Monthly Weather Summary in Thailand March 2011

Typically, climate March in commissioning of Thailand is often hot and humid with scattered smaller. But in March 2011 the weather of Thailand was cooler than usual and has gotten cold areas in Northern and Northeastern parts. The influence of high pressure area from China which occasionally extended its ridge to cover upper Thailand throughout the month leading to sharply drop in temperature mainly during 17-18 and 28-31 March. In addition westerly trough that moved to cover upper Thailand during mid March produced rainfall in upper Thailand. In southern part, the prevailing of easterly wind and the low pressure cell dominating over the middle part resulted in abundant rainfall almost the month with heavy to very heavy rainfalls in many areas especially during the late March. Widely severe floods and mudslide were reported in much of southern Thailand. Moreover, torrential rain triggered massive flooding seriously destroyed homes and croplands. Monthly rainfall of March was higher than its previous highest record during 36 years period and highly above normal in 5 regions i.e. northern part 82.1 mm (334%), central part 93.2 mm (305%), eastern part 61.6 mm (113%), southern part (east coast) 506.6 mm (1005%) and southern part (west coast) 353.7 mm (502%) while it was below normal in northeastern part 14.6 mm (39%). Mean temperatures of March were 1-3 °C below normal in general with the new lowest record of minimum temperature in some stations.

- 1 12 March: Cool weather generally observed in northern and northeastern parts with cold weather in some areas. The lowest minimum temperature of the period was 15.7 °C at Agrometeorological station in Sakon Nakhon province on March 11. Daytime temperature relatively increased with hot weather in many areas of upper Thailand mainly during middle period and very hot weather was observed in some areas with the highest maximum temperature of 40.4 °C at Amphoe Muang in Tak province on March 7. However, isolated to widely scattered rainfall was found in upper Thailand mainly during the early and late of the period, except for scanty rainfall in northeastern part. In southern part, isolated rain was found during the first half of the period then increasing in rainfall with scattered to fairy widespread rain. The highest daily rainfall of 122.0 mm was measured at Amphoe Srinagarindra in Phatthalung province on March 8.
- 13 22 March: Under the influence of the westerly trough and the rather active high pressure area that covered upper Thailand during early and middle of the period causing fairy widespread rain with heavy to very heavy rainfall in some areas. The maximum daily rainfall in upper Thailand was 101.4 mm at Amphoe Muang in Prachin Buri province on March 14. The temperature in upper Thailand decreased sharply about 6-10 °C during 17-18 March and cold weather occurred in most areas of northern and northeastern parts whereas the central, eastern and upper southern parts were generally cool with cold weather in some areas of central part. The lowest temperature of 12.0 °C was measured at Amphoe Thung Chang in Nan province on March 17 and 18. The minimum temperature of the mountaintop was 7.0 °C measured at Doi Angkhang, Amphoe Fang in Chiang Mai province on March 17. The weather turned hot in daytime in late period with maximum temperature of 39.1 °C at Amphoe Tha Phra in Khon Kaen province on March 22. In southern Thailand, scattered rain was observed in almost the period with heavy to very heavy rainfall in some areas and the maximum daily rainfall was 149.6 mm at Amphoe Muang in Nakhon Si Thammarat provinces on March 17.

23-31 March: Due to the rather active high pressure area extended its ridge to cover upper Thailand and the strong easterly wind prevailed over the Gulf of Thailand and southern part. It brought unseasonable rainfall across upper Thailand where experienced widely scattered to scattered rain almost the period with heavy rainfall in some areas. Cool weather still existed in most regions of Thailand and cold weather occurred in several areas of the northern, northeastern and some area of central part. The lowest minimum temperature was 12.2 C at Amphoe Muang in Nong Khai province on March 30 and 7.6 °C in the mountainous areas at Doi Angkhang on the same day. In southern part, plentiful rainfall continued to occur with heavy to very heavy rainfall in several areas due to the influence of the active low pressure cell covered the middle of southern part during middle and late period. The highest maximum daily rainfall was 425.0 mm at Amphoe Don Sak in Surat Thani province on March 28. The 10 provinces i.e. Chumphon, Surat Thani, Nakhon Si Thammarat, Songkhla, Phatthalung, Narathiwat, Phang-nga, Trang, Krabi and Satun provinces experienced extensive flooding almost the whole period and the mudslides were reported in Chumphon, Surat Thani, Trang and Krabi provinces during the second half of the period. In addition, an earthquake measured at 6.7 richter hit Myanmar on March 25 and was felt in many areas of the northern, northeastern and in Bangkok, Thailand.

