

每月天氣摘要 二零二零年七月

Monthly Weather Summary July 2020



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二零二零年八月出版

香港天文台編製
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1. 二零二零年七月天氣回顧

由於較正常強的副熱帶高壓脊於本月大部分時間持續影響華南，二零二零年七月是本港自一八八四年有記錄以來最熱的月份。本月平均最高氣溫 33.3 度、平均氣溫 30.2 度及平均最低氣溫 28.3 度，分別較正常值高 1.9 度、1.4 度及 1.5 度，均成為有記錄以來相關月平均值的最高紀錄。二零二零年七月的熱夜數目達 21 天，是有記錄以來最多熱夜數目的月份。由七月五日開始的連續 11 個熱夜，亦刷新了七月的連續熱夜紀錄。此外，本月的酷熱天氣日數為 20 天，是有記錄以來的單月最高。由於持續天氣晴朗，本月亦遠較正常少雨，全月總雨量只得 125.4 毫米，約是正常值 376.5 毫米的百分之 33。本年首七個月的累積雨量為 1088.8 毫米，較同期正常值 1473.3 毫米少約百分之 26。

受一道廣闊低壓槽及隨後的偏南氣流影響，本月首三天香港天氣夾雜著陽光及驟雨，間中有雷暴。七月三日的驟雨較大，本港大部分地區錄得超過 10 毫米雨量。在一個高空反氣旋支配下，七月四日至八日除有幾陣驟雨外，本港日間普遍天晴及天氣酷熱。受一股達強風程度的西南氣流影響，隨後兩天本港雲量較多及局部地區有驟雨。

隨著副熱帶高壓脊由太平洋向西伸展及覆蓋中國東南部，除有幾陣驟雨外，由七月十一日至七月三十日，本港的天氣持續普遍天晴及酷熱。其間酷熱天氣更於七月十七日、二十一日、二十二日及二十七日至二十九日觸發局部地區雷暴。在陽光充沛及微風情況下，七月二十三日天文台氣溫上升至全月最高的 35.3 度。在持續高溫下，酷熱天氣警告在七月十一日至三十日期間維持達 467 小時，是自二零零零年推出該警告信號以來的最長生效時間紀錄。同時，位於南海的季風低壓在本月最後一天逐漸發展為一熱帶低氣壓，其外圍雨帶為香港帶來狂風驟雨及雷暴。當日本港大部分地區錄得超過 20 毫米雨量，而香港島的雨量更超過 40 毫米。在大風及驟雨天氣下，持續影響本港超過半個月的酷熱及少雨情況最終得以紓緩。

本月有兩個熱帶氣旋影響南海及北太平洋西部。

本月沒有航機因惡劣天氣須轉飛其他地方。表 1.1 載列本月發出及取消各種警告/信號的詳情。

1. The Weather of July 2020

With a stronger than usual subtropical ridge persisting over southern China for most of the time in the month, July 2020 became the hottest month in Hong Kong since records began in 1884. The monthly mean maximum temperature of 33.3 degrees, monthly mean temperature of 30.2 degrees and monthly mean minimum temperature of 28.3 degrees were 1.9 degrees, 1.4 degrees and 1.5 degrees above their corresponding normals and all of them

were the highest of the correspondingly monthly mean values on record. With a total of 21 hot nights, July 2020 was the month with the highest number of hot nights on record and the 11 consecutive hot nights that started from 5 July also set a new record for July. Moreover, there were 20 very hot days in the month, the highest number of very hot days in a month on record. With long spell sunny weather, the month was also much drier than usual. The total monthly rainfall was only 125.4 millimetres, about 33 percent of the normal figure of 376.5 millimetres. The accumulated rainfall for the first seven months of the year was 1088.8 millimetres, about 26 percent below the normal figure of 1473.3 millimetres.

Affected by a broad trough of low pressure and the subsequent southerly airstream, the weather of Hong Kong was a mixture of sunshine and showers with occasional thunderstorms on the first three days of the month. The showers were heavier on 3 July with more than 10 millimetres of rainfall over most parts of the territory. Dominated by an anticyclone aloft, apart from a few showers, it was generally fine and very hot during the day on 4 – 8 July. Under the influence of a strong southwesterly airstream, local weather became cloudier with isolated showers in the next two days.

With the subtropical ridge extending westwards from the Pacific to cover southeastern China, apart from a few showers, a spell of generally fine and very hot weather set in on 11 July and persisted till 30 July in Hong Kong. The intense heat also triggered isolated thunderstorms on 17, 21, 22 and 27 - 29 July. With plenty of sunshine and under light wind condition, the maximum temperature at the Observatory soared to 35.3 degrees on 23 July, the highest of the month. The unrelenting heat also necessitated the Very Hot Weather Warning to remain in force for 467 hours from 11 to 30 July, setting the longest record since the introduction of the warning in 2000. Meanwhile, the monsoon depression over the South China Sea gradually developed into a tropical depression on the last day of the month and its outer rain bands brought squally showers and thunderstorms to the territory. More than 20 millimetres of rainfall were recorded over most parts of the territory, and rainfall even exceeded 40 millimetres over Hong Kong Island. The oppressive heat and parched condition that persisted for over half a month in Hong Kong were eventually relieved by the windy and showery weather.

Two tropical cyclones occurred over the South China Sea and the western North Pacific in the month.

During the month, no aircraft was diverted due to adverse weather. Details of the issuance and cancellation of various warnings/signals in the month are summarized in Table 1.1.

表 1.1 二零二零年七月發出的警告及信號
Table 1.1 Warnings and Signals issued in July 2020

熱帶氣旋警告信號

Tropical Cyclone Warning Signals

熱帶氣旋名稱 Name of Tropical Cyclone	信號 Signal Number	開始時間 Beginning Time		終結時間 Ending Time	
		日/月 day/month	時 hour	日/月 day/month	時 hour
		森拉克 SINLAKU	3	31/7	2040

強烈季候風信號

Strong Monsoon Signal

開始時間 Beginning Time		終結時間 Ending Time	
日/月 day/month	時 hour	日/月 day/month	時 hour
31/7	0705	31/7	2040

雷暴警告

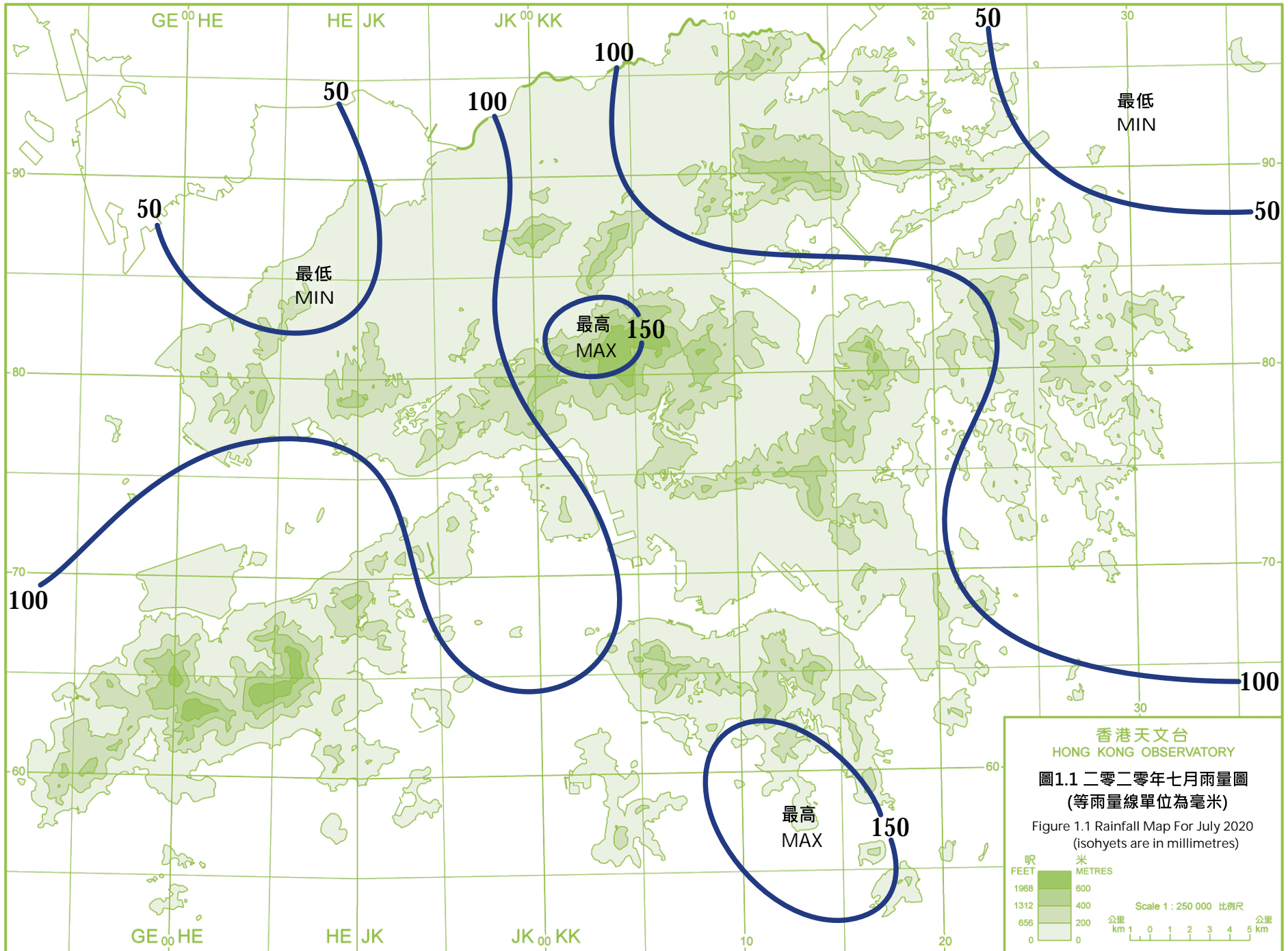
Thunderstorm Warning

開始時間 Beginning Time		終結時間 Ending Time	
日/月 day/month	時 hour	日/月 day/month	時 hour
1/7	1115	1/7	1230
2/7	1335	2/7	1600
3/7	0810	3/7	1200
3/7	1620	3/7	1715
3/7	1830	3/7	2015
17/7	0222	17/7	0430
21/7	1230	21/7	1400
22/7	0245	22/7	0345
22/7	0700	22/7	1000
27/7	0705	27/7	0945
27/7	1353	27/7	1500
28/7	0645	28/7	0800
29/7	1140	29/7	1630
30/7	0435	30/7	0730
30/7	1640	30/7	1800
31/7	0550	31/7	0945
31/7	1740	31/7	2000
31/7	2150	1/8	0915

酷熱天氣警告

Very Hot Weather Warning

開始時間 Beginning Time		終結時間 Ending Time	
日/月 day/month	時 hour	日/月 day/month	時 hour
29/6	1145	1/7	1630
3/7	1335	3/7	1620
4/7	1110	8/7	1730
11/7	0645	30/7	1745



2. 二零二零年七月熱帶氣旋概述

二零二零年七月在北太平洋西部及南海區域出現兩個熱帶氣旋，當中森拉克引致香港天文台需要發出熱帶氣旋警告信號。

一個熱帶低氣壓於七月十三日清晨在馬尼拉之東北約 510 公里的北太平洋西部上形成，中心附近最高持續風速估計為每小時 45 公里。該熱帶低氣壓大致向西北移動，翌日清晨在呂宋海峽減弱為低壓區。

熱帶低氣壓森拉克於七月三十一日晚上在香港之西南偏南約 550 公里的南海中部形成，大致向西北偏西移向海南島。



2. Overview of Tropical Cyclones in July 2020

Two tropical cyclones occurred over the western North Pacific and the South China Sea in July 2020. Sinlaku necessitated the issuance of the tropical cyclone warning signals by the Observatory.

A tropical depression formed over the western North Pacific about 510 km northeast of Manila on the early morning of 13 July with an estimated sustained wind of 45 km/h near its centre. It generally tracked northwestwards and weakened into an area of low pressure over the Luzon Strait in the early morning of the next day.

Tropical depression Sinlaku formed over the central part of the South China Sea about 550 km south-southwest of Hong Kong on the night of 31 July and generally moved west-northwestwards towards Hainan Island.

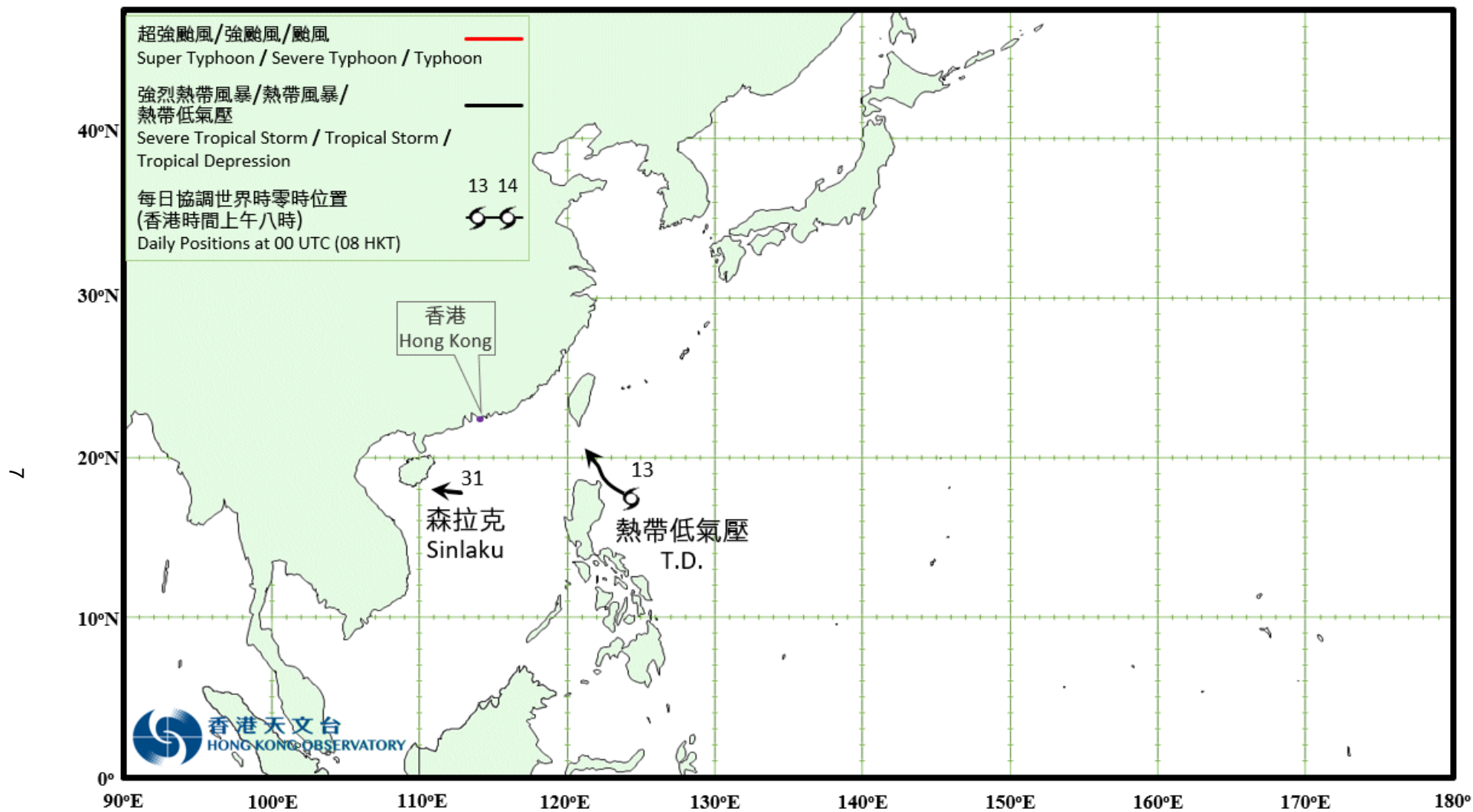
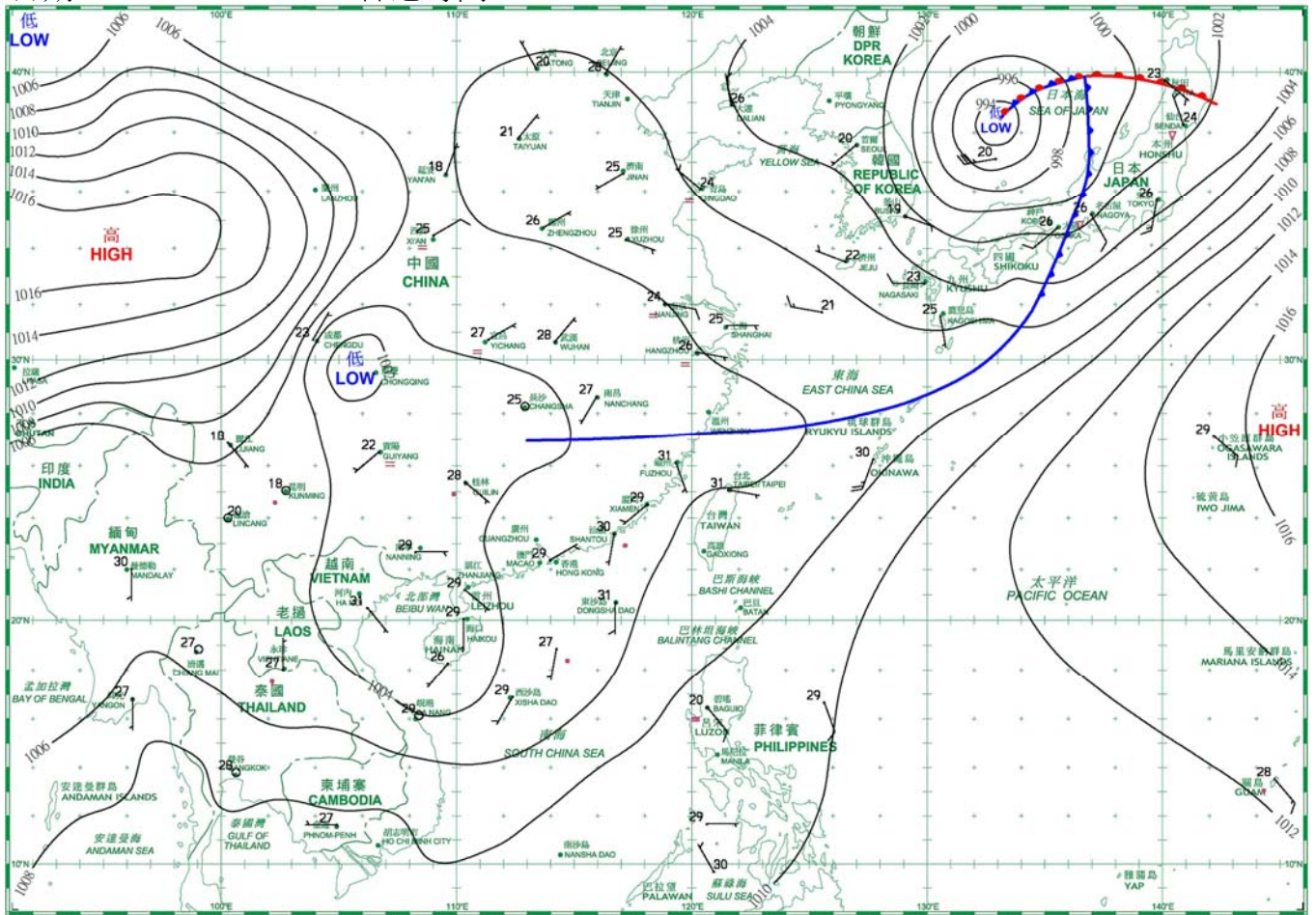


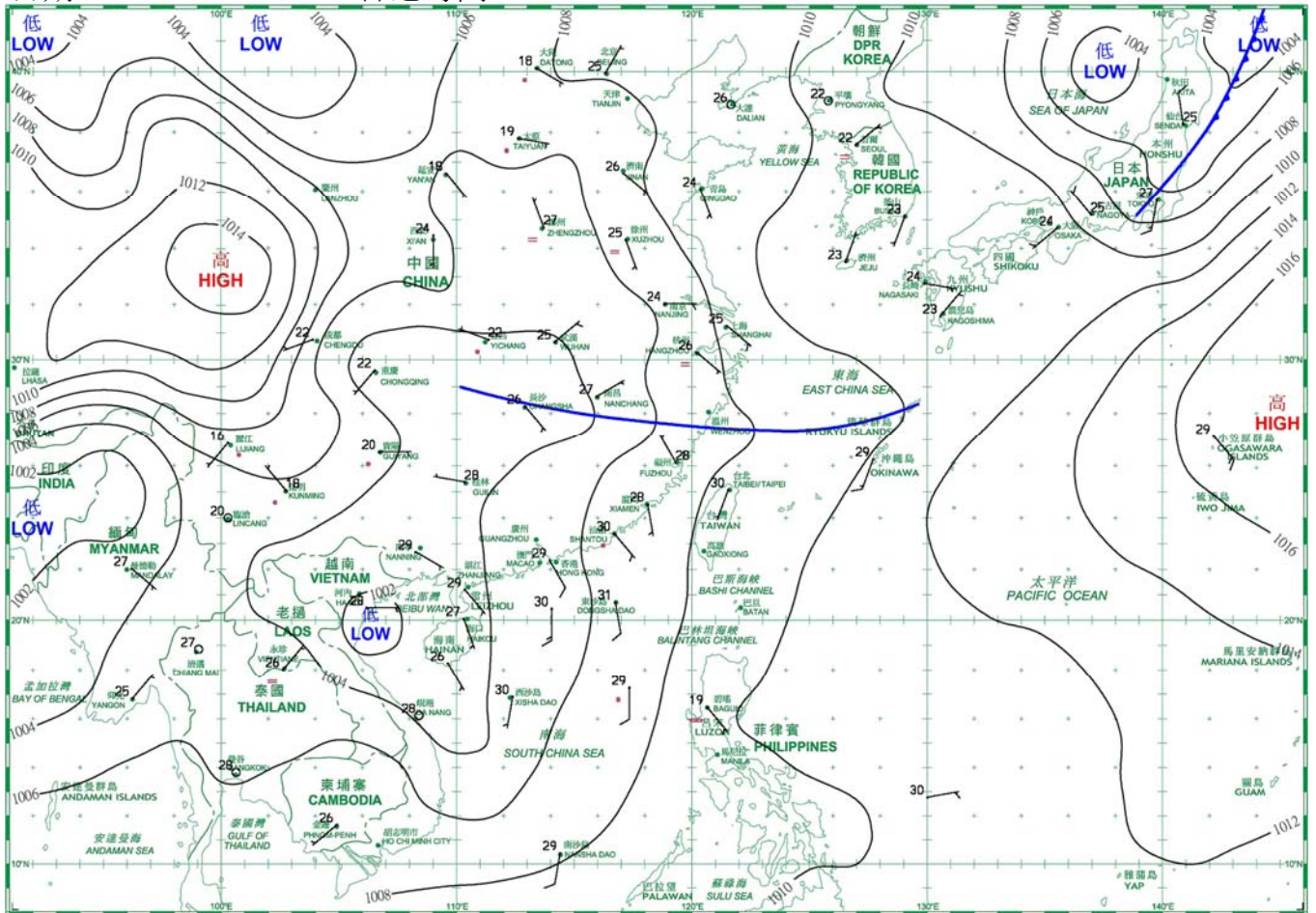
圖 2.1 二零二零年七月的熱帶氣旋路徑圖
Fig. 2.1 Tracks of tropical cyclones in July 2020

3. 二零二零年七月每日天氣圖 Daily Weather Maps for July 2020

日期/Date: 01.07.2020 香港時間/HK Time: 08:00

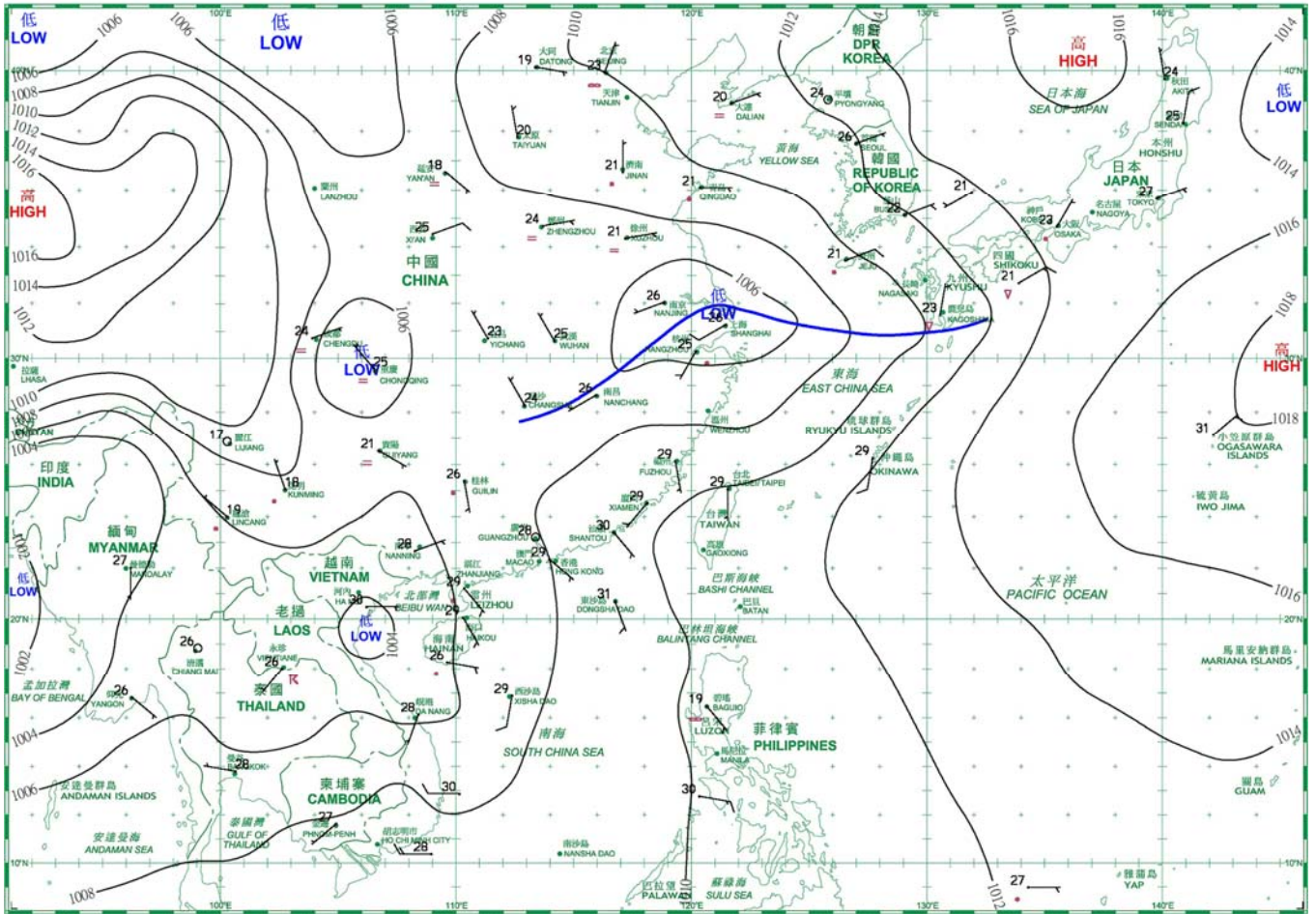


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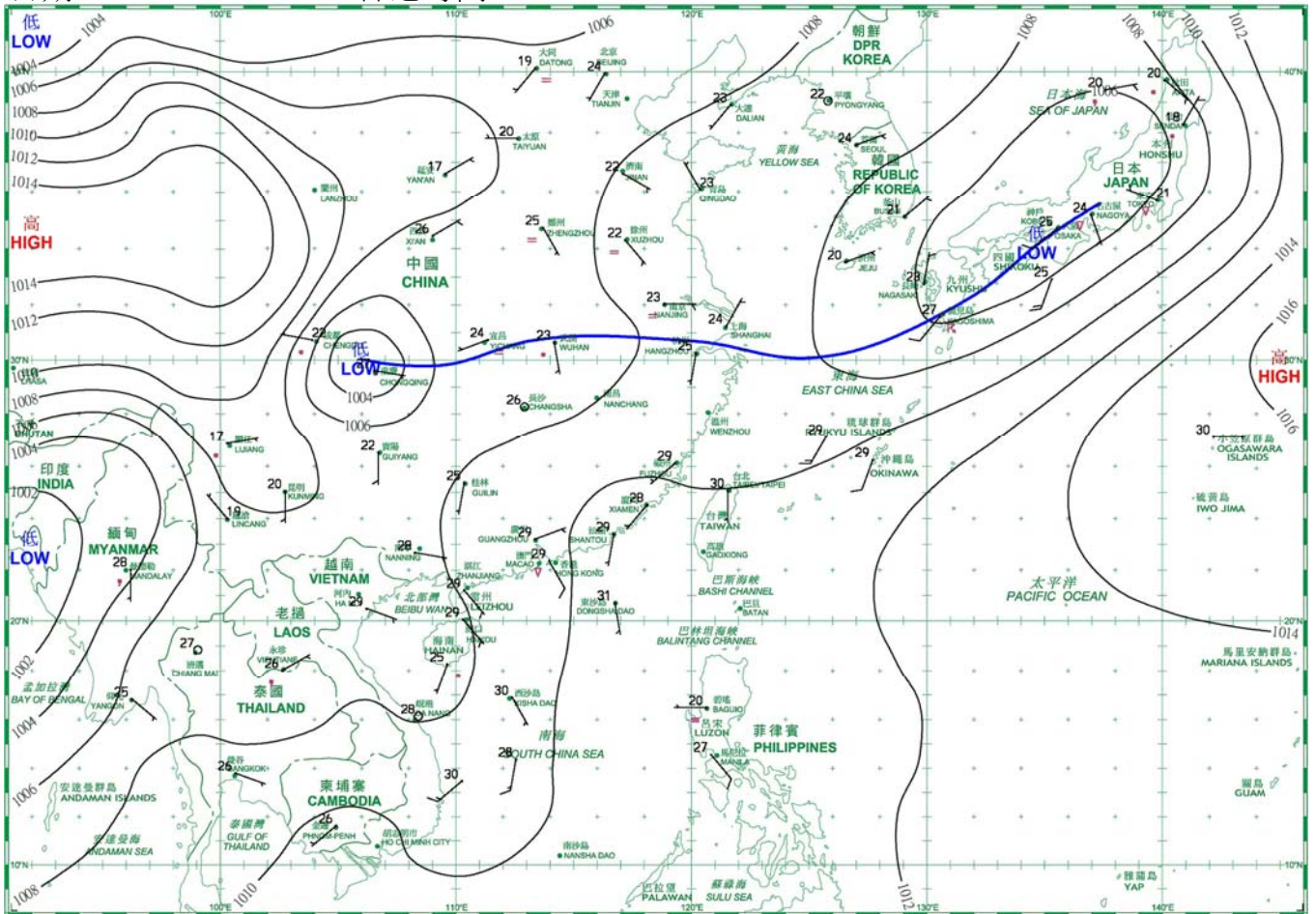


- 等壓線 Isobar(hPa)
- 暖鋒 Warm Front
- 靜止鋒 Stationary Front
- 消散中的冷鋒 Dissipating Cold Front
- 冷鋒 Cold Front
- 錮囚鋒 Occlusion
- 槽軸 (線) Axis of Trough
- 熱帶氣旋中心 Centre of Tropical Cyclone

