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Supplement of

Changing transport processes in the stratosphere by radiative heating of sulfate aerosols

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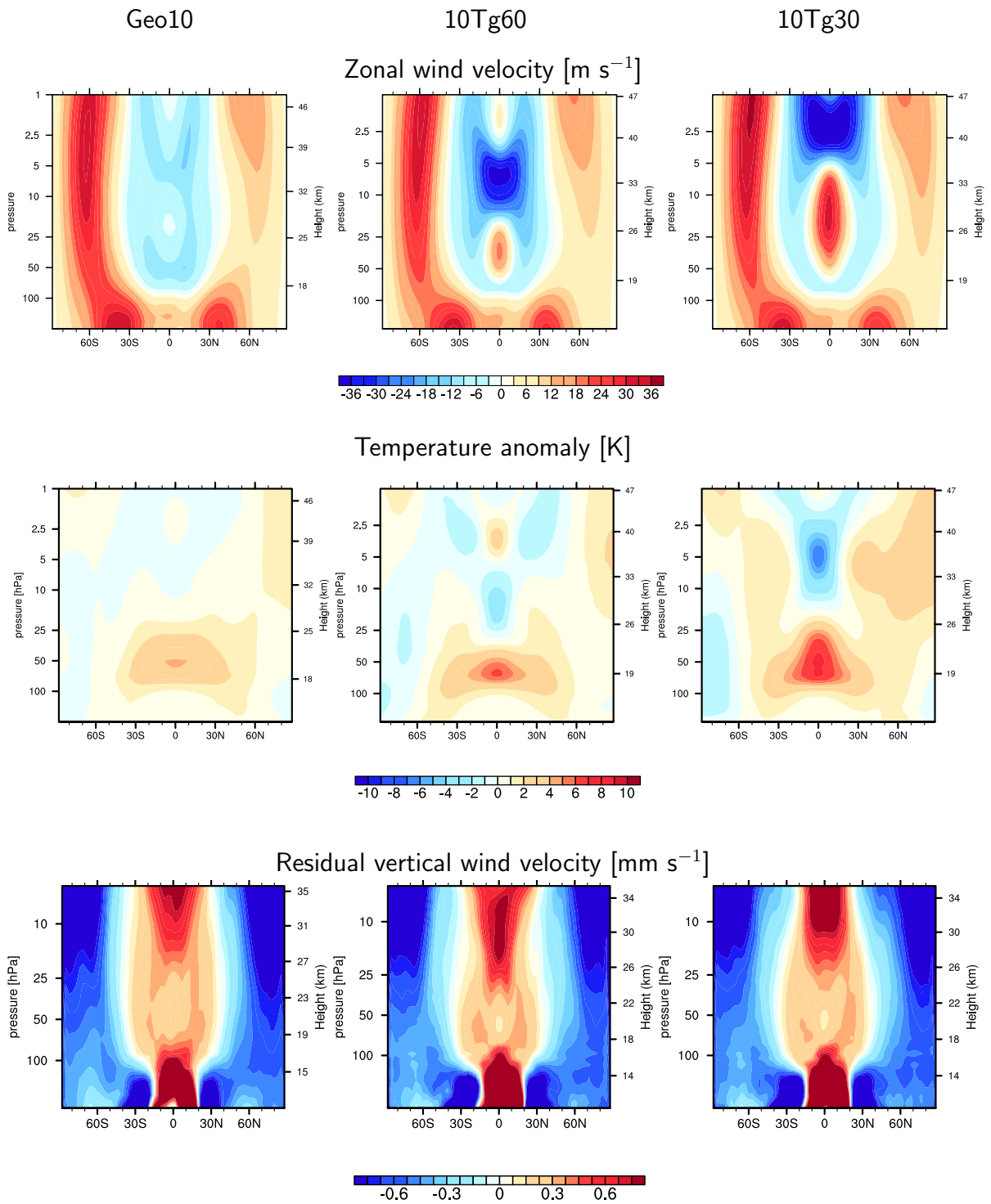


Figure 1: Zonal wind (top) temperature anomaly (middle) and residual vertical wind (bottom) as simulated in the three experiments with an injection rate of 10 Tg(S) yr^{-1} . Vertical axes show pressure levels [hPa] and height [km], respectively.

