

The seasonal forecast of Thailand during the 2016 – 2017 winter (Revised Edition) Issued on 26 October 2016

Thai Meteorological Department

Weather characteristic prediction for the coming winter of Thailand About November 2016 until middle February 2017:

This coming winter season of 2016 - 2017 follows that

- Mean minimum temperature in upper Thailand is near normal around 19-20 $^{\circ}$ C and colder than that of the last 2 – 3 years ago. The extreme minimum temperature of Thailand is around 6–7 $^{\circ}$ C in upper portion of Northern and Northeastern parts. For Bangkok Metropolis and neighbor provinces, the extreme minimum temperature is around 14–15 $^{\circ}$ C.

- The coldest period is during the 2nd half of December till middle January.

- The mountain tops and mountainous areas will face up cold to very cold weather with possible frost.

- The Southern Thailand is cool mostly at the upper portion of the part and still faces up to dense rainfall mostly in November and December, especially at the eastern coast (the Gulf of Thailand) from Chumphon province downward. In other words, the Southern Thailand will face up to heavy rain at many areas and very heavy rain at some areas. Together with the area favors a high chance to be affected by some tropical cyclones in the South China Sea. Additionally, a monsoon trough places over the area at some periods causing flash flood overflowing at many areas. Whereas wind waves in the Gulf of Thailand will be active from time to time at 2 - 4 meters high while those in the Andaman Sea are 1 - 2 meters high.

- The winter season will finished at about middle February 2017.

General Climatic Characteristics

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

During November until January, the northern and northeastern parts will face up to colder or cooler weather widely at many areas with thunder rains and gusty winds at some areas whereas the central and eastern parts will face up to cold or cool weather widely. For mountain tops and mountainous areas – cold to very cold weather with possible frost will occur. Due to the northeastern monsoon prevailing over Thailand continuously almost all of the winter season together with active high pressure air mass areas prevailing over Thailand periodically, for during the 1st period at the high pressure air mass areas starts to prevail, thunder rains and gusty winds will develop at some areas. Furthermore, occasionally westerly wind waves will prevail over the Upper Thailand bringing about thunder rains, gusty winds and possible hails at some areas.

Later, at the 1st half of February, warmer weather with thick fog at many areas including with hot weather at many areas during day time, while morning cold or cool weather occurs at the northern and northeastern parts because of weakening high pressure air mass areas over the Upper Thailand. <u>Southern Thailand</u>

During November until middle January, dense rainfall with heavy rain at many areas and very heavy rain at some areas, especially at the eastern coast from Chumphon province downward. Thus, flash flood may overflow at some areas. While wind waves in the Gulf of Thailand will be active from time to time since active northeastern monsoon prevails over the Gulf of Thailand and the Southern Thailand periodically, specifically in November and December. Additionally, the monsoon trough will place over the upper, central and lower portions of the Southern Thailand in October, November and December consecutively. Moreover, some tropical cyclones are highly possible to move near or through the Southern Thailand further.

During middle January till the 1st half of February, the amount and distribution of rainfall will reduce for the prevailing northeastern monsoon over the Gulf of Thailand and the Southern Thailand weakening and changing to be the prevailing eastern or southeastern winds instead.

Details of each part are as follows:

Northern and Northeastern part:

November, cool weather occurs widely with very cold weather at many areas. Especially during November, morning fog happens with 10% thunder rains of the area.

Then during December and January, cold or cool weather occurs widely. Besides, very cold weather appears at many areas at some periods with thick fog at many areas. For mountain tops and mountainous areas, cold to very cold weather happens with frost occurring at some periods.

While at the 2nd half of February, warmer weather with thick fog occurs at many areas. Hot weather happens at many areas during day time but morning cold or cool weather still appears.

Central and Eastern parts:

November, cool weather occurs widely with cold weather at some areas, specifically at the upper portion. Together with morning fog appears and thunder rains occur for 10 - 20% of the area.

