



MINISTRY OF DIGITAL ECONOMY AND SOCIETY,  
THAI METEOROLOGICAL DEPARTMENT

## 3-month Climate Prediction of Thailand

During February – April 2021

Issued on 29 January 2021

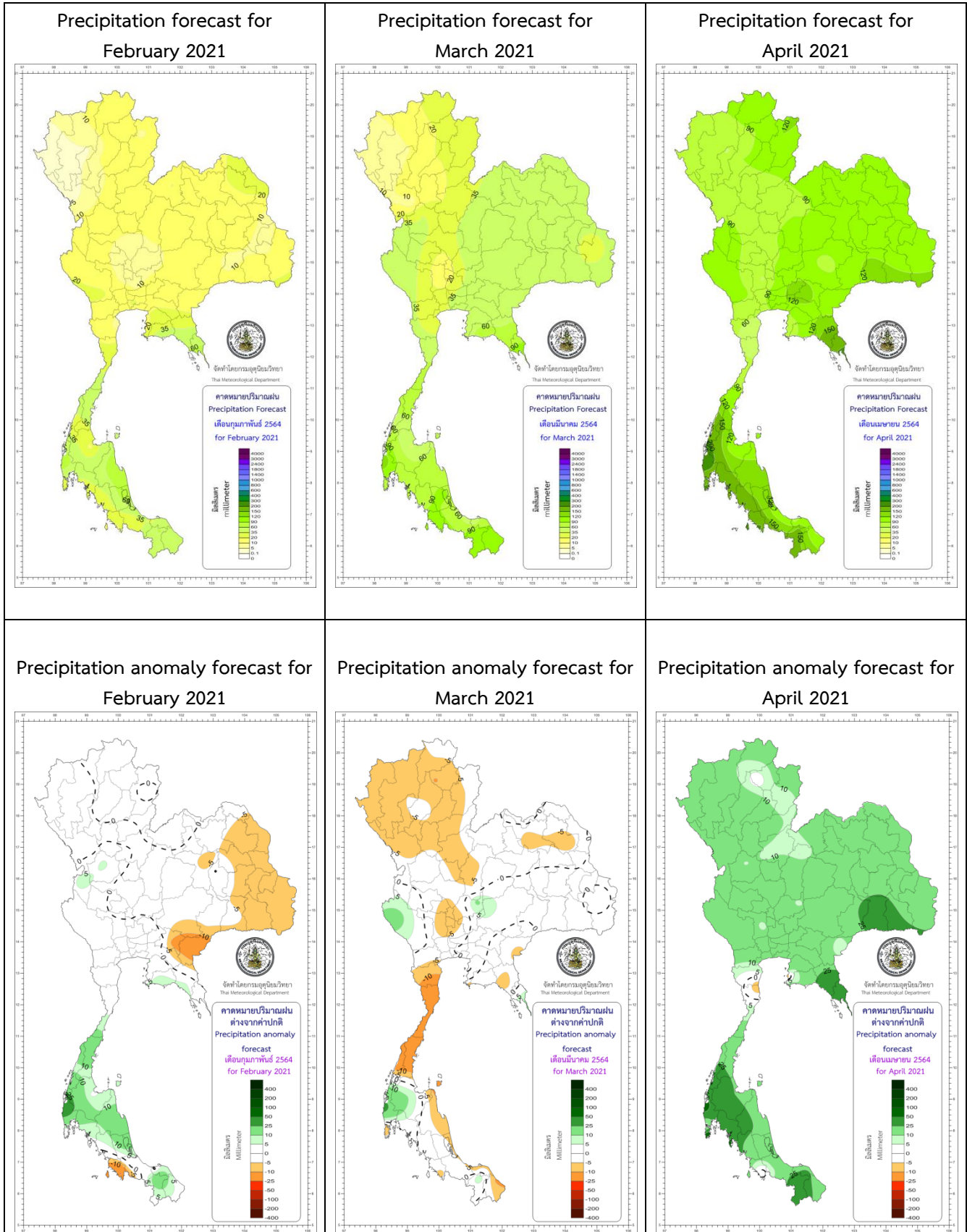
### Thailand climate for February – March - April from 30-year normal (A.D. 1981 - 2010 or B.E. 2524 - 2553 baseline average)

**February** Normally, this month is during the transition period from the winter to the summer. In other words, the high-pressure air mass areas prevailing over Thailand will start to weaken. Still, common weather of Thailand is still to be cool with morning fog whereas that of the northern and northeastern parts is still cold to very cold at some areas, mostly during the 1<sup>st</sup> half of this month. Afterward, rising temperature occurs due to prevailing hotly southerly wind replacing the northeastern monsoon. Thus, the start of the summer appears since the middle of this month onward. Furthermore, rain at the Southern Thailand will be less than that of the past month, especially at the East Coast.

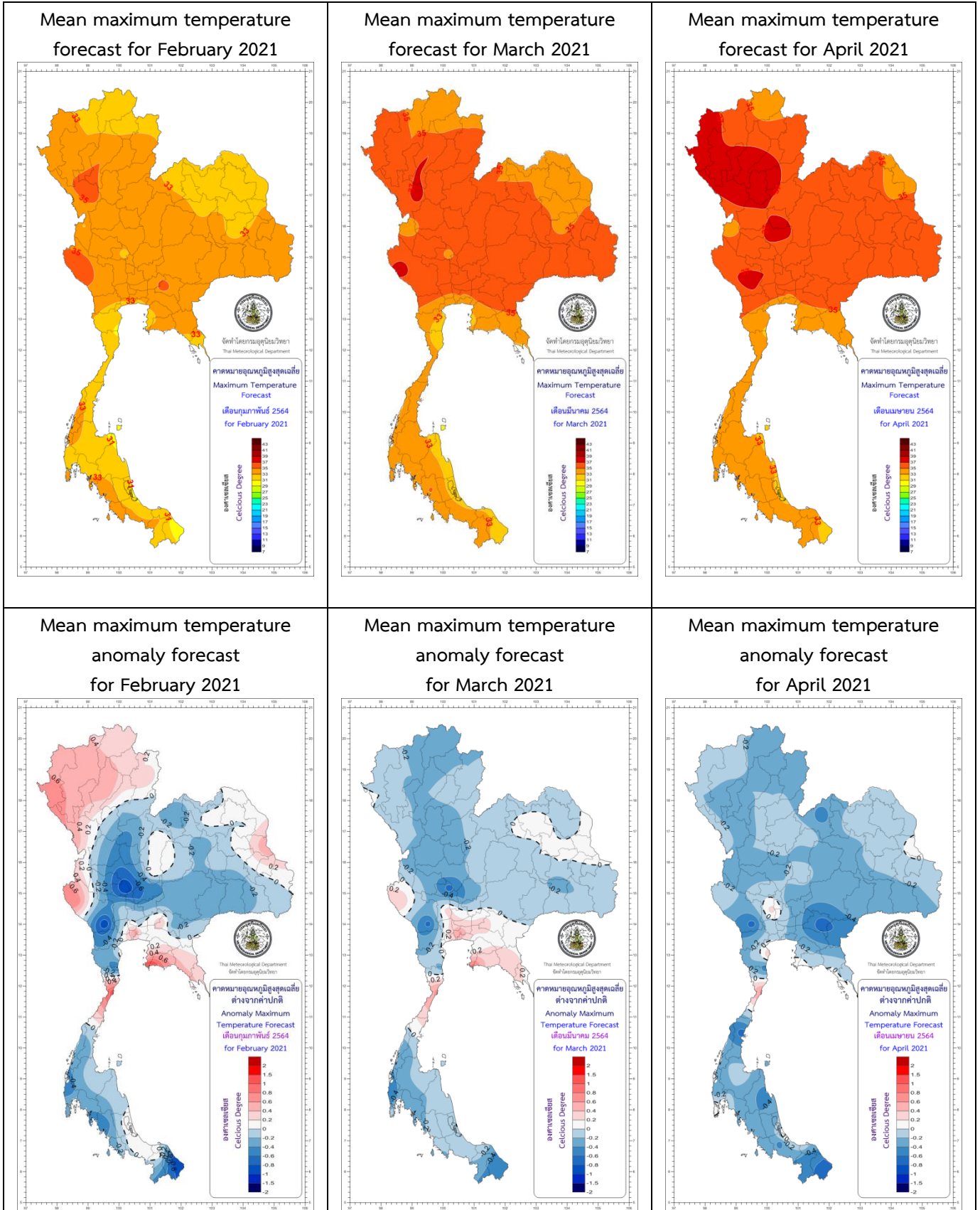
**March** Sweltering and dry weather with little humidity appears along with very hot weather on some days, specifically at the Upper Thailand due to mostly prevailing southerly wind over Thailand. However, at some periods, coldly high-pressure air masses from China will meet hot air masses already prevailing over Thailand. This brings about summer thunderstorms, specifically around the Upper Thailand. The summer thunderstorms often occur during short duration and at narrow areas. Commonly, severely gusty wind often appears too and feasibly causes damages to life and property.

**April** 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.

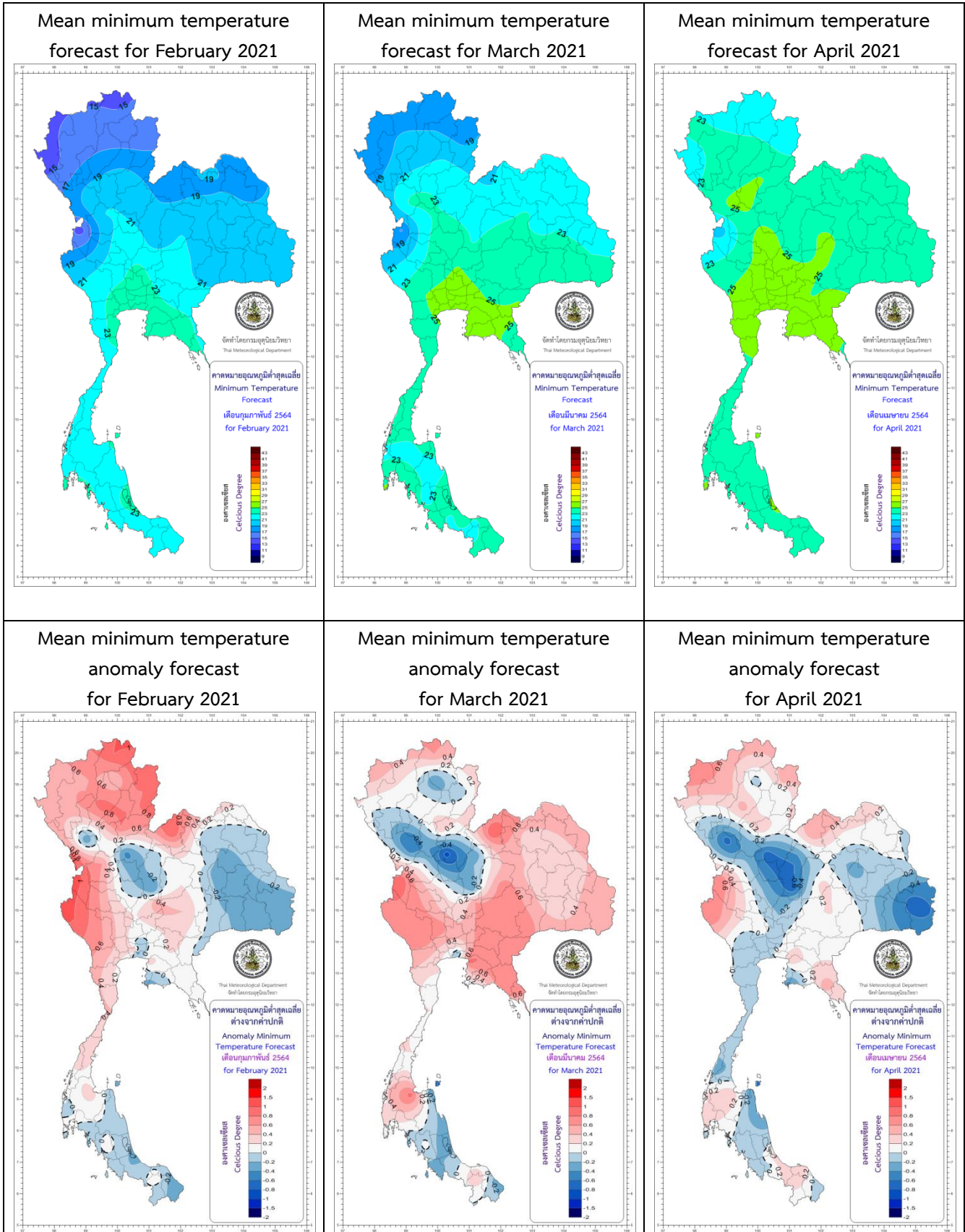
Precipitation (mm/month) and Anomaly (mm/month) Forecast:



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



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





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

**February 2021:** 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 2021:** 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 2021:** 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.

Below right Image source:

[https://www.researchgate.net/figure/Study-area-the-Indochina-Peninsula-in-Monsoon-Southeast-Asia\\_fig5\\_296329477](https://www.researchgate.net/figure/Study-area-the-Indochina-Peninsula-in-Monsoon-Southeast-Asia_fig5_296329477)

The below Image illustrates 7 parts of Thailand with seasons and Monsoons or wind:

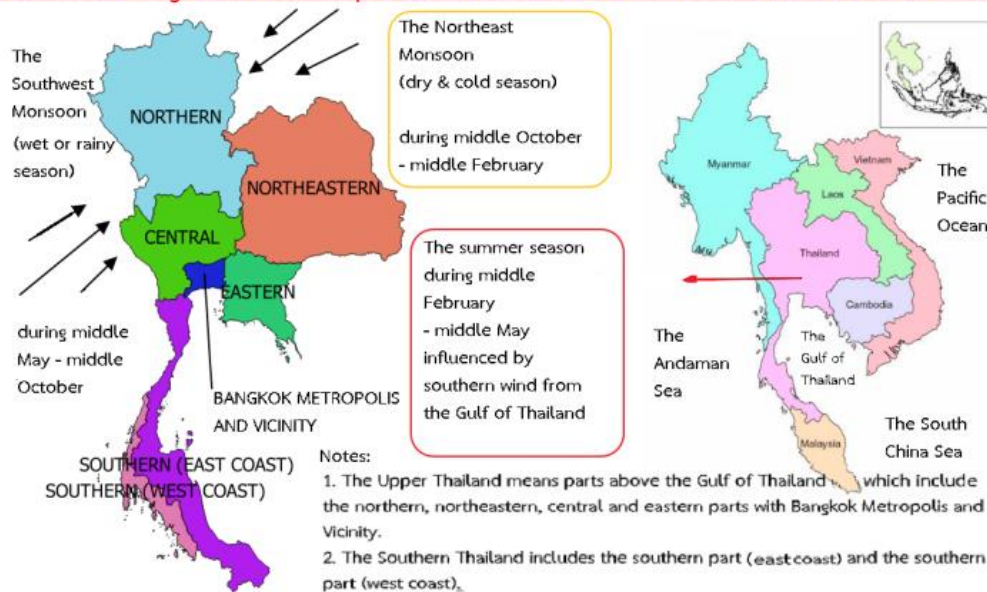


Table 1: Prediction of Rain (mm = millimeters), Rainy Days (days) and comparing with normal

Part	Prediction									Normal (Baseline period: 1981-2010)					
	February 2021			March 2021			April 2021			February		March		April	
	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	5-15	1-2	Near normal	20-40	3-5	20 % Below normal	70-100	7-9	20% Above normal	10.4	1.4	28.1	3.1	71.3	7.0
Northeastern	10-20	1-2	20 % Below normal	30-50	4-6	Near normal	90-120	7-9	20% Above normal	18.5	2.5	44.7	4.8	86.3	8.0
Central	10-20	1-2	Near normal	20-40	3-5	Near normal	70-100	7-9	20% Above normal	12.3	1.6	36.0	3.4	79.5	6.4
Eastern	20-40	2-4	Near normal	50-80	5-7	Near normal	100-130	8-10	20% Above normal	29.1	3.1	62.1	5.4	98.9	8.3
Southern Thailand (East Coast)	30-50	3-5	20% Above normal	50-80	5-7	20 % Below normal	70-100	7-9	20% Above normal	34.5	3.7	68.4	5.4	75.4	7.3
Southern Thailand (West Coast)	20-40	3-5	20% Above normal	70-100	7-9	Near normal	170-210	12-14	20% Above normal	27.5	3.6	88.8	7.6	160.6	12.7
Bangkok Metropolis and Vicinity	15-30	2-4	Near normal	30-50	4-6	Near normal	100-130	7-9	20% Above 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:

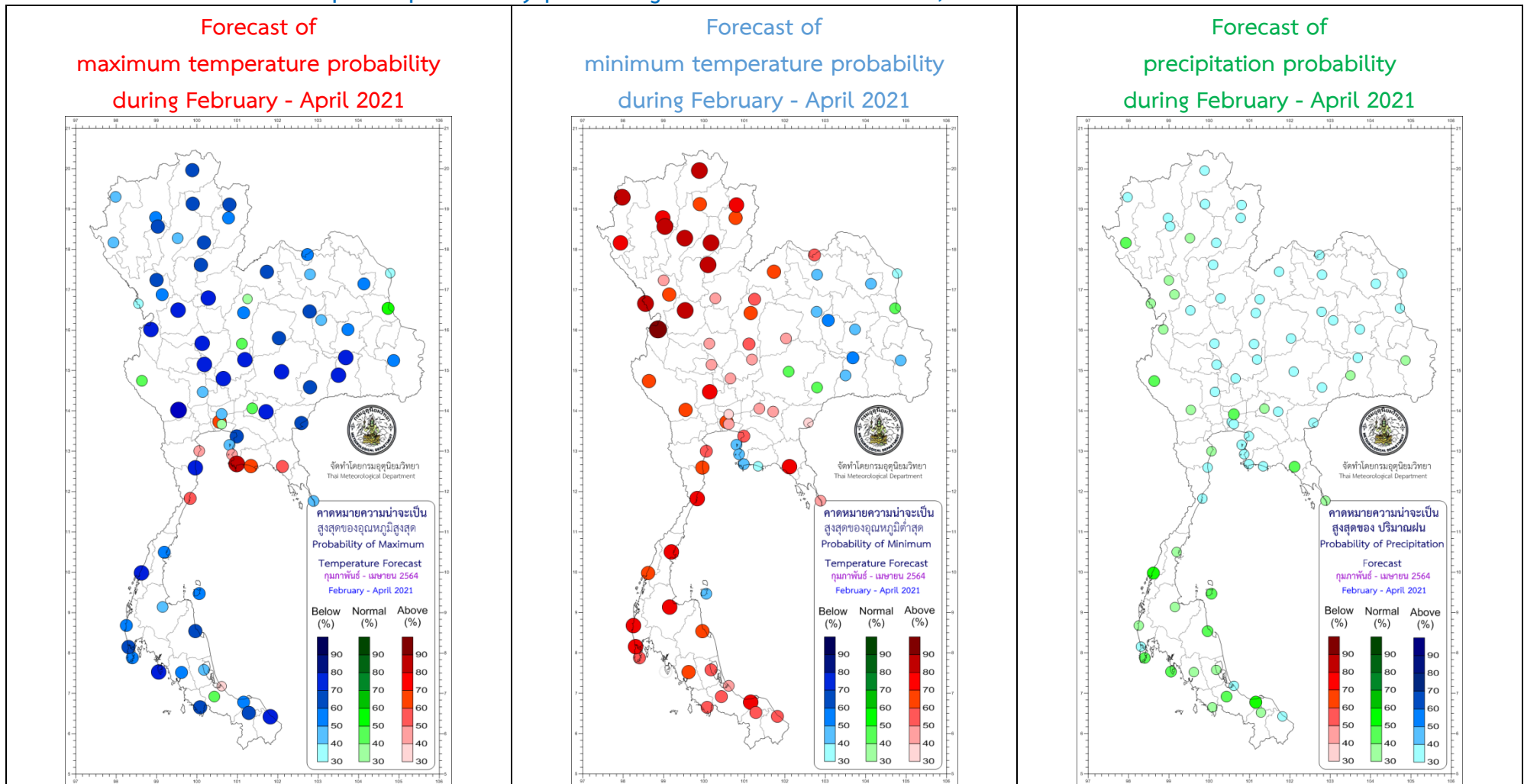
Part	Prediction									Normal (Baseline period: 1981-2010)					
	February 2021			March 2021			April 2021			February		March		April	
	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Comparing with Normal	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin
Northern	33-35	17-19	Near normal	35-37	20-22	Below normal	36-38	22-24	Below normal	33.7	17.2	36.1	20.4	37.1	23.4
Northeastern	32-34	19-21	Near normal	34-36	22-24	Below normal	35-37	24-26	Below normal	33.0	19.7	35.1	22.4	36.1	24.5
Central	33-35	22-24	Near normal	35-37	23-25	Below normal	36-38	25-27	Below normal	34.6	22.6	36.1	24.4	37.0	25.5
Eastern	32-34	22-24	Near normal	33-35	24-26	Below normal	33-35	25-27	Below normal	32.9	23.4	33.8	24.9	34.7	25.9
Southern (East Coast)	31-33	22-24	Near normal	32-34	23-25	Near normal	33-35	24-26	Below normal	31.4	22.7	32.6	23.7	33.7	24.6
Southern (West Coast)	32-34	22-24	Near normal	33-35	23-25	Near normal	33-35	24-26	Below normal	33.8	23.0	34.4	23.7	34.2	24.4
Bangkok and Vicinity	33-35	23-25	Near normal	33-35	25-27	Below normal	34-36	26-28	Below normal	33.3	24.4	34.3	25.9	35.4	26.6

**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 May 2020.
- Further enquiry of monthly climate, 3-month climate and seasonal forecasts can be preceded at Tel: (662)-398-9929 or Fax: (662)-383-8827.

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Ministry of Digital Economy and Society

Point probability forecast maps of **maximum** and **minimum** temperature, and **precipitation**  
 (Point maps for probability percentage (%) of: below normal, near normal or **above normal**)



**Note:** These maps are mean model forecasts for being included in this three-month climate forecast.