

Introduction of Collaborative Activities with Asian countries in the Field of Active Geosphere

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The purposes of the COE "Kyoto Univ. Active Geosphere Investigations" are two folds:

- To establish a world-standard group for research and education on the "Active Geosphere", based on Asia and Oceania where is the most active region.
- To create a new interdisciplinary "Active Geosphere Science" as a contemporary earth science, by expanding our field research mainly in Asia and Oceania further.

Here, the new word "Active Geosphere" is defined as "it varies with time-scales of human activities, $O(1 \text{ sec}) - O(10^3 \text{ years})$, and covers the regions that are important for the sustainable coexistence of human beings on the earth, from the lithosphere to the upper atmosphere". To accomplish the first purpose, we strive to organize new groups of young researchers in Asian countries through two activities:

1. Hold a international summer school for the Active Geosphere at The Institut Teknologi Bandung, Bandung, Indonesia, every summer.
2. Organize a workshop on regional models for the weather or climate prediction in tropical Asia.

(1) SUMMER SCHOOL

We started the international summer school at ITB for two weeks in the summer in 2004, and held the 3rd summer school at ITB on 16-28 July 2006. More than 40 students from Asian and Oceanian countries including Thailand, Vietnam, Lao, Bangladesh, Indonesia, China, Korea, Malaysia, Philippines, Australia, etc., participate the summer school every year. Almost all lecturers of the summer school are professors of Kyoto University and, as a whole, they cover the entire aspect of the Active Geosphere in their lectures. In addition to lectures in the class room (Fig.1), we arrange field inspection tours on volcanoes (Fig. 2), large faults, aerological observatory, and so on. We opened a communication board on our KAGI21 WEB site for the participants of three summer schools to facilitate the exchange information among the participants after the school and to give impetus to forming research groups of young scientists among and/or in their countries.



Fig. 1. Lecture in the classroom in ITB



Fig. 2. Field tour at volcano

(2) WORKSHOP

On 1- 3 March 2006, we organized the “KAGI21 International Workshop on Regional Models for the Prediction of Tropical Weather and Climate” at ITB, Bandung, Indonesia (Fig. 3). Considering that the energy source building up the earth climate is the solar radiation and the major part of the solar energy comes into the tropics, it is absolutely important to understand the mechanism governing tropical weather and climate. In this workshop, about 30 active scientists including 14 speakers in the field of numerical weather forecasting and climate modeling from Thailand, Singapore, India, Vietnam, Malaysia, Indonesia, Philippines, Lao, and Japan participated enthusiastically.

Through this workshop, it was revealed that, although scientists in Asia have been tackled numerical experiments to predict tropical weather and climate using regional weather/climate models, it has been hard for them in different Asian countries to exchange of information and know-how. We shall continuously provide opportunities to exchange information of numerical modeling and support them to build their capabilities in this field.

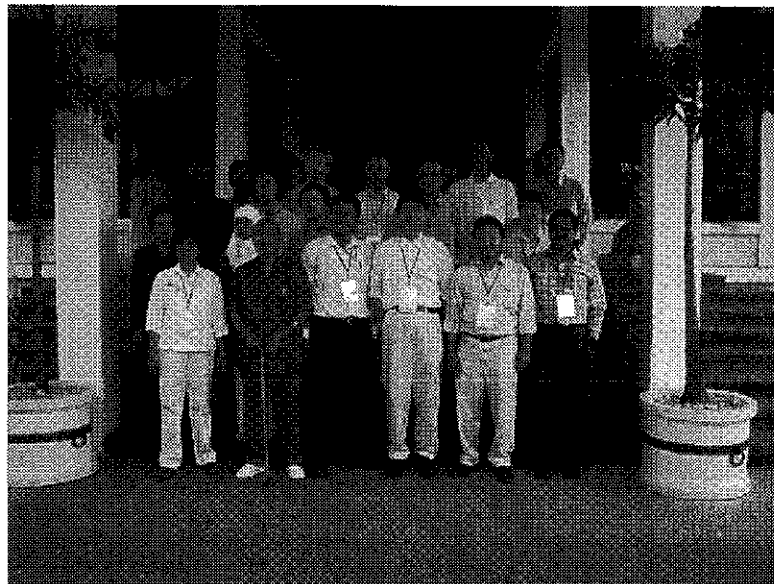


Fig. 3 Participants of the KAGI21 regional model workshop

CV

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