



## **The New GEWEX Imperatives and Earth Observation of the Energy and Water Cycle**

Petrus J. van Oevelen

International GEWEX Project Office, Silver Spring, United States (pvanoevelen@gmail.com, +1 240 485 1818)

In 2012 the second phase of the Global Energy and Water Cycle Experiment (GEWEX) of the World Climate Research Programme (WCRP) will end and currently a new set of imperatives have been defined to guide GEWEX into its third phase starting in 2013. Observation of the energy and water cycle at various scales will remain of central importance to GEWEX's mission. Observations from space are critical in managing environment in particular with respect to our energy and water resources. Focus will remain on improving our understanding of the processes involved and improve the predictions of the various aspects of the water cycle, such as precipitation, flooding, droughts etc.. With the "stationarity is dead in hydrology" hypothesis now generally accepted the importance of continued and improved observation of the water cycle is only strengthened. In this presentation a concise overview of the GEWEX Imperatives will be given as well as the practical implications of each with respect to observations of the Earth's energy and water cycle.