

Supplemental Material for "Forced and Internal Variability of Ocean Temperature Diagnosed via Multi-Model Ensemble Linear Dynamical Mode (M-ELDM) Decomposition"

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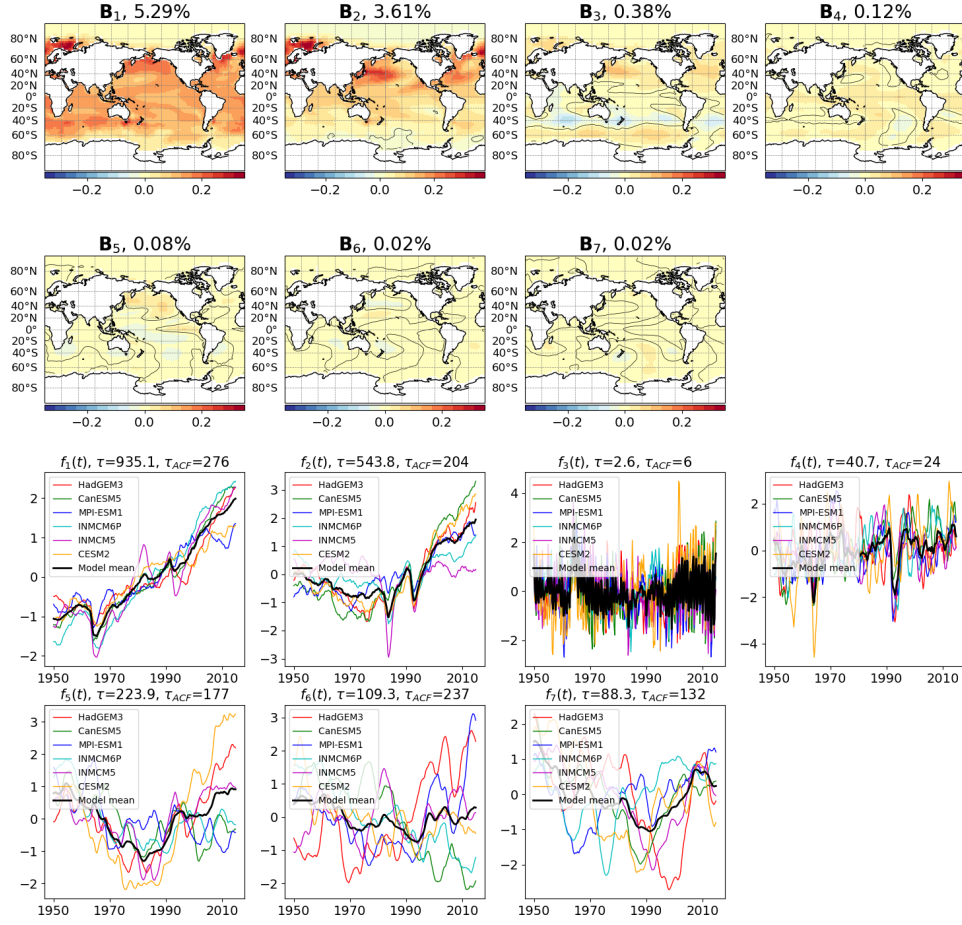


Fig. S1 Forced modes identified via M-ELDM method in multimodel ensemble of SST simulations. Here and after the modes spatial patterns are shown in two top rows, while the corresponding time series are shown in two bottom rows. The optimal time scales τ of the modes are shown in captions of time series together with corresponding estimates of characteristic quarter-periods τ_{ACF} extracted from autocorrelation functions of time series. The percentages in pattern captions show the ratio of the corresponding component variance to total variance of the ensemble of realizations and all time series are normalized to unit standard deviation. Color scales in patterns are in $^{\circ}\text{C}$.

