

Proposals for revision/updates of
RCC functions, products and
designation criteria

RCC MANDATORY FUNCTIONS

| Functions | Products |
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| Operational activities for LRF (both dynamical and statistical, within the range of a 1-month to 2-year timescale, based on regional needs) | Assessment of the reliability and outcomes of T2m, Prec from GPCs or LC-LRFMME products with update frequency: monthly or at least quarterly |
| | Probabilities for tercile (or appropriate quantile) categories of T2m, Prec in the form of maps, charts, text, tables, digital data with forecast period: one month up to six months and update frequency: 10 days to one month |
| | Consensus statement on regional or subregional forecast of T2m, Prec in form of report with period (from one month to one year) and update frequency: at least once per year (to be defined by the region) |
| | Verification datasets (e.g. SVS LRF scores, Brier Skill Score; ROC; Hit Rate Skill Score) For 2-m mean temperature, total precipitation An online data/information portal |
| | Analysis of feedback (which is made available using a template) Update frequency: annually, as part of a regular reporting of RCCs to WMO regional associations |
| Operational activities for climate monitoring | Climate diagnostics bulletin including tables, maps and related products for mean, maximum and minimum temperatures, total precipitation; other elements with update frequency: monthly |
| | Database of climatological means for various reference periods (e.g. 1931–1960; 1951–1980; 1961–1990; 1971–2000) for T2m mean, maximum and minimum, Precip; other elements to be determined by the region With update frequency: at least 30 years, preferably 10 years |
| | Climate advisories whenever required, based on the forecast of significant regional climate anomalies |
| Operational data services | Regional, quality controlled climate datasets, gridded where applicable Elements (daily): mean, maximum and minimum temperature, and total precipitation, at a minimum Temporal resolution: daily with monthly update |
| | National databases with metadata, accessible to the NMHS in question (backup service, development site, etc.) at the request of NMHS |
| Training services | Manuals, guidance documents and information notes Update frequency: when methods/products are revised or introduced or discontinued |
| | Survey and analysis of regional training needs, and proposals for training activities |

ADDITIONAL HIGHLY RECOMMENDED RCC FUNCTIONS

1) Climate prediction and climate projection

- Assist RCC users in the access and use of WCRP-Coupled Model Intercomparison Project climate model simulations;
- Perform downscaling of climate change scenarios;
- Provide information to RCC users for use in development of climate adaptation strategies;
- Generate, along with warnings of caution on uncertainty, seasonal forecasts for specific parameters where relevant, such as:
 - Onset, intensity and cessation of rainy season;
 - Tropical cyclone frequency and intensity;
- Perform verification on consensus statements for forecasts;
- Perform assessment of other GPC products such as SSTs and winds.

2) Non-operational data services

- Keep abreast of activities and documentation related to the WMO Information System (WIS), and work towards WIS compliance and data collection or production centre designation;
- Assist NMHSs in the rescue of climate data from outmoded storage media;
- Assist NMHSs to develop and maintain historical climate datasets;
- Assist RCC users in the development and maintenance of software modules for standard applications;
- Advise RCC users on data quality management;
- Conduct data homogenization, and advise RCC users on homogeneity assessment, and development and use of homogeneous datasets;
- Develop and manage databases, and generate indices, of climate extremes;
- Perform quality assurance/quality control on national datasets, at the request of an NMHS;
- Provide expertise on interpolation techniques;
- Facilitate data/metadata exchange among NMHSs, including online access, through an agreed regional mechanism;
- Perform quality assurance/quality control on regional datasets.

3) Coordination functions

- Strengthen collaboration between NMHSs on related observing, communication and computing networks including data collection and exchange;
- Develop systems to facilitate harmonization and assistance in the use of LRF products and other climate services;
- Assist NMHSs in user liaison, including the organization of climate and multidisciplinary workshops and other forums on user needs;
- Assist NMHSs in the development of a media and public awareness strategy on climate services.

4) Training and capacity-building

- Assist NMHSs in the training of users on the application and implications of LRF products;
- Assist in the introduction of appropriate decision models for end-users, especially as related to probability forecasts;
- Promote technical capacity-building at the NMHS level (for example, acquisition of hardware and software), as required for implementation of climate services;
- Assist in professional capacity-building (training) of climate experts for generating user-targeted products.

5) Research and development

- Develop a climate research and development agenda and coordinate it with other relevant RCCs;
- Promote studies of regional climate variability and change, predictability and impact in the Region;
- Develop consensus practices to handle divergent climate information for the Region;
- Develop and validate regional models, methods of downscaling and interpretation of global output products;
- Promote the use of proxy climate data in long-term analyses of climate variability and change;
- Promote application research, and assist in the specification and development of sector-specific products;
- Promote studies of the economic value of climate information.

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Designation criteria

1. Internal mandates
2. Mandates from the WMO Permanent Representative of the host country or countries
3. Availability of appropriate human resources
4. Availability of appropriate infrastructure, communication systems, and a necessary basis
5. Endorsement of the Permanent Representative of the WMO Member country in which this centre is based
6. Proposal for implementation
7. Taking Pilot phase
8. After positive assessment of RA concerned, P/CCI, with copy to P/CBS and SG are informed by written communication, signed by the Presidents of the RAs concerned, of the intent of the candidate(s) to establish a WMO RCC (-Network).