

## Monthly Weather Summary in Thailand

### September 2013

Thailand experienced abundant rainfall almost the month and severe flooding in several areas of upper Thailand with breaking records of rainfall in some areas. These were affected by the monsoon trough and the rather active southwest monsoon prevailing over the Andaman Sea, Thailand and the Gulf of Thailand. In addition with the remnants of two tropical cyclones, the first was tropical depression entering Thailand at Ubon Ratchathani province on September 19 and the second was typhoon “Wutip (1321)” in the middle South China Sea during late September that downgraded to the tropical depression before entering Thailand at Nakhon Phanom province on the first day of the next month. As a result, monthly rainfall was above normal in most parts of Thailand i.e. northern part 59.0 mm (27%), northeastern part 105.1 mm (43%), central part 93.1 mm (36%) and eastern part 111.3 mm (34%) while it was inversely below normal in southern part (east coast) 19.8 mm (13%) and southern part (west coasts) 14.1 mm (3%). The total rainfall over the country was 23 percent above normal and the accumulated rainfall since 1 January was 9 percent above normal. Mean temperatures of September were near normal in upper Thailand while southern Thailand was above normal. Thailand’s mean temperature of 27.4 degrees was 0.1 degrees above normal.

**1 – 10 September:** Under the influence of the monsoon trough lay across upper Thailand accompanied with the southwest monsoon blowing across the Andaman Sea, Thailand and the Gulf of Thailand nearly the whole period and the easterly wave moved to cover upper Thailand during September 7-8, Thailand experienced scattered to fairly widespread rain with heavy to very heavy rainfall in some areas, except for isolated to widely scattered rain with heavy rainfall in some areas of upper Thailand during early period. The maximum daily rainfall in upper Thailand was 150.6 mm at Kraseo Self – Help Settlement in Suphanburi province on September 8 while that of 124.0 mm was found as the highest in southern part at Amphoe Ko Lanta in Krabi province on September 4. Flash floods were reported at Surat Thani province on September 4, Nan province on September 5, Chiang Rai province on September 6, Phayao province on September 8 and Phang-nga province on September 10.

**11 – 21 September:** Southwest monsoon prevailed over Thailand almost the period and the rather active monsoon trough lay across upper Thailand toward the active low pressure cell in the middle South China Sea during mid-period. During that time, the mentioned cell began to develop to the tropical depression and made landfall over the central Vietnam in the morning of September 19. It moved further across Lao PDR and hit Ubon Ratchathani province of Thailand on the same day. The depression finally weakened into an area of low pressure and located at middle part of Thailand. It produced abundant rainfall in upper Thailand with heavy rainfall in many areas and very heavy rainfall

in some areas mainly in lower northeastern, central and eastern parts. The highest daily rainfall was 279.5 mm at Muang in Surin province on September 19. Flash floods were reported at Kamphang Phet, Tak, Nan, Phetchabun, Phitsanulok, Khon Kaen, Ubon Ratchathani, Surin, Si Sa Ket, Nakhon Ratchasima, Amnat Charoen, Buri Ram, Nakhon Sawan, Lop Buri, Kanchanaburi, Sa Kaeo, Prachin Buri and Nakhon Nayok provinces during late period. The river overflowed its bank at Uthai Thani province on September 11, Phra Nakhon Si Ayutthaya and Ang Thong provinces on September 17 and Kamphang Phet province on September 19. In southern part, widespread rain during early and late periods with heavy rainfall in many areas and very heavy rainfall in some areas mainly in west coast and upper portion. The maximum daily rainfall of 156.7 mm was measured at Takua Pa in Phang-nga province September 11. The river overflowed its bank at Chumphon province on September 21.

**22 – 30 September:** Affected by the rather active high pressure area from China extended its ridge to cover upper Thailand and the active southwest monsoon, northern and northeastern Thailand received less rain during early period. After that, the monsoon trough moved southward to lie across central and eastern part coupled with typhoon “Wutip (1321)” in the middle South China Sea made landfall over Hue in Vietnam in the evening of September 30. It rapidly weakened to the tropical depression and centered over Lao PDR. on the same day. It brought scattered to fairly widespread rain to upper Thailand with heavy to very heavy rainfall in some areas. The maximum daily rainfall of 187.6 mm was recorded at Muang in Prachin Buri province on September 29. Floods were reported at Phetchabun, Phitsanulok, Phichit, Surin, Si Sa Ket, Amnat Charoen, Buriram, Phra Nakhon Si Ayutthaya, Uthai Thani, Chai Nat, Lop Buri, Chachoengsao, Sa Kaeo and Prachin Buri provinces nearly the whole period. In southern part, widely scattered to scattered rain mainly occurred in upper portion during the first half of the period then fairly widespread rain with isolated heavy rainfall. The highest rainfall amount was 57.6 mm at Takua Pa in Phang-nga province September 29.

#### Breaking records of daily rainfall in September

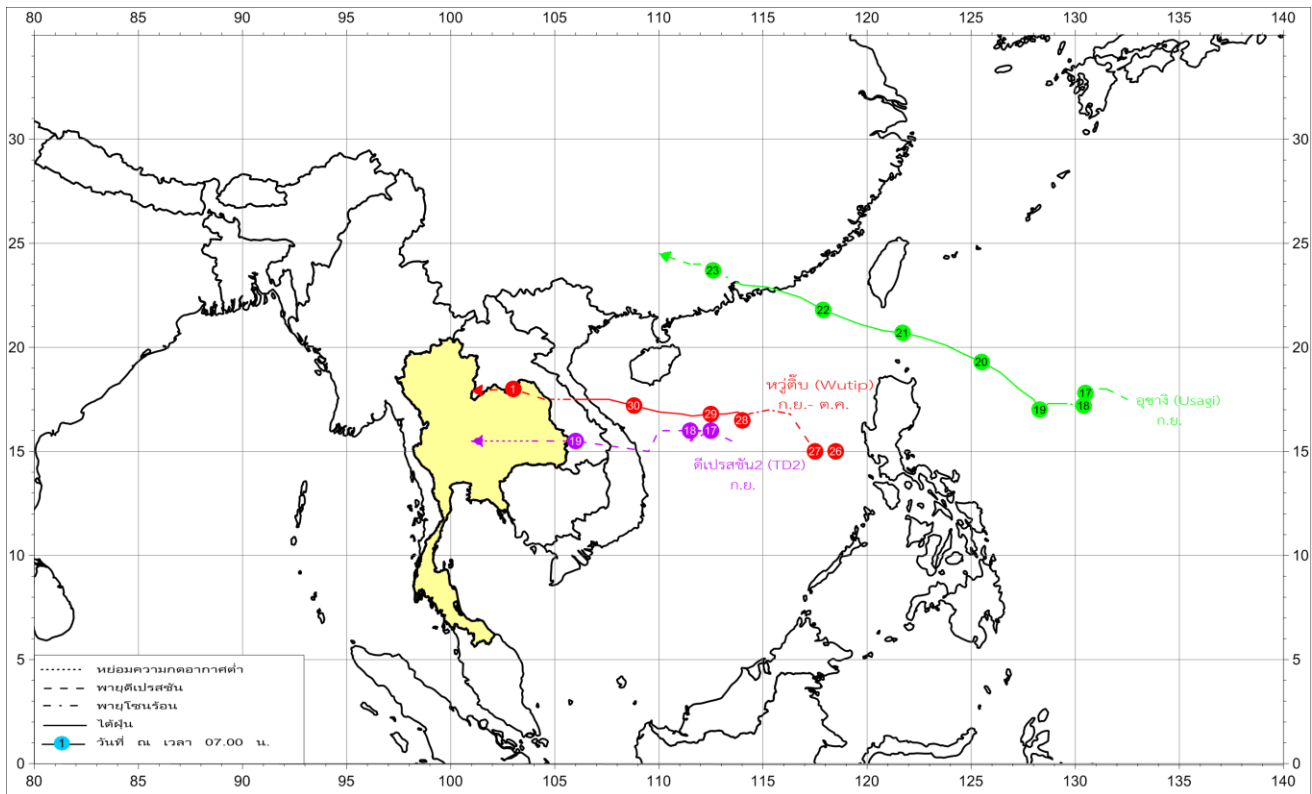
Station	New Record 2013		Previous Record		Start since
	Rainfall (mm)	Date	Rainfall (mm)	Date / Year	
Ubon Ratchathani	172.6	18	144.8	10/2001	1951
Ubon Ratchathani (Agromet.Stn.)	160.8	18	130.0	18/1974	1970
Surin	<u>279.5*</u>	19	104.5	28/1973	1951
Surin (Agromet.Stn.)	240.9	19	142.3	12/1976	1969
Prachin Buri (Kabin Buri)	159.9	19	126.3	19/1985	1970
Sa Kaeo	129.4	19	110.1	28/2012	2000

Remark: \* : The new highest record of the station

### Breaking records of monthly rainfall in September

Station	New Record 2013	Previous Record		Start since
	Rainfall (mm)	Rainfall (mm)	Year	
Lampang (Thoen)	313.1	292.2	2004	2004
Sukhothai	<u>477.2*</u>	382.0	2011	2000
Kamphaeng Phet	459.6	451.4	2002	1981
Si Sa Ket (Agromet Stn.)	546.8	487.1	1996	1983
Surin	<u>591.9*</u>	569.0	2003	1951
Nakhon Ratchasima (Chok Chai)	<u>387.4*</u>	386.9	1982	1970
Chachoengsao (Agromet Stn.)	<u>511.3*</u>	490.3	1991	1989
Surat Thani (Phra Sang)	280.8	226.9	2006	1998

Remark: \* : The new highest record of the station



Tracks of 3 Tropical Cyclones in the area between latitude 0°-25° N and longitude 90°-120° E in September 2013

- Note :**
1. Rainfall, temperatures and natural disasters were updated up to October 9, 2013
  2. “Wutip” mean butterfly contributed by Macao, China.
  3. “Usagi” mean rabbit contributed by Japan.

Monthly Current Report  
Rainfall and Accumulative Rainfall  
September 2013

Northern Thailand

Station	Temperature ( °c)		Rainfall (mm)		Accumulative rainfall (mm) Since 1 January	
	Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal
Chiang Rai	26.3	0.1	347.3	63.4	1748.2	255.8
Mae Hong Son	27.2	0.2	235.7	36.7	1060.3	-62.3
Phayao	26.6	0.3	196.6	-7.0	848.2	-118.0
Chiang Mai	27.4	0.7	275.6	64.2	1052.4	109.2
Tha Wang Pha	27.3	0.5	160.1	-51.4	1236.9	-49.2
Nan	27.3	0.1	281.1	77.6	920.4	-216.7
Lamphun	27.0	0.1	276.1	67.9	912.9	70.7
Lampang	27.2	0.2	190.9	-20.7	843.1	-67.6
Mae Sariang	26.9	0.4	173.4	-3.7	814.5	-176.4
Phrae	27.4	0.2	74.6	-117.1	998.4	5.8
Uttaradit	28.1	0.1	195.6	-52.7	1208.5	-20.4
Bhumibol Dam	27.3	-0.2	412.6	205.0	728.5	-58.6
Tak	27.5	-0.2	350.5	135.0	950.1	147.9
Mae Sot	26.2	0.0	220.2	34.8	1613.8	277.9
Umphang	24.9	0.5	427.2	179.6	1637.5	362.3
Phitsanulok	27.7	-0.4	359.6	113.0	1321.5	211.5
Lom Sak	27.2	0.1	215.9	22.3	844.8	-91.4
Phetchabun	27.4	0.3	409.6	203.9	1252.9	229.3
Wichian Buri	27.6	-0.3	284.5	38.4	1210.2	145.8
Kamphaeng Phet	27.4	-0.2	459.6	190.8	1412.9	348.7
Over the area	27.1	0.1	277.3	59.0 27%	1130.8	65.1 6%

Northeastern Thailand

Station	Temperature ( °c)		Rainfall (mm)		Accumulative rainfall (mm) Since 1 January	
	Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal
Nong Khai	27.7	0.3	233.8	-23.4	1403.4	-94.4
Loei	26.8	0.4	333.2	98.2	1363.7	274.8
Udon Thani	27.6	0.0	288.0	48.5	1220.4	-94.7
Nakhon Phanom	27.0	-0.1	202.5	-87.7	1966.7	-268.6
Sakon Nakhon	27.2	0.0	297.5	72.7	1906.8	356.2
Mukdahan	27.1	-0.1	390.7	179.0	1676.1	312.6
Khon Kaen	27.0	-0.2	214.2	-17.8	869.0	-240.1
Kosum Phisai	27.7	0.0	404.8	164.2	1140.6	9.5
Roi Et	27.2	-0.3	395.7	175.9	1544.6	327.2
Chaiyaphum	27.1	-0.2	362.8	132.8	1196.8	219.7
Ubon Ratchathani	26.7	-0.7	486.4	192.6	1593.6	158.6
Tha Tum	27.4	-0.3	355.8	92.8	1209.0	-30.6
Surin	26.9	-0.4	591.9	336.5	1471.7	198.3
Nakhon Ratchasima	27.2	-0.2	355.6	127.3	954.7	56.1
Chok Chai	27.1	-0.2	387.4	175.8	1079.3	201.4
Nang Rong	26.8	-0.4	253.8	14.2	977.9	-41.5
Over the area	27.2	-0.1	347.1	105.1 43%	1348.4	84.0 7%

- 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  
September 2013

Central Thailand

Station	Temperature ( °c)		Rainfall (mm)		Accumulative rainfall (mm) Since 1 January	
	Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal
Nakhon Sawan	27.8	-0.2	376.6	139.6	946.1	-18.2
Bua Chum	27.3	-0.3	463.2	211.5	1238.1	304.7
Lop Buri	27.7	-0.3	456.9	191.4	895.1	-38.7
Suphan Buri	28.2	-0.1	204.6	-18.8	781.7	53.8
Thong Pha Phum	26.6	-0.1	371.8	130.6	1707.9	124.0
Kanchanaburi	27.9	-0.1	258.0	37.5	774.4	-8.0
Bangkok Airport	28.7	0.3	307.7	22.8	1126.3	-13.6
Bangkok Metropolis	28.1	-0.2	364.1	29.8	1299.1	-1.2
Over the area	27.8	-0.1	350.4	93.1 36%	1096.1	50.4 5%

Eastern Thailand

Station	Temperature ( °c)		Rainfall (mm)		Accumulative rainfall (mm) Since 1 January	
	Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal
Prachin Buri	27.9	-0.2	661.9	312.5	1958.5	332.8
Kabin Buri						
Aranyaprathet	27.6	-0.1	222.0	-30.3	1417.2	286.9
Chon Buri	28.7	0.4	343.3	74.4	1329.0	296.6
Ko Sichang	28.1	0.0	202.7	-66.5	987.3	44.6
Pattaya	27.9	0.2	169.8	-34.9	623.0	-191.2
Sattahip						
Rayong	28.1	-0.1	265.8	10.6	1367.6	235.5
Chanthaburi	27.3	0.1	676.7	179.1	3309.4	674.1
Khlong Yai	27.0	0.1	989.2	308.2	4787.9	414.4
Over the area	27.8	0.0	441.4	111.3 34%	1972.5	370.8 23%

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Monthly Current Report  
Rainfall and Accumulative Rainfall  
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Southern Thailand, east coast

Station	Temperature ( °c)		Rainfall (mm)		Accumulative rainfall (mm) Since 1 January	
	Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal
Phetchaburi	28.2	0.0	155.8	2.2	500.3	-103.2
Hua Hin	27.9	-0.1	90.3	-30.1	543.6	-56.2
Prachuap Khiri Khan	27.5	-0.2	221.2	121.7	765.0	70.5
Chumphon	27.3	0.4	205.4	27.1	1217.4	7.5
Surat Thani	27.1	0.5	213.3	24.9	937.8	11.5
Ko Samui	28.5	0.6	54.7	-67.0	740.4	-193.0
Nakhon Si Thammarat	27.7	0.4	88.5	-73.1	1229.3	118.7
Songkhla	28.5	0.6	47.7	-89.2	979.2	160.2
Hat Yai Airport	27.1	0.2	99.8	-57.5	934.9	21.2
Pattani Airport	27.8	0.6	151.0	3.9	865.2	1.2
Narathiwat	28.0	0.8	102.2	-80.5	1353.2	267.4
Over the area	27.8	0.4	130.0	-19.8 -13%	915.1	27.6 3%

Southern Thailand, west coast

Station	Temperature ( °c)		Rainfall (mm)		Accumulative rainfall (mm) Since 1 January	
	Mean	Above or below normal	Actual	Above or below normal	Actual	Above or below normal
Ranong	27.0	0.6	470.9	-175.6	3755.4	309.3
Takua Pa	27.1	0.4	664.2	68.7	4065.1	1227.9
Phuket	28.4	0.9	303.0	-58.2	1790.2	140.6
Phuket Airport	28.3	1.0	379.6	-19.5	2124.8	278.4
Ko Lanta	28.4	0.8	556.4	226.1	2136.0	487.5
Trang Airport	27.3	0.7	236.1	-69.0	1633.3	99.6
Satun	27.4	0.5	256.8	-71.6	1629.4	-0.7
Over the area	27.7	0.7	409.6	-14.1 -3%	2447.7	363.2 17%

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