

Supplement for submission “QBOi El Niño Southern Oscillation experiments: Assessing relationships between ENSO, MJO, and QBO”

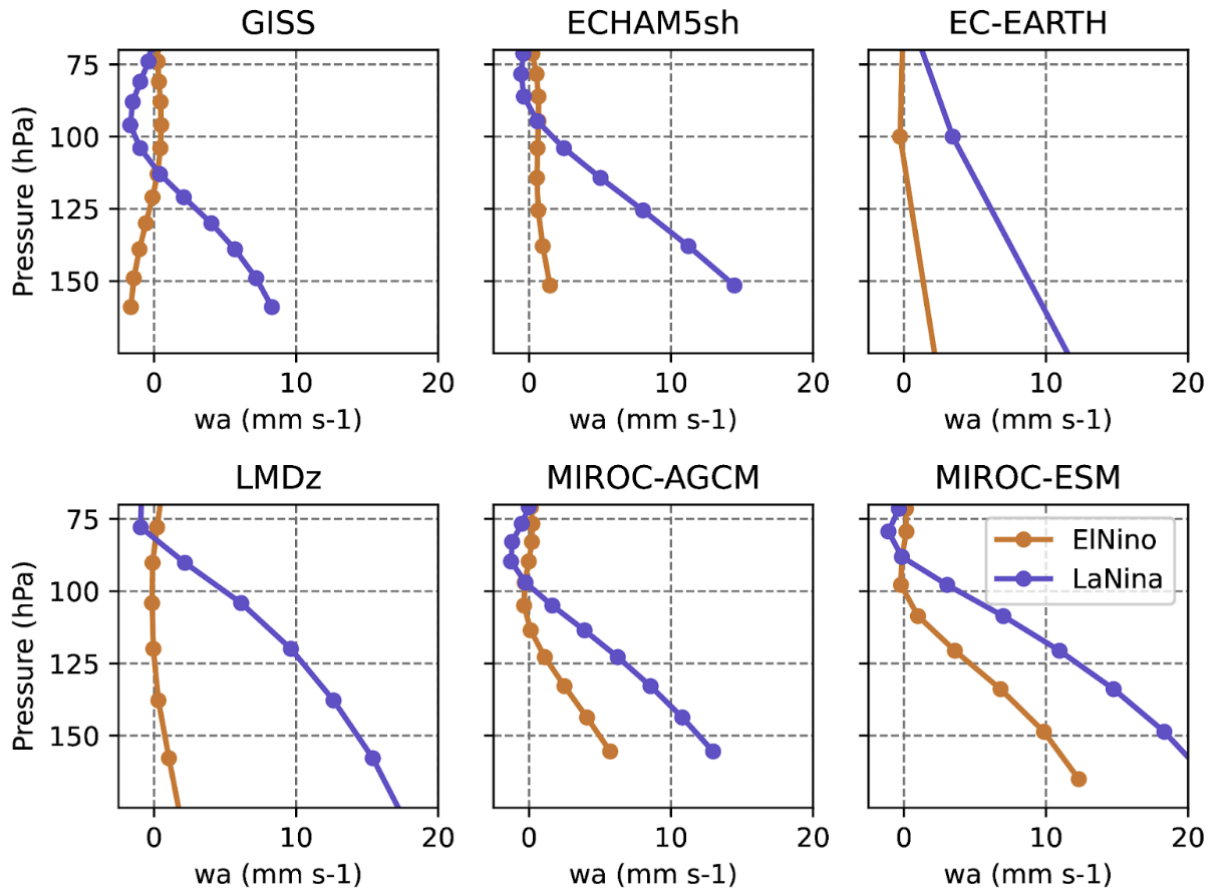


Figure S1: Vertical profiles of vertical velocity during December-February averaged in the area 120°E-150°E and 5°S-5°N for the El Niño and La Niña simulations of a subset of models. Pressure tendencies (Pa/s) are converted to vertical velocity using  $\omega = \text{density} \times \text{gravitational acceleration} \times \text{vertical velocity}$  and the perfect gas equation for ECHAM5sh, EC-EARTH3.3 and LMDz6. Some models, EMAC, MRI-ESM2.0, and WACCM are not included as they did not provide vertical velocity data.