

Supplement to:

Climate response to off-equatorial stratospheric sulfur injections in three Earth System Models - Part 2: stratospheric and free-tropospheric response

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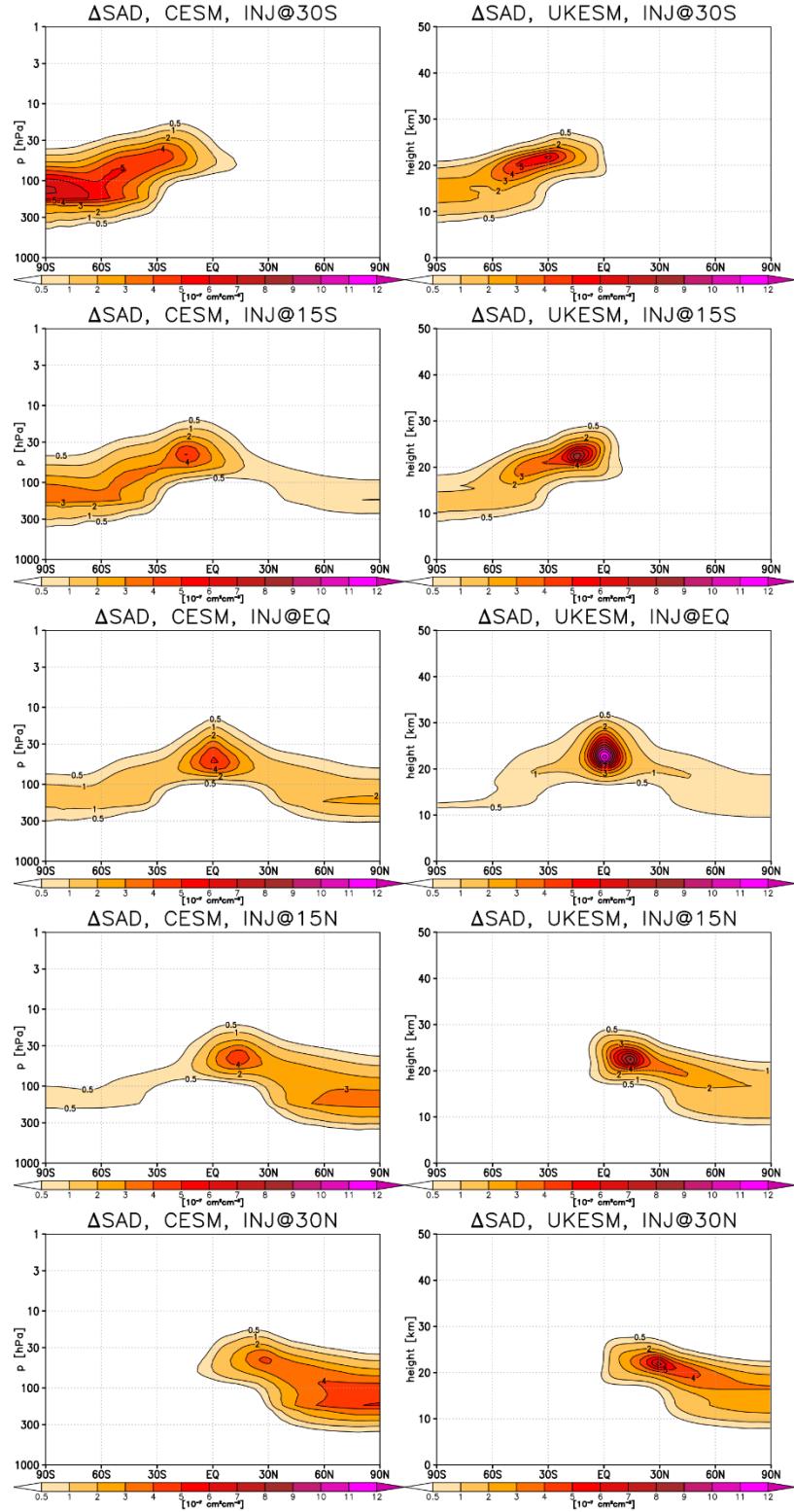


Figure S1. As in Fig. 1 but changes calculated using the online SAD diagnostics, which are available for CESM and UKESM only.

