
 [EE] Evening Poster | A (Atmospheric and Hydrospheric Sciences) | A-CG Complex & General

[A-CG37]Asian monsoon hydro-climate and water resources research for a next GEWEX RHP

convener:Shinjiro Kanae(School of Environment and Society, Tokyo Institute of Technology)

Sun. May 20, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

In the Asian monsoon region, water-related climate is one of the key issues for its growth, sustainability, and disaster prevention. The 10-year MAHASRI (a regional project of GEWEX under WCRP) period successfully finished in 2016, and we are currently trying to establish a new RHP (Regional Hydro-climate Project) for the Asian monsoon region under WCRP/GEWEX/GHP. This session will be open for all fields of research related with Asian monsoon hydro-climate and its application to society (e.g., water resources), regardless of the participation in the above projects. We also welcome GEWEX and GHP related studies outside the Asian monsoon. Keywords and targets of this session include: 1) hydro-climate extremes and water-related disasters in monsoon Asia in a changing climate; 2) prediction of hydro-climate and water resources in monsoon Asia from monthly, seasonal to decadal time-scales for societal benefits, 3) changes in water availability and water use in this particular food basket region of the world, 4) intra-seasonal oscillation and diurnal change of hydro-climate in Asia, and its impact on society, 5) long-term monitoring, data-rescue, satellite remote-sensing, and new observation of hydro-climate and water resources in this region for societal benefits, 6) monsoon onset and withdrawal and their linkages with society. Participants are encouraged to discuss future collaboration and research-network expansion for ultimately establishing the next RHP under GEWEX as a successor of MAHASRI and GAME.

[ACG37-P03]Asian monsoon variability over 100 years through long-term data rescue activities in ACRE-Japan

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Keywords:monsoon, data rescue, daily precipitation, rainfall characteristics, seasonal change

Climatic data utilized for climatic change studies have been limited prior to 1950 in the Asian monsoon region. A lot of data are still stored only in paper or image formats. These data which have not used in the past studies will provide important information not only for better recognition of past climatic changes but also for future climate prediction. We have started ACRE-Japan program for promoting data rescue activities in Japan since September 2017, in collaboration with the international project: Atmospheric Reconstruction over the Earth (ACRE).

We have digitized daily precipitation data published in the data books; Rainfall of India (1891-1914), Daily Rainfall of India (1915-1946), Daily Rainfall Record in Burma (1938-1941, 1947-1953) in the current Bangladesh and Myanmar where belonged in the former British India; Zi-Ka-Wei (1891-1939) in China; Observatorio Meteorologico de Manila (1868-1900) and Monthly Bulletins of the Philippine Weather Bureau (1901-1940); Data sheets of the climatological stations (Kunai-Kansokusho) in the Kanto and Tokai Districts (1891-1976) and those of light house stations (1877-1882) in Japan. Some preliminary results on the changes of daily rainfall characteristics, monsoon seasonal changes will be presented. Some of the digitized data are available at JCDP (Japan-Asia Climate Data Program) Web site

(<http://www.jcdp.jp/>).

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