

Climate characteristic expectation of Thailand during

the summer season of 2017,

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Thai Meteorological Department Ministry of Thailand Digital Economy

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Weather characteristic prediction for the 2017- summer of Thailand during about late February until middle May of 2017:

The summer of Thailand this year is expected to begin at about late February and end at about middle May. Whereas mean maximum temperature will be slightly above normal as about 35 – 37 C. while the total rain will be above normal.

Besides, summer thunderstorms will happen in the summer at many areas as thunder rain, gusty wind and hail at many areas. This results in loss of life and property damages. However, the rainfall of this summer will not suit demands at some areas in consumption and agricultural usages, specifically at areas outside irrigation zones including with repeated drought areas. As a result, people should maximize water utilization and prepare for the above-mentioned summer thunderstorms further.

General climate characteristics:

The Upper Thailand (The northern, northeastern, central and eastern parts of Thailand):

During the 1st period about late February until middle March, hot weather occurs commonly at daytime with thick fog at many areas on some days, especially around mountainous areas. Even though the northern and northeastern parts still meet morning cool weather due to weakening high pressure air mass areas from China still prevailing over the northern and northeastern parts from time to time.

Then about middle March until April, sweltering weather occurs almost widely with very hot weather at some areas on some days whereas extreme maximum temperatures may reach 42 – 43 C. Nevertheless, summer thunderstorms will occur at many areas during some periods as thunder rain, gusty wind and possible falling hail, thus helping reduce some heat. This results from southerly or southeasterly wind prevailing over for almost all of this period. In addition, heat low-pressure air mass cells will prevail from time to time.

During the 1st half of May, weather will fluctuate as sweltering weather occurring almost widely with very hot weather happening at some areas on some days and thunder rain at many areas. This results from prevailing southerly or southeasterly wind transforming to become southwestern monsoon prevailing over Thailand. The Southern Thailand

During late February until about late April, rainfall distribution occurs as 20 – 30% of the area with hot weather at many areas. While wind waves in the Gulf of Thailand and the Andaman Sea will be about 1 meter high because easterly or southeasterly wind prevails over the Gulf of Thailand and the Southern Thailand almost all of this period.

Then since late April, the Southern Thailand will meet more rain. Specifically, around the western coast, heavy to very heavy rain will occur at some areas together with wind waves in the Andaman Sea become stronger as 2–3 meters high during some periods comparing to wind waves in the Gulf of Thailand being about 1 meter high. This result from easterly or southeasterly wind prevails over the Gulf of Thailand and the Southern Thailand transforming to become the southwest monsoon prevailing over the Andaman Sea and the Southern Thailand.

+++ <u>Cautions</u> +++

<u>Fires and forest fires:</u> During this summer, the weather will favor for generating fires and forest fires easily. People should be cautious for fuel usage for any activities.

<u>Thunderstorms</u>: During March until May, summer thunderstorms will occur as thunder rain, gusty wind at many areas and possibly falling hail on some days.

Cyclones: During late April until May, low-pressure air mass cells may develop in the Andaman Sea and strengthening to become depressions, tropical storms and cyclones further. Their movements are toward northeasterly and may be near the western side of Thailand. This results in more rain at the western portion at both of the northern and central parts including with that of the Southern

Remarks:	-	Daily rainfall distribution (% of the area) criteria:	Isolated:	> 0 until < 20%
		Widely scattered:	>=20 until < 40%	Scattered:	>= 40 until < 60%
		Almost widespread:	>=60 until < 80%	Widespread	>= 80%
	-	Daily rainfall amount (mill	imeters) criteria:	Light:	> 0 until 10.0
		Moderate:	>=10.1 until <=35.0	Heavy:	>=35.1 until <90
		Very heavy:	>= 90.1		
	-	Daily minimum temperatu	re criteria for the winter	season:	
		Cool weather	=	18.0 - 22.9	°C.
		Moderately cold weath	ner =	16.0 - 17.9	°C.
		Cold weather	=	8.0 - 15.9	° C.
		Very cold weather	=	<= 7.9	° C.
	-	Daily maximum temperatu	re criteria for the summ	er season:	
		Hot weather	=	35.0 - 39.9	° C.
		Very hot weather	=	>= 40.0	° C.
	-	Normal means average du	ring the 30-year period (A.D. 1981 – 2010	0 or B.E. 2524 – 2553)

- These long range expectations are utilized by applying some climatic models and statistical methods, the public then should follow the daily weather news from the Thai Meteorological Department further.

