

Republic of Maldives

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WEATHER CLIMATE WATER
TEMPS CLIMAT EAU



WMO OMM

World Meteorological Organization
Organisation météorologique mondiale

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Outline

- I. Introduction to the country and the NMHS
- II. Physical context of the country
- III. National requirements for observations
- IV. Summary of national observing capabilities
- V. Status of National implementation of WIGOS

Introduction to the country and the NMHS

The Maldives

- 1,192 coral islands in a chain of 26 atolls
- 192 inhabited islands
- Population: 436,330 (2017)

Climate

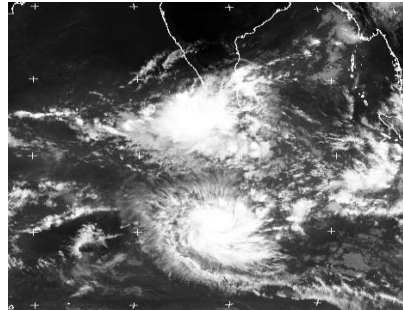
- Warm and humid tropical climate
- Two monsoons: southwest (rainy) And northeast (dry)
- Yearly temperatures: 27°C to 34°C



Introduction to the country and the NMHS

Extreme events

- Tidal waves in 1987
- Storm – Addu Atoll in 1991
- Flash flooding in Huvadhu Atoll in 2002
- Tsunami on 26 Dec 2004
- Tidal waves in 2007



Introduction to the country and the NMHS

Maldives Meteorological Service (MMS)

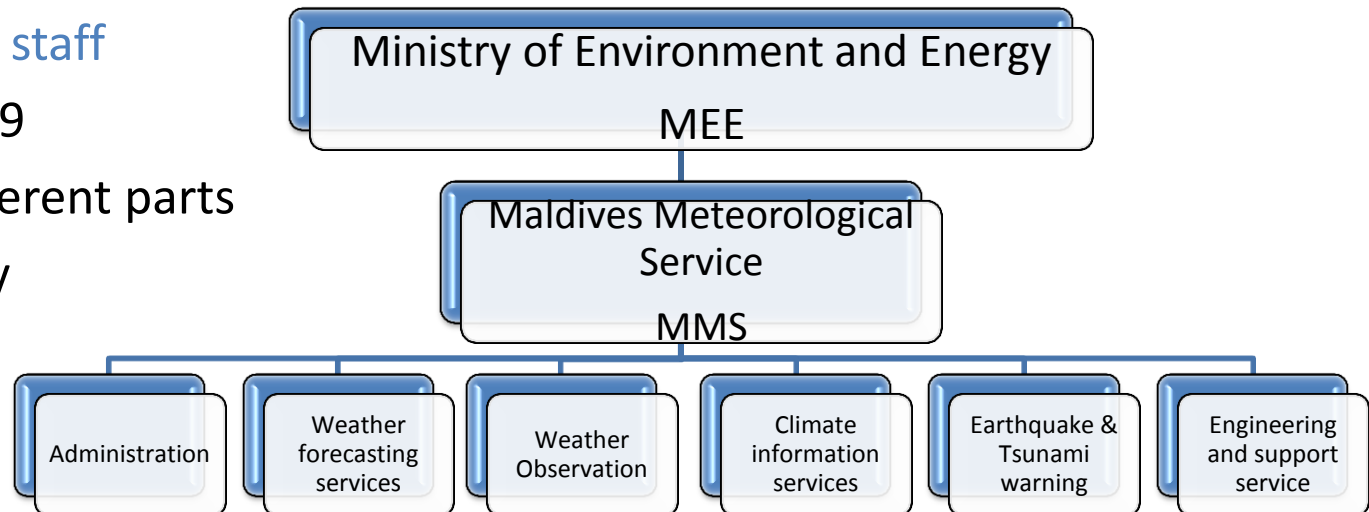
Mandate

1. Plan, develop and manage meteorology in the Maldives.
2. Gather and maintain scientific information about different fields of meteorology.
3. Monitor and record seismic activities in the Maldives.



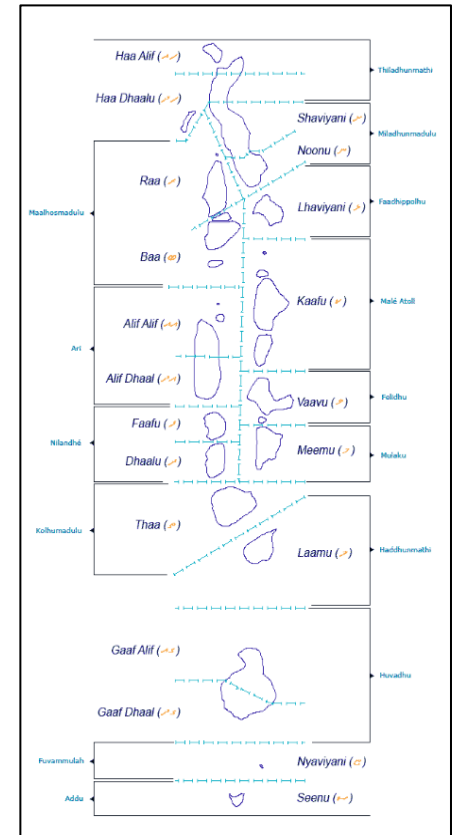
Infrastructure and staff

- No. of staff: 109
- 5 offices in different parts of the country



Physical context of the country

- **Surface area:** 90,000 square kilometers, but Maldives' exclusive economic zone (EEZ) extends over an area of 859,000 sq km.
- Maldives has no mountains, rivers but there are small lakes mostly in the southern most atolls namely Addu City and Fuvamulaku.
 - 1. Bandaara Kilhi
 - 2. Dhandimagi Kilhi
 - 3. Edigali Kilhi.



- Maldives has a coastline of 644 km.

National requirements for observations

National priority areas are:

- General public. (10 am & 8 pm)



- Tourism sector (on request)



- Aviation sector (every hour)



- Fishing & shipping (10 am & 8 pm)



National requirements for observations

Meteorological parameters collected are:

Wind

Temperature

Pressure

Humidity

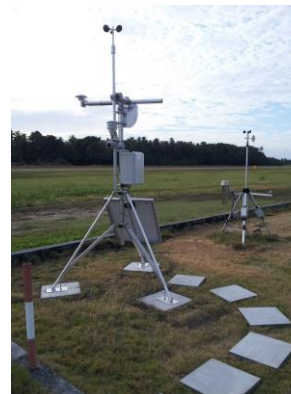
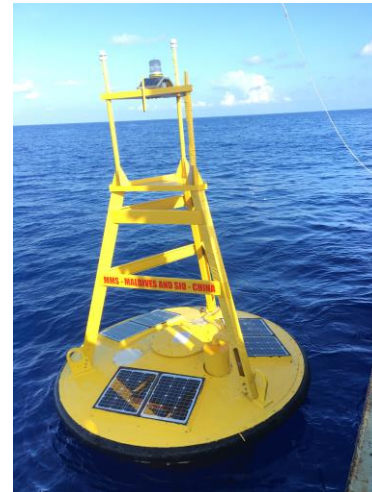
Precipitation

Sunshine hours

Cloud amount

Tide data from three stations

Radiation (in 11 airport AWS stations)



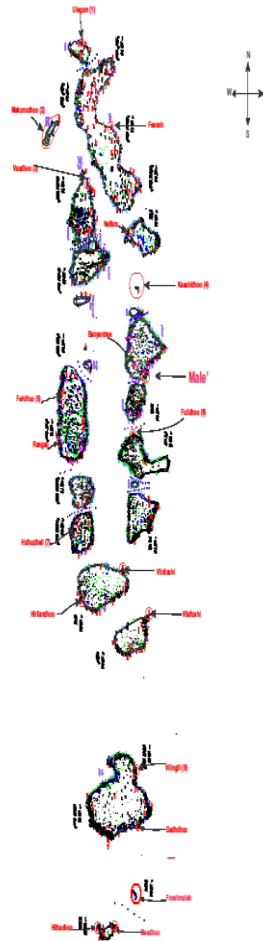
Summary of national observing capabilities

Existing

- 5 Meteorological stations
- 20 Automatic weather stations
- 1 Upper air station
- 1 Doppler weather radar
- 3 Tide stations
- 2 Seismic stations
- 1 Data buoy
- 8 Rainfall collection stations
- No lightning detection systems



AUTOMATIC WEATHER STATIONS (AWS)



Status of National implementation of WIGOS

- I. **National Observing Strategy:** Hourly observations are taken from all the 5 manned stations and observations are recorded at every 10 minutes from AWS stations.
- II. **National WIGOS Implementation Plan:** At the moment quality control of data is done manually in the process of an integration project with automatic quality control mechanisms.
- III. **National WIGOS governance mechanism:** No separate body of governance but done by climate section of MMS.
- IV. **National WIGOS partnership agreements for integration and open-sharing of observations from NMHSs and non-NMHSs sources:** No agreements at the moment but an integration project is underway within MMS.
- V. **WIGOS Station Identifiers:** not implemented, in the process
- VI. **WIGOS Data Quality Monitoring System (WDQMS):** Done manually within MMS by Climate Section.
- VII. **National focal points nominated (WIGOS NFP and OSCAR/Surface NFP) is**

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Thank you



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