

## Climate characteristic expectation of Thailand during the summer season of 2017 (Revised Edition),

Issued on 27 February 2017.

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

The summer of Thailand this year is expected to, mean maximum temperature will be slightly above normal as about 35 - 37 C. while April is the hottest month as extreme maximum temperature reaching 42 - 43 C. on some days. Whereas the total rain will be above normal and end at about middle May.

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):

<u>During the 1st half of March</u>, 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 commonly 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.

<u>During the 1st half of May.</u> 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

<u>During March until about late April</u>, 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 results from easterly or southeasterly wind prevailing over the Gulf of Thailand and the Southern Thailand transforming to become the southwest monsoon prevailing over the Andaman Sea and the Southern Thailand.

#### +++ Cautions +++

<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 Thailand. As a result, flash or forest flood may inundate further.

#### Remarks:

- Daily rainfall distribution (% of the area) criteria: Isolated: > 0 until < 20%>=20 until < 40% >= 40 until < 60% Widely scattered: Scattered: Almost widespread: >=60 until < 80% Widespread >= 80% Daily rainfall amount (millimeters) criteria: > 0 until 10.0 Light: Moderate: >=10.1 until <=35.0 Heavy: >=35.1 until <90
- Daily minimum temperature criteria for the winter season:

Very heavy:

>= 90.1

Cool weather = 18.0 - 22.9 °C.

Moderately cold weather = 16.0 - 17.9 °C.

Cold weather = 8.0 - 15.9 °C.

Very cold weather = <=7.9 °C.

- Daily maximum temperature criteria for the summer season:

Hot weather = 35.0 - 39.9 ° C. Very hot weather = >= 40.0 ° C.

- Normal means average during the 30-year period (A.D. 1981 2010 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,
	rainfall distribution will occur at 20-30% of the	Chumphon, Surat Thani, Nakhonsi Thammarat, Songkhla,
	areas. Wind waves in the Gulf of Thailand and	Pattani, Yala, Phuket, Krabi, Trang and Satun.
	the Andaman Sea will be about 1 meter high.	
Southern	But since late 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.	
Bangkok and vicinity	Hot weather will happen at almost all of this	37 − 39 °C.
	area. However, during some periods, some rain	
	occurring as thunder rain, wind gust and hail	
	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.)

	March		April		The 1 <sup>st</sup> half of May		
Part	Mean max temp. of 2017	Normal	Mean max temp. of 2017	Normal	Mean max temp. of 2017	Normal	
North	36-38	36.1	37-39	37.1	35-37	35.4	
Northeastern	35-37	35.1	36-38	36.1	35-37	34.9	
Central	36-38	36.1	37-39	37.0	35-37	35.8	
Eastern	34-36	33.8	35-37	34.7	34-36	34.1	
Southern Thailand (East Coast)	33-35	32.6	34-36	33.7	33-35	33.6	
Southern Thailand (West Coast)	34-36	34.4	34-36	34.2	33-35	33.0	
Bangkok and Vicinity	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.)

	March		April		The 1 <sup>st</sup> half of May		
Part	Rain amount of 2017	Normal	Rain amount of 2017	Normal	Rain amount of 2017	Normal	
North	30-50	28.1	70-100	71.3	80-110	80.2	
Northeastern	40-60	44.7	80-110	86.3	80-110	83.6	
Central	40-60	36.0	80-110 79.5		80-110	83.5	
Eastern	60-90	62.1	100-140	98.9	100-140	98.6	
Southern Thailand (East Coast)	70-100	68.4	70-100	75.4	70-100	71.7	
Southern Thailand (West Coast)	90-120	88.8	160-200	160.6	150-190	147.0	
Bangkok and Vicinity	40-60	42.1	90-120	91.4	120-160	116.4	

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

		Ν	larch	April			May		
Part	° C.	Date	Location	° C.	Date	Location	° C.	Date	Location
Northern	41.7	18	Thoen district,	44.6	28	Muang district,	44.5	1	Si Samrong,
			Lam Pang			Mae Hong Son			Sukhothai
Northeastern	42.1	19	Muang dist., Nong	43.6	17	Muang dist., Nong	41.8	11	Muang, Nakhon
			Bua Lum Phu			Bua Lum Phu			Ratchasima
Central	42.3	22	Muang distict,	43.5	11	Muang distict,	43.7	7	Muang,
			Kanchanaburi			Kanchanaburi			Nakhon Sawan
Eastern	40.9	17	Muang district,	42.2	11	Muang, Sa Kaew	40.9	5	Muang, Sa Kaew
			Sa Kaew		11	Aranyaprathet,			
						Sa Kaew			
Southern Thailand	39.5	17	Chawang district,	42.0	11	Nong Plub	41.4	11	Muang,
(East Coast)			Nakhon Si			Agromet. Station,			Surat Thani
			Thammarat			Prachuab Kirikhan			
Southern Thailand	39.6	21	Trang airport,	40.3	16	Trang airport,	39.0	9,10	Trang airport,
(West Coast)			Muang, Trang			Muang, Trang			Muang, Trang
The whole country	42.3	22	Muang district,	44.6	28	Muang district,	44.5	12	Si Samrong,
of Thailand			Kanchanaburi			Mae Hong Son			Suthothai
	38.7	24	Don Muang	39.9	23	Queen Sirikit	39.3	13	Don Muang
Bangkok and Vicinity			airport, Don			NCC, Klong Toei			airport, Don
			Munag district						Munag district

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.

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

Map of provinces with possibly very hot weather occurring on some days, Especially in March and April 2017:

