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Supplement of

Changes in clouds and thermodynamics under solar geoengineering and implications for required solar reduction

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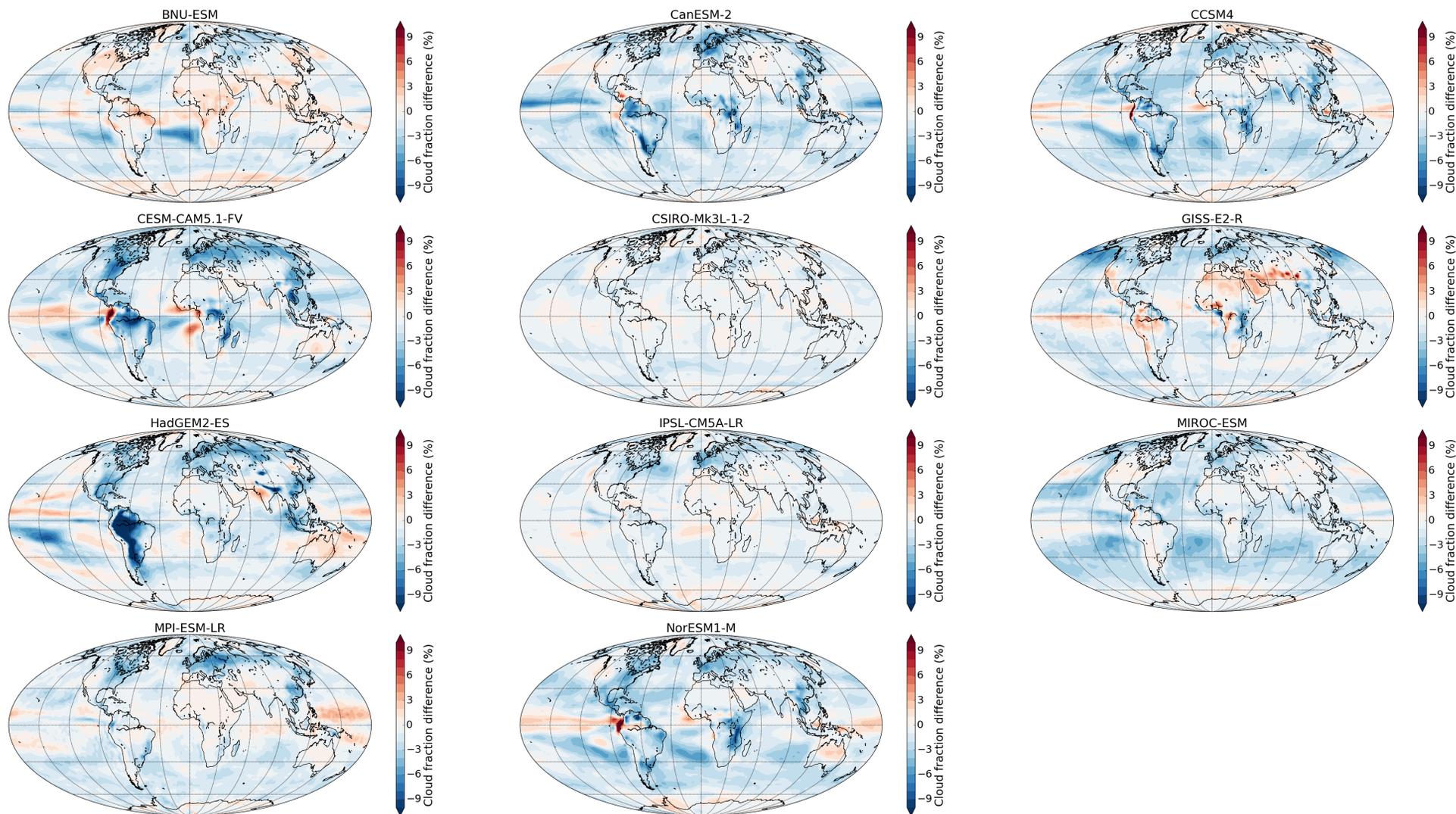


Figure S1: Change in low cloud fraction in G1 minus piControl in each model.

