





Maldives Meteorological Service

Rainfall and Temperature Outlook over Maldives

For February 2024

Summary

Rainfall is expected to be above average in some parts of central and southern atolls, and average over rest of the country. The average temperature is expected to be slightly higher than usual.

Introduction

This consensus outlook on rainfall and temperature for the Maldives has been prepared through assessments including prevailing regional and global climate conditions and prediction of various climate models, seasonal forecast of WMO Lead Centre for Long-Range Forecast Multi-Model Ensemble (LC-LRFMME), North American Multi-Model Ensemble (NMME) Forecasts of Monthly Climate Anomalies, climate driver update of Bureau of Meteorology (BoM) and monthly forecasts of European Centre for Medium-Range Weather Forecasts (ECMWF).

Current status and expected condition of major climate drivers.

El Niño conditions are prevailing with above-average equatorial sea surface temperatures (SSTs) across the central and eastern Pacific Ocean. Conditions are likely to continue during the month.

The Indian Ocean Dipole (IOD) has become neutral and expected to remain the same condition during the month.

Madden-Julian Oscillation (MJO) is currently enhanced over western Pacific. Some models indicate eastward propagation and the signal to become weak, over Indian Ocean by the end of the month.

Calibration of climate models

The Climate Predictability Tool (CPT) was used to downscale global model outputs to a local scale. These results indicate slightly above-normal rainfall over part of southern and central atolls.



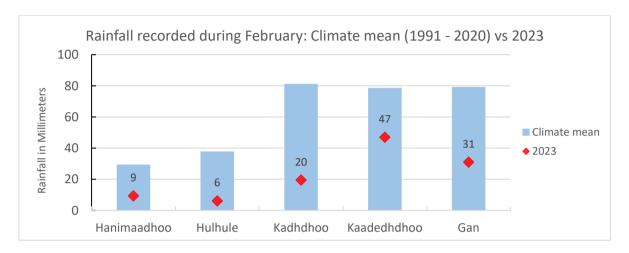




Global Producing Centres and WMO Lead Centre Forecasts

The Probabilistic Multi-Model Ensemble of WMO LC-LRFMME suggests above-normal rainfall in most parts of southern and central atolls and normal rainfall over rest of the country. Above-normal temperatures are expected across the country.

Condition of Rainfall and Temperature over the Maldives during February





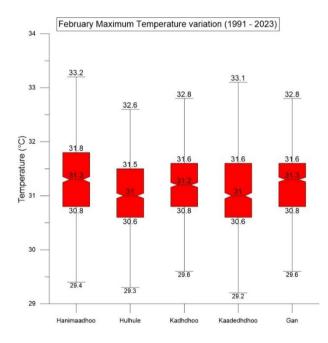


Figure 2: Daily maximum temperature range at Meteorological stations during February for the period 1991-2023, showing the highest maximum temperature of 33.2°C recorded at Meteorological Office Hanimaadhoo.



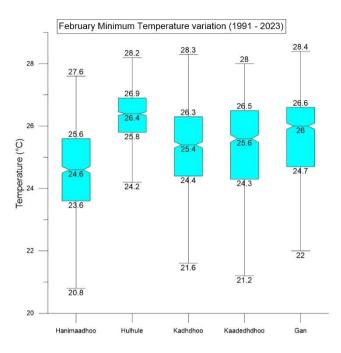


Figure 3: Daily minimum temperature range at the Meteorological stations during February for the period 1991-2023, showing the lowest minimum temperature of 20.8°C at the Meteorological Offices, Hanimaadhoo.

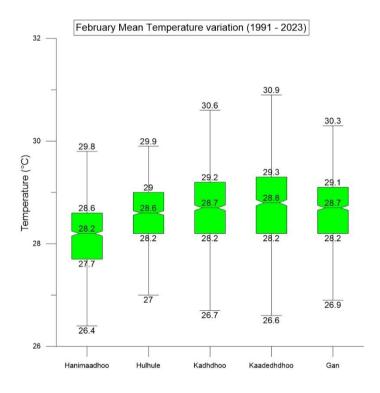


Figure 4: Daily mean temperature range at Meteorological stations during February for the period 1991-2023, showing most (50%) of the time, the daily average temperature lies between 27.7–28.6°C in Hanimaadhoo, 28.2–29.0 °C in Hulhule, 28.2–29.2 °C in Kadhdhoo, 28.2–29.3 °C in Kaadedhdhoo and 28.2-29.1 °C in Gan.



Conclusion

Considering the MJO signal over the Indian Ocean towards end of the month, along with the forecasts of Multi-Model Ensemble of WMO Lead Centre, NMME, CPT analysis and climate data of the Maldives, rainfall is expected to be above average in some parts of central and southern atolls, and average over rest of the country. The average temperature is expected to be slightly higher than usual.

Note:

Normal: Amount of rainfall between 90% - 110% of the average for the period. Above normal: Amount of rainfall more than 110% of the average for the period. Below Normal: Amount of rainfall less than 90% of the average for the period