Supporting information of:

Ensemble daily simulations for elucidating cloud-aerosol interactions under a large spread of realistic environmental conditions

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Figures S1 and S2 present comparison between the model simulations and ground base measurements of shortwave flux at the Barbados Cloud Observatory (BCO, (Stevens et al., 2016)) which is located on the island of Barbados (13°N, 59°W).

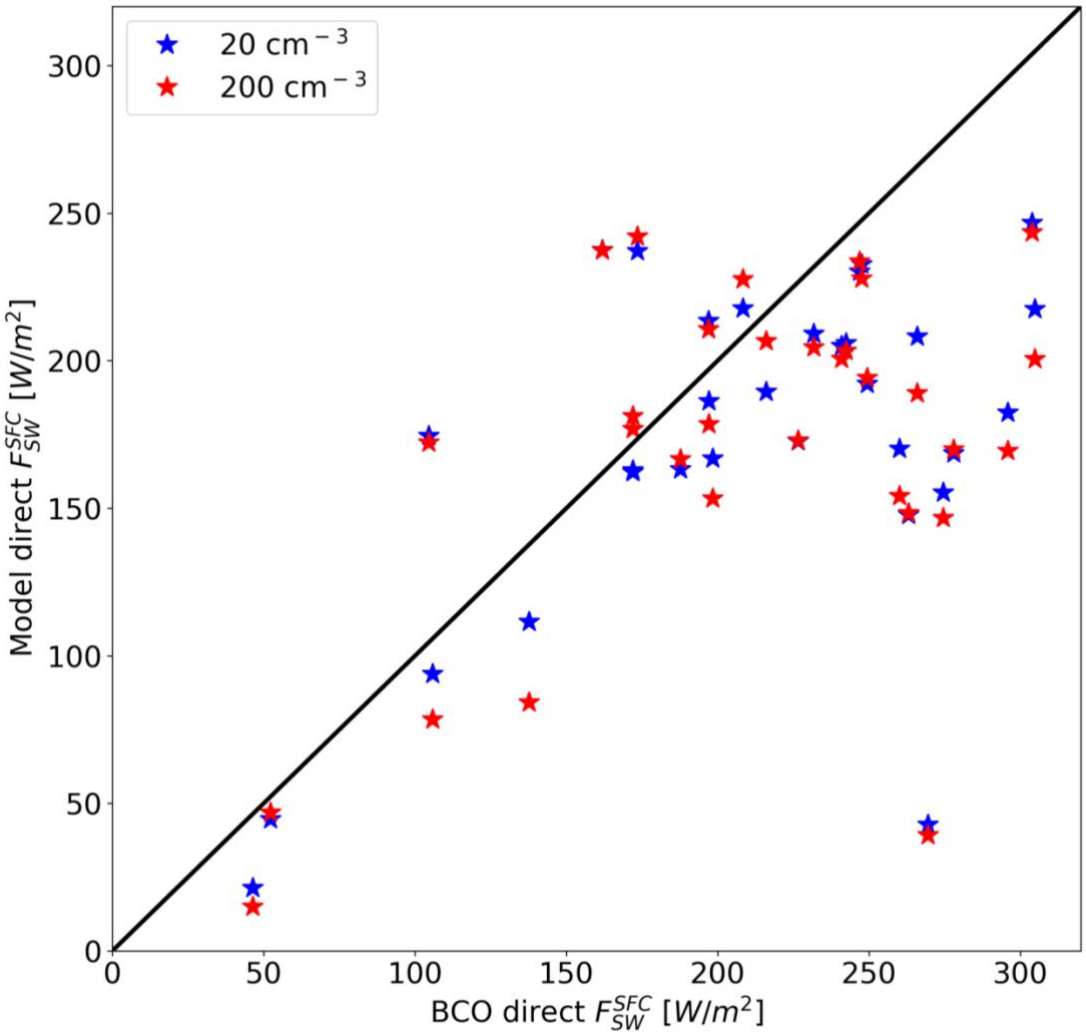

Figure S1. Comparison between the surface short wave flux (F_{SW}^{SFC}) observations at the Barbados Cloud Observatory (BCO; x-axis) and the model results (y-axis) for the NARVAL2 month (August 2016). For NARVAL1 no radiation measurements at the surface at BCO are available. Blue stars represent clean conditions (CDNC = 20 cm^{-3}) while red stars polluted conditions (CDNC = 200 cm^{-3}). In this case the model results were co-located with the BCO to within 0.01°. Black line mark the 1:1 line.

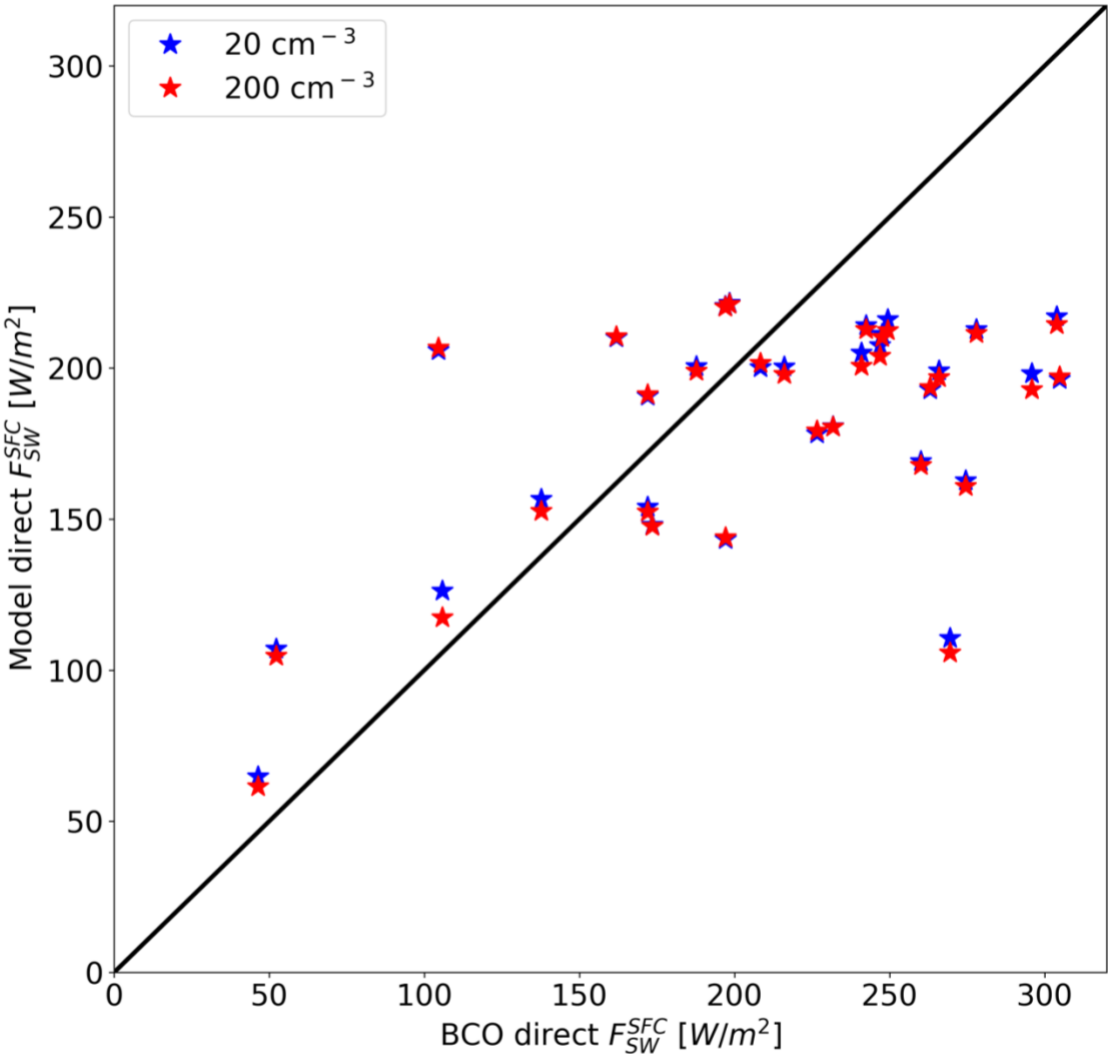

Figure S2. The same as Figure S1 but in this case the model results represent the mean over the entire domain.

References

Stevens, B., Farrell, D., Hirsch, L., Jansen, F., Nuijens, L., Serikov, I., Brügmann, B., Forde, M., Linne, H., and Lonitz, K.: The Barbados Cloud Observatory: Anchoring investigations of clouds and circulation on the edge of the ITCZ, Bulletin of the American Meteorological Society, 97, 787-801, 2016.