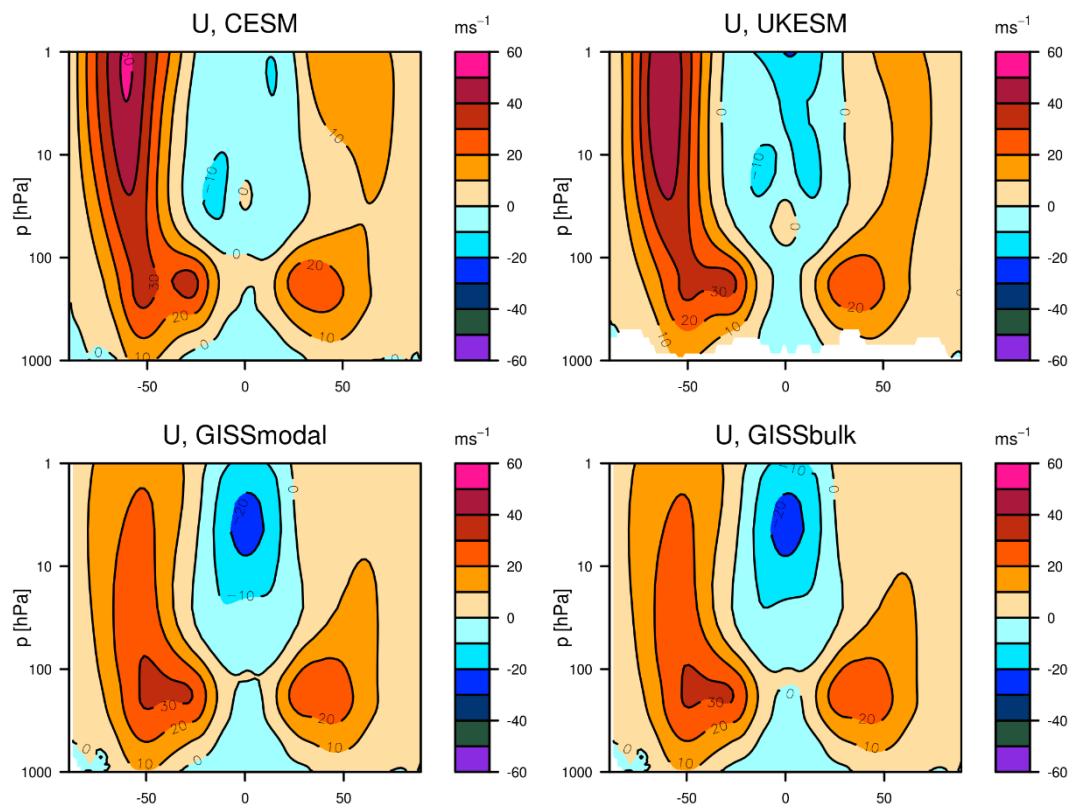


Figure S2. Climatological zonal mean winds [m/s], averaged over 2035-2064, in the control SSP2-4.5 for each of the four models.

