# **Regional climate services for Asian high mountain regions**

Task Team of the TPRCC-Network

9 May 2022

#### WMO Regional Climate Center Network



#### **Timeline of TPRCC-N**



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#### Development since FOCRAII, 2019



Structure of TPRCC-N



WMO High Mountain Summit (Oct. 2019)

Video meetings of task team

20220119

20220210 20220414




## **Trial services**



#### **Climate Services**



(http://www.rccra2.org/tp-rcc/)

	Gaps	
Techniques	<ul> <li>Fit for purpose downscaling techniques/model interpretation techniques for specific variable.</li> <li>Techniques for enhancing and verifying performance of prediction models/reanalysis products in mountain areas.</li> </ul>	
Observations & Data sets	<ul> <li>Scarcity of observations impact the accuracy of products, esp. at higher elevation</li> <li>Few long-term monitoring programs comprising meteorological, hydrological and glaciological data—lack of operational data with higher resolution, long time series, and high accuracy</li> <li>New techniques are required to improve the spatial coverage and representativeness of observations</li> </ul>	
Mechanism & Standard	<ul> <li>Facilitate access to long-range forecasts from WMO GPCs and Lead-Centre for Long-Range Forecasts Multi-Model Ensemble (LC-LRFMME) and to ground data from the consortium members to validate the developed products; Lack of mechanism</li> <li>Require common standards, format and meta data for different data types</li> <li>Need cross validation of data and products, to ensure the accuracy of products</li> </ul>	

#### Invitation for Engagement

- Deploy and register observations, with priority of cryosphere and ancillary meteorological data
- Access to the available cryosphere and ancillary meteorological data
- Verify remote sensing or reanalysis data and suggest applicable data
- Nominate Focal Point

No.	Country	No. of Reg. Station
1	China	23
2	India	13
3	Kazakhstan	3
4	Kyrgyzstan	3
5	Mongolia	6
6	Nepal	3
7	Pakistan	6
8	Uzbekistan	2
	total	59

Only 59 stations in the Third Pole region at above 2000m elevation were registered (any observation) in OSCAR/Surface.

### **Upcoming activities**

- Refer to JDP of RAII Operational Plan 2021-2024, promoting polar and high mountain activities for WMO LTG-2/Objective-2.2
  - Review and update metadata for stations registered cryosphere observations in OSCAR/Surface, cooperated with Regional WIGOS Centre (2022)
  - Questionnaire on Members' willingness, requirements, plan of cryospheric observations (in-situ and remote sensing) (2022-2023)
  - Training at regional level for WMO recommended best practices of cryospheric observations and their use, with experts invited (2024)
  - Workshop on addressing gaps on data and technical issues for developing TPRCC-Network (2022-2023)
  - Workshop on identifying the TPRCC Network's specific functions referencing the framework of GDPFS (2023-2024)
  - TP Climate Forum (TPCF) (2022-2024).

# Thank you

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