



Thai Meteorological Department
Ministry of Information and Communication
Technology

Climatic Characteristic Expectation during the winter season of 2013-2014

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Climatic characteristic expectations for the winter of Thailand

During December 2013 – middle February 2014

The winter of this year expects to, the general climatic characteristics are not too cold while rather cold in some periods. Additionally, the coldest period will be during middle December until middle January. For the upper portion of 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 November until middle January, the Southern Thailand will have abundant rainfall with heavy to very heavy falls in many areas. Especially on the eastern coast from Chumporn province downward, there will be flash floods and flooding conditions in some areas. Whereas winds and waves in the Gulf of Thailand will be strong periodically. In some periods, waves will be 2-3 meters high. While in the Andaman Sea, waves will be 1 meter high.

General Climatic Characteristics

Upper Thailand During December until January; 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.

Southern Thailand During December until the late 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. Especially in December, the monsoon will be mostly active. Additionally, a low pressure trough will lying around lower portions of Southern Thailand respectively. These characteristics will cause Southern Thailand to have abundant rainfall with heavy to very heavy falls in many areas, especially the east coast from Surat Thani province downward.

Then during the late of January until middle 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 December and January, The air will be generally cold or cool with very cold air in some areas on some days, especially around Mae Hong Son, Nan, and Tak provinces, with very thick fog in some 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 December and 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 December until the late of January, abundant rainfall, additionally, winds and waves will be strong especially in December. Almost widespread rainfall (70 % of the area) with heavy to very heavy falls in many areas, mostly from Surat Thani province downward. 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 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 December, Widely scattered rainfall (30-40% of the areas) and waves will be 1 meter high.

Then during January until middle 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 December and January, cool air periodically.

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

Cautions:

1. In December, There will always be low pressure cells forming in the lower portion of the South China Sea. Then they strengthen to become tropical cyclones (depressions, tropical storms or typhoons), and favor a high chance to move pass the Gulf of Thailand toward Southern Thailand. This makes 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 2–4 meters height. And possible storm surges around the eastern coast of Southern Thailand. The public should follow weather forecast news from the Thai Meteorological Department closely.
2. In December and January, 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. In January, The westerly trough may move from Myanmar 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

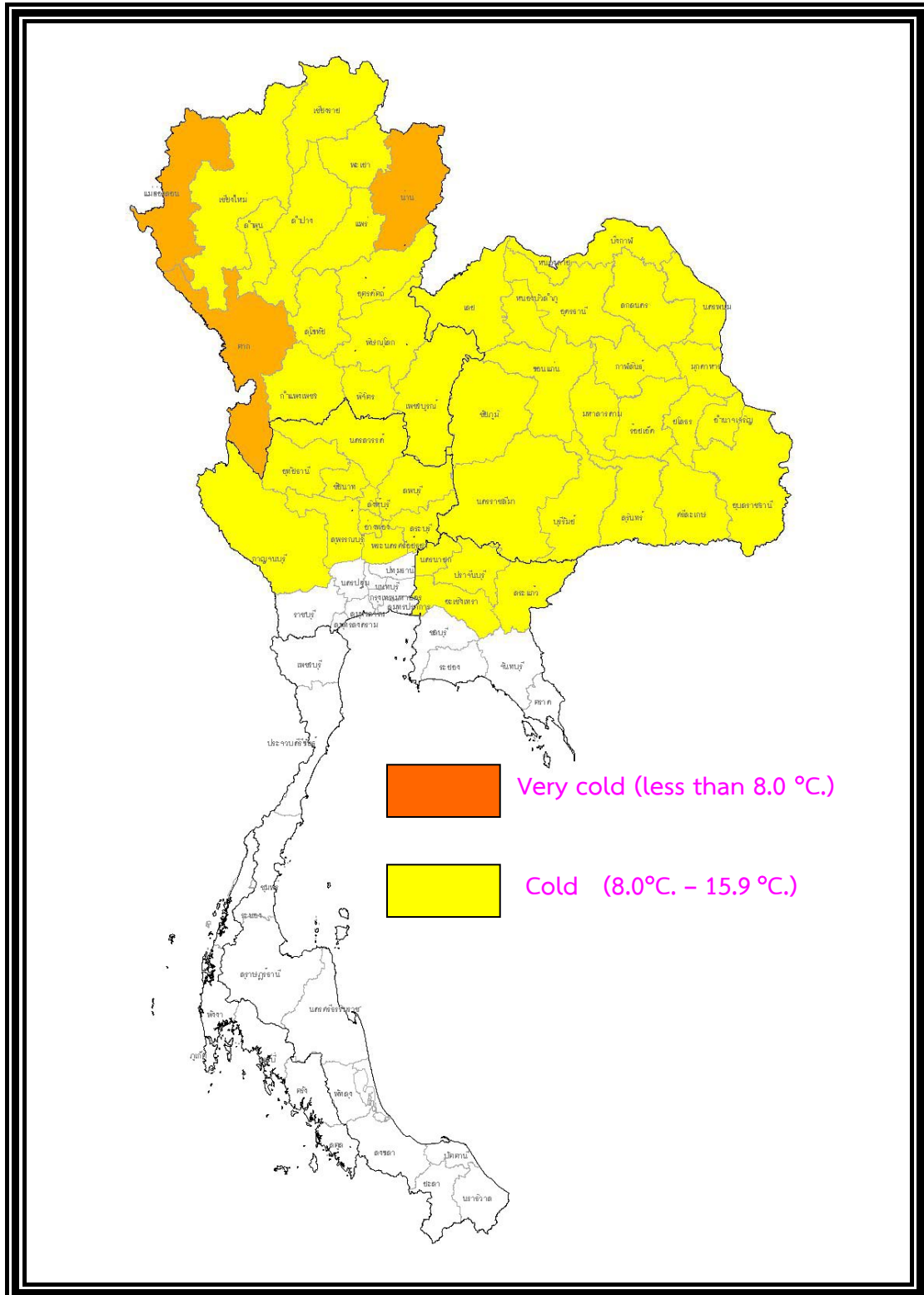
Cool Air	means	16.0 – 22.9 °C.
Cold Air	means	8.0 – 15.9 °C.
Very Cold Air	means	below 8.0 °C.

