

بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ



ދިވެހި ވަނަ ދުވަހުގެ ދުވަސް

# Maldives Meteorological Service

## Rainfall and Temperature Outlook over Maldives

For August 2022

### Summary

Rainfall is likely to be normal over northern-most atolls and above-normal over rest of the country.

Temperature is expected to be normal over northern and central atolls, slightly above-normal over southern atolls.

### Introduction

This consensus outlook on rainfall and temperature for Maldives has been prepared through assessments including prevailing regional and global climate condition 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, Multi-model Ensemble Based Seasonal Climate Prediction of Forecast Customization System (FOCUS), climate driver update of Bureau of Meteorology (BoM) and monthly forecasts of European Centre for Medium-Range Weather Forecasts (ECMWF).

### Current status of major climate drivers.

**El Niño Southern Oscillation (ENSO):** La Niña condition persists with below average equatorial Sea Surface Temperatures across most of the Pacific Ocean. Global models indicate La Niña condition to be continued during August 2022.

**Indian Ocean Dipole (IOD):** Global models indicate currently IOD at or below negative threshold value and expect a negative IOD condition to develop with warm SST anomalies over east Indian Ocean and cool SST anomalies over north-west Indian Ocean.

**Madden-Julian Oscillation (MJO):** Global models indicate MJO over Indian Ocean at the beginning of the month and propagate eastwards to Maritime Continent during the 1<sup>st</sup> week. The signal is likely over phase 1 by 2<sup>nd</sup> week and over Indian Ocean by 3<sup>rd</sup> week. Thus, convective activity likely to be enhanced over Maldives area towards end of the month.



www.meteorology.gov.mv | info@met.gov.mv | +960 3323084 | +960 3320021

22000 ވަނަ ދުވަހުގެ ދުވަސް  
Hulhule' 22000  
Republic of Maldives

@MetMaldives

#MetMaldives





## Calibration of climate models

Climate Predictability Tool ( CPT ) was used to downscale global model outputs to local scale. These results indicate above-normal rainfall over the country for August 2022.

## Global Producing Centres and WMO Lead Centre Forecasts

Probabilistic Multi-Model Ensemble of WMO LC-LRFMME indicates below-normal rainfall over northern-most atolls and climatological probability over rest of the country during August 2022. Probabilistic Multi-Model Ensemble of WMO LC-LRFMME indicates above-normal Temperature over southern atolls and part of central atolls, climatological probability over rest of the country for August 2022.

## Climatic condition during the month of August

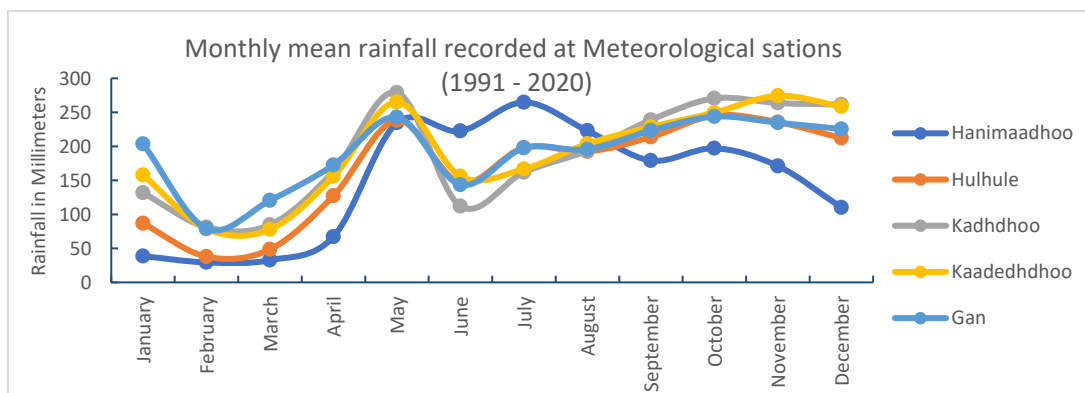


Figure 1- During the period 1991 - 2020, monthly mean rainfall of August are 223, 204, 195, 194 and 193 millimeters in Hdh.Hanimaadhoo, Gdh.Kaadeddhoo, S.Gan, L.Kadhdhoo and Hulhule, respectively.

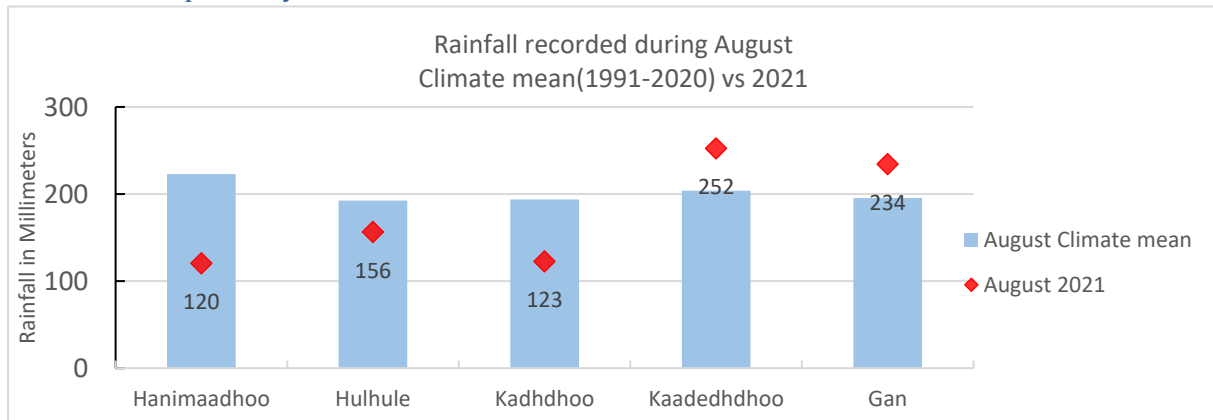


Figure 2- In August 2021, Kaadeddhoo and Gan received higher rainfall than climate mean for the month while rainfall in Kadhdhoo, Hulhule and Hanimaadhoo were lower than climate mean for the month. Highest amount of rainfall received in Kaadeddhoo with an increase of 24% and lowest rainfall received in Hanimaadhoo with a decrease of 46% of the average rainfall.

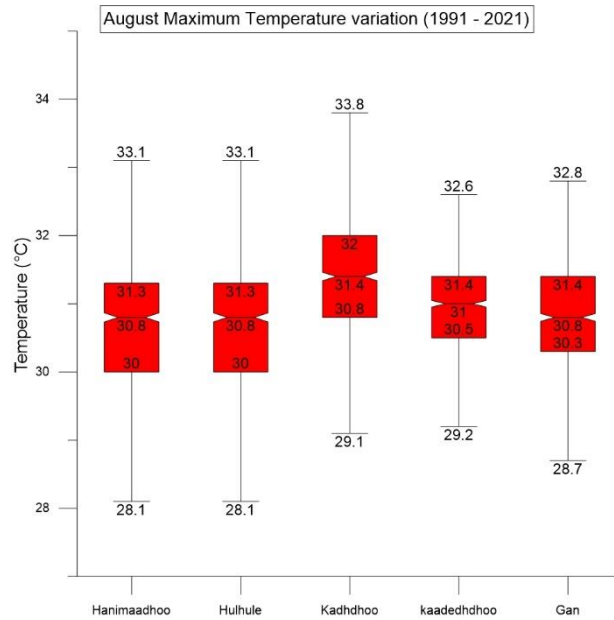


Figure 3: Daily Maximum Temperature range at Meteorological stations during August for the period 1991-2021. Highest maximum Temperature of 33.8°C recorded at Kadhdhoo Meteorological Office.

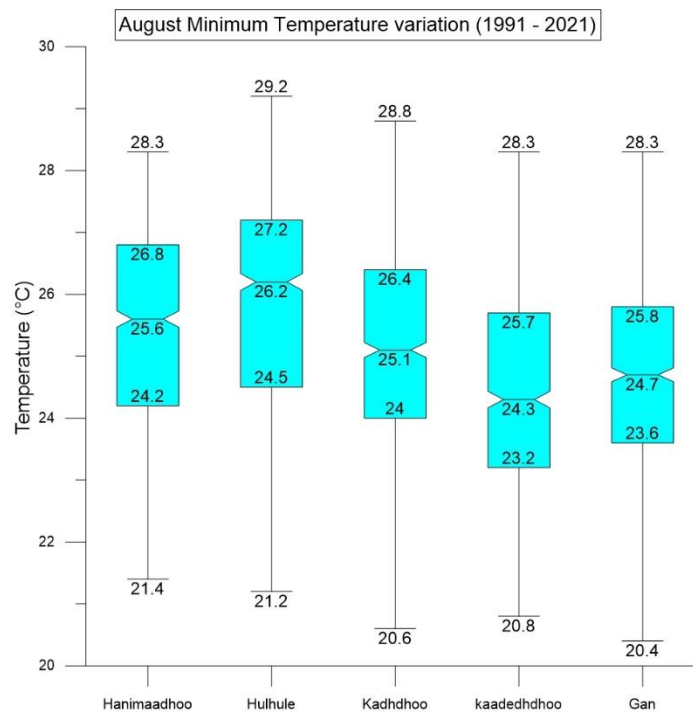


Figure 4: Daily Minimum Temperature range at Meteorological stations during August for the period 1991-2021, showing lowest minimum Temperature of 20.4°C at Gan Meteorological Office.

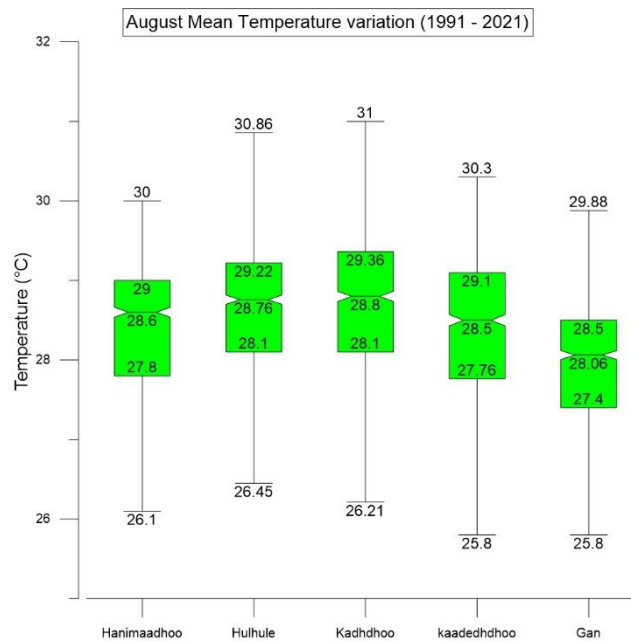


Figure 5: Daily Mean Temperature range at Meteorological stations during August for the period 1991-2021. It shows most (50%) of the times daily average temperature lies between 27.8– 29.0°C in Hanimaadhoo, 28.1 – 29.2°C in Hulhule, 28.1 – 29.4°C in Kadhdhoo, 27.8 - 29.1°C in Kaadedhdhoo and 27.4 - 28.5°C in Gan.

## Conclusion

By considering the La Niña and IOD condition, expected MJO activity, Multi-Model Ensemble of WMO Lead Centre forecasts, NMME forecasts, FOCUS forecasts and climate data of Maldives, Rainfall is likely to be normal over northern-most atolls and above-normal over rest of the country.

Temperature is expected to be normal over northern and central atolls, slightly above-normal over southern atolls.

### 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*