



Agency for hydrometeorology

**The Committee of Environmental Protection under the
Government of the Republic of Tajikistan**

THE 3RD SESSION OF THE THIRD POLE CLIMATE FORUM

Seasonal climate forecasts for Tajikistan

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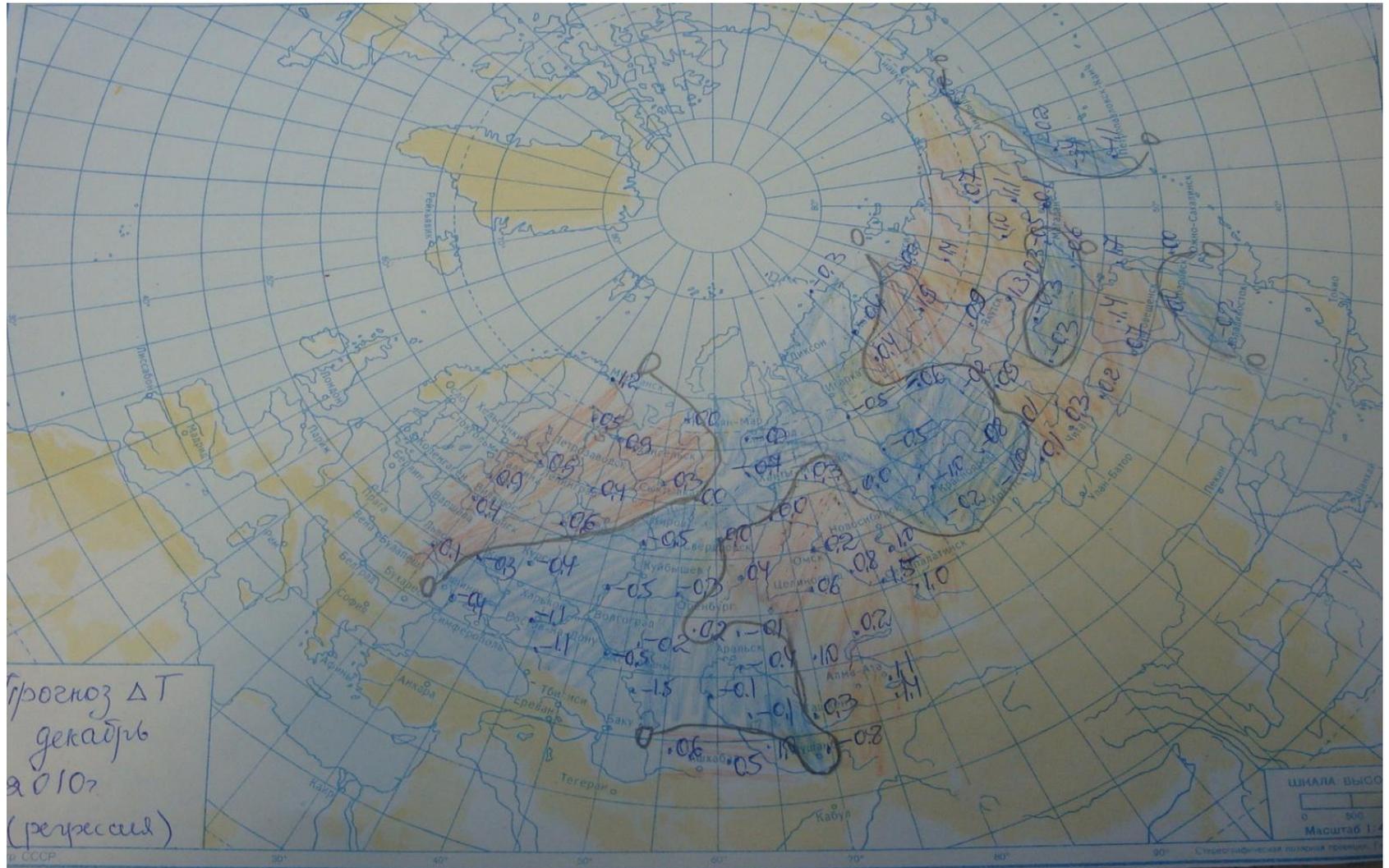
Seasonal Forecasts for Tajikistan

- From 2008 to 2024, seasonal forecasts were prepared in cooperation with the Russian Hydrometeorological Center and the North Eurasian Climate Center.
- Forecast periods included: November–December and January–March.
- In 2025, it was not possible to prepare a seasonal forecast.

Monthly Forecasts

- Uzbekistan's Hydrometeorological Service prepares a monthly year-analogue for Central Asia.
- We use this analogue to develop monthly forecasts.
- Methods used:
 - - Statistical analysis of previous years
 - - Dynamical climate models (e.g., ECMWF, GFS)

Analog prediction maps

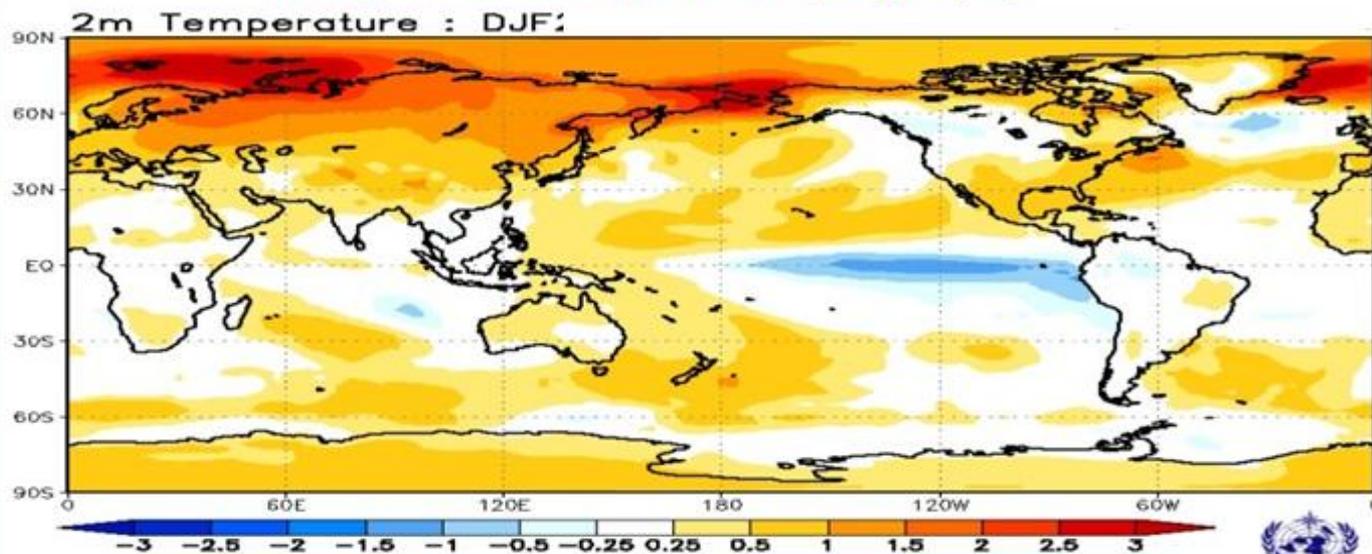


ДЕТЕРМИНИРОВАННЫЕ ПРОГНОЗЫ АНОМАЛИЙ ТЕМПЕРАТУРЫ

МОДЕЛИ:

- Beijing
- Seul
- Washington
- Toulouse
- Exeter
- CPTEC
- ECMWF
- Melbourne
- Montreal
- Moscow
- Offenbax

Композиты: аномалии температуры (°K).



LC MMELRF-WMO Lead Centre for MME LRF

<https://www.wmolc.org/>

Spring 2025 Forecast

- **March** temperatures matched the forecast by 60%.
- **April** and **May** forecasts did not verify.
- Spring temperatures were 1–6°C above normal.
- **May** was particularly anomalous.
- Precipitation was below normal in **April and May**, except for some local areas.
- Increased drought risk in southern regions.

Monthly Forecast Applications

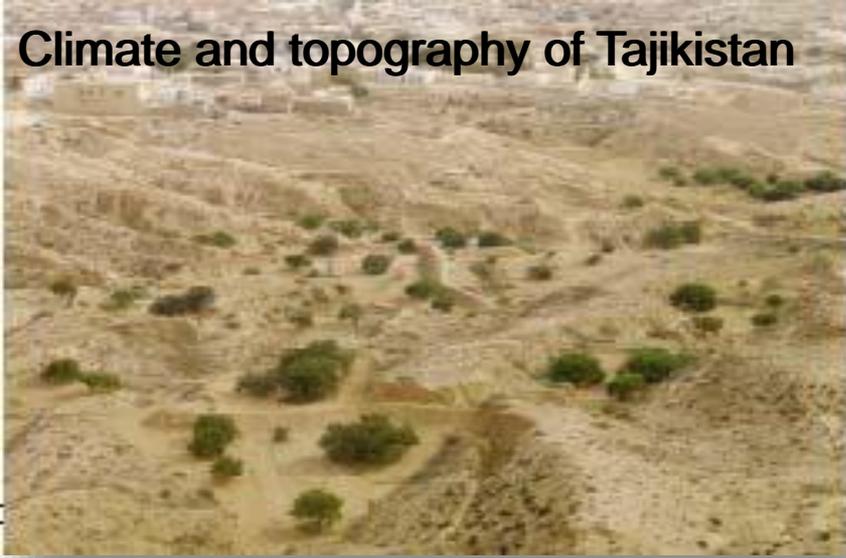
- - Development of adaptation measures for farmers
- - Preparation of emergency services
- - Planning of water resource use



Climate of Tajikistan

- - Complex terrain and diverse climate zones
- - Hot, dry summers in the south; cold winters in mountainous areas
- Regions:
 - - Sughd Region
 - - Khatlon Region
 - - Gorno-Badakhshan Autonomous Region (GBAO)
 - - Republican Subordination Region (RRP)

Climate and topography of Tajikistan



Climate and topography of Tajikistan

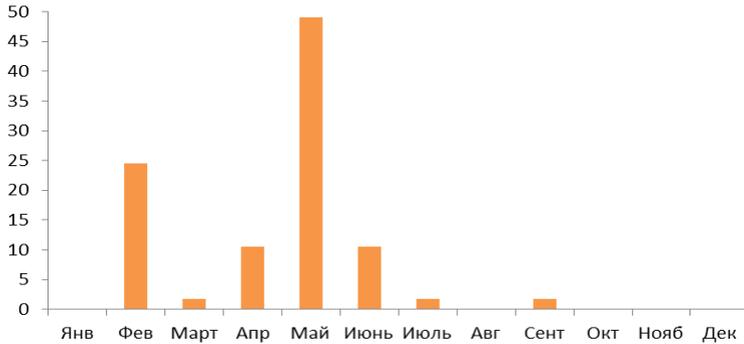


Climate and Topography – Hazards and Extremes

- - Possibility of heat waves
- - Risk of mudflows in mountainous areas
- - Increased avalanche danger in winter

Seasonality of Hazardous and Extreme Events

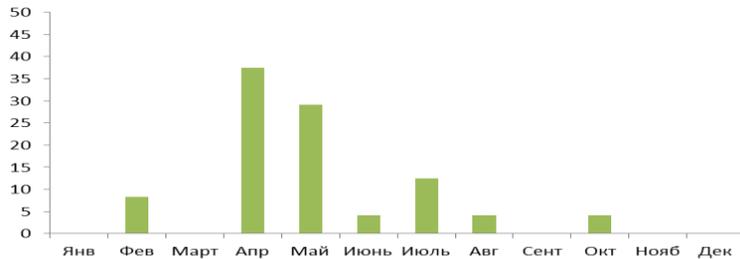
Осадки



Precipitation

February, April, May, June – general hazards

Наводнения



Floods

April, May, July, August – heavy rains, glacier melt

Лавины



Avalanches

February, March, April – snow-related hazards

Thank you!