

Trial using flood and landslide simulation system in Thailand

In collaboration with the National Disaster Warning Center (NDWC), NEC conducted a trial of its system to predict inundation areas and landslide hazard areas.

Thailand is a country where floods are frequent. The flood of the Chao Phraya River in 2011 was a particularly damaging event, resulting in extensive damage to many industrial parks and urban areas, including Bangkok. This caused severe disruption of the global supply chain, and had a major impact not only on the Thai economy but also on the world economy. For this reason, countermeasures against floods are urgently needed in Thailand. Further, landslides caused by heavy rain are also a frequent occurrence in Thailand, and because of the extensive human suffering and material damage they cause and their negative impact on logistics due to road closures, measures to mitigate the damage caused by landslide disasters are also a pressing issue.

In these trials, NEC ran simulations based on various data such as weather, topography, river, and soil conditions to predict inundation areas, maximum flood levels, levels of landslide risk, and so on, for up to 7 days in advance, and then confirmed the effectiveness of the system.

Going forward, NEC will continue to promote the advancement and utilization of disaster prevention ICT for floods and landslides in Thailand, and utilize the experience and know-how gained from these trials to proactively engage in the proposal of this system to Asian countries that frequently suffer damages from floods and landslides.

This trial is NDWC's first disaster prevention cooperation project between Thailand and Japan. NEC conducted this trial in collaboration with the Embassy of Japan in Thailand as part of the "Research and study for the development of a flooding simulator in Thailand" project commissioned by Japan's Ministry of Internal Affairs and Communications, and the "Research and study for the development of a landslide simulator in Thailand" project.



[Screen shot of flood simulation system]



[Screen shot of landslide simulation system]