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Boreal summer intraseasonal oscillation in the Asian-Pacific monsoon region simulated in CAMS-CSM

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The simulation of the boreal summer intraseasonal oscillation (BSISO) is investigated by using the Climate System Model (CSM) developed at Chinese Academy of Meteorological Sciences (CAMS). The results indicate that this new model is able to simulate a reasonable annual and seasonal cycle of the precipitation, as well as the vertical shear of large scale zonal wind in tropics. The model reproduces the eastward- and northward-propagating signals similar to that is found in observations. The simulation of BSISO is generally in agreement with the observations in terms of the variance center, periodicity and propagation, with the exception that the magnitude of the BSISO anomalous convections are underestimated in both eastward propagation along the equator in the Indian Ocean and northward propagation over the Asian-Pacific summer monsoon domain. The preliminary evaluation of the simulated BSISO by CAMS-CSM suggests that this new model has the capability, to a certain extent, in representing BSISO features and its zonal propagation along the equator and meridional propagation over the Asian-Pacific summer monsoon domain.