

Three-month Climate Forecast

For November 2018 - January 2019

Issued on 30 October 2018

Climate Outlook:

1. During the next 3 months, the mean total rain of the Upper Thailand in the following parts: northern, northeastern, central and eastern parts including with Bangkok Metropolis and Vicinity will be 5-10% below normal. In other words, the total rain of the above parts is to be about 40 (Normal: 46), 20 (Normal: 27), 40 (Normal: 44), 70 (Normal: 77) and 60 (Normal: 66) millimeters (mm) consecutively.

For the Southern Thailand (East and West Coasts), the mean total rain will be near normal or about 680 (Normal: 702) and 300 (Normal: 295) millimeters consecutively.

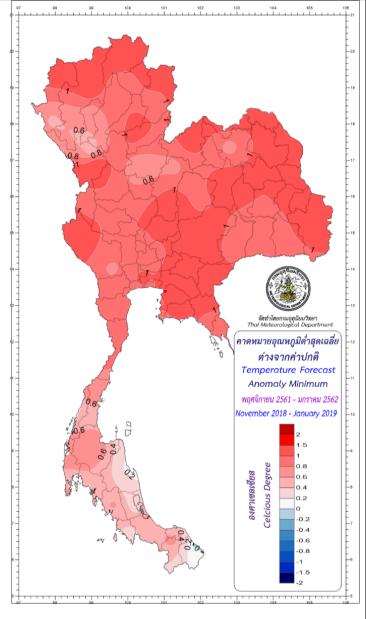
Additionally, the mean temperature of Thailand will be above normal whereas the mean maximum temperature is to be about 31 – 33 C. (Normal: 31.3 C.) while the mean minimum temperature is to be about 23 – 25 C. (Normal: 22 C.).

2. In November 2018, the mean total rain of the Upper Thailand will be about 20% below normal. The mean total rain of the northern, northeastern, central and eastern parts including with Bangkok Metropolis and Vicinity is 20, 10, 20, 30 and 30 millimeters consecutively.

While the mean total rain of the Southern Thailand will be near normal as that of the Eastern Coast is to be 360 and that of the Western Coast is to be about 190 millimeters consecutively.

Furthermore, the mean temperature of Thailand will be above normal. In fact, the mean maximum temperature is to be about 31 – 33 C. while the mean minimum temperature is to be about 22-24 C.

4. In December 2018, the mean total rain of the Upper Thailand will be 20% below normal (or about less than 5 millimeters at all parts). However, the mean total rain of the Southern Thailand will be 10% below normal (the East Coast: 240 millimeters and the West Coast: 70 millimeters).



Alternatively, the mean temperature of Thailand will be above normal as the mean maximum temperature is to be about 30 - 33 C. while the mean minimum temperature is to be about 19 - 23 C.

5. In January 2019, the mean total rain of the Upper Thailand will be near normal as that of the northern, northeastern and central parts is to be < 5 whereas that of the eastern part: 20 and that of Bangkok Metropolis and Vicinity: 10 millimeters accordingly. On the other hand, the total rain of the Southern Thailand will be 10% above normal (that of the East Coast: 70 mm and that of the West Coast: 40 mm).

The mean temperature of Thailand will be above normal as the mean maximum temperature is to be about 31-34 C. while the mean minimum temperature is to be about 20-23 C.

* The information supporting this 3-month climate outlook is at Tables 1 & 2 at Pages 9 & 10:

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

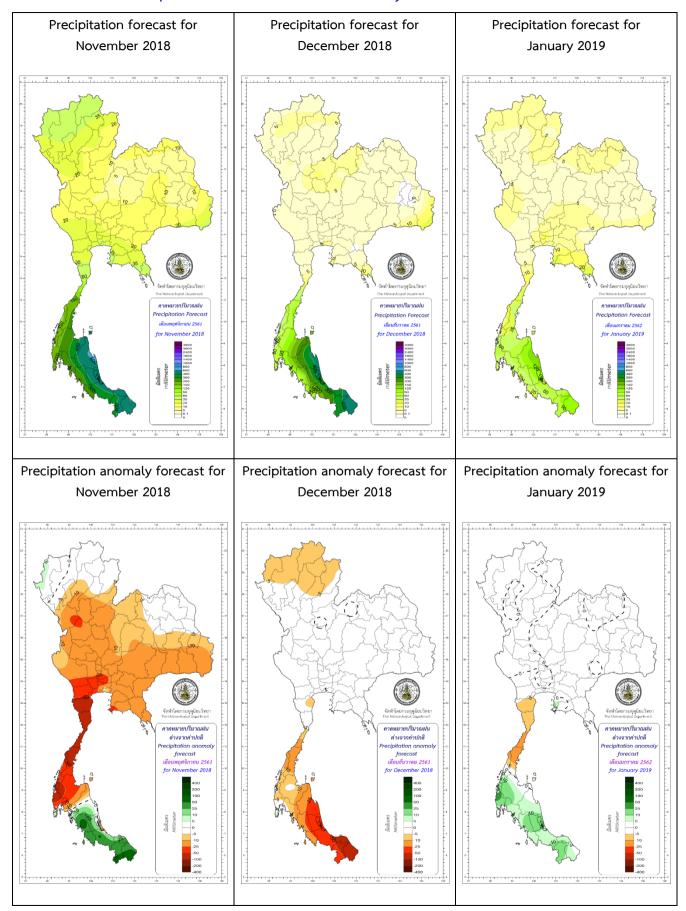
November 2018: The Upper Thailand will meet much reducing rain with cool weather for the whole month influenced by high pressure air mass from China prevailing over the Upper Thailand actively and periodically. This will cause reducing temperature toward cold weather at some areas, specifically at the northern and northeastern parts. Nevertheless, the Southern Thailand will meet abundant rain, especially at the East Coast influenced by the northeastern monsoon and the monsoon trough placing around the Southern Thailand and the Gulf of Thailand.

