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Session abstract

Title: Technological and social adaptation to extreme water hazards

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Human society has experienced large-scale water-related disasters in recent years. Extreme events with longer return period than design scope will occur all over the world and once it happens it brings catastrophic consequence to many places in the world. Damage in one place may propagate to the different regions through economic network in the world, which makes the situation worse. There is also the possibility that climate change will bring more catastrophic-level extreme hazards.

Facility-based countermeasures to water-related disasters are basic and important when prevention is considered for disasters up to design level. It is difficult, however, to deal with extreme events only by facilities. It is indispensable to foster human response system and social capacity in order to prevent catastrophic loss in those events. Therefore in this session, integration of technological adaptation and social one will be discussed. The implementation of technology to actual society and social system design is also the target issue of the session. Case studies for flood, drought and other water-related hazards and their management are also welcome.