

每月天氣摘要 二零一九年十二月

Monthly Weather Summary December 2019



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二零二零年一月出版

香港天文台編製
香港九龍彌敦道134A

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1. 二零一九年十二月天氣回顧

由於本月大部分時間影響華南的東北季候風較正常弱，二零一九年十二月本港遠較正常溫暖。本月平均最高氣溫 21.9 度，較正常值 20.2 度高 1.7 度，是有記錄以來十二月的其中一個第四高。本月平均氣溫 19.1 度，較正常值 17.9 度高 1.2 度。此外，二零一九年香港天氣極端溫暖，全年平均氣溫 24.5 度、平均最高氣溫 27.1 度及平均最低氣溫 22.6 度，均是自一八八四年以來的最高紀錄。本月雨量較正常少，只錄得 13.5 毫米，較正常值 26.8 毫米少約百分 50。二零一九年總雨量為 2396.2 毫米，接近正常值 2398.5 毫米。

受華南的東北季候風影響，十二月一日本港天晴乾燥。隨著一股強烈東北季候風的補充於當晚抵達，本港北風增強，十二月二日至四日天氣非常乾燥及顯著轉涼。與此同時，熱帶氣旋北冕橫過南海中部並於十二月四日至五日逐漸減弱。受廣東沿岸的東北季候風及與北冕相關的雨帶共同影響下，十二月五日本港風勢頗大及有幾陣雨。在晚間有雨的情況下，十二月六日早上天文台氣溫下降至全月最低的 12.7 度。隨著覆蓋廣東沿岸的雲層逐漸消散，十二月六日本港天氣再度轉晴及非常乾燥。受乾燥的東北季候風所支配，除十二月十二日及十三日間中多雲外，普遍天晴及乾燥的天氣一直持續至十二月十四日。

受一股較溫暖及潮濕的偏東氣流影響，十二月十五日及十六日本港轉為大致多雲。隨著雲層逐漸消散，十二月十七日及十八日本港日間溫暖及部分時間有陽光。十二月十八日下午天文台氣溫上升至全月最高的 27.3 度。

隨著一股東北季候風於十二月十八日稍後時間抵達廣東沿岸，十二月十九日至二十一日本港轉為大致多雲，天氣較涼及有幾陣雨。而十二月二十二日及二十三日日間本港短暫時間有陽光，多處地區能見度頗低。隨著東北季候風逐漸緩和，十二月二十四日至二十六日本港轉為普遍天晴及溫暖。一道冷鋒於十二月二十六日晚上在華中形成並逐漸移向廣東沿岸。受冷鋒隨後的強烈東北季候風影響，十二月二十七日及二十八日本港天晴及風勢頗大，早上天氣清涼。

颱風巴蓬於聖誕日橫過菲律賓，其後兩天向西北移動並進入南海中部。受乾燥的東北季候風影響，十二月二十八日巴蓬急速減弱，翌日在越南中部沿岸水域減弱為一個低壓區。受東北季候風及與巴蓬殘餘相關的外圍雨帶共同影響下，十二月二十九日本港轉為多雲及有雨。十二月三十日本港仍然多雲及有幾陣雨，能見度頗低。隨著一股東北季候風的補充抵達華南，十二月三十一日本港風勢頗大及有幾陣微雨。

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 December 2019

With the northeast monsoon over southern China weaker than normal for most of the time in the month, December 2019 was much warmer than usual in Hong Kong. The monthly mean maximum temperature was 21.9 degrees, 1.7 degrees above the normal figure of 20.2 degrees and one of the fourth highest on record for December. The monthly mean temperature of 19.1 degrees was 1.2 degrees above the normal figure of 17.9 degrees. Moreover, 2019 was an extremely warm year in Hong Kong. The annual mean temperature of 24.5 degrees, annual mean maximum temperature of 27.1 degrees and annual mean minimum temperature of 22.6 degrees were all the highest since records began in 1884. The month was drier than usual with a total rainfall of 13.5 millimetres, about 50 percent below the normal of 26.8 millimetres. The annual total rainfall in 2019 was 2396.2 millimetres, near the annual normal of 2398.5 millimetres.

Affected by the northeast monsoon over southern China, it was fine and dry in Hong Kong on the first day of the month. With the arrival of an intense replenishment of the northeast monsoon that night, winds strengthened from the north and local weather became appreciably cooler and very dry on 2-4 December. Meanwhile, Tropical Cyclone Kammuri moved across the central part of the South China Sea and weakened gradually on 4-5 December. Under the combined effect of the northeast monsoon over the coast of Guangdong and the rain-bearing cloud band associated with Kammuri, local weather became windy with a few rain patches on 5 December. With rain patches overnight, temperatures at the Hong Kong Observatory fell to 12.7 degrees on the morning of 6 December, the lowest of the month. As the clouds covering the coast of Guangdong thinned out gradually during the day, the weather in Hong Kong turned fine and very dry again on 6 December. Dominated by the dry northeast monsoon, apart from some cloudy interludes on 12 - 13 December, local weather remained generally fine and dry until 14 December.

Under the influence of a relatively warm and humid easterly airstream, the weather in Hong Kong became mainly cloudy on 15 - 16 December. With the clouds thinning out gradually, it was warm with sunny periods during the day on 17 - 18 December. The maximum temperature at the Observatory rose to 27.3 degrees on the afternoon of 18 December, the highest of the month.

With the northeast monsoon arriving at the coast of Guangdong later on 18 December, the weather in Hong Kong became mainly cloudy and cooler together with a few rain patches on 19 - 21 December. While sunny intervals emerged gradually on 22 - 23 December, the visibility was rather low in some areas. With the northeast monsoon moderating gradually, the weather turned generally fine and warm on 24-26 December. A cold front formed over central China and moved across the coast of Guangdong on the evening of 26 December. Affected by the intense northeast monsoon behind the cold front, local weather became windy and fine

with cool mornings on 27 – 28 December.

Typhoon Phanfone moved across the Philippines on Christmas day and tracked northwestwards entering the central part of the South China Sea on the next two days. Affected by the dry northeast monsoon, Phanfone weakened rapidly on 28 December and eventually became an area of low pressure over the waters off the coast of central Vietnam on 29 December. Under the combined effect of the northeast monsoon and the outer rainbands associated with the remnant of Phanfone, local weather became cloudy with rain on 29 December. The weather remained cloudy with a few rain patches and rather low visibility on 30 December. With a replenishment of the northeast monsoon reaching southern China, it was windy with a few light rain patches on the last day of the month.

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 二零一九年十二月發出的警告及信號
Table 1.1 Warnings and Signals issued in December 2019

強烈季候風信號
Strong Monsoon Signal

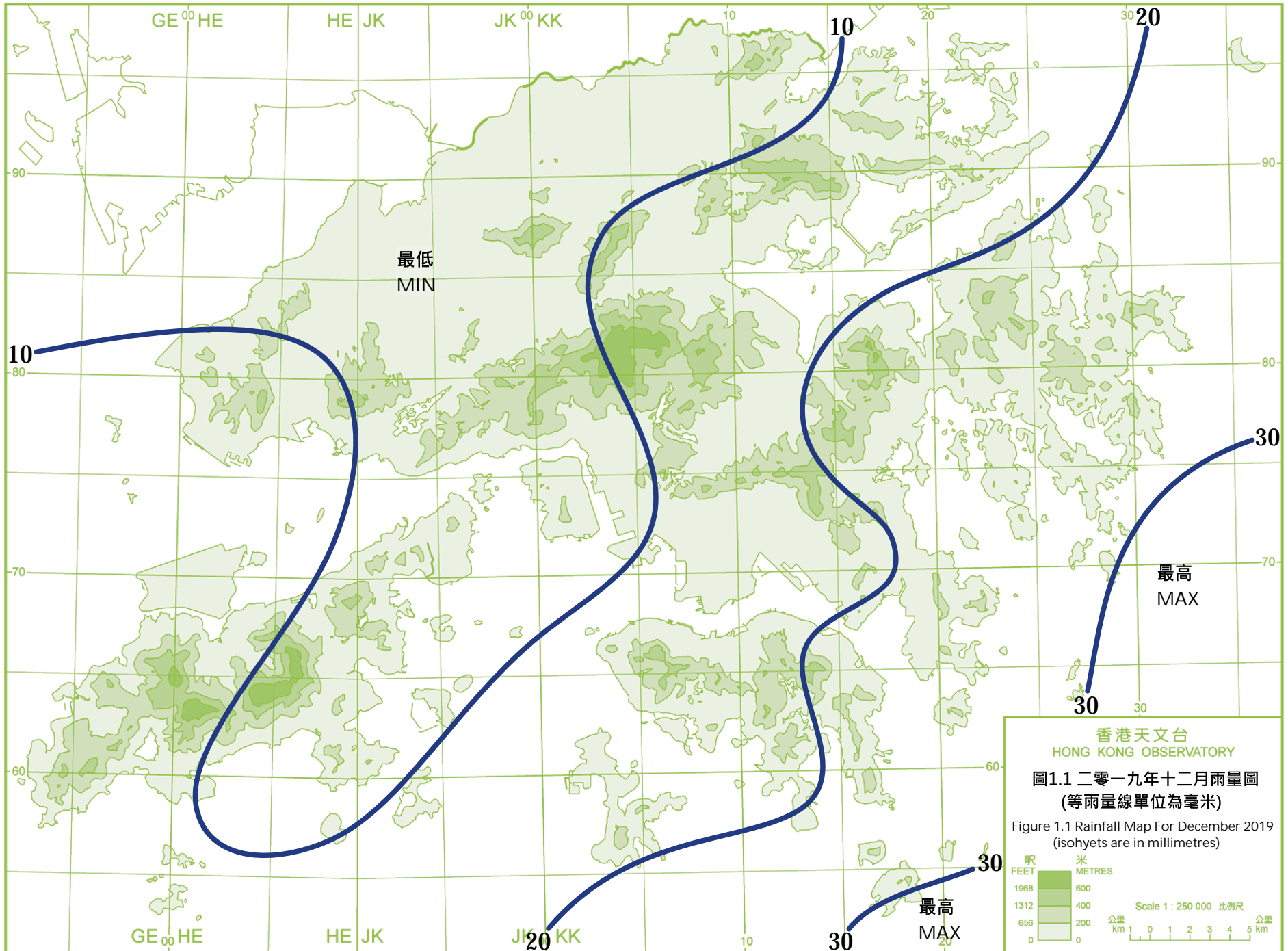
開始時間 Beginning Time		終結時間 Ending Time	
日/月 day/month	時 hour	日/月 day/month	時 hour
2/12	0220	2/12	1520
5/12	1100	6/12	1220
7/12	0545	7/12	1000
26/12	2015	27/12	0640
31/12	1145	1/1	0940

火災危險警告
Fire Danger Warnings

顏色 Colour	開始時間 Beginning Time		終結時間 Ending Time	
	日/月 day/month	時 hour	日/月 day/month	時 hour
黃色 Yellow	1/12	0600	1/12	2000
紅色 Red	2/12	0600	5/12	1000
紅色 Red	6/12	0845	8/12	2300
紅色 Red	9/12	0600	9/12	2115
紅色 Red	11/12	1000	11/12	2030
黃色 Yellow	22/12	0945	22/12	1800
黃色 Yellow	26/12	0600	27/12	1930
黃色 Yellow	28/12	0600	28/12	2015

寒冷天氣警告
Cold 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
4/12	2030	8/12	0930



香港天文台
HONG KONG OBSERVATORY
圖1.1 二零一九年十二月雨量圖
(等雨量線單位為毫米)
Figure 1.1 Rainfall Map For December 2019
(isohyets are in millimetres)

呎 FEET	米 METRES
1968	600
1312	400
656	200
0	0

Scale 1 : 250 000 比例尺
公里 km 1 0 1 2 3 4 5 km

2. 二零一九年十二月熱帶氣旋概述

二零一九年十二月在北太平洋西部及南海區域出現了兩個熱帶氣旋。

熱帶低氣壓北冕於十一月二十六日清晨在關島之東南偏東約 830 公里的北太平洋西部上形成，向西北偏西方向移動並逐漸增強。北冕於十一月二十九日增強為颱風，向西移向菲律賓以東海域。北冕於十二月二日晚上進一步增強為超強颱風，並達到其最高強度，中心附近最高持續風速估計為每小時 185 公里。翌日北冕橫過菲律賓中部進入南海，並迅速減弱。北冕於十二月五日轉向西南移動，晚上在南海南部減弱為低壓區。

根據報章報導，北冕為菲律賓帶來狂風暴雨，造成最少 17 人死亡、兩人失蹤及 322 人受傷。受北冕影響，呂宋東南部廣泛地區停電。馬尼拉機場亦被迫關閉，超過 500 班航班取消。

熱帶低氣壓巴蓬於十二月二十二日清晨在雅蒲島之東南約 410 公里的北太平洋西部上形成，向西北偏西方向移動並逐漸增強。巴蓬於十二月二十四日下午增強為颱風並橫過菲律賓中部，翌日上午達到其最高強度，中心附近最高持續風速估計為每小時 145 公里。受乾燥的東北季候風影響，巴蓬進入南海後於十二月二十七日移速減慢，在南海中部迅速減弱，最後於十二月二十八日下午在南海中部減弱為低壓區。

根據報章報導，巴蓬吹襲菲律賓期間帶來狂風暴雨，造成最少 57 人死亡、六人失蹤及 369 人受傷、逾 320 萬人受災，超過 53 萬間房屋受損。

2. Overview of Tropical Cyclones in December 2019

Two tropical cyclones occurred over the western North Pacific and the South China Sea in December 2019.

Kammuri formed as a tropical depression over the western North Pacific about 830 km east-southeast of Guam on the early morning of 26 November. It moved west-northwest and intensified gradually. Kammuri developed into a typhoon on 29 November and moved west towards the sea areas east of the Philippines. Kammuri further developed into a super typhoon on the night of 2 December and reached its peak intensity with an estimated maximum sustained wind of 185 km/h near its centre. It moved across the central part of the Philippines and entered the South China Sea on 3 December, and then weakened rapidly. Kammuri turned to move southwestwards on 5 December and finally degenerated into an area of low pressure over the southern part of the South China Sea that night.

According to press reports, Kammuri brought torrential rain and squalls to the Philippines, leading to at least 17 deaths, two missing and 322 injuries. Under the influence of Kammuri, there was widespread power outage across the southeastern part of Luzon. Manila Airport was also closed with over 500 flights cancelled.

Phanfone formed as a tropical depression over the western North Pacific about 410 km southeast of Yap on the early morning of 22 December. It moved west-northwest and intensified gradually. Phanfone intensified into a typhoon on the afternoon of 24 December and crossed the central part of the Philippines. It reached its peak intensity with an estimated maximum sustained wind of 145 km/h near its centre in the next afternoon. After entering the South China Sea, Phanfone slowed down on 27 December and weakened rapidly over the central part of the South China Sea under the influence of the dry northeast monsoon. Phanfone finally degenerated into an area of low pressure over the central part of the South China Sea on the afternoon of 28 December.

According to press reports, Phanfone brought torrential rain and squalls to the Philippines during its passage, leading to at least 57 deaths, six missing and 369 injuries, with more than 3.2 million people affected and over 530 000 houses damaged.

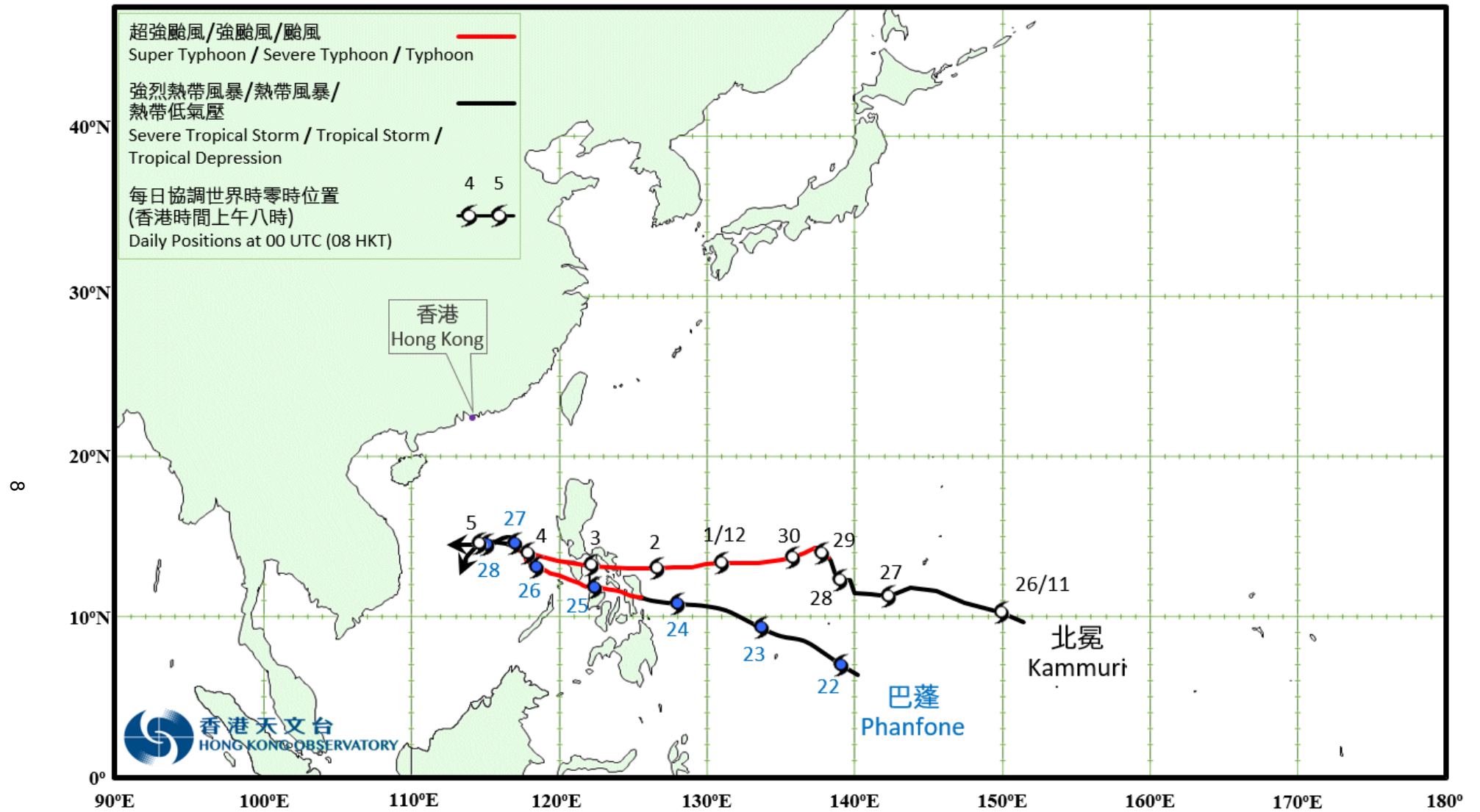
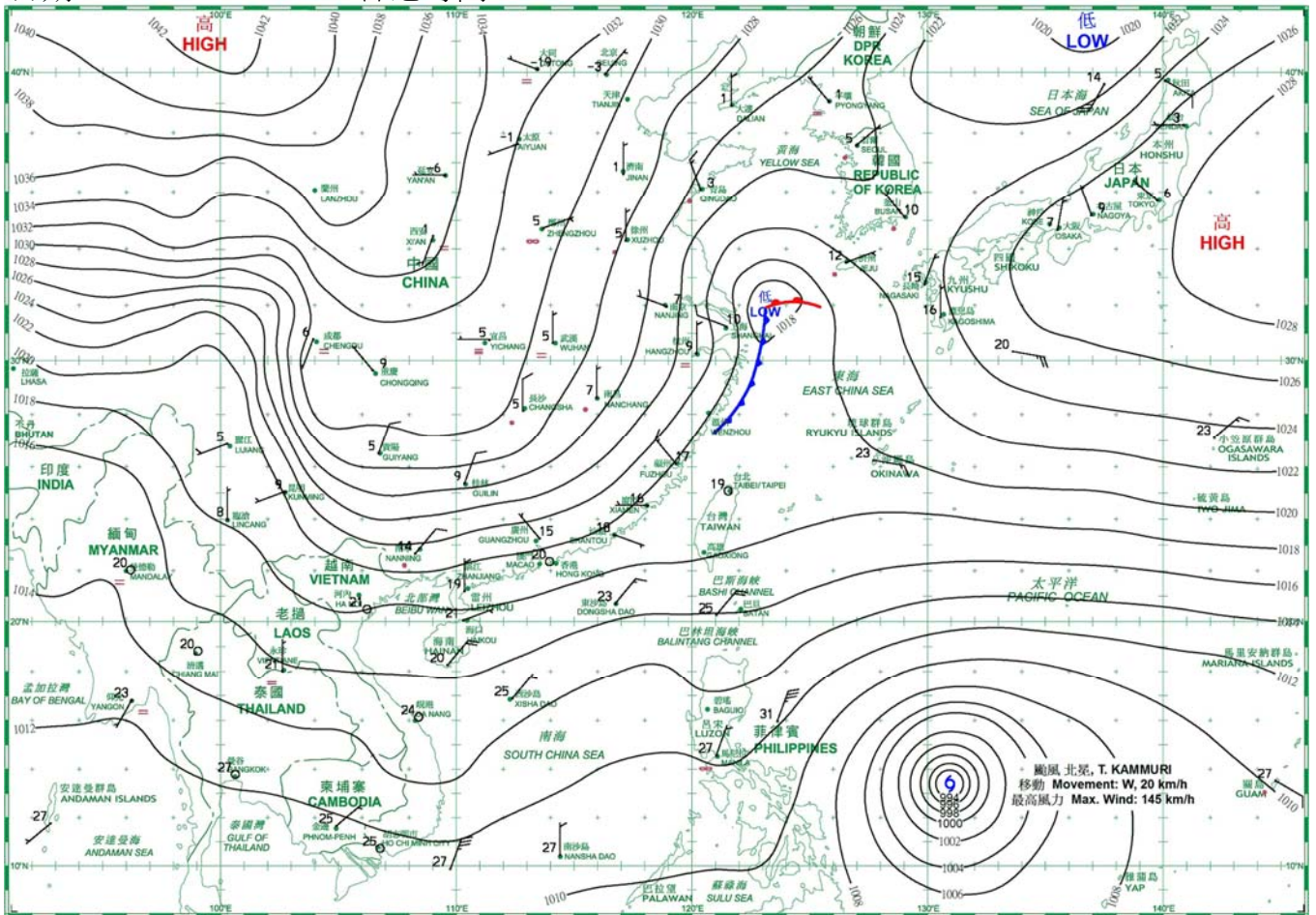


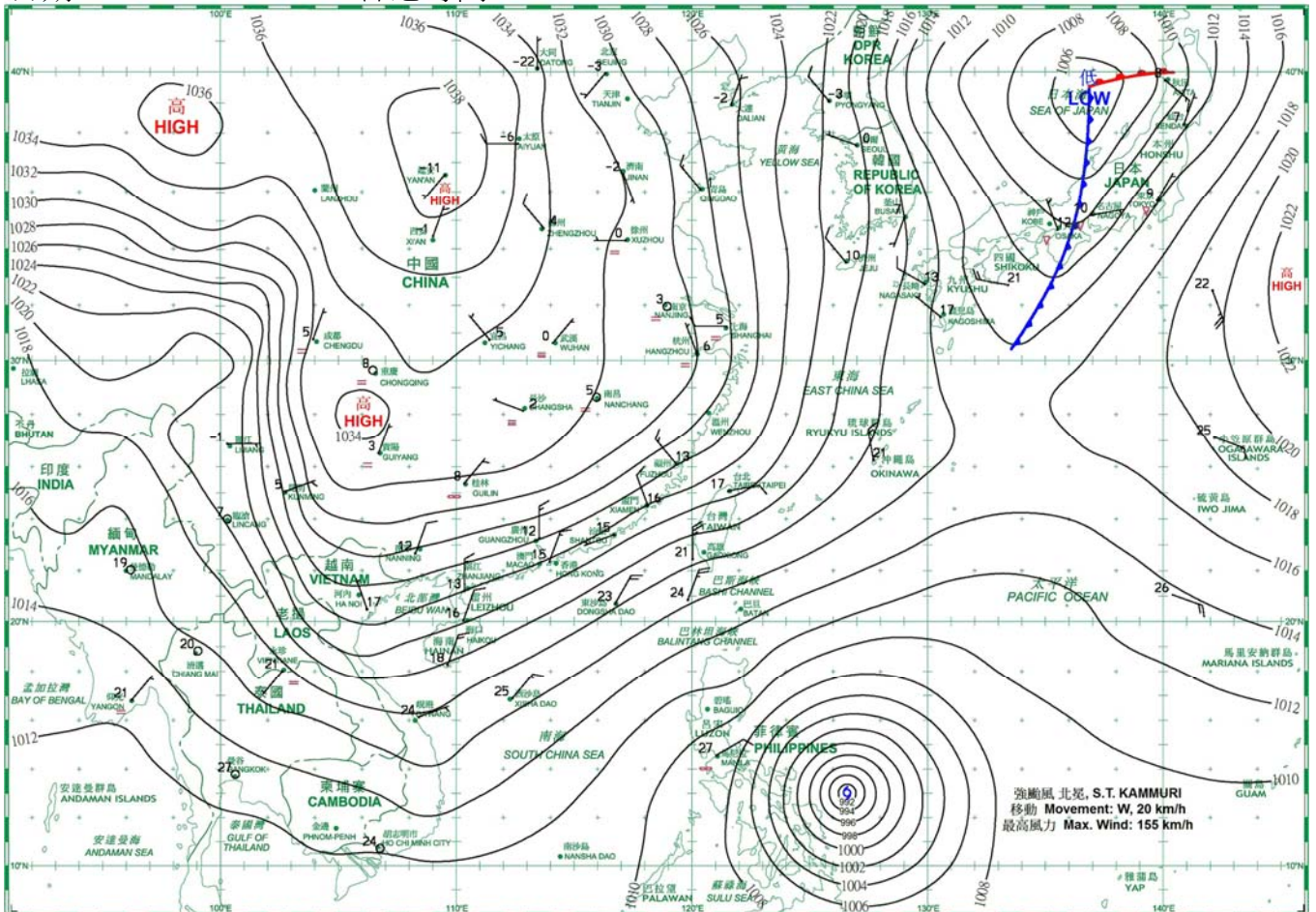
圖 2.1 二零一九年十二月的熱帶氣旋路徑圖
 Fig. 2.1 Tracks of tropical cyclones in December 2019

