Toward a sound and sustainable water policy for our world

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ound Decision Making & Societal Benefits



Socio-economic Information Population/ Food Water Use/ Land Use Hazard Map

Program

for water cycle modeling

This program develops a model for projecting water cycle changes associated with fluctuations in the supply and demand of water and with climate changes. It also creates a scenario for analyzing the trends of human activities that affect water circulation so as to form the basis for a model capable of projecting water cycle changes and accompanying environmental changes.

Advanced observations through data assimilation

Data assimilation integrates observations into a numerical model. It includes remote sensing measurements by satellites as well as other types of observations from around the world. Data assimilation produces valuable information for understanding the water cycle.

Program

for integrated observation of the global water cycle

This program promotes systematic observation activities (satellite observations, marine observations, land surveys and monitoring, etc.) and develops a global system of water cycle observations that enable mutual use of observational data. It also promotes the accumulation of data, etc., in the monsoon areas of Asia.

GWCRI Overall goal of the Global Water Cycle **Research Initiative** (GWCRI)

The GWCRI provides scientific knowledge and a technological foundation for establishing water management methods that can avert or minimize the adverse effects of changes in the supply, demand, and circulation of water, and for achieving sustainable development into the future. Based on this knowledge and foundation, it has developed optimum water management methods for the Asian region. In order to achieve its goals, the GWCRI has formulated four programs that are integrated by means of Global water cycle information.

Program

for interaction of water cycle and society

This program forecasts changes in the water cycle and their impact on the environment, food production, water resources, ecosystems, human health, society, and the economy.

Program

for comprehensive assessment of scenarios and technologies

This program assesses the applicability of existing technology, develops new technologies, and suggests scenarios for achieving optimum water management.



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FLOODS & DROUGHTS in 2002

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