<u>December 2018:</u> 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.

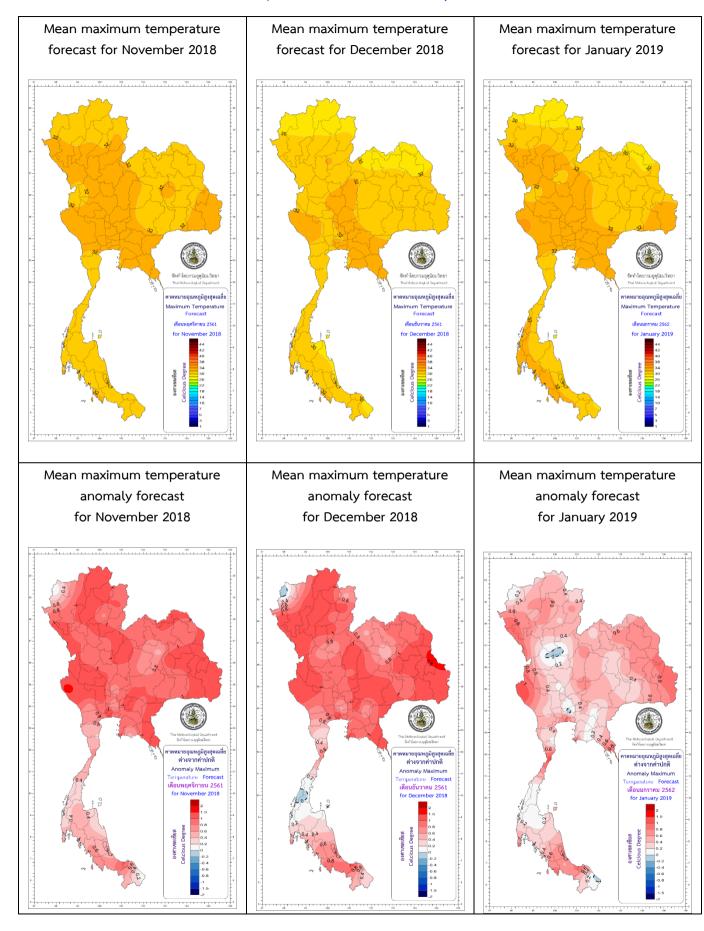
For the Southern Thailand, abundant rainfall still occurs mostly during the 1st half of this month, specifically at the East Coast due to the influentially northeast monsoon prevailing over the Southern Thailand and the Gulf of Thailand. Nevertheless, there may be some tropical cyclones moving near or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

January 2019: Cold weather appears because the influential high-pressure air mass 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 along with 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.

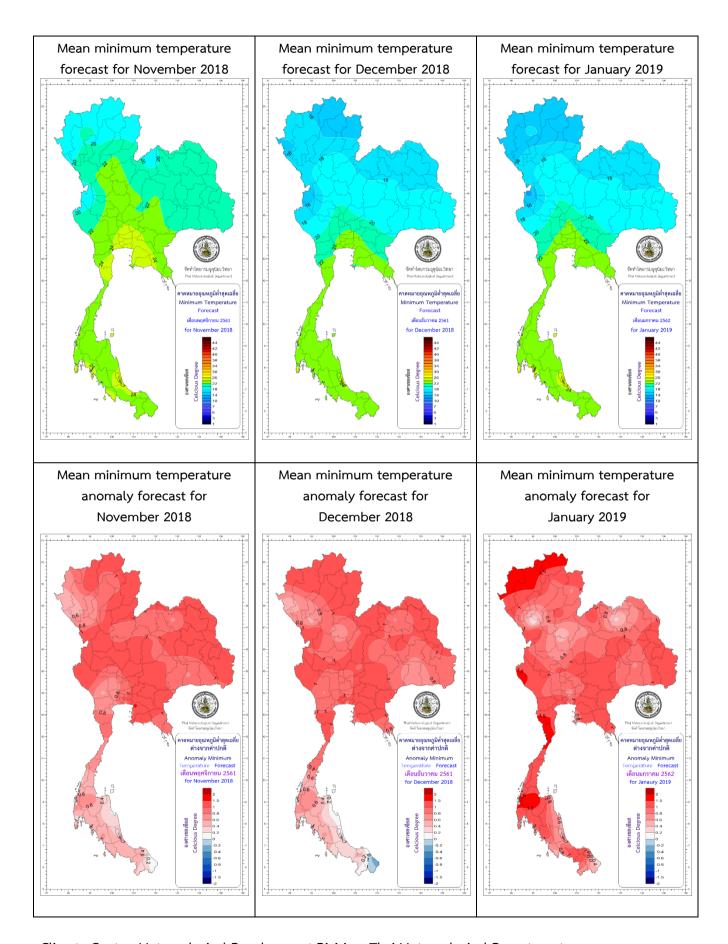
Precipitation (mm/month) and Anomaly (mm/month) Forecast:



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



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



*** <u>Caution:</u> ***

November 2018: Some tropical cyclones favor a high chance to move near Thailand or pass the Southern Thailand. They will pass the tip of the Indochina Peninsula toward the Gulf of Thailand influencing the Southern Thailand (East Coast) to meet increasing rainfall. As a result, flash or forest flood may happen at some areas.

<u>December 2018 & January 2019:</u> Some westerly wind waves from Myanmar 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.

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

			Normal (Baseline period 1980-2010)												
Part	November 2018			December 2018			January 2019			November		December		January	
	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	1-3	20 % below normal	Less than 10	1-2	20 % below normal	Less than 10	1-2	Near normal	32.9	4.1	8.2	1.2	4.6	1.0
Northeastern	Less than 10	1-2	20 % below normal	Less than 5	1-2	20 % below normal	Less than 10	1-2	Near normal	19.5	2.9	3.5	0.8	4.8	1.1
Central	0-25	1-3	20 % below normal	Less than 5	1-2	20 % below normal	Less than 10	1-2	Near normal	37.2	4.1	5.2	1.0	6.7	1.1
Eastern	15-45	2-4	20 % below normal	Less than 10	1-2	20 % below normal	5-30	1-2	Near normal	53.3	5.6	8.1	1.4	16.1	1.8
Southern Thailand (East Coast)	265-395	15-17	Near normal	175-305	10-12	10 % below normal	50-90	6-8	10 % above normal	357.2	16.3	236.9	12.1	59.7	7.2
Southern Thailand (West Coast)	150-235	15-17	Near normal	45-90	7-9	10 % below normal	20-55	3-5	10 % above normal	193.3	16.2	75.0	9.1	26.4	4.2
Bangkok Metropolis and Vicinity	3-35	2-4	20 % below normal	Less than 5	1-2	20 % below normal	5-20	1-2	Near normal	49.5	5.8	6.3	1.2	13.3	1.7

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

Part			Normal (Baseline period 1980-2010)												
	November 2018			December 2018			January 2019			November		December		January	
	Mean	Mean	Comparing	Mean	Mean	Comparing	Mean	Mean	Comparing	Mean	Mean	Mean	Mean	Mean	Mean
	Tmax	Tmax	to Normal	Tmax	Tmax	to Normal	Tmax	Tmax	to Normal	Tmax	Tmin	Tmax	Tmin	Tmax	Tmin
Northern	31-33	19-21	above normal	30-32	16-18	above normal	30-32	15-17	above normal	31.0	19.5	29.8	15.9	31.1	15.6
Northeastern	31-33	20-22	above normal	30-32	17-19	above normal	30-32	17-19	above normal	30.7	20.3	29.5	17.1	30.6	17.1
Central	32-34	21-23	above normal	31-33	19-21	above normal	32-33	19-21	above normal	31.9	22.6	31.4	20.1	32.7	20.6
Eastern	32-34	23-25	above normal	31-33	21-23	above normal	32-33	21-23	above normal	32.1	23.0	31.6	21.2	32.1	21.4
Southern Thailand (East Coast)	30-32	23-23	above normal	29-31	22-24	above normal	30-32	22-24	above normal	30.3	23.4	29.7	22.5	30.3	22.2
Southern Thailand (West Coast)	31-33	23-25	above normal	31-33	22-24	above normal	32-34	22-24	above normal	31.4	23.5	31.5	23.0	32.6	22.8
Bangkok Metropolis and Vicinity	32-34	24-26	above normal	31-33	22-24	above normal	32-34	22-24	above normal	32.4	23.9	31.7	22.0	32.5	22.6

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 November 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.