



Thai Meteorological Department
Ministry of Information and Communication
Technology

Climate Characteristic Expectations of Thailand during the Winter Season 2014 – 2015 (Revised Edition No. 1)

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Climate Characteristic Expectations of Thailand during the Winter Season: About from November 2014 until middle February 2015

The winter of this year has already started on 14 October 2014 and is expected to end at about middle February 2015. Whereas the winter of Thailand this year around the Upper Thailand will not be so cold and its average minimum temperature will be above normal and higher than that of last year. During some periods, the Upper Thailand will be cold and the coldest period will be during December until January. For mountain tops and mountainous areas, cold to very cold air appears with frost happening in some periods.

For Southern Thailand, cool air happens in some periods mostly at the upper portion of the part. During November until December, dense rains occur with heavy to very heavy rainfall in some areas, mostly around the eastern coast from Chumphon province downward. Flash flood and overflow can inundate in some areas. Whereas wind waves in the Gulf of Thailand will be rough with 2–4 meters height in some periods while those in the Andaman Sea will be 1–2 meters high.

General Climatic Characteristics

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

November: High pressure air masses from China will prevail to cover the Upper Thailand from time to time as being moderate to rather active discontinuously. Thus, during the first period of prevailing high pressure air masses, thunder rains occur and gusts may appear in some areas. Later, temperatures will reduce a little. For northern and northeastern parts, cool air appears generally while cold air occurs in some areas, mostly at the upper portion of the parts. Whereas central and eastern parts, cool air appears in many areas, mostly around the upper portion of the parts. December until January: High pressure air masses from China still prevail to cover the Upper Thailand more actively and continuously. Consequently, temperatures will reduce for many Celsius degrees. The northern and northeastern parts will be cold or cool generally while cool air occurs in the central and eastern parts generally with cold air in some areas on some days. For mountains and mountainous areas, cold to very cold air occurs with frost happening on some periods. During the first half of February: The prevailing high pressure air masses from China weaken discontinuously causing warming air with hot air during daytime, although cool air still appears in the northern and northeastern parts in the morning. The winter of this year is expected to end around middle February 2015.

Southern Thailand

During November until December: The northeastern monsoon will prevail to cover the Gulf of Thailand and the Southern Thailand bringing moisture from the Gulf of Thailand toward the Southern Thailand. Especially during November until December, the monsoon will be active periodically. Additionally, in some periods, a monsoon trough will place over the middle and southern portions of the Southern Thailand during November and December consecutively. As a result, the Southern Thailand still has densely abundant rainfall with heavy to very heavy rains in many areas, specifically along the eastern coast from Chumphon province downward. Flash flood and overflow can inundate in some areas. While Wind waves in the Gulf of Thailand will be rough periodically with 2 – 4 meter height in some periods, whereas those in the Andaman Sea will be 1 – 2 meters high. Then during January until middle February: The northeastern monsoon prevailing over the Gulf of Thailand and the Southern Thailand will weaken and will also change to be from the prevailing eastern direction. Thus, the amount and distribution of rainfall will reduce and marks the end of the rainy season of the Southern Thailand.

Details of each part are as follows:

Northern and Northeastern part: November: Cool air generally with cold air and morning fog in some areas on some days, mostly at the upper portion of the parts. Additionally, isolated rains appear (10% of the area). Then in December until January: Cool and cold generally with thick fogs in many areas in some periods. For mountains and mountainous areas, cold to very cold air with frosts appear on some days. While during the first half of February: Cool and cold air in the morning especially around the upper portion of the parts. Thick fogs occur in many areas, and warmer air appears with hot air during daytime.

Central and Eastern parts: November until January: Cool air appears in many areas mostly around the upper portion of the parts with morning thick fogs and isolated to widely scattered rainfall (20-30% of the area). Then during December until January, cool air appears almost generally; and also cold air occurs in some areas on some days, especially around mountains of Nakhon Sawan, Uthai Thani, Kanchanaburi, Ratchaburi, Suphanburi, Saraburi, Nakhon Nayok, Chachoengsao, Prachinburi and Chantaburi. Thick fogs will appear in some periods. During the first half of February: The upper portion of the parts and the mountainous areas still are cool in the morning with thick fogs in many areas. And warmer air appears causing hot air during daytime.

Southern Thailand - Eastern Coast (The Gulf of Thailand side): November until December: Abundant rainfall with almost widespread rainfall (70-80 % of the area) with heavy to very heavy rains in many areas, mostly from Chumphon province downward. Thus, flash flood and overflow inundate on some areas. Wind waves in the Gulf of Thailand will be rough periodically with 2 – 4 meter height in some periods. Then during January until middle February: The amount and distribution of rainfall will reduce. Even though widely scattered rainfall (40% of the area) occurs at the lower portion of the part and heavy rains appear on some days.

Southern Thailand – Western Coast (The Andaman Sea): November: Abundant rainfall with scattered (40 – 60% of the area) rains. Wind waves in the Andaman Sea are 1 – 2 meters high. Then from December onward: The amount and distribution of rainfall will reduce.

Bangkok Metropolis and neighbor provinces: November: Cool air appears on some days with morning fog and isolated rainfall (20 – 40% of the area). Then during December and January: Cool air appears periodically. February: Warmer air occurs and hot air appears during daytime.

