

# **Supplementary Materials for**

## **An assessment of representing land-ocean heterogeneity via convective adjustment timescale in the Community Atmospheric Model 6 (CAM6)**

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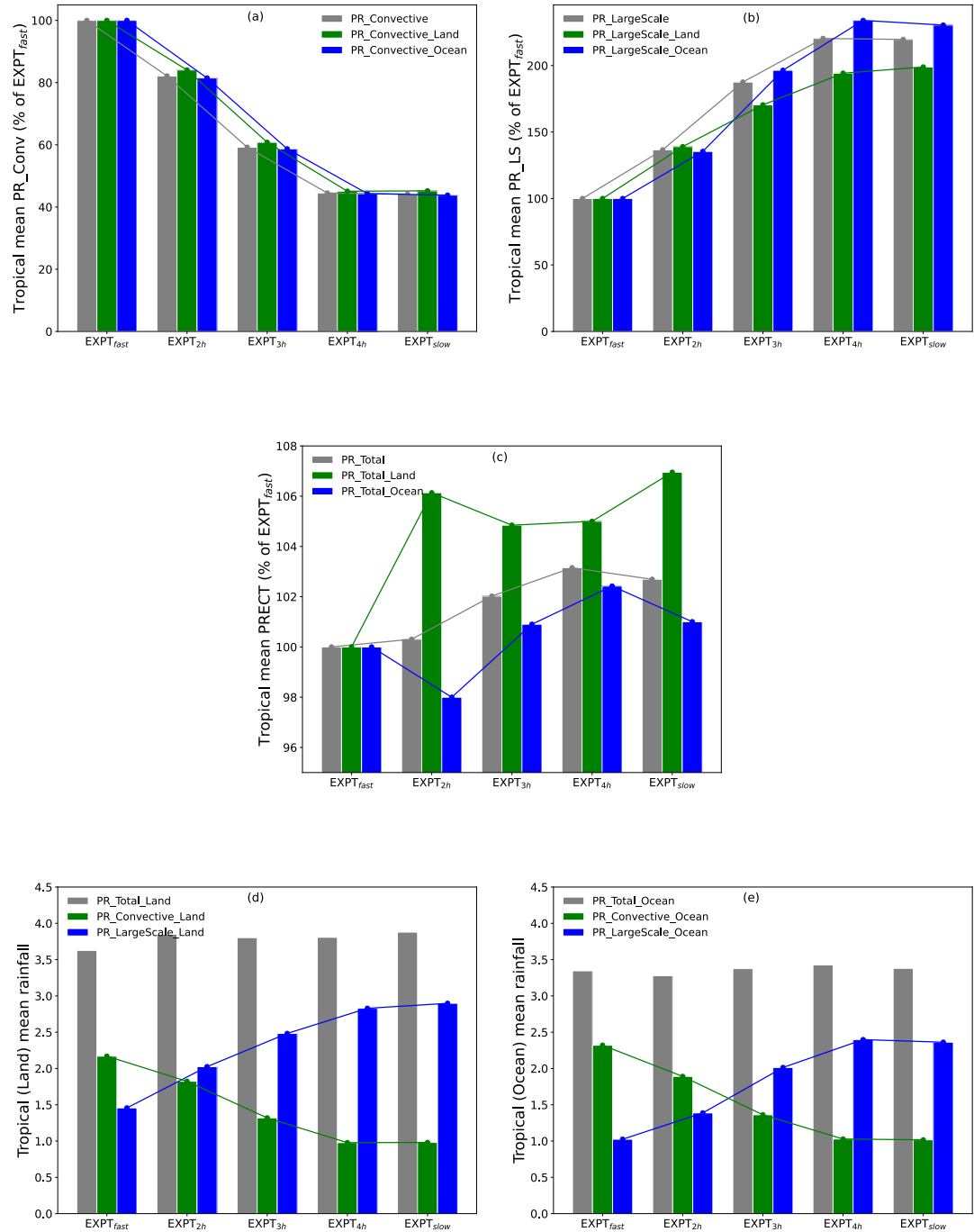
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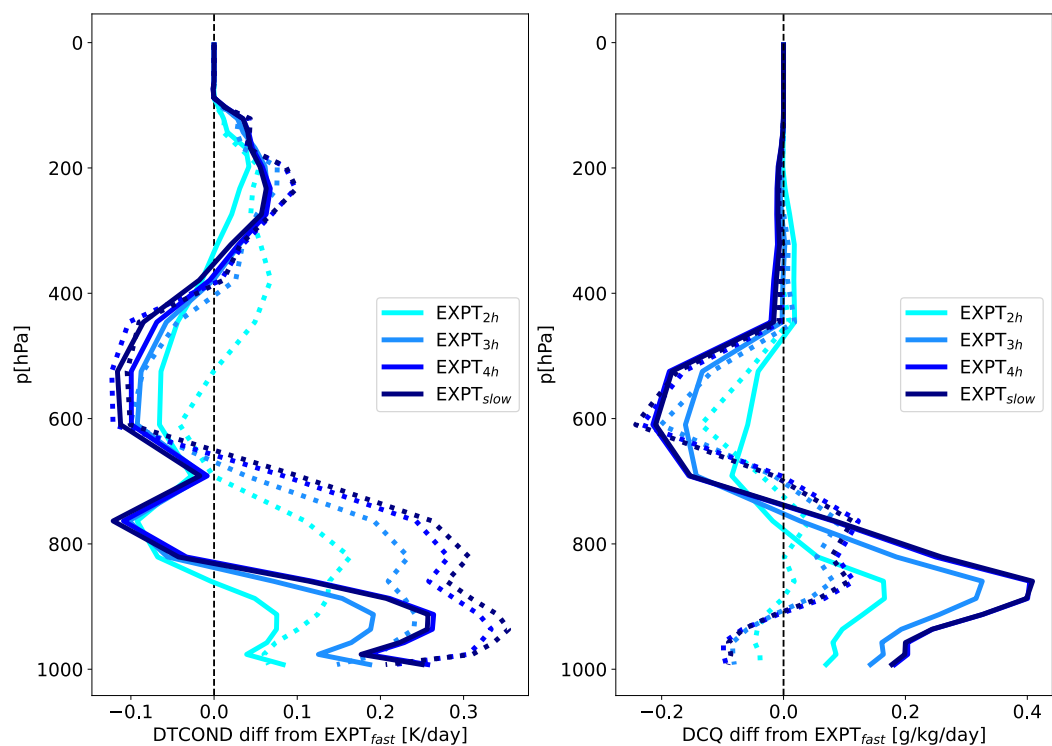
### **This PDF file contains:**

- Figure S1. Annual tropical daily mean rainfall (mm/day).
- Figure S2. Tropical mean vertical profiles of DTCOND and DCQ.
- Figure S3a. Annual daily mean surface specific humidity (g/kg).
- Figure S3b. Annual daily mean mid-low-level specific humidity (g/kg).
- Figure S4. MJO variance.

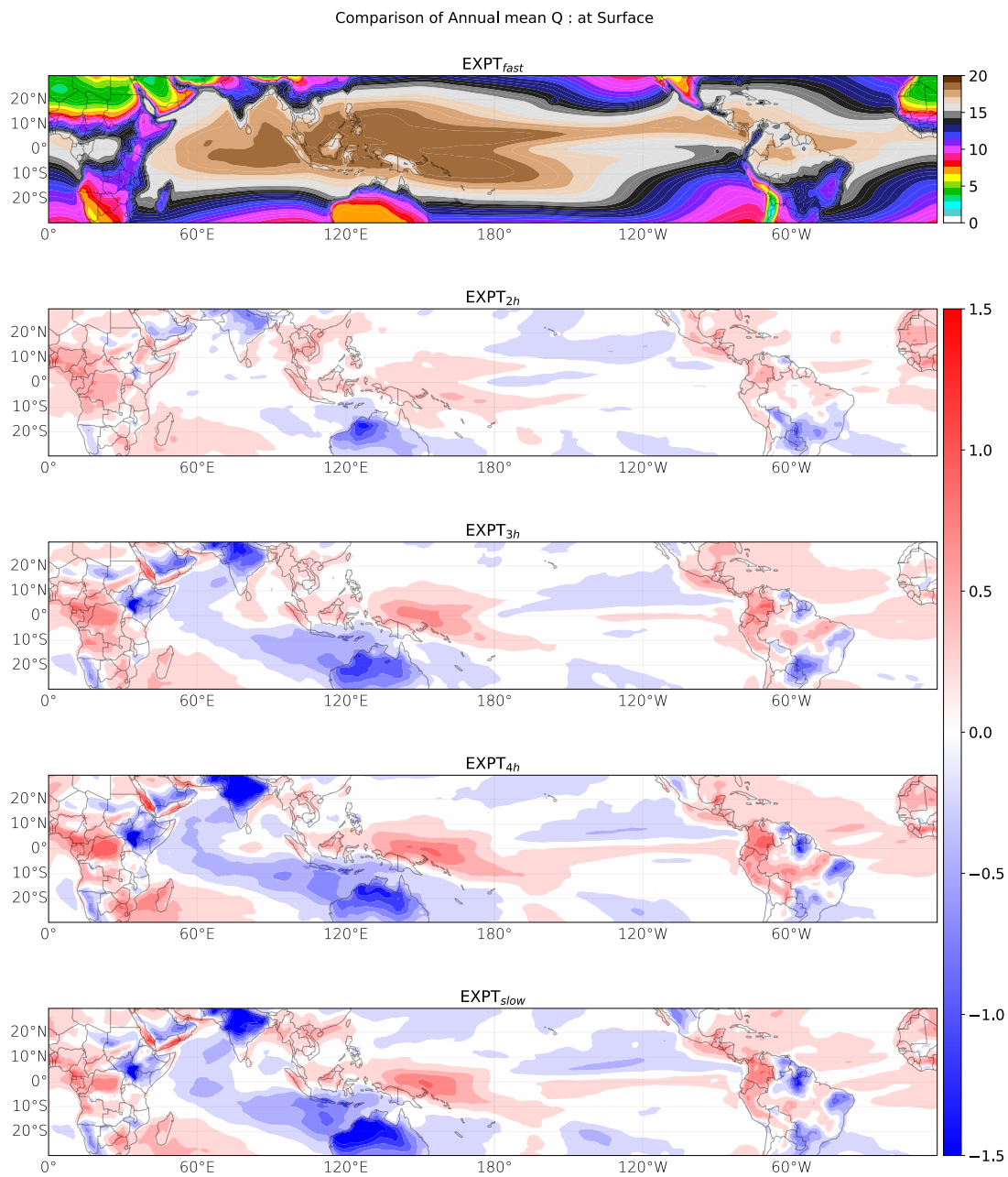
## Supplementary Materials



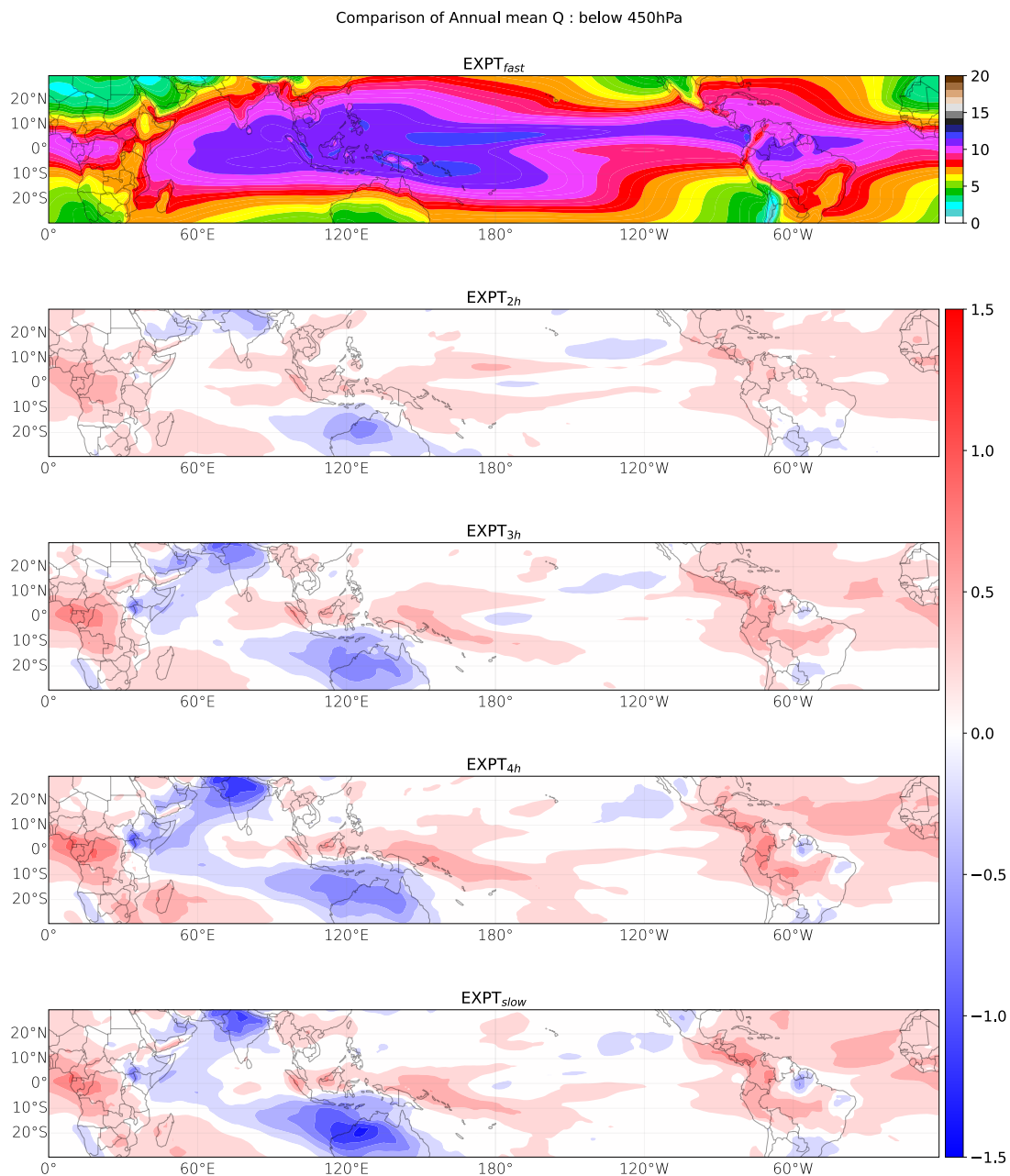
**Figure S1. Annual tropical daily mean rainfall (mm/day).** Same as Figure 1 of the main manuscript, except the Total, Convective and LargeScale rainfalls are plotted for land and ocean in addition to their total over the whole tropics.



