

MAHASRI



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January 10, 2007 at The University of Tokyo, Japan**

MAHASRI Monsoon Asian Hydro- Atmosphere Scientific Research and Prediction Initiative

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

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

<Time schedule>

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



Mackenzie GEWEX Study (MAGS)



Baltic Sea Experiment (BALTEX)



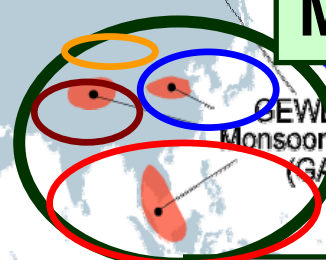
GEWEX Americas Prediction Project (GAPP)

Northeast Asia

MAHASRI

East Asia

Tibet/Himalaya



Tropics

Large Scale Biosphere-Atmosphere Experiment in Amazonia (LBA)



African Monsoon Multidisciplinary Analysis (AMMA)

La Plata Basin (LPB)



Murray-Darling Basin (MDB)



- Data Management
- Water and Energy Budget Studies
- Worldwide Integrated Study of Extremes
- Stable Water Isotope Intercomparison Group
- Transferability
- Water Resource Applications Project



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



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



Current status of MAHASRI

- Mid-January, 2006: Conditionally approved as Post-GAME CSE in Asia Proposal in the GEWEX-SSG18, Dakar, Senegal. (Also by WCRP-JSC27 in March).
- October 18, 2006: Asia Pacific Association of Hydrology and Water Resources Meeting (APHW) at Bangkok, Thailand. Special session on “GEOSS and MAHASRI” is organized.
- October 19-20, 2006: The 1-st International MAHASRI Science Steering Committee Meeting, Bangkok, Thailand. Start drafting of Implementation Plan.
- Expecting the official approval in the GEWEX-SSG19, January 22-26, 2007 at Honolulu, Hawaii (Also by WCRP-JSC28 in March).

New field observation plan

- **Asian Monsoon Year (AMY)-2008
in collaboration with MAHASRI**

Japan- JEPP

China- 973AIPO

India- STORM, CTCZ

AAMP/CLIVAR

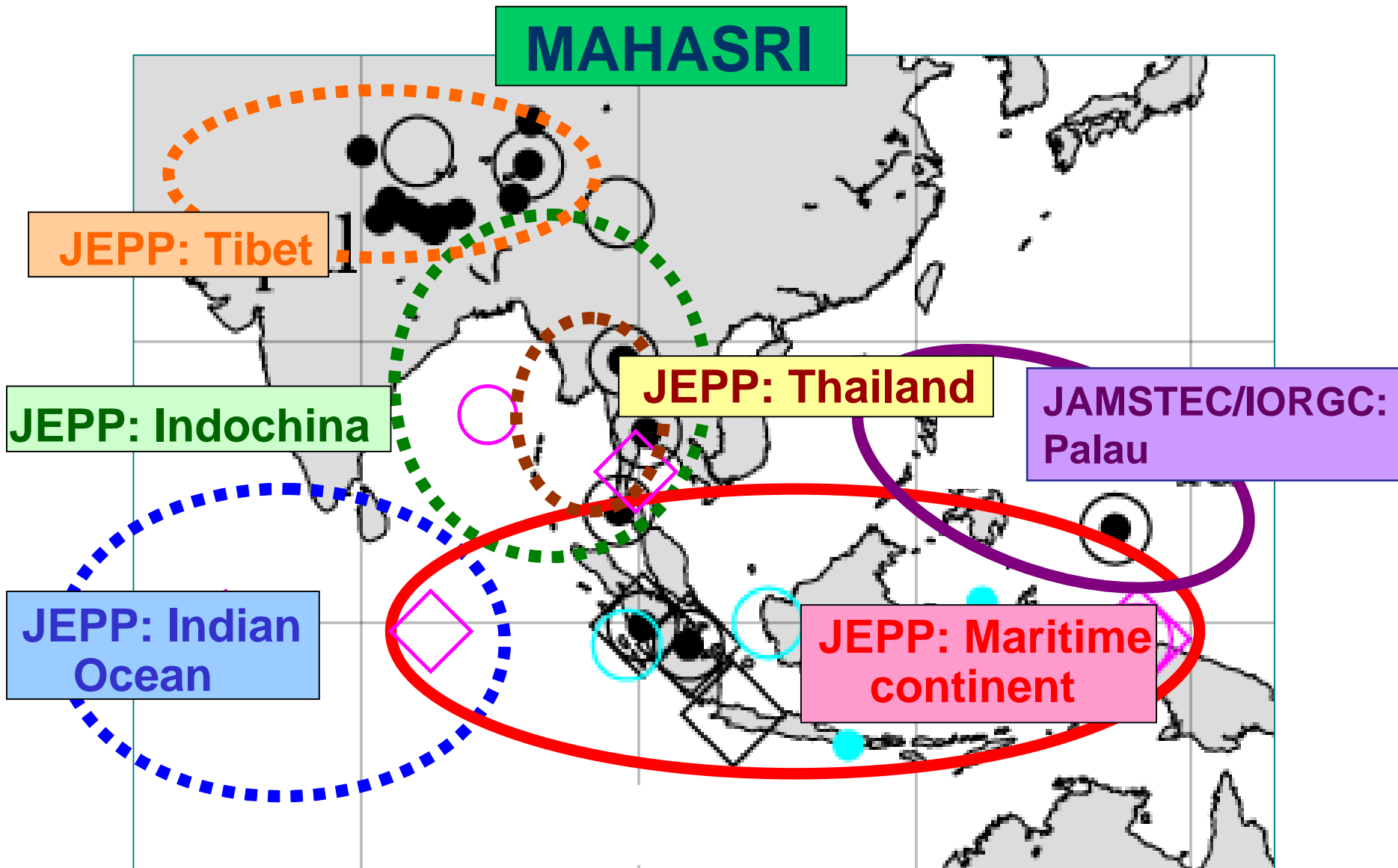


Objectives of AMY'08

- To clarify multi-scale interactions among diurnal, synoptic and intraseasonal variations of Asian monsoon
- To clarify the role of aerosol on Asian monsoon variability
- To clarify land surface processes related with Asian monsoon variability
- To improve Asian monsoon predictions, in particular, in intraseasonal and seasonal time scales and its applications to the reduction of water related hazards and to better water resource management



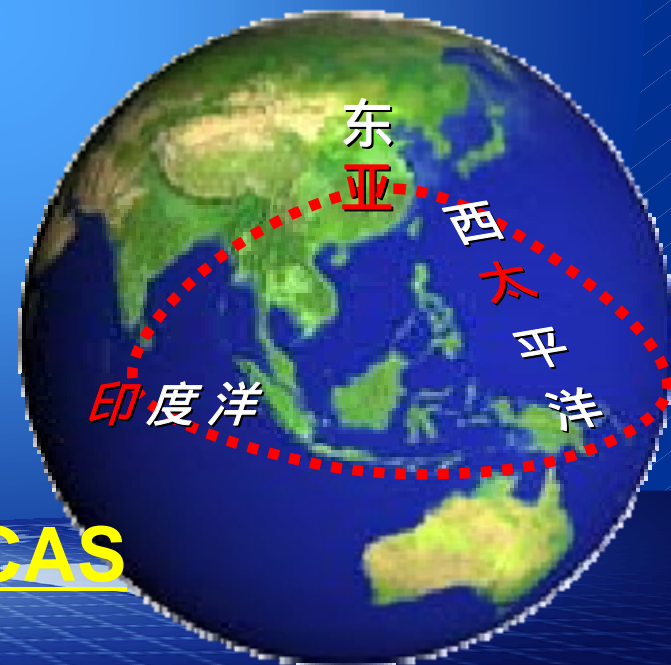
MAHASRI and related Japanese Projects (JEPP)

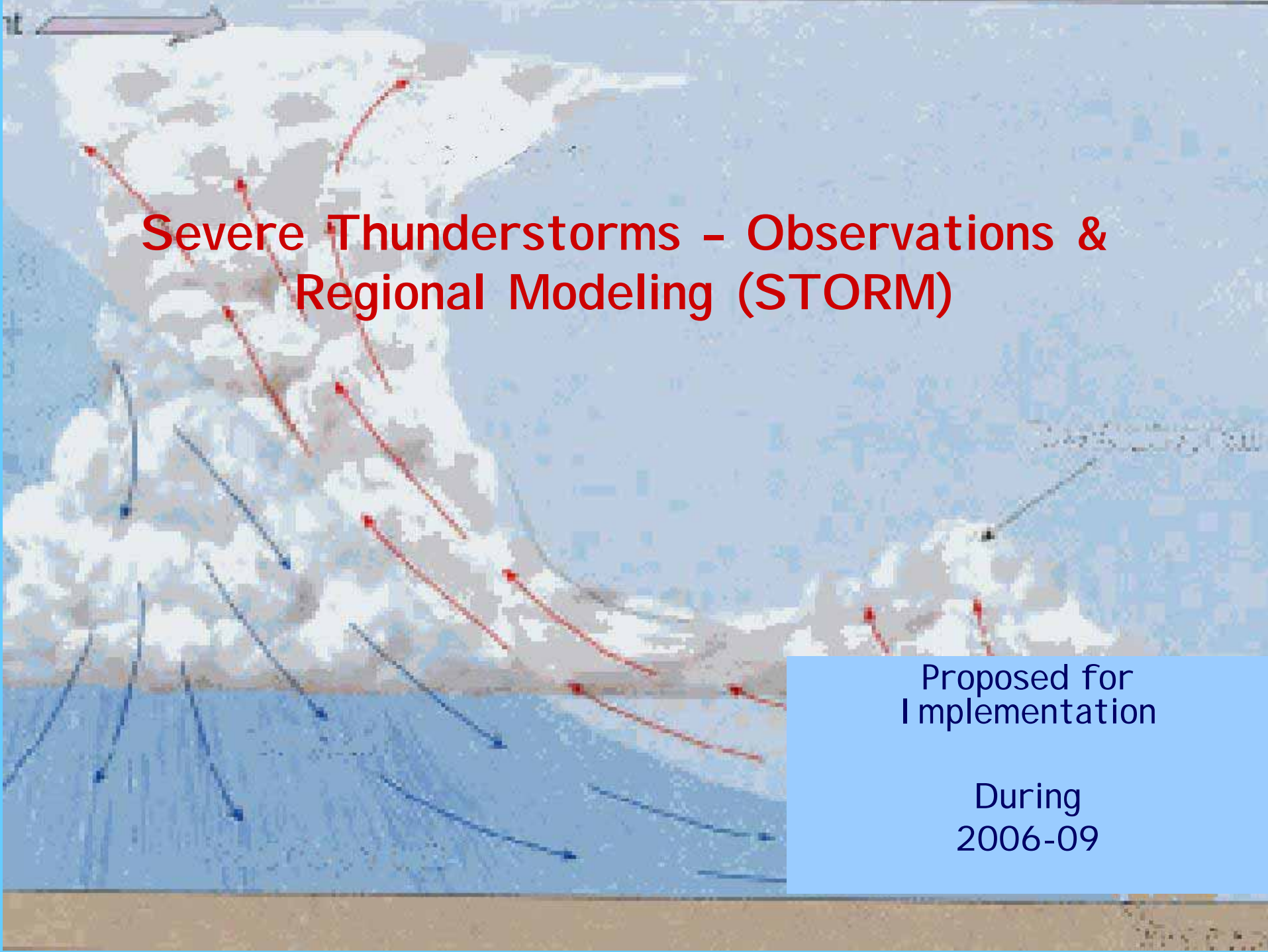


The National Basic Research Program of China

Ocean-Atmosphere Interaction over the Joining Area of Asia and Indian-Pacific Ocean (AIPO) and Its Impact on the Short-Term Climate Variation in China

- ❑ Period: 2006.09- 2011.09
- ❑ Supported by Ministry of Science and Technology of China (MOST)
- ❑ Adhesive Unit: Institute of Atmospheric Physics (IAP), CAS





Severe Thunderstorms - Observations & Regional Modeling (STORM)

Proposed for
Implementation

During
2006-09

Indian Monsoon Field Experiments and plans in the Indo-Gangetic Plains

Continental Tropical Convergence Zone (CTCZ) as a component of coupled Land-Ocean-Biosphere-Atmosphere System 2008-2010

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Dr. N. Singh, IITM, Pune.

Meeting Schedule in 2007

- Jun. 11-12: PSA Meteorology and Atmospheric Sciences Scientific Committee Meeting at Taipei
- Jun. 13-17: Pacific Science Congress XXI (PSC21) at Okinawa, Japan
- Jul. 2-13: IUGG XXIV 2007 Session JMS011 on Monsoon system at Perugia, Italy
- **Jul. 30-Aug. 4: The 4th AOGS 2007 Session AS07 GEOSS, CEOP and MAHASRI at Bangkok, Thailand**
- Aug. 9-13 : MAIRS/CEOP Workshop on semi-arid region at Lanzhou, China

MAHASRI in India (Hindu Godless)



MAHASRI in Japan (Buddhism Godless)



Thank you!