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Atmospheric Chemistry and Physics Discussions

Supplement of

Long-range transport of black carbon to the Pacific Ocean and its dependence on aging timescale

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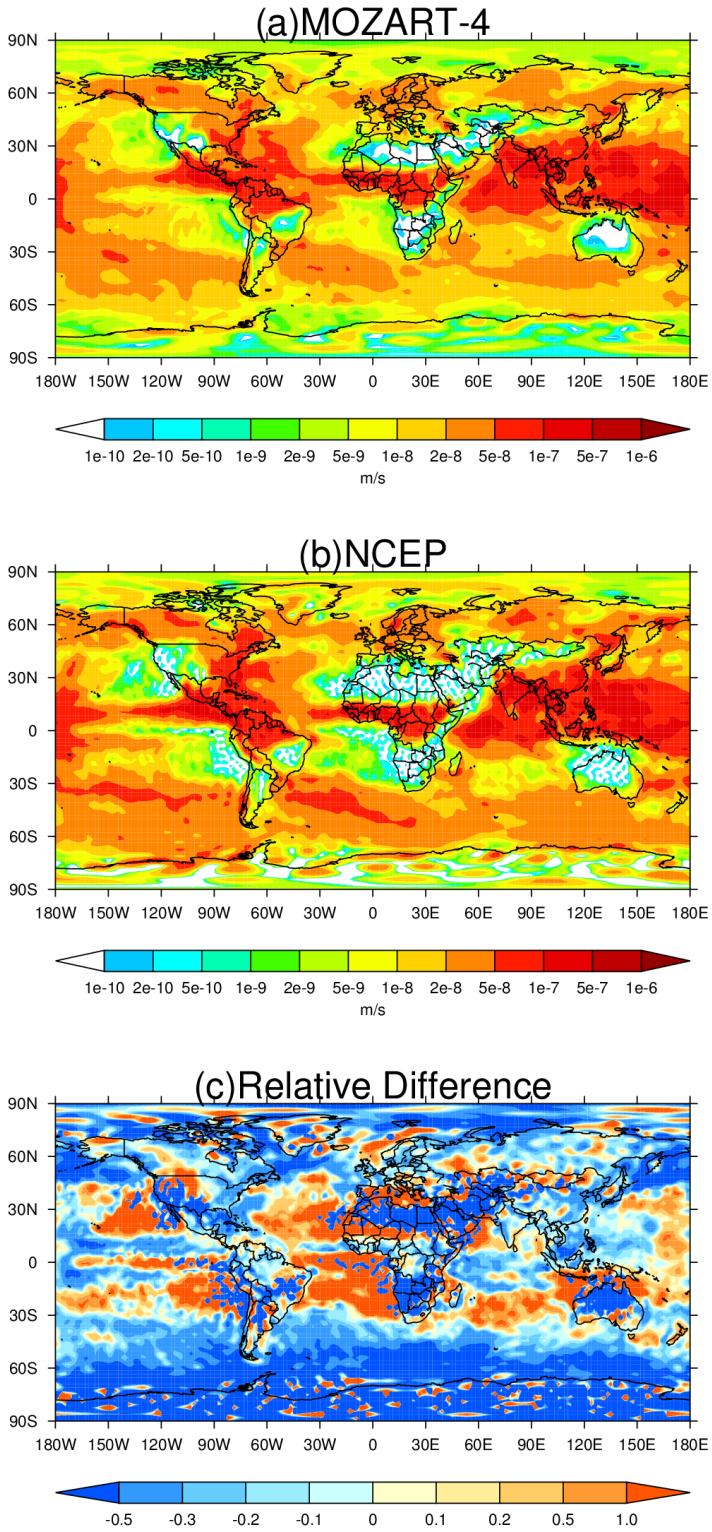

Figure S1. Average precipitation in August 2011: (a) MOZART-4 model, (b) NCEP reanalysis data, (c) the relative difference (MOZART-4 minus NCEP, normalized by NCEP).

