



# Three-month Climate Prediction of Thailand During April – June 2019

MINISTRY OF DIGITAL ECONOMY AND SOCIETY,  
THAI METEOROLOGICAL DEPARTMENT

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## Climate Outlook

**1. During the next three months,** the mean total rain of Thailand will be about 10% less than normal except that of the Southern Thailand is to be about 5% less than normal. Actually, the mean total rain of the northern, northeastern, central, eastern, the Southern Thailand (east coast), the Southern Thailand (west coast), Bangkok Metropolis and Vicinity will be 325-405 (Normal: 405), 395-480 (Normal: 486), 285-360 (357), 475-585 (584), 270-350 (340), 585-720 (697) and 265-345 (355) millimeters (mm) consecutively.

The mean temperature of Thailand will be above normal. Actually, the mean maximum and minimum temperature of the Upper Thailand will be about 35-36 °C (normal: 34.7 °C) and 25-26 °C (normal: 25.2 °C) whereas the mean maximum and minimum temperature of the Southern Thailand is to be 34-35 °C (normal: 33.3 °C) and 25-26 °C (normal: 24.6 °C) accordingly.

**2. In April 2019,** the mean total rain of Thailand will be about 20% less than normal. In fact, the mean total rain of each part is as follows: Northern (40-70), Northeastern (50-85), Central (35-70), Eastern (55-95), the Southern Thailand (east coast): 40-75, the Southern Thailand (west coast): 95-155, Bangkok Metropolis and Vicinity (35-80) millimeters (mm).

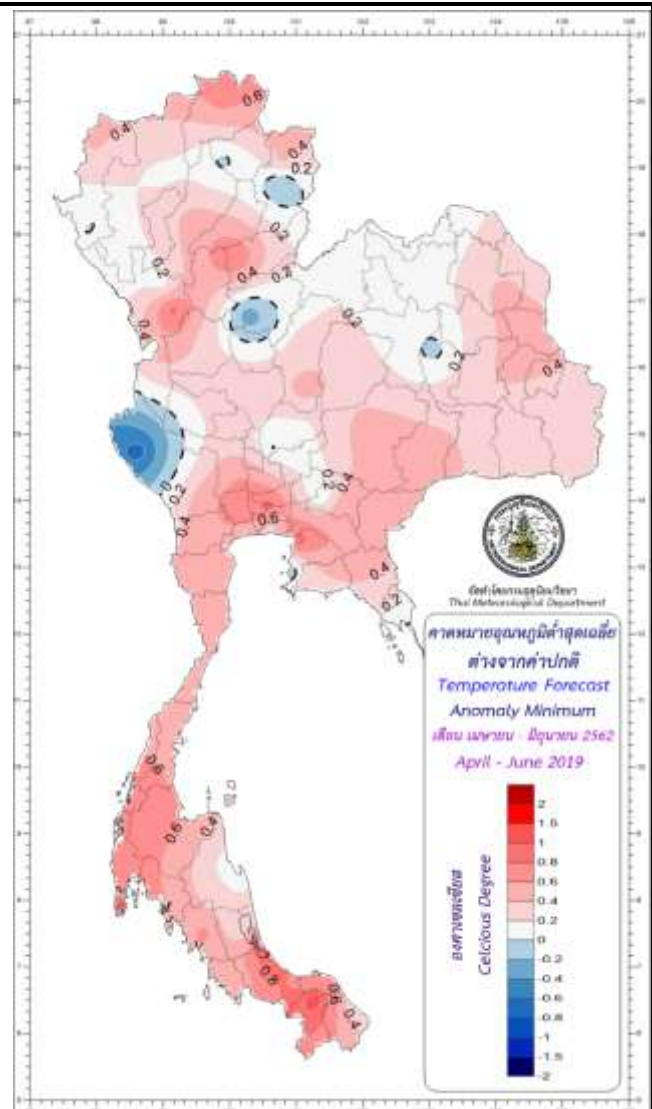
Moreover, the mean temperature of Thailand is to be mostly above normal. As a matter of fact, the mean maximum and minimum temperature of the Upper Thailand will be 36-38 and 24-26 °C whereas the mean maximum and minimum temperature of the Southern Thailand is to be 34-36 and 22-25 °C relatively.

