



Climate Outlook:

1. During the next 3 months, the mean total rain of Thailand will be below normal. In other words, the mean total rain of the northern part and the Southern Thailand (west coast) is to be 5% below normal as about 80-125 millimeters (mm, normal: 110 mm) and about 210-330 mm (normal: 284 mm) in the Southern Thailand (west coast).

Moreover, the mean total rain of the northeastern, central and eastern parts, the Southern Thailand (east coast) including with Bangkok Metropolitan and Vicinity will be 10% below normal or about 110-160 mm (normal: 150 mm), 70-120 mm (normal: 117 mm), 140-205 mm (normal: 190 mm), 125-215 mm (normal: 191 mm) and 100-165 mm (normal: 148 mm) consecutively.

The mean temperature of Thailand will be above normal. In fact, the mean maximum temperature of the Upper Thailand is to be 34-36 °C (normal: 34.9 °C) while the mean minimum temperature of the Upper Thailand is to be 23-24 °C (normal: 23.2 °C).

Furthermore, for the Southern Thailand, the mean maximum temperature will be 33-34 °C (normal: 33.4 °C) and the mean minimum temperature is to be 23-24 °C (normal: 23.7 °C).

2. In February 2019, the mean total rain of the northern part will be 30% below normal (or < 10 mm) while that of the central and eastern parts with the Southern Thailand (east & west coasts) is to be 20% below normal (central: < 10 mm, eastern: 10-35 mm, the Southern Thailand (east & west coasts: 5-30 mm)).

Additionally, the mean total rain of the northeastern part is to be 10% below normal (about 10-25 mm) whereas that of Bangkok Metropolis and Vicinity is to be near normal (about 5-25 mm).

While the mean temperature of Thailand will be above normal as the mean maximum temperature of the Upper Thailand is to be 33-35 °C whereas the mean minimum temperature is to be 21-23 °C. For the Southern Thailand, the mean maximum temperature will be 32-34 °C while the mean minimum temperature is to be 22-25 °C.

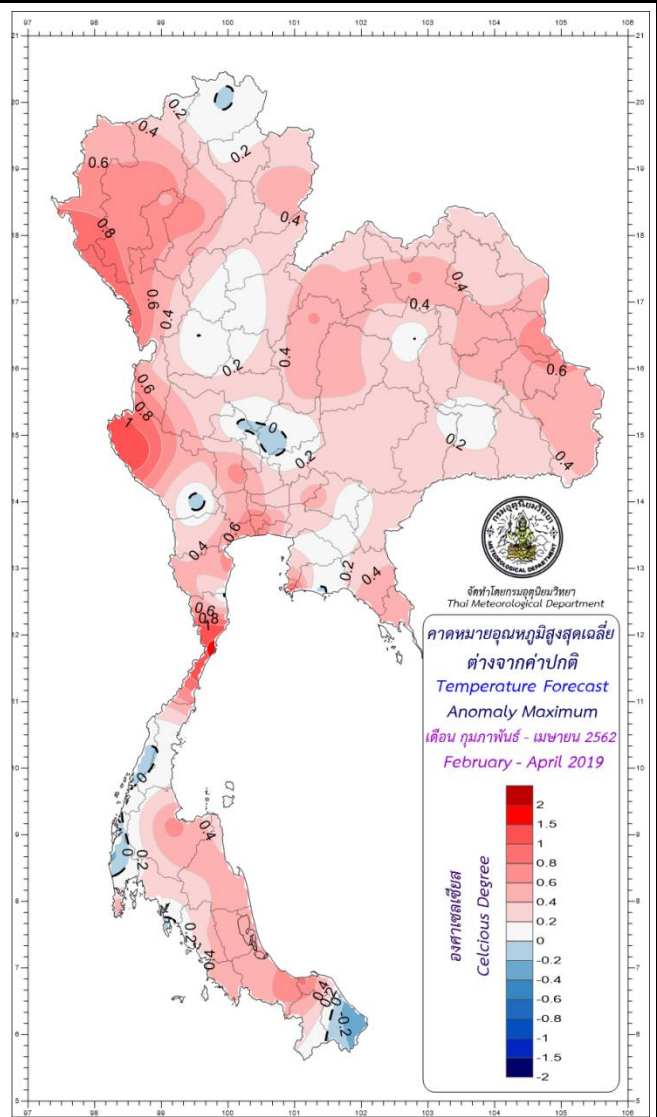
3. In March 2019, the mean total rain of Thailand will be 10% below normal. In other words, the mean total rain of the northern, northeastern, central and eastern parts, the Southern Thailand (east coast), the Southern Thailand (west coast) and Bangkok Metropolis and Vicinity is to be about 10-35, 20-50, 15-40, 30-70, 30-95, 50-110 and 15-45 mm accordingly.

