## Supplemental Figure.

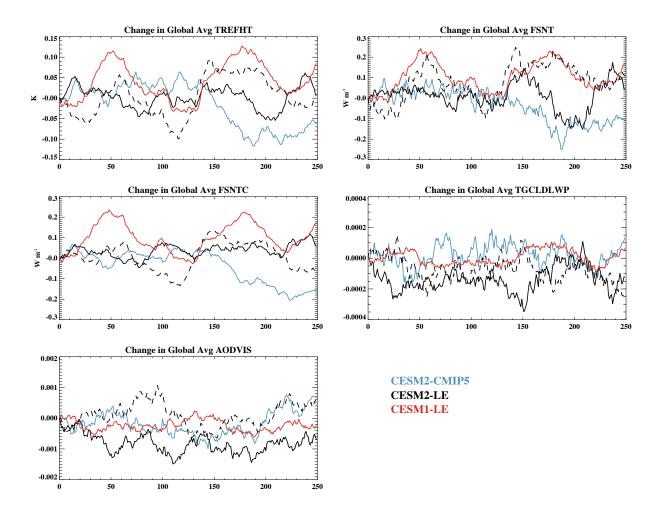


Figure. The timeseries of anomalies of global mean properties from the pre-industrial control integration starting from the time at which historical runs were initialized in the year 1850 for the CESM2-CMIP5 runs (blue), CESM2-LE (black) and CESM1-LE (red). For the CESM2-LE simulations, two lines (solid and dashed) are shown because historical runs were initialized at different periods from the pre-industrial control with the macro-initialization method. Values shown are for global mean anomalies of (a) surface air temperature, (b) net shortwave radiation at the top of the atmosphere, (c) net clear-sky shortwave radiation at the top of the atmosphere, (d) cloud liquid water path, and (e) aerosol optical depth.