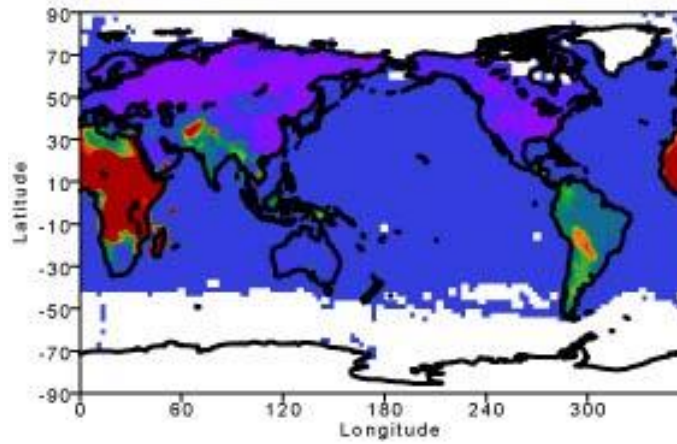
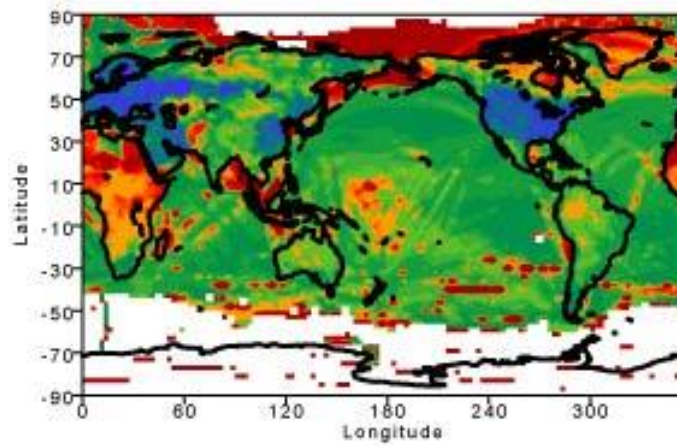


(a) SO₂ emission from fossil fuel combustion



(b) NO₂ emission



(c) NH₃ emission

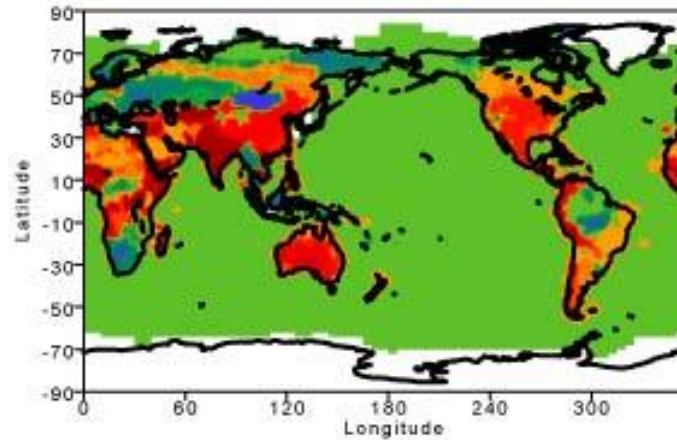


Figure S1. Ratios of (a) emission from fossil fuel combustion in 2100 to 2000 for SO₂, (b) total emission in 2100 to 2000 for NO₂, and (c) that for NH₃.

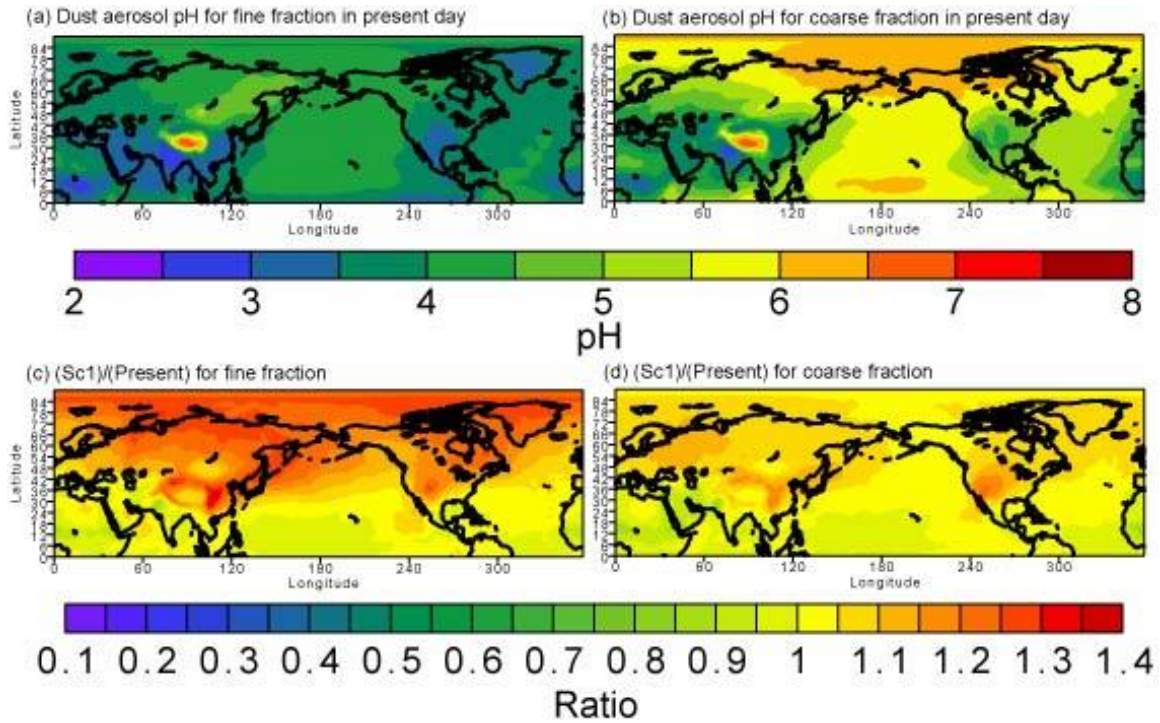


Figure S2. Spatial distribution of vertically and annually averaged dust pH for (a) fine (radius: $<1.25 \mu\text{m}$) and (b) coarse fraction (radius: $1.25\text{--}10 \mu\text{m}$) for the present day and the ratio of (Scenario 1)/(Present) for (c) fine and (d) coarse fraction.