Regional climate predictions and projections

Potential new approaches and products

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New approaches

- Co-design and co-production

-Ensure access to relevant data

-RCC to help with downscaling GPC model information

-Users: NMHSs, regional (e.g. Red cross)and local (national)

-Identified gap for regional users, mandate of RCCs to serve regional users?

-User needs: Advisory, data and graphical products

-Ex: Guidance and standardization for extreme events at regional level

New approaches

- Objective forecasts

- Mostly objective (regions with low predictability require human interpretation)
- Gap: documentation of forecast process (how forecasts are produced independently of who is producing)
- Transparency
- Gap: lack of mechanism for making guidance information applied

New approaches

- Sub-seasonal

-Important to be included as RCC function (monitoring and forecasting) – not ready for impact forecasts

- Importance to work with research institutions
- Access to data (on the fly hindcast production),
- Concern: RCC prepared to operate on a weekly operational basis?
- Capacity development needed
- Develop access to data in a similar way to current seasonal operational prediction (under way)

New approaches

- Regional climate scenarios

- How RCC can fill this gap? Too much work (very specialized effort).
- inform about existing resources and regional actors (e.g. CORDEX)
- Develop some capacity in model data access, processing and model selection
- RCC to work with specialized center with expertise in regional climate projection (gain knowledge from scientific paper published for the region)
- RCCs center of excellence for a specific activity and benefit from the others through strengthened networking
- Adaptation strategies based on scientific knowledge

- Value of products and services

- Improved feedback processes

- Variables/Parameters/Categories/etc

- Availability to daily data
- RCCs to develop research capacity to produce products based on daily information (e.g. length of rainy season)
- RCCs to define relevant seasonal of interest and parameters
- Identify RCC with specialized capabilities and applying this to other RCCs
- Prediction of melting onset (6-months earlier)
-Gap: only one global model available for dynamical downscaling

- Sub-seasonal

- RCC to be capacitated to deal with sub-seasonal data
-Replicate WMO structure of seasonal to sub-seasonal

New products

- Information from remote regions
- Tailored climate information

- Access to climate data (monitoring and forecasts) and relevant information from stakeholders (to design tailored indices)
- RCCs to disseminate climpact indices (software available). Promote use on regional scale
- Importance of RCF

- Access to relevant data

- Importance of RCF