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Maldives Meteorological Service

Rainfall and Temperature Outlook over Maldives For July 2020

Summary

Rainfall likely 10% increase in northern atolls and normal over rest of the country during July 2020. Temperature likely above normal during July 2020.

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 calibrating climate models.

El Niño -Southern Oscillation (ENSO): ENSO-neutral condition prevails with Equatorial Sea Surface Temperatures (SSTs) near to below average across east-central and eastern Pacific Ocean. Most of the models indicate ENSO neutral condition to persist during July 2020.

Indian Ocean Dipole (IOD): Neutral IOD condition is likely to continue throughout July.

Madden-Julian Oscillation (MJO): Weak MJO signal over western Indian Ocean and expected to become enhance during the 1st week. However, weakening of the signal expected towards end of the 2nd week and likely over eastern Indian Ocean by then.

Calibration of climate models

Calibration of some GCM output with station observed rainfall data suggests above normal rainfall in central atolls during July. Some models show below normal rainfall in northern atolls as well as southern-most atolls.



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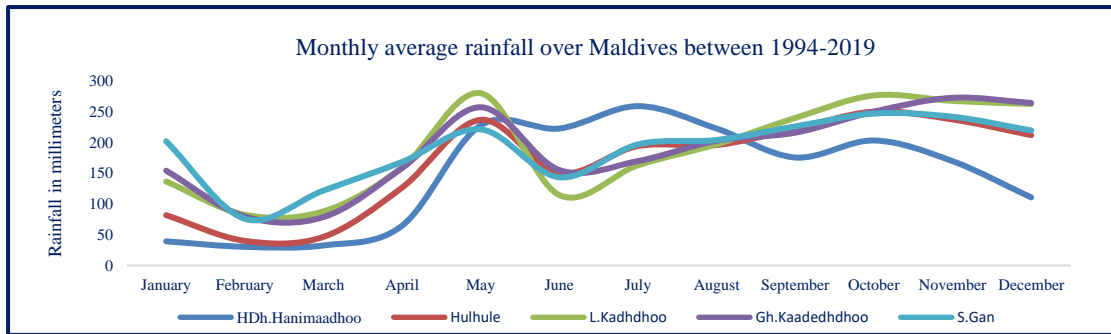


Global Producing Centres and Lead Centre

Probabilistic Multi-Model Ensemble of WMO Lead Centre for Long Range Forecast Multi-Model Ensemble indicates above normal rainfall in northern atolls and normal rainfall over rest of the country for July 2020. Most of individual models indicate above normal rainfall in northern atolls, below normal-to-normal rainfall in central and southern atolls.

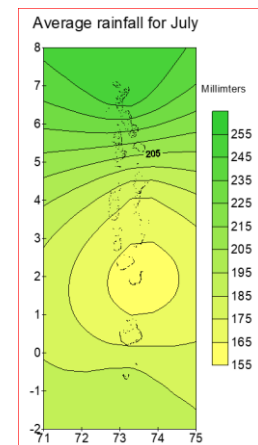
All models indicate above normal temperature throughout the country during July 2020.

Climate condition



Southwest monsoon (Hulhangu Moosun) continues over Maldives. Rainfall recorded in the period 1994-2019 in five stations show an increasing trend in rainfall during July.

On average, northern atolls receive relatively higher rainfall than rest of the country in this month.



Spatial distribution of rainfall over the country during July

Conclusion

By considering Multi-Model Ensemble of WMO Lead Centres with individual models, IRI forecasts, climate data, expected MJO signal over Indian Ocean, calibration of GCM output with station rainfall, northern atolls likely to receive above normal rainfall and rest of the country most likely to receive normal rainfall during July 2020.

Temperature likely above normal across the country during July 2020.

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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