Then from December and January, cold or cool weather occurs widely, specifically around the mountainous areas of Nakhon Sawan, Uthaithani, Kanchana Buri, Ratcha Buri, Suphan Buri, Saraburi, Nakornnayok, Chachoengsao, Prachin Buri and Chantha Buri. Including with thick fog will occur at many areas at some periods.

Whereas at the 1st half of February, 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 November till middle January, dense rainfall with active wind waves will occur. Especially, during November and December, thunder rains happen at 70 – 80% of the area with heavy rain at many areas and very heavy rain at some areas, 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.

Afterward, the amount and distribution of rainfall will lessen. However, the lower portion of the part still faces up to rainfall at 20 – 30% of the area with heavy rain at some areas on some days.

Southern Thailand – Western Coast (The Andaman Sea):

November, thunder rains happen at 60 - 70% of the area while wind waves in the Andaman Sea will be 1 - 2 meters high.

Later since December onwards, the amount and distribution of rainfall will reduce.

Bangkok Metropolis and neighbor provinces:

November, thunder rains will happen at 30 - 40% of the area together with cool weather on some days with morning fog.

Then in December and January, cool weather occurs widely with very cold weather at some areas on some days.

While at the 1st half of February, warmer weather starts to appear with hot weather at day time.

Cautions:

1. In November and December, active low pressure air mass cells develop in the lower portion of the South China Sea. Then, they strengthen to become tropical cyclones (depressions, tropical storms or typhoons) and are highly possible to move pass the Gulf of Thailand toward the Southern Thailand. As a result, the Southern Thailand will face up to rainfall occurring widely with heavy to very heavy rain at many areas. Furthermore, wind waves around the Gulf of Thailand are actively windy at 2 - 4 meters high. Thus, the public should follow the weather forecast news from the Thai Meteorological Department closely further.

2. During December and January, frost may occur at mountain tops or mountainous areas with thick fog at many areas, specifically at the northern and northeastern parts. Thus, the public should be cautious with road accidents.

3. During January and February, westerly wind waves may pass from Myanmar through the Upper Thailand causing thunder rain and gusty wind to occur and possible hail at some areas.

Remarks:

- Daily minimum	temperature	e 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.

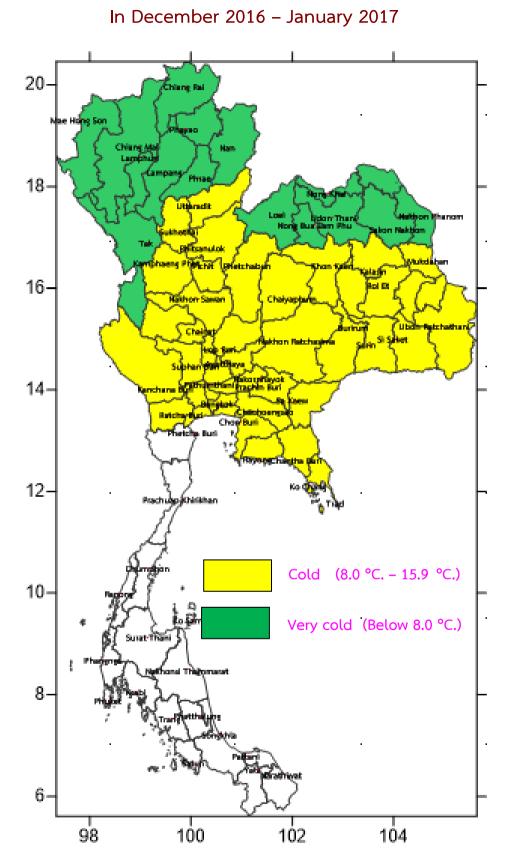
- These long rang climate expectation is derived from utilizing statistical methods and climate model analyses.

- This expectation will be updated at the last week of November 2016.

- 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 October 2016



Map for possible areas for cold air



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.

