

WCRP-JNU Training School on Monsoon Variability in Changing Climate

Monsoons are a global phenomenon, and the breadth of socio-economic areas in different regions is greatly influenced by its progress and consequences at regional and local scales. The World Climate Research Programme (WCRP) launched a collaborative framework with the Jeju National University (JNU, Republic of Korea) on training and education for ocean and climate science, and organized its first training school to share and promote contemporary issues in the area of monsoon study, particularly incorporating the interest of users (of information to understand and predict monsoon phenomena) of the Asia-Pacific region.

This school focused on understanding tropical processes and scale interactions therein (sub-daily, intraseasonal to interannual), for the Asia-Pacific region. Six top scientists who are active in research on monsoons and related areas provided exciting scientific talks on the subjects of: overview of global and regional (Asian) monsoons, dynamics and processes, scale interactions – time and space, ocean and atmosphere, status and gaps of monsoon prediction as well as intercomparisons of contemporary models, coastal impacts of monsoons (physical, biogeochemical, ecosystem) and various state-of-the-art research topics.

Out of over 160 highly qualified applications, 34 young scientists and early-career forecasters from 15 countries of the Asia-Pacific region were selected for this Training School. All participants enjoyed this 5-day course sharing knowledge and discussing scientific challenges for monsoon prediction, particularly intra-seasonal to seasonal scales, as well as the impacts of monsoon variability in a changing climate on coastal zones.

Through two breakout sessions, the summer school participants had open dialogues on “user needs”, as well as on the status and gaps regarding monsoon predictability. Enthusiastic young scientists and forecasters united their voices in emphasizing the need for interdisciplinary studies to bring the latest development in monsoon prediction to the real value of society. Participants also agreed on limitations and gaps in existing datasets, much needed new observations and systematic errors in climate models used for monsoon prediction, while contemplating questions on how the future operational prediction of monsoons can be designed given the current challenges of seasonal forecast modelling and impact assessment.

Other highlights of the workshop included a half-day field trip organized by the JNU and Jeju Sea Grant Center to natural heritage sites of Jeju Island, yielding bonding moments among our future leaders of climate science.

For more information on the Training School see <https://www.wcrp-climate.org/wcrp-jnu-overview>.

