

# The Second International Workshop on Prevention and Mitigation of Meteorological Disasters in Southeast Asia

## PROGRAM

March 2-5, 2009

at the Jayakarta Bandung Suite Hotel & Spa, Indonesia

### March 2 (Mon)

11:00 Registration

12:00 (Lunch)

#### Opening session

(Chair: Tri Wahyu HADI)

13:30 Tri Wahyu HADI (ITB, Indonesia)

Welcome, opening remarks, and logistics

13:40 Emmy SUPARKA (ITB, Indonesia)

Welcome address

14:00 Takashi NISHIGAKI (JST, Japan)

Welcome address

14:20 Shigeo YODEN (DG/Kyoto U., Japan)

International Collaborations on Prevention and Mitigation of Meteorological Disasters in Southeast Asia

14:50 Mu MU (IAP/CAS, China)

Approaches to Adaptive Observation for Improving High Impact Weather Prediction: CNOP and SV

15:30 (Coffee break)

#### Session I: Downscale NWP

(Chair: Takehiko SATOMURA)

16:00 Tri Wahyu HADI (ITB, Indonesia)

Prediction of Diurnal Variation over Java Island: A Four-Model Intercomparison

16:30 Shugo HAYASHI (MRI/JMA, Japan)

Statistical Verifications of Short Term NWP by NHM and WRF-ARW around Japan and Southeast Asia

17:00 Introduction of posters

*Two minutes talk without ppt slides*

17:30 (End of the first day sessions)

19:00 <<< Joint banquet with JSPS-AASP at the Jayakarta Hotel >>>

### March 3 (Tue)

**Session I:** - continued (Chair: Toshiki IWASAKI)

- 08:30 Md. Nazrul ISLAM (SAARC/MRC, Bangladesh)  
Regional Climate Model in Prevention of Meteorological Disaster in SAARC Region
- 09:00 KIEU Thi Xin (U. of Hanoi, Vietnam)  
Implementing Regional Hydrostatical Models & NHM of MRI for the Historical Heavy Rain Case Caused Flooding in Hanoi in November 2008. Comparison  
Development of a Short-Range Ensemble Prediction System at NCHMF: Preliminary Results  
( Le DUC, NCHMF, Vietnam)
- 09:30 Wai-kin WONG (Hong Kong Obs., Hong Kong)  
Development and Applications of JMA-NHM in Support of Severe Weather Forecasting in Hong Kong
- 10:00 (Coffee break)

**Session II: Tropical disturbances and precipitation process** (Chair: Chun-Chieh WU)

- 10:30 Takehiko SATOMURA (DG/Kyoto U., Japan)  
Numerical Simulation of Precipitation System Moving over the Bay of Bengal
- 11:00 Hiromu SEKO (MRI/JMA, Japan)  
Structure of the Regional Heavy Rainfall System that Occurred in Mumbai, India, on 26 July 2005
- 11:30 Tetsuya TAKEMI (DPRI/Kyoto U., Japan)  
High-Resolution Modeling Study of an Extreme Rainfall Event in a Complex Terrain under the Influence of Typhoon Fung-Wong (2008)
- 12:00 (Lunch)

**Session II:** - continued (Chair: Tieh Yong KOH)

- 13:30 Toshiki IWASAKI (Tohoku U., Japan)  
Influences of Cloud Microphysical Processes on Structure and Development of Tropical Cyclone  
Part II: Effects of evaporation from rain
- 14:00 Yoichi ISHIKAWA (DG/Kyoto U., Japan)  
Interaction between Tropical Convective Clouds and Ocean Mixed Layer Simulated by a High-Resolution Coupled Model
- 14:20 Madhavan N. RAJEEVAN (NARL, India)  
Sensitivity of Different Microphysics Parameterization Schemes to the Simulation of Mesoscale Convective Systems Observed over Gadanki, India
- 14:40 Tohru KURODA (MRI/JMA, Japan)  
NHM Utilities for SE Asian NWP and Numerical Experiments of Myanmar Cyclone Nargis
- 15:00 (Coffee break)

