



Ministry of Information and
Communication Technology,
Thai Meteorological Department

Climate characteristic expectation of Thailand during the summer season of 2016 (Revised Edition NO.1)

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Climate characteristic expectation during the summer season of 2016 about during March until middle May:

The summer of this year in Thailand is expected that mean maximum temperature will be above normal and a little higher than that of last year, whereas the total rain amount will be slightly below normal and near that of last year. This summer will end at about middle May.

Otherwise, summer thunderstorms will appear at many areas. This may result in possible damages of lives and properties. The amount of rainfall during this summer at some areas will not be sufficient for consumption needs and agricultural usages, especially for those repeated drought areas outside irrigation zones.

Thus, people should utilize water consumption efficiently and prepare for the above mentioned summer thunderstorms.

General climate characteristics:

The Upper Thailand (The northern, northeastern, central and eastern parts of Thailand):

During the 1st half of March, high pressure air mass areas from China will still prevail over the upper portion of both of the northern and northeastern parts from time to time. As a result, the northern and northeastern parts will still be cool in the morning, especially at the upper portion. Whereas during daytime, the upper portion of the Upper Thailand will experience hot weather commonly with thick fog or haze at many areas. Then afterward until April, southerly or southeasterly wind will prevail over the Upper Thailand almost all of this period. Moreover, heat low pressure air mass cells will prevail periodically. These characteristics will influence the Upper Thailand to experience sweltering weather commonly. Additionally, very hot weather appears on some days, especially during middle March until middle April. Maximum temperature may reach 43 – 44 °C. However, summer thunderstorms often occur at many areas as thunder rain, gust wnd, and possible hail, and thus helping reduce some heat. While during the 1st half of May, weather disturbances will happen while sweltering weather appears generally. Together with very hot weather occurs at some areas on some days. In addition, thunder rain wil occur at many areas.

The Southern Thailand

During March until late April, The easterly or southeasterly wind will prevail over the Gulf of Thailand and the Southern Thailand almost all of this period. Thus, the Southern Thailand will experience isolated to widely scattered rainfall with hot weather at many areas. Wind waves in the Gulf of Thailand and the Andaman Sea will be about 1 meter high.

Then from late April onwards, the southwestern monsoon will prevail over the Andaman Sea and the Southern Thailand. For this reason, the Southern Thailand will experience more rainfall. For especially along the western coast, heavy to very heavy rain will occur at some areas. Wind waves in the Andaman Sea will be more active with 2 meters high while those in the Gulf of Thailand will be about 1 meter high.

+++ Precautions +++

Fire and forest fire: During this summer, the sweltering weather will influence to bring about fire and forest fire easily. Then, the public should be cautious in using fuel for their activities.

Summer thunderstorms: During March – May, summer thunderstorms often occur as thunder rain and gust wind at many areas and possible hail on some days.

Tropical cyclones: During late April until May, some low pressure air mass cells may develop at the Andaman Sea. Further, they may strengthen to become depressions, tropical storms and cyclones. Also, they will move northerly to easterly toward the western side of Thailand. Thus, the western portion of both of the northern and central parts of Thailand and also that of the Southern Thailand will experience more rainfall. So, flash and forest flood may inundate the mentioned area.

Remarks:

- Daily rainfall distribution (% of the area) criteria:

| | |
|--------------------|-------------------|
| Isolated: | > 0 until < 20% |
| Widely scattered: | >=20 until < 40% |
| Almost widespread: | >=60 until < 80% |
| Scattered: | >= 40 until < 60% |
| Widespread: | >= 80% |
- Daily rainfall amount (millimeters) criteria:

| | |
|-------------|---------------------|
| Light: | > 0 until 10.0 |
| Moderate: | >=10.1 until <=35.0 |
| Heavy: | >=35.1 until <90 |
| Very heavy: | >= 90.1 |
- Daily minimum temperature criteria for the winter season:

| | | | |
|-------------------------|---|-------------|------|
| Cool weather | = | 18.0 - 22.9 | °C. |
| Moderately cold weather | = | 16.0 – 17.9 | °C. |
| Cold weather | = | 8.0 - 15.9 | ° C. |
| Very cold weather | = | <= 7.9 | ° C. |
- Daily maximum temperature criteria for the summer season:

| | | | |
|------------------|---|-------------|------|
| Hot weather | = | 35.0 – 39.9 | ° C. |
| Very hot weather | = | >= 40.0 | ° C. |
- Normal means average during the 30-year period (A.D. 1981 – 2010 or B.E. 2524 – 2553)
- These long range expectations are utilized by applying some climatic models and statistical methods, the public then should follow the daily weather news from the Thai Meteorological Department further.
- The next 3-month climate expectations will be at the last week of March 2016.
- Further enquiry of monthly climate, 3-month climate and seasonal forecasts can be preceded at Tel: 02-398-9929 or Fax: 02-383-8827.
- Please follow monthly climate, 3-month climate and seasonal forecasts at www.tmd.go.th/en/ at the climate tab.

Climatological Center,
 Meteorological Development Bureau,
 Thai Meteorological Department,
 Ministry of Information and Communication Technology

A table showing details of the weather prediction, maximum temperature and rain amount for each part of Thailand:

| Part | The weather prediction | Maximum temperature |
|--|--|--|
| Northern and northeastern | Hot weather will occur normally with very hot weather happening at many areas on some days, especially during the middle of March until the middle of April. However, for some periods, some rain occurring as thunder rain, windy gust and possible hail helps reduce some heat. | 40 – 44°C. around provinces: Mae Hong Son, Chiang Mai, Chiang Rai, Lamphun, Lampang, Phayao, Phrae, Nan, Tak, Uttaradit, Sukhothai, Kamphaeng Phet, Phitsanulok, Phetchabun, Pichit, Loei, Nong Khai, Bueng Kan, Nong bua Lam Phu, Udon Thani, Sakon Nakhon, Nakhon Phanom, Mukdahan, Chaiyaphum, Khon Kaen, Mahasarakham, Kalasin, Roi Et, Yasothon, Amnat Charoen, Nakhon Ratchasima, Buriram, Surin, Si Saket and Ubon Ratchathani. |
| Central and eastern (including with coastal areas) | Hot weather appears almost all of these parts, particularly at the upper portion. Also, very hot weather happens at many areas on some days, mostly during middle March until early April. But during some periods, some rain occurring as thunder rain, wind gust and possible hail at some areas helps reduce some heat. | 40 – 43°C. around provinces: Nakhon Sawan, Uthai Thani, Chainat, Sing Buri, Ang Thong, Suphan Buri, Lop Buri, Saraburi, Ayutthaya, Ratchaburi, Pathumthani, Nonthaburi, Bangkok, Kanchana Buri, Nakhonpathom, Chachoengsao, Prachin Buri and Sa Kaew. |
| Southern | Hot weather will happen at many areas and isolated to widely scattered rainfall occurs. Wind waves in the Gulf of Thailand and the Andaman Sea will be about 1 meter high. But since late April, more rain will happen at the Southern Thailand (the western coast) with heavy to very heavy rain at some areas. For wind waves in the Andaman Sea, they will be more active as 2 meters high. | 37 - 39°C. around provinces: Prachuap Khirikhan, Chumphon, Surat Thani, Nakhonsi Thammarat, Songkhla, Pattani, Yala, Phuket, Trang and Satun. |
| Bangkok and vicinity | Hot weather will happen at almost all of this area and very hot weather occurs on some days. However, during some periods, some rain occurring as thunder rain, wind gust and hail helps reduce some heat on some days. | 38 – 40 °C. |

Mean maximum temperature (° C.) prediction of Thailand during the summer of 2016
and normal (average of the 30-year period: 1981 - 2010, ° C.)

| Part | March | | April | | The 1 st half of May | |
|-----------------------------------|------------------------|--------|------------------------|--------|---------------------------------|--------|
| | Mean max temp. of 2016 | Normal | Mean max temp. of 2016 | Normal | Mean max temp. of 2016 | Normal |
| North | 36-38 | 36.3 | 37-39 | 36.8 | 35-37 | 35.4 |
| Northeastern | 35-37 | 35.3 | 36-38 | 36.7 | 35-37 | 34.9 |
| Central | 36-38 | 35.1 | 37-39 | 36.1 | 35-37 | 35.8 |
| Eastern | 34-36 | 38.7 | 35-37 | 34.7 | 34-36 | 34.1 |
| Southern Thailand (East Coast) | 32-34 | 34.0 | 33-35 | 34.4 | 33-35 | 33.6 |
| Southern Thailand (West Coast) | 34-36 | 35.2 | 34-36 | 34.6 | 32-34 | 33.0 |
| Bangkok and Vicinity | 34-36 | 34.1 | 35-37 | 35.2 | 34-36 | 34.8 |

