

Climate Characteristic Expectations of Thailand during the Winter Season 2015 - 2016 Issued on 29 September 2015

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

The winter of this year is expected to begin as normal about at the middle of October 2015 until about the middle of February 2016. The climate of the winter of this year will be generally quite close to that of last year. Mean minimum temperature will be approximately near as that of last year. Moreover, the extreme minimum temperature will be during the second half of December until late January. For mountain tops and mountainous areas, cold to very cold weather will appear with frost happening at some periods.

For Southern Thailand, the weather will be cool mostly around the upper portion during November until middle January with densely abundant rainfall and heavy to very heavy falls in some areas, especially from Chumphon province downward. Flash floods, flooding situations and over-flows can occur in some areas. During some periods, wind waves in the Gulf of Thailand will be rough as 2–4 meters height from time to time while those in the Andaman Sea will be 1–2 meters.

General Climatic Characteristics

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

<u>During middle October until November</u>, some high pressure air masses from China will prevail over the Upper Thailand as being moderately active periodically. As a result, during the first phase, thunder rain and gust will appear at some areas. Then, air temperature will reduce a little. As a result, the northern, northeastern, central and eastern parts will be cool generally and cold at some areas especially at the upper portion.

<u>During December until January.</u> some high pressure air masses from China will still prevail over the Upper Thailand periodically as being more active continuously, thus reducing temperature further. Consequently, the northern, northeastern, central and eastern parts will be cool generally and cold at some areas especially at the upper portion. Whereas mountain tops and mountainous areas will experience cold to very cold weather and frost may happen at some periods.

<u>During the first half of February</u>, the prevailing high pressure air masses will weaken discontinuously causing more warming weather appear as hot weather during day time. On the other hand, the northern and northeastern parts will still be cool or cold in the morning.

Southern Thailand

<u>During middle October until middle January</u>, the northeastern monsoon will prevail over the Gulf of Thailand and the Southern Thailand actively from time to time, especially during November and December. Additionally, at some periods, a monsoon trough will place over the upper, central and lower portions of the Southern Thailand during October, November and December consecutively. As a result, the Southern Thailand will experience densely abundant rainfall with heavy rain on many areas and very heavy rain at some areas, especially along the Southern Thailand (East Coast) from the Chumphon province downward. Thus, flood and overflow may inundate at some areas. For wind waves, those in the Gulf of Thailand will be active periodically with 2 – 4 meters high during some periods whereas those in the Andaman Sea will be about 1 – 2 meters high.

Then during middle January until middle February. the amount and distribution of rainfall will decrease generally as the northeastern monsoon prevailing over the Gulf of Thailand and the Southern Thailand weakens and changes to be the prevailing easterly or southeasterly direction.

Details of each part are as follows:

Northern and Northeastern part:

During middle October till November, cool air appears generally and cold air 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 and January, cool air appears generally and cold air appears at many areas during some periods. For mountain tops and mountainous areas, cold to very cold air appears and frost may happen during some periods. While in February, warmer air will appear causing hot air during day time. Still, morning cool or cold air appears at the upper portion with morning fog happening at many areas.

Central and Eastern parts:

During middle October until November, widely scattered (20-30% of the area) appears and cool air happens in many areas, mostly around the upper portion. Furthermore, cold air occurs at some areas on some days with morning fog. Then during December and January, cool air generally appears and cold air occurs at some areas on some days, especially around mountainous areas of the Nakorn Sawan, Utai Tani, Kanchanaburi, Ratchaburi, Suphan Buri, Saraburi, Nakorn Nayok, Chachoengsao, Prachinburi and Chantaburi provinces. Also, thick fog appears at many areas during some periods. While during February, warmer air appears causing hot air during day time whereas morning cool air with thick fog occurs at many areas at the upper portion and mountainous areas,

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

During middle October until middle January, densely abundant rainfall occurs and wind waves are more active. Especially during November and December, almost widespread (70-80% of the area) rainfall occurs with heavy rain happening on many areas and very heavy rain appearing at many areas. Specifically, from the Chumporn province downward, flash or forest flood with overflow may inundate at some areas. Then during middle January until February, the amount and distribution of rainfall will reduce while at the lower portion still widely scattered rainfall (20-30% of the area) appears with heavy rain on some days.

Southern Thailand - Western Coast (The Andaman Sea):

During middle October until November, abundant rainfall as almost widespread (60-70% of the area) happens. Additionally, wind waves in the Andaman Sea will be rather active. Then from December onward, the amount and distribution of rainfall will reduce.