- Further enquiry of monthly climate, 3-month climate and seasonal forecasts can be preceded at Tel: 02-398-9929 or Fax: 02-383-8827.
- Please follow monthly climate, 3-month climate and seasonal forecasts at www.tmd.go.th/en/ at the climate tab.

Climatological Center, Meteorological Development Bureau, Thai Meteorological Department,

A table showing details of the weather prediction, maximum temperature and rain amount for each part of Thailand:

Part	The weather prediction	Maximum temperature
	Hot weather appears almost all of these parts	40 – 43°C. around provinces: Mae Hong Son, Chiang Mai,
	with very hot weather happening at some areas	Lamphun, Lampang, Phrae, Tak, Uttaradit, Sukhothai,
	on some days. However, for some periods,	Kamphaeng Phet, Phitsanulok, Phetchabun, Pichit, Loei,
Northern and	some rain occurring as thunder rain, windy gust	Nong Khai, Bueng Kan, Nong bua Lam Phu, Udon Thani,
northeastern	and possible hail helps reduce some heat.	Sakon Nakhon, Nakhon Phanom, Mukdahan, Chaiyaphum,
		Khon Kaen, Mahasarakham, Kalasin, Roi Et, Yasothon,
		Amnat Charoen, Nakhon Ratchasima, Burirum, Surin, Si
		Saket and Ubon Ratchathani.
	Hot weather appears almost all of these parts	40 – 42°C. around provinces: Nakhon Sawan, Uthai Thani,
Central and	with very hot weather happening at some areas	Chainat, Sing Buri, Ang Thong, Suphan Buri, Lop Buri,
eastern	on some days, particularly at the upper portion.	Saraburi, Ayutthaya, Ratchaburi, Kanchana Buri, Prachin Buri
(including with	But during some periods, some rain occurring as	and Sa Kaew.
coastal areas)	thunder rain, wind gust and possible hail at	
	some areas helps reduce some heat.	
	Hot weather will happen at many areas and	37 - 39°C. around provinces: Prachuap Khirikhan,
	20-30 % of the areas will rainfall occurs. Wind	Chumphon, Surat Thani, Nakhonsi Thammarat, Songkhla,
	waves in the Gulf of Thailand and the Andaman	Pattani, Yala, Phuket, Krabi, Trang and Satun.
	Sea will be about 1 meter high. But since late	
Southern	April, more rain will happen at the Southern	
	Thailand (the western coast) with heavy to very	
	heavy rain at some areas. For wind waves in the	
	Andaman Sea, they will be more active as 2-3	
	meters high.	
	Hot weather will happen at almost all of this	37 – 39 °C.
	area. However, during some periods, some rain	
Bangkok and	occurring as thunder rain, wind gust and hail	
vicinity	helps reduce some heat on some days.	

Mean maximum temperature (° C.) prediction of Thailand during the summer of 2017 and normal (average of the 30-year period: 1981 - 2010, ° C.)

	The 2 nd half o	f February	March	ı	April		The 1 st half of May		
Part	Mean max temp. of 2016	Normal	Mean max temp. of 2016	Normal	Mean max temp. of 2016	Normal	Mean max temp. of 2016	Normal	
North	34-36	34.6	36-38	36.1	37-39	37.1	35-37	35.4	
Northeastern	34-36	33.9	35-37	35.1	36-38	36.1	35-37	34.9	
Central	35-37	35.2	36-38	36.1	37-39	37.0	35-37	35.8	
Eastern	33-35	33.3	34-36	33.8	35-37	34.7	34-36	34.1	
Southern Thailand (East Coast)	32-34	31.8	32-34	32.6	33-35	33.7	33-35	33.6	
Southern Thailand (West Coast)	34-36	34.1	34-36	34.4	34-36	34.2	32-34	33.0	
Bangkok and Vicinity	34-36	33.6	34-36	34.3	35-37	35.4	34-36	34.8	

Rain amount (millimeters) prediction of Thailand during the summer of 2017 and normal (average of 30-year period: 1981 – 2010, millimeters.)

