

Thai Meteorological Department Ministry of Information and Communication Technology

# Climate Characteristic Expectations of Thailand during the winter Season 2015 - 2016 Issued on 26 September 2015 (Updated Version)

## Climate Characteristic Expectations of Thailand during the Winter Season: About from November 2015 until middle February 2016

The winter of this year is expected that the general weather of the Upper Thailand will be cold or cool like that of last year; the mean minimum temperature will be near that of last year. The coldest or coolest period will be during the 2nd half of December until late January. For mount tops, mountain tops and mountainous areas, cold to very cold weather with frost happens during some periods. For the Southern Thailand, cool weather appears periodically, mostly at the upper portion. And during November until middle January, densely abundant rain occurs with heavy rain at many areas and very heavy rain occurs at some areas; especially at the East Coast from the Chumphon province downward, overflow and flood may happen at some areas. Whereas wind waves in the Gulf of Thailand are active from time to time as 2 – 4 meters high during some periods while those in the Andaman Sea will be about 1 meter high.

The winter of this year is expected to end around middle February 2016.

## General Climatic Characteristics

<u>Upper Thailand (Northern, Northeastern, Central and Eastern parts)</u>

November: Moderate to rather actively high pressure air mass cells from China will prevail over the Upper Thailand from time to time causing thunder rain and gusty wind to occur at some areas during the 1st phase. Then, temperature will reduce a little. Northern and northeastern parts will experience cool weather almost generally and cold weather at some areas; especially at the upper portion. While at central and eastern parts, cool weather occurs at many areas and cold weather appears at some areas; mostly at the upper portion. <u>During December until January:</u> More actively and continuously high pressure air masses from China will still prevail over the Upper Thailand periodically causing to reduce temperature further. Northern and northeastern parts will experience cool or cold weather generally while the central and eastern parts will experience cool weather almost generally. Cold weather occurs at many areas, mostly at the upper portion of these parts. For mountain tops, mount tops and mountainous areas, cold to very cold weather occurs with frost happening on some days. <u>During the 1st half of February</u>: Prevailing high pressure air mass cells will weaken discontinuously influencing warming weather to appear with hot weather during day time. However, the northern and northeastern parts will still experience morning cold or cool weather. <u>Southern Thailand</u>

During November until about middle January: \_\_\_\_\_Active northeastern monsoon will prevail over the Gulf of Thailand and the Southern Thailand from time to time; especially during November and December. Additionally, some monsoon troughs will place over the middle and lower portions of the Southern Thailand periodically in November and December consecutively. As a result, the Southern Thailand will experience densely abundant rain with heavy rain at many areas and very heavy rain at some areas; mostly around the Eastern Coast from the Chumphon province downward. Flood and overflow may happen at some areas. Whereas wind waves in the Gulf of Thailand will be active from time to time as 2 – 4 meters high during some periods while those in the Andaman Sea will be about 1 meter high. <u>Then during middle January until middle February</u>, the amount and distribution of rainfall will decrease generally as the prevailing northeastern monsoon over the Gulf of Thailand and the Southern Thailand weakens and changes to be the prevailing easterly or southeasterly direction over the area.

## Details of each part are as follows:

## Northern and Northeastern part:

During November, cool weather appears generally and cold weather occurs at some areas during some periods; mostly at the upper portion. Morning fog will occur and isolated rainfall appears (10% of the area). Then during December until January, cold or cool weather appears generally and thick fog appears at many areas. For mountain tops, mount tops and mountainous areas, cold to very cold weather appears and frost may happen during some periods. While in February, warmer weather will appear causing hot weather to occur during day time. Still, morning cool or cold weather appears at the upper portion with thick morning fog happening at many areas

## Central and Eastern parts:

During November, widely scattered rainfall (20-30% of the area) appears and cool weather happens at many areas; mostly around the upper portion. Furthermore, cold weather occurs at some areas on some days with morning fog. Then during December until January, cool weather will generally appear and cold weather occurs at some areas on some days, especially around mountainous areas of the Nakhon Sawan, Utai Tani, Kanchana Buri, Ratcha Buri, Suphan Buri, Sara Buri, Nakornnayok, Chachoengsao, Prachin Buri and Chantha Buri provinces. Also, thick fog appears at many areas during some periods. While during February, warmer weather will appear causing hot weather to occur during day time whereas morning cool weather occurs at the upper portion and mountainous areas with thick fog occurring at many areas.

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

During November until middle January, densely abundant rain will occur as almost widespread rainfall (70-80% of the area) happens with heavy rain appearing at many areas and very heavy rain appearing at some areas; specifically from the Chumphon province downward. Flash flood, forest flood and overflow may inundate at some areas. Furthermore, wind waves will be active periodically as 2 – 4 meters high during some periods. Then during middle January until February, the amount and distribution of rainfall will reduce while widely scattered rainfall (20-30% of the area) still appears at the lower portion of the part with heavy rain occurring on some days.

#### Southern Thailand – Western Coast (The Andaman Sea):

During November, abundant rain occurs as almost widespread rainfall (60-70% of the area) happens with heavy rain happening at some areas. Additionally, wind waves in the Andaman Sea will be rather active as 1 - 2 meters high during some periods. Then from December onward, the amount and distribution of rainfall will reduce whereas wind waves in the Andaman Sea will be about 1 meter high.

### Bangkok Metropolis and neighbor provinces:

During November, widely scattered rainfall (20 - 30% of the area) and cool weather will occur on some days with morning fog. Then during December until January, cool weather appears from time to time with thick fog on some days. While during February, warmer weather will happen with thick fog on some days and hot weather appears during day time.

## Cautions:

1. During November and December, low pressure air mass cells often develop in the lower portion of the South China Sea. Then, they may strengthen to become some tropical cyclones (depressions, tropical storms or typhoons). Also, they favor a high chance to move pass the Gulf of Thailand toward the Southern Thailand. As a result, the Southern Thailand will experience wide areas of rainfall with heavy to very heavy rain at many areas. Whereas wind waves in the Gulf of Thailand will be actively windy with 2-4 meters high and storm surges may happen along the Southern Thailand (East Coast). Then, the public should follow the weather forecast news from the Thai Meteorological Department closely further.

2. During December and January, frost may occur at the mountain tops or mount tops. Thick fog will often happen at many areas, especially at the northern and northeastern parts. The public then should be cautious of any possible accidents from vehicles or transportation.

3. During January, some westerly wind waves from Myanmar may pass the Upper Thailand. Consequently, the Upper Thailand will experience thunder rain and gusty wind at some areas. Some hails may also appear.

### 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 <sup>o</sup> C.

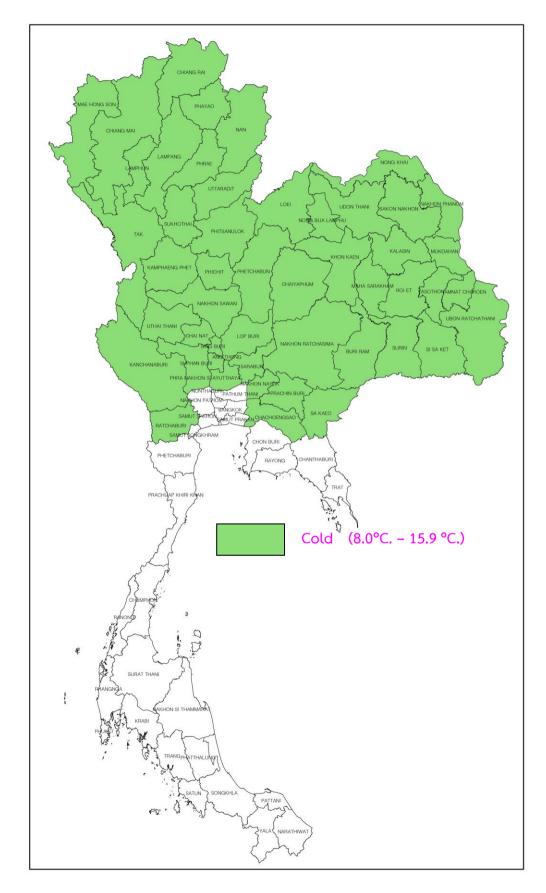
- These long rang climate expectation is derived from utilizing statistical methods and climate model analyses.

- This expectation will be updated at the last week of November 2015.

- 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 <u>www.tmd.go.th</u> or at <u>www.tmd.go.th/en</u>: climate tab.

Climatological Center, Meteorological Development Bureau Thai Meteorological Department Map for possible areas for cold air In December 2015 – January 2016



Remarks: 1. Long range expectations, the public should follow daily weather forecasts.2. Not including mountain and mount tops, and mountainous areas.

