# Regional Climate Outlook Forum: Concept and Implementation

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#### WMO OMM

World Meteorological Organization Organisation météorologique mondiale Scoping Workshop: Towards Implementing an Antarctic RCC-Network Bologna, Italy 7-9 October 2019 A Regional Approach to Implementing the Climate Services Information System (CSIS-R)



## Regional Climate Outlook Forums (RCOFs)

- First established in 1996 at a Meeting in Victoria Falls, Zimbabwe
- Gained momentum as a regional response to the major 1997- 1998 El Niño event
- RCOF Concept was pioneered in Africa and spread worldwide, as of now 21 RCOFs
- WMO and a number of national, regional and international organizations (e.g., NOAA, IRI, Meteo France, World Bank, etc.) have supported their growth and expansion
- RCOFs recognized to be key elements of the Global Framework for Climate Services (GFCS)



#### **Regional Climate Outlook Forums worldwide**



**REGIONAL CLIMATE OUTLOOK FORUMS** 



https://public.wmo.int/en/our-mandate/climate/regional-climate-outlook-products WMO OMM

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#### **RCOF concept**

- RCOFs provide platforms for climate experts and climate information users from countries in a climatologically homogeneous area to:
  - Discuss current climate status
  - Exchange views on scientific developments in climate prediction
  - Develop consensus-based regional climate outlooks that can feed into national climate outlooks produced by NMHSs
  - Engage in user-provider dialogue
- An important aspect of RCOFs is the facility to bring together experts in various fields, at regular intervals, operational climate providers and end users of forecasts in an environment that encourages interaction and learning.
- RCOFs assess the likely implications of the outlooks on the most pertinent socio-economic sectors in a given region, and explore the ways in which use can be made of them.



## RCOF process (1/2)

- RCOFs are essentially meetings of national, regional and global climate experts with a core objective to develop a consensus-based regional climate outlook for the season(s) of critical socio-economic importance, typically in a probabilistic form;
- Training programmes on seasonal climate prediction and tailoring to strengthen the capacity of the national and regional climate scientists to provide better inputs to the RCOF process;
- Climate Services User Forums Include formal sessions that involve climate scientists, key user groups, decision makers as well as media, for identification of impacts and implications, and the formulation of response strategies;
- Outreach sessions involving sector specialists as well as media experts to develop effective communications strategies.

The WMO Regional Climate Centres provide technical guidance and coordination to a majority of RCOFs.

## RCOF process (2/2)

- Identify the key season(s) and determine the critical time for development of climate outlook for the region in question;
- Assemble a group of experts:
  - Large scale prediction specialists,
  - Regional and local climate applications and prediction/downscaling specialists,
  - National climate experts providing country perspectives
  - Stakeholders representing climate-sensitive sectors;
- Review current large scale (global and regional) climate anomalies and the most recent predictions for their evolution;
- Review their impacts at local, national and regional levels, and implications for national-scale predictions;



#### **Global RCOF review 2017: Next generation**

- Adoption of objective seasonal climate forecasts to underpin RCOF products
- An expanded product portfolio, based on standardized operational practices, including climate monitoring, forecast verification, sub-seasonal products, and climate change-related products such as observed trends and attribution of extreme events
- Follow-up on product use in country-level decision-making processes
- Improved Partnership and User Engagement in RCOF process
- Training workshops targeting capacities required for RCOF operations



## **Key milestones**

- Objective climate forecasting: discussion paper Considered by WMO Executive Council at its 69<sup>th</sup> session in May 2017
- EC-69 Decision 4.5/2 Sub-seasonal And Seasonal Forecasting Systems
  - adoption of objective sub-seasonal and seasonal forecasts as an overarching technical strategy, particularly at regional and national levels, promoted through RCOFs
- Publication of WMO Guidance on Verification of Operational Seasonal Climate Forecasts (WMO-No. 1220) - Sept 2018
- Global review of Regional Climate Centre functions Nov 2018
- CBS/CCI Guidance on Operational Practices for Objective Seasonal Forecasting – to be published by 2020
- Operational Climate Prediction (OCP) Workshop series to be key drivers of good practices in partnership with research community



#### **REGIONAL CLIMATE OUTLOOK FORUMS**





## **Ongoing and Planned Actions for RCOFs**

- Formation of a Task Force to guide operationalization of objective seasonal forecast systems towards next generation RCOF
  - NOAA, KMA, ECMWF/C3S, UKMO, CIMH, IRI, RIMES
- Selection of the RCOFs for two periods:
  - April-May: SASCOF, GHACOF and PRESASS
  - October-November: ASEANCOF, PICOF, and Western South America (WCSACOF)
- Template "Recommendations for good practices for developing seasonal outlooks at regional and national level"
- Steering Committee(s) formed for each of RCOFs reps from relevant RCC coordinating RCOF, regional partner (if any), expert(s) from TF facilitated by WMO to develop an Implementation Plan Standard Operating Procedure
- The implementation rolling process to be done in several steps most of the actions will be taken by SC well before the RCOF in preparation stage



# Way Forward

- Enhancement of RCC products and services
  - RCC Review 2018 to provide the main thrust
  - Coordinated RCC support to countries
  - Focus on improved national capacities (especially human resources) to access and apply RCC products
- Expanding RCOF product portfolio (monitoring, subseasonal products, regional climate change, etc.)
- Greater and sustained engagement of regional implementation partners
- Regional consolidation and complementarity of investments in support of climate services
- Key regional inputs for co-production of climate products for decision support at the national level



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# Thank you