Breaking records of daily rainfall in March

GL III	New Record 2	2011	Old Red	Ctart Waar	
Station	Rainfall (mm.)	Date	Rainfall (mm.)	Date / Year	Start year
Sukhothai	49.5	17	13.0	22/2007	2000
Tak (Mae Sot)	84.0	17	48.0	19/2005	1951
Tak (Doi Muser)	52.8	17	46.5	8/2001	1992
Bangkok (Don Mueang)	90.5	22	77.0	30/2006	1951
Surat Thani	241.5	29	67.2	21/1994	1988
Surat Thani (Agromet Stn.)	275.1	25	96.0	26/2000	1993
Surat Thani (Ko Samui)	414.7	28	163.8	11/2001	1969
Nakhon Si Thammarat	290.4	25	119.8	25/2005	1952
Nakhon Si Thammarat (Agromet Stn.)	215.0	25	133.7	27/2000	1984
Phatthalung (Agromet Stn.)	199.1	24	108.4	1/2000	1981
Songkhla (Korhong District)	106.8	28	94.8	20/1999	1969
Narathiwat	395.9	28	154.2	25/1973	1956
Phang-nga (Takua Pa)	105.2	29	85.2	31/2010	1981
Phuket Airport	185.4	29	184.7	25/2003	1952
Krabi	161.4	29	62.2	21/2009	1994
Trang	121.1	28	101.3	25/1966	1951

Breaking record of daily minimum temperature in March

Chatian	New Record 20	11	Old Reco	Start Waar	
Station	Temperature(°C)	Date	Temperature(°C)	Date / Year	Start year
Lamphang (Thoen)	14.8	17	15.1	2 / 2010	2004
Sukhothai	15.2	18	17.4	6 / 2008	2000
Buri Ram	14.3	30	15.8	5 / 2008	2003
Ayutthaya (Agromet Stn.)	16.7	17	17.0	7 / 2005	1992
Pathum Thani (Agromet Stn)	17.2	17	17.6	6 / 2005	1999
Bangkok (Khlong Toei)	18.0	17	19.2	6 / 2005	1994
Chon Buri (Laem Chabang)	18.5	18	19.0	3 / 1997	1992
				6 / 2005	

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<u>Note</u>: Rainfall, temperatures and natural disasters available in this report are preliminary data.

Climatological Center Meteorological Development Bureau Meteorological Department

Monthly Current Report Rainfall and Accumulative Rainfall March 2011

Northern Thailand

	Tempera	ture (°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	23.6	-0.8	91.9	71.0	117.5	73.2		
Mae Hong Son	25.4	-0.9	71.2	54.6	85.9	56.8		
Phayao	24.6	-2.6	68.0	45.4	72.2	33.3		
Chiang Mai	25.4	-1.3	60.4	43.1	63.8	29.6		
Tha Wang Pha	24.9	-1.1	73.4	37.8	86.4	29.6		
Nan	25.2	-1.1	90.8	59.2	91.6	39.6		
Lamphun	25.2	-2.7	73.5	60.4	81.7	60.3		
Lampang	25.5	-1.9	92.3	71.8	98.6	64.9		
Mae Sariang	24.9	-1.5	156.6	145.3	170.0	144.7		
Phrae	25.3	-2.3	90.9	66.3	94.9	54.3		
Uttaradit	26.1	-2.5	160.7	135.3	162.7	115.0		
Bhumibol Dam	25.2	-4.8	242.8	224.7	245.9	216.0		
Tak	26.3	-3.8	124.1	110.7	126.1	100.1		
Mae Sot	25.3	-1.8	147.7	139.0	158.5	139.5		
Umphang	23.2	-1.0	128.2	95.8	141.5	87.8		
Phitsanulok	26.4	-2.7	110.4	79.9	134.0	85.5		
Lom Sak	25.7	-2.2	88.1	45.1	112.7	41.9		
Phetchabun	25.9	-2.7	67.8	29.4	116.2	53.2		
Wichian Buri	26.8	-2.8	69.5	31.6	86.3	27.6		
Kamphaeng Phet	26.1	-2.8	124.7	94.3	128.3	82.6		
Over the area	25.4	-2.1	106.7	82.1	118.7	76.8		
				334%		183%		

Northeastern Thailand

	Tempera	uture (°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	24.6	-2.8	61.8	31.5	63.2	11.5		
Loei	24.1	-2.7	83.6	41.7	103.0	38.4		
Udon Thani	24.7	-3.3	42.5	-5.0	67.3	-6.4		
Nakhon Phanom	24.1	-2.8	18.4	-31.0	23.2	-57.0		
Sakon Nakhon	23.9	-3.5	21.5	-24.4	36.3	-39.4		
Mukdahan	23.8	-4.2	7.3	-22.3	18.7	-34.2		
Khon Kaen	25.0	-3.6	15.6	-22.3	17.2	-38.8		
Kosum Phisai	25.0	-3.5	10.2	-37.6	73.3	9.4		
Roi Et	24.7	-3.4	32.2	5.4	33.0	-19.3		
Chaiyaphum	25.9	-2.9	3.0	-36.7	7.8	-53.9		
Ubon Ratchathani	25.7	-3.0	10.5	-14.4	11.6	-31.0		
Tha Tum	25.7	-3.2	20.6	-20.7	30.1	-28.8		
Surin	26.0	-2.8	3.1	-23.0	60.0	17.4		
Nakhon Ratchasima	26.1	-2.6	10.0	-26.1	20.2	-39.9		
Chok Chai	26.0	-2.5	16.0	-20.1	32.0	-19.3		
Nang Rong	25.9	-2.7	13.1	-28.5	18.3	-45.5		
Over the area	25.1 -3.1		23.1	-14.6	38.5	-21.0		
				-39%		-35%		

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 Rainfall March 2011

Central Thailand

	Tempera	nture (°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	26.5	-3.8	100.7	67.3	133.9	82.6		
Bua Chum	26.9	-2.7	5.0	-34.5	9.4	-44.0		
Lop Buri	26.9	-2.6	47.5	22.0	47.5	5.7		
Suphan Buri	26.5	-2.4	83.9	65.6	86.7	54.6		
Thong Pha Phum	26.5	-2.2	193.1	150.5	239.7	175.9		
Kanchanaburi	26.5	-3.4	240.6	213.1	278.7	234.6		
Bangkok Airport	26.9	-2.0	146.0	119.1	182.2	134.8		
Bangkok Metropolis	27.1	-2.0	173.3	142.0	195.4	135.4		
Over the area	26.7	-2.7	123.8	93.2	146.7	97.5		
				305%		198%		

Eastern Thailand

	Tempera	nture (°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	27.6	-2.0	149.1	99.0	180.3	105.4		
Kabin Buri	26.5	-2.6	61.8	13.1	104.0	26.7		
Aranyaprathet	27.8	-1.5	32.5	-20.5	34.9	-47.9		
Chon Buri	27.2	-1.7	119.0	84.5	143.1	81.0		
Ko Sichang	26.6	-2.1	75.6	37.9	104.7	39.3		
Pattaya	26.2	-2.0	82.2	37.0	159.6	88.3		
Sattahip	26.4	-2.1	154.8	105.9	241.2	141.7		
Rayong	26.6	-2.4	150.6	83.9	215.8	90.8		
Chanthaburi	26.9	-0.8	100.3	43.6	133.2	27.7		
Khlong Yai	27.1	-1.0	235.6	131.3	319.3	100.6		
Over the area	26.9	-1.8	116.2	61.6	163.6	65.3		
				113%		66%		

