

This auxiliary file contains five sections. Section 1 describes the technical details on constructing the spectral radiative kernel. Section 2 contains figures and tabulated broadband feedback strengths computed using both spectral kernel technique and published broadband kernel techniques. Section 3 summarizes the basic information of the CMIP3 and CMIP5 models used in this analysis. Section 4 is a plot for clear-sky feedbacks in parallel to the all-sky feedbacks shown as Figure 3 in the text. Section 5 shows the all-sky lapse-rate feedbacks of two GCMs that have identical broadband lapse-rate feedback strength.