Geophysical Research Abstracts Vol. 20, EGU2018-2879, 2018 EGU General Assembly 2018 © Author(s) 2018. CC Attribution 4.0 license.



Historical literacy on hydrology with humanity and nature interaction

Makoto Taniguchi

Research Institute for Humanity and Nature, Kyoto, Japan (makoto@chikyu.ac.jp)

Hydrological research has cultural dependency because of differences of hydroclimate, hydrogeology, water management, and water culture in each area. Historical literacy on hydrology also have many roots depending on the water culture. Ancient monk, Kukai who lived in 8th - 9th centuries, traveled all over Japan and found many springs and groundwater with good quality. He knew the groundwater flow system from the steep geomorphology and vegetation, and many narratives show that people appreciated and respected him very much. The literacies of groundwater uses in emergency situations are also existing in the cases of natural disasters including earthquake and flooding, and social disasters such as fires, wars, and others. In Obama, Japan, the numbers near the nameplate at the current house gate shows the numbers of the wells in their properties, therefore people can easily know from the road how much accessible to the water in the case of fires.

Interaction between humanity and nature can be found in many area in Asia. In the case of Bangkok, water quality in the channel is determined by the micro groundwater discharge from the temples which are located at the higher elevation for preventing the flooding. The land for the temple is donated from Buddhists in Bangkok to wish the temples stay longer even in heavy flooding. Therefore, we may say that the religious wish and water quality interaction exists in Bangkok.

Historical literacy on hydrology can tell us how much humanity and nature are closely related each other. This interaction is important for finding solutions to the current complicated and wicked global environmental problems toward sustainability.