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 Rainfall March 2011

Southern Thailand, east coast

	Tempera	ture (°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	26.3	-2.1	160.1	142.1	160.1	129.0		
Hua Hin	26.3	-1.9	105.0	77.1	105.2	49.1		
Prachuap Khiri Khan	26.1	-1.4	114.8	70.9	145.5	42.3		
Chumphon	26.3	-1.3	470.6	402.7	486.9	284.7		
Surat Thani	26.4	-1.2	809.4	771.4	975.0	878.4		
Ko Samui	27.1	-1.1	1170.1	1104.5	1545.4	1293.0		
Nakhon Si Thammarat	26.4	-0.9	1543.7	1484.0	2147.9	1881.4		
Songkhla	27.2	-1.2	527.1	483.2	787.9	652.4		
Hat Yai Airport	26.8	-0.7	249.0	193.6	427.1	304.4		
Pattani Airport	26.8	-0.3	213.1	173.6	362.1	243.5		
Narathiwat	26.4	-1.0	764.6	670.2	1156.6	931.3		
Over the area	26.6 -1.1		557.0 506.6		754.5	608.1		
				1005%		415%		

Southern Thailand, west coast

	Tempera	nture (°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			
Ranong	26.5	-1.6	393.3	343.4	479.4	400.8 538.7			
Takua Pa	26.3	-1.4	561.3	468.0	705.9				
Phuket	28.1	-1.1	377.1	317.9	456.7	345.5			
Phuket Airport	27.1	27.1	27.1	27.1	-1.0	547.5	473.5	655.0	512.5
Ko Lanta	27.2	-1.7	232.2	178.6	241.8	161.1			
Trang Airport	26.9	-1.2	448.7	383.8	574.5	450.0			
Satun	27.2	-1.2	409.1	310.7	442.5	292.3			
Over the area	27.0	-1.4	424.2	353.7	508.0	385.9			
				502%		316%			

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.

ปริมาณฝน (มม.) เดือนมีนาคม และการจัดอันดับจากมากไปน้อย

คาบ 36 ปี (พ.ศ.2519-2554)

