

The seasonal forecast of Thailand

during the 2018-summer season

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# Weather characteristic prediction for the 2018-summer season of Thailand during about late February until middle May of 2018:

The summer of Thailand this year is expected to begin at about late February which is 1-2 weeks later than usual and will end at about middle May. The weather will not be so sweltering as mean maximum temperature of the Upper Thailand is to be about 35 – 36 C. which is near normal (Normal: 35.4 C.) and near that of last year (35.3 C.). Furthermore, the mean total rain will be near normal to slightly above normal.

However, summer thunderstorms often happen during the summer at many areas as thunder rain, gusty wind and hail at some areas. This results in loss of life and damages of property and agricultural product. Additionally, the rainfall of this summer will not suit demands at many areas in consumption and agricultural usages, specifically at repeated drought areas outside irrigation zones. As a result, people should maximize water utilization and prepare for the above-mentioned summer thunderstorms further.

#### General climate characteristics:

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

During the 1st period about late February until middle March, hot weather occurs commonly at daytime with thick fog at many areas on some days. Even though morning cool weather still occurs at the northern and northeastern parts, the reason is that weakly high-pressure air mass areas from China will prevail over the northern and northeastern parts.

Then during about middle March until late April, sweltering weather occurs almost widely with very hot weather at some areas on some days whereas extreme maximum temperatures may reach 42 – 43 C. Nevertheless, summer thunderstorms often occur at many areas during some periods as thunder rain, gusty wind and possibly falling hail, thus helping reduce some heat. This results from prevailing southerly or southeasterly wind bringing about moisture from the Gulf of Thailand for almost all of this period. In addition, heat low-pressure air mass cells will prevail from time to time.

During late April until the 1st half of May, weather will fluctuate as sweltering weather occurring almost widely with very hot weather happening at some areas on some days and thunder rain at many areas. This results from prevailing southerly or southeasterly wind transforming to become southwestern monsoon prevailing over Thailand instead.

#### The Southern Thailand

During late February until about late April, rainfall distribution occurs as 20 – 30% of the area with hot weather at many areas. While wind waves in the Gulf of Thailand and the Andaman Sea will be about 1 meter high due to easterly or southeasterly wind prevailing over the Gulf of Thailand and the Southern Thailand for almost all of this period.

Then since late April onwards, more rain is going to happen at the Southern Thailand. Specifically, around the western coast, 60-80% rainfall distribution with heavy to very heavy rain at some areas will occur together with wind waves in the Andaman Sea become more active as 2 – 3 meters high during some periods comparing to wind waves in the Gulf of Thailand being about 1 meter high. This results from easterly or southeasterly wind prevailing over the Gulf of Thailand and the Southern Thailand transforming to become the southwestern monsoon prevailing over the Andaman Sea and the Southern Thailand instead.

#### +++ <u>Cautions</u> +++

<u>Fires and forest fires:</u> During this summer, the weather will favor for generating fires and forest fires easily. People should be cautious for fuel usage for any activities.

**Cyclones:** During late April until May, low-pressure air mass cells may develop in the Andaman Sea and strengthening to become depressions, tropical storms and cyclones further. Their movements are toward northeasterly and may be near the western side of Thailand. This results in more rain at the western portion at both of the northern and central parts including with that of the Southern Thailand. As a result, flash or forest flood may inundate further.

| Remarks:       | _ | Daily rainfall distribution (   | % of th    | Isolated:         | > 0 until < 20% |                   |  |  |  |  |  |
|----------------|---|---|------------|-------------------|-----------------|-------------------|--|--|--|--|--|
| <u>memano.</u> |   | Widely scattered:   |            | until < 40%       | Scattered:      | >= 40 until < 60% |  |  |  |  |  |
|                |   | •   |            |                   |                 |                   |  |  |  |  |  |
|                |   | Almost widespread:  | >=60 (     | until < 80%       | Widespread      | >= 80%            |  |  |  |  |  |
|                | - | Daily rainfall amount (mil  | limeters   | ) criteria:       | Light:          | > 0 until 10.0    |  |  |  |  |  |
|                |   | Moderate:   | >=10.1     | l until <=35.0    | Heavy:          | >=35.1 until <90  |  |  |  |  |  |
|                |   | Very heavy:   | >= 90.     | 1                 |                 |                   |  |  |  |  |  |
|                | - | Daily minimum temperatu   | ure criter | ia for the winter | season:         |                   |  |  |  |  |  |
|                |   | Cool weather  |            | =                 | 18.0 - 22.9     | °C.               |  |  |  |  |  |
|                |   | Moderately cold weat  | her        | =                 | 16.0 - 17.9     | °C.               |  |  |  |  |  |
|                |   | Cold weather  |            | =                 | 8.0 - 15.9      | ° C.              |  |  |  |  |  |
|                |   | Very cold weather   |            | =                 | <= 7.9          | ° C.              |  |  |  |  |  |
|                | - | Daily maximum temperate   | ure crite  | ria for the sumn  | ner 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  |            |                   |                 |                   |  |  |  |  |  |
|                |   |   |            |                   |                 |                   |  |  |  |  |  |

- Meteorological Department further.
- 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 <u>www.tmd.go.th/en/</u> at the climate tab.

