

BULETIN METEOROLOGI PERTANIAN 10 HARI
DEKAD PERTAMA JULAI 2021
(1hb – 10hb Julai 2021)
10 DAYS AGROMETEOROLOGICAL BULLETIN
FIRST DECADE OF JULY 2021
(1st – 10th July 2021)

PENDAHULUAN / INTRODUCTION

Pada dekad pertama Jun (1hb – 10hb Julai 2021), Negara sedang mengalami fasa Monsun Barat Daya yang telah bermula pada 19 Mei 2021 dan dijangka berterusan sehingga September 2021. Dalam tempoh ini, angin bertiup secara konsisten dari arah barat daya dengan kelembapan udara lebih rendah yang lazimnya terjadi keadaan atmosfera yang lebih stabil menyebabkan kurangnya pembentukan awan yang menghasilkan hujan. Namun, pada masa tertentu dengan wujudnya keadaan atmosfera yang tidak stabil, boleh menyebabkan terbentuknya hujan di beberapa kawasan di Semenanjung serta Sarawak dan Sabah.

In the first decade of June (1st – 10th July 2021), the country is in the Southwest Monsoon phase which has started on 19 May 2021 and is expected to continue until September 2021. During this period, wind is consistently blowing from the southwest with lower air humidity which typically results in more stable atmospheric conditions resulting in less cloud formation producing rain. However, at certain times with the existence of unstable atmospheric conditions, can cause the formation of rain in some areas in the Peninsula as well as Sarawak and Sabah.

HUJAN / RAINFALL

Merujuk Rajah 1, secara umumnya kebanyakan kawasan di Semenanjung merekodkan peratusan anomali hujan dari purata hingga 60 % atas purata kecuali di Cameron Highlands dan Batu Pahat (Johor) yang merekodkan peratusan anomali hujan 20 – 40 % bawah purata. Di Sarawak, kebanyakan kawasan merekodkan peratusan anomali hujan dari purata

hingga 60% di bawah purata kecuali Miri yang merekodkan peratusan anomali 20 – 60 % atas purata. Di Sabah, kebanyakan kawasan merekodkan peratusan anomali hujan dari purata hingga 60 % atas purata kecuali Keningau yang merekodkan peratusan anomali hujan 20 – 40 % bawah purata.

Berdasarkan Rajah 2, terdapat enam (6) kawasan yang merekodkan bacaan jumlah hujan melebihi 120 mm iaitu di Prai (120 mm) di Pulau Pinang, Stesen Pertanian Sungai Sudah (131 mm) di Johor, Kuantan (132 mm) dan Stesen Pertanian Gali Raub (131 mm) di Pahang serta Alor Setar (121 mm) dan Pulau Langkawi (169 mm) di Kedah yang merekodkan jumlah hujan tertinggi dengan 8 hari pencerapan hujan. Pulau Langkawi juga merekodkan jumlah hujan harian tertinggi pada dekad ini dengan bacaan sebanyak 89 mm yang dicerap pada 10 haribulan.

Di Sarawak, terdapat dua kawasan yang merekodkan jumlah hujan melebihi 80 mm iaitu di Bintulu (86 mm) dan Miri (118 mm) yang merekodkan jumlah hujan tertinggi dengan 5 hari pencerapan hujan. Miri juga merekodkan hujan harian tertinggi dengan bacaan sebanyak 54.2 mm yang dicerap pada 7 haribulan.

Di Sabah, terdapat tiga kawasan yang merekodkan jumlah hujan melebihi 70 mm iaitu di Labuan (70 mm), Kota Kinabalu (78 mm) dan Sandakan (105 mm) yang merekodkan jumlah hujan tertinggi dengan 6 hari pencerapan hujan. Sandakan juga merekodkan hujan harian tertinggi dengan bacaan sebanyak 58.4 mm yang dicerap pada 5 haribulan.

Berdasarkan Indeks Hujan Piawai pada Rajah 3, secara amnya, kawasan di Malaysia mencatatkan indeks normal. Perlis serta Lahad Datu, Semporna dan Kudat (Sabah) mencatatkan indeks kering. Kuala Terengganu dan Sandakan merekodkan indeks terlalu kering manakala Mersing (Johor), Besut (Terengganu) dan Sri Aman mencatatkan indeks lembap.

