

Thailand Annual Weather Summary, 2010

Year 2010 was warmer than usual. Mean air temperature was above normal for all months. Annual rainfall was about 5 percent above normal and 3 percent higher than the previous year. The monsoon trough and tropical depression brought the downpour rainfall, widespread intensive floods affecting the lower portion of northeastern and central parts during October to mid November including southern Thailand during early November. However many areas in upper Thailand affected drought during summer to early rainy season. The details are as follow.

Rainfall over the territory was above normal in January 2010. Monthly total was the highest in 35 years of record (1976-2010) at the lower northern, northeastern and central parts. During February until early May most areas of Thailand were dry and rainfalls were below normal. Agricultural areas mainly in upper Thailand were affected by drought. From the beginning of rainy season on May 21 to winter season in late 2010, the rainfall was in most areas and wetter than normal in several places. The new highest record of daily rainfall was established in some stations. In addition, due to the combination of the active monsoon trough, the prevailing of southwest monsoon and the active low pressure cell resulted in torrential rain with flash flood in many areas in northeastern and central parts during the second half of October. Moreover, the tropical depression intensified in the lower Gulf of Thailand before moving into the southern part at Sathing Phra, Songkhla province on November 1. The depression induced heavy rainfall and severe floods in many areas of southern part, especially Hat Yai district in Songkhla province. Besides, the huge wave occurred along the coastal province.

Despite above normal mean temperature was in every month, generally cool and cold weather in the morning remained in several places of northern and northeastern parts in January and early February when the surge of rather active high pressure area from China arrived. The minimum temperature was 10.1 °C at Umphang in Tak province on January 19 and 2.0 °C over the area of mountaintop at Doi Angkhang, Amphoe Fang in Chiang Mai province on January 3. During the second week of February, as the covering of the heat low pressure cell, temperature started to rise. Hot weather with consecutive days of very hot weather occurred in several places in March, April and mid May in northern, northeastern and central parts. The new highest record of daily maximum temperature was established at most stations. The extreme maximum temperature of the year was 44.0 °C at Muang district in Mae Hong Son province on May 15. The areas of swelter weather were widely reduced but some areas still hot during daytime until late October. In November and December, a major high pressure system brought cool and cold weather to most areas of northern and northeastern parts. Extreme minimum temperature was 9.0 °C at Agrometeorological Station in Nakhon Phanom province on December 27.

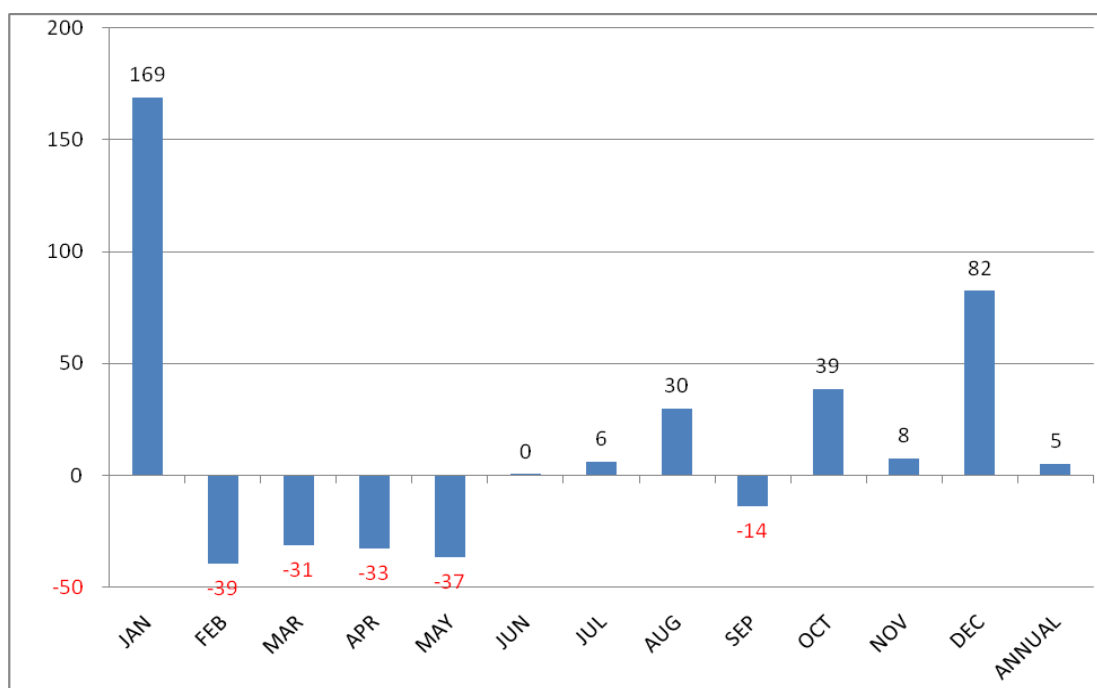
Breaking records of daily rainfall in Thailand

Station	New Record 2010		Old Record		Start since
	Rainfall (mm)	Date	Rainfall (mm)	Date / Year	
October					
Mae Hong Son	128.0	20	108.7	27/1965	1951
Lamphun	74.2	20	63.6	13/1988	1981
Phetchabun (Wichian Buri)	110.8	15	97.7	17/2009	1970
Lop Buri (Bua Chum District)	172.2	15	123.2	10/1983	1970
Songkhla (Hat Yai)	208.0	31	111.0	11 / 1980	1973
Songkhla (Korhong District)	174.0	31	141.4	28 / 2009	1969
Yala	139.0	31	128.9	31 / 2550	1982

Breaking records of daily rainfall in Thailand (Cont.)

Station	New Record 2010		Old Record		Start since
	Rainfall (mm)	Date	Rainfall (mm)	Date / Year	
November					
Songkhla (Sa Dao District)	174.7	1	91.4	5 / 2009	1999
Surat Thani (Pra Saeng District)	79.0	1	73.7	24 / 2000	1998
Pattani	274.3	1	266.2	18 / 1974	1964
Trang	144.5	1	130.1	12 / 1995	1951
Satun	116.8	1	113.3	20 / 1988	1978
December					
Lamphang(Thoen)	24.6	16	16.6	26/2008	2004
Sukhothai	44.0	16	2.9	26/2008	1999
Tak (Bhumibol Dam)	64.9	16	50.0	24/1992	1959
Loei	69.2	16	57.4	4/2002	1954
Kalasin (Kamalasai)	15.8	16	7.5	27/2008	1995
Nakhon Ratchasima (Pak Chong)	25.4	16	20.7	24/1977	1971
Nakhon Sawan (Tak Fa)	22.8	16	21.7	29/1983	1967
Kanchanaburi (Thong Pha Phum)	25.6	16	22.9	24/1992	1970
Pathum Thani	30.3	13	21.5	8/2006	2006
Bangkok (Bang Na)	57.5	12	41.8	8/1972	1967