Rain amount (millimeters) prediction of Thailand during the summer of 2016
and normal (average of 30-year period: 1981 – 2010, millimeters.)

| Part | March | | April | | The 1 st half of May | |
|-----------------------------------|---------------------|--------|---------------------|--------|---------------------------------|--------|
| | Rain amount of 2016 | Normal | Rain amount of 2016 | Normal | Rain amount of 2016 | Normal |
| North | 15-30 | 28.1 | 40-70 | 71.3 | 50-80 | 80.2 |
| Northeastern | 30-50 | 44.7 | 60-90 | 86.3 | 60-90 | 83.6 |
| Central | 20-40 | 36.0 | 50-80 | 79.5 | 60-90 | 83.5 |
| Eastern | 40-70 | 62.1 | 70-100 | 98.9 | 70-100 | 98.6 |
| Southern Thailand (East Coast) | 40-70 | 68.4 | 50-80 | 75.4 | 40-70 | 71.7 |
| Southern Thailand (West Coast) | 60-90 | 88.8 | 130-170 | 160.6 | 110-150 | 147.0 |
| Bangkok and Vicinity | 30-50 | 42.1 | 70-100 | 91.4 | 90-120 | 116.4 |

The extreme maximum temperature (° C.) statistics of Thailand during February – May of the past year (2015)

| Part | March | | | April | | | May | | |
|-----------------------------------|-------|---------|--|-------|------|--|------|------|--|
| | ° C. | Date | Location | ° C. | Date | Location | ° C. | Date | Location |
| Northern | 42.0 | 19 | Bhumibol Dam, Sam Ngao District, Tak | 43.1 | 20 | Muang District, Sukhothai | 42.0 | 5 | Muang District, Sukhothai |
| Northeastern | 39.3 | 20 | Muang District, Chaiyaphum | 42.5 | 21 | Muang District, Buriram | 41.7 | 31 | Muang District, Ubon Ratchathani |
| Central | 40.0 | 6 15 | Thong Pha Phum District, Kanchana Buri Muang District, Nakhon Sawan | 42.3 | 21 | Muang District, Kanchana Buri | 42.4 | 12 | Muang District, Nakhon Sawan |
| Eastern | 38.8 | 20 | Aranya Prathet District, Sa Kaew | 41.4 | 21 | Aranya Prathet District, Sa Kaew | 40.5 | 7 | Aranya Prathet District, Sa Kaew |
| Southern Thailand (East Coast) | 38.2 | 20 | Sadao District, Songkhla | 41.8 | 21 | Nong Phlub Agromet., Prachuap Khirikhan | 38.5 | 6 | Muang District, Surat Thani |
| Southern Thailand (West Coast) | 38.4 | 19 | Trang Airport, Muang District,Trang | 36.8 | 2 | Trang Airport, Muang District,Trang | 36.5 | 6 | Muang District, Phuket |
| The whole country of Thailand | 42.0 | 19 | Bhumibol Dam, Sam Ngao District, Tak | 43.1 | 20 | Muang District, Sukhothai | 42.4 | 12 | Muang District, Nakhon Sawan |
| Bangkok and Vicinity | 36.0 | 30 | Queen Sirikit National Convention Center – QSNCC, Klong Toei District | 39.8 | 21 | Queen Sirikit National Convention Center – QSNCC, Klong Toei District | 37.9 | 1 | Queen Sirikit National Convention Center – QSNCC, Klong Toei District |

Notes: 1. The extreme temperature data are from meteorological stations (classified into three groups as Agromet. = agrometeorological stations, Hydromet. = hydrometeorological stations, Synoptic. = synoptic stations) of the Thai Meteorological Department all over Thailand.

2. Meteorological station names are from <http://www.tmd.go.th/en/climate.php?FileID=1>.

A map showing provinces of possibly very hot weather during some periods in March – April 2016:

