



Issued on 28 October 2019 (Revised Edition)

Thai Meteorological Department, 4353 Sukhumvit Road, Bangna, Bangkok 10260 THAILAND.

Overview of the winter of Thailand

About during November 2019 until middle February 2020:

The winter of Thailand this year is expected as the following:

For the Upper Thailand:

- 1) The mean minimum temperature around the Upper Thailand would be $20 21 \,^{\circ}\text{C}$ which is $1 \,^{\circ}\text{C}$ above normal (normal: $19.9 \,^{\circ}\text{C}$) and is to be chillier than that of last year. (The mean minimum temperature of last year was $21.9 \,^{\circ}\text{C}$). The extreme minimum temperature would be $7 8 \,^{\circ}\text{C}$ which is to be around the upper portion of northern and northeastern parts while that of Bangkok Metropolis and Vicinity is to be $15 17 \,^{\circ}\text{C}$.
- 2) The chilliest period would mostly begin during the 2nd half of December 2019 until late January 2020.
- 3) For mount tops and mountainous areas, the weather would become cold to very cold with frost happening often.
- 4) The winter would end at about middle February 2020.

For the Southern Thailand:

1) Chilly weather occurs at some areas on some days, mostly at the upper portion. Densely abundant rainfall still happens along the east coast from Chumphon province downward, especially during November and December. Heavy rain appears at many areas together with very heavy rain occurs at some areas. Consequently, flash or forest flood with overflow inundates at some areas.

Furthermore, wind waves in the Gulf of Thailand would be active from time to time with 2 - 4 meters high at some periods while those in the Andaman Sea are to be 1 - 2 meters high.

Climate Outlook

The Upper Thailand (northern, northeastern, central and eastern parts)

In November: The northern and northeastern parts would meet commonly chilly and cold weather at some places on some days. While the central and eastern parts would meet cool weather at many areas at the upper portion. Moreover, the amount and distribution of rainfall will reduce; still thunder rain occurs at 10 - 20% of the area with gusty wind at some areas. The reason is that high-pressure air mass areas from China will prevail over the northern and northeastern parts from time to time; being mostly moderately active. Additionally, the Northeast Monsoon will prevail over the Upper Thailand for almost all of this period.

Then during December until January: The weather will become chillier. Specifically, the northern and northeastern parts are to meet commonly chilly weather with very cold weather on some days at the upper portion. For mount tops and mountainous areas, the weather will become cold to very cold with frost happening at some periods. For the central and eastern parts, cool weather appears commonly with cold weather occurring at many areas at some periods, mostly at the upper portion. The reason is that high-pressure air mass areas from China still prevail over Thailand from time to time continuously; mostly being moderately active, together with the Northeast Monsoon prevails over Thailand.

<u>During the 1st half of February:</u> The weather will fluctuate as warming weather happens including with hot weather at many areas during daytime along with morning thick fog or haze at many areas. The northern and northeastern parts still meet morning chilly weather although the high-pressure air mass areas prevailing over the Upper Thailand weakens.

The Southern Thailand

<u>During November until middle January:</u> Densely abundant rainfall still occurs, especially along the east coast from Chumphon province downward. Thunder rain occurs at 60 – 80% of the area with heavy rain at many areas and very heavy rain at some areas. As a result, flash or forest flood with overflow will inundate at some areas.

Meanwhile, wind waves in the Gulf of Thailand will be active periodically, sometimes they are to be 2 – 4 meters high. The reason is that the Northeast Monsoon prevailing over the Gulf of Thailand and the Southern Thailand will be active from time to time, specifically during November and December.

Moreover, a monsoon trough would prevail over the upper, middle, and lower portions of the Southern Thailand during some periods in October, November, and December consecutively. Besides, some active low-pressure air mass cells or tropical cyclones would feasibly move near or pass the Southern Thailand.

<u>During the 2nd half of January till middle February:</u> The amount and distribution of rainfall will lessen because the prevailing Northeast Monsoon over the Gulf of Thailand and the Southern Thailand weakens. As a matter of fact, the Northeast Monsoon will transform into prevailing eastern or southeastern winds instead.

Details for each part are as the following:

The northern and northeastern parts

In November, cool weather almost commonly occurs with morning fog or haze and cold weather at some areas on some days. Thunder rain would happen at 10 - 20% of the area together with gusty wind at some areas on some days.

During December till late January, the weather becomes chillier as commonly chilly weather. Very cold weather happens at some areas on some days at the upper portion around Chiang Rai, Nan, Sakhon Nakhon, and Nakhon Pranom provinces with thick fog or haze at many areas on some days. For mount tops and mountainous areas, the weather will become cold to very cold with frost happening at some periods.

During the 1st half of February, the weather would fluctuate. In fact, the weather becomes warmer and hot weather occurs at many areas during daytime with thick fog or haze at many areas. Nevertheless, chilly weather still happens in the morning.

The central and eastern parts

In November, cool weather occurs at many areas with morning fog or haze, especially around the upper portion. Thunder rain would appear at 10 – 20% of the area with feasibly gusty wind at some areas on some days.

During December till late January, cool weather occurs almost commonly with cold weather at many areas during some periods, specifically at the upper portion and mountainous areas. Thick fog or haze would also appear at many areas during some periods.

During the 1st half of February, weather would fluctuate. Warmer weather is to appear with hot weather at many areas during daytime. Thick fog or haze would also happen at many areas during some periods. Nevertheless, the upper portion and mountainous areas would meet morning cool weather.

The Southern Thailand (east coast or the Gulf of Thailand)

For November to mid-January, densely abundant rainfall will occur, especially from Chumphon province downward. Thunder rain would occur at 60 – 80% of the area with heavy rain at many areas and very heavy rain at some areas. Consequently, flash or forest flood with overflow will inundate at some areas. Furthermore, wind waves will become active as 2 – 4 meters high at some periods.

During late January until middle February, the amount and distribution of rainfall will reduce. Still, the lower portion would meet rainfall at 30 – 40% of the area with heavy rain at some areas on some days.

The Southern Thailand (west coast or the Andaman Sea)

For November, thunder rain would occur at 40 - 60% of the area with heavy rain at some areas whereas wind waves in the Andaman Sea are to be 1 - 2 meters high.

During December until middle February, the amount and distribution of rainfall will lessen; rainfall still occurs at 10 - 20% of the area.

Bangkok Metropolis and Vicinity

In November, cool weather would occur at some periods along with thunder rain is to appear at 20 – 30% of the area.

During December until late January, cool weather would happen at many areas with cold weather at some areas on some days. Thick fog or haze is to occur at some areas at some periods.

During the 1st half of February, weather would fluctuate. Warmer weather is to appear with cool weather at some areas on some days. Hot weather would also occur during daytime.

Caution:

- 1) During November and December, active low-pressure air mass cells often develop in the lower portion of the South China Sea. They favor a high chance to move near or pass the Gulf of Thailand toward the Southern Thailand. Thus, the Southern Thailand will meet vast areas of rainfall with heavy to very heavy rain at many areas. Furthermore, wind waves in the Gulf of Thailand will be active and some storm surges may develop as 2 4 meters high. For these reasons, the public should follow weather forecast news from the Thai Meteorological Department attentively further.
- 2) During December and January, frost often occurs around mount tops with thick fog or haze happening at many areas, especially at the northern and northeastern parts. Thus, the public should proceed with caution while driving vehicles further.
- 3) During January and February, some westerly wind waves may pass Myanmar toward the Upper Thailand influencing thunder rain, gusty wind, and falling hail to occur at some areas.

Remarks:

1) The extreme minimum temperature criteria during the winter season:

Cool	refers to	16.0 – 22.9 °C
Cold	refers to	8.0 – 15.9 °C
Very cold	refers to	< 8.0 °C

- 2) This long-range climate forecast is created by applying some climate models and statistical methods.
- 3) This forecast *may be* updated during the last week of November 2019.
- 4) Further enquiry of monthly climate, 3-month climate and seasonal forecasts can be preceded at Tel: (662) 398-9929 or Fax: (662) 383-8827.
- 5) Also, please follow monthly climate, 3-month climate and seasonal forecasts at www.tmd.go.th/en at the climate tab or at www.climate.tmd.go.th.

Climate Center, Meteorological Development Division,
Thai Meteorological Department,
Ministry of Digital Economy and Society

<u>Table 1</u>: Forecast of rain and mean minimum temperature.

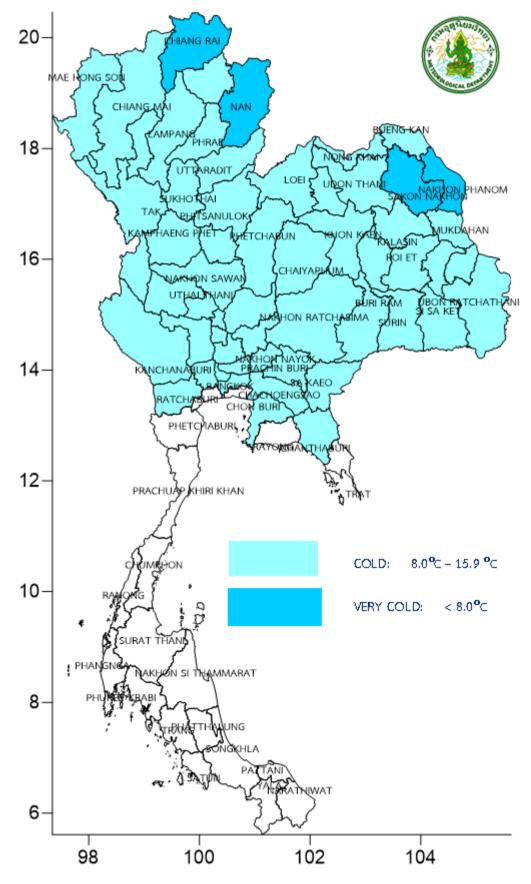
Parts / Portions	November 2019	December 2019	January 2020	February 2020		
				The 1 st half	The 2 nd half	
<u>Northern</u>						
Upper	19 – 21°C.	15 - 17°C.	14 - 16°C.	15 - 17°C.	17 - 19°C.	
Lower	2123°C.	17 - 19°C.	16 - 18°C.	17 - 19°C.	19 - 21°C.	
	With 10 - 20% rainfall of the area	With 0 – 20% area of slight rain	With 0 – 20% area of slight rain	With 0 – 20% area of slight ra		
<u>Northeastern</u>						
Upper	20 - 22°C.	16 - 18°C.	14 - 16°C.	16 - 18°C.	18 - 20°C.	
Lower	21 - 23°C.	17 - 19°C.	16 - 18°C.	17 - 19°C.	19 - 21°C.	
	With 10 - 20% rainfall of the area	With 0 – 20% area of slight rain	With 0 – 20% area of slight rain	With 0 – 20% area of slight rain		
Central	22 - 24°C.	20 - 22°C.	19 - 21°C.	20 - 22°C.	22 - 24°C.	
	With 10 - 20% rainfall of the area	With 0 2004 area of dight rain	With 0 – 20% area of slight rain	Warmer weather	Warmer weather	
	With 10 - 20% rainfall of the area	With 0 – 20% area of slight rain	With 0 – 20% area of stight rain	With 0 – 20% area of slight rain		
Eastern including	23 - 25°C.	21 - 23°C.	20 - 22°C.	21 - 23°C.	23 - 25°C.	
with its coastal	With 20 - 30% rainfall of the area	With 0 - 20% rainfall of the area	With 0 – 20% area of slight rain	Warmer weather	Warmer weather	
zone	With 20 - 30 /0 faillfatt of the area	With 0 - 20 / Fairmatt Of the area	With 0 - 2070 area of stight faili	With 10% rainfall of the area		
Southern Thailand	23 - 25°C.	22 - 24°C.	21 - 23°C.	21 -	23°C.	
(<u>east coast</u> or the	Thunder rain at 60 - 80% of	Thunder rain at 60 - 80% of	With 30 - 40% rainfall of the area	With 10 - 20% rainfall of the area		
Gulf of Thailand)	the area and isolated heavy to	the area with isolated heavy to	and isolated heavy rain, mostly at			
	very heavy rain, mostly from	very heavy rain, mostly from	the lower portion of the part	the lower portion of the part		
	Chumphon province downward	Surat Thani province downward	the torrer portion of the part	the tower port		
Southern Thailand	23 - 25°C.	22 - 24°C.	22 - 24°C.	22 - 24°C.		
(<u>west coast</u> or the	Thunder rain at 40 - 60% of	With 20 - 30% rainfall of the area	With 10 - 20% rainfall of the area	With 10% rainfall of the area		
Andaman Sea)	the area with isolated heavy rain		2070 1000 100 100 100 100 100 100 100 100			
<u>Bangkok</u>	24 - 26°C.	22 - 24°C.	21 - 23°C.	22 - 24°C.	24- 26°C.	
Metropolitan and	With 20 - 30% rainfall of the area	With 0 – 20% area of slight rain	With 0 – 20% area of slight rain		Warmer weather	
<u>Vicinity</u>	That is so to the area	2070 and 0. 345/10 fail	2070 a.ea 0. 30511 14111	With 10% rainfall of the area		

<u>Table 2</u>: Forecast of extreme minimum temperature.

Note: Excluding the extreme minimum temperature of mount tops and mountainous areas.

	December			January						
<u>Parts</u>	Extre	me Min.	Гетр.	Extreme Min.	Forecast of extreme	Extre	me Min.	Temp.	Extreme Min.	Forecast of extreme
Provinces	(A.D	(A.D. 1951 - 2018)		Temp. (A.D. 2018)	min. temp. of A.D. 2019	(A.D. 1951 - 2019)		Temp. (A.D. 2019)	min. temp. of A.D. 2020	
	°C	Date	A.D.	°C	°C	°C	Date	A.D.	°C	°C
<u>Northern</u>										
Chiang Rai	1.5	25	1999	12.0	7 - 9	1.5	2	1974	11.5	7 - 9
Chiang Mai	3.8	25	1999	15.1	12 - 14	3.7	2	1974	15.6	13 - 15
Nan	2.7	25	1999	13.5	7 - 9	3.5	1	1974	14.7	7 - 9
Phitsanulok	8.9	26	1999	17.3	14 - 16	7.5	13	1955	17.5	14 - 16
<u>Northeastern</u> Sakhon Nakhon	4.0	30 24	1975 1999	15.4	7 - 9	0.5	12	1955	13.3	7 - 9
Nakhon Pranom	4.1	30	1975	13.0	7 - 9	1.8	12	1955	10.9	7 - 9
Nakhon Ratchasima	6.2	31	1975	17.2	13 - 15	4.9	12	1955	15.4	13 - 15
Ubon Ratchathani	8.5	30	1975	16.7	13 - 15	7.6	12	1955	14.8	12 - 14
<u>Central</u>										
Nakhon Sawan	7.7	25	1999	17.8	14 - 16	6.1	13	1955	17.2	13 - 15
Suphan Buri	10.0	31	1975	19.5	16 - 18	9.2	13	1955	18.5	14 - 16
Kanchanaburi	6.8	31	1975	17.2	13 - 15	5.5	13	1955	16.0	13 - 15
<u>Eastern</u>										
Sa Kaew	9.0	24	1999	19.1	14 - 16	11.4	12	2009	17.2	14 - 16
Chon Buri	12.0	29	1975	23.2	16 - 18	9.9	12	1955	20.5	16 - 18
<u>Southern</u>										
Prachuap Khiri Khan	11.4	31	1956	20.5	17 - 19	10.5	19	1963	18.8	18 - 20
Phuket	18.4	1	1982	21.0	20 - 22	17.4	4	1957	21.7	20 - 22
<u>Bangkok</u> Queen Sirikit NCC	10.5	30	1975	21.2	15 - 17	9.9	12	1955	18.7	15 - 17

<u>Provincial map</u> of possibly cold and very cold weather occurring at some periods during December 2019 – January 2020:



<u>Notes:</u> 1. This is a long-range forecast, then please follow daily weather forecast further. 2. Excluding the extreme minimum temperature of mount tops and mountainous areas.