3. 二零一九年十二月每日天氣圖 Daily Weather Maps for December 2019

日期/Date: 01.12.2019 香港時間/HK Time: 08:00



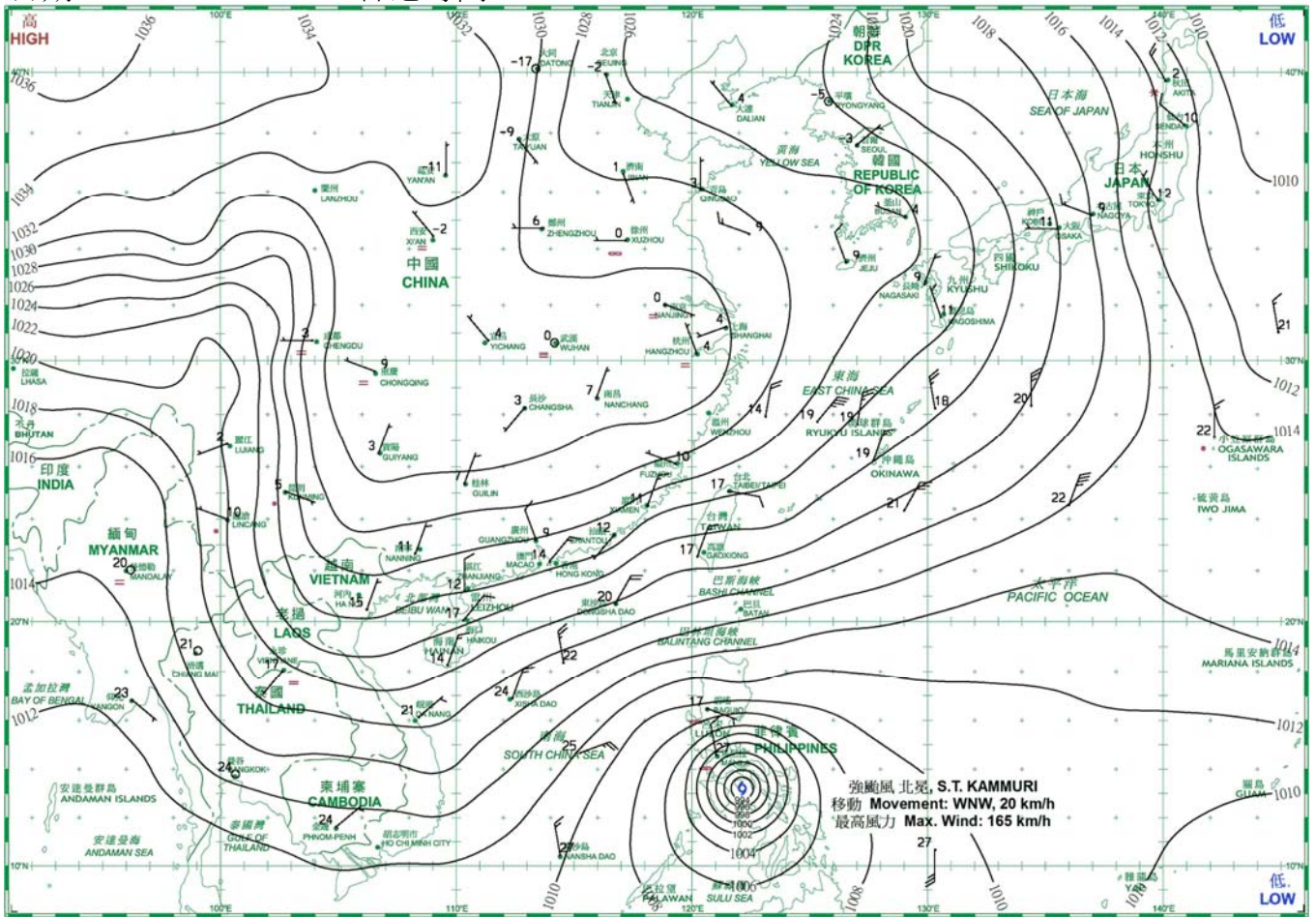
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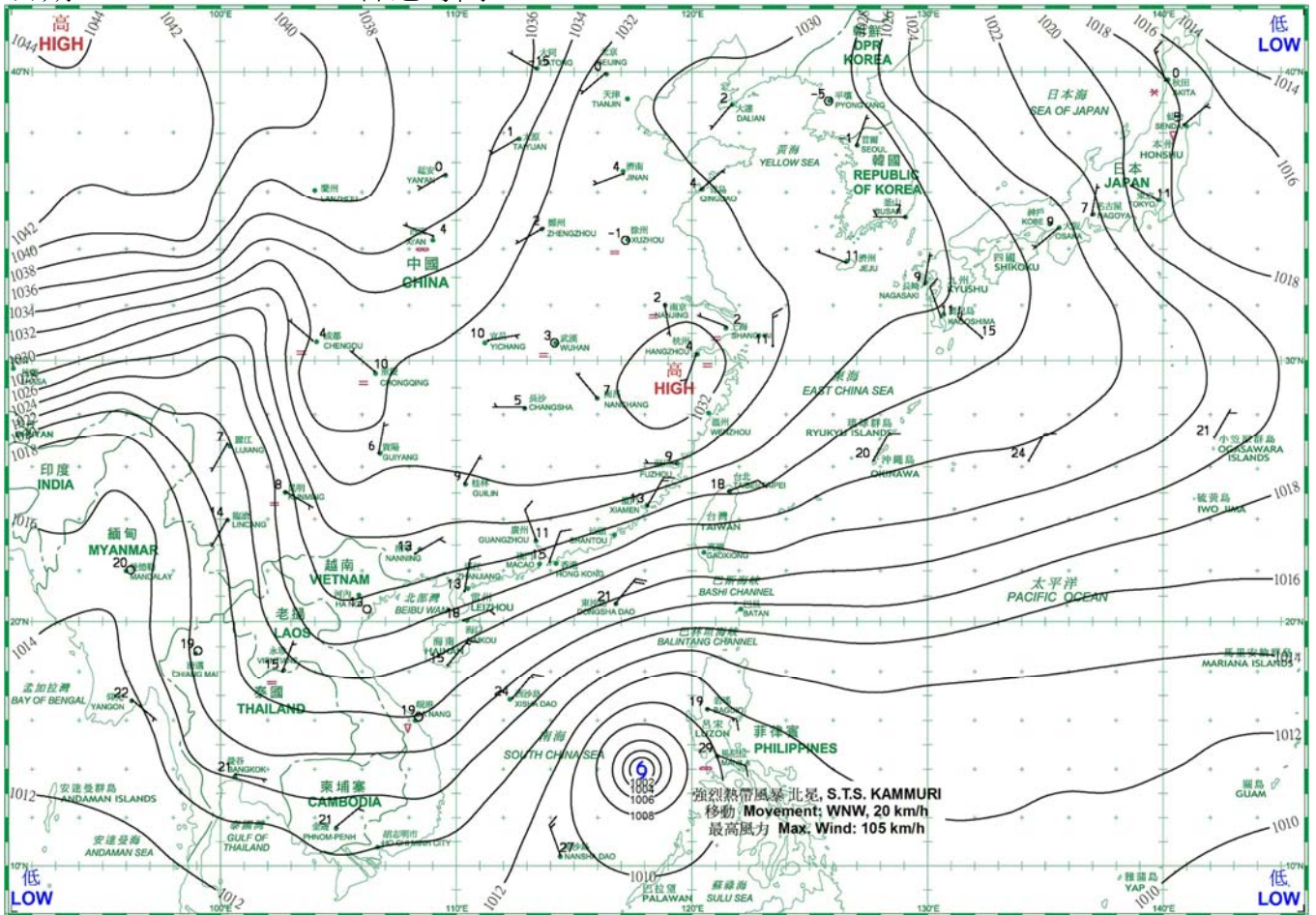
~~~~~ 等壓線 Isobar(hPa)     
 暖鋒 Warm Front     
 靜止鋒 Stationary Front     
 消散中的冷鋒 Dissipating Cold Front     
 熱帶氣旋中心 Centre of Tropical Cyclone  
 冷鋒 Cold Front     
 錮囚鋒 Occlusion     
 槽軸 (線) Axis of Trough     
 6



日期/Date: 03.12.2019 香港時間/HK Time: 08:00

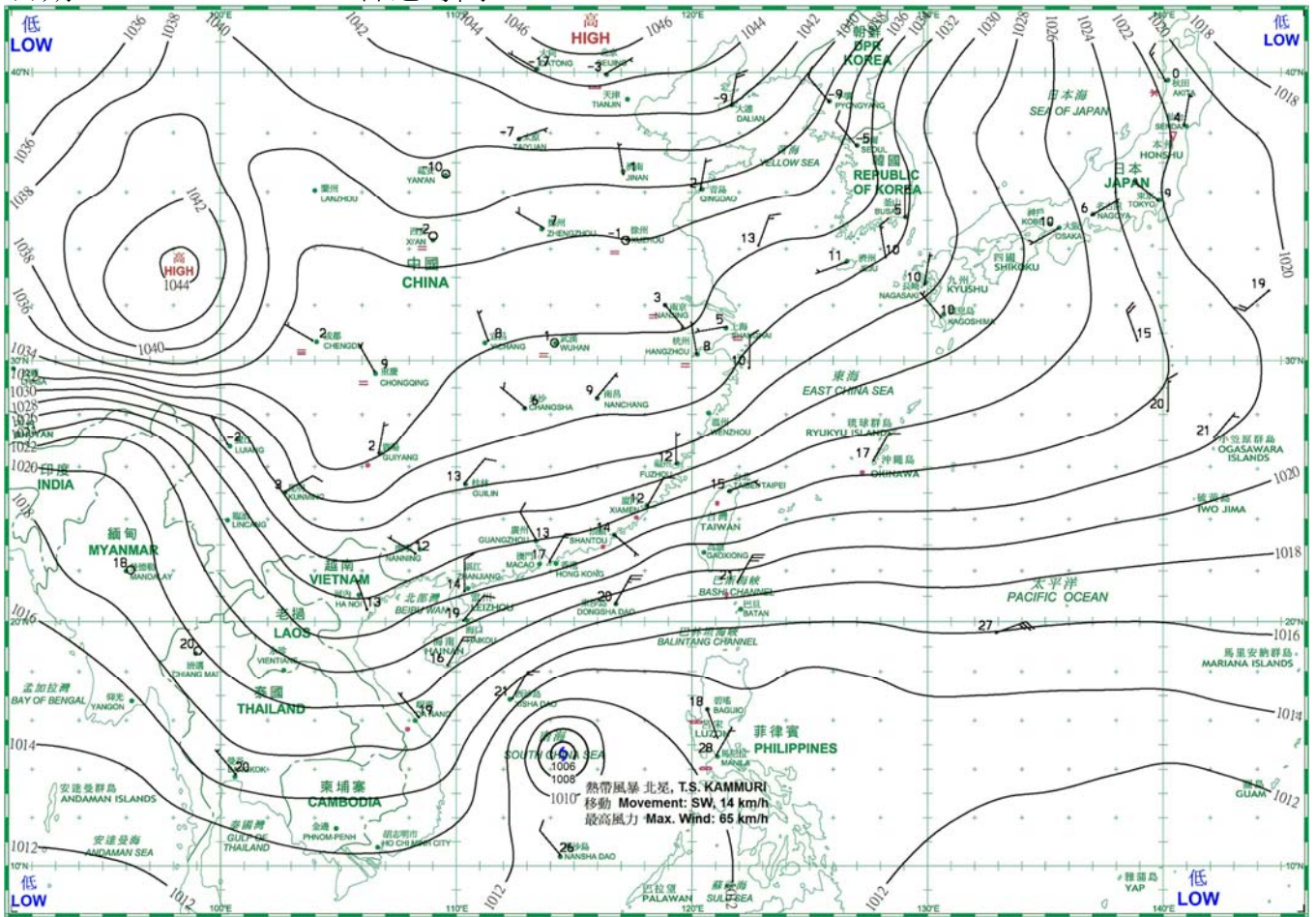


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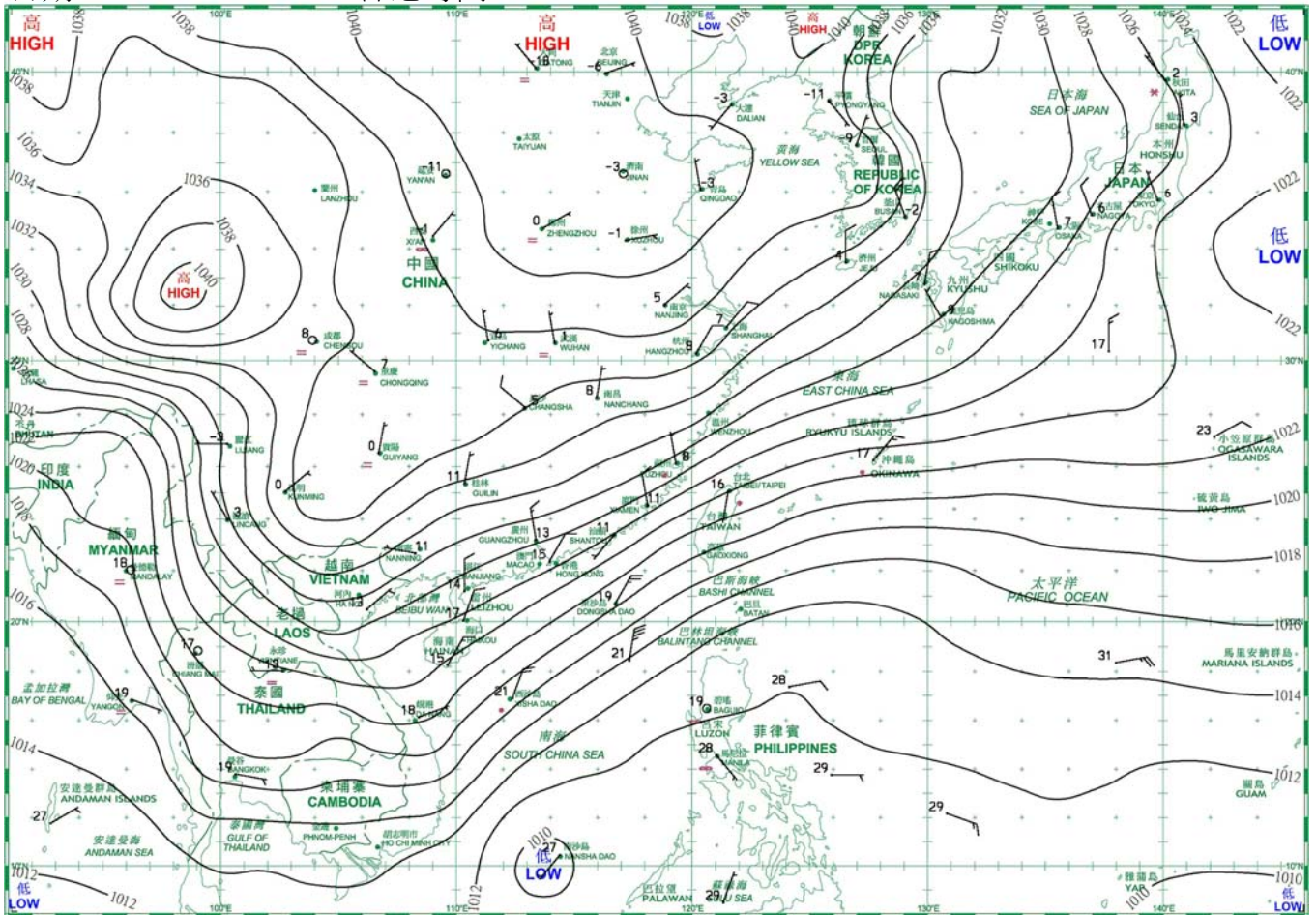




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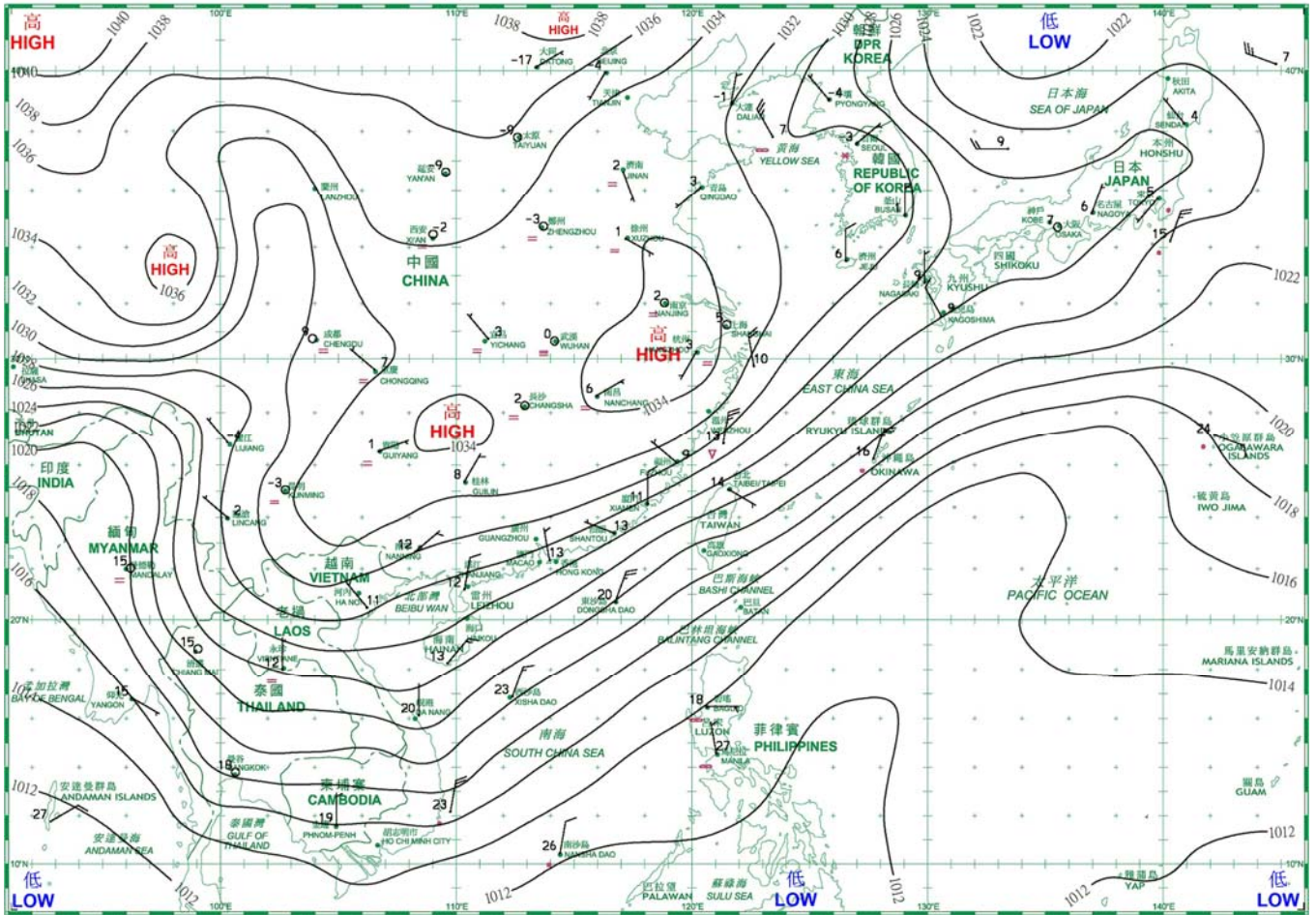


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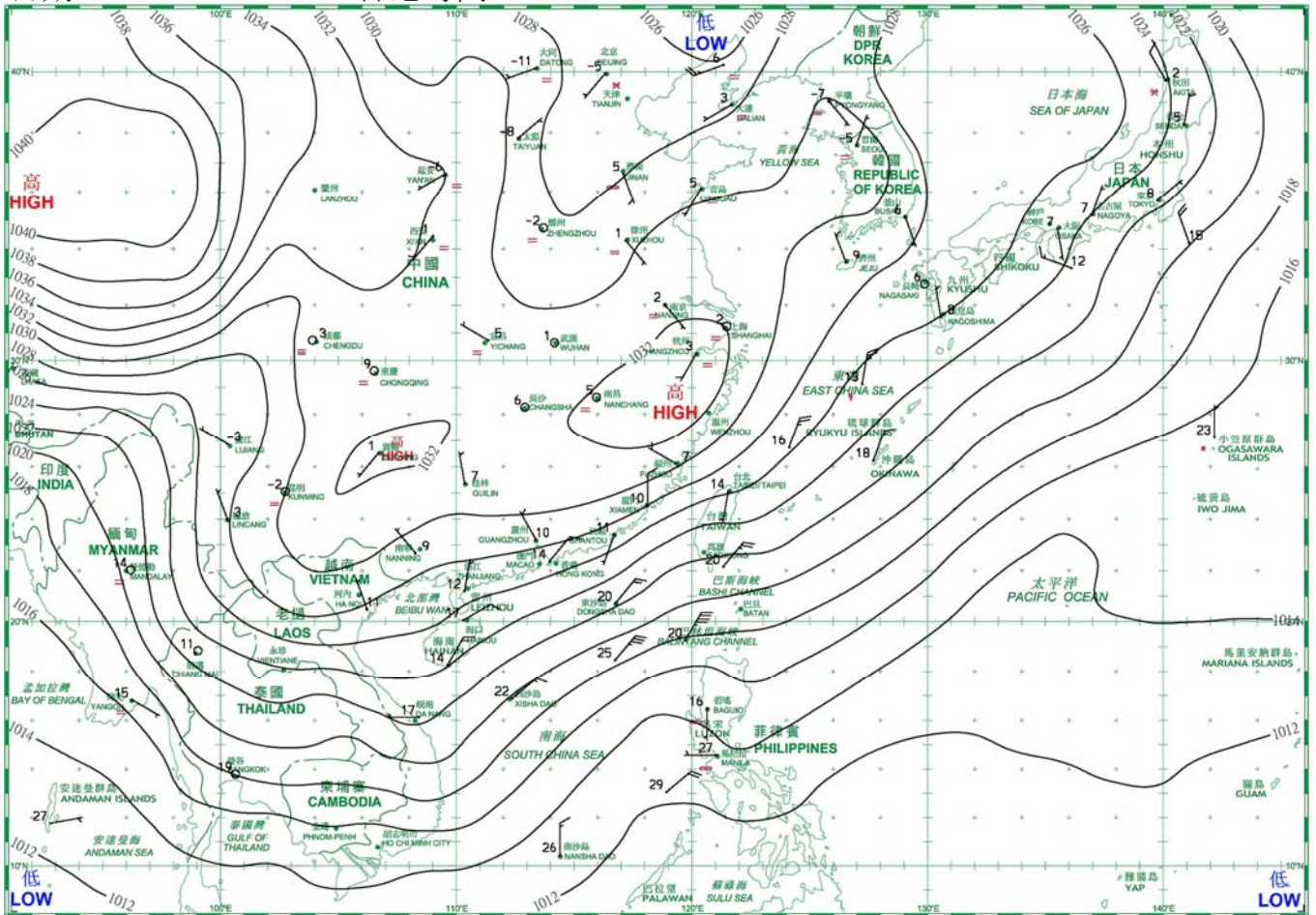




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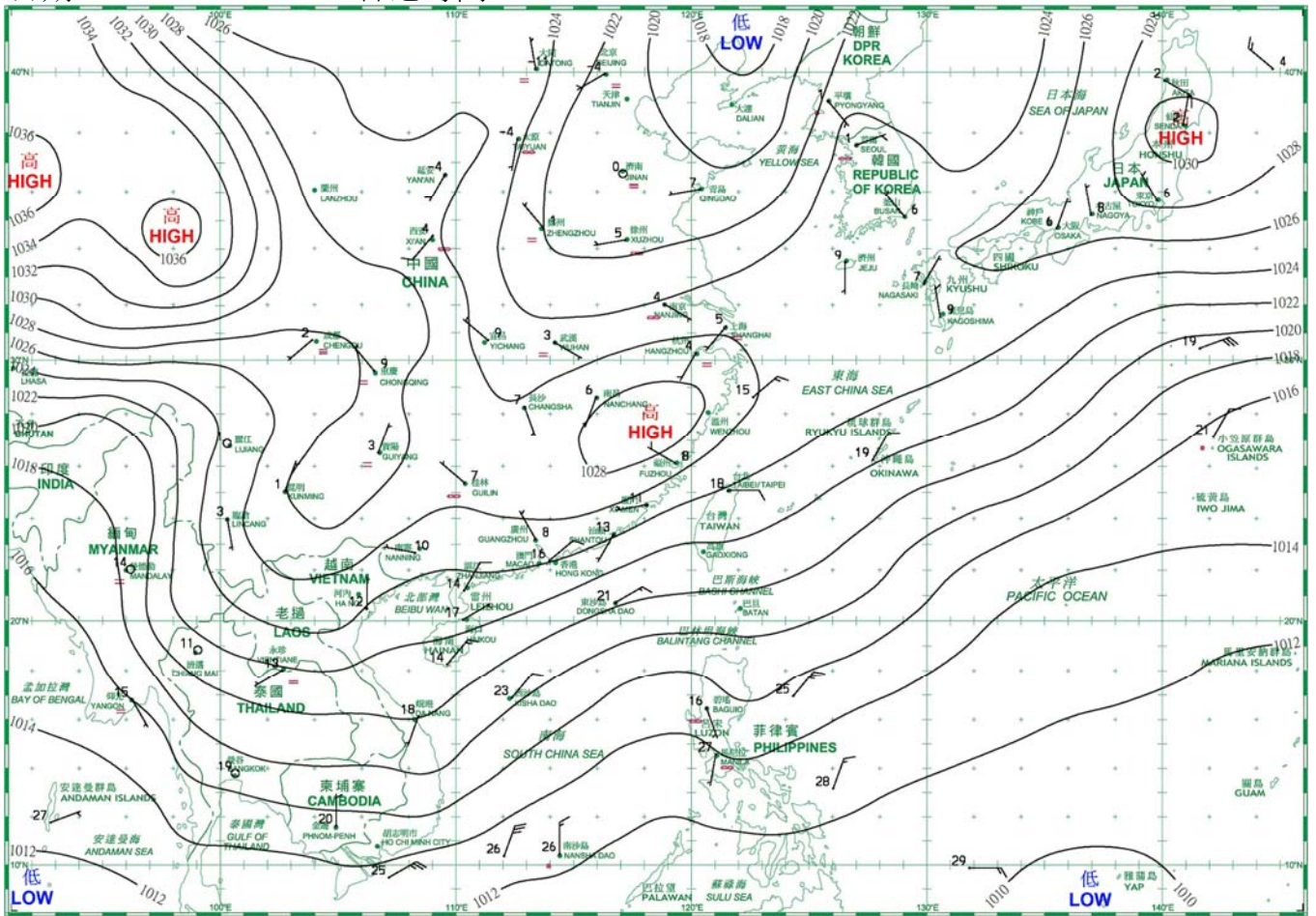


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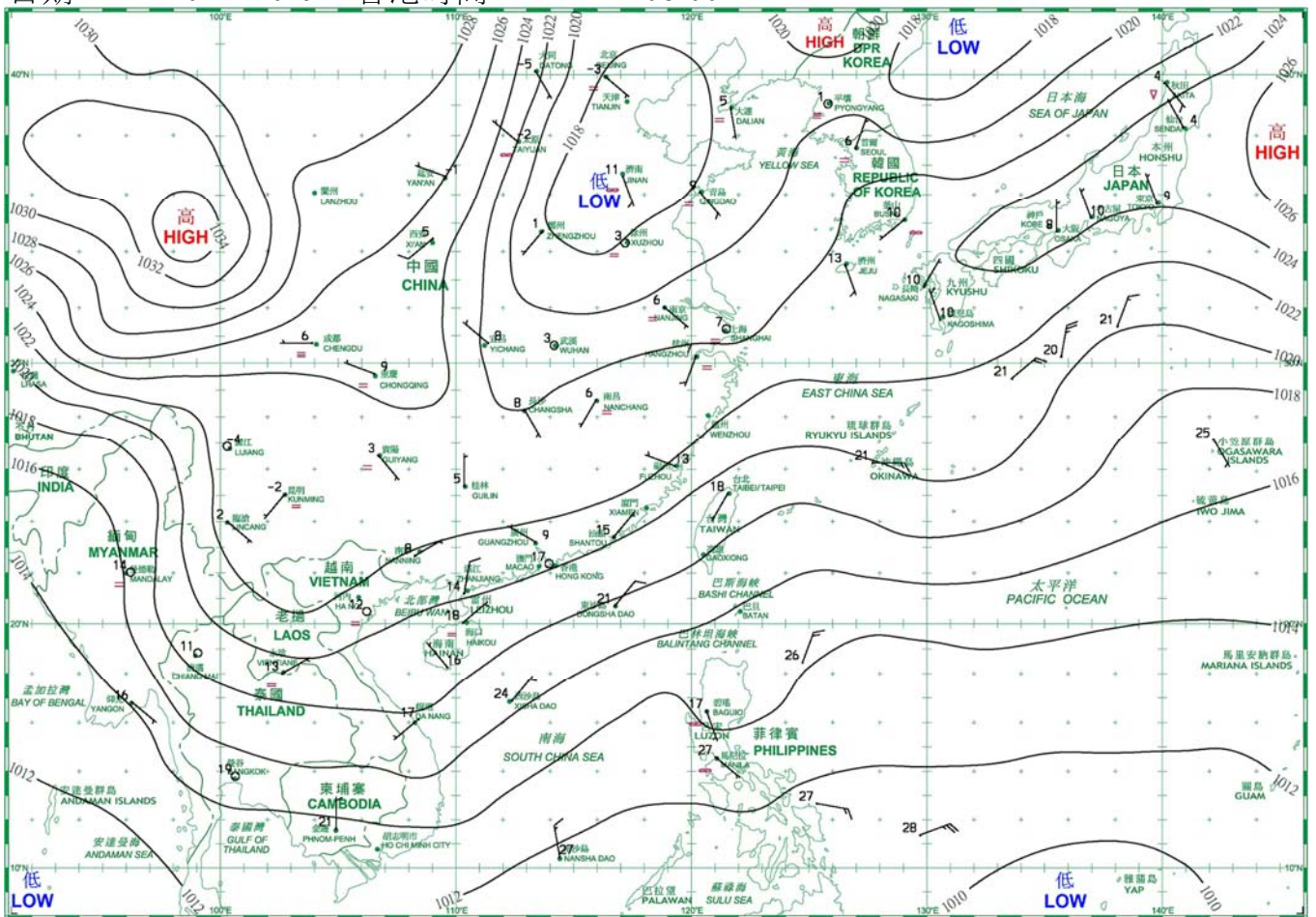




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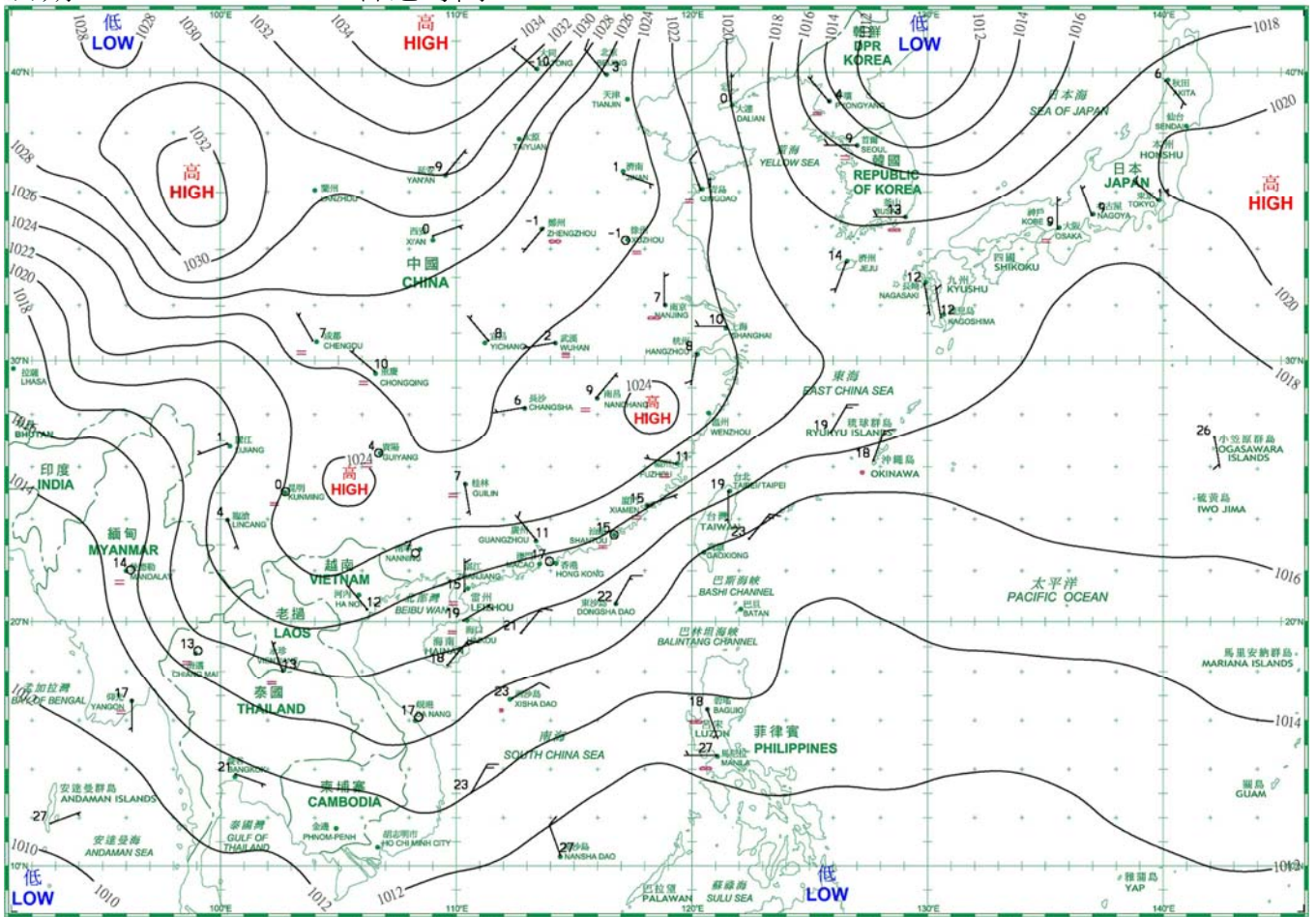


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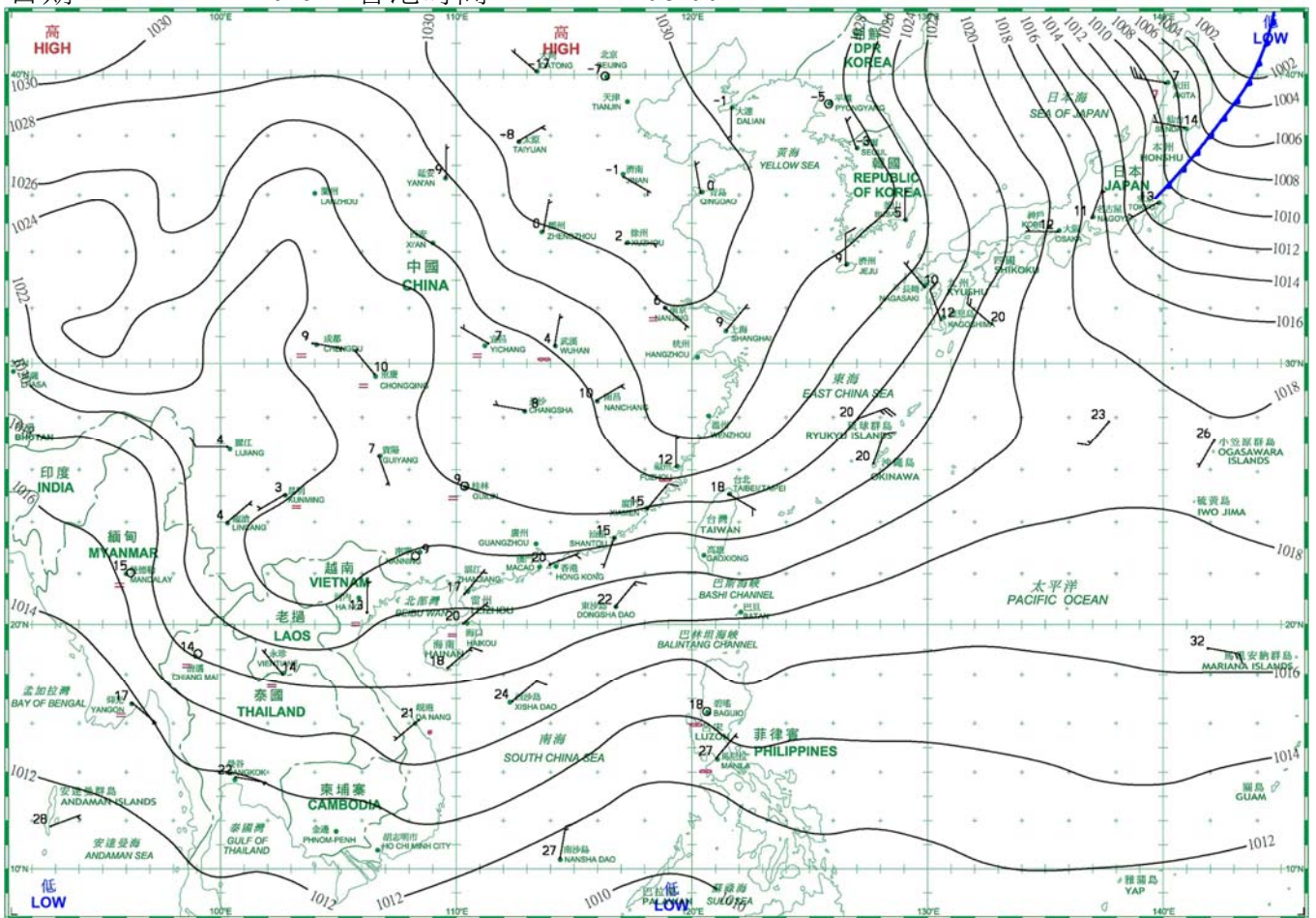




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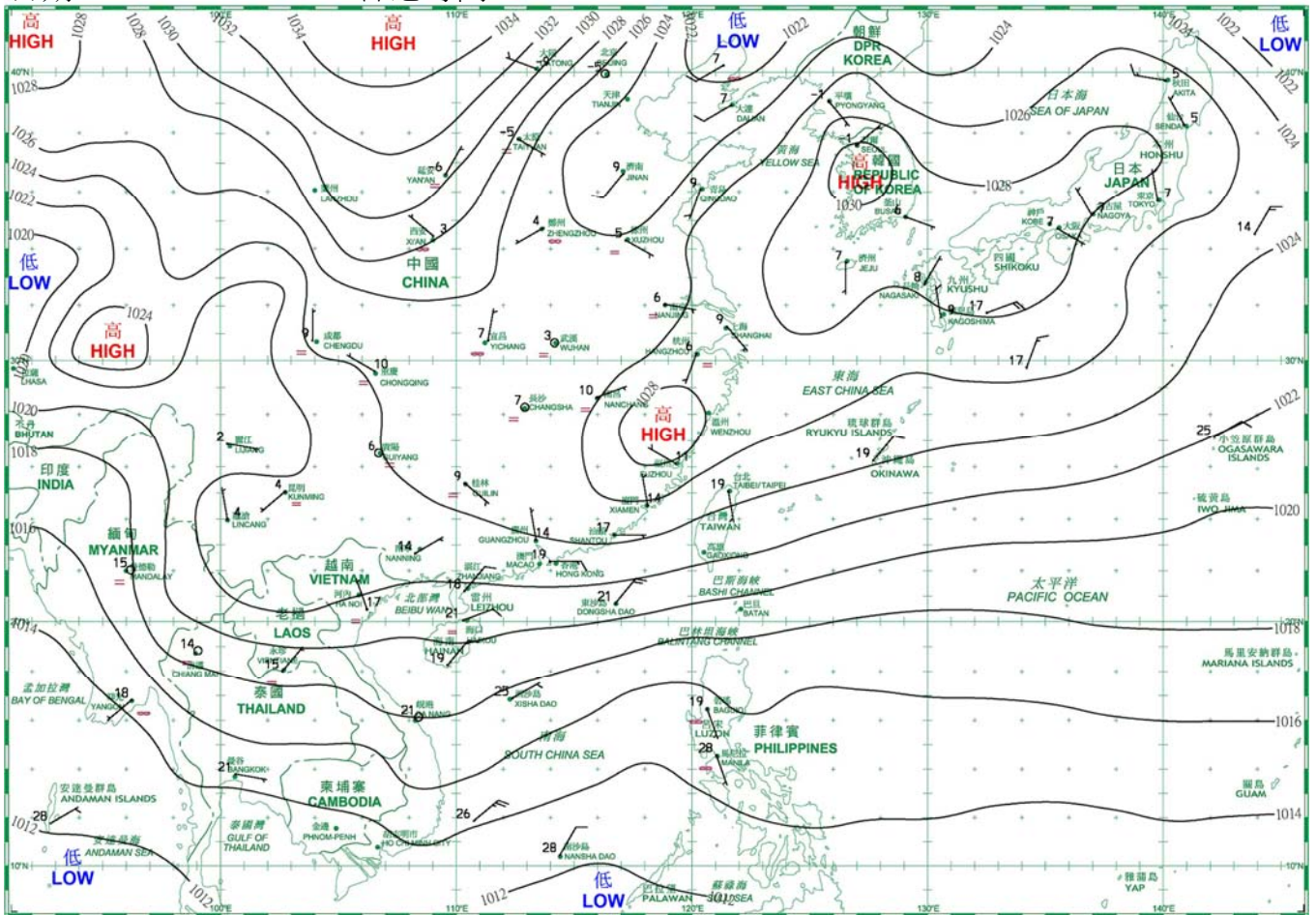


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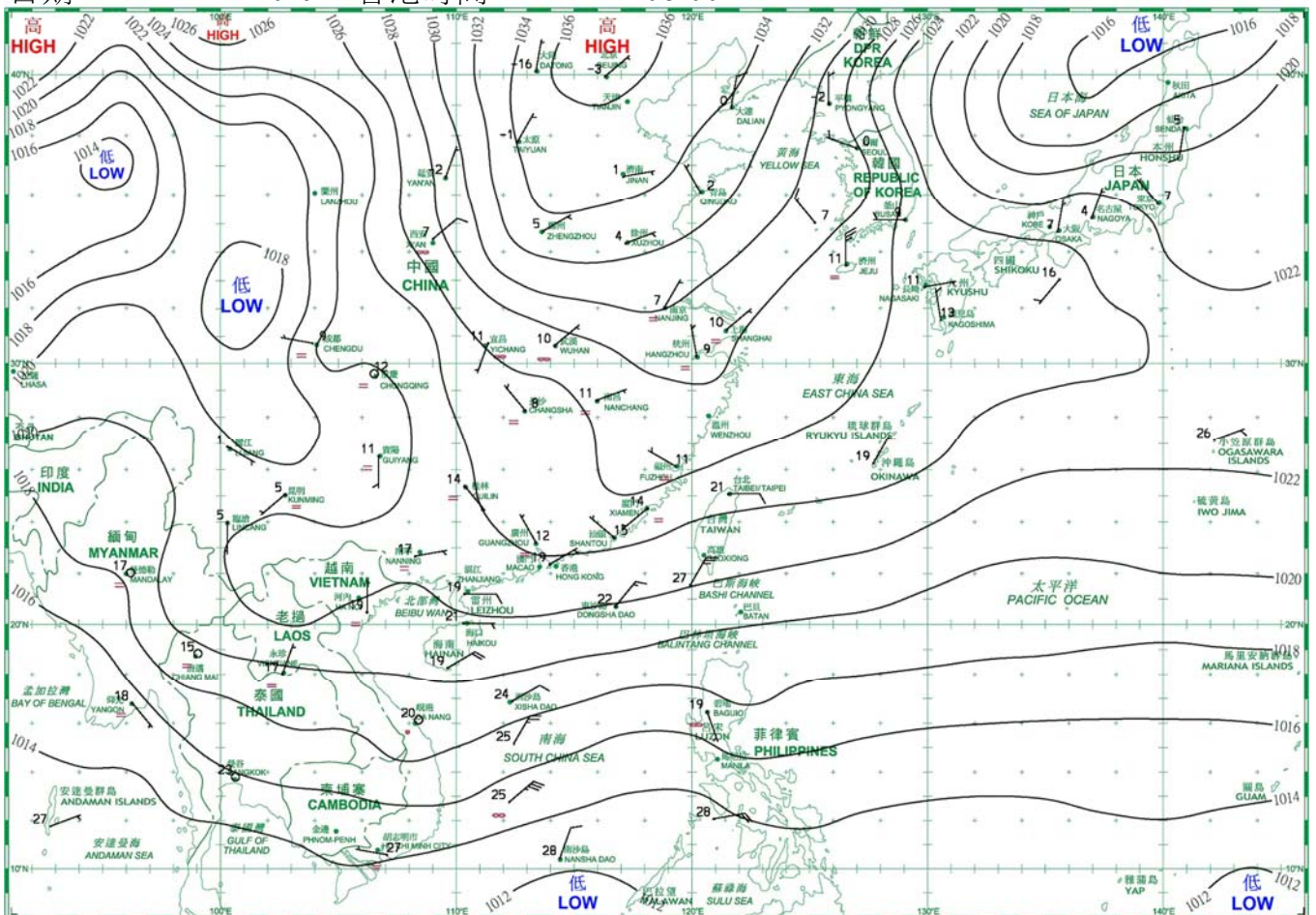




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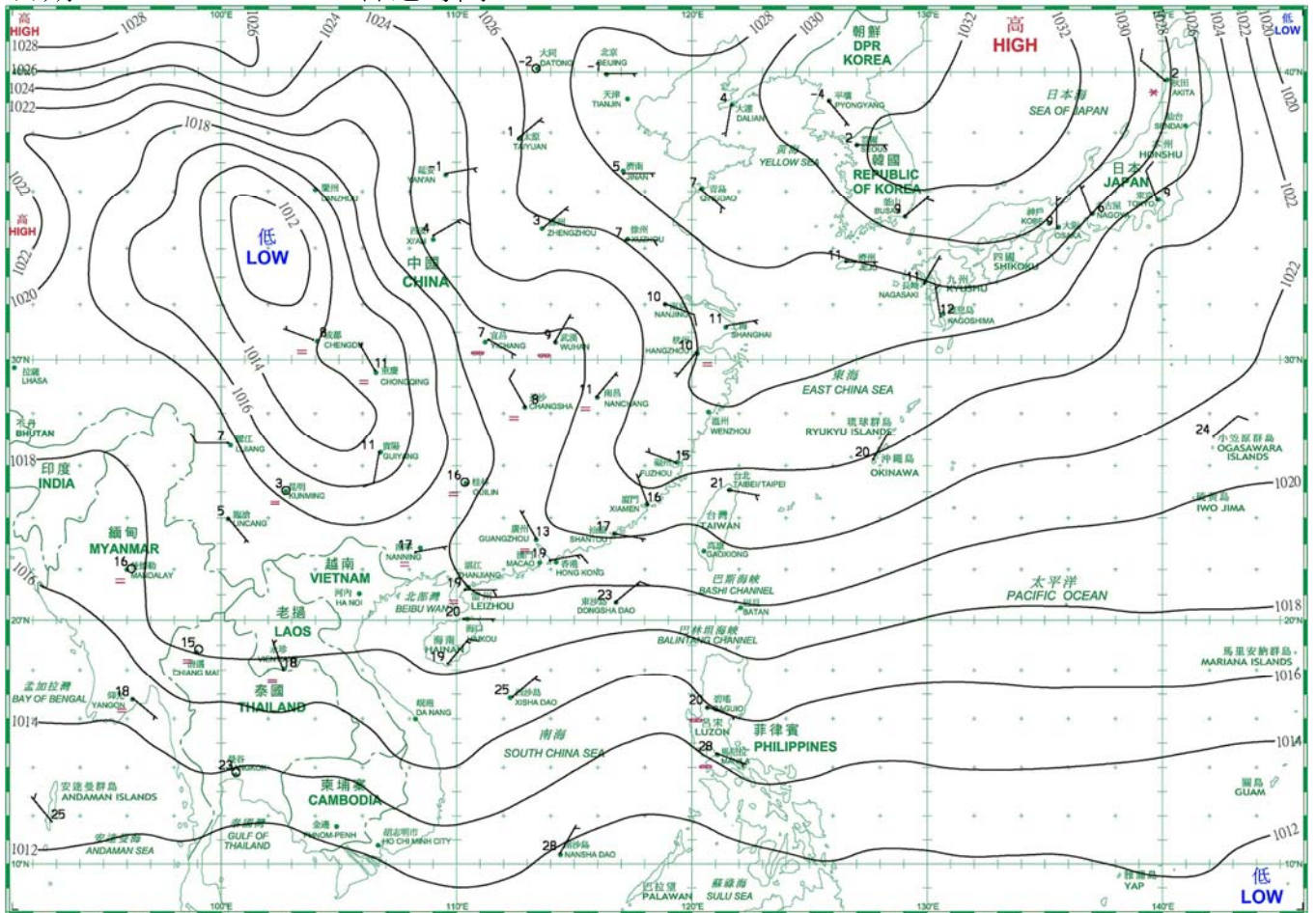


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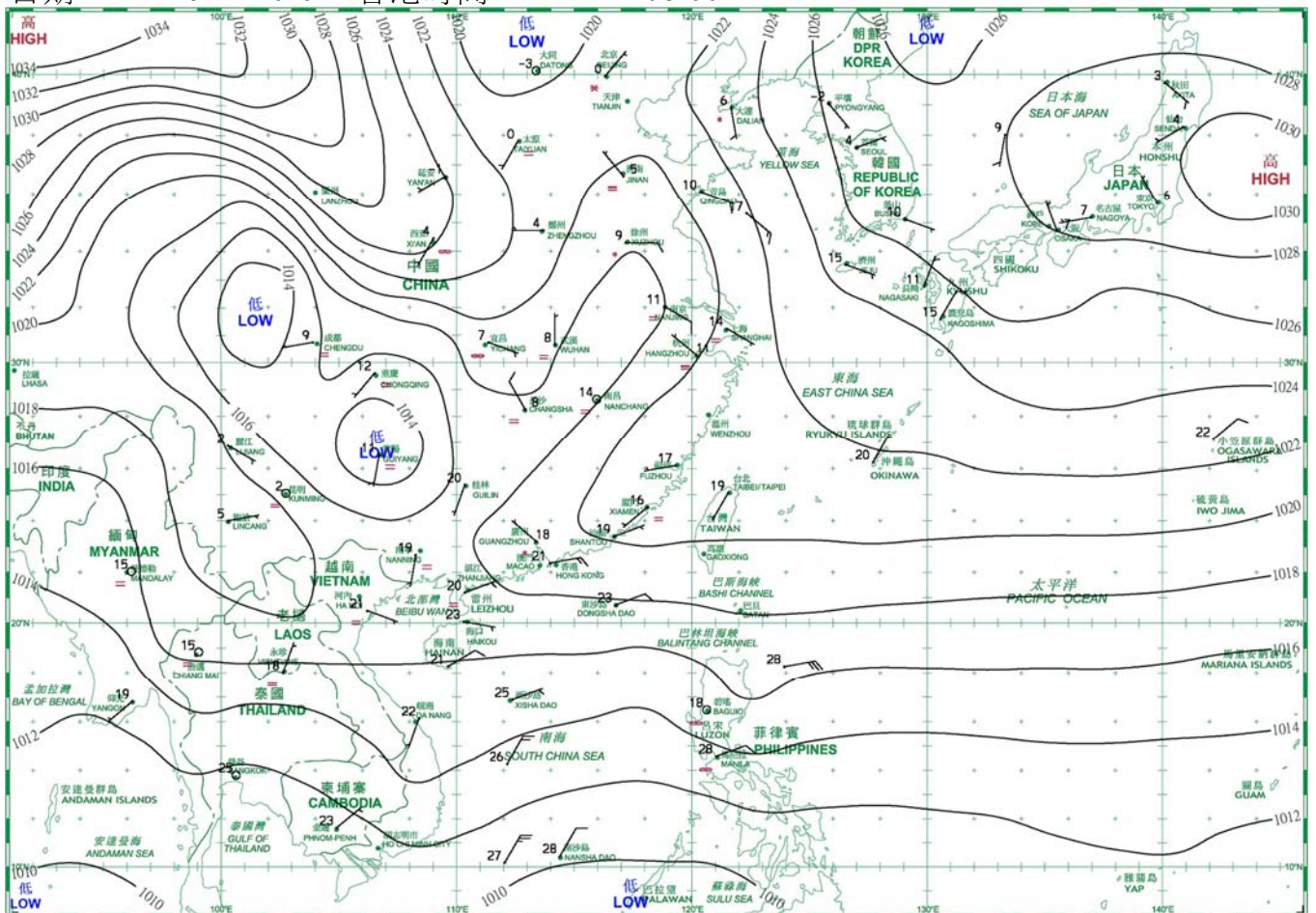




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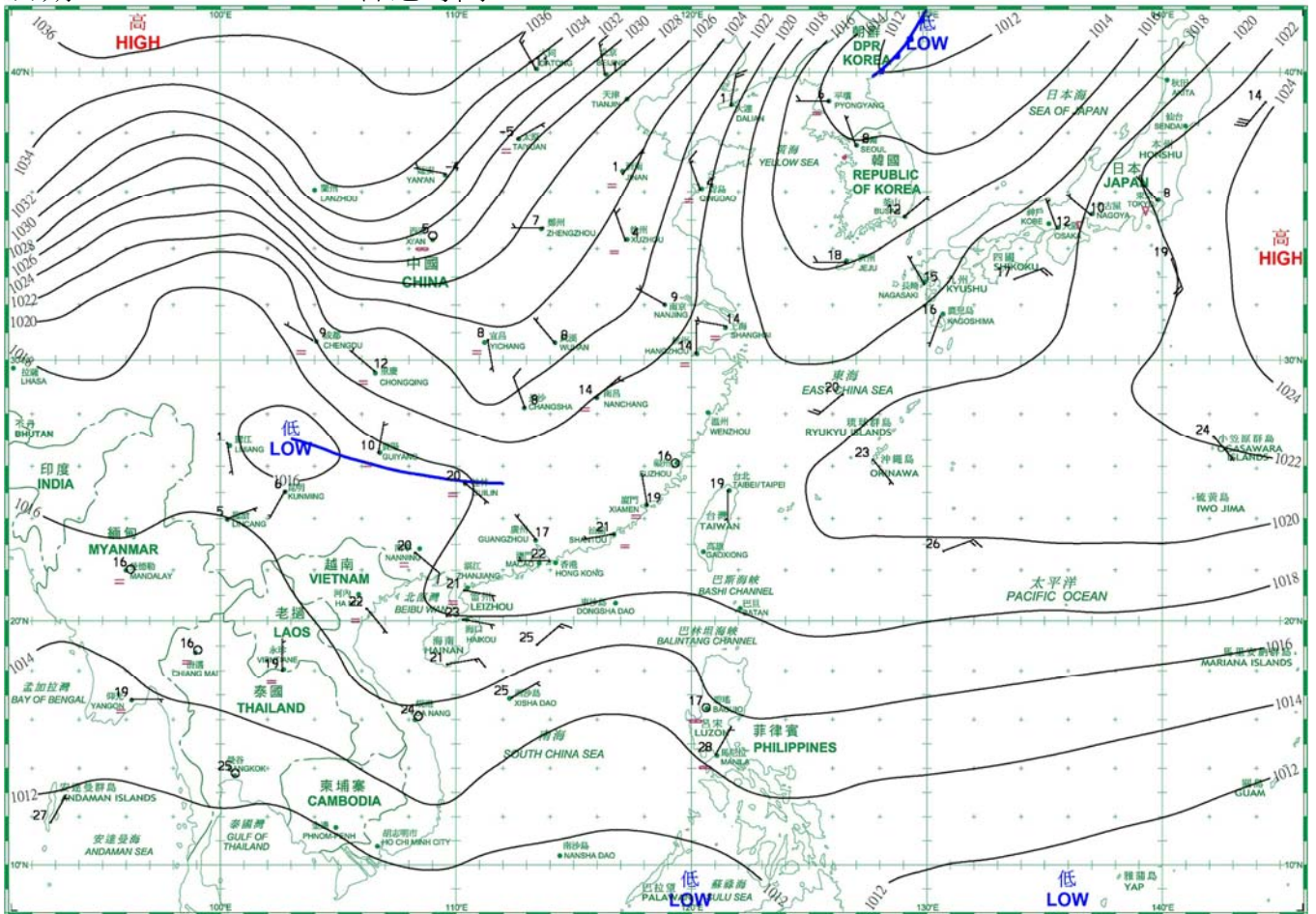


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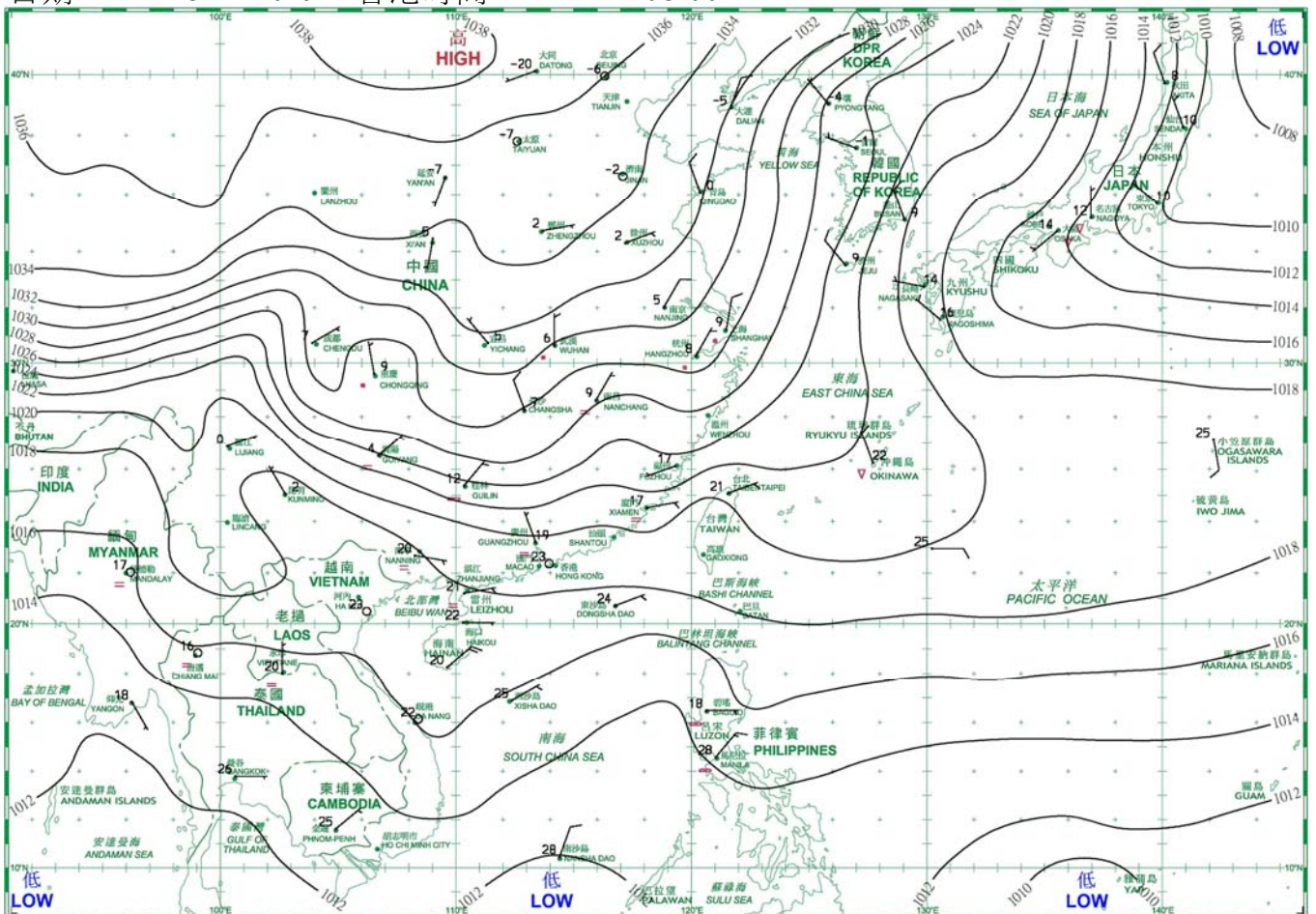




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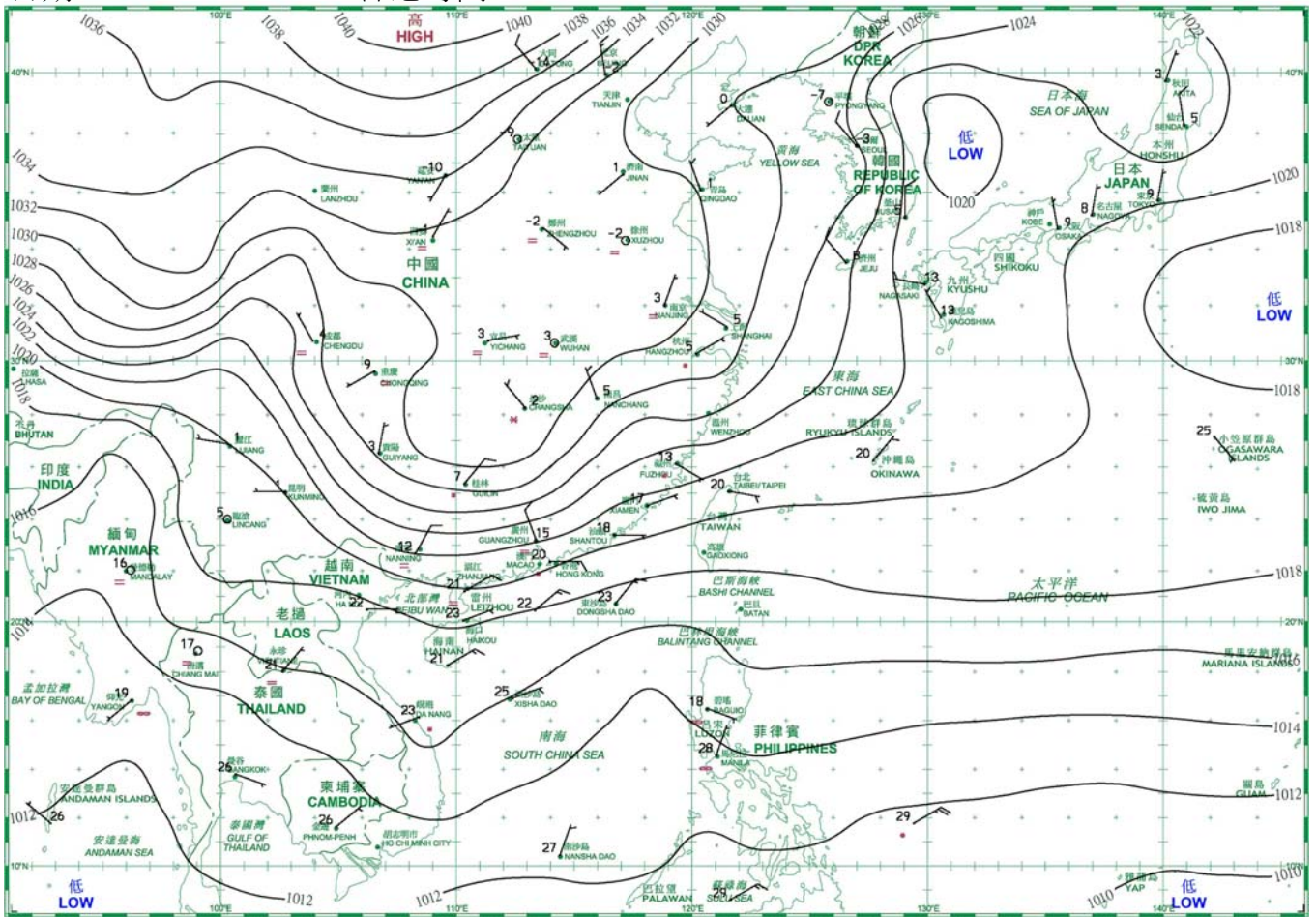


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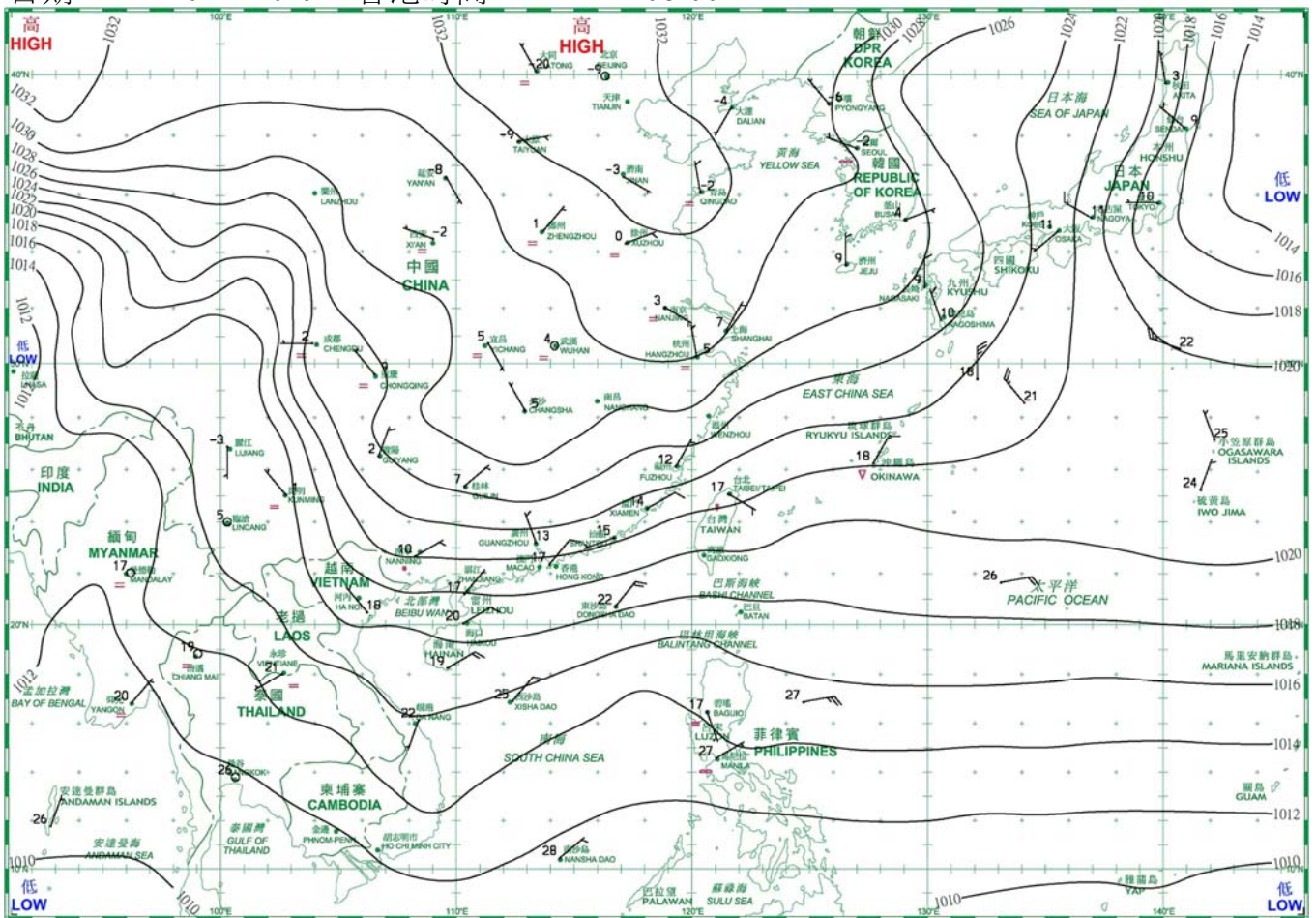




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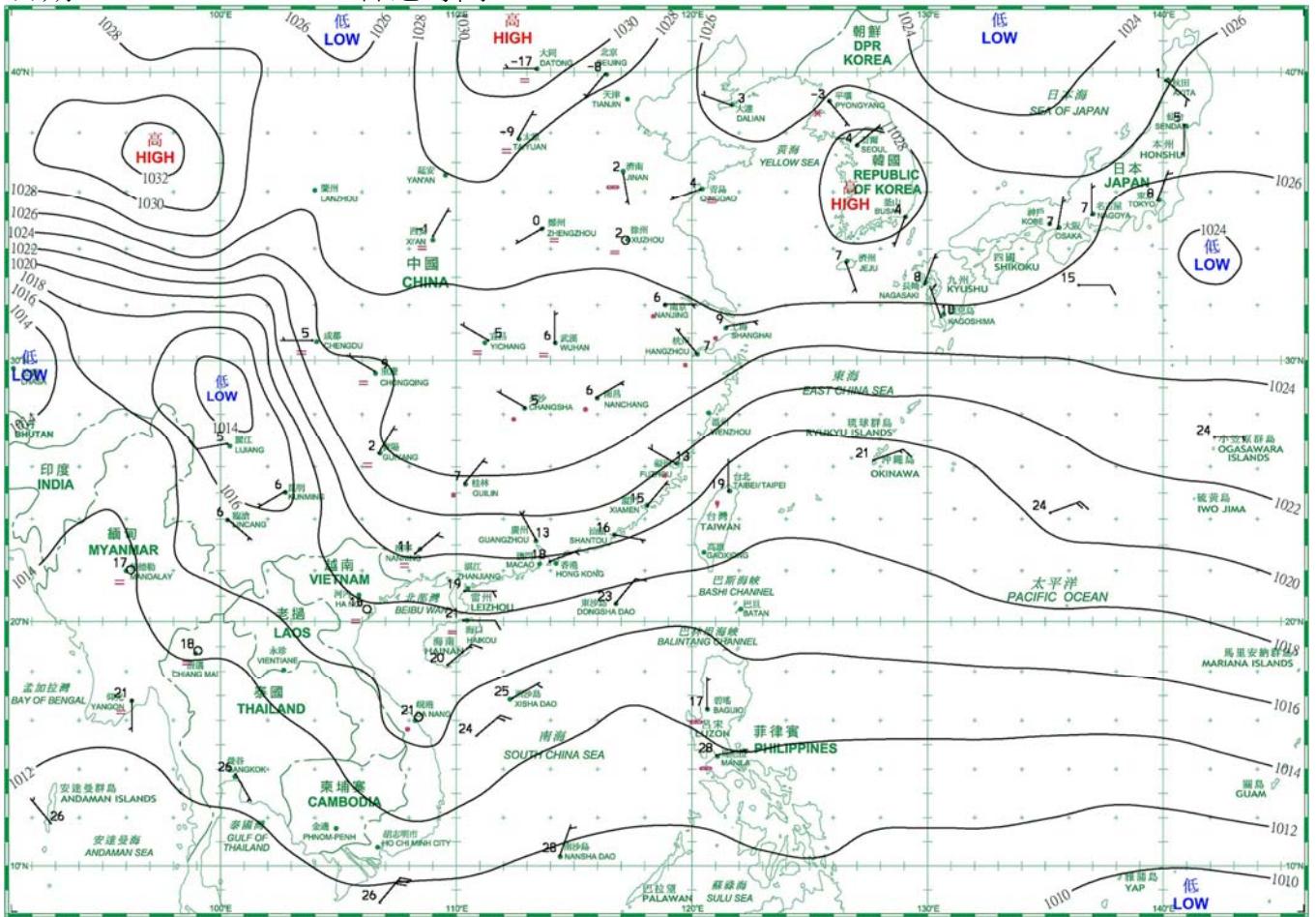


日期/Date: 20.12.2019 香港時間/HK Time: 08:00

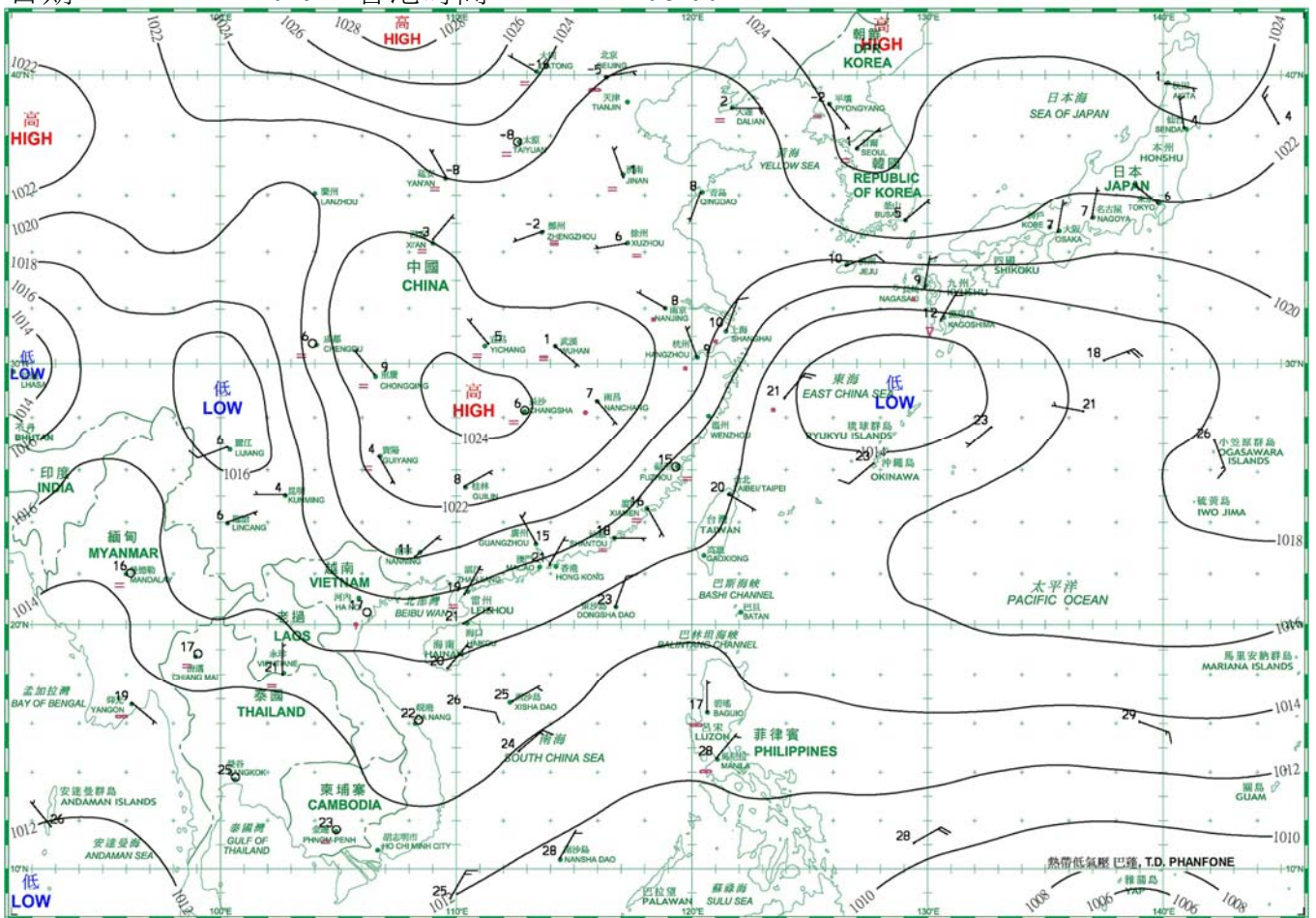




日期/Date: 21.12.2019 香港時間/HK Time: 08:00

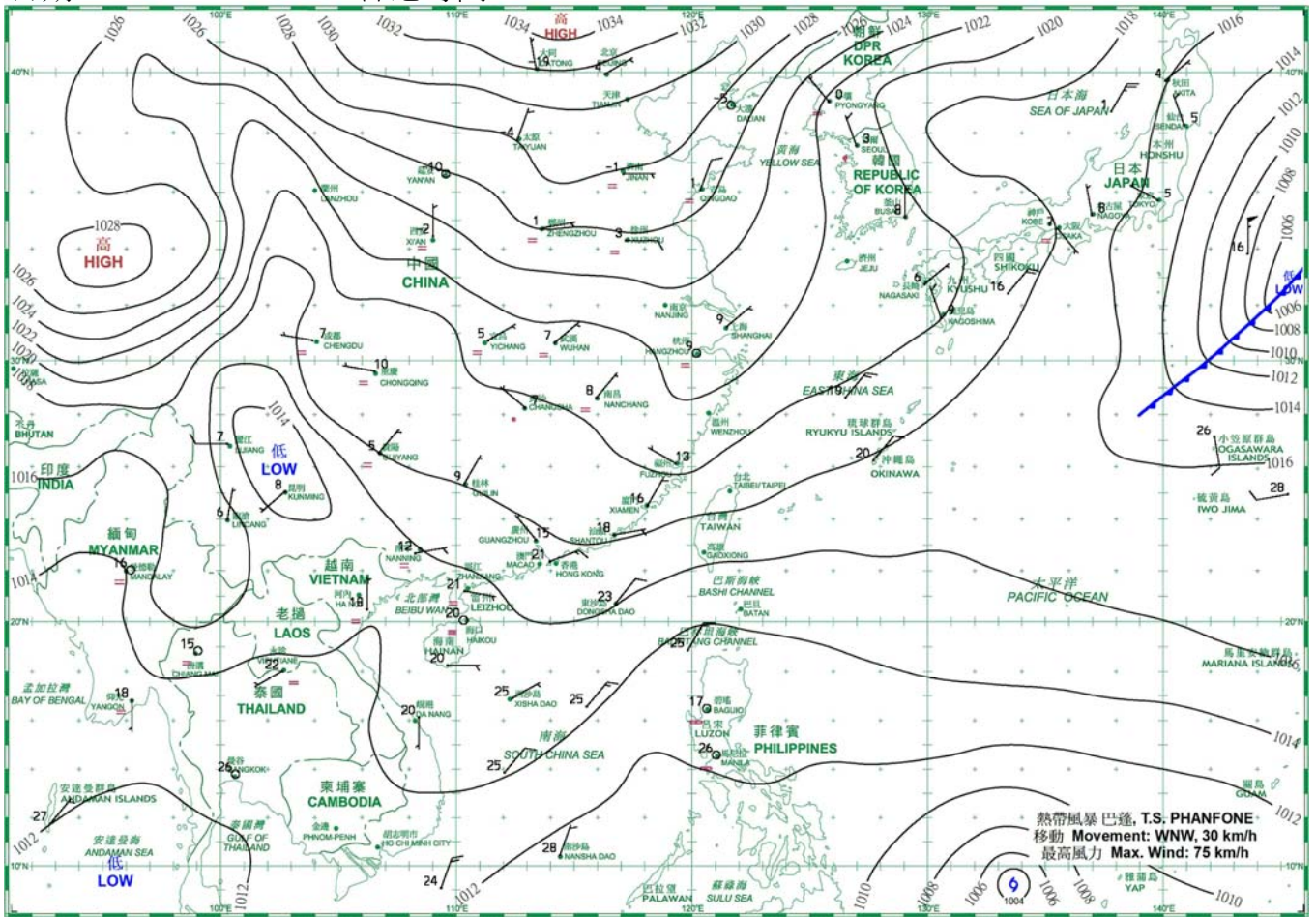


日期/Date: 22.12.2019 香港時間/HK Time: 08:00

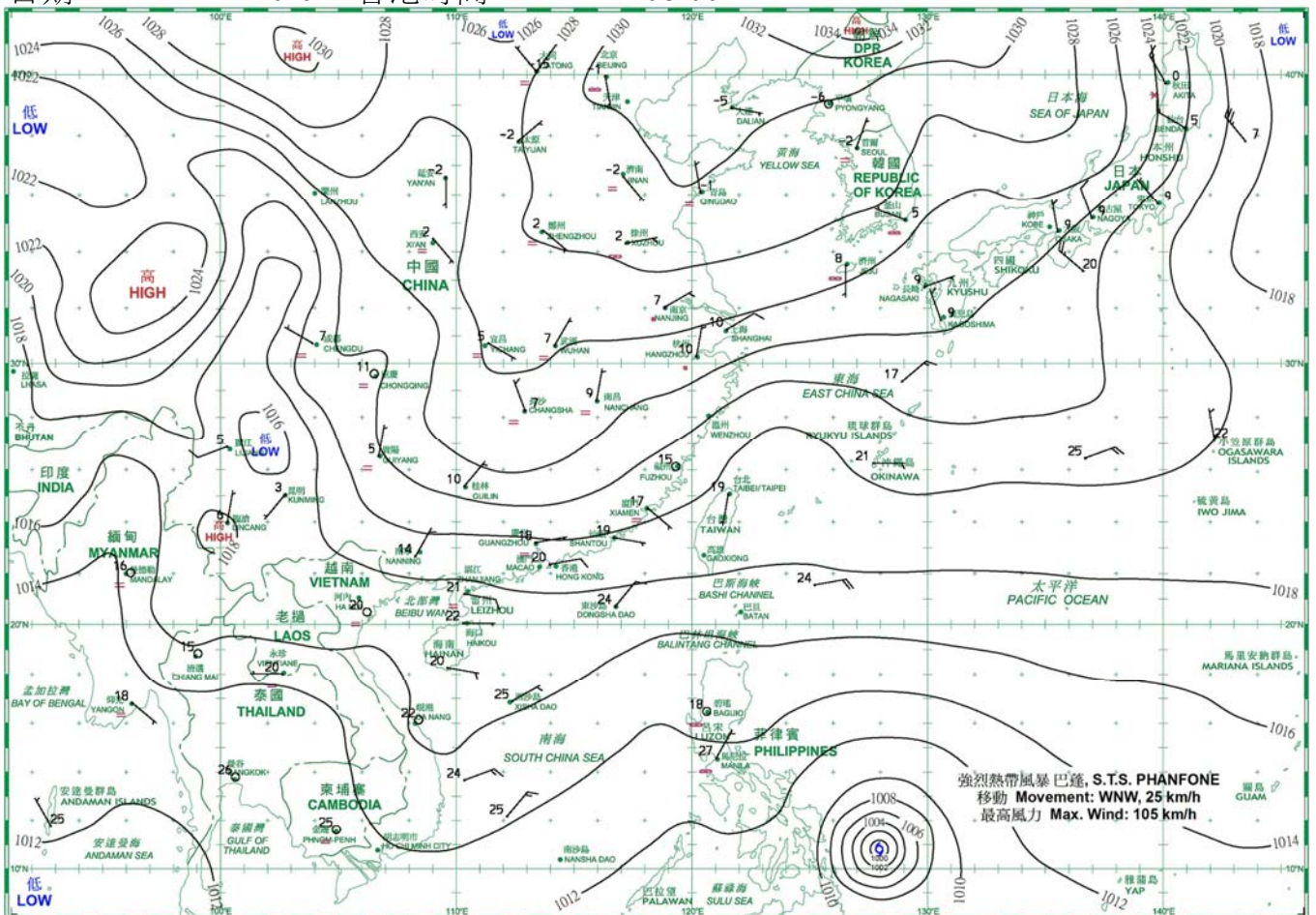




日期/Date: 23.12.2019 香港時間/HK Time: 08:00

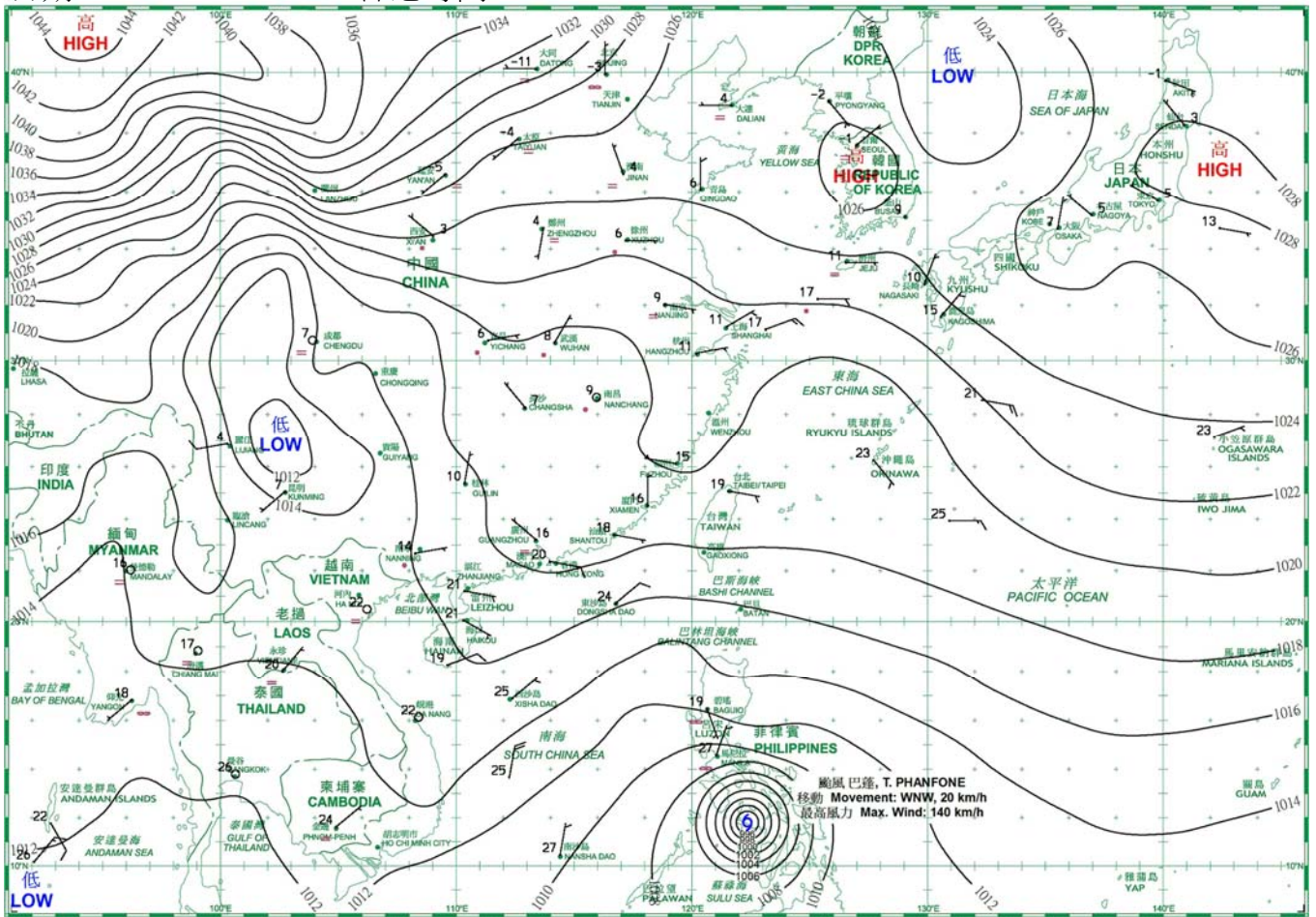


日期/Date: 24.12.2019 香港時間/HK Time: 08:00

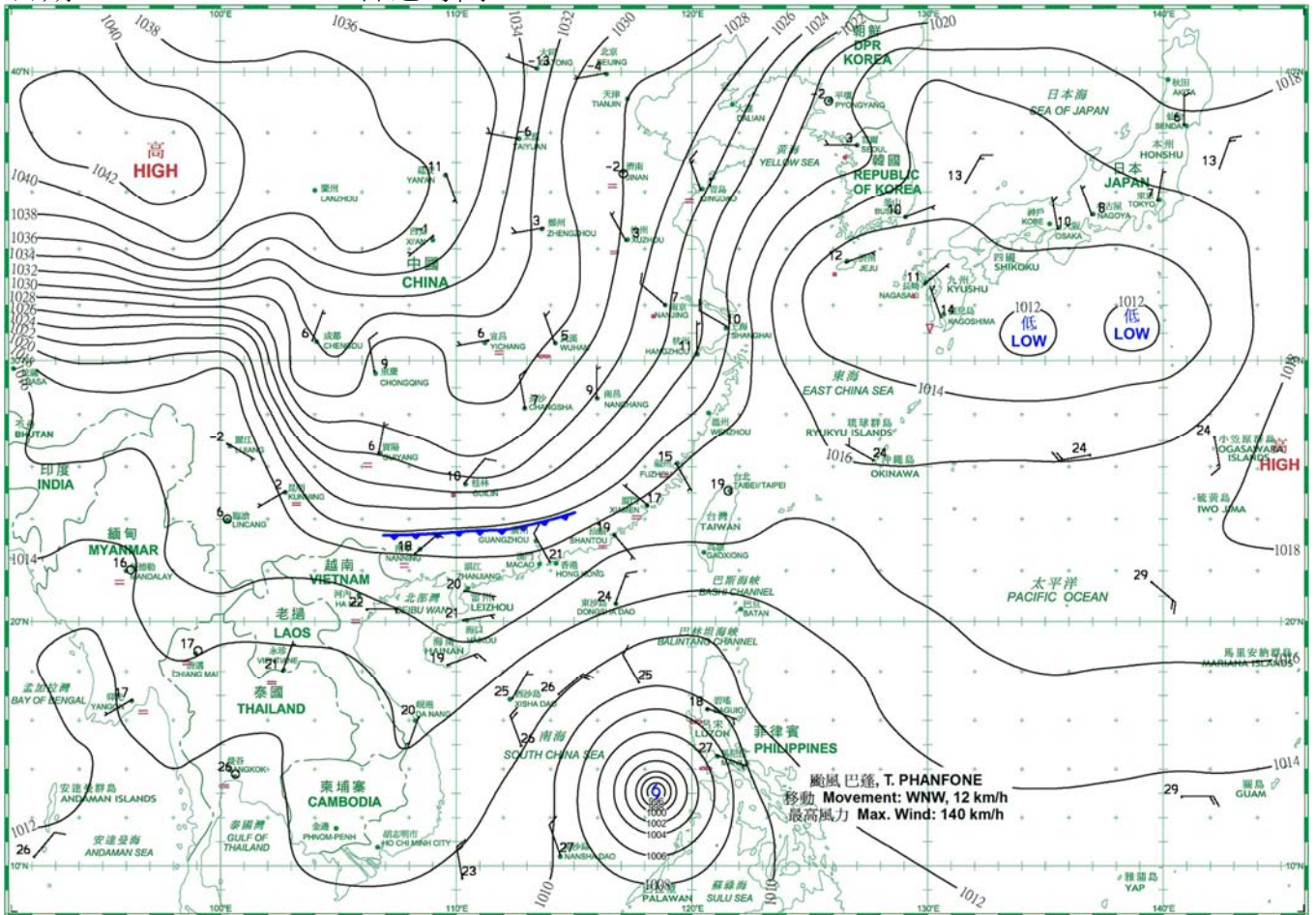




日期/Date: 25.12.2019 香港時間/HK Time: 08:00

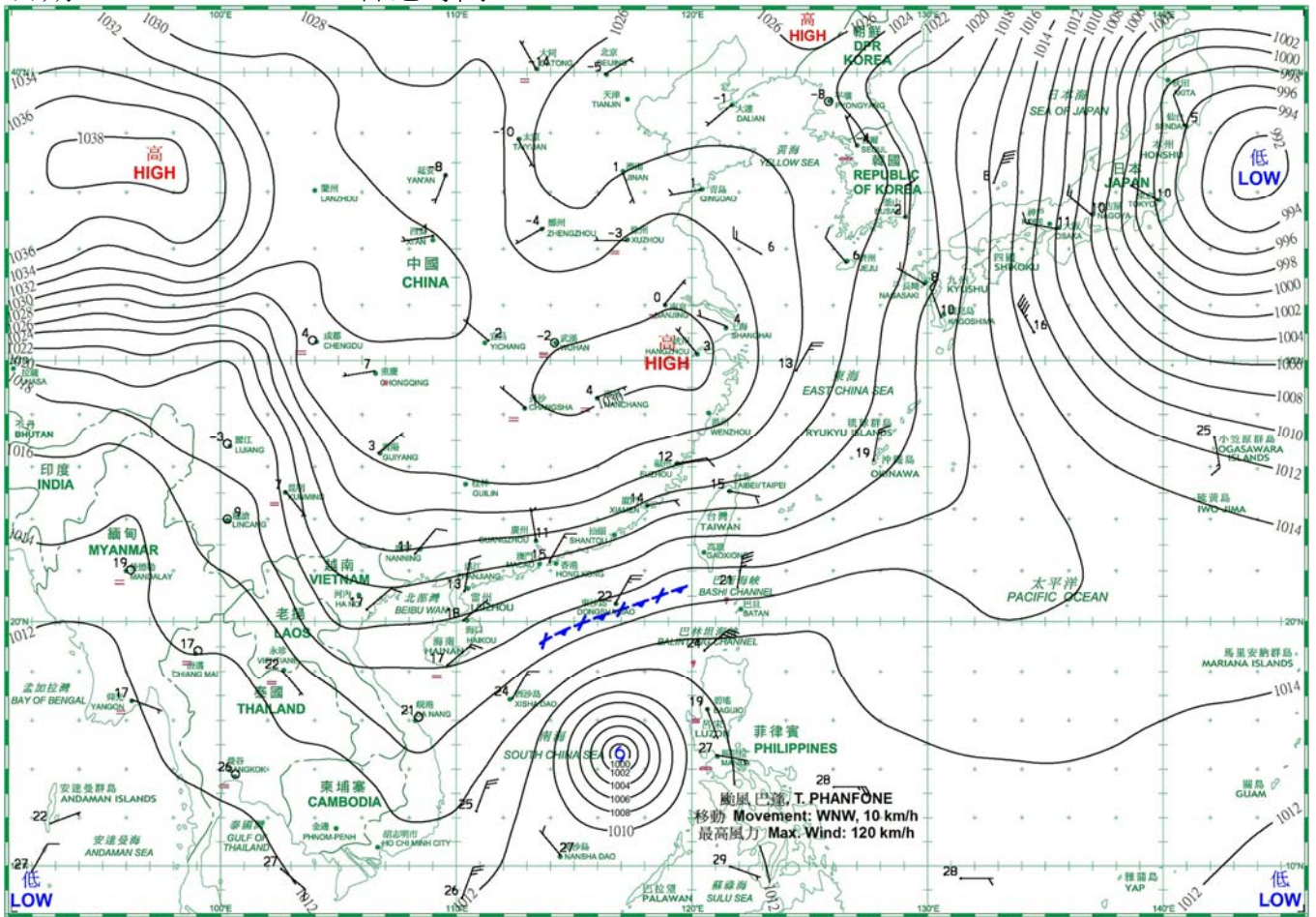


日期/Date: 26.12.2019 香港時間/HK Time: 08:00

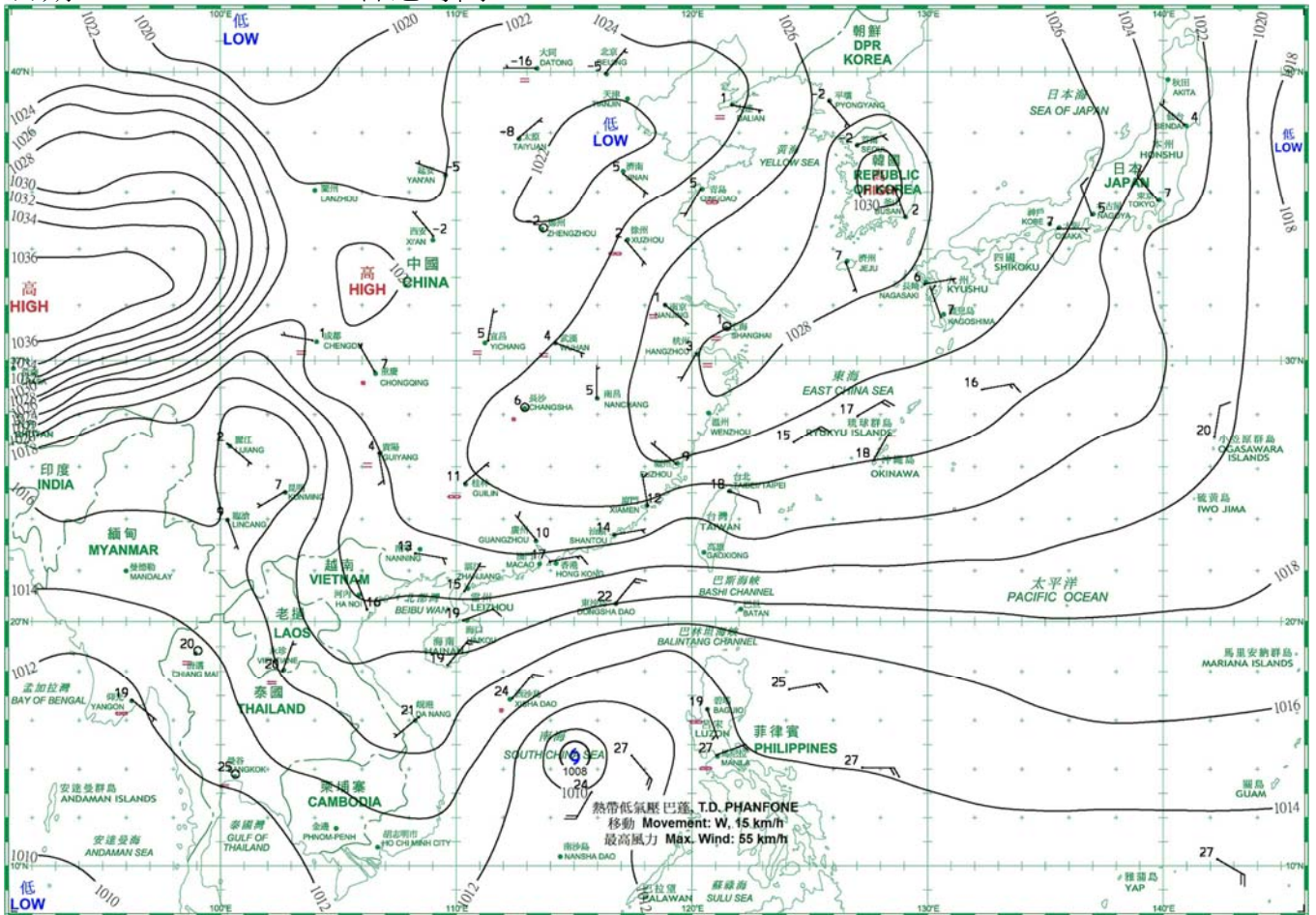




日期/Date: 27.12.2019 香港時間/HK Time: 08:00

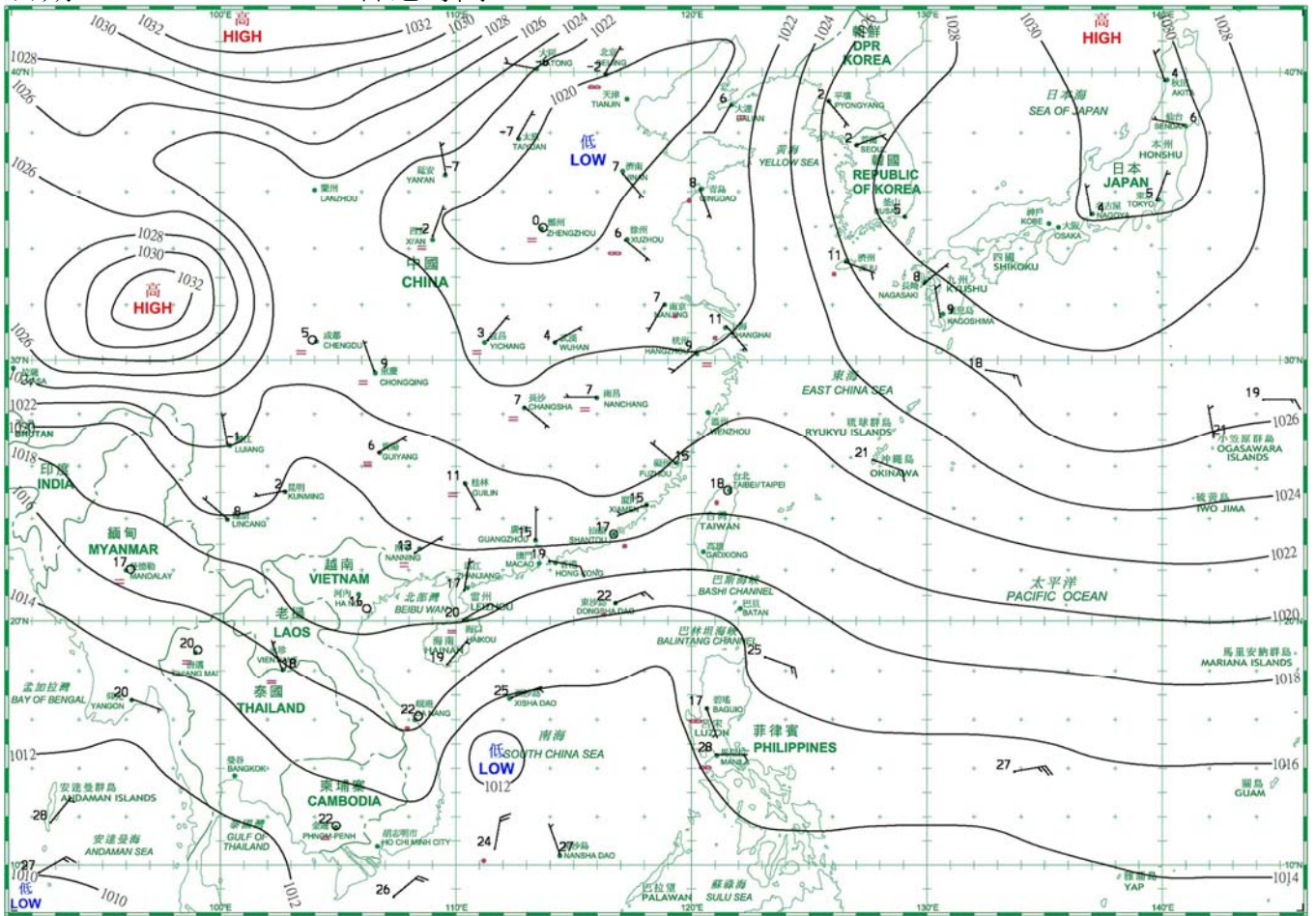


日期/Date: 28.12.2019 香港時間/HK Time: 08:00

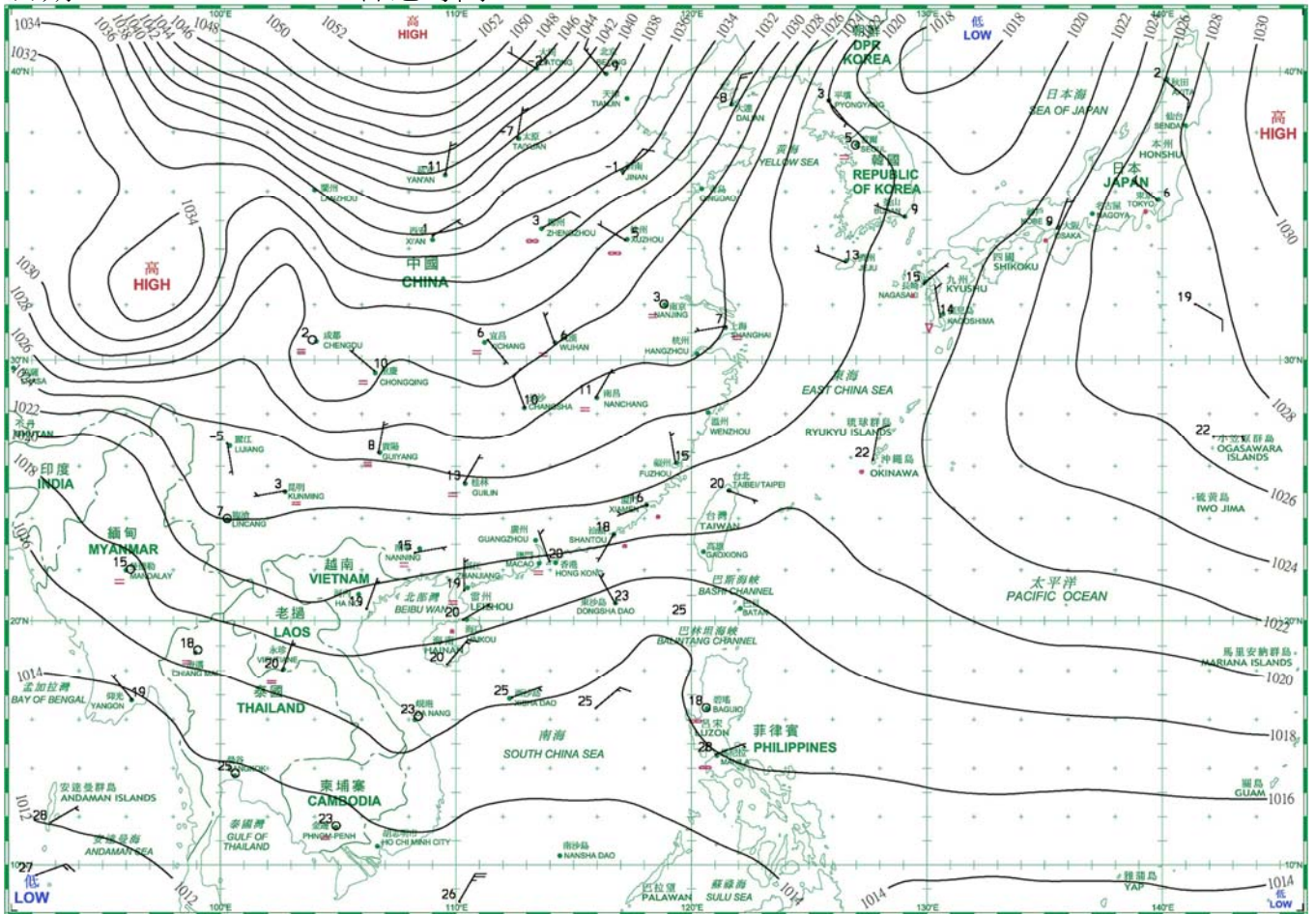




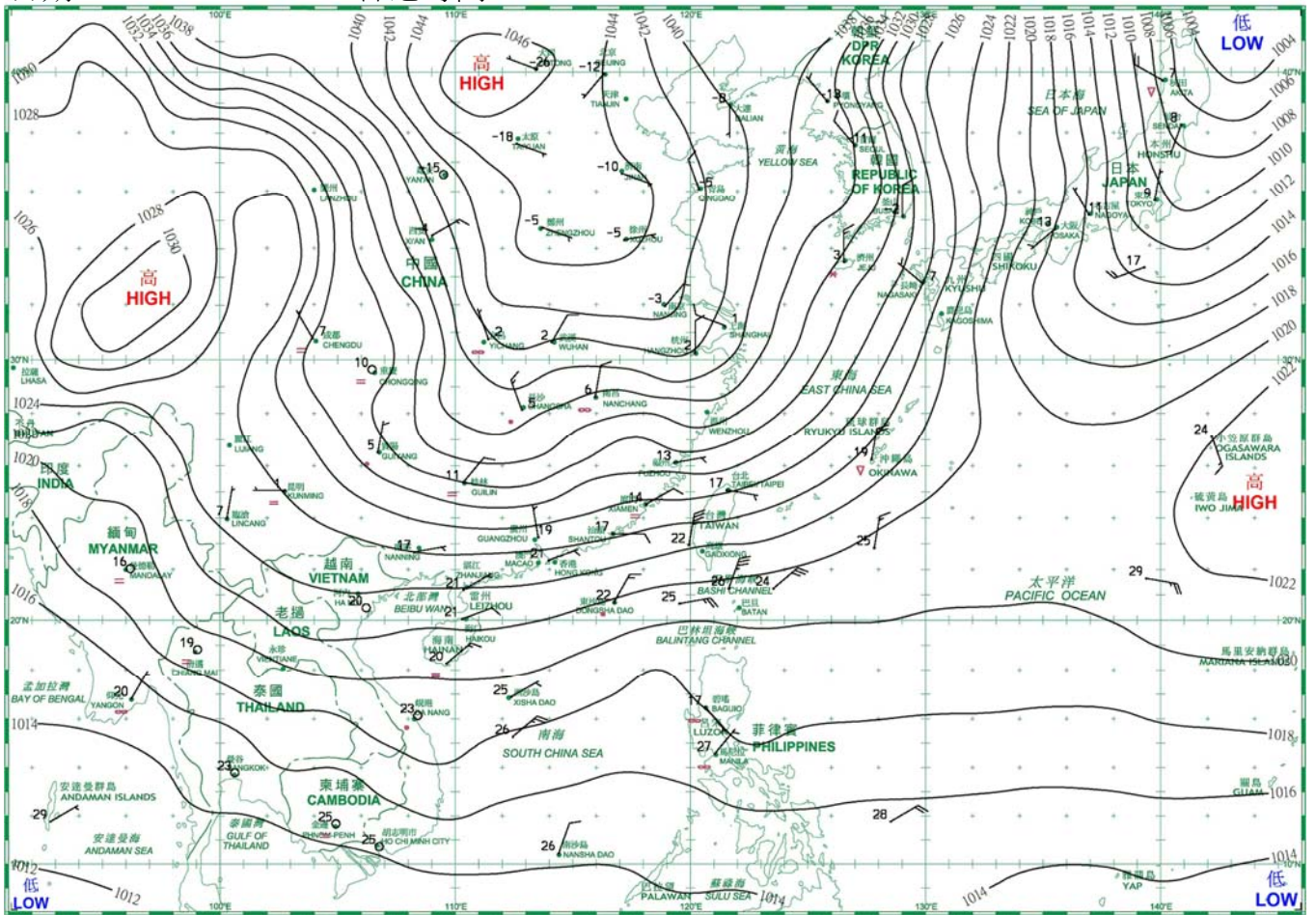
日期/Date: 29.12.2019 香港時間/HK Time: 08:00



日期/Date: 30.12.2019 香港時間/HK Time: 08:00







## 4.1.1 二零一九年十二月香港氣象觀測摘錄(一)

## 4.1.1 Extract of Meteorological Observations in Hong Kong (Part 1), December 2019

| 日期<br>Date          | 平均氣壓<br>Mean<br>Pressure     | 氣 溫<br>Air Temperature |            |               | 平均<br>露點溫度<br>Mean<br>Dew Point<br>Temperature | 平均<br>相對濕度<br>Mean<br>Relative<br>Humidity | 平均雲量<br>Mean<br>Amount<br>of Cloud | 總雨量<br>Total<br>Rainfall |
|---------------------|------------------------------|------------------------|------------|---------------|------------------------------------------------|--------------------------------------------|------------------------------------|--------------------------|
|                     |                              | 最高<br>Maximum          | 平均<br>Mean | 最低<br>Minimum |                                                |                                            |                                    |                          |
| 十二月<br>December     | 百帕斯卡<br>hPa                  | °C                     | °C         | °C            | °C                                             | %                                          | %                                  | 毫米<br>mm                 |
| 1                   | 1018.3                       | 25.5                   | 21.5       | 18.8          | 15.5                                           | 69                                         | 8                                  | -                        |
| 2                   | 1021.6                       | 20.3                   | 17.4       | 15.1          | 8.0                                            | 54                                         | 18                                 | -                        |
| 3                   | 1023.1                       | 20.1                   | 16.4       | 13.8          | 4.7                                            | 46                                         | 32                                 | -                        |
| 4                   | 1022.9                       | 20.1                   | 17.5       | 13.9          | 3.6                                            | 40                                         | 55                                 | -                        |
| 5                   | 1024.8                       | 18.3                   | 15.3       | 13.1          | 5.7                                            | 54                                         | 88                                 | 1.4                      |
| 6                   | 1024.7                       | 19.5                   | 16.5       | 12.7          | 2.3                                            | 39                                         | 47                                 | 0.3                      |
| 7                   | 1024.8                       | 19.1                   | 16.2       | 13.2          | 2.2                                            | 39                                         | 1                                  | -                        |
| 8                   | 1024.8                       | 19.5                   | 15.9       | 13.0          | 4.5                                            | 47                                         | 16                                 | -                        |
| 9                   | 1021.8                       | 21.7                   | 17.4       | 14.7          | 9.7                                            | 62                                         | 56                                 | -                        |
| 10                  | 1018.6                       | 21.9                   | 18.4       | 15.7          | 12.5                                           | 69                                         | 39                                 | -                        |
| 11                  | 1018.4                       | 24.0                   | 19.1       | 16.5          | 11.7                                           | 64                                         | 2                                  | -                        |
| 12                  | 1020.9                       | 21.4                   | 19.1       | 17.4          | 12.6                                           | 67                                         | 43                                 | -                        |
| 13                  | 1022.4                       | 22.0                   | 19.2       | 18.0          | 14.6                                           | 75                                         | 43                                 | -                        |
| 14                  | 1021.7                       | 23.3                   | 19.5       | 17.6          | 14.8                                           | 75                                         | 17                                 | -                        |
| 15                  | 1020.0                       | 20.5                   | 19.5       | 18.5          | 16.1                                           | 81                                         | 85                                 | -                        |
| 16                  | 1018.1                       | 23.7                   | 21.3       | 19.7          | 16.7                                           | 76                                         | 86                                 | -                        |
| 17                  | 1017.7                       | 26.2                   | 23.2       | 21.2          | 17.7                                           | 71                                         | 79                                 | -                        |
| 18                  | 1018.1                       | 27.3                   | 22.8       | 20.0          | 18.5                                           | 77                                         | 70                                 | -                        |
| 19                  | 1019.8                       | 21.4                   | 19.8       | 18.8          | 17.1                                           | 84                                         | 94                                 | 0.1                      |
| 20                  | 1019.6                       | 21.6                   | 19.1       | 17.7          | 15.1                                           | 78                                         | 83                                 | 0.7                      |
| 21                  | 1017.8                       | 21.9                   | 19.3       | 17.0          | 16.5                                           | 84                                         | 86                                 | 1.4                      |
| 22                  | 1015.8                       | 22.8                   | 20.5       | 19.2          | 17.7                                           | 84                                         | 60                                 | -                        |
| 23                  | 1016.7                       | 21.4                   | 20.0       | 18.9          | 17.3                                           | 85                                         | 81                                 | -                        |
| 24                  | 1017.9                       | 23.3                   | 20.4       | 19.0          | 16.9                                           | 80                                         | 44                                 | -                        |
| 25                  | 1016.4                       | 22.9                   | 20.1       | 19.0          | 16.6                                           | 80                                         | 65                                 | -                        |
| 26                  | 1016.3                       | 24.5                   | 21.0       | 17.5          | 15.8                                           | 73                                         | 29                                 | -                        |
| 27                  | 1020.3                       | 21.3                   | 18.0       | 15.6          | 11.2                                           | 65                                         | 23                                 | -                        |
| 28                  | 1020.2                       | 20.9                   | 18.5       | 16.8          | 13.1                                           | 72                                         | 64                                 | Tr                       |
| 29                  | 1018.3                       | 19.6                   | 18.8       | 17.9          | 16.8                                           | 88                                         | 92                                 | 9.3                      |
| 30                  | 1020.0                       | 22.5                   | 20.3       | 18.8          | 18.7                                           | 91                                         | 90                                 | 0.3                      |
| 31                  | 1024.9                       | 20.2                   | 19.2       | 18.0          | 16.8                                           | 86                                         | 93                                 | Tr                       |
| 平均/總值<br>Mean/Total | 1020.2                       | 21.9                   | 19.1       | 17.0          | 12.9                                           | 69                                         | 54                                 | 13.5                     |
| 正常*<br>Normal*      | 1020.5                       | 20.2                   | 17.9       | 15.9          | 11.9                                           | 69                                         | 52                                 | 26.8                     |
| 觀測站<br>Station      | 天文台<br>Hong Kong Observatory |                        |            |               |                                                |                                            |                                    |                          |

天文台於十二月二十二日 15 時 31 分錄得本月最低氣壓 1013.3 百帕斯卡。

The minimum pressure recorded at the Hong Kong Observatory was 1013.3 hectopascals at 1531 HKT on 22 December.

天文台於十二月十八日 12 時 51 分錄得本月最高氣溫 27.3 °C。

The maximum air temperature recorded at the Hong Kong Observatory was 27.3 °C at 1251 HKT on 18 December.

天文台於十二月六日 5 時 23 分錄得本月最低氣溫 12.7 °C。

The minimum air temperature recorded at the Hong Kong Observatory was 12.7 °C at 0523 HKT on 6 December.

京士柏於十二月二十九日 18 時 45 分錄得本月最高1分鐘平均降雨率 9 毫米/小時。

The maximum 1-minute mean rainfall rate recorded at King's Park was 9 millimetres per hour at 1845 HKT on 29 December.

\* 1981-2010 氣候平均值 (除特別列明外) (<http://www.hko.gov.hk/wxinfo/climat/normal/cnormal12.htm>)

\* 1981-2010 Climatological normal, unless otherwise specified (<http://www.hko.gov.hk/wxinfo/climat/normal/enormal12.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 二零一九年十二月香港氣象觀測摘錄(二)

### 4.1.2 Extract of Meteorological Observations in Hong Kong (Part 2), December 2019

| 日期<br>Date          | 出現低能見度的時數#<br>Number of hours of<br>Reduced Visibility# | 總日照<br>Total Bright<br>Sunshine | 每日太陽總輻射<br>Daily Global<br>Solar Radiation | 總蒸發量<br>Total<br>Evaporation | 盛行風向<br>Prevailing<br>Wind Direction | 平均風速<br>Mean<br>Wind Speed |
|---------------------|---------------------------------------------------------|---------------------------------|--------------------------------------------|------------------------------|--------------------------------------|----------------------------|
| 十二月<br>December     | 小時<br>hours                                             | 小時<br>hours                     | 兆焦耳/米 <sup>2</sup><br>MJ/m <sup>2</sup>    | 毫米<br>mm                     | 度<br>degrees                         | 公里/小時<br>km/h              |
| 1                   | 0                                                       | 9.6                             | 16.61                                      | 4.7                          | 360                                  | 14.0                       |
| 2                   | 0                                                       | 9.3                             | 17.02                                      | 4.7                          | 360                                  | 44.2                       |
| 3                   | 0                                                       | 9.7                             | 17.20                                      | 3.7                          | 360                                  | 31.2                       |
| 4                   | 0                                                       | 9.5                             | 17.36                                      | 5.9                          | 360                                  | 31.8                       |
| 5                   | 0                                                       | -                               | 3.88                                       | 2.6                          | 050                                  | 45.2                       |
| 6                   | 0                                                       | 7.2                             | 14.65                                      | 5.2                          | 360                                  | 49.3                       |
| 7                   | 0                                                       | 9.6                             | 18.35                                      | 4.1                          | 360                                  | 37.4                       |
| 8                   | 0                                                       | 9.6                             | 18.26                                      | 2.0                          | 090                                  | 23.3                       |
