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Maldives Meteorological Service



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Rainfall and Temperature Outlook over Maldives

For June 2021

Summary

Rainfall is likely to be below normal in all areas June 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 monthly forecasts of European Centre for Medium-Range Weather Forecasts (ECMWF).

El Niño -Southern Oscillation (ENSO): ENSO-neutral condition presents. Over east-central and eastern Pacific Ocean, Equatorial Sea Surface Temperatures are near to below average. Some global models indicate high probability for neutral condition to prevail during June.

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

Madden-Julian Oscillation (MJO): MJO is enhanced over Pacific Ocean at the beginning of June and predicted a westward movement during the 1st week. It is expected to be weakened from 2nd week and move over Indian Ocean towards end of the month.

Calibration of climate models

Most models suggest below normal rainfall over the country.

Global Producing Centres and Lead Centre



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Probabilistic Multi-Model Ensemble of WMO Lead Centre for Long Range Forecast Multi-Model Ensemble indicates below normal rainfall over most part of the country and climatological probability over part of southern atolls during June.

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

Climate condition

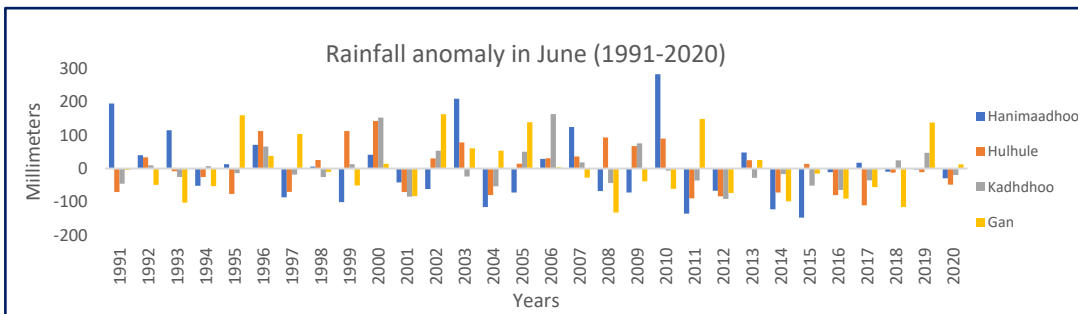


Figure 1- Rainfall has a decreasing trend during June.

Figure 1 shows rainfall recorded between 1991 and 2020 in four Meteorological stations.

Figure 2 shows spatial distribution of rainfall across the country during Jun 2020, with data from all five Meteorological stations. Highes rainfall recorded in northern atolls.

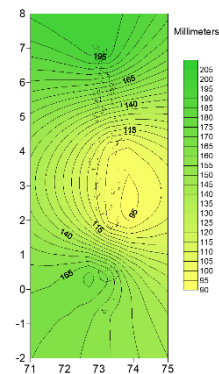


Figure 2 Spatial distribution of rainfall over the country during June 2020

Conclusion

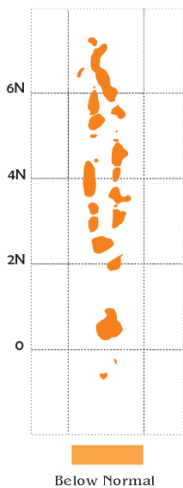


Figure 3 Rainfall probability for Jun 2021

By considering the neutral condition ENSO and IOD, MJO signal over phase 6 and expected movement, Multi-Model Ensemble of WMO Lead Centres, NMME Probability Forecasts, ECMWF monthly forecasts, climate data, rainfall is likely below normal throughout 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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