

We thank reviewer 2 very much for her/his helpful comments. We took her/his remarks into account and improved the manuscript accordingly.

Comment: The start date of the models is still not addressed. The timing of the initialization date within the seasonal cycle crucially matters for the prediction of climate phenomena, and different timings of the initializations render the different models not comparable. This is a crucial issue that has to be addressed in the paper. If the models are not initialized at the same time, they are not comparable.

Answer: We analysed the seasonal prediction skill of East Asian summer monsoon (EASM) in six CMIP5 models. These models follow the CMIP5 framework, but establish their own initialisation strategy. A detailed description of the initialisation strategies for the six CMIP5 models can be found in Table 2. These datasets have been widely used in climate prediction research (Meehl et al., 2009; Meehl and Teng, 2012; Meehl et al., 2014; Choi et al., 2016a; Choi et al., 2016b). As the ocean is driving the long-term prediction skill rather than the initial condition of the atmosphere, the timing of the initialization has to be considered in the time scale of the ocean circulation, i.e. years to decades. Therefore, on an ocean time scale, the initialization takes place with comparable timing and therefore the results are comparable. This is a new approach based on decadal prediction experiments, which deviates from the scores of other seasonal prediction experiments based on initialization techniques derived from weather forecasting.

We added a paragraph to clarify our approach (Line 102-110).

Comment: My comment about CHFP has not been addressed at all. These models provide a large range of models that could be used to address the issues raised in this study for a large number of models with the same timing of the initialization.

Answer: Indeed, the CHFP provides a large range of forecast dataset for study the monsoon predictability based on the old seasonal prediction approach. The main goal of our paper is the comparison the seasonal prediction skill of EASM in CMIP5 models to investigate the potential of seasonal prediction using the decadal prediction methods. A comparison with published result can be found in the manuscript. A comprehensive comparison of all the CHFP data with the CMIP5 simulations regard to the seasonal prediction skill of the EASM is certainly an interesting topic, which should be addressed in an additional paper.

A sentence has been added to the text to clarify this issue (Line 345-352).

Minor comments:

Answer: we accordingly revised the manuscript by the comments.

Choi, J., Son, S. W., Ham, Y. G., Lee, J. Y., and Kim, H. M.: Seasonal-to-Interannual Prediction Skills of Near-Surface Air Temperature in the CMIP5 Decadal Hindcast Experiments, *J Clim*, 29, 1511-1527, 10.1175/Jcli-D-15-0182.1, 2016a.

Choi, J., Son, S. W., Seo, K. H., Lee, J. Y., and Kang, H. S.: Potential for long-lead prediction of the western North Pacific monsoon circulation beyond seasonal time scales, *Geophys Res Lett*, 43, 1736-1743, doi: 10.1002/2016GL067902, 2016b.

Meehl, G. A., Goddard, L., Murphy, J., Stouffer, R. J., Boer, G., Danabasoglu, G., Dixon, K., Giorgetta, M. A., Greene, A. M., Hawkins, E., Hegerl, G., Karoly, D., Keenlyside, N., Kimoto, M., Kirtman, B., Navarra, A., Pulwarty, R., Smith, D., Stammer, D., and Stockdale, T.: DECADAL PREDICTION Can It Be Skillful?, *Bull Am Meteorol Soc*, 90, 1467-1485, 10.1175/2009bams2778.1, 2009.

Meehl, G. A., and Teng, H. Y.: Case studies for initialized decadal hindcasts and predictions for the Pacific region, *Geophys Res Lett*, 39, L22705, 10.1029/2012gl053423, 2012.

Meehl, G. A., Goddard, L., Boer, G., Burgman, R., Branstator, G., Cassou, C., Corti, S., Danabasoglu, G., Doblas-Reyes, F., Hawkins, E., Karspeck, A., Kimoto, M., Kumar, A., Matei, D., Mignot, J., Msadek, R., Navarra, A., Pohlmann, H., Rienecker, M., Rosati, T., Schneider, E., Smith, D., Sutton, R., Teng, H. Y., van Oldenborgh, G. J., Vecchi, G., and Yeager, S.: DECADAL CLIMATE PREDICTION An Update from the Trenches, *Bull Am Meteorol Soc*, 95, 243-267, 10.1175/Bams-D-12-00241.1, 2014.