

Revisiting global fossil fuel and biofuel emissions of ethane

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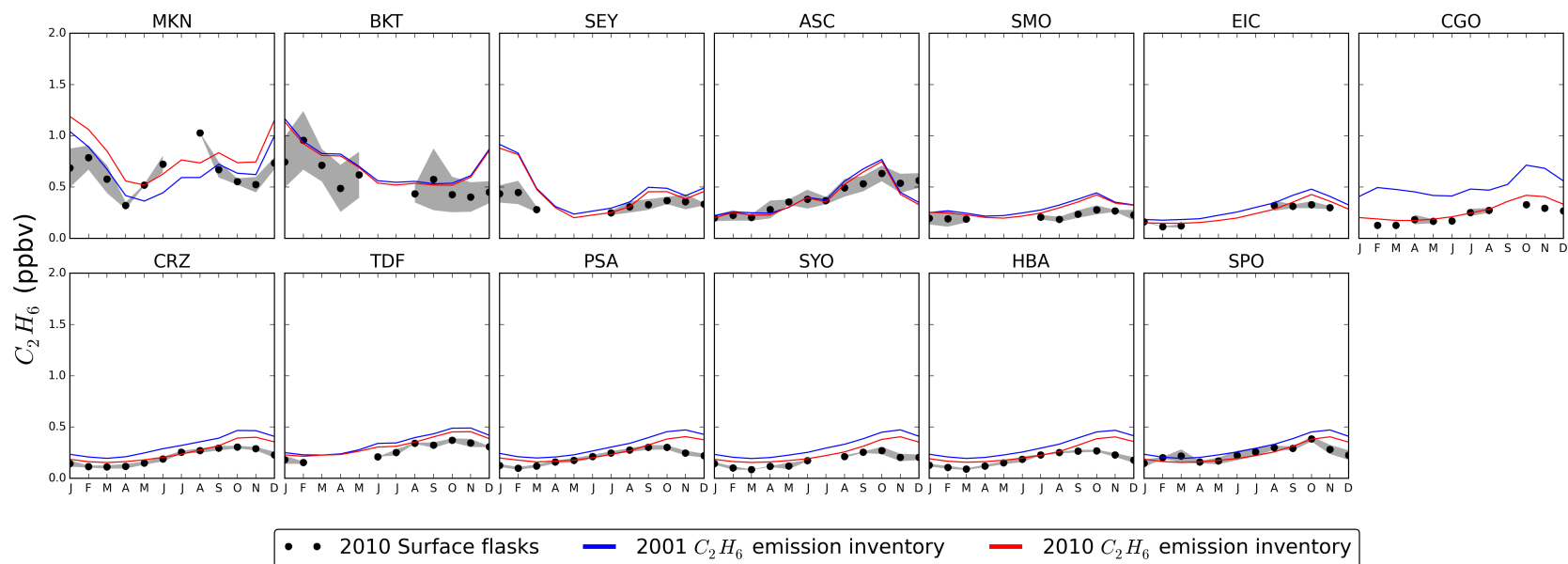


Figure S1. Comparison of Southern Hemisphere 2010 C_2H_6 surface mixing ratios to modeled 2001 and 2010 C_2H_6 emission inventories. Black dots represent C_2H_6 observations from NOAA GGGRN global surface flask network and grey areas denote their associated 1σ standard deviation. Lines represent model mixing ratios at the surface from both C_2H_6 emission inventories. Stations are ordered from higher to lower latitudes.