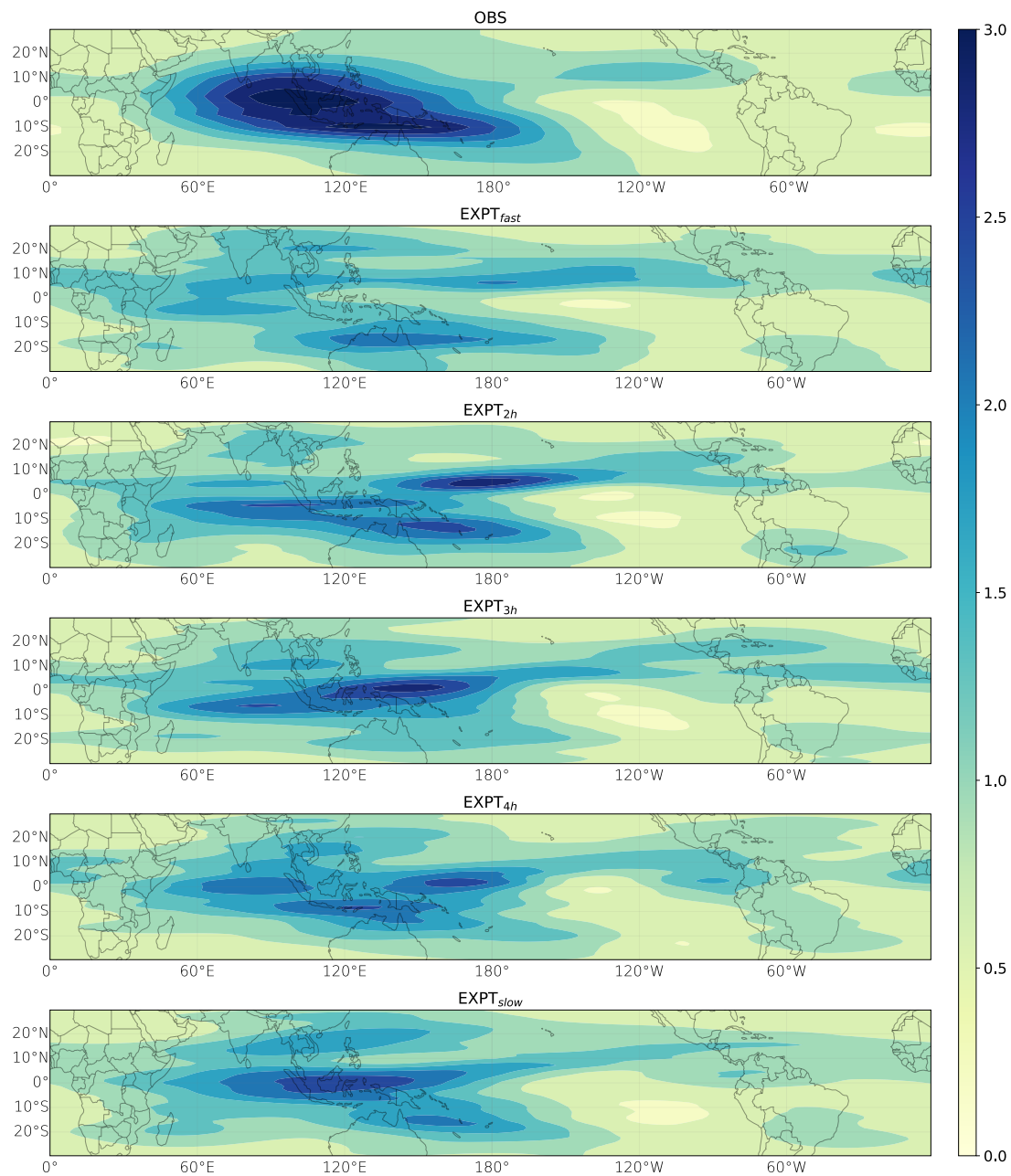
**Figure S2.** Tropical mean vertical profiles of temperature tendency due to moist processes (DTCOND) and specific humidity tendency due to moist processes (DCQ). Same as Figure 2 of the main manuscript, except for DTCOND and DCQ.



**Figure S3a. Annual daily mean surface specific humidity (g/kg).** Top panel shows the absolute values for  $EXPT_{fast}$  and the remaining panels show departures of other simulations, simulation names as indicated by the panel headings, from  $EXPT_{fast}$ .



**Figure S3b. Annual daily mean mid-low-level specific humidity (g/kg).** Same as Figure S3a, except averaged over surface to 450hPa.



**Figure S4. MJO variance.** Same as Figure 6 of the main manuscript, except the variance fields are normalized by the respective domain means.