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Interactive comment on "Cluster analysis of midlatitude oceanic cloud regimes – Part 1: Mean cloud and meteorological properties" by N. D. Gordon and J. R. Norris

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As is already stated in the text, our cloud data are, in fact, primarily from geostationary satellites, not polar orbiters. We use only the noon value expressly to avoid sampling biases associated with differing numbers of daylight hours (e.g., far more points in lower latitudes and in the summer hemispheres). Because the autocorrelation time of cloudiness is on the order of a day, we would not gain additional information worth the cost of the sampling bias by using multiple hours in a day.

We have clarified in the Appendix that we separately averaged normalized flux over all grid boxes and seasons before multiplying it by diurnal mean downward SW that

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was separately averaged over all grid boxes and seasons. Thus, SW CRF does not include any radiative weighting toward lower latitude and summer season. The results are qualitatively the same irrespective of radiative weighting/averaging method.

We have changed our reference to the origin of cloud radiative forcing terminology to Charlock and Ramanathan (1985).

The ISCCP-FD data used is of the same spatial and temporal resolution as the ISCCP D1 data (e.g., 3-hourly). A clarification has been added to the text. I obtained the flux data from isccp.giss.nasa.gov, and it is the data set with the i2_prfii prefix. I have added a line in the acknowledgements to clarify the source of the ISCCP-FD.

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 1559, 2010.