

每月天氣摘要 二零二一年十月

Monthly Weather Summary October 2021



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二零二一年十一月出版

香港天文台編製
香港九龍彌敦道134A

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 : November 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. 二零二一年十月天氣回顧

由於熱帶氣旋獅子山及圓規為香港帶來大雨，二零二一年十月本港遠較正常多雨。本月總雨量達 631.1 毫米，是十月份正常值 120.3 毫米的五倍以上（或 1981-2010 正常值 100.9 毫米的六倍以上），是有記錄以來十月份的第二高。本年首十個月的累積雨量為 2281.8 毫米，較同期正常值 2363.1 毫米少百分之 3（或較 1981-2010 正常值 2334.0 毫米少百分之 2）。本月天氣的另一特徵是首周遠較正常溫暖，而後期稍涼。總括來說，本月平均氣溫為 26.0 度，略高於正常值的 25.7 度（或較 1981-2010 正常值高 0.5 度）。

在微風的情況下，除局部地區有驟雨外，本月首兩日香港天氣酷熱及部分時間有陽光。在陽光充沛的情況下，十月一日天文台氣溫上升至全月最高的 33.1 度。當日最低氣溫 28.8 度是十月份及國慶日的最高紀錄。而平均氣溫 30.3 度，也是有記錄以來其中一個十月份的最高。當日的高溫天氣亦在部分地區觸發雷雨。翌日香港國際機場第三跑道工地附近有塵捲風報告。

受一股清勁至強風程度的偏東氣流影響，十月三日本港短暫時間有陽光及有幾陣雷雨。部分地區的雨勢較大，大澳錄得超過 50 毫米雨量。受一股較乾燥的偏東氣流影響，除局部地區有驟雨外，隨後兩日本港普遍天晴及炎熱。在一股強風程度的東北季候風影響下，十月六日本港東風增強，陽光充沛及天氣乾燥。

與此同時，在南海中部的低壓區於十月七日下午增強為熱帶低氣壓，之後被命名為獅子山。十月七日至八日獅子山大致向西北移向海南島。十月九日獅子山緩慢橫過海南島，並於晚間進入北部灣。獅子山之後登陸越南北部，並於十月十一日減弱為低壓區。另外，在菲律賓以東的一個廣闊低壓區於十月八日增強為熱帶低氣壓，並被命名為圓規。圓規逐步發展為強烈熱帶風暴，並於十月十一日橫過呂宋海峽。隨後圓規向西移動，橫過南海北部，並於十月十三日早上進一步發展為颱風。在橫過海南島及北部灣後，圓規登陸越南北部，並於十月十四日減弱為低壓區。

在獅子山及東北季候風的共同影響下，十月七日至八日本港風勢頗大，有狂風大驟雨及雷暴。十月八日的雨勢特別大而且持續，本港普遍錄得超過 200 毫米雨量，天文台需發出本年第二個黑色暴雨警告。當日天文台錄得的雨量更達 329.7 毫米，是十月份月總雨量正常值 120.3 毫米的兩倍以上，亦是十月份日雨量的最高紀錄。隨著獅子山於十月九日靠近廣東沿岸及本港風力進一步增強，天文台在當日清晨發出八號烈風或暴風信號。在惡劣天氣下，一艘雙體帆船於十月七日在蒲台島附近海域被大浪掀翻，兩人墮海，其中一人溺斃。十月八日早上跑馬地一座住宅大廈的外牆棚架倒塌，釀成一死一傷。當日的傾盆大雨亦令部分道路嚴重水浸。

隨著獅子山遠離本港，十月十日日間驟雨減少，風勢逐漸緩和。受乾燥東北季

候風影響，十月十一日本港大致天晴。隨著圓規靠近及在東北季候風共同影響下，十月十二日本港風力再次增強，當晚達強風至烈風程度。十月十二日下午天文台再次發出八號烈風或暴風信號，與獅子山的八號信號取消後僅相距 60 小時 40 分鐘，這是自一九四六年以來由兩個不同熱帶氣旋所引致的八號信號之時間相距最短的紀錄。十月十三日本港大部分時間普遍吹強風至烈風，離岸及高地風力更達暴風程度。圓規的外圍雨帶於十月十二日至十三日為本港帶來大驟雨，十月十三日部分地區錄得超過 100 毫米雨量。此外，圓規引起的風暴潮在十月十三日早上令本港海水高度較正常潮水高度高出超過 1 米。由於適逢天文漲潮，兩者的疊加效應導致本港部分低窪地區出現水浸，當中包括大澳、城門河及鯉魚門。隨著圓規遠離，十月十四日本港風勢逐漸緩和，雨勢減弱。

受一個雨區影響，十月十五日本港大致多雲及有幾陣雨。一股乾燥東北季候風在翌日抵達廣東沿岸，隨後數天本港天氣轉為普遍天晴，日間天氣乾燥，早上稍涼。受一股偏東氣流影響，十月二十日除早上有幾陣微雨外，本港日間持續大致天晴。

一道冷鋒於十月二十一日早上橫過廣東沿岸地區。當日下午本港有幾陣雨，北風增強及氣溫顯著下降。與其相關的東北季候風在隨後兩日為本港帶來稍涼及有幾陣微雨的天氣。十月二十二日早上天文台氣溫下降至全月最低的 18.2 度。受東北季候風所支配，十月二十四日至二十六日本港日間陽光充沛及天氣乾燥。隨著一道雲帶覆蓋廣東沿岸地區，除十月二十九日日間大致天晴外，十月二十七日至三十日本港天氣大致多雲及早上有幾陣雨。隨著雲層轉薄，本月最後一日本港下午部分時間有陽光。

本月有六個熱帶氣旋影響南海及北太平洋西部。

本月有十五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 October 2021

Attributing to the heavy rain induced by tropical cyclones Lionrock and Kompas, October 2021 was much wetter than usual in Hong Kong with monthly rainfall amounted to 631.1 millimetres, more than five times of the normal figure of 120.3 millimetres (or more than six times of the 1981-2010 normal of 100.9 millimetres) and

the second highest on record for October. The accumulated rainfall up to October this year was 2281.8 millimetres, a deficit of 3 percent compared with the normal of 2363.1 millimetres (or 2 percent below the 1981-2010 normal of 2334.0 millimetres) for the same period. October 2021 was also characterized by much warmer than usual weather in the first week and relatively cooler weather in the latter part of the month. Overall, the monthly mean temperature of 26.0 degrees was slightly higher than the normal figure of 25.7 degrees (or 0.5 degrees above the 1981-2010 normal).

Under light wind conditions, apart from isolated showers, it was very hot with sunny periods in Hong Kong on the first two days of the month. With plenty of sunshine, the temperature at the Observatory soared to 33.1 degrees on 1 October, the highest of the month. The daily minimum temperature of 28.8 degrees on 1 October was the highest on record for October and National Day. The daily mean temperature of 30.3 degrees on that day was also one of the highest on record for October. High temperatures also triggered localized thundery showers in some areas on that day. Dust devil was reported on the next day near the third runway construction site of the Hong Kong International Airport.

With the setting in of a fresh to strong easterly airstream, there were sunny intervals and a few thundery showers on 3 October. The showers were particularly heavy in some areas with more than 50 millimetres of rainfall recorded over Tai O. Affected by a relatively dry easterly airstream, the local weather was generally fine and hot apart from isolated showers on the next two days. Under the influence of a strong northeast monsoon, it was sunny and dry with winds strengthening from the east on 6 October.

Meanwhile, an area of low pressure over the central part of the South China Sea intensified into a tropical depression on the afternoon of 7 October and was later named Lionrock. It moved generally northwestwards towards Hainan Island on 7 – 8 October. Lionrock slowly moved across Hainan Island on 9 October and entered Beibu Wan that night. It made landfall over the northern part of Vietnam and weakened into an area of low pressure on 11 October. Concurrently, a broad area of low pressure to the east of the Philippines intensified into a tropical depression and was named Kompasu on 8 October. It developed progressively into a severe tropical storm and moved across the Luzon Strait on 11 October. Kompasu moved westwards across the northern part of the South China Sea and further developed into a typhoon on the morning of 13 October. After moving across Hainan Island and Beibu Wan, Kompasu made landfall over the northern part of Vietnam and weakened into an area of low pressure on 14 October.

Under the combined effect of Lionrock and the northeast monsoon, it was windy with squally heavy showers and thunderstorms in Hong Kong on 7 – 8 October. The rain was particularly heavy and persistent on 8 October with more than 200 millimetres

of rainfall generally recorded over Hong Kong, necessitating the issuance of the second Black Rainstorm Warning in the year. The rainfall recorded at the Observatory on that day even reached 329.7 millimetres, more than two times of October's monthly total normal figure of 120.3 millimetres and the highest daily rainfall on record for October. With Lionrock edging closer to the coast of Guangdong and winds over Hong Kong further strengthening on 9 October, the No. 8 Gale or Storm Signal was issued early that morning. Under the inclement weather, a catamaran was overturned by huge waves over the waters near Po Toi Island on 7 October. Two people on board fell into the sea and one of them was drowned. The scaffolding of a residential building in Happy Valley collapsed on the morning of 8 October, resulting in one death and one injury. The heavy downpour on that day also caused serious flooding to some roads.

When Lionrock moved away from Hong Kong, showers eased off and winds subsided gradually during the day on 10 October. Affected by the dry northeast monsoon, the local weather was mainly fine on 11 October. With the approach of Kompasu and under the combined effect of the northeast monsoon, local winds strengthened again on 12 October, reaching strong to gale force that night. The No. 8 Gale or Storm Signal was issued again on the afternoon of 12 October with only a break time of 60 hours and 40 minutes after the cancellation of the No. 8 Signal for Lionrock. This was the shortest record of break time between two No.8 signals for two different tropical cyclones since 1946. For most of the time on 13 October, winds over Hong Kong were generally strong to gale force, with winds reaching storm force offshore and on high ground. The outer rainbands of Kompasu brought heavy showers to Hong Kong on 12 – 13 October with over 100 millimetres of rainfall recorded in some parts of the territory on 13 October. Moreover, the storm surge induced by Kompasu raised the water level in Hong Kong over 1 metre higher than the normal tide levels on the morning of 13 October. Coincided with the astronomical high tide, the aggregated effect resulted in the inundation of some low-lying areas in Hong Kong, including Tai O, Shing Mun River and Lei Yue Mun. With Kompasu moving away from the territory, local winds moderated gradually with less rain on 14 October.

A rain area brought mainly cloudy weather and a few rain patches to Hong Kong on 15 October. A surge of the dry northeast monsoon reached the coast of Guangdong on 16 October, the local weather of the following few days became generally fine and dry during the day with slightly cooler mornings. Affected by an easterly airstream, apart from a few light rain patches in the morning, the weather remained mainly fine during the day on 20 October.

A cold front moved across the coast of Guangdong on the morning of 21 October. Locally, there were a few rain patches with winds strengthening from the north in the afternoon and temperatures falling significantly. The associated northeast monsoon

brought relatively cool weather and a few light rain patches to Hong Kong on the next two days. The temperature of the Observatory dropped to 18.2 degrees on the morning of 22 October, the lowest of the month. Dominated by the northeast monsoon, it was sunny and dry during the day on 24 – 26 October. With a cloud band covering the coastal areas of Guangdong, apart from mainly fine weather during the day in Hong Kong on 29 October, it was mainly cloudy with a few morning rain patches on 27 – 30 October. With the clouds thinning out, there were sunny periods on the afternoon of the last day of the month.

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

During the month, fifteen aircrafts were 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 二零二一年十月發出的警告及信號

Table 1.1 Warnings and Signals issued in October 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
獅子山 LIONROCK	3	8/10	0440	9/10	0640
	8SE	9/10	0640	10/10	0440
	3	10/10	0440	10/10	1240
	1	10/10	1240	10/10	1420
圓規 KOMPASU	3	12/10	0040	12/10	1720
	8NE	12/10	1720	13/10	1640
	3	13/10	1640	14/10	0440
	1	14/10	0440	14/10	0620

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
6/10	0335	6/10	0730
6/10	2340	8/10	0439
11/10	1600	12/10	0039
16/10	2210	18/10	0345

雷暴警告

Thunderstorm Warning

開始時間 Beginning Time		終結時間 Ending Time	
日/月 day/month	時 hour	日/月 day/month	時 hour
1/10	1140	1/10	1700
3/10	0310	3/10	1200
7/10	1831	8/10	0830
8/10	1016	8/10	1900
10/10	0144	10/10	0545
10/10	0751	10/10	0920
10/10	1055	10/10	1615
13/10	0746	13/10	1100
13/10	1328	13/10	1900

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	7/10	2320	8/10	1120
紅色 Red	8/10	1120	8/10	1145
黑色 Black	8/10	1145	8/10	1245
紅色 Red	8/10	1245	8/10	1745
黃色 Amber	8/10	1745	8/10	1925
黃色 Amber	9/10	1300	9/10	2105
黃色 Amber	13/10	1402	13/10	1710

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	14/10	1030	14/10	1900
黃色 Yellow	17/10	0600	17/10	1900
黃色 Yellow	24/10	0600	24/10	2000
黃色 Yellow	31/10	0720	31/10	1930

山泥傾瀉警告

Landslip 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
8/10	0950	10/10	1000

酷熱天氣警告

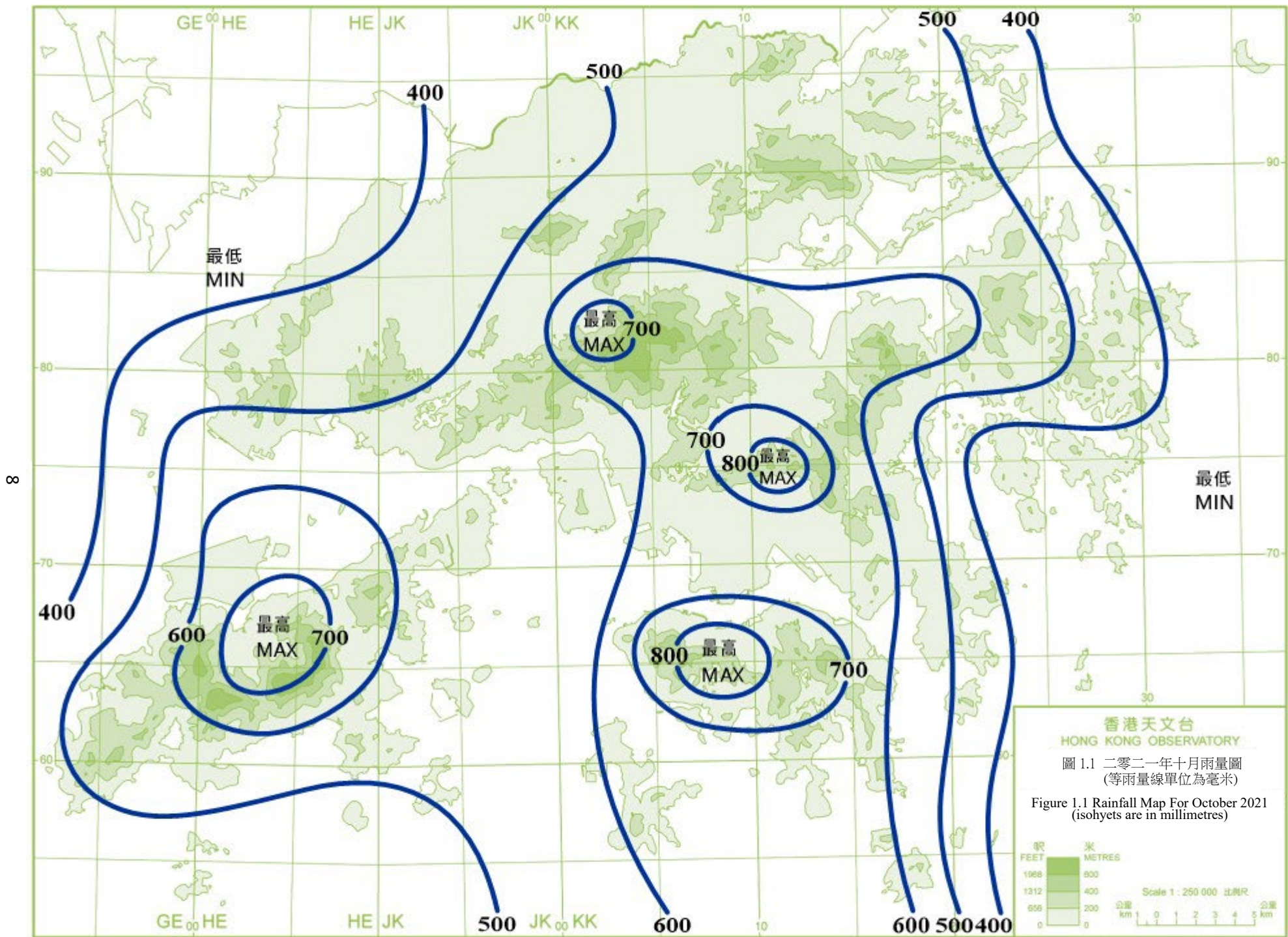
Very Hot Weather Warning

開始時間 Beginning Time		終結時間 Ending Time	
日/月 day/month	時 hour	日/月 day/month	時 hour
1/10	0945	1/10	1620

新界北水浸特別報告

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
8/10	1020	8/10	1925



香港天文台
HONG KONG OBSERVATORY

圖 1.1 二零二一年十月雨量圖
(等雨量線單位為毫米)

Figure 1.1 Rainfall Map For October 2021
(isohyets are in millimetres)

2.1 二零二一年十月的熱帶氣旋概述

二零二一年十月在北太平洋西部及南海區域出現了六個熱帶氣旋，當中獅子山及圓規引致香港天文台需要發出熱帶氣旋警告信號。

熱帶低氣壓蒲公英於九月二十三日早上在關島之東南約 290 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。九月二十四日晚上蒲公英發展為強烈熱帶風暴，轉向西北方向移動並迅速增強。九月二十六日蒲公英進一步發展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 220 公里。隨後三日蒲公英向偏北方向移動，並在九月三十日轉向東北，移向日本以東海域。最後蒲公英於十月一日在日本以東海域演變為一股溫帶氣旋。

一個季風低壓於十月七日下午在三亞之東南偏東約 290 公里的南海中部上發展為熱帶低氣壓，大致向西北移向海南島。該熱帶低氣壓在十月八日上午被命名為獅子山，並增強為熱帶風暴。當日下午獅子山達到其最高強度，中心附近最高持續風速估計為每小時 75 公里。十月九日獅子山橫過海南島，期間路徑較為飄忽，以逆時針方向轉了一個圈。當日下午獅子山轉向西北偏西方向移動，在晚上進入北部灣。十月十日晚上獅子山在越南北部沿岸減弱為低壓區。

根據報章報導，獅子山在澳門造成六人受傷。此外，獅子山亦為珠海帶來暴雨，多處地區水浸。有關獅子山的詳細資料及對香港的影響，請參閱它的熱帶氣旋報告。

圓規於十月八日晚上在馬尼拉以東約 1020 公里的北太平洋西部上發展為熱帶低氣壓，初時向偏北方向移動，並逐漸增強。十月十日圓規加速向偏西方向移動，十月十一日發展為強烈熱帶風暴及橫過呂宋海峽。圓規在十月十二日向西橫過南海北部，翌日早上進一步發展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。十月十三日圓規橫過海南島並迅速減弱，十月十四日在北部灣減弱為低壓區。

根據報章報導，圓規吹襲菲律賓期間，造成 40 人死亡，5 人受傷，17 人失蹤，超過五十萬人須要撤離。此外，圓規帶來的暴雨令廣東鹽田港及海南島的三個港口關閉，海上運輸服務暫停。有關圓規的詳細資料及對香港的影響，請參閱它的熱帶氣旋報告。

熱帶低氣壓南川於十月九日晚上在威克島之西南偏西約 550 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。南川於十月十二日轉向北移動，翌日再向東北漂移。南川在十月十六日早上增強為強烈熱帶風暴並達到其最高強度，中心附近最高持續風速估計為每小時 90 公里。南川隨後迅速減弱，最後於十月十七日在威克島以北的北太平洋西部演變為一股溫帶氣旋。

熱帶低氣壓瑪瑙於十月二十四日早上在雅蒲島之東北約 340 公里的北太平洋西部上形成，大致向北移動並逐漸增強。瑪瑙於十月二十七日晚上增強為颱風，並轉向東北偏北移動。十月二十八日下午瑪瑙達到其最高強度，中心附近最高持續風速估計為每小時 145 公里。瑪瑙隨後逐漸減弱，最後於十月二十九日在日本以東海域演變為一股溫帶氣旋。

一個熱帶低氣壓於十月二十四日下午在南沙以東約 280 公里的南海南部上形成，向西或西北偏西移動。十月二十六日下午該熱帶低氣壓達到其最高強度，中心附近最高持續風速估計為每小時 55 公里。十月二十七日該熱帶低氣壓在越南南部減弱為一個低壓區。

2.1 Overview of Tropical Cyclone in October 2021

Six tropical cyclones occurred over the western North Pacific and the South China Sea in October 2021. Among them, Lionrock and Kompasu necessitated the issuance of the tropical cyclone warning signals by the Observatory.

Mindulle formed as a tropical depression over the western North Pacific about 290 km southeast of Guam on the morning of 23 September. It moved west-northwestwards and intensified gradually. Mindulle developed into a severe tropical storm on the night of 24 September. It turned to move northwestwards and intensified rapidly. Mindulle further developed into a super typhoon on 26 September and reached its peak intensity with an estimated maximum sustained wind of 220 km/h near its centre. It tracked northwards in the following three days and turned to move northeastwards towards the seas east of Japan on 30 September. Mindulle finally evolved into an extratropical cyclone over the seas east of Japan on 1 October.

A monsoon depression developed into a tropical depression over the central part of the South China Sea about 290 km east-southeast of Sanya on the afternoon of 7 October. It generally tracked northwestwards towards Hainan Island. The tropical depression was named Lionrock on the morning of 8 October and intensified into a tropical storm. Lionrock reached its peak intensity in the afternoon with an estimated maximum sustained wind of 75 km/h near its centre. When Lionrock moved across Hainan Island on 9 October, it took on an erratic track and made an anti-clockwise loop. Lionrock turned to move west-northwestwards in that afternoon and entered Beibu Wan at night. It degenerated into an area of low pressure over the coast of northern Vietnam on the night of 10 October.

According to press reports, Lionrock left six injuries in Macao. Besides, it also brought torrential rain to Zhuhai and triggered extensive flooding. For detailed information of Lionrock including its impact to Hong Kong, please refer to the Tropical Cyclone Report of Lionrock.

Kompasu developed as a tropical depression over the western North Pacific about 1 020 km east of Manila on the night of 8 October. It moved northwards at first and intensified gradually. Kompasu picked up speed to move westwards on 10 October. It developed into a severe tropical storm and moved across the Luzon Strait on 11 October. Kompasu moved westwards across the northern part of the South China Sea on 12 October. It further developed into a typhoon on the morning of next day, reaching its peak intensity with an estimated sustained wind of 120 km/h near its centre. Kompasu moved across Hainan Island on 13 October and weakened rapidly. It degenerated into an area of low pressure over Beibu Wan on 14 October.

According to press reports, Kompasu left 40 deaths, 5 injuries, 17 missing and over 500 000 people evacuated in the Philippines during its passage. Besides, the Yantian Port in Guangdong and 3 ports in Hainan Island were closed and the marine transportation services were suspended because of the torrential rain brought by Kompasu. For detailed information of Kompasu including its impact to Hong Kong, please refer to the Tropical Cyclone Report of Kompasu.