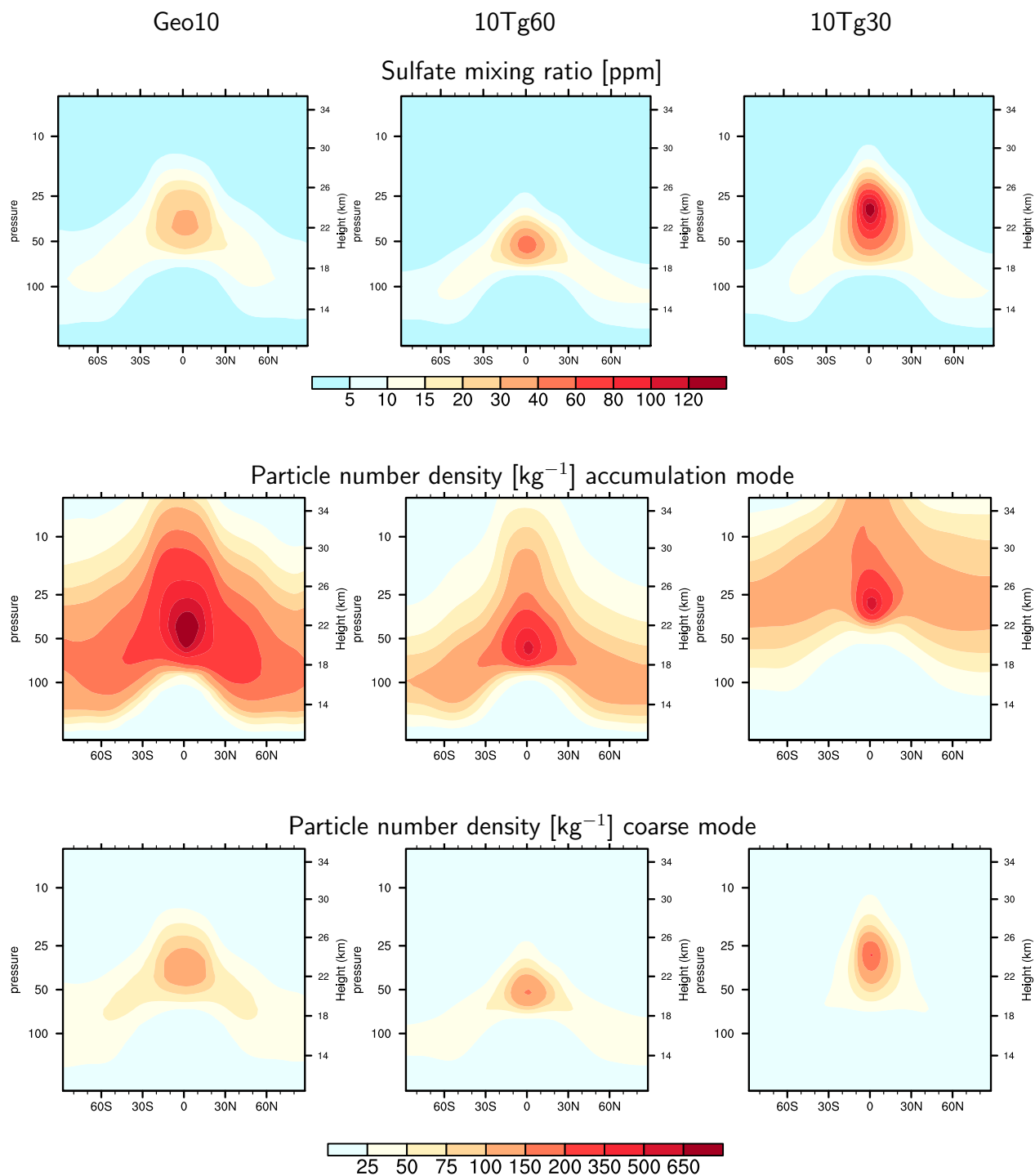


Figure 2: Annual and zonal mean of sulfate mixing ratios [ppm] and of aerosol number density [kg⁻¹] of accumulation mode particles (radius r : $0.05 \mu\text{m} \leq r \leq 0.2 \mu\text{m}$) and coarse mode particles ($r \geq 0.2 \mu\text{m}$) as simulated in the three experiments with an injection rate of $10 \text{Tg(S)} \text{ yr}^{-1}$. Only particles in accumulation and coarse modes are radiatively active.