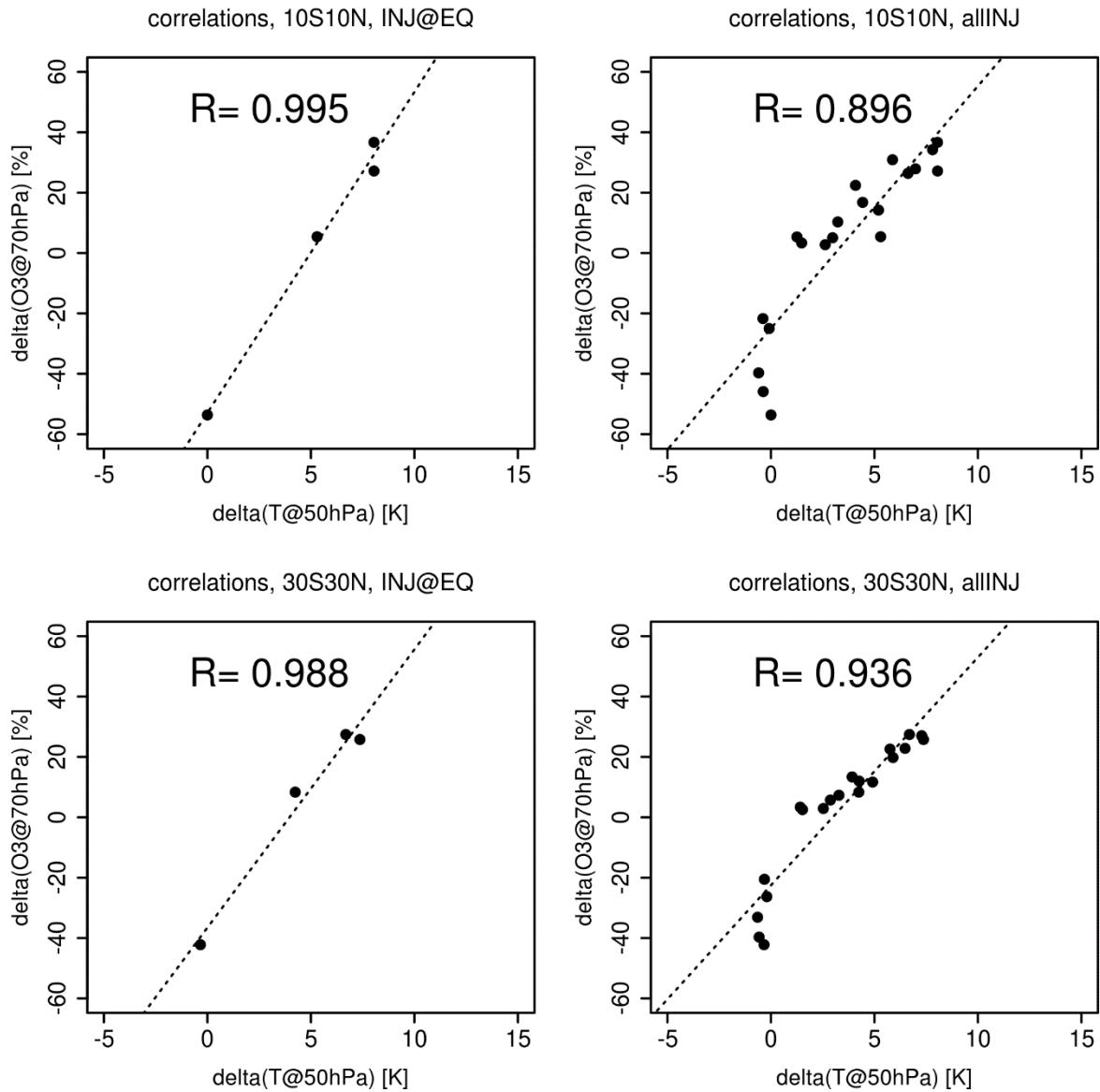


Figure S3. Correlation of tropical (10S-10N in top panels, and 30S-30N in bottom panels) temperature change at 50 hPa with the associated ozone change at 70 hPa for the equatorial injection case (left) and all injection cases (right) for all of the models combined.

