

Climate Prediction Center's Central Asia Hazards Outlook For USAID / FEWS-NET 27 April – 3 May, 2023

Temperature:

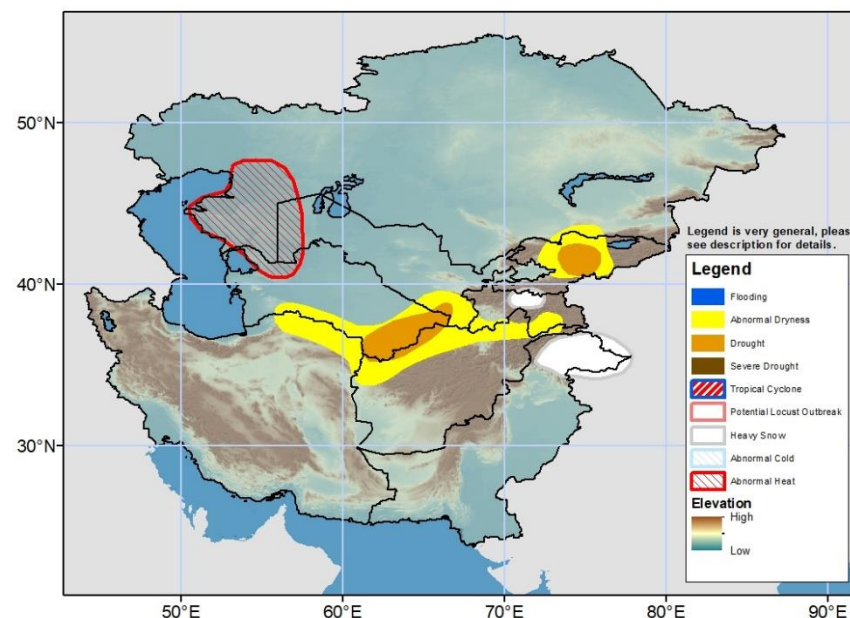
Weekly average minimum temperatures were below normal over most of Central Asia. The largest negative anomalies were 6-12°C across northeastern Kazakhstan, with more moderate 4-6°C anomalies across southern Kazakhstan, Uzbekistan, eastern Turkmenistan and parts of Afghanistan. Maximum temperatures exhibited a very similar anomaly pattern in the region. Weekly average maximum temperatures remained lower than 10°C across northeastern Kazakhstan and only exceeded 30°C in southwestern Afghanistan and parts of Iran and Pakistan. Weekly average minimum temperatures were observed around -10 to 0°C across higher elevations of Kyrgyzstan (>3000 m), the higher elevations of eastern Tajikistan (>4000 m), northern Kazakhstan, and the higher elevations of the central highlands and northeastern Afghanistan (>2500 m).

During the outlook period, the GEFS model forecasts a substantial increase in temperatures throughout the region. Much-above average mean maximum temperatures will move in from the west and the warmest areas in western Kazakhstan, western Uzbekistan, and northern Turkmenistan will observe 6-10°C anomalies. More moderate positive anomalies (2-6°C) should expand across central Kazakhstan, eastern parts of Turkmenistan and Uzbekistan, northern Iran, northern and western Afghanistan, western Kyrgyzstan, and western Tajikistan. Far-eastern Afghanistan and Pakistan should expect below-average temperatures to remain in place. The mean minimum temperature pattern is predicted to look very similar with comparable magnitude anomalies. Weekly average minimum temperatures are forecast between -15 to -5°C across eastern Tajikistan, the higher elevations of eastern Kyrgyzstan and northeastern Afghanistan. Mean minimum temperatures are likely to remain above freezing across Kazakhstan. Mean maximum temperatures are forecast to exceed 30°C in Turkmenistan, southern Uzbekistan, and southern/western/northern Afghanistan, while exceeding 35°C in southwestern Afghanistan, eastern Iran, and Pakistan.

Precipitation:

A robust low pressure system brought heavy precipitation to eastern Afghanistan and northern Pakistan. 25mm to as much as 100mm of liquid equivalent precipitation were observed according to gauge analysis, with much of it falling as heavy snow at higher elevations. Lighter precipitation was observed over central portions of Afghanistan, Tajikistan, and eastern Kyrgyzstan. Based on USGS snow water equivalent (SWE) analysis, negative SWE anomalies persist across eastern/northwestern Tajikistan, most of northeastern/central Afghanistan, and most of Kyrgyzstan outside of lower elevations in west-central portions of the country. However, recent precipitation has slightly increased SWE values in Afghanistan and Pakistan. Low SWE values and low standardized precipitation index (SPI) values support the placement of drought in central Kyrgyzstan. Low SPI values and precipitation accumulation over the last two months, as well as low soil moisture, supports the placement of a drought hazard in eastern Turkmenistan and northern/western Afghanistan.

The GEFS ensemble mean forecasts moderate to heavy precipitation (25-100mm liquid equivalent) for eastern Afghanistan, as well as in northern Pakistan during the outlook period. Heavy snowfall (>25cm) is likely to accumulate in northern Pakistan's higher elevations. Moderate rain and mountain snow is forecast in Tajikistan, Kyrgyzstan and parts of eastern Kazakhstan. Little to no precipitation is forecast in Kazakhstan, Turkmenistan, and Uzbekistan.



Note: The Hazards outlook map is based on current weather/climate information, short and medium range weather forecasts (up to 1 week), sub-seasonal forecasts up to 4 weeks, and assesses the potential impact of extreme events on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed and predicted to continue during the outlook period. The boundaries of these polygons are only approximate at the spatial scale of the map. This product takes into account long range seasonal climate forecasts but does not reflect current or projected food security conditions. FEWS NET is a USAID-funded activity whose purpose is to provide objective information about food security conditions. Its views are not necessarily reflective of those of USAID or the U.S. Government. The FEWS NET weather hazards outlook process and products include participation by FEWS NET field and home offices, NOAA-CPC, USGS, USDA, NASA, and a number of other national and regional organizations in the countries concerned. Questions or comments about this product may be directed to Dr. Wassila Thiaw, Head, International Desks/NOAA, wassila.thiaw@noaa.gov. Questions about the USAID FEWS NET activity may be directed to Dr. James Verdin, Program Manager, FEWS NET/USAID, jverdind@usaid.gov.