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Maldives Meteorological Service

Rainfall and Temperature Outlook over Maldives

For April 2021

Summary

Rainfall is likely to be above normal for the area from Haa Alifu atoll to Kaafu Atoll, below normal from Gaafu Alifu atoll to Addu City and normal over rest of the country during April 2021. Temperature is expected to be slightly above normal during the month.

Introduction

This consensus outlook for Maldives has been developed through assessments including prevailing regional and global climate condition and prediction of various models, seasonal forecast of WMO Lead Centre for Long-Range Forecast Multi-Model Ensemble (LC-LRFMME), NMME Probability Forecasts of Monthly Climate Anomalies and forecasts from Regional Integrated Multi-Hazard Early Warning System (RIMES).

El Niño -Southern Oscillation (ENSO): La Niña condition persists with currently below average Equatorial Sea Surface Temperatures (SSTs) from the west-central to eastern Pacific Ocean. Chances are high for the transition from La Niña to ENSO-Neutral during April.

Indian Ocean Dipole (IOD): Neutral IOD condition persists and models suggest same condition during the month.

Madden-Julian Oscillation (MJO): MJO is currently enhanced over Western Maritime Continent. The signal is expected to maintain active and propagate eastwards to Western Pacific during the second week and become weak over phase 7 towards end of the month.

Calibration of climate models

Most models suggest above normal rainfall mostly for northern part of the country.

Global Producing Centres and Lead Centre

Probabilistic Multi-Model Ensemble of WMO Lead Centre for Long Range Forecast Multi-Model Ensemble indicates above normal rainfall over the area from Haa Alifu atoll to Kaafu atoll and below normal rainfall from Gaafu Alifu to Addu City. Most individual models



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indicate above normal rainfall to northern atolls and below normal rainfall to southern-most atolls for April.

Probabilistic Multi-Model Ensemble of WMO Lead Centre for Long Range Forecast Multi-Model Ensemble indicates above normal Temperature across the country for April 2021.

Climate condition

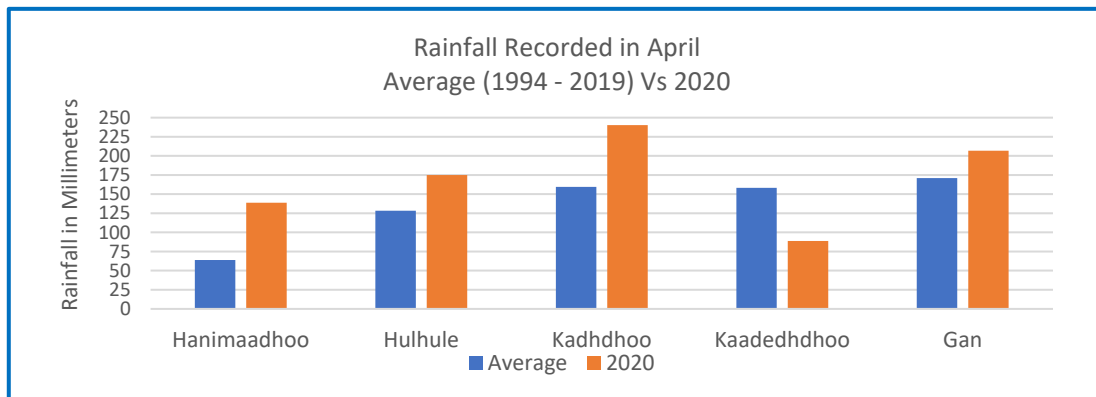


Figure 1- All stations, except Kaadeddhoo recorded higher than average rainfall in 2020.

Figure 1 shows rainfall recorded between 1994 and 2020 in five Meteorological stations.

Figure 2 shows spatial distribution of rainfall across the country during April between 1994 and 2020. Rainfall is higher in southern atolls than central and northern atolls during April.

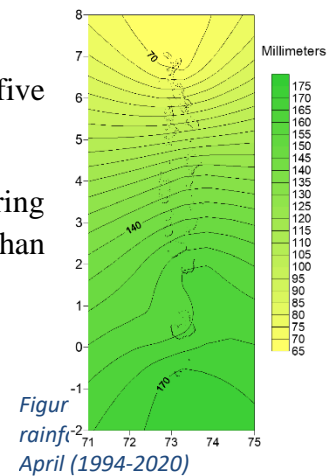


Figure 2- Spatial distribution of rainfall across the country during April (1994-2020)

Conclusion

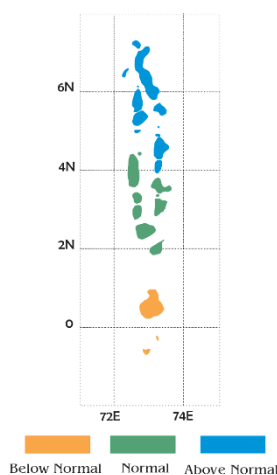


Figure 3 Rainfall probability for April 2021

By considering the Multi-Model Ensemble of WMO Lead Centres, individual models, NMME Probability Forecasts, RIMES forecasts, climate data, rainfall is likely above normal over the area from Haa Alifu atoll to Kaafu atoll, below normal from Gaafu Alifu atoll to Addu City and normal over rest of the country.

Temperature is likely to be slightly above normal across the country during the month.



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.

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