



## LAPORAN PEMANTAUAN KEMARAU FEBRUARI 2025

### Pemantauan Kemarau

#### Indeks Kerpasan Piawai (SPI) Terkini

Berdasarkan kiraan Indeks Kerpasan Piawai (SPI) terkini bagi bulan Februari 2025 (Jadual 1), kebanyakan kawasan merekodkan bacaan pada skala normal sehingga terlalu lembap kecuali Stesen Meteorologi Mulu yang merekodkan bacaan indeks SPI pada skala sederhana kering. Walau bagaimanapun, **tiada stesen yang telah mencapai status kemarau meteorologi** iaitu mencatatkan bacaan defisit jumlah hujan kumulatif 3 bulan semasa yang melebihi 35%. Pemantauan dari semasa ke semasa akan dilaksanakan dengan lebih kerap agar status kemarau meteorologi dapat dikeluarkan seawal yang mungkin.

## DROUGHT MONITORING REPORT FEBRUARY 2025

### Drought Monitoring

#### Current Standardized Precipitation Index (SPI)

*Based on the current SPI index calculations for February 2025 (Table 1), most areas recorded values within the normal to extremely wet scale, with the exception of the Mulu Meteorological Station, which showed a moderate dry SPI index. However, **no station has reached the meteorological drought status**, which is defined as a cumulative 3-month rainfall deficit exceeding 35%. Monitoring will be conducted more frequently to issue meteorological drought alerts as early as possible.*



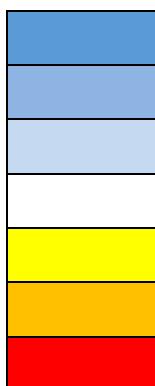
Jadual 1: Indeks SPI Februari 2025 (Data-data diambil dari 40 stesen Utama sahaja)

Table 1: SPI Index for February 2025 (Data sourced from 40 main stations only)

Stesen	Lat	Long	SPI					
			1 bulan	2 bulan	3 bulan	4 bulan	5 bulan	6 bulan
PULAU LANGKAWI	6.33	99.73	0.59	1.09	1.20	0.66	0.04	0.21
BAYAN LEPAS	5.30	100.27	-0.85	-0.23	0.09	0.00	-0.08	0.19
BUTTERWORTH	5.45	100.38	1.29	1.23	1.38	0.45	0.43	0.60
CHUPING	6.48	100.27	0.22	0.53	-0.34	0.51	0.71	1.22
KOTA BHARU	6.17	102.30	0.27	0.40	-0.32	0.98	0.71	0.71
KUALA KRAI	5.53	102.20	0.81	0.70	0.25	1.67	1.58	1.33
GONG KEDAK	5.80	102.50	0.35	0.48	-0.36	1.22	1.03	1.20
KUALA TERENGGANU	5.38	103.10	0.01	0.04	-0.11	0.25	0.12	0.13
KERTEH	4.54	103.43	-0.24	-0.57	-0.57	0.99	1.00	1.13
SITIAWAN	4.22	100.70	0.29	0.36	0.35	0.29	-0.03	0.04
LUBOK MERBAU	4.80	100.90	0.04	0.01	0.30	-0.10	0.53	0.65
IPOH	4.57	101.10	0.87	1.42	1.41	1.86	1.86	2.52
CAMERON HIGHLANDS	4.47	101.37	1.27	1.83	2.14	2.13	2.43	2.81
BATU EMBUN	3.97	102.35	1.11	0.74	0.08	1.03	1.65	1.49
SUBANG	3.13	101.55	0.19	0.91	0.68	0.99	1.17	1.09
MUADZAM SHAH	3.05	103.08	0.13	-0.62	-0.81	0.04	-0.02	0.01
KLIA SEPANG	2.73	101.70	0.39	0.78	0.70	0.72	0.63	0.61
TEMERLOH	3.47	102.38	0.64	0.41	0.46	0.90	0.93	0.87
KUANTAN	3.77	103.22	-0.33	-0.09	0.05	0.33	0.08	0.05
MELAKA	2.27	102.25	0.69	0.70	0.10	1.08	1.39	1.34
KUALA PILAH	2.73	102.25	0.22	0.53	-0.34	0.51	0.71	1.22
BATU PAHAT	1.87	102.98	0.96	0.94	0.33	0.36	0.37	0.25
KLUANG	2.02	103.32	0.19	0.43	0.01	-0.11	-0.09	0.39
MERSING	2.45	103.83	-0.49	0.17	0.14	0.32	0.28	0.10
SENAI	1.63	103.67	0.96	1.28	0.59	0.74	0.76	0.90
KUCHING	1.48	110.35	-0.65	0.34	-0.08	-0.24	0.02	-0.22
SRI AMAN	1.22	111.45	0.60	1.90	1.30	1.28	1.35	1.10
SIBU	2.25	111.97	0.22	1.27	1.25	1.32	1.11	1.03
BINTULU	3.12	113.02	1.31	2.78	2.49	2.27	2.05	1.68
MIRI	4.33	113.98	1.00	1.82	1.70	1.79	1.79	1.63
KAPIT	2.00	112.92	-0.44	1.75	1.17	1.92	2.13	2.07
LIMBANG	4.80	115.00	0.72	0.63	0.78	0.94	0.87	0.81
MULU	4.05	114.82	-1.03	-0.11	-0.31	-0.32	0.62	0.34
LABUAN	5.30	115.25	1.41	1.11	0.81	0.48	0.52	0.18
KOTA KINABALU	5.93	116.05	1.95	1.84	1.48	1.65	1.58	1.35
KUDAT	6.92	116.83	0.49	0.66	0.23	0.18	0.34	0.45
TAWAU	4.32	118.12	1.25	0.76	1.55	1.30	0.97	1.06



