

Workshop on global precipitation systems

28-29 Nov. 2016

Miyoshi Memorial Hall
Yokohama Institute for Earth Science
JAMSTEC

28/Nov. (Mon.)

9:30-10:00 Registration

10:00-10:20 Introduction (Chair: Takeshi Doi)

10:00-10:05 Logistics (Takeshi Doi)

10:05-10:10 Opening addresses (Michio Kawamiya, Deputy Executive Director)

10:10-10:20 Workshop objectives (Shingo Watanabe)

10:20-11:30 Session 1: Observations and analysis (Chair: Takeshi Doi)

<< Keynote Lecture 1 >>

10:20-10:45 **Atsushi Hamada** (AORI, The University of Tokyo): Contribution from spaceborne precipitation radar measurements to the understanding of the global precipitation characteristics (Invited)

<< Keynote Lecture 2 >>

10:45-11:10 **Satoru Yokoi** (JAMSTEC): Diurnal cycle of precipitation in western coastal area of Sumatra Island observed during Pre-YMC field campaign (Invited)

11:10-11:30 **Kazuyoshi Kikuchi** (IPRC, University of Hawaii): Multiscale structure of the MJO revealed by the spatio-temporal wavelet transform: From observations to a global cloud resolving model (Invited)

11:30-13:00 Lunch break & poster session

13:00-14:30 Session 2: Diversity of global models (Chair: Wataru Sasaki)

13:00-13:25 Brief introduction and target of each modeling group (3 mins each)

Akira Kuwano-Yoshida (JAMSTEC): AFES

Masashi Ujiie (Numerical Prediction Division, JMA): JMA-GSM

Hiroaki Tatebe (JAMSTEC): MIROC

Ryo Mizuta (MRI): MRI-AGCM

Ryo Ohnishi (JAMSTEC): MSSG

Chihiro Kodama (JAMSTEC): NICAM

Takeshi Doi (JAMSTEC): SINTEX

<< Keynote Lecture 3 >>

13:25-13:50 **Masashi Ujiie** (Numerical Prediction Division, JMA): Recent upgrades and plans for improving parameterization schemes in the JMA operational global model (Invited)

13:50-14:10 **John McGregor** (CSIRO Oceans and Atmosphere): Modelling precipitation over Asia and Australia using CCAM (Invited)

14:10-14:25 **Christopher Moseley** (MPI-M): Large-eddy simulations over Germany using ICON: A comprehensive evaluation

14:25-15:20 Group photo, coffee break & poster session

15:20-16:45 Session 3: Diversity of global models (Cont.) (Chair: Chihiro Kodama)

<< Keynote Lecture 4 >>

15:20-15:45 **Masuo Nakano** (JAMSTEC): Global 7-km mesh nonhydrostatic Model Intercomparison Project for improving TYphoon forecast (TYMIP-G7) (Invited)

15:45-16:00 **Nagio Hirota** (NIES): Improvements of the Eastward Propagation of the MJO in MIROC6

16:00-16:15 **Wataru Sasaki** (JAMSTEC): MJO simulation in a cloud-system-resolving global ocean-atmosphere coupled model

16:15-16:30 **Takeshi Doi** (JAMSTEC): Prediction of Indian Ocean Dipole Mode and its teleconnections

16:30-16:45 **Akira Kuwano-Yoshida** (JAMSTEC): Storm track response to SST fronts in the Northwestern Pacific region in an AGCM

16:45-17:15 Discussion (Chair: Yoshiyuki Kajikawa)

17:30-19:30 Reception @ Guest house (Optional)

29/Nov. (Tue.)

9:30-10:35: Session 4: Model development (Chair: Chihiro Kodama)

9:30- 9:50 **Takanobu Yamaguchi** (CIRES, University of Colorado / NOAA ESRL):
Stratocumulus to cumulus transition by rain (Invited)

9:50-10:05 **Hugo Bellenger** (JAMSTEC): A parameterization for rain-induced
freshwater lenses

10:05-10:20 **Masato Sugi** (MRI): Cumulus Convection Scheme for Gray Zone

10:20-10:35 **Yuya Baba** (JAMSTEC): Response of rainfall to land surface properties
under weak wind shear conditions

10:35-11:05 Coffee break

11:05-12:30: Session 5: Observation and analysis from tropics to extratropics (Chair: Takeshi Doi)

<< Keynote Lecture 5 >>

11:05-11:30 **Akiyo Yatagai** (Hirosaki University): Asian Precipitation -- Highly Resolved
Observational Data Integration Towards Evaluation of Extreme Events
(APHRODITE-2) (Invited)

11:30-11:45 **Fumie Murata** (Kochi University): Observational study over north eastern
part of the Indian subcontinent

11:45-12:00 **Yuki Takano** (AORI, The University of Tokyo): Water isotopic variability
associated with the Baiu front simulated by NICAM-isotope

12:00-12:15 **Ryusuke Masunaga** (RCAST, The University of Tokyo): Climatological
influence of midlatitude oceanic fronts on the atmosphere as revealed in the
JRA-55 family

12:15-12:30 **Satoru Okajima** (RCAST, The University of Tokyo): Interannual
modulations of the influence of North Pacific oceanic fronts on the
atmosphere as revealed in the JRA-55 family

12:30-13:30 Lunch break

13:30-14:30: Session 6: Synthesis and future outlook (Chair: Wataru Sasaki)

13:30-13:50 **Yoshiyuki Kajikawa** (Kobe University): A new framework for regional
climate change: individual effect of climatology, perturbation and their
interaction (Invited)

13:50-14:05 **Masahiro Sawada** (MRI): Characteristics of tropical rainfall and diabatic heating in Global 7-km mesh nonhydrostatic Model Intercomparison Project for improving TYphoon forecast

14:05-14:20 **Masaki Satoh** (AORI, The University of Tokyo): RCEMIP: Radiative Convective Equilibrium Model Inter-comparison Program

14:20-14:30 **Chihiro Kodama** (JAMSTEC): JMIP activity

14:30-15:00 Discussion (Yoshiyuki Kajikawa)

15:00-15:15 Summary of the workshop

15:30-16:10 Earth Simulator tour (Optional)

Poster list

Julie Mae Dado (Tokyo Metropolitan University): Potential impact of sea surface temperature on Rainfall over the western Philippines

Mikiko Fujita (JAMSTEC): Climatological Characteristics of Precipitation Over Japan in the NICAM AMIP-type 25-year Simulation

Chihiro Kodama (JAMSTEC): Future projection of extratropical cyclone simulated by a 14 km mesh global atmospheric model

Andi Syahid Muttaqin (Universitas Gadjah Mada): On The Development of Tropospheric Biennial Oscillation Index for Indo-Pacific Region

Tomoe Nasuno (JAMSTEC): Global cloud-permitting simulations of Typhoon Fengshen (2008)

Masaki Satoh (AORI, The University of Tokyo): RCEMIP: Radiative Convective Equilibrium Model Inter-comparison Program

Shiori Sugimoto (JAMSTEC): Precipitation-soil moisture coupling over South Asia

Long Trinh-Tuan (Department of Geography, Tokyo Metropolitan University): Trends in Rainfall Characteristics over Vietnam

Yohei Yamada (JAMSTEC): Intense tropical cyclones in ensemble simulations using a high-resolution nonhydrostatic model