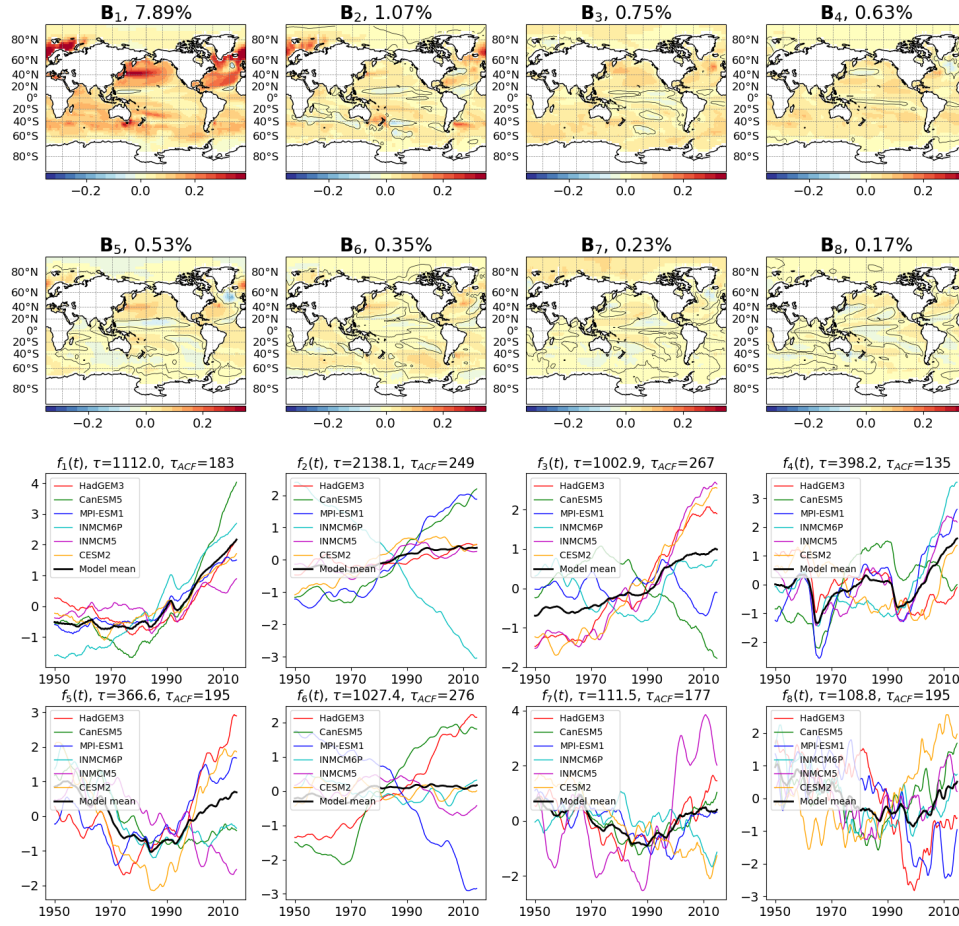


Fig. S2 The same as in Fig S1 but for OHC model simulations. Color scales in patterns are in 10^9 J m^{-2} .

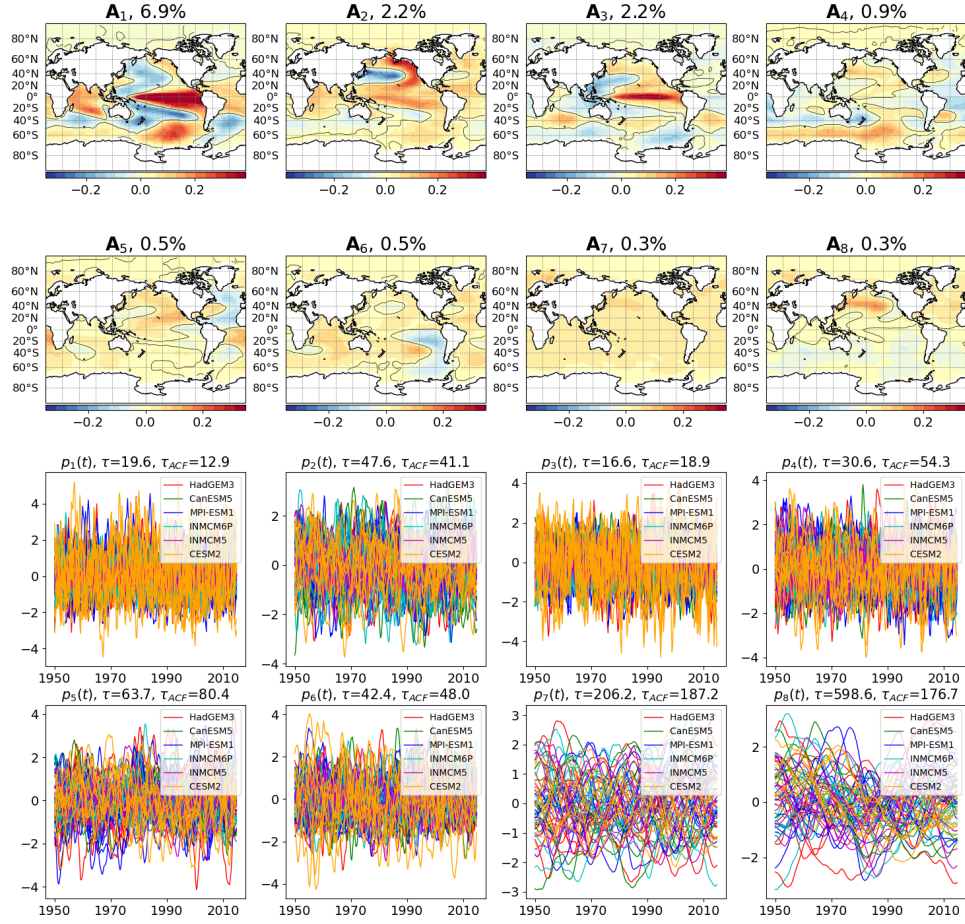


Fig. S3 Spatial patterns and corresponding time series of the internal modes identified in multi-model ensemble of SST simulations. Color scales in patterns are °C. Time series of all 10 realizations are shown by the same color within each model.

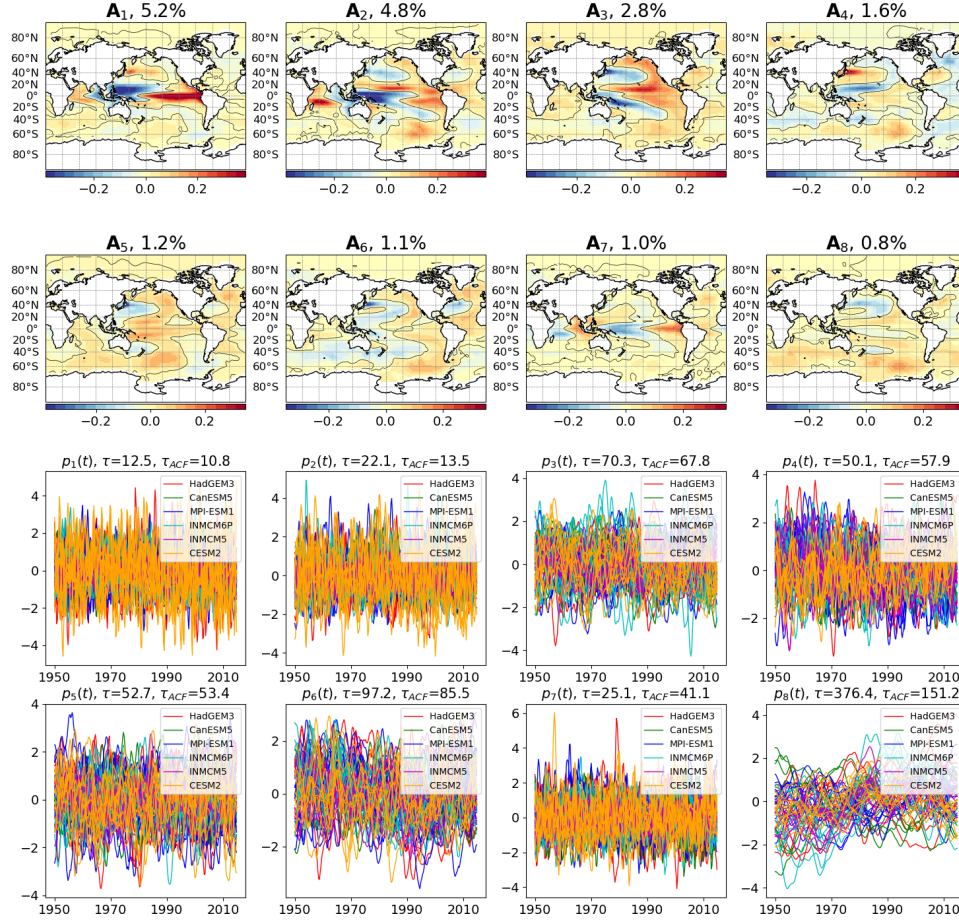


Fig. S4 The same as in Fig S3 but for OHC model simulations. Color scales in patterns are in 10^9 J m^{-2} .

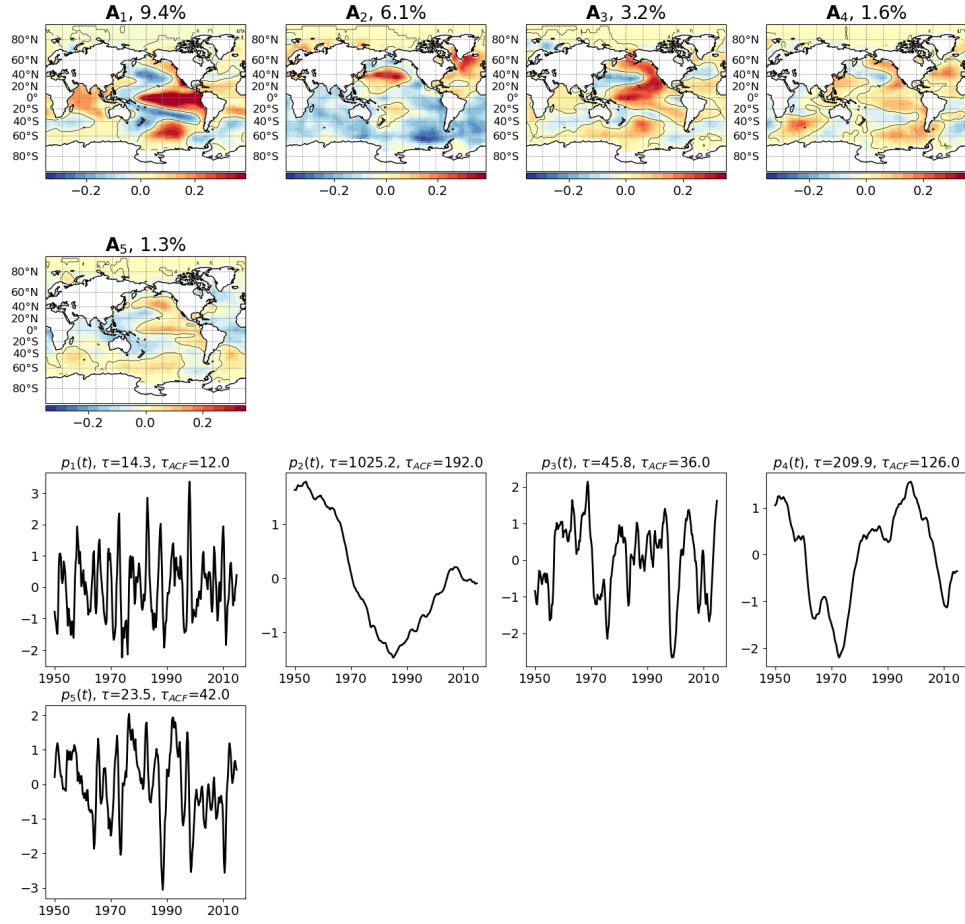


Fig. S5 The estimated internal modes of the observational SST data.

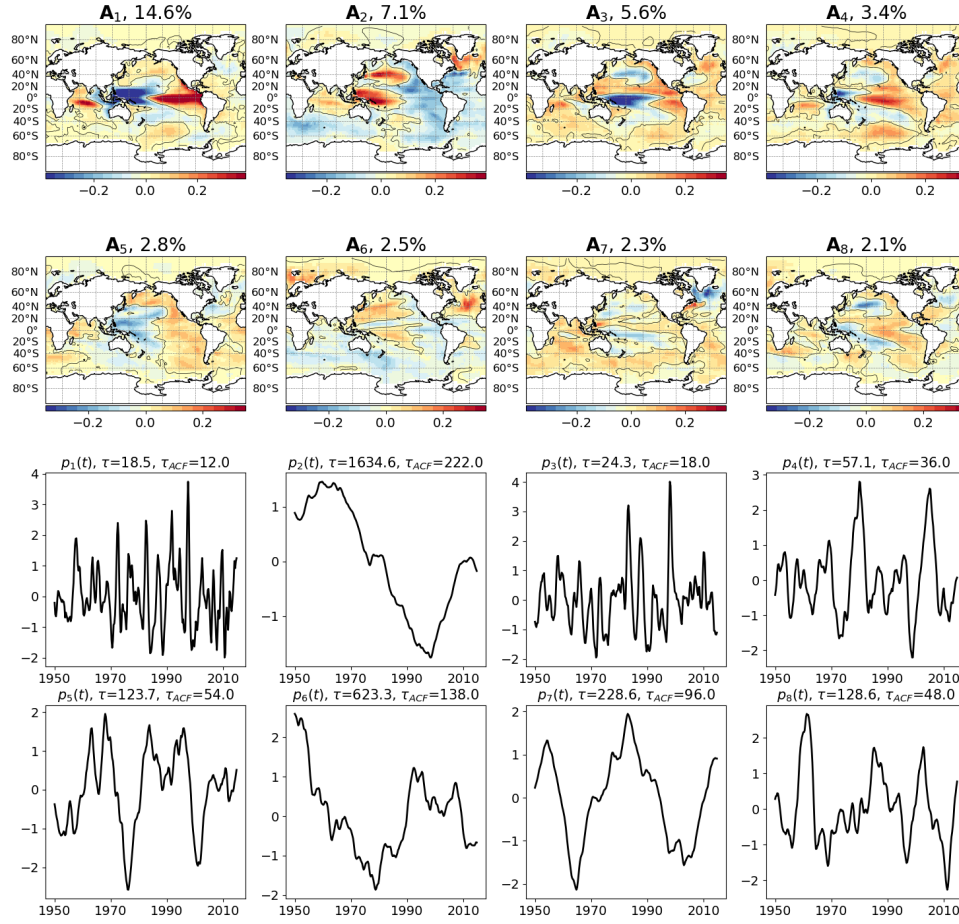


Fig. S6 The estimated internal modes of the observational OHC data.