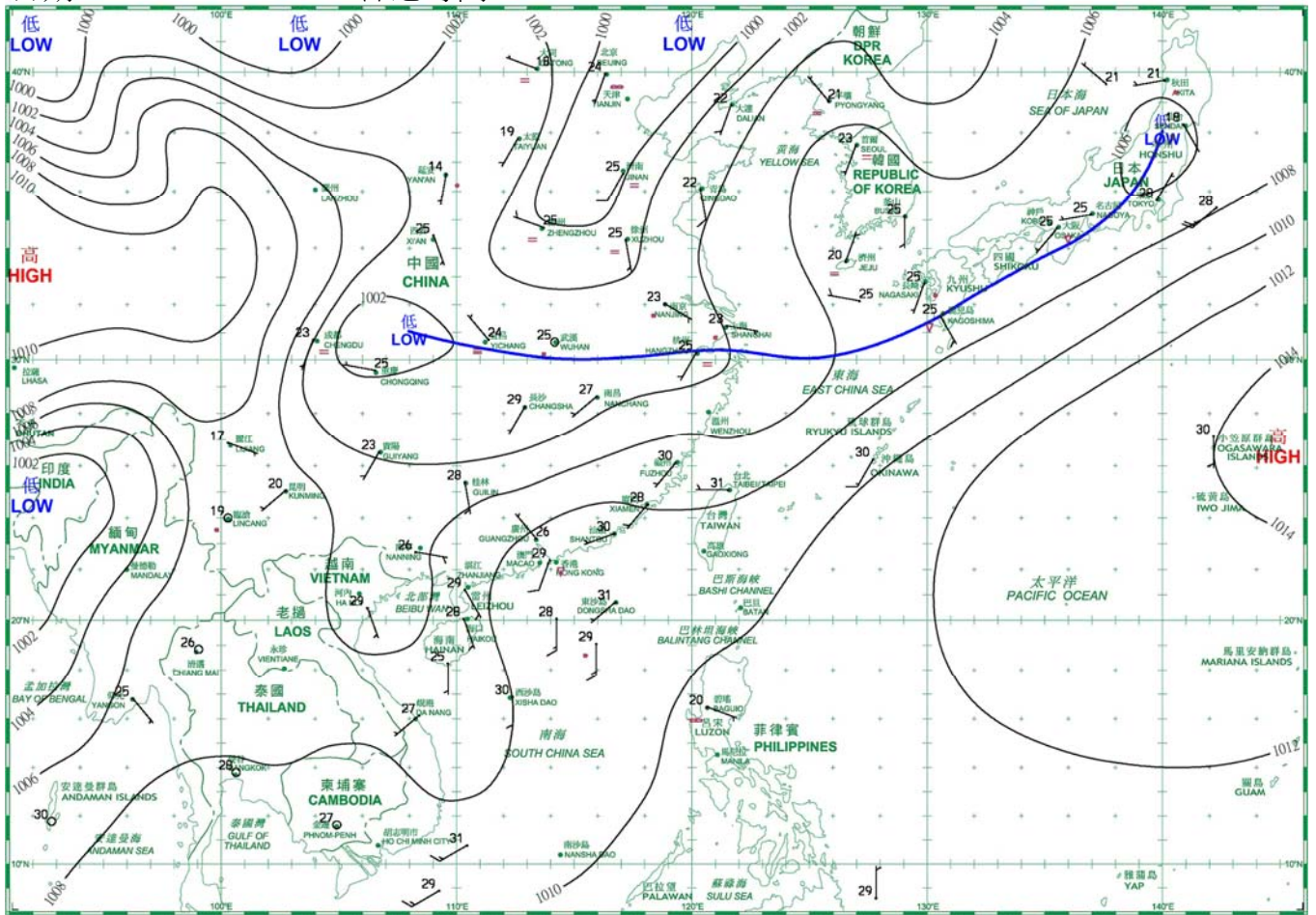
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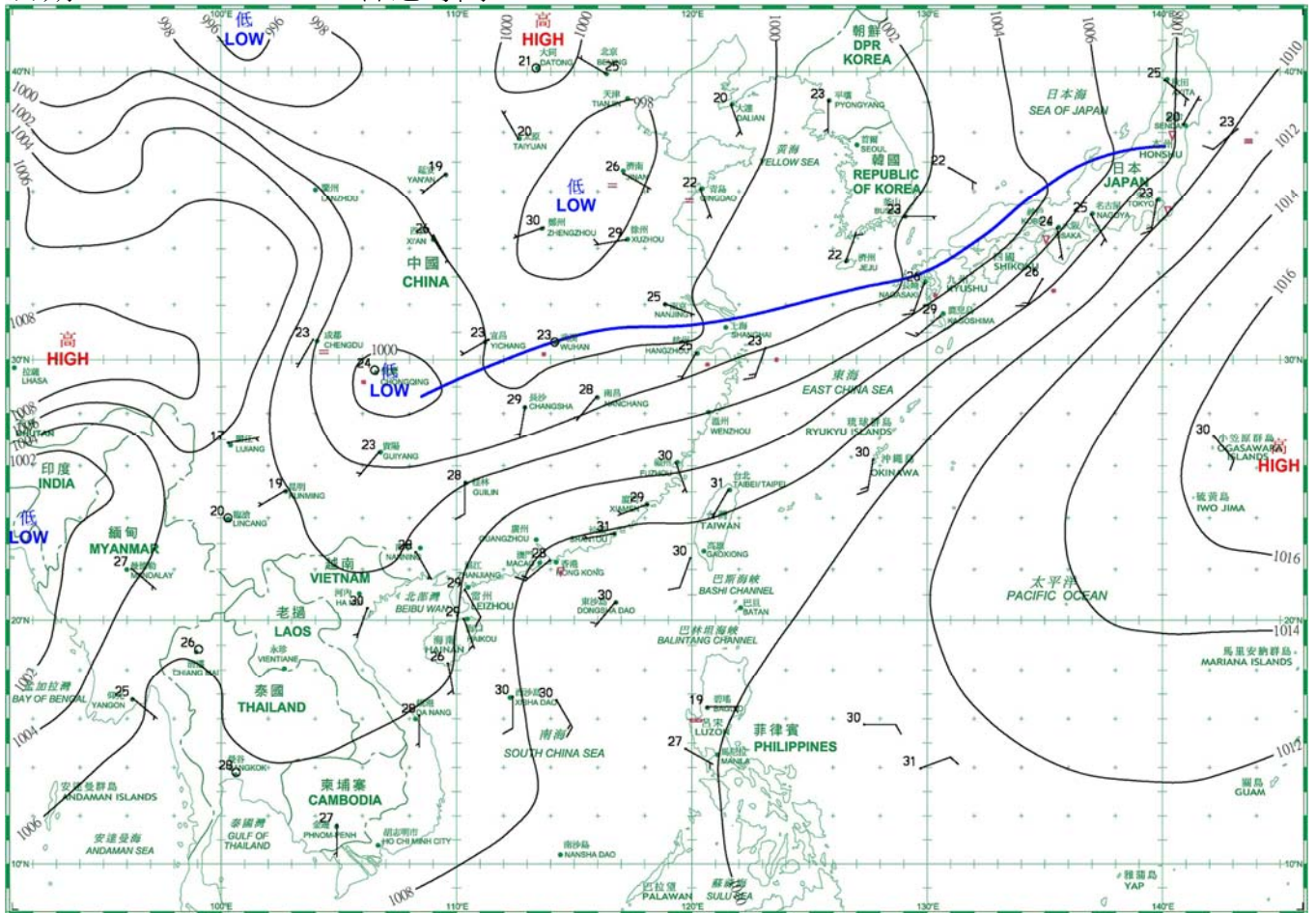
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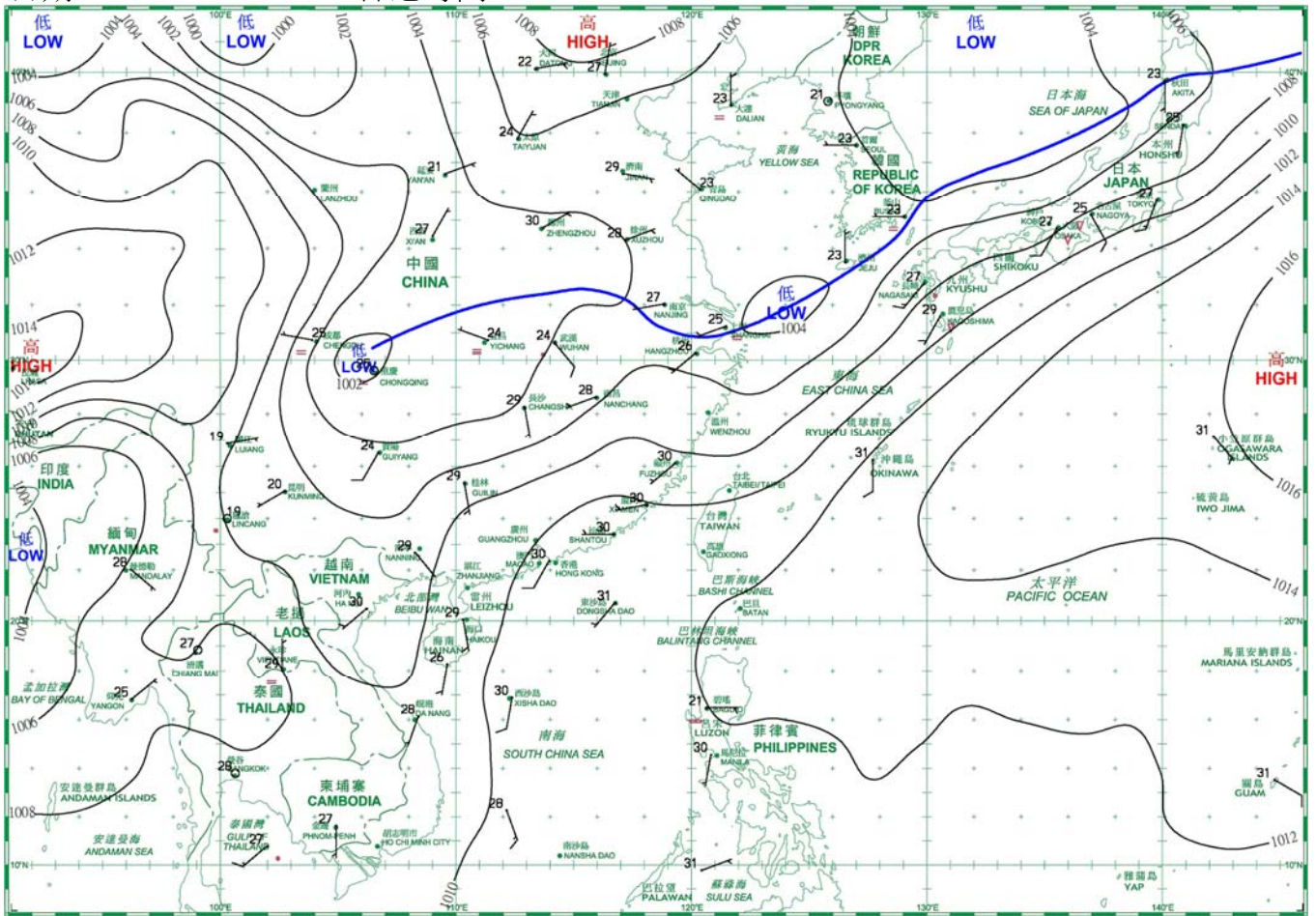
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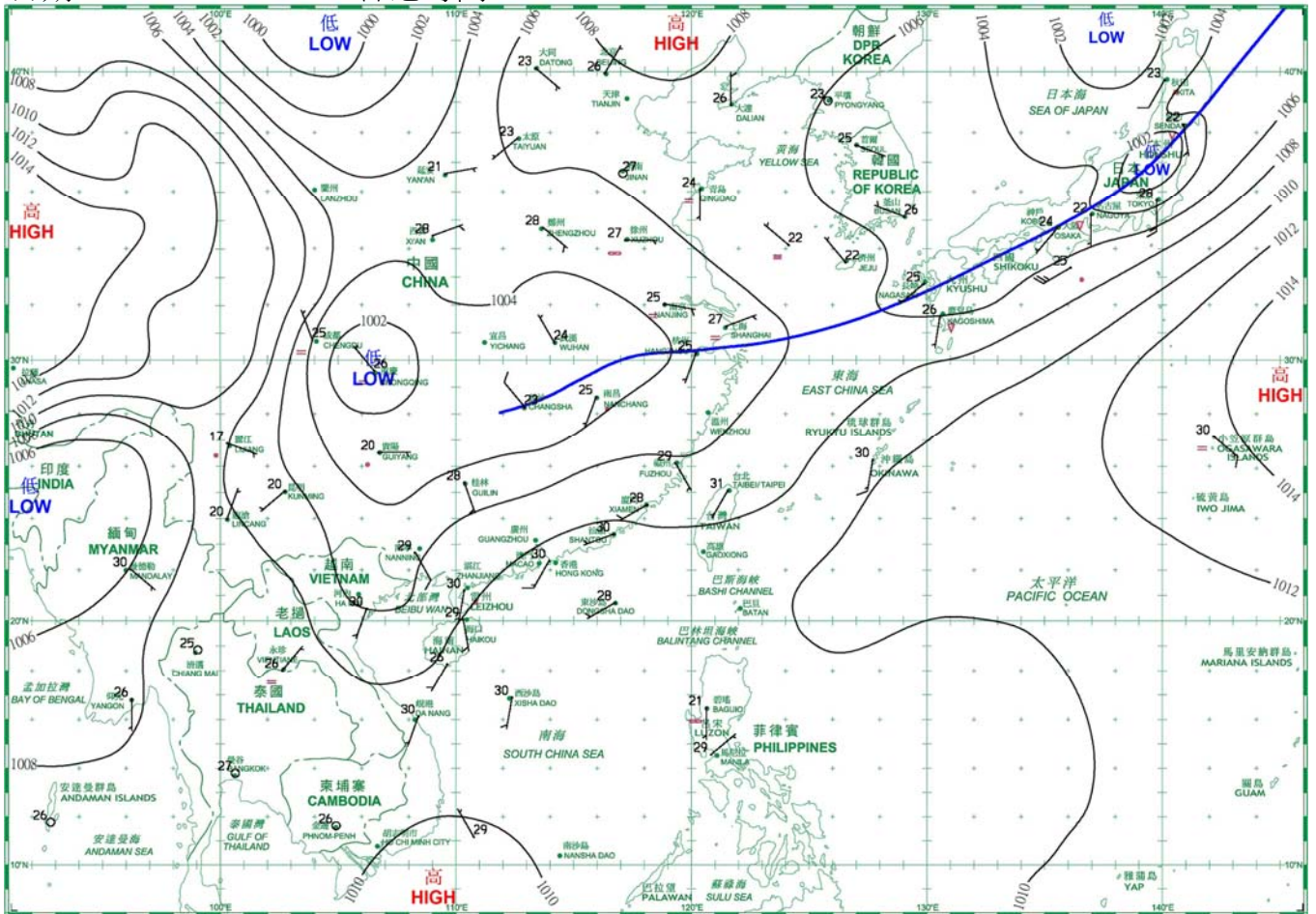
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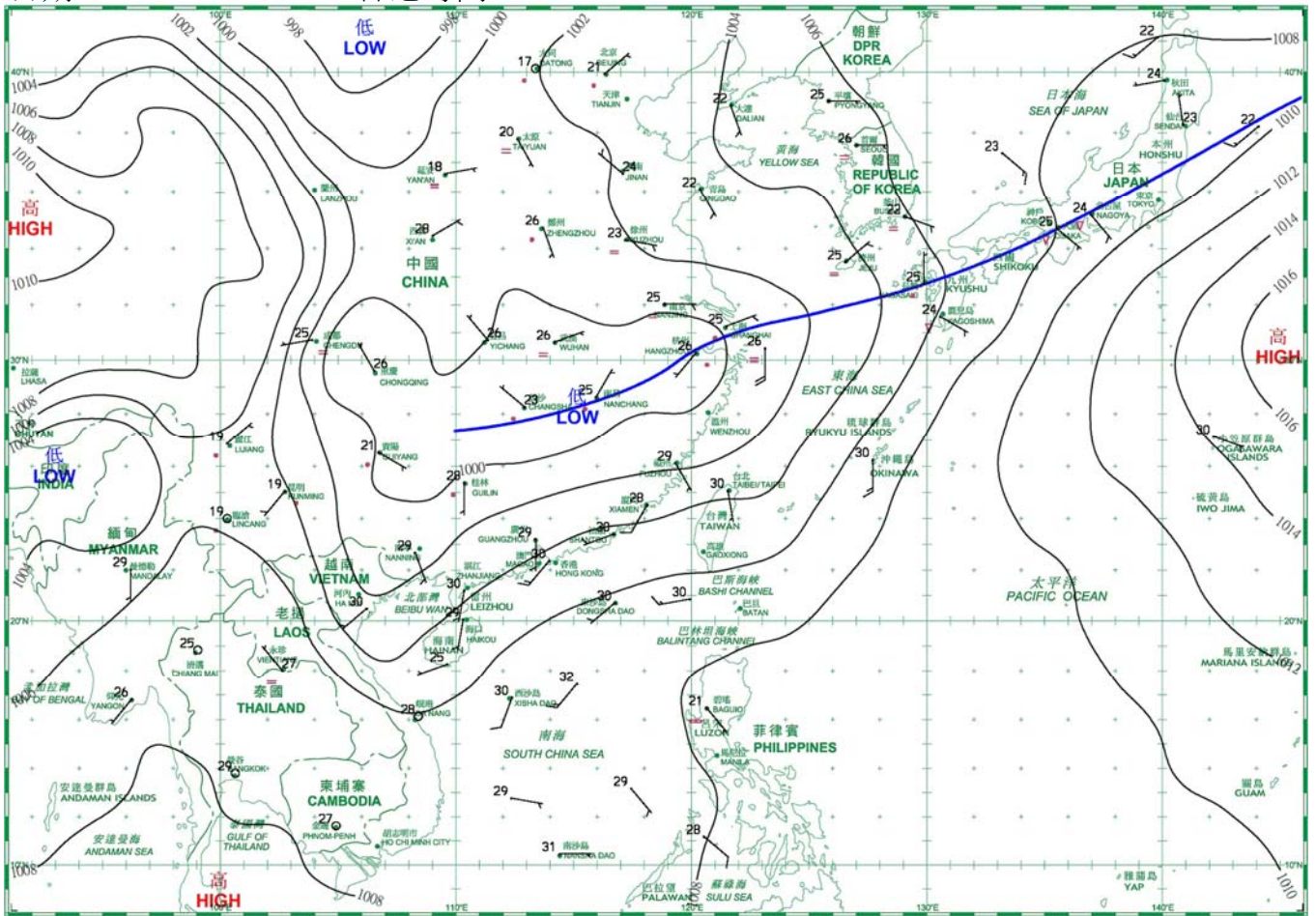
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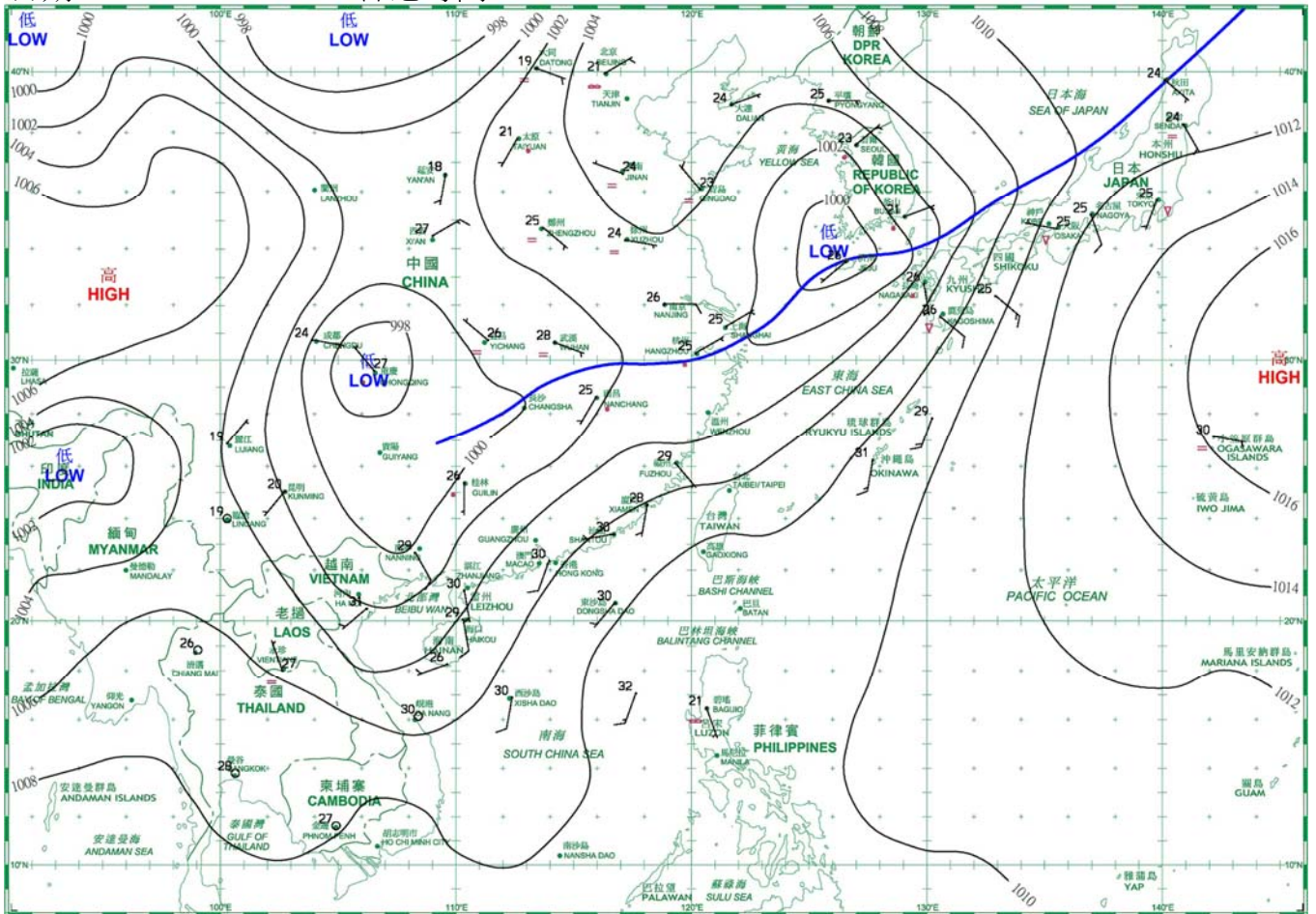
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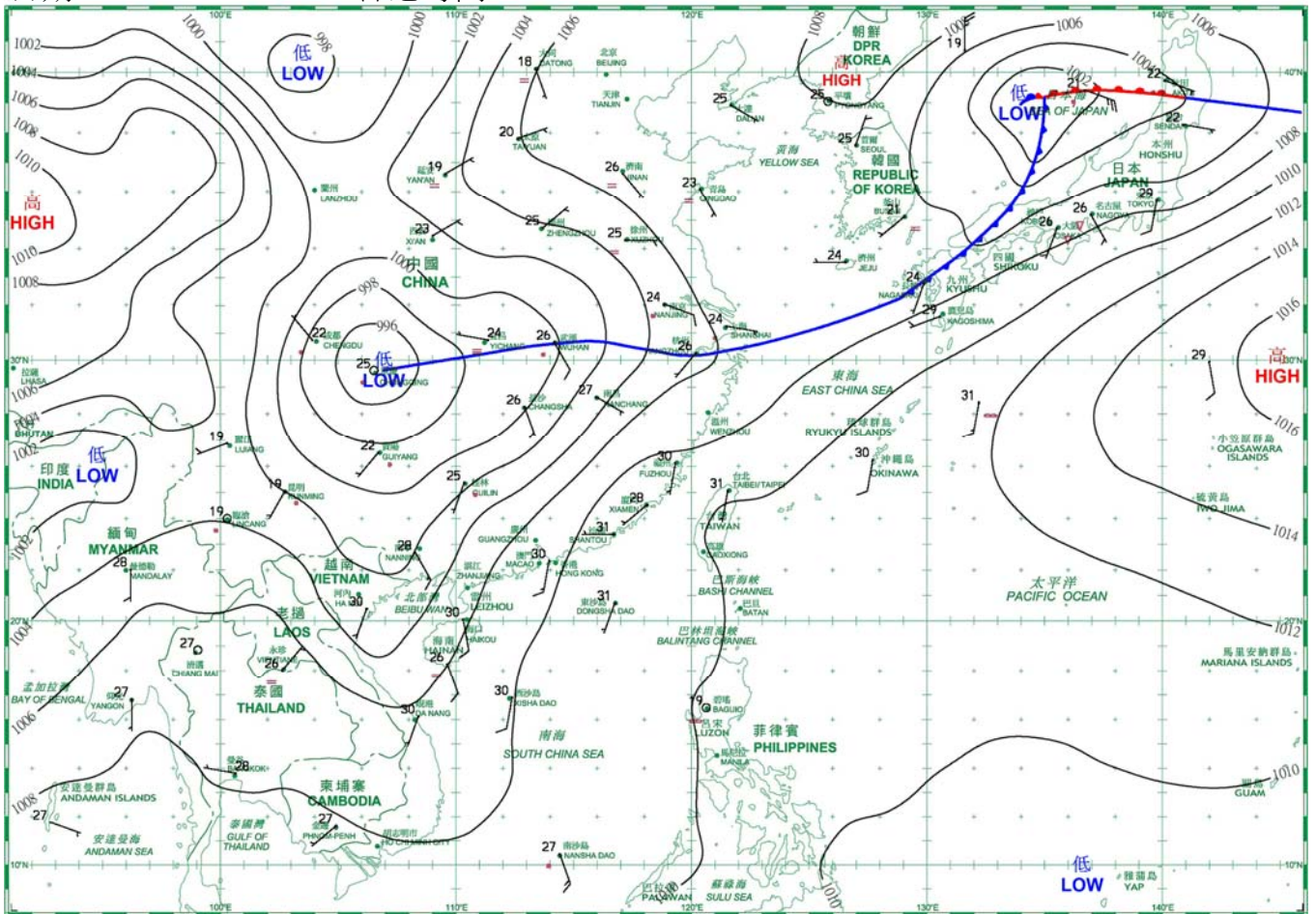
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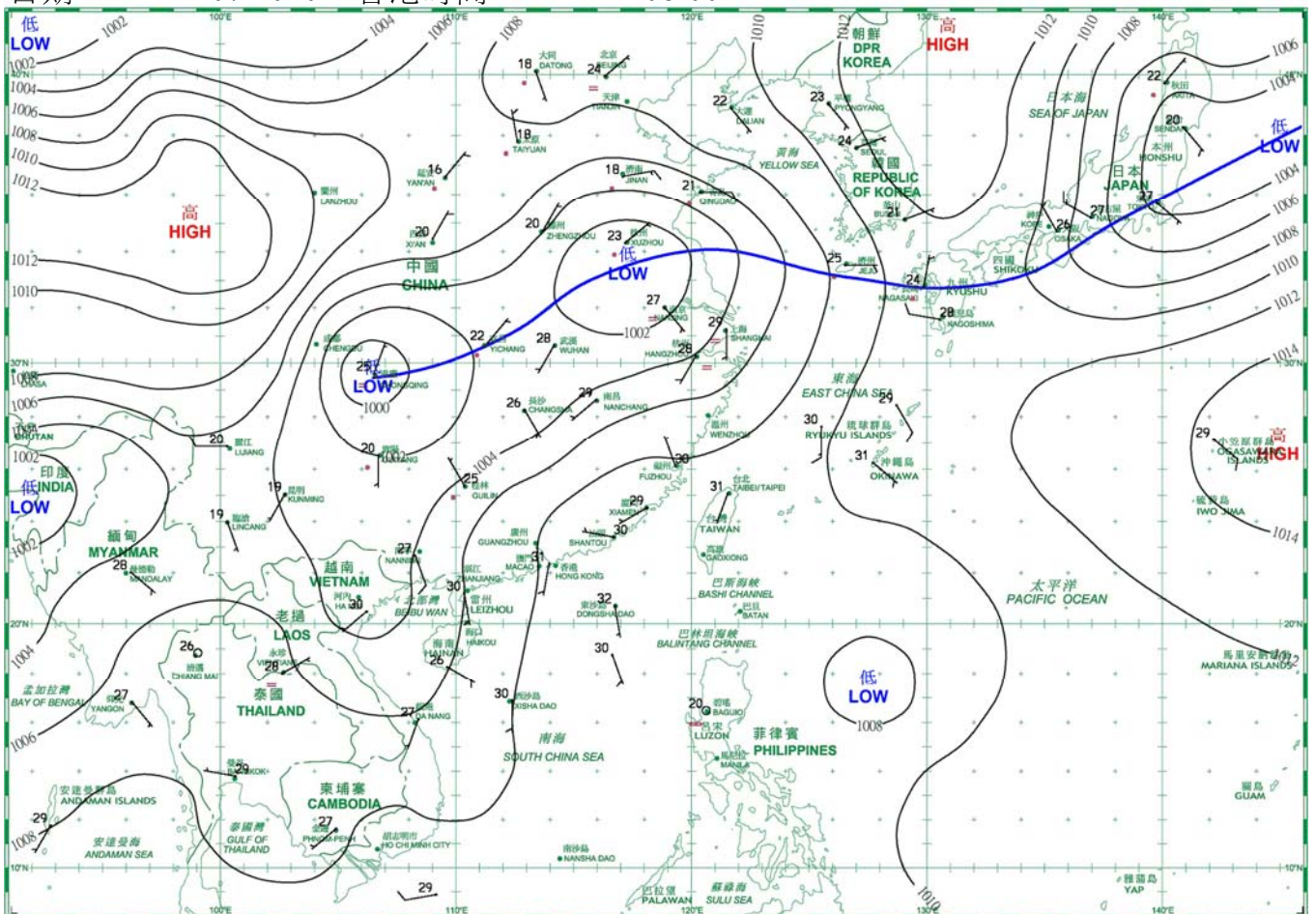
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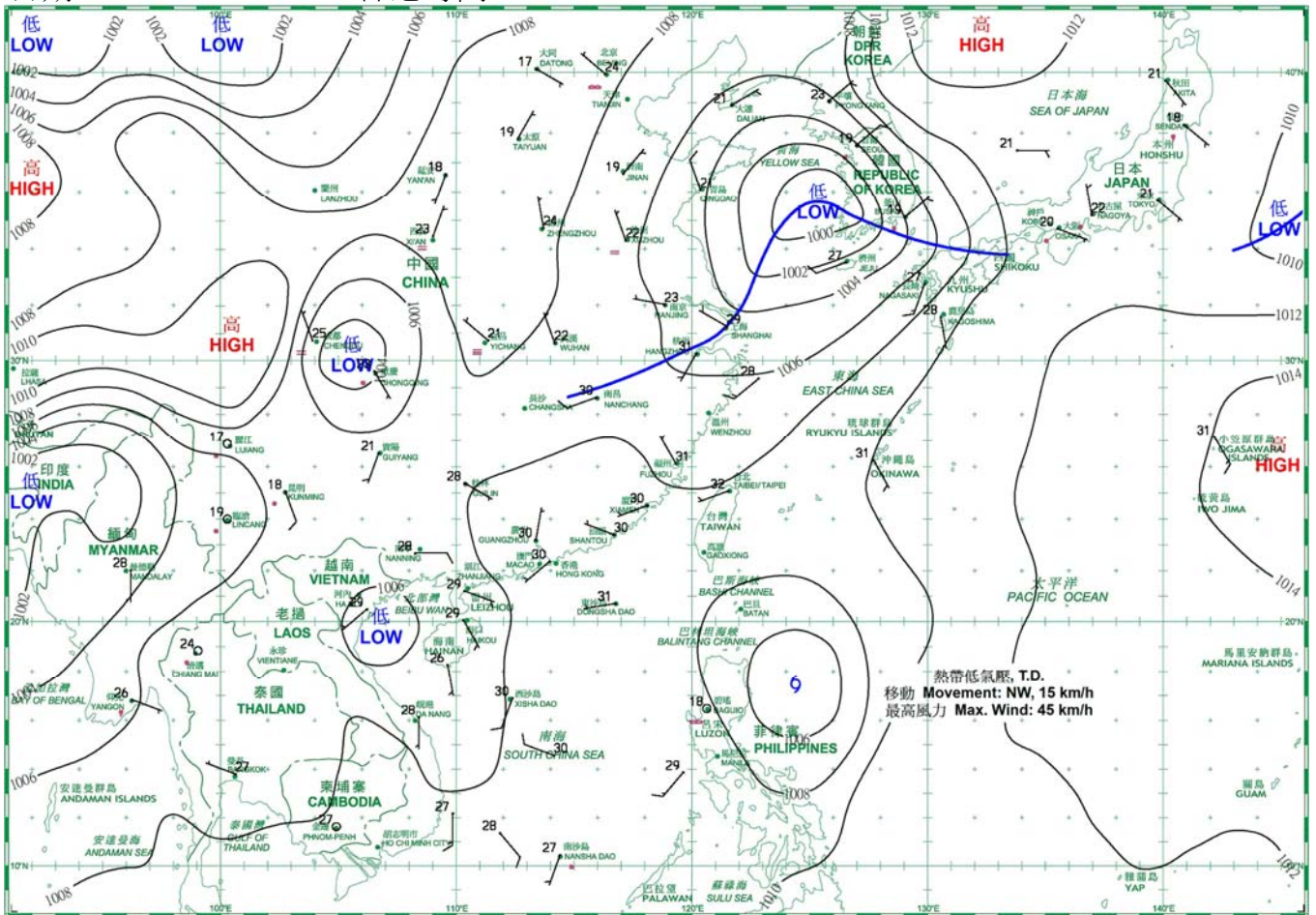
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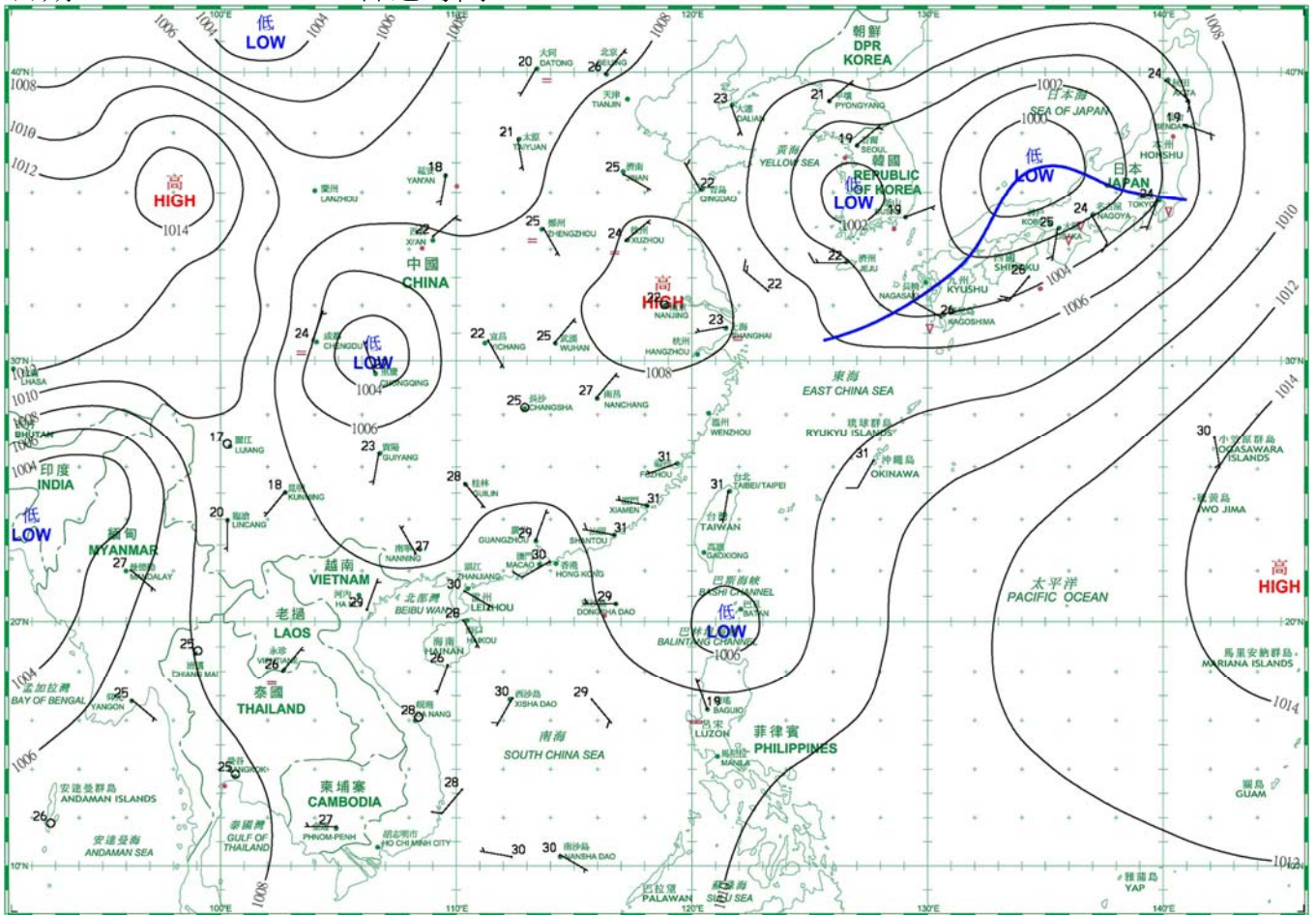
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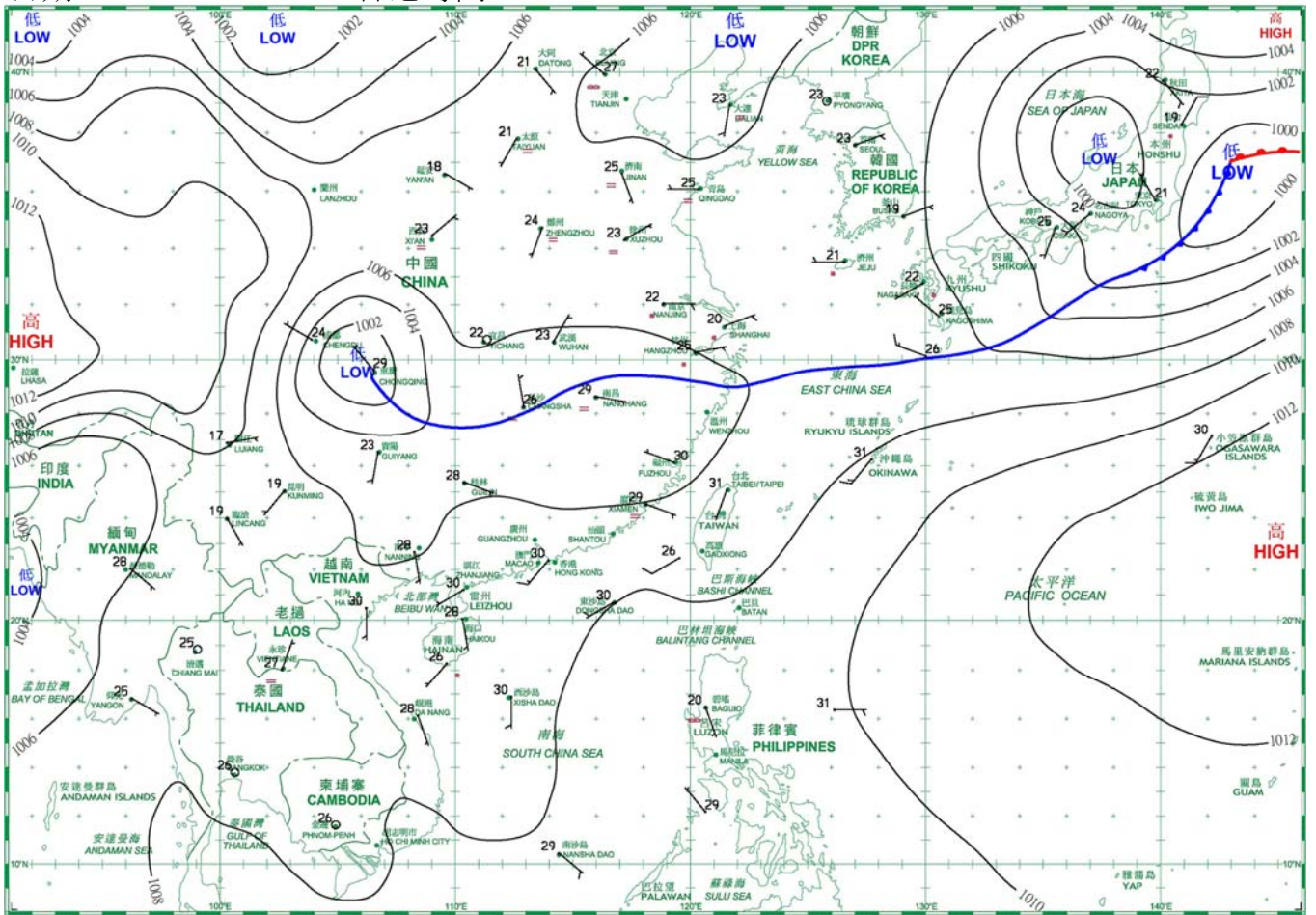
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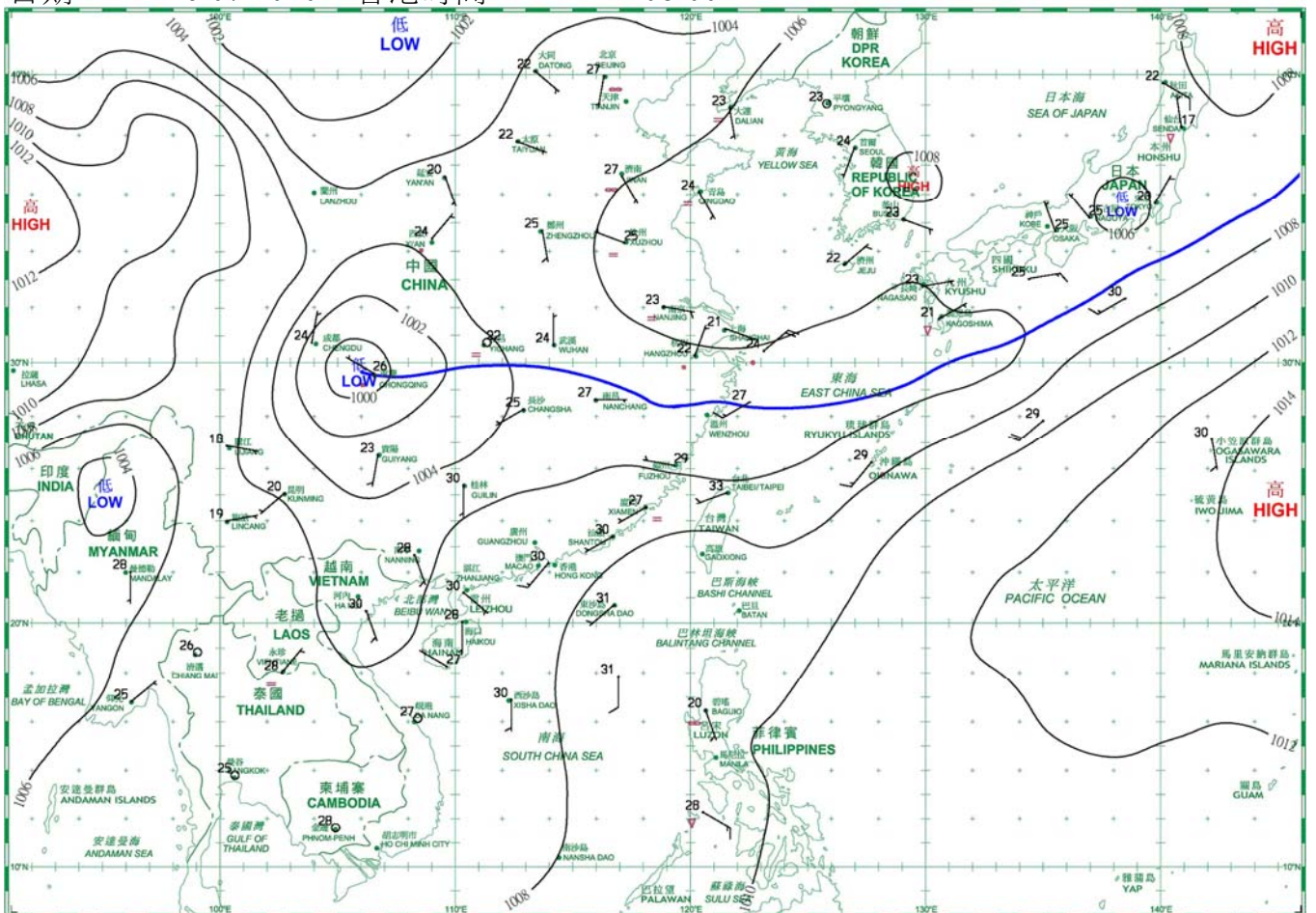
