



WORLD  
METEOROLOGICAL  
ORGANIZATION



# GLOBAL SEASONAL CLIMATE UPDATE

TARGET SEASON: August-September-October 2021

Issued: 26 July 2021



Canada



HYDROMETEOROLOGICAL  
CENTRE OF RUSSIA



## Summary

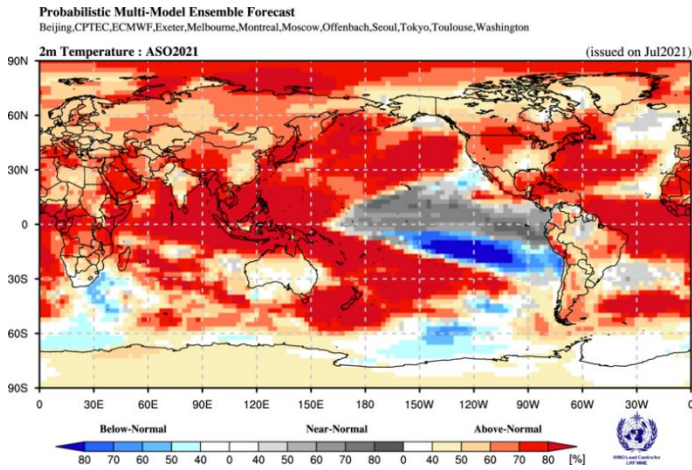
Observed sea surface temperatures (SSTs) in the central tropical Pacific continued in a neutral ENSO condition during April-June 2021. The Indian Ocean Dipole (IOD) also remained in a near-neutral condition and is predicted to continue being neutral. The near-normal sea-surface temperature anomalies in the Niño 3.4 and Niño 3 regions are favoured to remain in near-normal conditions in the August-October 2021 season. Farther west in the Niño 4 region, the sea surface temperature anomaly is predicted to be near-zero. The August-October 2021 prediction, therefore, indicates continuation of near-normal conditions in the central tropical Pacific.

Apart from the tropical eastern Pacific Ocean (where prediction for SSTs is for slightly below-average), sea-surface temperatures over most of the equatorial western Pacific, Indian, and Atlantic Oceans are expected to be near or above-average for August-October 2021. Sea surface temperatures between about 30° and 60°N in the Pacific and Atlantic Oceans are also expected to be above-normal. The widespread warmer global sea-surface temperature anomalies are likely to contribute to the above-normal forecast of air temperatures for August-October 2021.

Air temperature anomalies over land are expected to be strongest in the Northern Hemisphere. Positive temperature anomalies are expected over almost the whole northern hemisphere. The largest land air temperature anomalies are expected over the central part of North America, and the far northern part of Asia, and model consistency is high. There is also high consistency in the predictions of an anomalously warm August-October 2021 temperature anomalies over the Caribbean, the Arabian Peninsula, part of central Asia, far eastern and southeast Asia. In near-equatorial latitudes, positive temperature anomalies are predicted with high consistency in the Maritime subcontinent, and western Africa extending into central and eastern Africa. In the Southern Hemisphere, most of the land areas are predicted to have weak positive air temperature anomalies. With the notable exceptions of some regions in the Indian Ocean, South Pacific islands and New Zealand where model consistency is high, elsewhere model consistency is only moderate. Below-normal temperatures are predicted only for areas over the sea, including in the vicinity of the equatorial Pacific, and to the south of Madagascar.

The general weakness of predicted rainfall anomalies for August-October 2021 are typical of the absence of any strong sea-surface temperature anomalies in the tropical oceans. Nevertheless, there are increased chances of unusually dry conditions in parts of the South Pacific and anomalously wet conditions to the western and south-western Pacific. Along the equator across most of the central Pacific Ocean, probabilities are highest for near-normal rainfall. Above-normal rainfall is also expected over the Maritime and Indian subcontinent, northwest South America, and Australia. Over the Caribbean there is a moderate to strong indication of below-normal rainfall. A band of above-normal rainfall immediately to the south and along the equator is predicted in the Atlantic Ocean and is flanked by a band of below-normal rainfall farther north. Increased chances of below-normal precipitation are also indicated over many parts of South America south of the equator, over much of the northern Mediterranean and surrounding areas, over parts of central and western North America, southern regions of Africa, and over much of the east coast of Africa. Other areas of weakly increased probabilities for above-normal rainfall include some scattered locations in high latitudes of the northern hemisphere.

## Surface Air Temperature, ASO 2021



## Precipitation, ASO 2021

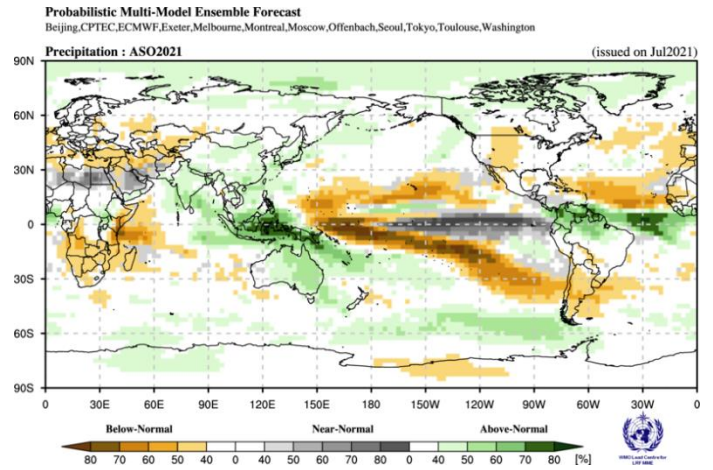


Figure 1. Probabilistic forecasts of surface air temperature and precipitation for the season August-September-October 2021. The tercile category with the highest forecast probability is indicated by shaded areas. The most likely category for below-normal, above-normal and near-normal is depicted in blue, red and grey shadings respectively for temperature, and orange, green and grey shadings respectively for precipitation. White areas indicate equal chances for all categories in both cases. The baseline period is 1993-2009.

