



ཨཱ། རྒྱལ་ཡོངས་ཚུད་ཕྱད་དང་གནམ་གཤིས་རིག་པའི་རྩེ་བ།

NATIONAL CENTRE FOR HYDROLOGY AND METEOROLOGY
THIMPHU: BHUTAN

"Centre of Excellence in Hydrology, Meteorology and Cryosphere Science and Services"



09 January, 2026

Extended Range Prediction for Bhutan

Background

Extended Range Prediction (ERP) for Bhutan is prepared with the support from the Indian Meteorological Department (IMD), Government of India. The model used for the system is CFSv2 coupled model (Atmospheric and Ocean model) which runs once every week (Wednesday), with the 16 Ensemble Members at the horizontal resolution of around 25 km, and the products are made available the next day (Thursday). Therefore, the ERP products for Bhutan will be generated every Friday. ERP for Bhutan is carried out for two climate variables, rainfall and temperature.

Generally, the forecast output is produced on a weekly basis for a period of a month for both the variables. The current products available from NCHM are on pilot basis which needs further studies and validation with the ground observations until the product is fully operationalized.



ཨཱ། རྒྱལ་ཡོངས་ཚུད་ཕྱད་དང་གནམ་གཤིས་རིག་པའི་རྩེ་བ།

NATIONAL CENTRE FOR HYDROLOGY AND METEOROLOGY
THIMPHU: BHUTAN

"Centre of Excellence in Hydrology, Meteorology and Cryosphere Science and Services"



Observed weather over last week

Most of the stations across the country showed constant maximum temperature and minimum temperature throughout the week. No rain was observed throughout the country. The table below displays observed real time rain and temperature data from regional meteorological stations over the last week.

Station		02 Jan	03 Jan	04 Jan	05 Jan	06 Jan	07 Jan	08 Jan
Babesa	Tmax (°C)	13.5	12.5	10.0	12.0	13.0	12.5	13.5
	Tmin (°C)	-4.5	-5.0	1.0	-3.5	-3.0	-3.5	-3.0
	Rain (mm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dagana	Tmax (°C)	20.0	18.5	20.0	20.0	21.0	20.0	20.5
	Tmin (°C)	6.5	5.5	6.5	6.0	5.5	6.0	5.0
	Rain (mm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chamkhar	Tmax (°C)	15.5	13.5	9.5	12.5	11.5	11.5	13.0
	Tmin (°C)	0.0	-1.0	2.0	-2.5	-4.0	-2.5	-1.5
	Rain (mm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deothang	Tmax (°C)	23.5	24.0	24.0	22.0	22.0	23.0	23.5
	Tmin (°C)	11.5	11.0	11.0	10.5	10.0	10.5	11.0
	Rain (mm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gasa	Tmax (°C)	12.0	11.0	8.0	10.0	6.0	9.0	12.0
	Tmin (°C)	-1.0	-1.0	0.0	2.0	0.0	-1.0	0.0
	Rain (mm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0



