HW # 2

CLIM319/GGS-319

We have examined the effects of aerosols on the surface temperature T_o of the Earth.

1) Sulfate aerosols scatter solar radiation (no absorption), and do not absorb or scatter terrestrial radiation. Discuss briefly what effect would an increase in sulfate aerosol concentrations have on T_o ?

2) Soot aerosols absorb solar and terrestrial radiation (no scatter). Discuss briefly how the effect of a soot layer on T_o depends on the altitude of the layer.