| 9                   | 0                                                       | 8.6                             | 16.14                                      | 2.4                          | 070                                  | 23.8                       |
| 10                  | 0                                                       | 8.8                             | 16.35                                      | 2.4                          | 050                                  | 16.9                       |
| 11                  | 4                                                       | 9.6                             | 16.66                                      | 2.8                          | 080                                  | 11.3                       |
| 12                  | 0                                                       | 7.1                             | 14.37                                      | 2.1                          | 070                                  | 36.8                       |
| 13                  | 0                                                       | 7.3                             | 15.38                                      | 3.1                          | 070                                  | 32.5                       |
| 14                  | 0                                                       | 9.6                             | 16.69                                      | 2.5                          | 060                                  | 25.6                       |
| 15                  | 0                                                       | -                               | 6.51                                       | 1.6                          | 060                                  | 31.0                       |
| 16                  | 0                                                       | 1.0                             | 8.22                                       | 1.8                          | 040                                  | 18.6                       |
| 17                  | 0                                                       | 5.1                             | 11.60                                      | 2.7                          | 030                                  | 13.8                       |
| 18                  | 4                                                       | 5.3                             | 12.18                                      | 3.3                          | 030                                  | 20.1                       |
| 19                  | 3                                                       | 0.6                             | 5.49                                       | 1.9                          | 070                                  | 27.3                       |
| 20                  | 2                                                       | 4.7                             | 12.27                                      | 2.0                          | 070                                  | 24.4                       |
| 21                  | 6                                                       | 3.0                             | 10.06                                      | 1.4                          | 020                                  | 16.9                       |
| 22                  | 21                                                      | 5.5                             | 12.15                                      | 2.1                          | 030                                  | 7.2                        |
| 23                  | 7                                                       | 0.3                             | 6.38                                       | 1.6                          | 070                                  | 23.4                       |
| 24                  | 0                                                       | 8.6                             | 15.84                                      | 2.4                          | 060                                  | 17.2                       |
| 25                  | 5                                                       | 7.7                             | 14.89                                      | 2.0                          | 060                                  | 21.8                       |
| 26                  | 9                                                       | 9.4                             | 13.76                                      | 4.0                          | 360                                  | 19.3                       |
| 27                  | 0                                                       | 9.4                             | 16.24                                      | 2.5                          | 360                                  | 32.0                       |
| 28                  | 0                                                       | 6.1                             | 13.23                                      | 2.3                          | 070                                  | 28.3                       |
| 29                  | 0                                                       | -                               | 3.43                                       | 0.3                          | 050                                  | 22.7                       |
| 30                  | 3                                                       | -                               | 4.59                                       | 1.7                          | 070                                  | 22.8                       |
| 31                  | 2                                                       | -                               | 1.93                                       | 1.1                          | 070                                  | 43.1                       |
| 平均/總值<br>Mean/Total | 66                                                      | 182.2                           | 12.51                                      | 82.9                         | 070                                  | 26.2                       |
| 正常*<br>Normal*      | 205.5 §                                                 | 172.2                           | 10.89                                      | 83.7                         | 070                                  | 26.0                       |
| 觀測站<br>Station      | 香港國際機場<br>Hong Kong<br>International Airport            | 京士柏<br>King's Park              | 橫瀾島^<br>Waglan Island^                     |                              |                                      |                            |

橫瀾島於十二月五日 10 時 43 分錄得本月最高陣風 79 公里/小時，風向 050 度。

The maximum gust peak speed recorded at Waglan Island was 79 kilometres per hour from 050 degrees at 1043 HKT on 5 December.

# 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的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/cnormal12.htm>)

\* 1981-2010 Climatological normal, unless otherwise specified (<http://www.hko.gov.hk/wxinfo/climat/normal/enormal12.htm>)

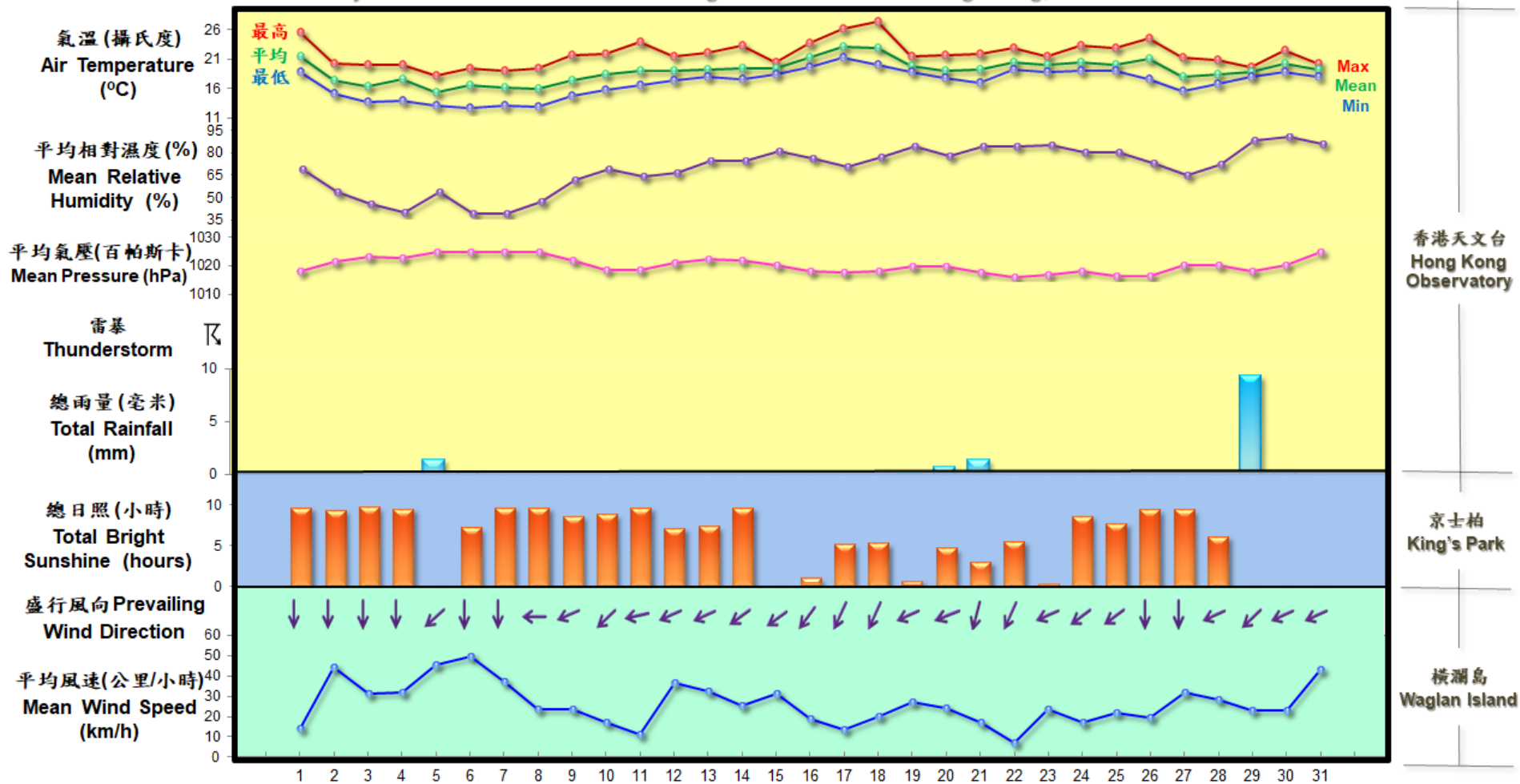
§ 1997-2018 平均值

§ 1997-2018 Mean value



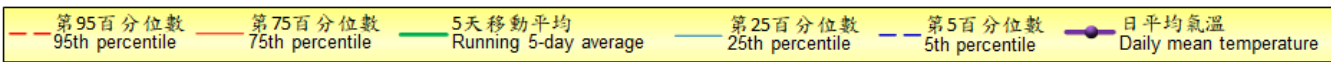
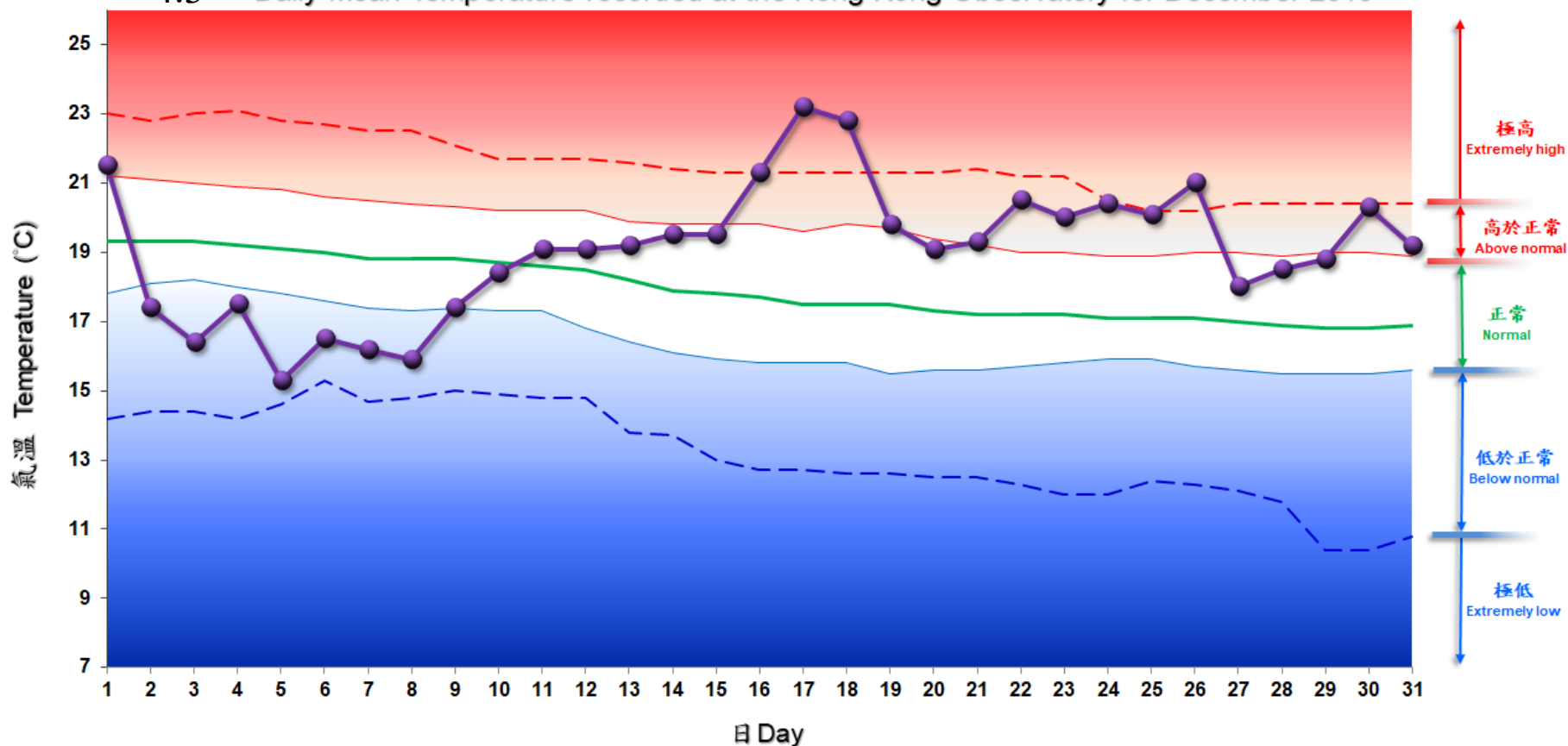
## 4.2 2019年12月部分香港氣象要素的每日記錄

### 4.2 Daily Values of Selected Meteorological Elements for Hong Kong, December 2019



### 4.3 2019年12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 December 2019



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

## 5. 二零一九年天氣概況

根據世界氣象組織的初步評估，2019 年很可能是全球有記錄以來第二或第三最暖的年份。2019 年 9 月份北極的每日最低海冰面積是有衛星記錄以來的第二低，而 10 月份的海冰面積更進一步降至紀錄新低。2019 年各類極端天氣事件在全球多處肆虐，當中包括西歐和北歐、中東、印度、日本、澳洲、紐西蘭及南美洲南部的持續熱浪；北美洲中部的寒潮；東南亞多處地區、太平洋西南部、澳洲東部及非洲之角的嚴重乾旱；極端降雨引致的嚴重水浸亦影響印度西部和北部、華南部分地區、伊朗、澳洲昆士蘭省北部、紐西蘭南島西岸、印尼查亞普拉、美國中部大部分地區及加拿大東部部分地區；熱帶氣旋引致的大風、風暴潮及暴雨為美國東岸部分地區、德州東部、加拿大新斯科舍省、日本、印度、菲律賓、莫桑比克、津巴布韋部分地區及巴哈馬帶來嚴重破壞及重大傷亡；強烈風暴為西班牙部分地區、法國南部、法國科西嘉島、意大利威尼斯、希臘塞薩洛尼基、非洲東部、巴基斯坦及印度北部和西部帶來嚴重破壞。而高溫及乾旱引發的山火亦在北美洲西部、阿拉斯加、俄羅斯西伯利亞、亞馬遜盆地、玻利維亞、委內瑞拉、印尼及澳洲多處地區造成災害。

一個微弱的厄爾尼諾現象在 2019 年初形成，隨後赤道太平洋中部及東部的海水表面溫度冷卻並於 7 月回復正常。接近年底該區海水表面溫度有所上升。

本港方面，由於年內有十一個月較正常溫暖，2019 年是自 1884 年有記錄以來最暖的年份，全年平均氣溫為 24.5 度，較 1981-2010 年氣候正常值<sup>[1]</sup>高 1.2 度(或較 1961-1990 年氣候正常值高 1.5 度)。而全年平均最高氣溫 27.1 度及平均最低氣溫 22.6 度亦是有記錄以來的最高。當中 2018 年 12 月至 2019 年 2 月的冬季及 2019 年 9 月至 11 月的秋季平均氣溫分別高達 19.1 度及 26.1 度，兩者均是有記錄以來的最高。香港天文台於 8 月 9 日錄得全年最高氣溫 35.1 度，是自 1884 年有記錄以來的第十四高。2019 年的全年熱夜<sup>[2]</sup>數目 46 天及酷熱天氣<sup>[3]</sup>日數 33 天，分別是有記錄以來最高及第四高。

香港天文台於 1 月 1 日錄得的 11.4 度為全年最低氣溫，亦是有記錄以來最高的全年絕對最低氣溫。全年寒冷天氣<sup>[4]</sup>日數只有一天，較 1981-2010 年氣候正常值少 16.1 天，是自 1884 年有記錄以來寒冷天氣日數最少的年份。

2019 年本港的全年雨量為 2396.2 毫米，接近 1981-2010 年氣候正常值 2398.5 毫米 (較 1961-1990 年氣候正常值多約百分之 8)。2019 年天文台曾發出三次紅色暴雨警告。本年並沒有發出黑色暴雨警告。2019 年的雷暴日數為 59 天，較 1981-2010 年正常值 38.6 天多 20.4 天，是自 1947 年有記錄以來其中一個最多雷暴日數的年份。

2019 年共有 28 個熱帶氣旋影響北太平洋西部及南海，較 1961-2010 年長期平均約 30 個為少。全年有 16 個熱帶氣旋達到颱風或以上強度<sup>[5]</sup>，略高於長期平均的約 15 個，當中有七個熱帶氣旋達到超強颱風強度(中心附近最高十分鐘持續風速達到每小時 185 公里或以上)。年內有五個熱帶氣旋引致香港天文台發出熱帶氣旋警告信號，略少於長期年平均的約六個。天文台在 7 月韋帕吹襲本港期間曾發出八號烈風或暴風信號，而在 9 月劍魚吹襲本港期間，天文台曾發出三號強風信號。

至於各月份的詳細天氣論述，可參考「每月天氣摘要」網頁：  
<https://www.weather.gov.hk/tc/wxinfo/pastwx/mws/mws.htm>

2019 年本港發生的重要天氣事件扼述如下：

### **最暖的冬季和秋季**

由於 2018 年 12 月至 2019 年 2 月天氣持續異常溫暖，本港經歷了一個自 1884 年有記錄以來最溫暖的冬季。2018 年 12 月至 2019 年 2 月的平均氣溫、平均最高氣溫及平均最低氣溫分別達至 19.1 度、21.4 度及 17.5 度，全是有記錄以來的最高，亦較其各自正常值高出超過兩度。

由於 2019 年 9 月至 10 月大部分時間受到華南的高空反氣旋所支配，加上 2019 年 11 月持續雨量稀少及陽光充沛，本港秋季平均氣溫高達 26.1 度，較正常值 25.0 度高 1.1 度，是有記錄以來其中一個最暖的秋季。此外，秋季平均最高氣溫為 29.1 度，亦是有記錄以來最高。

### **最多熱夜數目和最少寒冷天氣日數**

2019 年全年熱夜數目高達 46 天，較正常值多 28.2 天，是自 1884 年有記錄以來最多。此外，9 月 8 日至 14 日連續七天的熱夜，亦是自 1884 年以來九月份的最長連續熱夜紀錄。受異常溫暖的冬季和秋季影響，全年只得一天寒冷天氣日子，是有記錄以來最少。

### **4 月 20 日的狂風雷暴**

一道夾雜著頻密閃電、大雨及猛烈狂風的強雷雨帶於 4 月 20 日下午橫過本港，伴隨著雷雨帶的猛烈狂風為維港部分地區帶來超過時速 100 公里的陣風，而京士柏錄得的最高陣風達每小時 117 公里，是京士柏自動氣象站自 1992 年開始運作以來在非熱帶氣旋情況下的最高紀錄。此外，當天本港地區錄得約 9090 次雲對地閃電，是自 2005 年推出閃電定位系統以來 4 月份的最高紀錄。當日下午惡劣天

氣期間，一人在大澳行山時被雷電擊中死亡，一艘舢舨在東龍洲海域翻側，兩人不幸遇溺身亡。此外，本港不同地區亦有塌樹及棚架倒塌的報告。

附註：

[1] 1961-1990 年、1971-2000 及 1981-2010 年氣候正常值，可參考：  
<https://www.weather.gov.hk/tc/cis/normal.htm>

除特別列明外，本文採用 1981-2010 氣候正常值。

[2] 熱夜指當日最低氣溫在 28.0 度或以上。

[3] 酷熱天氣指當日最高氣溫達 33.0 度或以上。

[4] 寒冷天氣指當日最低氣溫在 12.0 度或以下。

[5] 熱帶氣旋分級資料可瀏覽 <https://www.weather.gov.hk/tc/informtc/class.htm>

表 5.1.1 2019 年破紀錄高溫天氣事件摘要

| 破紀錄事件 (自 1884 年有記錄以來) | 日期 / 週期                 | 新紀錄    |
|-----------------------|-------------------------|--------|
| 1. 最高冬季平均氣溫           | 2018 年 12 月至 2019 年 2 月 | 19.1°C |
| 2. 最少冬季寒冷天氣日數         | 2018 年 12 月至 2019 年 2 月 | 3 天    |
| 3. 最高農曆年初一至初三平均氣溫     | 2019 年 2 月 5 日至 7 日     | 21.8°C |
| 4. 最高 3 月份日最低氣溫*      | 2019 年 3 月 22 日         | 24.8°C |
| 5. 最高 4 月份平均最低氣溫**    | 2019 年 4 月              | 22.9°C |
| 6. 最高 4 月份日平均氣溫***    | 2019 年 4 月 25 日         | 28.5°C |
| 7. 最高 5 月份日最低氣溫       | 2019 年 5 月 19 日         | 29.2°C |
| 8. 最高夏至日平均氣溫          | 2019 年 6 月 21 日         | 30.8°C |
| 9. 最高夏至日最低氣溫          | 2019 年 6 月 21 日         | 29.5°C |
| 10. 最高 6 月份日最低氣溫****  | 2019 年 6 月 29 日         | 29.5°C |
| 11. 最高上半年平均氣溫         | 2019 年 1 月至 6 月         | 23.0°C |
| 12. 最高上半年平均最高氣溫       | 2019 年 1 月至 6 月         | 25.4°C |
| 13. 最高上半年平均最低氣溫       | 2019 年 1 月至 6 月         | 21.3°C |
| 14. 最高 7 月份平均最低氣溫     | 2019 年 7 月              | 27.7°C |
| 15. 最高中秋節日最高氣溫        | 2019 年 9 月 13 日         | 33.0°C |
| 16. 最多 9 月熱夜日數#       | 2019 年 9 月              | 7 天    |
| 17. 最多 9 月連續熱夜日數      | 2019 年 9 月              | 7 天    |
| 18. 最高 10 月份日平均氣溫     | 2019 年 10 月 1 日         | 30.3°C |
| 19. 最高國慶日日平均氣溫        | 2019 年 10 月 1 日         | 30.3°C |
| 20. 最高國慶日日最低氣溫        | 2019 年 10 月 1 日         | 28.4°C |
| 21. 最高秋季平均氣溫##        | 2019 年 9 月至 11 月        | 26.1°C |
| 22. 最高秋季平均最高氣溫        | 2019 年 9 月至 11 月        | 29.1°C |
| 23. 最高下半年平均氣溫###      | 2019 年 7 月至 12 月        | 25.9°C |
| 24. 最高下半年平均最高氣溫####   | 2019 年 7 月至 12 月        | 28.6°C |
| 25. 最多全年熱夜日數          | 2019 年                  | 46 天   |
| 26. 最少全年寒冷天氣日數        | 2019 年                  | 1 天    |
| 27. 最高全年平均氣溫          | 2019 年                  | 24.5°C |
| 28. 最高全年平均最高氣溫        | 2019 年                  | 27.1°C |
| 29. 最高全年平均最低氣溫        | 2019 年                  | 22.6°C |
| 30. 最高全年最低氣溫          | 2019 年                  | 11.4°C |

\*與 1999 年 3 月 19 日並列最高

\*\*與 1998 年 4 月並列最高

\*\*\*與 2012 年 4 月 30 日及 1994 年 4 月 26 日並列最高

\*\*\*\*與 2019 年 6 月 21 日並列最高

#與 2008 年 9 月及 2009 年 9 月並列最多

##與 2015 年 9 月至 11 月並列最高

###與 2015 年 7 月至 12 月並列最高

####與 1968 年 7 月至 12 月並列最高

## 5. The Year's Weather – 2019

Globally, 2019 is likely to be the second or third warmest year on record according to the World Meteorological Organization's preliminary assessment. Over the Arctic, the daily sea-ice extent minimum in September 2019 was the second lowest in the satellite record and October has seen further record low extents. In 2019, various extreme weather events ravaged different parts of the world, including unrelenting heatwaves in much of western and northern Europe, Middle East, India, Japan, Australia, New Zealand and southern South America, a significant cold spell in central North America, severe drought in many parts of southeast Asia, the southwest Pacific, eastern Australia and Greater Horn of Africa. Extreme rainfall triggered severe flooding in western and northern India, parts of southern China, Iran, northern Queensland of Australia, west coast of New Zealand's South Island, Jayapura of Indonesia, large part of the central United States and parts of Eastern Canada. High winds, storm surges and torrential rain induced by tropical cyclones brought severe damages and heavy casualties to parts of the United States east coast, eastern Texas, Nova Scotia of Canada, Japan, India, the Philippines, Mozambique, parts of Zimbabwe and the Bahamas. Severe storms brought significant damages to parts of Spain, southern France, Corsica of France, Venice of Italy, Thessaloniki of Greece, eastern Africa, Pakistan and northern and western India. High temperature and drought also contributed to destructive wildfires in western North America, Alaska, Siberia of Russia, Amazon basin, Bolivia, Venezuela, Indonesia and many parts of Australia.

A weak El Niño event was established in early 2019. Sea surface temperatures of the central and eastern equatorial Pacific then cooled and returned to normal in July. The sea surface temperatures of the region exhibited some warming towards the end of the year.

In Hong Kong, with eleven out of the twelve months warmer than usual, 2019 was the warmest year since records began in 1884 with an annual mean temperature of 24.5 degrees, 1.2 degrees above the 1981-2010 normal<sup>[1]</sup> (or 1.5 degrees above the 1961-1990 normal). The annual mean maximum temperature of 27.1 degrees and annual mean minimum temperature of 22.6 degrees were also the highest on record. In particular, the mean temperatures for winter (December 2018 to February 2019) and autumn (September to November 2019) respectively reached 19.1 degrees and 26.1 degrees, both ranking the highest on record. The highest temperature recorded at the Hong Kong Observatory in the year was 35.1 degrees on 9 August, the fourteenth highest on record. There were 46 Hot Nights<sup>[2]</sup> and 33 Very Hot Days<sup>[3]</sup> in Hong Kong in 2019, ranking the highest and one of the fourth highest on record respectively.

The lowest temperature recorded at the Hong Kong Observatory in the year was 11.4 degrees on 1 January, the highest annual absolute minimum temperature on record. There was

only one Cold Day<sup>[4]</sup> in the year, which is 16.1 days less than the 1981-2010 normal and the fewest annual number of Cold Days since 1884.

The annual total rainfall was 2396.2 millimetres, near the 1981-2010 normal of 2398.5 millimetres (or about 8 percent above the 1961-1990 normal). Three red rainstorm warnings were issued by the Hong Kong Observatory in 2019. There was no black rainstorm warning issued in the year. 2019 was a thundery year in Hong Kong with thunderstorms reported on 59 days, which is 20.4 days above the annual normal of 38.6 days and one of the highest since records began in 1947.

A total of 28 tropical cyclones occurred over the western North Pacific and the South China Sea in 2019, less than the long-term (1961-2010) average of about 30. There were 16 tropical cyclones reaching typhoon intensity<sup>[5]</sup> or above during the year, slightly more than the long-term average of about 15, and seven of them reached super typhoon intensity (maximum 10-minute wind speed of 185 km/h or above near the centre). In Hong Kong, five tropical cyclones necessitated the issuance of tropical cyclone warning signals, slightly less than the long-term average of about six in a year. The No. 8 Gale or Storm Signal was issued during the passage of Wipha in July, while the No. 3 Strong Wind Signal was issued during the passage of Kajiki in September.

Detailed description of the weather for individual months is available on the Monthly Weather Summary webpage:

<https://www.weather.gov.hk/en/wxinfo/pastwx/mws/mws.htm>

Some significant weather events in Hong Kong in 2019 are highlighted below:

### **Warmest winter and autumn**

With unseasonably warm weather persisting from December 2018 to February 2019, Hong Kong experienced the warmest winter on record since 1884. The mean temperature, mean maximum temperature and mean minimum temperature for the winter from December 2018 to February 2019 reached 19.1 degrees, 21.4 degrees and 17.5 degrees respectively. All were the highest on record and more than 2 degrees above their corresponding normals.

Owing to the dominance of upper-air anticyclone over southern China for most of the time in September and October 2019 as well as prolonged dry and sunny weather in November 2019, the autumn mean temperature in Hong Kong reached 26.1 degrees and was 1.1 degrees above the normal of 25.0 degrees, making it one of the warmest autumns on record. Furthermore, the autumn mean maximum temperature of 29.1 degrees was also the highest on record.



### **Highest number of Hot Nights and fewest number of Cold Days**

The annual number of Hot Nights in 2019 reached 46, which is 28.2 days above the normal and the highest on record since 1884. Moreover, seven consecutive Hot Nights were recorded from 8 September to 14 September, the longest on record for September since 1884. With exceptionally warm winter and autumn, there was only one Cold Day in the whole year, the fewest on record.

### **Severe squally thunderstorms on 20 April**

A band of intense thunderstorms packed with frequent lightning, heavy rain and severe squalls swept across Hong Kong in the afternoon of 20 April. The severe squalls associated with the thunderstorms induced gusts exceeding 100 kilometres per hour in some places in Hong Kong. The maximum gust recorded at King's Park near the city centre was 117 kilometres per hour. Excluding tropical cyclone cases, this is the highest record of gust since the operation of the automatic weather station in King's Park in 1992. Moreover, about 9090 cloud-to-ground lightning strokes were detected in Hong Kong on that day, the highest on record for April since the launch of the lightning location system in 2005. During the inclement weather in that afternoon, a person died after being struck by lightning while hiking and two persons were tragically drowned when a sampan capsized in rough seas. There were also reports of tree failure and scaffolding collapsing in different parts of the territory.

Notes :

- [1] Climatological normals for the reference period of 1961-1990, 1971-2000 and 1981-2010 are available at : <https://www.weather.gov.hk/en/cis/normal.htm>. Climatological normals of 1981-2010 are referenced in the text unless otherwise stated.
- [2] 'Hot Night' refers to the condition with the daily minimum temperature equal to or higher than 28.0 degrees.
- [3] 'Very Hot Day' refers to the condition with the daily maximum temperature equal to or higher than 33.0 degrees.
- [4] 'Cold Day' refers to the condition with the daily minimum temperature equal to or lower than 12.0 degrees.
- [5] Information on the classification of Tropical Cyclones is available at: <https://www.weather.gov.hk/en/informtc/class.htm>

Table 5.1.2 Summary of record-breaking high temperature events in 2019

| <b>Record-breaking Events<br/>(since records began in 1884)</b>                             | <b>Date / Period</b>              | <b>New Record</b> |
|---------------------------------------------------------------------------------------------|-----------------------------------|-------------------|
| 1. Highest Mean Temperature for winter                                                      | December 2018 to<br>February 2019 | 19.1°C            |
| 2. Fewest number of Cold Days for winter                                                    | December 2018 to<br>February 2019 | 3 days            |
| 3. Highest Mean Temperature for 1 <sup>st</sup> to 3 <sup>rd</sup><br>day of Lunar New Year | 5 February to 7 February<br>2019  | 21.8°C            |
| 4. Highest Daily Minimum Temperature<br>for March*                                          | 22 March 2019                     | 24.8°C            |
| 5. Highest Monthly Mean Minimum<br>Temperature for April**                                  | April 2019                        | 22.9°C            |
| 6. Highest Daily Mean Temperature for<br>April***                                           | 25 April 2019                     | 28.5°C            |
| 7. Highest Daily Minimum Temperature<br>for May                                             | 19 May 2019                       | 29.2°C            |
| 8. Highest Daily Mean Temperature for<br>Summer Solstice                                    | 21 June 2019                      | 30.8°C            |
| 9. Highest Daily Minimum Temperature<br>for Summer Solstice                                 | 21 June 2019                      | 29.5°C            |
| 10. Highest Daily Minimum Temperature<br>for June****                                       | 29 June 2019                      | 29.5°C            |
| 11. Highest Mean Temperature for first half<br>of year                                      | January to June 2019              | 23.0°C            |
| 12. Highest Mean Maximum Temperature<br>for first half of year                              | January to June 2019              | 25.4°C            |
| 13. Highest Mean Minimum Temperature<br>for first half of year                              | January to June 2019              | 21.3°C            |
| 14. Highest Monthly Mean Minimum<br>Temperature for July                                    | July 2019                         | 27.7°C            |
| 15. Highest Daily Maximum Temperature<br>for Mid-Autumn Festival                            | 13 September 2019                 | 33.0°C            |
| 16. Highest Number of Hot Nights for<br>September#                                          | September 2019                    | 7 days            |
| 17. Highest Number of Consecutive Hot<br>Nights for September                               | September 2019                    | 7 days            |

|                                                                  |                            |         |
|------------------------------------------------------------------|----------------------------|---------|
| 18. Highest Daily Mean Temperature for October                   | 1 October 2019             | 30.3°C  |
| 19. Highest Daily Mean Temperature for National Day              | 1 October 2019             | 30.3°C  |
| 20. Highest Daily Minimum Temperature for National Day           | 1 October 2019             | 28.4°C  |
| 21. Highest Mean Temperature for autumn##                        | September to November 2019 | 26.1°C  |
| 22. Highest Mean Maximum Temperature for autumn                  | September to November 2019 | 29.1°C  |
| 23. Highest Mean Temperature for second half of year###          | July to December 2019      | 25.9°C  |
| 24. Highest Mean Maximum Temperature for second half of year#### | July to December 2019      | 28.6°C  |
| 25. Highest Annual Number of Hot Nights                          | 2019                       | 46 days |
| 26. Fewest Annual Number of Cold Days                            | 2019                       | 1 day   |
| 27. Highest Annual Mean Temperature                              | 2019                       | 24.5°C  |
| 28. Highest Annual Mean Maximum Temperature                      | 2019                       | 27.1°C  |
| 29. Highest Annual Mean Minimum Temperature                      | 2019                       | 22.6°C  |
| 30. Highest Annual Absolute Minimum Temperature                  | 2019                       | 11.4°C  |

\* Joint highest record with 19 March 1999

\*\* Joint highest record with April 1998

\*\*\* Joint highest record with 26 April 1994 and 30 April 2012

\*\*\*\* Joint highest record with 21 June 2019

# Joint highest record with September 2008 and September 2009

## Joint highest record with September to November 2015

### Joint highest record with July to December 2015

#### Joint highest record with July to December 1968

表 5.2.1 二零一九年香港氣象觀測摘要(一)

Table 5.2.1 Summary of Meteorological Observations in Hong Kong (Part1), 2019

| 月份<br>Month         | 平均氣壓<br>Mean<br>Pressure       | 氣 溫<br>Air Temperature |                                |      | 平均<br>露點溫度<br>Mean<br>Dew Point<br>Temperature | 平均<br>相對濕度<br>Mean<br>Relative<br>Humidity | 平均雲量<br>Mean<br>Amount<br>of Cloud | 總雨量<br>Total Rainfall |
|---------------------|--------------------------------|------------------------|--------------------------------|------|------------------------------------------------|--------------------------------------------|------------------------------------|-----------------------|
|                     | 平均日最高<br>Mean Daily<br>Maximum | 平均<br>Mean             | 平均日最低<br>Mean Daily<br>Minimum |      |                                                |                                            |                                    |                       |
|                     | 百帕斯卡<br>hPa                    | °C                     | °C                             | °C   | °C                                             | %                                          | %                                  | 毫米<br>mm              |
| 一月<br>January       | 1021.3                         | 20.4                   | 18.1                           | 16.4 | 13.7                                           | 76                                         | 68                                 | 4.7                   |
| 二月<br>February      | 1018.1                         | 22.6                   | 20.1                           | 18.4 | 17.5                                           | 85                                         | 82                                 | 68.7                  |
| 三月<br>March         | 1015.2                         | 23.3                   | 21.0                           | 19.4 | 18.2                                           | 84                                         | 81                                 | 186.5                 |
| 四月<br>April         | 1012.1                         | 27.2                   | 24.7                           | 22.9 | 21.7                                           | 84                                         | 76                                 | 185.8                 |
| 五月<br>May           | 1009.5                         | 27.2                   | 25.3                           | 23.7 | 22.7                                           | 86                                         | 83                                 | 234.6                 |
| 六月<br>June          | 1005.8                         | 31.5                   | 29.0                           | 27.0 | 25.7                                           | 83                                         | 79                                 | 429.1                 |
| 七月<br>July          | 1004.6                         | 32.1                   | 29.5                           | 27.7 | 25.9                                           | 81                                         | 79                                 | 328.5                 |
| 八月<br>August        | 1003.3                         | 31.9                   | 29.0                           | 26.9 | 25.6                                           | 82                                         | 73                                 | 596.4                 |
| 九月<br>September     | 1009.6                         | 31.8                   | 28.7                           | 26.6 | 23.1                                           | 73                                         | 50                                 | 198.9                 |
| 十月<br>October       | 1014.8                         | 29.5                   | 26.6                           | 24.6 | 21.2                                           | 73                                         | 49                                 | 149.5                 |
| 十一月<br>November     | 1017.1                         | 26.1                   | 23.0                           | 21.0 | 16.8                                           | 69                                         | 37                                 | Tr                    |
| 十二月<br>December     | 1020.2                         | 21.9                   | 19.1                           | 17.0 | 12.9                                           | 69                                         | 54                                 | 13.5                  |
| 平均/總值<br>Mean/Total | 1012.6                         | 27.1                   | 24.5                           | 22.6 | 20.4                                           | 79                                         | 68                                 | 2396.2                |
| 正常*<br>Normal*      | 1012.9                         | 25.6                   | 23.3                           | 21.4 | 19.0                                           | 78                                         | 68                                 | 2398.5                |
| 觀測站<br>Station      | 天文台<br>Hong Kong Observatory   |                        |                                |      |                                                |                                            |                                    |                       |

香港天文台於八月九日 15 時 45 分錄得本年最低氣壓 995.3 百帕斯卡。

The annual minimum pressure recorded at the Hong Kong Observatory was 995.3 hectopascals at 1545 HKT on 9 August.

香港天文台於八月九日 15 時 9 分錄得本年最高氣溫 35.1 °C。

The annual maximum air temperature recorded at the Hong Kong Observatory was 35.1 °C at 1509 HKT on 9 August.

香港天文台於一月一日 7 時 9 分錄得本年最低氣溫 11.4 °C。

The annual minimum air temperature recorded at the Hong Kong Observatory was 11.4 °C at 0709 HKT on 1 January.

京士柏於八月二十五日 0 時 45 分錄得本年最高1分鐘平均降雨率 198 毫米/小時。

The annual maximum 1-minute mean rainfall rate recorded at King's Park was 198 millimetres per hour at 0045 HKT on 25 August.

\* 1981-2010 氣候平均值 ([https://www.weather.gov.hk/tc/cis/normal/1981\\_2010/normal.s.htm](https://www.weather.gov.hk/tc/cis/normal/1981_2010/normal.s.htm))

\* 1981-2010 Climatological normal ([https://www.weather.gov.hk/en/cis/normal/1981\\_2010/normal.s.htm](https://www.weather.gov.hk/en/cis/normal/1981_2010/normal.s.htm))

Tr - 微量 (降雨量少於 0.05 毫米)

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

表 5.2.2 二零一九年香港氣象觀測摘要(二)

Table 5.2.2 Summary of Meteorological Observations in Hong Kong (Part2), 2019

| 月份<br>Month         | 出現低能見度的時數#<br>Number of hours of<br>Reduced Visibility# |                                              | 總日照<br>Total Bright<br>Sunshine | 平均每日<br>太陽總輻射<br>Mean Daily Global<br>Solar Radiation | 總蒸發量<br>Total<br>Evaporation | 盛行風向<br>Prevailing<br>Wind Direction | 平均風速<br>Mean<br>Wind Speed |
|---------------------|---------------------------------------------------------|----------------------------------------------|---------------------------------|-------------------------------------------------------|------------------------------|--------------------------------------|----------------------------|
|                     | 小時<br>hours                                             | 小時<br>hours                                  | 小時<br>hours                     | 兆焦耳/米 <sup>2</sup><br>MJ/m <sup>2</sup>               | 毫米<br>mm                     | 度<br>degrees                         | 公里/小時<br>km/h              |
| 一月<br>January       | 91                                                      | 114                                          | 133.3                           | 10.98                                                 | 67.5                         | 060                                  | 22.8                       |
| 二月<br>February      | 96                                                      | 21                                           | 96.9                            | 10.63                                                 | 55.8                         | 060                                  | 23.4                       |
| 三月<br>March         | 59                                                      | 27                                           | 91.3                            | 10.13                                                 | 65.3                         | 060                                  | 24.5                       |
| 四月<br>April         | 32                                                      | 18                                           | 123.1                           | 13.37                                                 | 84.4                         | 070                                  | 21.9                       |
| 五月<br>May           | 20                                                      | 1                                            | 83.1                            | 11.51                                                 | 76.5                         | 070                                  | 26.1                       |
| 六月<br>June          | 7                                                       | 2                                            | 153.9                           | 16.32                                                 | 100.5                        | 220                                  | 20.4                       |
| 七月<br>July          | 11                                                      | 1                                            | 150.5                           | 15.51                                                 | 114.4                        | 230                                  | 24.2                       |
| 八月<br>August        | 31                                                      | 10                                           | 178.6                           | 16.22                                                 | 109.5                        | 240                                  | 23.1                       |
| 九月<br>September     | 25                                                      | 30                                           | 216.3                           | 17.95                                                 | 129.9                        | 080                                  | 20.1                       |
| 十月<br>October       | 35                                                      | 26                                           | 230.7                           | 16.51                                                 | 113.0                        | 080                                  | 24.5                       |
| 十一月<br>November     | 9                                                       | 19                                           | 263.0                           | 16.48                                                 | 106.0                        | 070                                  | 25.9                       |
| 十二月<br>December     | 59                                                      | 66                                           | 182.2                           | 12.51                                                 | 82.9                         | 070                                  | 26.2                       |
| 平均/總值<br>Mean/Total | 475                                                     | 335                                          | 1902.9                          | 14.01                                                 | 1105.7                       | 070                                  | 23.6                       |
| 正常*<br>Normal*      | 692.3                                                   | 1189.5                                       | § 1835.6                        | 12.85                                                 | 1227.3                       | 080                                  | 23.3                       |
| 觀測站<br>Station      | 天文台<br>Hong Kong<br>Observatory                         | 香港國際機場<br>Hong Kong<br>International Airport | 京士柏<br>King's Park              |                                                       | 橫瀾島^<br>Waglan Island^       |                                      |                            |

橫瀾島於七月三十一日 13 時 48 分錄得本年最高陣風 117 公里/小時，風向 080 度。

The annual maximum gust peak speed recorded at Waglan Island was 117 kilometres per hour from 080 degrees at 1348 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.

\* 1981-2010 氣候平均值 (除特別列明外) ([https://www.weather.gov.hk/tc/cis/normal/1981\\_2010/normal.s.htm](https://www.weather.gov.hk/tc/cis/normal/1981_2010/normal.s.htm))

\* 1981-2010 Climatological normal, unless otherwise specified ([https://www.weather.gov.hk/en/cis/normal/1981\\_2010/normal.s.htm](https://www.weather.gov.hk/en/cis/normal/1981_2010/normal.s.htm))

§ 1997-2018 平均值

§ 1997-2018 Mean value

^ 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

表 5.2.3 二零一九年香港氣象觀測摘要(三)

Table 5.2.3 Summary of Meteorological Observations in Hong Kong (Part3), 2019

| 月份<br>Month         | 酷熱天氣日數<br>Number of Very Hot days | 熱夜日數<br>Number of Hot nights | 寒冷天氣日數<br>Number of Cold days | 雷暴日數<br>Number of days with Thunderstorm |
|---------------------|-----------------------------------|------------------------------|-------------------------------|------------------------------------------|
| 一月<br>January       | -                                 | -                            | 1                             | -                                        |
| 二月<br>February      | -                                 | -                            | -                             | 2                                        |
| 三月<br>March         | -                                 | -                            | -                             | 4                                        |
| 四月<br>April         | -                                 | -                            | -                             | 7                                        |
| 五月<br>May           | -                                 | 3                            | -                             | 5                                        |
| 六月<br>June          | 5                                 | 11                           | -                             | 9                                        |
| 七月<br>July          | 8                                 | 15                           | -                             | 13                                       |
| 八月<br>August        | 11                                | 9                            | -                             | 9                                        |
| 九月<br>September     | 8                                 | 7                            | -                             | 6                                        |
| 十月<br>October       | 1                                 | 1                            | -                             | 4                                        |
| 十一月<br>November     | -                                 | -                            | -                             | -                                        |
| 十二月<br>December     | -                                 | -                            | -                             | -                                        |
| 平均/總值<br>Mean/Total | 33                                | 46                           | 1                             | 59                                       |
| 正常*<br>Normal*      | 10.2                              | 17.8                         | 17.1                          | 38.6                                     |
| 觀測站<br>Station      | 天文台<br>Hong Kong Observatory      |                              |                               |                                          |

\* 1981-2010 氣候平均值 ([https://www.weather.gov.hk/tc/cis/normal/1981\\_2010/normals.htm](https://www.weather.gov.hk/tc/cis/normal/1981_2010/normals.htm))

\* 1981-2010 Climatological normal ([https://www.weather.gov.hk/en/cis/normal/1981\\_2010/normals.htm](https://www.weather.gov.hk/en/cis/normal/1981_2010/normals.htm))



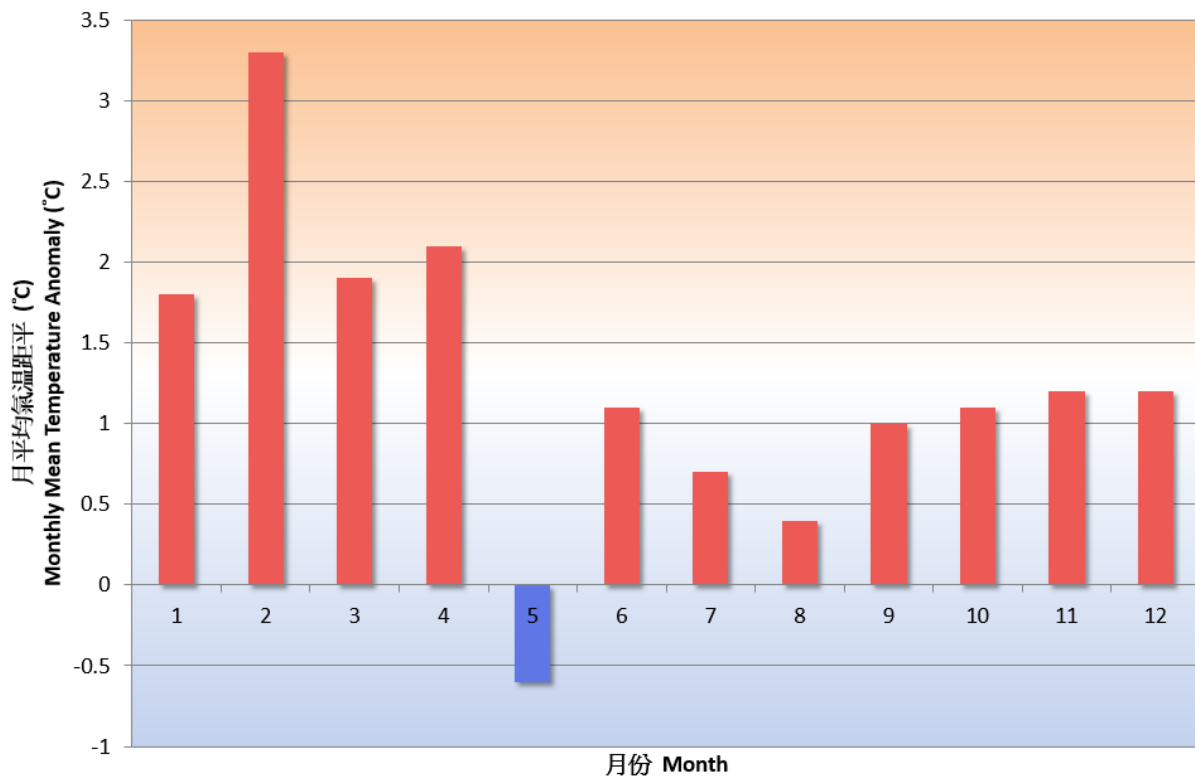


圖 5.1 2019 年香港月平均氣溫距平  
 Fig. 5.1 Monthly mean temperature anomalies in Hong Kong in 2019

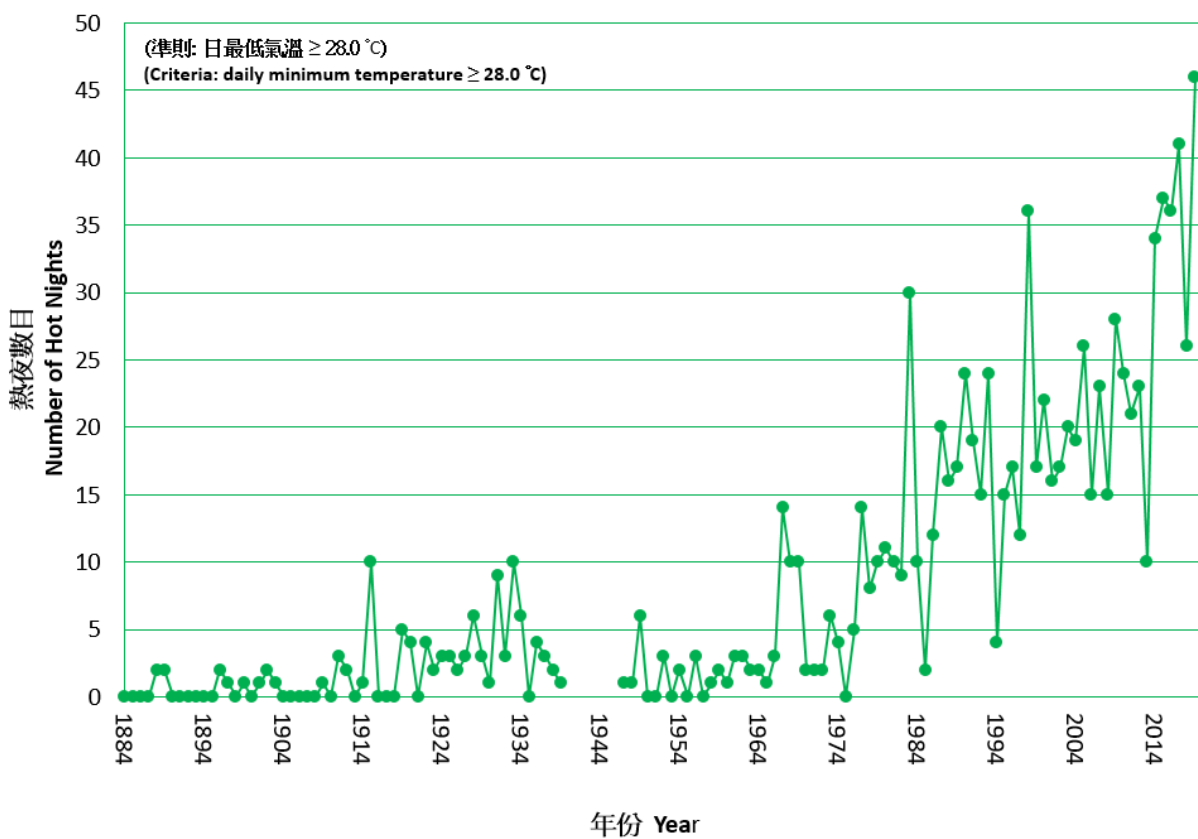


圖 5.2 香港全年熱夜數目的長期時間序列(1884-2019)  
 Fig. 5.2 Long-term time series of number of Hot Nights in Hong Kong 1884-2019

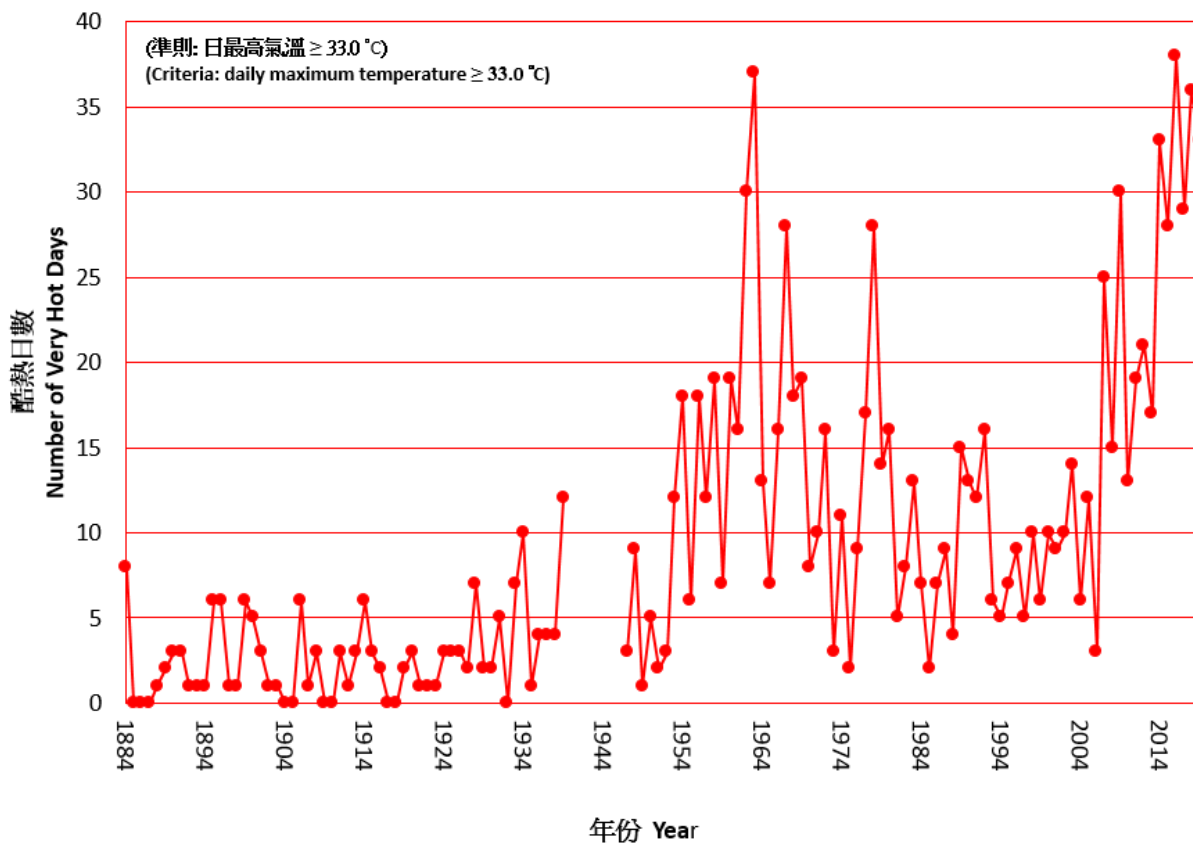


圖 5.3 香港全年酷熱天氣日數的長期時間序列(1884-2019)

Fig. 5.3 Long-term time series of number of Very Hot Days in Hong Kong 1884-2019

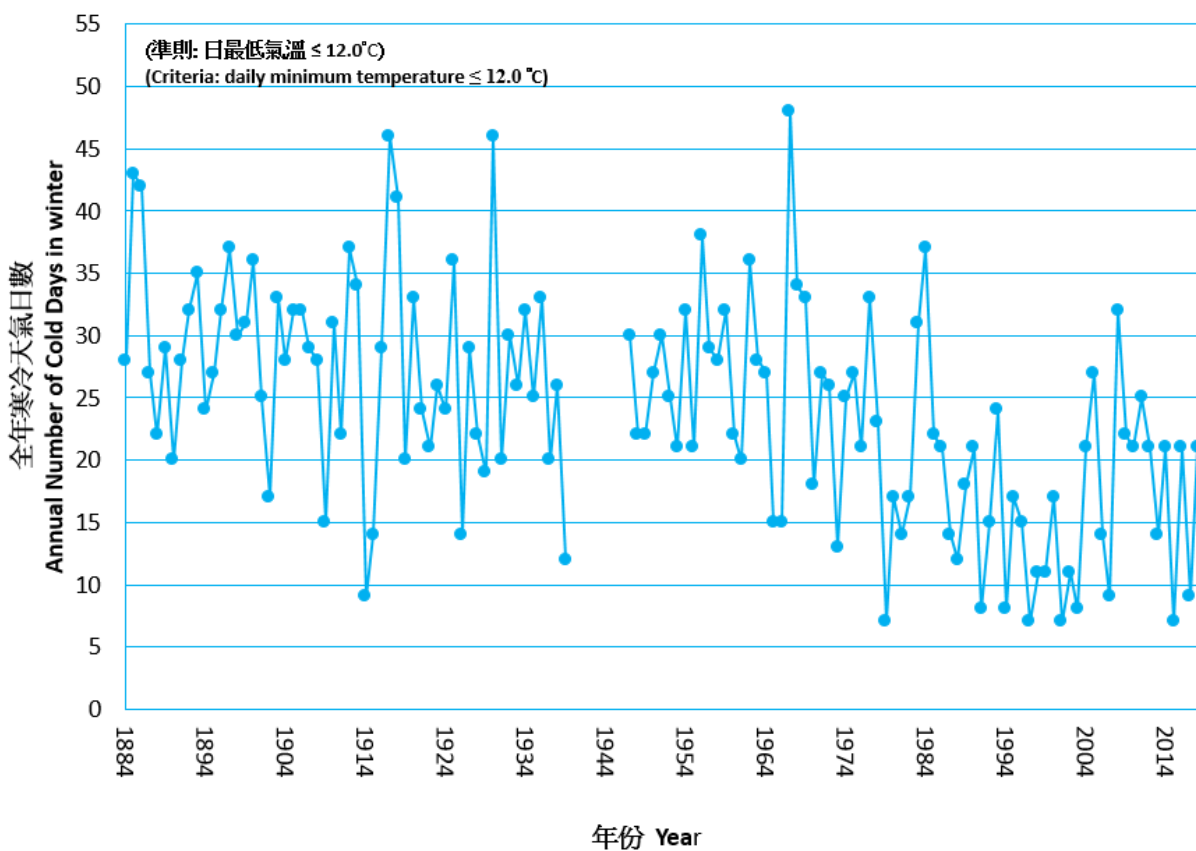


圖 5.4 香港全年寒冷天氣日數的長期時間序列(1884-2019)

Fig. 5.4 Long-term time series of number of Cold Days in Hong Kong 1884-2019

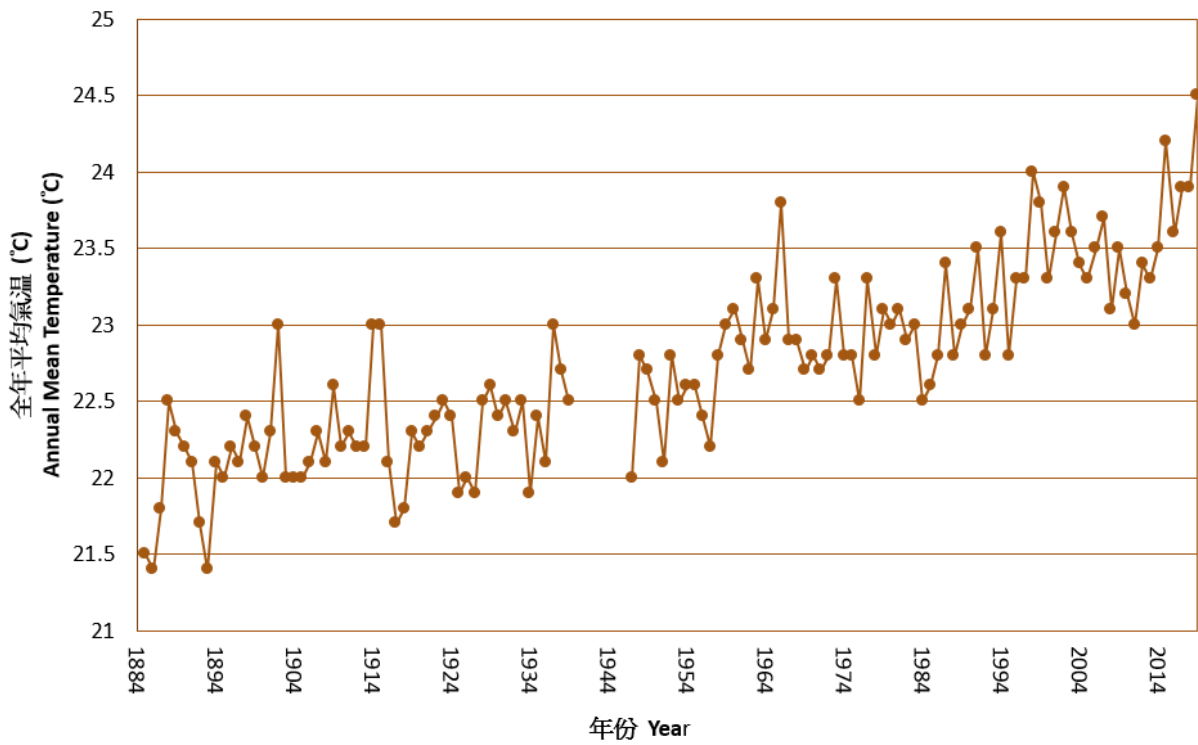


圖 5.5 香港全年平均氣溫的長期時間序列(1884-2019)

Fig. 5.5 Long-term time series of annual mean temperature in Hong Kong 1884-2019

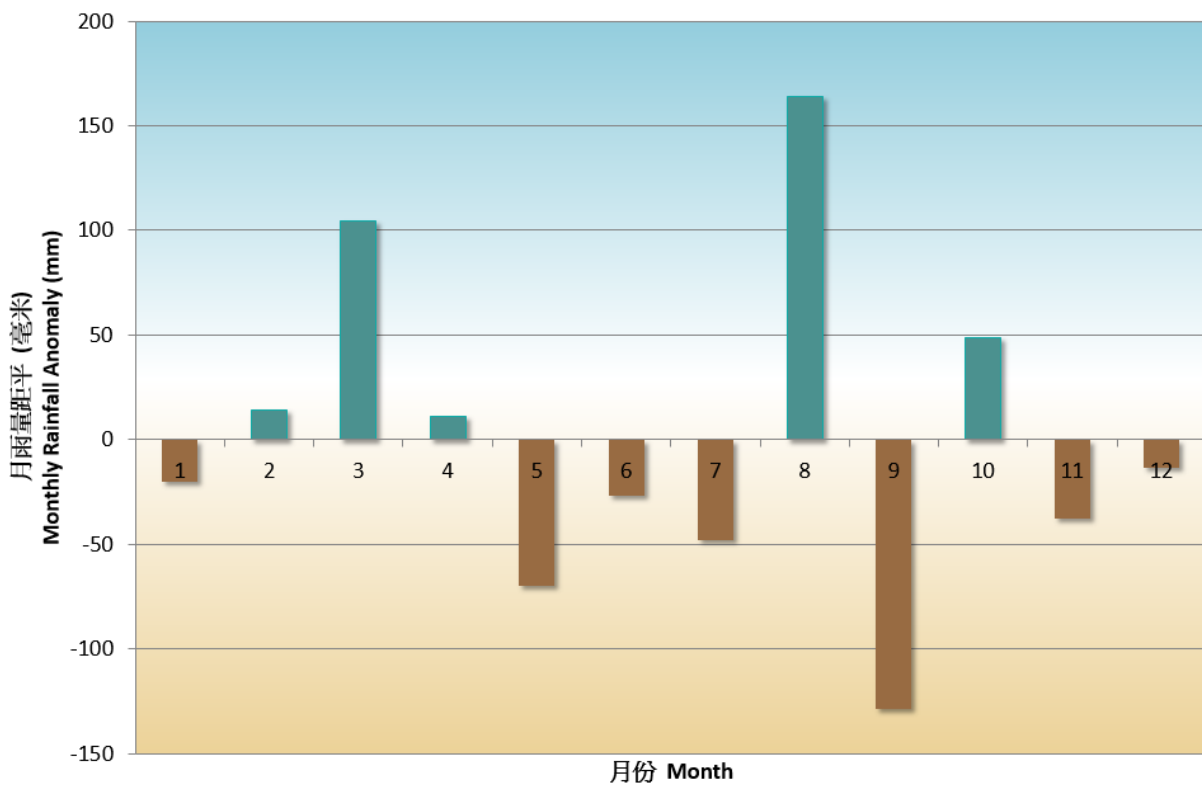


圖 5.6 2019 年香港月雨量距平

Fig. 5.6 Monthly rainfall anomalies in Hong Kong in 2019



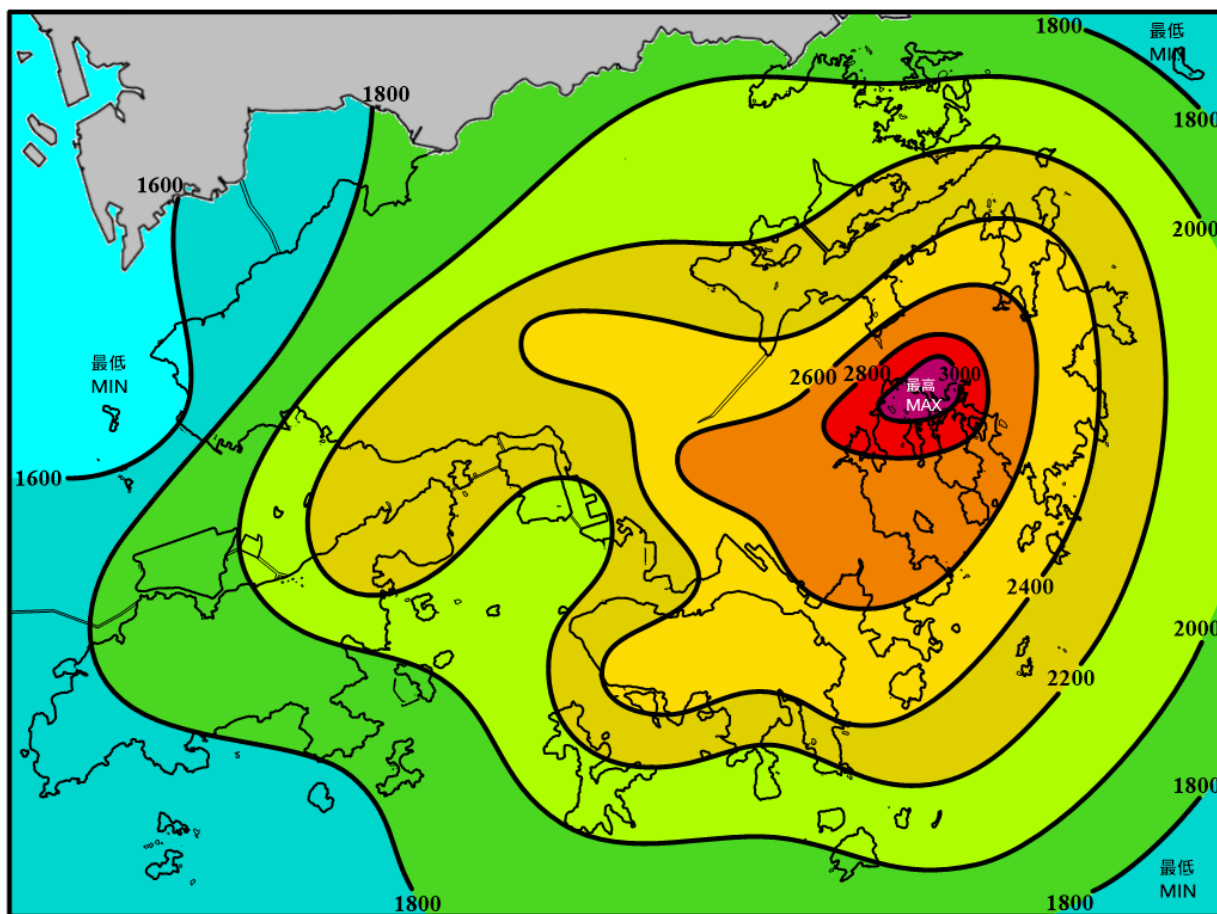


圖 5.7 2019 年香港年雨量(毫米)分佈

Fig. 5.7 Annual rainfall distribution (millimetres) in Hong Kong in 2019