**Session III: Observation network** (joint with JSPS-AASP)

(Chair: Toshitaka TSUDA)

- 15:30 Manabu D. YAMANAKA (JAMSTEC, Japan)  
Overview and Scientific Background of JEPP-HARIMAU Project: Long Coastlines of Maritime  
Continent Governing Global Climate
- 16:00 Masato SHIOTANI (RISH/Kyoto U., Japan)  
Ozone and Water Vapor Observations in the Equatorial Pacific
- 16:30 Tieh Yong KOH (Nanyang T. U., Singapore)  
Towards a Mesoscale Observation Network in Southeast Asia
- 17:00 Basuki SUHARDIMAN (ITB, Indonesia)  
Trans European Information Network 3 (TEIN3) and Its Potential Use for the Weather and  
Climate Research in Southeast Asia
- 17:20 (End of the second day sessions)  
<<< Group photo >>>

**March 4 (Wed)**

**Session IV: New methods in observation, data assimilation, and NWP** (joint with JSPS-AASP)

(Chair: Masato SHIOTANI)

- 08:30 Toshitaka TSUDA (RISH/Kyoto U., Japan)  
Application of GPS Radio Occultation (RO) Data for the Studies of Atmospheric Dynamics and  
Data Assimilation into Numerical Weather Prediction Model
- 09:00 Seon Ki PARK (Ewha W.U., Korea)  
Data Assimilation and Parameter Estimation to Improve Forecast Accuracy of Disastrous  
Weather Systems
- 09:30 Kevin CHEUNG (Macquarie U., Australia)  
A Statistical Tropical Cyclone Rainfall Model for the Taiwan Area
- 10:00 (Coffee break)

**Session IV: - continued** (Chair: Mezak A. RATAG)

- 10:30 Chun-Chieh WU (National Taiwan U., Taiwan)  
Targeted Observation for Improving Tropical Cyclone Predictability – DOTSTAR and T-PARC
- 11:00 DODLA V. Bhaskar Rao (Andhra U., India)  
Ensemble Prediction of “SIDR” Cyclone over Bay of Bengal Using a High Resolution Mesoscale  
Model
- 11:30 Kazuo SAITO (MRI/JMA, Japan)  
Ensemble Forecast Experiment of Cyclone Nargis
- 12:00 (Lunch)

**Session V: Risk assessment and community preparedness** (Chair: Kazuo SAITO)

- 13:30 Hirohiko ISHIKAWA (DPRI/Kyoto U., Japan)  
Estimation of Meteorological Hazards Using Output from Numerical Weather Prediction Model
- 14:00 Kamol PROMASAKHA NA SAKOLNAKHON (TMD, Thailand)  
Case Study: The Atmospheric Stability Indices and Applied GIS Risk Assessment Severe Thunderstorms in the Northeastern of Thailand
- 14:30 Mezak A. RATAG (BMG, Indonesia)  
Roles of High Resolution Weather and Climate Models in Disaster Risk Management at District Level
- 15:00 (Coffee break)

**Tutorials**

- 15:30 Kazuo SAITO, Shugo HAYASHI, and Tohru KURODA (MRI/JMA, Japan)  
Introduction to Non-Hydrostatic Model of MRI/JMA
- 17:00 (End of the third day sessions)

**March 5 (Thu)**

**Session VI: Extended range NWP** (Chair: Mu MU)

- 08:30 Hitoshi MUKOUGAWA (DPRI/Kyoto U., Japan)  
On the Influence of the Tropical Intraseasonal Oscillation to the Predictability of the Pacific/North American Pattern
- 09:00 Krushna C. GOUDA (CSIR/CMMCS, India)  
Advance Prediction of Date of Onset of Monsoon: Dynamical Basis and Skill Evaluation
- 09:30 Donald Sukma PERMANA (BMG, Indonesia)  
Comparisons between Conformal Cubic Atmospheric Model (CCAM) and Global Forecasting System (GFS): Global Model Output over Indonesia in September – October – November (SON) 2008
- 10:00 (Coffee break)