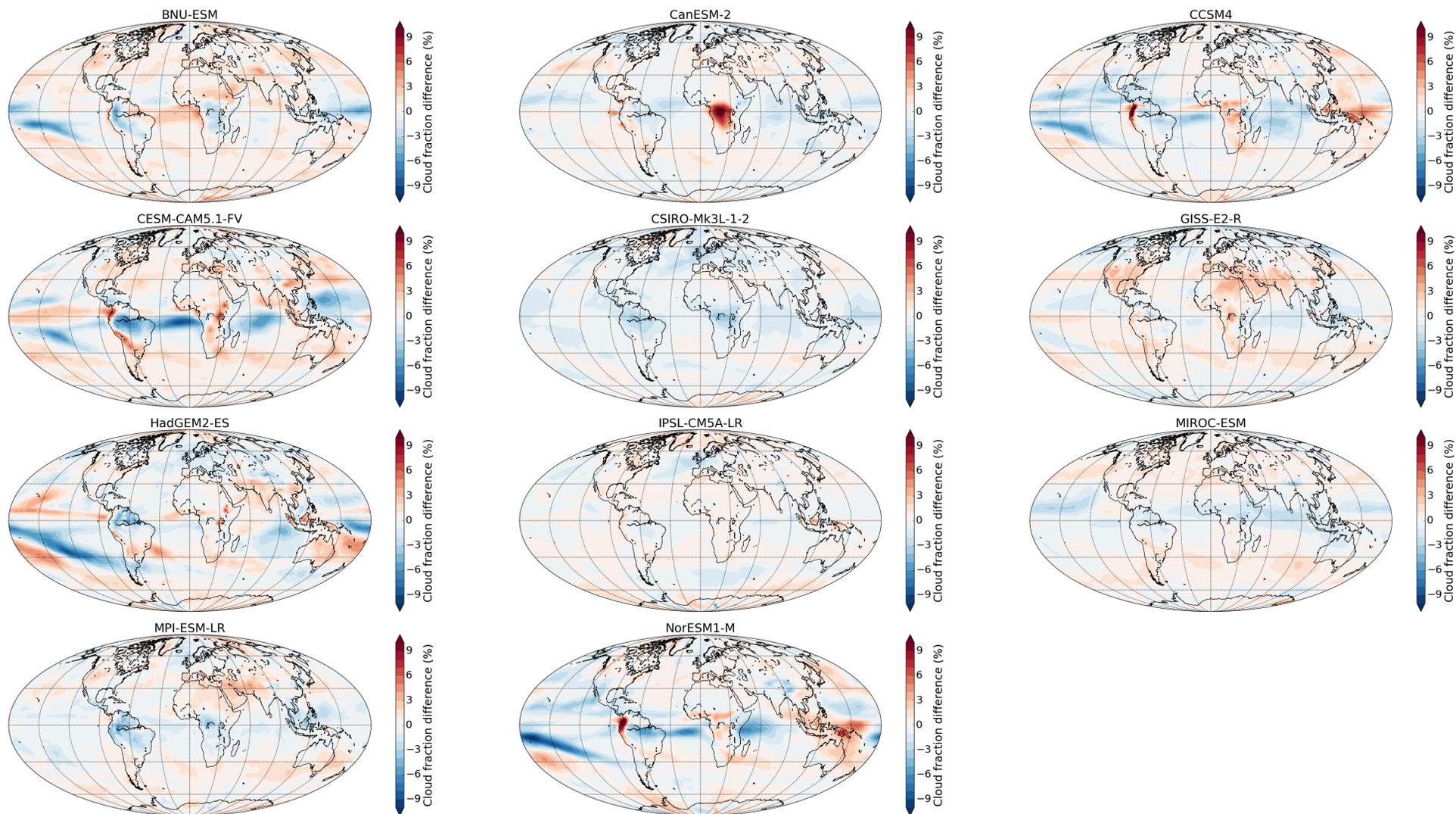


Figure S2: Change in middle cloud fraction in G1 minus piControl in each model.

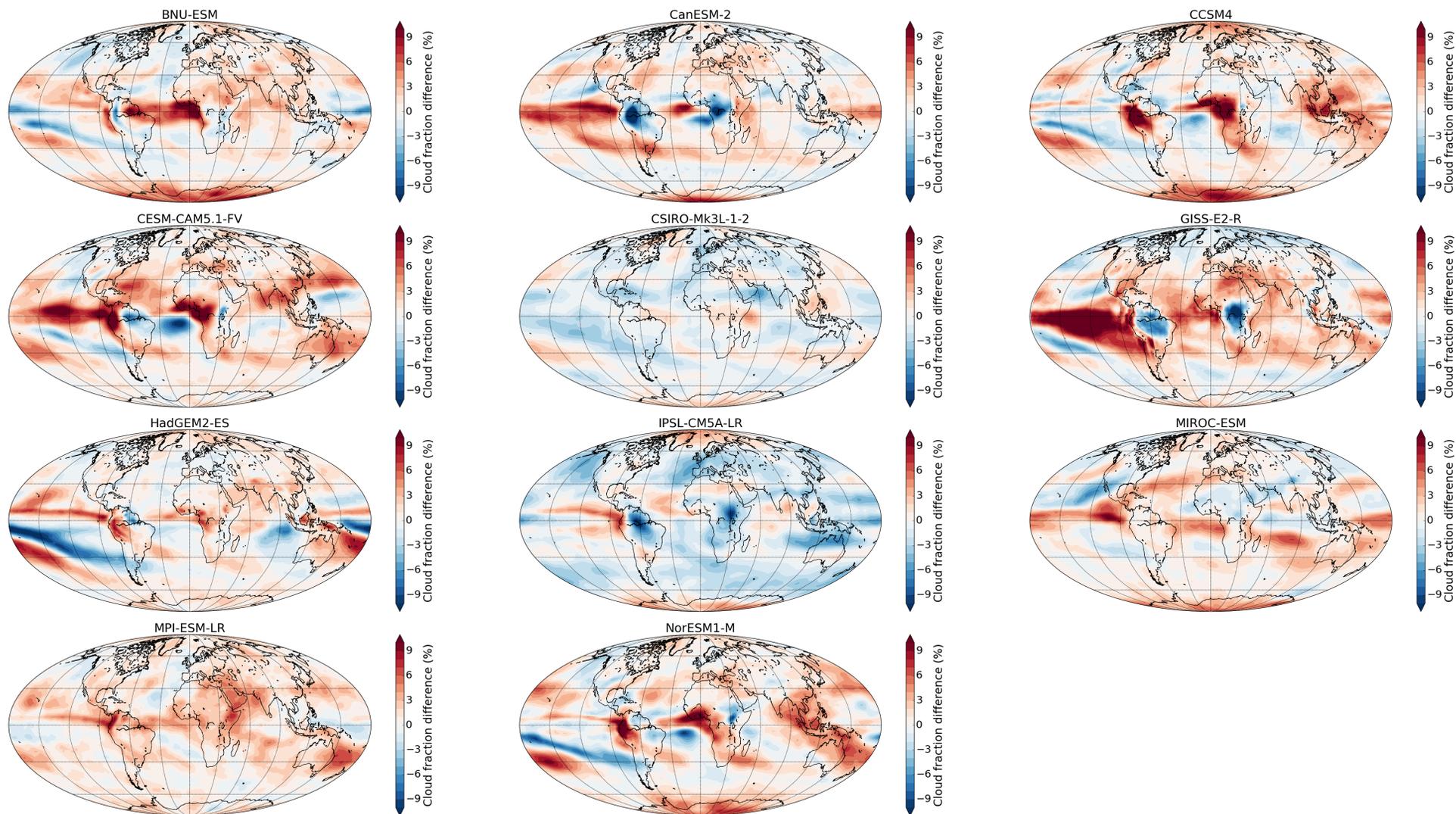


Figure S3: Change in high cloud fraction in G1 minus piControl in each model.

