November 1, 2024

Metting minute: The LS4P-RCM small meeting

Attendants: Yongkang Xue, Yaoming Ma, Yang Kun, Jianping Tang, Shiori Sugimoto, Changgui Lin, Tomonori Sato

Agenda

Presentation by Changgui

- Information about station datasets and satellite estimation datasets
- Two stations start to observe from 2006, One is from 2007, another is from 2009, and several stations start the operation from 2014.

Presentation by Shiori

- Introduce Yamada and Uyeda (2006) and our research plan

Summary

- To understand basic information how the models can simulate land surface condition, we should validate land-surface parameters between observation and model at first. Then, differences of land-atmosphere coupling process in different phases are investigated. Intraseasonal-scale (pre-monsoon, monsoon, and retreat phases) to see model performance for each of 3 phases.
- To focus on annual variations, long-term satellite observation datasets are useful. Also, we can intensively examine the seasonal and/or sub-seasonal variations in 2014-2015 using in-situ observation. (Several stations also have long-term data for 10 years~)
- It is better to choose appropriate reference data considering the spatial representativeness, suggested by Prof. Yang.
  # Radiation, Tair, Humidity: Station data
  # Tskin, soil moisture, evaporation: Satellite data
- How do we validate station data with 20-km model output? Shiori will consider what is the best way (to use closest point in the model or to average simulated variables in small area near the station). Try both approaches, but the average of multiple grid points surrounding the observation site is planned at this time. Consider spatial representativeness as discussed above.

Actions

- Changgui and Shiori share the PDF of their presentation to all attendants.
- To upload the RCM dataset conducted by the NJU and the Tsinghua, Shiori will send information about which model variables are needed to Prof. Tang by e-mail.
- Prof. Ma will also provide the gridded skin temperature dataset by satellite.
- Changgui will try to test downloading observation data (this is just a test whether we can download dataset successfully) and exchange information with Shiori.
  # Shiori would like to know each data volume.