Supporting Information for

The Pacific Equatorial Undercurrent in Three Generations of Global Climate Models and Glider Observations

Kristopher B. Karnauskas [1], Julie Jakoboski [2], T. M. Shaun Johnston [3], W. Brechner Owens [4], Daniel L. Rudnick [3], Robert E. Todd [4]

[1] University of Colorado, Boulder, CO 80309–0311

[2] MetOcean Solutions, Raglan, New Zealand

[3] Scripps Institution of Oceanography, La Jolla, CA 92093–0213

[4] Woods Hole Oceanographic Institution, Woods Hole, MA 02543

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Figures S1 and S2

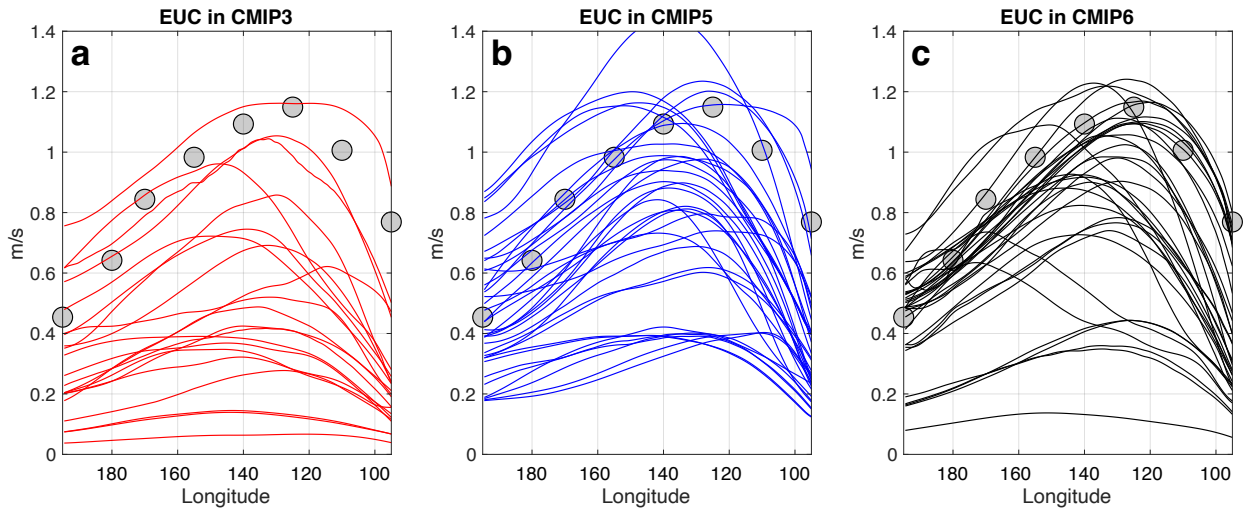

Figure S1. Peak EUC velocity (m s^{-1}) along the equatorial Pacific Ocean in 21 CMIP3 models (a), 35 CMIP5 models (b) and 34 CMIP6 models (c). Observations of Johnson et al. (2002) are indicated in gray circles. This figure is directly comparable to the analysis of CMIP3 models in Fig. 1b of Karnauskas et al. (2012).

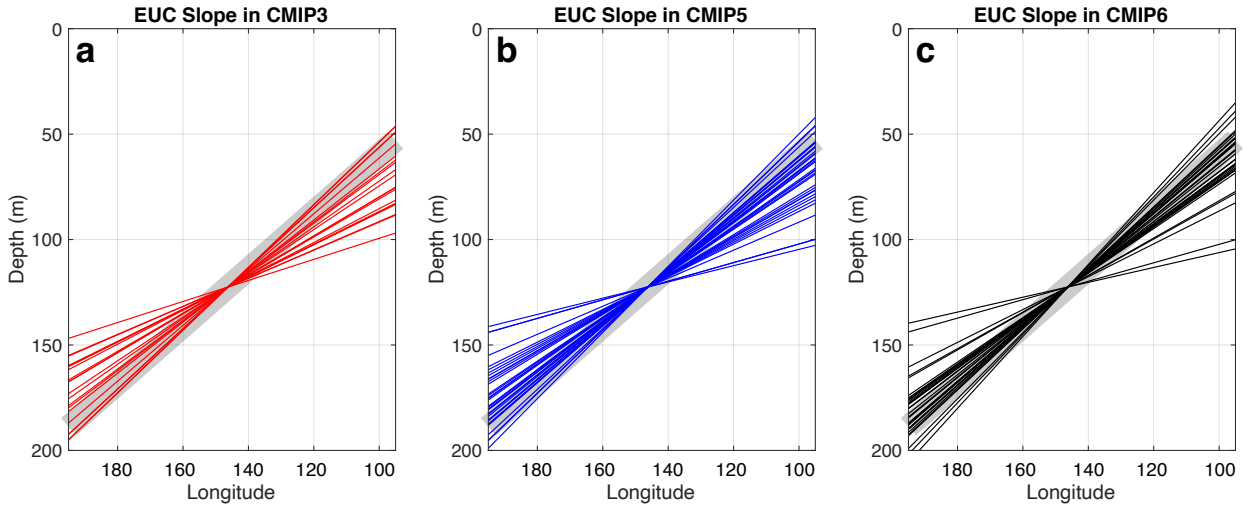

Figure S2. Slope of the EUC in 21 CMIP3 models (a), 35 CMIP5 models (b) and 34 CMIP6 models (c), estimated by linear regression of the depth of the peak EUC velocity versus longitude between 165°E and 95°W. The thick gray line represents the observed rate of EUC shoaling based on the observations of Johnson et al. (2002). To facilitate visual comparison of slopes, the basin-scale mean EUC depth bias was removed from each line. The multi-model mean EUC shoaling rates for CMIP3, CMIP5, and CMIP6 are 1.03, 1.08, and 1.19 m per degree longitude, respectively—compared to the observed estimate of 1.36 m per degree longitude.