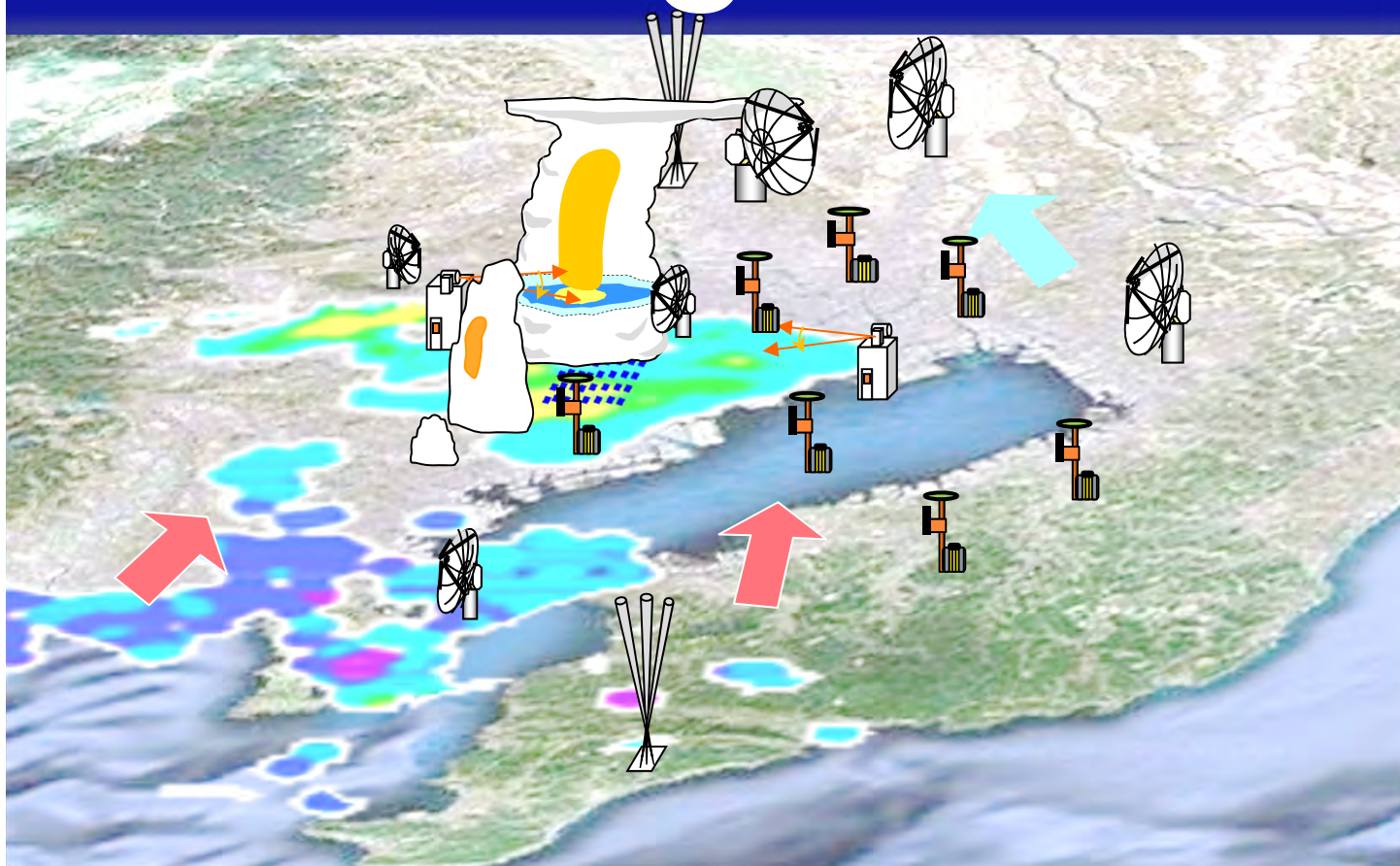


**First International Workshop on
Tokyo Metropolitan Area
Convection Study for Extreme
Weather Resilient Cities
(TOMACS/RDP)**