ภาค	เห	นื้อ	เหา	นือ	ตะวันออกเ	ฉียงเหนือ	ตะวันออกเ		กล	•	ตะวัน		ใต้ฝั่งตะ	วันออก	ใต้ฝั่งตะ	ะวันตก	ประเท	เศไทย	กรุงเทพม	Jหานคร
	ตอเ	เบน	ตอน	เล่าง	ตอน	บน	ตอน	ล่าง												
พ.ศ.	ปริมาณฝน	อันดับที่	ปริมาณฝน	อันดับที่	ปริมาณฝน	อันดับที่	ปริมาณฝน	อันดับที่	ปริมาณฝน	อันดับที่	ปริมาณฝน	อันดับที่	ปริมาณฝน	อันดับที่	ปริมาณฝน	อันดับที่	ปริมาณฝน	อันดับที่	ปริมาณฝน	อันดับที่
2519	15.9	17	23.0	17	34.7	21	44.0	15	42.2	12	86.4	9	35.4	22	41.1	25	40.3	16	1.8	31
2520	26.0	12	36.2	11	18.4	29	12.0	30	29.6	17	30.0	31	31.1	24	2.3	36	24.9	28	4.2	25
2521	2.5	30	9.9	30	55.1	14	31.8	20	4.6	32	38.1	24	15.5	28	65.5	21	25.1	27	1.0	32
2522	2.8	29	1.7	35	9.1	34	3.0	35	0.1	35	13.6	34	4.1	35	17.5	32	5.7	35	0.0	34
2523	34.8	7	31.4	14	28.9	26	40.3	16	12.9	27	57.6	16	15.5	28	75.4	16	34.7	22	4.0	26
2524	14.2	20	21.1	22	40.2	17	24.8	21	27.8	18	36.4	27	6.3	34	16.9	33	22.8	30	16.7	20
2525	7.6	27	12.1	28	65.1	11	39.5	17	51.5	7	71.6	14	85.2	9	55.1	22	48.1	13	176.0	1
2526	1.3	33	3.4	34	12.6	33	2.2	36	9.5	29	37.5	25	49.5	16	33.3	30	19.5	32	29.0	17
2527	1.0	35	22.4	20	23.1	27	48.2	14	38.8	14	48.0	19	48.0	18	72.1	20	37.0	21	33.9	15
2528	1.1	34	25.1	16	22.8	28	15.3	27	14.6	26	61.0	15	82.0	10	83.4	13	38.8	19	11.3	24
2529	2.2	31	4.2	33	15.1	31	7.8	33	0.3	34	3.9	36	14.9	30	27.0	31	8.8	34	0.0	34
2530	21.9	15	51.4	8	58.0	12	22.9	23	27.2	19	32.7	29	24.3	26	33.5	29	33.0	23	41.4	13
2531	3.4	28	10.0	29	36.0	19	20.0	25	19.0	24	46.4	21	25.4	25	41.0	26	24.2	29	2.7	28
2532	9.4	25	34.5	13	74.2	5	73.5	6	49.5	8	81.2	10	43.6	19	75.0	17	53.0	11	82.0	5
2533	31.7	9	63.3	6	66.1	10	91.5	1	45.6	10	90.8	8	9.0	32	75.8	15	56.6	10	50.7	10
2534	10.4	22	19.7	24	55.7	13	20.3	24	22.0	23	32.8	28	38.4	21	83.2	14	33.0	23	12.0	23
2535	0.0	36	0.2	36	6.1	36	4.0	34	0.0	36	7.8	35	2.2	36	16.1	34	4.1	36	0.0	34
2536	37.2	5	36.9	10	16.7	30	58.2	11	48.9	9	122.5	3	98.8	7	125.9	10	69.8	8	78.9	6
2537	125.7	1	102.1	3	89.5	2	58.2	11	90.5	4	93.8	7	238.1	3	144.3	6	123.3	3	35.1	14
2538	9.5	24	21.3	21	34.0	22	38.2	19	25.6	21	37.5	25	32.2	23	127.7	9	38.4	20	56.6	8
2539	15.6	18	28.7	15	98.2	1	39.2	18	10.1	28	32.5	30	8.2	33	34.0	28	29.8	25	2.4	29
2540	29.2	11	34.7	12	81.6	4	63.0	7	34.5	15	80.5	11	19.7	27	36.7	27	45.6	15	28.5	18
2541	14.1	21	20.3	23	38.4	18	23.4	22	5.8	31	17.7	33	13.7	31	8.8	35	17.3	33	0.9	33
2542	29.6	10	22.9	18	44.0	16	84.4	5	43.6	11	105.5	5	70.4	11	198.5	4	71.3	6	50.9	9
2543	37.1	6	9.4	31	13.9	32	9.8	32	33.0	16	40.4	23	180.5	4	146.4	5	59.8	9	43.9	11
2544	114.4	2	105.1	2	54.7	15	87.7	4	103.9	3	183.2	1	341.5	2	280.7	2	162.4	2	175.1	2
2545	8.3	26	51.0	9	67.4	8	48.3	13	27.1	20	80.5	11	70.1	12	42.8	24	49.6	12	43.7	12
2546	46.8	4	84.7	4	72.8	6	89.1	3	111.9	2	133.7	2	107.0	6	142.6	7	97.9	4	134.6	4
2547	1.6	32	12.8	27	31.7	24	11.4	31	3.4	33	24.8	32	42.8	20	45.8	23	21.1	31	2.0	30
2548	25.0	13	22.8	19	33.5	23	18.9	26	41.5	13	41.2	22	62.6	13	73.3	18	39.1	18	17.4	19
2549	32.9	8	54.8	7	67.0	9	58.3	10	68.7	6	74.9	13	96.9	8	130.9	8	70.7	7	75.4	7
2550	9.6	23	14.1	25	31.3	25	58.4	9	16.2	25	47.3	20	59.1	15	94.4	11	39.9	17	12.7	22
2551	20.0	16	13.0	26	82.8	3	62.8	8	23.5	22	48.1	18	60.5	14	92.4	12	48.0	14	3.6	27
2552	24.2	14	66.4	5	71.0	7	89.7	2	68.9	5	95.3	6	107.3	5	225.4	3	89.9	5	30.2	16
2553	14.9	19	7.7	32	6.5	35	13.7	28	8.7	30	50.4	17	49.2	17	72.5	19	28.0	26	14.6	21
2554	86.9	3	126.4	1	35.8	20	13.2	29	123.8	1	116.2	4	557.0	1	424.2	1	191.0	1	173.3	3

หมายเหตุ 1) ข้อมูลจากสถานีตรวจอากาศและสถานีอุตุนิยมวิทยาอุทก

^{2) &}quot; T " ฝน Trace, ปริมาณฝนไม่ถึง 0.1 มม.

^{3) &}quot; - " ข้อมูลไม่สมบูรณ์