



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 middle October 2013 – middle February 2014

The winter of this year expects to begin about middle October 2013. General climatic characteristics are not too cold or cool, 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 2-4 meters high. While in the Andaman Sea, waves will be 1-2 meters high.

General Climatic Characteristics

Upper Thailand During middle October until November; High pressure air masses from China will prevail to cover Upper Thailand from time to time with medium to rather active strengths in some periods but not continuously. This causes thundershowers and possible gusts in some areas early when high pressure air masses prevail to cover the area. Then temperatures will reduce a little. About which Northern and Northeastern parts will have cool air almost all of the areas, and have cold air in some areas mostly at the upper portion of the parts. For Central and Eastern parts, they will have cool air in many areas mostly around the upper portion of the parts.

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 middle October until middle 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 November until December, the monsoon will

be mostly active. Additionally, there will be a low pressure trough lying around the upper, central, and 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 Chumporn province downward.

Then during middle 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 middle October until November, The air will be generally cool with cold air in some areas on some days with morning mist or fog, mostly at the upper portion of these parts, and some isolated to widely scattered (20 – 30% of the areas) rainfall in some periods. **Then 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 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

Around middle October until November, Widely scattered to scattered rainfall (30–50% of the areas), and the air starts to be cool in many areas mostly around the upper portion of the parts with morning fog. **Then 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, Uthairat, Chainat, Kanchanaburi, Ratchaburi, Supanburi, Lopburi, Saraburi, Nakorn Nayok, Chachoengsao, Prachinburi, Srakaew, and Chantaburi provinces, with some thick fog in many areas in some periods. **Then during 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)

About middle October until middle January, abundant rainfall, additionally, winds and waves will be strong especially during November and December. Almost widespread rainfall (70 - 80% of the area) with heavy to very heavy falls in many areas, mostly from Chumporn province downward. This will cause flash floods and flooding situations in many areas. **Then during middle January until February,** The amount and distribution of rainfall starts to reduce, but the lower portion of this part still has widely scattered to scattered (30 – 50% of the area) rainfall, with heavy falls on some days.

Southern Thailand – Western Coast (The Andaman Sea)

About middle October until November, Abundant rainfall: Scattered to almost widespread (50 – 70% of the area). Additionally, winds and waves in the Andaman Sea will be rather strong. **Then from December onwards,** the amount and distribution of rainfall will reduce.

Bangkok Metropolis and neighbor provinces

About middle October until November, Widely scattered to scattered rainfall (30–50% of the areas), and cool air on some days with morning fog. **Then from 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 October, around Central and Eastern parts will have continuous rainfall. Additionally, Northern rivers flow downwards. And in some periods, some storms surge toward some coasts at a rather high level causing floods and overflow in some areas.
2. In October, November, and December, some active low pressure air masses form 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.
3. 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.

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.

