

MAHASRI

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MAHASRI Monsoon Asian Hydro-
Atmosphere Scientific Research and Prediction
Initiative

(Cf. MAHA=Great, Sri=Saint in Sanskrit)

<http://mahasri.cr.chiba-u.ac.jp/>



Objective

"To establish hydro-meteorological prediction system, particularly up to seasonal time-scale, through better scientific understanding of Asian monsoon variability".

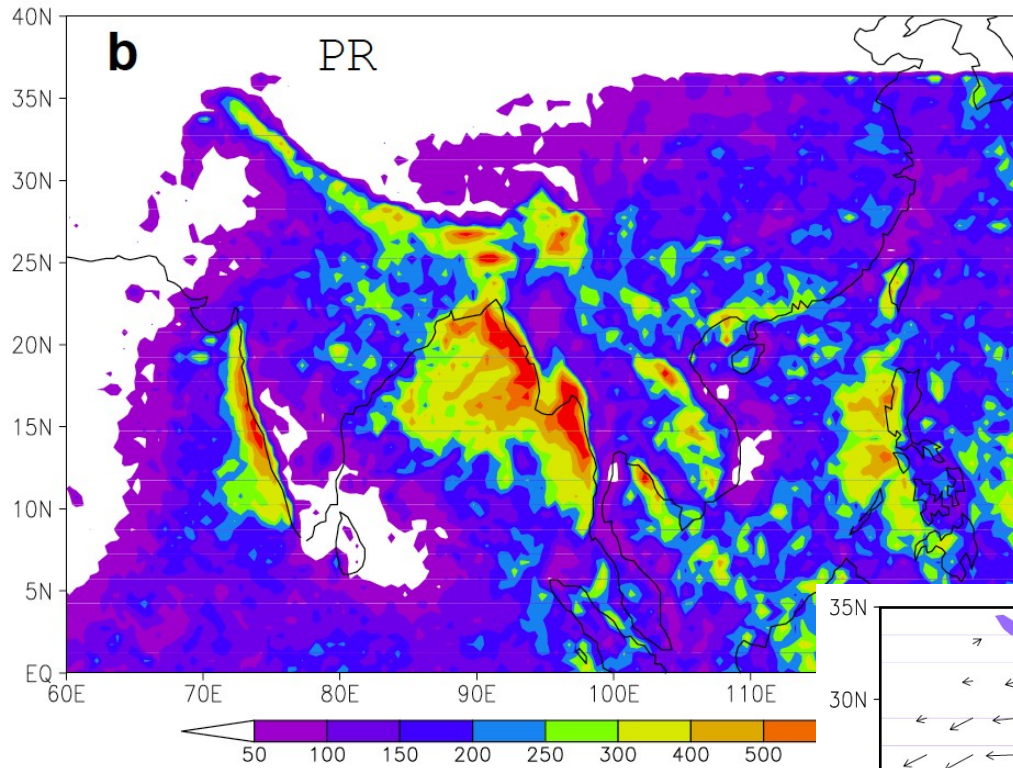


Key Science Issues (1)

