

# International Research for Prevention and Mitigation of Meteorological Disasters in Southeast Asia

MEXT Special Coordination Funds for Promoting Science and Technology for FY 2007 - 2009  
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## Newsletter

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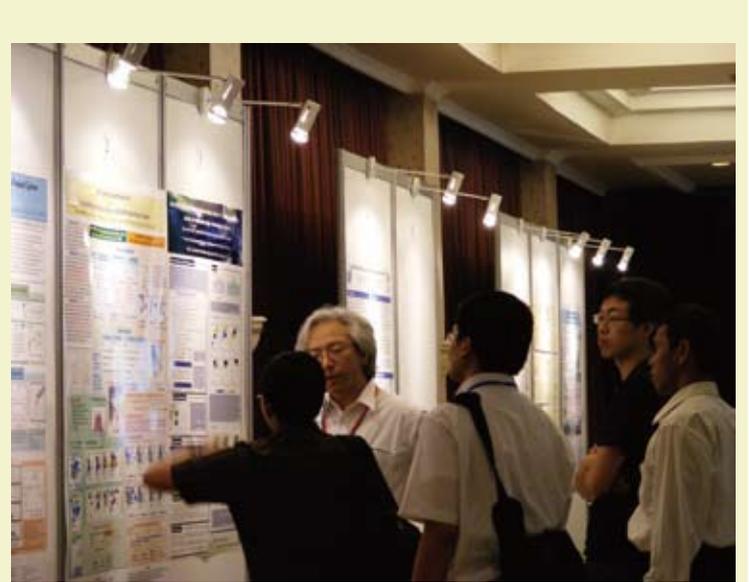
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## Report on the 2nd International Workshop

The second international workshop of this research project on "Prevention and Mitigation of Meteorological Disasters in Southeast Asia" was held on 2-5 March, 2009, at Jayakarta Hotel in Bandung, Indonesia. In total 47 researchers participated from 12 countries and regions in East Asia, Southeast Asia, and South Asia. This workshop was also partially supported by the Organization for the Promotion of International Relations of Kyoto University.

The workshop was opened by the welcome address by Dr. Emmy Suparka (Bandung Institute of Technology), followed by the welcome address by Dr. Takashi Nishigaki, Program Officer of JST (Japan Science and Technology Agency). After the keynote speech by the program leader Dr. Shigeo Yoden (Kyoto University) and the presentation by Dr. Mu Mu (Chinese Academy of Sciences), seven sessions were held. In session I, Hadi, Hayashi, Islam, Xin, and Wong gave talks on "Downscale Numerical Weather Predictions (NWP)". In section II, Seko, Takemi, Iwasaki, Y. Ishikawa, Rajeevan, and Kuroda gave talks on "Tropical disturbances and precipitation process". Session III and IV were the joint sessions (see the next page). In session V, H. Ishikawa, Promasakha, and Ratag gave talks on "Risk management and community preparedness". After session V, Saito, Hayashi, and Kuroda from MRI (Meteorological Research Institute) demonstrated JMA (Japan Meteorological Agency)-MRI NHM (Non-Hydrostatic Model) as a tutorial seminar. In session VI, Mukougawa, Gouda, and Permana gave talks on "Extended range NWP". In session VII, Shoji and Junnaedhi gave talks on "Data assimilation". During the workshop, 14 posters were presented by



Ito, Kawabata, Kim, Kunii, Nugroho, Otsuka, Saito, Seko, Seto, Sofian, Surmaini, Putra, Listiaji, and Fithra.

In this workshop, various new results since the first international workshop in 2008 were presented. We will have the third international workshop at Ritsumeikan Asia Pacific University, Beppu, Japan in March 2010.

(Shigenori Otsuka, Kyoto Univ.)



