
WG1: GEOSS ASIAN WATER CYCLE INITIATIVE (AWCI)

Human factors such as globalization, population growth, poverty, urbanization and changes in land use are aggravating the negative consequences of climatological, hydrological and meteorological hazards. Extreme climate events are also increasing these water-related disaster risks faced by populations living in vulnerable areas. The losses are increasing in both developed and developing countries, and in this inter-connected world, the impact of an event can immediately cross borders, leading to cascading consequences, even in areas that are remote from the event. Repeated exposure to disasters is hampering sustainable development in vulnerable localities.

In 2015, the international community agreed on three major accords: the Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework), the Sustainable Development Goals (SDGs), and the Paris Agreement on Climate Change (Paris Agreement). These agreements collectively present an urgent need and opportunity for action now and beyond. There are important connections among these agreements. The SDG on water and its related targets capture the many ways water is utilized, managed, treated and protected throughout the entire water cycle. These targets address pressing water-related issues including social vulnerability and water-related hazards due to intensified climate change as well as poverty, hunger and cities. These water issues are inter-related and interdependent and must be addressed in a systemic and global way to create a more water-secure world.

GEOSS/AWCI has stepped into the second phase. Based on the series of discussions at the Asia Water Cycle Symposium (AWCS2016) in Tokyo, March 2016, the 9th GEOSS Asia-Pacific Symposium in Tokyo, January 2017, the 3rd UN Special Thematic Session on Water and Disasters in New York July 2017, and the predatory meeting at Myanmar, Pakistan, Philippines and Sri Lanka, AWCI in collaboration with International Flood Initiative (IFI) established a Platform on Water and Disasters in each country and has launched its activity. AOGEOS also proposed Task 6 on drought aiming to apply Earth Observations and other Space-based technologies to provide timely and free access to space-based data/products and services for effective drought monitoring, evaluation, and management.

This session will discuss concerted actions in Asia-Oceania region to be taken for contributing to the three global key agendas, Sendai Framework, SDGs and Paris Agreement, and to plans of UN Decade of Action "Water for Sustainable Development" (2018-2028)

Co-Chairs:

Dr. Srikanth Herath, Senior Advisor, Ministry of Megapolis and Western Development, Sri Lanka

Dr. Richard Lawford, Senior Scientist, Morgan State University, Canada

Prof. Toshio Koike, International Centre for Water Hazard and Risk Management (ICHARM)

Day1

- 14:00-14:50** **1. Opening GEOSS/AWCI Breakout Session**
- 1) Opening Address Co-Chairs
 - 2) Opening Remarks
 - Hon. State Minister, Palitha Range Bandara, Ministry of Irrigation and Water Resources & Disaster Management, Sri Lanka
 - Linda Anne Stevenson, Asia-Pacific Network for Global Change Research (APN)
 - 3) Report on the AWCI Session of the 10th GEOSS-AP and the related activities Toshio Koike
- 14:50-15:40** **2. Introductions to the International Activities on Water**
- 1) GEOGLOWS Richard Lawford
 - 2) JAXA Shinichi Sobue
 - 3) WMO Johannes Cullmann
 - 4) UNESCO Shahbaz Kahn
- 15:40-15:50** **Break**
- 15:50-18:00** **3. Report on the Platforms on Water Resilience and Disasters**
- 1) Myanmar
 - 2) Philippines
 - 3) Pakistan
 - 4) Sri Lanka
 - 5) Indonesia
- 18:00** **Adjourn**

Day2

- 9:30-10:00** **4. Keynote Lectures**
- Global Challenges on Water Resources and Disaster Management and Position of Earth Observation in Addressing Them
- Kenzo Hiroki, GRIPS
- 10:00-10:30** **5. Special Report**
- Introduction of the JMA's models and their Products available via the DIAS Yoshiaki Kanno, JMA
 - How are the government weather agencies of Japan and the United States evolving in the face of increasing natural disasters? Ian Morrison, NOAA

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- 10:30-10:50** *Break*
- 10:50-11:20** **6. Demonstration of Platform Functions**
1) Rainfall and Flood Prediction
2) Climate Change Impact Assessment
- 11:20-12:30** **7. Contributions to SDGs, Paris Agreement and Sendai Framework**
1) SDGs
2) Paris Agreement
3) Sendai Framework
- 12:30-14:00** *Lunch Break*
- 14:00-14:20** **7. Contributions to SDGs, Paris Agreement and Sendai Framework**
continued
- 14:20-14:40** **8. Closing GEOSS/AWCI Breakout Session**
1) Inputs into the Kyoto Statement
2) Session Summary
- 14:40-15:00** *Break*
- 15:00-17:30** **9. TG1(Water)-TG5(Agriculture) Joint Session**
1) Collaborative Research Topics
2) Collaborative Fields
3) Implementation Planning