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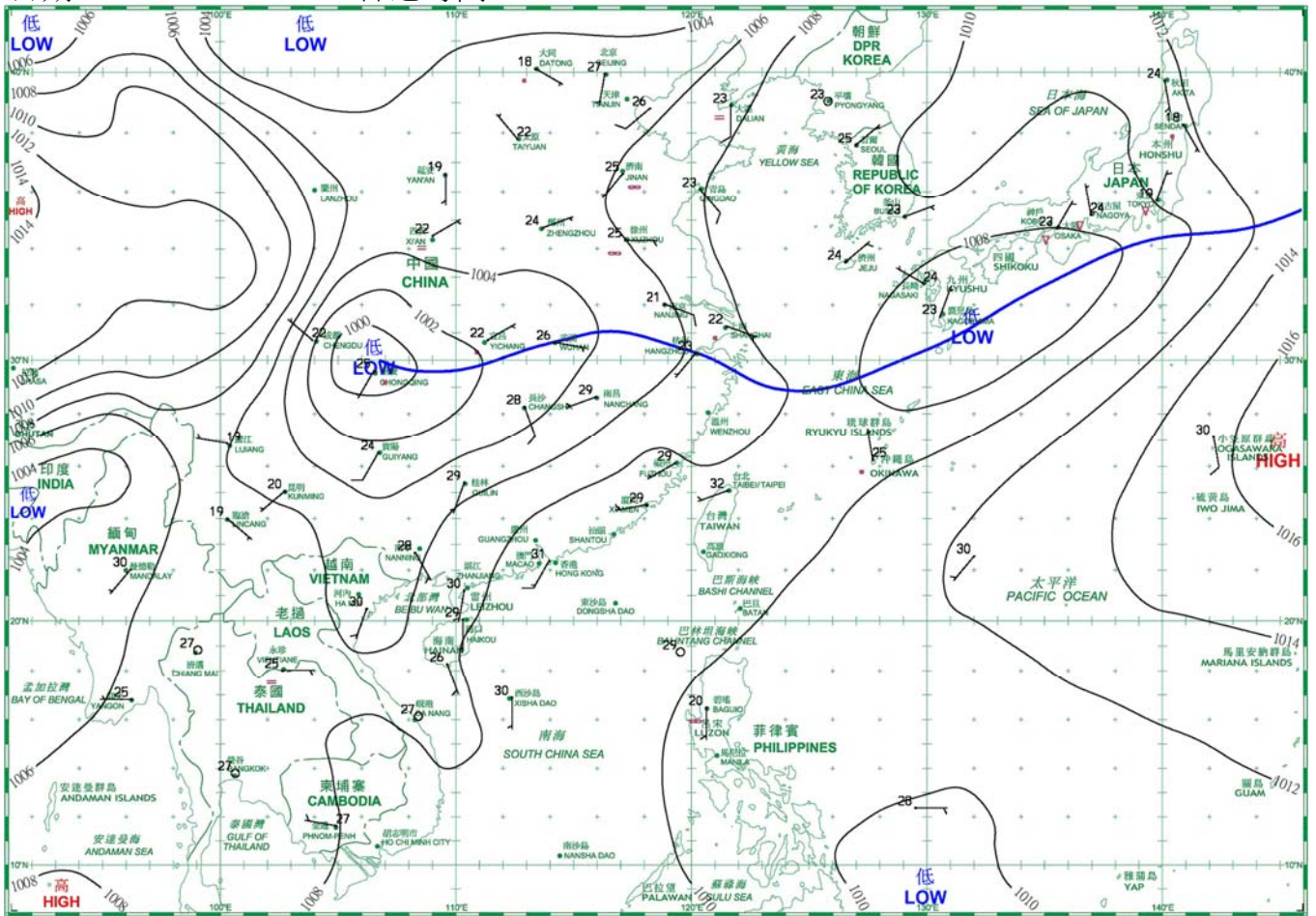
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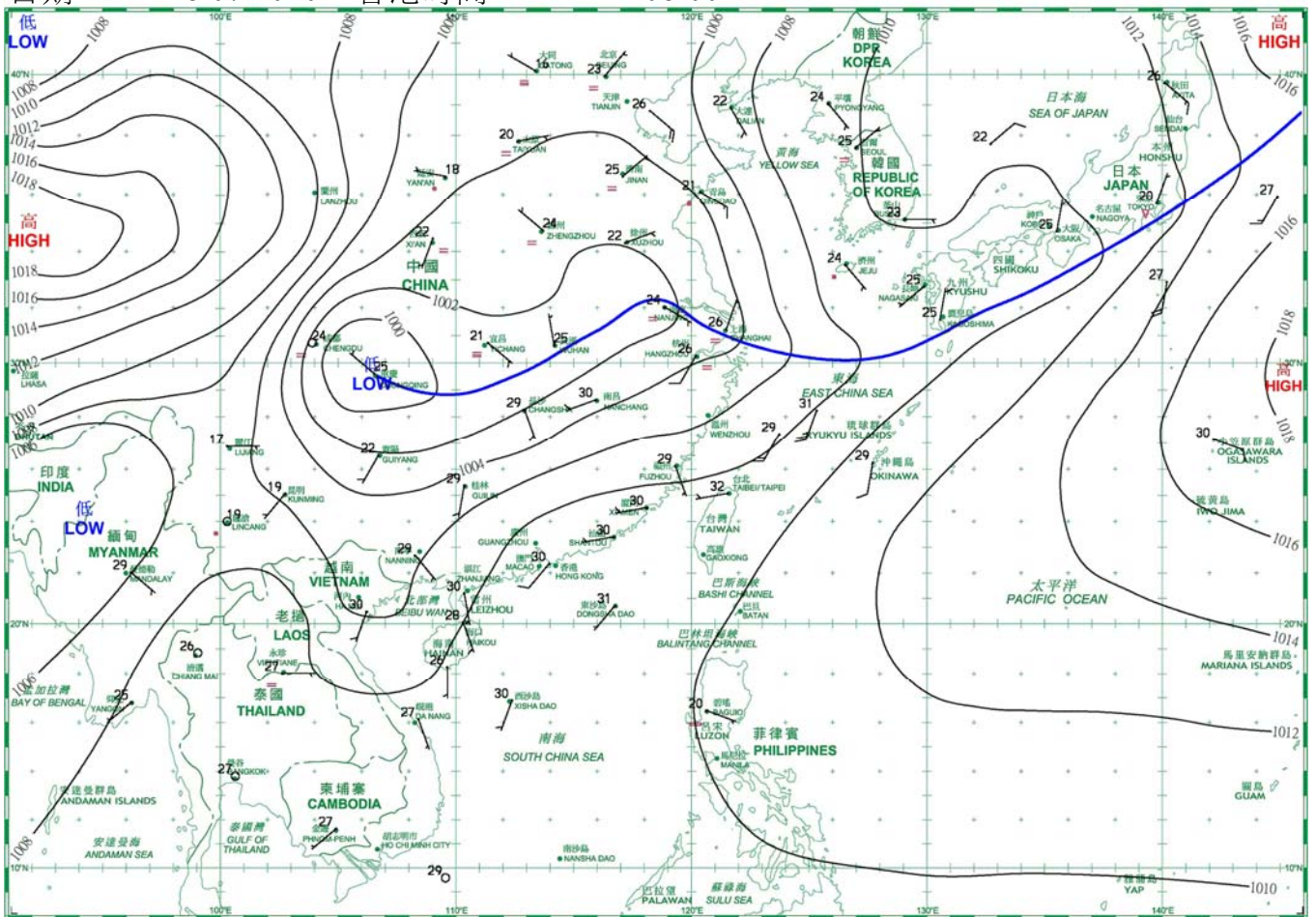
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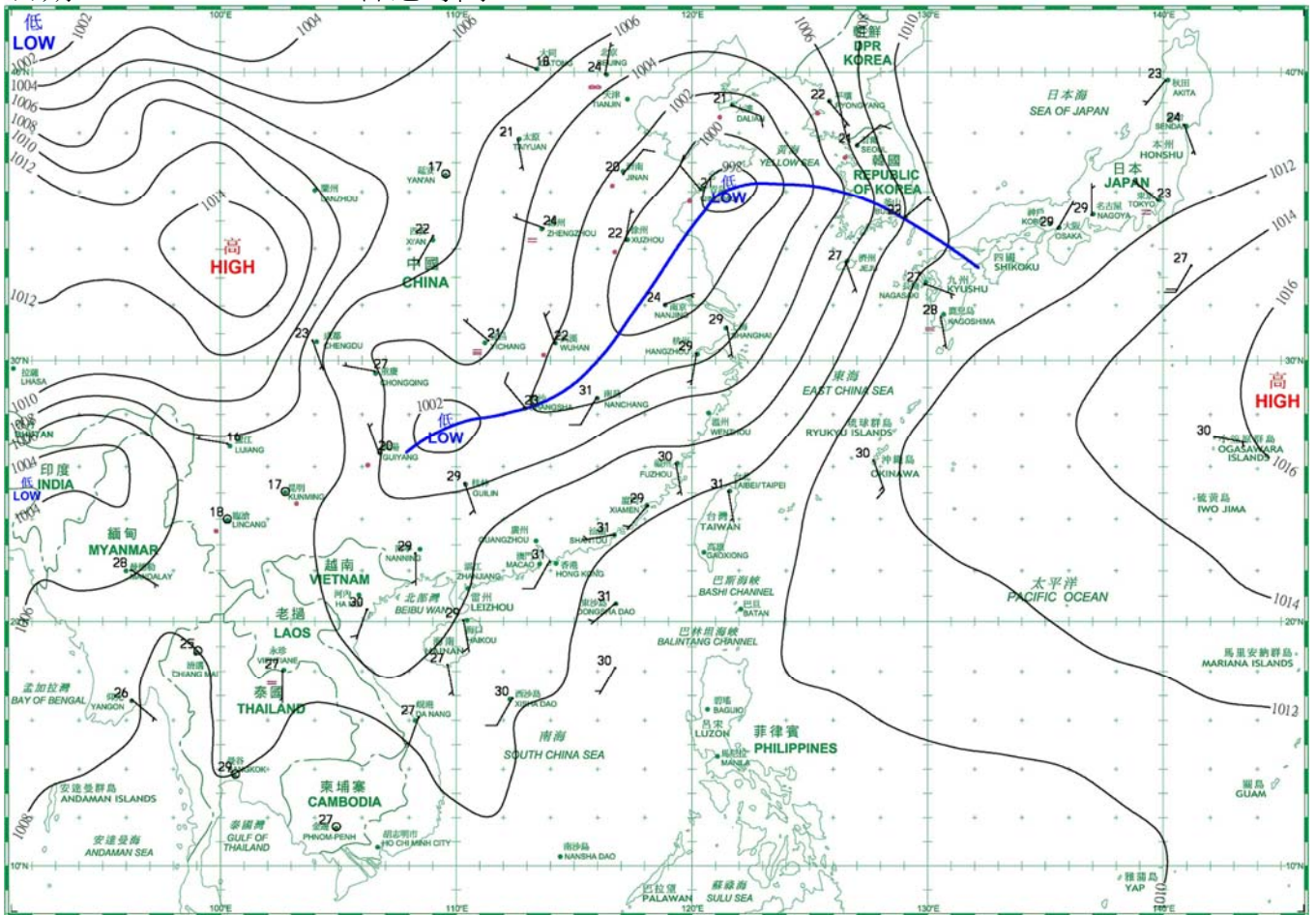
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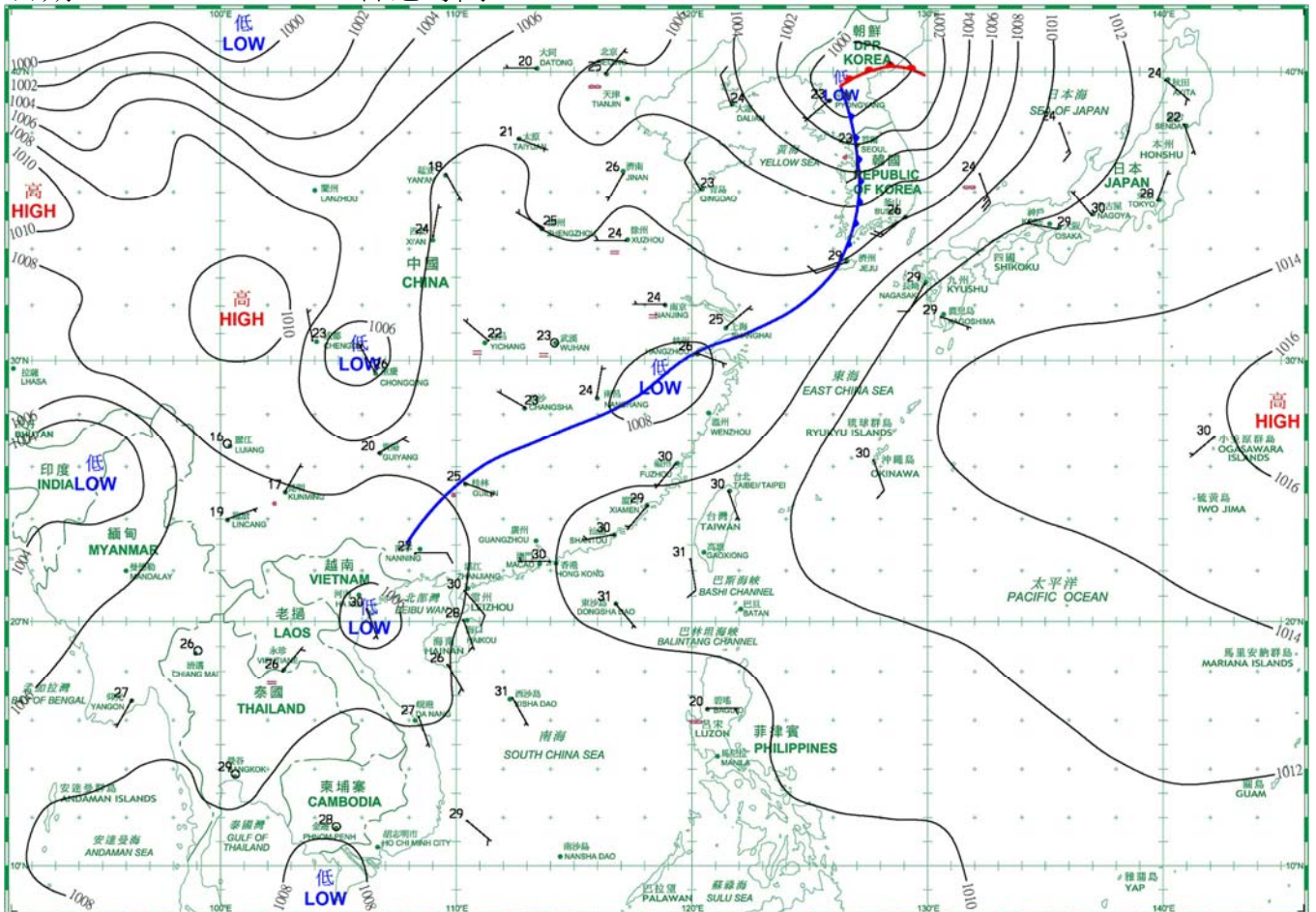
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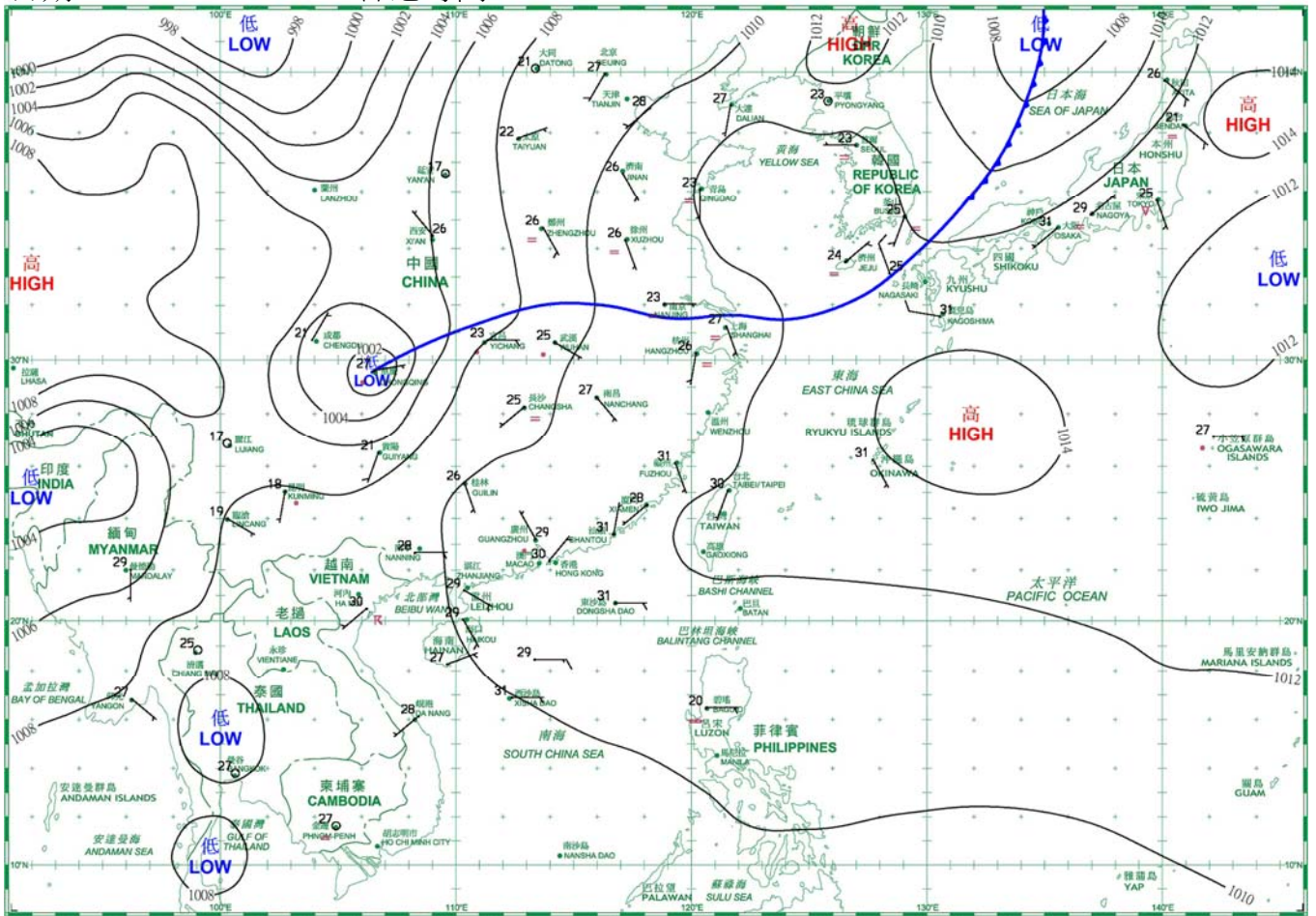
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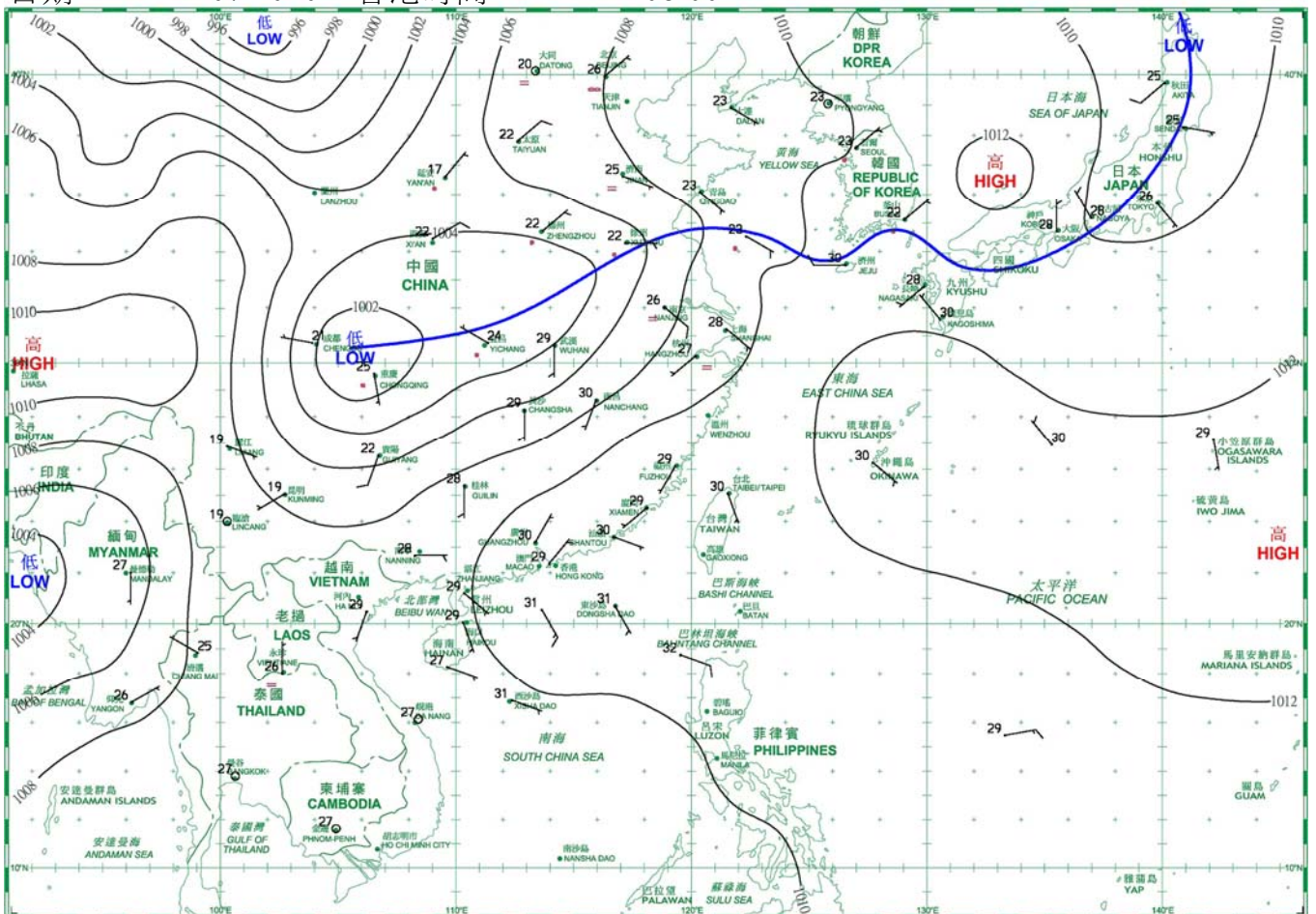
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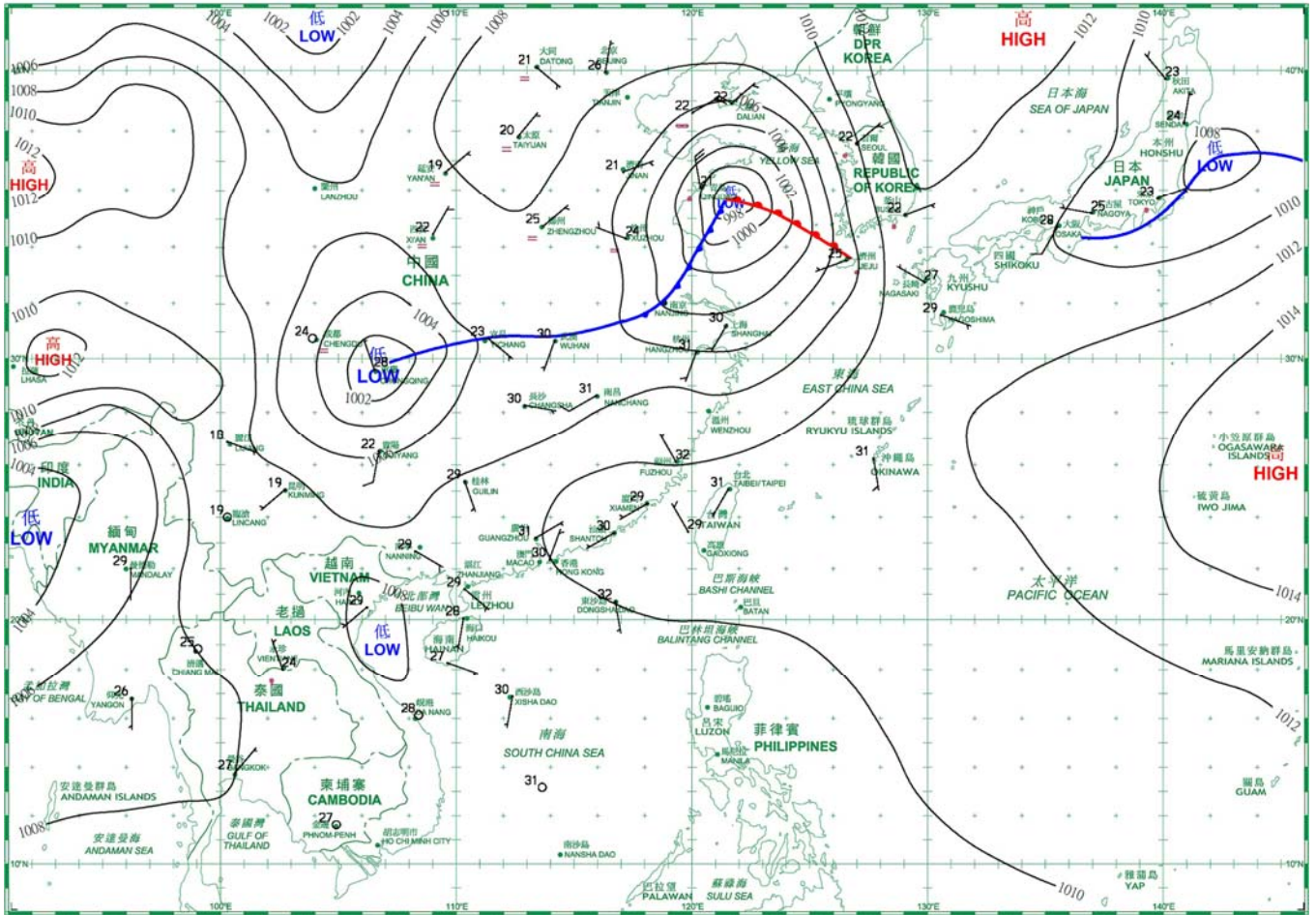
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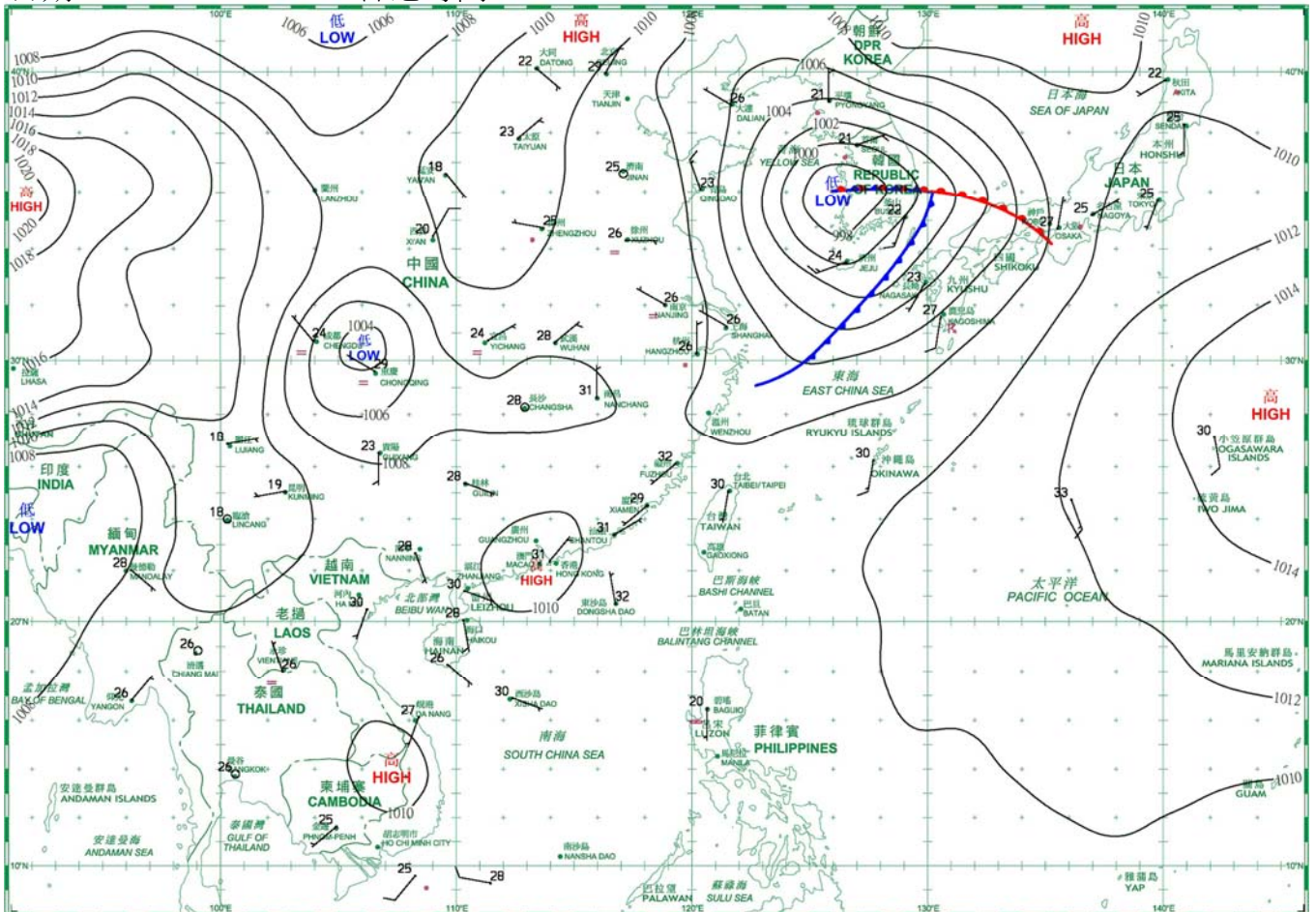
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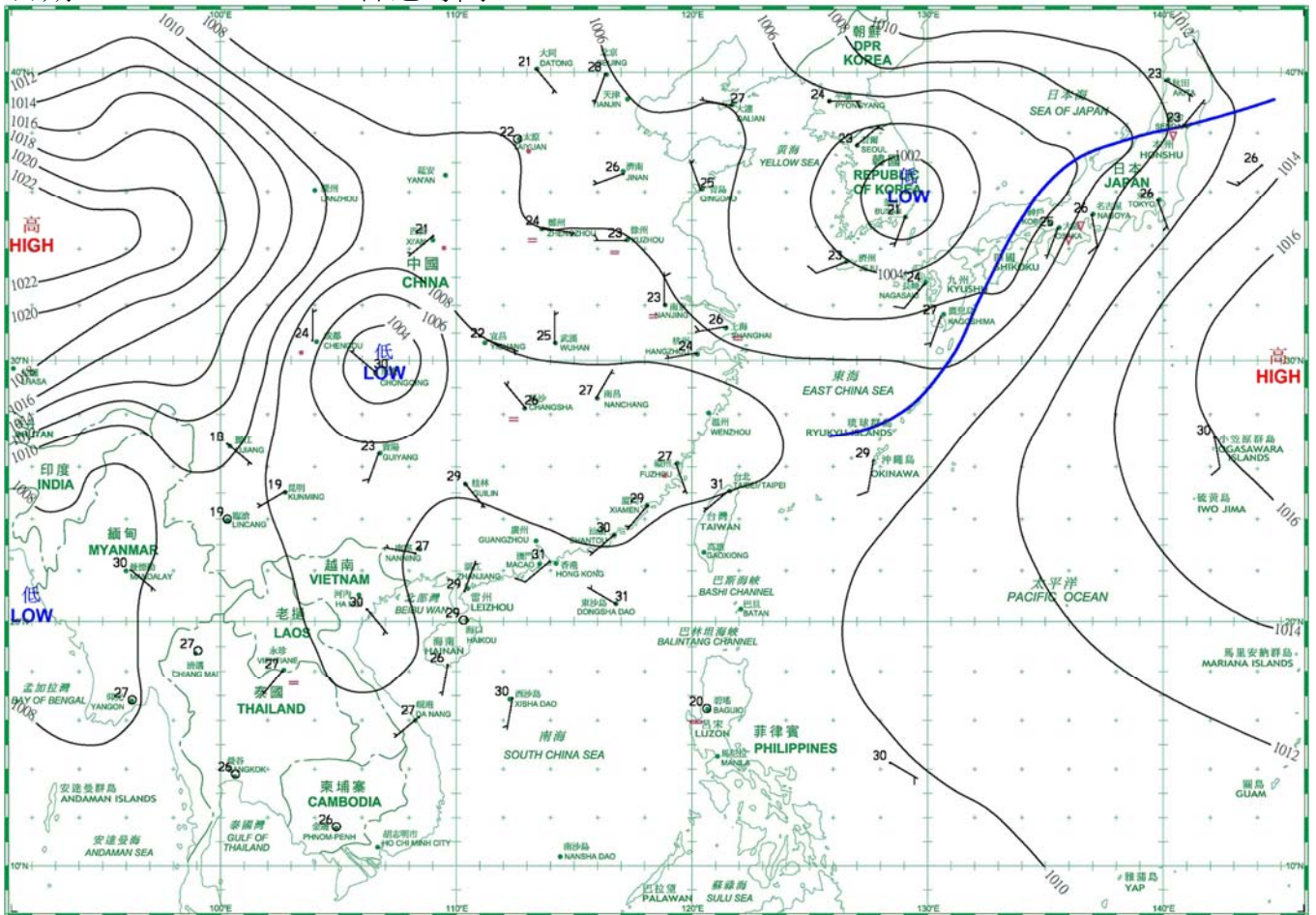
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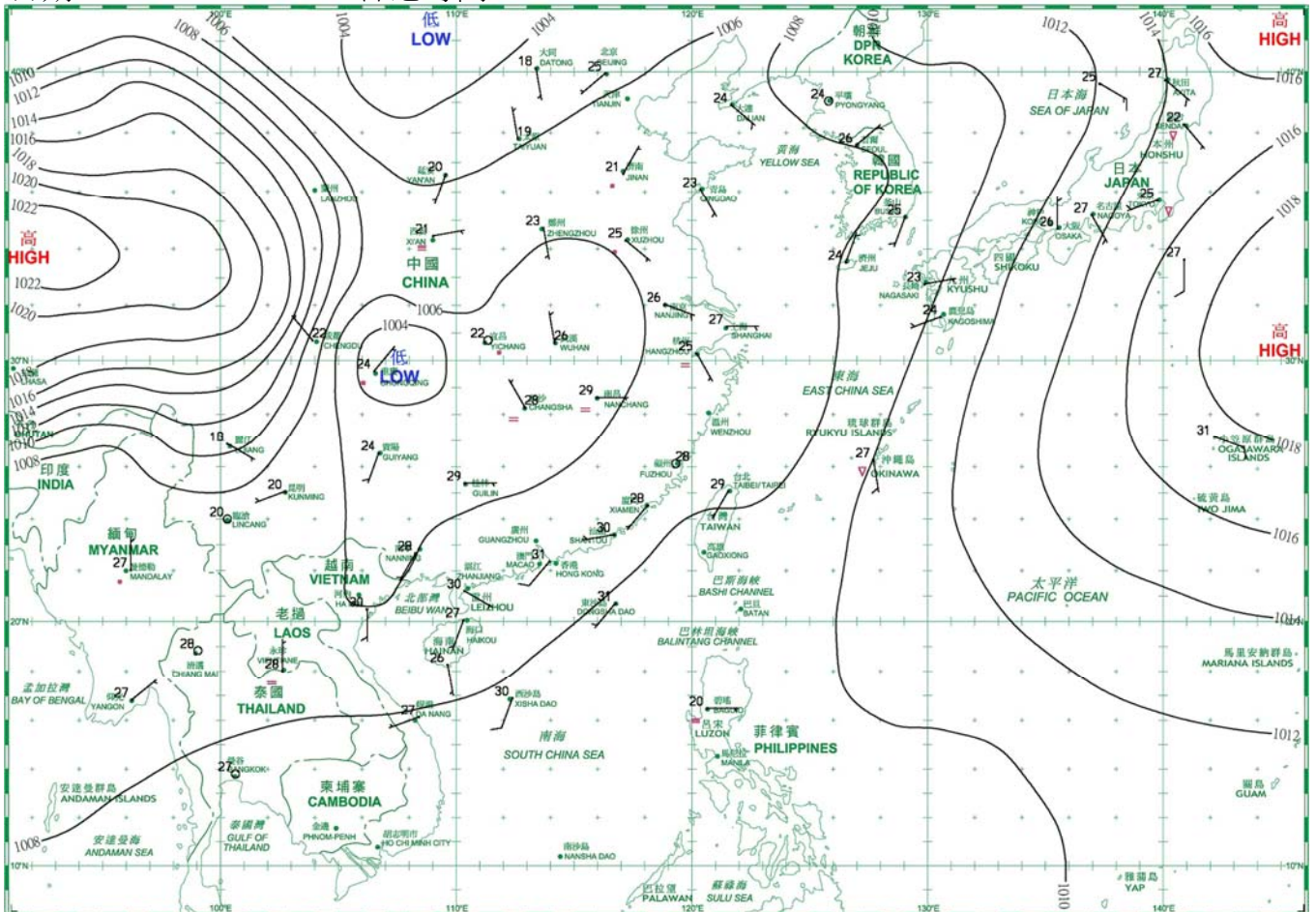
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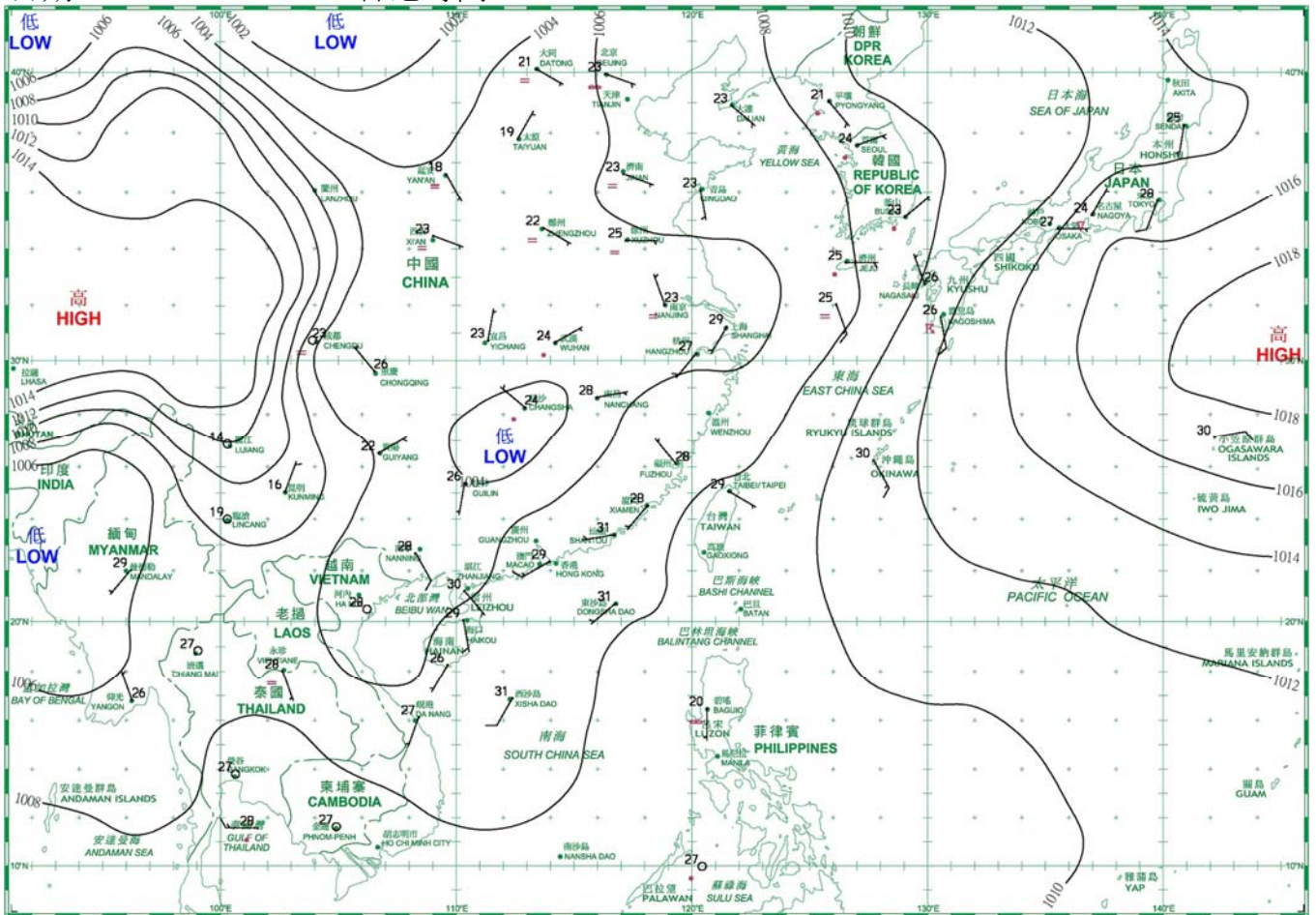
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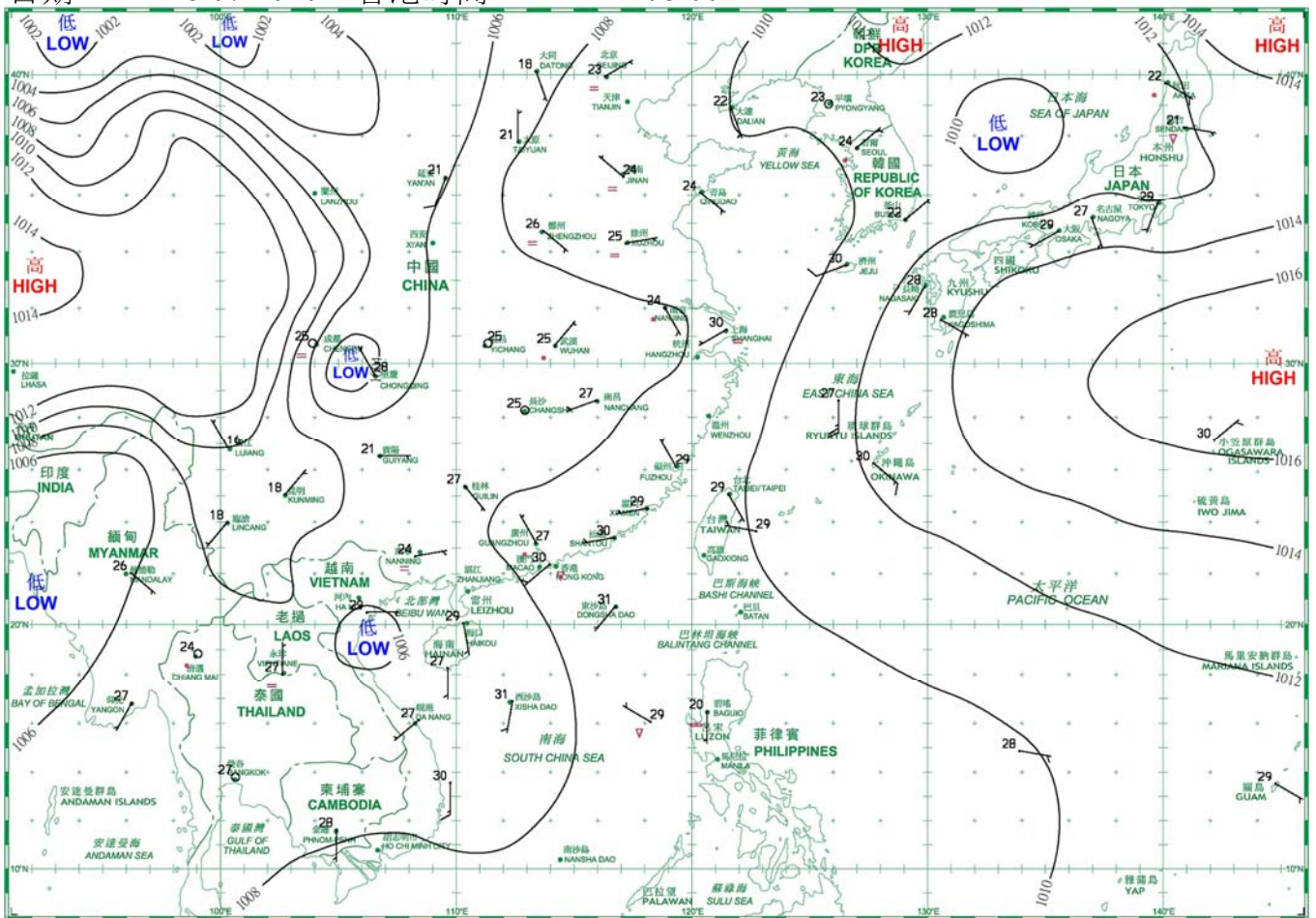
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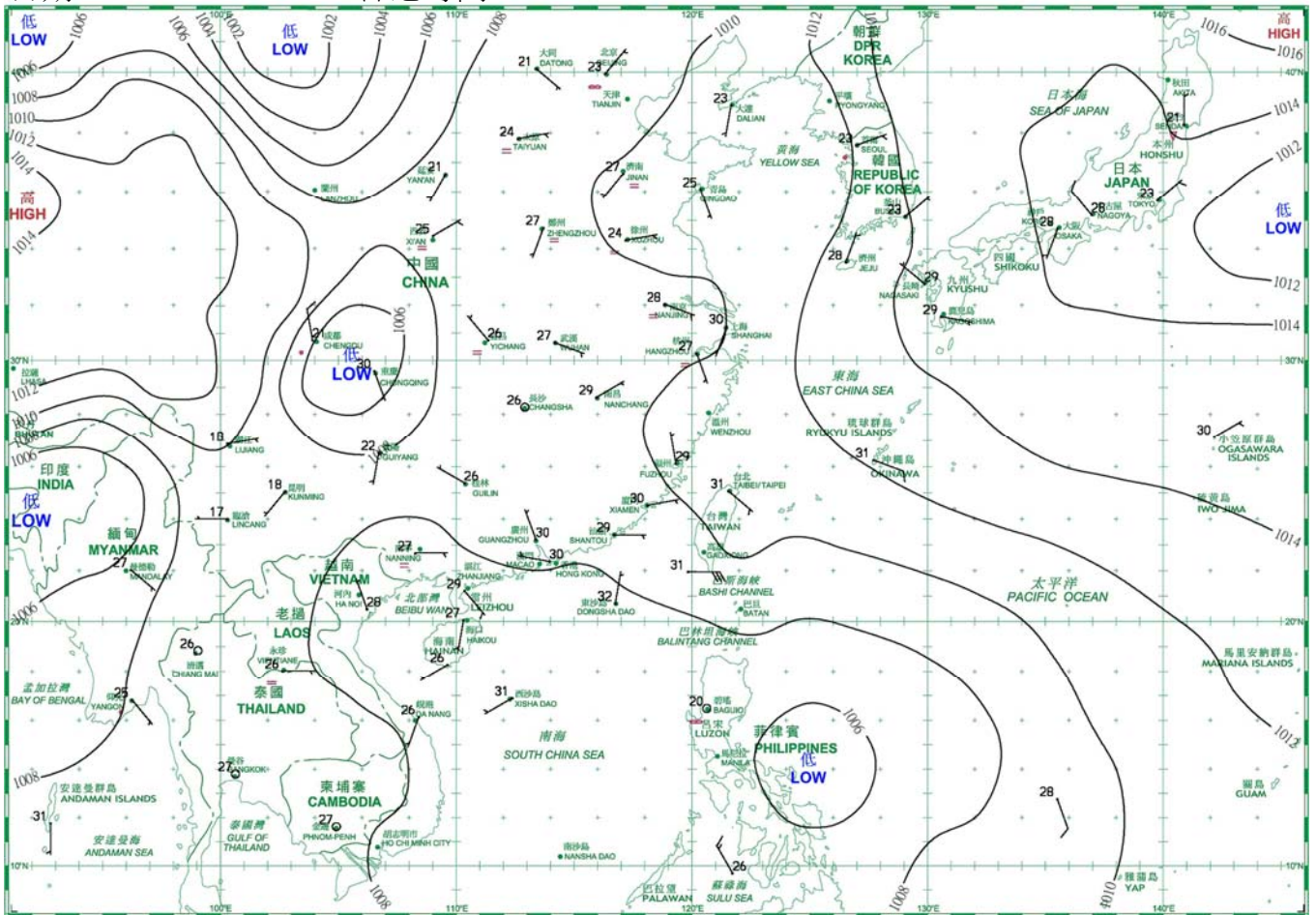
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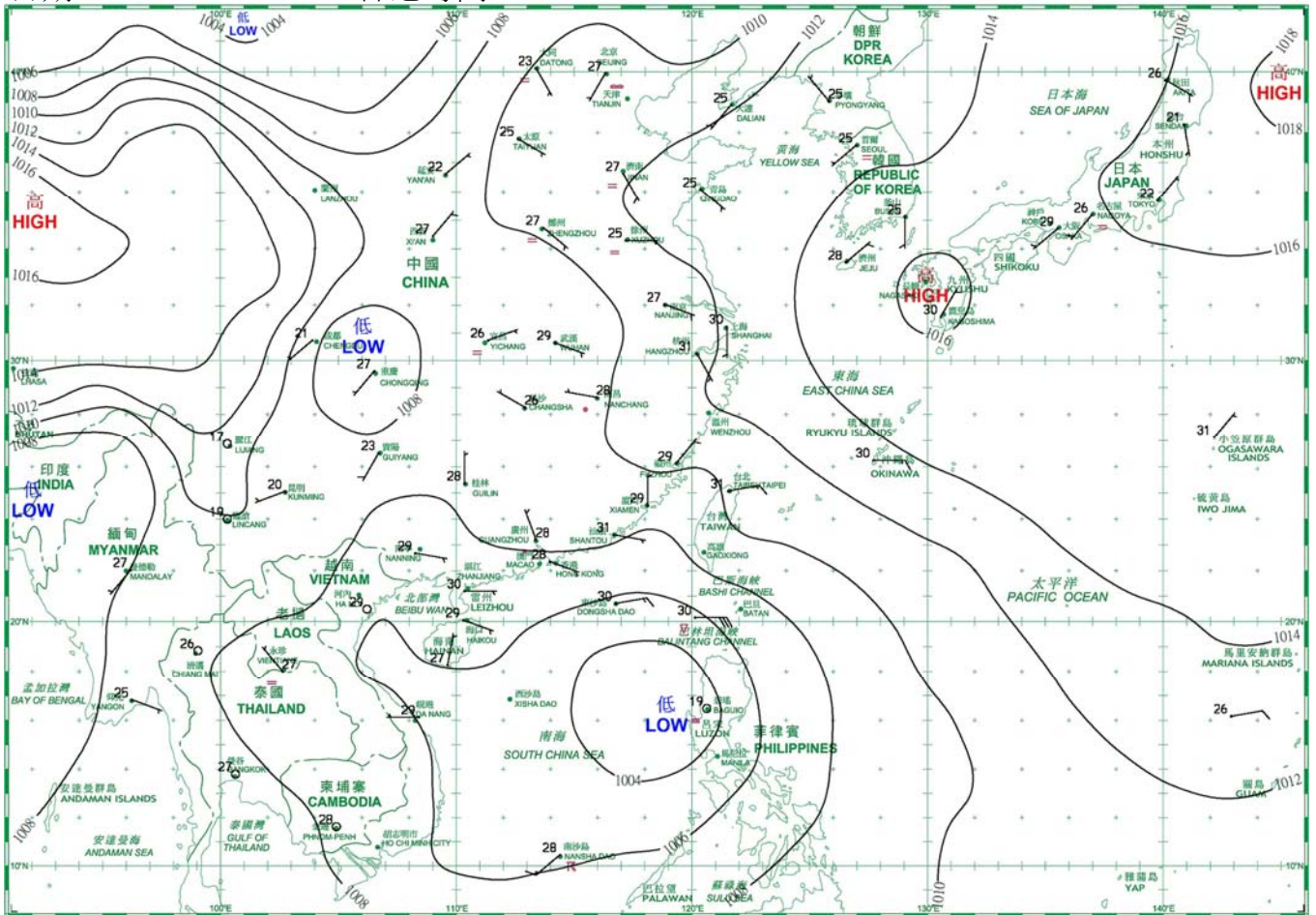
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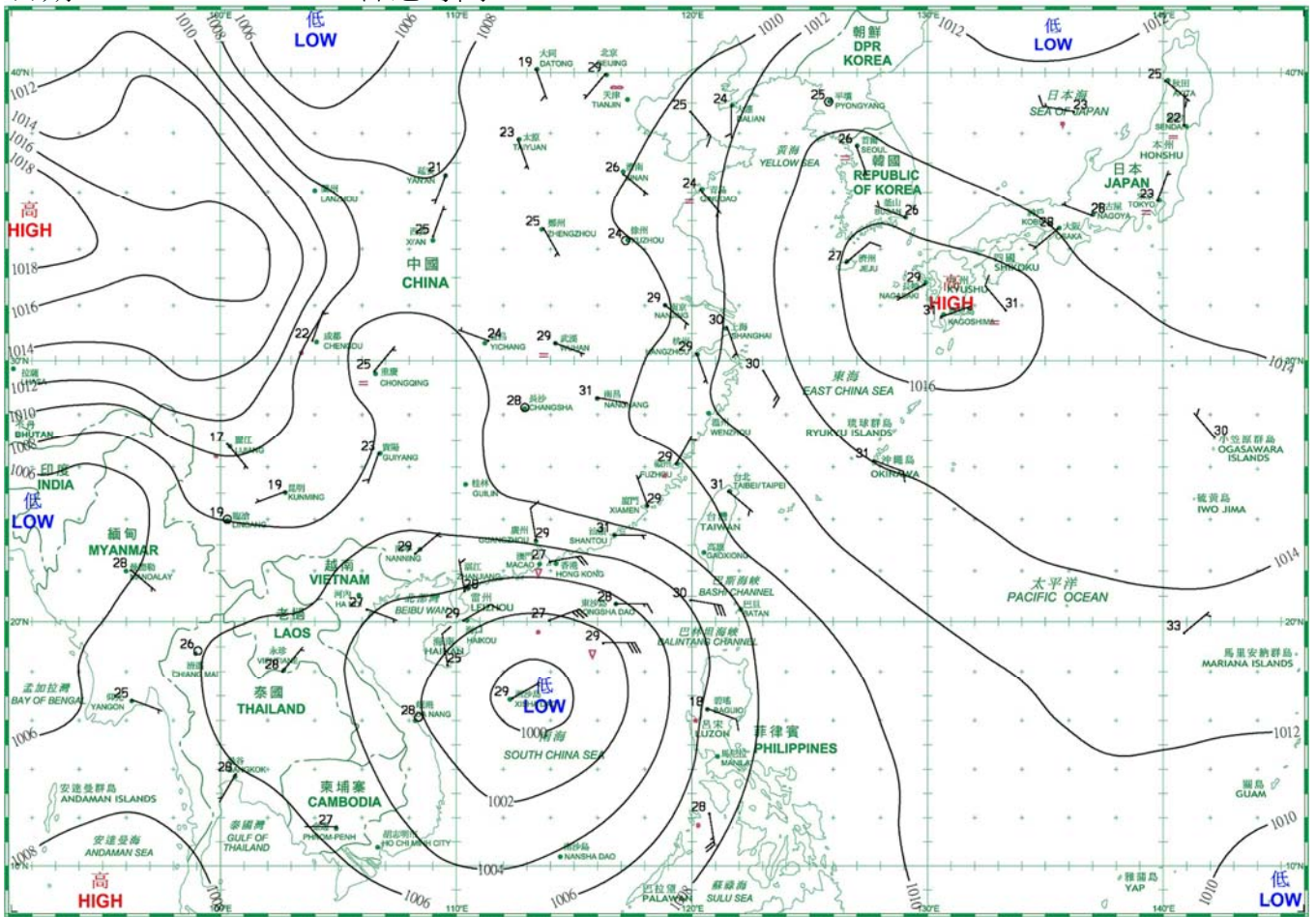
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日期/Date: 30.07.2020 香港時間/HK Time: 08:00