## Joint Sessions and Activities in Institut Teknologi Bandung

A joint banquet with the "Workshop on Ground-based Atmosphere Observation Network in Equatorial Asia" was held on March 2 at Jayakarta hotel, Bandung. Following a speech of welcome by Dr. Lambok Marinangan Hutasoit, the dean of the Faculty of Earth Sciences and Technology (ITB) at the beginning of the banquet, Dr. Toshitaka Tsuda (Kyoto University) addressed the importance of the collaborative relationship to prevent and mitigate meteorological disasters in South Asia. All the participants for both workshops enjoyed a delicious food and conversation.

The joint session "Observational network" and "New methods in observation, data assimilation, and NWP" were held in March 3-4. As many as 10 speakers had impressive presentations on the observational network in South East Asia and the most recent research progresses in observation, data assimilation, and NWP. Dr. Manabu D. Yamanaka (JAMSTEC) highlighted HARIMAU project, which is a high-resolution observational network with the meteorological radars and wind profilers for monitoring convective activities. Dr. Tieh Yong Koh (Nanyang Technological University) address a closer regional coordination in plans for developing infrastructure in the light of new observational networks and sophisticated numerical models. Dr. Toshitaka Tsuda (Kyoto Univ.) introduced an application of GPS radio occultation data to the temperature and humidity, and Dr. Seon Ki Park (Ewha Woman Univ.) addressed data assimilation and parameter estimation to improve forecast accuracy of disastrous weather system. Dr. Chun-Chieh Wu (National Taiwan Univ.) introduced a targeted observation for improving tropical cyclone predictability,



DOTSTAR and T-PARK. The participants made an active discussion concerning the presentations across the research areas.

On May 5, many participants visited the Faculty of Earth Sciences and Technology of ITB. The dean illustrated the basic outlines of the faculty with a number of durians for hospitable reception. The participants asked the questions such as foreign exchange program and teaching system, and envisioned a future of the university.

(Kosuke Ito, Kyoto Univ.)



## Topics

### A workshop on "Ground-based atmospheric observation network in equatorial Asia"

For three years in FY2008-2010 we promote an international collaboration on "Elucidation of ground-based atmosphere observation network in equatorial Asia", which has been selected as one of the projects of the Asia Africa Science Platform (AA-SP) program of JSPS.

Our project aims at establishing a concrete collaborative consortium among the Asian countries on atmosphere observations. In particular, LAPAN (National Institute of Aeronautics and Space) and NARL (National Atmosphere Research Laboratory) are the main counterpart which serve as the coordinating organization in Indonesia and India, respectively (<http://www.rish.kyoto-u.ac.jp/radar-group/aaplat/index.htm>). Within this program, we carry out four types of collaborative research and capacity building programs; (1) lecture courses, (2) on-job training, (3) exchange of scientists, and (4) workshop. We organized two series of intensive lectures in August and November 2008 at LAPAN, and the on-job training at EAR in October 2008. We also invited a few scientists from India and Indonesia to Japan for a collaborative research.

On 2-4 March 2009 we organized a workshop dedicated to ground-based and satellite observations of the equatorial atmosphere and ionosphere in Bandung. The meeting was jointly coordinated with the second workshop on "Prevention and Mitigation of Meteorological Disasters in Southeast Asia" of JST lead by Prof. Shigeo Yoden.

We first held a separate meeting at LAPAN for 1.5 days on 2-3 March, which was opened by a welcome address by Dr. Bambang Teja, the deputy chairman of LAPAN, followed by three overview talks by representatives of RISH, LAPAN and NARL. The oral sessions consist of nine invited papers and four contributed talks. In addition, 47 poster papers were presented, where most of them were associated with active discussions. A total of more than 80 participants attended the workshop, including eight from Japan, two from India and one from Vietnam.

From the afternoon of 3 March, we joined the 2nd JST workshop at Jayakarta hotel, which we found very useful in stimulating interactions between observations and numerical modeling of the equatorial atmosphere. We hope our collaborative activities will be more enhanced in the coming years.

(Toshitaka Tsuda, Kyoto Univ./RISH)



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