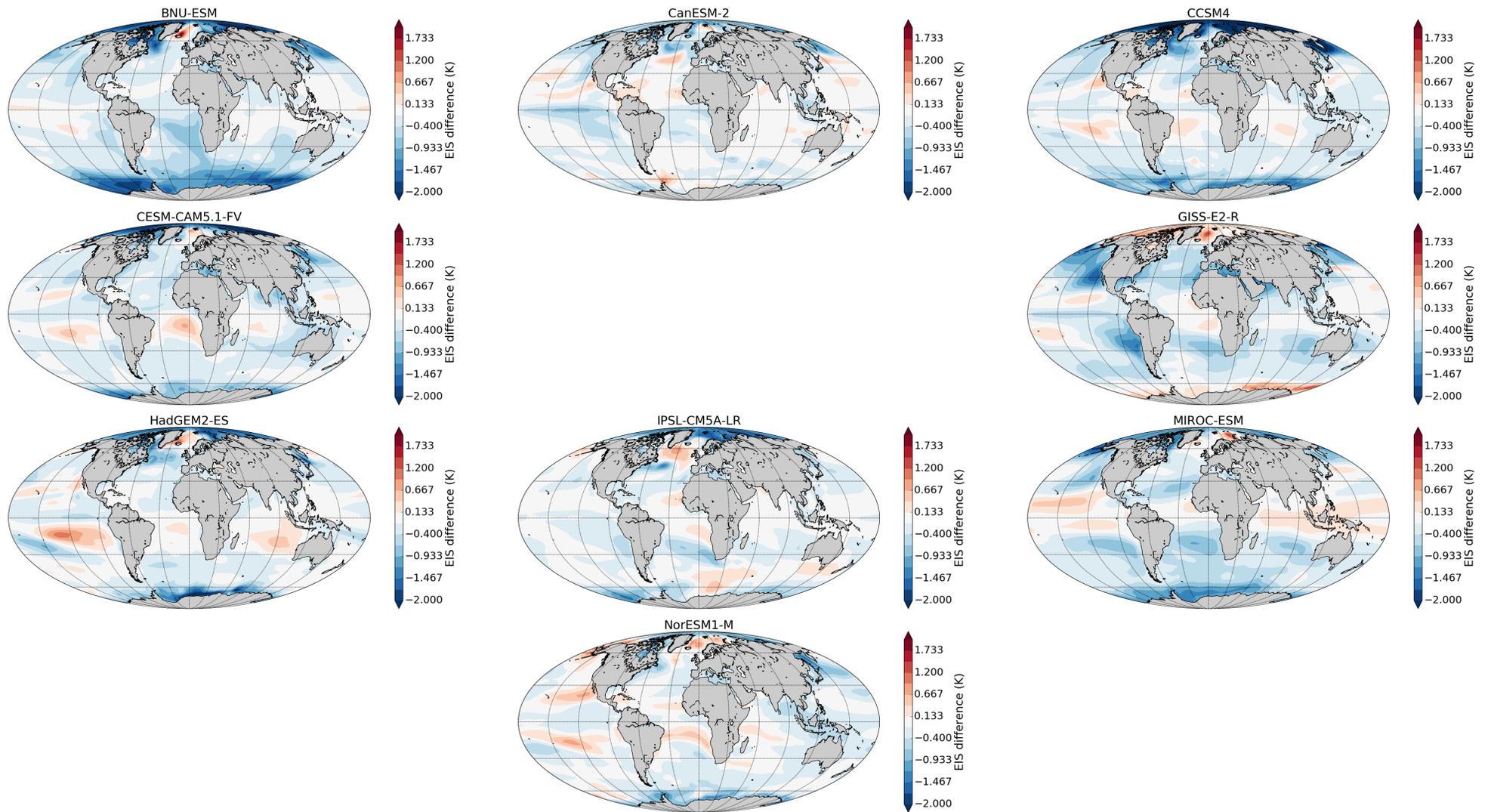


Figure S4: Change in Estimated Inversion Strength in G1 minus piControl in each model.

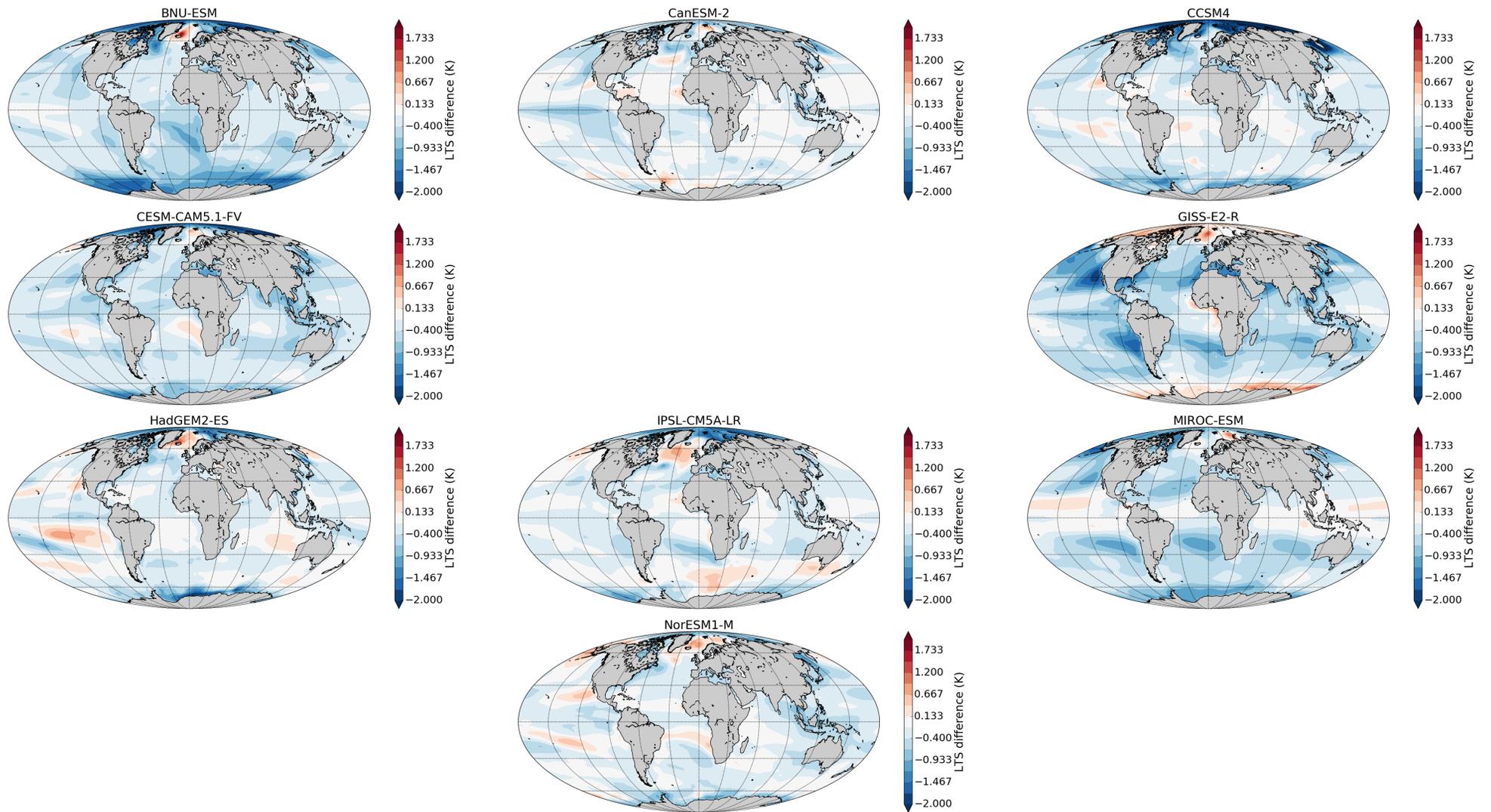


Figure S5: Change in Lower Tropospheric Stability in G1 minus piControl in each model.

