



MINISTRY OF DIGITAL ECONOMY AND SOCIETY,
THAI METEOROLOGICAL DEPARTMENT

3-month Climate Prediction of Thailand During March – May 2019

Issued on 27 February 2019

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Climate Outlook

1. During the next three months, the mean total rain of Thailand will be about 5% less than normal as that of northern part is to be about 230-300 millimeters (mm, normal: 227 mm). Whereas the mean total rain of northeastern part is to be about 270-340 mm (normal: 321 mm) while that of central part is to be about 210-280 mm (normal: 256 mm). Furthermore, the mean total rain of eastern part, Southern Thailand (east coast), Southern Thailand (west coast) and Bangkok Metropolis and Vicinity will be 325-415 mm (normal: 370 mm), 240-340 mm (normal: 300 mm), 435-565 mm (normal: 534 mm) and 290-395 (normal: 340 mm) consecutively.

The mean temperature of Thailand will be above normal while the mean maximum and minimum temperature of the Upper Thailand is to be about 35-36 °C (normal: 35.3 °C) and 25-26 °C (normal: 24.6 °C). Whereas the mean maximum and mean minimum temperature of the Southern Thailand will be 34-35 °C (normal: 33.6 °C) and 24-25 °C (normal: 24.3 °C) accordingly.

2. In March 2019, the mean total rain of the northern part will be about 20% less than normal whereas that of others is to be about 10% less than normal. In other words, the mean total rain of the northern, northeastern, central and eastern parts, the Southern Thailand (east coast), the Southern Thailand (west coast) and Bangkok Metropolis and Vicinity will be about 10-35, 25-60, 15-45, 40-75, 40-100, 55-115 and 20-55 mm relatively.

However, the mean temperature of Thailand will be mostly above normal as the mean maximum and minimum temperature is to be about 34-37 and 23-25 °C. In addition, the mean maximum and minimum temperature of the Southern Thailand is to be about 33-35 and 22-23 °C.

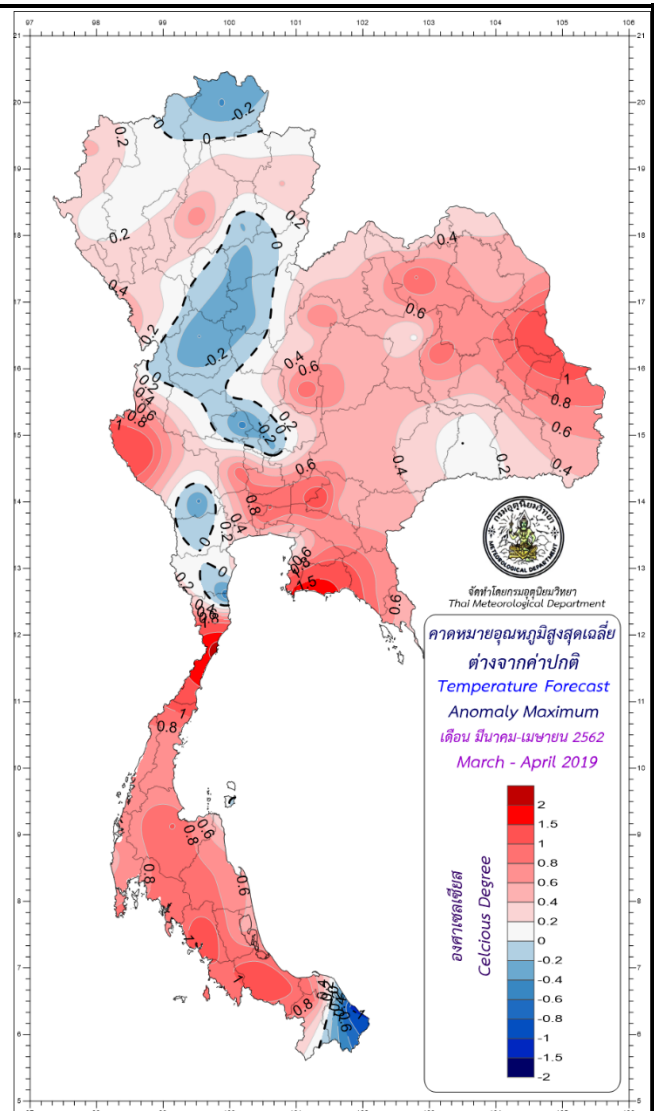
3. In April 2019, the mean total rain of Thailand will be about 10% below normal except that of the Southern Thailand (west coast) is to be about 5% below normal. In other words, the mean total rain of the northern, northeastern, central and eastern parts, the Southern Thailand (east coast), the Southern Thailand (west coast) and Bangkok Metropolis and Vicinity is to be about 45-85, 60-95, 45-85, 70-115, 55-95, 120-195 and 55-110 mm consecutively.

The mean temperature of Thailand will be above normal whereas the mean maximum and minimum temperature of the Upper Thailand is to be 35-38 and 24-26 °C. Moreover, the mean maximum and minimum temperature of the Southern Thailand is to be about 34-36 and 24-26 °C.

4. In May 2019, the mean total rain of all parts is near normal. In other words, the mean total rain of the northern, northeastern, central, eastern, the Southern Thailand (east coast), the Southern Thailand (west coast) and Bangkok Metropolis and Vicinity is to be about 150-210, 165-215, 125-175, 190-260, 120-175, 270-355 and 185-260 mm accordingly.

Additionally, the mean temperature of Thailand will be above normal whereas the mean maximum and minimum temperature of the Upper Thailand is to be about 34-36 and 25-27 °C. Moreover, the mean maximum and minimum temperature of the Southern Thailand is to be about 33-35 and 24-26 °C.

* The information supporting this 3-month climate outlook is at Tables 1 & 2 at Pages 7 & 8:



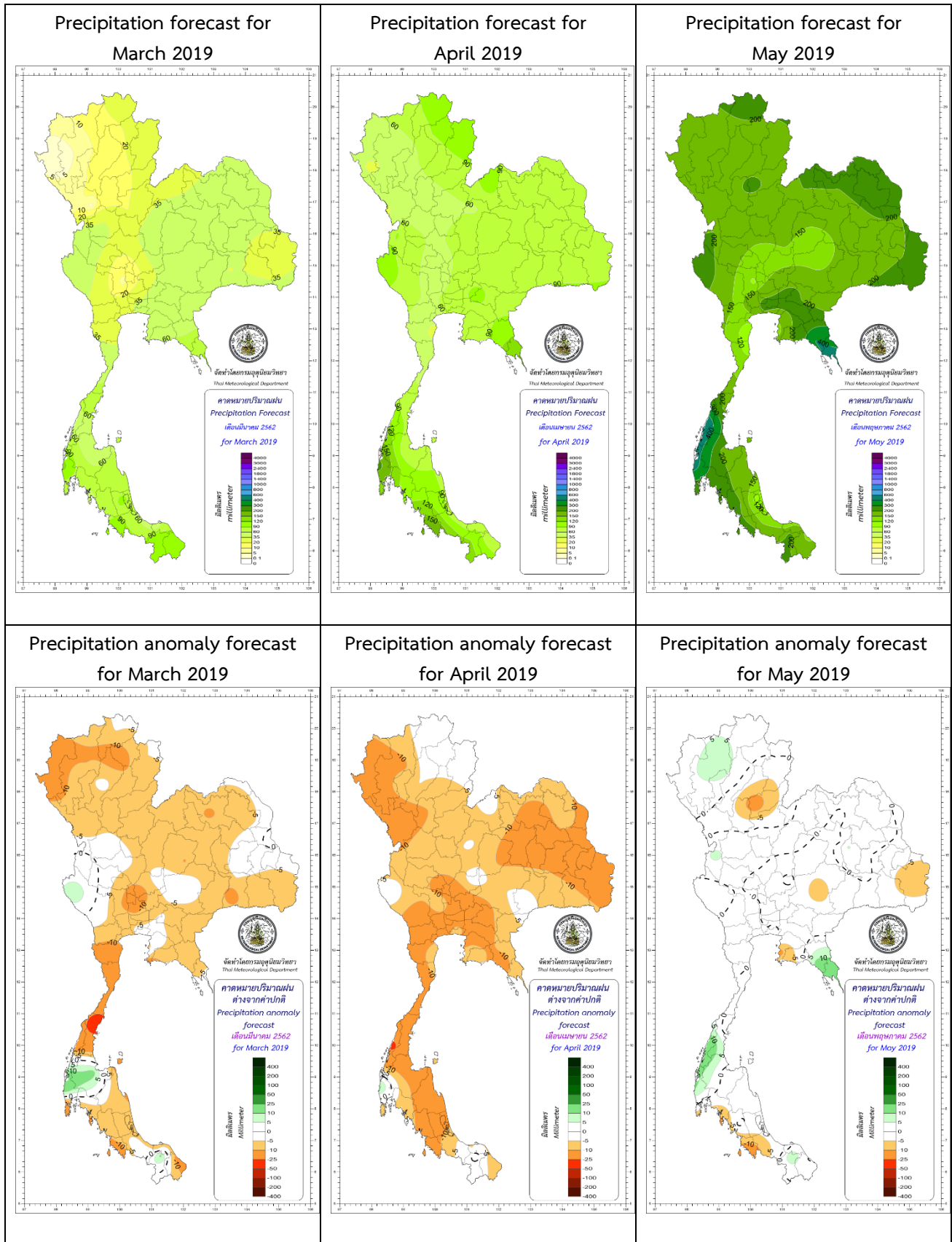
Thailand climate for March-April-May 2019 from baseline: 1981-2010