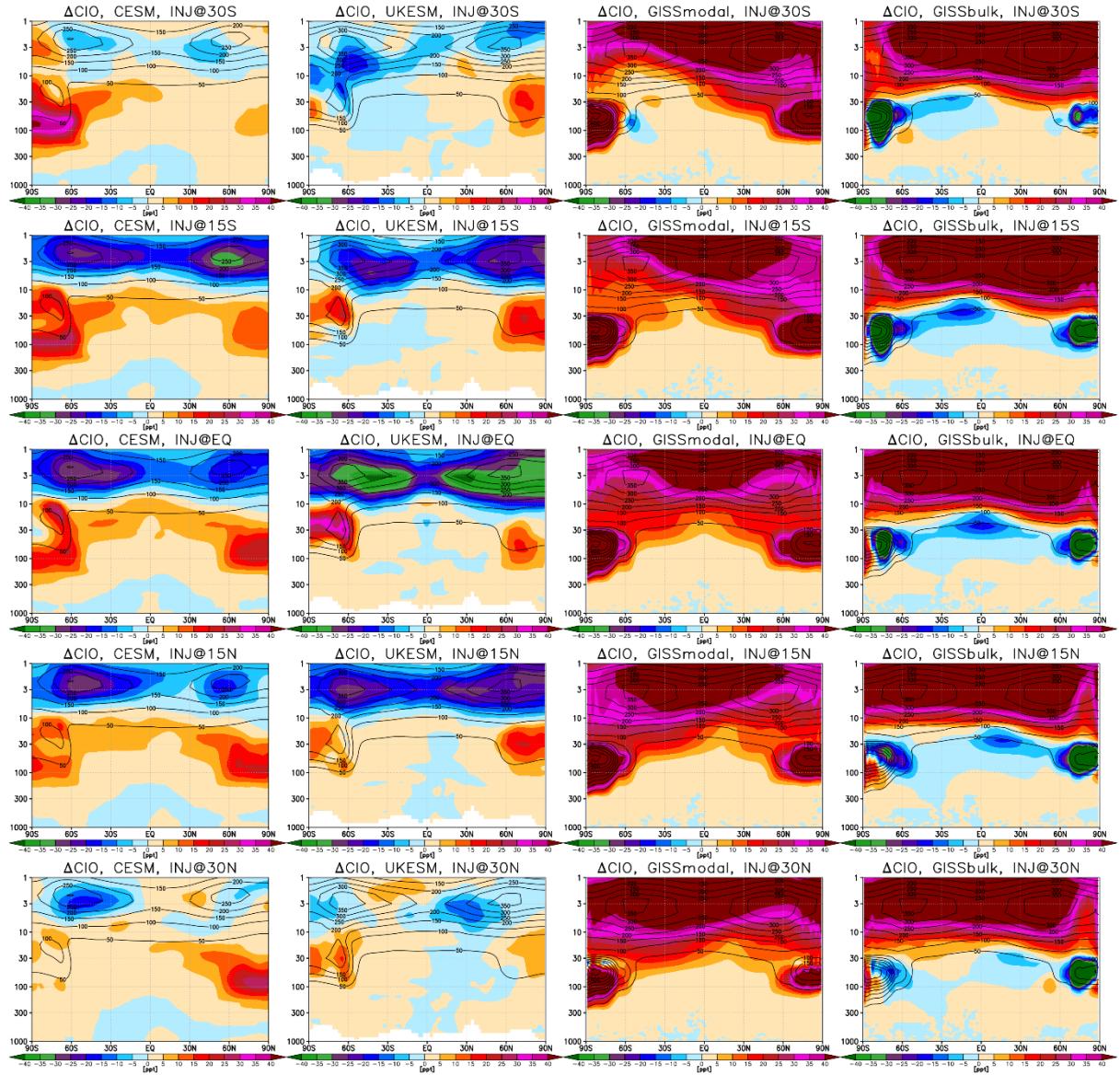


Figure S4. As in Figure 3 but for the associated changes in CIO [ppt].

