

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

Anonymous Referee #2

Received and published: 13 May 2016

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.

C1

(6) page 11: 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?

Interactive comment on Geosci. Model Dev. Discuss., doi:10.5194/gmd-2016-69, 2016.

C2