Program



**Date: 4-5 December 2013
Venue: Meteorological Research Institute**

Organizers: National Research Institute for Earth Science and Disaster Prevention
Meteorological Research Institute
Co-sponsored by World Meteorological Organization

December 4 (Wednesday), 2013	
09:30-10:00	Registration (Lobby)
10:00-11:05	Opening Session (Chair: K. Saito, MRI) (Auditorium)
10:00-10:10	Opening Address Akihide Segami (Director General, MRI)
10:10-10:25	Opening Address Tsuyoshi Nakatani (Principal Investigator of TOMACS)
10:25-10:45	Overview of the World Weather Research Program and the Working Group on Nowcasting Research Paul Joe (Chair of WGNR, Environment Canada)
10:45-11:05	Severe summertime weather at the urban scale: Perspective from WWRP's Working Group on Mesoscale Weather Forecasting Research Stephane Belair (Member of WG-MFWR, Environment Canada)
11:05-11:45	Session 'Results and plans in TOMACS' (Chair: Y. Shoji, MRI) (Auditorium)
11:05-11:25	TOMACS IOP: Overview and Results Yoshinori Shoji (MRI)
11:25-11:45	Nowcasting and forecasting studies in TOMACS Ryohei Misumi (NEID)
11:45-13:15	Lunch Break
13:15-14:55	Session 'Observation 1' (Chair: S. Suzuki, NIED) (Auditorium)
13:15-13:35	Simultaneous C-band and S-band polarimetric radar measurements of heavy rain during urban flooding. A tale of two cities *A. Ryzhkov, P. Zhang, S. Boodoo and D. Hudak (*NOAA)
13:35-13:55	Development and observation of the phased array radar in Osaka *Tomoo Ushio, Fumihiko Mizutani, and Shinsuke Satoh (*Osaka University)
13:55-14:10	Characteristics of distribution and preceding surface conditions of cumulonimbus clouds appeared on Kofu basin on a calm day in summer *Tetsuya Sano, Tadashi Suetsugi, and Satoru Oishi (*ICRE)
14:10-14:25	Change in structure of the atmospheric boundary layer associated with heavy rainfall revealed by a 3D-scanning coherent Doppler lidar Yasushi. Fujiyoshi (ILTS, Hokkaido Univ.)
14:25-14:40	A case study of the merging of two mesocyclones in the TOMACS field campaign area of Tokyo on 26 August 2011. Sadao Saito (MRI)

14:40-14:55	GPS/GNSS slant delay: analysis procedure and application for monitoring of water vapor variation associated with severe thunderstorms Yoshinori Shoji (MRI)
14:55-15:10	Coffee Break
15:10-16:15	Session 'Nowcast' (Chair: Y. Shusse, NIED) (Auditorium)
15:10-15:30	On the spatial distribution of nowcasting errors *Alan Seed, Loris Foresti (*Bureau of Meteorology)
15:30-15:45	Short term ensemble forecasting of rainfall over Kanto region, Japan *Shakti P.C., R. Misumi, T. Nakatani, M. Maki, and A. Seed (*NIED)
15:45-16:00	Relationship between precipitation core behavior in cumulonimbus clouds and surface rainfall intensity observed on 18 August 2011 in the Kanto region, Japan. *Yukari Shusse, Masayuki Maki, Shingo Shimizu, Koyuru Iwanami, Takeshi Maesaka, Shin-ichi Suzuki, Namiko Sakurai, and Ryohei Misumi (*NIED)
16:00-16:15	Immediate rainfall nowcast for extreme weather using VIL from X-band polarimetric radar volume data Kohin Hirano (NIED)
16:15-17:15	Session 'Data Assimilation' (Chair: H. Seko, MRI) (Auditorium)
16:15-16:30	Data assimilation with a cloud-resolving 4D-Var Takuya Kawabata (MRI)
16:30-16:45	High resolution ensemble prediction for local high impact weather --experiences in Beijing 2008RDP and a case study for the 26 Aug 2011 local heavy rainfall-- Kazuo Saito (MRI)
16:45-17:00	Preliminary experiments of 4DVAR data assimilation using densely networked radar data in TOMACS area *Soichiro Sugimoto, Juanzhen Sun, Zhuming Ying (*CRIEPI)
17:00-17:15	Local heavy rainfalls and tornadoes reproduced by a nested-LETKF system Hiromu Seko (MRI/JAMSTEC)