Cautions:

1. During November and December: Low pressure air masses develop in the lower portion of the South China Sea. Then they may develop to be tropical cyclones (depressions, tropical storms, and typhoons). They favor a high chance to move pass the Gulf of Thailand toward the Southern Thailand causing the area to have rainfall occurring over wide regions. Moreover, heavy to very heavy rainfall occurs in many areas. Wind waves in the Gulf of Thailand will be rough and windy with 2 – 4 meters high. Together with storm surges may occur along the eastern coast of the Southern Thailand. The public should follow weather news from the Thai Meteorological Department closely.
2. During December and January: Frosts may occur around mountains and mountainous areas and thick fogs always appear in many areas, especially around northern and northeastern parts. The public should be cautious of accidents from vehicles during January. During December and January, frost possibly happens in mountainous areas and mountain tops. Thick fog occurs at many areas especially in the northern and northeastern parts. The public should be cautious of vehicle accidents.
3. During January: Westerly winds from Myanmar may move toward the Upper Thailand and cause the area to have thunder rains and gusts in many areas. The public should follow weather news from the Thai Meteorological Department closely.

Remarks: - Normal mean averages of the 30-year period during B.E. 2524–2553 or A.D. 1971–2010.

- Next update will be at the last week in December 2014.

- Daily rainfall distribution (percent of the area) criteria:

Isolated: > 0 until < 20 %,

Widely scattered: >=20 until < 40 %

Scattered: >= 40 until < 60 %

Almost widespread: >=60 until < 80 %

Widespread: >= 80 %

- Daily rainfall amount (millimeters) criteria:

Light: > 0 until 9.9

Moderate: >=10 until <= 34.9

Heavy: >= 35 until <= 90

Very Heavy: >= 90.1

- Daily Minimum temperature criteria (used in the winter season):

Cool: 16.0 – 22.9 Celsius degrees.

Cold: 8.0 – 15.9 Celsius degrees.

Very cold: < 8.0 Celsius degrees.

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Table of expected average minimum temperatures and rainfall for parts of Thailand during the winter season of 2014 - 2015

Regions	November2014	December2014	January 2015	February 2015	
				First half	Second half
Northern	Upper 18-20 °C. Isolated showers	15-17 °C. Slightly showers	15-17 °C. Slightly showers	17-19 °C. Slightly showers	19-21 °C.
	Lower 20-22 °C. Isolated showers	17-19 °C. Slightly showers	17-19 °C. Slightly showers	19-21 °C.	21-23 °C.
Northeastern	Upper 19-21 °C. Isolated showers	16-18 °C. Slightly showers	16-18 °C. Slightly showers	18-20 °C. Slightly showers	19-21 °C.
	Lower 21-23 °C. Isolated showers	18-20 °C. Slightly showers	18-20 °C. Slightly showers	20-22 °C.	21-23 °C.
Central	22-24 °C. Isolated showers	19-21 °C. Slightly showers	20-22 °C. Slightly showers	21-23 °C. Slightly showers	23-25 °C.
East	22-24 °C. Widely scattered showers	21-23 °C. Slightly showers	21-23 °C. Slightly showers	22-24 °C. Isolated showers	23-25 °C.
Southern Thailand (East coast)	23-25 °C. Almost widespread thundershowers and heavy to very heavy falls in some areas, mainly from Chumphon southward.	22-24 °C. Almost widespread thundershowers and heavy falls in some areas, mainly from Surat Thani southward.	22-24 °C. Widely scattered showers, mainly during the first half of the month.	22-24 °C. Isolated showers, mainly lower portion.	
Southern Thailand (West coast)	23-25 °C. Scattered showers and isolated heavy falls.	23-25 °C. Widely scattered showers.	23-25 °C. Isolated showers	23-25 °C. Isolated showers	
Bangkok Metropolis and Vicinity	23-25 °C. Widely scattered showers.	22-24 °C. Slightly showers	22-24 °C. Slightly showers	23-25 °C. Slightly showers	24-26 °C.

The extreme minimum temperature by statistics and forecast in December and January

	December					January				
	Extreme minimum temperature (1951-2013)			Extreme minimum temperature in 2013	Ext. minimum temperature forecast in 2014	Extreme minimum temperature (1951-2014)			Extreme minimum temperature in 2014	Ext. minimum temperature forecast in 2015
	(°C.)	Date	Year	(°C.)	(°C.)	(°C.)	Date	Year	(°C.)	(°C.)
Northern										
Chiang Rai	1.5	25	1999	7.8	11-13	1.5	2	1974	7.0	10-12
Chiang Mai	3.8	25	1999	10.5	13-15	3.7	2	1974	11.0	12-14
Phitsanulok	8.9	26	1999	12.0	15-17	7.5	13	1955	10.5	14-16
Northeastern										
loe	2.2	31	1973 1975	8.0	11-13	0.1	2	1974	5.5	10-12
Nakhon Phanom	4.1	30	1975	10.1	12-14	1.8	12	1955	9.4	11-13
Nakhon Ratchasima	6.2	31	1975	12.2	15-17	4.9	12	1955	11.2	14-16
Ubon Ratchathani	8.5	30	1975	12.4	14-16	7.6	12	1955	12.1	13-15
Central										
Nakhon Sawan	7.7	25	1999	12.2	15-17	6.1	13	1955	10.3	14-16
Suphanburi	10.0	31	1975	14.2	15-17	9.2	13	1955	12.6	14-16
Kanchanaburi	6.8	31	1975	13.8	14-16	5.5	13	1955	12.0	13-15
Eastern										
Sa kaew	9.0	24	1999	13.0	15-17	11.4	12	2009	11.9	14-16
Chon Buri	12.0	29	1975	16.4	18-20	9.9	12	1955	15.5	17-19
South										
Prachuap Khiri Khan	11.4	31	1956	17.5	19-21	10.5	19	1963	14.5	18-20
Trang	18.4	1	1982	24.1	22-24	17.4	4	1957	23.0	21-23
Bangkok	10.5	30	1975	17.8	19-21	9.9	12	1955	16.6	18-20

Remark : Excludes minimum temperature in mountainous areas.