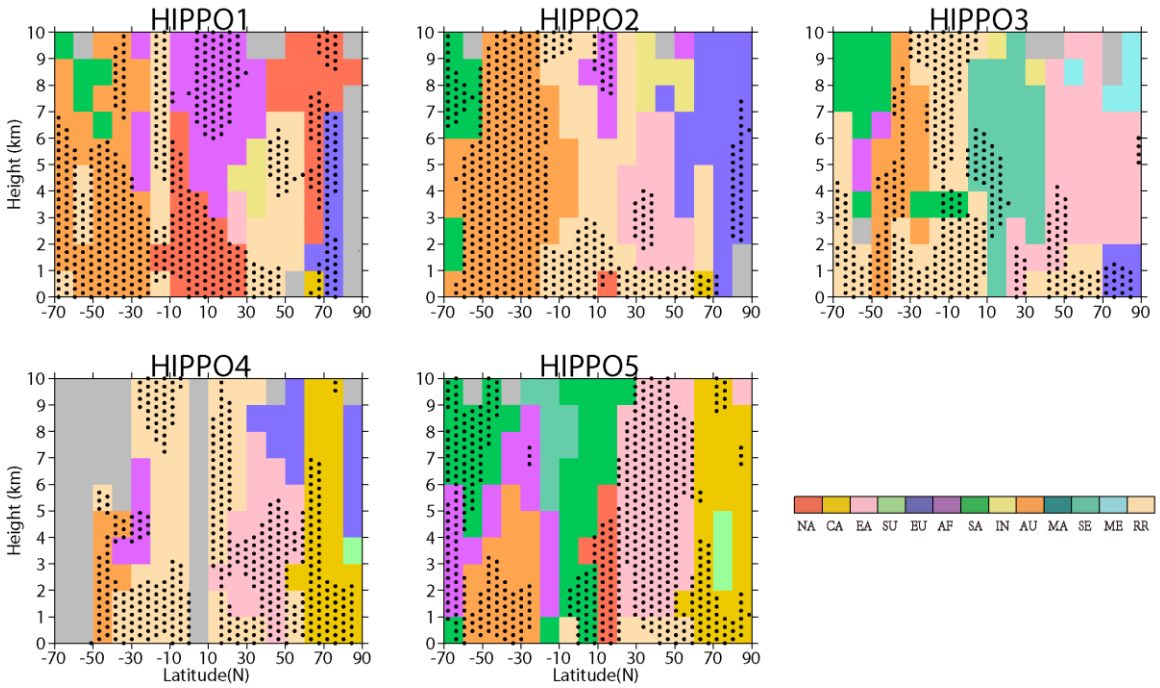

Figure S2. The most significant regional contributors to BC mass mixing ratios along the trajectories of five HIPPO campaigns, averaged over 1 km altitude and 10 ° latitude bins. Dotted areas represent where the most significant contributor accounts for more than 50% of the total BC mixing ratio.

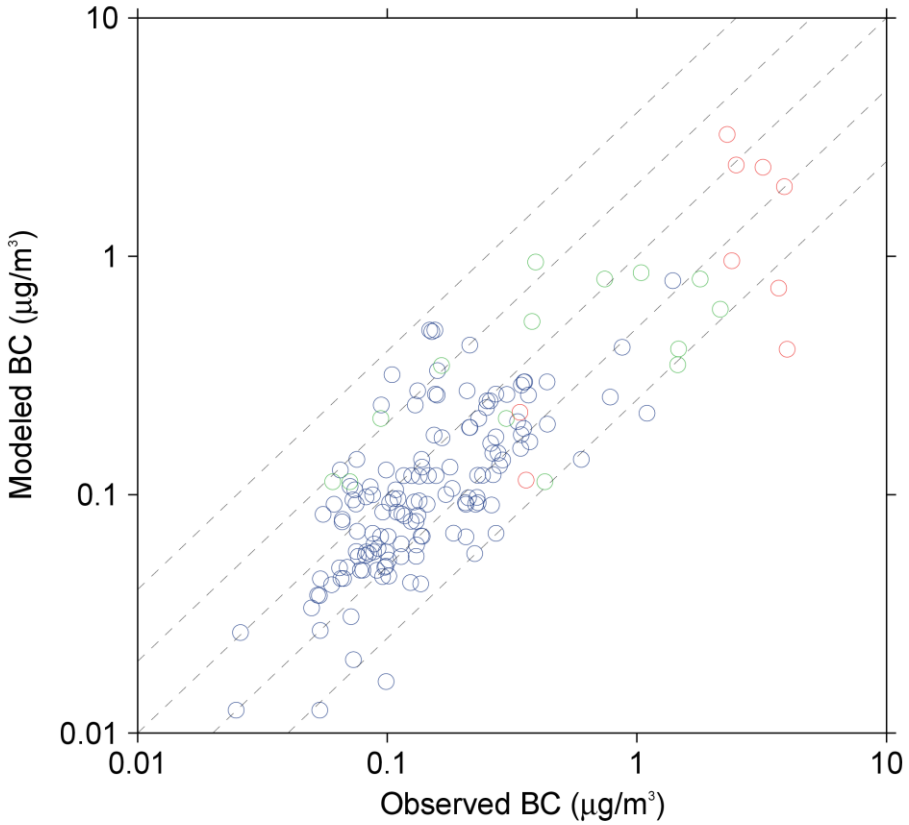

Figure S3. Modeled versus observed surface annual mean concentration of BC at sites in IMPROVE (blue), EMEP (green), and China (red). Dash lines are 1 : 4, 1 : 2, 1 : 1, 2 : 1, and 4 : 1 ratio lines. BC observations in China are attained from Zhang et al. (2008).

References

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