Stesen	Lat	Long	SPI					
			1 bulan	2 bulan	3 bulan	4 bulan	5 bulan	6 bulan
SANDAKAN	5.90	118.07	0.58	0.80	0.60	0.89	0.78	0.57
RANAU	5.95	116.67	2.37	1.60	1.14	1.08	1.13	1.07
KENINGAU	5.33	116.13	1.59	2.37	1.52	1.36	1.49	1.67



2.0 dan ke atas / and above :Terlalu lembap / *Extremely wet*

1.5 ke 1.99 :Sangat lembap / *Severely wet*

1.0 ke 1.49 :Sederhana lembap / *Moderately wet*

-0.99 ke 0.99 :Normal

-1.0 ke -1.49 :Sederhana kering / *Moderately dry*

-1.5 ke -1.99 :Sangat kering / *Severely dry*

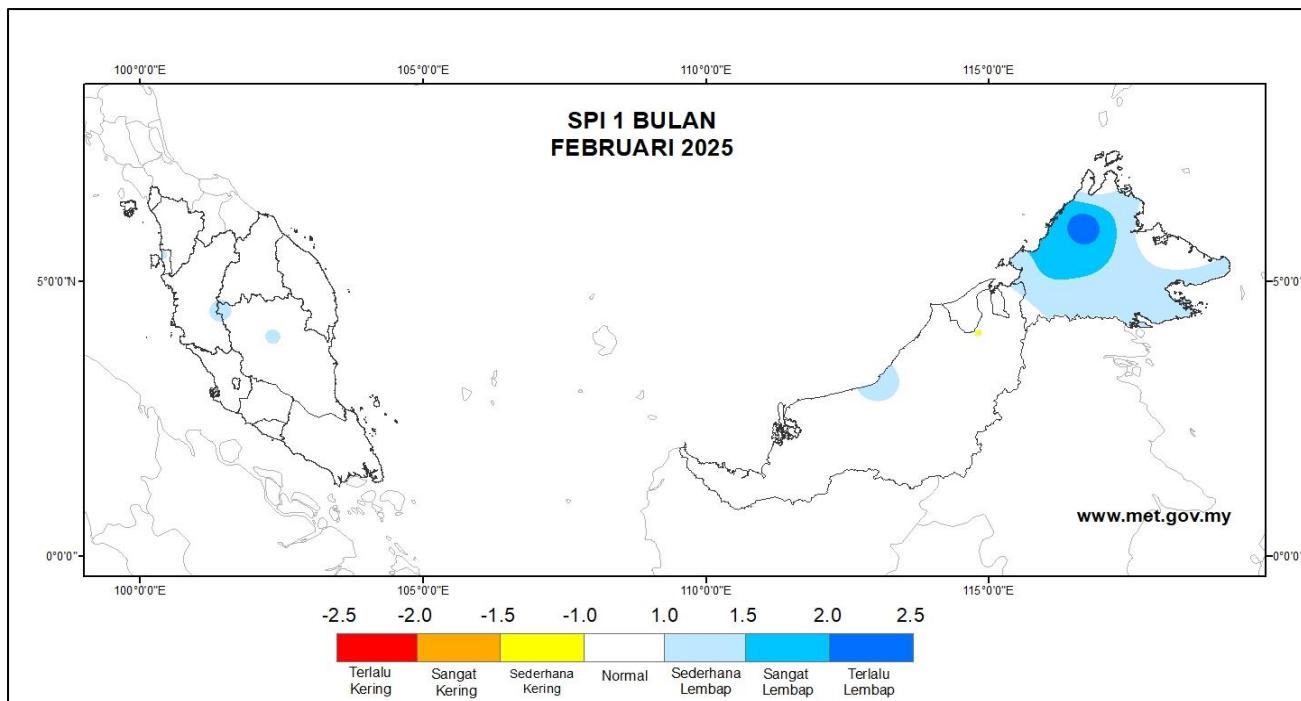
-2.0 atau kurang / or less :Terlalu kering / *Extremely dry*



<b>PEMANTAUAN STATUS KEMARAU METEOROLOGI MONITORING OF METEOROLOGICAL DROUGHT STATUS</b>	
<b>Tahap Amaran Warning Level</b>	<b>Penjelasan Description</b>
<b>WASPADA ALERT</b>	<p>Defisit jumlah hujan kumulatif untuk tempoh 3 bulan terkini melebihi dari 35% dari normal; DAN Indeks SPI bulan terkini adalah kurang daripada -1.5</p> <p><i>Cumulative rainfall deficit for the most recent 3-month period exceeds 35% of normal; AND the current month's SPI index is less than -1.5</i></p> <p><b>ATAU / OR</b></p> <p>Defisit jumlah hujan kumulatif untuk tempoh 6 bulan terkini melebihi 35% dari normal DAN indeks SPI bulan terkini kurang dari -1.5</p> <p><i>Cumulative rainfall deficit for the most recent 6-month period exceeds 35% of normal; AND the current month's SPI index is less than -1.5</i></p>
<b>AMARAN WARNING</b>	<p>Defisit jumlah hujan kumulatif untuk tempoh 3 bulan DAN 6 bulan terkini juga melebihi 35% dari normal;</p> <p><i>Cumulative rainfall deficit for both the most recent 3-month and 6-month periods exceeds 35% of normal;</i></p> <p><b>DAN / AND</b></p> <p>Indeks SPI 3 bulan terkini adalah kurang daripada -1.5 serta tahap kemarau sebelumnya telahpun dikategorikan WASPADA</p> <p><i>The current 3-month SPI index is less than -1.5, and the previous drought status has already been categorized as ALERT.</i></p>
<b>BAHAYA DANGER</b>	<p>Defisit jumlah hujan kumulatif untuk tempoh 3 bulan DAN 6 bulan terkini melebihi 35% dari normal;</p> <p><i>Cumulative rainfall deficit for both the most recent 3-month and 6-month periods exceeds 35% of normal;</i></p> <p><b>DAN / AND</b></p> <p>Indeks SPI 3 bulan terkini adalah kurang daripada -2.0 serta tahap kemarau sebelumnya telahpun dikategorikan AMARAN</p> <p><i>The current 3-month SPI index is less than -2.0, and the previous drought status has already been categorized as WARNING.</i></p>