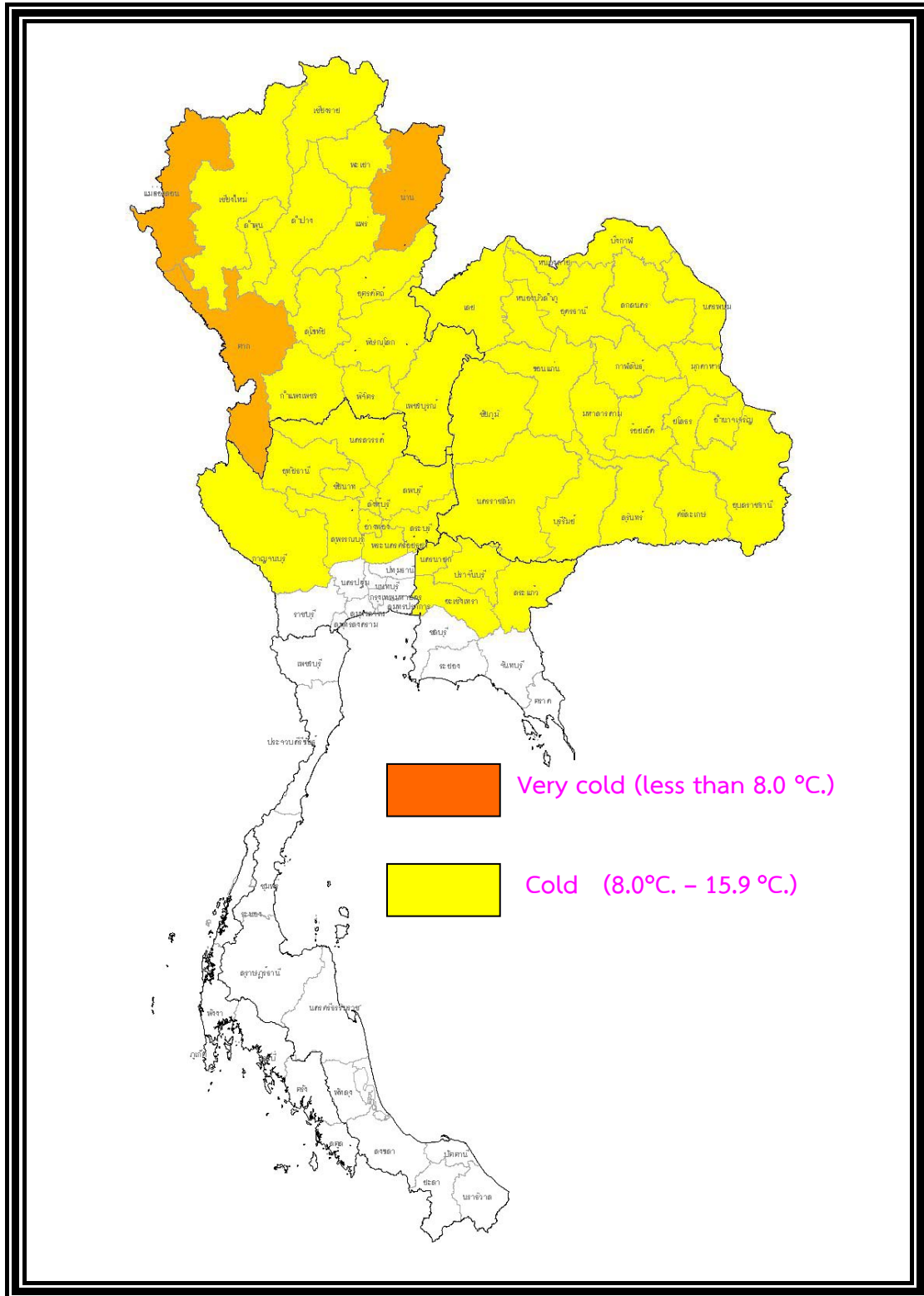
- Next expectations will be updated on the last week of November 2013.

- 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

National Climatological Center, Meteorological Development Bureau,
Thai Meteorological Department, Ministry of Information and Communication
Technology

24th September 2013

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	November2013	December2013	January 2014	February 2014	
				First half	Second half
Northern	Upper 18-20 °C. Isolated showers	15-17 °C. Slightly showers	14-16 °C. Slightly showers	16-18 °C. Slightly showers	17-19 °C.
	Lower 20-22 °C. Isolated showers	17-19 °C. Slightly showers	17-19 °C. Slightly showers	18-20 °C.	19-21 °C.
Northeastern	Upper 18-20 °C. Isolated showers	15-17 °C. Slightly showers	15-17 °C. Slightly showers	17-19 °C. Slightly showers	18-20 °C.
	Lower 20-22 °C. Isolated showers	17-19 °C. Slightly showers	17-19 °C. Slightly showers	19-21 °C.	20-22 °C.
Central	21-23 °C. Isolated showers	20-22 °C. Slightly showers	19-21 °C. Slightly showers	22-24 °C. Slightly showers	23-25 °C.
East	22-24 °C. Widely scattered showers	20-22 °C. Slightly showers	20-22 °C. Slightly showers	22-24 °C. Isolated showers	23-25 °C.
Southern Thailand (East coast)	23-25 °C. Almost widespread thundershowers and heavy to very heavy falls in some areas, mainly from Chumphon southward.	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. Scattered showers and isolated heavy falls.	23-25 °C. Widely scattered showers.	22-24 °C. Isolated showers	22-24 °C. Isolated showers	
Bangkok Metropolis and Vicinity	22-24 °C. Widely scattered showers.	21-23 °C. Isolated shower	21-23 °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.