



Needs of Observations for Adaptation to Climate Variability and Change

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The Global Climate Observing System (GCOS) was established in 1992 with the goal to provide comprehensive information on the Earth's climate system, involving a multidisciplinary range of physical, chemical and biological properties, and atmospheric, oceanic, hydrological, cryospheric and terrestrial processes. It was conceived as a system of contributing observing systems covering components of the overall climate system, coordinated by a GCOS programme that seeks to ensure that all climate-related observation and monitoring requirements from local to global scales are met by the contributing systems. It thus is an integral part of the observation and monitoring pillar of the newly established Global Framework for Climate Services (GFCS).

In preparation for publishing in 2015 a 'Third Adequacy Report' on the status of the global observing systems for climate, in support *inter alia* of the GFCS and the United Nations Framework for Climate Change (UNFCCC), a dedicated international workshop, co-sponsored by GCOS, the Intergovernmental Oceanographic Commission (IOC) of the United Nations Educational Scientific and Cultural Organization (UNESCO) and the United Nations Environment Programme (UNEP), was held in February 2013 to address the requirements for 'Observations for Adaptation to Climate Variability and Change'. The workshop identified key needs to present existing information in forms of relevance to users, to develop information and products in close consultation with users, to invest in the ground-based network of primary hydro-meteorological observations and to establish and improve mechanisms for data access and data description. Common themes regarding observational requirements are the needs for higher spatial and temporal resolution, to focus on regions where climate change will have significant effects key sectors and where there are vulnerable populations, to develop infrastructure and governance to support sustained data rescue and to support research initiatives such as PROVIA and Future Earth. These will be discussed in the presentation.