日期/Date: 31.07.2020 香港時間/HK Time: 08:00



4.1.1 二零二零年七月香港氣象觀測摘錄(一)

4.1.1 Extract of Meteorological Observations in Hong Kong (Part 1), July 2020

日期 Date	平均氣壓 Mean Pressure	氣 溫 Air Temperature			平均 露點溫度 Mean Dew Point Temperature	平均 相對濕度 Mean Relative Humidity	平均雲量 Mean Amount of Cloud	總雨量 Total Rainfall
		最高 Maximum	平均 Mean	最低 Minimum				
七月 July	百帕斯卡 hPa	°C	°C	°C	°C	%	%	毫米 mm
1	1004.0	32.7	30.2	28.9	25.9	78	83	1.1
2	1005.1	33.3	30.2	27.7	26.1	79	83	9.3
3	1008.4	33.1	29.2	27.3	26.1	84	82	29.5
4	1008.9	33.3	29.8	27.5	25.9	80	84	8.3
5	1007.3	32.9	30.0	28.0	25.4	77	77	1.3
6	1007.4	32.3	30.1	28.3	25.2	76	77	4.1
7	1009.2	32.7	30.1	28.5	25.5	77	78	0.7
8	1007.1	32.2	30.0	29.0	25.9	79	88	0.6
9	1004.2	31.9	30.1	29.0	26.0	79	88	Tr
10	1005.9	32.2	30.3	29.3	25.4	75	88	-
11	1007.4	33.4	30.4	29.2	25.6	76	83	-
12	1007.7	33.5	30.4	29.1	25.3	75	59	-
13	1007.8	33.2	30.5	28.7	25.2	74	38	-
14	1006.5	33.6	30.6	28.6	25.5	75	57	-
15	1006.1	33.9	30.5	28.8	25.3	74	80	-
16	1006.9	32.7	30.4	27.4	25.5	76	73	2.4
17	1008.5	33.4	30.3	27.8	25.4	75	76	2.5
18	1008.2	33.2	30.4	28.9	25.4	75	84	2.2
19	1007.7	32.9	30.3	28.8	25.4	75	84	-
20	1009.5	32.2	29.9	27.5	25.3	77	82	3.1
21	1010.5	34.7	30.4	28.1	25.6	76	61	-
22	1009.3	33.1	30.0	27.7	25.9	79	50	2.5
23	1009.0	35.3	31.0	28.6	25.3	73	32	Tr
24	1008.3	33.9	30.8	28.8	25.4	74	47	-
25	1007.3	34.0	30.7	28.8	25.6	75	83	-
26	1006.6	34.9	30.8	28.9	25.5	74	78	Tr
27	1006.4	33.5	30.5	28.4	25.5	75	76	2.3
28	1007.5	35.0	30.8	27.9	25.2	73	55	3.0
29	1007.2	34.9	30.5	28.6	25.9	77	69	2.6
30	1006.7	34.9	30.2	26.0	25.1	75	76	13.3
31	1004.2	29.7	27.9	25.9	25.0	84	86	36.6
平均/總值 Mean/Total	1007.3	33.3	30.2	28.3	25.5	76	73	125.4
正常* Normal*	1005.7	31.4	28.8	26.8	25.1	81	69	376.5
觀測站 Station	天文台 Hong Kong Observatory							

天文台於七月三十一日 17 時 37 分錄得本月最低氣壓 1002.2 百帕斯卡。

The minimum pressure recorded at the Hong Kong Observatory was 1002.2 hectopascals at 1737 HKT on 31 July.

天文台於七月二十三日 13 時 51 分錄得本月最高氣溫 35.3 °C。

The maximum air temperature recorded at the Hong Kong Observatory was 35.3 °C at 1351 HKT on 23 July.

天文台於七月三十一日 23 時 50 分錄得本月最低氣溫 25.9 °C。

The minimum air temperature recorded at the Hong Kong Observatory was 25.9 °C at 2350 HKT on 31 July.

京士柏於七月三十一日 23 時 35 分錄得本月最高1分鐘平均降雨率 113 毫米/小時。

The maximum 1-minute mean rainfall rate recorded at King's Park was 113 millimetres per hour at 2335 HKT on 31 July.

* 1981-2010 氣候平均值 (除特別列明外) (<http://www.hko.gov.hk/wxinfo/climat/normal/cnormal107.htm>)

* 1981-2010 Climatological normal, unless otherwise specified (<http://www.hko.gov.hk/wxinfo/climat/normal/enormal107.htm>)

Tr - 微量 (降雨量少於 0.05 毫米)

Tr - Trace of rainfall (amount less than 0.05 mm)

4.1.2 二零二零年七月香港氣象觀測摘錄(二)

4.1.2 Extract of Meteorological Observations in Hong Kong (Part 2), July 2020

日期 Date	出現低能見度的時數# Number of hours of Reduced Visibility#	總日照 Total Bright Sunshine	每日太陽總輻射 Daily Global Solar Radiation	總蒸發量 Total Evaporation	盛行風向 Prevailing Wind Direction	平均風速 Mean Wind Speed
七月 July	小時 hours	小時 hours	兆焦耳/米 ² MJ/m ²	毫米 mm	度 degrees	公里/小時 km/h
1	0	3.8	15.46	3.3	130	15.2
2	0	4.4	16.68	3.5	160	22.8
3	0	3.7	17.39	4.5	170	18.1
4	0	6.9	20.39	4.0	190	17.4
5	0	9.4	26.18	5.6	200	21.4
6	0	8.9	21.27	3.8	230	25.0
7	0	9.6	24.54	5.3	230	22.4
8	0	5.7	18.24	4.4	230	34.0
9	0	3.9	17.91	4.9	230	36.7
10	0	2.6	14.32	4.1	200	27.9
11	0	6.0	17.41	4.2	190	22.3
12	0	9.2	24.07	5.3	190	13.1
13	0	11.5	27.46	6.5	230	13.9
14	0	12.0	25.63	6.0	240	27.2
15	0	10.5	26.50	5.9	230	32.1
16	0	10.1	26.42	6.0	230	25.7
17	0	10.5	24.49	5.9	230	22.7
18	0	11.3	26.32	6.0	230	22.3
19	0	10.0	25.09	5.8	230	20.0
20	0	5.8	17.78	4.0	210	10.5
21	0	9.6	21.96	5.0	090	5.2
22	0	6.7	18.18	4.3	100	12.0
23	0	9.8	22.89	5.7	200	8.0
24	0	11.1	27.28	6.7	230	14.8
25	0	9.5	24.38	6.0	230	22.4
26	0	10.5	26.15	6.4	230	22.7
27	0	9.8	26.13	6.3	220	19.6
28	0	11.1	27.19	6.8	200	13.7
29	0	6.1	18.03	3.8	100	10.0
30	0	9.5	26.05	5.7	040	23.4
31	0	0.2	5.04	0.3	080	49.6
平均/總值 Mean/Total	0	249.7	21.83	156.0	230	21.0
正常* Normal*	13.0 §	212.0	17.17	146.2	230	21.3
觀測站 Station	香港國際機場 Hong Kong International Airport	京士柏 King's Park		橫瀾島 [^] Waglan Island [^]		

橫瀾島於七月三十一日 13 時 49 分錄得本月最高陣風 83 公里/小時，風向 070 度。

The maximum gust peak speed recorded at Waglan Island was 83 kilometres per hour from 070 degrees at 1349 HKT on 31 July.

低能見度是指能見度低於 8 公里，不包括出現霧、薄霧或降水。

- 在2004年及以前，香港國際機場的能見度讀數是基於專業氣象觀測員每小時的觀測數據。在2005年及以後，讀數是採用位於機場南跑道中間的能見度儀表在每小時前10分鐘的平均數據。這與使用儀器觀測來改進能見度評估的國際趨勢是一致的。
- 在2007年10月10日前曾出現於此摘錄內香港國際機場2005年及以後的低能見度時數資料乃基於專業氣象觀測員每小時的觀測數據。有關資料已於2007年10月10日起改為以機場南跑道中間之能見度儀表在每小時前10分鐘的平均數據計算。

Reduced visibility refers to visibility below 8 kilometres when there is no fog, mist, or precipitation.

- The visibility readings at the Hong Kong International Airport are based on hourly observations by professional meteorological observers in 2004 and before, and average readings over the 10-minute period before the clock hour of the visibility meter near the middle of the south runway from 2005 onwards. The change of the data source in 2005 is an improvement of the visibility assessment using instrumented observations following the international trend.
- Before 10 October 2007, the number of hours of reduced visibility at the Hong Kong International Airport in 2005 and thereafter displayed in this summary was based on hourly visibility observations by professional meteorological observers. Since 10 October 2007, the data have been revised using the average visibility readings over the 10-minute period before the clock hour, as recorded by the visibility meter near the middle of the south runway.

[^] 如橫瀾島未能提供數據，則以長洲或其他鄰近氣象站的數據作補充，以計算盛行風向和平均風速。

[^] In case the data are not available from Waglan Island, observations of Cheung Chau or other nearby weather stations will be incorporated in computing the Prevailing Wind Direction and Mean Wind Speed.

* 1981-2010 氣候平均值 (除特別列明外) (<http://www.hko.gov.hk/wxinfo/climat/normal/cnormal07.htm>)

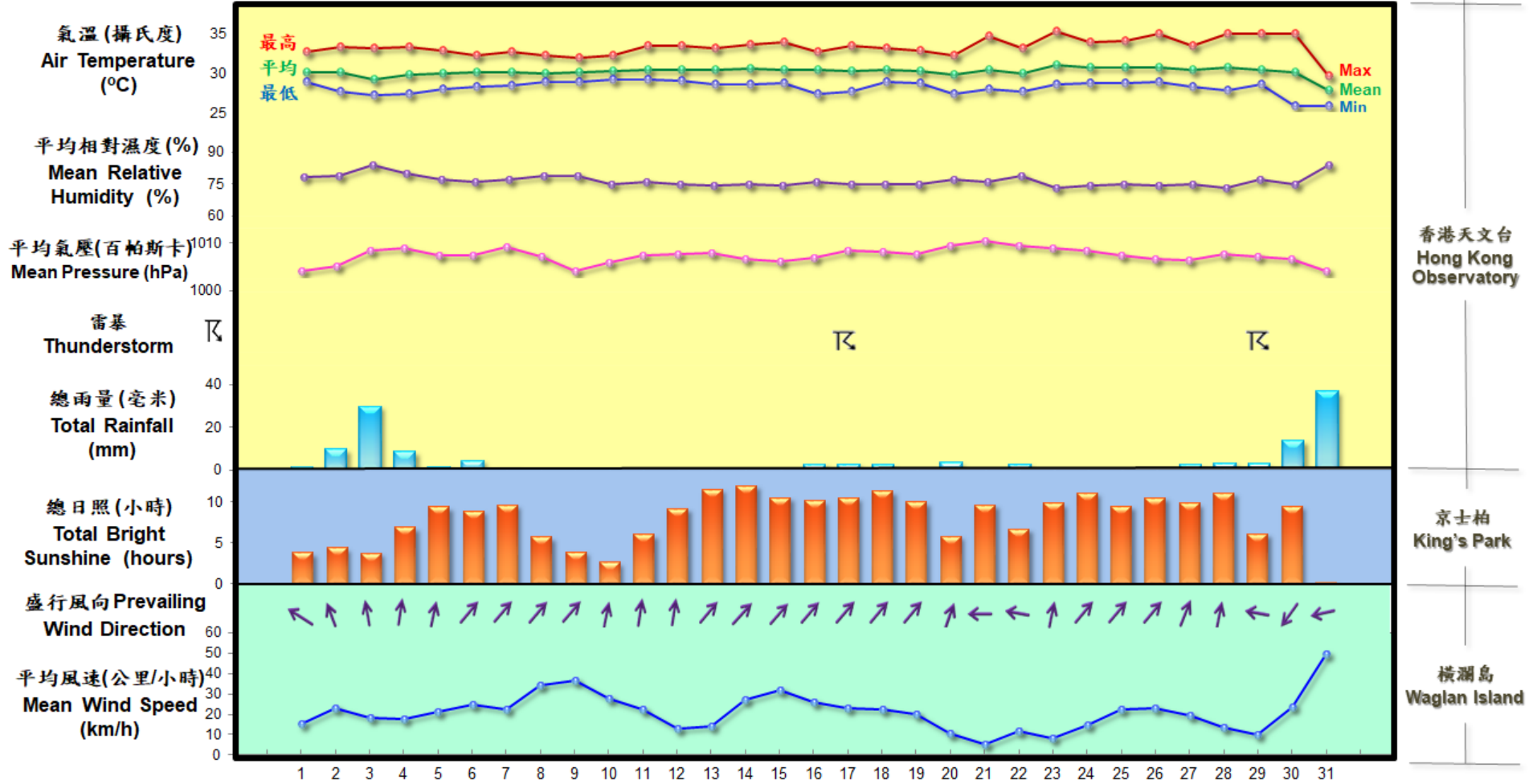
* 1981-2010 Climatological normal, unless otherwise specified (<http://www.hko.gov.hk/wxinfo/climat/normal/enormal07.htm>)

§ 1997-2019 平均值

§ 1997-2019 Mean value

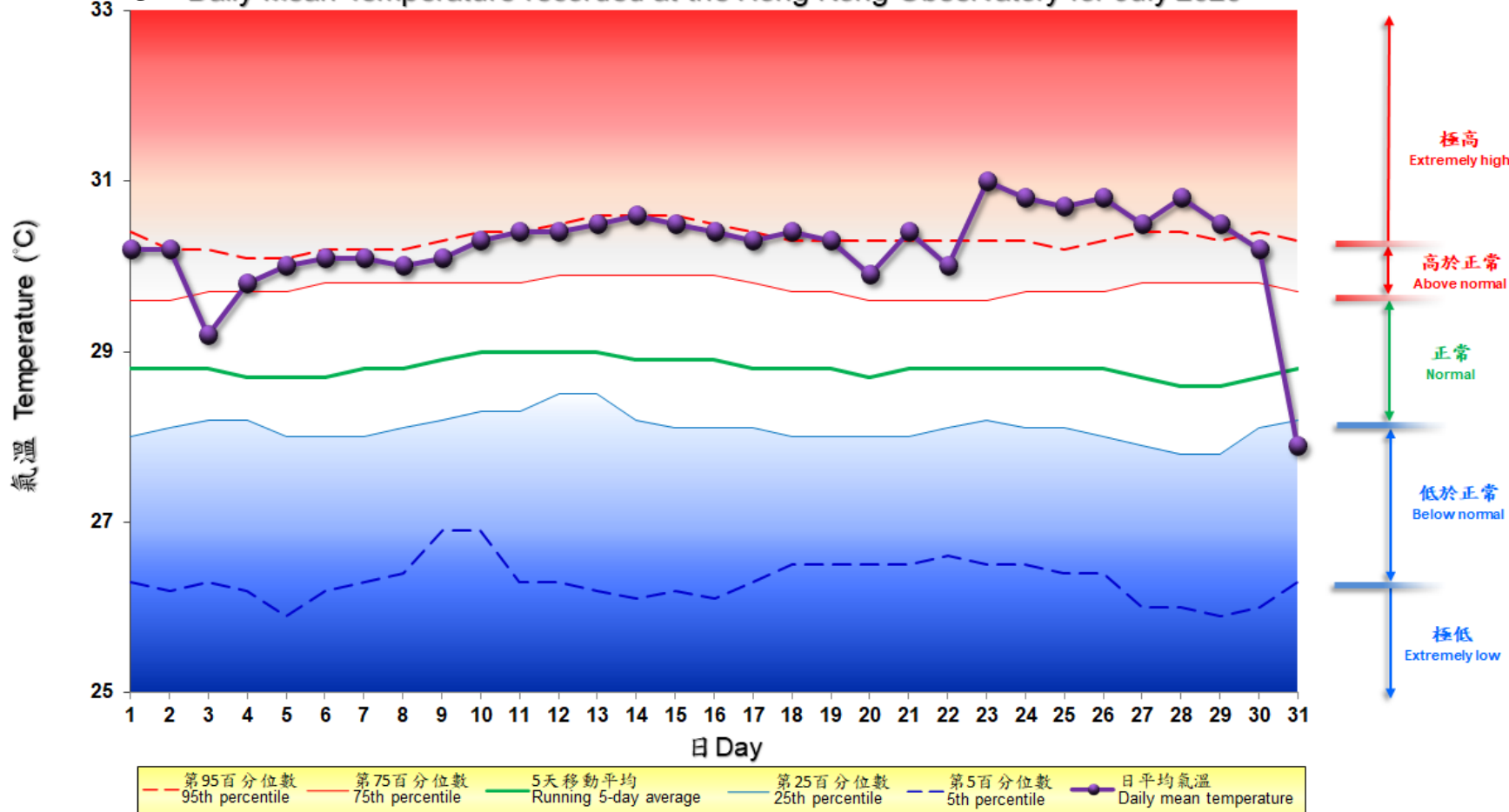
4.2 2020年7月部分香港氣象要素的每日記錄

4.2 Daily Values of Selected Meteorological Elements for Hong Kong, July 2020



4.3 2020年7月香港天文台錄得的日平均氣溫

4.3 Daily Mean Temperature recorded at the Hong Kong Observatory for July 2020



備註:

極高: 高於第 95 百分位數
 高於正常: 介乎第 75 和第 95 百分位數之間
 正常: 介乎第 25 和第 75 百分位數之間
 低於正常: 介乎第 5 和第 25 百分位數之間
 極低: 低於第 5 百分位數
 百分位數值及 5 天移動平均值是基於 1981 至 2010 年的數據計算所得

Remarks:

Extremely high: above 95th percentile
 Above normal: between 75th and 95th percentile
 Normal: between 25th and 75th percentile
 Below normal: between 5th and 25th percentile
 Extremely low: below 5th percentile
 Percentile and 5-day running average values are computed based on the data from 1981 to 2010