

Oki Taikan LAB.

[Development of research capacity on water security under changing climate]

Department of Human and Social System

<http://hydro.iis.u-tokyo.ac.jp/index.shtml>

Global Hydrological System

Department of Civil Engineering

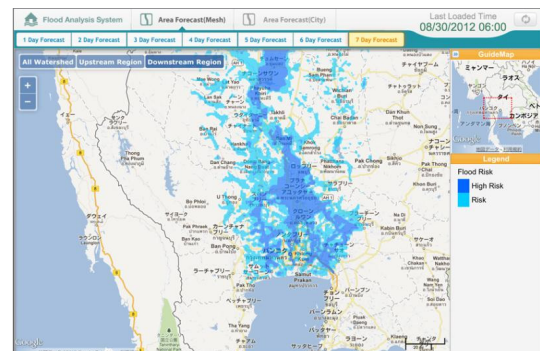
Integrated Study on Hydro-Meteorological Prediction and Adaptation toward Climate Change in Thailand

Integrated hydro-meteorological monitoring and prediction system has been developed considering climate change and land use change. Higher accuracy has been achieved through tight collaboration with Thai government and universities on data exchange and field survey.

Field survey has been conducted over Chao Phraya River for the flood disaster in year 2011 in order to understand actual situation, and we have been contributing to the adaptation planning.



Collaboration with Thai government



for data exchange and field survey on 2011 Thailand Flood Fig.1. Prediction and early-warning system for flood

Development of Integrated Hydrological Model for Sustainability Assessment of World Water Resources

HiGW-MAT, an integrated hydrological model, has been developed incorporating both natural and anthropogenic effects. It becomes capable to assess more realistic supply and demand of water resources by synthesizing various model components. Based on the results, we assess the sustainability of world water resources considering energy and food, and the impact of future climate change and society change on human-being in the aspect of water resources.

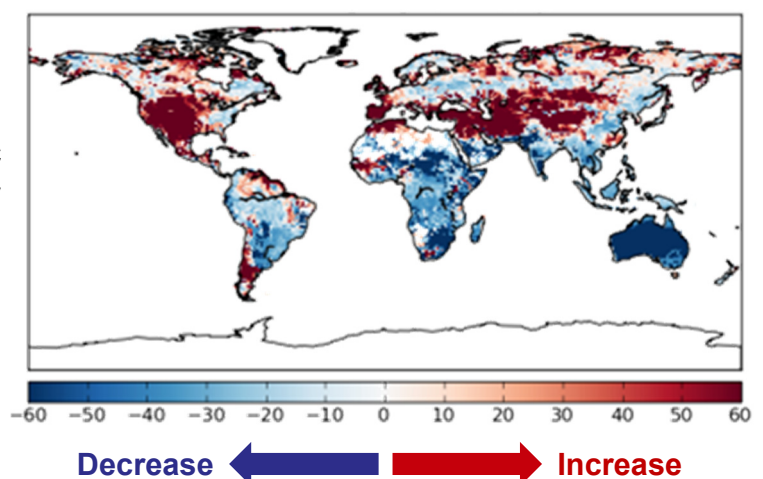


Fig.2. Variation of drought days caused by climate change