**3. In May 2019,** the mean total rain of all parts will be 10% below normal except that of the northeastern part is to be 5% below normal and that of the Southern Thailand (west coast) is to be near normal. In fact, the mean total rain of each part is as follows: Northern (130-190), Northeastern (155-210), Central (110-160), Eastern (170-235), the Southern Thailand (east coast): 100-160, the Southern Thailand (west coast): 265-355, Bangkok Metropolis and Vicinity (165-235) mm respectively.

Furthermore, the mean temperature of Thailand will be above normal except that of the eastern part and the Southern Thailand is to be near normal. In particular, the mean maximum and minimum temperature of the Upper Thailand will be 34-36 and 24-26 °C while those of the Southern Thailand are to be 33-36 and 24-26 °C.

**4. In June 2019,** the mean total rain around Thailand will be 5% below normal except that of the northeastern part is to be 10% below normal. In detail, the mean total rain of all parts is as the following: the northern part (125-175), the northeastern part (160-220), the central part (105-150), the eastern part (210-290), the Southern Thailand (east coast): 85-130, the Southern Thailand (west coast): 250-340, Bangkok Metropolis and Vicinity (130-185) millimeters (mm).

Additionally, the mean temperature of Thailand will be above normal. In particular, the mean maximum and minimum temperature of the Upper Thailand will be 33-36 and 25-27 °C whereas those of the Southern Thailand are to be 33-35 and 24-25 °C.



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

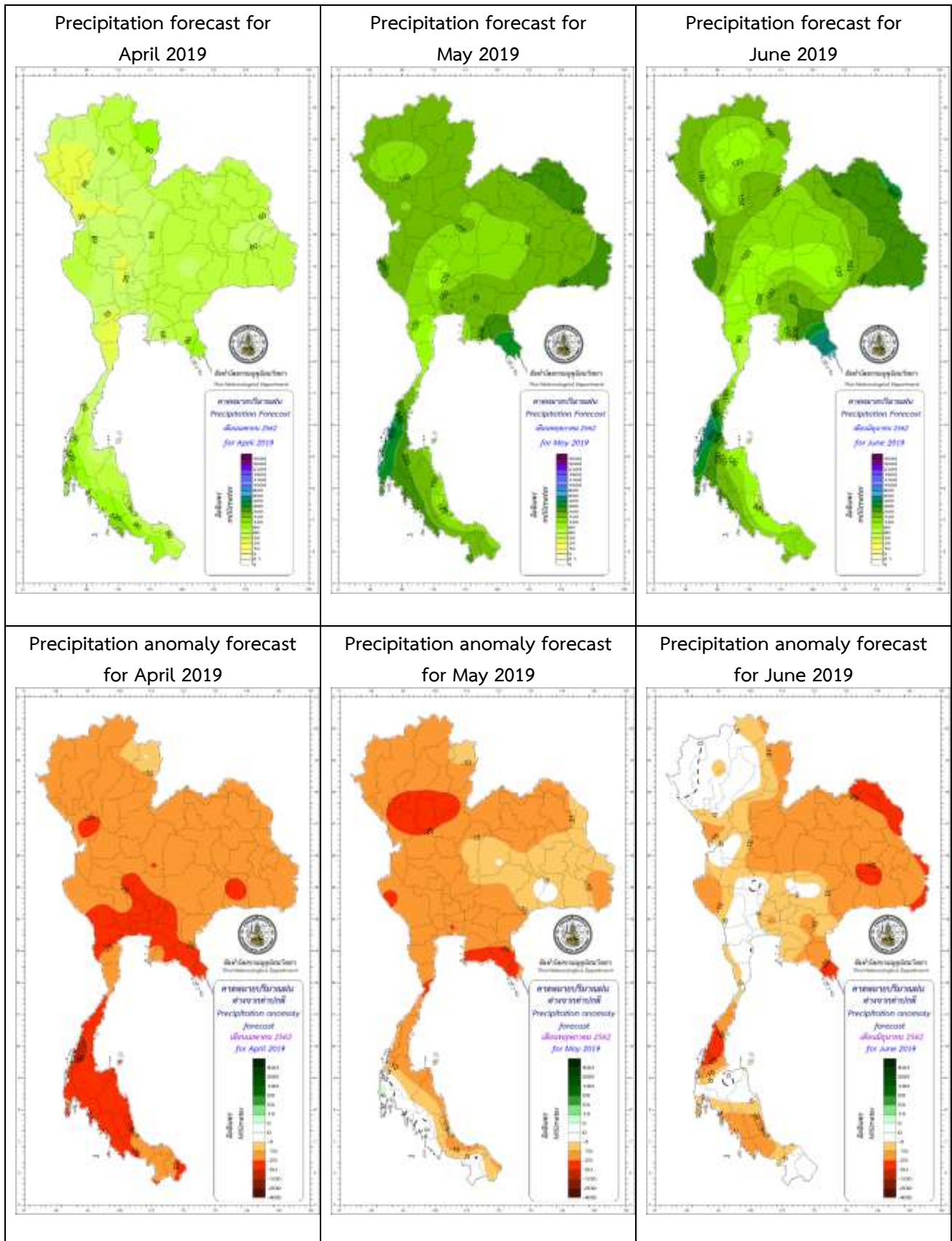
## Thailand climate for April-May-June 2019 from baseline: 1981-2010