- 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

Climatological Center, Meteorological Development Bureau,
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Map for possible areas for cold to very cold air
In December 2013 – January 2014



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

Table of expected average minimum temperatures and rainfall for parts of Thailand during the winter season of 2013 - 2014

Regions	December 2013	January 2014	February 2014	
			First half	Second half
Northern	Upper 15-17 °C. Slightly showers	14-16 °C. Slightly showers	16-18 °C. Slightly showers	17-19 °C.
	Lower 17-19 °C. Slightly showers	16-18 °C. Slightly showers	18-20 °C.	19-21 °C.
Northeastern	Upper 16-18 °C. Slightly showers	15-17 °C. Slightly showers	17-19 °C. Slightly showers	18-20 °C.
	Lower 18-20 °C. Slightly showers	17-19 °C. Slightly showers	19-21 °C.	20-22 °C.
Central	19-21 °C. Slightly showers	19-21 °C. Slightly showers	22-24 °C. Slightly showers	23-25 °C.
East	21-23 °C. Slightly showers	20-22 °C. Slightly showers	22-24 °C. Isolated showers	23-25 °C.
Southern Thailand (East coast)	22-24 °C. Almost widespread thundershowers and heavy falls in some areas, mainly from Surat Thani southward.	21-23 °C. Widely scattered showers, mainly during the first half of the month.	22-24 °C. Widely scattered showers	
Southern Thailand (West coast)	23-25 °C. Widely scattered showers.	22-24 °C. Isolated showers	22-24 °C. Isolated showers	
Bangkok Metropolis and Vicinity	22-24 °C. Isolated shower	22-24 °C. Isolated shower	23-25 °C. Isolated showers	24-26 °C.

The extreme minimum temperature by statistics and forecast in December 2013 and January 2014

	December					January				
	Extreme minimum temperature (1951-2012)			Extreme minimum temperature in 2012 (°C.)	Ext. minimum temperature forecast in 2013 (°C.)	Extreme minimum temperature (1951-2013)			Extreme minimum temperature in 2013 (°C.)	Ext. minimum temperature forecast in 2014 (°C.)
	(°C.)	Date	Year			(°C.)	Date	Year		
Northern										
Chiang Rai	1.5	25	1999	12.5	10-12	1.5	2	1974	12.7	9-11
Chiang Mai	3.8	25	1999	15.0	12-14	3.7	2	1974	12.9	11-13
Phitsanulok	8.9	26	1999	20.1	16-18	7.5	13	1955	17.0	15-17
Northeastern										
loe	2.2	31	1973 1975	14.6	11-13	0.1	2	1974	13.0	10-12
Nakhon Phanom	4.1	30	1975	14.4	10-12	1.8	12	1955	12.5	9-11
Nakhon Ratchasima	6.2	31	1975	16.3	14-16	4.9	12	1955	16.5	13-15
Ubon Ratchathani	8.5	30	1975	15.0	13-15	7.6	12	1955	14.4	12-14
Central										
Nakhon Sawan	7.7	25	1999	19.8	16-18	6.1	13	1955	16.9	15-17
Suphanburi	10.0	31	1975	19.7	16-18	9.2	13	1955	17.9	15-17
Kanchanaburi	6.8	31	1975	19.7	15-17	5.5	13	1955	17.5	14-16
Eastern										
Sa kaew	9.0	24	1999	19.1	16-18	11.4	12	2009	16.9	15-17
Chon Buri	12.0	29	1975	21.6	18-20	9.9	12	1955	20.7	17-19
South										
Prachuap Khiri Khan	11.4	31	1956	19.5	18-20	10.5	19	1963	19.2	17-19
Trang	18.4	1	1982	24.0	22-24	17.4	4	1957	24.0	21-23
Bangkok	10.5	30	1975	21.8	18-20	9.9	12	1955	21.7	17-19

Remark : Excludes minimum temperature in mountainous areas.