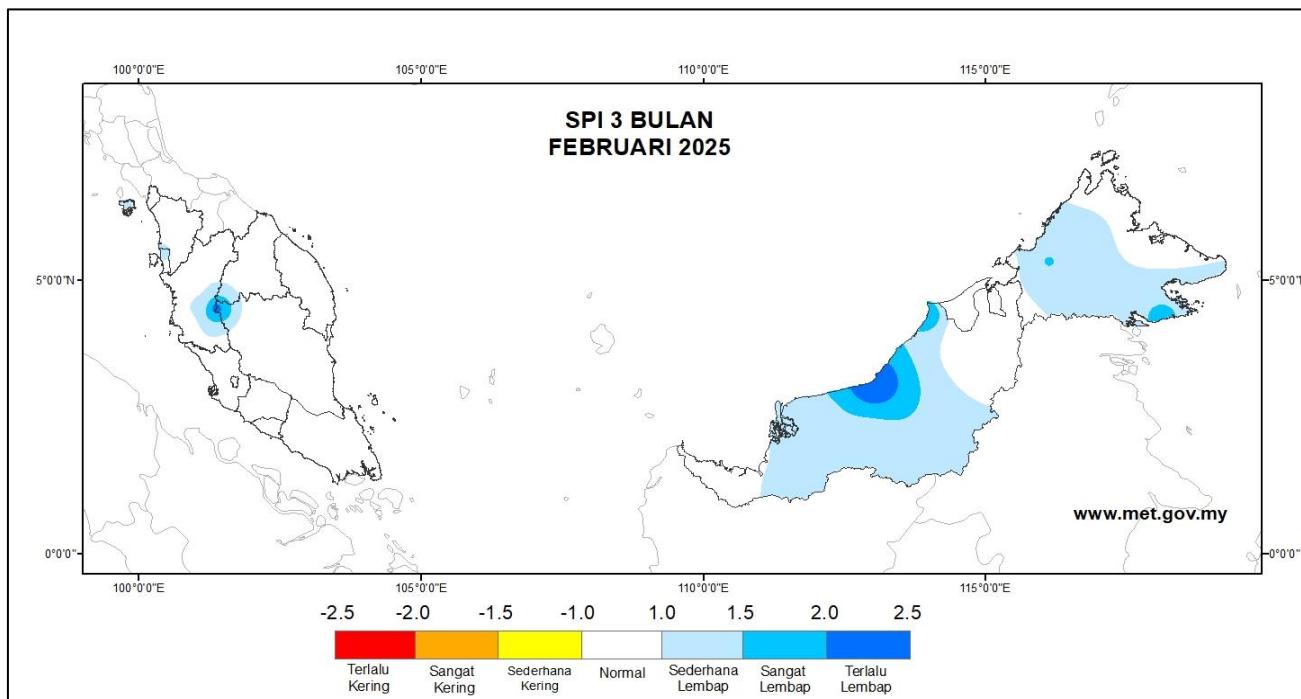
Rajah 1: Tahap Pemantauan Status Kemarau

Figure 1: Drought Status Monitoring Levels



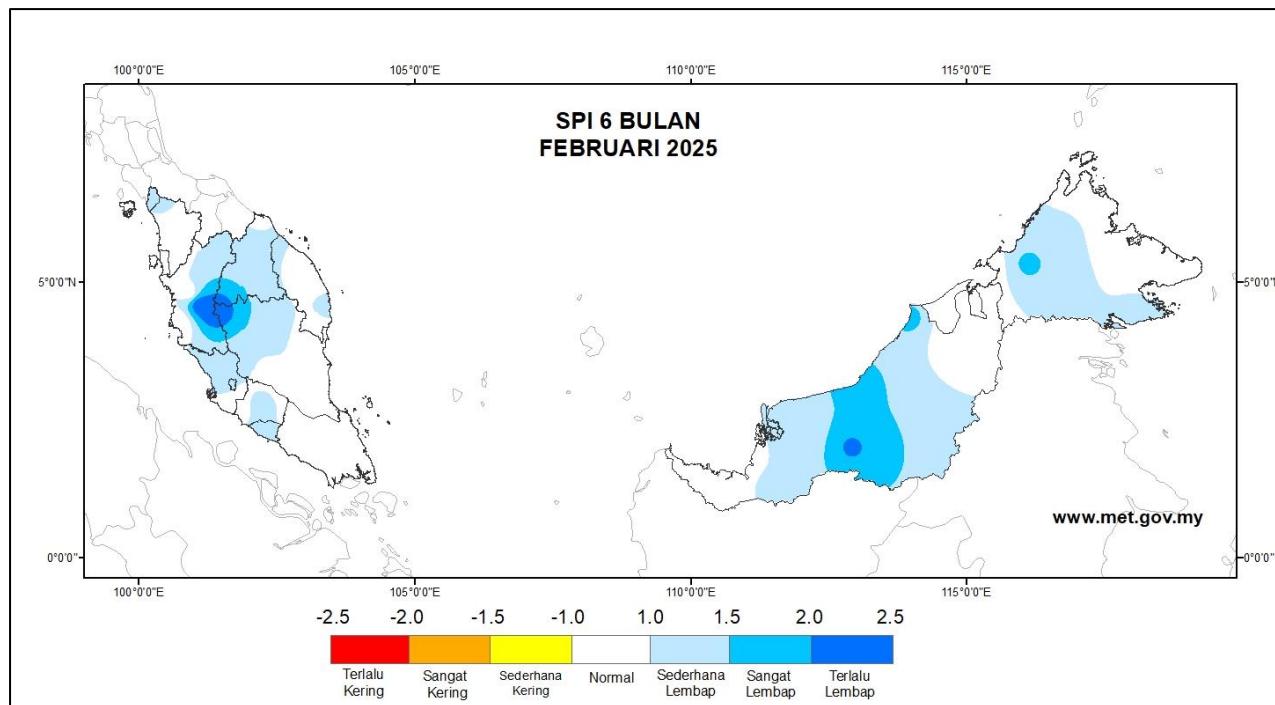
Rajah 2: SPI 1 Bulan (Februari 2025)

Figure 2: 1-Month SPI (February 2025)



Rajah 3: SPI 3 Bulan (Disember 2024 - Februari 2025)

Figure 3: 3-Month SPI (December 2024 - February 2025)



Rajah 4: SPI 6 Bulan (September 2024 - Februari 2025)

Figure 4: 6-Month SPI (September 2024 - February 2025)

### Keadaan Cuaca Semasa

Negara kini berada di penghujung musim Monsun Timur Laut yang dijangka berakhir pada Mac 2025. Dalam tempoh ini, taburan hujan diramalkan berkurangan di kebanyakan kawasan, terutama di negeri-negeri utara dan pantai timur Semenanjung. Ketiadaan hujan yang berpanjangan berpotensi menyebabkan cuaca menjadi lebih panas dan kering daripada biasa, di samping meningkatkan risiko berlakunya gelombang haba serta jerebu setempat. Fenomena cuaca panas dan kering ini lazimnya berlaku pada bulan Februari hingga Mei setiap tahun.

Sepanjang bulan Februari, taburan hujan di Semenanjung Malaysia mencatatkan peratusan anomali hujan pada paras purata hingga melebihi 60% di atas paras purata kecuali di Stesen Meteorologi Bayan Lepas (Pulau Pinang), Alor Setar (Kedah), Chuping (Perlis), Mersing (Johor), Kuala Terengganu, Kerteh (Terengganu), Muadzam Shah dan Kuantan (Pahang) yang merekodkan peratusan anomali hujan 20% hingga melebihi 60% di bawah paras purata. Bagi Negeri Sarawak, kebanyakan bahagian mencatatkan peratusan anomali hujan pada paras purata hingga melebihi 60% di atas paras purata

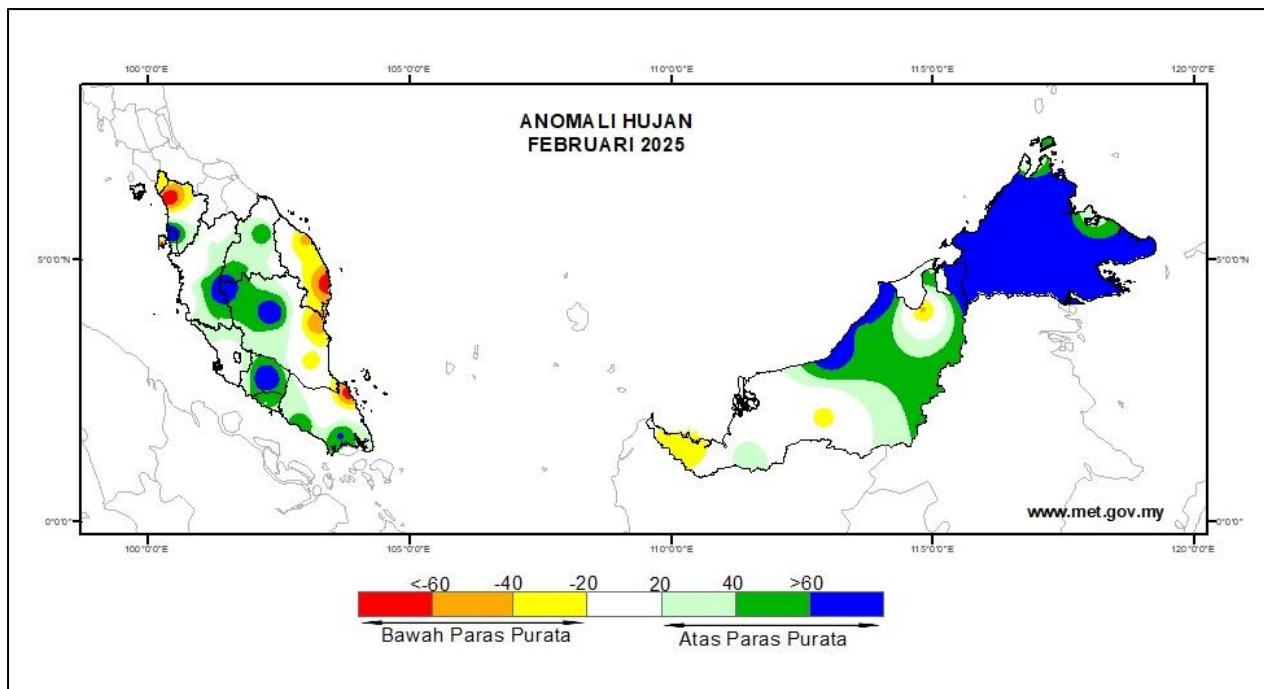


kecuali di Stesen Meteorologi Kuching yang merekodkan peratusan anomali hujan 20% hingga 40% di bawah paras purata. Manakala Sabah, kebanyakan bahagian mencatatkan peratusan anomali hujan pada paras purata hingga melebihi 60% di atas paras purata (Rajah 5).