Moreover, the mean temperature of Thailand will be above normal. For the Upper Thailand, the mean maximum temperature is to be 34-37 °C while the mean minimum temperature is to be 23-26 °C. For the Southern Thailand, the mean maximum temperature is to be 33-35 °C whereas the mean minimum temperature is to be 23-25 °C.

4. In April 2019, the mean total rain of Thailand will be 10% below normal except that of the northern part and the Southern Thailand (west coast) is to be near normal. In fact, 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 approximately 55-90, 55-95, 45-85, 70-110, 50-95, 130-195 and 55-110 mm consecutively.

However, the mean temperature of Thailand will be above normal. For the Upper Thailand, the mean maximum temperature is to be 35-38 °C whereas the mean minimum temperature is to be 25-27 °C. For the Southern Thailand, the mean maximum temperature is to be 33-36 °C while the mean minimum temperature is to be 24-26 °C.

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



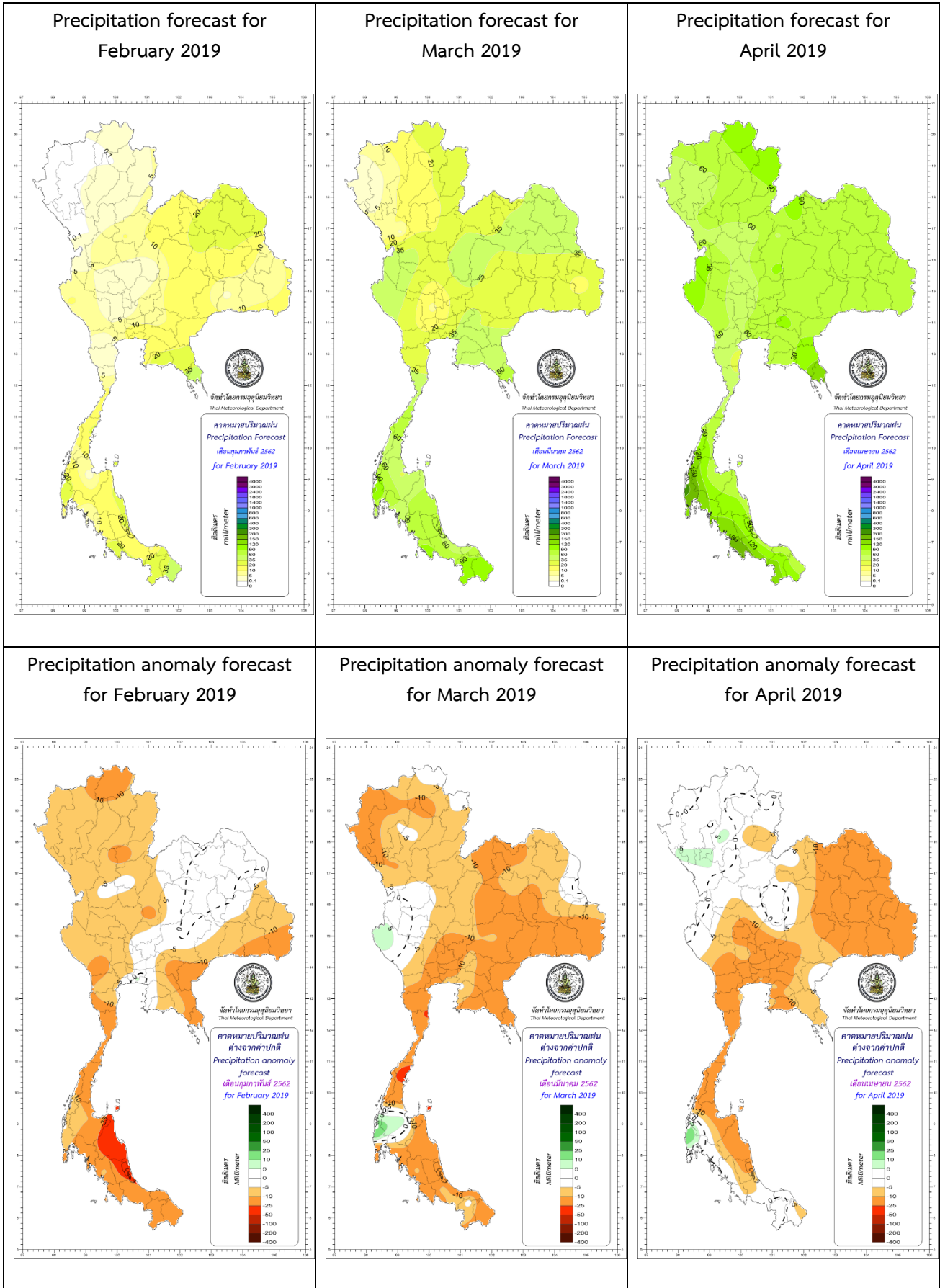
Thailand climate for February-March-April 2019 from baseline: 1981-2010