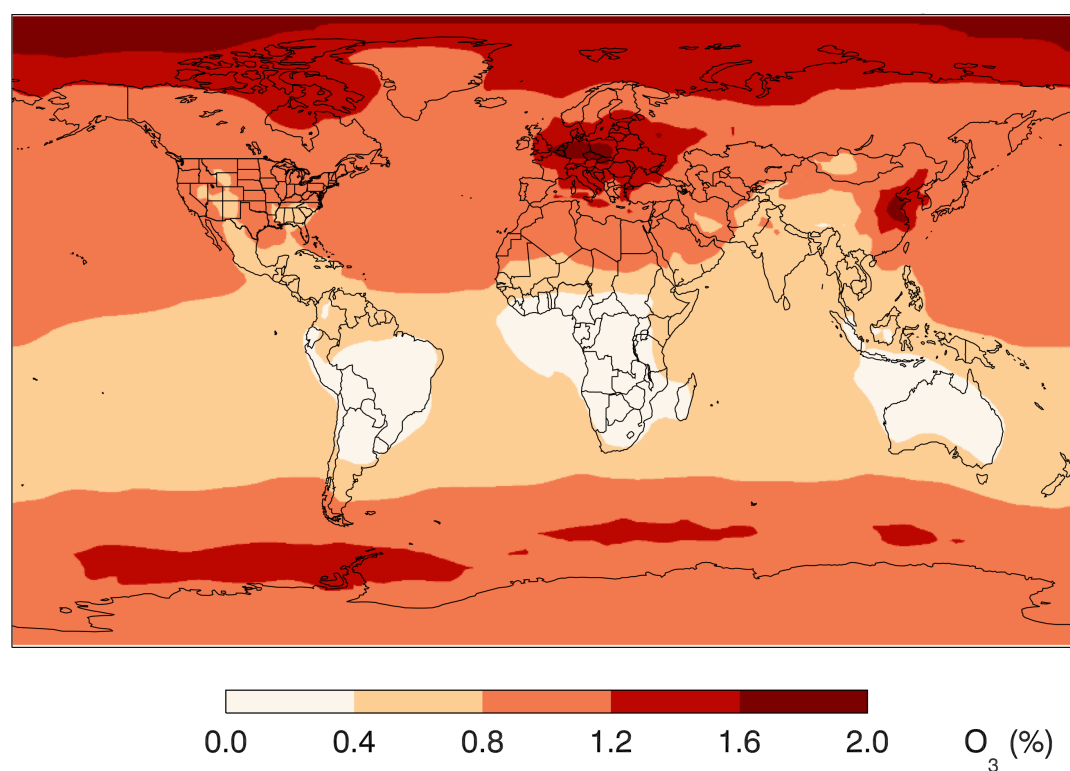
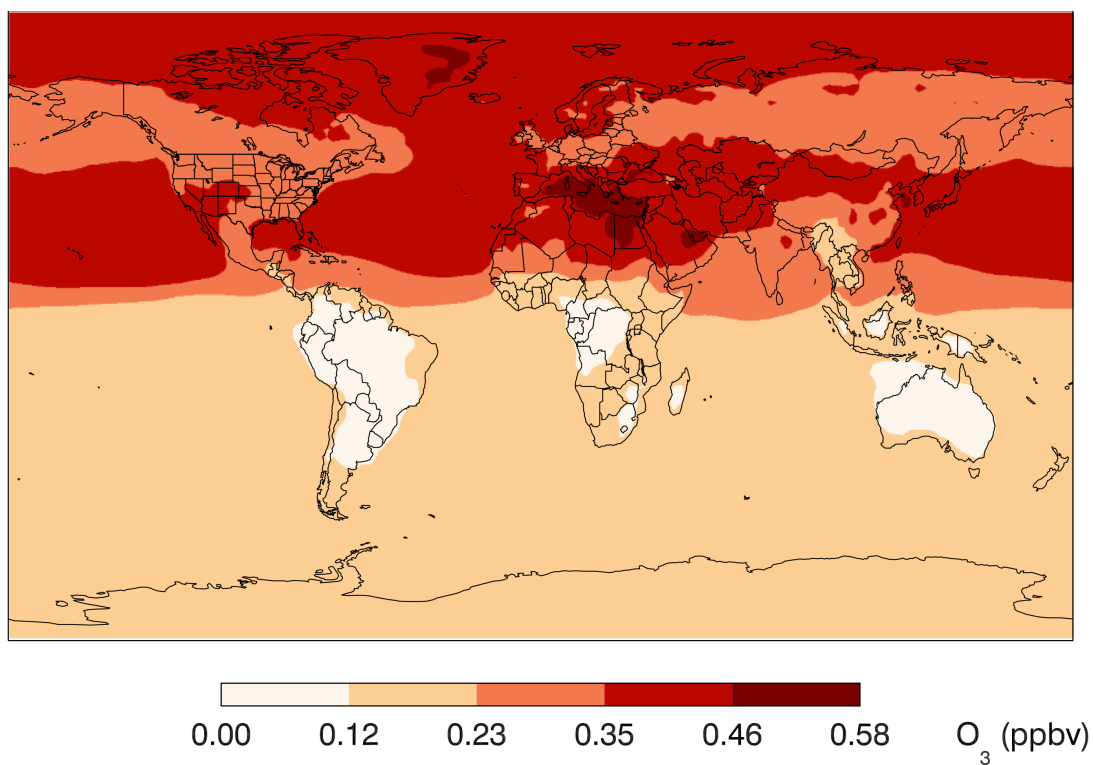


Figure S2. Absolute (top) and percent (bottom) averaged annual contribution of oxidation of C_2H_6 from fossil fuel sources to surface O_3 mixing ratios. Modeled C_2H_6 fossil fuel sources correspond to the 2010 C_2H_6 emission inventory.

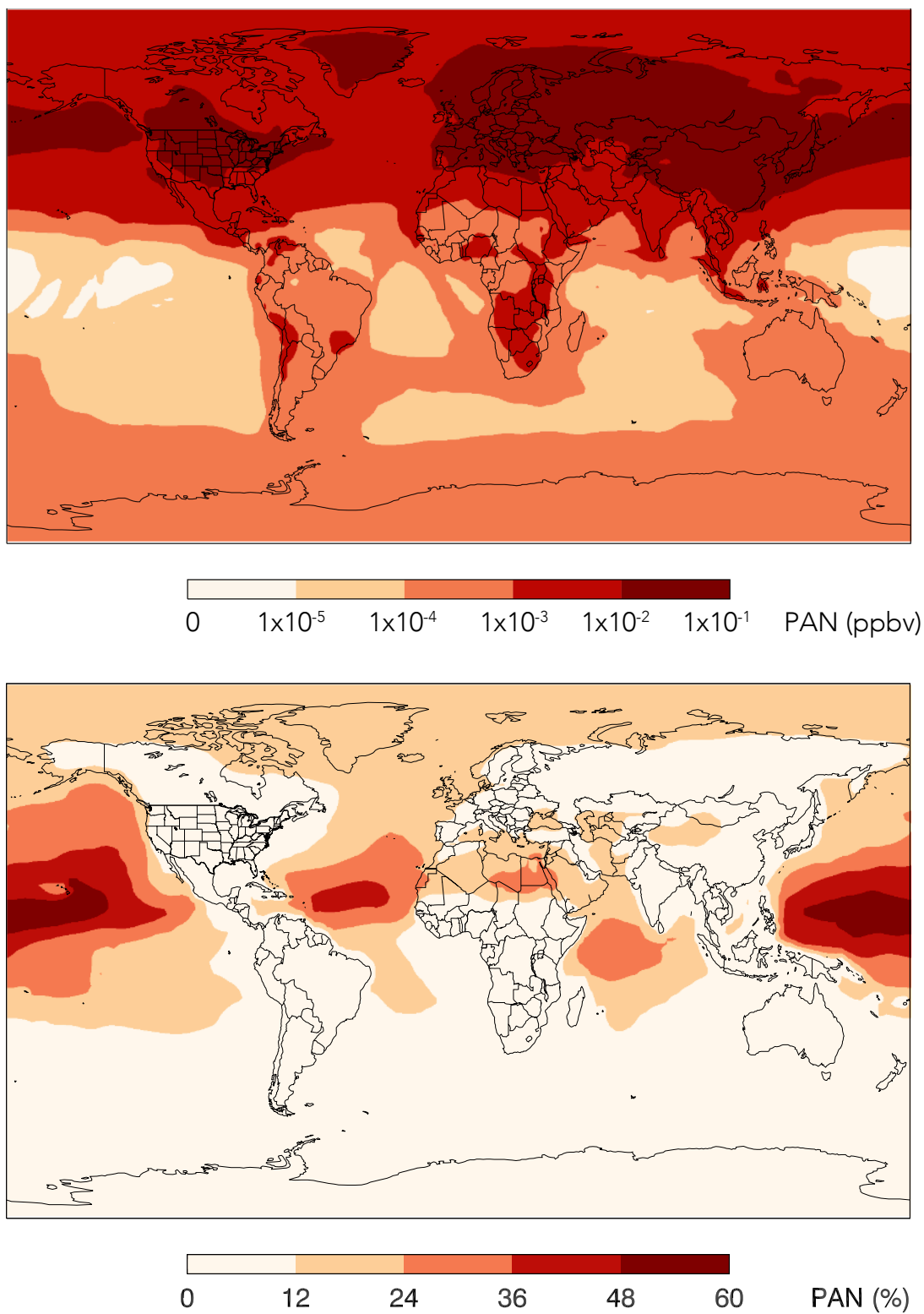


Figure S3. Absolute (top) and percent (bottom) averaged annual contribution of oxidation of C_2H_6 from fossil fuel sources to surface mixing ratios of PAN. Modeled C_2H_6 fossil fuel sources correspond to the 2010 C_2H_6 emission inventory.