### ***Current Weather Conditions***

*The country is currently at the end of the North East Monsoon season which is expected to end in March 2025. During this period, rainfall is predicted to decrease in most areas, especially in the northern states and the peninsula's east coast. The prolonged absence of rain has the potential to cause the weather to be hotter and drier than usual, in addition to increasing the risk of heat waves and localized haze. This phenomenon of hot and dry weather usually occurs every year, from February to May.*

*In February, the rainfall distribution in Peninsular Malaysia recorded rainfall anomaly percentages at the average to more than 60% above the average level, except for the Meteorological Stations in Bayan Lepas (Penang), Alor Setar (Kedah), Chuping (Perlis), Mersing (Johor), Kuala Terengganu, Kerteh (Terengganu), Muadzam Shah, and Kuantan (Pahang), which recorded rainfall anomaly percentages between 20% to more than 60% below the average. In Sarawak, most areas recorded rainfall anomaly percentages at the average to more than 60% above the average level, except for the Kuching Meteorological Station, which recorded rainfall anomaly percentages between 20% to 40% below the average. Meanwhile, in Sabah, most areas recorded rainfall anomaly percentages at the average to more than 60% above the average level (Figure 5).*



Rajah 5: Anomali Hujan (Februari 2025)

Figure 5: Rainfall Anomalies (February 2025)

### Ramalan Cuaca Jangka Sederhana (Mac - Mei 2025)

Pada bulan Mac 2025, semua negeri di Semenanjung Malaysia dijangkakan akan menerima hujan pada paras purata antara 100mm hingga 350mm. Di Sarawak, kesemua bahagian dijangkakan menerima hujan pada paras purata iaitu antara 100mm hingga 500mm. Manakala di Sabah, kebanyakan kawasan dijangkakan menerima hujan sedikit melebihi purata iaitu antara 100mm hingga 250mm kecuali di Tawau dan Pedalaman yang dijangkakan menerima hujan pada paras purata antara 100mm hingga 150mm. W.P Labuan juga dijangkakan menerima hujan pada paras purata iaitu antara 100mm hingga 150mm.

Bagi bulan April 2025, negara dijangka berada dalam fasa Peralihan Monsun. Semua negeri di Semenanjung dijangka akan menerima taburan hujan pada paras purata iaitu antara 50mm hingga 400mm. Di Sarawak, kebanyakan bahagian juga dijangka akan menerima jumlah hujan pada paras purata di antara 150mm hingga 450mm kecuali di Kuching, Samarahan, Sri Aman, Betong, Sarikei, Sibu dan Mukah yang dijangkakan



menerima hujan sedikit bawah purata iaitu antara 150mm hingga 250mm. Manakala, Sabah dan W.P Labuan pula dijangkakan menerima hujan pada paras purata iaitu antara 50mm hingga 250mm.

Dalam bulan Mei 2025, keadaan cuaca negara dijangkakan akan dipengaruhi oleh fasa Monsun Barat Daya bermula pada pertengahan Mei hingga September. Dalam tempoh ini, kejadian ribut petir dan hujan lebat dijangka berkurangan dan kebanyakan negeri akan mengalami lebih banyak bilangan hari tanpa hujan. Pada bulan ini kebanyakan kawasan di Semenanjung Malaysia dijangka menerima hujan pada paras purata antara 100mm hingga 350mm. Di Sarawak, kebanyakannya bahagian dijangka akan menerima jumlah hujan pada paras purata di antara 150mm hingga 550mm, kecuali di Kuching, Samarahan, Sri Aman, Betong, Sarikei, Sibu dan Mukah yang dijangkakan menerima hujan sedikit bawah purata iaitu antara 150mm hingga 200mm. Manakala negeri Sabah dan W.P Labuan dijangka menerima hujan pada paras purata antara 100mm hingga 350mm.

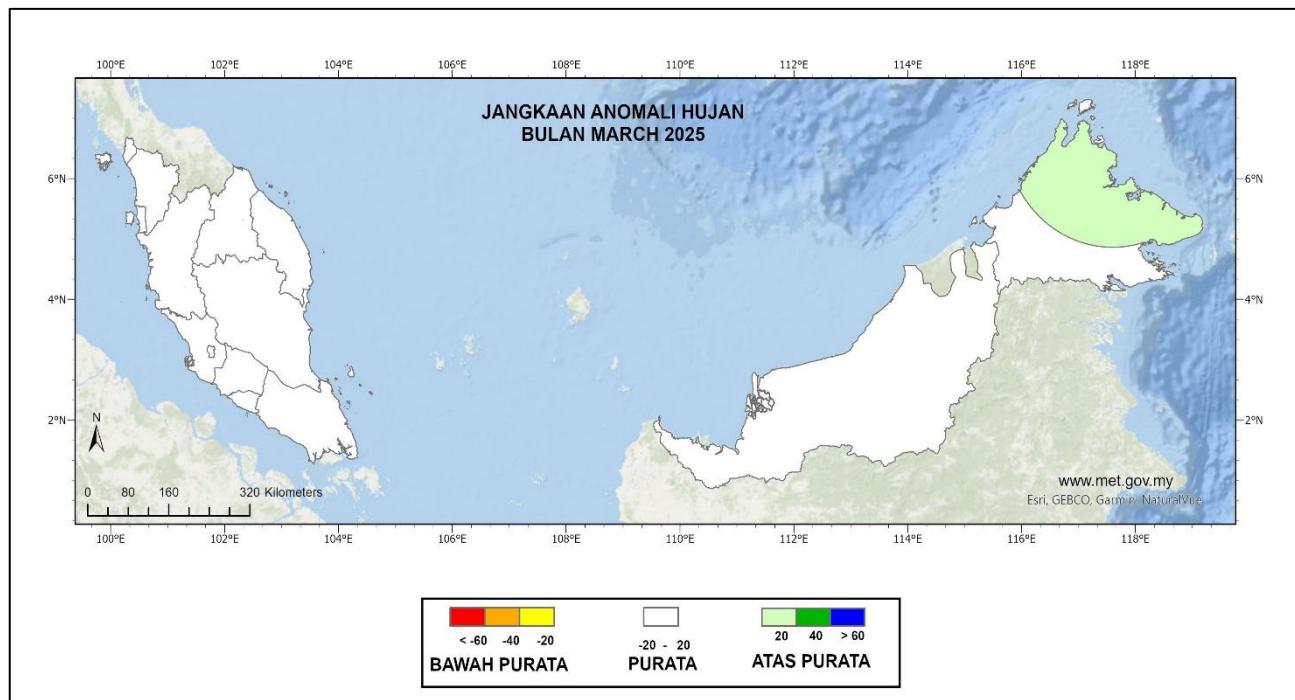
### ***Medium Range Weather Forecast (March-May 2025)***