Regions	November2014	December2014	January 2015	February 2015		
				First half	Second half	
Upper	19-21 °C.	15-17 °C.	15-17 °C.	17-19 °C.	19-21 °C.	
Northern	With 10% isolated rainfall	With isolated slight rain	With isolated slight rain	With isolated slight rain		
Lower	21-23 °C.	17-19 °C.	17-19 °C.	18-20 °C.	21-23 °C.	
Upper	20-22 °C.	16-18 °C.	16-18 °C.	18-20 °C.	19-21 °C.	
Northeastern	With 10% isolated rainfall	With isolated slight rain	With isolated slight rain	With isolated slight rain		
Lower	22-24 °C.	18-20 °C.	18-20 °C.	20-22 °C.	21-23 °C.	
Central	22-24 °C.	20-22 °C.	20-22 °C.	21-23 °C.	23-25 °C.	
	With 10% isolated rainfall	With isolated slight rain	With isolated slight rain	With isolated slight rain		
East	23-25 °C.	21-23 <sup>°</sup> C.	21-23 °C.	21-23 °C.	23-25 °C.	
	With 20% isolated rainfall	With isolated slight rain	With isolated slight rain	With 10% isolated rainfall		
	23-25 °C.	22-24 °C.	22-24 °C.	21-23 °C.		
Southern	With thunder rain 70-80%	With thunder rain 60-70% of	With thunder rain 20-30%	With thunder rain 10% of		
Thailand	of the area, mostly from	the area, mostly from the	of the area, mostly during	the area, mostly around the		
(East coast)	the Chumporn province	Surat Tani province	the first half of the month	lower portion		
	downward	downward				
Southern	23 <b>-</b> 25 °C.	23-25 °C.	22-24 °C.	22-24 <sup>°</sup> C.		
Thailand	With thunder rain 40-60%	With thunder rain 20-30% of	With 10% isolated rainfall	With 10% isolated rainfall		
(West coast)	of the area	the area.				
Bangkok	24-26 °C.	22-24 °C.	22-24 °C.	23-25 °C.	25-27 °C.	
Metropolis and	With 10-20% isolated	With isolated slight rain	With isolated slight rain	With 10% is	olated rainfall	
Vicinity	rainfall					

Table of rainfall distribution and mean minimum temperature at each part of Thailand for the winter season of 2015 - 2016

	December					January				
	Extreme minimum temperature (1951-2013)			minimum tem	Ext. minimum temperature forecast in 2015	Extreme minimum temperature (1951-2014)			Extreme minimum temperature in 2015	Ext. minimum temperature forecast in 2016
	( °C.)	Date	Year	( °C.)	( °C.)	( °C.)	Date	Year	( °C.)	( °C.)
Northern				( 0,)						
Chiang Rai Chiang Mai Phitsanulok	1.5 3.8 8.9	25 25 26	1999 1999 1999	7.8 10.5 12.0	11-13 13-15 15-17	1.5 3.7 7.5	2 2 13	1974 1974 1955	7.0 11.0 10.5	10-12 12-14 14-16
Northeastern loei	2.2	31	1973 1975	8.0	11-13	0.1	2	1974	5.5	10-12
Nakhon Phanom Nakhon Ratchasima Ubon Ratchathani	4.1 6.2 8.5	30 31 30	1975 1975 1975	10.1 12.2 12.4	12-14 15-17 14-16	1.8 4.9 7.6	12 12 12	1955 1955 1955	9.4 11.2 12.1	11-13 14-16 13-15
Central Nakhon Sawan Suphanburi Kanchanaburi	7.7 10.0 6.8	25 31 31	1999 1975 1975	12.2 14.2 13.8	15-17 15-17 14-16	6.1 9.2 5.5	13 13 13	1955 1955 1955	10.3 12.6 12.0	14-16 14-16 13-15
Eastern Sa kaew Chon Buri	9.0 12.0	24 29	1999 1975	13.0 16.4	15-17 18-20	11.4 9.9	12 12	2009 1955	11.9 15.5	14-16 17-19
South Prachuap Khiri Khan Phuket	11.4 18.4	31 1	1956 1982	17.5 23.9	19-21 23-25	10.5 17.8	19 4	1963 1957	14.5 24.0	18-20 22-24
Bangkok	10.5	30	1975	17.8	19-21	9.9	12	1955	16.6	18-20

# Table of extreme minimum temperature expectation during December 2015 – January 2016

Remark : Excludes minimum temperature in mountainous areas.