



The ENACTS Approach: Overcoming Challenges with Availability and Quality of Climate Data and Information in Africa

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Climate data are essential in an array of climate research and applications, that include analyses of climate variability and trends and modelling the impact of climate variability and change on different socioeconomic activities. However, the use of climate data for research and applications in Africa has been scanty because availability of and access to climate data is very limited. In many parts of Africa, weather stations are sparse and their number has been declining. Besides, the distribution of existing stations is uneven, with most located along major roads. Where data exist, they are often of poor quality with many gaps. Thus, useful climate information is often not available or, if it does exist, is inaccessible to those that need it most. There are different efforts underway to overcome these challenges. One of these efforts is the ENACTS (Enhancing National Climate Services) initiative lead by the International Research Institute for Climate and Society (IRI) at Columbia University. This initiative works with National Meteorological Services (NMS) in Africa to improve the availability and quality of climate data. The ENACTS team works directly with NMS in Africa to organize and quality-control all data from the national observation network, and combine the quality-controlled data with proxies. The engagement with the NMS is critical to this approach as the NMHS are the nationally mandated organizations for the creation, management and dissemination of meteorological observation and are the custodians of the historical records. The ENACTS approach also enables NMS to generate and deliver targeted climate information products relevant to the needs of decision makers at multiple levels. ENACTS has so far been implemented in 12 countries and at two Regional Climate Centers in Africa.