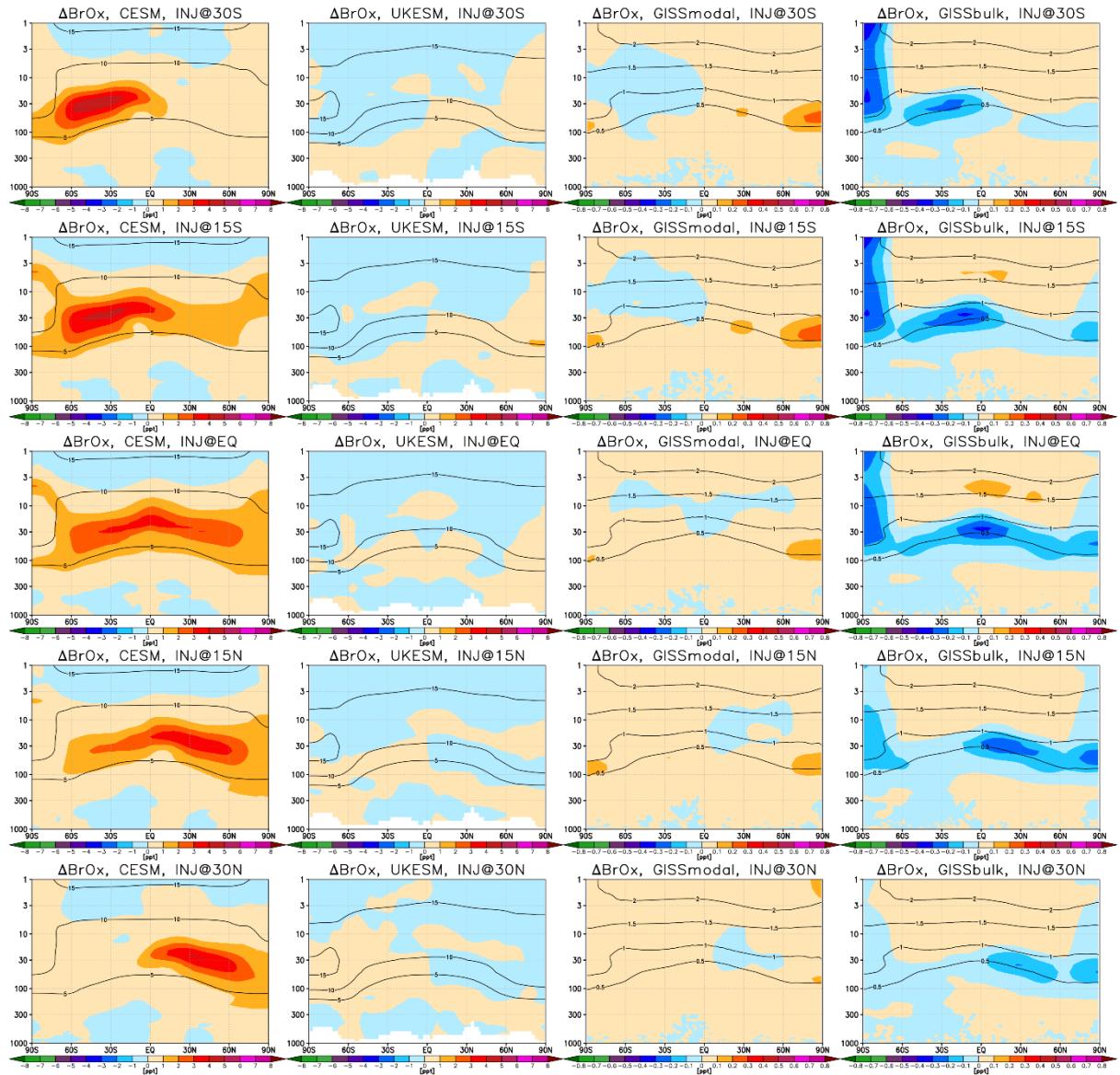


Figure S5. As in Figure 3 but for the associated changes in the activated bromine, BrOx [ppt]. Note differences in scale between CESM/UKESM and GISS values.

