#### Monthly Weather Summary in Thailand December 2011

Throughout the month, the high pressure area from China continuously extended to cover upper Thailand and occasionally strengthen. It brought cool and cold weather to upper Thailand especially during middle and late December. In the mountainous areas and mountaintop, the weather was cold and very cold. Thailand's mean temperature of 24.2 °C was 0.3 °C above normal. In upper Thailand, there was scanty rainfall but some areas remained severe flooding from the previous month. Southern Thailand received abundant rainfall nearly the whole month with flash flooding in some areas of southern east coast especially during 15<sup>th</sup>-16<sup>th</sup> and 31<sup>st</sup> associated with the moderate to rather active northeast monsoon and the low pressure cell in the lower South China Sea which moved to cover Malaysia and the lower southern Thailand.

The total rainfall over Thailand in December was 25% above normal. Monthly rainfall were higher than normal in southern part (east coast) 83.6 mm (37%) and southern part (west coast) 19.4 mm (30%) while the rainfall of rest areas were lower than normal i.e. northern part 7.5 mm (93%), northeastern part 3.4 mm (97%), central part 4.6 mm (85%) and eastern part 4.2 mm (55%).

1-10 December: The high pressure area from China covered upper Thailand and the South China Sea during early and mid periods then another active high pressure area from China extended to cover the said areas. Cool weather occurred in the northern and northeastern parts with cold weather in some areas, while the other part experienced cool weather mainly in upper portion nearly the whole period. The minimum temperature of the period was 12.5 °C, at Agrometeorological Station in Nakhon Phanom province on December 10 and 6.0 °C was in the area of mountain top at Doi Angkhang, Amphoe Fang in Chiang Mai province on December 7 and Phu Rua Nation Park in Loei province on December 8 and 10. Upper Thailand turned unseasonable rainfall mainly in the northern part; the maximum daily rainfall was 15.1 mm at Muang in Nan province on December 1. Southern Thailand experienced cool weather in several areas and scattered to fairly widespread rain with isolated heavy to very heavy rainfall by the influence of the moderate to rather active northeast monsoon. The heaviest daily rainfall was 191.5 mm at Muang in Narathiwat province on December 10. Strong winds and high waves occurred at Nahkon Si Thammarat, Songkhla and Pattani provinces during late period.

11-20 December: During this period, the ridge of rather active high pressure from China continuously covered upper Thailand, causing temperature relatively decreased with cool and cold weather in most of areas especially in the northern and northeastern parts. Mountainous areas and mountaintop experienced cold and very cold weather. In central and eastern Thailand, generally cool weather nearly the whole period and cold weather in some areas during the first half of the period. The lowest minimum temperature was 9.2 °C at Umphang in Tak province on December 14 and 3.0 °C was measured at Doi Angkhang, Amphoe Fang in Chiang Mai province on December 20.There was isolated slight rain in northern part on December 11 and in northeastern part on December 15 while scattered to fairly widespread rain with isolated heavy to very heavy rainfall was observed in southern part mainly along the east coast from Surat Thani southward. The heaviest daily rainfall of 175.0 mm was measured at Muang in Phattalung province on December 16 with flash flooding at Songkhla and Phattalung provinces on December 17.

21-31 December: The high pressure area still covered upper Thailand during early period then another active high pressure area from China extended to cover the mentioned area and weakened during late period. The weather in northern and northeastern parts remained cool and cold especially during middle period. Moreover, cool weather was observed in most areas of central and eastern parts nearly the whole period. The lowest minimum temperature was 9.0 °C at Agrometeorological Station in Sakon Nakhon province on December 25 and Agrometeorological Station in Nakhon Phanom province on December 27. The temperature dropped to 1.5 °C over the area of mountain top Doi Angkhang, Amphoe Fang in Chiang Mai province on December 21and frost occurred at Doi Intanon, Amphoe Chom Thong in Chiang Mai province on December 21. In southern part, cool weather in several areas of the upper portion while plentiful of rainfall with heavy and very heavy rainfall experienced in several areas mainly from Chumphon southward as the active northeast monsoon and the low pressure cell in the lower South China Sea that moved to cover Malaysia and the lower southern Thailand during late period. The maximum daily rainfall was 325.3 mm at Ru So in Narathiwat province on December 31. Strong wind wave occurred at Prachuap Khiri Khan, Chumphon, Surat Thani and Nahkon Si Thammarat provinces on December 25. Floods were reported at Prachuap Khiri Khan province on December 25 and Narathiwat province on December 31.