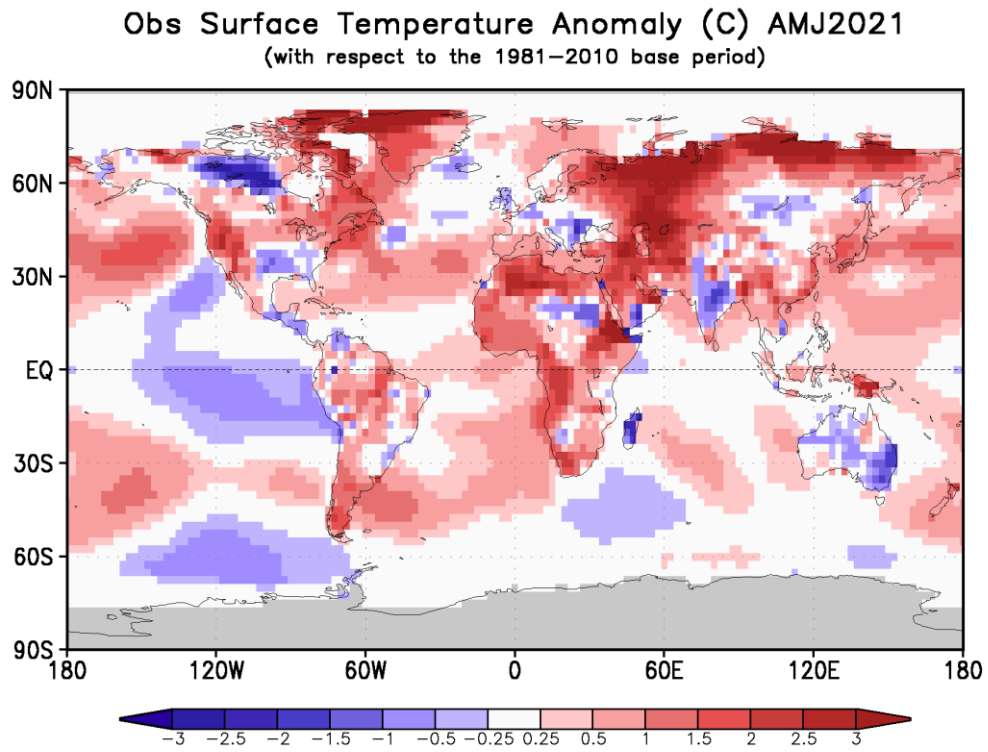


Figure 2. Observed April-May-June 2021 near-surface temperature anomalies relative to 1981-2010. (Source: U.S. [Climate Prediction Center](#)).

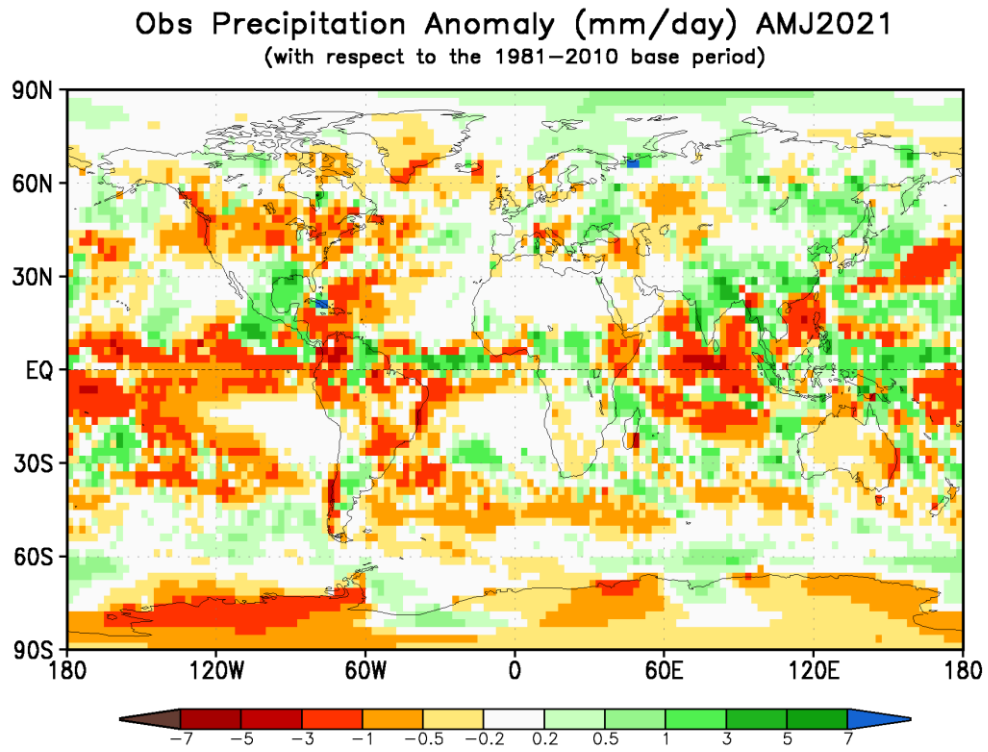


Figure 3. Observed April-May-June 2021 precipitation anomalies relative to 1981-2010 base period (top). (Source: U.S. [Climate Prediction Center](#)).