Climatological Center,

Meteorological Development Bureau, Thai Meteorological Department,

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

| Part            | The weather prediction                            | Maximum temperature  |
|-----------------|---|--|
|                 | Hot weather appears almost all of these parts     | 40 – 43°C. around provinces: Mae Hong Son, Chiang Mai,     |
|                 | with very hot weather happening at some areas     | Lamphun, Lampang, Phrae, Nan, Tak, Uttaradit, Sukhothai,   |
| Northern and    | on some days. However, for some periods,          | Kamphaeng Phet, Phitsanulok, Phetchabun, Pichit, Loei,     |
| northeastern    | some rain occurring as thunder rain, windy gust   | Nong Khai, Bueng Kan, Nong bua Lam Phu, Udon Thani,        |
| northeastern    | and possible hail helps reduce some heat.         | Mukdahan, Chaiyaphum, Khon Kaen, Mahasarakham,             |
|                 |   | Kalasin, Roi Et, Yasothon, Amnat Charoen, Nakhon           |
|                 |   | Ratchasima, Burirum, Surin, Si Saket and Ubon Ratchathani. |
|                 | Hot weather appears almost all of these parts     | 40 – 42°C. around provinces: Nakhon Sawan, Uthai Thani,    |
| Central and     | with very hot weather happening at some areas     | Chainat, Sing Buri, Ang Thong, Suphan Buri, Lop Buri,      |
| eastern         | on some days, particularly at the upper portion.  | Saraburi, Ayutthaya, Kanchana Buri, Prachin Buri and Sa    |
| (including with | But during some periods, some rain occurring as   | Kaew.  |
| coastal areas)  | thunder rain, wind gust and possible hail at      |  |
|                 | some areas helps reduce some heat.                |  |
|                 | Hot weather will happen at many areas and         | 38 - 39°C. around provinces: Prachuap Khirikhan,           |
|                 | rainfall distribution will occur at 20-30% of the | Chumphon, Surat Thani, Nakhonsi Thammarat, Yala, Krabi,    |
|                 | areas. Wind waves in the Gulf of Thailand and     | Trang and Satun.   |
|                 | the Andaman Sea will be about 1 meter high.       |  |
| Southern        | 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 2-3 meters high.                   |  |
|                 | Hot weather will happen at almost all of this     | 38 – 39 °C.  |
| Developing 1    | area, especially middle May to late April.        |  |
| Bangkok and     | However, during some periods, some rain           |  |
| vicinity        | occurring as thunder rain, wind gust and hail     |  |
|                 | helps reduce some heat on some days.              |  |

## Mean maximum temperature (° C.) prediction of Thailand during the summer of 2018 and normal (average of the 30-year period: 1981 - 2010, ° C.)

|                                   | The 2 <sup>nd</sup> half o   | f February | March                        | ı      | April                        |        | The 1 <sup>st</sup> half of May |        |  |
|-----------------------------------|------------------------------|------------|------------------------------|--------|------------------------------|--------|---------------------------------|--------|--|
| Part                              | Mean max<br>temp. of<br>2018 | Normal     | Mean max<br>temp. of<br>2018 | Normal | Mean max<br>temp. of<br>2018 | Normal | Mean max<br>temp. of<br>2018    | Normal |  |
| North                             | 34-36                        | 34.6       | 35-37                        | 36.1   | 36-38                        | 37.1   | 35-37                           | 35.4   |  |
| Northeastern                      | 33-35                        | 33.9       | 34-36                        | 35.1   | 35-37                        | 36.1   | 34-36                           | 34.9   |  |
| Central                           | 34-36                        | 35.2       | 35-37                        | 36.1   | 36-38                        | 37.0   | 35-37                           | 35.8   |  |
| Eastern                           | 33-35                        | 33.3       | 33-35                        | 33.8   | 34-36                        | 34.7   | 33-35                           | 34.1   |  |
| Southern Thailand<br>(East Coast) | 31-33                        | 31.8       | 32-34                        | 32.6   | 33-35                        | 33.7   | 33-35                           | 33.6   |  |
| Southern Thailand<br>(West Coast) | 33-35                        | 34.1       | 33-35                        | 34.4   | 33-35                        | 34.2   | 32-34                           | 33.0   |  |
| Bangkok and Vicinity              | 33-35                        | 33.6       | 34-36                        | 34.3   | 35-37                        | 35.4   | 34-36                           | 34.8   |  |

## Rain amount (millimeters) prediction of Thailand during the summer of 2018 and normal (average of 30-year period: 1981 – 2010, millimeters.)

