Supplement of

Evaluation of aerosol and cloud properties in three climate models using MODIS observation and its corresponding COSP simulator, and their application in aerosol-cloud interaction.

Saponaro et al.
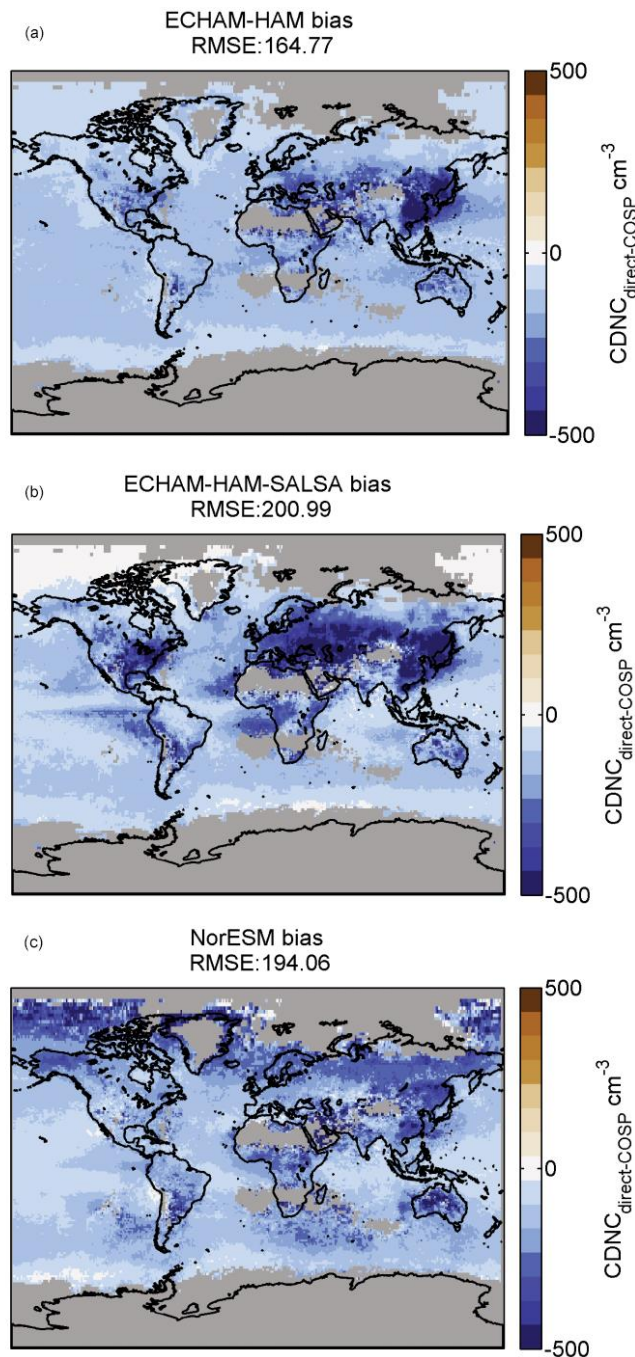
Figure S1. Cloud droplet number concentration (CDNC) annual mean bias. The bias represents the difference between the CDNC model direct output and CDNC derived from CER and COT from MODIS-COSP diagnostics.
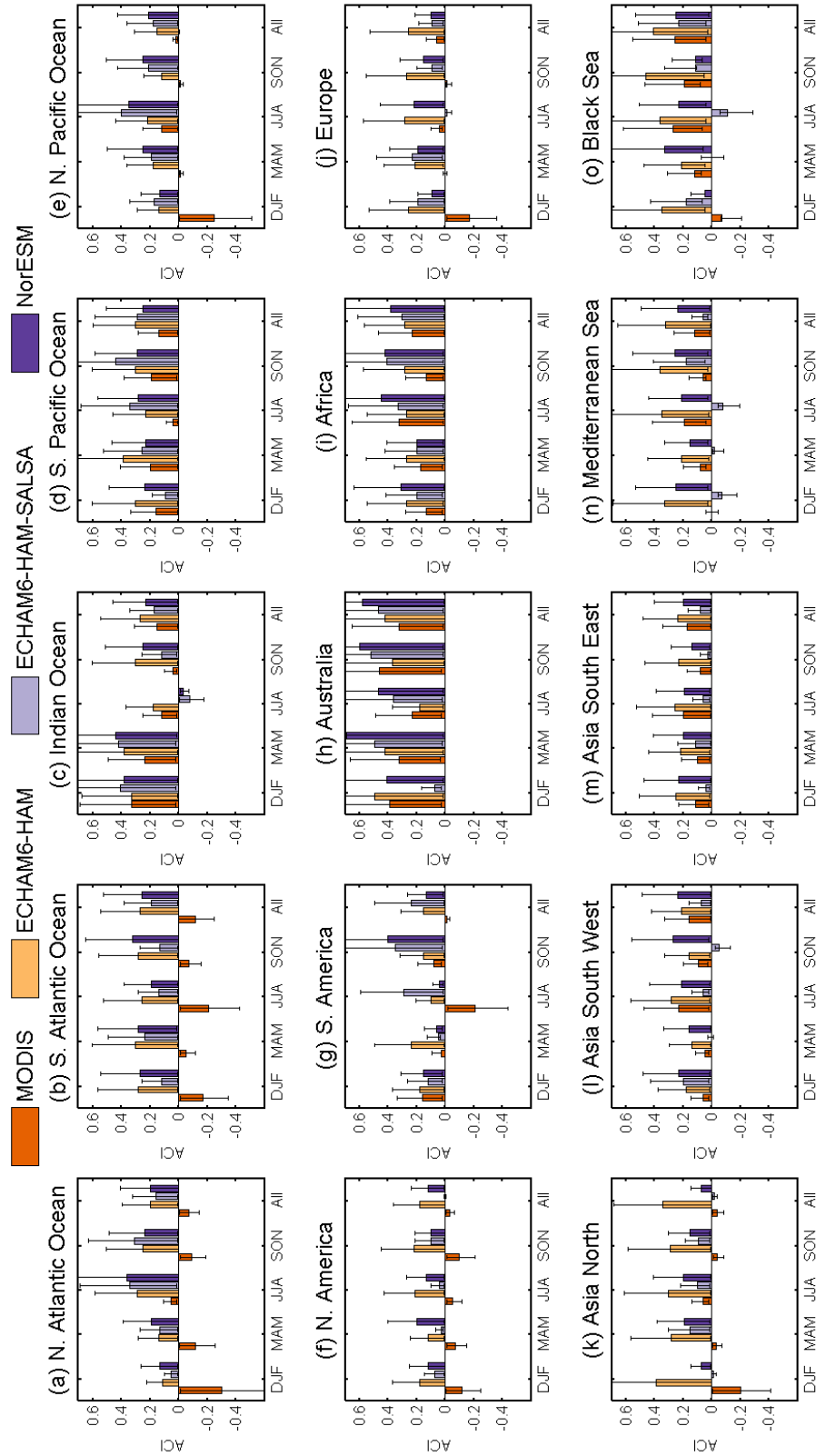
Figure S2. Regional estimates of the aerosol-cloud interaction (ACI) computed as the changes of ln(CDNC) to ln(AI). CDNC are derived from corresponding daily grid points of LWP and COT from MODIS observations and COSP-MODIS outputs. ACI values are calculated by season and for the entire period (1 January 2008 – 31 December 2008). Uncertainties estimates are calculated as 95% confidence interval from the daily values. The definition of the subregion was adopted from Myhre et al. (2007)

References

Myhre, G., Stordal, F., Johnsrud, M., Kaufman, Y. J., Rosenfeld, D., Storelvmo, T., Kristjansson, J. E., Berntsen, T. K., Myhre, A., Isaksen, I. S. A., Aerosol-cloud interaction inferred from MODIS satellite data and global aerosol models, Atmos. Chem. Phys., 7, 12, 3081-3101, https://www.atmos-chem-phys.net/7/3081/2007/, doi: 10.5194/acp-7-3081-2007