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 radiating 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.

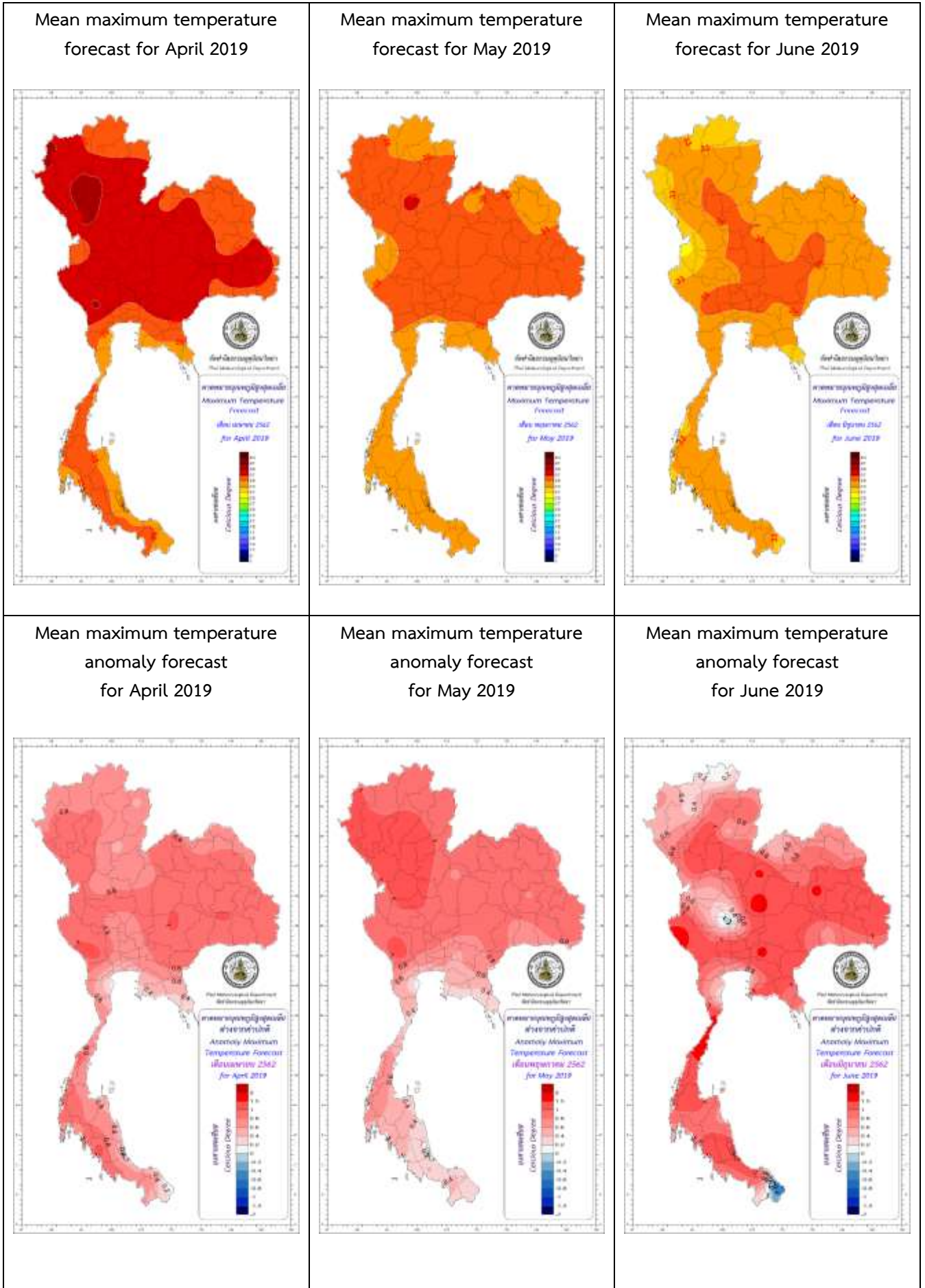
May 2019: As being the transitional period from the summer to the rainy seasons, the common weather during the 1<sup>st</sup> half of this month is usually sweltering. Also, thunder rain storms and summer thunderstorms occur often. Sometimes, hail happens too. And from the influential heat low-pressure air mass cells, mostly at the 2<sup>nd</sup> 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.

June 2019: Usually, rainfall is abundant during the 1<sup>st</sup> half of this month from the influential southwest monsoon prevailing over Thailand together with a low-pressure trough placing over the central portion of Thailand. Afterward, rain will reduce and dry spell may occur for 1-2 weeks especially around the Upper Thailand due to the low-pressure trough moving upward to place over the southern portion of China including with the prevailing southwest monsoon over Thailand weakening. Additionally, some tropical cyclones from the Pacific Ocean or the South China Sea may feasibly move near or toward Thailand, specifically at the eastern portion of Thailand.

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

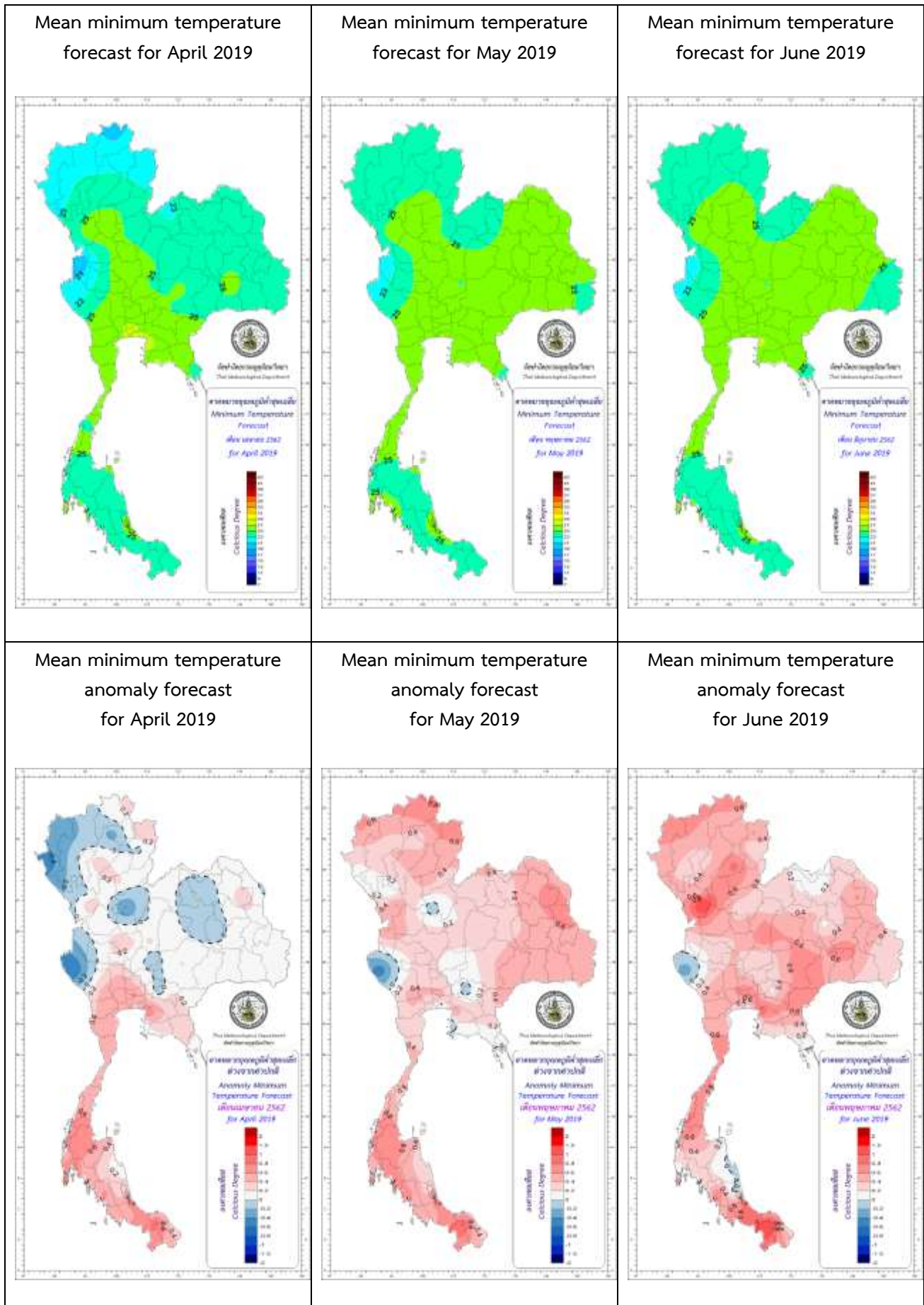


Mean Maximum Temperature (°C) and Anomaly (°C) Forecast:





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



\*\*\* Caution: \*\*\*

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 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.

