

<b>Paper ID</b>	091
<b>Author(s)</b>	Emiko Nakaya, Masahide Ishizuka, Masataka Yatsuzuka, Toru Terao, Satoshi Murayama, Ayumi Hattori and Noboru Higashi
<b>Title</b>	Characteristics of floods and droughts since Edo era in the lower reaches of Yura river, Kyoto
<b>Abstract</b>	
<p>The purpose of this study is to clarify the characteristics of floods and droughts in the Yura river since Edo era (17th Century) by organizing recorded and land use changes related to floods and droughts, and by simulating floods.</p> <p>The historical documents recoded in the Meiji era (around 1881) revealed that 1) floods were more frequent in the Koumori area of Ooe-cho town, which is located downstream of Yura river with a gentle riverbed gradient, and 2) droughts were more frequent in the area from the Koumori to the river mouth. Numerical simulations reproduced the maximum inundation depth of flood waters in the Koumori. The reason for the drought was considered to be the close proximity of the steep mountain slopes to the rivers, which forced the use of agricultural water from the limited tributary stream water. In other words, floods and inundations in the lower Yura River are strongly influenced by the local topography.</p> <p>The people living around the river have long been aware of the river's flooding and have built houses at higher elevations. They also built rice fields along the tributaries to use the water for rice cultivation. Like this, it was confirmed that people lived downstream of the Yura River with an understanding of the characteristics of the river. This indicates that it is important for people today to know the river topography and its water amount.</p>	
<b>Keywords</b>	Water, Disasters, Gunsonshi, RRI model

<b>Paper ID</b>	280
<b>Author(s)</b>	Masashi Kiguchi and Taikan Oki
<b>Title</b>	Integrated river basin management for the flood -Case study: Wise reservoir operation in the southeast Asia and Japan
<b>Abstract</b>	
<p>Integrated water resources management at all levels, across administrative and stakeholder boundaries, is an urgent issue. Due to the steep and limited land area in Japan, each sector uses water in different ways, making integrated water resource management very complex. Moreover, this counter measures contributes to SDG 6.5 "Integrated water resources management at all levels, including appropriate cross-border cooperation". In response to the enormous wind and flood damage in recent years, "Integrated river basin management for flood" has been the focus of attention. River managers implement the flood control measures while preserving and utilizing the nature of the river basin. Prefectural and municipal governments conserve and improve the land with water retention and recreational functions. This study aims to achieve integrated water resources management at all levels, including appropriate cooperation across various boundaries such as provincial borders and administrative jurisdictions. The existing stochastic flood forecasting system incorporating flood control will be extended to present flood and drought forecast information to various stakeholders, to seek an objective function that can reflect their values in an integrated manner, and to develop a method for co-creating dynamic operational rules effective for basin flood control involving various stakeholders.</p>	
<b>Keywords</b>	re-discharge of dams, SDGs, climate change