Monthly and Annual rainfall anomalies (%) for the year 2010



Breaking record of daily maximum temperature in Thailand

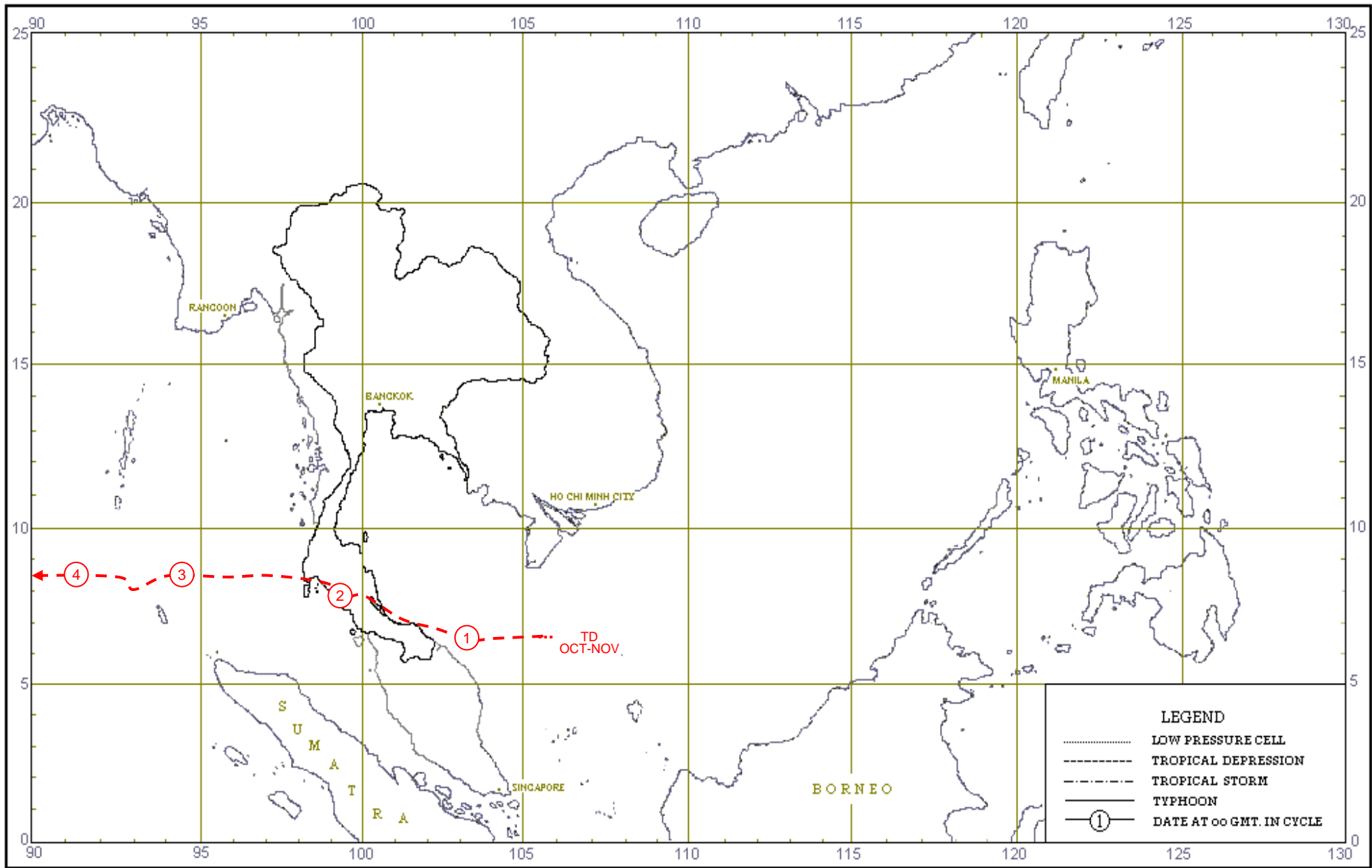
Station	New Record 2010		Old Record		Start year
	Temperature(°C)	Date	Temperature(°C)	Date / Year	
March					
Phetchabun	42.2	25	42.0	24 / 1983	1951
Kanchanaburi(Thong Pha Phum)	41.3	25	40.9	17 / 1998	1970
Sa Kaeo	39.9	25	39.0	30 / 1998	1998
				26, 29 / 2004	
				31 / 2007	
Chachoengsao (Agromet. Stn.)	40.0	25	39.1	22 / 1996	1989
				19 / 1998	
				13 / 2005	
Chon Buri (Laem Chabang)	37.5	18	37.3	27 / 1998	1994
				22 / 1999	
Chon Buri (Ko Sichang)	36.0	18,19,25	35.8	26 / 1960	1959
Songkhla (Sa Dao District)	38.5	3	38.0	13 / 2005	1999
Phuket	37.8	5	37.7	21 / 1998	1952
April					
Mae Hong Son	43.4	23	43.0	17 / 1991	1955
Nan (Tha Wang Pha)	42.5	22	41.7	18 / 1983	1970
Nan (Thung Chang)	40.3	22	39.5	1 / 2007	1998
Lamphang(Thoen)	43.1	6, 8	42.9	24 / 2007	2003
Sukhothai	42.6	21	41.6	7 / 2003	2000
Tak (Mae Sot)	41.1	8	40.9	24 / 2004	1951
Phichit	40.7	10	39.3	23 / 2001	1993
Buri Ram	41.7	6, 22	40.8	2 / 2007	2003
Kanchanaburi(Thong Pha Phum)	43.0	8	42.0	16 / 1998	1970
Songkhla (Korhong District)	37.5	14	37.3	14 / 1998	1969
				16 / 2004	
Songkhla (Sa Dao District)	37.2	22	37.1	19 / 2001	1999
May					
Mae Hong Son	44.0	15	43.6	9 / 1998	1955
Phare	43.0	10	42.8	9 / 1992	1952
Sukhothai	42.8	10	42.6	7 / 2003	2000
Kalasin (Kamalasai)	42.3	9	41.5	7 / 2003	1998
Roi Et	41.1	7	40.2	2 / 1980	1955
Surin (Agromet. Stn.)	41.0	6	40.4	3 / 1989	1969
Buriram	42.2	9, 10	38.8	18 / 2007	2003
Nakhon Sawan (Tak Fa)	41.2	10	40.9	8 / 1992	1969
Chai Nat	41.4	10	41.2	7, 9 / 1992	1970
Lop Buri (Bua Chum)	41.8	10	41.6	9 / 1992	1970
Bangkok Metropolis	39.7	10	39.5	22 / 1983	1951
Bangkok (Khlong Toey)	39.3	10	38.4	2 / 1998	1994
Chonburi	39.0	10	38.5	20 / 1983	1951
				26 / 1995	
Phetchaburi	38.5	18	37.3	14 / 1996	1981

Breaking record of daily maximum temperature in Thailand (Cont.)

Station	New Record 2010		Old Record		Start year
	Temperature(°C)	Date	Temperature(°C)	Date / Year	
Prachuap Khiri Khan (Nong Phlup)	40.2	10	39.6	3 / 1980 21 / 1983 12 / 1998	1971
Prachuap Khiri Khan	39.5	23	39.1	7 / 1992	1951
Surat Thani	39.8	11	38.5	21 / 1983 5 / 2005	1969
Songkhla	38.6	27	36.8	19 / 2004	1951
Songkhla (Hat Yai)	38.3	7	37.7	7, 16 / 1998	1973
Songkhla (Sa Dao District)	38.0	10	36.7	2 / 2008	1999
Phuket Airport	37.7	15	37.2	6 / 1998	1952

 Note: Rainfall amount, temperatures and natural disasters are the preliminary information.

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Track of Tropical Depression in Thailand, 2010