Regions	November2016	December2016	January 2017	February 2017		
				First half	Second half	
Upper	18-20 °C.	14-16 °C.	14-16 °C.	16-18 °C.	18-20 °C.	
Northern	With 10% 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.	18-20 °C.	20-22 °C.	
Upper	18-20 °C.	15-17 °C.	15-17 °C.	17-19 [°] C.	19-21 °C.	
Northeastern	With 10% 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.	17-19 °C.	17-19 °C.	19-21 °C.	21-23 °C.	
Central	22-24 °C.	19-21 °C.	19-21 °C.	21-23 °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	22-24 °C.	20-22 °C.	20-22 °C.	21-23 °C.	23-25 °C.	
	With 10-20% rainfall of the area	With slightly rain in some area	With slightly rain in some area	With 10% rainfall of the area		
	22-24 °C.	21-23 °C.	21-23 °C.	22-	24 °C.	
Southern	With 70-80% thunder rain	With 60-70% thunder rain	With 30-40% thunder rain	With 20-30% thunder rain o		
Thailand	of the area, mostly from	of the area, mostly from	of the area, mostly during	the area, mostly around the		
(East coast)	the Chumporn province downward	the Surat Tani province downward	the first half of the month	lower portion		
Southern	23-25 °C.	22-24 °C.	22-24 °C.	22-24 °C.		
Thailand	With 60-70% thunder rain	With 30-40% thunder rain	With 10% rainfall of the area	With 10% rainfall of the area		
(West coast)	rainfall of the area	of the area.				
Bangkok	23-25 °C.	21-23 °C.	21-23 °C.	22-24 °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% rai	nfall of the area	
Vicinity	area					

Mean minimum temperature and rainfall prediction for each part of Thailand during the winter of 2016 – 2017

	December				January					
	Extreme minimum temperature (1951-2013)			minimum temp temperature fore	Ext. minimum temperature forecast in 2016	Extreme minimum temperature (1951-2014)			Extreme minimum temperature in 2016	Ext. minimum temperature forecast in 2017
	(°C.)	Date	Year	(°C.)	(°C.)	(°C.)	Date	Year	(°C.)	(°C.)
Northern										
Chiang Rai Chiang Mai Phitsanulok	1.5 3.8 8.9	25 25 26	1999 1999 1999	13.5 15.6 17.8	5-7 7-9 10-12	1.5 3.7 7.5	2 2 13	1974 1974 1955	8.1 10.0 12.3	6-8 8-10 11-13
Northeastern	0.7	20	1///	11.0	10 12	1.5	15	1755	12.5	11 15
loei	2.2	31	1973 1975	12.8	6-8	0.1	2	1974	10.5	6-8
Nakhon Phanom	4.1	30	1975	14.0	7-9	1.8	12	1955	10.7	7-9
Nakhon Ratchasima	6.2	31	1975	17.1	11-13	4.9	12	1955	12.0	11-13
Ubon Ratchathani	8.5	30	1975	15.1	12-14	7.6	12	1955	13.0	12-14
Central										
Nakhon Sawan	7.7	25	1999	17.3	11-13	6.1	13	1955	14.0	12-14
Suphanburi	10.0	31	1975	18.6	12-14	9.2	13	1955	14.3	13-15
Kanchanaburi	6.8	31	1975	18.2	11-13	5.5	13	1955	13.6	12-14
Eastern										
Sa kaew	9.0	24	1999	18.3	13-15	11.4	12	2009	14.5	14-16
Chon Buri	12.0	29	1975	21.0	14-16	9.9	12	1955	16.4	15-17
South										
Prachuap Khiri Khan	11.4	31	1956	20.3	18-20	10.5	19	1963	14.0	18-20
Phuket	18.4	1	1982	21.2	20-22	17.8	4	1957	20.9	20-22
Bangkok	10.5	30	1975	20.6	14-16	9.9	12	1955	14.8	15-17

Extreme minimum temperature statistic and prediction during December 2016 – January 2017

Remark : Not including mountainous area data.