



Figure S1: Estimates of the contribution from radiative forcing to the surface air temperature trends binned by elevation for the GFDL-CM4 historical simulation (1959–2014). The solid black line shows the contribution estimated using an instantaneous radiative forcing (IRF), estimated as a residual between the total radiative flux trend at TOA and the various feedback components [see section 5.2 in the main text]. The dashed black line shows the contribution estimated using an effective radiative forcing (ERF), estimated using the fixed-SST historical simulation (named *piClim-histall*) from the Radiative Forcing Model Intercomparison Project. When estimating the ERF, the stratospheric adjustments are included in the forcing and the fast tropospheric adjustments (i.e., those which occur for fixed SST) are included in the feedbacks.