Third Panel Discussion (Douglas Cripe to chair) Water cycle observations and IWRM

Questions for panelists (3 min each):

For:

Srikantha Herath, United Nation University (UNU) Tadashige Kawasaki, Network of Asian River Basin Organizations (NARBO)

1) What can the Earth observation community do to address the needs of stakeholders in terms of providing information about the water cycle for IWRM?

For:

Akio Takemoto, Asia-Pacific Network for Global Change Research (APN) Andre Nonguierma, United Nations Economic Commission for Africa (UNECA)

2) What opportunities should be provided in terms of (1) developing Capacity Building Programs for practitioners, administrators and decision makers; and (2) harmonizing Earth observation missions in the area of IWRM with funding activities of stakeholders? What role do you see for GEO to play in facilitating these activities?

For:

Rasul Ghulam, *Pakistan Meteorological Department (PDM)* Richard Lawford, *Integrated Global Water Cycle Observations (IGWCO)* Chu Ishida, *Japan Aerospace Exploration Agency (JAXA)*

3) It goes without saying that in-situ networks for water cycle variables are critically important, both for the precise nature of the information they provide, and also as a means to validate satellite retrievals and model outputs. Yet, no comparable coordination body such as the Committee on Earth Observation Satellites (CEOS) exists for in-situ networks. Moreover, it is often said that in-situ networks worldwide are not only not keeping pace, but most systems are actually in decline. How do we provide an international coordination body that would act to reverse this trend and draw attention to the importance of sustaining and expanding in-situ networks for water cycle variables? Are there specific items that AWCI and AfWCCI can address or implement to deal with this issue?

For general discussion:

4) The concept of IWRM was refined subsequent to the World Summit on Sustainable Development in 2002, Johannesburg, and it was the Global Water Partnership's definition of IWRM that has been widely accepted. It states:

"IWRM is a process which promotes the co-ordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems."

In your opinion, is this definition still valid/relevant today? Why or why not? What can GEO do in terms of supplying Earth observations to support IWRM?