ཨ། རྒྱལ་ཡོངས་ཁྲུང་ཕུང་དང་གནམ་གཤིས་རིག་པའི་མཛེ་བ།

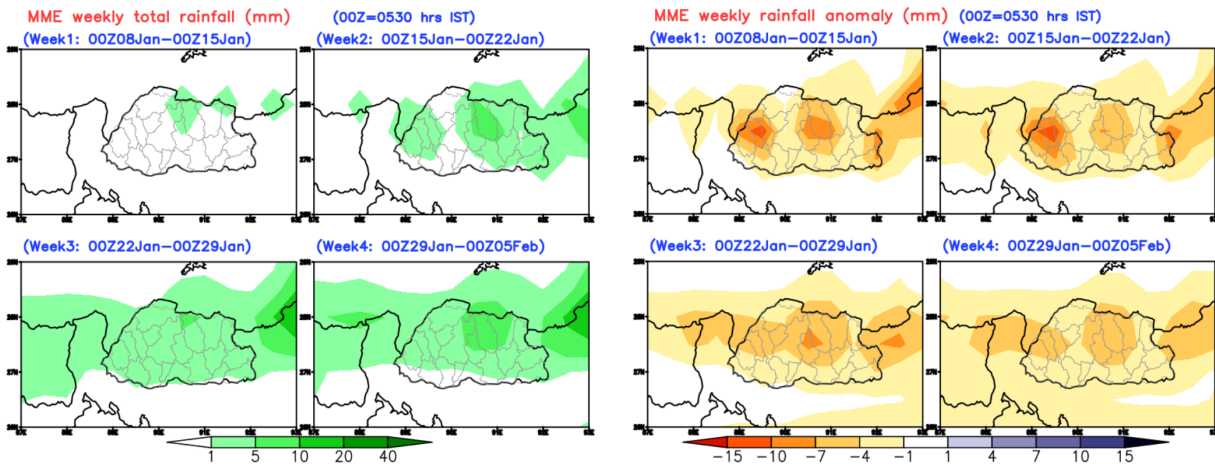
NATIONAL CENTRE FOR HYDROLOGY AND METEOROLOGY
THIMPHU: BHUTAN

"Centre of Excellence in Hydrology, Meteorology and Cryosphere Science and Services"



Weekly forecast for Bhutan

1. Rainfall Prediction



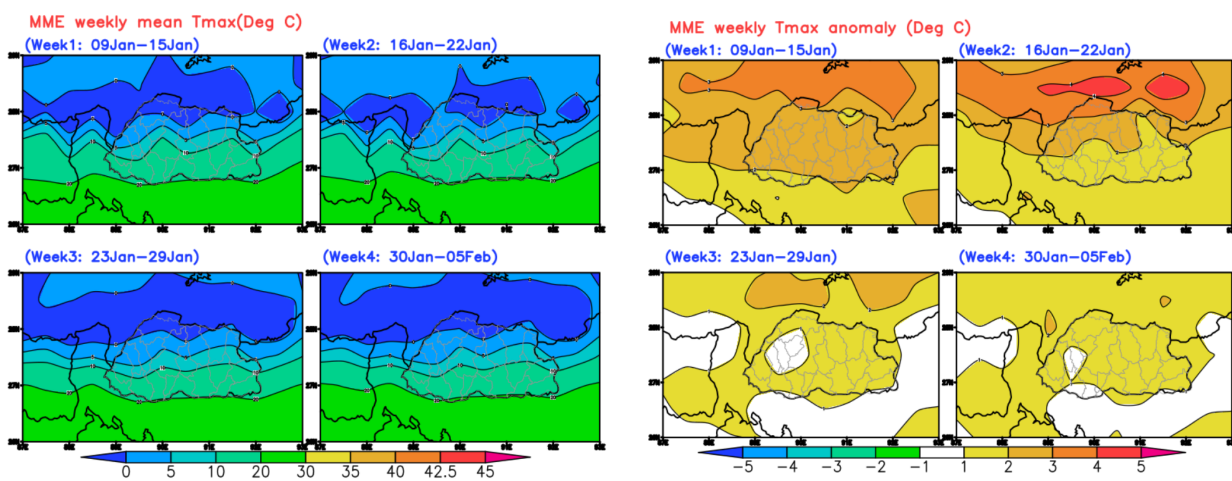
Week 1 (08 Jan - 15 Jan), Week 2 (15 Jan - 22 Jan) and Week 3 (22 Jan - 29 Jan)

Below normal rainfall is indicated over most parts of the country, with some localized pockets of stronger negative anomalies during this period.

Week 4 (29 Jan - 05 Feb)

Rainfall conditions improve to near normal across most areas of the country.

2. Maximum Temperature Prediction





ཨཱ། རྒྱལ་ཡོངས་ཁྲུང་ཕུང་དང་གནམ་གཤིས་རིག་པའི་སྡེ་བ།

NATIONAL CENTRE FOR HYDROLOGY AND METEOROLOGY
THIMPHU: BHUTAN

"Centre of Excellence in Hydrology, Meteorology and Cryosphere Science and Services"



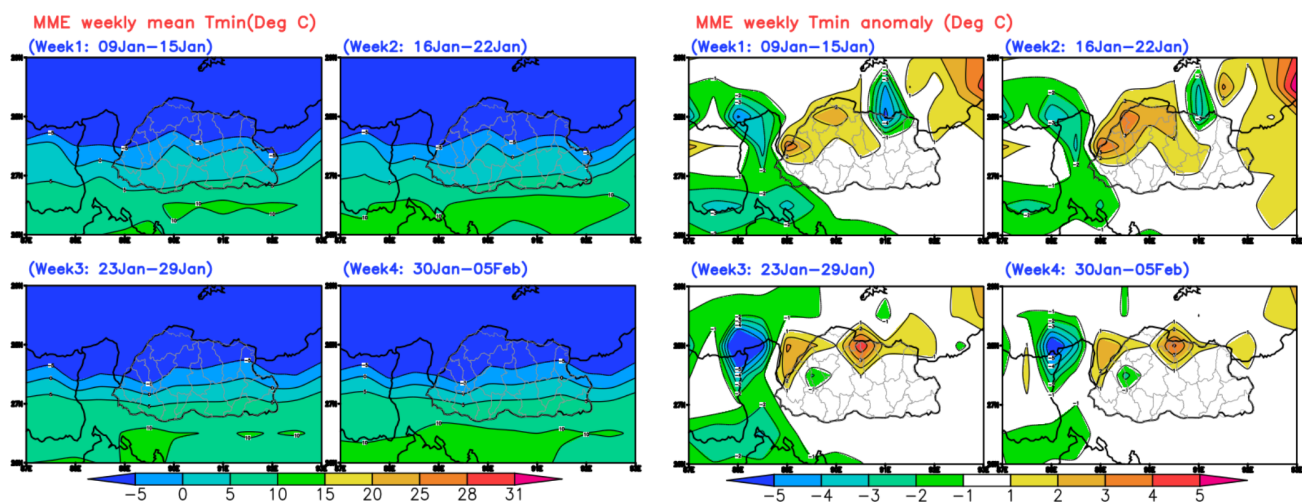
Week 1 (09 Jan - 15 Jan) and Week 2 (15 Jan - 22 Jan)

Above normal maximum temperatures are indicated over most parts of the region, with stronger warming over northern areas.

Week 3 (22 Jan - 29 Jan) and Week 4 (29 Jan - 05 Feb)

Maximum temperatures are expected to be largely near normal across the region.

3. Minimum Temperature Prediction



Week 1 (08 Jan - 15 Jan) and Week 2 (15 Jan - 22 Jan)

Minimum temperatures are likely to show mixed conditions, with below normal values over some parts and isolated pockets of above normal nighttime temperatures.

Week 3 (22 Jan - 29 Jan) and Week 4 (29 Jan - 05 Feb)

Minimum temperatures are expected to remain largely near normal over most parts of the region.



ཨཱ། རྒྱལ་ཡོངས་ཚུད་ཕྱད་དང་གནམ་གཤིས་རིག་པའི་རྩེ་བ།

NATIONAL CENTRE FOR HYDROLOGY AND METEOROLOGY
THIMPHU: BHUTAN

"Centre of Excellence in Hydrology, Meteorology and Cryosphere Science and Services"



Summary

- Below normal rainfall is expected during the early weeks, with rainfall conditions improving to near normal in the later part of the period.
- Above normal maximum temperature in the first two weeks and near normal for the next two weeks.
- Below and above normal minimum temperatures in the first two weeks and near normal minimum temperatures in the later weeks.

Classification of rainfall for 24 Hours

No rainfall	0.0 mm
Very light rainfall	0.1 to 0.9 mm
Light rainfall	1.0 to 10.0 mm
Moderate rainfall	11.0 to 30.0 mm
Heavy rainfall	31.0 to 70.0 mm
Very heavy rainfall	71.0 to 150.0 mm
Extremely heavy rainfall	Equal or more than 151.0 mm