March 2019: Sweltering and dry weather together with little humidity occurs with very hot weather on some days especially around the Upper Thailand because mostly southerly wind prevails over Thailand. Although at some periods, some cold air masses from China will prevail to collide with existing hot air masses over Thailand, this causes summer thunderstorms to happen specifically around the Upper Thailand. These summer thunderstorms often occur at short durations around narrow or small areas along with instantly gusty wind. They can also feasibly contribute to life and property damages.

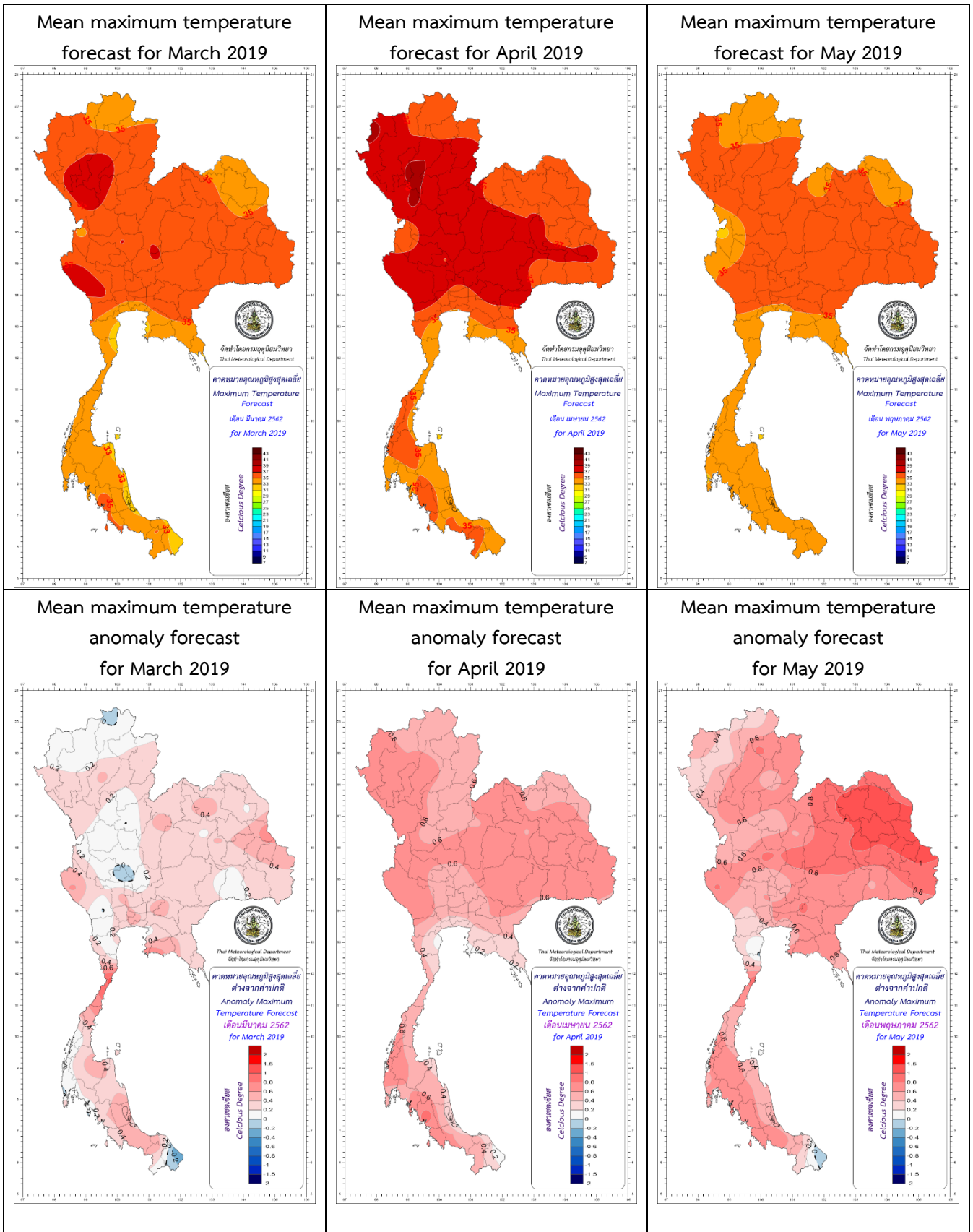
April 2019: This is the most sweltering month for the whole year, especially around the Upper Thailand. Often, hot to very hot weather occurs including with low-pressure air mass cells along with more heat prevailing over the Upper Thailand. The reason is that this month is at the duration of the Sun radiates perpendicularly to the plane of Thailand. As a result, summer thunderstorms occur influencing the rain amount of this month to increase more than that of the past month in every part of Thailand.

May 2019: As being the transitional period from the summer to the rainy seasons, the common weather during the 1st half of this month is usually sweltering. Also, thunder rain storms and summer thunderstorms occur often. Sometimes, hail happens too. And from the influential heat low-pressure air mass cells, mostly at the 2nd half of this month as the start of the rainy season, temperature will reduce with increasing rain. In other words, the prevailing wind over Thailand will start to transform into southwest monsoon while the low-pressure trough placing over Malaysia moves upward to place over the Southern Thailand and the central part of Thailand consecutively. Besides, some tropical cyclones developing in the Andaman Sea and the Bay of Bengal may move near or toward the western side of Thailand further.