Referring to Figure 1, in general most areas in the Peninsula recorded a percentage of rainfall anomalies from average to 60 % above average except in Cameron Highlands and Batu Pahat (Johore) recorded a percentage of rainfall anomalies 20 – 40 % below average. In Sarawak, most areas recorded a percentage of rainfall anomalies from average to 60 % below average except in Miri which recorded a percentage of anomalies of 20 – 60 % above average. In Sabah, most areas recorded a percentage of rainfall anomalies from average

to 60 % above average except Keningau which recorded a percentage of rainfall anomalies of 20 – 40 % below average.

Based on Figure 2, there are six (6) areas that recorded rainfall readings exceeding 120 mm, namely in Prai (120 mm) in Penang, Pertanian Sungai Sudah Station (131 mm) in Johore, Kuantan (132 mm) and Pertanian Gali Raub Station (131 mm) in Pahang as well as Alor Setar (121 mm) and Pulau Langkawi (169 mm) in Kedah which recorded the highest rainfall with 8 days of rainfall observations. Pulau Langkawi also recorded the highest daily rainfall this decade with a reading of 89 mm observed on the 10th day of the month.

In Sarawak, there are two areas that recorded rainfall over 80 mm, namely Bintulu (86 mm) and Miri (118 mm) which recorded the highest rainfall with 5 days of rainfall observation. Miri also recorded the highest daily rainfall with a reading of 54.2 mm observed on the 7th of the month.

In Sabah, there are three areas that recorded rainfall over 70 mm, namely in Labuan (70 mm), Kota Kinabalu (78 mm) and Sandakan (105 mm) which recorded the highest rainfall with 6 days of rainfall observations. Sandakan also recorded the highest daily rainfall with a reading of 58.4 mm observed on the 5th day of the month.

Based on the Standardized Precipitation Index in Figure 3, in general, areas in Malaysia recorded a normal index. Lubok Merbau, Limbang (Sarawak) and Sandakan (Sabah) recorded extremely wet index.

Based on the Standardized Precipitation Index in Figure 3, in general, areas in Malaysia recorded a normal index. Perlis as well as Lahad Datu, Semporna and Kudat (Sabah) recorded moderately dry index. Kuala Terengganu and Sandakan recorded severely dry index while Mersing (Johore), Besut (Terengganu) and Sri Aman recorded moderately wet index.

SUHU / TEMPERATURE

Merujuk kepada Rajah 4 dan 5, kebanyakan kawasan tanah rendah menerima purata suhu harian antara 26.9 °C hingga 29.1 °C. Pada dekad ini, bacaan suhu tertinggi direkodkan di Stesen MARDI Jerangau (Terengganu) dengan bacaan 36.1 °C manakala bacaan suhu terendah direkodkan di Stesen Pertanian Charok Padang (Kedah) dengan bacaan 21.9 °C.

Bagi kawasan tanah tinggi pula, julat suhu purata telah direkodkan di antara 15.3 °C hingga 24.2 °C di Cameron Highlands.

Referring to Figure 4 and 5, most lowland areas received average daily temperatures ranging from 26.9 °C to 29.1 °C. In this decade, the highest temperature reading was recorded at MARDI Jerangau Station (Terengganu) with a reading of 36.1 °C while the lowest temperature reading was recorded at Pertanian Charok Padang Station (Kedah) with a reading of 21.9 °C. For the highlands, the average temperature range has been recorded between 15.3 °C to 24.2 °C in Cameron Highlands.

SEJATAN / EVAPORATION

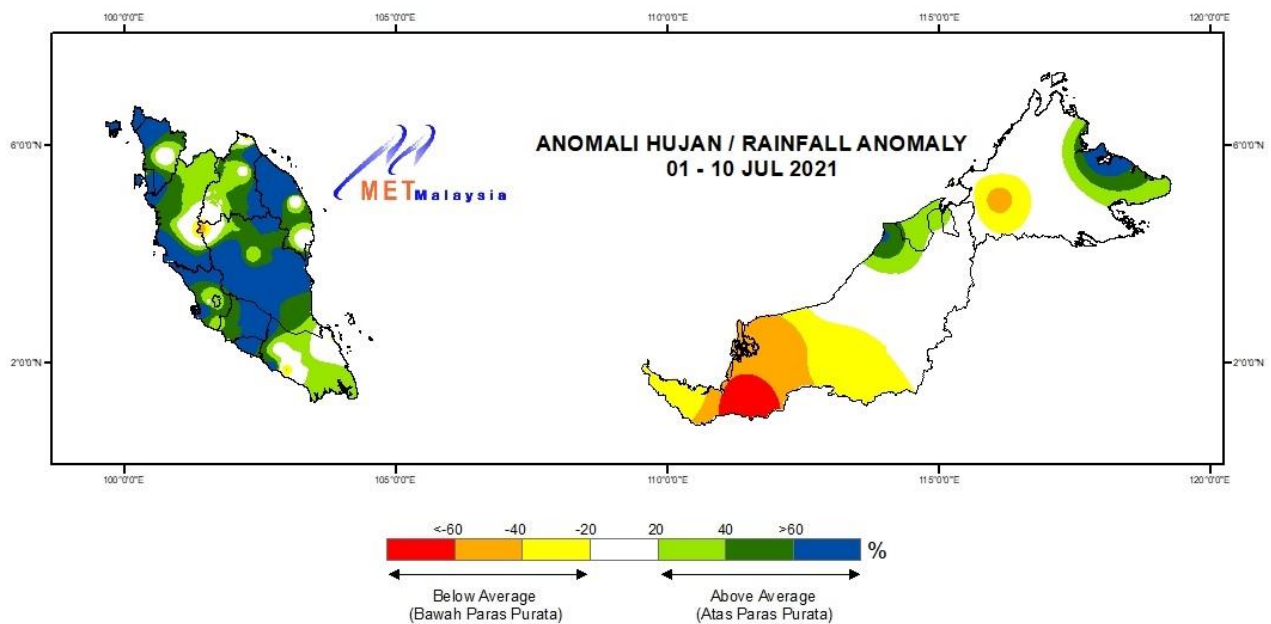
Kebanyakan kawasan di Semenanjung secara umumnya merekodkan kadar purata sejatan harian antara 3.0 mm hingga 4.0 mm di mana Chuping (Perlis) mencatatkan bacaan tertinggi dengan bacaan sebanyak 4.8 mm manakala Pulau Pinang mencatatkan bacaan terendah iaitu 2.4 mm. Manakala di Sabah dan Sarawak pula, kebanyakan stesen merekodkan bacaan dari 3.5 mm hingga 4.5 mm di mana Labuan mencatatkan bacaan tertinggi dengan bacaan sebanyak 4.9 mm manakala Sri Aman mencatatkan bacaan terendah iaitu 3.4 mm. Cameron Highlands pula telah merekodkan purata bacaan sejatan 0.9 mm (Rujuk Rajah 6). Pada dekad ini, Chuping merekodkan kadar purata sejatan harian dengan nilai sisihan purata tertinggi iaitu +1.5 mm manakala Bintulu mencatatkan bacaan nilai sisihan purata harian terendah iaitu -3.3 mm.

Most areas in the Peninsula generally recorded an average daily evaporation rates ranging from 3.0 mm to 4.0 mm where Chuping (Perlis) recorded the highest reading with a reading of 4.8 mm while Penang recorded the lowest reading with a reading of 2.4 mm. In Sabah and Sarawak, most stations recorded readings from 3.5 mm to 4.5 mm where Labuan recorded the highest reading with a reading of 4.9 mm while Sri Aman recorded the lowest reading with a reading of 3.4 mm. Cameron Highlands recorded 0.9 mm an average evaporation reading (Refer to Figure 6). In this decade, Chuping recorded an average daily evaporation rate with the highest average deviation value of +1.5 mm while Bintulu recorded the lowest daily average deviation value reading of -3.3 mm.

