Geoscientific

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comment

Interactive comment on "The Cloud Feedback Model Intercomparison Project (CFMIP) contribution to CMIP6" *by* Mark J. Webb et al.

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This paper provides a clear description of the design of CFMIP3/CMIP6. The proposed experiments and outputs are interesting and will be important contributions to CMIP6. I have only a few minor comments.

I assume that all the CFMIP experiments are CO2 concentration driven. Should ESMs turn off dynamic vegetation and chemistry schemes?

Line 213 "Sea ice and SSTs under sea ice remain the same as in the amip DECK experiment.": How should we set SSTs in grids with 50% concentration of sea ice?

Line 263 "As such we hope that these experiments will provide useful synergies with Palaeoclimate Model Intercomparision Project (PMIP)": If there are any experiments

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that are directly related to the CFMIP experiments, please specify.

Line 302 "cloud-radiative effects are switched off in the longwave part of the radiation code": Is the shortwave part retained?

2.4 Abrupt +/-4% solar forced runs: Not only TSI but also spectral solar irradiance (SSI) are provided for CMIP6 (http://solarisheppa.geomar.de/cmip6). I assume that many ESMs use the SSI data for their DECK experiments. How to add +/-4% solar forcing on SSI?

Line 411 piSST: Do we use the monthly mean values of each year of piControl? Monthly mean climatology would lead to better S/N.

Line 550 "allowing a detailed evaluation clouds": allowing a detailed evaluation of clouds?

Hope this helps.

Interactive comment on Geosci. Model Dev. Discuss., doi:10.5194/gmd-2016-70, 2016.