December 5 (Thursday), 2013	
9:30-10:30	Session 'Observation 2' (Chair: T. Maesaka, NIED) (Auditorium)
9:30-9:45	Observation strategy and preliminary analyses of heavy rainfall in Jeju island, Korea (2012-2013) *Dong-In Lee, Sang-Min Jang, Sung-Hwa Park, Jong-Hoon Jung and Sung-A Jung etc...(*Pukyong National University)
9:45-10:00	Vertical structure of the Tsukuba F3 tornado on 6 May 2012 as revealed by a polarimetric radar Hiroshi Yamauchi (MRI)
10:00-10:15	Descending reflectivity core (DRC) analysis by Ku-band radar Eiichi Sato (MRI)
10:15-10:35	Coffee Break
10:35-11:35	Session 'Urban weather' (Chair: N. Seino, MRI) (Auditorium)
10:35-10:55	Environment Canada's 2D and 3D modelling over Tokyo for TOMACS *Stephane Belair, S. Leroyer, M. Abrahamowicz, V. Souvanlasy, and J. Milbrandt (*Environment Canada)
10:55-11:15	Dallas-Fort Worth urban demonstration network for flood mitigation *V. Chandraskar, Brenda Philips, D. J. Seo, Haonan Chen, Arezoo Nasib, and Amy Cannon (*Colorado State University)
11:15-11:35	Synergies between TOMACS and RainGain: Uncertainties, stochastic modeling and high resolution rainfall data, *Daniel Schertzer, M. Maki, I.Tchiguirinskaia (*Université Paris Est)
11:35-13:10	Lunch Break and Group Photo
13:20-15:00	Session 'Urban Weather', continued (Chair: H. Sugawara, NDA) (Auditorium)
13:10-13:30	Hydrometeorological studies in TOMACS *Augusto José Pereira Filho, Felipe Vemado and Ivon Wilson da Silva Junior (*Universidade de São Paulo)
13:30-13:45	Extreme weather and hydraulic characteristics in open channel under extreme weather Qian Chaochao (Chuo University)
13:45-14:00	Radiosonde observations in TOMACS and case studies of heavy rainfalls in Tokyo *Naoko Seino, Hirofumi Sugawara, and Ryoko Oda (*MRI)
14:00-14:15	Does a city produce heavy rain environment? *Hirofumi Sugawara, Naoko Seino, and Ryoko Oda (*NDA)

14:15-14:30	Development of providing rainfall information on X-band multi-parameter radar using digital signage Naoya Sekiya (Toyo Univ.)
14:30-14:45	Products of X-band weather radar network in Tokyo metropolitan area (X-NET) Takeshi Maesaka (NIED)
14:45-15:00	Data archive at MRI Eiichi Sato (MRI)
15:00-15:10	Closing (Dr. Koyuru Iwanami, NIED) (Auditorium)
15:10-15:25	Break
15:25-16:25	Business Meeting (First Shared Room 1F)

CRIEPI: Central Research Institute of Electric Power Industry

ICRE: International Research Center for River Basin Environment, University of Yamanashi

ILTS: Institute of Low Temperature Science

NDA: National Defense Academy of Japan

NIED: National Research Institute for Earth Science and Disaster Prevention

NICT: National Institute of Information and Communications Technology

NOAA: National Oceanic and Atmospheric Administration

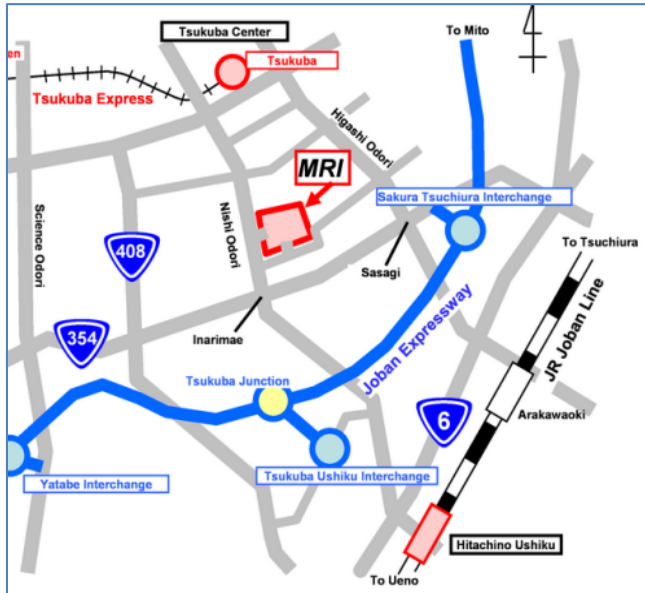
MRI: Meteorological Research Institute

Contact Information:

Local Organizing Committee of TOMACS/RDP International workshop

TEL: 029-853-8640, FAX: 029-853-8649, E-mail: hseko@mri-jma.go.jp

ACCESS



By Train

From Akihabara - Tsukuba Express

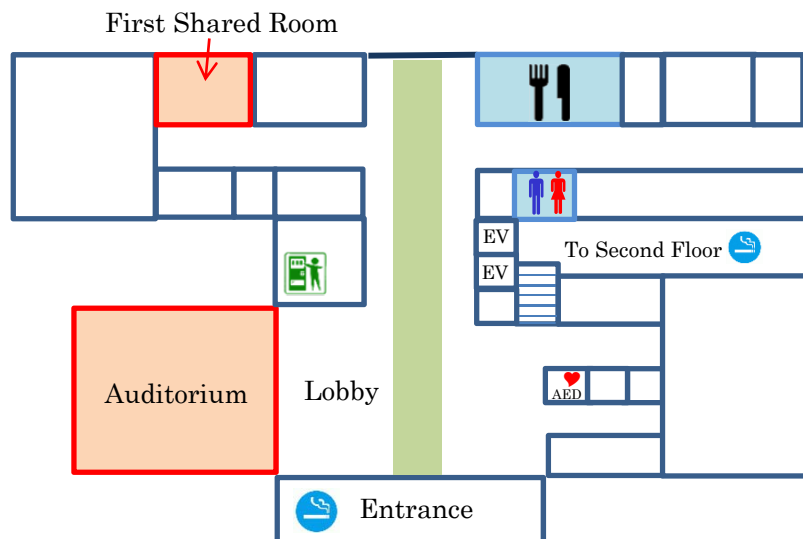
- From "Akihabara" station, take the Tsukuba Express train bound for "Tsukuba" (45-57 min)
- Get off at the final stop "Tsukuba", take exit A4
- From the Tsukuba Center Bus Terminal, take the Kanto Tetsudo Bus bound for "Hitachino Ushiku" (15 min)
- Get off at "Kishou Kenkyusho".

By Bus

From Haneda / Narita Airport - Airport Bus

- From Haneda / Narita Airport, take the bus bound for "Tsukuba Center" (120 min)
- Get off at the final stop "Tsukuba Center"
- From the Tsukuba Center Bus Terminal, take the Kanto Tetsudo Bus bound for "Hitachino Ushiku" (15 min)
- Get off at "Kishou Kenkyusho".

First floor of MRI



Buffet opens from 12:00 to 13:00.

Smoking is not allowed except the smoking room (2F).