SINARAN SOLAR / SOLAR RADIATION

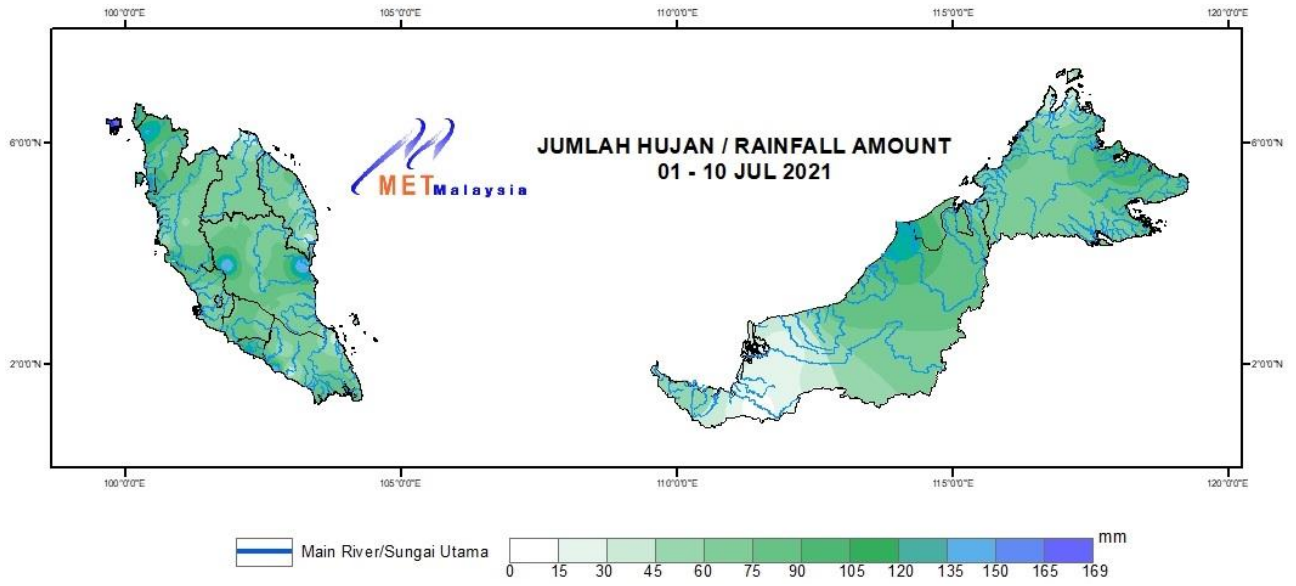
Pada dekad ini, kebanyakan tempat di Semenanjung merekodkan purata sinaran solar harian antara 15.0 sehingga 18.0 MJm⁻² di mana Kuala Terengganu (Terengganu) mencatatkan bacaan tertinggi dengan bacaan sebanyak 20.4 MJm⁻² manakala Johor Bahru (Johor) mencatatkan bacaan terendah dengan bacaan 12.8 MJm⁻². Bagi Sabah dan Sarawak pula, purata bacaan harian direkodkan antara 17.0 MJm⁻² hingga 18.0 MJm⁻² di mana Miri mencatatkan bacaan tertinggi sebanyak 19.8 MJm⁻² manakala Tawau (Sabah) mencatatkan bacaan terendah sebanyak 16.3 MJm⁻². Bagi kawasan tanah tinggi, Cameron Highlands mencatatkan bacaan sebanyak 12.9 MJm⁻² (Rujuk Rajah 7).

In this decade, most places in the Peninsula recorded an average daily solar radiation between 15.0 to 18.0 MJm⁻² where Kuala Terengganu (Terengganu) recorded the highest reading with a reading of 20.4 MJm⁻² while Johore Bahru (Johore) recorded the lowest reading with a reading of 12.8 MJm⁻². For Sabah and Sarawak, an average daily reading was recorded between 17.0 MJm⁻² to 18.0 MJm⁻² where Miri recorded the highest reading of 19.8 MJm⁻² and Tawau (Sabah) recorded the lowest reading of 16.3 MJm⁻². For the highlands, Cameron Highlands recorded a reading of 12.9 MJm⁻² (Refer to Figure 7).



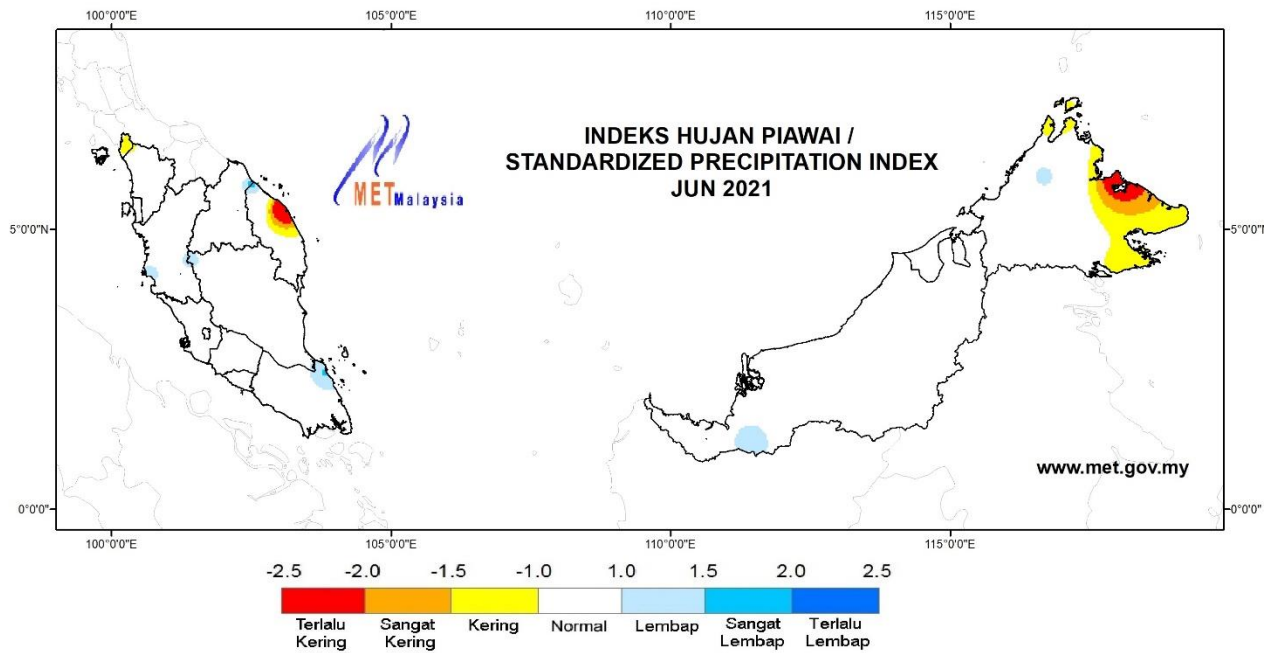
Rajah 1: Anomali Hujan

Figure 1: Rainfall Anomaly



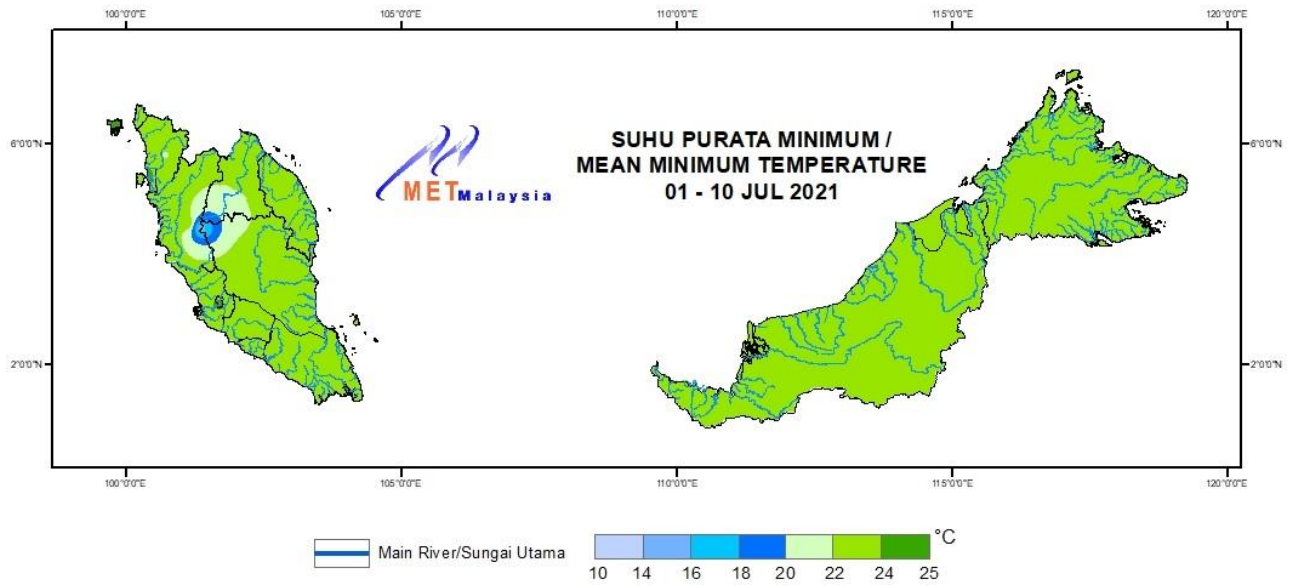
Rajah 2: Jumlah Hujan

Figure 2: Rainfall Amount



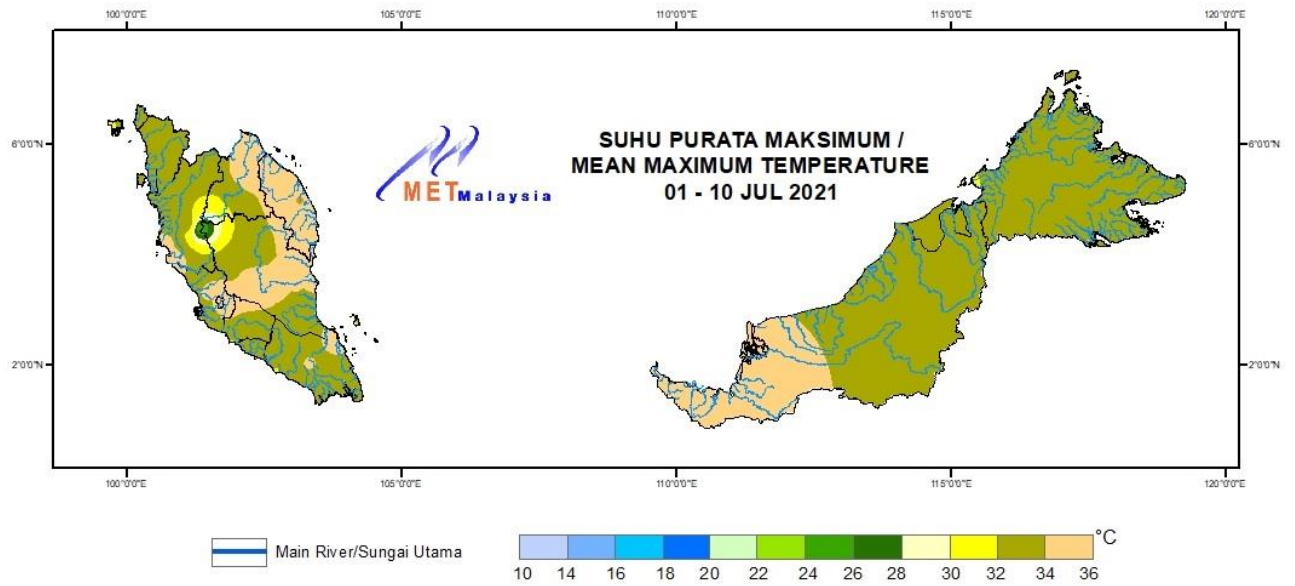
Rajah 3: Indeks Hujan Piawai

Figure 3: Standardized Precipitation Index



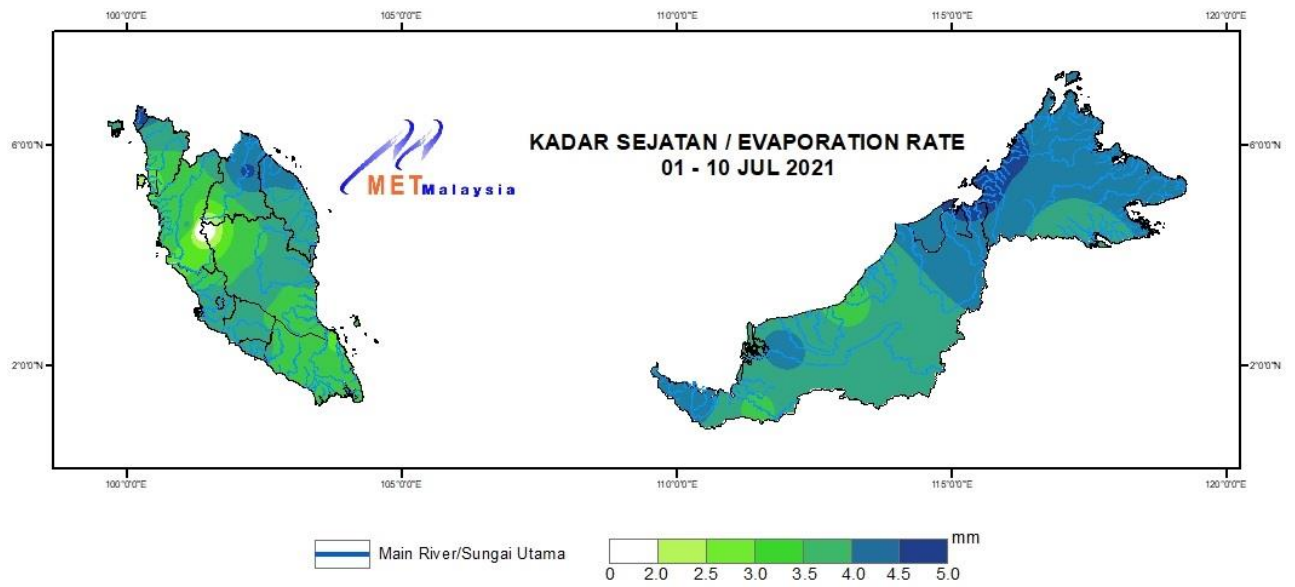
Rajah 4: Suhu Purata Minimum

Figure 4: Mean Minimum Temperature



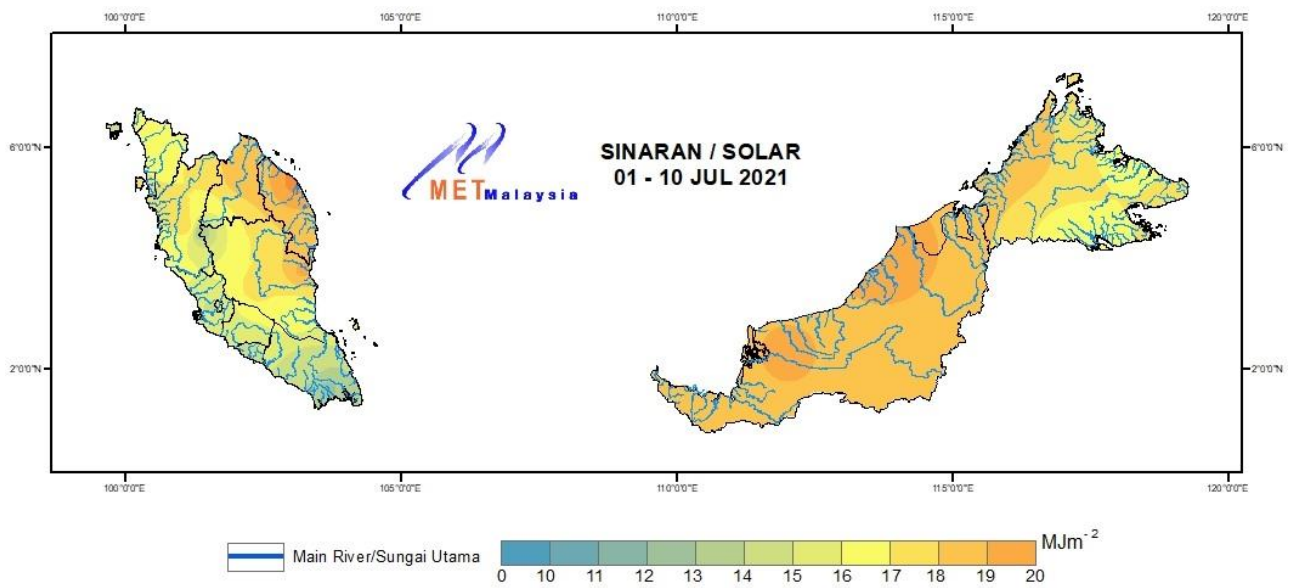
Rajah 5: Suhu Purata Maksimum

Figure 5: Mean Maximum Temperature



Rajah 6: Kadar Sejatan

Figure 6: Evaporation Rate



Rajah 7: Sinaran Solar

Figure 7: Solar Radiation

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