

Project: **884**

Project title: **Dynamical downscaling in CORDEX-East Asia using the high resolution Regional Climate Model COSMO-CLM**

Project lead: **Bo Huang**

Report period: **1.1.2014 - 31.12.2015**

The request of this project for 2014 as following:

Within the dynamical downscaling experiment of CORDEX-East Asia regional climate model simulations will be carried out using the COSMO-CLM model with a horizontal resolution of about 50 km. A present-day model simulation from 1979-2010 driven by ERA-Interim reanalysis data will be compared with observation data to evaluate the performance of the model in East Asia focussing on the climatology in the East-Asian monsoon system.

In the last two years, the project finished the present-day model simulation. Then, the simulation results have been inter-compared with other 4 RCMs which are contributed to CORDEX-East Asia. The inter-comparison work is focus on the precipitation climatology which include (1) an extreme rainfall event, (2) seasonal climatology, (3) annual cycles and inter-annual variability and (4) the monsoon characteristics. All these work are contributed to the CORDEX-East Asia project, and has been published on the Journal of Climate Research (Huang et al., 2015).

Huang B, Polanski S and Cubasch U (2015) Assessment of precipitation climatology in an ensemble of CORDEX-East Asia regional climate simulations. Clim Res 64: 141–158