



Supplement of

The global impact of the transport sectors on atmospheric aerosol in 2030 – Part 1: Land transport and shipping

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Land transport impacts on POM

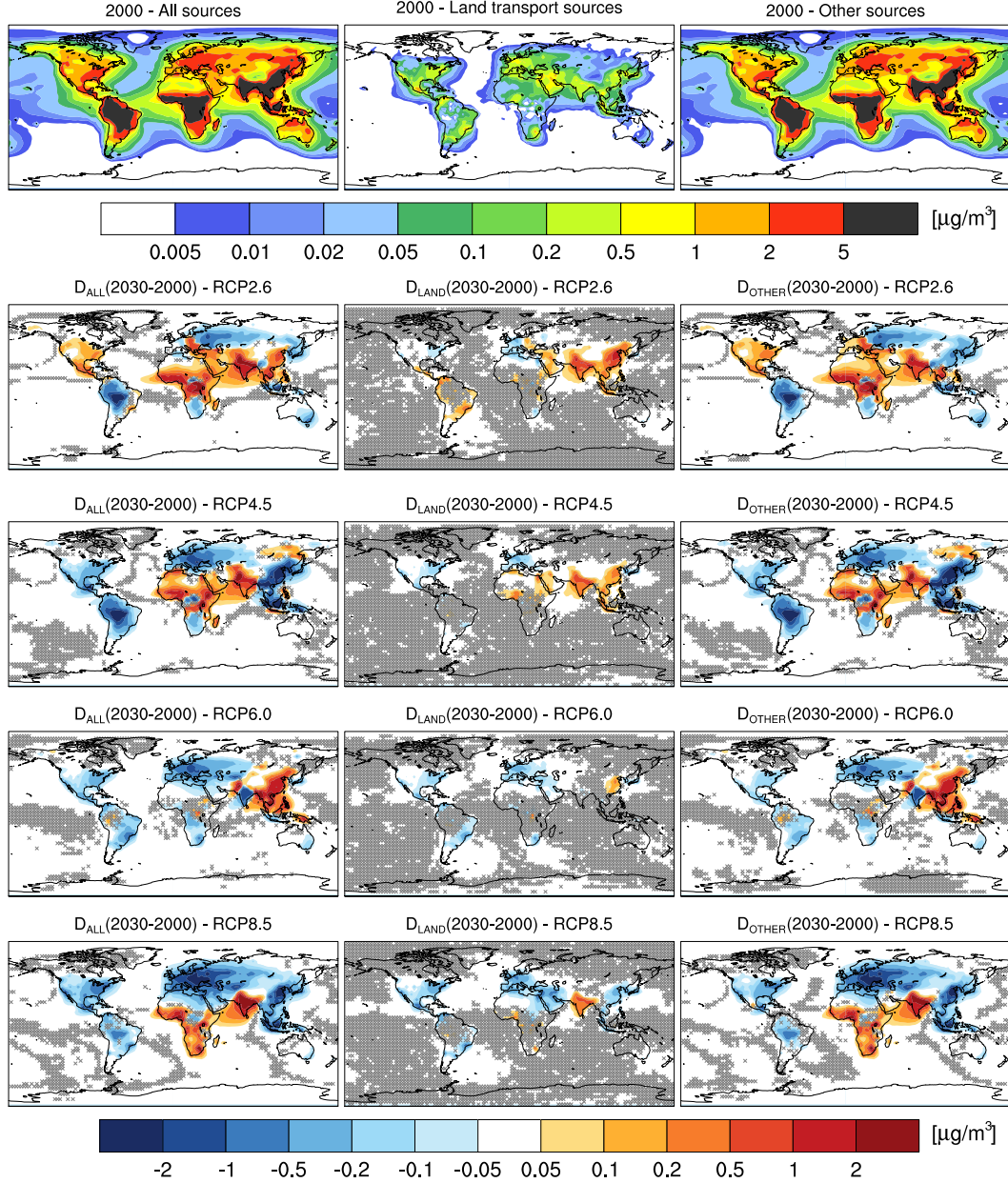


Fig. S1: Annual average large-scale mean surface-level concentrations of POM. The first row shows the values for 2000: total concentration (REF_{2000} , left), the concentration induced by land transport ($\Delta_{2000}^{\text{LAND}}$, middle) and the concentration induced by other sources (NOLAND_{2000} , right). The other rows show the changes in the same quantities between 2000 and 2030 for the four RCPs, as given in Eqs. (2)–(4) in the paper. Grid points where the difference is not statistically significant according to a uni-variate t test (5 % error probability) are hatched.

Land transport impacts on SO₄

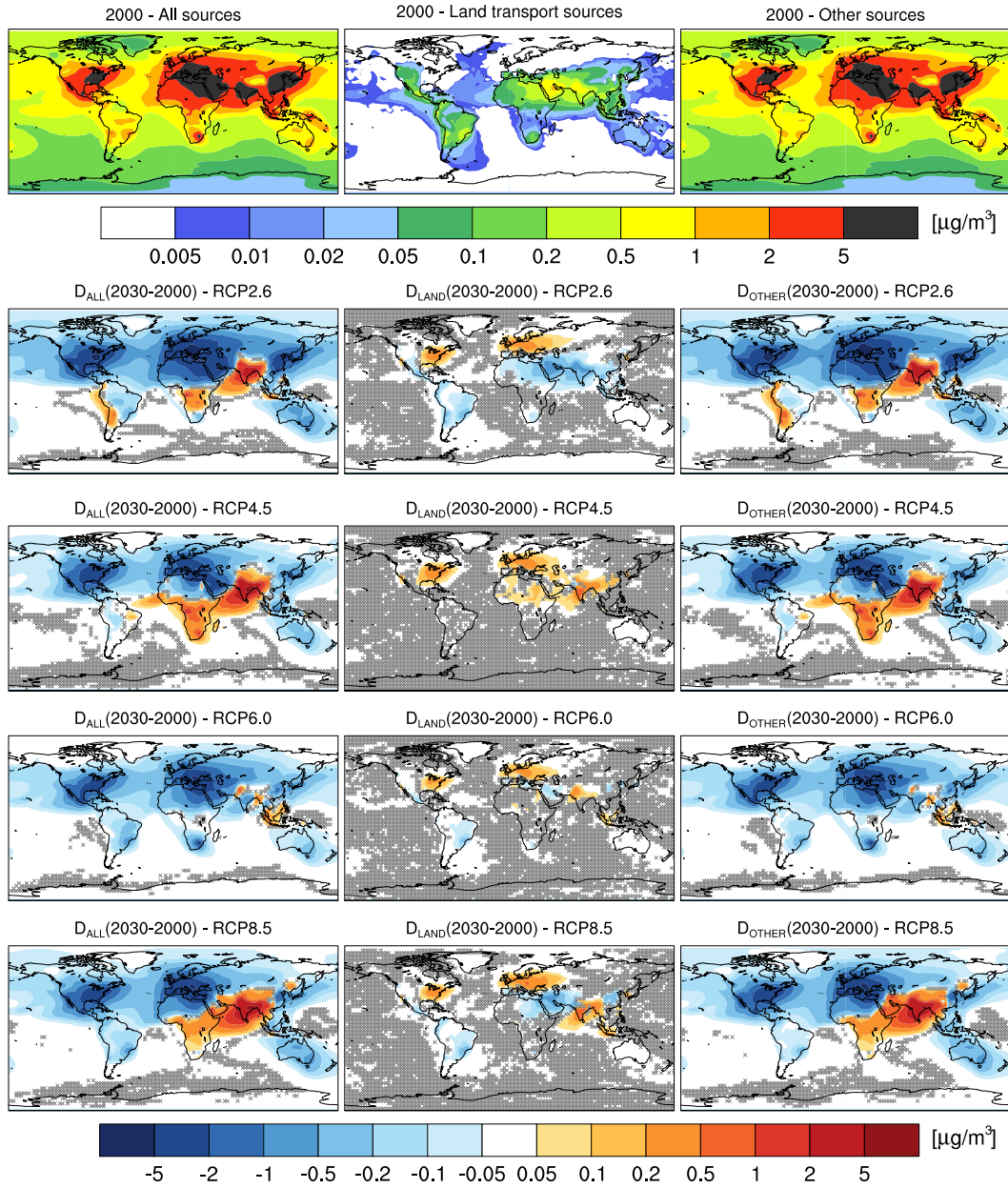


Fig. S2: As in Fig. S1, for sulfate concentrations.

Land transport impacts on NH_4

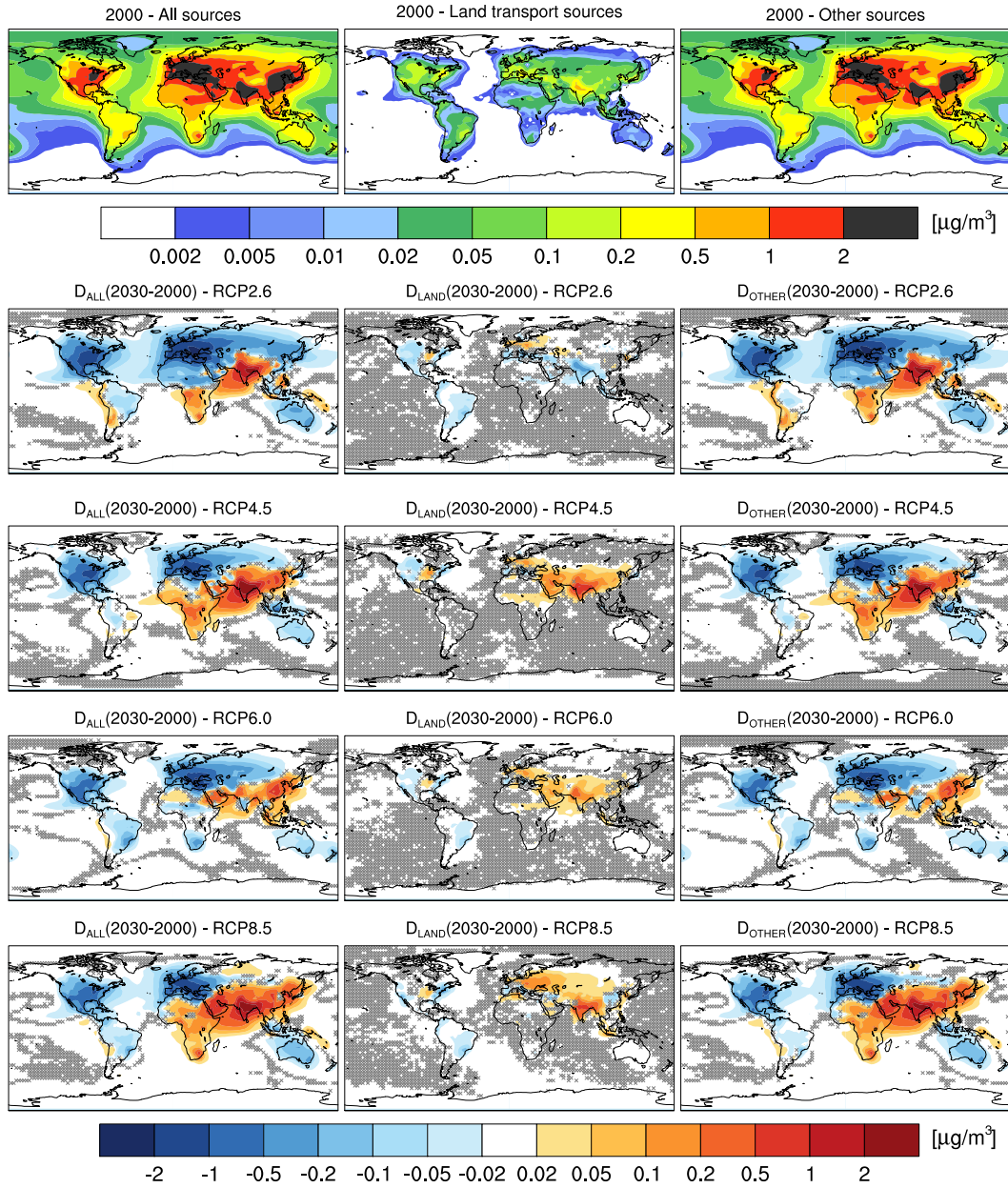


Fig. S3: As in Fig. S1, for aerosol ammonium concentrations.

Shipping impacts on BC

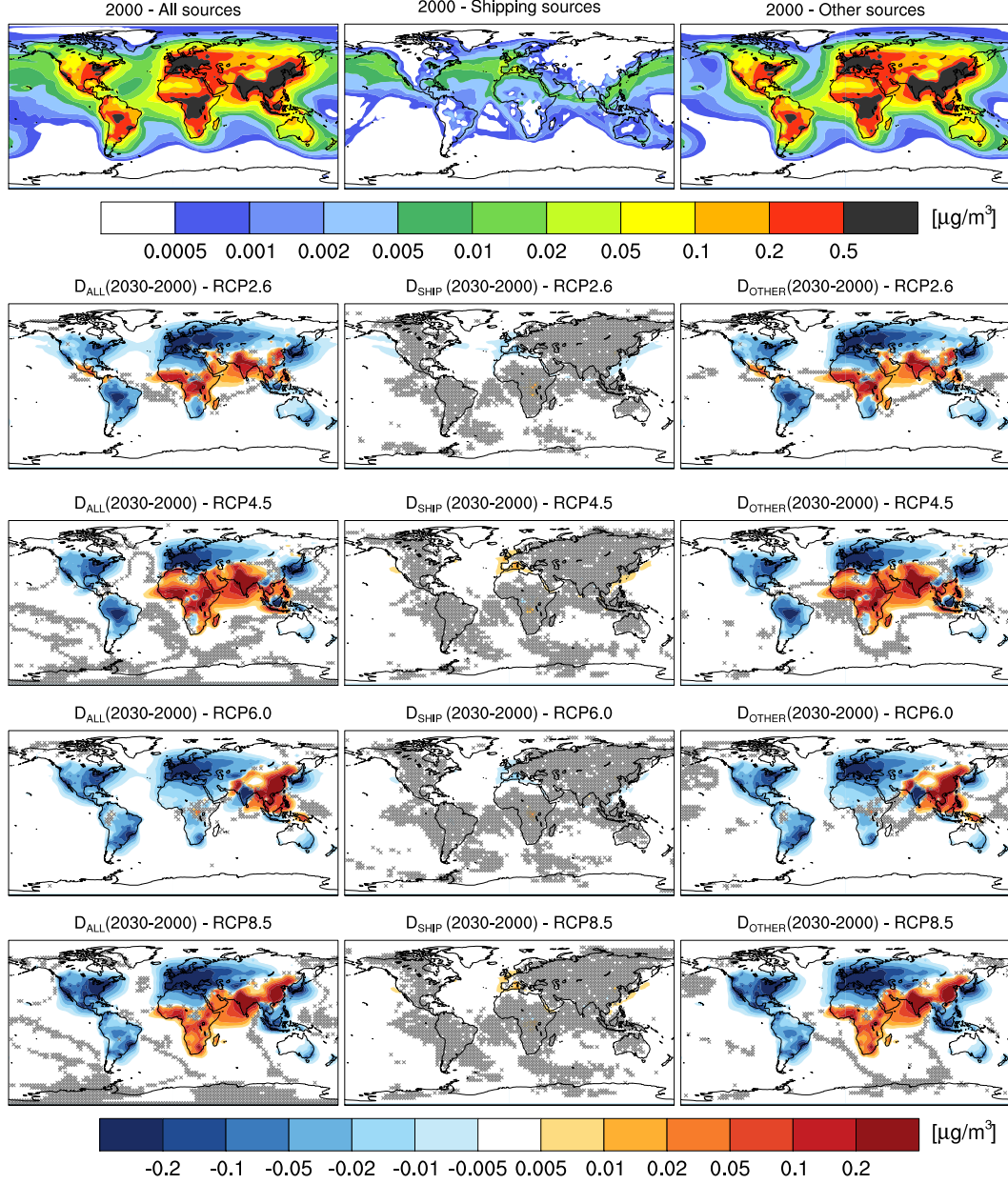


Fig. S4: Annual average large-scale mean surface-level concentrations of BC. The first row shows the values for 2000: total concentration (REF_{2000} , left), the concentration induced by shipping ($\Delta_{2000}^{\text{SHIP}}$, middle) and the concentration induced by other sources (NOSHIP_{2000} , right). The other rows show the changes in the same quantities between 2000 and 2030 for the four RCPs, as in Figs. 3–5 in the paper. Grid points where the difference is not statistically significant according to a uni-variate t test (5 % error probability) are hatched.

Shipping impacts on POM

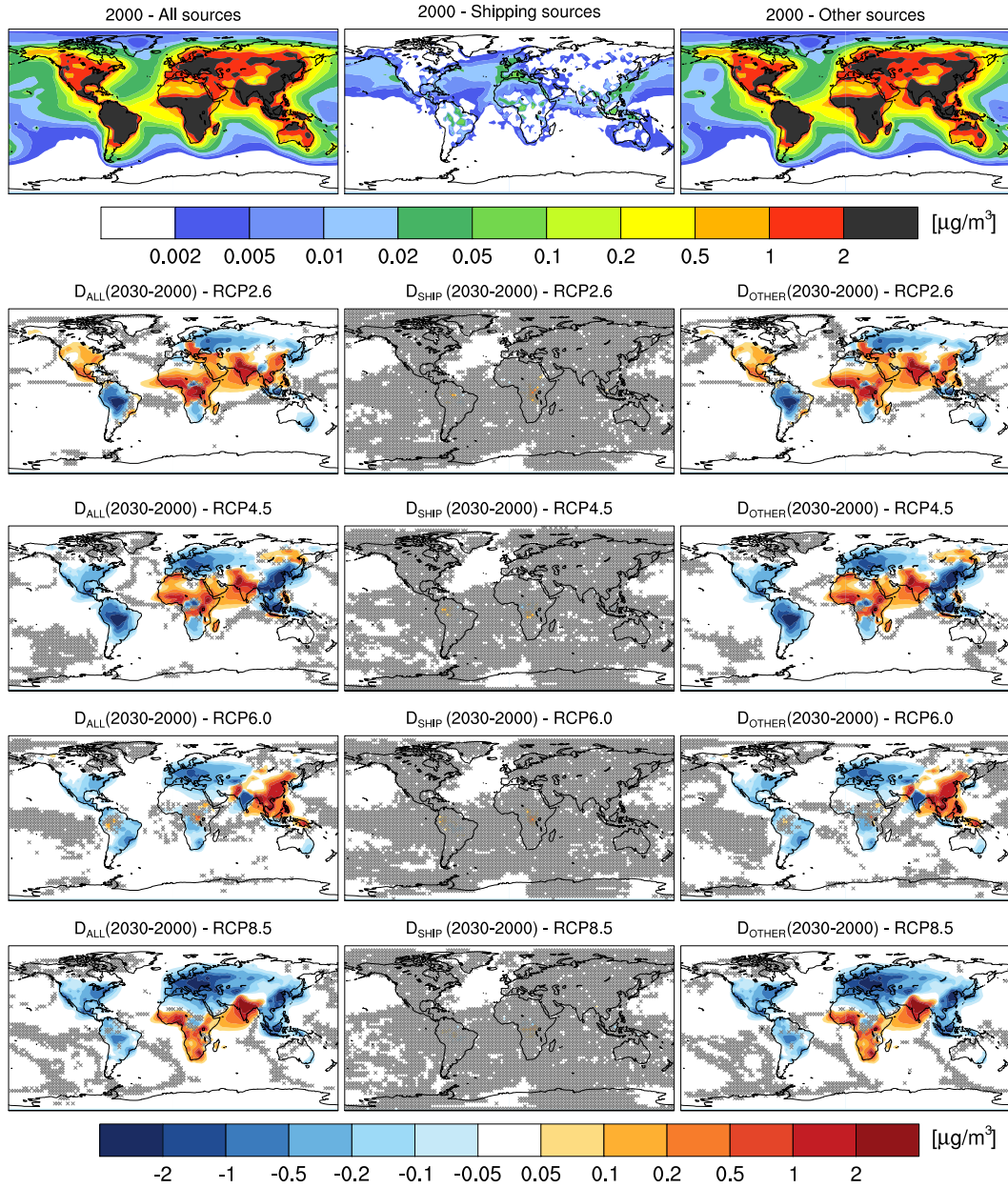


Fig. S5: As in Fig. S4, for POM concentrations.

Shipping impacts on NH₄

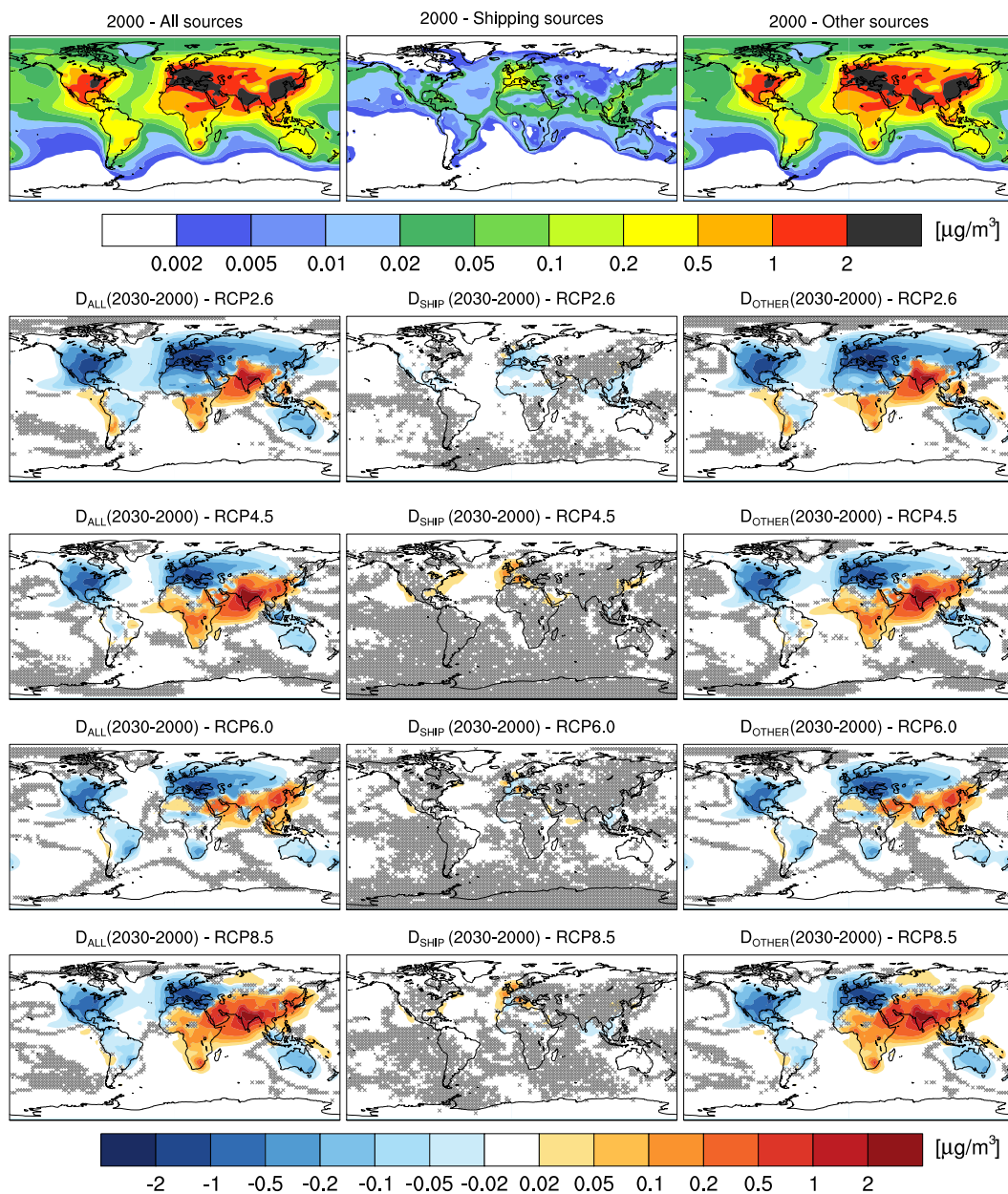


Fig. S6: As in Fig. S4, for aerosol ammonium concentrations.