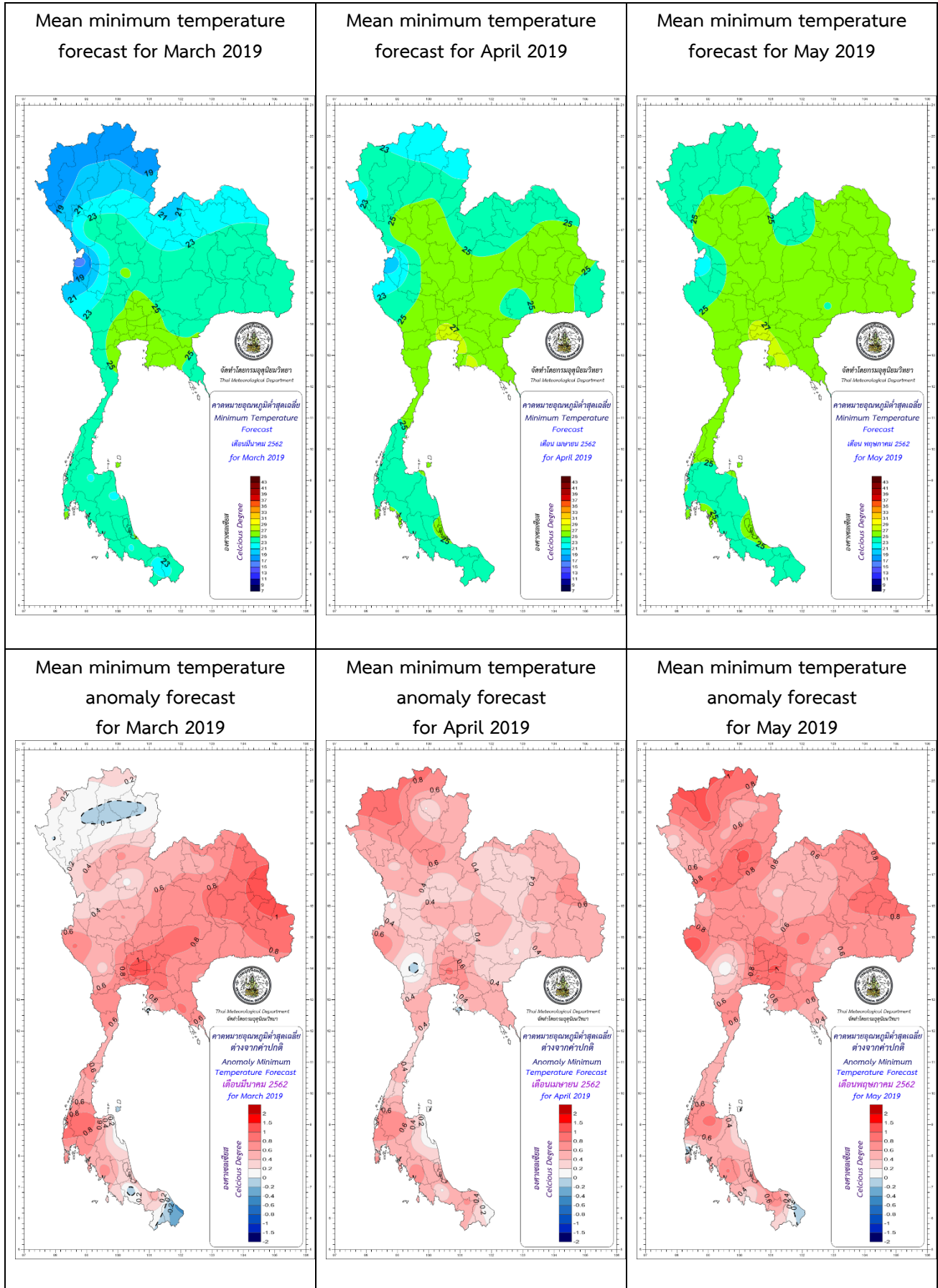
Precipitation (mm/month) and Anomaly (mm/month) Forecast:



Mean Maximum Temperature (°C) and Anomaly (°C) Forecast:



Mean Minimum Temperature (°C) and Anomaly (°C) Forecast:



*** Caution: ***

March and April 2019: Often, summer thunderstorms happen as thunder rain storms, gusty wind and possibly falling hail at some areas. As a result, property and crop damages may occur.

During late April and May 2019: Probably, some low-pressure air mass cells develop around the Andaman Sea. These may strengthen to become depressions and tropical cyclones further. Their movements are toward northerly to easterly and may move closely toward the western side of Thailand. Thus, the western portions of both of the northern and central parts including with that of the Southern Thailand will meet more rain.

The public then should follow the weather forecast news from the Thai Meteorological Department closely.