**Session VII: Data assimilation** (Chair: Seon Ki PARK)

- 10:30 Yoshinori SHOJI (MRI/JMA, Japan)  
Data Assimilation of Precipitable Water Vapor Derived from GPS Network in South East Asia
- 11:00 I Dewa Gede A. JUNNAEDHI (ITB, Indonesia)  
Impact of Local Data Assimilation on Short Range Weather Prediction in Indonesia : A Preliminary Result
- 11:30 (Lunch)

## Poster session

- 13:00 Kosuke ITO (DG/Kyoto U., Japan)  
Improved Estimates of Air-Sea Fluxes in a Tropical Cyclone Using an Adjoint Method  
Takuya KAWABATA (MRI/JMA, Japan)  
Development and Results of a Cloud-Resolving Nonhydrostatic 4DVAR Assimilation System  
Hyun Hee KIM (Ewha W.U., Korea)  
Identification of Adaptive Observation Area in Typhoon Megi (2002) Using an Ensemble Data  
Assimilation Method  
Masaru KUNII (MRI/JMA, Japan)  
Sensitivity Analysis using the Mesoscale Singular Vectors  
Jalu Tejo NUGROHO (LAPAN, Indonesia)  
Solar Cycle Prediction using Periodicity Analysis of Weighted Wavelet Z-Transform  
Shigenori OTSUKA (DG/Kyoto U., Japan)  
Numerical Experiments on Formation Processes of Thin Moist Layers in the Mid-Troposphere  
over a Tropical Ocean  
Kazuo SAITO (MRI/JMA, Japan)  
Achievements and Experiences of MRI/JMA at the WWRP Beijing Olympic Research and  
Development Project  
Hiromu SEKO (MRI/JMA, Japan)  
Mesoscale Ensemble Experiments on Potential Parameters for Tornado Formation  
Hiromu SEKO (MRI/JMA, Japan)  
Mesoscale Ensemble Experiments on Heavy Rainfalls in Japan Area using LETKF  
Tri Handoko SETO (BPPT, Indonesia)  
Weather Modification Technology for Flood Prevention in Indonesia  
Ibnu SOFIAN (BAKOSURTANAL, Indonesia)  
Simulation of Wind-Setup Wave in the Indonesian Seas Using the Nesting Wavewatch III  
Elza SURMAINI (Dept. of Agriculture, Indonesia)  
Validation of ECMWF Seasonal Forecast Output in Indonesia

## Closing session

(Chair: Shigeo YODEN)

- 14:30 All Participants  
Discussion for Future Activities  
15:00 (Adjourn)

JST - Special Coordination Funds for Promoting Science and Technology (FY2007-9):

Asia S&T Strategic Cooperation Program

**“The Second International Workshop on Prevention and Mitigation of Meteorological Disasters in Southeast Asia”**

	2 (Mon)	3 (Tue)	4 (Wed)	5 (Thu)
morning (8:30-12:00)	(11:00- ) Registration	Oral session (Jayakarta Hotel)	*Joint session (Jayakarta Hotel)	Oral session (Jayakarta Hotel)
afternoon (13:30-17:00)	Opening Oral session (Jayakarta Hotel)	*Joint session (Jayakarta Hotel)	Oral session and Tutorials (Jayakarta Hotel)	Poster session (Jayakarta Hotel)
evening (19:00-21:00)	*Joint banquet (Jayakarta Hotel)			

\* Joint sessions and event

JSPS - the Asia-Africa Science Platform (AA-SP) Program

**“Workshop on Ground-Based Atmosphere Observation Network in Equatorial Asia”**

	2 (Mon)	3 (Tue)	4 (Wed)	5 (Thu)
morning (8:30-12:00)	Opening session (LAPAN auditorium)	Poster session Session 3 (LAPAN auditorium)	*Joint session (Jayakarta Hotel)	---
afternoon (13:00-17:30)	Sessions 1 and 2 (LAPAN auditorium)	*Joint session (Jayakarta Hotel)	---	---
evening (19:00-21:00)	*Joint banquet (Jayakarta Hotel)	---	---	---

\* Joint sessions and event