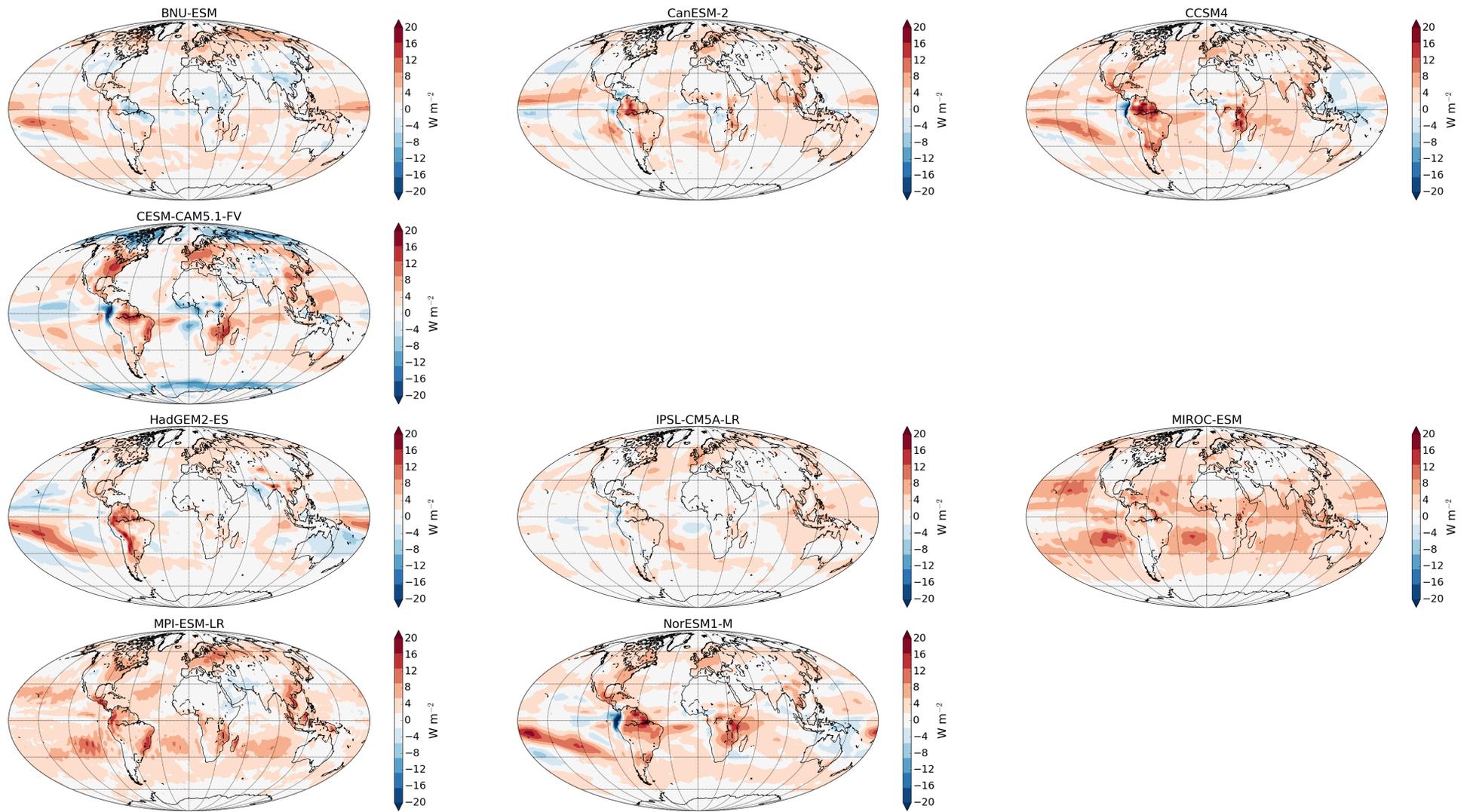


Figure S6: Change in net downward SW radiation at TOA due to changes in cloud properties, for G1 minus piControl in each model, calculated using APRP.

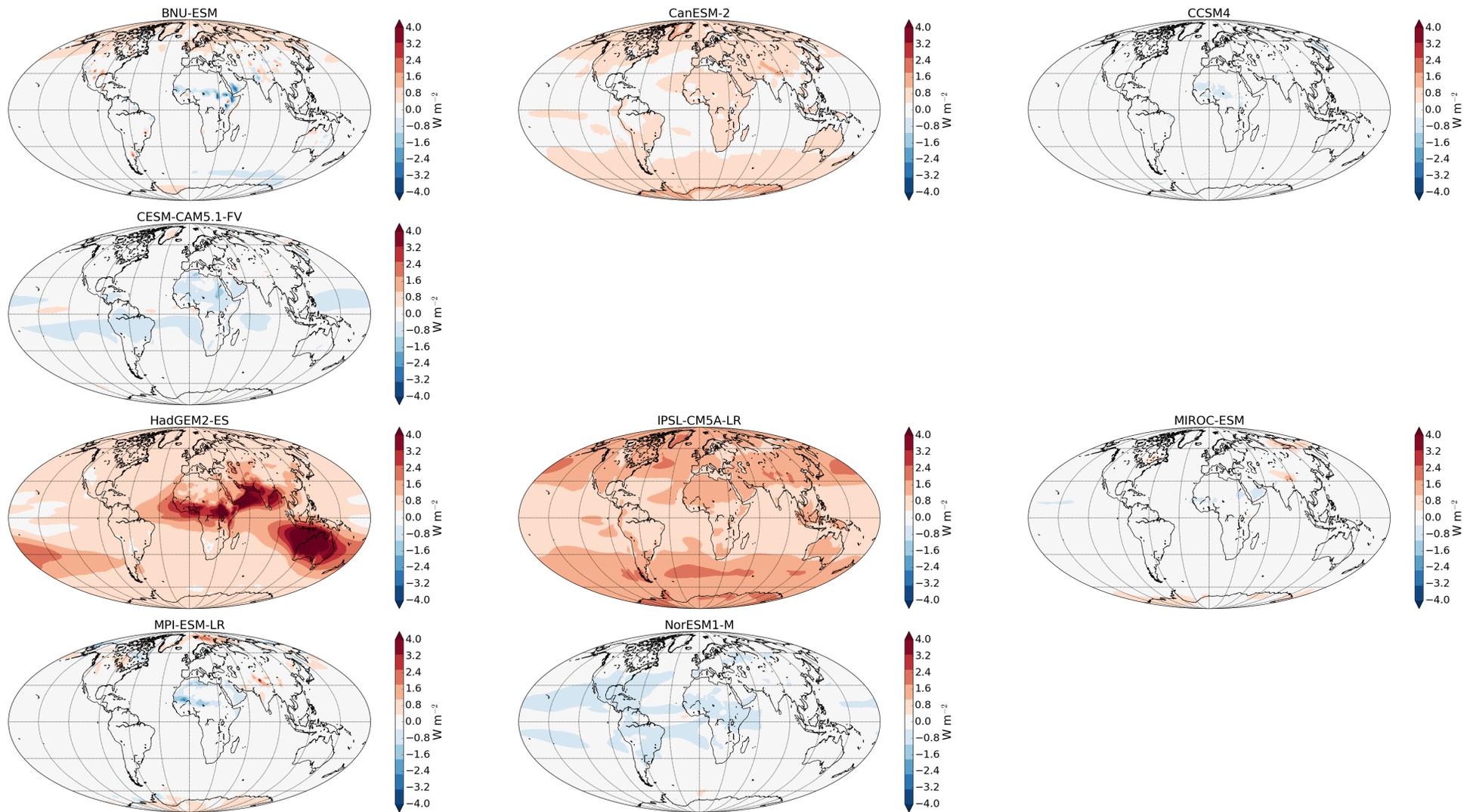


Figure S7: As in Figure S6 but for changes in non-cloud atmospheric properties.

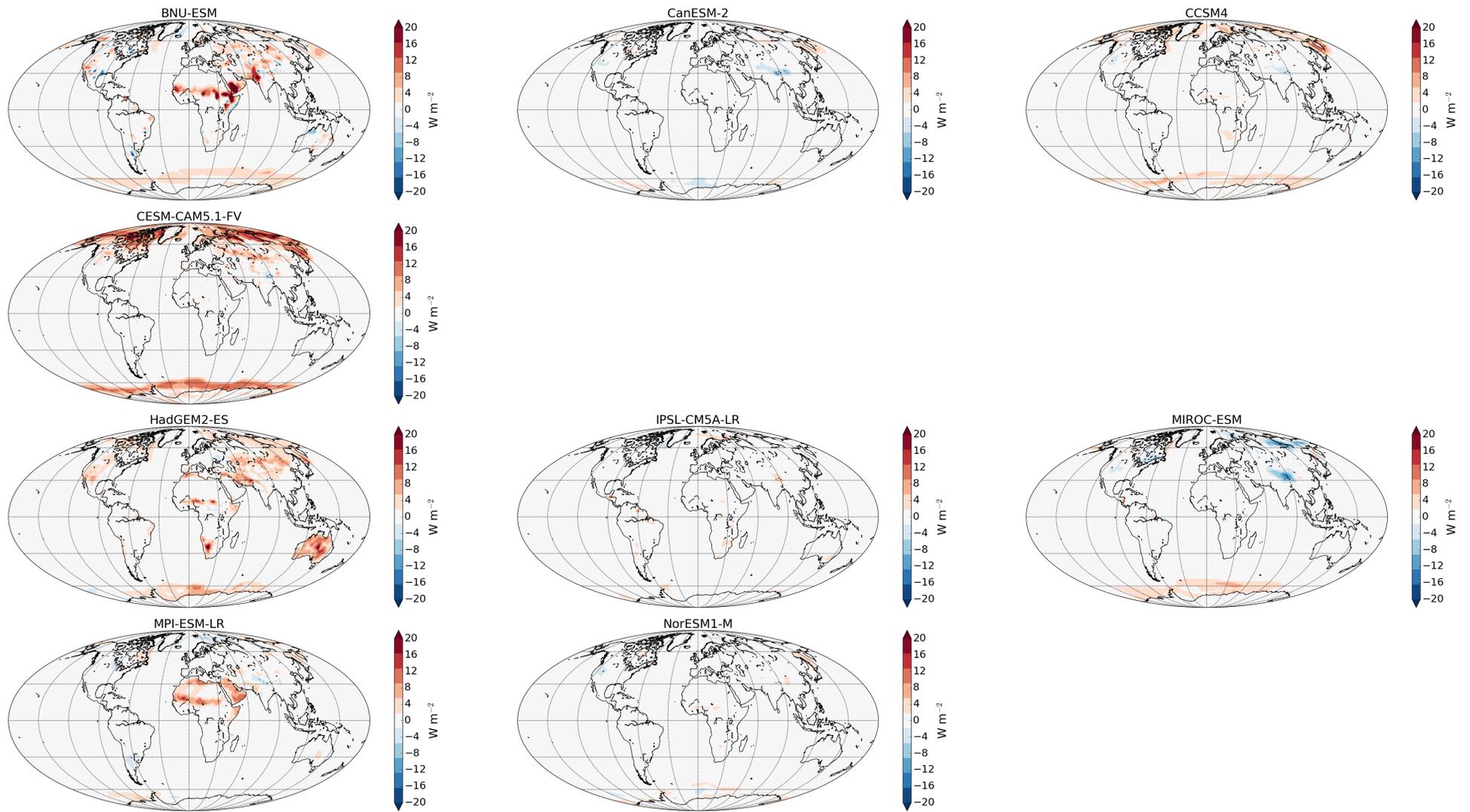


Figure S8: As in Figure S6 but for changes in surface albedo.

