Supplementary information for Scheme for calculation of multi-layer cloudiness and precipitation for climate models of intermediate complexity

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References

Mace, G., Zhang, Q., Vaughan, M., Marchand, R., Stephens, G., Trepte, C., and Winker, D.: A description of hydrometeor layer occurrence statistics derived from the first year of merged Cloudsat and CALIPSO data, J. Geophys. Res., 114, D00A26, doi:10.1029/2007JD009755, 2009.



Figure S1: Annual mean low-level cloud amount $c_l \equiv c_{sl} + c_{co}$ (a and b), midlevel cloud amount $c_m \equiv c_{sm}$ (c and d), and upper-level cloud amount $c_h \equiv c_{sh}$ (e and f) for the model versions with initial (a, c, and e) and calibrated (b, d, and f) parameter sets. The units are fractions.

This is a duplicate for Fig. 5 of the main text but redrawn to be compatible to relevant Figures from (Mace et al., 2009) (see also Fig. S2).



Figure S2: Figures 10a, 11, and 12a from (Mace et al., 2009) (a, b, and c correspondingly). The plots are reproduced with permission from John Wiley and Sons Inc. (license number 3144290033498).

a)

Hydrometeor Fraction: Base <3 km, Thickness >0 km (Absolute) Avg Box: 6.0X8.0. For Period 200607-200706