February 2019: Usually, this month is during the transition period from the winter to the summer seasons as the high-pressure air mass areas prevailing over Thailand starts to weaken. Common weather is mostly cool with morning fog except around the northern and northeastern parts are still cold to very cold at some areas, mostly during the 1st half of this month. Afterward, rising temperature appears due to hot southerly wind starting to prevail instead of the former northeastern monsoon. This is the beginning of the summer season originating from the middle of this month onward. Additionally, for the Southern Thailand, the rain amount of this month lessens than that of the past month, specifically around the eastern coast.

March 2019: Sweltering and dry weather 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 instant gusty wind. They can also feasibly contribute to life and property damages.

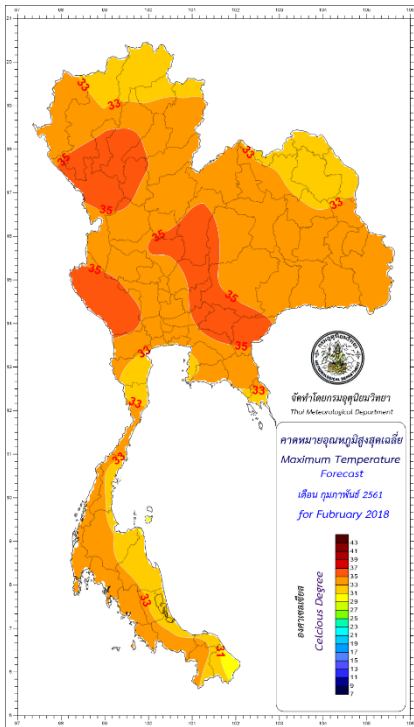
April 2019: This is the most sweltering month for the whole year, especially around the Upper Thailand. Often, hot to very hot weather occurs together with low-pressure air mass cells along with more heat prevailing over the Upper Thailand. The reason is that this month is at the duration of the Sun 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.

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

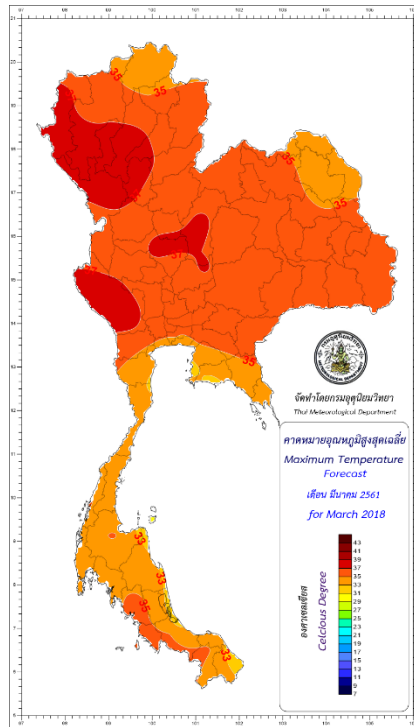


Mean Maximum Temperature (°C) and Anomaly (°C) Forecast:

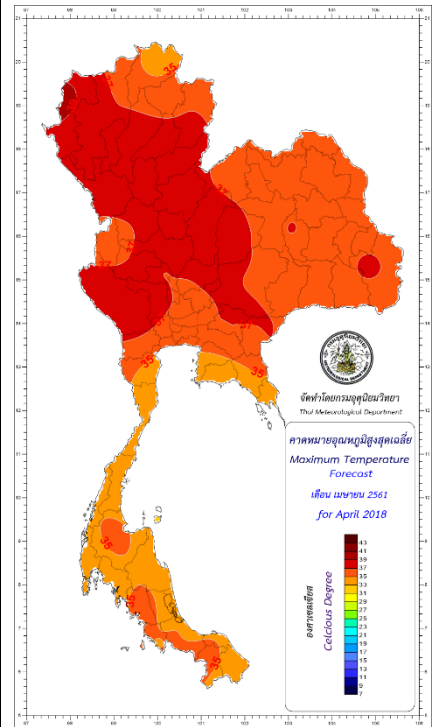
Mean maximum temperature forecast for February 2019



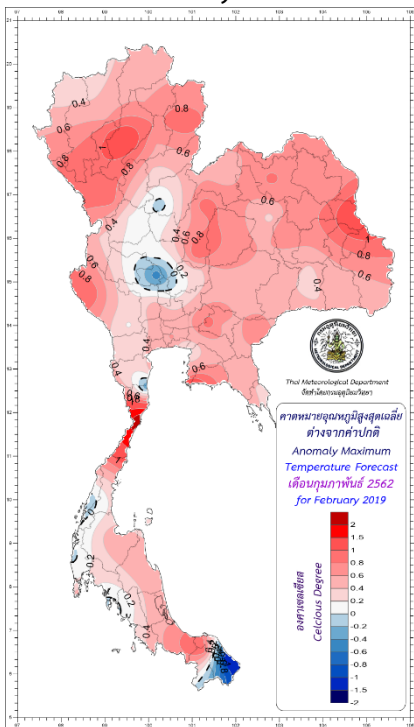
Mean maximum temperature forecast for March 2019



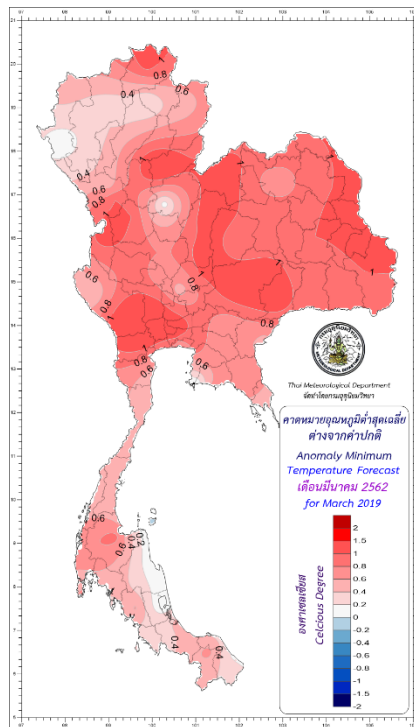
Mean maximum temperature forecast for April 2019



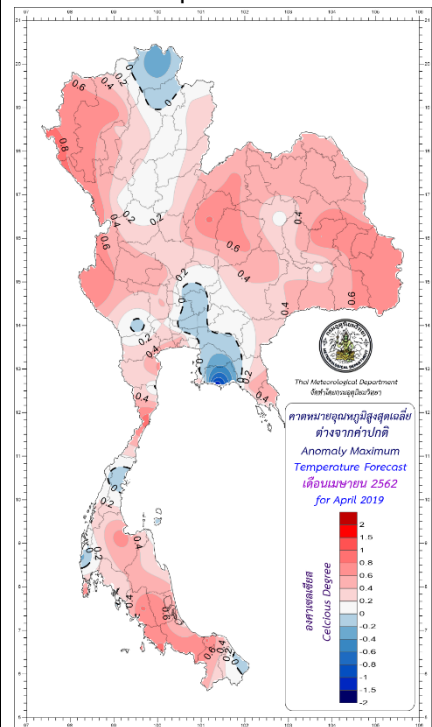
Precipitation anomaly forecast for February 2019



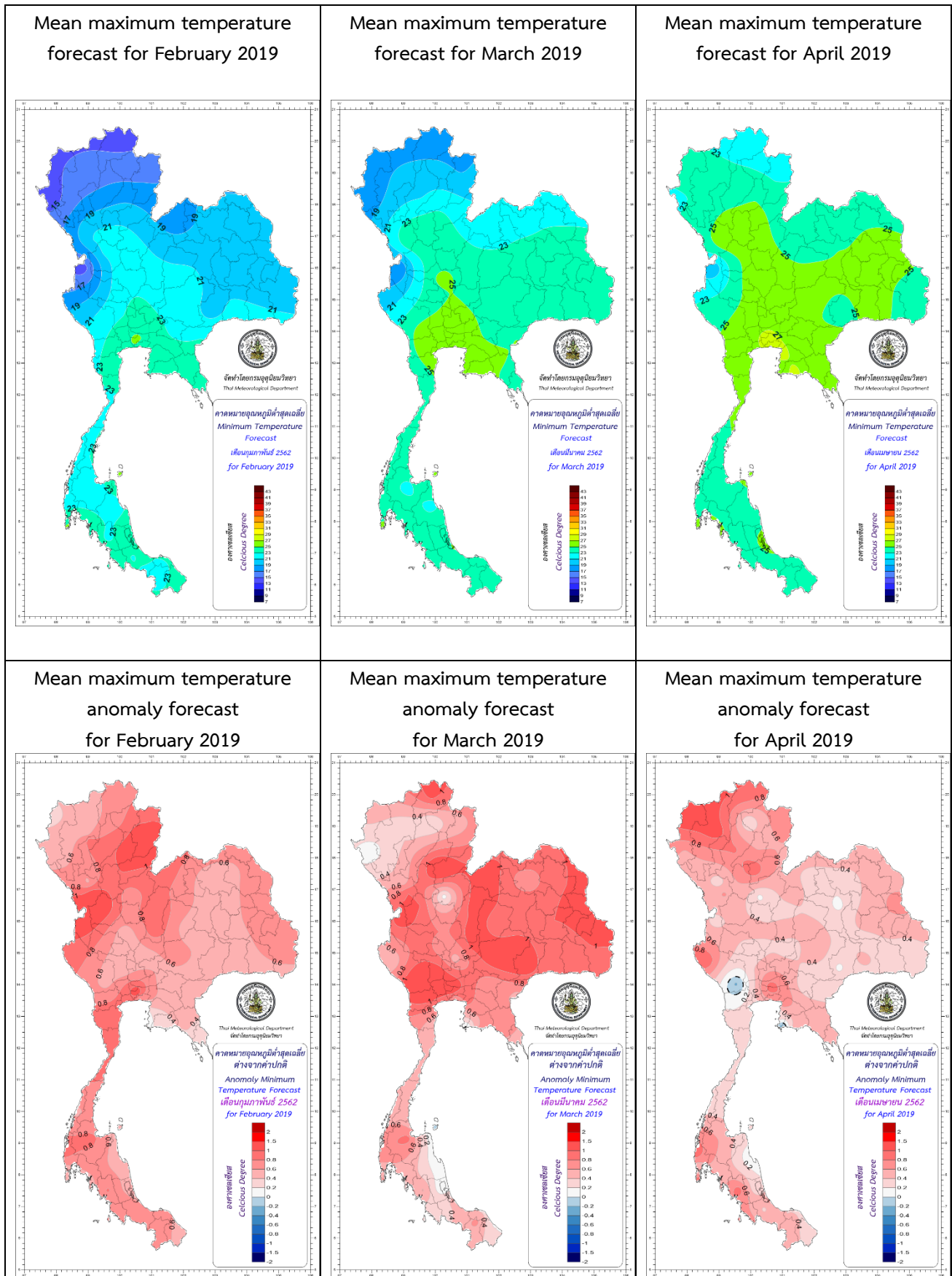
Precipitation anomaly forecast for March 2019



Precipitation anomaly forecast for April 2019



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



***** Caution: *****

February 2019: Perhaps, some westerly wind waves may move pass Myanmar toward the Upper Thailand causing the area to meet thunder rain with gusty wind at some areas, and possibly falling hail.

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 2019: Probably, 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 close toward the western portion of Thailand. Thus, the western sides of both of the northern and central parts including with 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)					
	January 2019			February 2019			March 2019			January		February		March	
	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	1-2	30 % below normal	10-35	2-3	10 % below normal	55-90	5-7	Near normal	10.4	1.4	28.1	3.1	71.3	7.0
Northeastern	10-25	2-3	10 % below normal	20-50	3-5	10 % below normal	55-95	6-8	10 % below normal	18.5	2.5	44.7	4.8	86.3	8.0
Central	< 10	1-2	20 % below normal	15-40	2-3	10 % below normal	45-85	4-6	10 % below normal	12.3	1.6	36.0	3.4	79.5	6.4
Eastern	10-35	2-3	20 % below normal	30-70	3-5	10 % below normal	70-110	5-7	10 % below normal	29.1	3.1	62.1	5.4	98.9	8.3
Southern Thailand (East Coast)	5-30	2-3	20 % below normal	30-95	3-5	10 % below normal	50-95	5-7	10 % below normal	34.5	3.7	68.4	5.4	75.4	7.3
Southern Thailand (West Coast)	5-30	2-3	20 % below normal	50-110	6-8	10 % below normal	130-195	11-13	Near normal	27.5	3.6	88.8	7.6	160.6	12.7
Bangkok Metropolis and Vicinity	5-25	2-3	Near normal	15-45	2-3	10 % below normal	55-110	4-6	10 % below normal	20.0	2.5	42.1	3.6	91.4	6.5

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

Part	Prediction									Normal (Baseline period 1981-2010)					
	January 2019			February 2019			March 2019			January		February		March	
	Mean Tmax	Mean Tmin	Comparing to Normal	Mean Tmax	Mean Tmin	Comparing to Normal	Mean Tmax	Mean Tmin	Comparing to Normal	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin
Northern	33-36	16-20	Above normal	35-38	19-23	Above normal	36-39	23-25	Above normal	33.7	17.2	36.1	20.4	37.1	23.4
Northeastern	32-35	19-22	Above normal	34-37	22-25	Above normal	35-38	24-26	Above normal	33.0	19.7	35.1	22.4	36.1	24.5
Central	34-36	21-24	Above normal	36-38	23-26	Above normal	36-39	25-27	Above normal	34.6	22.6	36.1	24.4	37.0	25.8
Eastern	32-35	23-25	Above normal	33-35	24-26	Above normal	34-36	25-27	Above normal	32.9	23.4	33.8	24.9	34.7	25.9
Southern Thailand (East Coast)	31-33	22-25	Above normal	32-34	23-25	Above normal	33-35	23-26	Above normal	31.4	22.7	32.6	23.7	33.7	24.6
Southern Thailand (West Coast)	33-35	22-25	Above normal	34-36	23-25	Above normal	33-36	24-26	Above normal	33.8	23.0	34.4	23.7	34.2	24.4
Bangkok Metropolis and Vicinity	33-35	24-26	Above normal	34-36	25-28	Above normal	34-37	26-28	Above normal	33.3	24.4	34.3	25.9	35.4	26.9

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 next month.
- 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.

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