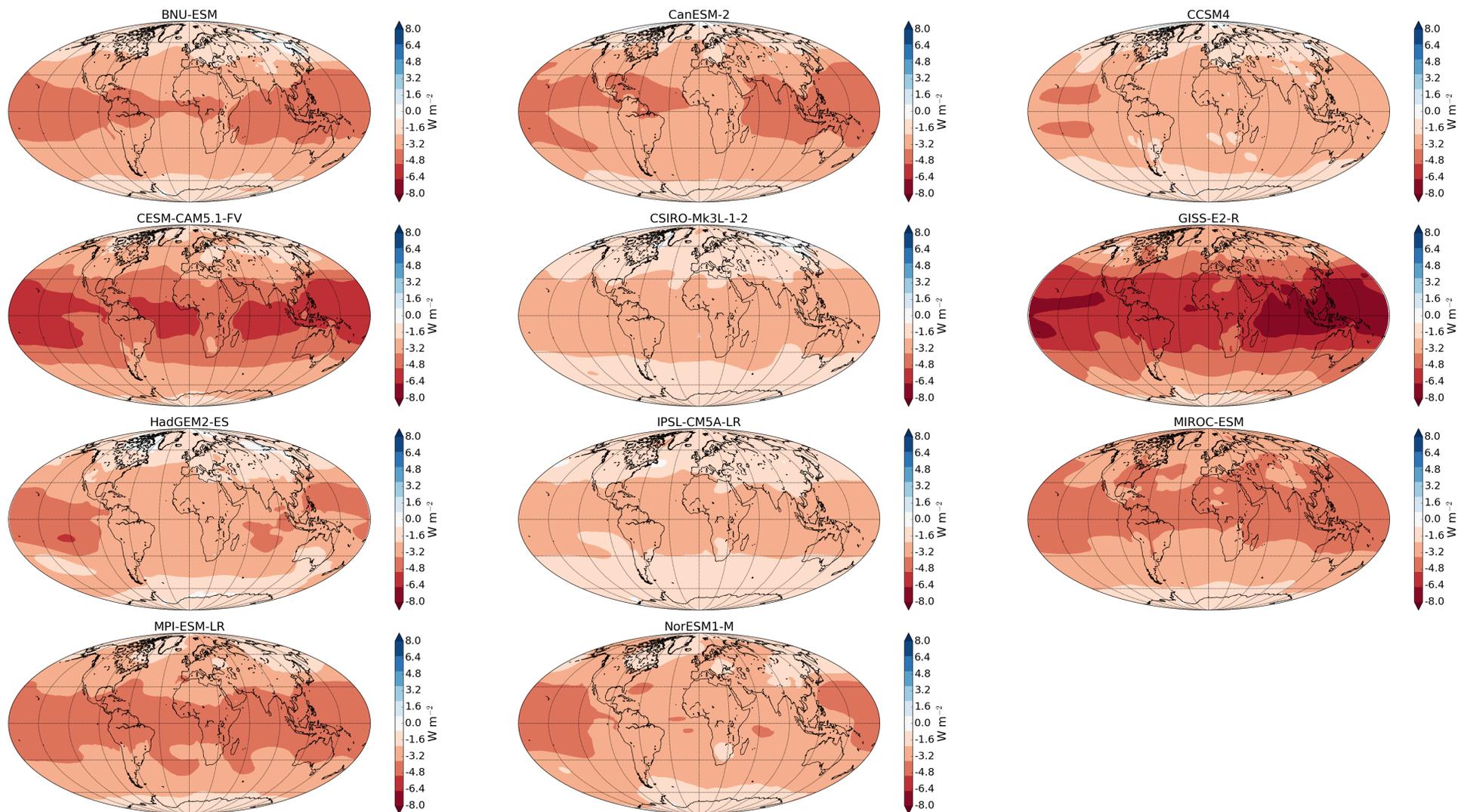


Figure S9: Change OLR due to atmospheric temperature change, calculated using radiative kernels, in G1 minus piControl in each model.

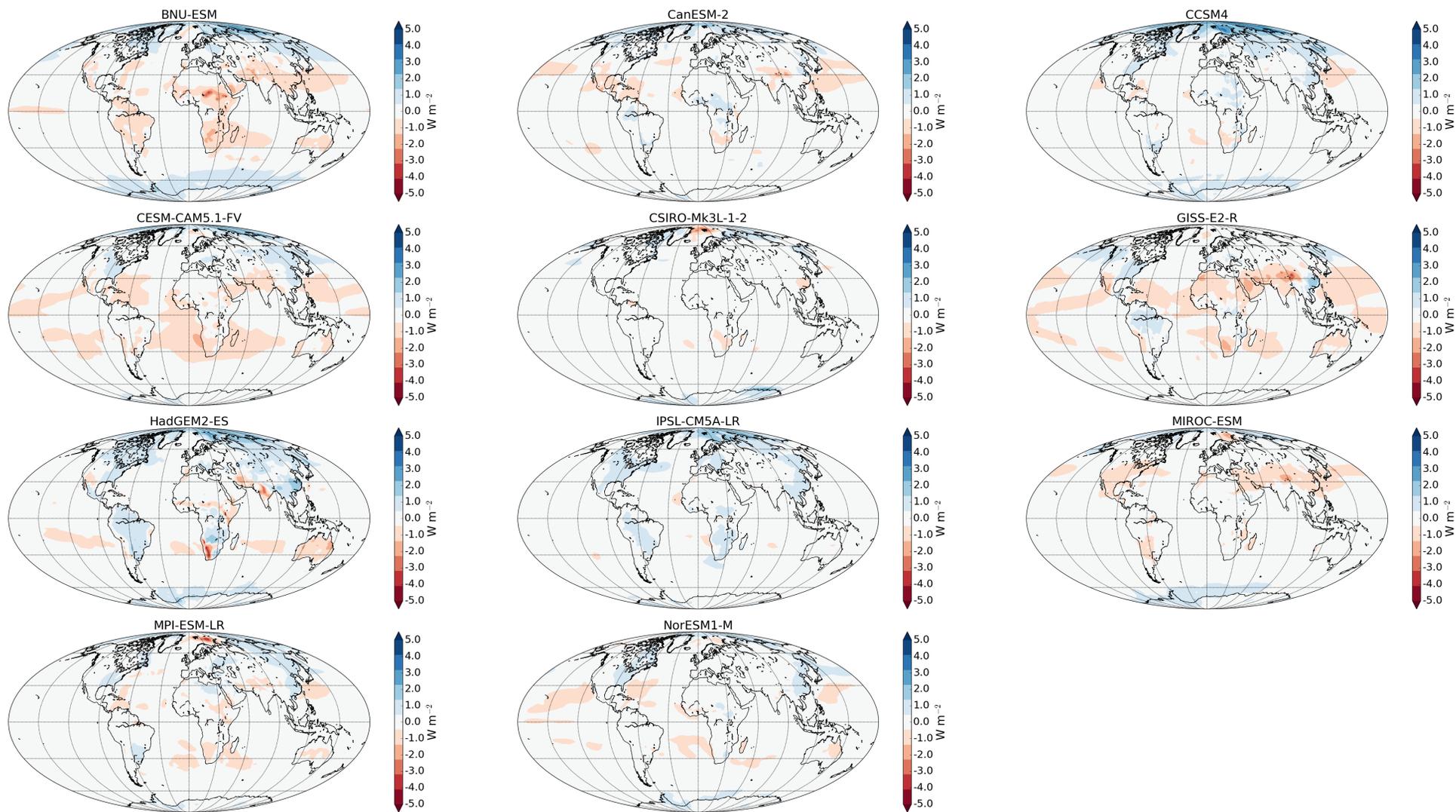


Figure S10: Change OLR due to surface temperature change, calculated using radiative kernels, in G1 minus piControl in each model.

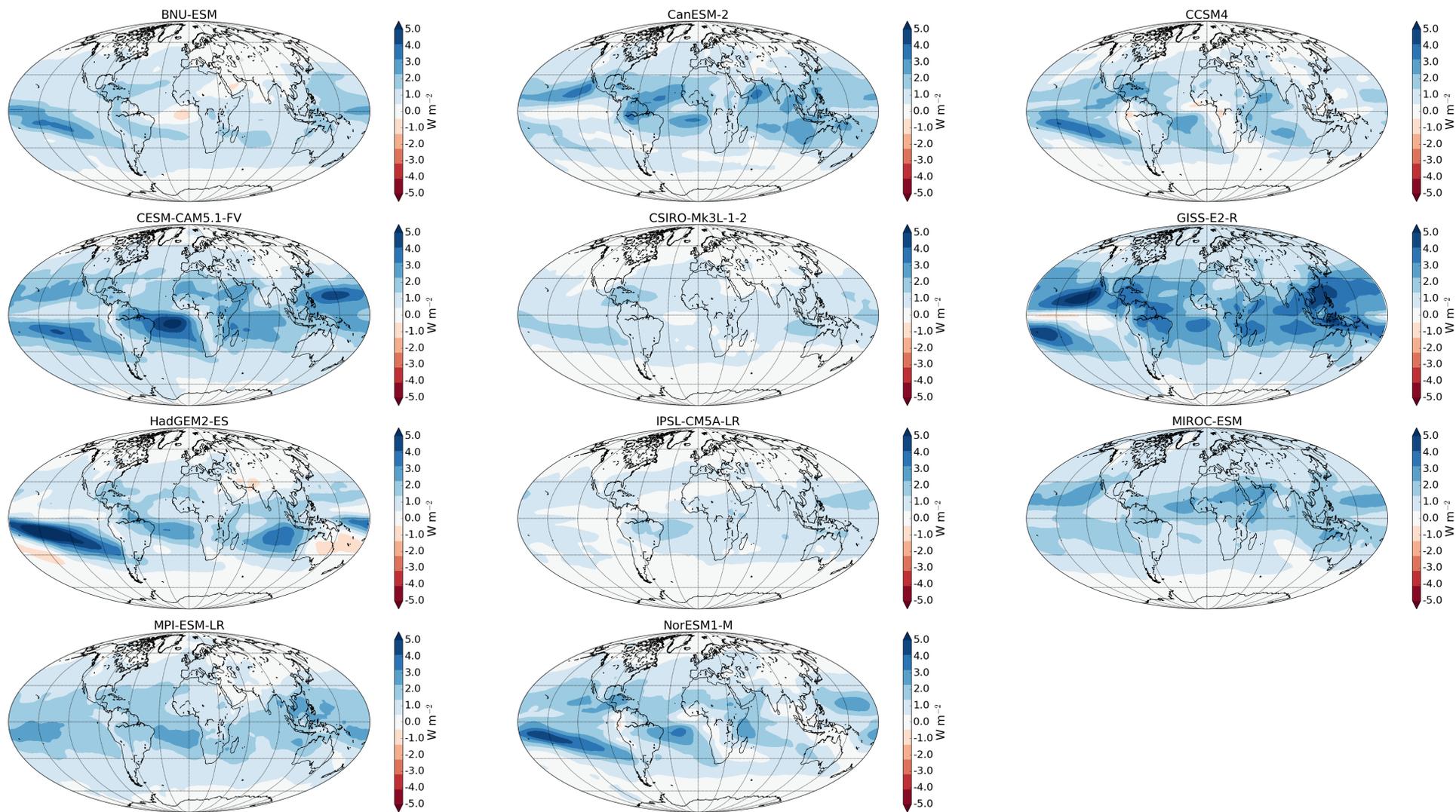


Figure S11: Change OLR due to water vapor change, calculated using radiative kernels, in G1 minus piControl in each model.

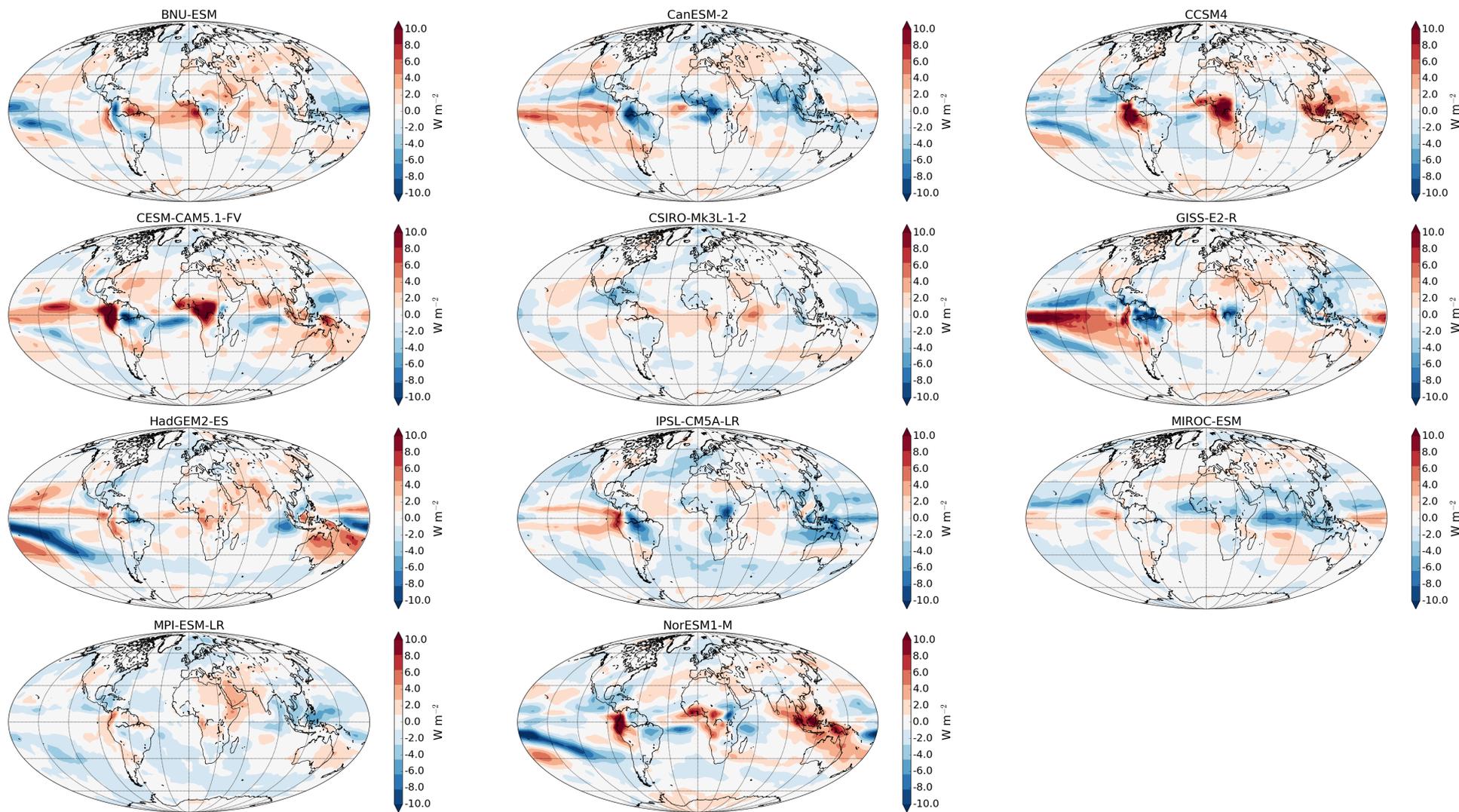


Figure S12: Change in LW cloud radiative effect, corrected for cloud masking effects using radiative kernels, in G1 minus piControl in each model.

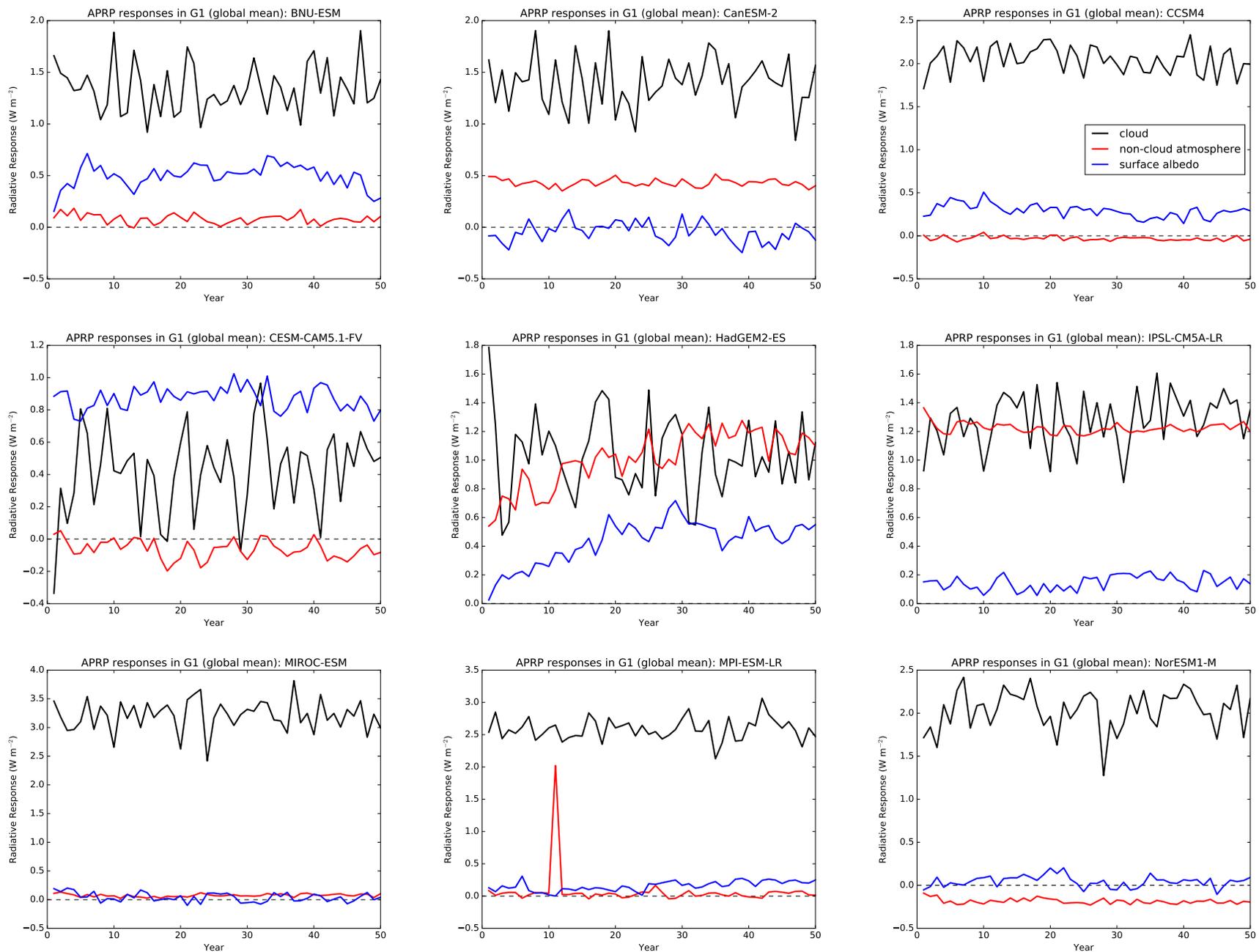


Figure S13: Time series of global mean SW radiative responses calculated using APRP for each year of G1 minus the 40-year piControl baseline, in each of nine models.