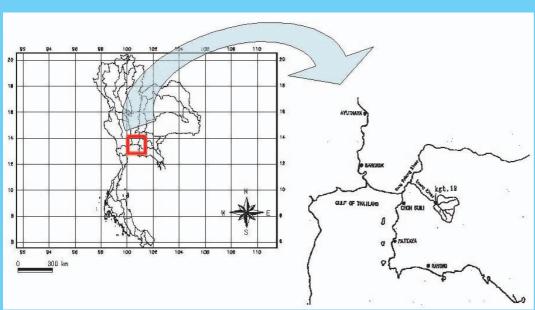


Towards the prediction in ungauged basins -database development for a mesoscale river basin in tropic cimatic zone-

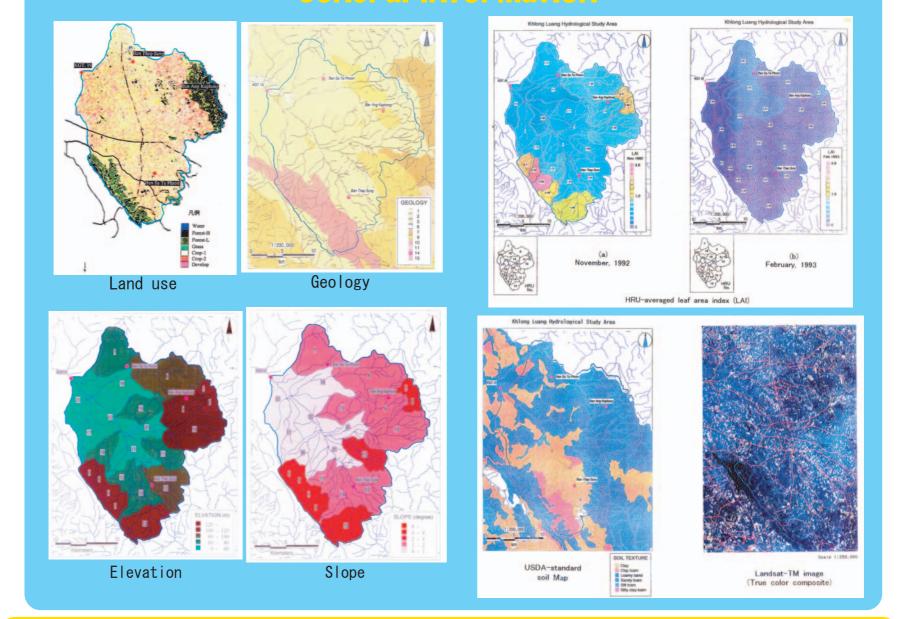


Chanchai SUVANPIMOL*, Sukit SUANKUASAKOOL*, Taichi TEBAKARI**, Tiangi AO**, Kazuhiko FUKAMI** and Junichi YOSHITANI** *Royal Irrigation Department, Kingdom of Thailand and **Public Works Research Institute, Japan



Klong Luang River Basin

This basin locates in the southeast of Thailand, 100 km far from Bangkok, has a drainage area of 433 km2 and a mainstream of about 30 km. Its elevation is between 30-100 m and its topography is comparatively flat. There is not large dam and large city in the basin and no significant human made interruption to the natural stream flow. Its major land use is for agriculture; about 70% of the area is arable. Its surface soil is dominantly loam and clay. From 1965 to present, the Royal Irrigation Department of Thailand (RID) has been measuring water level, discharge, rainfall, and evaporation for the Khlong Luang River basin. The Public Works Research Institute of Japan (PWRI) and RID have carried out cooperative observation for soil moisture during 1994 to 1995. For the period of 1965-2001, the observed annual average rainfall is 1229.94 mm, the maximum and minimum are 1644.7 mm and 869.8 mm, respectively; annual runoff is 663.6-48.2 mm, and the annual runoff rate is between 43% and 5.5%. For the Khlong Luang River basin, the prepared hydrological database contains observed rainfall, stream discharge/water level, evaporation, land use, soil type, soil water content and geology.



Development of hydrometeorogical database, opening to researchers on website