

Supplement to: The ephemeral and elusive ocean carbon response to COVID-related emissions reductions

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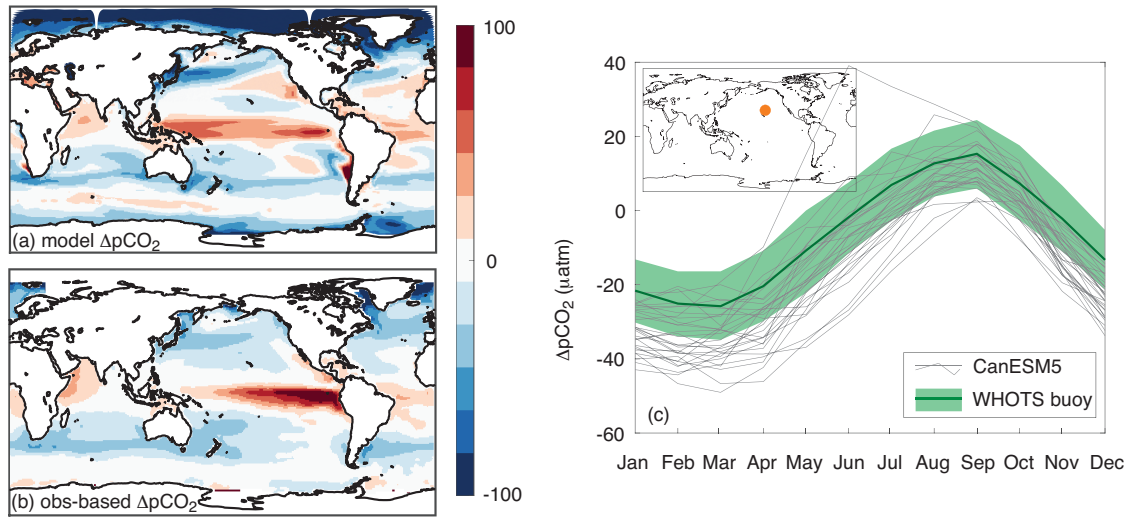
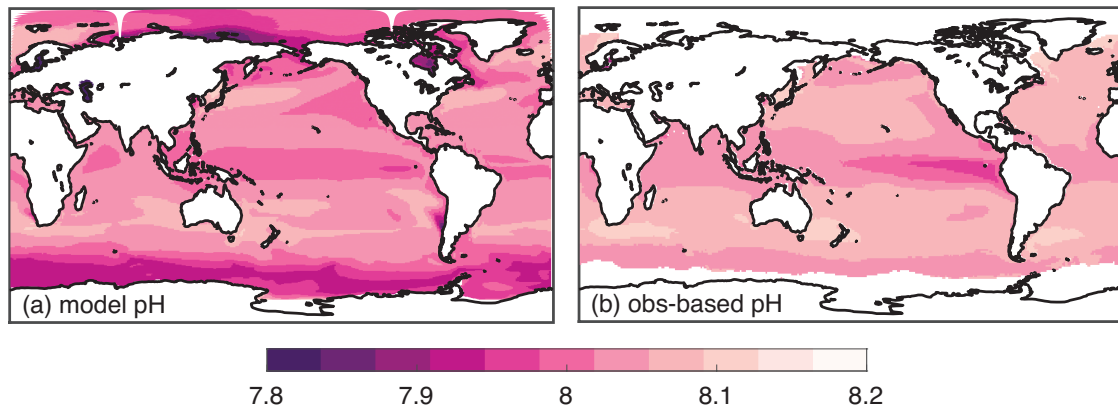


Figure S1. Comparison of modeled and observed $\Delta p\text{CO}_2$ ($p\text{CO}_2^{oc} - p\text{CO}_2^{atm}$). Annual-mean $\Delta p\text{CO}_2$ from (a) the CanESM5 control ensemble mean, and (b) the observation-based Landschützer et al. [2016] climatology over 2015-2018. (c) Seasonal cycle of $\Delta p\text{CO}_2$ at the WHOTS buoy location (orange dot on inset map): (gray) 30 CanESM5 control ensemble members in 2015 and (green) the observed $\Delta p\text{CO}_2$ climatology (mean \pm one standard deviation) from Sutton et al. [2019].



32 **Figure S2.** Comparison of modeled and observed surface ocean pH. Annual-mean pH from (a) the
 33 CanESM5 control ensemble mean, and (b) the observation-based *Gregor and Gruber* [2020] climatology
 34 over 2015-2018.