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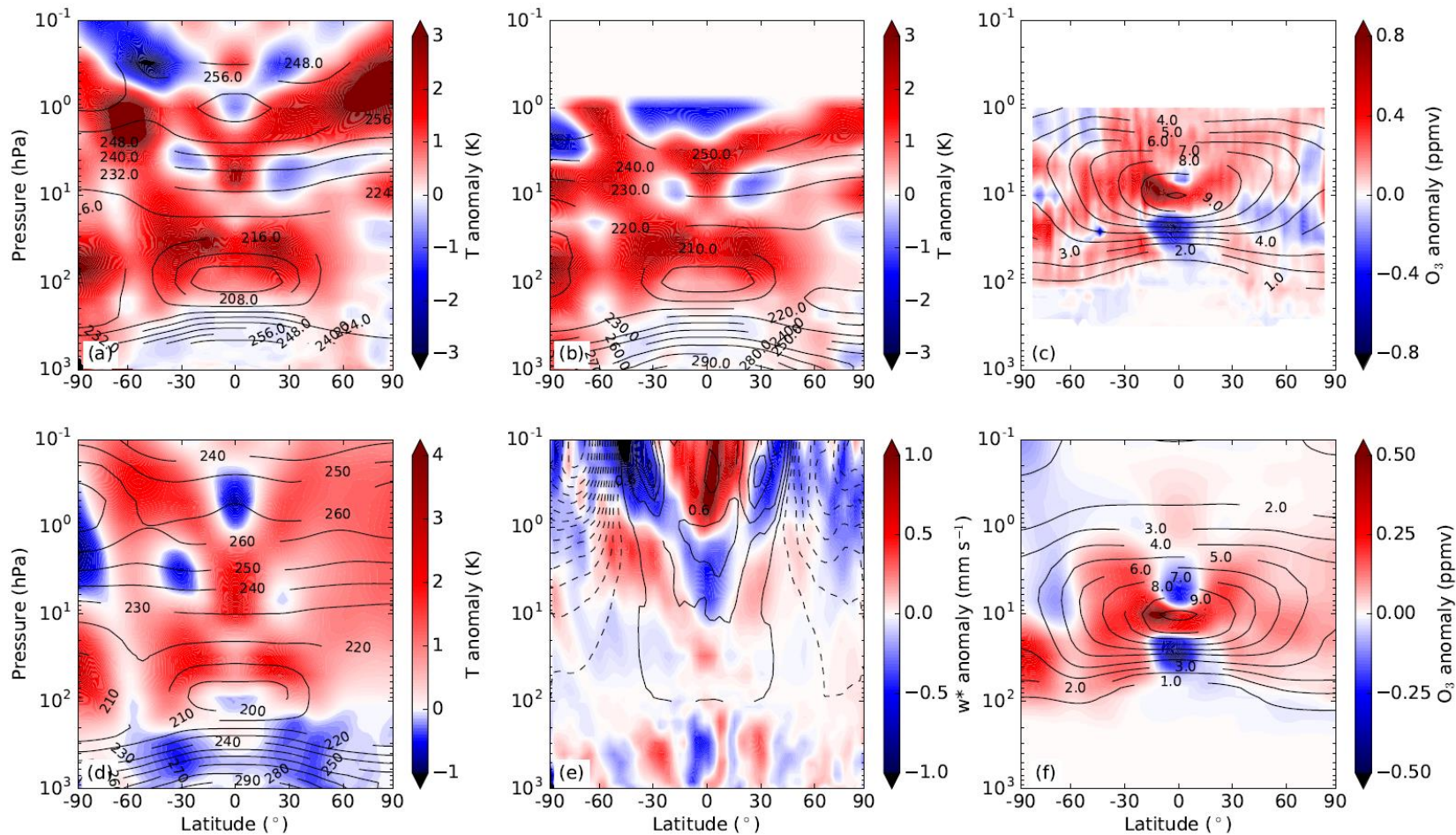
Supplement of

Impacts of Mt Pinatubo volcanic aerosol on the tropical stratosphere in chemistry–climate model simulations using CCM1 and CMIP6 stratospheric aerosol data

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Top row: Zonal-mean anomalies in the 6 months following the Mt. Pinatubo eruption for (a) MERRA temperature reanalyses; (b) ERA-Interim temperature reanalyses; (c) SWOOSH ozone observations. Black contour lines show the annual climatological mean (1986-2005). **Bottom row:** As for Figure 2(a-c), but for the simulations using CMIP6 stratospheric aerosol. i.e., ensemble-mean, zonal-mean anomalies averaged over the 6 months following the Mt. Pinatubo eruption. (d) Temperature anomalies in the CMIP6 ensemble (red/blue shading). Black contours indicate the annual climatological mean (1986-2005) temperatures for the CMIP6 ensemble. (e) As for (d), but showing anomalies in the rate of the vertical residual circulation (w^*). For clarity, the annual climatological mean rate of the vertical residual circulation (black contours) is only shown above 100 hPa. Dashed contours indicate negative values. (f) As for (d), but showing ozone anomalies.