

The Asian-Australian Monsoon - Land-atmosphere interactions over the Australian-Asian monsoon region

Xubin Zeng[†];

[†] University of Arizona, USA

Leading author: xubin@atmo.arizona.edu

Numerous studies have attempted to address the land-precipitation coupling, but our understanding remains limited and discrepancies still exist from different studies. In this poster presentation, several easy-to-compute quantities, including the Gamma index introduced in Zeng et al. (2010), will be computed using observational data, IPCC4 model output, and IPCC5 model output. While the analysis is global, the emphasis will be placed on the Australian-Asian monsoon region. The improvement (or lack thereof) of the IPCC5 over IPCC4 model results will be assessed. The computed quantities from individual models will also provide simple indicators to characterize the land-atmosphere coupling strengths of these models, which will help better understand model results on the Australian-Asian monsoon. Zeng, X., M. Barlage, C. Castro, and K. Fling, 2010: Comparison of land-precipitation coupling strength using observations and models. *J. Hydrometeor.*, 11, 980-995.