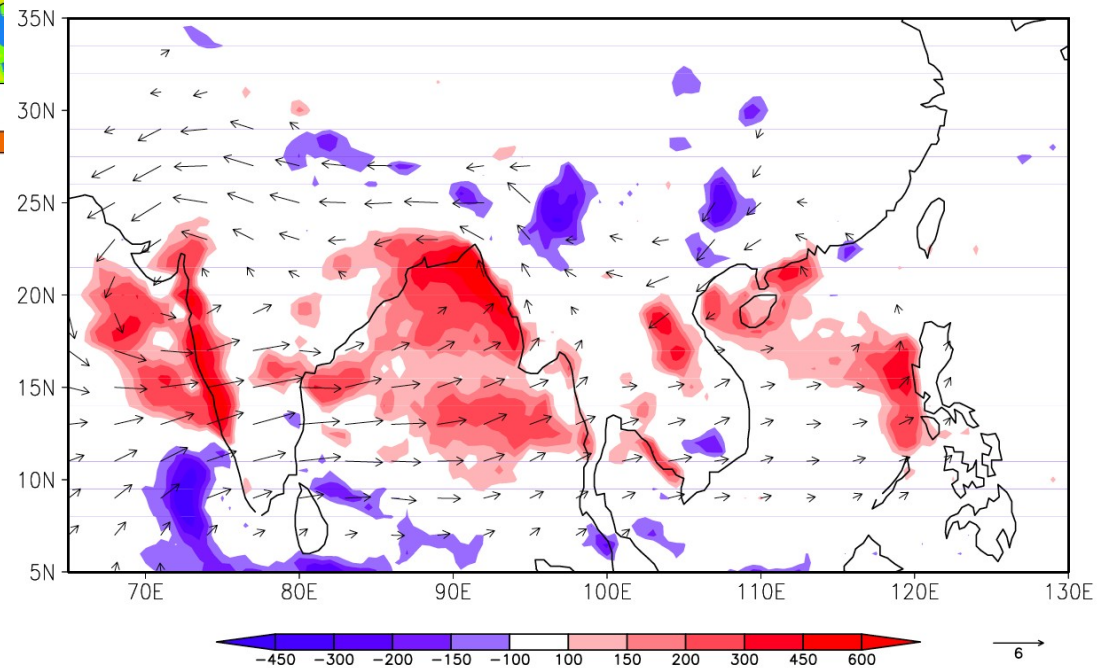
- Atmosphere-ocean-land interactions in the Asian monsoon system
- Effect of various-scale orography on monsoon rainfall
- Scale-interactions among diurnal, synoptic, intraseasonal and seasonal variability of Asian monsoon rainfall



Effect of topography by high-resolution regional modeling



Jun-Aug



(Xie et al., 2006 J. Climate)

Key Science Issues (2)

- Effect of human influences (i.e., aerosols, land-use change, and greenhouse-gas increase) on hydro-meteorological variations in Asian monsoon regions – Collaboration with MAIRS





Data Management

Water and Energy Budget Studies

Worldwide Integrated Study Extremes

Stable Water Isotope Intercomparison Group

Transferability

Water Resource Applications Project

Mackenzie GEWEX Study (MAGS)

Baltic Sea Experiment (BALTEX)

Northeast Asia

MAHASRI

East Asia

Tibet/Himalaya

Tropics



GEWEX Americas Prediction Project (GAPP)

Large Scale Biosphere-Atmosphere Experiment in Amazonia (LBA)



African Monsoon Multidisciplinary Analysis (AMMA)

La Plata Basin (LPB)



Murray-Darling Basin (MDB)



Time Schedule

- October, 2006-March, 2010: Research phase I (2006-2007: Build-up new observation systems)
- 2008(-2009): IOP-year (AMY: Asian Monsoon Year)
- 2011-2014: Research phase II
- 2015: Concluding phase



MAHASRI after the GHP-11 (1) - Jan. 2006

- November 1, 2005: 2-nd International Planning Workshop at Tokyo, Japan
- November 2-4, 2005: 1st Asian Water Cycle Symposium, Tokyo, Japan
- November 4-6, 2005: Workshop on Hydroinformatics and atmospheric sciences, Kanchanaburi, Thailand
- Early December, 2005: Submit MAHASRI Science Plan draft (Ver. 1) to the GEWEX SSG members
- Mid-January, 2006: Proposal in the GEWEX-SSG, Dakar, Senegal . Conditionally approved as Post-GAME CSE in Asia.



MAHASRI after the GHP-11 (2) - Sept., 2006

- April, 2006: Meeting in the Symposium on Asian Winter Monsoon, Kuala Lumpur, Malaysia
- August 18-20, 2006: The 1st Vietnam-Japan Joint Workshop on Asian monsoon, Halong, Vietnam
- July, 2006: Review from the CLIVAR community
- August 7-8, 2006: Informal meeting with IAP etc., Beijing, China.
- September 15, 2006: APCC SAC meeting, Busan Korea
- September 26-28, 2006: Capacity building in Asia, Bangkok, Thailand.
- September 29-30, 2006: Workshop on East Asian Monsoon Experiment (EAMEX), Chung-Li