*In March 2025, all states in Peninsular Malaysia are expected to receive rainfall within an average range of 100mm to 350mm. In Sarawak, all regions are expected to receive rainfall within an average range of 100mm to 500mm. Meanwhile, in Sabah, most areas are expected to receive slightly above-average rainfall, ranging from 100mm to 250mm, except for Tawau and the Interior region, which are expected to receive rainfall within an average range of 100mm to 150mm. The Federal Territory of Labuan is also expected to receive rainfall within an average range of 100mm to 150mm.*

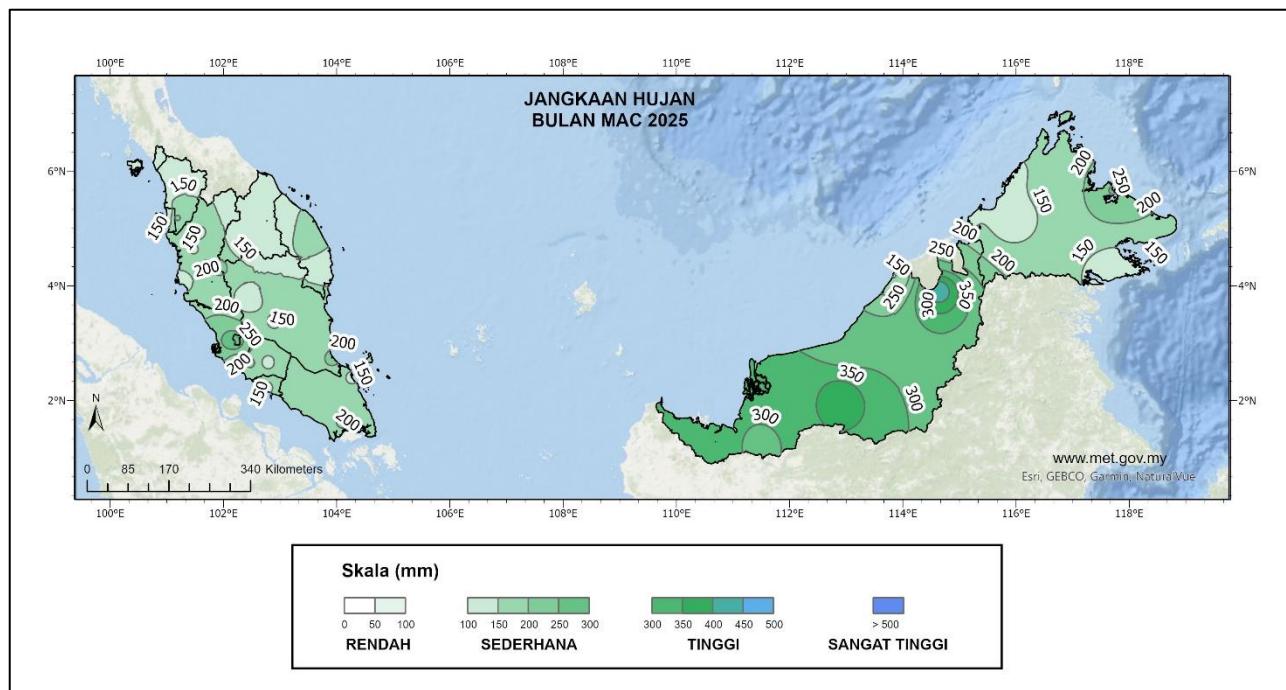
*For April 2025, the country is expected to be in the inter-monsoon phase. All states in Peninsular Malaysia are expected to receive rainfall within an average range of 50mm to 400mm. In Sarawak, most areas are also expected to receive average rainfall between 150mm and 450mm, except for Kuching, Samarahan, Sri Aman, Betong, Sarikei, Sibu, and Mukah, which are expected to receive slightly below-average rainfall, ranging from 150mm to 250mm. Meanwhile, Sabah and the Federal Territory of Labuan are expected to receive rainfall within an average range of 50mm to 250mm.*



In May 2025, the country's weather is expected to be influenced by the Southwest Monsoon phase, which begins in mid-May and lasts until September. During this period, thunderstorms and heavy rainfall are expected to decrease, and most states will experience more dry days. This month, most Peninsular Malaysia areas are expected to receive rainfall within an average range of 100mm to 350mm. In Sarawak, most regions are expected to receive rainfall within an average range of 150mm to 550mm, except for Kuching, Samarahan, Sri Aman, Betong, Sarikei, Sibu, and Mukah, which are expected to receive slightly below-average rainfall, ranging from 150mm to 200mm. Meanwhile, the states of Sabah and the Federal Territory of Labuan are expected to receive rainfall within an average range of 100mm to 350mm.

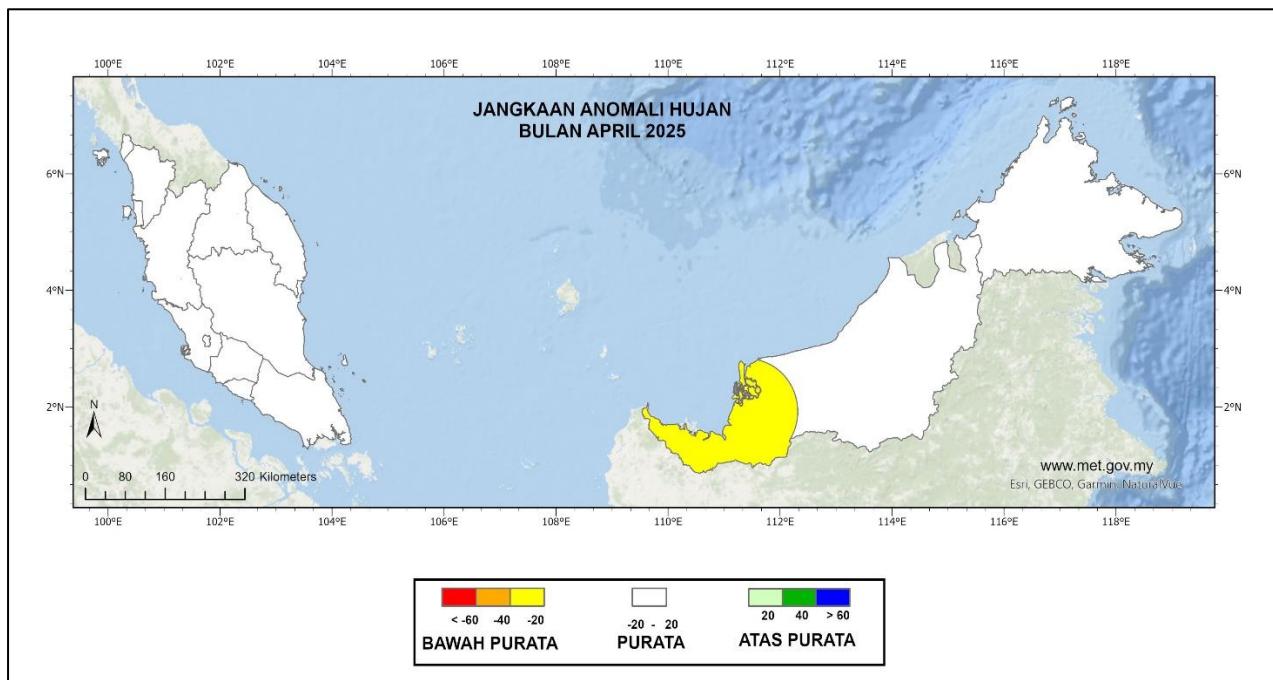


Rajah 6: Jangkaan Anomali Hujan Mac 2025  
Figure 6: Expected Rainfall Anomaly for March 2025



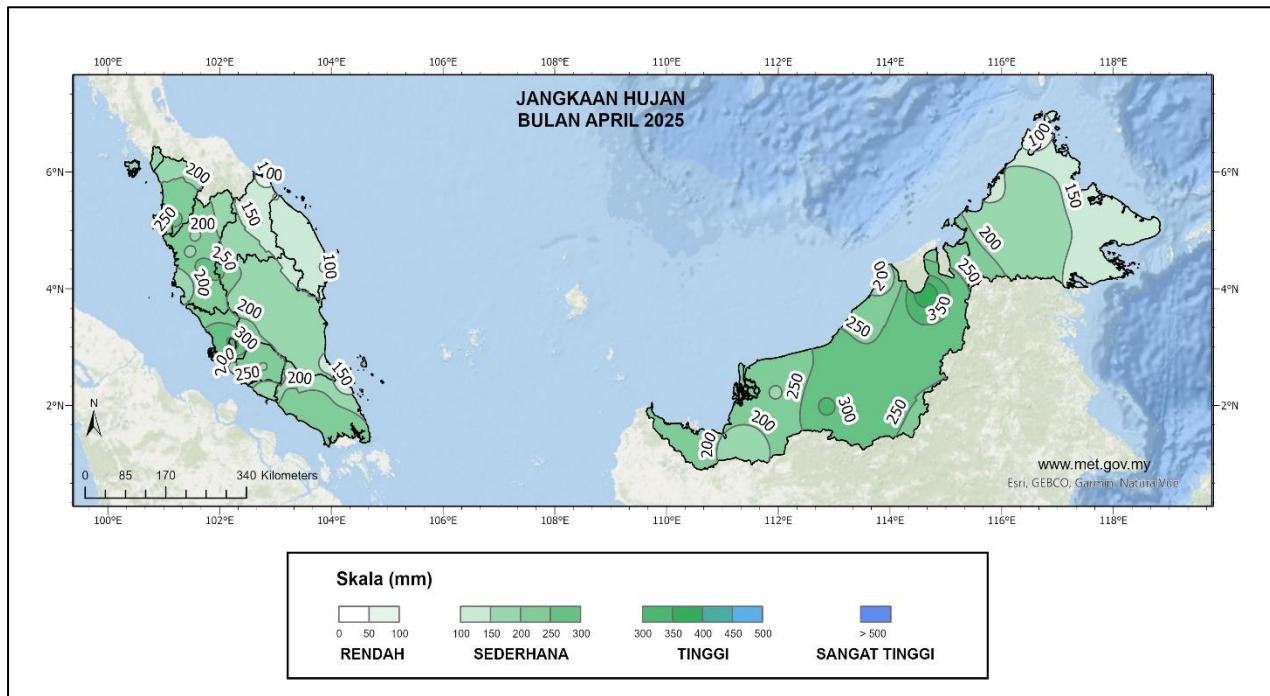
Rajah 7: Jangkaan Hujan Mac 2025

Figure 7: Expected Rainfall for March 2025

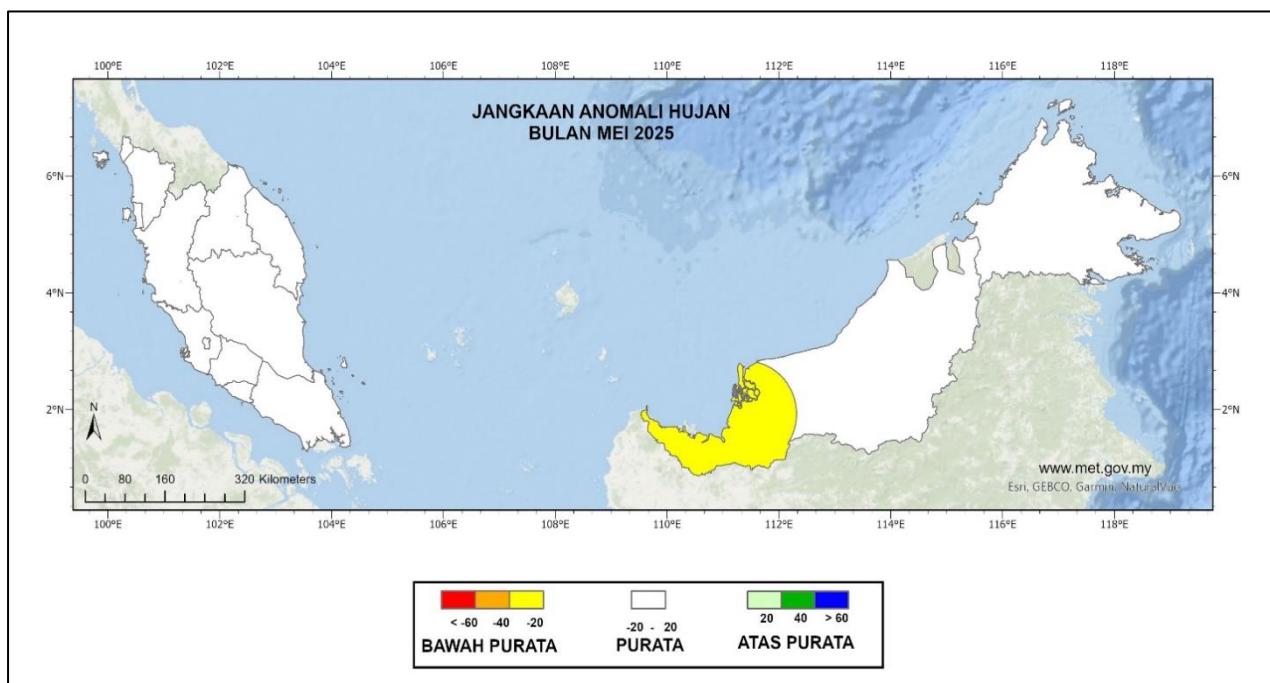


Rajah 8: Jangkaan Anomali Hujan April 2025

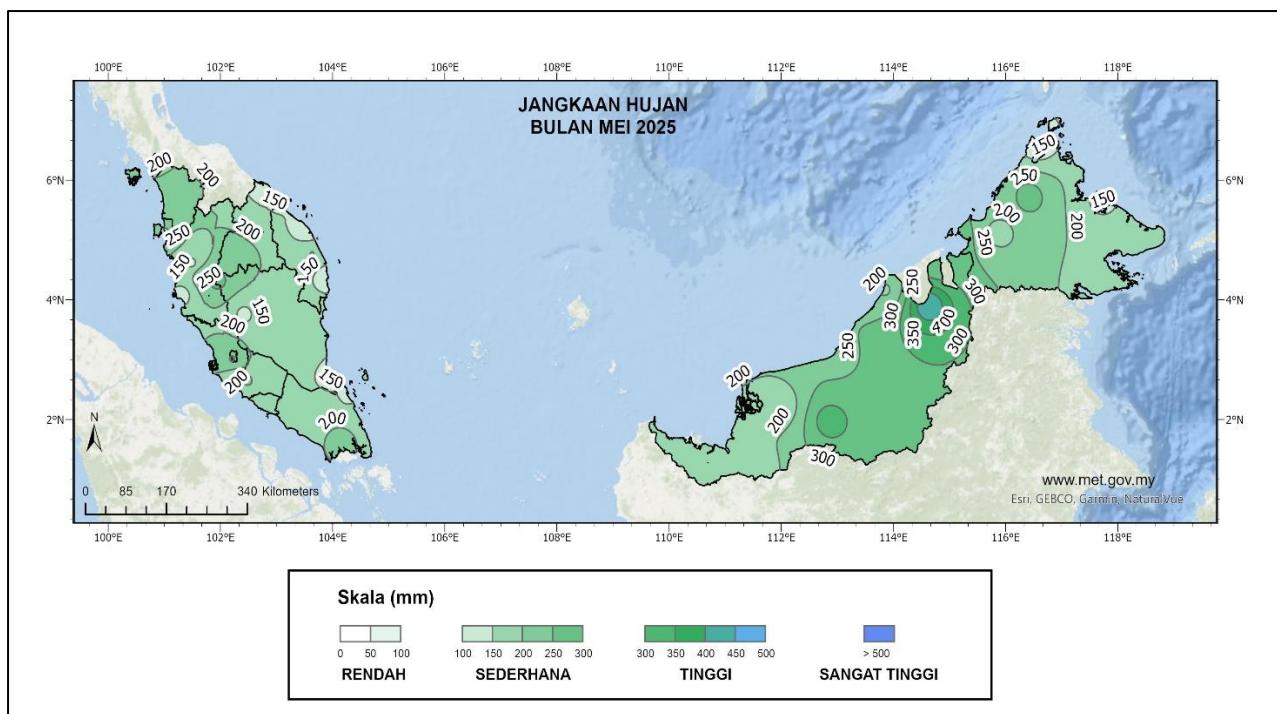
Figure 8: Expected Rainfall Anomaly for April 2025



Rajah 9: Jangkaan Hujan April 2025  
Figure 9: Expected Rainfall for April 2025



Rajah 10: Jangkaan Anomali Hujan Mei 2025  
Figure 10: Expected Rainfall Anomaly for May 2025



Rajah 11: Jangkaan Hujan Mei 2025  
Figure 11: Expected Rainfall for May 2025

\*Rajah 2 - 11 ini dijana daripada 40 buah stesen meteorologi utama MET Malaysia menggunakan kaedah interpolasi IDW.

\*Figure 2 - 11 is generated from 40 main meteorological stations of MET Malaysia using the IDW interpolation method.

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10 Februari 2025