

Global Hydrological Prediction Center

[Water cycle prediction from global to municipality scales]

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<https://ghpc.iis.u-tokyo.ac.jp/>

One of the global challenges that humanity is currently facing is the issue related to water. Water is closely related to not only floods and droughts, but also climate change, food, energy, and environmental issues, and is also extremely important from the perspective of geopolitics and security. The Global Hydrological Prediction Center (GHPC) will establish a strong and systematic team in Komaba, Hongo, and Kashiwa to promote cutting-edge research on observation, process elucidation, modeling, and prediction of hydrological phenomena from river basins in municipal to the global scales, and to contribute to society using the research achievements.

Members in Global Hydrological Prediction Center

plus
Assis. Profs. 2
PD fellows, etc 15



Prof. K. Yoshimura
(Hydrometeorology)



A.Prof. D. Yamazaki
(Hydrogeography)



Prof. W. Takeuchi
(Remote Sensing)



Prof. D. Kitazawa
(Marine Engineering)



Prof. Y. Sekimoto
(GIS)



Prof. T. Kiyota
(Geodisaster Mitigation)



A.Prof. M. Numada
(Disaster Prevention)



Prof. E. Ikoma
(Data Engineering)



Prof. K. Oki
(Ecological Monitoring)



Lect. D. Tokuda
(Diasystem Hydromodeling)



Prof. T. Oki
(Sociohydrology)



Prof. M. Kiguchi
(Hydroclimatology)

**Origin: Asian Monsoon Study
Observation, Modeling, and
Prediction**

1993-1994 UNESCO-IHP IV Tropical Monsoon Region
1995-2002 World Climate Research Program Global Energy and Water Cycle Experiment (WCRP/GEWEX) Asian Monsoon Experiment (GAME)
2001-2005 IHP/CREST Asia Water Cycle Experiment
2005-2008 Japan EOS Promotion Program (JEPPI)
2009-2014 Science and Technology Research Partnership for Sustainable Development (STRIPPS)

Prof. Katsumi Musiake
1977-03 Assoc. Prof.
1982-0003 IIS Professor

Future Direction of GHPC

Global Continental
Scaleless Flood Prediction
Knowledge Gap
Horizontal Scale
Vertical Scale
HydroSOS seeks to improve water information
HydroSOS to realize flood prediction with better accuracy and longer lead time, and seamlessly downscale from the global scale to the municipality scale to predict the flooding from large rivers to municipal sized rivers in the world.

Developed
Underway
TE-japan
TE-Asia
TE-India
TE-SouthAsia

Cooperation with Research Center