During June 2019: Frequently, some tropical cyclones develop in the Western Pacific and may move pass the Philippines toward the South China Sea. This influences the southwestern monsoon prevailing over Thailand and the Gulf of Thailand to strengthen causing Thailand to meet more rainfall, specifically around the coastal areas of the eastern part and the Southern Thailand (west coast). The public then should follow 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)					
	April 2019			May 2019			June 2019			April		May		June	
	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	40-70	5-7	20 % Below Normal	130-190	14-16	10 % Below Normal	125-175	16-18	5 % Below Normal	71.3	7.0	177.8	15.5	156.2	17.8
Northeastern	50-85	6-8	20 % Below Normal	155-210	14-16	5 % Below Normal	160-220	14-16	10 % Below Normal	86.3	8.0	187.1	15.3	203.4	16.1
Central	35-70	4-6	20 % Below Normal	110-160	12-14	10 % Below Normal	105-150	13-15	5 % Below Normal	79.5	6.4	172.1	14.3	145.2	15.4
Eastern	55-95	6-8	20 % Below Normal	170-235	14-16	10 % Below Normal	210-290	15-17	5 % Below Normal	98.9	8.3	223.9	15.8	261.5	16.7
Southern Thailand (East Coast)	40-75	5-7	20 % Below Normal	110-160	12-14	10 % Below Normal	85-130	12-14	5 % Below Normal	75.4	7.3	143.7	14.3	113.0	13.7
Southern Thailand (West Coast)	95-155	11-13	20 % Below Normal	265-355	19-21	Near Normal	250-340	17-19	5 % Below Normal	160.6	12.7	310.0	19.9	312.4	18.9
Bangkok Metropolis and Vicinity	35-80	4-6	20 % Below Normal	165-235	14-16	10 % Below Normal	130-185	15-17	5 % Below Normal	91.4	6.5	247.7	16.2	157.1	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)					
	April 2019			May 2019			June 2019			April		May		June	
	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	37-39	22-25	Above Normal	34-37	24-26	Above Normal	32-35	24-26	Above Normal	37.1	23.4	34.7	24.2	33.0	24.3
Northeastern	36-38	24-26	Above Normal	34-36	24-26	Above Normal	33-36	25-26	Above Normal	36.1	24.5	34.4	24.8	33.4	24.9
Central	37-40	24-26	Above Normal	35-38	24-26	Above Normal	34-36	24-26	Above Normal	37.0	25.8	35.2	25.7	34.0	25.5
Eastern	34-36	25-27	Above Normal	33-35	25-27	Near Normal	32-35	25-27	Above Normal	34.7	25.9	33.7	25.8	32.8	25.7
Southern Thailand (East Coast)	33-35	24-26	Above Normal	33-35	24-26	Near Normal	33-35	24-26	Above Normal	33.7	24.6	33.5	24.9	33.1	24.7
Southern Thailand (West Coast)	34-36	20-23	Above Normal	32-34	24-26	Near Normal	32-34	24-26	Above Normal	34.2	24.4	32.7	24.6	32.0	24.6
Bangkok Metropolis and Vicinity	35-37	26-28	Above Normal	34-36	25-27	Above Normal	33-36	26-28	Above Normal	35.4	26.9	34.4	26.3	33.6	26.1

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

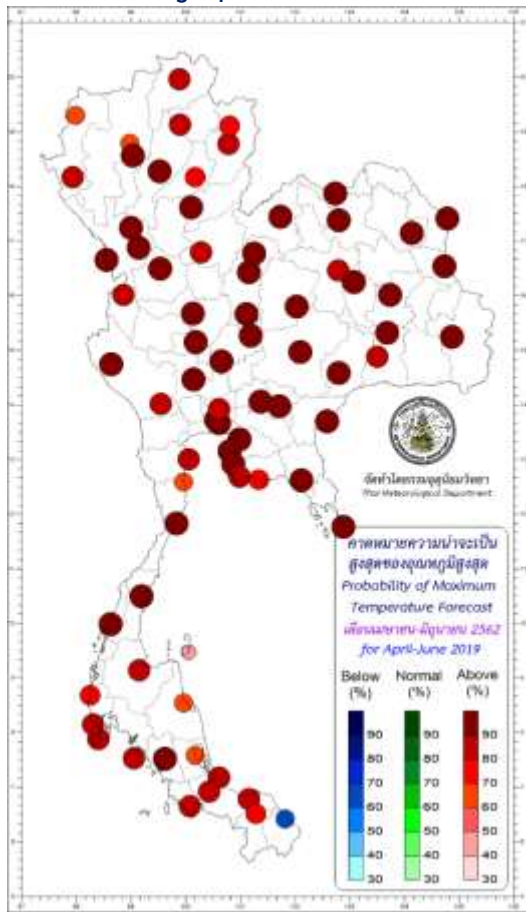
- This long-range climate forecast is created by applying some climate models and statistical methods, the public then should follow the daily weather forecast news from the Thai Meteorological Department for more accuracy further.
- The next 3-month climate forecast will be published online before the end of April 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 at the [climate tab](#).

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 Thai Meteorological Department,  
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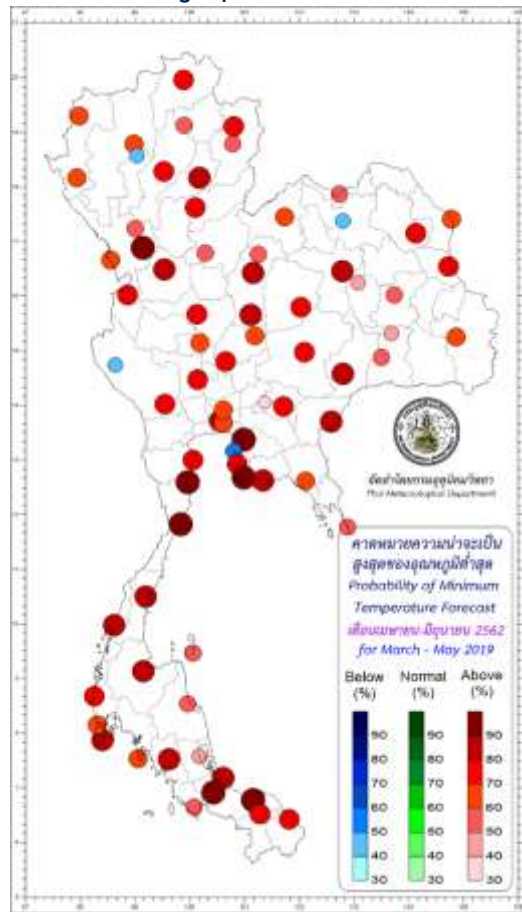


Probability forecast of maximum, minimum temperature and precipitation  
(whether below normal, normal or above normal)

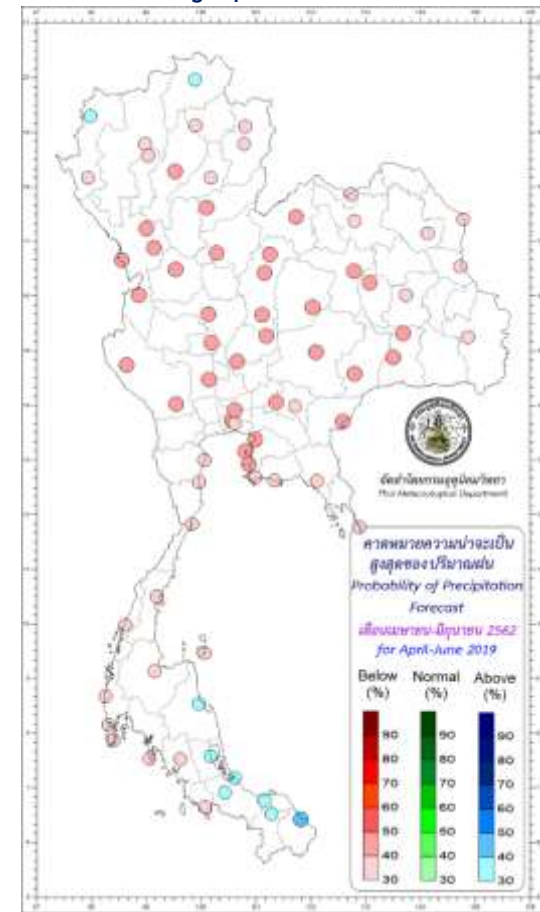
Probability forecast of maximum temperature during April – June 2019



Probability forecast of minimum temperature during April – June 2019

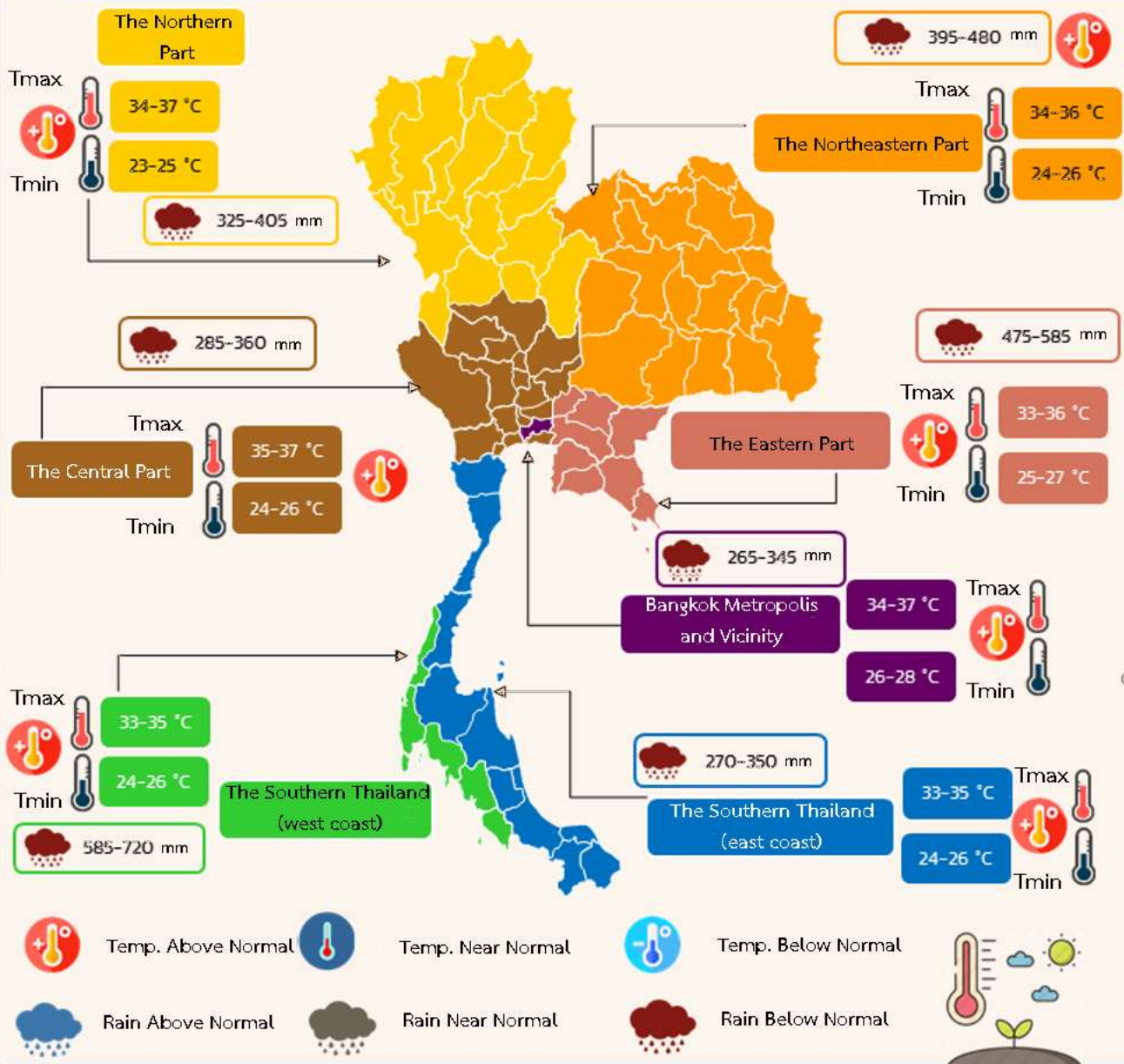


Probability forecast of precipitation during April – June 2019



Note: These maps are mean model forecasts for this three-month climate prediction.

# Three-month climate prediction of Thailand: April - June 2019



## Caution:

- March and May: Summer thunderstorms around the Upper Thailand causing thunder rain and gusty wind to happen at some areas with possibly falling hail.
- Late April until May: Some low-pressure air mass cells may develop around the Andaman Sea influencing the western portion of Thailand to meet more rain.
- June: Some tropical cyclones often develop in the Pacific Ocean influencing the southwestern monsoon to strengthen causing more rain to occur, specifically around the coastal areas of the eastern part and the Southern Thailand (west coast).

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