Figure S1: Sensitivity of PAN to emissions from biomass burning during December 20015 (top) and December 2006 (bottom) at 6 km calculated as the difference in PAN between a simulation with and without biomass burning emissions.

Figure S2: Sensitivity of PAN to emissions of lightning NO$_x$ during December 20015 (top) and December 2006 (bottom) at 6 km calculated as the difference in PAN between a simulation with and without lightning NO$_x$ emissions.