

Climate Prediction Center's Central Asia Hazards Outlook For USAID / FEWS-NET 13 April –19 April, 2023

Temperature:

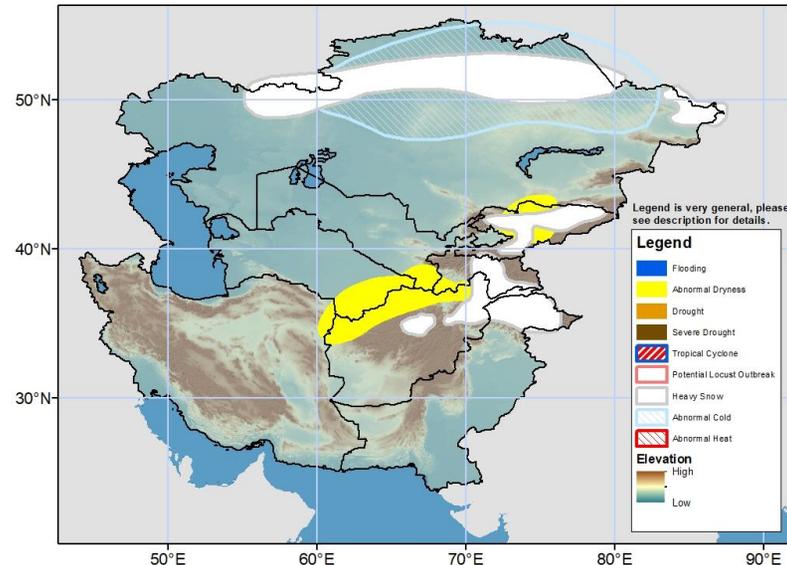
Weekly average minimum temperatures were above normal by 2-4°C across the western half of Kazakhstan portions of Uzbekistan, and eastern Turkmenistan. Minimum temperatures were 2-8°C cooler than average in parts of southern/eastern Afghanistan and Pakistan. Maximum temperatures were much warmer than average across central and northwestern Kazakhstan, with positive anomalies topping out at 6-8°C above normal. Weekly average maximum temperatures higher than 15°C reached into northwestern Kazakhstan. Weekly average minimum temperatures were observed around -15 to -5°C across higher elevations of Kyrgyzstan (>3000 m), -10 to -5°C across the higher elevations of eastern Tajikistan (>4000 m), higher elevations of eastern Kazakhstan, and the highest elevations of central and northeastern Afghanistan (>3000 m).

During the outlook period, the GEFS model forecasts below-normal mean minimum temperatures (2 -10°C anomalies) across Kazakhstan. Positive anomalies (1-4°C) are expected in central Kyrgyzstan, Tajikistan, much of Afghanistan, and Pakistan. Weekly average minimum temperatures are forecast around -20 to -5°C across eastern Tajikistan, the higher elevations of eastern/southern Kyrgyzstan, and the higher elevations of northeastern Afghanistan. Minimum temperatures between -10 and 0°C are forecast for parts of central Kyrgyzstan, and northern Kazakhstan. Positive mean maximum temperature anomalies between 1 to 4°C are expected in southern portions of Kazakhstan (especially Turkistan and Jambyl), southern Turkmenistan, eastern Uzbekistan, northeastern Iran, Afghanistan, and northern Pakistan. Mean maximum temperatures are forecast to exceed 25°C in northern/southwestern Afghanistan and eastern Turkmenistan, while exceeding 40°C in Pakistan. While daily temperatures will start out quite-above average for much of the region, by the latter half of the outlook period, a strong upper-level trough will usher in much colder than average air over the region.

Precipitation:

Heavy precipitation (25-50mm) was observed in southern Kazakhstan's Turkistan and Jambyl regions, as well as small neighboring portions of Uzbekistan and Kyrgyzstan. Light to moderate precipitation, less than 25mm, spread across other portions of northern Afghanistan, Tajikistan, parts of Kyrgyzstan, Turkmenistan, Uzbekistan, and southern/eastern Kazakhstan. Light rains fell in areas that had previously reported deadly flooding around Pakistan's Khyber Pakhtunkhwa province from 24 March to 2 April. Based on USGS snow water equivalent (SWE) analysis, negative SWE anomalies exist 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 steadied or slightly increased SWE values in Afghanistan -now safely above climatological minimums. Low SWE values and low standardized precipitation index (SPI) values support abnormal dryness in central Kyrgyzstan. Low SPI values and precipitation accumulation over the last two months supports the abnormal dryness polygon across the northern tier of Afghanistan and neighboring portions of Turkmenistan, Uzbekistan, and Tajikistan.

The GEFS ensemble mean forecasts heavy precipitation across the central mountainous areas of the central Asia region, as well as eastern and northern Kazakhstan during the outlook period. Liquid equivalent values of 50-100m are forecast in northeastern Afghanistan, northern Pakistan, and eastern Kazakhstan -mostly falling as snow. Because of the late season snow, heavy snow hazards are placed across northwestern/central Tajikistan (Sughd, Pamir Range), portions of northeastern and eastern Afghanistan (Nuristan, Laghman, Kunar, Panjshir, Badakhshan), northern Pakistan, Kyrgyzstan, and the higher elevations of eastern Kazakhstan. Low elevation heavy snow (25-50cm) is expected across northern Kazakhstan. Lighter rains, less than 25mm, are forecast across central Afghanistan, western Turkmenistan and Uzbekistan, and western/central Kazakhstan.



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, jverdin@usaid.gov