

The seasonal forecast of Thailand during the 2018 – 2019 winter Issued on 27 September 2018

Climate prediction for the 2018-2019 winter season of Thailand During about middle October 2018 until middle February of 2019:

The winter of Thailand this year is expected that:

- The winter of the Upper Thailand will start around middle October 2017 and end at about middle February 2018.
- The mean minimum temperature of the Upper Thailand will be slightly above normal or about

20-21 $^{\circ}$ C. that above normal 0.1-1.1 $^{\circ}$ C. (Normal: 19.9 $^{\circ}$ C.) and cooler nearly last year (Last year's mean minimum temperature: 20.6 $^{\circ}$ C.). Moreover, the extreme minimum temperature of Thailand will situate at the upper portion of northern and northeastern parts as about 6 – 7 $^{\circ}$ C. However, the extreme minimum temperature around Bangkok Metropolis and Vicinity will be about 15 – 16 $^{\circ}$ C.

- The coldest period will be about during the 2nd half of December 2018 until late January 2019.
- For the Southern Thailand, cool weather will happen at some areas, mostly at the upper portion.

Still, densely abundant rainfall occurs, especially during November and December, specifically around the eastern coast from the Chumphon province downward. Together with heavy rain appears at many areas and very heavy rain happens at some areas influencing overflowing flash or forest flood to inundate at some areas. For wind waves in the Gulf of Thailand, they will be active as 2-4 meters high at some periods. On the other hand, wind waves in the Andaman Sea are going to be about 1-2 meters high.

General Climatic Characteristics

Upper Thailand (Northern, Northeastern, Central and Eastern parts)

During the 2nd half of October until late November, the northern and northeastern parts will experience cool weather commonly with cold weather at some areas. Besides, central and eastern parts will experience cool weather at many areas. With thunder rain at many areas (10-20 % rainfall) and gusty wind at some areas on some days. The reason is that northeastern monsoon will prevail over the Upper Thailand for almost of this whole period. Additionally, rather active high- pressure air mass areas from China are going to prevail over the northern and northeastern parts periodically.

For December till late January, cooler and colder weather appears commonly with very cold weather at some areas on some days at the upper portion of the northern and northeastern parts. Also, cold to very cold weather with possible frost appears at mountainous areas and mount tops. The reason is that the northeastern monsoon still prevails over Thailand along with active high-pressure air mass areas from China prevail over Thailand periodically and continuously.

Early and middle February, weather will fluctuate as warmer weather with thick fog appearing at many areas together with hot weather occurring at many areas during daytime. On the other hand, the northern and northeastern parts still experience morning chilly weather. The reason is that the high-pressure air mass areas from China prevailing over the Upper Thailand weaken.

Southern Thailand

During the 2nd half of October till middle January, densely abundant rain occurs as 60 – 80% rainfall distribution of the area with heavy rain at many areas and very heavy rain at some areas, specifically at the eastern coast from the Chumphon province downward. As a result, overflowing flash and forest flood will inundate at some areas. For wind waves in the Gulf of Thailand, they will be active periodically as 2 – 4 meters high at some periods while those in the Andaman Sea are going to be 1 – 2 meters high. The reason is that the prevailing northeastern monsoon over the Gulf of Thailand and the Southern Thailand becomes active from time to time, specifically during November and December. Additionally, some monsoon troughs are going to prevail over the upper, middle and lower portions of the Southern Thailand around October, November and December consecutively. Furthermore, chances are high that some tropical cyclones may move near or pass the Southern Thailand.

For 2nd half of January until middle February, the rain amount and rainfall distribution will reduce because the prevailing northeastern monsoon over the Gulf of Thailand and the Southern Thailand weakens and transforms to be the prevailing easterly or southeasterly wind instead.

Details of each part are as follows:

Northern and Northeastern part:

During the second half of October until end of November, mostly cool weather with very cold weather at many areas especially at the upper portion, morning fog happens with thunder rains in many areas in some days and maybe gusty winds at some areas.

During December until end of January, The weather will be colder. Mostly cool to cold weather and very cold weather at some areas in some days especially the upper portion such as Mae Hong Son, Chiang Rai, Phayao, Nan, Loei, Sakon Nakhon and Nakhon Phanom provinces, thick fog at many areas at some periods. For mountain tops and mountainous areas, cold to very cold weather happens with frost occurring at some periods.

Early and middle of February, the weather conditions will variability. Warmer weather with thick fog occurs at many areas. Thunder rains in many areas, and hot weather happens at many areas during day time but morning cold or cool weather still appears.

Central and Eastern parts:

During second half of October till end of November, cool weather occurs in many areas with cold weather at some areas, specifically at the upper portion. Together with morning fog appears and thunder rains in many areas in some days and maybe gusty winds at some areas.

During December until end of January, mostly cool weather with cold weather at many areas in some days especially at the upper portion and around the mountainous areas, including thick fog at many areas at some periods.

Early and middle of February, the weather conditions will variability. Warmer weather occurs with thick fog at many areas. Hot weather appears at day time while the upper portion and mountainous areas are still cool in the morning.

Southern Thailand - Eastern Coast (The Gulf of Thailand side):

During second half of October till middle January, dense rainfall with thunder rains happen at 60 - 80% of the areas with heavy rain at many areas and very heavy rain at some areas, especially during November and December, mostly from Chumphon province downward. Consequently, flash flood will overflow at some areas. For wind waves in the Gulf of Thailand, they will be 2 - 4 meters high at some periods.

End of January till middle of February, the amount and distribution of rainfall will lessen. However, the lower portion of the part still faces up to rainfall at 30 – 40% of the area with heavy rain at some areas on some days.

Southern Thailand - Western Coast (The Andaman Sea):

During second half of October till November, thunder rains happen at 40 – 60% of the area while wind waves in the Andaman Sea will be 1 – 2 meters high.

Early November until middle of February, the amount and distribution of rainfall will reduce 10-20% of the area.

Bangkok Metropolis and neighbor provinces:

During second half of October till end of November, cool weather in some areas on some days with thunder rains at 20 - 30% of the area.

Early December till End of January, Mostly cool weather and cold weather at some areas on some days with thick fog in some areas at some periods.

Early and middle of February, the weather conditions will variability. Warmer weather starts to appear but cool weather at some areas on some days, and hot weather at day time.

Cautions:

- 1. In October, rain still occurs around the central part, eastern part and the upper of Southern part continuously. Additionally, storm surges and high tides will occur at some periods influencing flooding and overflowing to inundate at some areas.
- 2. In November and December, active low-pressure air mass cells develop at the lower portion of the South China Sea and may strengthen to become tropical cyclones (depressions, tropical storms or typhoons). Chances are high that they may move toward the Southern Thailand influencing rainfall to occur widely with heavy to very heavy rain at many areas. Furthermore, wind waves in the Gulf of Thailand are active and windy as 2-4 meters high. Thus, the public should follow the weather forecast news from the Thai Meteorological Department closely further.
- 3. Later during December and January, frost may appear at mountainous areas or mount tops with thick fog happening at many areas, especially at the northern and northeastern parts. Consequently, the public should be cautious for road accidents from vehicles.
- 4. Afterward during January and February, the westerly wind waves from Myanmar may move pass the Upper Thailand influencing thunder rain, gusty wind and hail to occur at some areas. The Public then should follow the weather forecast news from the Thai Meteorological Department closely further.

Remarks:

- Daily minimum temperature criteria for the winter season:

Cool air = 16.0 - 22.9 ° C. Cold air = 8.0 - 15.9 ° C. Very cold air = below 8.0 ° C.

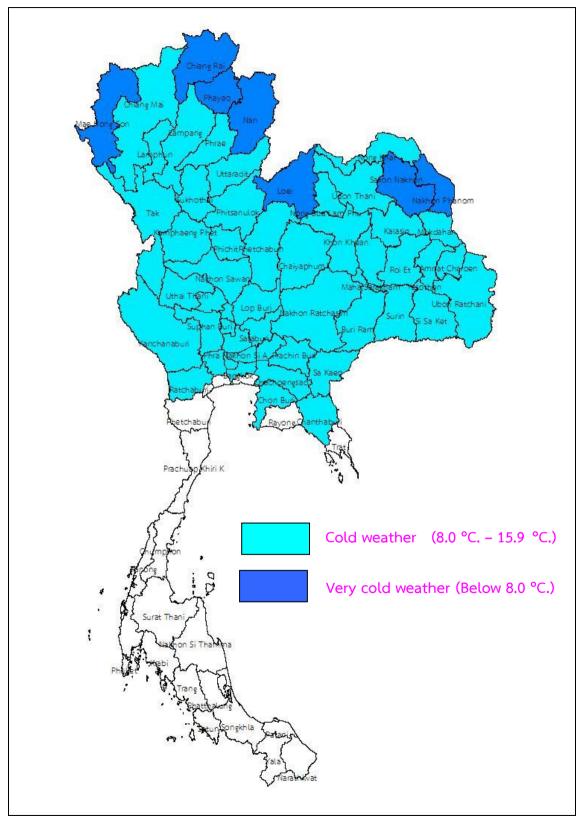
- These long rang climate expectation is derived from utilizing statistical methods and climate model analyses.
 - This expectation will be updated at the last week of November 2018.
- Monthly or seasonal climate forecast can be enquired at Tel: 02-398-9929 or Fax: 02-383-8827
- Please follow weather forecast news and climate forecasts at www.tmd.go.th or at www.tmd.go.th/en: climate tab.

