
RECENT RESEARCH ACTIVITIES

International Equatorial Atmosphere School 2019

(Laboratory of Radar Atmospheric Science, RISH, Kyoto University)

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The equatorial atmosphere generates the strongest convection in the world and affects the global atmospheric circulation as well as the local weather and climate. To further strengthen the collaboration between Japan and the equatorial countries such as Indonesia, it is very important to promote education and research activity in these countries. To this end, we held the first International Equatorial Atmosphere School on March 18-22, 2019 at the Aerospace Research Institute (LAPAN) in Bandung, Indonesia in partnership with Humanosphere Asia Research Node (ARN). 109 researchers and students from Japan, Indonesia and surrounding countries participated at LAPAN, and 61 students in three different institutes participated online, so the total number of participants was 170.

RISH, Kyoto University and LAPAN collaborate and conduct the equatorial atmospheric research for a long time. Since 2001, we have been successfully operating the Equatorial Atmosphere Radar (EAR) at Kototabang, West Sumatra, and continue the long-term observations. We proposed an international school for the study of the equatorial atmosphere. This school event was aimed to benefit young scientists and researchers who are interested in this field to have a good summary of the study techniques and recent topics. Also, this event helped accelerate our big research project to establish the Equatorial MU Radar (EMU) that is the full-spec atmospheric radar in the near future right next to the EAR.

The lecture topics in the school are: 1) Introduction and basics of the Earth's atmosphere, 2) Atmospheric radar basics and advanced, 3) Equatorial rainfall and global climate, 4) Climate-biogeosphere-humanosphere interaction, 5) Atmospheric waves and coupling processes, 6) Upper atmosphere basics and observations, 7) Radio Acoustic Sounding System (RASS), 8) GNSS measurement of the atmosphere, 9) Numerical models in Japan and Indonesia, 10) Numerical simulation techniques for atmosphere, and 10) Hands-on training of IUGONET data analysis for promotion of atmospheric science.

All lectures and school events were successfully completed with a great help of LAPAN staff. Participants learned the basics and research techniques of the equatorial atmosphere, and the importance of the EMU project to further understand the whole atmospheric dynamics. We hope to hold the school regularly to maintain the research activity in Southeast Asia.

Acknowledgements

The first International Equatorial Atmosphere School was supported by Kyoto University, JSPS, Nagoya University, LAPAN, and RISTEKDIKTI, Indonesia.



Figure 1. Lecture scene at the school.



Figure 2. Group photo of all participants.