Interactive comment on “Overview of the Global Monsoons Model Inter-comparison Project (GMMIP)” by Tianjun Zhou et al.

Anonymous Referee #2

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This is an overview of one of satellite MIPs under CMIP6, which is already endorsed by the CMIP6 panel. Therefore only minor comments are given here.

Minor comments: (1) page 2, line 7: The East Asian monsoon is controlled by zonal temperature and pressure gradient. Therefore, "meridional temperature and pressure gradients" should be replaced with "temperature and pressure gradients" without "meridional". (2) page 4: Four primary scientific questions are raised here, but how predictability of monsoons can be solved by GMMIP is unclear. Delete this question or include one sub-section regarding this in Section 5. (3) page 5, line 8: regional climate information is not a part of WCRP Grand Challenges (unfortunately). (4) page 8, Section 5: How is CORDEX data planned to use? (5) page 9, line 29: A maximum width of the Meiyu/Baiu rain band is about 200 km in a climatological time averaging, but it consists of meso-scale cloud clusters. This is why high-resolution modeling is needed.
In the pacemaker experiments, SST is restored to daily climatological SST. On the other hand, in the AMIP experiment, the Taylor-corrected monthly mean SST is used after interpolation into daily values. Therefore temporal behavior of SST is different between the AMIP and the pacemaker experiments. Doesn’t this matter?

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