Explaining the spread in global mean thermosteric sea level rise in CMIP5 climate models: Supplementary material

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This supplementary material presents figures for the 21st century under the RCP4.5 scenario.
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Fig. 1. Calculation of \( \beta \), the fraction of the Earth’s energy imbalance stored in the ocean, during the 21st century under the RCP4.5 scenario. Each panel shows a scatter plot of global ocean heat uptake (relative to year 2006, in \( 10^{22} \text{J} \)) against global mean time-integrated net TOA flux \( N \) multiplied by the Earth’s surface \( S \) (in \( 10^{22} \text{J} \)) for a CMIP5 climate model. Values of \( \beta \) and of the coefficient of determination \( R^2 \) for the linear regression over 2006-2099 (black line) are indicated to the upper left of each panel. Each panel has the same axis, shown on the bottom left panel, and colorbar (indicating years).
Fig. 2. Calculation of $\epsilon$, the expansion efficiency of heat, during the 21st century under the RCP4.5 scenario. Each panel shows a scatter plot of global mean thermosteric sea level rise (relative to year 2006, in mm) against ocean heat uptake (relative to year 2006, in $10^{22}$J) for a CMIP5 climate model. Values of $\epsilon$ and of the coefficient of determination $R^2$ for the linear regression over 2006-2099 (black line) are indicated to the upper left of each panel. Each panel has the same axis, shown on the bottom left panel, and colorbar (indicating years).
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