

# Climatic Characteristic Expectation during the winter season of 2013-2014

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# Climatic characteristic expectations for the winter of Thailand During January – middle of February 2014

The winter of this year expects to, the general climatic characteristics are not too cold while cold to very cold weather in some periods in upper portion. Additionally, the coldest period will be during the first half of January mostly. For the upper Thailand (Northern, Northeastern, Central and Eastern parts) will have colder or cooler air than last year's, but still above normal.

While Southern Thailand will have cool air mostly at the upper portion of the part. And during the early and middle of January, the Southern Thailand will have abundant rainfall with heavy to very heavy falls in some areas, especially in the lower portion. The waves in the Gulf of Thailand will be 1-2 meters high and in strong periodically, the waves will be 2-3 meters high. While in the Andaman Sea, waves will be 1 meter high.

#### **General Climatic Characteristics**

<u>Upper Thailand</u> <u>During January</u>; High pressure air masses from China will prevail to cover over Upper Thailand with increasing strengths and continuity. This will cause temperature reduction causing Northern and Northeastern parts to have cold or cool air generally with very cold air in some areas on some days. Whereas Central and Eastern parts, they will have cool air generally with very cold air in some areas on some days too. For mountain tops, mounts, and mountains will have cold to very cold air with some frost in some periods.

Then during the first half of February; High pressure air masses prevailing to cover over Thailand will weaken and be not continuous. This causes to warm up the air and heats it during day time. But for Northern and Northeastern parts, the air is still cold or cool in the morning. The winter of this year is expected to end around middle February 2014.

<u>Southern Thailand</u> During the beginning and middle of January; Northeastern monsoon will prevail to cover over the Gulf of Thailand and Southern Thailand. This will bring moisture from the Gulf of Thailand toward Southern Thailand. The monsoon will be mostly active. These characteristics will cause Southern Thailand to have abundant rainfall with heavy to very heavy falls in some areas, especially in the lower portion.

Then during the late of January until middle of February; The Northeastern monsoon prevailing over the Gulf of Thailand and Southern Thailand begins to weaken, and Eastern or Southeastern wind starts to prevail over the areas. These cause the amount and distribution of rainfall in Southern Thailand begins to reduce, and mark the end of the rainy season of Southern Thailand.

### Details of each part are as follows:

#### Northern and Northeastern parts

During January, The air will be generally cold or cool with very cold air in some areas on some days, especially around Mae Hong Son, Chiang Rai, Phayao, Nan, Tak, Sakon Nakhon, and Nakhon Phanom provinces, with very thick fog in many areas in some periods. For mountain tops, mounts, and mountainous areas, the air will be cold to very cold with some frost happening on some days.

Then during the first half of February, The air will be cold or cool in the morning, especially around the upper portion of the part, with some thick fog in many areas. Additionally, the air will begin to warm up causing hot air during day time.

#### Central and Eastern parts

During January, The air will be cool generally and cold in some areas on some days, especially around mountainous areas of Nakorn Sawan, Utaitani, Chainat, Kanchanaburi, Ratchaburi, Supanburi, Lopburi, Saraburi, Nakorn Nayok, Chachoengsao, Prachinburi, Srakaew, and Chantraburi provinces, with some thick fog in many areas in some periods.

Then during the first half of February, The air of the upper portion of these parts and their mountainous areas is still cool in the morning with thick fog in many areas. The air begins to warm up causing hot air during day time.

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

During the beginning and middle of January, abundant rainfall, additionally with heavy to very heavy falls in some areas, especially in lower portion. This will cause flash floods and flooding situations in many areas. Waves will be 1-2 meters high. While during the strong monsoon, waves will be 2-3 meters high.

Then during the late of January until middle of February, The amount and distribution of rainfall starts to reduce, but the lower portion of this part still has widely scattered to scattered (30–40 % of the area) rainfall, with heavy falls on some days. Waves will be 1 meter high.

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

During January until middle of February, the amount and distribution of rainfall will reduce. Isolated rainfall (10–20% of the areas) and waves will be 1 meter high.