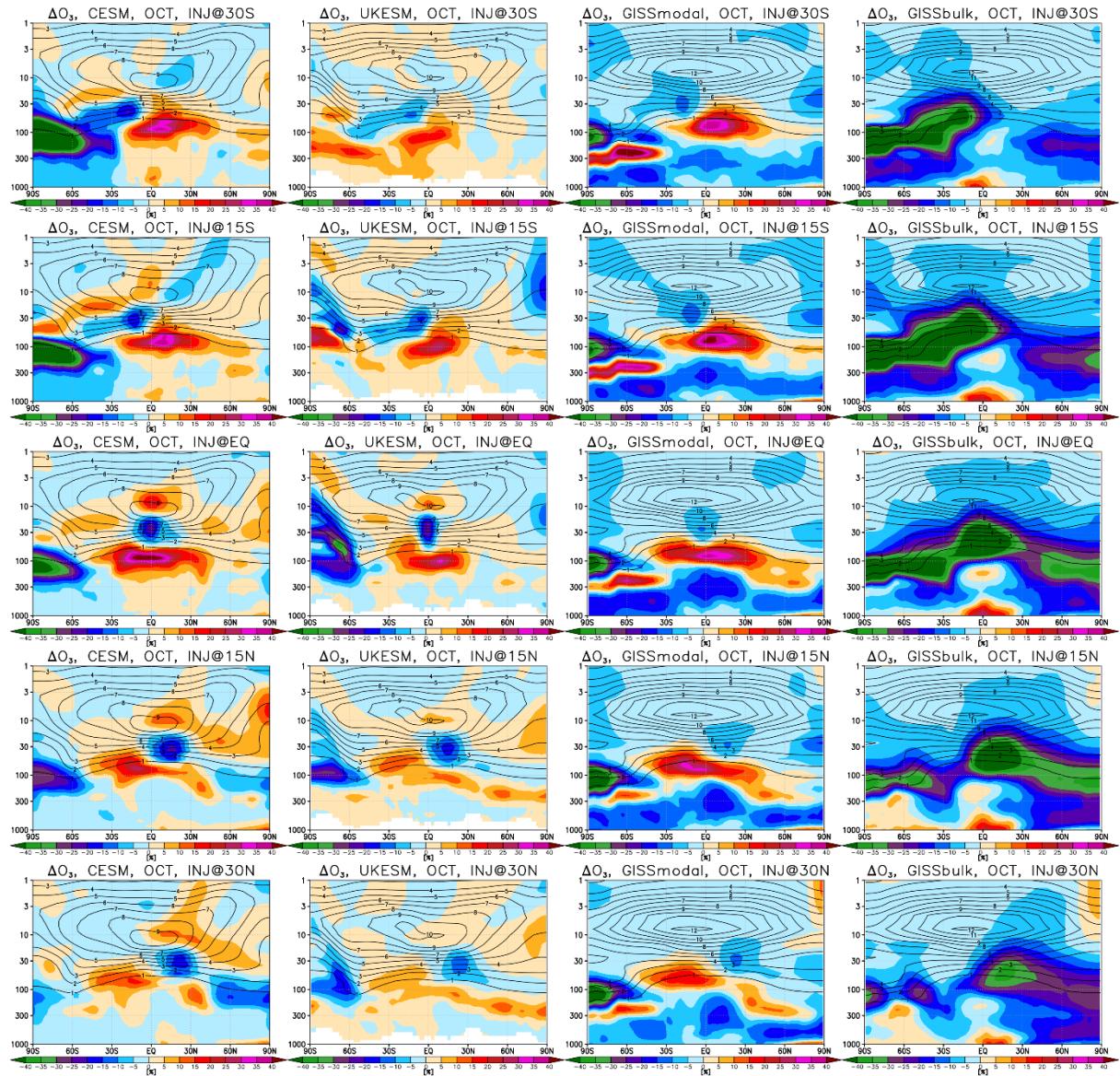


Figure S6. As in Figure 6 but for October mean.