Bangkok Metropolis and neighbor provinces:

During middle October till November, widely scattered to scattered rainfall (30-50% of the area) will occur together with cool air happens on some days. Also, morning fog appears. Then during December and January, cool air appears from time to time. While during February, warmer air happens and hot air appears during day time.

Cautions:

- 1. During October, the central and eastern parts still experience continuous rainfall. Furthermore, sea level rise will cause flash flood and overflow inundate at some areas.
- 2. 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 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 on many areas. Whereas wind waves in the Gulf of Thailand will be active and windy with 2-4 meters high and storm surges may happen along the Southern Thailand (East Coast). The public should follow weather forecast news from the Thailand Meteorological Department closely.
- 3. During December and January, frost may occur at the mountain tops or mountainous areas. Thick fog often happens at many areas especially at the northern and northeastern parts. The public then should drive their vehicles carefully preventing from any accidents 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.

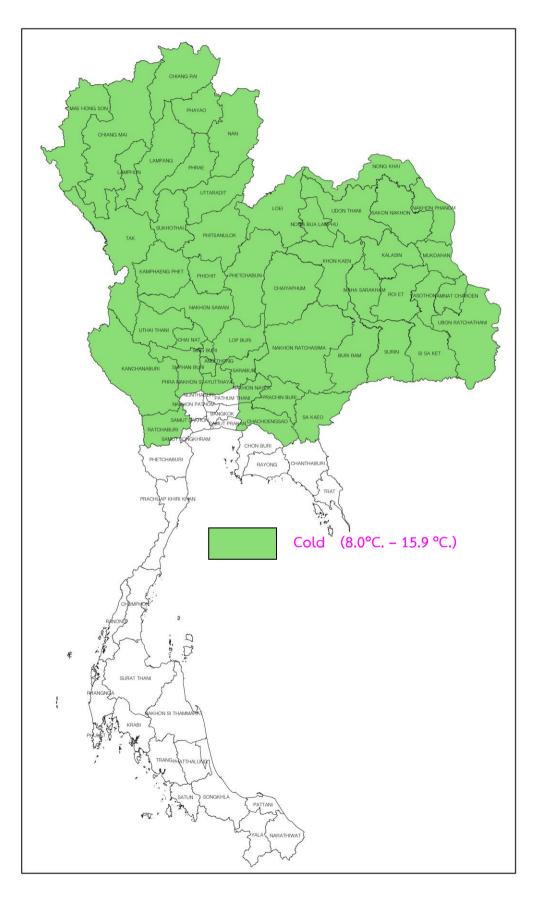
- These long rang climate expectation is derived from utilizing statistical methods and climate model analyses.
 - This expectation will be updated at the last week of October 2015.
- Monthly or seasonal climate forecast can be enquired at Tel: 02-398-9929 or Fax: 02-383-8827
- Please follow weather forecast news and climate forecasts at www.tmd.go.th or at www.tmd.go.th/en: climate tab.

Climatological Center, Meteorological Development Bureau

Thai Meteorological Department

September 2015

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.

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

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.	16-18 °C.	18-20 °C.	21-23 °C.	
Upper	20-22 °C.	16-18 °C.	15-17 °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	21-23 °C.	18-20 °C.	17-19 °C.	20-22 °C.	21-23 °C.	
Central	22-24 °C.	19-21 °C.	19-21 ℃.	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 °C.	20-22 °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.	21-23 °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		
(Lust coust)	downward	downward				
Southern	23-25 °C.	23-25 °C.	22-24 °C.	22-24 °C. With 10% isolated rainfall		
Thailand	With thunder rain 40-60%	With thunder rain 20-30% of	With 10% isolated rainfall			
(West coast)	of the area	the area.				
Bangkok	24-26 °C.	22-24 °C.	21-23 °C.	23-25 °C.	25-27 °C.	
Metropolis and	With 10-20% isolated	With isolated slight rain	With isolated slight rain	With 10% isolated rainfall		
Vicinity	rainfall					

Extreme minimum temperature expectation during December 2015 - January 2016

	December					January				
	Extreme minimum temperature (1951-2013)			Extreme Ext. minimum temperature forecast in 2014 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										
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										
loei	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
Phuket	18.4	1	1982	23.9	23-25	17.8	4	1957	24.0	22-24
Bangkok	10.5	30	1975	17.8	19-21	9.9	12	1955	16.6	18-20

Remark: Excludes minimum temperature in mountainous areas.