#### Bangkok Metropolis and neighbor provinces

During January, cool air periodically.

Whereas in February, The air starts to warm up, and will be hot during day time.

## Cautions:

- 1. This period, there will always be low pressure cells in lower portion of the South China Sea. Then they move pass the Gulf of Thailand toward to lower portion of Southern Thailand include Malaysia. This makes the lower portion of Southern Thailand to have wide rainfall area with heavy to very heavy falls in many areas. Winds and waves around the Gulf of Thailand will be windy and strong with 2–3 meters height.
- 2. <u>In January</u>, frosts can appear at mountainous areas or mountain tops. Thick fog happens in many areas, especially in the Northern and Northeastern parts. The public should be cautious of accidents from vehicles.
- 3. <u>During January</u>, The westerly trough may move from Mynmar through upper Thailand, causing thundershower and gust in some areas, so people should follow the weather forecast for further information.

#### Remarks:

- Minimum temperature criteria during the winter

Cool Air	means	16.0 – 22.9 °C.
Cold Air	means	8.0 – 15.9 °C.
Verv Cold Air	means	below 8.0 °C.

- These expectations are long range climatic forecasts by using climatic models and statistical methods.
- Please enquire monthly/seasonal climatic forecasts at Tel. 02-398-9939, Tel./Fax. 02-383-8827 or at Websites: www.tmd.go.th, or www.weather.go.th

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Table of expected average minimum temperatures and rainfall for parts of Thailand during January – February 2014

Regions	January 2014	February 2014	
		First half	Second half
Upper	14-16 °C. Slightly showers	16-18 °C.	17-19 °C.
Northern		Slightly showers	
Lower	16-18 °C. Slightly showers	18-20 °C.	19-21 °C.
Upper	14-16 °C. Slightly showers	17-19 °C.	18-20 °C.
Northeastern		Slightly showers	
Lower	16-18 °C. Slightly showers	19-21 °C.	20-22 °C.
Central	19-21 °C. Slightly showers	22-24 °C.	23-25 °C.
		Slightly showers	
East	20-22 °C. Slightly showers	22-24 °C.	23-25 °C.
		Isolated showers	
	21-23 °C.	22-24 °C.	
Southern	Widely scattered showers,	Widely scattered showers	
Thailand	mainly during the first half		
(East coast)	of the month.		
Southern	22-24 °C.	22-24 °C.	
Thailand	Isolated showers	Isolated showers	
(West coast)			
Bangkok	21-23 °C.	23-25 °C.	24-26 °C.
Metropolis and	Isolated shower	Isolated showers	
Vicinity			

The extreme minimum temperature by statistics and forecast in January

	January					
	Extreme minimum temperature			Extreme	Ext. minimum	
	(1951-2013)			minimum	temperature	
				temperature	forecast in	
				in 2013	2014	
	( °C.)	Date	Year	( °C.)	( °C.)	
Northern						
Chiang Rai	1.5	2	1974	12.7	8-10	
Chiang Mai	3.7	2	1974	12.9	10-12	
Phitsanulok	7.5	13	1955	17.0	13-15	
Northeastern						
loei	0.1	2	1974	13.0	9-11	
Nakhon Phanom	1.8	12	1955	12.5	8-10	
Nakhon Ratchasima	4.9	12	1955	16.5	13-15	
Ubon Ratchathani	7.6	12	1955	14.4	12-14	
Central						
Nakhon Sawan	6.1	13	1955	16.9	13-15	
Suphanburi	9.2	13	1955	17.9	14-16	
Kanchanaburi	5.5	13	1955	17.5	14-16	
Eastern						
Sa kaew	11.4	12	2009	16.9	14-16	
Chon Buri	9.9	12	1955	20.7	17-19	
South						
Prachuap Khiri Khan	10.5	19	1963	19.2	17-19	
Trang	17.4	4	1957	24.0	20-22	
Bangkok	9.9	12	1955	21.7	17-19	

Remark: Excludes minimum temperature in mountainous areas.