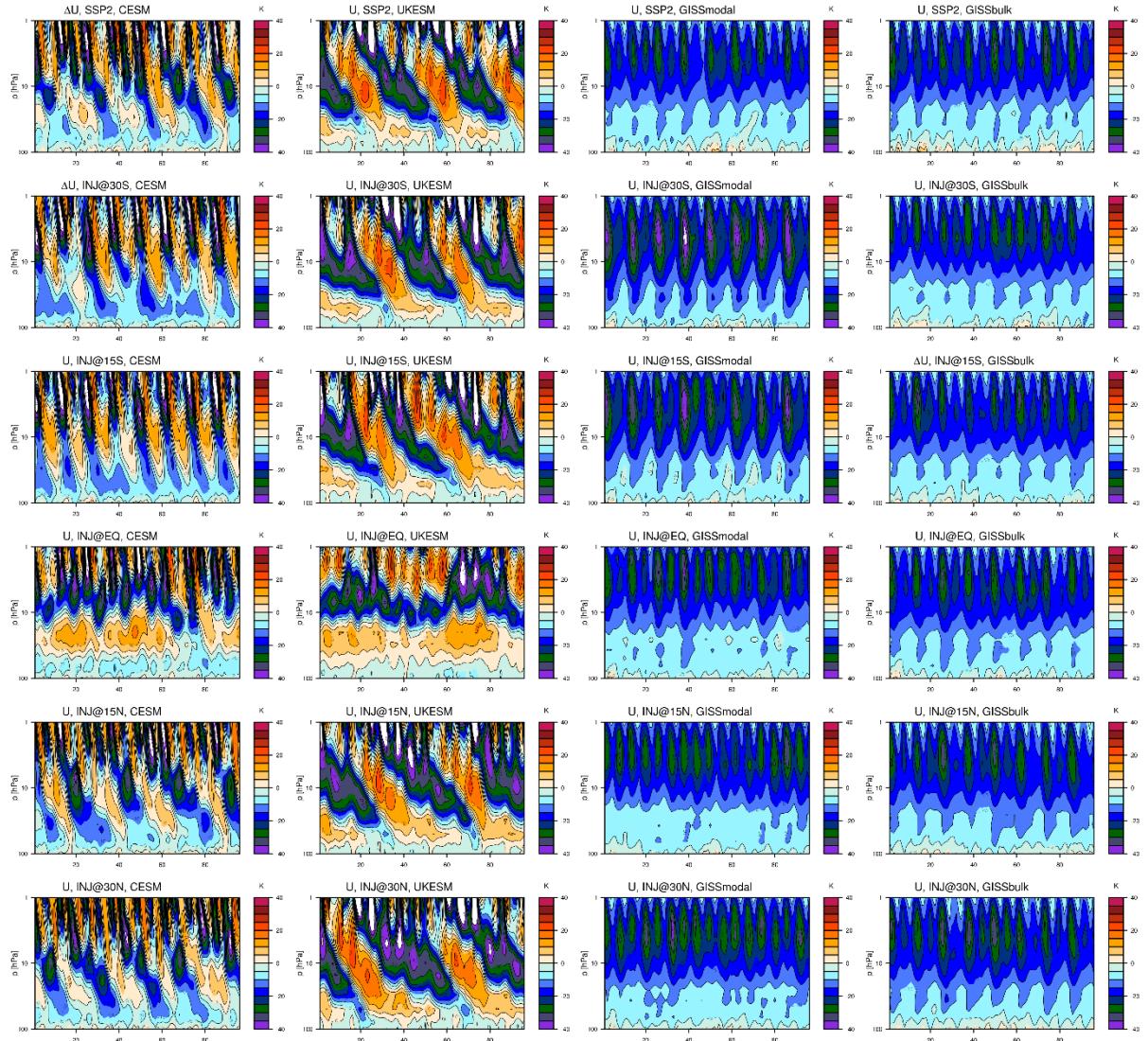


Figure S7. Zonal mean zonal winds, averaged over 10S-10N, simulated in each SAI injection experiment over the last 8 years of the simulations.