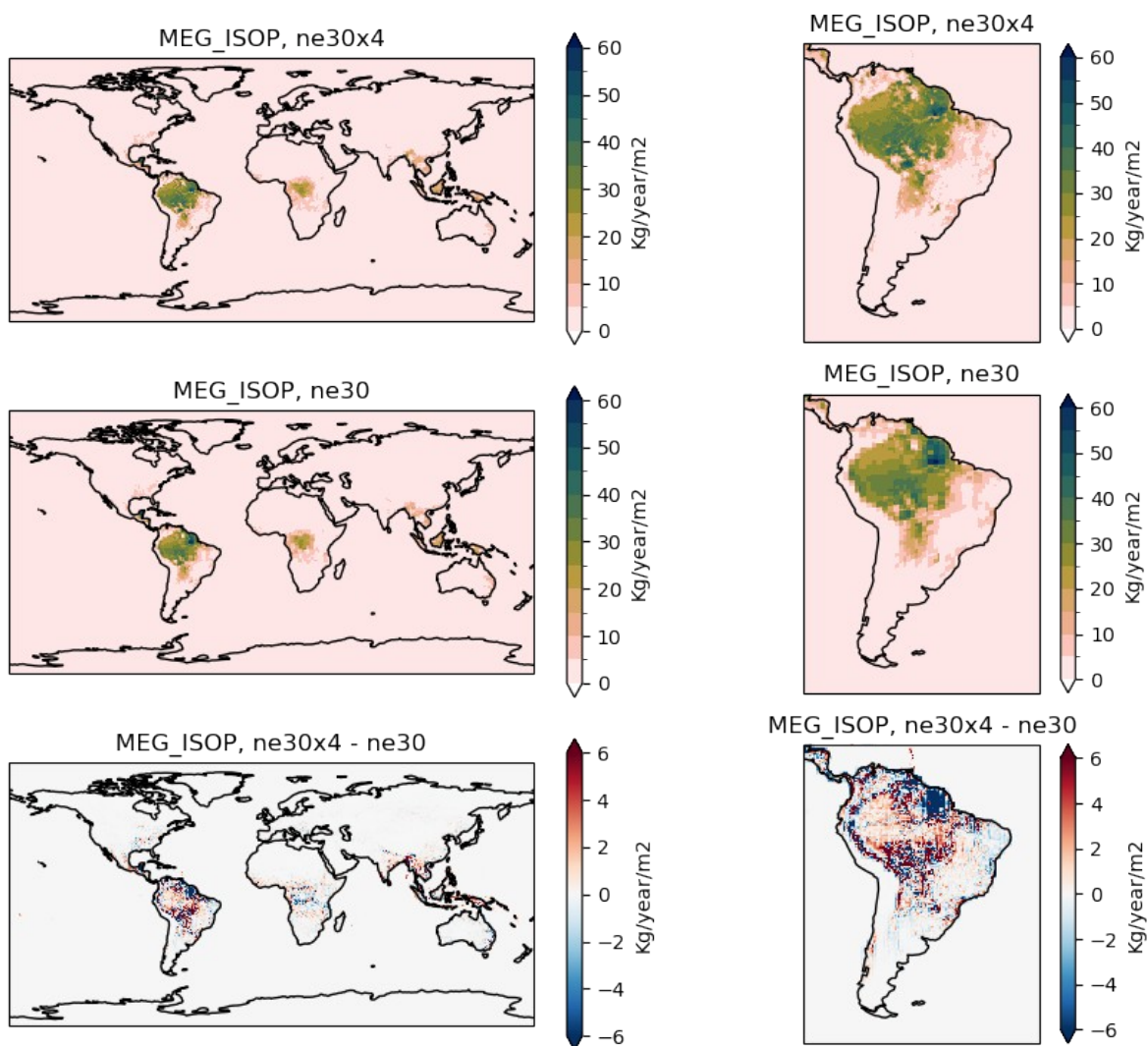


Figure S5. Comparison of the MEGAN Isoprene emissions monthly mean for a) the refined, ne30x4 and b) the control ne30 runs. The difference is represented in c).