

Regional Climate Centres and Regional Climate Outlook Forums: A regional collaborative approach in support of climate services

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WMO Regional Climate Centres (RCCs) are centres of excellence that create regional products including long-range forecasts that support regional and national climate activities, and thereby strengthen the capacity of WMO Members in a given region to deliver better climate services to national users. Serving as a backbone for climate activities of National Meteorological and Hydrological Services (NMHSs), WMO RCCs contribute to capacity-building of NMHSs and sustainable development within countries. WMO RCCs support NMSs in implementing and maintaining climate services by regionalizing global climate products and introducing innovative regional products, helping to access and apply tools, such as software and models, for regional and national analyses and applications, offering infrastructural support such as archiving services, stimulating the development of a regional research and development agenda, conducting training and promoting resource mobilization. WMO RCCs are regional institutions mandated to deliver high-quality regional-scale products, for example, by using data and products from the WMO Global Producing Centres of Long Range Forecasts (GPCs) and other global centres and incorporating regional-scale information. An additional main source of information for WMO RCCs is the national data, products, know-how and feedback they receive from the NMHSs. WMO RCCs provide online access to their products to NMSs and other regional users, including the Regional Climate Outlook Forums (RCOFs). At the same time, they provide regional data, products and feedback to GPCs and associated lead centres for respective verification and product optimization of the global-scale information. WMO has established formal designation procedures for WMO RCCs, through a well-defined joint mechanism through its Regional Associations, Commission for Climatology (CCI) and Commission for Basic Systems (CBS). RCOFs are widely recognized to constitute an innovative concept conceived, developed and supported as part of WMO's Climate Information and Prediction Services (CLIPS) project in partnership with the NMHSs, regional climate institutions and other agencies. RCOFs bring together national, regional and international climate experts, on an operational basis, to produce regional climate outlooks based on input from NMHSs, regional institutions, RCCs, GPCs and other climate prediction centres. RCCs and RCOFs have been recognized to be key mechanisms to facilitate regional collaboration in supporting climate services, in the context of the emerging Global Framework for Climate Services (GFCS). This poster summarizes the concepts, current status and future prospects for the establishment of RCCs and RCOFs around the world, and highlights their value in underpinning the climate services at the national level.