Climatological Center, Meteorological Development Bureau

Thai Meteorological Department

September 2018

Area map of possibly for cold and very cold weather occurring at some periods during December 2018 – January 2019



Notes:

- 1. This map is for the long range prediction purpose. Thus, please follow up daily weather forecast news further for more accuracy.
- 2. This map does not include mountain top and mountainous area data.

Mean minimum temperature and rainfall prediction for each part of Thailand during the winter of 2018 – 2019

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Regions	November 2018	December 2018	January 2019	February 2019		
				First half	Second half	
Upper	18-20 °C.	14-16 °C.	14-16 °C.	15-17 °C.	17-19 °C.	
Northern	With 10-20% rainfall of the area	With slightly rain in some area	With slightly rain in some area	With slightly rain in some area		
Lower	20-22 °C.	16-18 °C.	16-18 °C.	17-19 °C.	19-21 °C.	
Upper	19-21 °C.	16-18 °C.	16-18 °C.	16-18 °C. 18-20 °C.		
Northeastern	With 10-20% rainfall of the area	With slightly rain in some area	With slightly rain in some area	With slightly rain in some area		
Lower	21-23 °C.	18-20 °C.	18-20 °C.	18-20 °C.	20-22 °C.	
Central	22-24 °C.	20-22 °C.	20-22 °C.	22-24 °C.	23-25 °C.	
	With 10-20% rainfall of the area	With slightly rain in some area	With slightly rain in some area	With slightly rain in some area		
East	23-25 °C.	21-23 °C.	21-23 °C.	22-24 °C.	23-25 °C.	
	With 20-30% rainfall of the	With slightly rain in some area	With slightly rain in some area	With 10% rainfall of the area		
	area					
	23-25 °C.	22-24 °C.	21-23 °C.	22-2	24 °C.	
Southern	With 60-80% thunder rain	With 60-80% thunder rain	With 30-40% thunder rain	With 10-20% rainfall of the		
Thailand	of the area, mostly from	of the area, mostly from	of the area, mostly around	area, mostly around the lower portion		
(East coast)	the Chumporn province	the Surat Tani province	the lower portion			
	downward	downward				
Southern	23-25 °C.	22-24 °C.	22-24 °C.	22-24 °C.		
Thailand	With 40-60% thunder rain	With 20-30% rainfall of the	With 10-20% rainfall of the	With 10% rainfall of the area		
(West coast)	rainfall of the area	area.	area			
Bangkok	23-25 °C.	21-23 °C.	21-23 °C.	23-25 °C.	24-26 °C.	
Metropolis and	With 20-30% rainfall of the	With slightly rain in some area	With slightly rain in some area	With 10% rainfall of the area		
Vicinity	area					
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Extreme minimum temperature statistic and prediction during December 2018 – January 2019

	December					January				
	Extreme minimum temperature (1951-2017)			Extreme minimum	Ext. minimum temperature	Extreme minimum temperature		Extreme minimum	Ext. minimum temperature	
						(1951-2018)				
				temperature	forecast in				temperature	forecast in
				in 2017	2018				in 2018	2019
	(°C.)	Date	Year	(°C.)	(°C.)	(°C.)	Date	Year	(°C.)	(°C.)
Northern										
Chiang Rai	1.5	25	1999	6.0	6-8	1.5	2	1974	9.7	7-9
Chiang Mai	3.8	25	1999	9.6	9-11	3.7	2	1974	12.5	10-12
Phitsanulok	8.9	26	1999	12.5	12-14	7.5	13	1955	16.6	15-17
Northeastern										
loei	2.2	31	1973 1975	6.7	6-8	0.1	2	1974	12.0	7-9
Nakhon Phanom	4.1	30	1975	6.0	6-8	1.8	12	1955	9.6	7-9
Nakhon Ratchasima	6.2	31	1975	12.8	12-14	4.9	12	1955	14.9	13-15
Ubon Ratchathani	8.5	30	1975	12.2	12-14	7.6	12	1955	14.1	13-15
Central										
Nakhon Sawan	7.7	25	1999	11.5	12-14	6.1	13	1955	15.9	14-16
Suphanburi	10.0	31	1975	14.4	14-16	9.2	13	1955	16.4	15-17
Kanchanaburi	6.8	31	1975	13.9	13-15	5.5	13	1955	16.9	15-17
Eastern										
Sa kaew	9.0	24	1999	12.9	12-14	11.4	12	2009	15.6	14-16
Chon Buri	12.0	29	1975	15.9	15-17	9.9	12	1955	18.5	15-17
South										
Prachuap Khiri Khan	11.4	31	1956	17.8	17-19	10.5	19	1963	19.0	18-20
Phuket	18.4	1	1982	20.5	20-22	17.8	4	1957	19.5	19-21
Bangkok	10.5	30	1975	14.8	15-17	9.9	12	1955	18.0	15-17

Remark: Not including mountainous area data.