

## **Thai Meteorological Department Scientists Visit ADPC-Facilitated Multi-Hazard End-to-End Early Warning System**

**26 November 2007**

A team of Thai Meteorological Department (TMD) scientists visited ADPC on 26 November 2007 to further discussions on a collaborative project to generate locally-specific disaster risk information for select high-risk locations in Thailand. Led by Dr. Somchai Baimoung, Director of Weather Forecasting Bureau, the TMD team comprised of Mr. Kamol Promasakha na Sakolnakhon, Mr. Preecha Tanittiraporn, Mr. Chatchai Chaiyasaen, Mr. Somkuan Tonjan, Mr. Charoon Laohalertchai, Mr. Santi Sumdin, Mr. Dhiraphat Kasempunnarai, Mr. Sombhop Wongwilai, Mr. Amorn Kaewmorakot and Ms. Kesaraporn Techapichetvanich.

ADPC scientists- Dr. U C Mohanty, Dr. Jayaraman Potty and Dr. PVS Raju, presented the Weather Research Forecast (WRF) model simulation of the May 2006 Uttaradit extreme weather event, which resulted in flashfloods and landslides in Uttaradit province. The simulation, using data from the U.S. National Center for Environmental Prediction (NCEP), proved the possibility of generating high-resolution 72-hour forecast of rainfall, mean sea level pressure and wind. Using TMD observation data, the model can be fine-tuned to increase forecast skill. TMD appreciated ADPC's efforts in addressing critical research gaps and thus playing a value added role to provide location specific disaster risk information.

ADPC also presented the experimental simulation, undertaken 3 days in advance of each of the current events, such as Bangladesh tropical cyclone SIDAR (from 13- 16 November 2007) and clearly simulated Fujihara effect due to combined interaction of the Hagibis and Mitag typhoons with initial conditions from 23 November, 2007 up to 72 hours in advance. The latter has affected Philippines and Vietnam since Friday, 23 November 2007. It appears that these two recent simulations at EWS with ADPC High Performance Computing (HPC) system are very close to reality and superior to some of the operational forecasts.

The team also visited the computing facility at the ADPC-Facilitated Multi-Hazard End-to-End Early Warning System. Expertise and facilities of the ADPC-facilitated system, established with support from the Danish International

Development Agency (Danida) and the UN Tsunami Regional Trust Fund, is available to countries participating in the regional cooperation on tsunami and multi-hazard warning in the Indian Ocean and Southeast Asia to contribute to enhancing capabilities of national hydro-meteorological services in collaboration with IOC and WMO in providing locally-actionable disaster risk information.



Dr. Somchai Baimoung and his colleagues from TMD take a look at the computing facilities at the ADPC-Facilitated Multi-Hazard End-to-End Early Warning System