|                                   | The 2 <sup>nd</sup> h<br>of Februa |         | March  |        | April                  |        | The 1 <sup>st</sup> half of May |        |  |
|-----------------------------------|------------------------------------|---------|--------|--------|------------------------|--------|---------------------------------|--------|--|
| Part                              | Rain amount of 2018                | INOrmal |        | Normal | Rain amount<br>of 2018 | Normal | Rain amount<br>of 2018          | Normal |  |
| North                             | 5-10                               | 6.9     | 20-40  | 28.1   | 60-90                  | 71.3   | 70-100                          | 80.2   |  |
| Northeastern                      | 5-15                               | 9.7     | 30-50  | 44.7   | 70-100                 | 86.3   | 70-100                          | 83.6   |  |
| Central                           | 5-10                               | 5.9     | 30-50  | 36.0   | 60-90                  | 79.5   | 70-100                          | 83.5   |  |
| Eastern                           | 10-20                              | 17.0    | 50-80  | 62.1   | 80-110                 | 98.9   | 80-110                          | 98.6   |  |
| Southern Thailand<br>(East Coast) | 5-15                               | 10.7    | 50-80  | 68.4   | 60-90                  | 75.4   | 60-90                           | 71.7   |  |
| Southern Thailand<br>(West Coast) | 10-20                              | 13.2    | 70-100 | 88.8   | 150-180                | 160.6  | 130-170                         | 147.0  |  |
| Bangkok and Vicinity              | 5-15                               | 9.3     | 30-50  | 42.1   | 80-110                 | 91.4   | 100-140                         | 116.4  |  |

|                         | February |      |                    | March |      |                     | April |      |                     | May  |      |                   |
|-------------------------|----------|------|--------------------|-------|------|---------------------|-------|------|---------------------|------|------|-------------------|
| Part                    | ° C.     | Date | Location           | ° C.  | Date | Location            | ° C.  | Date | Location            | ° C. | Date | Location          |
| Northern                | 40.0     | 24   | Thoen district,    | 41.3  | 26   | Thoen district,     | 42.0  | 8,11 | Muang,              | 42.2 | 3    | Muang, Tak        |
|                         |          |      | Lampang            |       |      | Lam Pang            |       |      | Mae Hong Son        |      |      |                   |
| Northeastern            | 38.6     | 23   | Kosum Phisai dist. | 40.5  | 13   | Loei Agromet.,      | 40.6  | 22   | Muang,              | 40.2 | 4    | Muang,            |
|                         |          |      | Mahasarakham       |       |      | Loei                |       |      | Chaiyaphum          |      |      | Chaiyaphum        |
|                         |          | 23   | Tha Phra Agromet.  |       | 14   | Tha Phra Agromet.   |       |      |                     |      |      |                   |
|                         |          |      | Khon Kaen          |       |      | Khon Kaen           |       |      |                     |      |      |                   |
| Central                 | 38.5     | 23   | Muang,             | 41.0  | 14   | Muang,              | 41.2  | 22   | Chai Badan distict, | 41.2 | 4    | Muang,            |
|                         |          |      | Kanchanaburi       |       |      | Kanchanaburi        |       |      | Lopburi             |      |      | Nakhon Sawan      |
|                         |          | 24   | Thong Pha Phum,    |       |      |                     |       |      |                     |      |      |                   |
|                         |          |      | Kanchanaburi       |       |      |                     |       |      |                     |      |      |                   |
| Eastern                 | 37.6     | 23   | Aranyaprathet,     | 39.5  | 14   | Kabin Buri distict, | 39.5  | 22,  | Kabin Buri distict, | 39.6 | 2    | Muang,            |
|                         |          |      | Sa Kaew            |       |      | Prachin Buri        |       | 23   | Prachin Buri        |      |      | Prachin Buri      |
| Southern Thailand       | 36.4     | 6    | Chawang, Nakhon    | 38.1  | 17   | Nong Plub,          | 39.9  | 23   | Nong Plub,          | 38.5 | 1    | Nong Plub,        |
| (East Coast)            |          |      | Si Thammarat       |       |      | Prachuab Kirikhan   |       |      | Prachuab Kirikhan   |      |      | Prachuab Kirikhan |
| Southern Thailand       | 36.1     | 5    | Muang,             | 37.0  | 12   | Trang airport,      | 36.3  | 15   | Nuea Khlong         | 36.6 | 9,10 | Nuea Khlong       |
| (West Coast)            |          |      | Phuket             |       |      | Muang, Trang        |       |      | distict, Krabi      |      |      | distict, Krabi    |
| The whole country       | 40.0     | 24   | Thoen district,    | 41.3  | 26   | Thoen district,     | 42.0  | 8,11 | Muang,              | 42.2 | 3    | Muang,            |
| of Thailand             |          |      | Lampang            |       |      | Lampang             |       |      | Mae Hong Son        |      |      | Tak               |
|                         | 36.6     | 6    | Klong Toei Port,   | 37.5  | 13   | Don Muang           | 39.1  | 25   | Queen Sirikit       | 37.7 | 2    | Don Muang         |
| Bangkok<br>and Vicinity |          |      | Klong Toei         |       |      | Airport             |       |      | NCC, Klong Toei     |      |      | airport, Don      |
|                         |          |      |                    |       | 21   | Klong Toei Port,    |       |      |                     |      |      | Munag district    |
|                         |          |      |                    |       |      | Klong Toei          |       |      |                     |      |      |                   |

### The extreme maximum temperature (° C.) statistics of Thailand during February – May of the past year (2016)

Map of provinces with possibly very hot weather occurring on some days. Especially during middle March until late April 2018:

