

每月天氣摘要 二零二一年七月

Monthly Weather Summary July 2021



目錄

	<u>頁</u>
1. 二零二一年七月天氣回顧	1
2. 二零二一年七月影響北太平洋西部和南海的熱帶氣旋	8
3. 二零二一年七月每日天氣圖	34
4. 二零二一年七月氣象觀測資料	50

Contents

	<u>Page</u>
1. Weather Review of July 2021	2
2. Tropical Cyclones over the western North Pacific and the South China Sea in July 2021	9
3. Daily Weather Maps for July 2021	34
4. Meteorological Observations for July 2021	50

二零二一年八月出版

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1. 除特別列明外，所有時間均以協調世界時加八小時為準。
2. 除特別列明外，所有氣象要素數值均在香港天文台錄得。
3. 因惡劣天氣引致的人命傷亡及財物損毀數字是由各政府部門提供或根據報章報導輯錄。



Published : August 2021

Prepared and published by : Hong Kong Observatory,
134A Nathan Road,
Kowloon,
Hong Kong.

1. Unless otherwise stated, all times given are 8 hours ahead of Co-ordinated Universal Time (UTC).
2. Values of meteorological elements are those recorded at the Hong Kong Observatory, unless otherwise specified.
3. Figures of damage and casualties caused by weather phenomena are compiled from press reports and information provided by other government departments.

1. 二零二一年七月天氣回顧

由於華南的高空反氣旋較正常強，二零二一年七月本港異常炎熱。本月平均最低氣溫 27.7 度、平均最高氣溫 32.6 度及平均氣溫 29.7 度，較各自正常值高 0.8 度、1.0 度及 0.8 度（或較 1981-2010 正常值高 0.9 度、1.2 度及 0.9 度），分別是有記錄以來七月份的第二、第三及第四高。本月總雨量為 379.5 毫米，略少於正常值的 385.8 毫米（或略多於 1981-2010 正常值的 376.5 毫米）。本年首七個月的累積雨量為 1170.6 毫米，較同期正常值 1468.2 毫米少約百分之 20（或較 1981-2010 正常值 1473.3 毫米少約百分之 21）。

受一股西南氣流影響，本月首日香港天氣夾雜陽光及驟雨。在一個高空反氣旋支配下，除有幾陣驟雨外，七月二日至五日本港普遍天晴及天氣酷熱。

與此同時，七月五日早上在呂宋附近的低壓區增強為熱帶低氣壓。該熱帶低氣壓在七月六日早上掠過台灣西南沿岸，並於下午在台灣海峽附近減弱為低壓區。在南海中部的另一個低壓區於七月五日晚上增強為熱帶低氣壓。該熱帶低氣壓在七月六日採取西北路徑移向海南島。七月七日該熱帶低氣壓橫過海南島西南部後進入北部灣。七月八日該熱帶低氣壓登陸越南北部並減弱為低壓區。受這兩個熱帶低氣壓相關的外圍雨帶影響，在七月六日及七月七日初段時間本港間中有狂風驟雨及雷暴。隨著日間驟雨逐漸減少，七月七日本港天氣轉為酷熱及短暫時間有陽光。

受副熱帶高壓脊及隨後的高空反氣旋影響，七月八日至十五日本港持續普遍天晴及天氣酷熱，但局部地區亦有幾陣驟雨。在陽光充沛的情況下，天文台於七月十五日的氣溫上升至本月最高的 35.4 度，這亦是自一八八四年有記錄以來七月份的其中一個第三高。此外，七月十四日及十五日香港國際機場第三跑道工地附近有塵捲風報告。

受南海東北部的一個廣闊低壓區影響，七月十六日及十七日本港天氣大致多雲，有幾陣驟雨及局部地區有雷暴。本港部分地區在這兩日錄得超過 30 毫米雨量，而大埔區的雨量更超過 70 毫米。

在南海北部的低壓區於七月十八日稍後時間增強為熱帶低氣壓。七月十九日早上該熱帶低氣壓在南海北部徘徊，並進一步發展為熱帶風暴及命名為查帕卡。七月二十日清晨查帕卡向西北緩慢移向廣東西部沿岸，並迅速增強為颱風。當日晚上，查帕卡在陽江附近登陸並減弱為強烈熱帶風暴。查帕卡隨後於七月二十一日及二十二日橫過廣東西部及廣西沿岸地區，並逐漸減弱為熱帶低氣壓。七月二十三日早上查帕卡進入北部灣，並於七月二十五日在北部灣減弱為低壓區。在查帕卡相關的雨帶影響下，七月十八日至二十一本港間中有大驟雨及狂風雷暴。本港各區在這四日普遍錄得超過 200 毫米雨量，而西貢區更錄得超過 400 毫米雨量。七月二十日一名男子在馬鞍山行山時遭洪水沖走致死。在有雨的情況下，七月十八日天文台氣溫下降至本月最低的 24.9 度。

七月二十二日熱帶氣旋煙花在台灣以東海域徘徊。煙花隨後移向華東，並於四日後在浙江北部沿岸登陸。受煙花的外圍下沉氣流及隨後本港的微風情況影響，七月二十二日至二十八日本港陽光充沛及天氣酷熱，但有幾陣驟雨。悶熱的天氣亦於七月二十三日至二十八日觸發大驟雨及狂風雷暴。七月二十四日及二十五日的雨勢較大，新界部份地區及港島在這兩日錄得超過 50 毫米雨量。受一股活躍的西南氣流影響，本月最後三日本港天氣轉為不穩定、間中有驟雨及雷暴。本港大部分地區在這三日錄得超過 40 毫米雨量，而上水、將軍澳及大嶼山北部的雨量更超過 100 毫米。

二零二一年七月有五個熱帶氣旋影響南海及北太平洋西部。

本月一班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 2021

Owing to the stronger than normal upper-air anticyclone over southern China, July 2021 was unusually hot in Hong Kong. The monthly mean minimum temperature of 27.7 degrees, monthly mean maximum temperature of 32.6 degrees and monthly mean temperature of 29.7 degrees were 0.8 degrees, 1.0 degree and 0.8 degrees above their corresponding normals (or 0.9 degrees, 1.2 degrees and 0.9 degrees above their corresponding 1981-2010 normals) and respectively the second, third and fourth highest on record for July. The monthly rainfall was 379.5 millimetres, slightly below the normal figure of 385.8 millimetres (or slightly above the 1981-2010 normal of 376.5 millimetres). The accumulated rainfall recorded in the first seven months of the year was 1170.6 millimetres, about 20 percent below the normal figure of 1468.2 millimetres (or 21 percent below the 1981-2010 normal of 1473.3 millimetres) for the same period.

Under the influence of a southwesterly airstream, the weather of Hong Kong was a mixture of sunshine and showers on the first day of the month. Dominated by an anticyclone aloft, apart from a few showers, it was generally fine and very hot on 2 – 5 July.

Meanwhile, the area of low pressure near Luzon intensified into a tropical depression on the morning of 5 July. It skirted past the southwestern coast of Taiwan on the morning of 6 July and weakened into an area of low pressure near the Taiwan Strait that afternoon. Another area of low pressure over the central part of the South China Sea intensified into a tropical depression on the night of 5 July. It tracked northwestwards towards Hainan Island on 6 July. The tropical depression moved across the southwestern part of Hainan Island and entered Beibu Wan on 7 July. It made landfall over the northern part of Vietnam and then weakened into an area of low pressure on 8 July. Affected by the outer rainbands of these two tropical depressions, there were occasional squally showers and thunderstorms in Hong Kong on 6 July and the early part of 7 July.

With showers abating gradually during the day, local weather became very hot with sunny intervals on 7 July.

Under the influence of the subtropical ridge and subsequent anticyclone aloft, apart from a few isolated showers, generally fine and very hot weather persisted during 8 – 15 July. With plenty of sunshine, the temperature at the Observatory soared to 35.4 degrees on 15 July, the highest of the month. It was also one of the third highest temperature in July since records began in 1884. Moreover, dust devils were reported near the third runway construction site of the Hong Kong International Airport on 14 July and 15 July.

Under the influence of a broad area of low pressure over the northeastern part of the South China Sea, the weather of Hong Kong was mainly cloudy with a few showers and isolated thunderstorms on 16 – 17 July. More than 30 millimetres of rainfall were recorded over parts of the territory and rainfall even exceeded 70 millimetres over Tai Po District on these two days.

The area of low pressure over the northern part of the South China Sea intensified into a tropical depression later on 18 July. It lingered over the northern part of the South China Sea and further developed into a tropical storm and was named Cempaka on the morning of 19 July. Cempaka moved northwestwards slowly towards the coast of western Guangdong and rapidly intensified into a typhoon on the early morning of 20 July. It made landfall near Yangjiang and weakened into a severe tropical storm that night. Cempaka then moved across the coastal areas of western Guangdong and Guangxi and weakened gradually into a tropical depression on 21 – 22 July. It entered Beibu Wan on the morning of 23 July and weakened into an area of low pressure over Beibu Wan on 25 July. Affected by the rainbands associated with Cempaka, there were occasional heavy showers and squally thunderstorms in Hong Kong on 18 – 21 July. More than 200 millimetres of rainfall were generally recorded over the territory, and rainfall even exceeded 400 millimetres over Sai Kung District on these four days. A man died after being washed away by floods while hiking in Ma On Shan on 20 July. Under the rain, the temperature at the Observatory dropped to a minimum of 24.9 degrees on 18 July, the lowest of the month.

Tropical Cyclone In-fa lingered over the seas east of Taiwan on 22 July. It then moved towards eastern China and made landfall over the coast of the northern part of Zhejiang four days later. Affected by the subsiding air outside the circulation of In-fa and the subsequent light wind conditions in Hong Kong, apart from a few showers, local weather was sunny and very hot on 22 – 28 July. The oppressive heat also triggered heavy showers and squally thunderstorms on 23 – 28 July. The showers were particularly heavy on 24 – 25 July, more than 50 millimetres of rainfall were recorded over parts of the New Territories and Hong Kong Island on these two days.

Under the influence of an active southwesterly airstream, the weather became unsettled with occasional showers and thunderstorms on the last three days of the month. More than 40 millimetres of rainfall were recorded over most parts of the territory and rainfall even exceeded 100

millimetres over Sheung Shui, Tseung Kwan O and the northern part of Lantau Island on these three days.

Five tropical cyclones occurred over the South China Sea and the western North Pacific in July 2021.

During the month, one 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 二零二一年七月發出的警告及信號
Table 1.1 Warnings and Signals issued in July 2021

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
無名 No Name	1	6/7	0415	7/7	1410
查帕卡 CEMPAKA	1 3 1	18/7 19/7 20/7	2140 1610 1320	19/7 20/7 20/7	1610 1320 1940

暴雨警告信號

Rainstorm 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 Amber	18/7	0620	18/7	0745
黃色 Amber	19/7	0235	19/7	0350
黃色 Amber	19/7	1230	19/7	1405
黃色 Amber	20/7	1140	20/7	1540
黃色 Amber	25/7	0005	25/7	0300
黃色 Amber	30/7	0715	30/7	0840

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
2/7	1115	5/7	1900
7/7	1425	16/7	0945
22/7	1330	23/7	2330
24/7	1000	24/7	1900
25/7	0745	27/7	2010
28/7	0645	28/7	1615
31/7	1145	31/7	1620

雷暴警告

Thunderstorm Warning

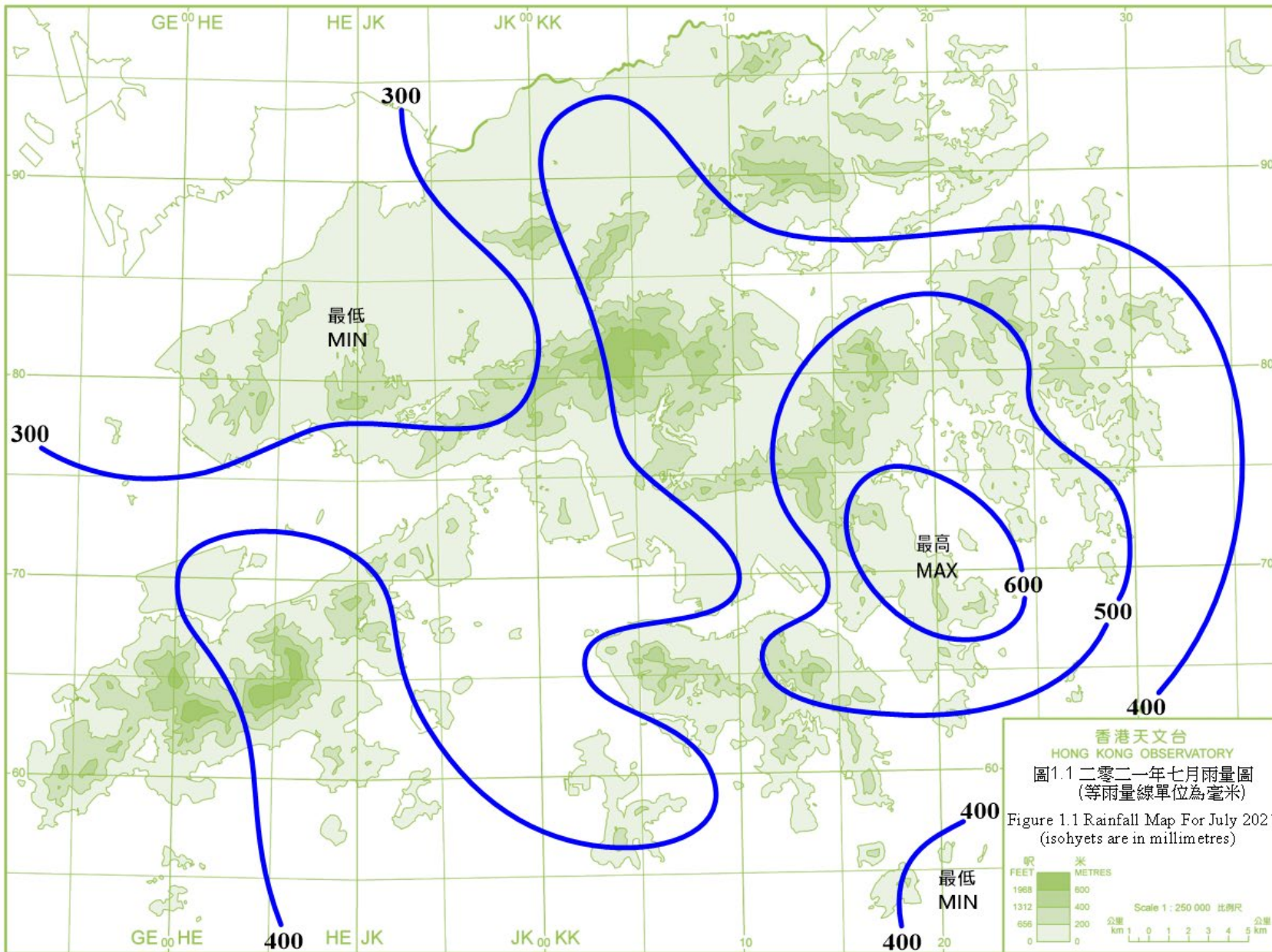
開始時間 Beginning Time		終結時間 Ending Time	
日/月 day/month	時 hour	日/月 day/month	時 hour
5/7	1100	5/7	1230
5/7	1350	5/7	1530
6/7	1352	6/7	1930
6/7	2300	7/7	0900
14/7	1322	14/7	1600
16/7	0735	16/7	1800
17/7	0520	17/7	1300
18/7	0315	18/7	1700
18/7	2055	19/7	1900
20/7	0215	20/7	1640
21/7	0255	21/7	0730
21/7	0955	21/7	1200
21/7	1340	21/7	1630
23/7	1625	23/7	1800
23/7	2250	24/7	0400

開始時間 Beginning Time		終結時間 Ending Time	
日/月 day/month	時 hour	日/月 day/month	時 hour
24/7	0440	24/7	0830
24/7	1325	24/7	1930
24/7	2140	25/7	0430
25/7	1525	25/7	1800
26/7	1350	26/7	1730
27/7	1355	27/7	1730
27/7	1920	27/7	2330
28/7	0615	28/7	0715
28/7	1015	28/7	2000
29/7	0735	29/7	0945
29/7	1030	29/7	1630
30/7	0125	30/7	1030
31/7	0010	31/7	0930
31/7	1445	31/7	1715
31/7	2345	1/8	0330

新界北部水浸特別報告

Special Announcement on Flooding in the northern New Territories

開始時間 Beginning Time		終結時間 Ending Time	
日/月 day/month	時 hour	日/月 day/month	時 hour
20/7	1225	20/7	1620
25/7	0110	25/7	0325
29/7	1435	29/7	1640



2.1 二零二一年七月熱帶氣旋概述

二零二一年七月在北太平洋西部及南海區域出現了五個熱帶氣旋，當中兩個熱帶低氣壓及查帕卡引致香港天文台需要發出熱帶氣旋警告信號。

七月五日凌晨，一個低壓區在馬尼拉之東北偏東約 740 公里的北太平洋西部上發展為熱帶低氣壓，隨後向西北方向移動，橫過呂宋海峽。該熱帶低氣壓在當晚達到其最高強度，中心附近最高持續風速估計為每小時 55 公里。該熱帶低氣壓在七月六日早上掠過台灣西南沿岸海域並迅速減弱，中午過後在台灣海峽附近消散。

而另一個低壓區則在七月五日晚上於西沙之東南偏南約 230 公里的南海中部上增強為熱帶低氣壓。該熱帶低氣壓在七月六日大致採取西北至西北偏北路徑移向海南島，當晚達到其最高強度，中心附近最高持續風速估計為每小時 55 公里。七月七日該熱帶低氣壓橫過海南島西南部後進入北部灣，翌日登陸越南北部並減弱為低壓區。

有關這兩個熱帶低氣壓的詳細資料及對香港的影響，請參閱它們的熱帶氣旋報告。

熱帶低氣壓煙花於七月十七日凌晨在那霸之東南約 1 110 公里的北太平洋西部上形成，向西北偏北方向移動，並逐漸增強。七月十九日早上煙花增強為強烈熱帶風暴，並採取西至西南偏西路徑掠過琉球群島一帶。七月二十日晚上煙花進一步增強為颱風，翌日早上達到其最高強度，中心附近最高持續風速估計為每小時 145 公里。七月二十二日煙花移速減慢，隨後三天轉向西北偏北方向移動，橫過東海。煙花於七月二十六日在浙江北部沿岸登陸，並逐漸減弱，最後於七月二十九日在山東減弱為低壓區。

根據報章報導，在煙花的持續影響下，華東一帶有暴雨，多處地區水浸，超過 270 萬人受災，約 1 100 間房屋受損。

熱帶低氣壓查帕卡於七月十八日晚上在香港之西南偏南約 180 公里的南海北部上形成，大致向西北至西北偏西方向緩慢移動，趨向廣東西部沿岸並迅速增強。七月二十日凌晨查帕卡增強為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 120 公里，晚上查帕卡開始減弱並在陽江附近登陸。查帕卡於七月二十一日橫過廣東西部及廣西內陸，逐步減弱為熱帶低氣壓。查帕卡翌日轉向西南偏南移動，七月二十三日進入北部灣。最後於七月二十四日在北部灣減弱為一個低壓區。

有關查帕卡的詳細資料及對香港的影響，請參閱它的熱帶氣旋報告。

熱帶低氣壓尼伯特於七月二十三日早上於硫磺島之東南偏東約 720 公里的北太平洋西部上形成，當晚增強為熱帶風暴，隨後兩天大致向東北偏北方向移動及減弱為熱帶低氣壓，尼伯特於七月二十六日逐漸轉向偏西方向移動，橫過日本以東海域，晚上再增強為熱帶風暴。尼伯特於七月二十七日凌晨達到其最高強度，中心附近最高持續風速估計為每小時 75 公里。隨後尼伯特轉向西北方向移動，最後於七月二十八日在日本本州以北海域減弱為一個低壓區。



2.1 Overview of Tropical Cyclones in July 2021

Five tropical cyclones occurred over the western North Pacific and the South China Sea in July 2021. Two tropical depressions and Cempaka necessitated the issuance of the tropical cyclone warning signals by the Hong Kong Observatory.

The area of low pressure over the western North Pacific around 740 km east-northeast of Manila developed into a tropical depression in the small hours on 5 July. The tropical depression then moved northwestwards across the Luzon Strait. It reached its peak intensity that night with an estimated sustained wind of 55 km/h near its centre. The tropical depression skirted past the southwestern coastal waters of Taiwan and weakened rapidly on the morning of 6 July. It dissipated near the Taiwan Strait shortly after noon.

Another area of low pressure over the central part of the South China Sea around 230 km south-southeast of Xisha intensified into a tropical depression on the night of 5 July. It tracked generally northwest to north-northwestwards towards Hainan Island on 6 July and reached its peak intensity that night with an estimated sustained wind of 55 km/h near its centre. After moving across the southwestern part of Hainan Island, the tropical depression entered Beibu Wan on 7 July. It made landfall over the northern part of Vietnam the next day and then weakened into an area of low pressure.

For detailed information of these two tropical depressions including their impact to Hong Kong, please refer to the Tropical Cyclone Report of these two tropical depressions.

In-fa formed as a tropical depression over the western North Pacific about 1 110 km southeast of Naha in the small hours on 17 July. It moved north-northwestwards and intensified gradually. In-fa intensified into a severe tropical storm on the morning of 19 July, and took a west to west-southwesterly track to skirt past the vicinity of Ryukyu Islands. It further intensified into a typhoon on the night of 20 July and reached its peak intensity with an estimated maximum sustained wind of 145 km/h near its centre in the next morning. In-fa slowed down on 22 July and turned to move north-northwestwards across the East China Sea in the following three days. In-fa made landfall over the coast of the northern part of Zhejiang on 26 July and weakened gradually. It finally degenerated into an area of low pressure over Shandong on 29 July.

According to press reports, there were torrential rain and extensive flooding over the vicinity of eastern China under the persistent influence of In-fa. More than 2.7 million people were affected and around 1 100 houses were damaged.

Cempaka formed as a tropical depression over the northern part of the South China Sea about 180 km south-southwest of Hong Kong on the night of 18 July. It moved generally northwest to west-northwestwards slowly towards the coast of western Guangdong and intensified rapidly. Cempaka intensified into a typhoon in the small hours on 20 July and reached its peak intensity with an estimated maximum sustained wind of 120 km/h near its centre. It started to weaken at night and made landfall near Yangjiang. Cempaka moved across western Guangdong and inland Guangxi, and weakened into a tropical depression progressively on 21 July. It turned to move south-southwestwards the next day and entered Beibu Wan on 23 July. Cempaka finally degenerated into an area of low pressure over Beibu Wan on 24 July.

For detailed information of Cempaka including its impact to Hong Kong, please refer to the Tropical Cyclone Report of Cempaka.

Nepartak formed as a tropical depression over the western North Pacific about 720 km east-southeast of Iwo Jima on the morning of 23 July and intensified into a tropical storm that night. It generally moved north-northeastwards in the following two days, and weakened into a tropical depression. Nepartak then gradually turned to move westwards across the seas east of Japan on 26 July and re-intensified into a tropical storm that night. Nepartak reached its peak intensity with an estimated maximum sustained wind of 75 km/h near its centre in the small hours on 27 July. It then turned to move northwestwards and finally weakened into an area of low pressure over the seas north of Honshu of Japan on 28 July.

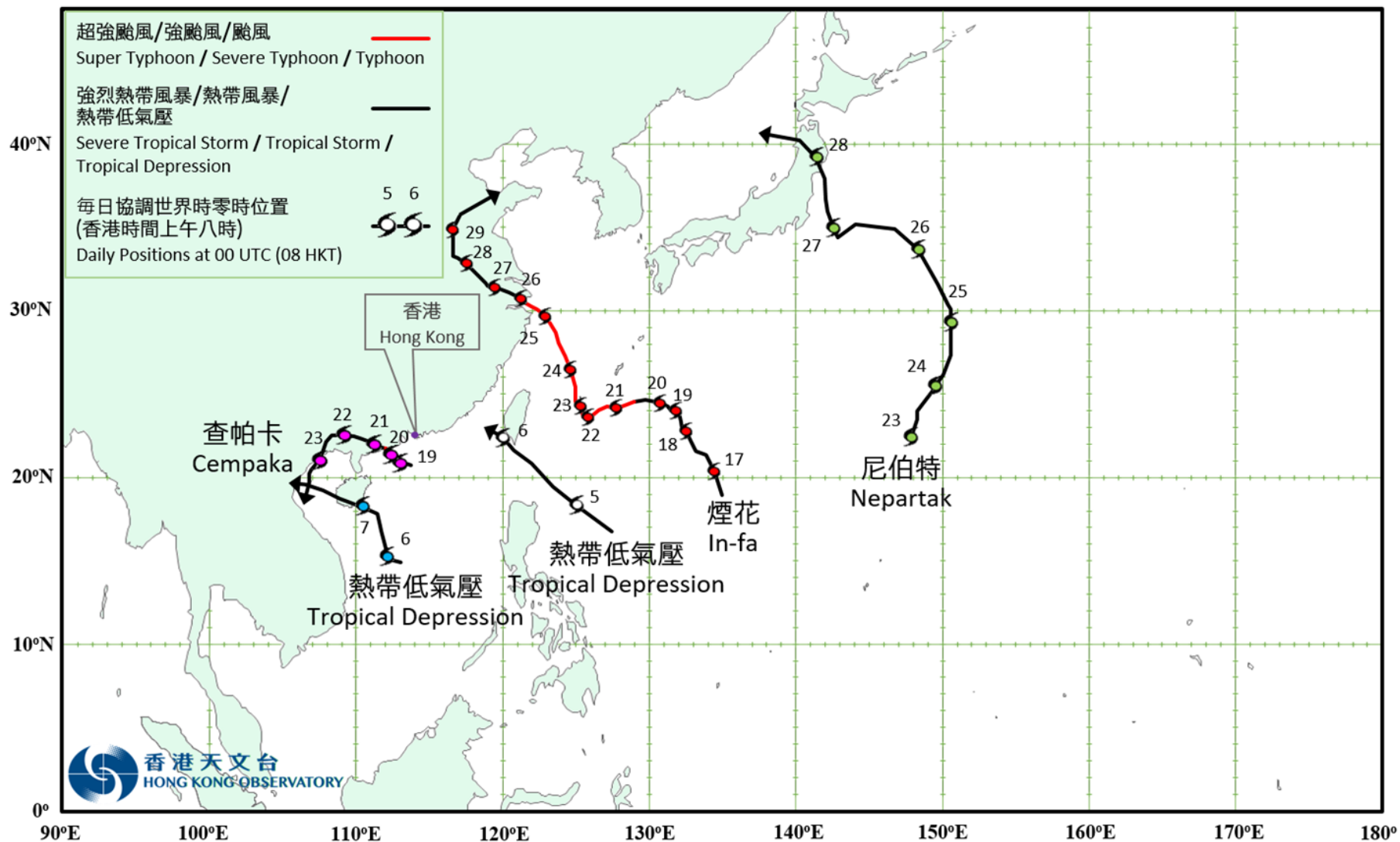


圖 2.1 二零二一年七月的熱帶氣旋路徑圖
Fig. 2.1 Track of tropical cyclone in July 2021

2.2 兩個熱帶低氣壓

二零二一年七月五日至八日

七月六日天文台就分別位於台灣南部附近及南海中部的兩個熱帶低氣壓發出一號戒備信號，這情況較為罕見，對上一次天文台同時就兩個熱帶氣旋發出熱帶氣旋警告信號是一九七九年九月的強烈熱帶風暴麥克及熱帶風暴蘭茜。

七月五日凌晨，一個低壓區在馬尼拉之東北偏東約 740 公里的西北太平洋上增強為熱帶低氣壓，隨後向西北方向移動，橫過呂宋海峽。該熱帶低氣壓在當晚達到其最高強度，中心附近最高持續風速估計為每小時 55 公里。該熱帶低氣壓在七月六日早上掠過台灣西南沿岸海域並迅速減弱，中午過後在台灣海峽附近消散。

而另一個低壓區則在七月五日晚上於西沙之東南偏南約 230 公里的南海中部上增強為熱帶低氣壓。該熱帶低氣壓在七月六日大致採取西北至西北偏北路徑移向海南島，當晚達到其最高強度，中心附近最高持續風速估計為每小時 55 公里。七月七日該熱帶低氣壓橫過海南島西南部後進入北部灣，翌日登陸越南北部並減弱為低壓區。

香港天文台在七月六日上午 4 時 15 分發出一號戒備信號，當時第一個位於台灣南部附近的熱帶低氣壓集結在香港以東約 660 公里，而第二個位於南海中部的熱帶低氣壓則在香港之西南偏南約 820 公里。當日早上本港普遍吹和緩偏東風。第一個熱帶低氣壓在中午前最接近本港，其中心位於香港以東約 610 公里。中午過後該熱帶低氣壓在台灣海峽附近消散。但由於位於南海中部的第二個熱帶低氣壓繼續移近本港，一號戒備信號仍然維持。七月六日下午及翌日本港離岸及高地間中吹強風。第二個熱帶低氣壓在七月七日上午二時左右最接近本港，在香港之西南偏南約 570 公里掠過。隨著該熱帶低氣壓登陸海南島及遠離香港，對香港的威脅減少，天文台在七月七日下午 2 時 10 分取消所有熱帶氣旋警告信號。

在這兩個熱帶低氣壓的影響下，尖鼻咀錄得最高潮位(海圖基準面以上) 2.49 米，而大廟灣及大埔滘均錄得最大風暴潮(天文潮高度以上)0.22 米。天文台總部於七月六日上午 4 時 15 分錄得最低瞬時海平面氣壓 1004.7 百帕斯卡。

受這兩個熱帶低氣壓相關的外圍雨帶影響，在七月六日及七月七日初時本港間中有狂風驟雨及雷暴，多處地區錄得超過 20 毫米雨量。隨著覆蓋中國東南部的副熱帶高壓脊向西伸展，七月七日本港日間驟雨減少，天氣轉為酷熱及短暫時間有陽光。

這兩個熱帶低氣壓影響香港期間並沒有造成嚴重破壞。

2.2 Two Tropical Depressions 5 to 8 July 2021

On 6 July, the Standby Signal No.1 was issued for two tropical depressions which were respectively located near the southern part of Taiwan and over the central part of the South China Sea. This is a relatively rare event and the last time with a tropical cyclone warning signal issued for two tropical cyclones at the same time was due to severe tropical storm Mac and tropical storm Nancy in September 1979.

The area of low pressure over the western North Pacific around 740 km east-northeast of Manila intensified into a tropical depression in the small hours on 5 July. The tropical depression then moved northwestwards across the Luzon Strait. It reached its peak intensity at night with an estimated sustained wind of 55 km/h near its centre. The tropical depression skirted past the southwestern coastal waters of Taiwan and weakened rapidly on the morning of 6 July. It dissipated near the Taiwan Strait shortly after noon.

Another area of low pressure over the central part of the South China Sea around 230 km south-southeast of Xisha intensified into a tropical depression on the night of 5 July. It tracked generally northwest to north-northwestwards towards Hainan Island on 6 July. The tropical depression reached its peak intensity on the night of 6 July with an estimated sustained wind of 55 km/h near its centre. After moving across the southwestern part of Hainan Island, the tropical depression entered Beibu Wan on 7 July. It made landfall over the northern part of Vietnam on 8 July and then degenerated into an area of low pressure.

In Hong Kong, the Standby Signal No.1 was issued at 4:15 a.m. on 6 July when the first tropical depression near the southern part of Taiwan was about 660 km east of Hong Kong and the second tropical depression over the central part of the South China Sea was about 820 km south-southwest of Hong Kong. Local winds were generally moderate easterlies in the morning. The first tropical depression was closest to Hong Kong before noon with its centre about 610 km east of Hong Kong. It dissipated near Taiwan Strait shortly after noon. Meanwhile, as the second tropical depression over the central part of the South China Sea continued to edge closer to Hong Kong, the Standby Signal No.1 remained in force. Locally, there were occasional strong winds offshore and on high ground on the afternoon of 6 July and the next day. The second tropical depression came closest to Hong Kong around 2 a.m. on 7 July as it skirted past about 570 km south-southwest of the territory. With the second tropical depression making landfall over Hainan Island and moving away from Hong Kong, its threat

to Hong Kong diminished and all tropical cyclone warning signals were cancelled at 2:10 p.m. on 7 July.

Under the influence of the two tropical depressions, a maximum sea level (above chart datum) of 2.49 m was recorded at Tsim Bei Tsui. A maximum storm surge of 0.22 m (above astronomical tide) was recorded at Tai Miu Wan and Tai Po Kau. At the Observatory Headquarters, the lowest instantaneous mean sea-level pressure of 1004.7 hPa was recorded at 4:15 a.m. on 6 July.

Affected by the outer rainbands of these two tropical depressions, there were occasional squally showers and thunderstorms in Hong Kong on 6 July and the early part of 7 July. More than 20 millimetres of rainfall were recorded in many places of Hong Kong. With the subtropical ridge over southeastern China extending westwards, showers in Hong Kong abated gradually during the day on 7 July and local weather became very hot with sunny intervals.

The two tropical depressions did not cause significant damage in Hong Kong.

表 2.2.1 在兩個熱帶低氣壓影響下，本港各站在熱帶氣旋警告信號生效時所錄得的最高陣風、最高每小時平均風速及風向

Table 2.2.1 Maximum gust peak speeds and maximum hourly mean winds with associated wind directions recorded at various stations when the tropical cyclone warning signals for the two tropical depressions were in force

站 Station (https://www.hko.gov.hk/tc/informtc/station2021.html)		最高陣風 Maximum Gust				最高每小時平均風速 Maximum Hourly Mean Wind					
		風向 Direction		風速 (公里/時) Speed (km/h)	日期/月份 Date/Month	時間 Time	風向 Direction		風速 (公里/時) Speed (km/h)	日期/月份 Date/Month	時間 Time
中環碼頭	Central Pier	東	E	56	6/7	15:38	東	E	22	6/7	22:00
							東南偏東	ESE	22	7/7	11:00
長洲	Cheung Chau	東南	SE	69	6/7	23:09	東南偏東	ESE	40	7/7	09:00
長洲泳灘	Cheung Chau Beach	東	E	61	6/7	14:24	東	E	36	6/7	15:00
香港國際機場	Hong Kong International Airport	東南偏東	ESE	54	6/7	23:35	東	E	28	6/7	15:00
啟德	Kai Tak	東南偏東	ESE	54	6/7	15:34	東南偏東	ESE	24	7/7	11:00
京士柏	King's Park	東	E	46	6/7	23:46	東	E	17	7/7	11:00
南丫島	Lamma Island	東南偏東	ESE	50	6/7	14:12	東南偏東	ESE	26	7/7	10:00
流浮山	Lau Fau Shan	東南偏南	SSE	51	6/7	16:24	東南	SE	30	7/7	13:00
昂坪	Ngong Ping	東南偏東	ESE	90	6/7	23:26	東	E	53	7/7	03:00
北角	North Point	東	E	50	6/7	15:33	東	E	22	7/7	03:00
坪洲	Peng Chau	東南	SE	54	6/7	14:25	東	E	30	6/7	22:00
平洲	Ping Chau	東南	SE	27	7/7	14:08	東	E	8	6/7	22:00
西貢	Sai Kung	東南偏南	SSE	50	6/7	15:43	東南偏南	SSE	30	7/7	11:00
沙洲	Sha Chau	東南	SE	52	6/7	14:52	東南	SE	34	7/7	12:00
沙螺灣	Sha Lo Wan	東南偏東	ESE	54	7/7	08:28	東	E	18	7/7	00:00
沙田	Sha Tin	東南	SE	39	7/7	09:55	東南	SE	15	7/7	11:00
							東南	SE	15	7/7	12:00
九龍天星碼頭	Star Ferry (Kowloon)	東	E	52	6/7	23:45	東南偏東	ESE	27	7/7	11:00
打鼓嶺	Ta Kwu Ling	東	E	43	7/7	03:37	東南偏南	SSE	15	7/7	13:00
大美督	Tai Mei Tuk	東	E	68	7/7	03:20	東	E	30	7/7	02:00
大帽山	Tai Mo Shan	東南偏東	ESE	69	7/7	09:17	東	E	49	6/7	23:00
大埔滘	Tai Po Kau	東南偏南	SSE	50	6/7	15:56	東南偏東	ESE	25	7/7	12:00
塔門東	Tap Mun East	-	-	62	7/7	03:56	-	-	38	7/7	04:00
大老山	Tate's Cairn	東南	SE	65	6/7	15:37	東南偏東	ESE	37	7/7	00:00
將軍澳	Tseung Kwan O	東南偏東	ESE	36	6/7	15:33	東	E	5	7/7	09:00
							東南偏東	ESE	5	7/7	11:00
青衣島蜆殼油庫	Tsing Yi Shell Oil Depot	東南	SE	49	6/7	14:40	東南	SE	24	6/7	15:00
屯門政府合署	Tuen Mun Government Offices	東南	SE	48	6/7	14:41	東南偏南	SSE	24	6/7	15:00
橫瀾島	Waglan Island	東南偏東	ESE	59	6/7	23:18	東南偏東	ESE	37	7/7	08:00
							東南偏東	ESE	37	7/7	09:00
濕地公園	Wetland Park	南	S	33	7/7	12:31	東南偏南	SSE	14	7/7	13:00
							南	S	14	7/7	14:00
黃竹坑	Wong Chuk Hang	北	N	49	6/7	14:04	北	N	17	7/7	13:00

黃麻角(赤柱)、青洲、石崗 - 沒有資料
塔門東 - 沒有風向資料

Bluff Head (Stanley), Green Island, Shek Kong - data not available
Tap Mun East - wind direction not available

表 2.2.2 兩個熱帶低氣壓影響香港期間，香港天文台總部及其他各站所錄得的日雨量

Table 2.2.2 Daily rainfall amounts recorded at the Hong Kong Observatory Headquarters and other stations during the passage of the two tropical depressions

站 (參閱圖 2.2.2) Station (See Fig. 2.2.2)		七月六日 6 Jul	七月七日 7 Jul	總雨量(毫米) Total rainfall (mm)
香港天文台 Hong Kong Observatory (HKO)		18.4	11.7	30.1
香港國際機場 Hong Kong International Airport (HKA)		2.8	1.5	4.3
長洲 Cheung Chau (CCH)		10.0	0.0	10.0
H23	香港仔 Aberdeen	17.5	5.0	22.5
N05	粉嶺 Fanling	3.5	20.0	23.5
N13	糧船灣 High Island	7.0	12.5	19.5
K04	佐敦谷 Jordan Valley	7.5	26.0	33.5
N06	葵涌 Kwai Chung	2.0	22.0	24.0
H12	半山區 Mid Levels	13.5	5.0	18.5
N09	沙田 Sha Tin	5.5	10.0	15.5
H19	筲箕灣 Shau Kei Wan	17.0	14.5	31.5
SEK	石崗 Shek Kong	0.5	7.0	7.5
K06	蘇屋邨 So Uk Estate	9.5	20.0	29.5
R31	大美督 Tai Mei Tuk	10.0	15.0	25.0
R21	踏石角 Tap Shek Kok	0.0	3.0	3.0
N17	東涌 Tung Chung	0.0	0.0	0.0
TMR	屯門水庫 Tuen Mun Reservoir	0.3	6.8	7.1

表 2.2.3 兩個熱帶低氣壓影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮

Table 2.2.3 Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of the two tropical depressions

站 Station (https://www.hko.gov.hk/tc/informtc/station2021.html)		最高潮位 (海圖基準面以上) Maximum sea level (above chart datum)			最大風暴潮 (天文潮高度以上) Maximum storm surge (above astronomical tide)		
		高度(米) Height (m)	日期/月份 Date/Month	時間 Time	高度(米) Height (m)	日期/月份 Date/Month	時間 Time
鰂魚涌	Quarry Bay	2.11	7/7	07:10	0.15	6/7	23:27
石壁	Shek Pik	2.26	7/7	07:04	0.21	6/7	23:25
大廟灣	Tai Miu Wan	2.12	7/7	07:26	0.22	6/7	22:29
大埔滘	Tai Po Kau	2.09	7/7	08:01	0.22	6/7	22:55
尖鼻咀	Tsim Bei Tsui	2.49	7/7	07:59	0.20	7/7	01:05

橫瀾島 - 沒有資料 Waglan Island - data not available

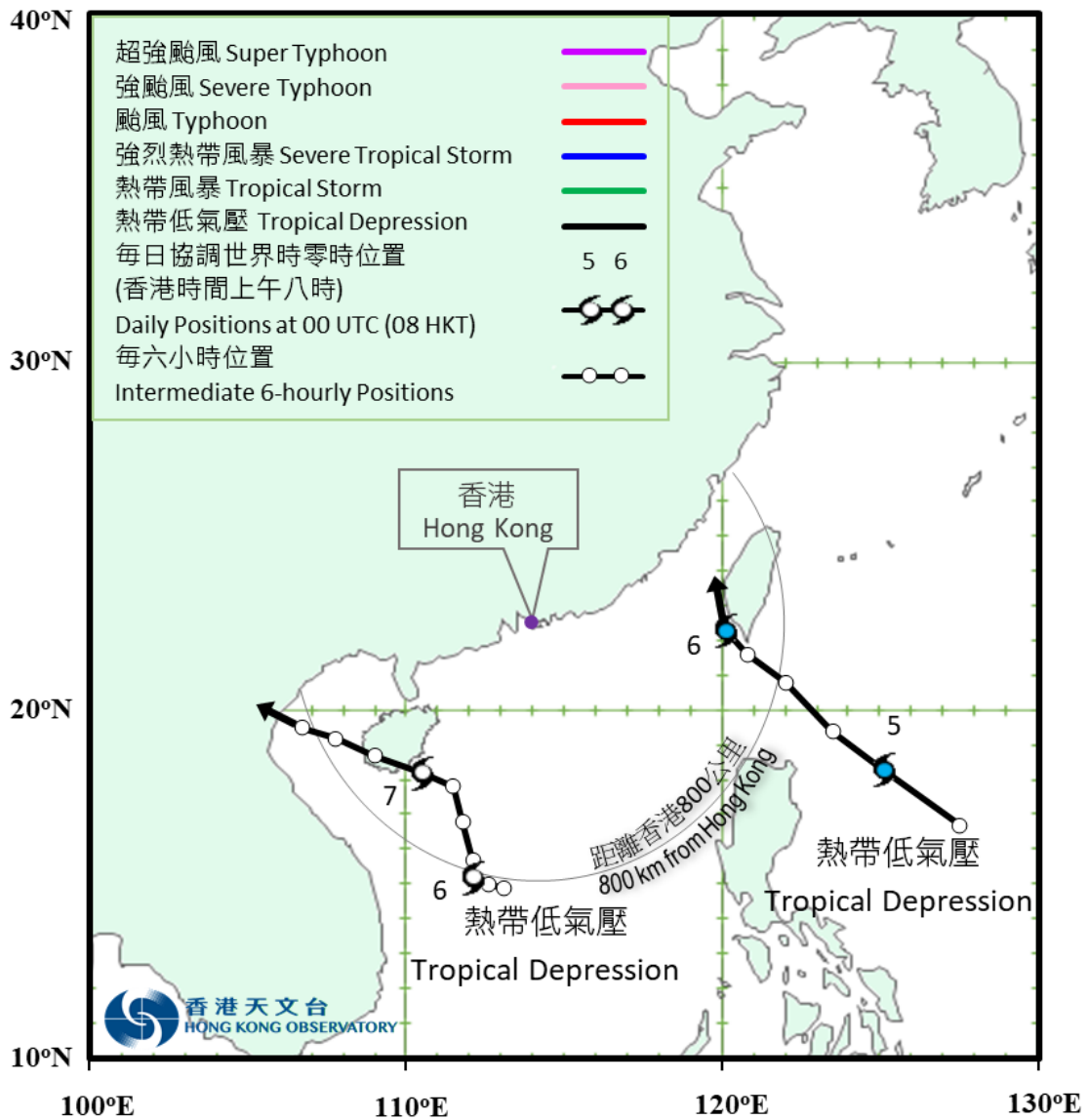


圖 2.2.1 二零二一年七月五日至八日兩個熱帶低氣壓的暫定路徑圖。
 Figure 2.2.1 Provisional Tracks of the two tropical depressions: 5 – 8 July 2021.

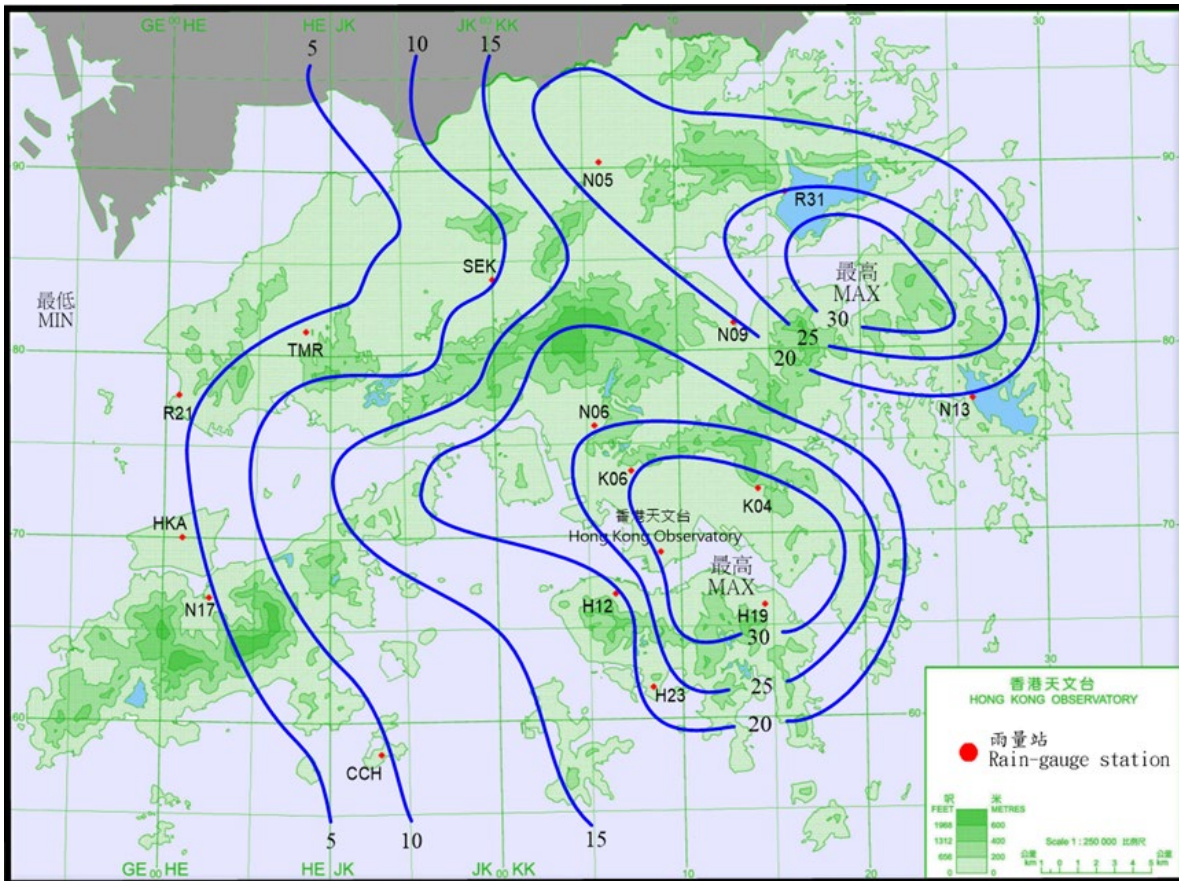


圖 2.2.2 二零二一年七月六日至七日的雨量分佈(等雨量線單位為毫米)。
 Figure 2.2.2 Rainfall distribution on 6 – 7 July 2021 (isohyets in millimetres).

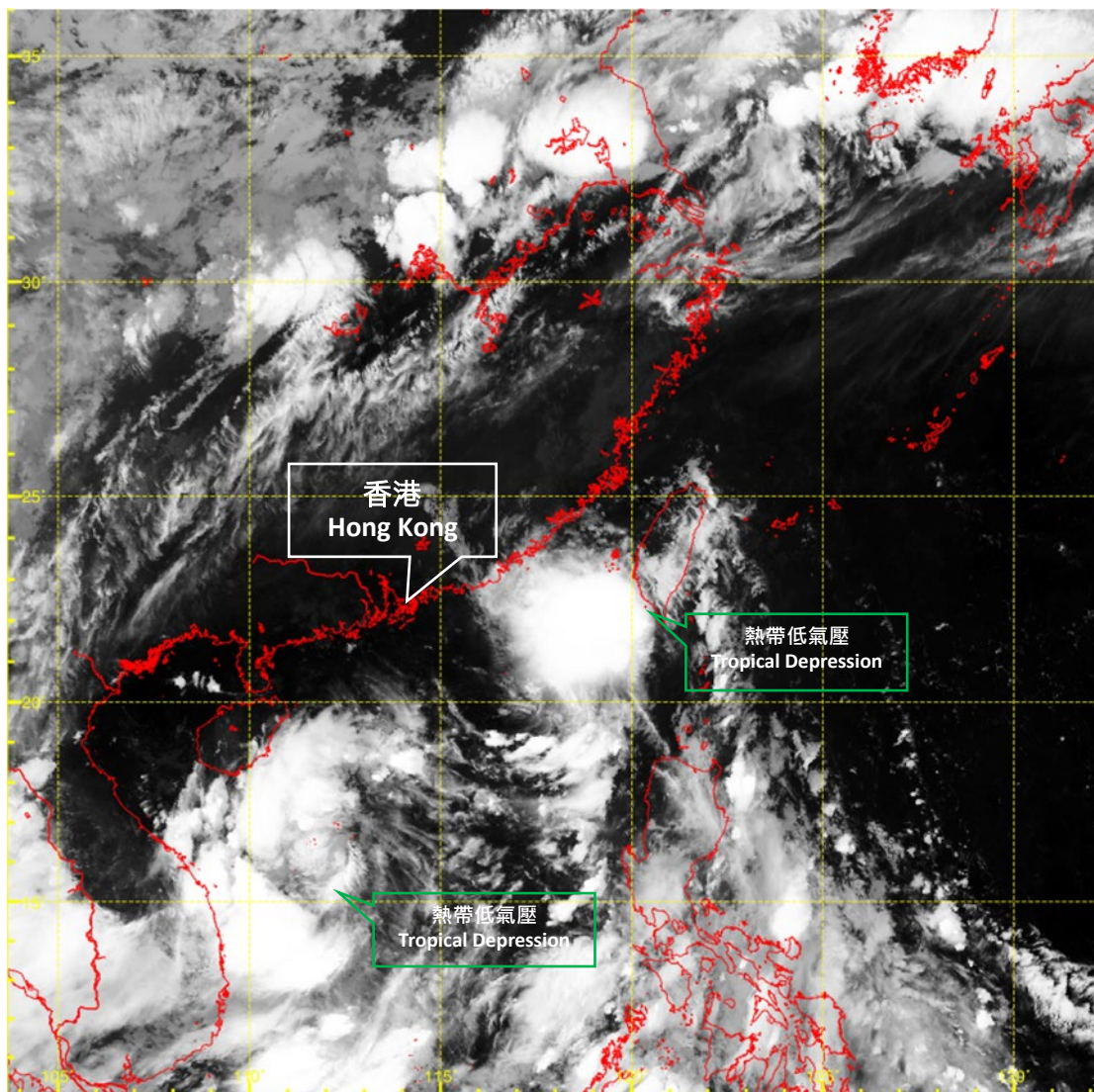


圖 2.2.3a 二零二一年七月六日上午 5 時左右的紅外線衛星圖片，當時第一個熱帶低氣壓集結在台灣南部附近，而第二個熱帶低氣壓則位於南海中部。

Figure 2.2.3a Infra-red satellite imagery around 5 a.m. on 6 July 2021, when the first tropical depression was near the southern part of Taiwan and the second tropical depression was over the central part of the South China Sea.

〔此衛星圖像接收自日本氣象廳的向日葵 8 號衛星。〕
 [The satellite imagery was originally captured by Himawari-8 Satellite (H-8) of Japan Meteorological Agency (JMA).]

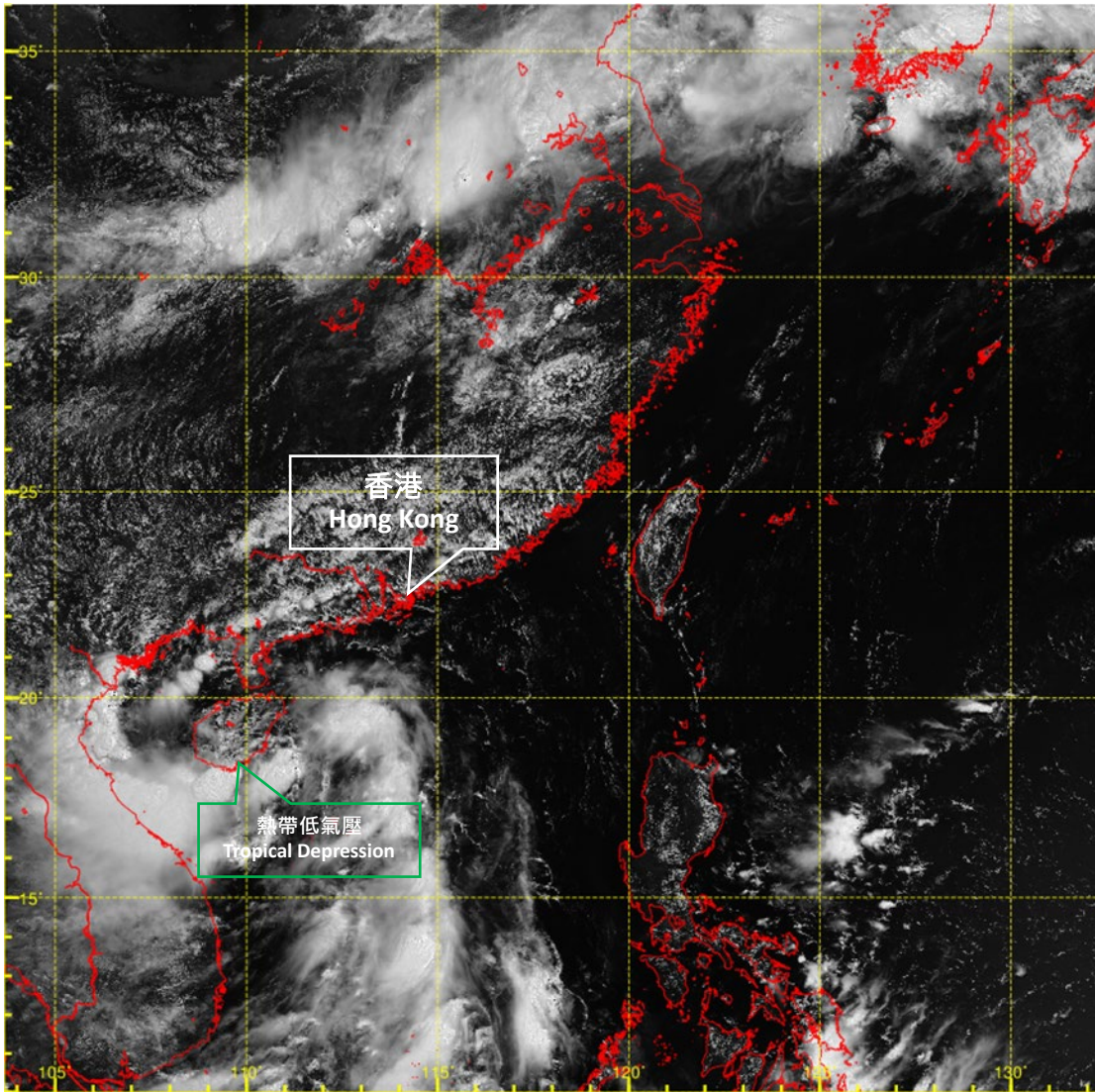


圖 2.2.3b 二零二一年七月七日上午 11 時左右的可見光衛星圖片，當時第二個熱帶低氣壓已登陸海南島，而副熱帶高壓脊為中國東南部及南海東北部帶來普遍晴朗的天氣。

Figure 2.2.3 Visible satellite imagery around 11 a.m. on 7 July 2021. The second tropical depression had already made landfall over Hainan Island at that time. The subtropical ridge was bringing generally fine weather to southeastern China and the northeastern part of the South China Sea.

〔此衛星圖像接收自日本氣象廳的向日葵 8 號衛星。〕

[The satellite imagery was originally captured by Himawari-8 Satellite (H-8) of Japan Meteorological Agency (JMA).]

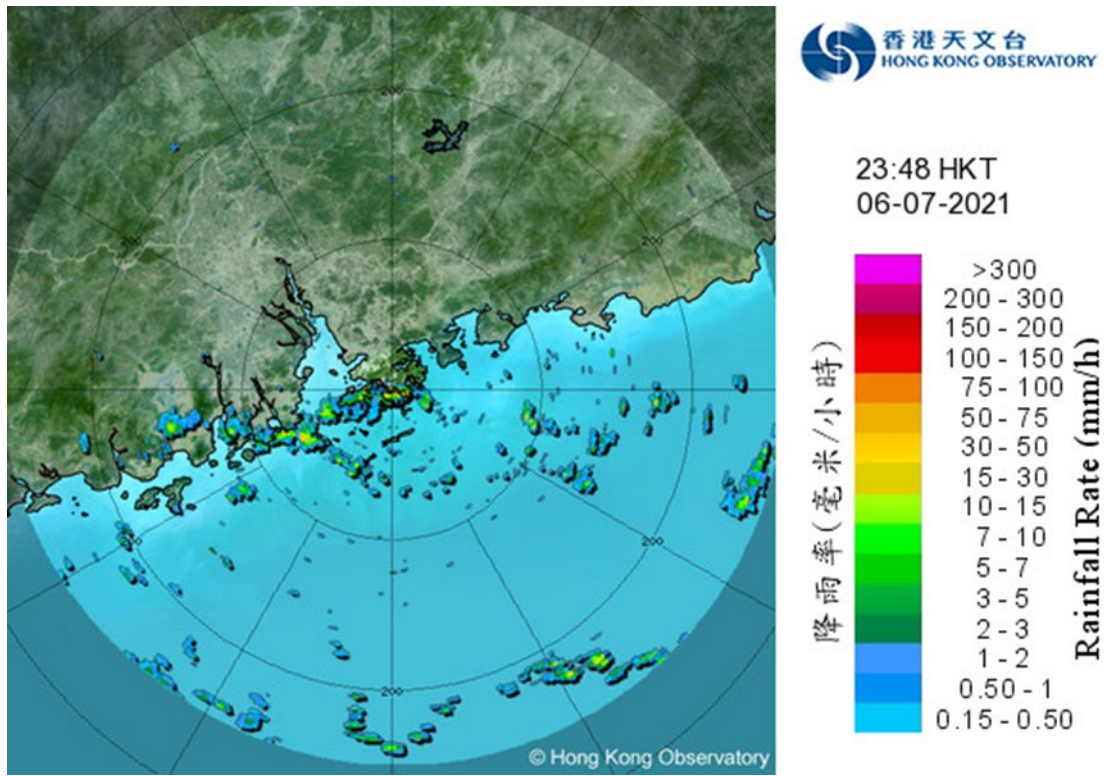


圖 2.2.4 二零二一年七月六日晚上 11 時 48 分的雷達回波圖像，當時與兩個熱帶低氣壓相關的外圍雨帶正影響香港。

Figure 2.2.4 Image of radar echoes at 11:48 p.m. on 6 July 2021. The outer rainbands associated with the two tropical depressions were affecting Hong Kong at that time.

2.3 颱風查帕卡(2107)

二零二一年七月十八日至二十四日

查帕卡是二零二一年第四個影響香港的熱帶氣旋。

熱帶低氣壓查帕卡於七月十八日晚上在香港之西南偏南約 180 公里的南海北部上形成，大致向西北至西北偏西方向緩慢移動，趨向廣東西部沿岸並迅速增強。七月二十日凌晨查帕卡增強為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 120 公里，晚上查帕卡開始減弱並在陽江附近登陸。查帕卡於七月二十一日橫過廣東西部及廣西內陸，逐步減弱為熱帶低氣壓。查帕卡翌日轉向西南偏南移動，七月二十三日進入北部灣。最後於七月二十四日在北部灣減弱為一個低壓區。

七月十八日晚上查帕卡形成後，天文台在晚上 9 時 40 分發出一號戒備信號，當時亦是查帕卡最接近香港的時候。當晚及翌日早上本港普遍吹和緩至清勁偏東風，離岸及高地間中吹強風。由於查帕卡逐漸靠近廣東西部沿岸及顯著增強，天文台在七月十九日下午 4 時 10 分發出三號強風信號，當時查帕卡集結在香港之西南約 180 公里。當晚及七月二十日初時本港離岸吹強風，高地間中吹烈風。隨著查帕卡逐漸遠離香港並減弱，本港風力緩和，天文台於七月二十日下午 1 時 20 分以一號戒備信號取代三號強風信號，到當晚 7 時 40 分取消所有熱帶氣旋警告信號。

在查帕卡的影響下，尖鼻咀錄得最高潮位(海圖基準面以上) 2.60 米，而大埔滘則錄得最大風暴潮(天文潮高度以上) 0.41 米。天文台總部於七月十九日下午 4 時 09 分錄得最低瞬時海平面氣壓 1001.2 百帕斯卡。

受查帕卡相關的外圍雨帶影響，本港七月十八日至二十日有狂風大驟雨及雷暴，期間天文台曾四度發出黃色暴雨警告，亦在七月二十日下午發出新界北部水浸特別報告。這三天本港大部分地區錄得超過 200 毫米雨量，新界東的雨量更超過 350 毫米。

查帕卡吹襲香港期間，本港有多宗塌樹及水浸報告。在強陣風下牛池灣有大樹倒塌並壓毀鐵絲網。一名男子於七月二十日在馬鞍山遠足時遭洪水沖走，其後被證實死亡。

2.3 Typhoon Cempaka (2107) 18 to 24 July 2021

Cempaka was the fourth tropical cyclone affecting Hong Kong in 2021.

Cempaka formed as a tropical depression over the northern part of the South China Sea about 180 km south-southwest of Hong Kong on the night of 18 July. It moved generally northwestwards to west-northwestwards slowly towards the coast of western Guangdong and intensified rapidly. Cempaka intensified into a typhoon in the small hours on 20 July and reached its peak intensity with an estimated maximum sustained wind of 120 km/h near its centre. It started to weaken at night and made landfall near Yangjiang. Cempaka moved across western Guangdong and inland Guangxi, and weakened into a tropical depression progressively on 21 July. It turned to move south-southwestwards the next day and entered Beibu Wan on 23 July. Cempaka finally degenerated into an area of low pressure over Beibu Wan on 24 July.

After the formation of Cempaka on the night of 18 July, the Hong Kong Observatory issued the Standby Signal, No.1 at 9:40 p.m. Cempaka was also closest to the territory at that time. Local winds were generally moderate to fresh easterlies that night and the next morning, occasionally reaching strong force offshore and on high ground. With Cempaka edging closer to the coast of western Guangdong and intensifying, the Strong Wind Signal, No.3 was issued at 4:10 p.m. on 19 July when Cempaka was about 180 km southwest of Hong Kong. Locally, there were strong winds offshore and occasional gales on high ground that night and on the morning of 20 July. As Cempaka moved away from Hong Kong gradually and weakened, local winds moderated and the Strong Wind Signal, No.3 was replaced by the Standby Signal, No.1 at 1:20 p.m. on 20 July. All tropical cyclone warning signals were cancelled at 7:40 p.m. that day.

Under the influence of Cempaka, a maximum sea level (above chart datum) of 2.60 m and a maximum storm surge of 0.41 m (above astronomical tide) were recorded at Tsim Bei Tsui and Tai Po Kau respectively. At the Observatory Headquarters, the lowest instantaneous mean sea-level pressure of 1001.2 hPa was recorded at 4:09 p.m. on 19 July.

The outer rainbands associated with Cempak brought heavy squally showers and thunderstorms to Hong Kong on 18 - 20 July. The Observatory issued the Amber Rainstorm Warning for four times during this period. The Special Announcement on Flooding in Northern New Territories was also issued on the afternoon of 20 July. More than 200 millimetres of rainfall were recorded over most part of Hong Kong during these three days, with rainfall exceeding 350 millimetres over the eastern part of the New Territories.

A number of reports of fallen trees and flooding were reported in Hong Kong during the passage of Cempaka. A tree toppled at Ngau Chi Wan under intense gusts, damaging the wire fences. A man was washed away by flash floods while hiking in Ma On Shan on 20 July and confirmed dead later.

表 2.3.1 在查帕卡影響下，本港各站在熱帶氣旋警告信號生效時所錄得的最高陣風、最高每小時平均風速及風向

Table 2.3.1 Maximum gust peak speeds and maximum hourly mean winds with associated wind directions recorded at various stations when the tropical cyclone warning signals for Cempaka were in force

站 Station (https://www.hko.gov.hk/tc/informtc/station2021.html)		最高陣風 Maximum Gust				最高每小時平均風速 Maximum Hourly Mean Wind					
		風向 Direction		風速 (公里/時) Speed (km/h)	日期/月份 Date/Month	時間 Time	風向 Direction		風速 (公里/時) Speed (km/h)	日期/月份 Date/Month	時間 Time
中環碼頭	Central Pier	東南偏東	ESE	55	20/7	03:22	東	E	32	19/7	11:00
長洲	Cheung Chau	東南偏東	ESE	75	19/7	12:05	東南偏東	ESE	44	20/7	00:00
長洲泳灘	Cheung Chau Beach	東北偏東	ENE	75	19/7	12:00	東北偏東	ENE	47	19/7	13:00
香港國際機場	Hong Kong International Airport	東	E	51	19/7	12:35	東	E	30	19/7	22:00
啟德	Kai Tak	東北	NE	63	19/7	00:18	東	E	25	19/7	15:00
京士柏	King's Park	東	E	53	19/7	20:42	東	E	21	19/7	21:00
南丫島	Lamma Island	東南偏東	ESE	60	19/7	12:06	東	E	27	19/7	13:00
流浮山	Lau Fau Shan	東	E	53	19/7	15:55	東	E	24	19/7	16:00
昂坪	Ngong Ping	東	E	96	20/7	06:10	東	E	69	19/7	18:00
北角	North Point	東	E	54	19/7	07:35	東	E	33	19/7	11:00
		東北偏東	ENE	54	19/7	10:47					
坪洲	Peng Chau	東	E	58	19/7	12:56	東	E	39	19/7	18:00
平洲	Ping Chau	東北偏東	ENE	34	19/7	09:44	東	E	12	19/7	19:00
西貢	Sai Kung	東	E	86	18/7	22:58	東北偏東	ENE	34	19/7	11:00
沙洲	Sha Chau	東南偏東	ESE	54	19/7	12:39	東南偏東	ESE	34	19/7	18:00
沙螺灣	Sha Lo Wan	東	E	53	19/7	16:50	東	E	25	19/7	17:00
沙田	Sha Tin	東	E	39	19/7	15:10	東北	NE	14	18/7	23:00
		東南	SE	39	19/7	16:47					
九龍天星碼頭	Star Ferry (Kowloon)	東	E	54	19/7	23:42	東	E	28	19/7	15:00
打鼓嶺	Ta Kwu Ling	東南偏東	ESE	50	19/7	13:57	東	E	16	19/7	16:00
大美督	Tai Mei Tuk	東	E	76	18/7	23:05	東	E	42	19/7	18:00
大帽山	Tai Mo Shan	東南偏東	ESE	89	19/7	18:55	東	E	62	19/7	18:00
大埔滘	Tai Po Kau	東	E	61	18/7	23:11	東	E	32	19/7	19:00
塔門東	Tap Mun East	東	E	89	18/7	22:53	東南偏東	ESE	48	19/7	15:00
大老山	Tate's Cairn	東南偏東	ESE	86	19/7	00:14	東南偏東	ESE	56	19/7	18:00
		東南偏東	ESE	86	19/7	00:15					
將軍澳	Tseung Kwan O	東北偏北	NNE	40	19/7	00:21	北	N	6	19/7	01:00
青衣島蜆殼油庫	Tsing Yi Shell Oil Depot	東	E	51	19/7	02:46	東南偏東	ESE	19	20/7	19:00
屯門政府合署	Tuen Mun Government Offices	東北	NE	37	19/7	03:02	東北偏北	NNE	11	20/7	07:00
橫瀾島	Waglan Island	東南偏東	ESE	75	19/7	12:22	東	E	53	19/7	11:00
		東南偏東	ESE	75	19/7	12:24					
濕地公園	Wetland Park	東	E	36	18/7	23:35	東	E	12	19/7	19:00
黃竹坑	Wong Chuk Hang	-	-	51	19/7	00:36	-	-	18	19/7	11:00

黃麻角(赤柱)、青洲、石崗 - 沒有資料
黃竹坑 - 沒有風向資料

Bluff Head (Stanley), Green Island, Shek Kong - data not available
Wong Chuk Hang - wind direction not available

表 2.3.2 在查帕卡影響下，熱帶氣旋警告信號系統的八個參考測風站在熱帶氣旋警告信號生效時錄得持續風力達到強風程度的時段

Table 2.3.2 Periods during which sustained strong winds were attained at the eight reference anemometers in the tropical cyclone warning system when tropical cyclone warning signals for Cempaka were in force

站 Station (https://www.hko.gov.hk/tc/informtc/station2021.html)		最初達到強風*時間		最後達到強風*時間	
		Start time when strong wind speed* was attained		End time when strong wind speed* was attained	
		日期/月份 Date/Month	時間 Time	日期/月份 Date/Month	時間 Time
長洲	Cheung Chau	19/7	01:56	20/7	18:48
西貢	Sai Kung	18/7	23:04	19/7	00:14

香港國際機場、啟德、流浮山、沙田、打鼓嶺、青衣島蜆殼油庫的持續風力未達到強風程度。

The sustained wind speed did not attain strong force at Hong Kong International Airport, Kai Tak, Lau Fau Shan, Sha Tin, Ta Kwu Ling and Tsing Yi Shell Oil Depot.

* 十分鐘平均風速達每小時 41 - 62 公里

* 10-minute mean wind speed of 41 - 62 km/h

註： 本表列出持續風力達到強風程度的起始及終結時間。期間風力可能高於或低於指定的風力。

Note: The table gives the start and end time of sustained strong winds. Winds might fluctuate above or below the specified wind speeds in between the times indicated.

表 2.3.3 查帕卡影響香港期間，香港天文台總部及其他各站所錄得的日雨量
Table 2.3.3 Daily rainfall amounts recorded at the Hong Kong Observatory Headquarters and other stations during the passage of Cempaka

站 (參閱圖 2.3.2) Station (See Fig. 2.3.2)			七月十八日 18 Jul	七月十九日 19 Jul	七月二十日 20 Jul	總雨量(毫米) Total rainfall (mm)
香港天文台 Hong Kong Observatory (HKO)			42.4	117.2	87.8	247.4
香港國際機場 Hong Kong International Airport (HKA)			12.6	104.5	137.1	254.2
長洲 Cheung Chau (CCH)			[38.5]	[142.0]	[128.0]	[308.5]
H23	香港仔	Aberdeen	57.5	93.5	82.5	233.5
N05	粉嶺	Fanling	5.0	52.5	109.5	167.0
N13	糧船灣	High Island	47.0	62.5	141.5	251.0
K04	佐敦谷	Jordan Valley	48.0	170.5	162.5	381.0
N06	葵涌	Kwai Chung	24.0	112.0	112.0	248.0
H12	半山區	Mid Levels	54.0	114.0	102.0	270.0
N09	沙田	Sha Tin	40.5	92.5	166.0	299.0
H19	筲箕灣	Shau Kei Wan	80.0	130.5	107.0	317.5
SEK	石崗	Shek Kong	[14.0]	[64.5]	[118.5]	[197.0]
K06	蘇屋邨	So Uk Estate	29.0	126.5	100.5	256.0
R31	大美督	Tai Mei Tuk	8.0	45.5	116.0	169.5
R21	踏石角	Tap Shek Kok	5.5	52.5	123.5	181.5
TMR	屯門水庫	Tuen Mun Reservoir	5.0	62.1	120.1	187.2

東涌 (N17) - 沒有資料 Tung Chung (N17) - data not available

註：[] 基於不完整的每小時雨量數據。 Note：[] based on incomplete hourly data.

表 2.3.4 查帕卡影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮

Table 2.3.4 Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of Cempaka

站 Station (https://www.hko.gov.hk/tc/informtc/station2021.html)		最高潮位 (海圖基準面以上) Maximum sea level (above chart datum)			最大風暴潮 (天文潮高度以上) Maximum storm surge (above astronomical tide)		
		高度(米) Height (m)	日期/月份 Date/Month	時間 Time	高度(米) Height (m)	日期/月份 Date/Month	時間 Time
鰂魚涌	Quarry Bay	2.34	20/7	05:14	0.31	20/7	05:14
石壁	Shek Pik	2.48	20/7	05:27	0.39	19/7	12:17
大廟灣	Tai Miu Wan	2.30	20/7	05:45	0.38	18/7	23:18
大埔滘	Tai Po Kau	2.36	20/7	05:24	0.41	20/7	05:09
尖鼻咀	Tsim Bei Tsui	2.60	20/7	06:37	0.34	20/7	10:55

橫瀾島 - 沒有資料 Waglan Island - data not available

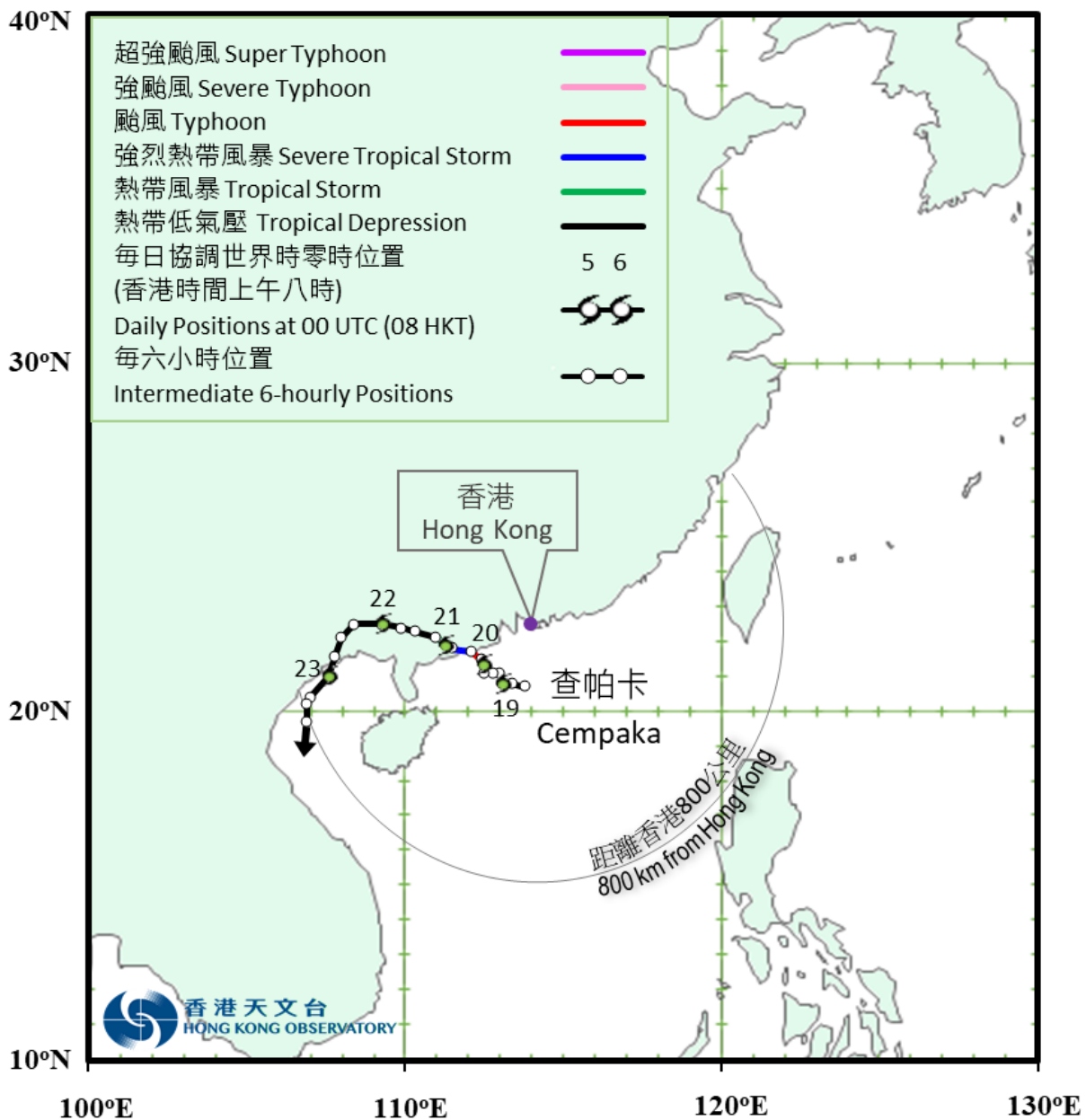


圖 2.3.1a 二零二一年七月十八日至二十四日查帕卡的暫定路徑圖。

Figure 2.3.1a Provisional Track of Cempaka : 18 – 24 July 2021.

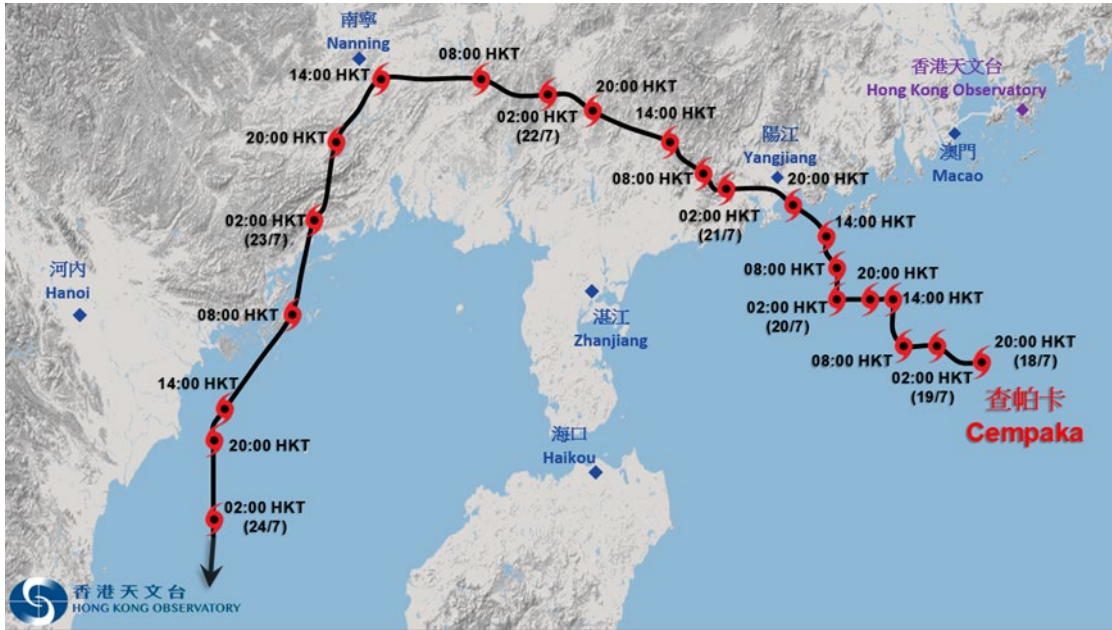


圖 2.3.1b 查帕卡接近香港時的暫定路徑圖。

Figure 2.3.1b Provisional Track of Cempaka near Hong Kong.

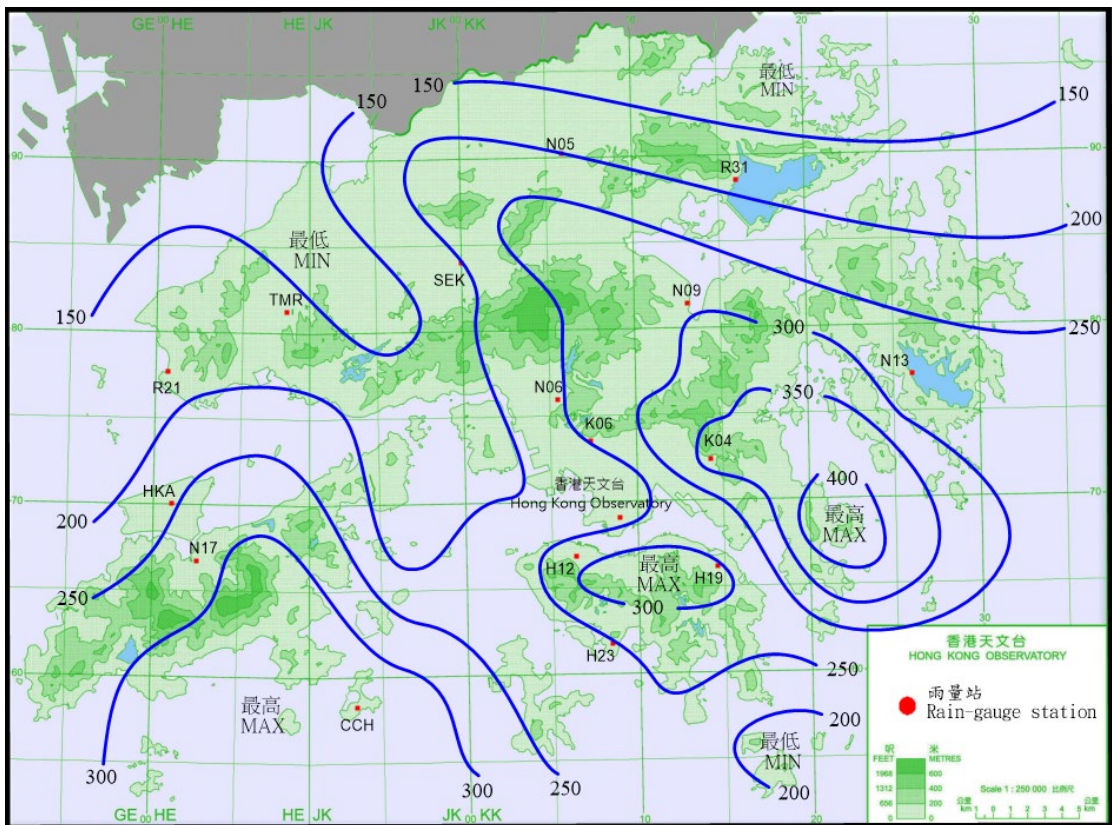


圖 2.3.2 二零二一年七月十八日至二十日的雨量分佈(等雨量線單位為毫米)。

Figure 2.3.2 Rainfall distribution on 18 – 20 July 2021 (isohyets in millimetres).

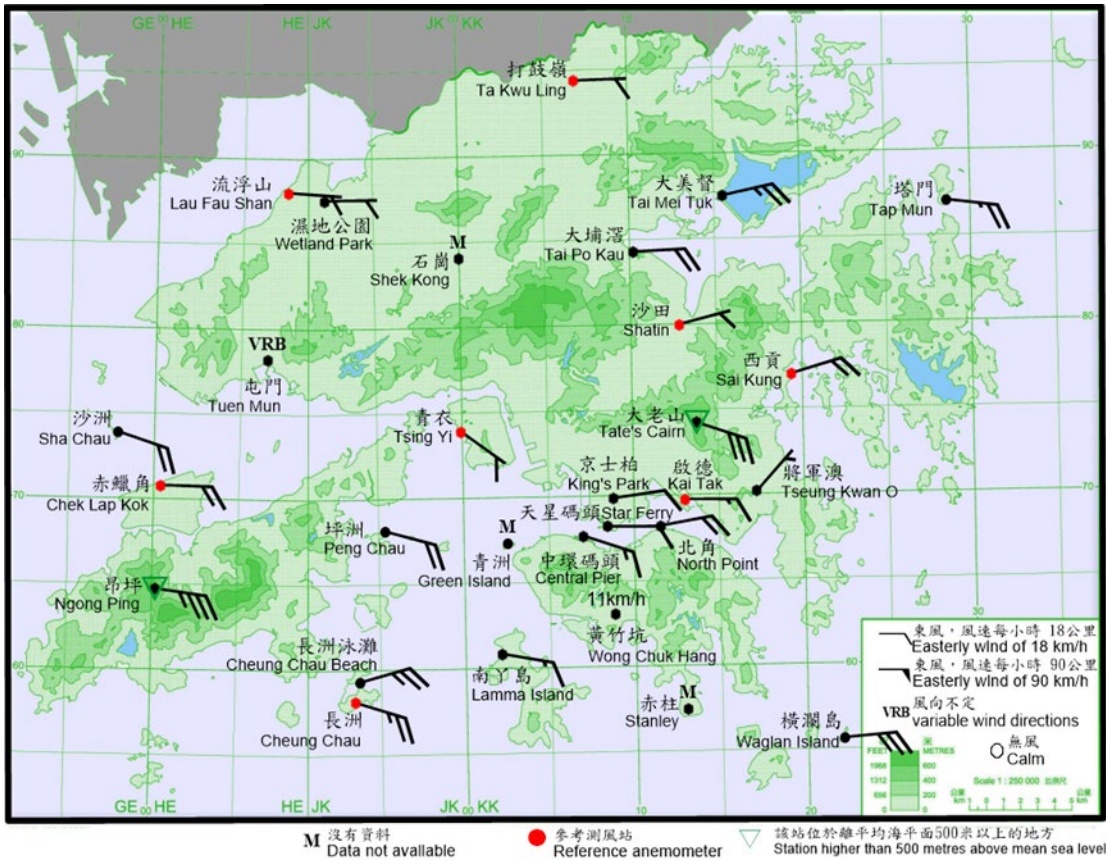


圖 2.3.3 二零二一年七月十九日下午 6 時正香港各站錄得的十分鐘平均風向和風速。當時昂坪的風力達到烈風程度，大老山、橫瀾島、長洲、長洲泳灘及大美督的風力達到強風程度。

Figure 2.3.3 10-minute mean wind direction and speed recorded at various stations in Hong Kong at 6:00 p.m. on 19 July 2021. Wind at Ngong Ping reached gale force at that time, while winds at Tate's Cairn, Waglan Island, Cheung Chau, Cheung Chau Beach and Tai Mei Tuk reached strong force.

註： 屯門當時錄得的十分鐘平均風速為每小時 10 公里。
 Note: The 10-minute mean wind speed recorded at Tuen Mun was 10 km/h at that time

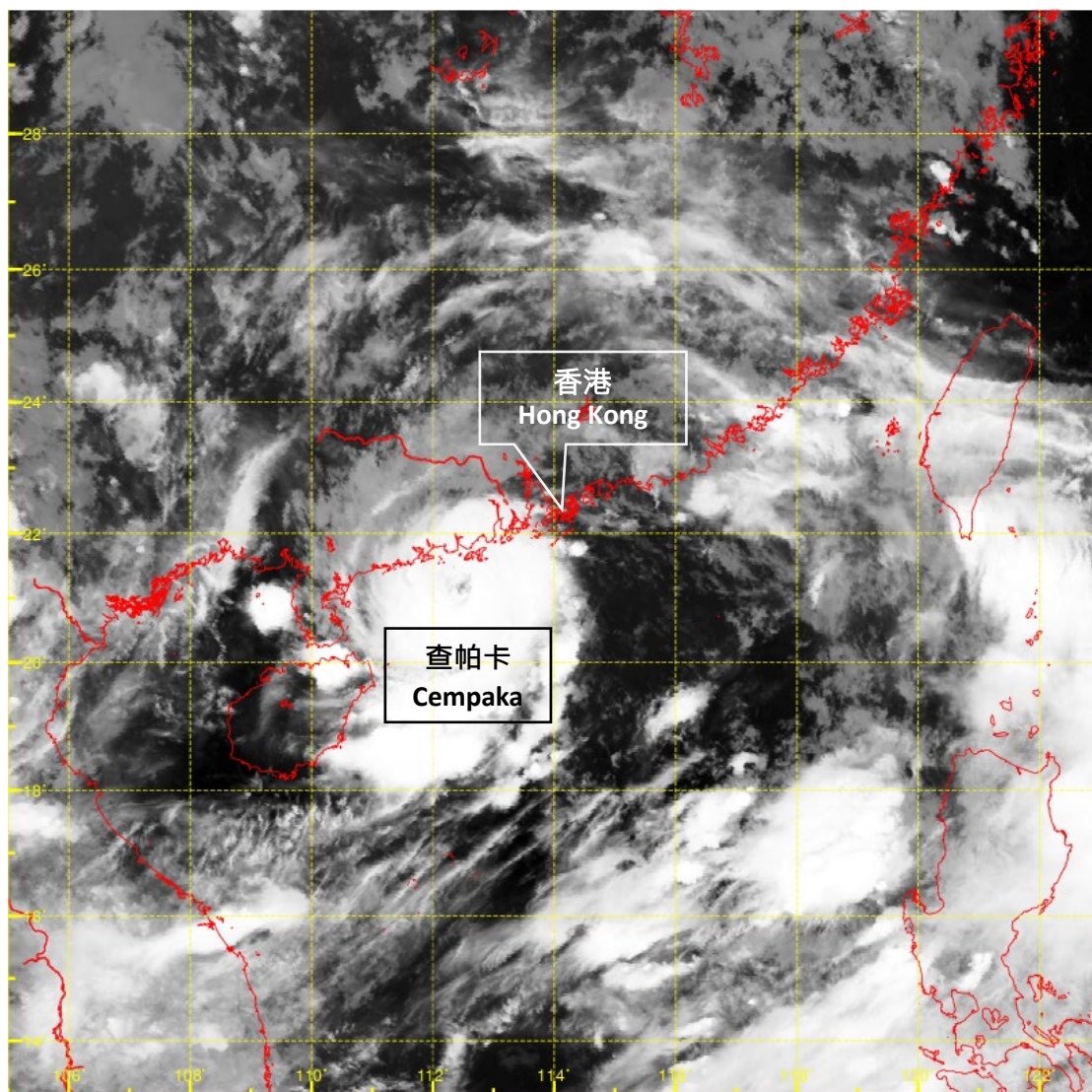


圖 2.3.4 二零二一年七月二十日上午 2 時左右的紅外線衛星圖片，當時查帕卡達到其最高強度，中心附近最高持續風速估計為每小時 120 公里。查帕卡的對流雲團較為細小，直徑只有約 350 公里。

Figure 2.3.4 Infra-red satellite imagery around 2 a.m. on 20 July 2021, when Cempaka was at its peak intensity with an estimated sustained wind of 120 km/h near its centre. The convection of Cempaka was relatively small with a diameter of only around 350 km.

〔此衛星圖像接收自日本氣象廳的向日葵 8 號衛星。〕

[The satellite imagery was originally captured by Himawari-8 Satellite (H-8) of Japan Meteorological Agency (JMA).]

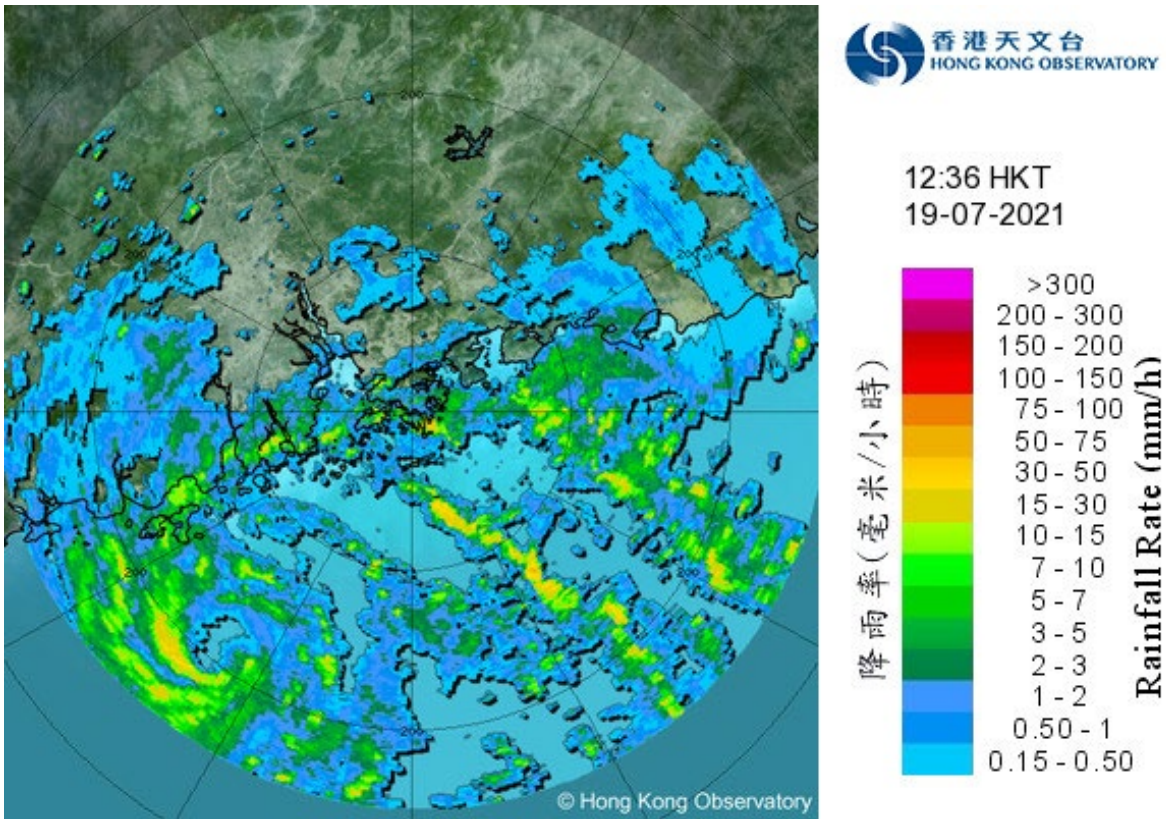


圖 2.3.5a 二零二一年七月十九日下午 12 時 36 分的雷達回波圖像，當時查帕卡的外圍雨帶正影響廣東沿岸及南海北部，黃色暴雨警告正在生效。

Figure 2.3.5a Image of radar echoes at 12:36 p.m. on 19 July 2021 when the outer rainbands of Cempaka were affecting the coast of Guangdong and the northern part of the South China Sea. Amber Rainstorm Warning was in force at that time.

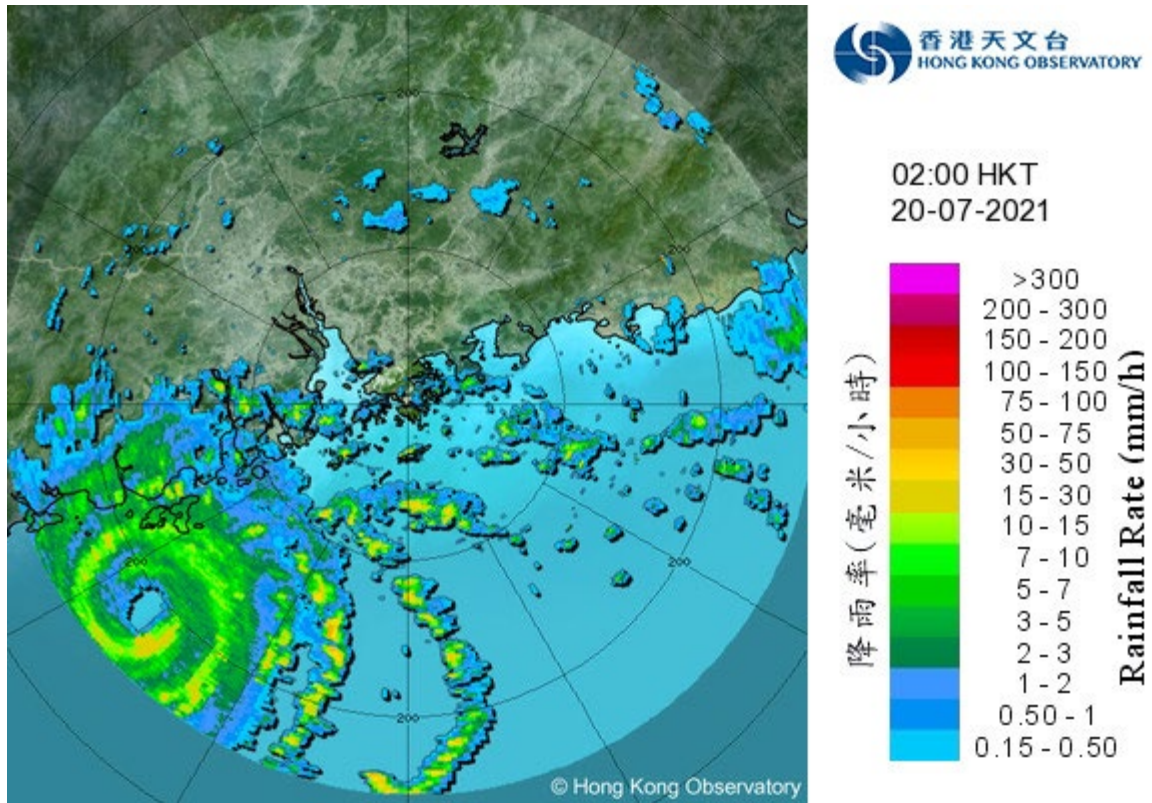
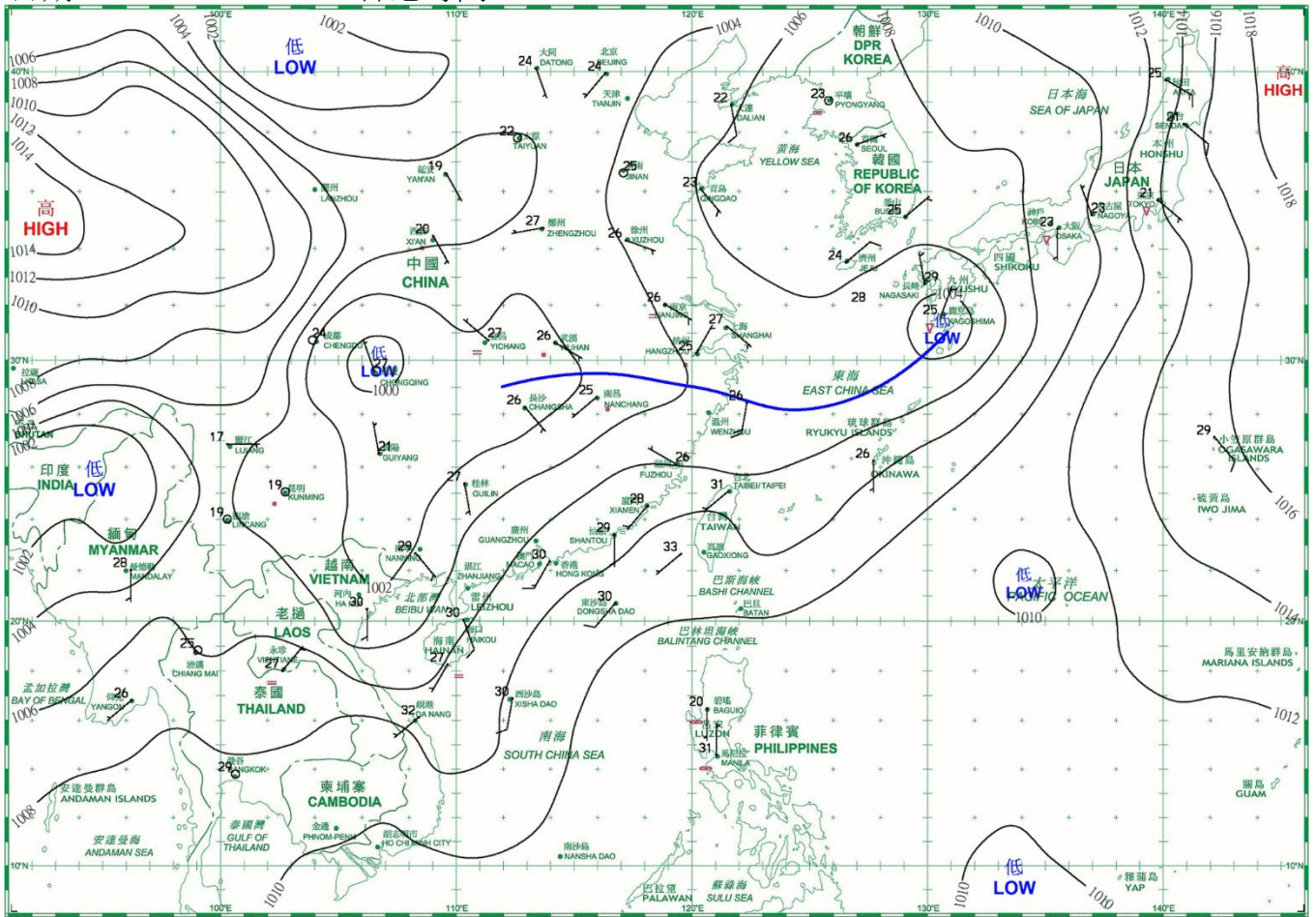


圖 2.3.5b 二零二一年七月二十日上午 2 時正的雷達回波圖像，查帕卡直徑約 25 公里的風眼清晰可見。

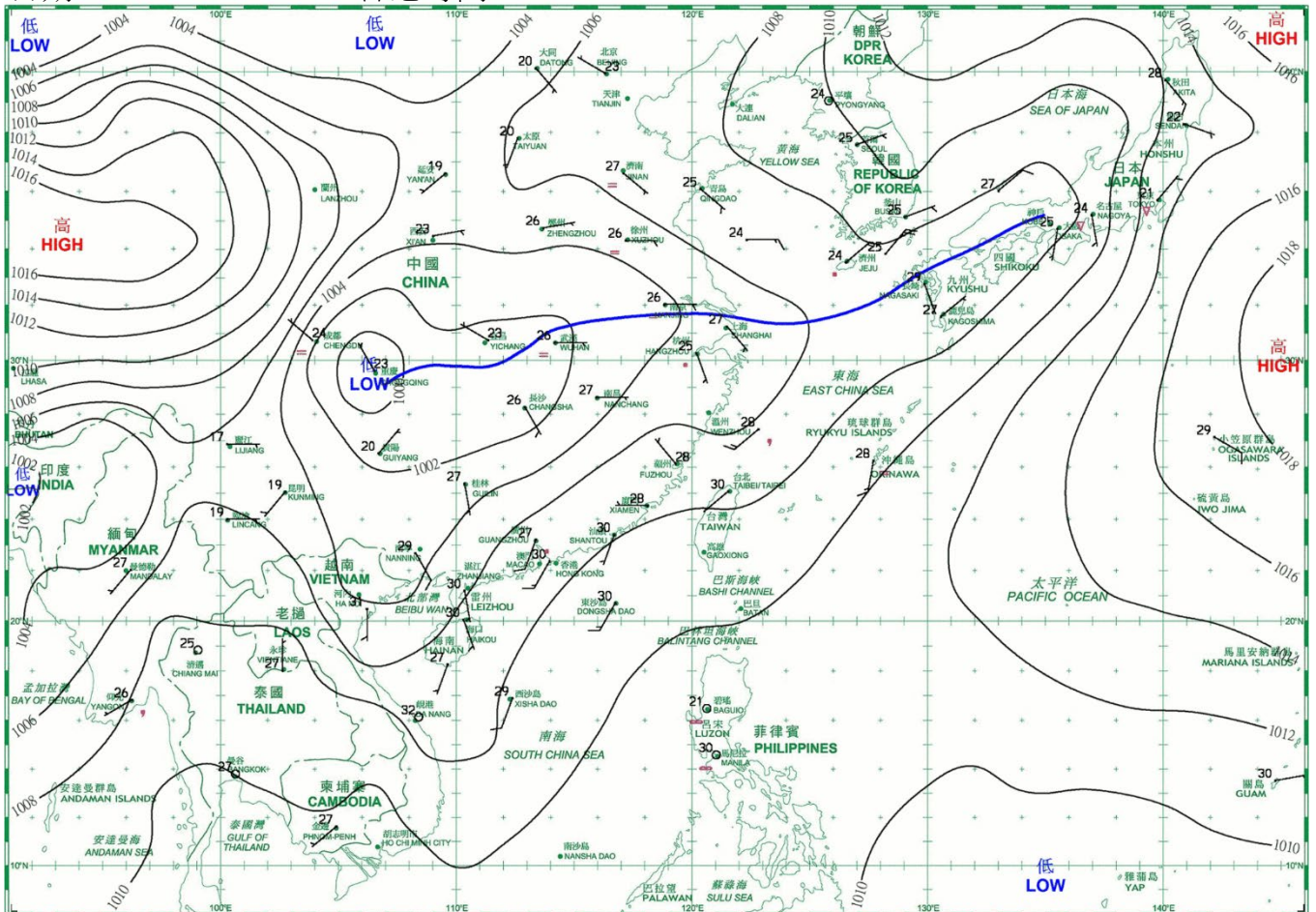
Figure 2.3.5b Image of radar echoes at 2:00 a.m. on 20 July 2021 showing clearly the eye of Cempaka with a diameter of about 25 km.

3. 二零二一年七月每日天氣圖 Daily Weather Maps for July 2021

日期/Date: 01.07.2021 香港時間/HK Time: 08:00

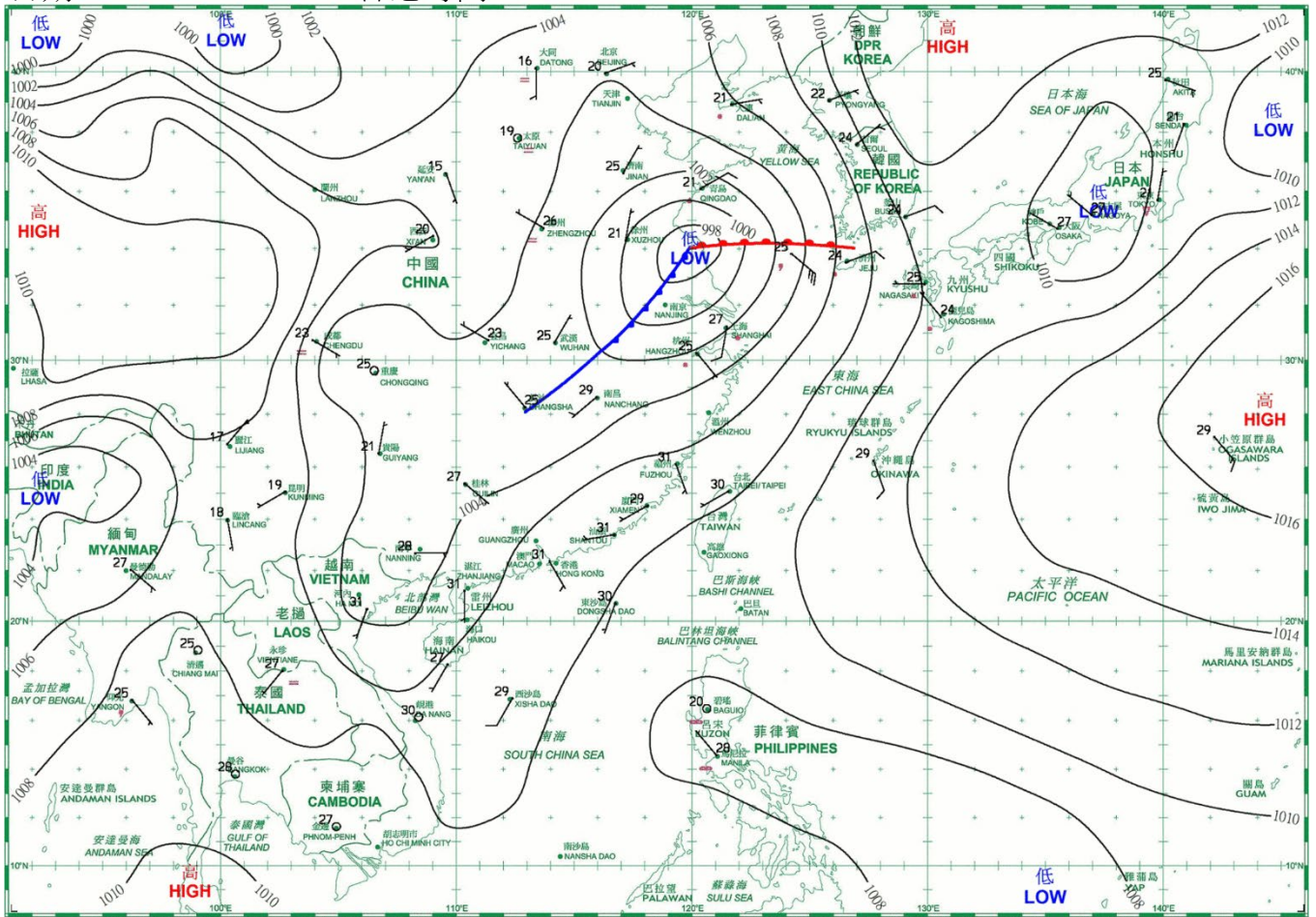


日期/Date: 02.07.2021 香港時間/HK Time: 08:00

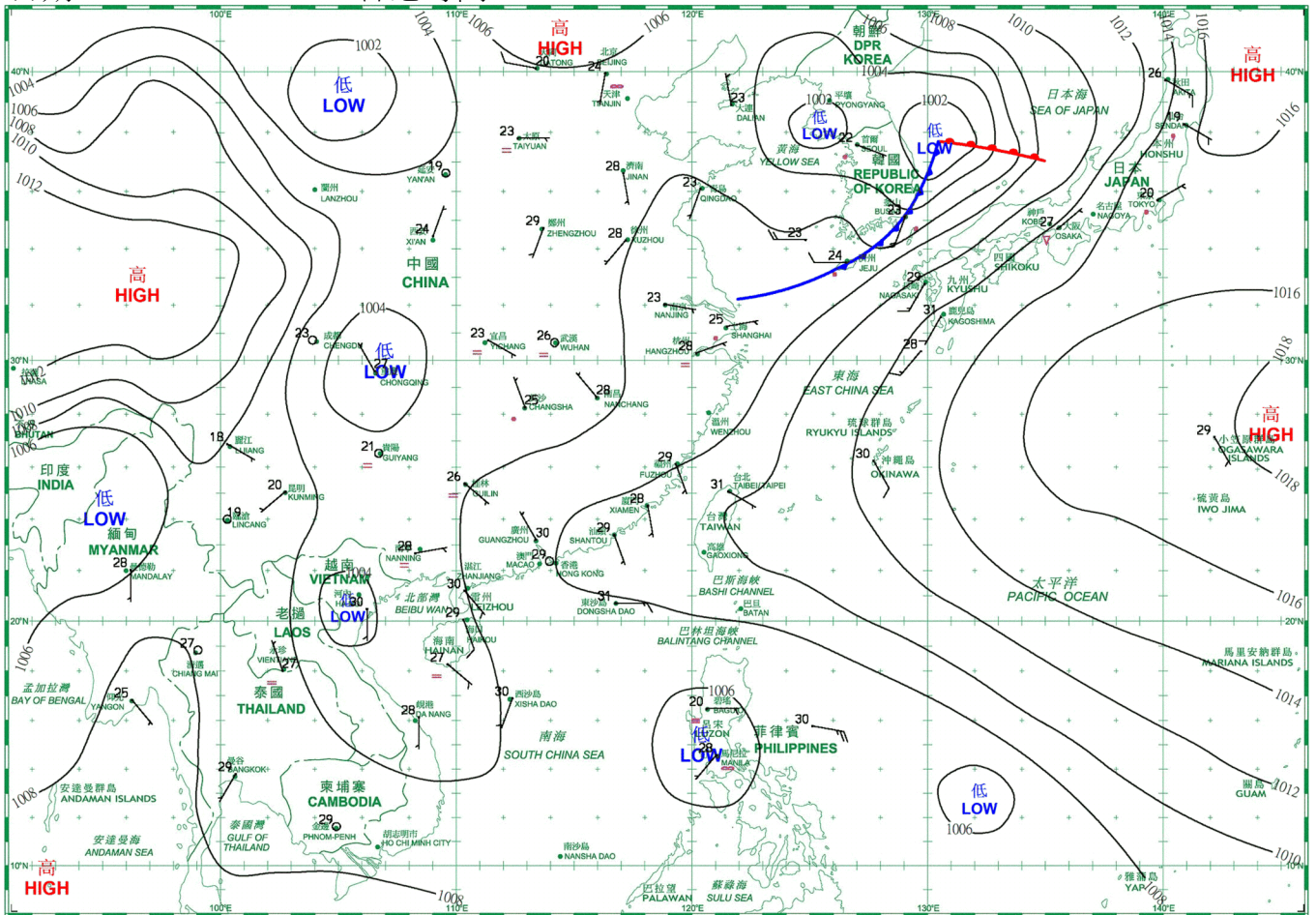


- 等壓線 Isobar(hPa)
- 冷鋒 Cold Front
- 暖鋒 Warm Front
- 錮囚鋒 Occlusion
- 靜止鋒 Stationary Front
- 槽軸 (線) Axis of Trough
- 消散中的冷鋒 Dissipating Cold Front
- 熱帶氣旋中心 Centre of Tropical Cyclone

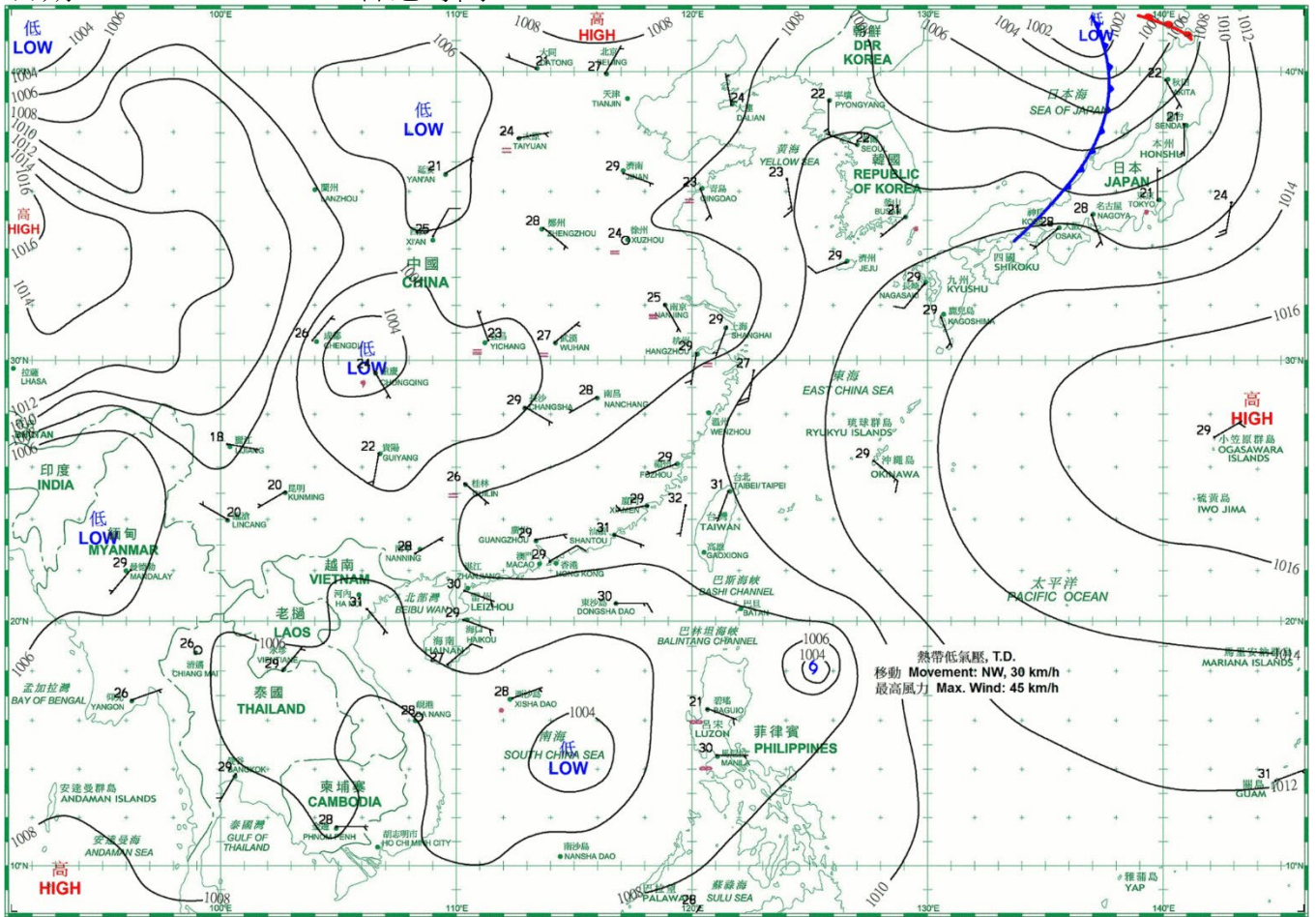
日期/Date: 03.07.2021 香港時間/HK Time: 08:00



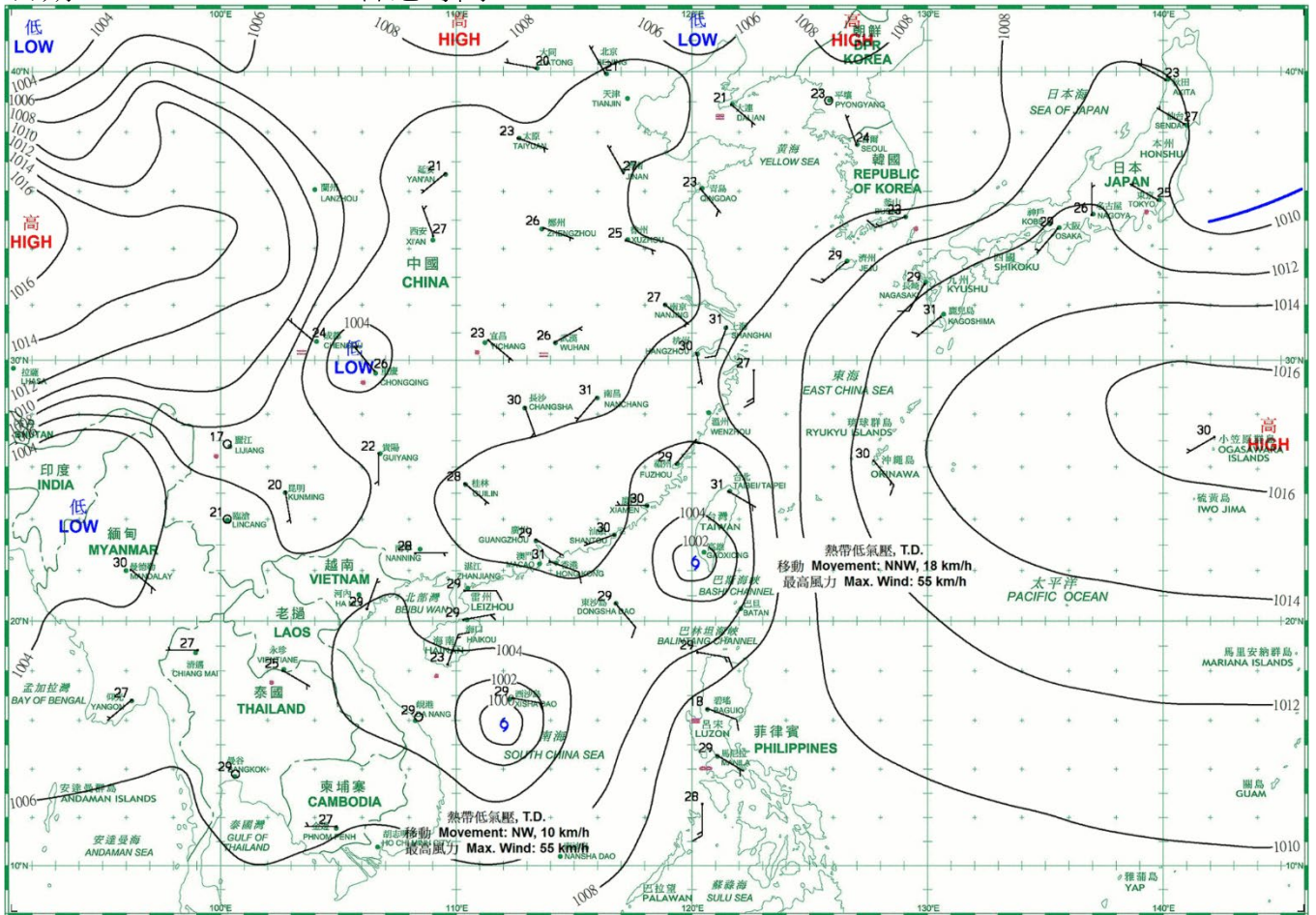
日期/Date: 04.07.2021 香港時間/HK Time: 08:00



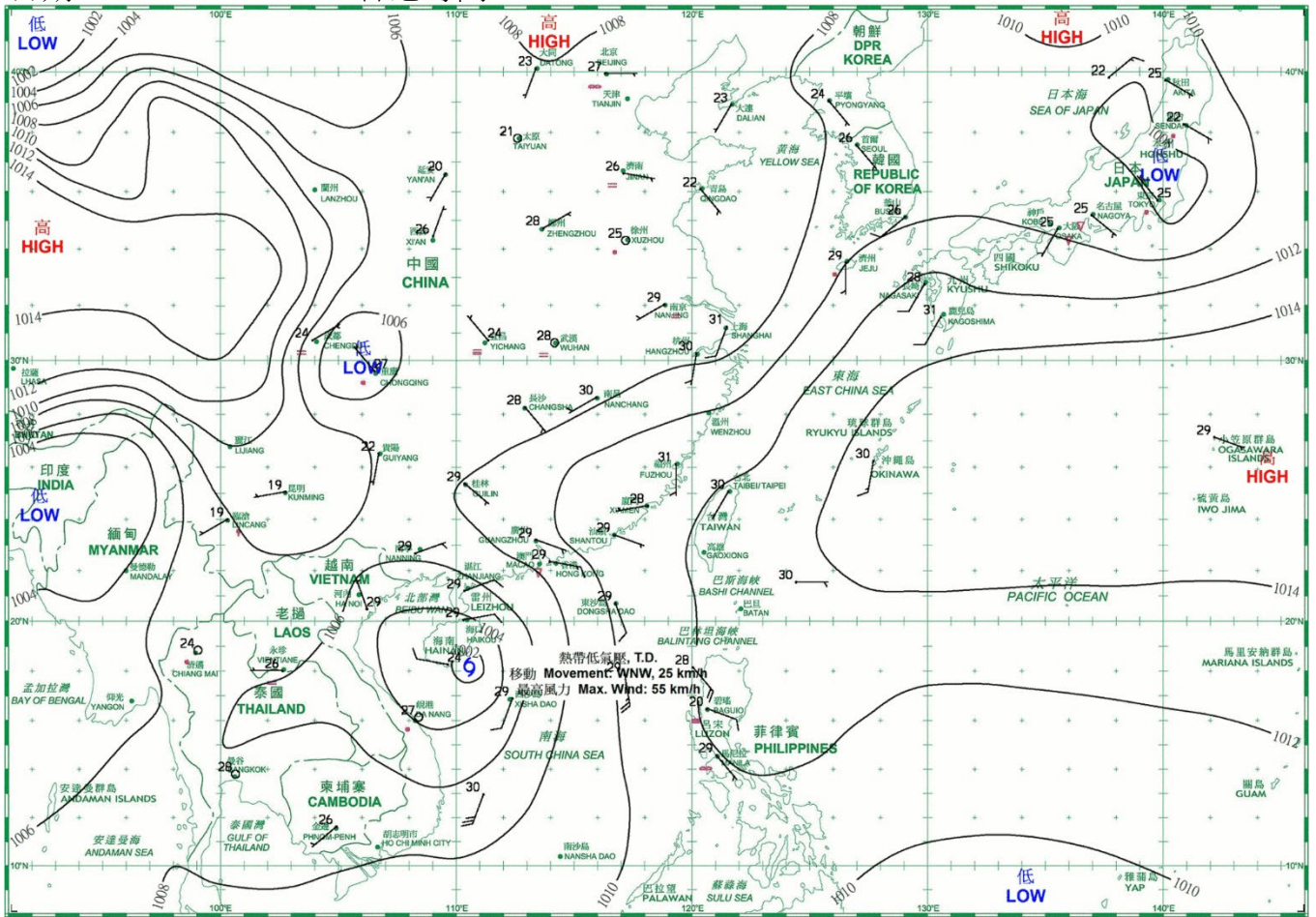
日期/Date: 05.07.2021 香港時間/HK Time: 08:00



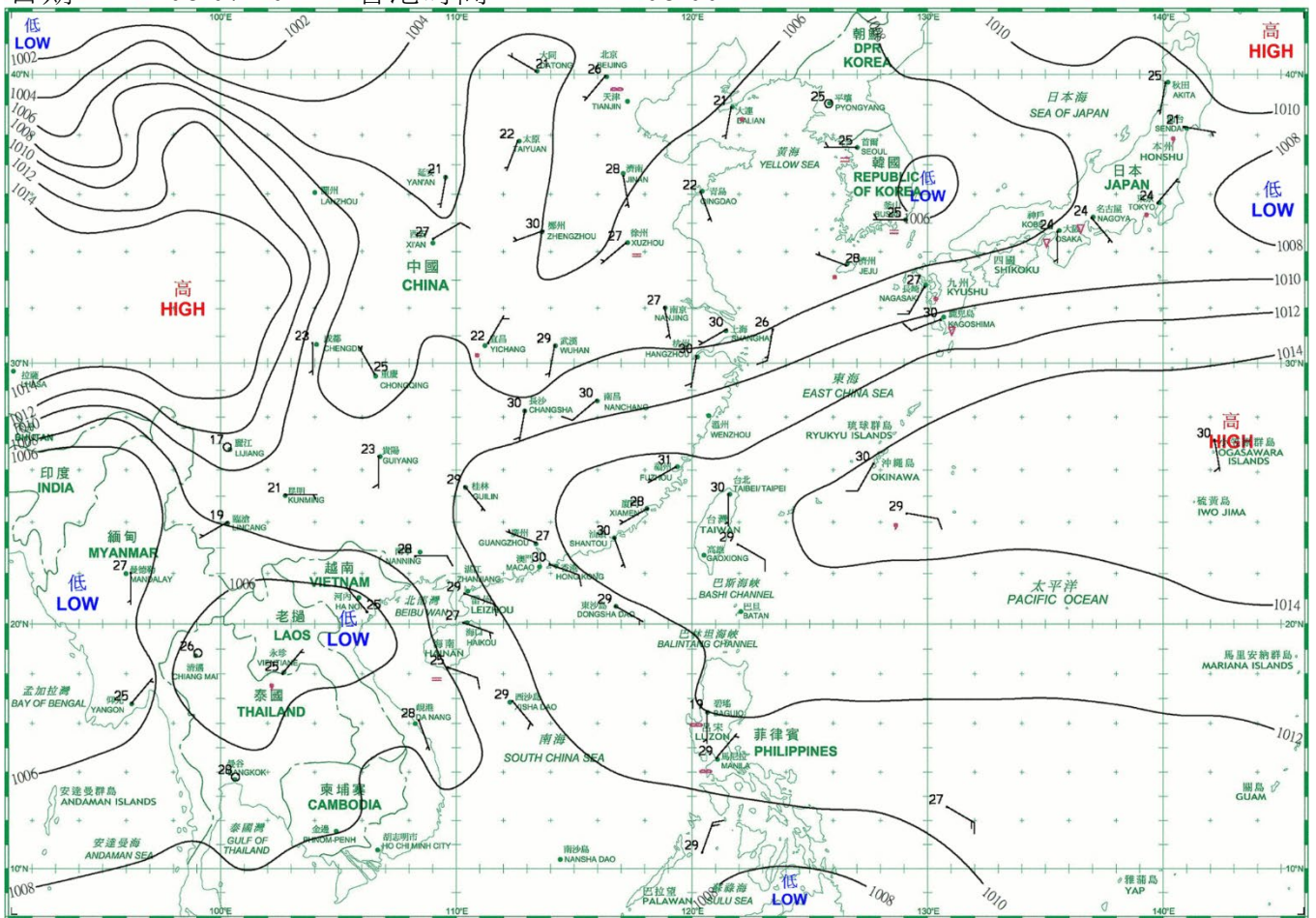
日期/Date: 06.07.2021 香港時間/HK Time: 08:00



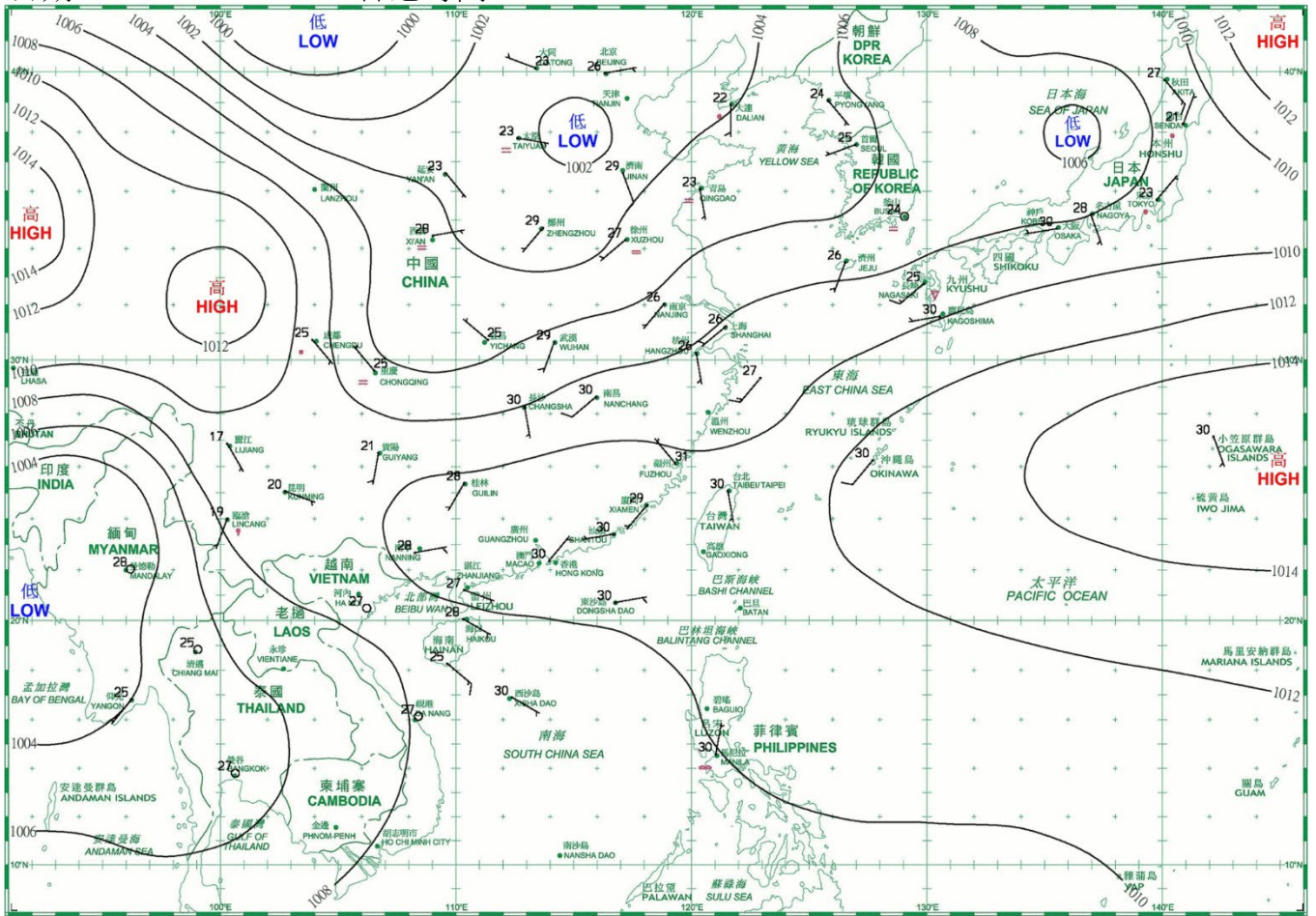
日期/Date: 07.07.2021 香港時間/HK Time: 08:00



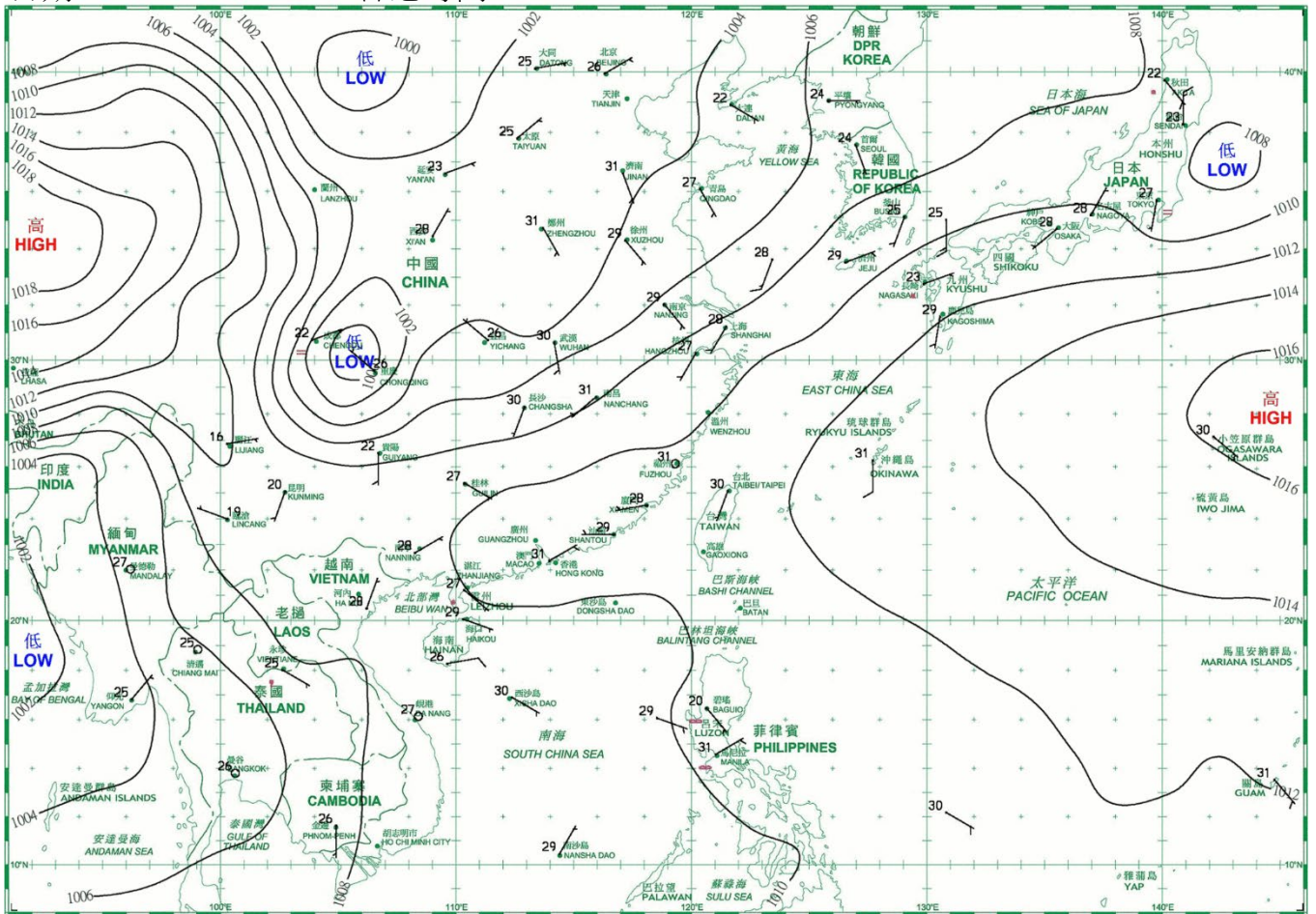
日期/Date: 08.07.2021 香港時間/HK Time: 08:00



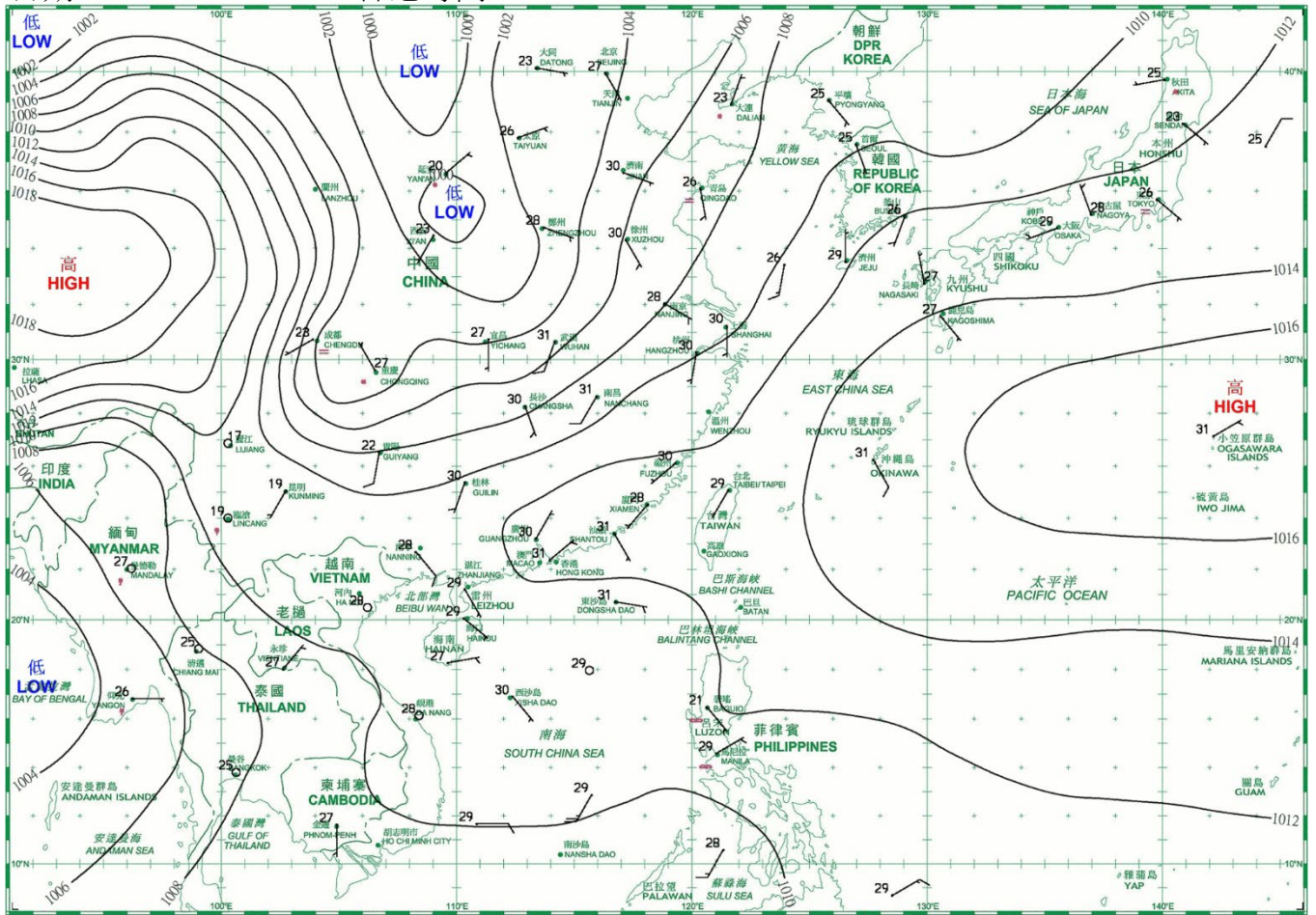
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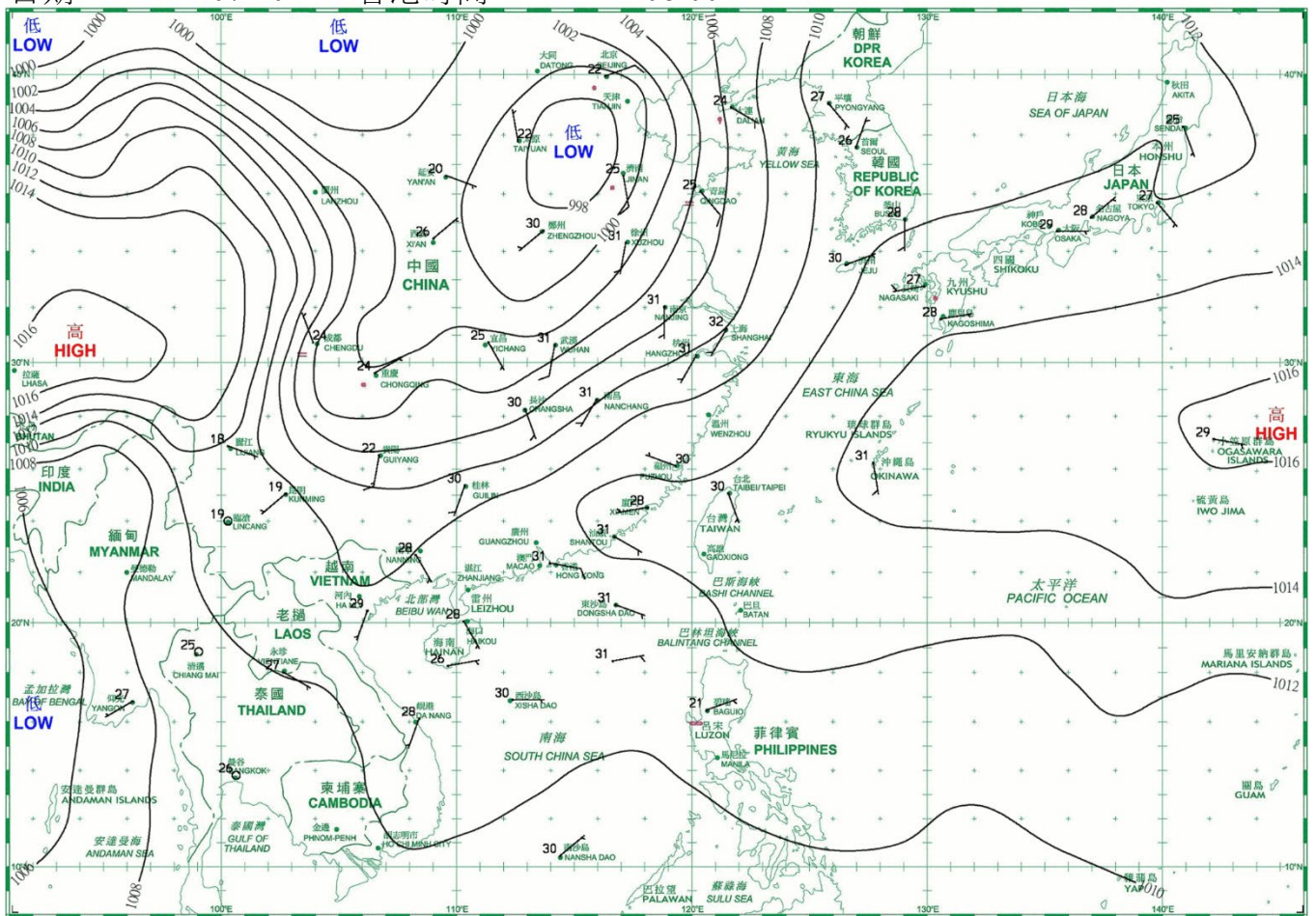
日期/Date: 10.07.2021 香港時間/HK Time: 08:00



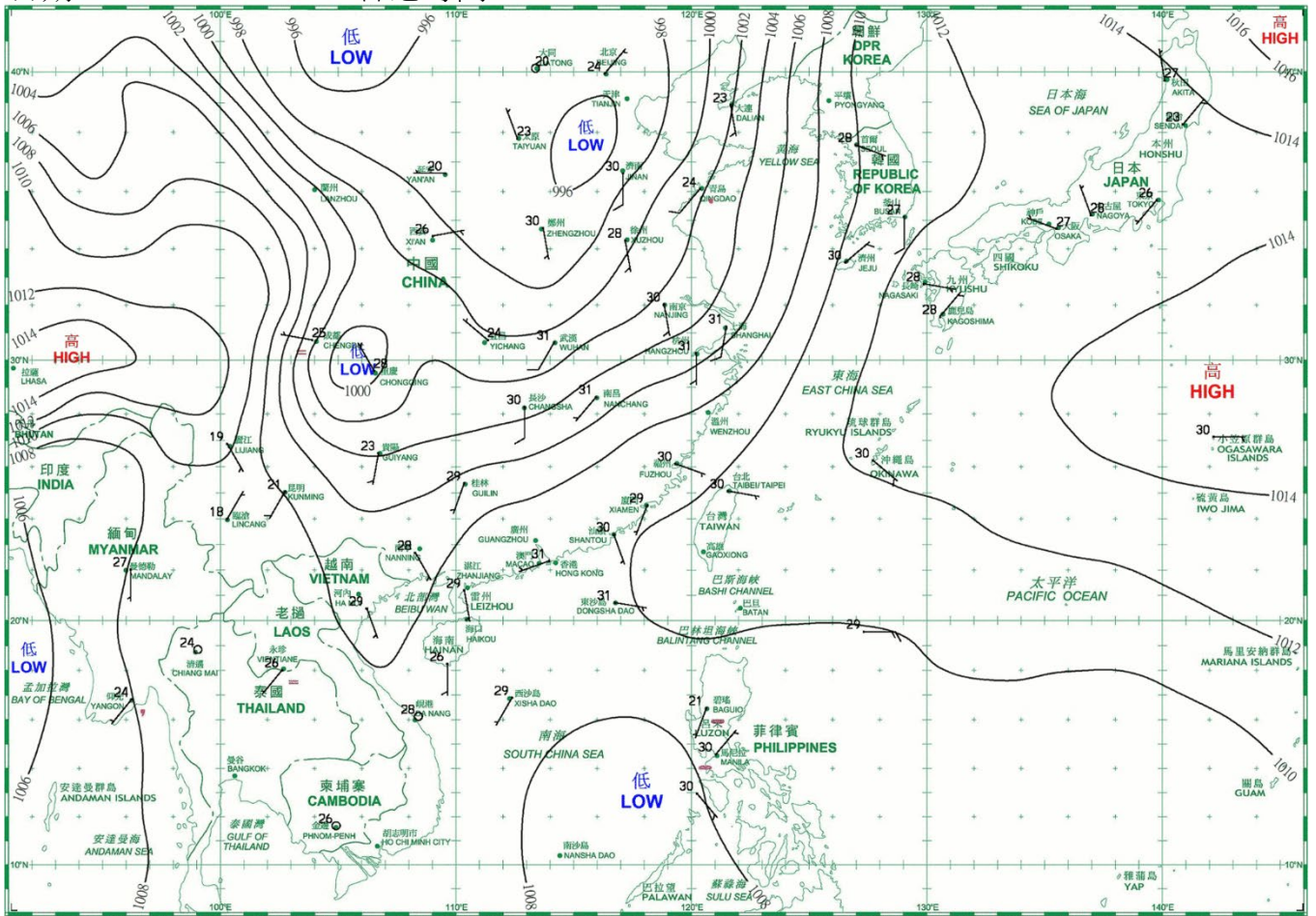
日期/Date: 11.07.2021 香港時間/HK Time: 08:00



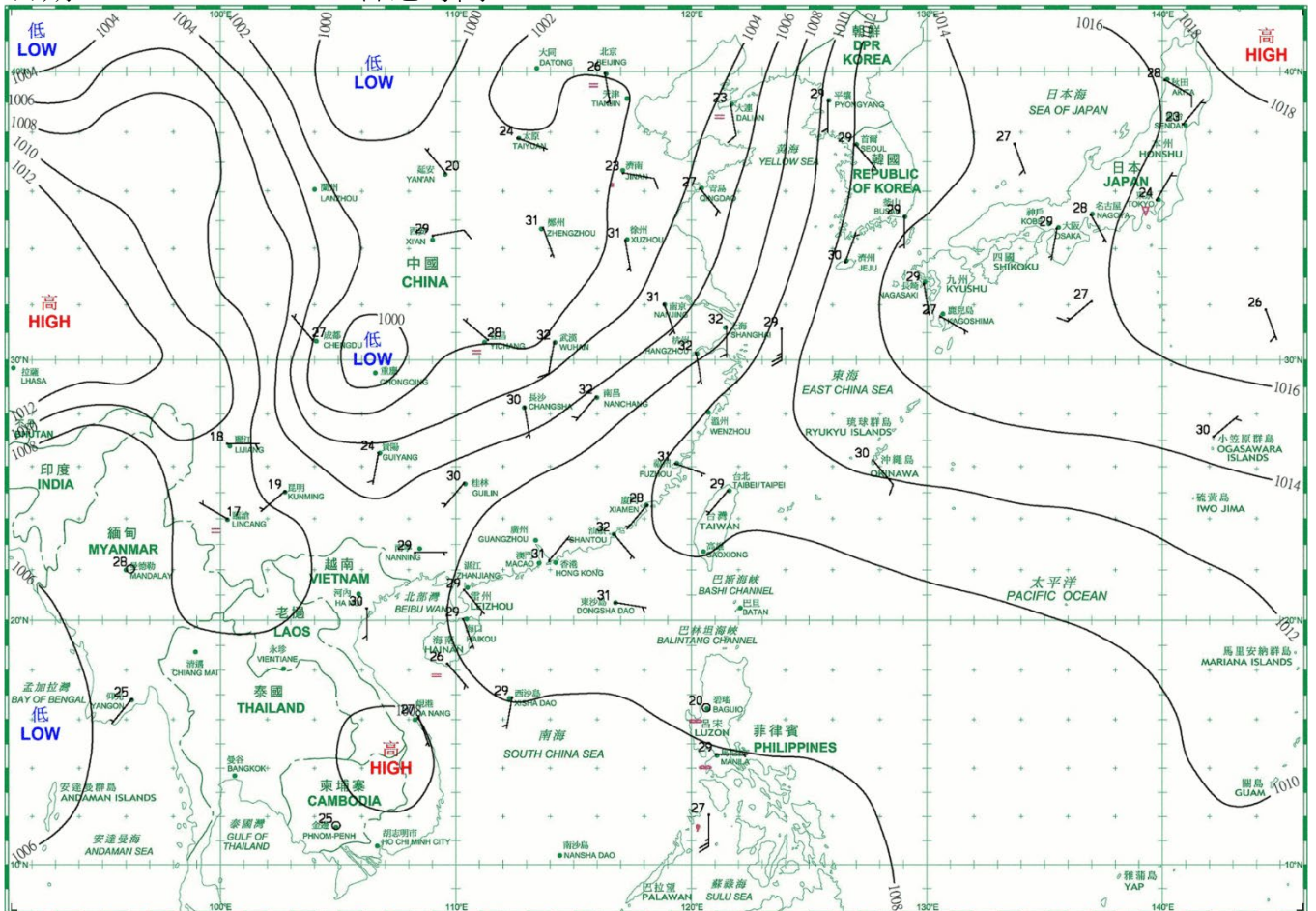
日期/Date: 12.07.2021 香港時間/HK Time: 08:00



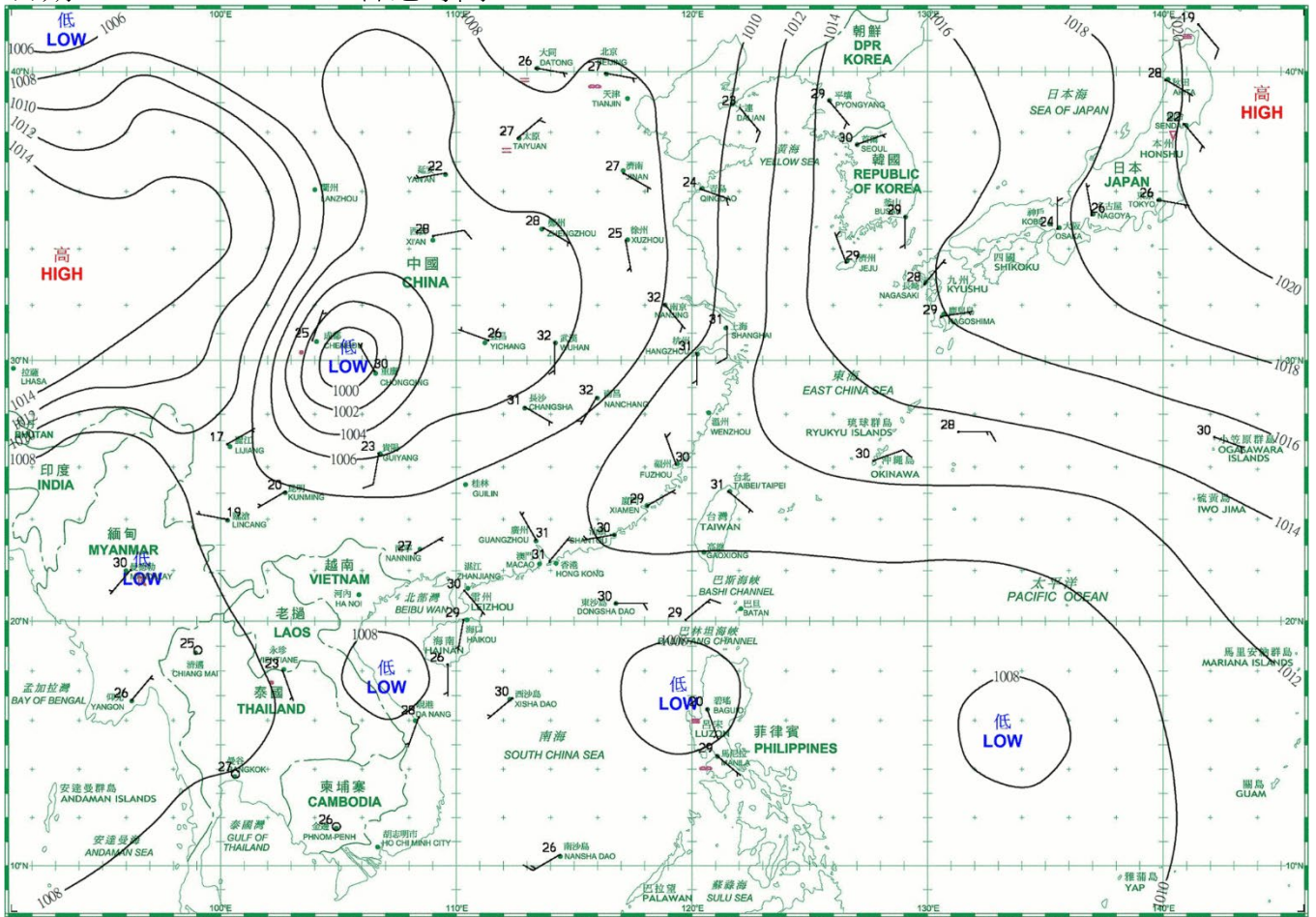
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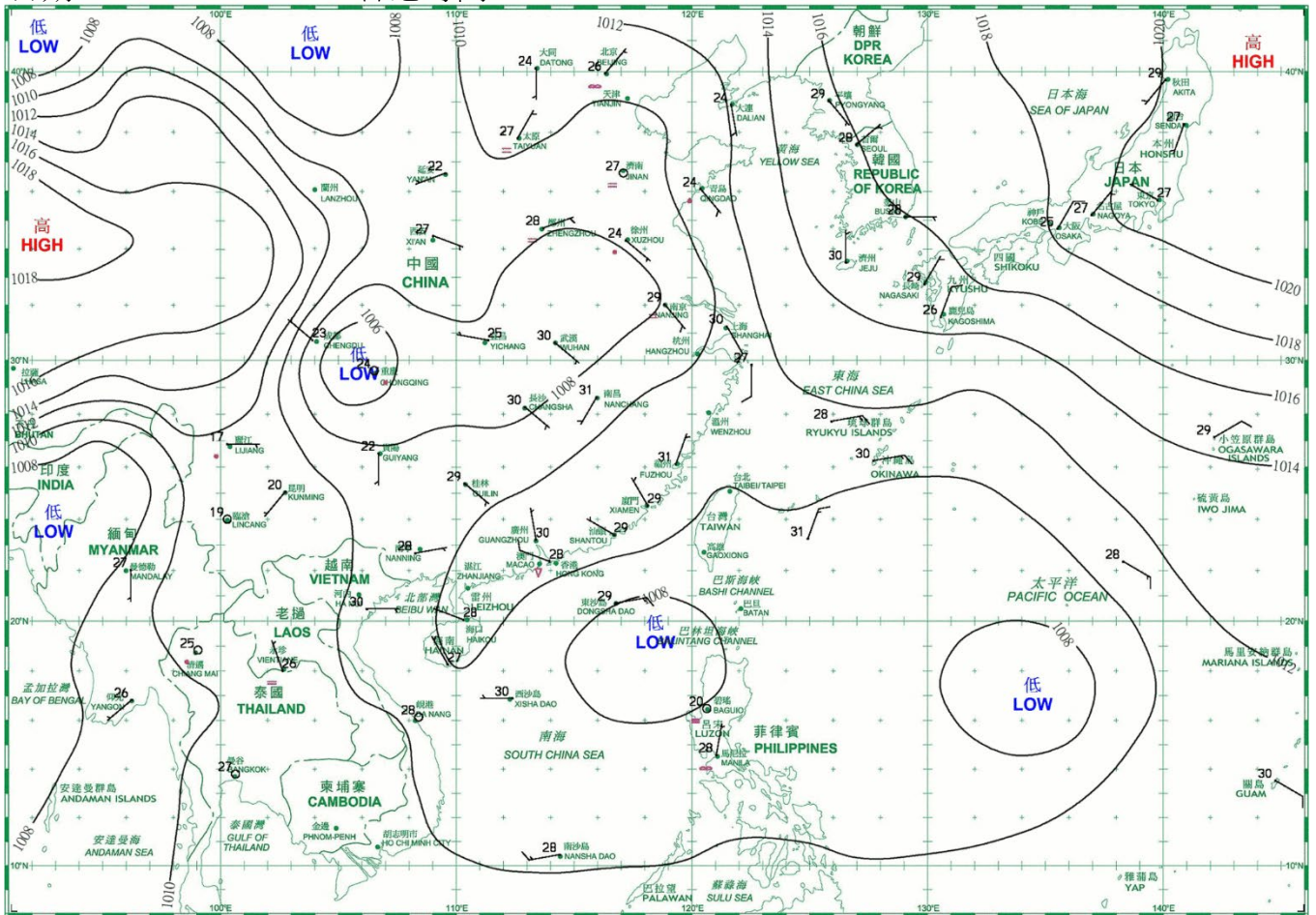
日期/Date: 14.07.2021 香港時間/HK Time: 08:00



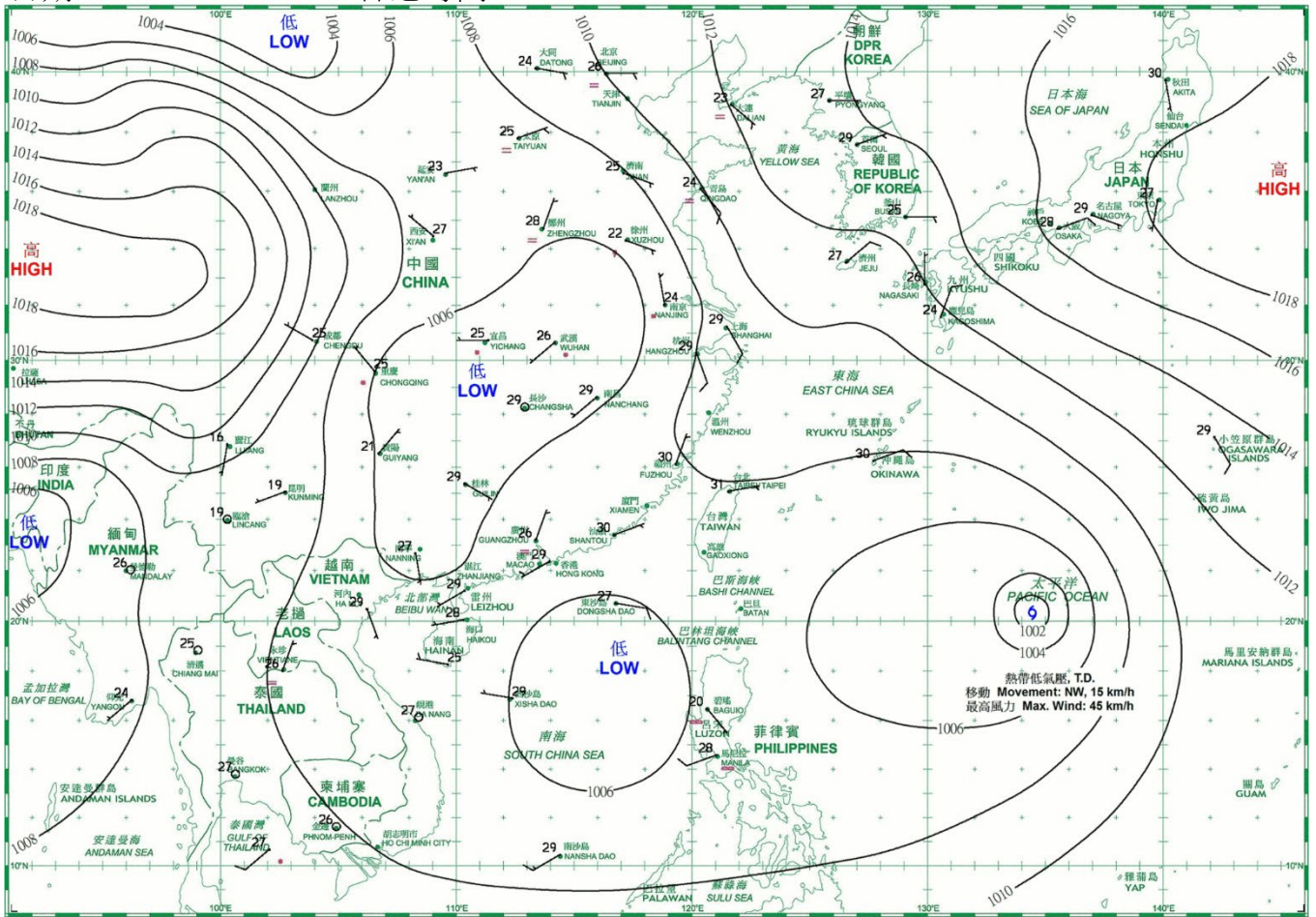
日期/Date: 15.07.2021 香港時間/HK Time: 08:00



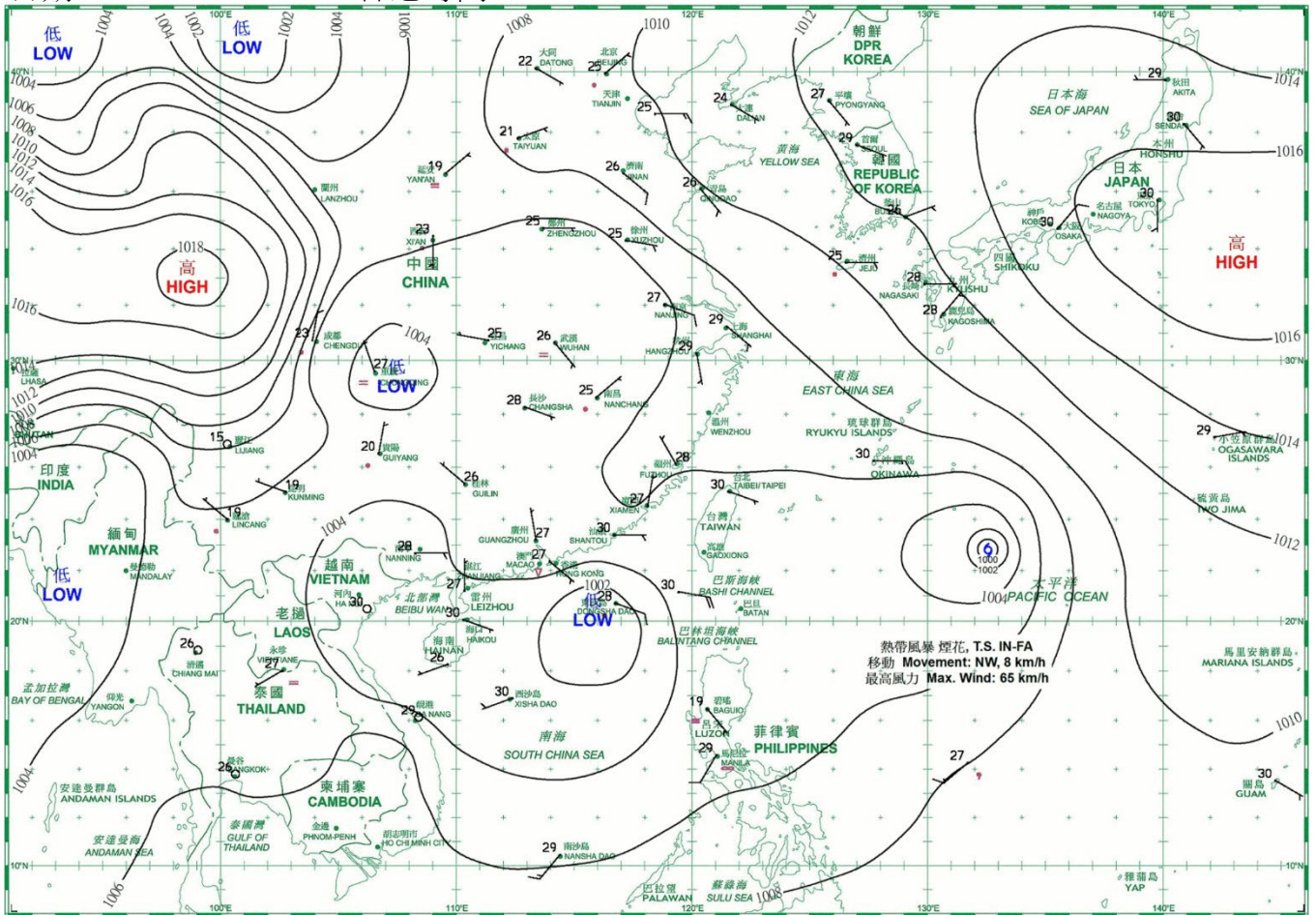
日期/Date: 16.07.2021 香港時間/HK Time: 08:00



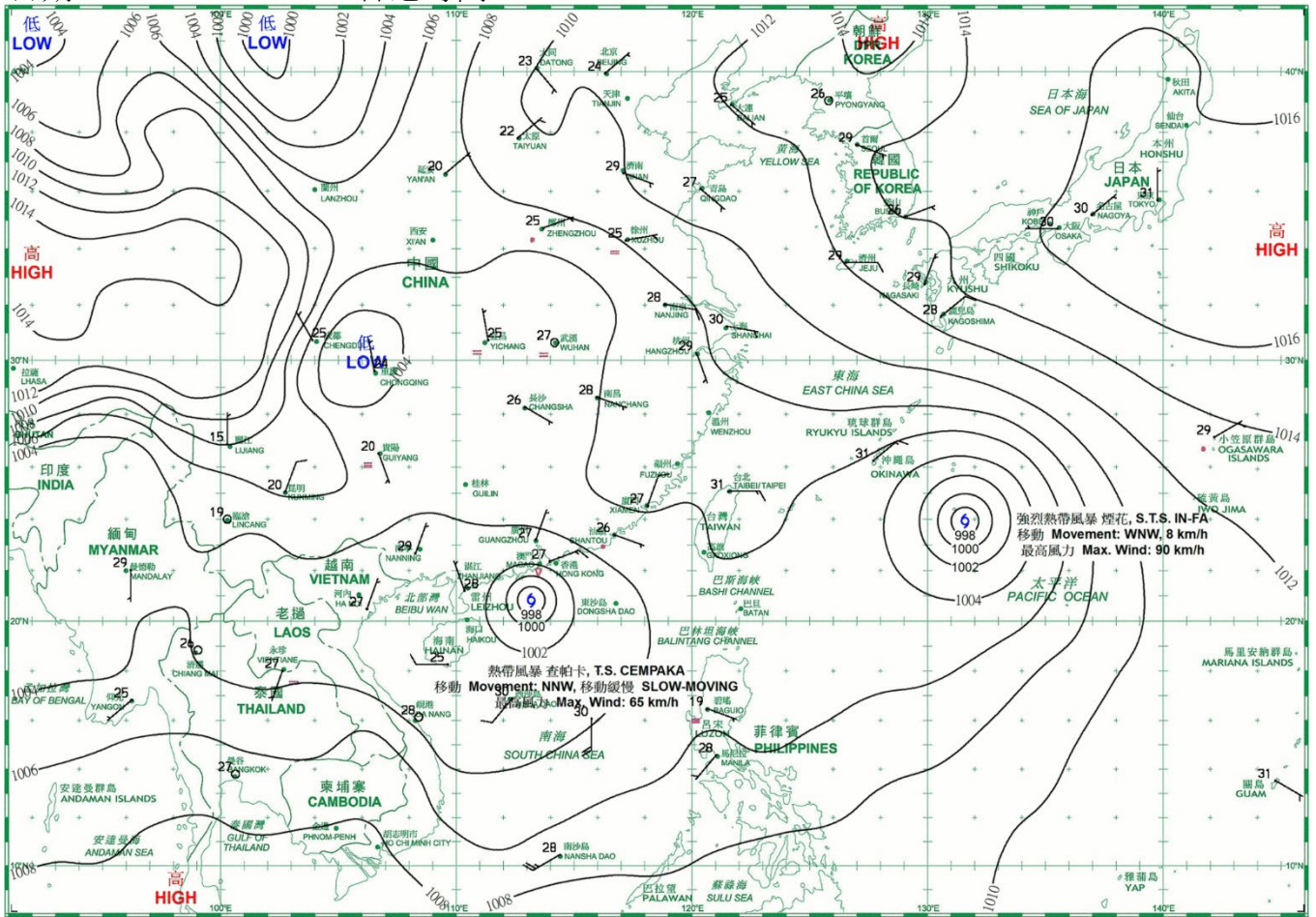
日期/Date: 17.07.2021 香港時間/HK Time: 08:00



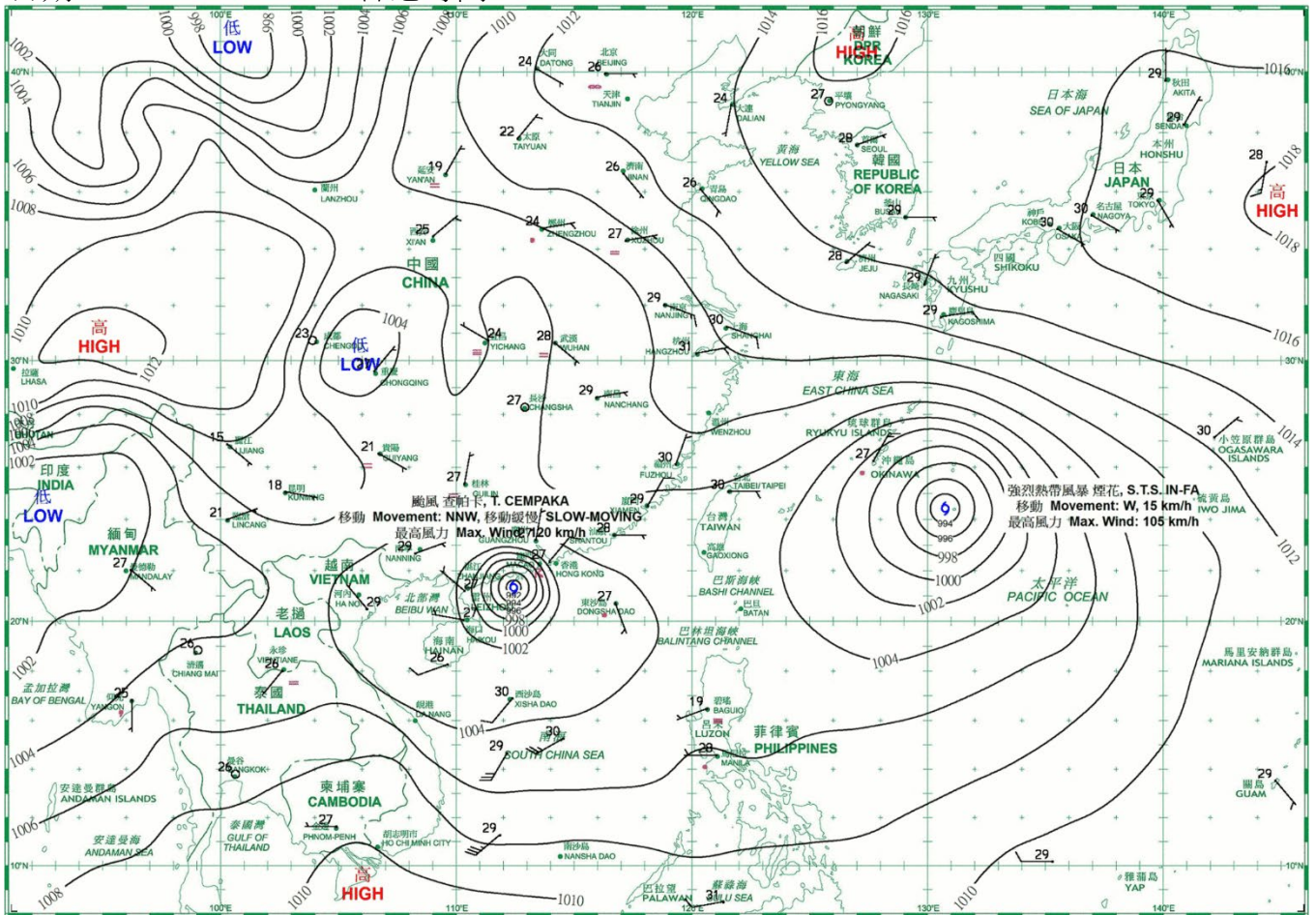
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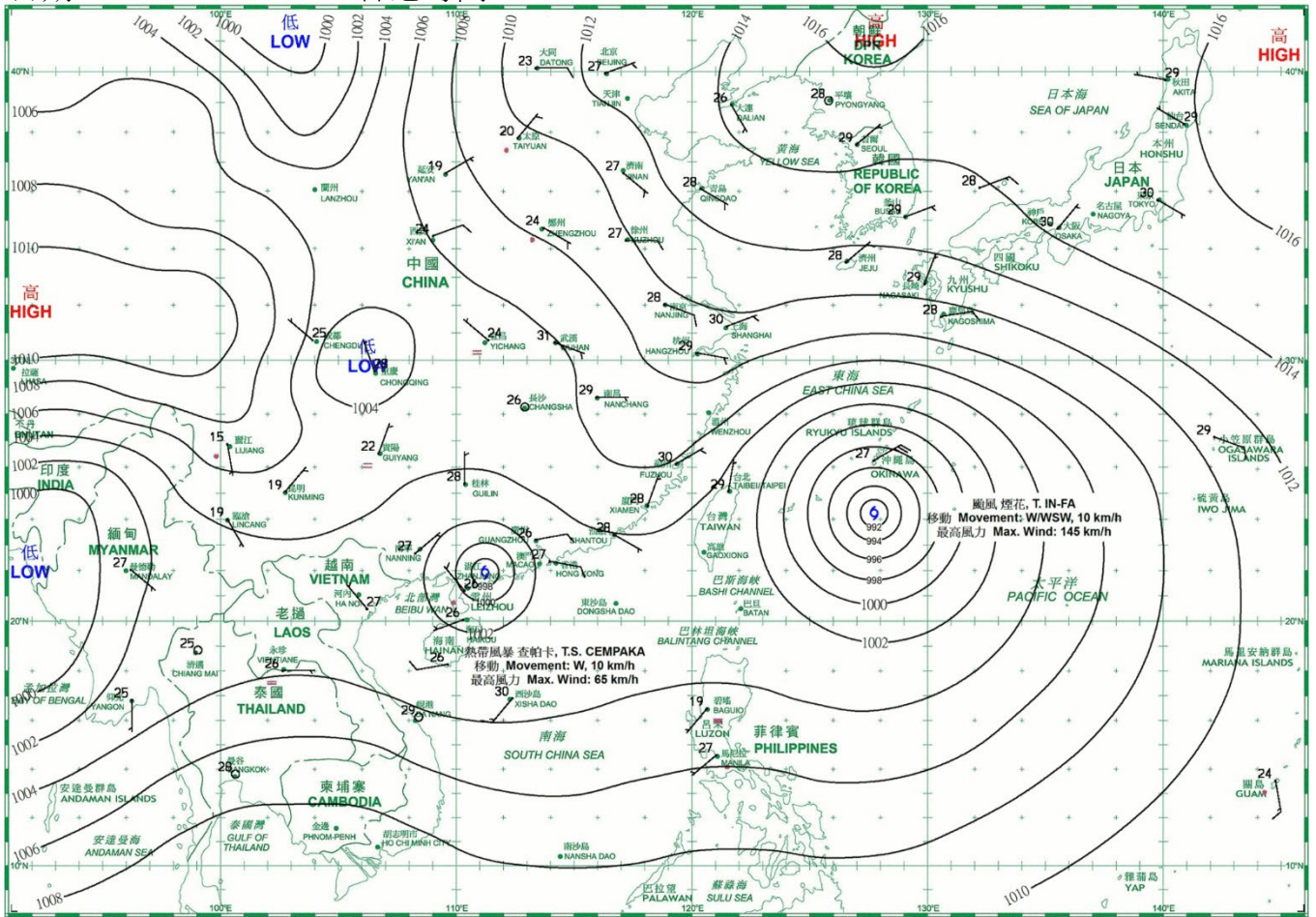
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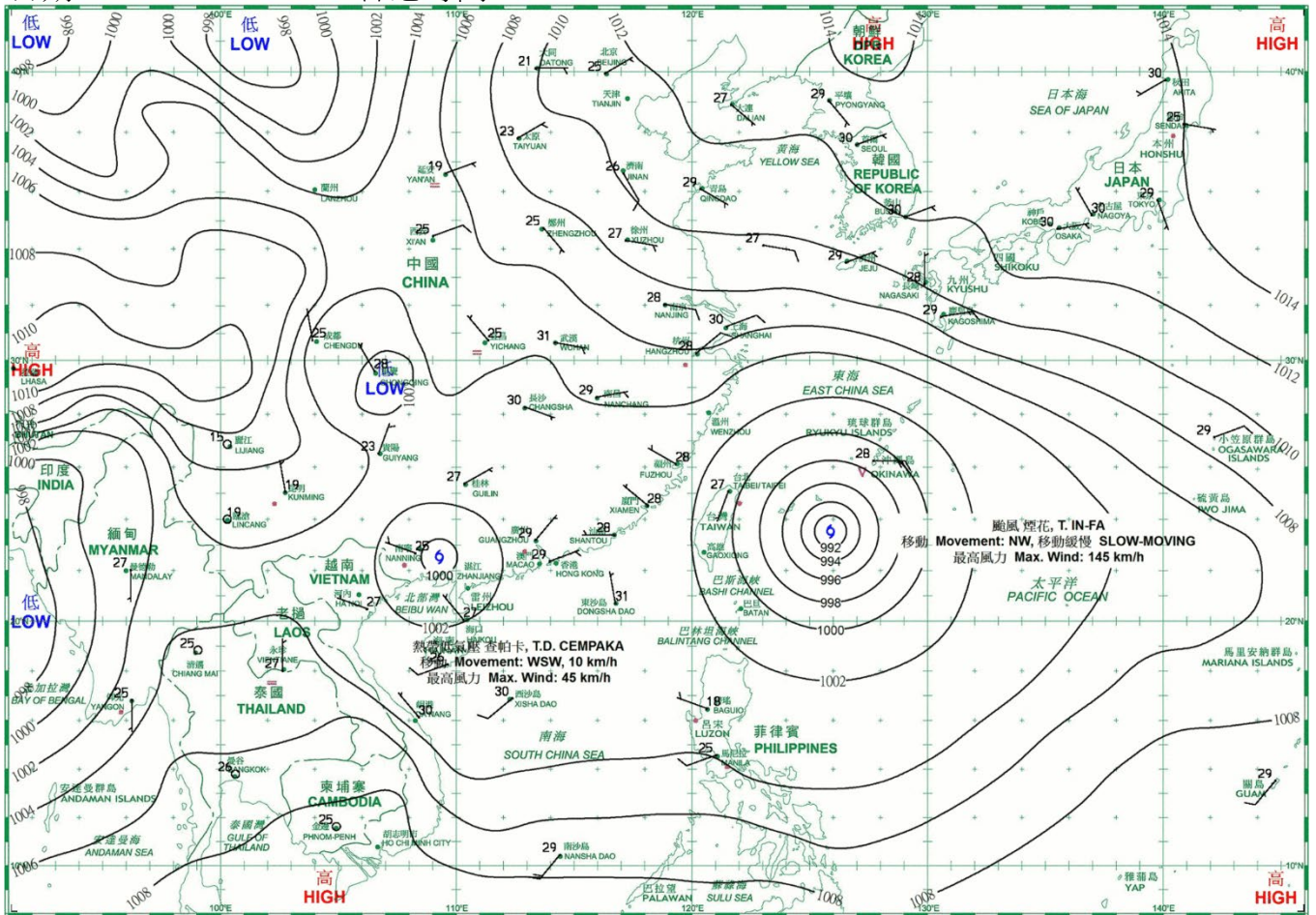
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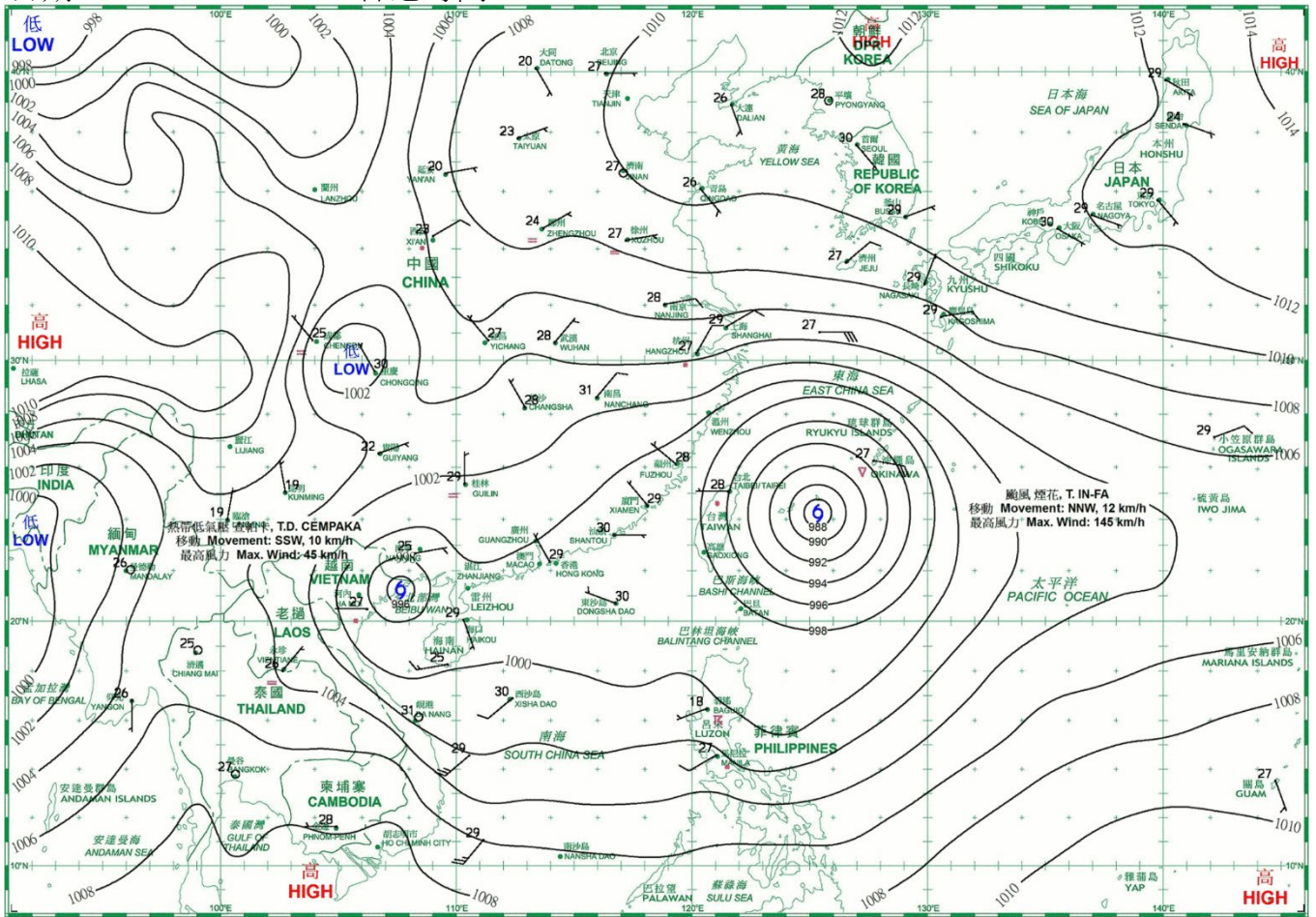
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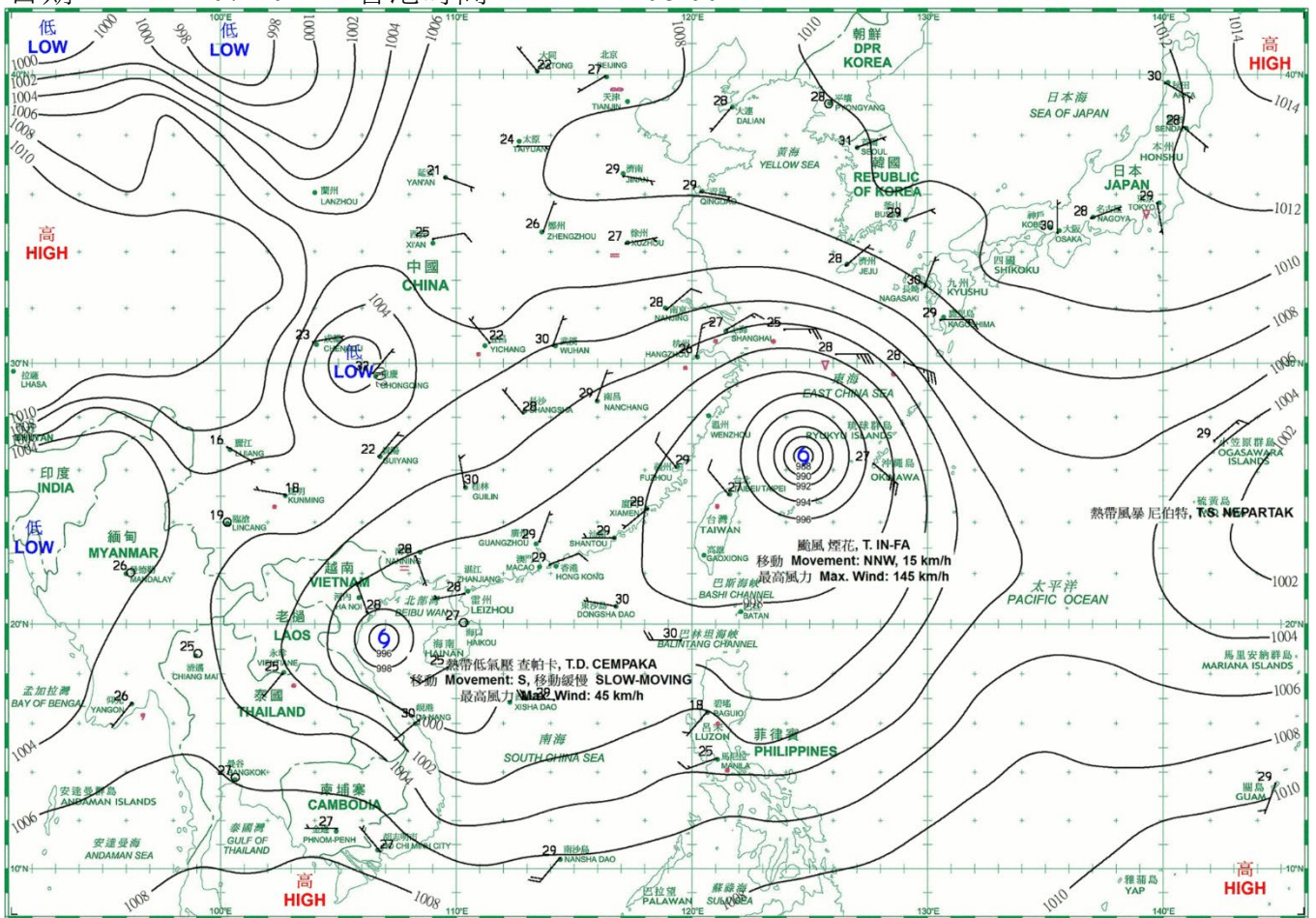
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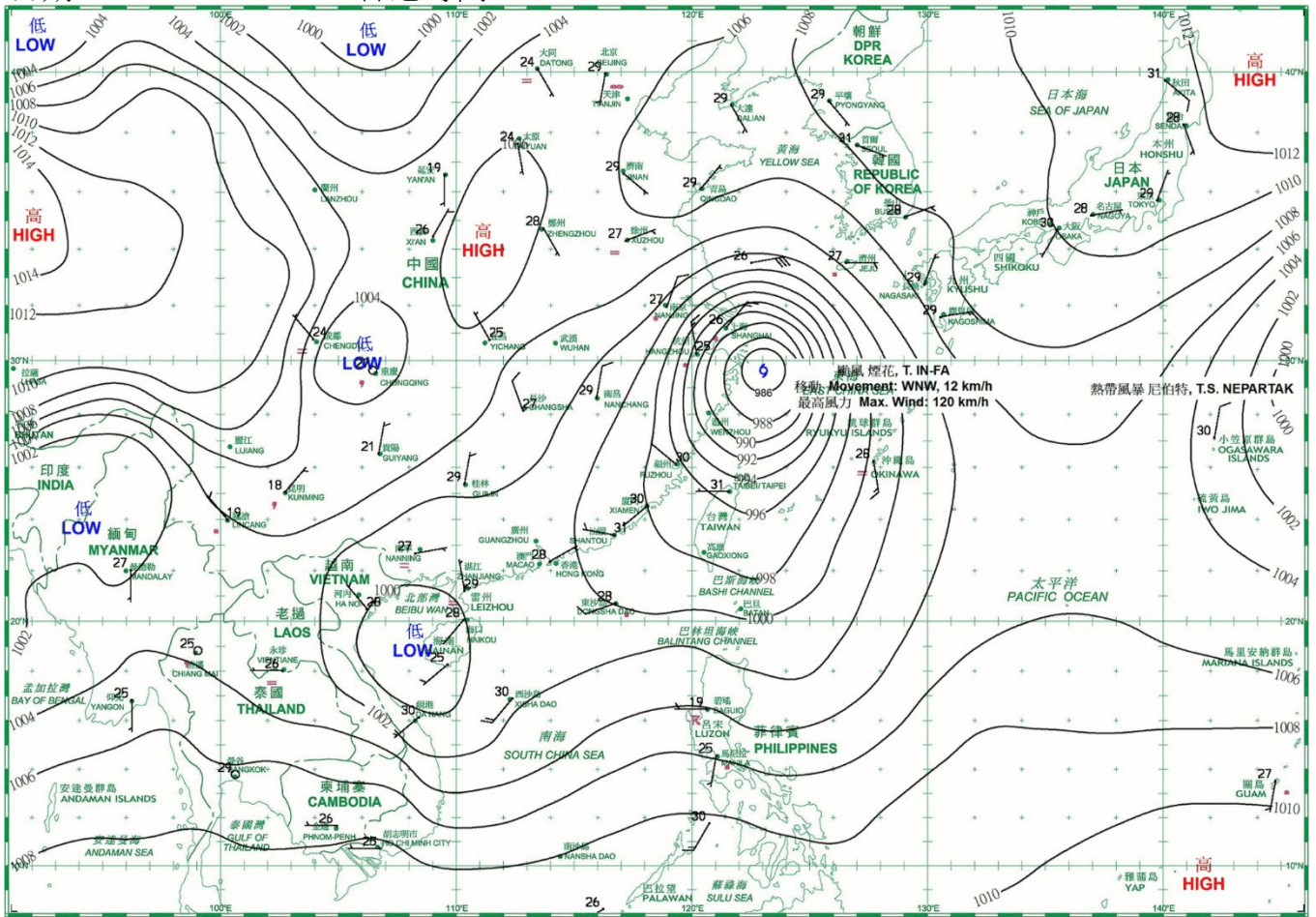
日期/Date: 23.07.2021 香港時間/HK Time: 08:00



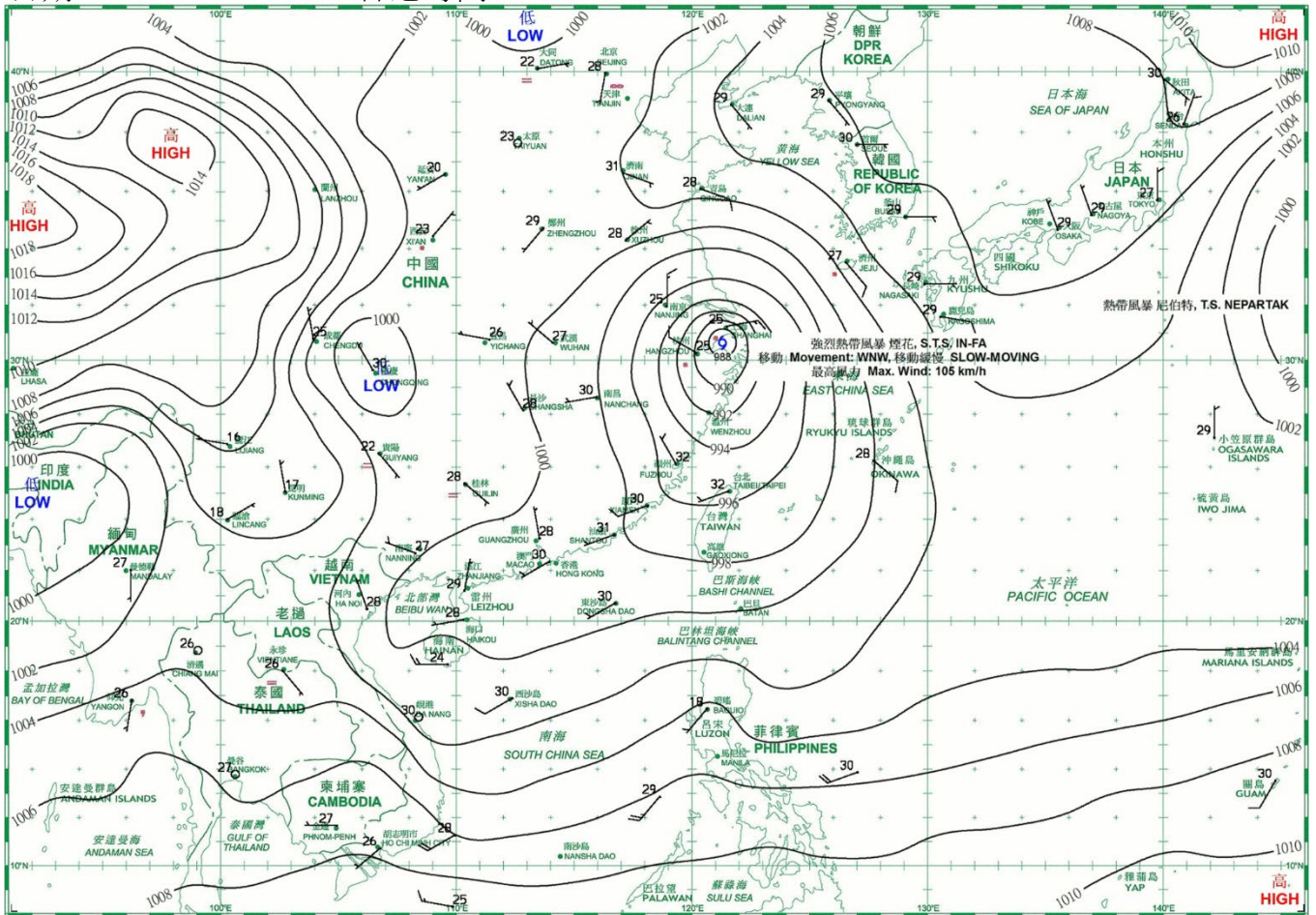
日期/Date: 24.07.2021 香港時間/HK Time: 08:00



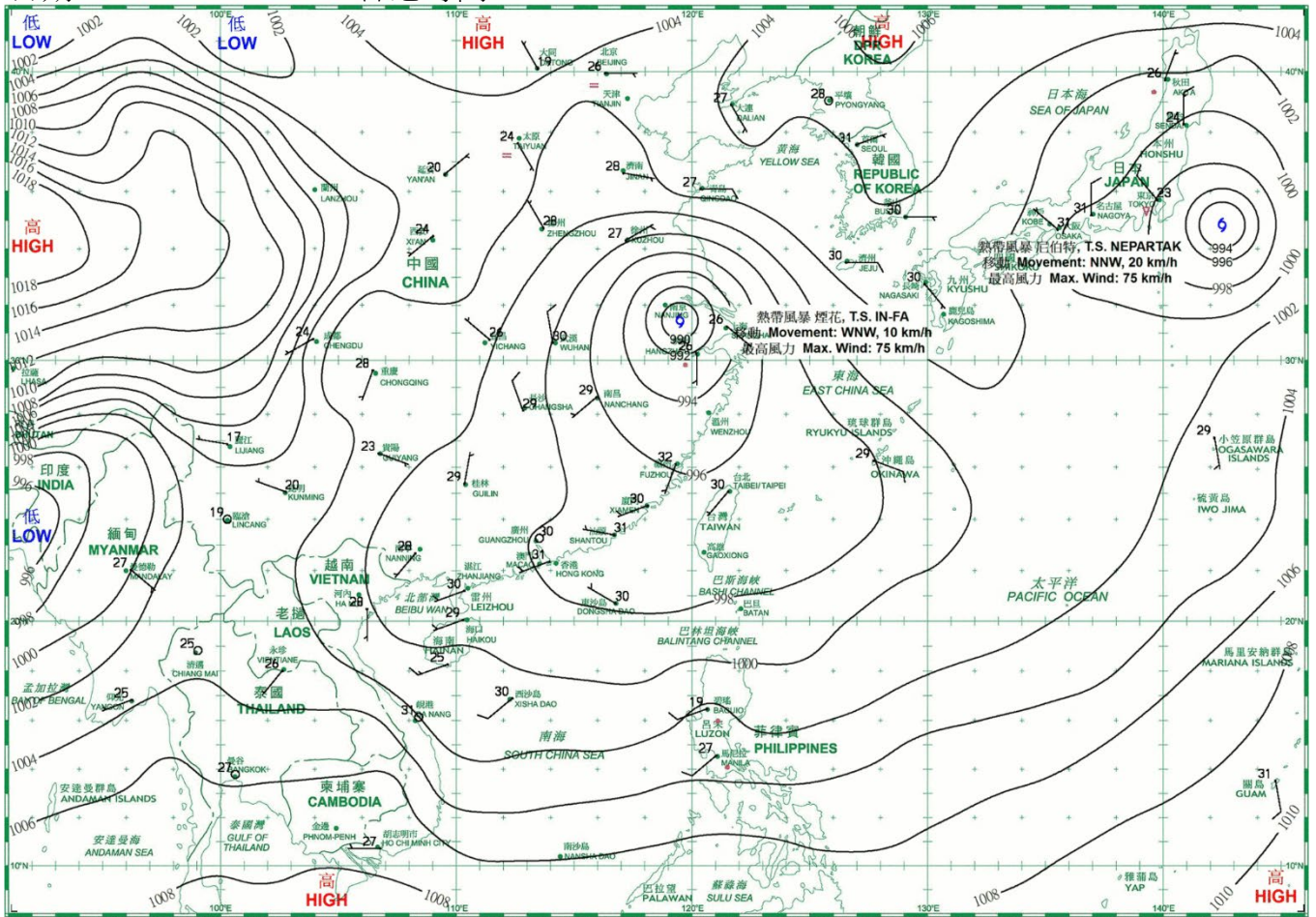
日期/Date: 25.07.2021 香港時間/HK Time: 08:00



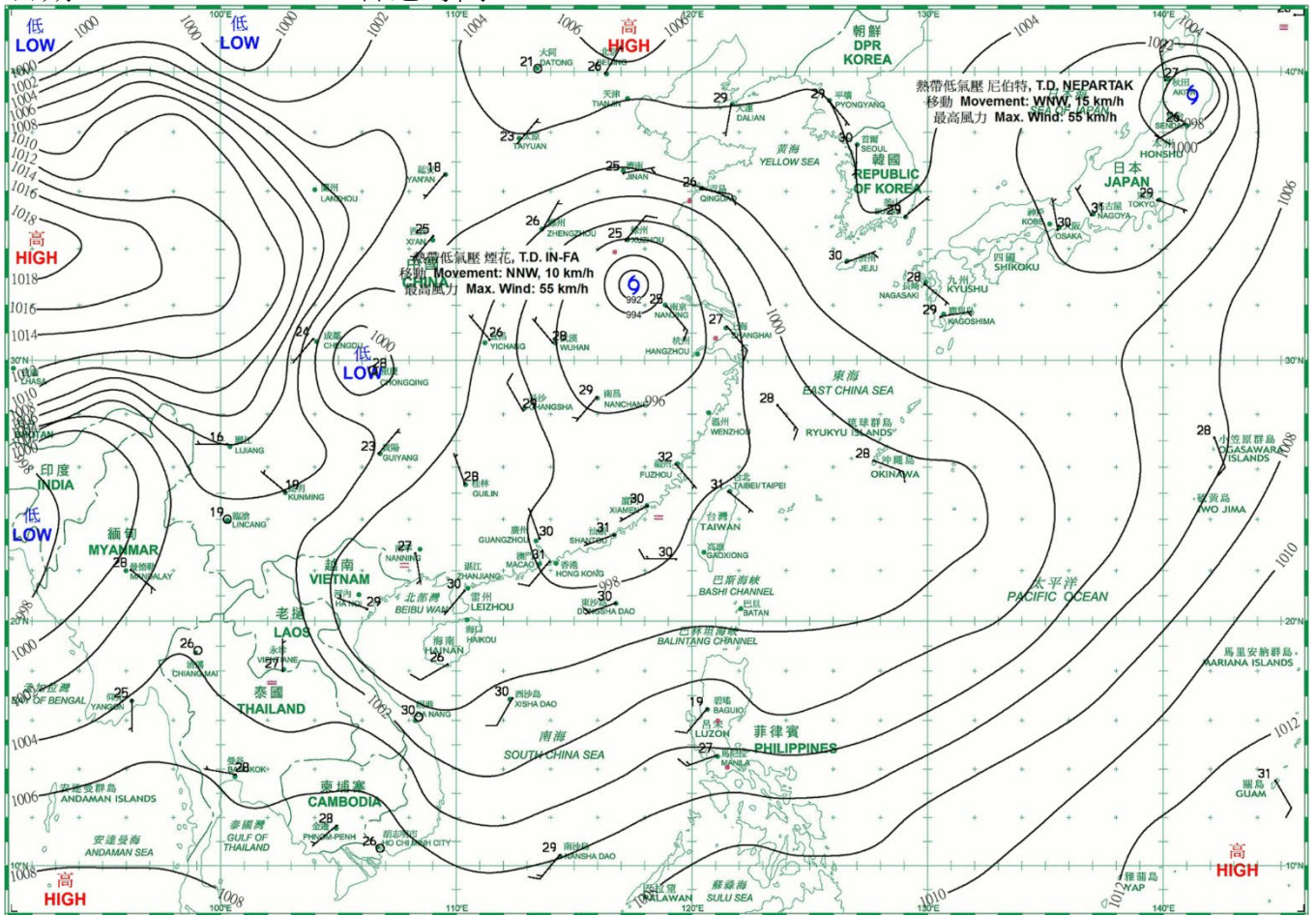
日期/Date: 26.07.2021 香港時間/HK Time: 08:00



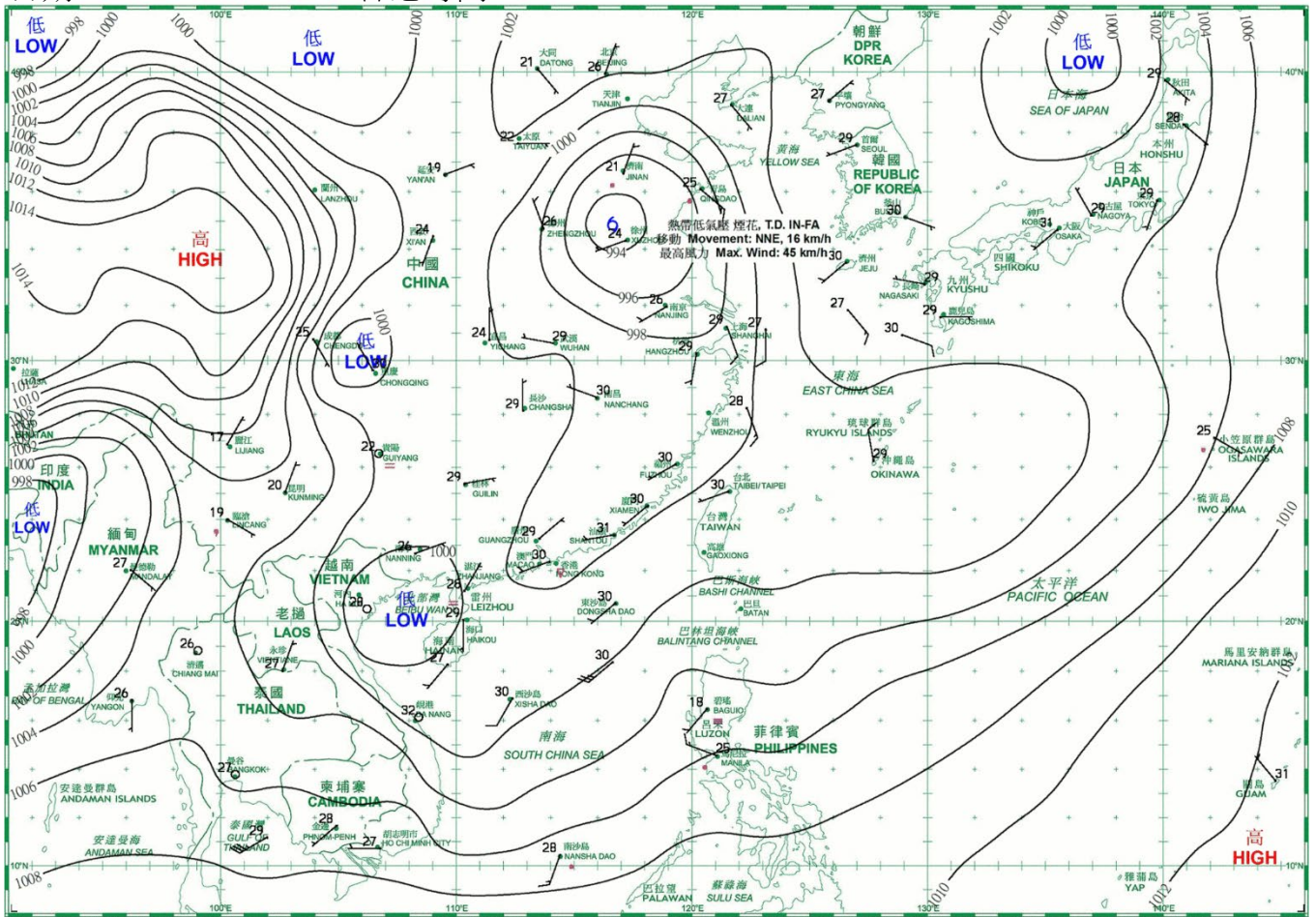
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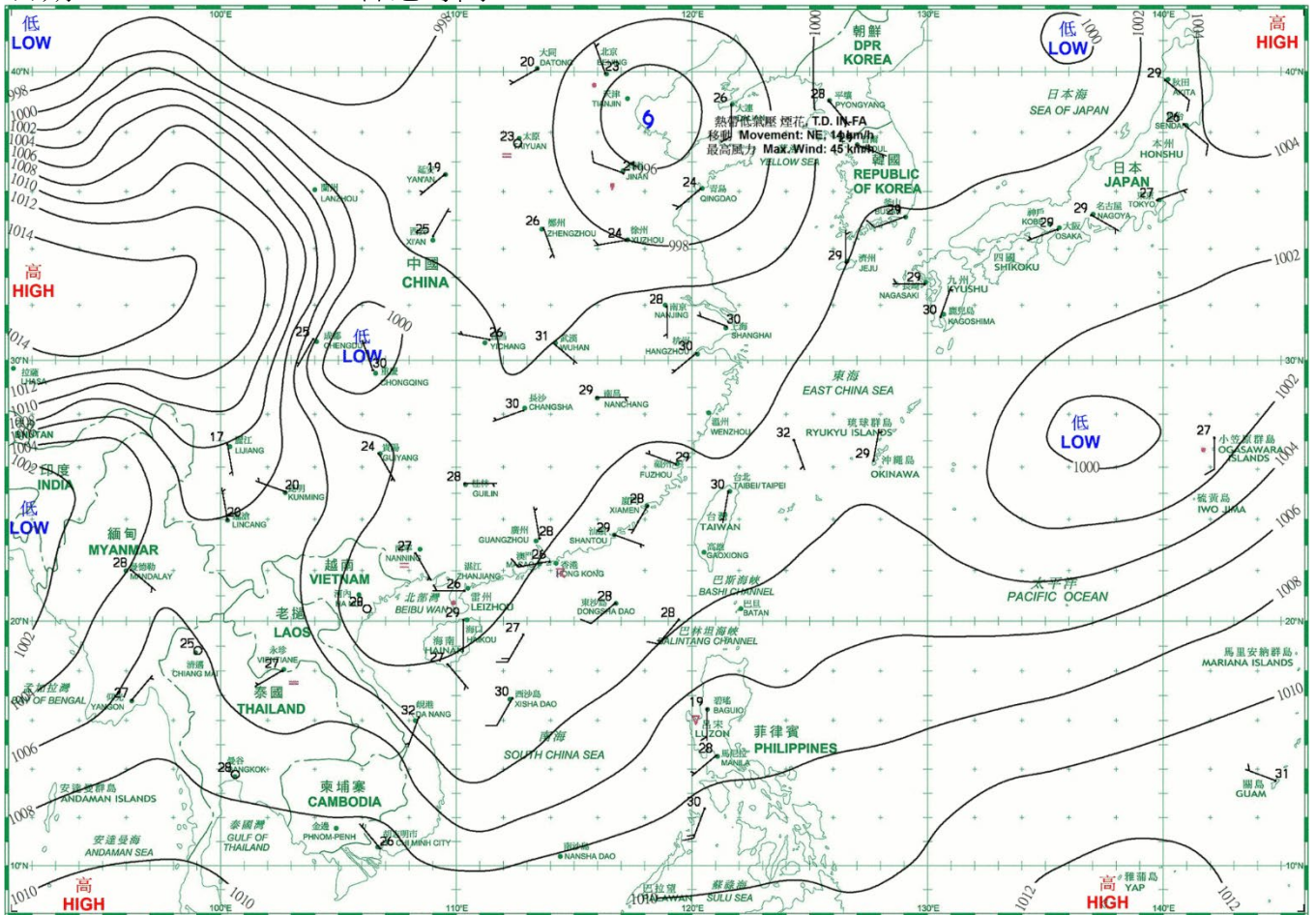
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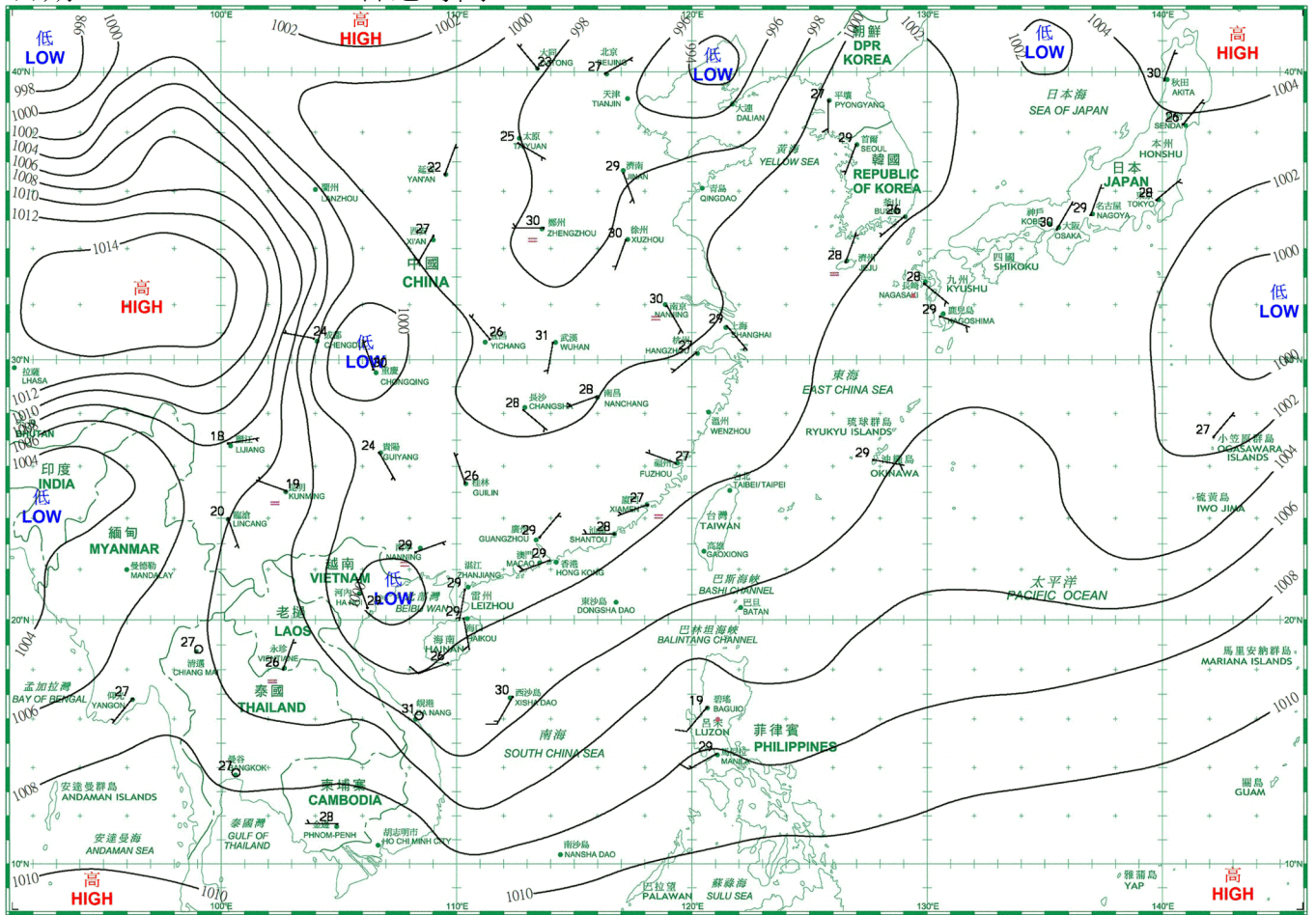
日期/Date: 29.07.2021 香港時間/HK Time: 08:00



日期/Date: 30.07.2021 香港時間/HK Time: 08:00



日期/Date: 31.07.2021 香港時間/HK Time: 08:00



4.1.1 二零二一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 2021

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	1006.3	32.4	30.3	29.2	25.9	78	88	Tr
2	1006.7	32.8	30.6	29.3	26.1	77	87	-
3	1006.4	33.0	30.4	29.1	26.3	79	85	Tr
4	1007.2	33.2	30.4	28.9	26.3	79	81	-
5	1007.4	33.8	30.2	28.0	26.2	79	68	2.3
6	1006.4	32.7	29.4	26.7	25.6	80	74	18.4
7	1009.1	33.1	29.4	26.6	25.8	81	73	11.7
8	1011.4	32.8	29.8	28.4	25.7	79	49	1.5
9	1010.3	34.8	30.5	28.2	25.6	76	28	-
10	1010.4	34.0	30.5	28.2	25.8	76	60	-
11	1011.1	33.6	30.6	28.8	26.0	77	84	Tr
12	1010.2	34.8	30.9	28.7	25.8	75	73	0.1
13	1008.5	35.3	31.1	28.8	25.2	72	55	-
14	1008.3	34.1	30.7	29.1	25.7	75	47	1.5
15	1008.9	35.4	31.3	28.9	25.3	71	41	-
16	1008.5	30.9	29.6	28.7	25.3	78	81	Tr
17	1005.8	31.2	28.8	26.9	25.0	80	88	0.2
18	1003.3	28.8	26.9	24.9	25.1	90	88	42.4
19	1002.3	27.9	26.5	25.0	25.1	93	93	117.2
20	1002.6	27.1	26.2	25.3	25.2	94	95	87.8
21	1003.0	27.8	26.8	25.3	25.7	94	88	28.4
22	1001.0	32.8	29.3	26.9	25.3	80	66	-
23	998.3	34.1	30.3	27.4	25.8	77	40	-
24	998.0	33.2	29.8	26.5	26.4	82	70	26.5
25	999.4	33.6	29.6	25.9	25.8	81	55	8.9
26	998.1	33.9	30.7	28.7	26.4	78	53	-
27	996.8	35.3	31.3	29.5	26.4	75	67	Tr
28	997.5	34.1	30.8	29.1	26.8	79	76	Tr
29	1000.1	32.3	29.5	28.3	26.0	82	84	7.8
30	1001.4	30.5	28.8	26.5	25.7	83	85	7.9
31	1000.3	32.2	29.7	27.0	26.6	84	88	16.9
平均/總值 Mean/Total	1004.7	32.6	29.7	27.7	25.8	80	71	379.5
氣候平均值 Climatological normal (1991-2020)	1005.6	31.6	28.9	26.9	25.2	81	72	385.8
氣候平均值 Climatological normal (1981-2010)	1005.7	31.4	28.8	26.8	25.1	81	69	376.5
觀測站 Station	天文台 Hong Kong Observatory							

天文台於七月二十七日 14 時 28 分錄得本月最低氣壓 994.6 百帕斯卡。

The minimum pressure recorded at the Hong Kong Observatory was 994.6 hectopascals at 1428 HKT on 27 July.

天文台於七月十五日 15 時 12 分錄得本月最高氣溫 35.4 °C。

The maximum air temperature recorded at the Hong Kong Observatory was 35.4 °C at 1512 HKT on 15 July.

天文台於七月十八日 8 時 5 分錄得本月最低氣溫 24.9 °C。

The minimum air temperature recorded at the Hong Kong Observatory was 24.9 °C at 0805 HKT on 18 July.

京士柏於七月二十日 8 時 31 分錄得本月最高1分鐘平均降雨率 133 毫米/小時。

The maximum 1-minute mean rainfall rate recorded at King's Park was 133 millimetres per hour at 0831 HKT on 20 July.

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 二零二一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 2021

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	7.5	21.48	5.2	200	29.6
2	0	8.0	21.74	5.5	220	28.5
3	0	5.4	17.36	4.0	200	20.5
4	0	7.5	18.87	4.3	130	11.3
5	0	6.5	21.23	5.2	080	24.8
6	0	6.1	20.47	4.4	090	20.4
7	0	5.8	19.86	3.5	130	28.9
8	0	7.0	19.73	4.9	130	19.8
9	0	9.7	24.46	5.3	110	7.2
10	0	11.7	28.35	6.3	100	12.6
11	0	9.8	25.10	6.3	110	11.6
12	0	10.2	25.83	6.4	150	12.3
13	0	11.7	28.04	6.3	200	8.6
14	0	8.0	16.38	4.1	130	8.0
15	0	12.0	28.51	6.6	160	10.9
16	0	0.5	7.92	2.4	070	8.1
17	0	5.6	17.05	3.0	080	19.7
18	0	0.4	6.17	0.5	070	32.7
19	0	0.3	5.06	0.4	090	42.8
20	0	-	1.78	0.3	090	32.0
21	0	0.2	4.36	1.0	100	25.1
22	0	11.7	26.56	4.8	060	12.0
23	0	10.7	24.27	4.9	240	16.4
24	0	6.3	17.91	3.5	240	16.4
25	0	9.6	24.46	5.9	230	18.8
26	0	9.9	21.93	5.1	240	19.9
27	0	8.5	21.47	5.3	240	20.2
28	0	6.4	18.38	4.7	240	27.9
29	0	1.8	9.80	3.7	230	12.3
30	0	0.6	10.56	2.8	230	15.0
31	0	4.1	16.32	3.9	230	31.2
平均/總值 Mean/Total	0	203.5	18.43	130.5	090	19.5
氣候平均值 Climatological normal (1991-2020)	12.5 §	197.3	17.22	142.0	230	21.3
氣候平均值 Climatological normal (1981-2010)	12.5 §	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 7 時 10 分錄得本月最高陣風 79 公里/小時，風向 320 度。

The maximum gust peak speed recorded at Waglan Island was 79 kilometres per hour from 320 degrees at 0710 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。

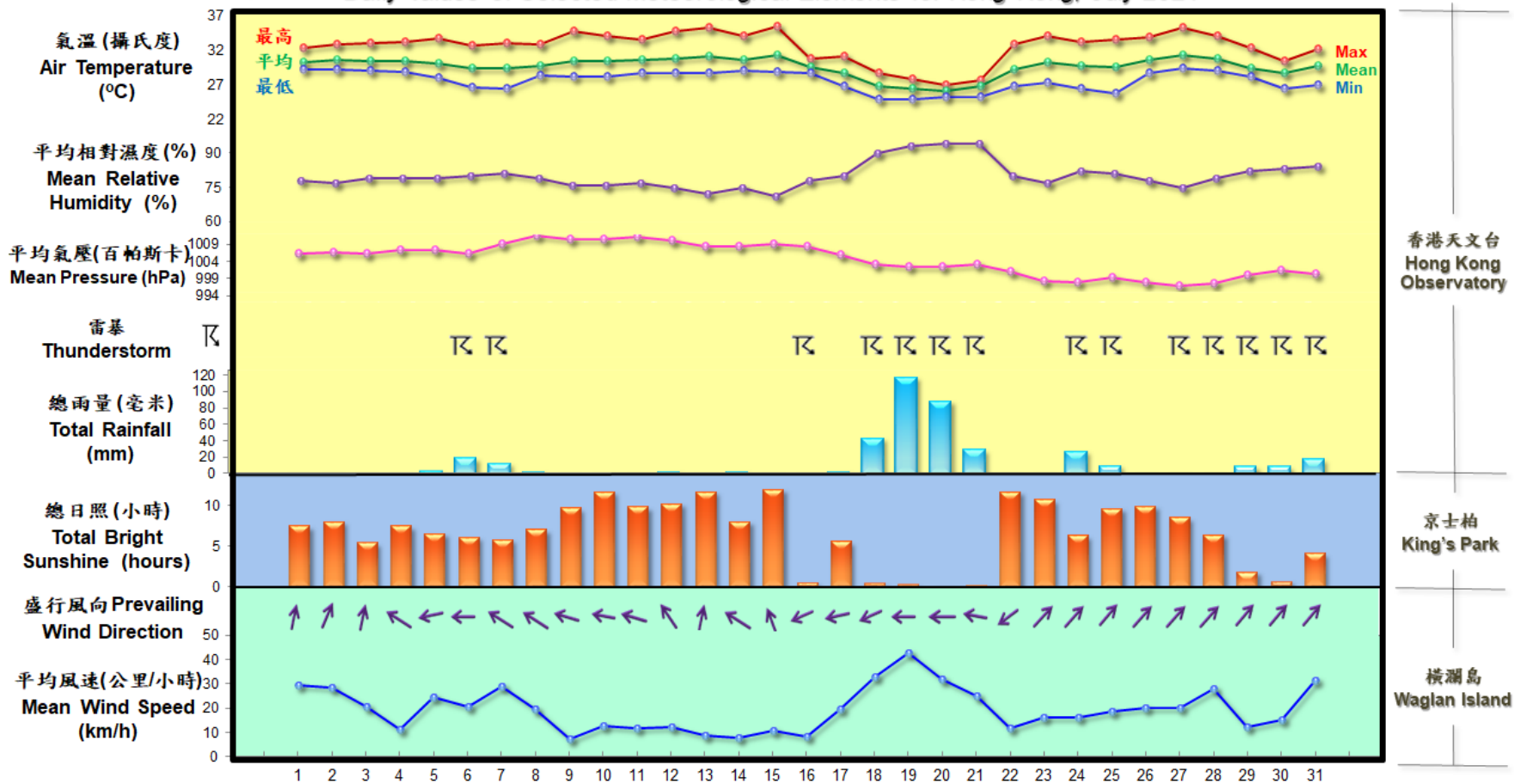
[^] In case the data are not available from Waglan Island, observations of Cheung Chau or other nearby weather stations will be incorporated in computing the Prevailing Wind Direction and Mean Wind Speed.

§ 1997-2020 平均值

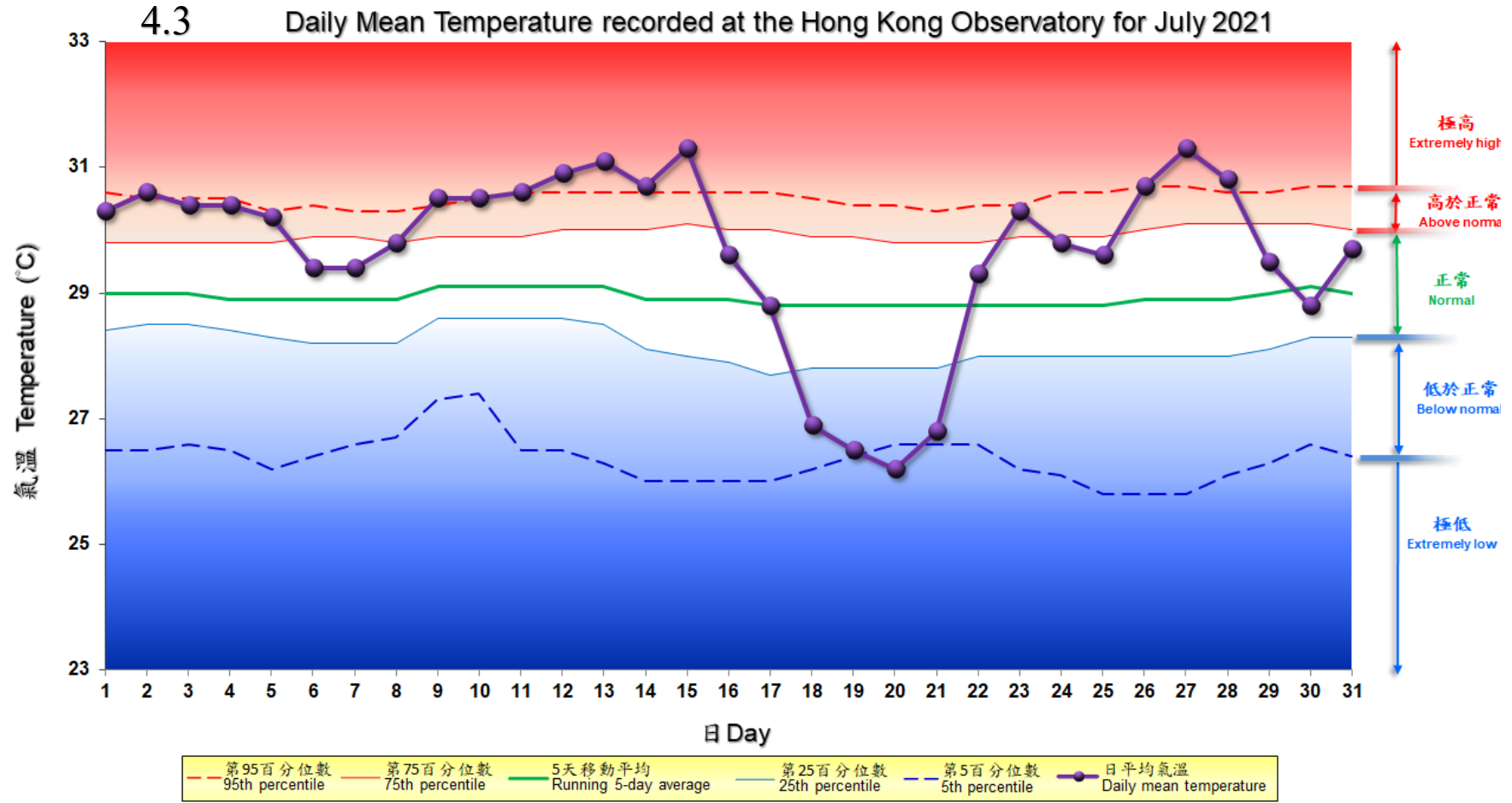
§ 1997-2020 Mean value

4.2 2021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 2021



4.3 2021年7月香港天文台錄得的日平均氣溫



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

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