



Figure S1: Antarctic mean seasonal cycle of (total) BC AOD for simulations with GISS modelE (in colors) compared to the AeroCom models (in light grey). The darker grey AeroCom model is the GISS modelE AeroCom run. (a) shows emission perturbations for a doubling of BC emissions (fossil fuel and biofuel) in South Asia (green), East Asia (red), and Russia (yellow). (b) shows double (red) and half (green) of the e-folding time from hydrophobic to hydrophilic BC.