## Assessment of climate condition effect on the inundation conditions

oPingping Luo<sup>a</sup>, Kaoru Takara<sup>a</sup>, Han Xue<sup>b</sup>, Bin He<sup>a</sup>, Weili Duan<sup>b</sup>, Maochuan Hu<sup>b</sup>, Apip<sup>a</sup>, Watanabe Tsugihiro<sup>c</sup>, Kenichi Nakagami<sup>d</sup> and Izumi Takamiya<sup>e</sup>

<sup>a</sup>Disaster Prevention Research Institute (DPRI), Kyoto University, Gokasho, Uji-shi, Kyoto 611-0011, Japan

<sup>b</sup>Department of Civil and Earth Resources Engineering, Graduate School of Engineering, Kyoto University, Kyoto, Japan

<sup>d</sup> Graduate School of Global Environmental Studies, Kyoto University, Sakyo-ku, Kyoto 606-8501 Japan

<sup>e</sup> Graduate School of Policy Science & College of Policy Science, Ritsumeikan University, Kyoto Japan

<sup>f</sup>Faculty of Literature, Arts and Cultural Studies, Kinki University, Osaka, Japan.

Inundation simulation is very import for flood risk management to reduce the damage and economic loss and provide escape information of flood disaster. Climate conditions have impacted on the hydrological response and inundation conditions. In this study, the main objective is to reconstruct the inundation conditions under the climate change by using the output from PMP and GCM data. The results of this study play an important role on reconstructing the flooding and damage conditions, evaluating the effect of climate change on inundation conditions, providing the experiences of historical flood risk management and escape technology.