Note: Rainfall, temperatures and natural disasters in this report were updated up to January 6, 2012.

#### Monthly Current Report Rainfall and Accumulative Rainfal December 2011

## Northern Thailand

	Temperature (°c)		Rainfa	ll (mm)	Accumulative rainfall (mm) Since 1 January		
Station		Above		Above		Above	
	Mean	or below	Actual	or below	Actual	or below	
		normal		normal		normal	
Chiang Rai	20.3	1.4	6.3	-12.2	2042.6	340.4	
Mae Hong Son	21.9	1.2	0.3	-14.0	1686.1	403.8	
Phayao	20.7	0.9	0.0	-11.5	1399.0	303.1	
Chiang Mai	23.1	2.0	0.6	-17.5	1449.5	315.5	
Tha Wang Pha	21.2	1.1	0.0	-9.3	1941.7	545.4	
Nan	22.0	1.6	1.3	-5.5	1954.5	717.2	
Lamphun	22.3	1.2	0.0	-7.2	1706.7	744.3	
Lampang	22.2	1.2	0.0	-7.6	1862.5	802.5	
Mae Sariang	22.3	1.4	0.9	-7.9	1647.3	507.6	
Phrae	22.4	0.8	0.0	-7.0	1550.0	468.1	
Uttaradit	24.1	0.7	0.7	-3.4	2112.8	702.5	
Bhumibol Dam	22.5	-0.2	1.8	-5.4	1325.9	290.0	
Tak	23.5	0.9	0.0	-5.2	1407.5	353.7	
Mae Sot	23.4	1.7	0.0	-4.2	2062.0	666.7	
Umphang	20.5	1.1	0.0	-3.2	1928.9	501.4	
Phitsanulok	24.4	0.3	0.0	-6.6	1853.6	518.0	
Lom Sak	23.8	0.3	0.0	-4.5	1035.5	-8.8	
Phetchabun	24.1	0.9	0.0	-6.6	1602.1	523.0	
Wichian Buri	24.7	0.2	0.0	-4.9	1612.4	408.2	
Kamphaeng Phet	24.2	0.5	0.1	-5.5	1594.2	313.9	
Over the area	22.7	1.0	0.6	-7.5	1688.7	470.9	
				-93%		39%	

#### Northeastern Thailand

	Temperature (°c)		Rainfa	ll (mm)	Accumulative rainfall (mm) Since 1 January		
Station		Above		Above		Above	
	Mean	or below	Actual	or below	Actual	or below	
		normal		normal		normal	
Nong Khai	22.1	0.4	0.0	-5.0	2408.8	869.5	
Loei	21.1	0.3	0.2	-5.3	1972.2	734.7	
Udon Thani	21.8	-0.3	0.0	-5.0	1714.5	323.7	
Nakhon Phanom	21.3	-0.3	0.0	-4.8	2719.6	463.8	
Sakon Nakhon	21.1	-0.6	0.0	-6.3	1892.6	292.7	
Mukdahan	21.1	-0.8	0.0	-2.7	1775.2	268.1	
Khon Kaen	22.4	-0.2	0.0	-5.1	1377.1	167.8	
Kosum Phisai	22.7	-0.4	0.0	-4.4	1365.8	147.2	
Roi Et	22.0	-0.5	0.0	-2.1	1550.1	204.8	
Chaiyaphum	23.2	-0.2	0.0	-5.3	1274.3	156.3	
Ubon Ratchathani	22.8	-0.5	0.0	-1.3	1956.8	375.4	
Tha Tum	22.7	-0.8	0.0	-0.9	1544.1	154.2	
Surin	22.9	-0.4	0.0	-1.0	1804.8	453.2	
Nakhon Ratchasima	23.1	0.0	0.0	-3.0	1208.6	173.9	
Chok Chai	22.9	-0.4	0.3	-1.5	1187.2	90.6	
Nang Rong	22.4	-1.0	1.0	-1.3	1302.1	113.9	
Over the area	22.2	-0.4	0.1	-3.4	1690.9	311.8	
				-97%		23%	

NOTES: 1) Mean temperature is the average of daily dry-bulb temperatur 2) "T" is trace, rainfall amount less than 0.1 mm. 3) "blank" is incomplete data.

4) Temperature and rainfall are preliminary data

# Monthly Current Report Rainfall and Accumulative Rainfal December 2011

## Central Thailand

	Temperature ( °c)		Rainfa	ll (mm)	Accumulative rainfall (mm Since 1 January		
Station		Above		Above		Above	
	Mean	or below	Actual	or below	Actual	or below	
		normal		normal		normal	
Nakhon Sawan	24.5	-0.1	4.7	-0.2	1547.0	469.6	
Bua Chum	24.0	-0.1	0.0	-2.9	1112.0	26.8	
Lop Buri	25.8	0.2	0.0	-4.4	1270.6	146.8	
Suphan Buri	24.9	0.3	0.0	-9.3	999.9	-60.0	
Thong Pha Phum	24.1	0.6	0.0	-2.9	1913.9	150.4	
Kanchanaburi	25.3	0.6	0.0	-6.2	1067.0	11.7	
Bangkok Airport	-	-	-	-	1958.0	726.1	
Bangkok Metropolis	26.8	0.9	0.7	-4.3	2240.3	697.1	
Over the area	25.1	0.2	0.8	-4.6	1513.6	271.0	
				-85%		22%	

## Eastern Thailand

	Temperature ( °c)		Rainfa	ll (mm)	Accumulative rainfall (mm Since 1 January		
Station		Above		Above		Above	
	Mean	or below	Actual	or below	Actual	or below	
		normal		normal		normal	
Prachin Buri	26.2	0.2	0.0	-6.9	2468.5	590.2	
Kabin Buri	24.9	-0.6	0.0	-5.3	1156.7	-494.9	
Aranyaprathet	25.2	0.4	0.4	-3.4	1429.4	52.8	
Chon Buri	26.7	0.8	0.0	-4.7	1703.8	405.0	
Ko Sichang	26.4	0.4	0.0	-7.5	1021.8	-232.4	
Pattaya	25.9	0.3	0.0	-6.4	1290.6	166.8	
Sattahip	25.9	0.4	0.0	-8.6	1409.2	123.2	
Rayong	25.9	0.1	0.6	-4.0	1650.4	249.1	
Chanthaburi	26.0	0.5	0.0	-8.2	3316.7	464.6	
Khlong Yai	27.3	0.6	32.9	12.7	5496.3	759.2	
Over the area	26.0	0.3	3.4	-4.2	2094.3	208.2	
				-55%		11%	

NOTES: 1) Mean temperature is the average of daily dry-bulb temperature

- 2) "T" is trace, rainfall amount less than 0.1 mm.
- 3) "blank" is incomplete data.
- 4) Temperature and rainfall are preliminary data.

# Monthly Current Report Rainfall and Accumulative Rainfal December 2011

# Southern Thailand, east coast

	Temperature ( °c)		Rainfa	ll (mm)	Accumulative rainfall (mm Since 1 January		
Station		Above		Above		Above	
	Mean	or below	Actual	or below	Actual	or below	
		normal		normal		normal	
Phetchaburi	25.8	0.7	0.6	-10.5	977.7	-9.7	
Hua Hin	26.4	1.0	3.5	-8.9	684.8	-280.9	
Prachuap Khiri Khan	25.9	0.8	68.8	46.6	901.5	-211.1	
Chumphon	25.6	0.5	86.9	-11.8	2044.3	168.0	
Surat Thani	25.6	0.1	177.9	43.1	1978.8	459.0	
Ko Samui	26.9	0.5	119.1	-91.6	2655.5	709.6	
Nakhon Si Thammarat	25.6	0.0	404.9	-10.9	4201.6	1805.5	
Songkhla	26.7	0.0	735.9	315.6	3203.4	1208.5	
Hat Yai Airport	25.8	0.4	438.2	168.8	2297.5	612.9	
Pattani Airport	26.2	0.5	501.0	136.9	2448.9	605.5	
Narathiwat	26.0	0.1	902.0	342.4	4100.2	1615.0	
Over the area	26.0	0.4	312.6	83.6	2317.7	607.5	
				37%		36%	

# Southern Thailand, west coast

	Temperature (°c)		Rainfall (mm)		Accumulative rainfall (mm Since 1 January		
Station		Above		Above		Above	
	Mean	or below	Actual	or below	Actual	or below	
		normal		normal		normal	
Ranong	26.5	0.5	21.0	-14.6	4151.5	32.2	
Takua Pa	27.1	0.9	104.7	48.8	4282.1	643.5	
Phuket	28.1	0.7	50.1	-9.3	2400.6	129.4	
Phuket Airport	27.5	1.1	114.6	48.7	3113.1	616.3	
Ko Lanta	27.1	0.3	64.8	16.4	2039.1	-144.4	
Trang Airport	26.4	0.4	138.6	28.2	2335.4	139.1	
Satun	27.4	0.6	99.1	17.4	2427.5	147.8	
Over the area	27.2	0.7	84.7	19.4	2964.2	223.5	
				30%		8%	

NOTES: 1) Mean temperature is the average of daily dry-bulb temperature

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## **Monthly Current Report** December 2011

		Temper	ature ( °c)	Rainfa	ll (mm)	Accumulative Since 1	rainfall (mm January
Region	Station		Above		Above		Above
		Mean	or below normal	Actual	or below normal	Actual	or below normal
	Chiang Rai	20.3	1.4	6.3	-12.2	2042.6	340.4
	Mae Hong Son	21.9	1.2	0.3	-14.0	1686.1	403.8
	Phayao	20.7	0.9	0.0	-11.5	1399.0	303.1
	Chiang Mai	23.1	2.0	0.6	-17.5	1449.5	315.5
	Tha Wang Pha	21.2	1.1	0.0	-9.3	1941.7	545.4
	Nan	22.0	1.6	1.3	-5.5	1954.5	717.2
	Lamphun	22.3	1.2	0.0	-7.2	1706.7	744.3
	Lampang	22.2	1.2	0.0	-7.6	1862.5	802.5
	Mae Sariang	22.3	1.4	0.9	-7.9	1647.3	507.6
North	Phrae	22.4	0.8	0.0	-7.0	1550.0	468.1
	Uttaradit Bhumibol Dam	24.1 22.5	0.7 -0.2	0.7 1.8	-3.4 -5.4	2112.8 1325.9	702.5 290.0
	Tak	23.5	0.9	0.0	-5.4	1407.5	353.7
	Mae Sot	23.4	1.7	0.0	-4.2	2062.0	666.7
	Umphang	20.5	1.1	0.0	-3.2	1928.9	501.4
	Phitsanulok	24.4	0.3	0.0	-6.6	1853.6	518.0
	Lom Sak	23.8	0.3	0.0	-4.5	1035.5	-8.8
	Phetchabun	24.1	0.9	0.0	-6.6	1602.1	523.0
	Wichian Buri	24.7	0.2	0.0	-4.9	1612.4	408.2
	Kamphaeng Phet	24.2	0.5	0.1	-5.5	1594.2	313.9
	Nong Khai	22.1	0.4	0.0	-5.0	2408.8	869.5
	Loei	21.1	0.3	0.2	-5.3	1972.2	734.7
	Udon Thani	21.8	-0.3	0.0	-5.0	1714.5	323.7
	Nakhon Phanom	21.3	-0.3	0.0	-4.8	2719.6	463.8
	Sakon Nakhon	21.1	-0.6	0.0	-6.3	1892.6	292.7
	Mukdahan	21.1	-0.8	0.0	-2.7	1775.2	268.1
	Khon Kaen	22.4	-0.2	0.0	-5.1	1377.1	167.8
Northeast	Kosum Phisai	22.7	-0.4	0.0	-4.4	1365.8	147.2
	Roi Et	22.0	-0.5	0.0	-2.1	1550.1	204.8
	Chaiyaphum	23.2	-0.2	0.0	-5.3	1274.3	156.3
	Ubon Ratchathani	22.8	-0.5	0.0	-1.3	1956.8	375.4
	Tha Tum Surin	22.7	-0.8	0.0	-0.9	1544.1	154.2
	Nakhon Ratchasima	22.9 23.1	-0.4 0.0	0.0 0.0	-1.0 -3.0	1804.8 1208.6	453.2 173.9
	Chok Chai	22.9	-0.4	0.0	-1.5	1187.2	90.6
	Nang Rong	22.4	-1.0	1.0	-1.3	1302.1	113.9
	Nakhon Sawan	24.5	-0.1	4.7	-0.2	1547.0	469.6
	Bua Chum	24.0	-0.1	0.0	-2.9	1112.0	26.8
	Lop Buri	25.8	0.2	0.0	-4.4	1270.6	146.8
Control	Suphan Buri	24.9	0.3	0.0	-9.3	999.9	-60.0
Central	Thong Pha Phum	24.1	0.6	0.0	-2.9	1913.9	150.4
	Kanchanaburi	25.3	0.6	0.0	-6.2	1067.0	11.7
	Bangkok Airport	-	-	-	-	1958.0	726.1
	Bangkok Metropolis	26.8	0.9	0.7	-4.3	2240.3	697.1
	Prachin Buri	26.2	0.2	0.0	-6.9	2468.5	590.2
	Kabin Buri	24.9	-0.6	0.0	-5.3	1156.7	-494.9
	Aranyaprathet	25.2	0.4	0.4	-3.4	1429.4	52.8
	Chon Buri	26.7	0.8	0.0	-4.7	1703.8	405.0
East	Ko Sichang	26.4	0.4	0.0	-7.5	1021.8	-232.4
	Pattaya	25.9	0.3	0.0	-6.4	1290.6	166.8
	Sattahip	25.9	0.4	0.0	-8.6	1409.2	123.2
	Rayong Chanthaburi	25.9	0.1 0.5	0.6 0.0	-4.0 -8.2	1650.4 3316.7	249.1 464.6
	Chanthaburi Khlong Yai	26.0 27.3	0.5	32.9	-8.2 12.7	5496.3	759.2
	Phetchaburi	25.8	0.6	0.6	-10.5	977.7	-9.7
	Hua Hin	26.4	1.0	3.5	-10.3	684.8	-280.9
	Prachuap Khiri Khan	25.9	0.8	68.8	46.6	901.5	-211.1
	Chumphon	25.6	0.5	86.9	-11.8	2044.3	168.0
d	Surat Thani	25.6	0.1	177.9	43.1	1978.8	459.0
uth	Ko Samui	26.9	0.5	119.1	-91.6	2655.5	709.6
(East Coast)	Nakhon Si Thammarat	25.6	0.0	404.9	-10.9	4201.6	1805.5
	Songkhla	26.7	0.0	735.9	315.6	3203.4	1208.5
	Hat Yai Airport	25.8	0.4	438.2	168.8	2297.5	612.9
	Pattani Airport	26.2	0.5	501.0	136.9	2448.9	605.5
	Narathiwat	26.0	0.1	902.0	342.4	4100.2	1615.0
	Ranong	26.5	0.5	21.0	-14.6	4151.5	32.2
	Takua Pa	27.1	0.9	104.7	48.8	4282.1	643.5
uth	Phuket	28.1	0.7	50.1	-9.3	2400.6	129.4
(West Coast)	Phuket Airport	27.5	1.1	114.6	48.7	3113.1	616.3
(WEST COAST)	Ko Lanta	27.1	0.3	64.8	16.4	2039.1	-144.4
	Trang Airport	26.4	0.4	138.6	28.2	2335.4	139.1
	Satun	27.4	0.6	99.1	17.4	2427.5	147.8
	Over the area	24.2	0.3	57.5	11.5	1946.2	373.7

NOTES: 1) Mean temperature is the average of daily dry-bulb temperatur

<sup>2) &</sup>quot;T" is trace, rainfall amount less than 0.1 mm.3) "blank" is incomplete data

<sup>4)</sup> Temperature and rainfall are preliminary data