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Maldives Meteorological Service

Rainfall and Temperature Outlook over Maldives For June 2020

Summary

Rainfall likely 10% increase in southern-most atolls and normal over rest of the country during June 2020. Temperature likely above normal during June 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 average across most of the Pacific Ocean. Most of the models indicate ENSO neutral condition to persist during June 2020.

Indian Ocean Dipole (IOD): IOD remain neutral and models indicate same condition throughout June.

Madden-Julian Oscillation (MJO): MJO currently enhanced over Western Hemisphere. Eastward propagation expected with some models showing weak amplitude after emerging into phase 1. It is likely to move into western Indian Ocean after week 1.

Calibration of climate models

Calibration of some GCM output with station observed rainfall data suggests above normal rainfall mostly in southern atolls for June 2020.



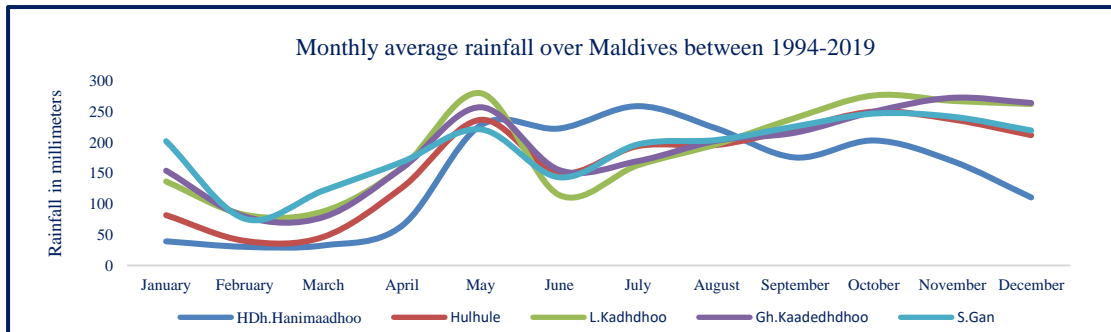


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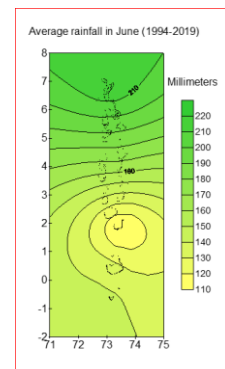
Probabilistic Multi-Model Ensemble of WMO Lead Centre for Long Range Forecast Multi-Model Ensemble indicates normal rainfall in part of central and northern atolls while above normal rainfall over rest of the country. Most of individual models suggest above normal rainfall in all areas during this month.

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

Climate condition



Southwest monsoon (Hulhangu Moosun) continues over Maldives. Gauge recorded rainfall (1994-2019) in five stations show a decreasing trend in rainfall during June and on average, northern atolls receive relatively higher rainfall than rest of the country in this month.



Spatial distribution of rainfall over the country during June

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, southern-most atolls likely to receive above normal rainfall and rest of the country most likely to receive normal rainfall during June 2020.

Temperature likely above normal across the country during June 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.



References

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