Table 1: Prediction of Rain (mm = millimeters), Rainy Days (days) and comparing with normal

Part	Prediction									Normal (Baseline period: 1981-2010)					
	March 2019			April 2019			May 2019			March		April		May	
	Rain (mm)	Rainy Days	Comparing with normal	Rain (mm)	Rainy Days	Comparing with normal	Rain (mm)	Rainy Days	Comparing with normal	Rain (mm)	Rainy Days	Rain (mm)	Rainy Days	Rain (mm)	Rainy Days
Northern	10-35	2-3	20 % Below normal	45-85	5-7	10 % Below normal	150-210	14-16	Near normal	28.1	3.1	71.3	7.0	177.8	15.5
Northeastern	25-60	3-5	10 % Below normal	60-95	6-8	10 % Below normal	165-215	14-16	Near normal	44.7	4.8	86.3	8.0	187.1	15.3
Central	15-45	2-3	10 % Below normal	45-85	4-6	10 % Below normal	125-175	13-15	Near normal	36.0	3.4	79.5	6.4	172.1	14.3
Eastern	40-75	3-5	10 % Below normal	70-115	5-7	10 % Below normal	190-260	14-16	Near normal	62.1	5.4	98.9	8.3	223.9	15.8
Southern Thailand (East Coast)	40-100	3-5	10 % Below normal	55-95	5-7	10 % Below normal	120-175	13-15	Near normal	68.4	5.4	75.4	7.3	143.7	14.3
Southern Thailand (West Coast)	55-115	6-8	10 % Below normal	120-190	11-13	5 % Below normal	270-355	19-21	Near normal	88.8	7.6	160.6	12.7	310.0	19.9
Bangkok Metropolis and Vicinity	20-55	2-3	10 % Below normal	55-110	4-6	10 % Below normal	185-260	15-17	Near normal	42.1	3.6	91.4	6.5	247.7	16.2

Table 2: Prediction of Mean Maximum Temperature (Tmax) and Mean Minimum Temperature (Tmin) (°C) comparing with normal:

Part	Prediction									Normal (Baseline period: 1981-2010)					
	March 2019			April 2019			May 2019			March		April		May	
	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin
Northern	35-38	19-22	Above normal	36-39	23-25	Above normal	34-37	24-26	Above normal	36.1	20.4	37.1	23.4	34.7	24.2
Northeastern	34-37	22-24	Above normal	35-38	24-26	Above normal	34-37	25-26	Above normal	35.1	22.4	36.1	24.5	34.4	24.8
Central	35-38	23-25	Above normal	37-39	24-26	Above normal	35-37	25-27	Above normal	36.1	24.4	37.0	25.8	35.2	25.7
Eastern	33-35	24-26	Above normal	33-36	25-27	Above normal	33-35	25-27	Above normal	33.8	24.9	34.7	25.9	33.7	25.8
Southern Thailand (East Coast)	32-34	23-25	Above normal	33-35	24-26	Above normal	33-35	24-26	Above normal	32.6	23.7	33.7	24.6	33.5	24.9
Southern Thailand (West Coast)	33-36	20-21	Near normal	34-36	24-26	Above normal	32-34	24-26	Above normal	34.4	23.7	34.2	24.4	32.7	24.6
Bangkok Metropolis and Vicinity	34-36	25-27	Above normal	35-37	26-28	Above normal	34-36	26-28	Above normal	34.3	25.9	35.4	26.9	34.4	26.3

Remarks: - Normal means average during the 30-year period (A.D. 1981 – 2010 or B.E. 2524 – 2553).

- This long-range climate forecast is created by applying some climate models and statistical methods, the public then should follow the daily weather forecast news from the Thai Meteorological Department for more accuracy further.
- The next 3-month climate forecast will be published online before the end of March 2019.
- Further enquiry of monthly climate, 3-month climate and seasonal forecasts can be preceded at Tel: (662)-398-9929 or Fax: (662)-383-8827.
- Also, please follow monthly climate, 3-month climate and seasonal forecasts at <http://www.tmd.go.th/en/> at the climate tab.

Climate Center, Meteorological Development Division,
 Thai Meteorological Department,
 Ministry of Digital Economy and Society