	The 2 nd h of Februa		March	n	April		The 1 st half of May		
Part	Rain amount of 2016	Normal	Rain amount of 2016	Normal	Rain amount of 2016	Normal	Rain amount of 2016	Normal	
North	10-20	6.9	30-50	28.1	70-100	71.3	80-110	80.2	
Northeastern	10-20	9.7	40-60	44.7	80-110	86.3	80-110	83.6	
Central	10-20	5.9	50-80	36.0	80-110	80-110 79.5		83.5	
Eastern	20-40	17.0	70-100	62.1	100-140	98.9	100-140	98.6	
Southern Thailand (East Coast)	20-40	10.7	70-100	68.4	80-110	75.4	70-100	71.7	
Southern Thailand (West Coast)	10-20	13.2	90-120	88.8	160-200	160.6	150-190	147.0	
Bangkok and Vicinity	10-20	9.3	40-60	42.1	90-120	91.4	120-160	116.4	

	February			March			April			Мау		
Part	° C.	Date	Location	° C.	Date	Location	° C.	Date	Location	° C.	Date	Location
Northern	37.7	19	Thoen district,	41.7	18	Thoen district,	44.6	28	Muang district,	44.5	1	Si Samrong,
			Lampang			Lam Pang			Mae Hong Son			Sukhothai
Northeastern	37.7	14	Kosum Phisai dist.	42.1	19	Muang dist., Nong	43.6	17	Muang dist., Nong	41.8	11	Muang, Nakhon
			Mahasarakham			Bua Lum Phu			Bua Lum Phu			Ratchasima
Central	39.2	28	Thong Pha Phum,	42.3	22	Muang distict,	43.5	11	Muang distict,	43.7	7	Muang,
			Kanchanaburi			Kanchanaburi			Kanchanaburi			Nakhon Sawan
Eastern	38.0	15	Kabinburi dist.,	40.9	17	Muang district,	42.2	11	Muang, Sa Kaew	40.9	5	Muang, Sa Kaew
			Prachinburi,			Sa Kaew		11	Aranyaprathet,			
		15	Maung, Sa Kaew						Sa Kaew			
Southern Thailand	36.4	15	Pra Saeng dist.,	39.5	17	Chawang district,	42.0	11	Nong Plub	41.4	11	Muang,
(East Coast)			Surat Thani			Nakhon Si			Agromet. Station,			Surat Thani
						Thammarat			Prachuab Kirikhan			
Southern Thailand	37.0	25	Takua Pha dist.,	39.6	21	Trang airport,	40.3	16	Trang airport,	39.0	9,10	Trang airport,
(West Coast)			Phang Nga			Muang, Trang			Muang, Trang			Muang, Trang
The whole country	39.2	15	Thong Pha Phum,	42.3	22	Muang district,	44.6	28	Muang district,	44.5	12	Si Samrong,
of Thailand			Kanchanaburi			Kanchanaburi			Mae Hong Son			Suthothai
	35.6	1	Klong Toei Port,	38.7	24	Don Muang	39.9	23	Queen Sirikit	39.3	13	Don Muang
Bangkok			Klong Toei			airport, Don			NCC, Klong Toei			airport, Don
and Vicinity						Munag district						Munag district

The extreme maximum temperature (° C.) statistics of Thailand during February – May of the past year (2016)

Notes: 1. The extreme temperature data are from meteorological stations (classified into three groups as Agromet. = agrometeorological stations, Hydromet. =

hydrometeorological stations, Synoptic. = synoptic stations) of the Thai Meteorological Department all over Thailand.

2. Meteorological station names are from <u>http://www.tmd.go.th/en/climate.php?FileID=1</u>.

Map of provinces with possibly very hot weather occurring on some days, Especially during middle March until middle April 2017:

