



MINISTRY OF DIGITAL ECONOMY AND SOCIETY,
THAI METEOROLOGICAL DEPARTMENT

Three-month Climate Forecast
For December 2018 – February 2019
Issued on 30 November 2018

Climate Outlook:

1. During the next 3 months, the mean total rain of Thailand is expected to become below normal as follows:

The Upper Thailand except for the eastern part: 20% below normal. The northern part: about 20 millimeters (mm, normal: 23 mm). The northeastern part: about 20 mm (normal: 27 mm). The central part: about 15 mm (normal: 21 mm). And Bangkok Metropolis and Vicinity: about 30 mm (normal: 33 mm).

For the eastern part and the Southern Thailand (East Coast): about 10% below normal with the mean total rain about 50 mm (normal: 53 mm) and 330 mm (normal: 368 mm) consecutively.

For the Southern Thailand (West Coast): 5% below normal with the mean total rain about 120 mm (normal: 129 mm).

Additionally, the mean temperature of the Upper Thailand will be above normal whereas the mean maximum temperature is to be about 32-34 C. (normal: 32 C.) while the mean minimum temperature is to be about 20-22 C. (normal: 19.8 C.).

Furthermore, the mean temperature of the Southern Thailand will be near normal (normal of mean maximum and minimum temperature: 31.6 and 22.7 C. accordingly).

2. December 2018, the mean total rain of the Upper Thailand will be about 30% below normal except that of the eastern part is to be about 20% below normal (less than 10 mm in all parts of the Upper Thailand).

Whereas the mean total rain of the Southern Thailand is to be about 10% below normal (that of the East Coast: 230 mm and that of the West Coast: 60 mm).

Furthermore, the mean temperature of the Upper Thailand will be above normal. In other words, the mean maximum temperature is to be about 30-32 C. while the mean minimum temperature is to be about 19-21 C.

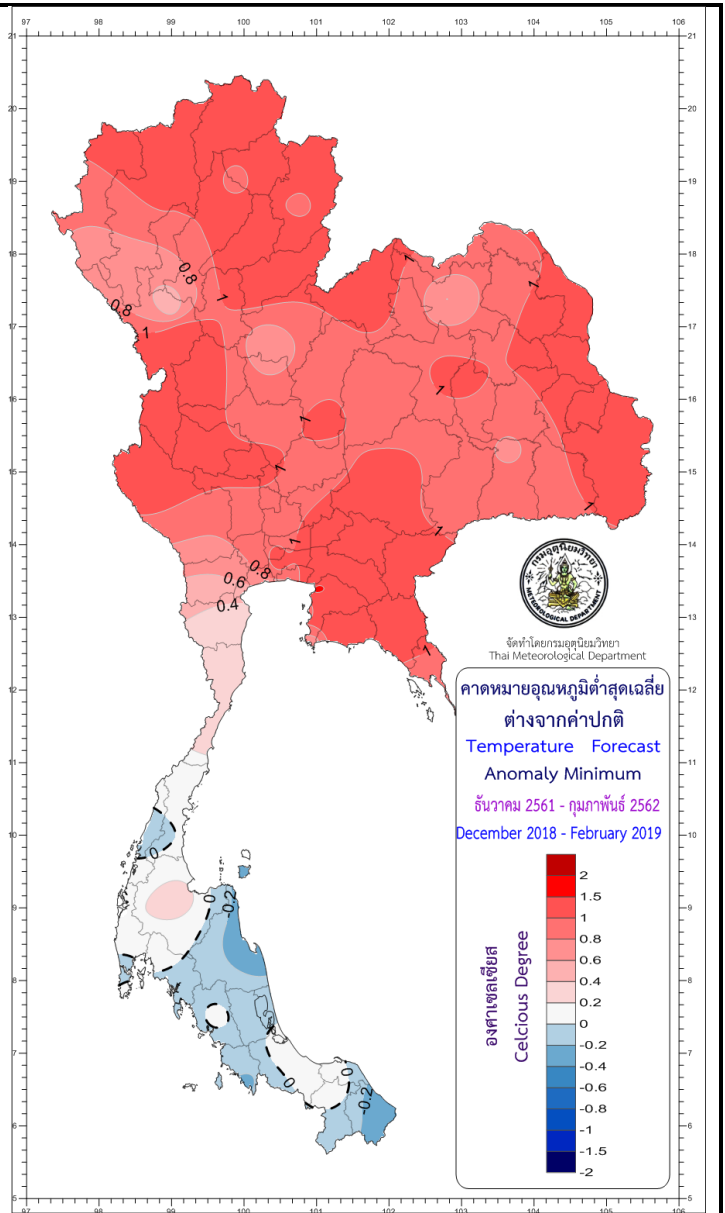
However, the mean temperature of the Southern Thailand will be near normal. In fact, the mean maximum temperature is to be about 30-32 C. while the mean minimum temperature is to be about 22-24 C.

3. January 2019, the mean total rain of the Upper Thailand will be about 20% below normal, except that of the eastern part is to be about 10% below normal (less than 10 mm in all parts of the Upper Thailand).

On the other hand, the mean total rain of the Southern Thailand will be 10% above normal (that of the East Coast: 70 mm and that of the West Coast: 30 mm).

Moreover, the mean temperature of the Upper Thailand will be above normal as the mean maximum temperature is to be about 31-33 C. whereas the mean minimum temperature is to be about 19-21 C.

Nevertheless, the mean temperature of the Southern Thailand will be near normal as the mean maximum temperature is to be about 30-32 C. while the mean minimum temperature is to be about 22-24 C.



(Continued from Climate Outlook of Page 1):

4. February 2019, the mean total rain of the northern, central parts and that of Bangkok Metropolis and Vicinity will be about 20% below normal (less than 10 mm for all these parts). In addition, the mean total rain of other parts of Thailand will be about 10% below normal (or about 20 mm).

For the Upper Thailand, the mean temperature will be above normal as the mean maximum temperature is to be about 33-35 C. whereas the mean minimum temperature is to be about 21-23 C.

For the Southern Thailand, the mean temperature will be near normal as the mean maximum temperature is to be about 32-34 C. while the mean minimum temperature is to be about 22-24 C.

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

Thailand climate for December 2018 - February 2019 from baseline: 1981-2010

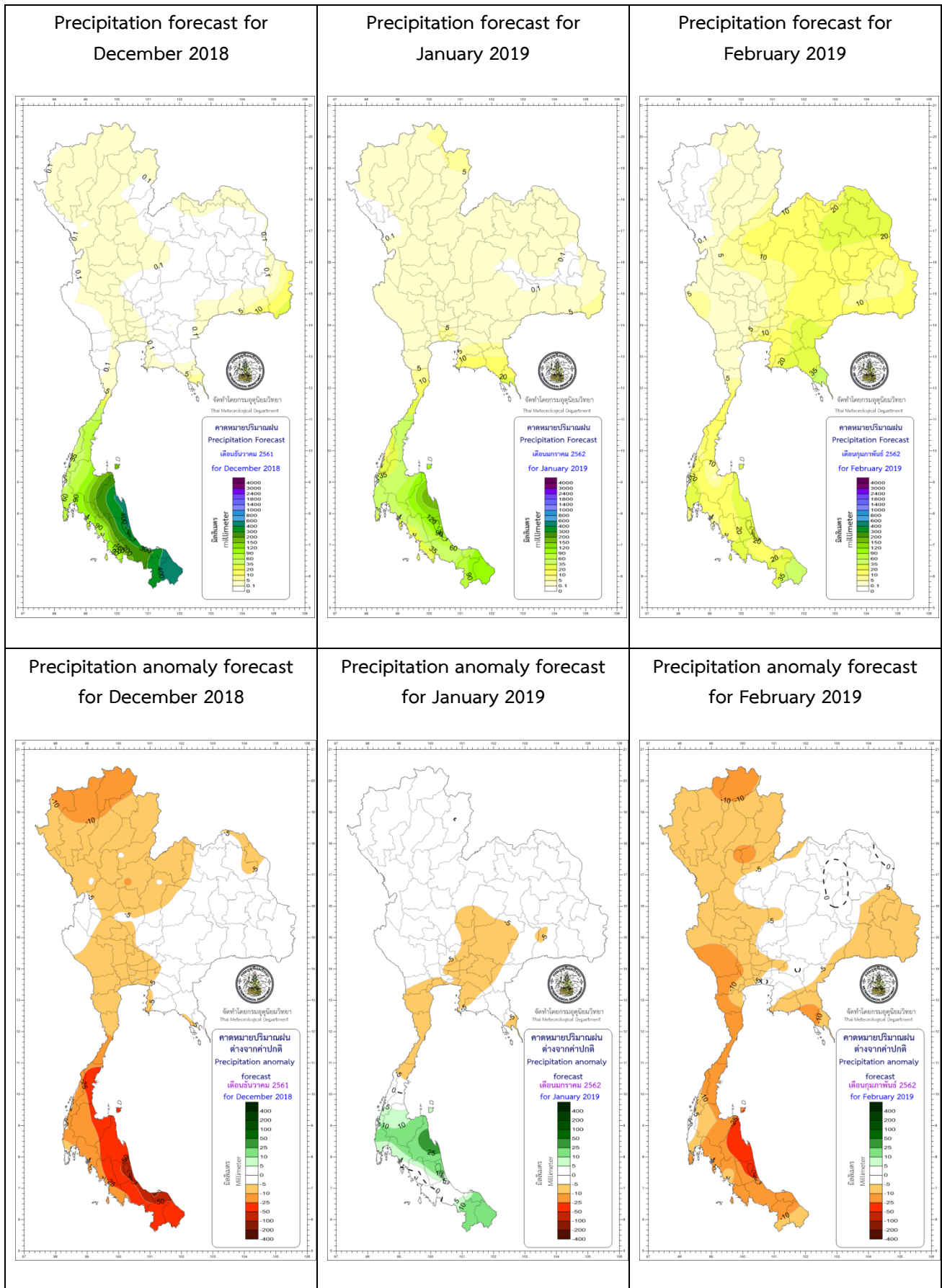
December 2018 Usually, the coldly high-pressure air mass areas from China will prevail over Thailand for the whole month actively and periodically. As a result, the temperature of the Upper Thailand will possibly reduce to become commonly chilly, especially around the upper portion of the northern and northeastern parts including with feasibly very cold weather (less than 8.0 C.) at mount tops or mountainous areas.

For the Southern Thailand, abundant rainfall still occurs mostly during the 1st half of this month, specifically at the East Coast due to the influentially northeast monsoon prevailing over the Southern Thailand and the Gulf of Thailand. Nevertheless, there may be some tropical cyclones moving near or toward Thailand further, commonly at the lower portion of the Southern Thailand.

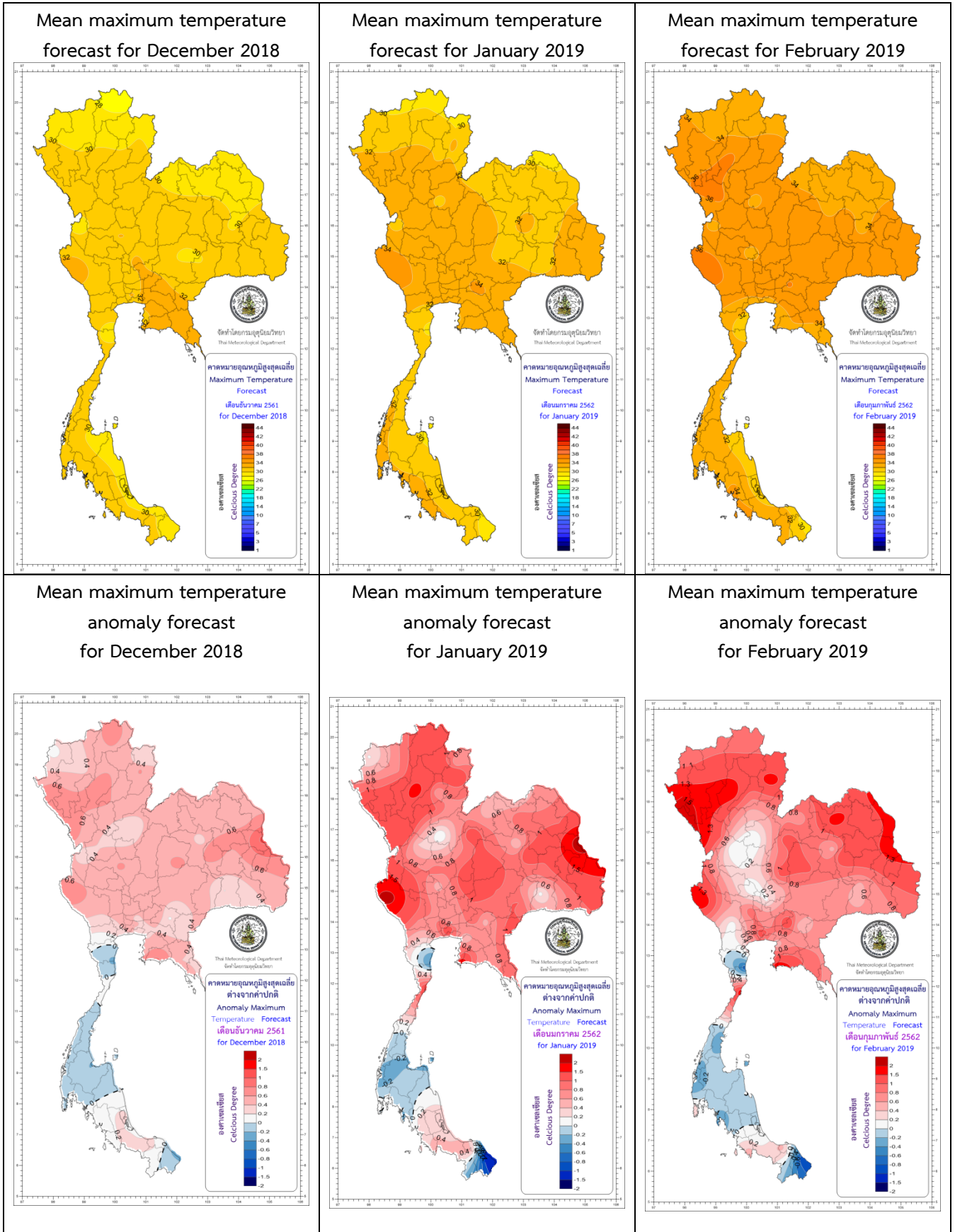
January 2019 Cold weather appears because the influentially high-pressure air mass areas prevailing over Thailand for the whole month. In fact, most of Thailand will meet the lowest reducing temperature in this month appearing as commonly chilly weather, specifically at the northern and northeastern parts including with high mount tops. Additionally, morning fog occurs while the central and eastern parts will meet cool weather. Furthermore, the Southern Thailand will not meet much chilly weather except at the upper portion because of surrounding seas at both sides.

February 2019 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 1st 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.

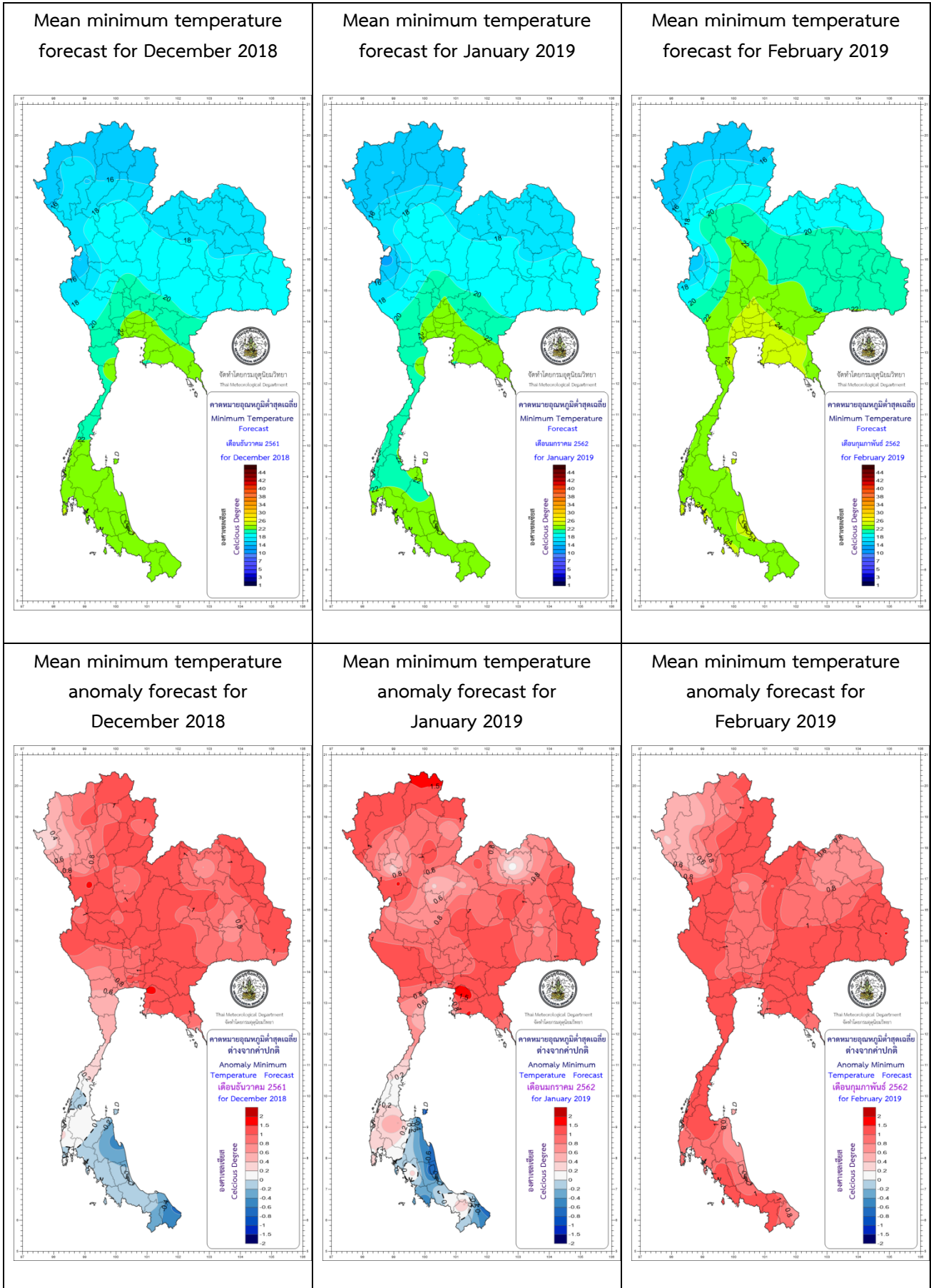
Precipitation (mm/month) and Anomaly (mm/month) Forecast:



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



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



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

December 2018 & January 2019: Some upper-air westerly wind waves moving easterly from the Myanmar direction may pass the Upper Thailand causing the area to meet thunder rain, gusty wind at some areas and possibly falling hail. The public then should follow weather forecast news from the Thai Meteorological Department closely.

February 2019: Some upper-air westerly wind waves moving easterly from the Myanmar direction may pass the Upper Thailand and the western portion of Thailand causing the area to meet thunder rain, gusty wind at some areas and possibly falling hail. The public then should follow weather forecast news from the Thai Meteorological Department closely further.

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

Part	Prediction									Normal (Baseline period 1980-2010)					
	December 2018			January 2019			February 2019			December 2018		January 2019		February 2019	
	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	Less than 10	1-2	30 % below normal	Less than 10	1-2	20 % below normal	Less than 10	1-2	20 % below normal	8.2	1.2	4.6	1.0	10.4	1.4
Northeastern	Less than 10	1-2	30 % below normal	Less than 10	1-2	20 % below normal	10-25	2-3	10 % below normal	3.5	0.8	4.9	1.1	18.8	2.5
Central	Less than 10	1-2	30 % below normal	Less than 10	1-2	20 % below normal	Less than 10	1-2	20 % below normal	5.1	1.0	4.7	1.1	11.3	1.6
Eastern	Less than 10	1-2	20 % below normal	5-20	1-2	10 % below normal	15-40	2-3	10 % below normal	8.1	1.4	16.1	1.8	29.1	3.1
Southern Thailand (East Coast)	175-295	10-12	10 % below normal	50-110	7-9	10 % above normal	10-35	3-5	10 % below normal	266.9	12.1	64.5	7.2	36.5	3.7
Southern Thailand (West Coast)	45-85	7-9	10 % below normal	15-45	4-6	10 % above normal	10-35	3-5	10 % below normal	75.0	9.1	26.4	4.2	27.5	3.6
Bangkok Metropolis and Vicinity	Less than 10	1-2	30 % below normal	5-15	1-2	20 % below normal	5-20	2-3	20 % below normal	6.9	1.2	11.9	1.7	14.1	2.5

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

Part	Prediction									Normal (Baseline period 1980-2010)					
	December 2018			January 2019			February 2019			December 2018		January 2019		February 2019	
	Mean Tmax	Mean Tmax	Comparing with Normal	Mean Tmax	Mean Tmax	Comparing with Normal	Mean Tmax	Mean Tmax	Comparing with Normal	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin	Mean Tmax	Mean Tmin
Northern	30-32	16-18	above normal	31-33	16-18	above normal	34-36	17-19	above normal	29.8	15.9	31.1	15.6	33.7	17.2
Northeastern	30-32	17-19	above normal	30-32	17-19	above normal	33-35	19-21	above normal	29.5	17.1	30.5	17.1	32.9	19.6
Central	31-33	19-21	above normal	32-34	19-21	above normal	34-36	21-23	above normal	31.3	19.0	32.7	19.4	34.8	21.6
Eastern	31-33	21-23	above normal	32-34	21-23	above normal	33-35	23-25	above normal	31.6	21.2	32.1	21.4	32.9	23.4
Southern Thailand (East Coast)	29-31	22-24	near normal	29-31	21-23	near normal	31-33	22-24	near normal	29.7	22.6	30.4	22.3	31.5	22.7
Southern Thailand (West Coast)	31-33	22-24	near normal	32-34	22-24	near normal	33-35	22-24	near normal	31.5	23.0	32.6	22.8	33.8	23.0
Bangkok Metropolis and Vicinity	31-33	22-24	above normal	32-34	22-24	above normal	33-35	24-26	above normal	31.3	21.8	32.2	22.3	33.3	24.1

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 December 2018.
- 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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