Namtheun formed as a tropical depression over the western North Pacific about 550 km west-southwest of Wake Island on the night of 9 October. It moved west-northwestwards and intensified gradually. Namtheun turned to move northwards on 12 October and drifted northeastwards the next day. Namtheun intensified into a severe tropical storm and reached its peak intensity on the morning of 16 October with an estimated maximum sustained wind of 90 km/h near its centre. It then weakened rapidly and finally evolved into an extratropical cyclone over the western North Pacific to the north of Wake Island on 17 October.

Malou formed as a tropical depression over the western North Pacific about 340 km northeast of Yap Island on the morning of 24 October. It generally moved northwards and intensified gradually.

Malou intensified into a typhoon on the night of 27 October and turned to move north-northeastwards. It reached its peak intensity on the afternoon of 28 October with an estimated maximum sustained wind of 145 km/h near its centre. Malou then weakened gradually and finally evolved into an extratropical cyclone over the seas east of Japan on 29 October.

A tropical depression formed over the southern part of the South China Sea about 280 km east of Nansha on the afternoon of 24 October. It generally moved westwards or northwestwards. The tropical depression reached its peak intensity on the afternoon of 26 October with an estimated maximum sustained wind of 55 km/h near its centre. It degenerated into an area of low pressure over the southern part of Vietnam on 27 October.

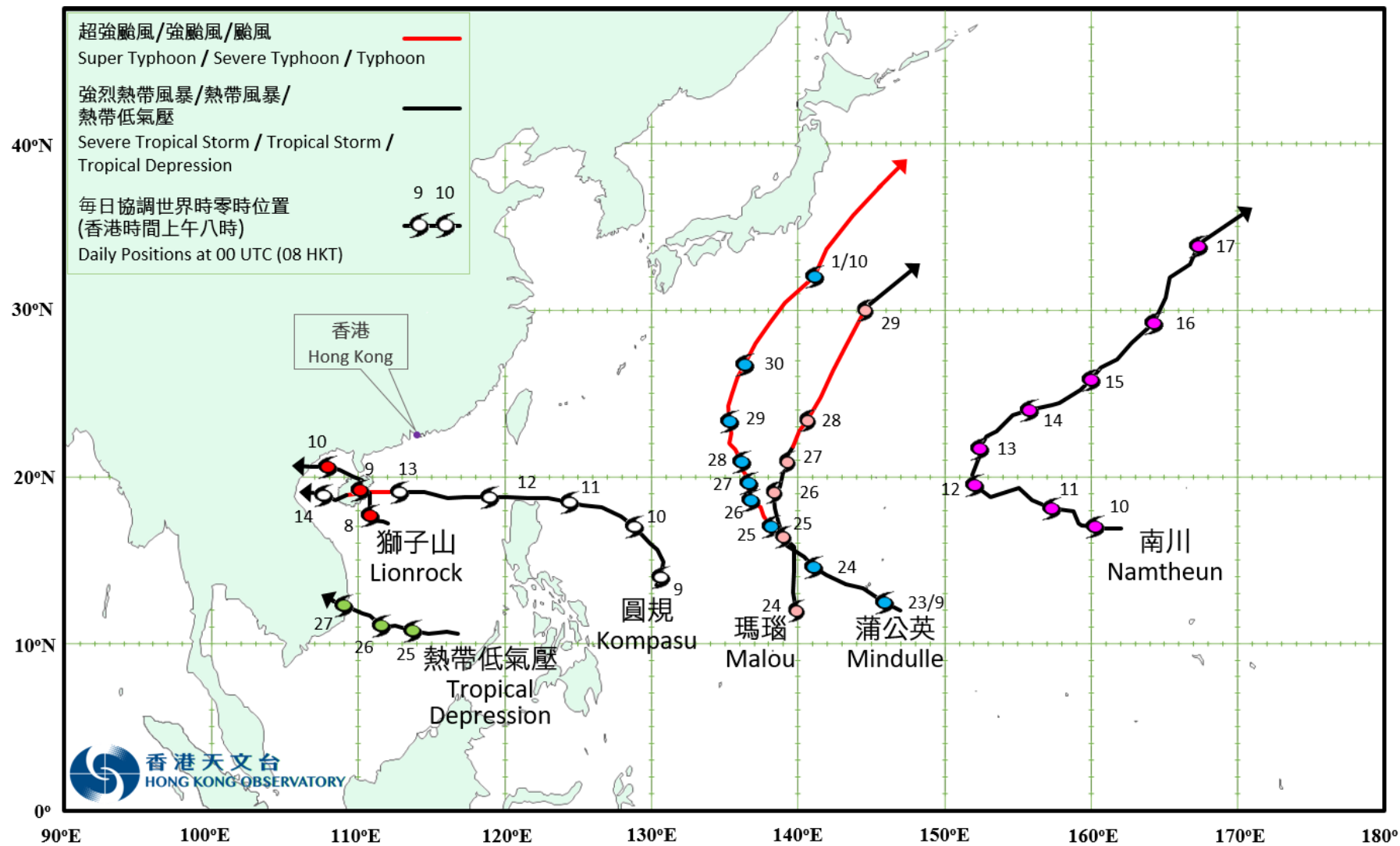


圖 2.1 二零二一年十月的熱帶氣旋暫定路徑圖

Fig. 2.1 Provisional Tropical Cyclone Tracks in October 2021

2.2 熱帶風暴獅子山(2117)

二零二一年十月七日至十日

獅子山是二零二一年第六個影響香港的熱帶氣旋。雖然獅子山在香港約 490 公里掠過，在其廣闊環流與東北季候風的共同影響下，天文台需要發出今年首個八號烈風或暴風信號。獅子山亦是一九六一年以來距離香港最遠而需發出八號烈風或暴風信號的熱帶氣旋。

一個季風低壓於十月七日下午在三亞之東南偏東約 290 公里的南海中部上發展為熱帶低氣壓，大致向西北移向海南島。該熱帶低氣壓在十月八日上午被命名為獅子山，並增強為熱帶風暴。當日下午獅子山達到其最高強度，中心附近最高持續風速估計為每小時 75 公里。十月九日獅子山橫過海南島，期間路徑較為飄忽，以逆時針方向轉了一個圈。當日下午獅子山轉向西北偏西方向移動，在晚上進入北部灣。十月十日晚上獅子山在越南北部沿岸減弱為低壓區。

根據報章報導，獅子山在澳門造成六人受傷。此外，獅子山亦為珠海帶來暴雨，多處地區水浸。

天文台在十月六日晚上 11 時 40 分發出強烈季候風信號。在東北季候風及季風低壓的外圍環流共同影響下，十月七日香港普遍吹清勁偏東風，離岸吹強風。隨著該季風低壓發展為熱帶低氣壓及逐漸靠近海南島，天文台在十月八日上午 4 時 40 分發出三號強風信號，取代強烈季候風信號，當時獅子山集結在香港之西南偏南約 630 公里。在獅子山與東北季候風共同影響下，十月八日本港普遍吹強風，離岸及高地間中吹烈風。翌日清晨本港風力進一步增強，天文台在十月九日上午 6 時 40 分發出八號東南烈風或暴風信號，當時獅子山集結在香港之西南約 550 公里。在獅子山的外圍兩帶影響下，十月九日本港持續吹強風至烈風程度的東至東南風，離岸間中吹暴風，西南部高地風力更間中達颶風程度。獅子山在當日下午 2 時最接近本港，其中心集結在本港之西南約 490 公里。隨著獅子山移入北部灣及遠離香港，本港風力逐漸減弱，天文台在十月十日上午 4 時 40 分發出三號強風信號，取代八號東南烈風或暴風信號。隨著本港風力進一步緩和，天文台在十月十日下午 12 時 40 分以一號戒備信號取代三號強風信號，並於當日下午 2 時 20 分取消所有熱帶氣旋警告信號。

在獅子山的影響下，昂坪、長洲及橫瀾島錄得的最高每小時平均風速分別為每小時 103、76 及 74 公里，而最高陣風則分別為每小時 154、123 及 101 公里。尖鼻咀錄得最高潮位 3.12 米(海圖基準面以上)及最大風暴潮(天文潮高度以上) 0.60 米。各站錄得的最低瞬時海平面氣壓如下：

站	最低瞬時 海平面氣壓 (百帕斯卡)	日期/月份	時間
香港天文台總部	1003.2	9/10	上午 3 時 35 分
香港國際機場	1002.3	9/10	上午 5 時 03 分
長洲	1002.3	9/10	上午 3 時 06 分
京士柏	1003.2	8/10	下午 3 時 28 分
流浮山	1003.0	9/10	上午 3 時 10 分
坪洲	1002.6	9/10	上午 2 時 57 分
沙田	1003.5	8/10	下午 3 時 33 分
上水	1003.2	9/10	上午 4 時 25 分
打鼓嶺	1003.3	9/10	上午 4 時 25 分
大埔	1003.5	9/10	上午 4 時 02 分
橫瀾島	1002.7	8/10	上午 6 時 48 分

獅子山的外圍雨帶在十月七日至九日為本港帶來狂風大驟雨及雷暴。十月八日的雨勢特別大而且持續，本港普遍錄得超過 200 毫米雨量，天文台需發出本年第二個黑色暴雨警告。山泥傾瀉警告及新界北部水浸特別報告在當日亦曾經生效。十月八日天文台錄得的雨量更達 329.7 毫米，是十月份月總雨量正常值 120.3 毫米的兩倍以上，亦是有記錄以來十月份日雨量的最高紀錄。隨著獅子山遠離本港，十月十日日間驟雨逐漸減少。在十月七日至十日的四天期間，本港普遍錄得超過 400 毫米雨量，港島部分地區的雨量更超過 700 毫米。

獅子山吹襲香港期間，有兩人死亡，至少 14 人受傷，另有超過 1100 宗塌樹報告、六宗水浸報告及三宗山泥傾瀉報告。約三百公頃的新界農地受影響。香港國際機場有 15 班航班需要轉飛其他地方。在十月七日強烈季候風信號生效期間，一艘雙體帆船在蒲台島附近海域被大浪掀翻，兩人墮海，其中一人溺斃。一艘途經香港果洲群島對開水域的貨輪有約 10 個貨櫃墮海。十月八日早上跑馬地一座住宅大廈的外牆棚架倒塌，釀成一死一傷。當日的傾盆大雨亦導致部分道路嚴重水浸，公主道、大坑道及順利邨道分別有車輛被洪水圍困。十月九日荃灣有建築地盤的棚架倒塌，九龍塘及深水灣分別有大樹塌下，壓毀三輛私家車及一輛警車。

2.2 Tropical Storm Lionrock (2117) 7 - 10 October 2021

Lionrock was the sixth tropical cyclone affecting Hong Kong in 2021. While Lionrock skirted past at about 490 km of Hong Kong, under the combined effect of Lionrock's extensive circulation and the northeast monsoon, the Observatory issued the first No. 8 Gale or Storm Signal in the year. Lionrock is also the farthest tropical cyclone necessitating the issuance of No. 8 Gale or Storm Signal in Hong Kong since 1961.

A monsoon depression developed into a tropical depression over the central part of the South China Sea about 290 km east-southeast of Sanya on the afternoon of 7 October. It generally tracked northwestwards towards Hainan Island. The tropical depression was named Lionrock on the morning of 8 October and intensified into a tropical storm. Lionrock reached its peak intensity in the afternoon with an estimated maximum sustained wind of 75 km/h near its centre. When Lionrock moved across Hainan Island on 9 October, it took on an erratic track and made an anti-clockwise loop. Lionrock turned to move west-northwestwards in that afternoon and entered Beibu Wan at night. It degenerated into an area of low pressure over the coast of northern Vietnam on the night of 10 October.

According to press reports, Lionrock left six injuries in Macao. Besides, it also brought torrential rain to Zhuhai and triggered extensive flooding.

The Strong Monsoon Signal was issued at 11:40 p.m. on 6 October. Under the combined effect of the northeast monsoon and the outer circulation of the monsoon depression, local winds were generally fresh easterlies, reaching strong force offshore on 7 October. With the monsoon depression developing into a tropical depression and edging closer to Hainan Island, the No. 3 Strong Wind Signal was issued to replace the Strong Monsoon Signal at 4:40 a.m. on 8 October when Lionrock was about 630 km south-southwest of Hong Kong. Under the combined effect of Lionrock and the northeast monsoon, local winds were generally strong with occasional gales offshore and on high ground on 8 October. Local winds further strengthened on the early morning of 9 October and the No. 8 Southeast Gale or Storm Signal was issued at 6:40 a.m. when Lionrock was about 550 km southwest of Hong Kong. Under the influence of the outer rainbands of Lionrock, local winds were strong to gale force east to southeasterlies, with occasional storm force winds offshore and even hurricane force occasionally on high ground over the southwestern part of Hong Kong on 9 October. Lionrock came closest to Hong Kong at around 2 p.m. on 9 October with its centre passing about 490 km southwest of Hong Kong. With Lionrock entering Beibu Wan and departing from Hong Kong, local wind moderated and the No. 3 Strong Wind Signal was issued to replace the No. 8 Southeast Gale or Storm Signal at 4:40 a.m. on 10 October. As local winds further subsided,

the No. 1 Standby Signal was issued to replace the No. 3 Strong Wind Signal at 12:40 p.m. on 10 October and all tropical cyclone warning signals were cancelled at 2:20 p.m. on that day.

Under the influence of Lionrock, maximum hourly mean winds of 103, 76 and 74 km/h and maximum gusts of 154, 123 and 101 km/h were recorded at Ngong Ping, Cheung Chau and Waglan Island respectively. A maximum sea level (above chart datum) of 3.12 m and a maximum storm surge (above astronomical tide) of 0.60 m were recorded at Tsim Bei Tsui. The lowest instantaneous mean sea-level pressures recorded at some selected stations are as follows:

Station	Lowest Instantaneous mean sea-level pressure (hPa)	Date/Month	Time
Hong Kong Observatory Headquarters	1003.2	9/10	3:35 a.m.
Hong Kong International Airport	1002.3	9/10	5:03 a.m.
Cheung Chau	1002.3	9/10	3:06 a.m.
King's Park	1003.2	8/10	3:28 p.m.
Lau Fau Shan	1003.0	9/10	3:10 a.m.
Peng Chau	1002.6	9/10	2:57 a.m.
Sha Tin	1003.5	8/10	3:33 p.m.
Sheung Shui	1003.2	9/10	4:25 a.m.
Ta Kwu Ling	1003.3	9/10	4:25 a.m.
Tai Po	1003.5	9/10	4:02 a.m.
Waglan Island	1002.7	8/10	6:48 a.m.

The outer rainbands of Lionrock brought squally heavy showers and thunderstorms to Hong Kong on 7 – 9 October. The rain was particularly heavy and persistent on 8 October with more than 200 millimetres of rainfall generally recorded over Hong Kong, necessitating the issuance of the second Black Rainstorm Warning this year. Landslip Warning and Special Announcement on Flooding in the northern New Territories were also in force on that day. The rainfall recorded at the Observatory on 8 October even reached 329.7 millimetres, more than two times of October's monthly total normal figure of 120.3 millimetres and the highest daily rainfall on record for the month of October. When Lionrock moved away from Hong Kong, showers eased off during the day on 10 October. More than 400 millimetres of rainfall were generally recorded over the territory during the four-day period of 7 – 10 October, with rainfall exceeding 700 millimetres over parts of Hong Kong Island.

Lionrock caused two deaths and at least 14 others injured in Hong Kong during its passage. There were over 1 100 reports of fallen trees, 6 reports of flooding and 3 reports of landslip. About 300 hectares of farmland in the New Territories were affected. 15 flights were diverted at the Hong Kong International Airport. A catamaran was overturned by huge waves over the waters near Po Toi Island on 7 October when the Strong Monsoon Signal was in force. Two people on board fell into the sea and one of them was drowned. About 10 containers fell into the sea from a freighter passing through the waters off the Ninepin Island. The scaffolding of a residential building in Happy Valley collapsed on the morning of 8 October, resulting in one death and one injury. The heavy downpour on that day also caused serious flooding to some roads. A number of vehicles were trapped by flood waters at Princess Margaret Road, Tai Hang Road and Shun Lee Tsuen Road. On 9 October, the scaffolding of a construction site in Tsuen Wan collapsed under strong wind. The fallen trees in Kowloon Tong and Deep Water Bay damaged three private cars and a police vehicle.

表 2.2.1 在獅子山影響下，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 Lionrock 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	95	9/10	17:33	東南偏東 ESE	44	9/10	18:00
長洲	Cheung Chau	東南偏東 ESE	123	9/10	12:44	東南偏東 ESE	76	9/10	03:00
		東南偏東 ESE				東南偏東 ESE	76	9/10	07:00
長洲泳灘	Cheung Chau Beach	東 E	111	9/10	15:03	東 E	77	9/10	13:00
青洲	Green Island	東北偏東 ENE	99	8/10	10:19	東北偏東 ENE	54	10/10	01:00
香港國際機場	Hong Kong International Airport	東南偏東 ESE	89	9/10	16:18	東南偏東 ESE	48	9/10	17:00
啟德	Kai Tak	東 E	78	9/10	00:49	東 E	36	9/10	07:00
京士柏	King's Park	東 E	79	9/10	17:26	東 E	34	9/10	02:00
南丫島	Lamma Island	東南偏東 ESE	87	9/10	12:42	東 E	45	9/10	13:00
流浮山	Lau Fau Shan	東 E	69	9/10	22:10	東 E	36	9/10	23:00
昂坪	Ngong Ping	東 E	154	9/10	15:38	東 E	103	9/10	15:00
北角	North Point	東北偏東 ENE	82	8/10	10:15	東 E	49	10/10	01:00
坪洲	Peng Chau	東南 SE	80	9/10	12:49	東南偏東 ESE	50	9/10	13:00
平洲	Ping Chau	東北偏東 ENE	59	9/10	21:55	東 E	23	9/10	23:00
西貢	Sai Kung	東南 SE	81	8/10	13:17	東北偏東 ENE	46	10/10	00:00
沙螺灣	Sha Lo Wan	東南 SE	102	9/10	16:24	東 E	39	9/10	03:00
						東南 SE	39	9/10	17:00
沙田	Sha Tin	南 S	67	9/10	06:45	東南偏南 SSE	24	9/10	07:00
九龍天星碼頭	Star Ferry (Kowloon)	東南偏東 ESE	85	9/10	13:02	東 E	45	9/10	07:00
						東 E	45	9/10	21:00
打鼓嶺	Ta Kwu Ling	東 E	71	9/10	18:07	東 E	27	9/10	09:00
大美督	Tai Mei Tuk	東 E	99	9/10	12:55	東 E	62	9/10	14:00
大帽山	Tai Mo Shan	東南偏東 ESE	136	9/10	12:56	東南偏東 ESE	89	9/10	18:00
大埔滘	Tai Po Kau	東南 SE	82	9/10	06:55	東 E	46	10/10	00:00
大老山	Tate's Cairn	東南 SE	116	9/10	06:22	東南偏東 ESE	71	9/10	22:00
將軍澳	Tseung Kwan O	東 E	75	9/10	13:01	東南 SE	20	9/10	07:00
青衣島蜆殼油庫	Tsing Yi Shell Oil Depot	東 E	75	9/10	13:23	東南偏東 ESE	26	9/10	03:00
						東南偏東 ESE	26	9/10	04:00
						東南偏東 ESE	26	9/10	16:00
屯門政府合署	Tuen Mun Government Offices	東南偏東 ESE	77	9/10	16:36	東南 SE	24	9/10	08:00
橫瀾島	Waglan Island	東南偏東 ESE	101	9/10	15:29	東 E	74	10/10	01:00
濕地公園	Wetland Park	東南偏東 ESE	59	9/10	14:38	東 E	18	9/10	23:00
黃竹坑	Wong Chuk Hang	東 E	89	9/10	08:19	東 E	30	9/10	02:00

黃麻角(赤柱)、沙洲、石崗、塔門東 - 沒有資料 Bluff Head (Stanley), Sha Chau, Shek Kong, Tap Mun East - data not available

表 2.2.2 在獅子山影響下，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及烈風程度的時段

Table 2.2.2 Periods during which sustained strong and gale force winds were attained at the eight reference anemometers in the tropical cyclone warning system when tropical cyclone warning signals for Lionrock were in force

站 Station (https://www.hko.gov.hk/tc/informtc/station2021.html)		最初達到強風*		最後達到強風*		最初達到烈風#		最後達到烈風#	
		時間		時間		時間		時間	
		Start time when strong wind speed* was attained		End time when strong wind speed* was attained		Start time when gale force wind speed# was attained		End time when gale force wind speed# was attained	
		日期/月份	時間	日期/月份	時間	日期/月份	時間	日期/月份	時間
Date/Month	Time	Date/Month	Time	Date/Month	Time	Date/Month	Time		
長洲	Cheung Chau	8/10	07:33	10/10	11:34	8/10	20:46	9/10	23:01
香港國際機場	Hong Kong International Airport	8/10	08:02	9/10	23:19	9/10	13:06	9/10	13:06
流浮山	Lau Fau Shan	9/10	22:06	9/10	22:14	-			
啟德	Kai Tak	9/10	00:54	9/10	19:52	-			
西貢	Sai Kung	8/10	06:49	10/10	01:36	-			

沙田、打鼓嶺及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 Sha Tin, Ta Kwu Ling and Tsing Yi Shell Oil Depot.

- 未達到指定的風速

- not attaining the specified wind speed

* 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

十分鐘平均風速達每小時 63-87 公里

10-minute mean wind speed of 63-87 km/h

註： 本表列出持續風力達到強風及烈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 or gale force winds. Winds might fluctuate above or below the specified wind speeds in between the times indicated.

表 2.2.3 獅子山影響香港期間，香港天文台總部及其他各站所錄得的日雨量

Table 2.2.3 Daily rainfall amounts recorded at the Hong Kong Observatory Headquarters and other stations during the passage of Lionrock

站 (參閱圖 2.2.2) Station (See Fig. 2.2.2)			十月七日 7 Oct	十月八日 8 Oct	十月九日 9 Oct	十月十日 10 Oct	總雨量(毫米) Total rainfall (mm)
香港天文台 Hong Kong Observatory (HKO)			43.9	329.7	130.3	45.1	549.0
香港國際機場 Hong Kong International Airport (HKA)			23.0	276.9	154.3	63.0	517.2
長洲 Cheung Chau (CCH)			[26.5]	160.5	92.0	76.0	[355.0]
H23	香港仔	Aberdeen	43.5	269.0	163.5	49.0	525.0
N05	粉嶺	Fanling	21.5	238.0	101.0	16.0	376.5
N13	糧船灣	High Island	15.0	261.0	73.0	15.5	364.5
K04	佐敦谷	Jordan Valley	27.5	417.0	117.5	36.0	598.0
N06	葵涌	Kwai Chung	14.5	361.0	128.5	31.0	535.0
H12	半山區	Mid Levels	55.5	344.5	150.0	54.5	604.5
N09	沙田	Sha Tin	17.0	345.5	118.5	24.5	505.5
H19	筲箕灣	Shau Kei Wan	66.5	369.0	133.0	48.0	616.5
SEK	石崗	Shek Kong	[16.0]	274.5	130.5	29.0	[450.0]
K06	蘇屋邨	So Uk Estate	19.5	350.5	132.5	29.0	531.5
R31	大美督	Tai Mei Tuk	16.5	267.0	107.0	13.0	403.5
N17	東涌	Tung Chung	49.5	297.5	166.5	92.5	606.0
TMR	屯門水庫	Tuen Mun Reservoir	6.4	278.4	131.0	25.0	440.8

踏石角(R21) - 沒有資料

Tap Shek Kok (R21) - data not available

註：[] 基於不完整的每小時雨量數據。

Note : [] based on incomplete hourly data.

表 2.2.4 獅子山影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮

Table 2.2.4 Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of Lionrock

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	2.70	9/10	22:43	0.47	9/10	15:12
石壁	Shek Pik	2.91	9/10	22:25	0.56	9/10	05:39
大廟灣	Tai Miu Wan	2.71	9/10	23:06	0.48	9/10	15:20
大埔滘	Tai Po Kau	2.86	8/10	23:37	0.55	9/10	06:44
尖鼻咀	Tsim Bei Tsui	3.12	9/10	23:41	0.60	9/10	21:21

橫瀾島 - 沒有資料

Waglan Island - data not available

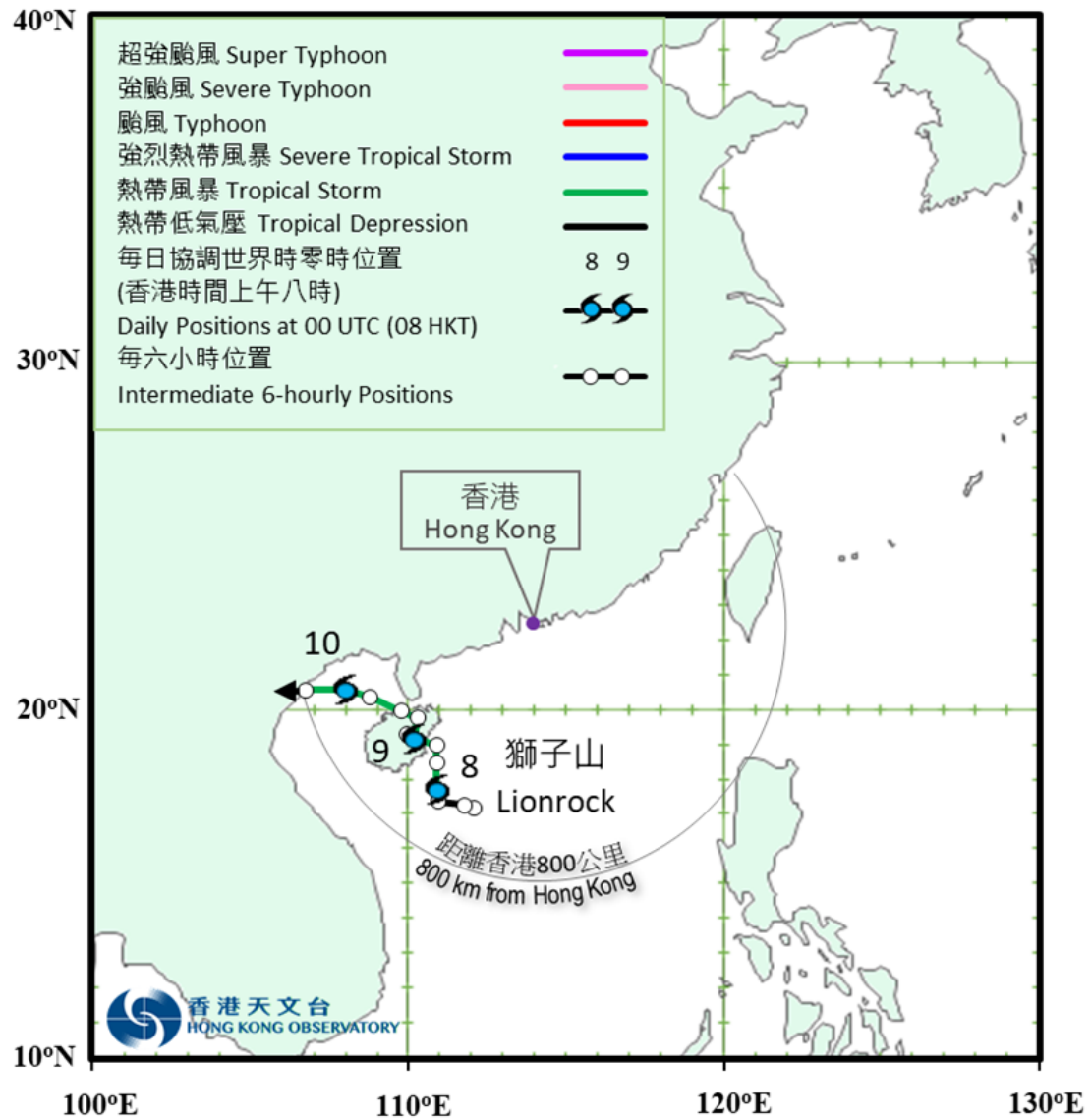


圖 2.2.1a 二零二一年十月七日至十日獅子山(2117)的暫定路徑圖。
 Figure 2.2.1a Provisional track of Lionrock (2117): 7 - 10 October 2021.



圖 2.2.1b 獅子山接近海南島時的暫定路徑圖。
 Figure 2.2.1b Provisional track of Lionrock near Hainan Island.

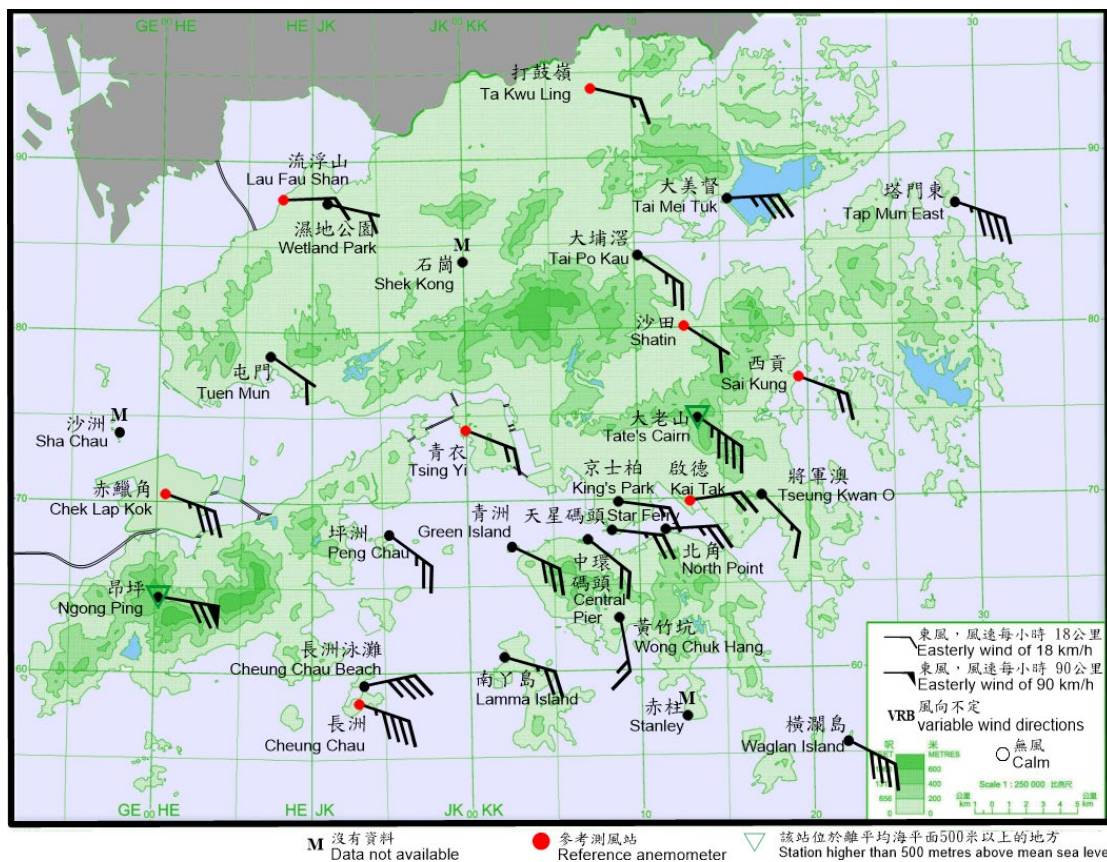


圖 2.2.2 二零二一年十月七日至十日的雨量分佈(等雨量線單位為毫米)。
 Figure 2.2.2 Rainfall distribution on 7 – 10 October 2021 (isohyets are in millimetres).

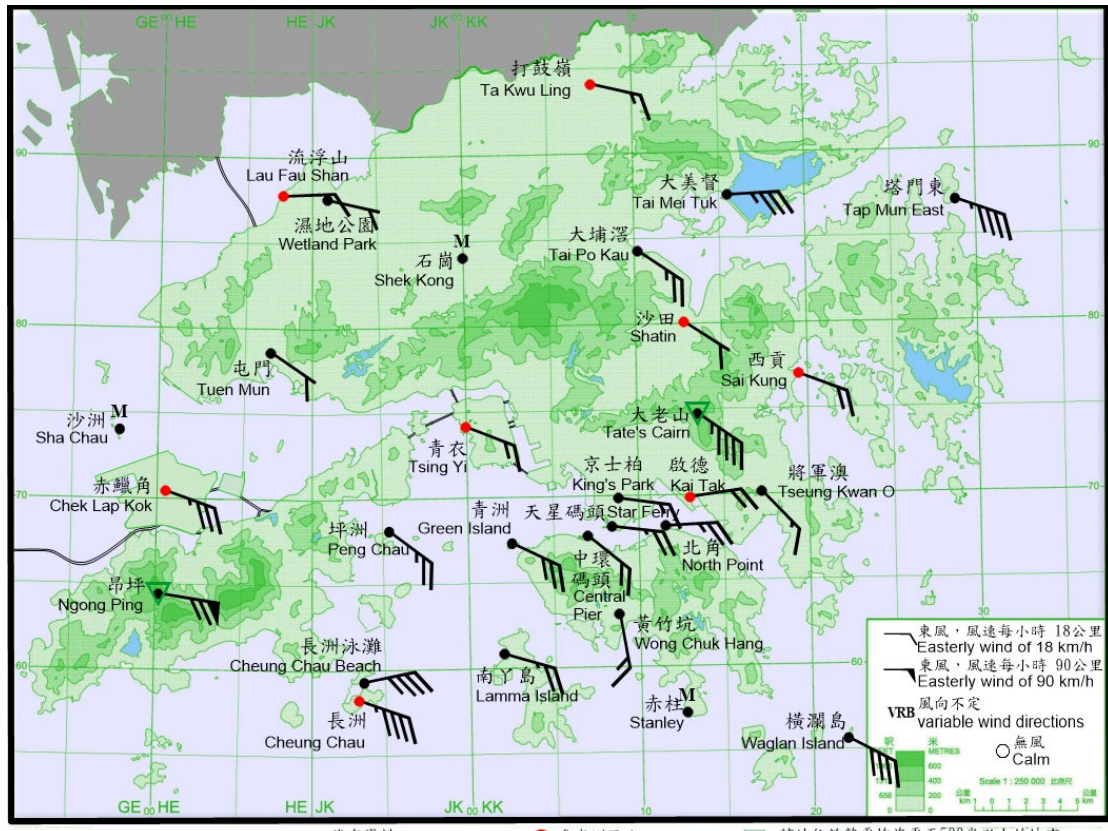


圖 2.2.3a

二零二一年十月九日下午 3 時 40 分香港各站錄得的十分鐘平均風向和風速。當時昂坪風力達到颶風程度，而塔門東、大老山、橫瀾島、長洲及長洲泳灘的風力達到烈風程度。

Figure 2.2.3a

10-minute mean wind direction and speed recorded at various stations in Hong Kong at 3:40 p.m. on 9 October 2021. At that time, winds at Ngong Ping reached hurricane force, while winds at Tap Mun East, Tate's Cairn, Waglan Island, Cheung Chau and Cheung Chau Beach reached gale force.

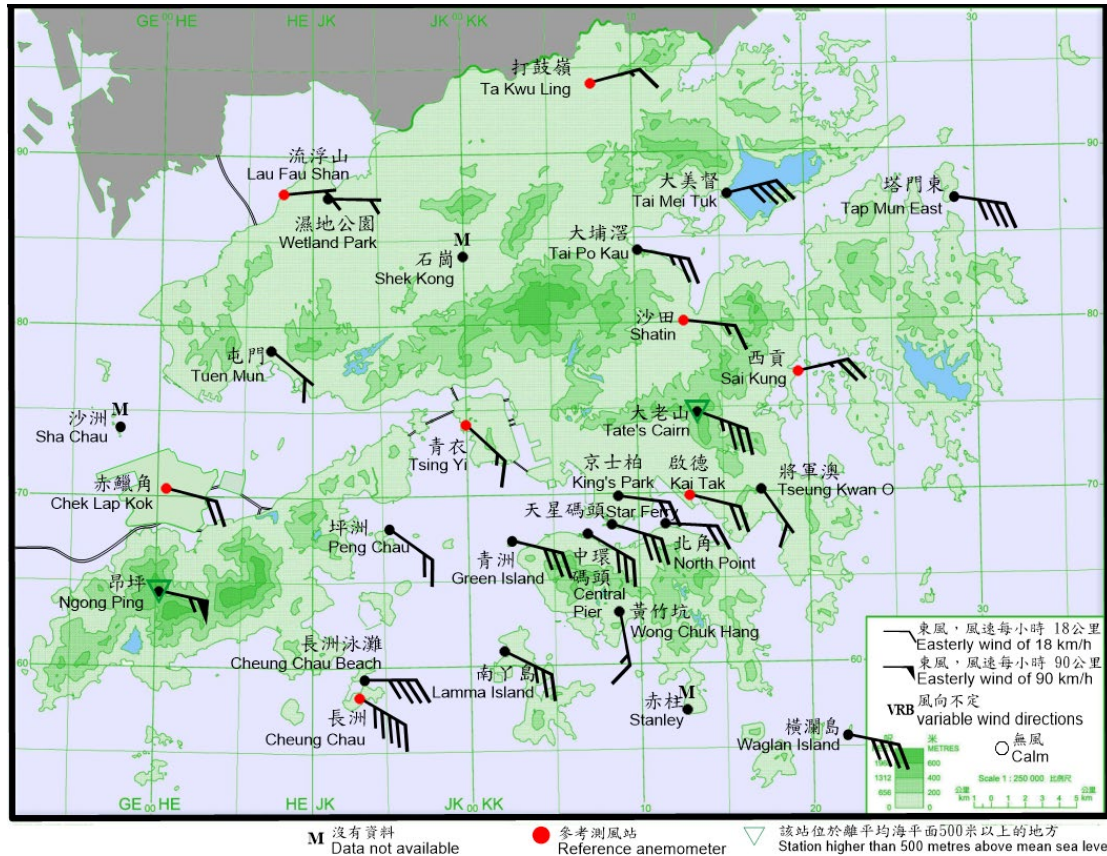


圖 2.2.3b 二零二一年十月九日下午 8 時 20 分香港各站錄得的十分鐘平均風向和風速。當時昂坪風力達到暴風程度，而塔門東、大美督、橫瀾島、長洲及長洲泳灘的風力達到烈風程度。

Figure 2.2.3b 10-minute mean wind direction and speed recorded at various stations in Hong Kong at 8:20 p.m. on 9 October 2021. At that time, winds at Ngong Ping reached storm force, while winds at Tap Mun East, Tai Mei Tuk, Waglan Island, Cheung Chau and Cheung Chau Beach reached gale force.

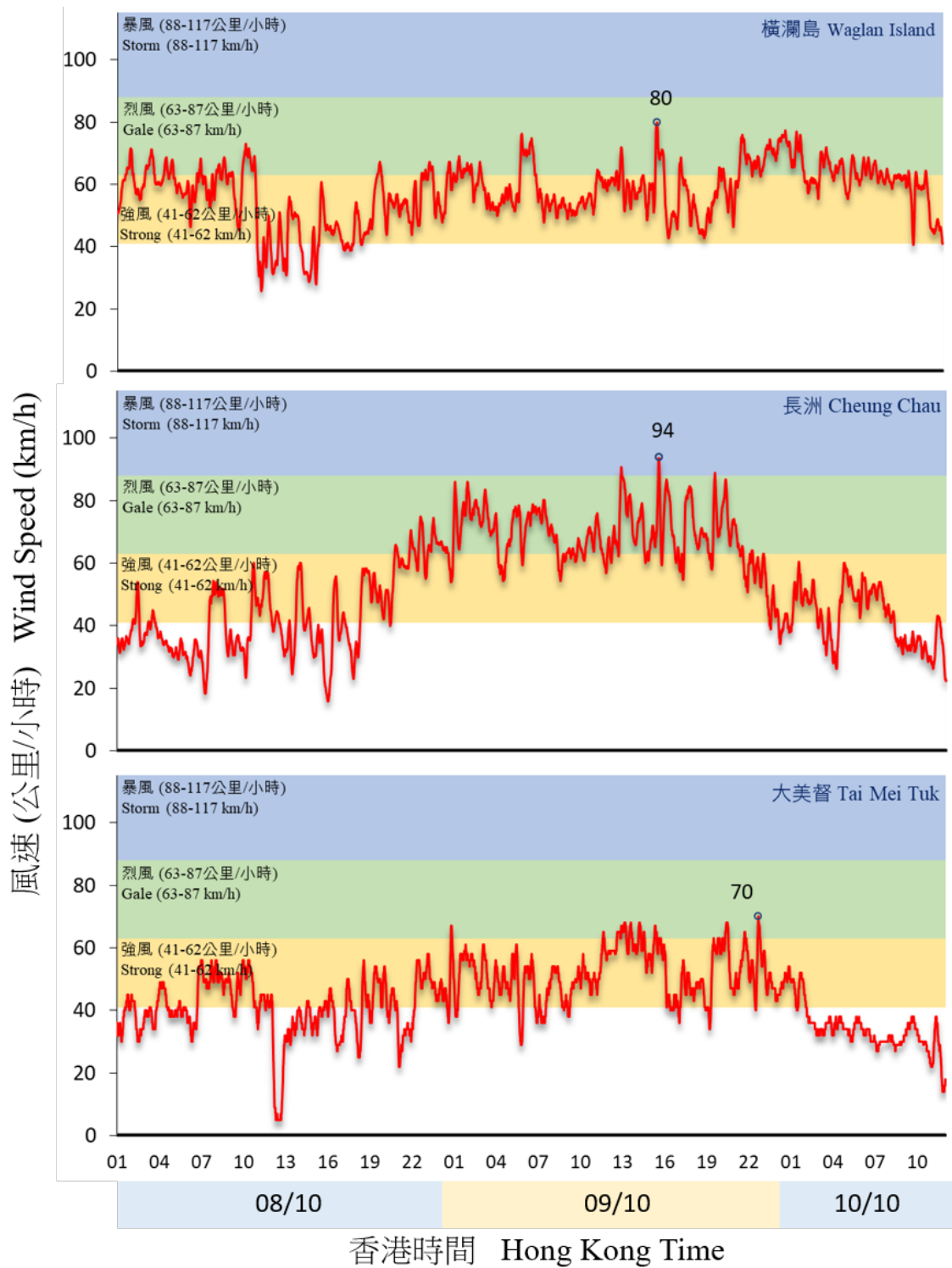


圖 2.2.4 二零二一年十月八日至十日橫瀾島、長洲及大美督錄得的十分鐘風速。
 Figure 2.2.4 Traces of 10-minute wind speed recorded at Waglan Island, Cheung Chau and Tai Mei Tuk on 8 - 10 October 2021.

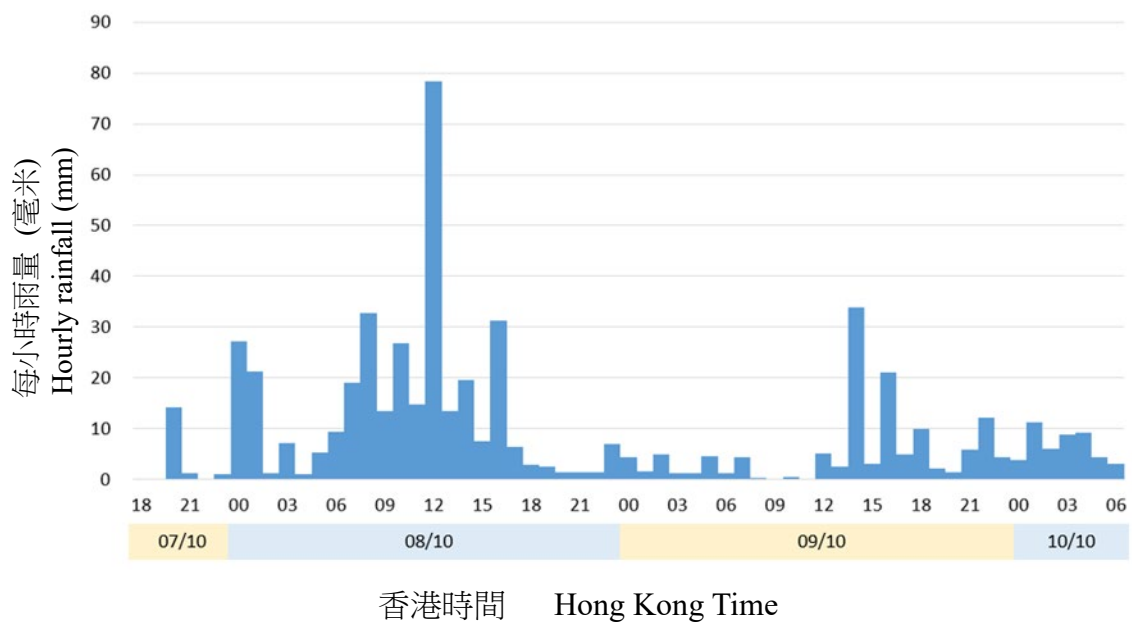


圖 2.2.5 二零二一年十月七日至十日在天文台錄得的每小時雨量。
 Figure 2.2.5 Hourly rainfall recorded at the Observatory during 7 – 10 October 2021.

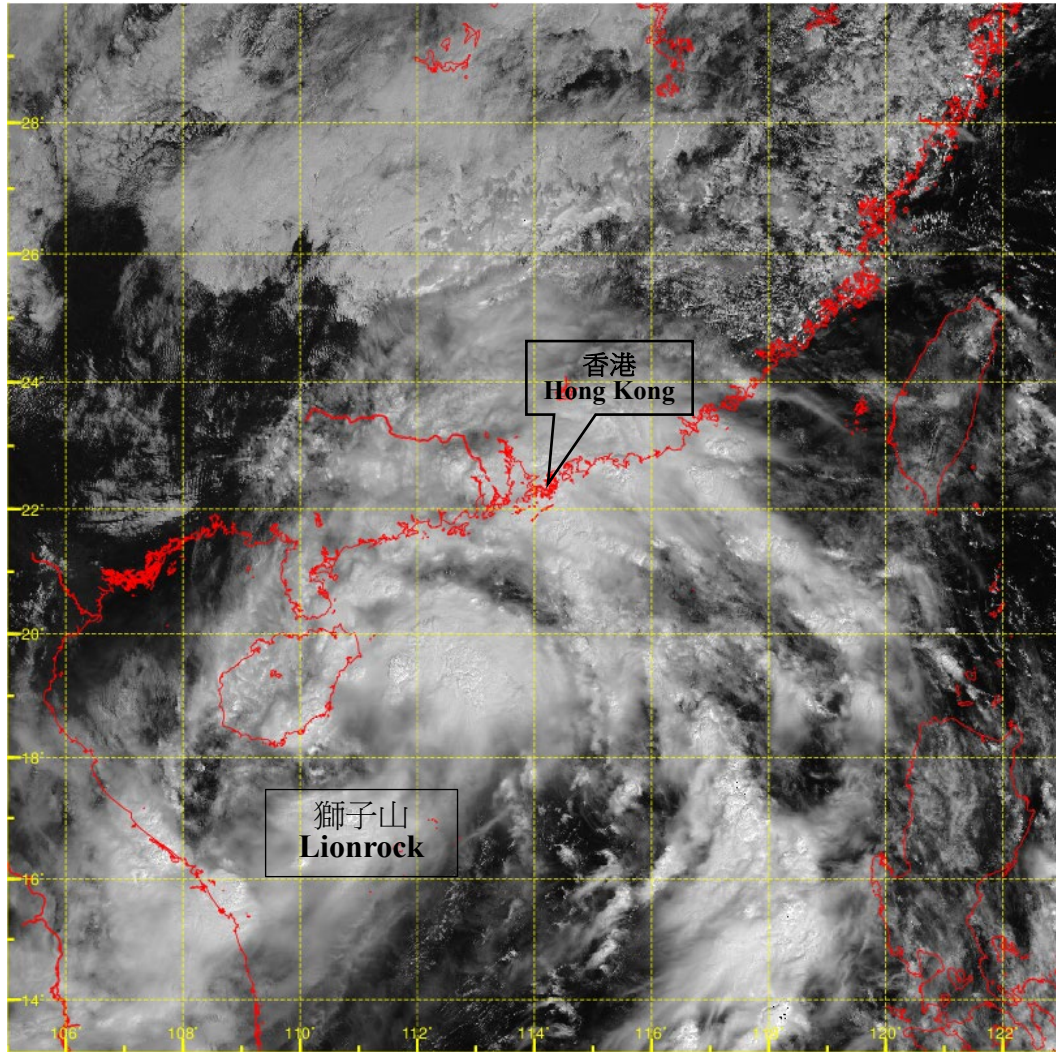


圖 2.2.6a 二零二一年十月八日上午 11 時左右的可見光衛星圖片，當時獅子山達到其最高強度，中心附近最高持續風速估計為每小時 75 公里。

Figure 2.2.6a Visible satellite imagery around 11 a.m. on 8 October 2021 when Lionrock was at its peak intensity with estimated maximum sustained winds of 75 km/h near its centre.

〔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.]

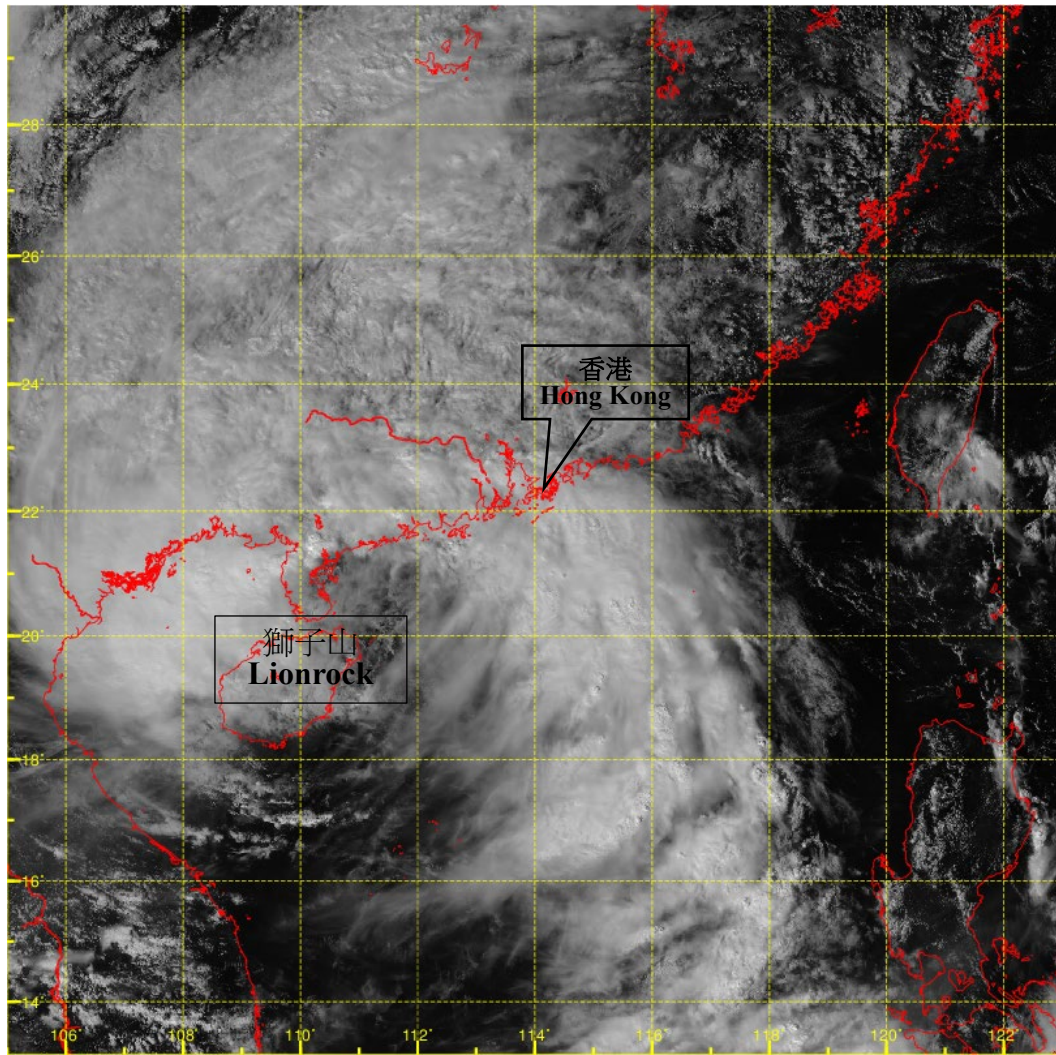


圖 2.2.6b 二零二一年十月九日下午 2 時左右的可見光衛星圖片，當時熱帶風暴獅子山正橫過海南島，而與獅子山相關的雨帶持續影響廣東沿岸地區。

Figure 2.2.6b Visible satellite imagery around 2 p.m. on 9 October 2021 when tropical storm Lionrock was moving across Hainan Island and the rainbands associated with it were persistently affecting the coastal areas of Guangdong.

[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.]

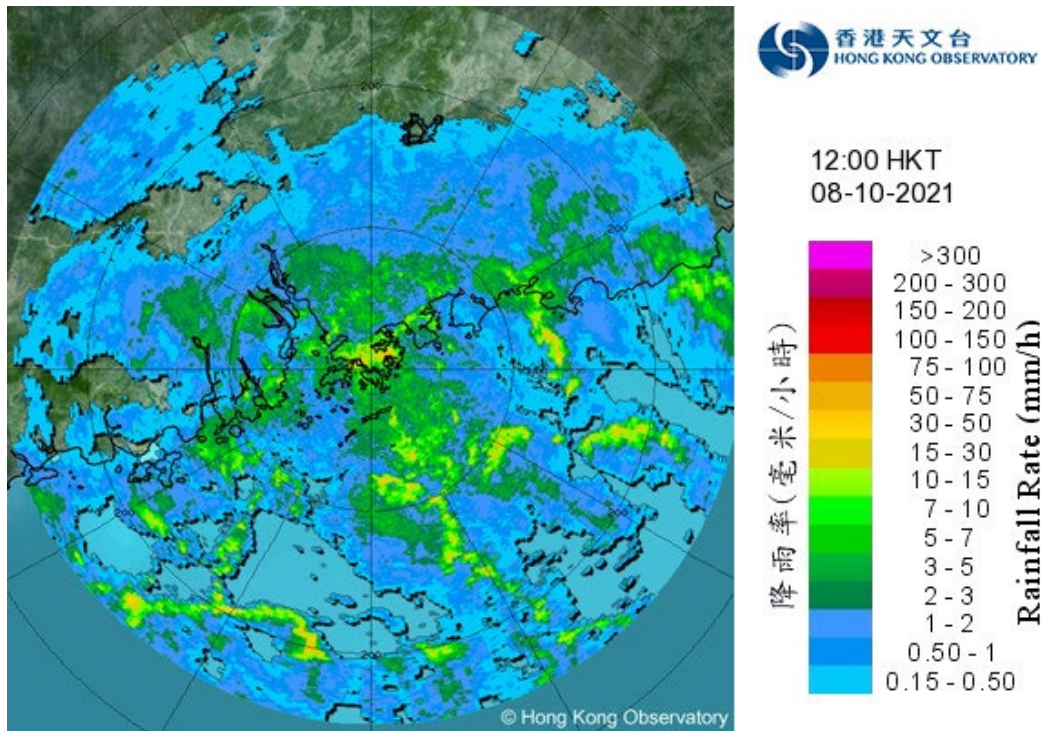


圖 2.2.7a 二零二一年十月八日中午 12 時的雷達回波圖像，當時與獅子山相關的強雨帶正影響香港，三號強風信號、黑色暴雨警告、山泥傾瀉警告、新界北部水浸特別報告及雷暴警告正在生效。

Figure 2.2.7a Radar echoes captured at noon on 8 October 2021 when the intense rainbands associated with Lionrock were affecting Hong Kong. The No. 3 Strong Wind Signal, Black Rainstorm Warning, Landslip Warning, Special Announcement on Flooding in the northern New Territories and thunderstorm warning were in force.

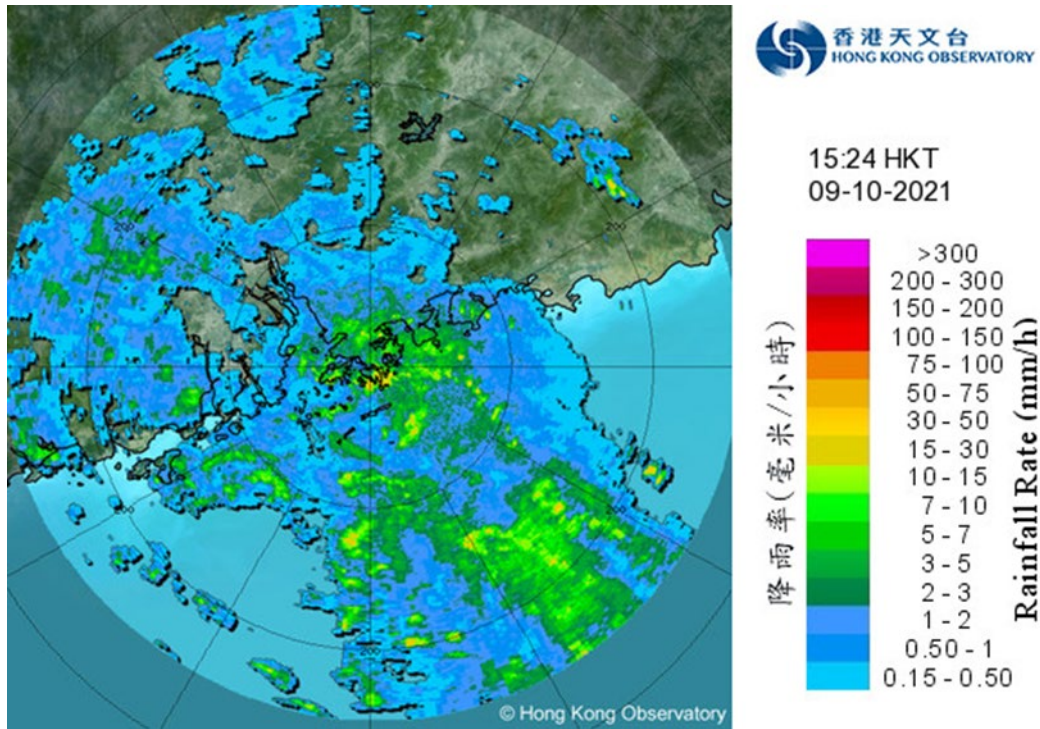


圖 2.2.7b 二零二一年十月九日下午 3 時 24 分的雷達回波圖像，與獅子山相關的雨帶持續影響香港。

Figure 2.2.7b Radar echoes captured at 3:24 p.m. on 9 October 2021. The rainbands associated with Lionrock continued to affect Hong Kong.



圖 2.2.8a 二零二一年十月八日跑馬地有棚架倒塌。
(圖片由香港電台提供)

Figure 2.2.8a Scaffolding collapsed in Happy Valley on 8 October 2021.
(Courtesy of Radio Television Hong Kong)



圖 2.2.8b 二零二一年十月八日暴雨期間在大坑道(上)及維多利亞公園(下)附近的嚴重水浸 (圖片由香港電台(上)及 Cyril Tong(下)提供)

Figure 2.2.8b Serious flooding at Tai Hang Road (top) and Victoria Park (bottom) during the rainstorm on 8 October 2021 (Courtesy of Radio Television Hong Kong (top) and Cyril Tong (bottom))

2.3 颱風圓規(2118)

二零二一年十月八日至十四日

圓規是二零二一年第七個影響香港的熱帶氣旋。在十月九日至十二日短短四日內，香港接連受熱帶氣旋獅子山及圓規吹襲，天文台均需發出八號烈風或暴風信號。而獅子山的八號信號取消時間與圓規的八號信號發出時間僅相距 60 小時 40 分鐘，這是自一九四六年以來由兩個熱帶氣旋所引致的八號信號相距時間最短的紀錄。

圓規於十月八日晚上在馬尼拉以東約 1 020 公里的北太平洋西部上發展為熱帶低氣壓，初時向偏北方向移動，並逐漸增強。十月十日圓規加速向偏西方向移動，十月十一日發展為強烈熱帶風暴及橫過呂宋海峽。圓規在十月十二日向西橫過南海北部，翌日早上進一步發展為颱風並達到其最高強度，其中心附近最高持續風速估計為每小時 120 公里。十月十三日圓規橫過海南島並迅速減弱，十月十四日在北部灣減弱為低壓區。

根據報章報導，圓規吹襲菲律賓期間，造成 40 人死亡，5 人受傷，17 人失蹤，超過五十萬人須要撤離。此外，圓規帶來的暴雨令廣東的鹽田港及海南島的三個港口關閉，海上運輸服務暫停。

天文台在十月十一日下午 4 時正發出強烈季候風信號。在東北季候風及圓規的外圍環流共同影響下，當晚本港吹清勁北至東北風，離岸吹強風。隨著圓規進入南海東北部，天文台在十月十二日上午 12 時 40 分發出三號強風信號，取代強烈季候風信號，當時圓規集結在香港之東南偏東約 770 公里。當日早上本港普遍吹清勁至強風程度的北至東北風，離岸及高地間中吹烈風。由於圓規逐漸靠近廣東沿岸，預料本港風力會在晚上進一步增強，天文台在十月十二日下午 5 時 20 分發出八號東北烈風或暴風信號，當時圓規集結在香港之東南約 480 公里。十月十三日上午本港吹強風至烈風程度的東至東北風，離岸間中吹暴風，高地風力更達颶風程度。圓規在十月十三日上午 4 時最接近本港，在本港以南約 360 公里掠過。隨著圓規登陸海南島及逐漸遠離香港，下午本港風力有所減弱，天文台在十月十三日下午 4 時 40 分改發三號強風信號，取代八號東北烈風或暴風信號。翌日凌晨圓規繼續減弱及進一步遠離香港，天文台在十月十四日上午 4 時 40 分以一號戒備信號取代三號強風信號，並於當日早上 6 時 20 分取消所有熱帶氣旋警告信號。

在圓規的影響下，大老山、橫瀾島及長洲泳灘錄得的最高每小時平均風速分別為每小時 111、85 及 76 公里，而最高陣風則分別為每小時 153、110 及 119 公里。大埔滘錄得最高潮位 3.53 米(海圖基準面以上)，而石壁則錄得最大風暴潮(天文潮高度以上) 1.36 米。各站錄得的最低瞬時海平面氣壓如下：

站	最低瞬時 海平面氣壓 (百帕斯卡)	日期/月份	時間
香港天文台總部	997.3	13/10	上午 3 時 04 分
香港國際機場	998.5	13/10	上午 3 時 14 分
長洲	996.6	13/10	上午 3 時 13 分
京士柏	997.2	13/10	上午 3 時 08 分
流浮山	998.7	13/10	上午 3 時 07 分
坪洲	997.5	13/10	上午 3 時 11 分
沙田	998.6	13/10	上午 3 時 08 分
上水	999.3	13/10	上午 3 時 07 分
打鼓嶺	999.1	13/10	上午 3 時 14 分
大埔	999.2	13/10	上午 3 時 13 分
橫瀾島	996.3	13/10	上午 2 時 53 分

受乾燥東北季候風影響，十月十一日本港大致天晴。圓規的外圍雨帶在十月十二日至十三日為本港帶來大驟雨。隨著圓規減弱及遠離香港，十月十四日本港雨勢減弱，短暫時間有陽光。十月十二日至十四日期間香港大部分地區錄得超過 100 毫米雨量。

圓規吹襲香港期間至少有 20 人受傷，另有 877 宗塌樹報告及 10 宗水浸報告。黃大仙及灣仔分別有大樹倒塌，壓毀五輛汽車。圓規所引發的風暴潮令本港多處地區的水位升高超過一米，由於適逢天文漲潮，兩者的疊加效應導致本港部分低窪地區出現水浸，當中沙田城門河一帶的單車徑及行人隧道被淹浸，杏花邨及小西灣藍灣半島對出長廊亦有輕微水浸，柴灣有工業大廈地下的停車場被海水湧入，一個保安更亭及水馬被沖毀。鯉魚門三家村有村屋出現水浸。大澳有一名居民因水浸被困家中，需要救援人員協助。

2.3 Typhoon Kompasu (2118) 8 - 14 October 2021

Kompasu was the seventh tropical cyclone affecting Hong Kong in 2021. Tropical Cyclones Lionrock and Kompasu successively hit Hong Kong within four days between 9 – 12 October and both necessitated the issuance of No. 8 Gale or Storm Signal. The time separation between the cancellation of the No. 8 signal for Lionrock and the issuance of the No. 8 signal for Kompasu was only 60 hours 40 minutes, the shortest record of break time between two No. 8 signals for two tropical cyclones since 1946.

Kompasu developed as a tropical depression over the western North Pacific about 1 020 km east of Manila on the night of 8 October. It moved northwards at first and intensified gradually. Kompasu picked up speed towards the west on 10 October. It developed into a severe tropical storm while moving across the Luzon Strait on 11 October. Kompasu moved westwards across the northern part of the South China Sea on 12 October. It further developed into a typhoon on the morning of next day, reaching its peak intensity with an estimated sustained wind of 120 km/h near its centre. Kompasu moved across Hainan Island on 13 October and weakened rapidly. It degenerated into an area of low pressure over Beibu Wan on 14 October.

According to press reports, Kompasu left 40 deaths, 5 injuries, 17 missing and over 500 000 people evacuated in the Philippines during its passage. Besides, the Yantian Port in Guangdong and 3 ports in Hainan Island were closed and the marine transportation services were suspended owing to the torrential rain brought by Kompasu.

The Strong Monsoon Signal was issued at 4:00 p.m. on 11 October. Under the combined effect of the northeast monsoon and the outer circulation of Kompasu, local winds were fresh north to northeasterlies, reaching strong force offshore. With Kompasu entering the northeastern part of the South China Sea, the No. 3 Strong Wind Signal was issued to replace the Strong Monsoon Signal at 12:40 a.m. on 12 October when Kompasu was about 770 km east-southeast of Hong Kong. Local winds were generally fresh to strong north to northeasterlies, occasionally reaching gale force offshore and on high ground that morning. Since Kompasu gradually edged closer to the coast of Guangdong, local winds were expected to strengthen further at night and the No. 8 Northeast Gale or Storm Signal was issued at 5:20 p.m. on 12 October when Kompasu was about 480 km southeast of Hong Kong. Local winds were strong to gale force east to northeasterlies, occasionally reaching storm force offshore and even hurricane force on high ground on the morning of 13 October. Kompasu came closest to Hong Kong at around 4 a.m. on 13 October when it skirted past about 360 km south of Hong Kong.

With Kompasu making landfall over Hainan Island and gradually departing from Hong Kong, local winds moderated in the afternoon. The No. 3 Strong Wind Signal was issued to replace the No. 8 Northeast Gale or Storm Signal at 4:40 p.m. on 13 October. As Kompasu continued to weaken and further departed from Hong Kong in the next early morning, the No. 1 Standby Signal was issued to replace the No. 3 Strong Wind Signal at 4:40 a.m. on 14 October and all tropical cyclone warning signals were cancelled at 6:20 a.m. on that day.

Under the influence of Kompasu, maximum hourly mean winds of 111, 85 and 76 km/h and maximum gusts of 153, 110 and 119 km/h were recorded at Tate's Cairn, Waglan Island and Cheung Chau Beach respectively. A maximum sea level of 3.53 m (above chart datum) was recorded at Tai Po Kau and a maximum storm surge of 1.36 m (above astronomical tide) was recorded at Shek Pik. The lowest instantaneous mean sea-level pressures recorded at some selected stations are as follows:

Station	Lowest Instantaneous mean sea-level pressure (hPa)	Date/Month	Time
Hong Kong Observatory Headquarters	997.3	13/10	03:04 am
Hong Kong International Airport	998.5	13/10	03:14 am
Cheung Chau	996.6	13/10	03:13 am
King's Park	997.2	13/10	03:08 am
Lau Fau Shan	998.7	13/10	03:07 am
Peng Chau	997.5	13/10	03:11 am
Sha Tin	998.6	13/10	03:08 am
Sheung Shui	999.3	13/10	03:07 am
Ta Kwu Ling	999.1	13/10	03:14 am
Tai Po	999.2	13/10	03:13 am
Waglan Island	996.3	13/10	02:53 am

Affected by the dry northeast monsoon, local weather was mainly fine on 11 October. The outer rainbands of Kompasu brought heavy showers to Hong Kong on 12 – 13 October. With Kompasu weakening and moving away from Hong Kong, rain eased off locally and there were sunny intervals on 14 October. Over 100 millimetres of rainfall was recorded over most parts of the territory during 12 – 14 October.

In Hong Kong, at least 20 persons were injured during the passage of Kompasu.

There were 877 reports of fallen trees and 10 reports of flooding. The fallen trees in Wong Tai Sin and Wan Chai damaged five vehicles. The storm surge brought by Kompasu raised the water level in Hong Kong generally by more than one metre. Coinciding with the astronomical high tide, the aggregated effect resulted in the inundation of some low-lying areas in Hong Kong. The cycle tracks and subways near Shing Mun River in Sha Tin were flooded. Minor flooding was also reported in the promenade of Heng Fa Chuen and Island Resort in Siu Sai Wan. With sea water flowing into the carpark of an industrial building in Chai Wan, a security guard post and water-filled barriers were washed away. Some village houses of Sam Ka Tsuen in Lei Yue Man were inundated. A resident in Tai O was trapped by flooding and needed to be rescued.

表 2.3.1 在圓規影響下，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 Kompasu 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	91	13/10	10:24	東	E	53	13/10	10:00
長洲	Cheung Chau	東南	SE	103	13/10	10:41	東北偏北	NNE	65	13/10	04:00
長洲泳灘	Cheung Chau Beach	東北	NE	119	13/10	07:31	東北偏東	ENE	76	13/10	10:00
青洲	Green Island	東北偏北	NNE	125	13/10	03:35	東北偏北	NNE	78	13/10	04:00
香港國際機場	Hong Kong International Airport	東	E	75	13/10	10:59	東	E	44	13/10	12:00
		東	E	75	13/10	11:00					
啟德	Kai Tak	東北偏東	ENE	80	13/10	10:22	東	E	33	13/10	11:00
京士柏	King's Park	東北偏東	ENE	79	13/10	09:12	東	E	35	13/10	11:00
南丫島	Lamma Island	東北偏東	ENE	89	13/10	07:16	西北偏北	NNW	48	12/10	05:00
流浮山	Lau Fau Shan	東北偏北	NNE	75	13/10	03:32	北	N	40	12/10	16:00
昂坪	Ngong Ping	東北偏東	ENE	138	13/10	10:48	東	E	90	13/10	11:00
北角	North Point	東北偏東	ENE	86	13/10	11:52	東	E	57	13/10	10:00
坪洲	Peng Chau	東	E	98	13/10	10:38	東	E	66	13/10	11:00
西貢	Sai Kung	北	N	81	12/10	21:08	東北偏東	ENE	50	13/10	10:00
沙洲	Sha Chau	北	N	95	13/10	01:10	北	N	64	13/10	02:00
沙螺灣	Sha Lo Wan	東	E	71	13/10	10:39	東	E	36	13/10	12:00
沙田	Sha Tin	東	E	70	13/10	10:15	東北	NE	24	12/10	22:00
九龍天星碼頭	Star Ferry (Kowloon)	東	E	85	13/10	10:50	東	E	38	13/10	13:00
打鼓嶺	Ta Kwu Ling	東北偏北	NNE	72	12/10	22:02	東北偏北	NNE	34	12/10	23:00
大美督	Tai Mei Tuk	東北偏北	NNE	94	13/10	04:15	東北	NE	61	13/10	05:00
							東北偏東	ENE	61	13/10	12:00
大帽山	Tai Mo Shan	東南偏東	ESE	119	13/10	10:03	東	E	80	13/10	05:00
大埔滘	Tai Po Kau	東	E	79	13/10	11:37	東	E	48	13/10	12:00
塔門東	Tap Mun East	東	E	108	13/10	11:23	東	E	71	13/10	11:00
大老山	Tate's Cairn	東北	NE	153	13/10	04:28	東北偏東	ENE	111	13/10	05:00
將軍澳	Tseung Kwan O	西北偏北	NNW	67	12/10	07:02	北	N	27	12/10	08:00
青衣島蜆殼油庫	Tsing Yi Shell Oil Depot	東	E	64	13/10	05:34	西北偏北	NNW	25	12/10	13:00
屯門政府合署	Tuen Mun Government Offices	東北偏北	NNE	55	12/10	23:08	北	N	21	13/10	00:00
		東北偏北	NNE	55	12/10	23:13					
橫瀾島	Waglan Island	東北	NE	110	13/10	04:37	東北	NE	85	13/10	06:00
濕地公園	Wetland Park	東北偏北	NNE	48	13/10	04:01	東北偏北	NNE	17	13/10	04:00
黃竹坑	Wong Chuk Hang	東	E	89	13/10	07:15	東北	NE	32	13/10	09:00
							東北	NE	32	13/10	10:00

黃麻角(赤柱)、平洲、石崗 - 沒有資料 Bluff Head (Stanley), Ping Chau, Shek Kong - data not available

表 2.3.2 在圓規影響下，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及烈風程度的時段

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

站 Station (https://www.hko.gov.hk/tc/informtc/station2021.html)		最初達到強風*		最後達到強風*		最初達到烈風#		最後達到烈風#	
		時間		時間		時間		時間	
		Start time when strong wind speed* was attained		End time when strong wind speed* was attained		Start time when gale force wind speed# was attained		End time when gale force wind speed# was attained	
		日期/月份	時間	日期/月份	時間	日期/月份	時間	日期/月份	時間
		Date/Month	Time	Date/Month	Time	Date/Month	Time	Date/Month	Time
長洲	Cheung Chau	12/10	00:40	14/10	05:14	13/10	03:05	13/10	14:59
香港國際機場	Hong Kong International Airport	13/10	03:48	13/10	12:57	-			
流浮山	Lau Fau Shan	12/10	01:48	13/10	04:40	-			
西貢	Sai Kung	12/10	13:25	13/10	15:09	-			

啟德、沙田、打鼓嶺及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 Kai Tak, Sha Tin, Ta Kwu Ling and Tsing Yi Shell Oil Depot.

- 未達到指定的風速

- not attaining the specified wind speed

* 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

十分鐘平均風速達每小時 63 - 87 公里

10-minute mean wind speed of 63 - 87 km/h

註：本表列出持續風力達到強風及烈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 or gale force winds. Winds might fluctuate above or below the specified wind speeds in between the times indicated.

表 2.3.3 圓規影響香港期間，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 Kompasu

站 (參閱圖 2.2.2) Station (See Fig. 2.2.2)			十月十二日 12 Oct	十月十三日 13 Oct	十月十四日 14 Oct	總雨量(毫米) Total rainfall (mm)
香港天文台 Hong Kong Observatory (HKO)			0.2	57.7	13.3	71.2
香港國際機場 Hong Kong International Airport (HKA)			微量 Trace	102.3	11.1	113.4
長洲 Cheung Chau (CCH)			0.0	90.5	2.0	92.5
H23	香港仔	Aberdeen	0.5	86.5	12.5	99.5
N05	粉嶺	Fanling	0.0	94.0	5.0	99.0
N13	糧船灣	High Island	1.0	68.5	11.5	81.0
K04	佐敦谷	Jordan Valley	0.5	70.0	14.0	84.5
N06	葵涌	Kwai Chung	0.0	77.5	25.5	103.0
H12	半山區	Mid Levels	0.0	73.5	10.0	83.5
N09	沙田	Sha Tin	0.0	97.5	12.5	110.0
H19	筲箕灣	Shau Kei Wan	0.5	67.5	9.5	77.5
SEK	石崗	Shek Kong	0.0	96.0	19.5	115.5
K06	蘇屋邨	So Uk Estate	0.0	79.0	13.5	92.5
R31	大美督	Tai Mei Tuk	0.0	89.5	13.5	103.0
N17	東涌	Tung Chung	0.0	160.0	7.0	167.0
TMR	屯門水庫	Tuen Mun Reservoir	0.3	69.4	8.5	78.2

踏石角(R21) - 沒有資料 Tap Shek Kok (R21) - data not available

表 2.3.4 圓規影響香港期間，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 Kompasu

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	3.38	13/10	01:53	1.13	13/10	08:49
石壁	Shek Pik	3.38	13/10	02:26	1.36	13/10	09:32
大廟灣	Tai Miu Wan	3.48	13/10	02:16	1.21	13/10	08:42
大埔滘	Tai Po Kau	3.53	13/10	02:03	1.16	13/10	07:57
尖鼻咀	Tsim Bei Tsui	3.29	13/10	03:17	1.27	13/10	10:59

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

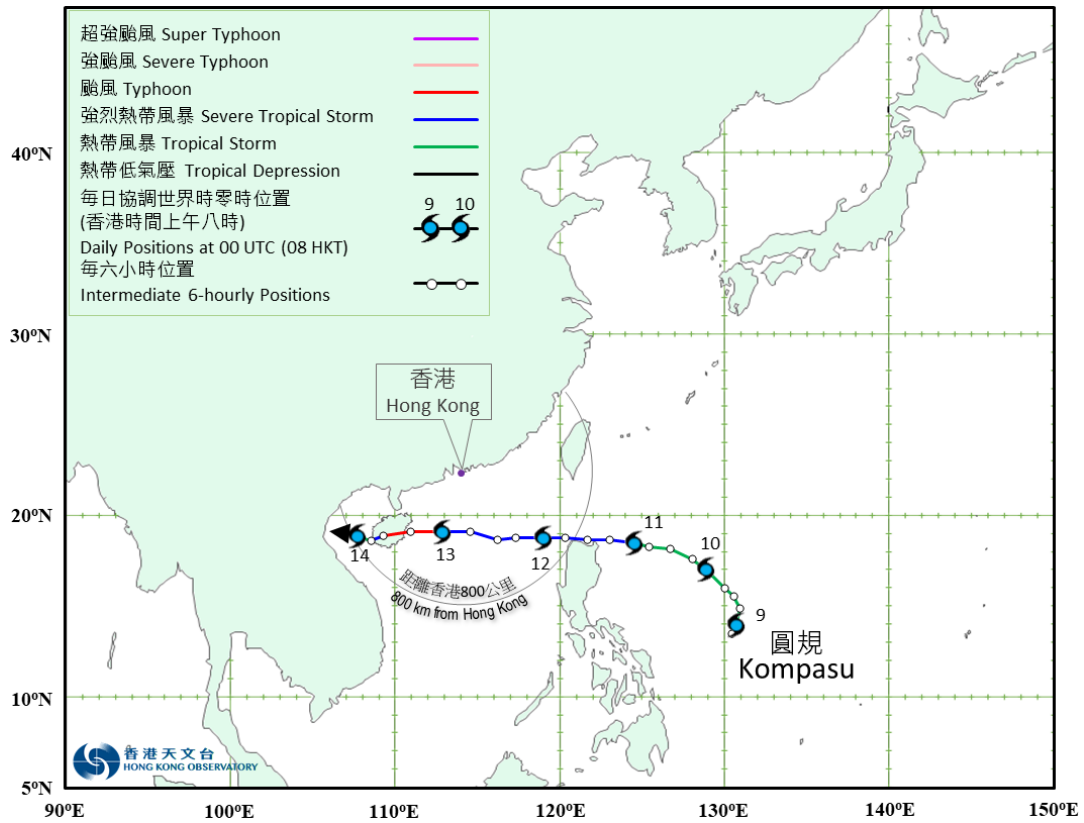


圖 2.3.1 二零二一年十月八日至十四日圓規(2118)的暫定路徑圖。
 Figure 2.3.1 Provisional track of Kompasu (2118): 8 - 14 October 2021.

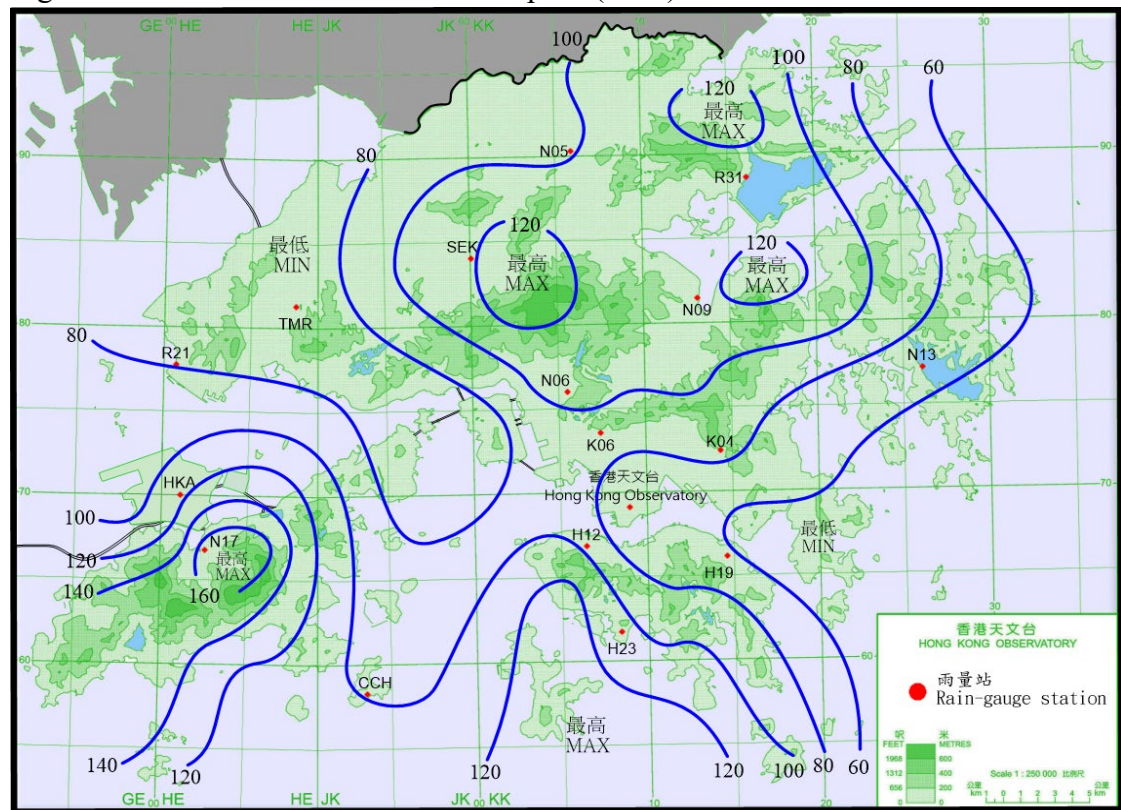


圖 2.3.2 二零二一年十月十二日至十四日的雨量分佈(等雨量線單位為毫米)。
 Figure 2.3.2 Rainfall distribution on 12 - 14 October 2021 (isohyets are in millimetres).

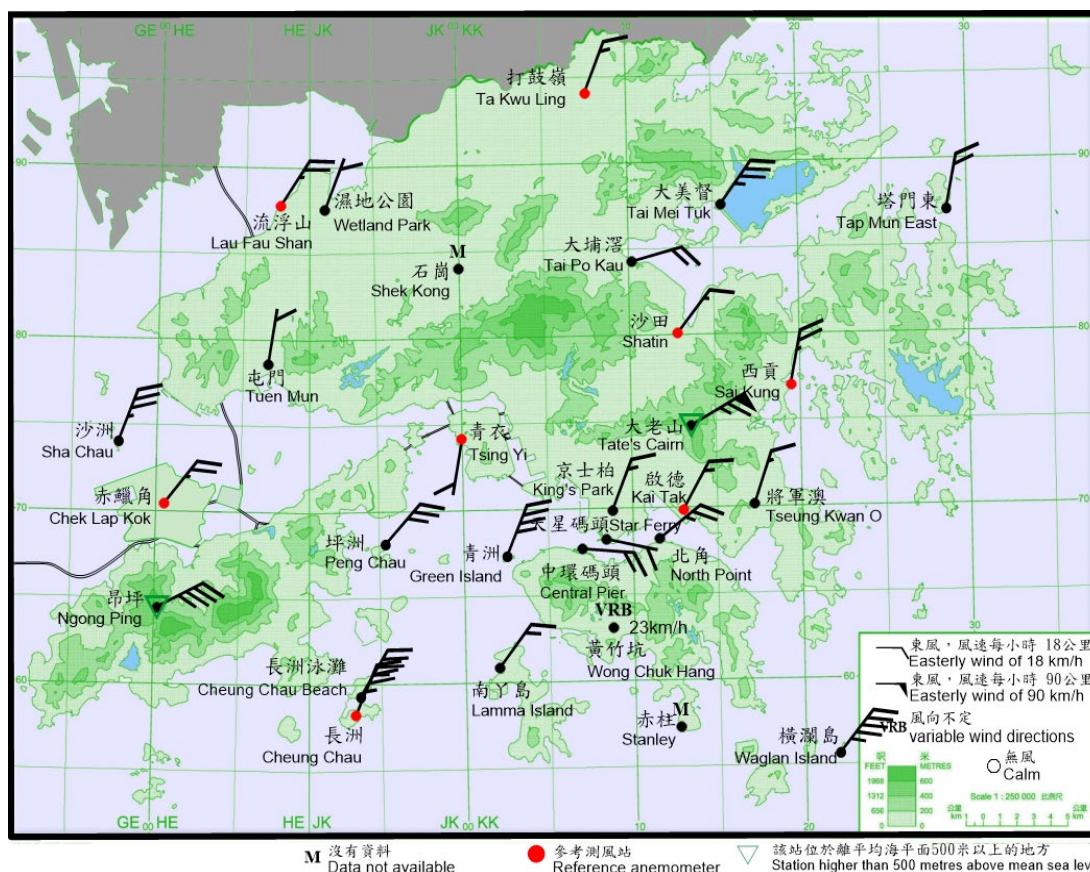


圖 2.3.3a 二零二一年十月十三日上午 4 時 20 分香港各站錄得的十分鐘平均風向和風速。當時大老山風力達到颶風程度，而青洲、昂坪、橫瀾島、長洲及長洲泳灘的風力達到烈風程度。

Figure 2.3.3a 10-minute mean wind direction and speed recorded at various stations in Hong Kong at 4:20 a.m. on 13 October 2021. At that time, winds at Tate's Cairn reached hurricane force, while winds at Green Island, Ngong Ping, Waglan Island, Cheung Chau and Cheung Chau Beach reached gale force.

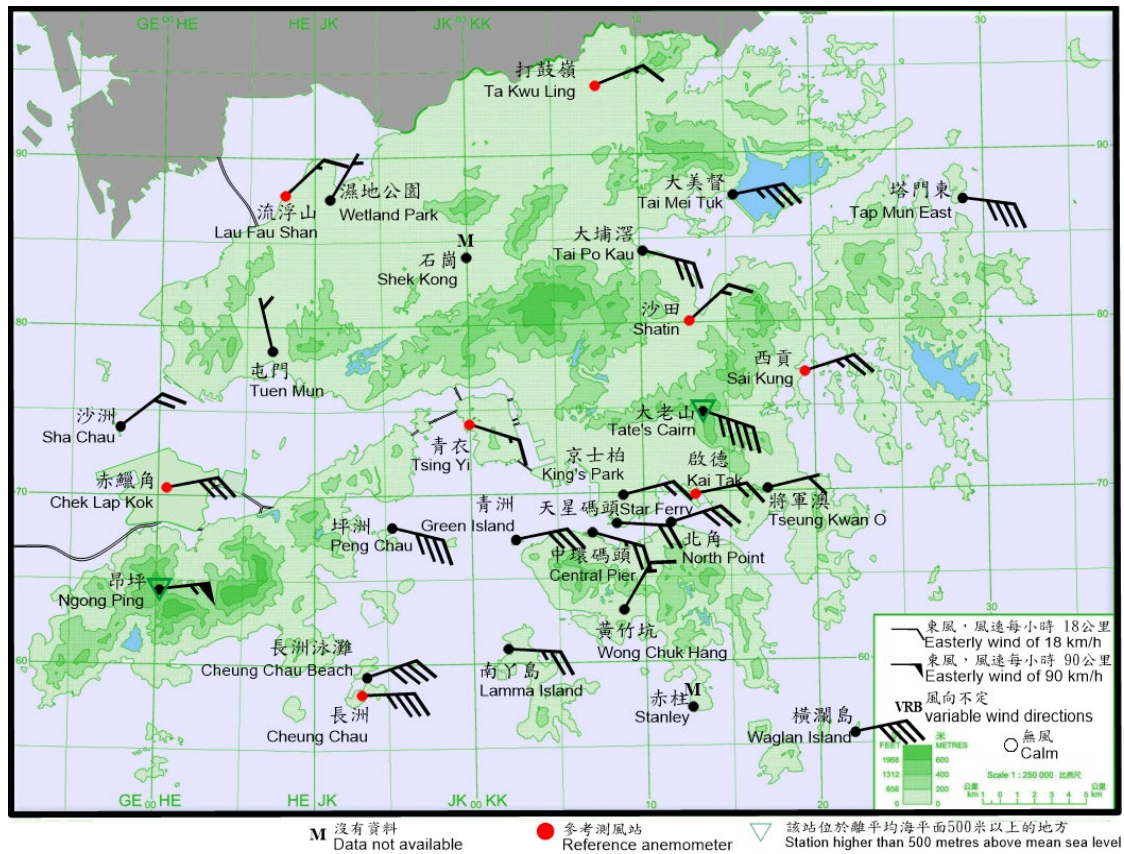


圖 2.3.3b 二零二一年十月十三日上午 11 時正香港各站錄得的十分鐘平均風向和風速。當時昂坪及大老山風力達到暴風程度，而長洲、長洲泳灘、坪洲、塔門東及橫瀾島風力達到烈風程度。

Figure 2.3.3b 10-minute mean wind direction and speed recorded at various stations in Hong Kong at 11:00 a.m. on 13 October 2021. At that time, winds at Ngong Ping and Tate's Cairn reached storm force, while winds at Cheung Chau, Cheung Chau Beach, Peng Chau, Tap Mun East and Waglan Island reached gale force.

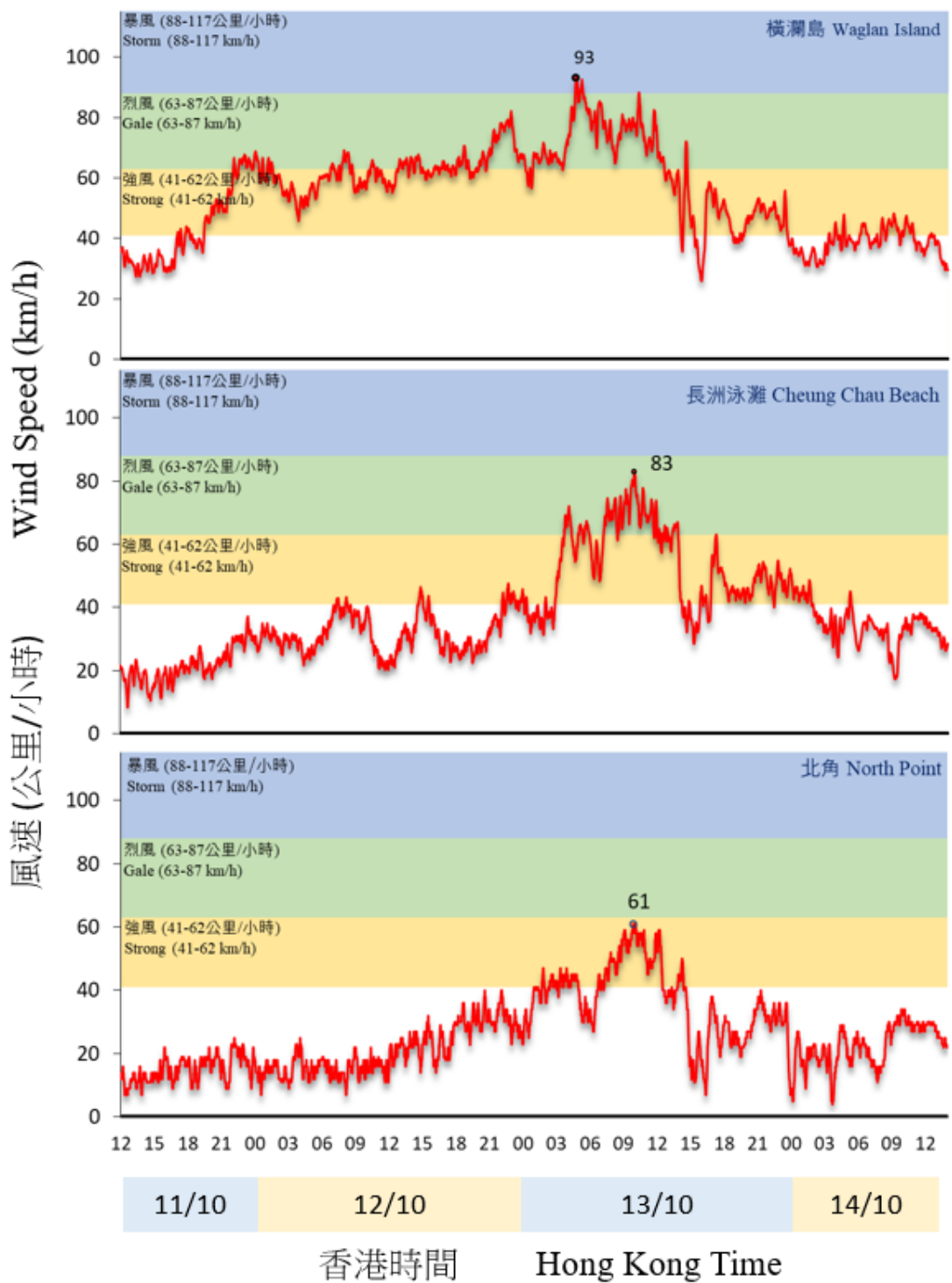


圖 2.3.4 二零二一年十月十一日至十四日橫瀾島、長洲泳灘及北角錄得的十分鐘風速。

Figure 2.3.4 Traces of 10-minute wind speed recorded at Waglan Island, Cheung Chau Beach and North Point on 11 - 14 October 2021.

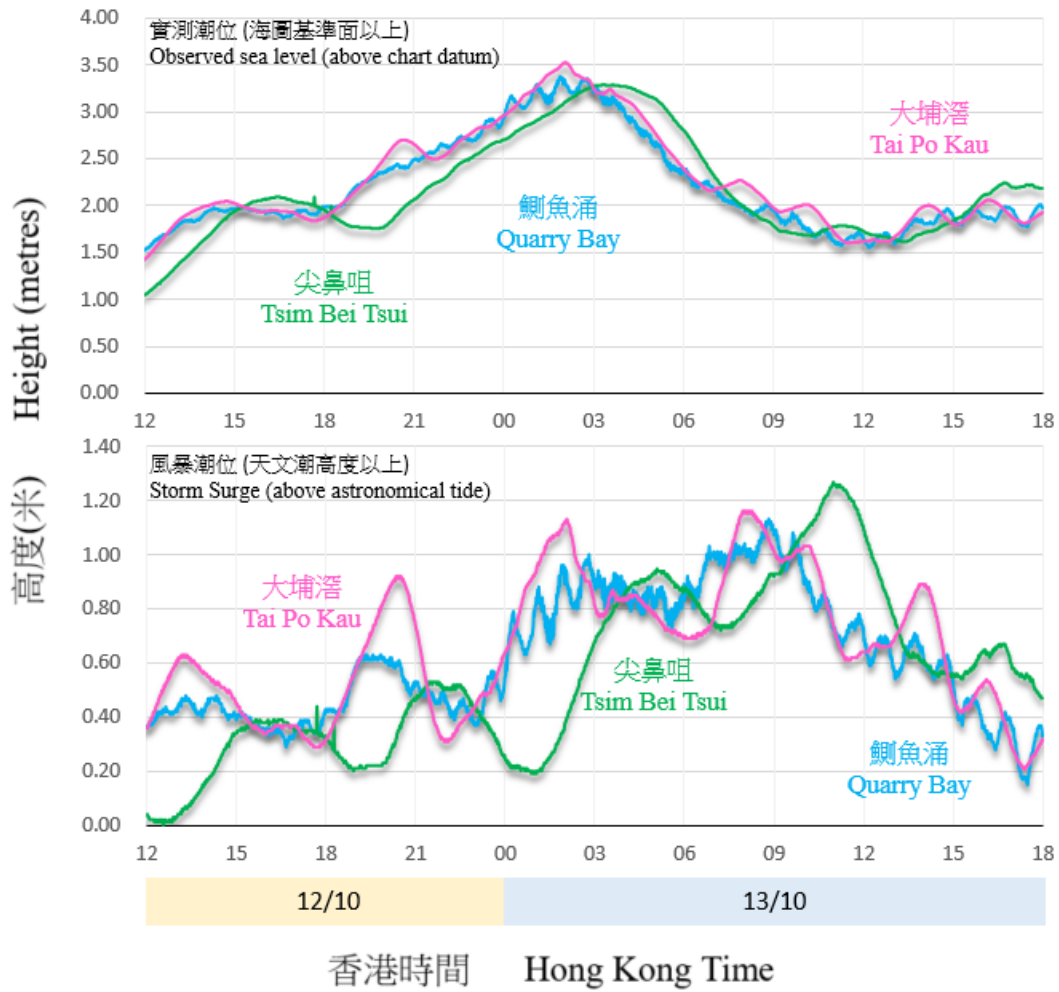


圖 2.3.5 二零二一年十月十二日至十三日在鰂魚涌、大埔滘及尖鼻咀錄得的潮位 (海圖基準面以上)及風暴潮(天文潮高度以上)。

Figure 2.3.5 Traces of sea level (above chart datum) and storm surge (above astronomical tide) recorded at Quarry Bay, Tai Po Kau, and Tsim Bei Tsui on 12 - 13 October 2021.

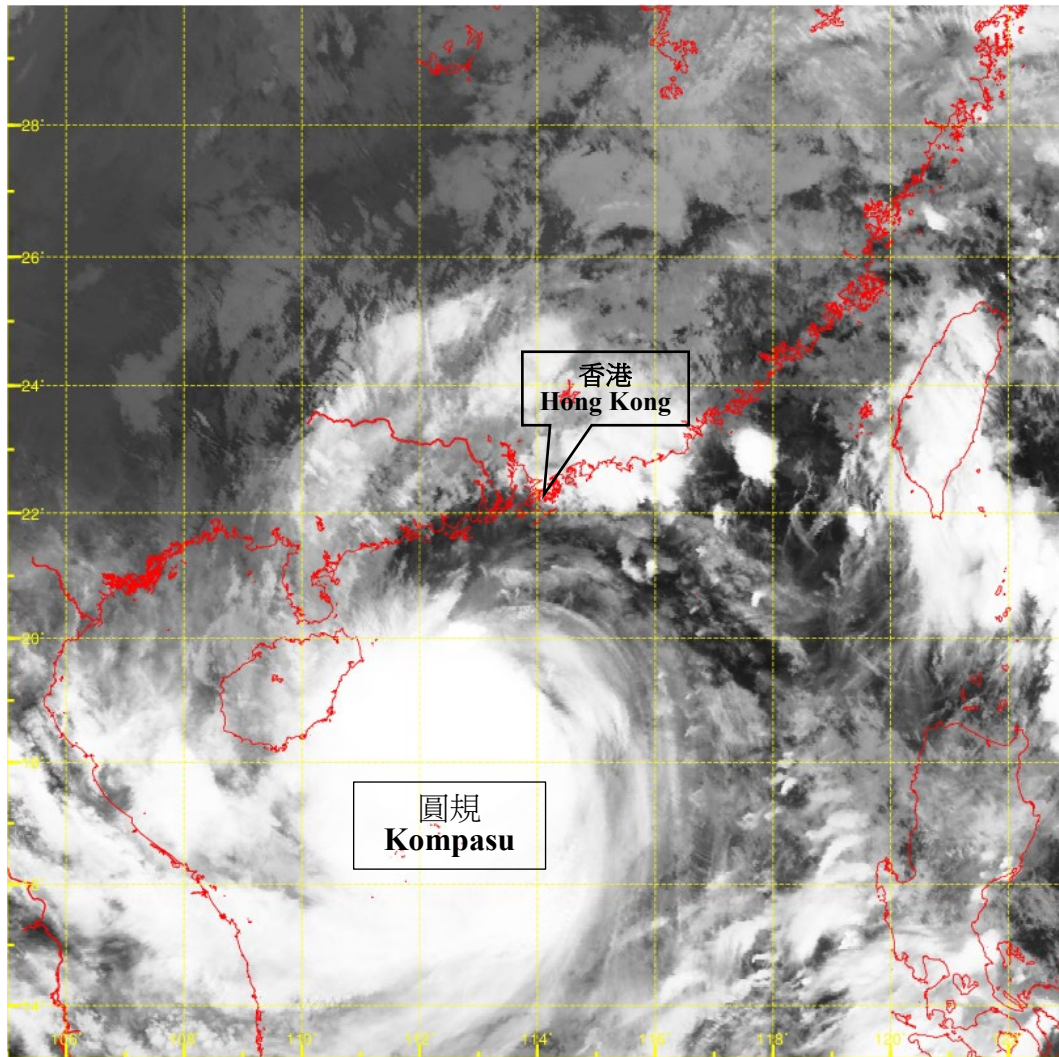


圖 2.3.6 二零二一年十月十三日上午 5 時左右的紅外線衛星圖片，當時圓規達到其最高強度，中心附近最高持續風速估計為每小時 120 公里。

Figure 2.3.6 Infra-red satellite imagery around 5 a.m. on 13 October 2021 when Kompasu was at its peak intensity with estimated maximum sustained winds of 120 km/h near its centre.

[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.]

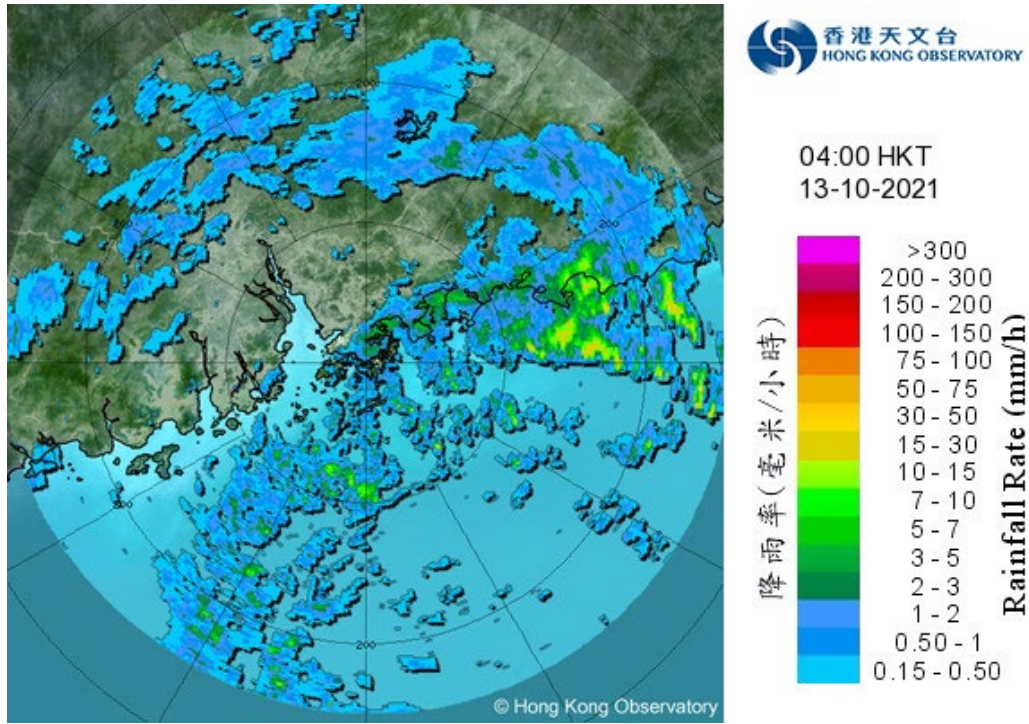


圖 2.3.7 二零二一年十月十三日上午 4 時的雷達回波圖像，當時圓規最接近本港，在本港以南約 360 公里掠過。與圓規相關的雨帶正影響廣東沿岸及南海北部。

Figure 2.3.7 Radar echoes captured at 4 a.m. on 13 October 2021 when Kompasu was closest to Hong Kong, skirting past about 360 km south of the territory. The rainbands associated with Kompasu were affecting the coast of Guangdong and the northern part of the South China Sea.

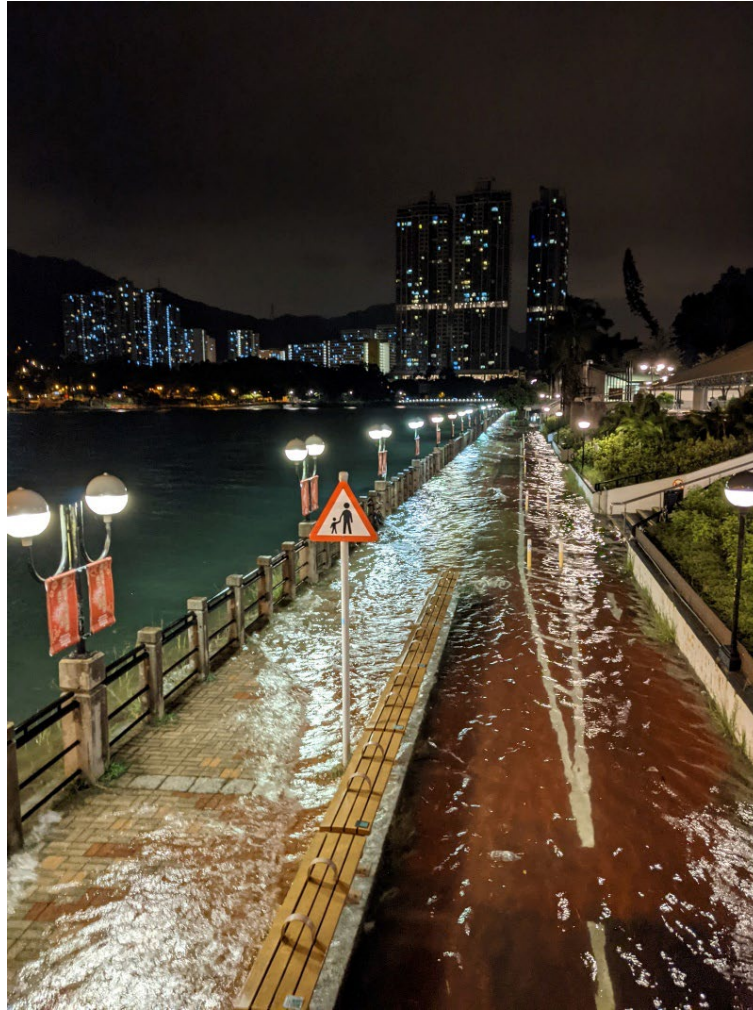


圖 2.3.8a 二零二一年十月十三日凌晨圓規引起的風暴潮導致城門河出現水浸。(圖片由 Poon Chi Ming(上)及 Hiu Cheng Chow(下)提供)

Figure 2.3.8a Flooding of Shing Mun River due to storm surge induced by Kompasu on the early morning of 13 October 2021. (Courtesy of Poon Chi Ming (top) and Hiu Cheng Chow (bottom))

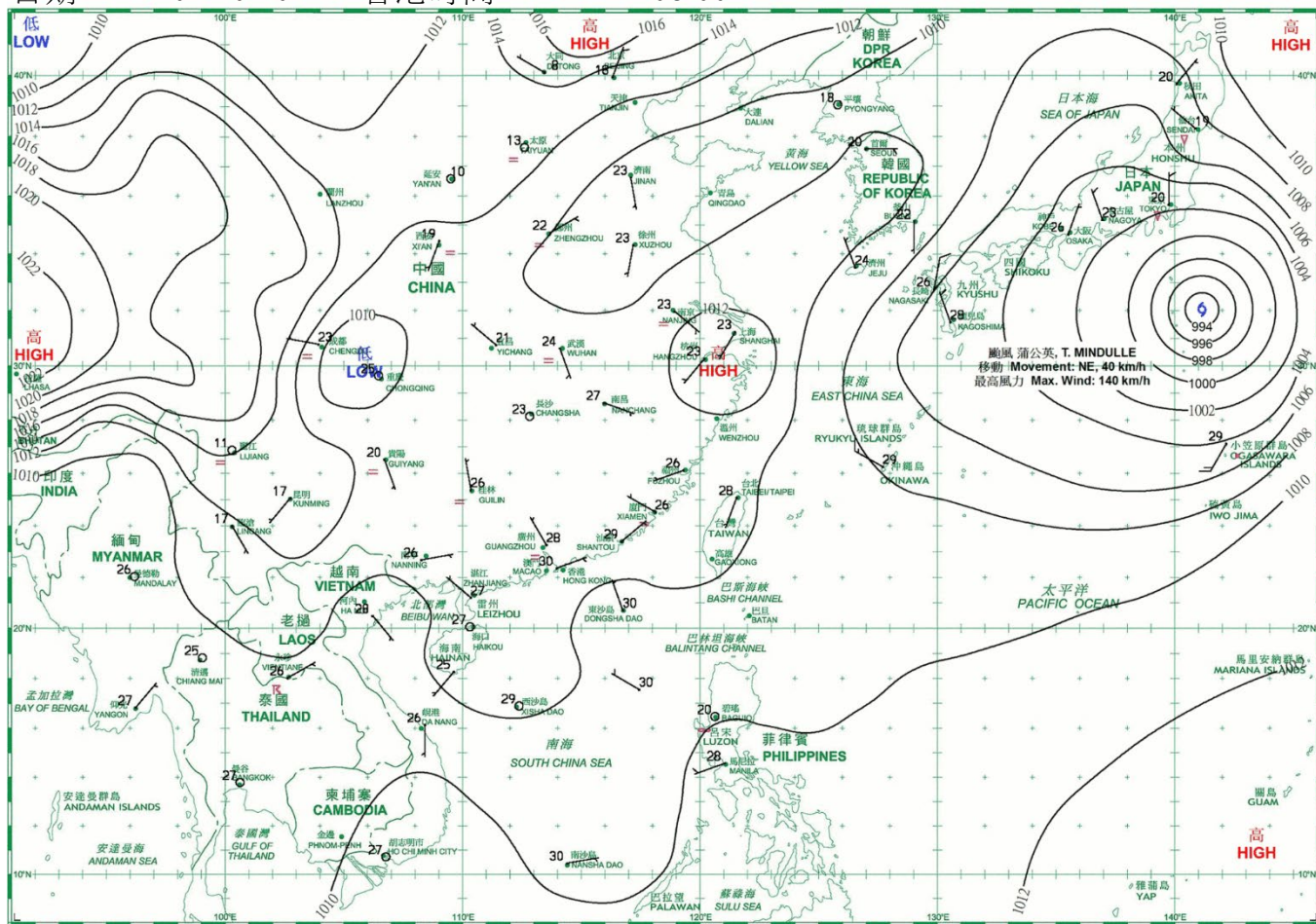


圖 2.3.8b 二零二一年十月十三日圓規吹襲期間，黃大仙東頭邨有樹木被吹倒。(圖片由香港電台提供)

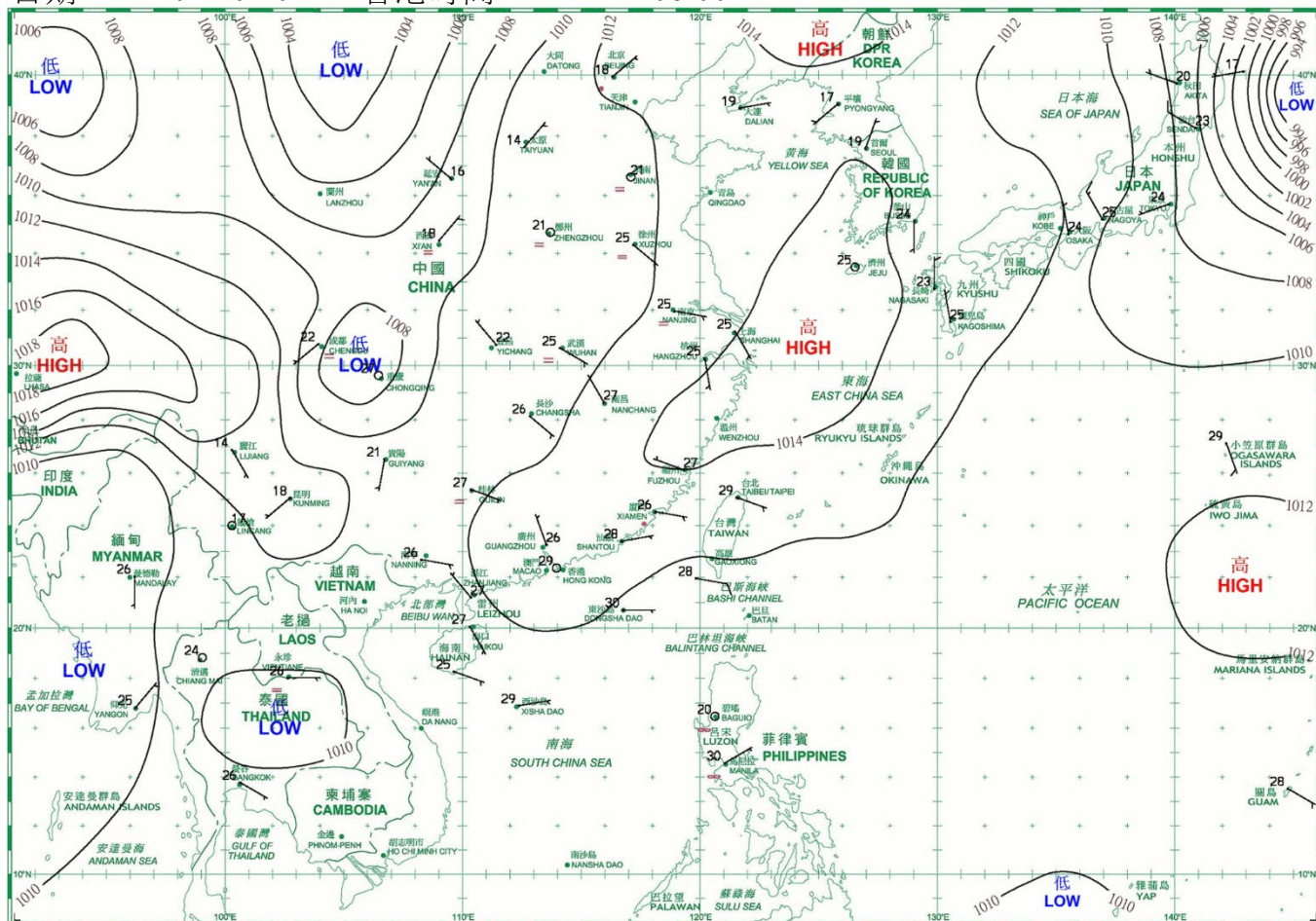
Figure 2.3.8b A tree was blown down at Tung Tau Estate, Wong Tai Sin during the passage of Kompasu on 13 October 2021. (Courtesy of Radio Television Hong Kong)

3. 二零二一年十月每日天氣圖 Daily Weather Maps for October 2021

日期/Date: 01.10.2021 香港時間/HK Time: 08:00

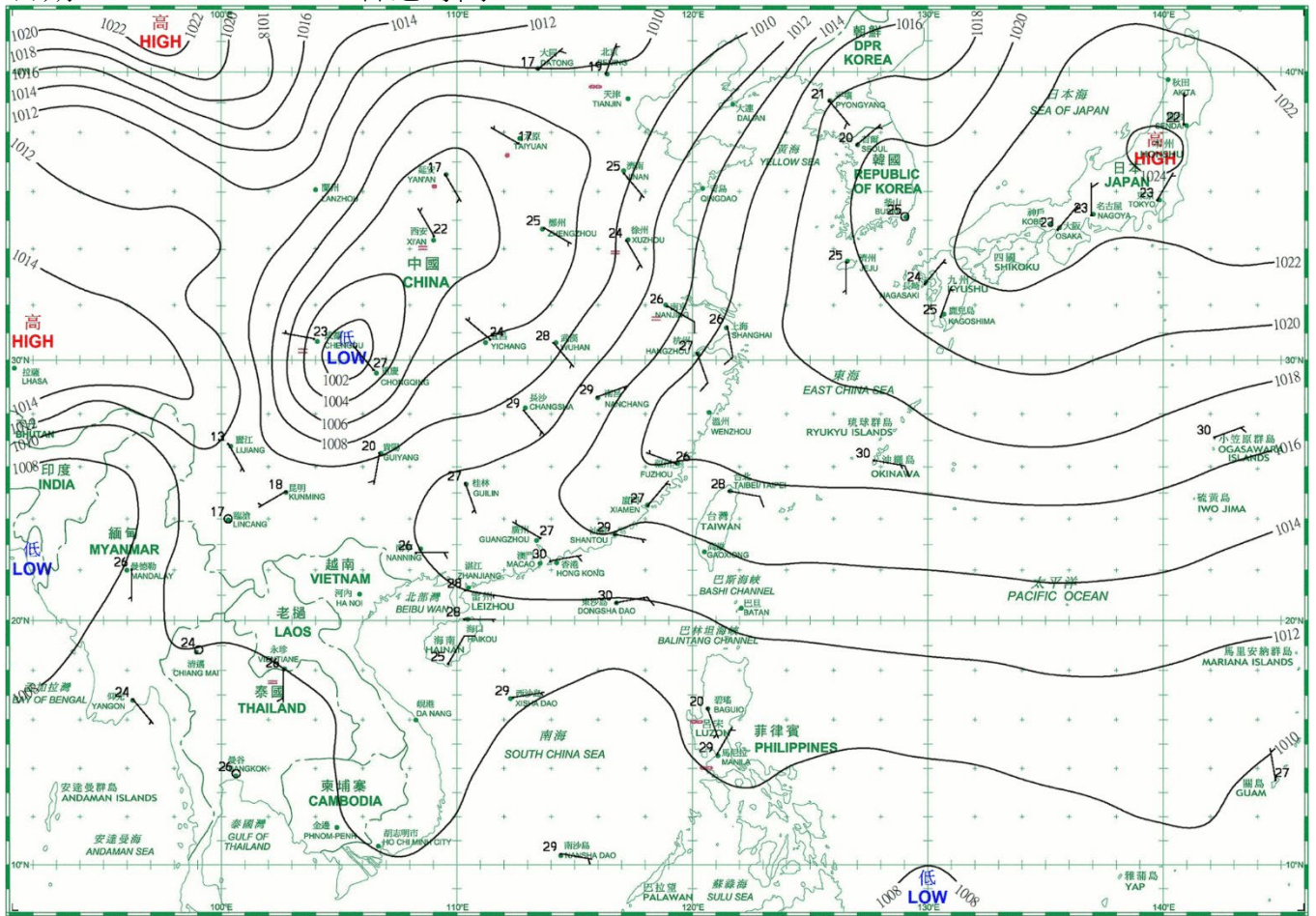


日期/Date: 02.10.2021 香港時間/HK Time: 08:00

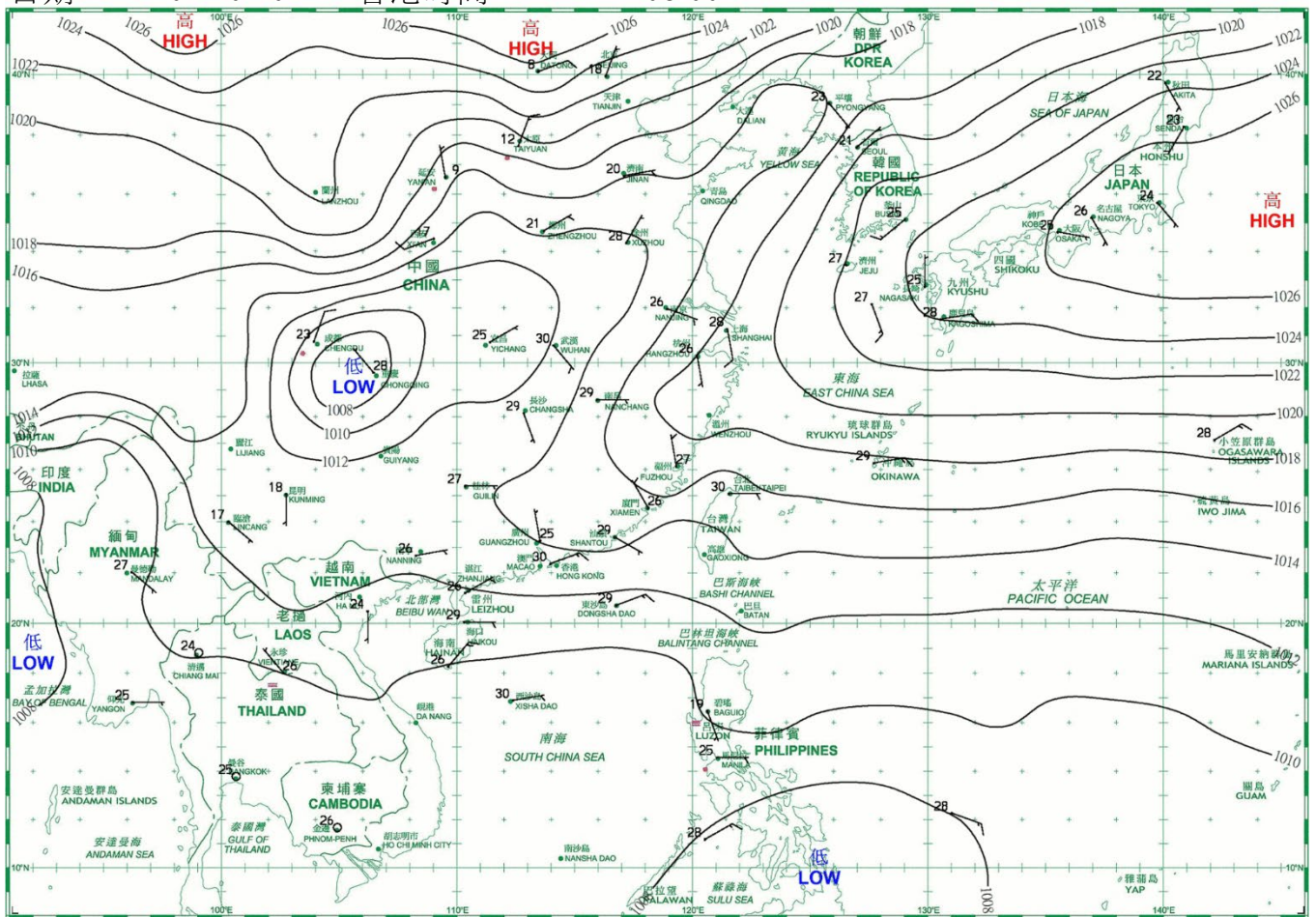


- 等壓線 Isobar(hPa)
- 暖鋒 Warm Front
- 靜止鋒 Stationary Front
- 消散中的冷鋒 Dissipating Cold Front
- 冷鋒 Cold Front
- 錮囚鋒 Occlusion
- 槽軸 (線) Axis of Trough
- 熱帶氣旋中心 Centre of Tropical Cyclone

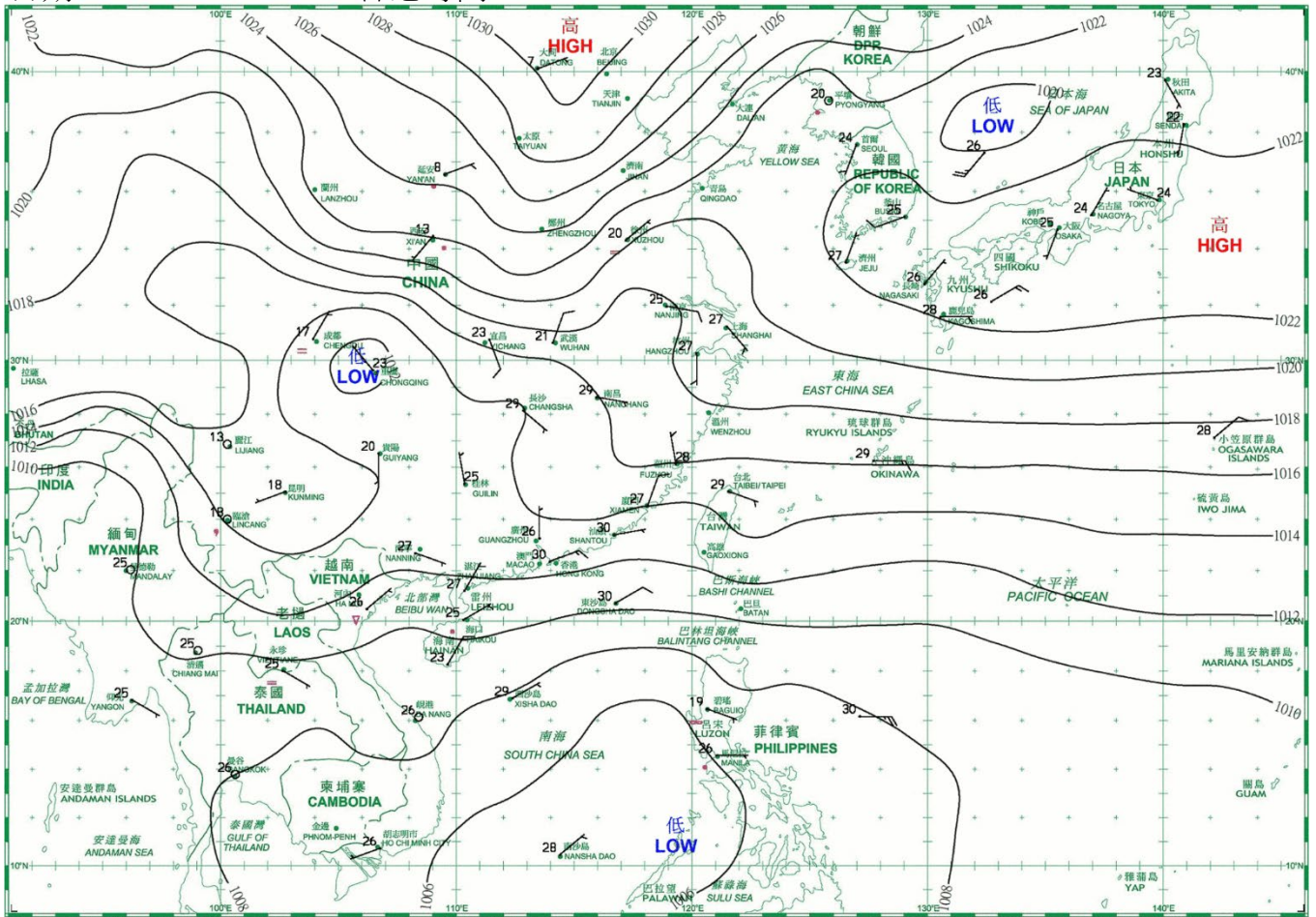
日期/Date: 03.10.2021 香港時間/HK Time: 08:00



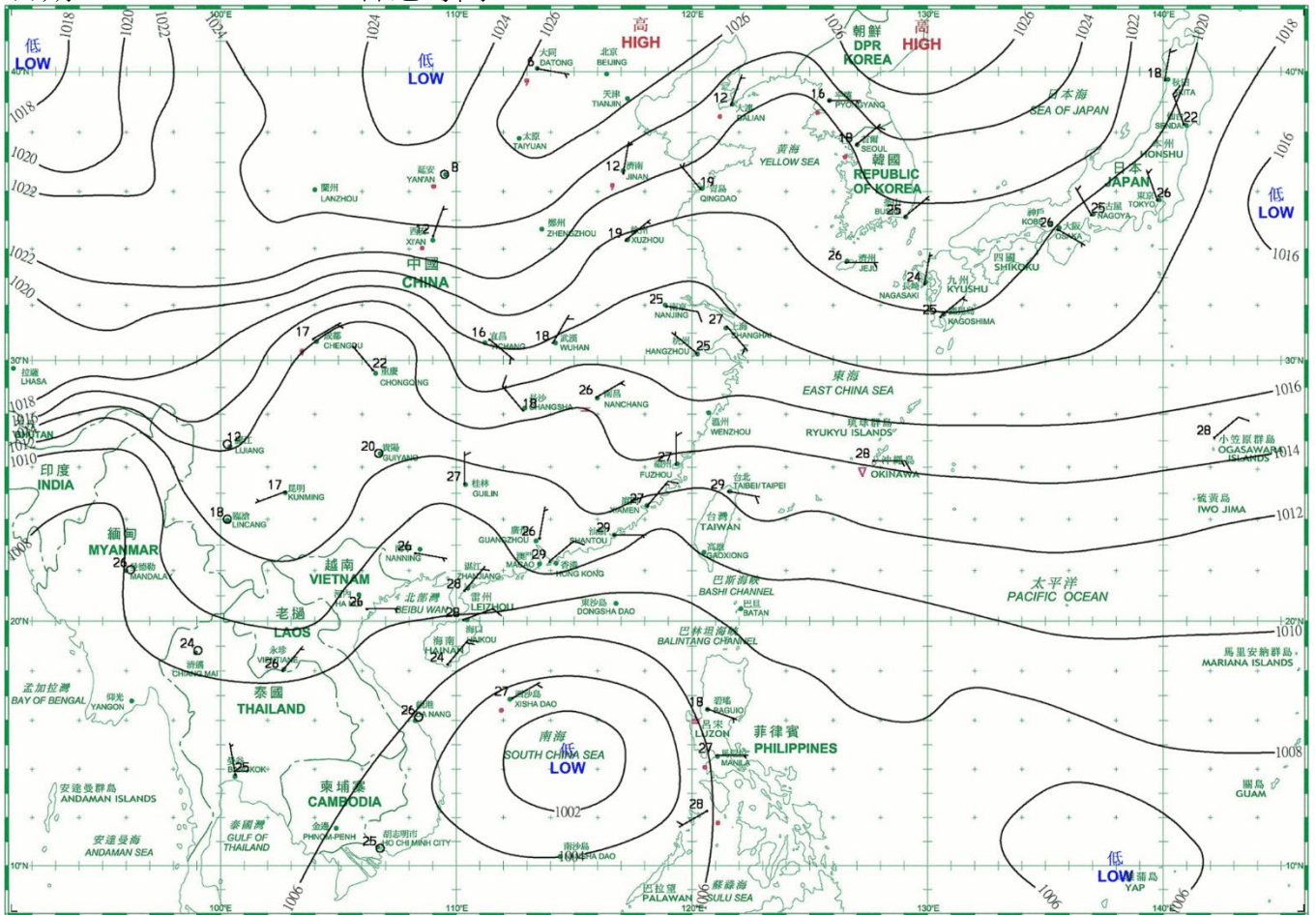
日期/Date: 04.10.2021 香港時間/HK Time: 08:00



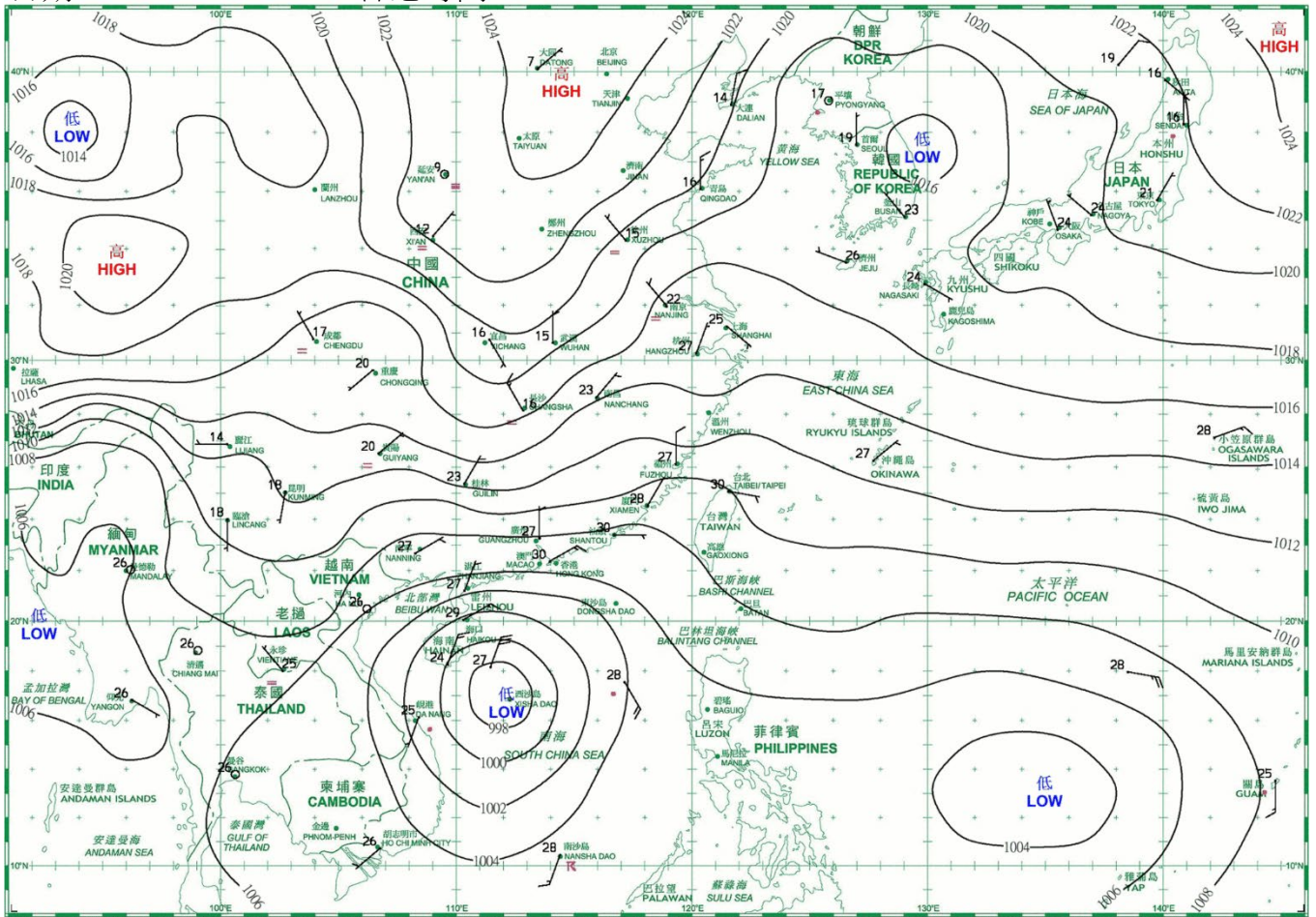
日期/Date: 05.10.2021 香港時間/HK Time: 08:00



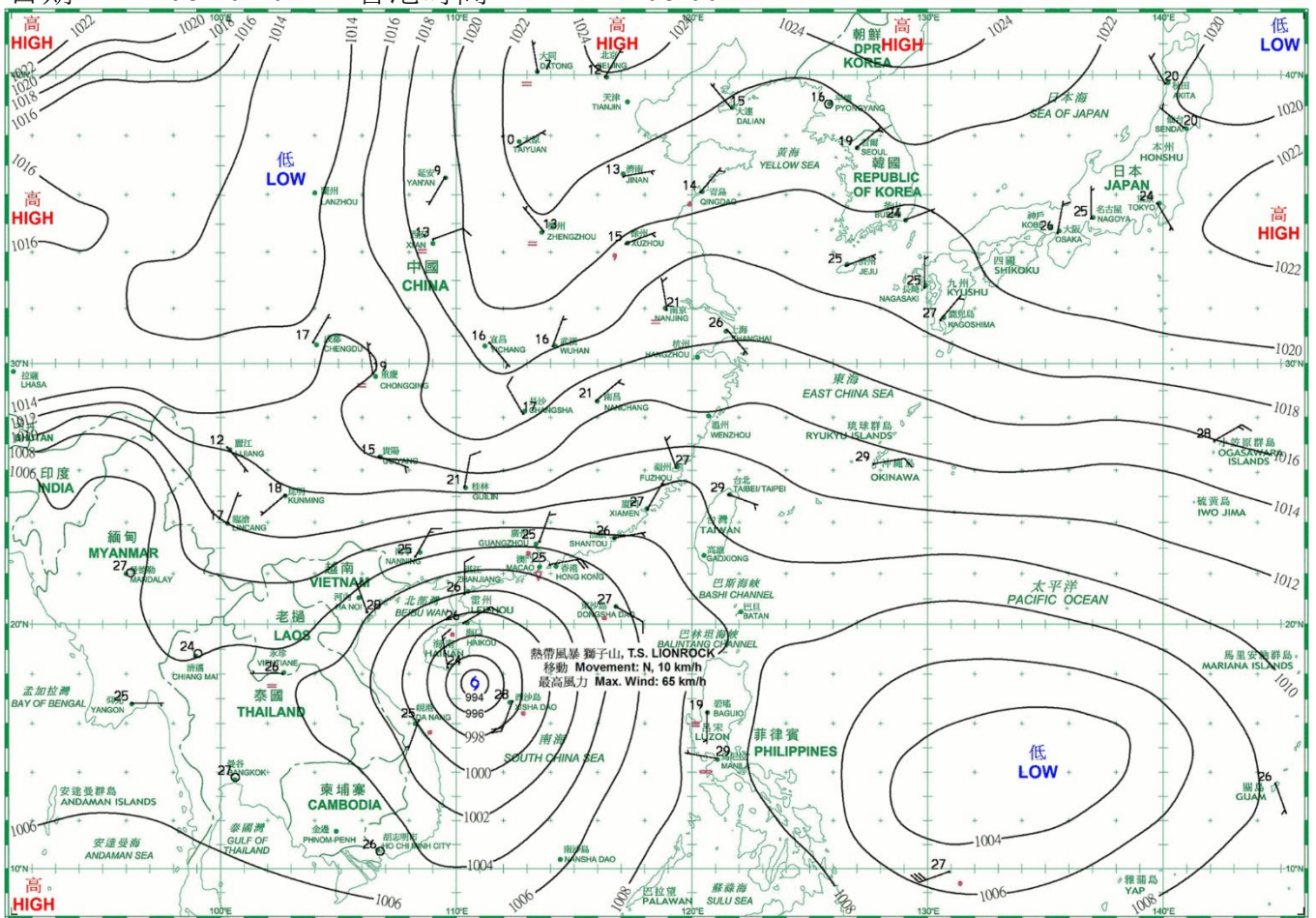
日期/Date: 06.10.2021 香港時間/HK Time: 08:00



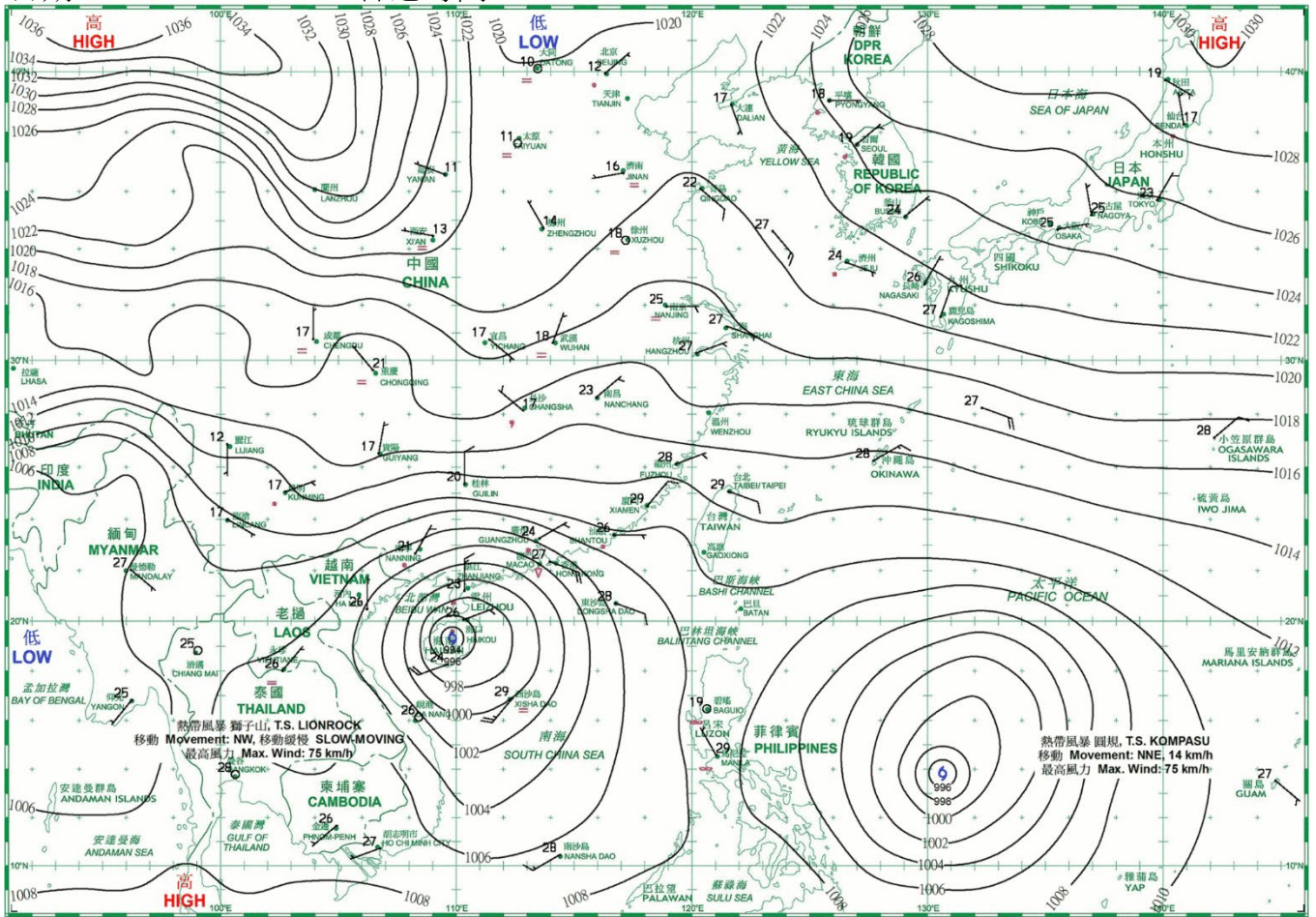
日期/Date: 07.10.2021 香港時間/HK Time: 08:00



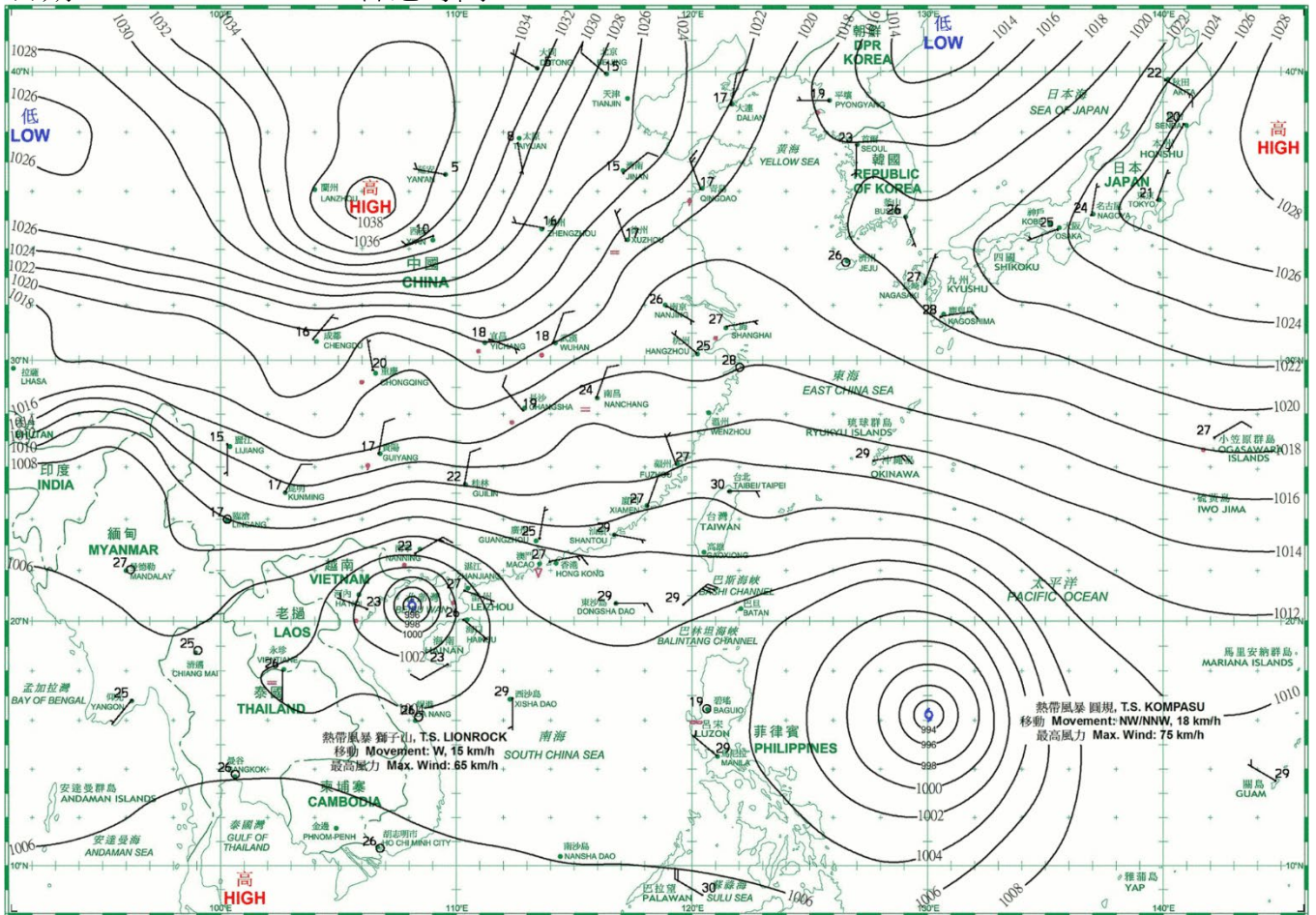
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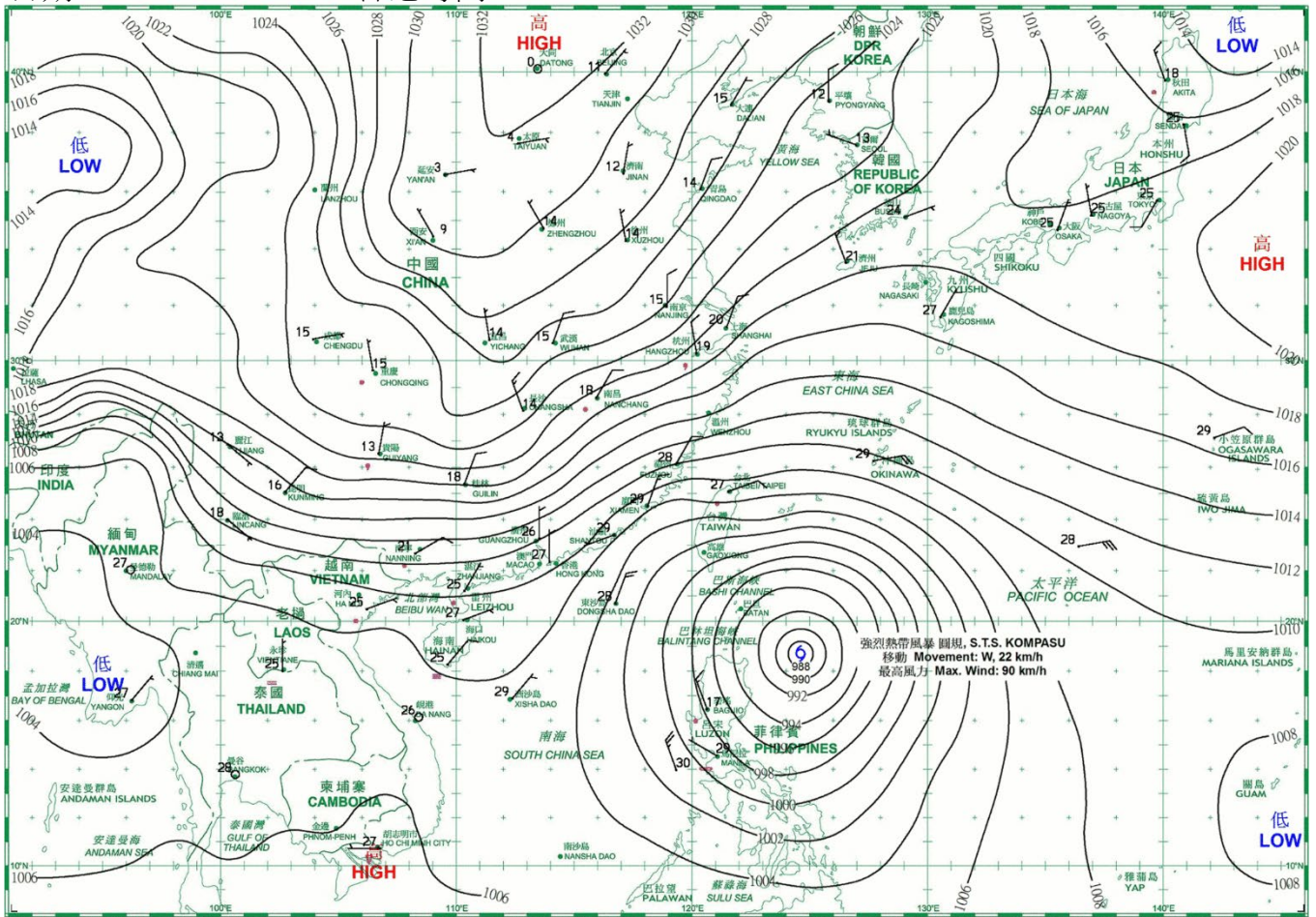
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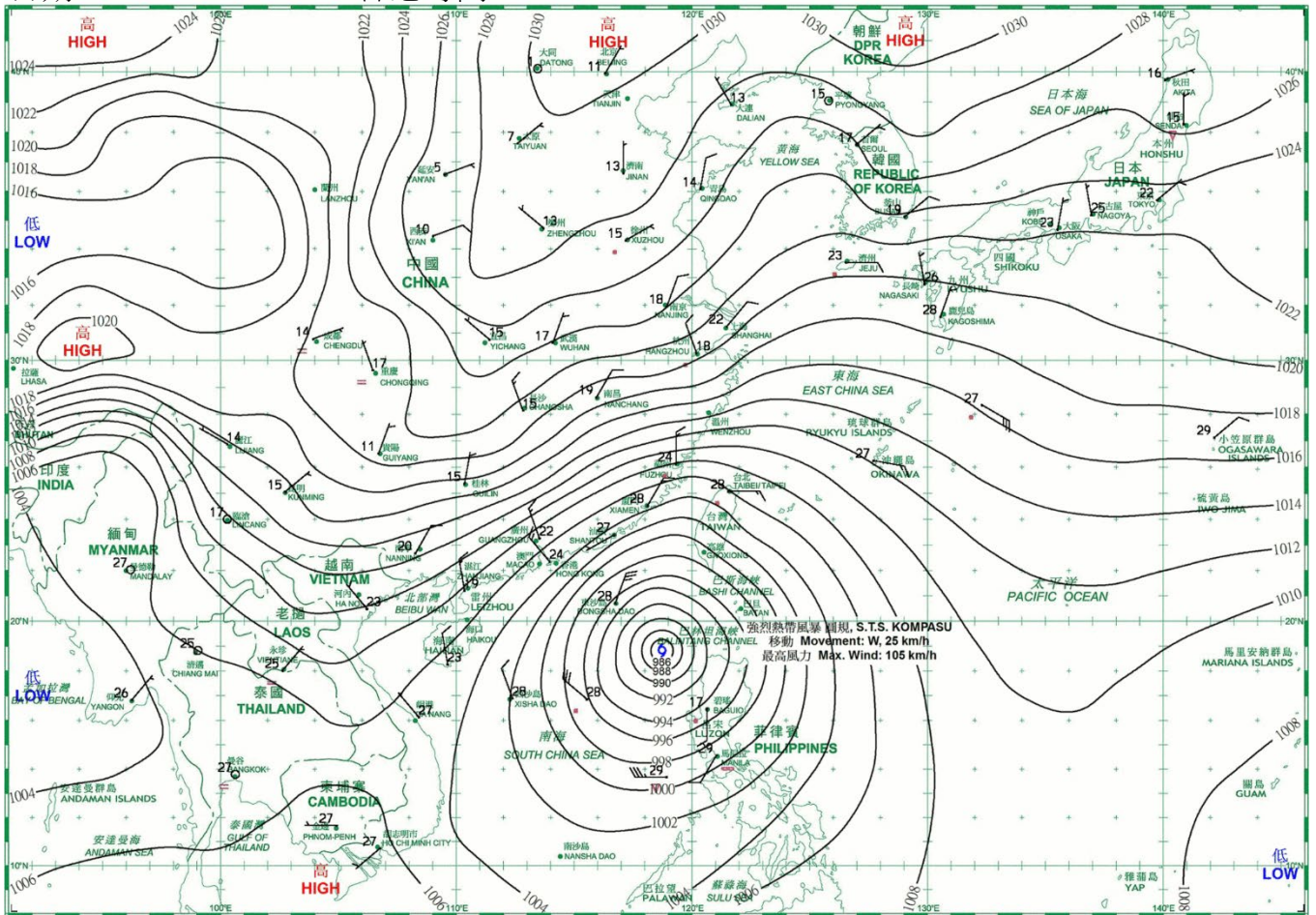
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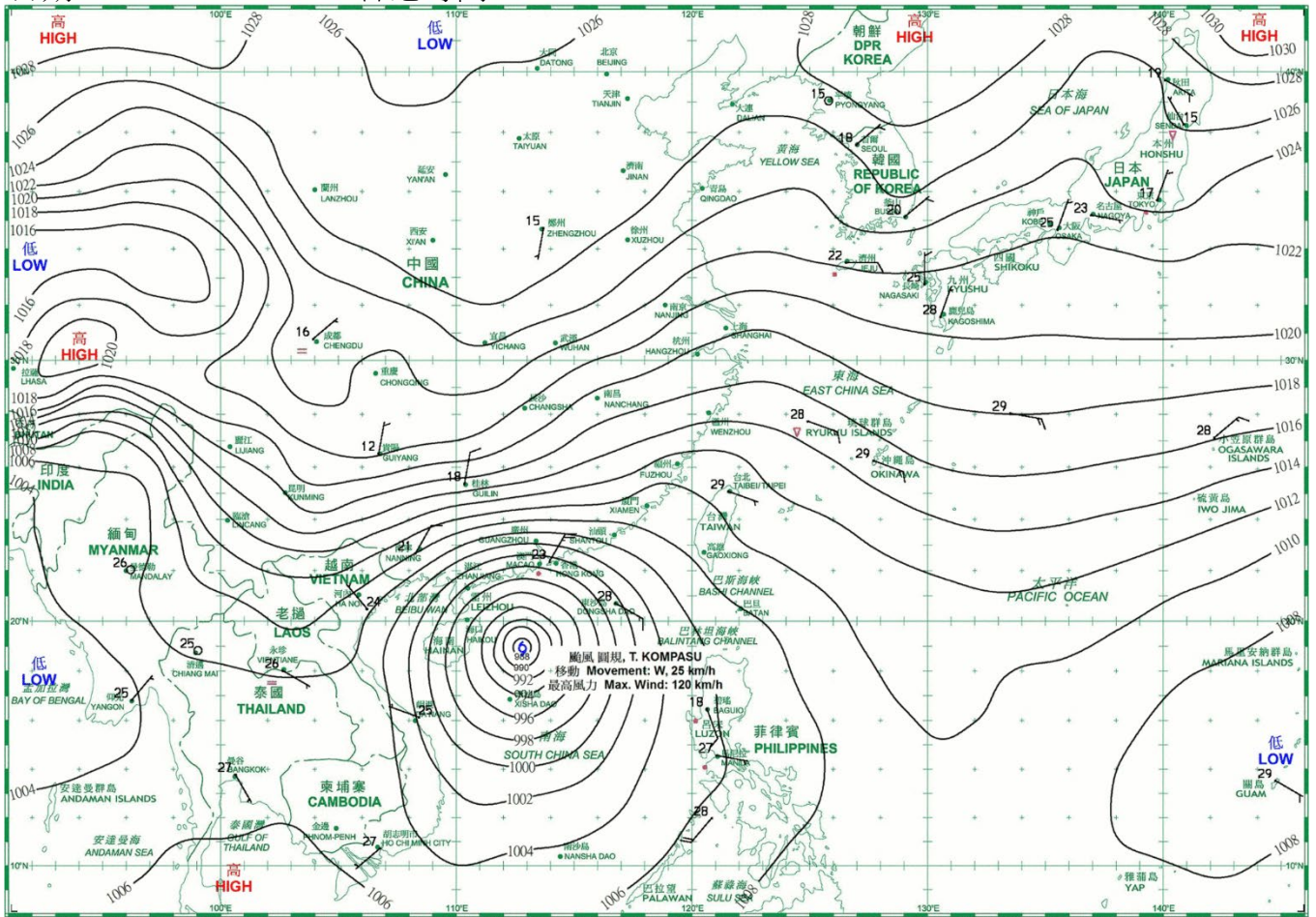
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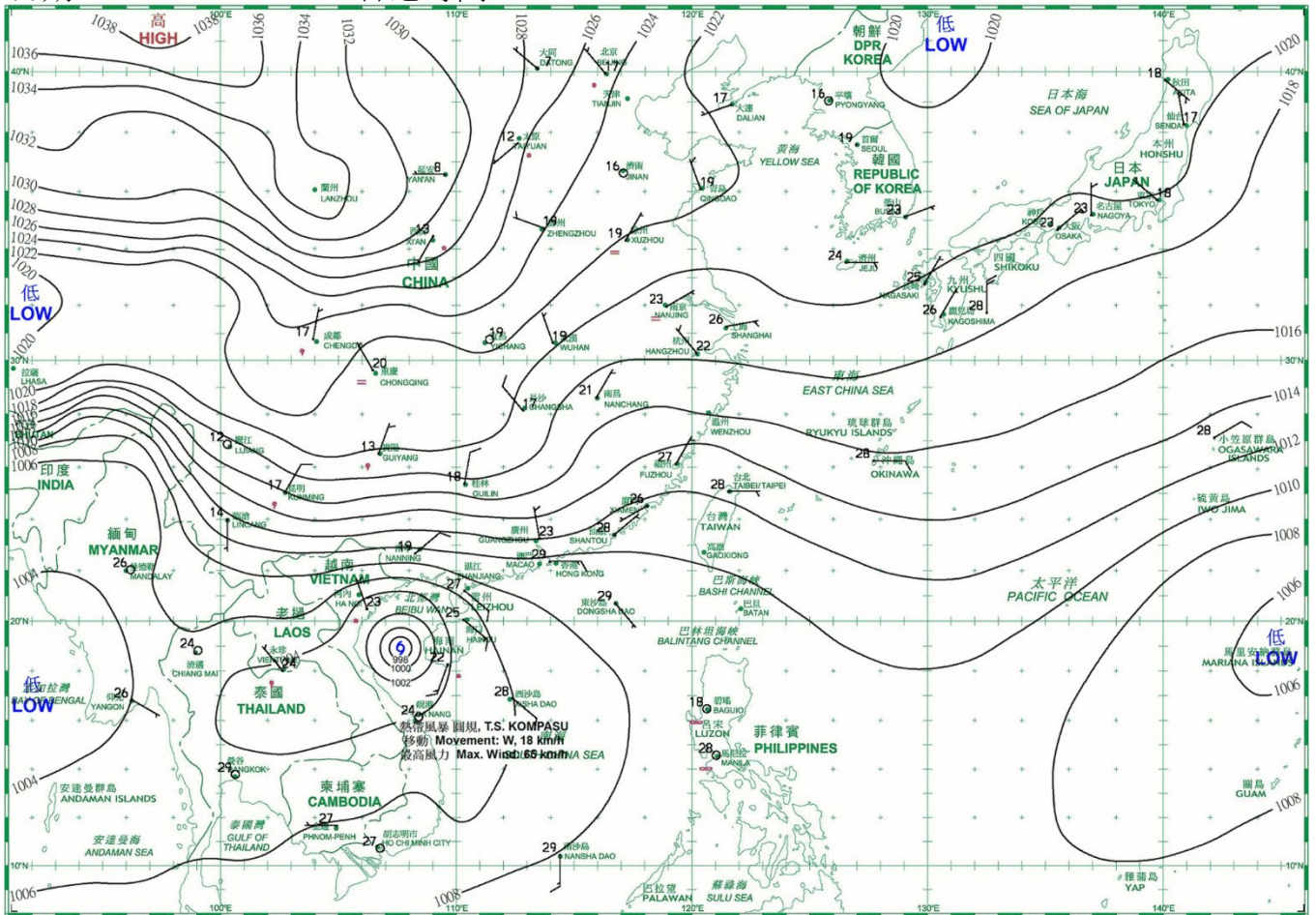
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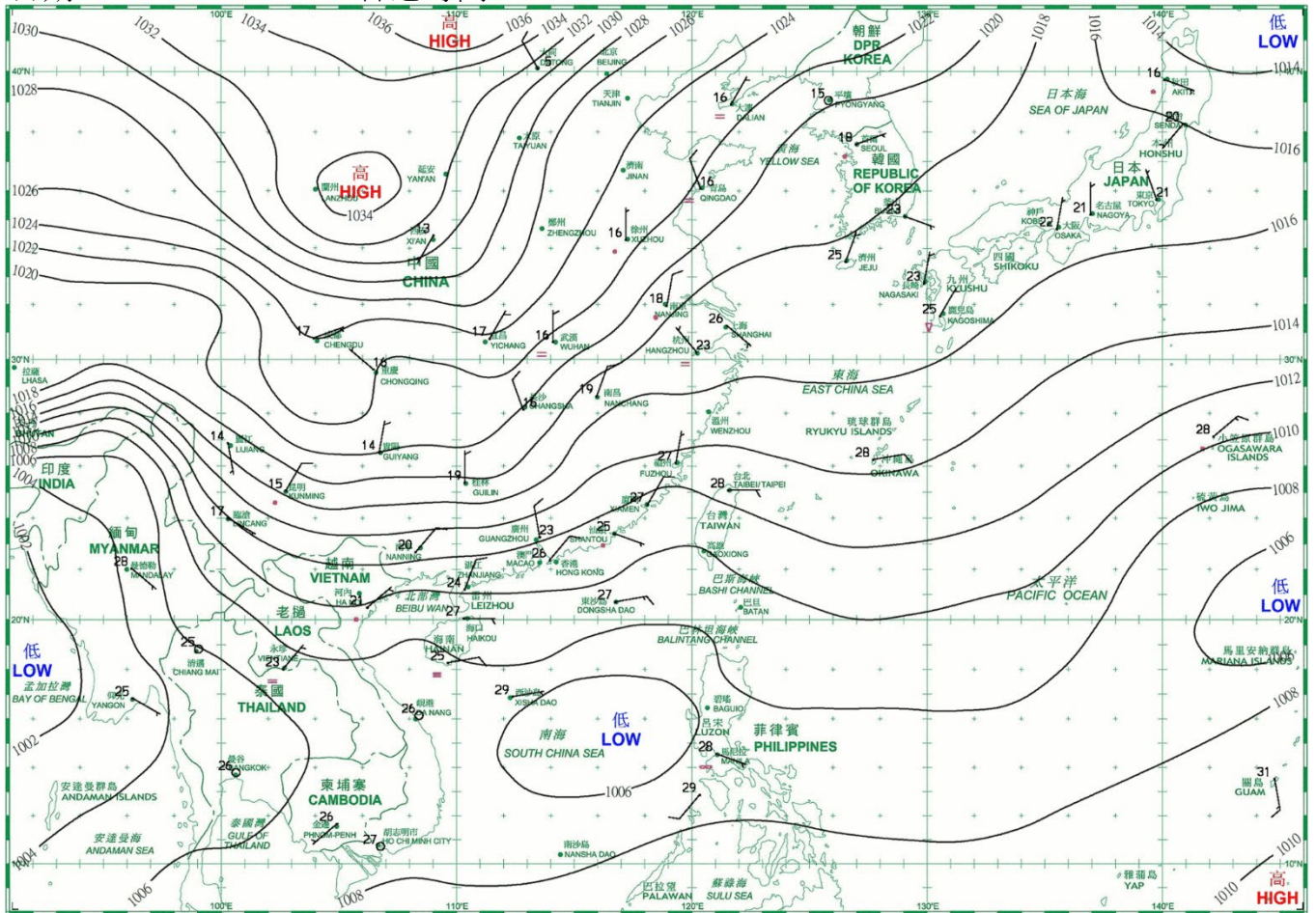
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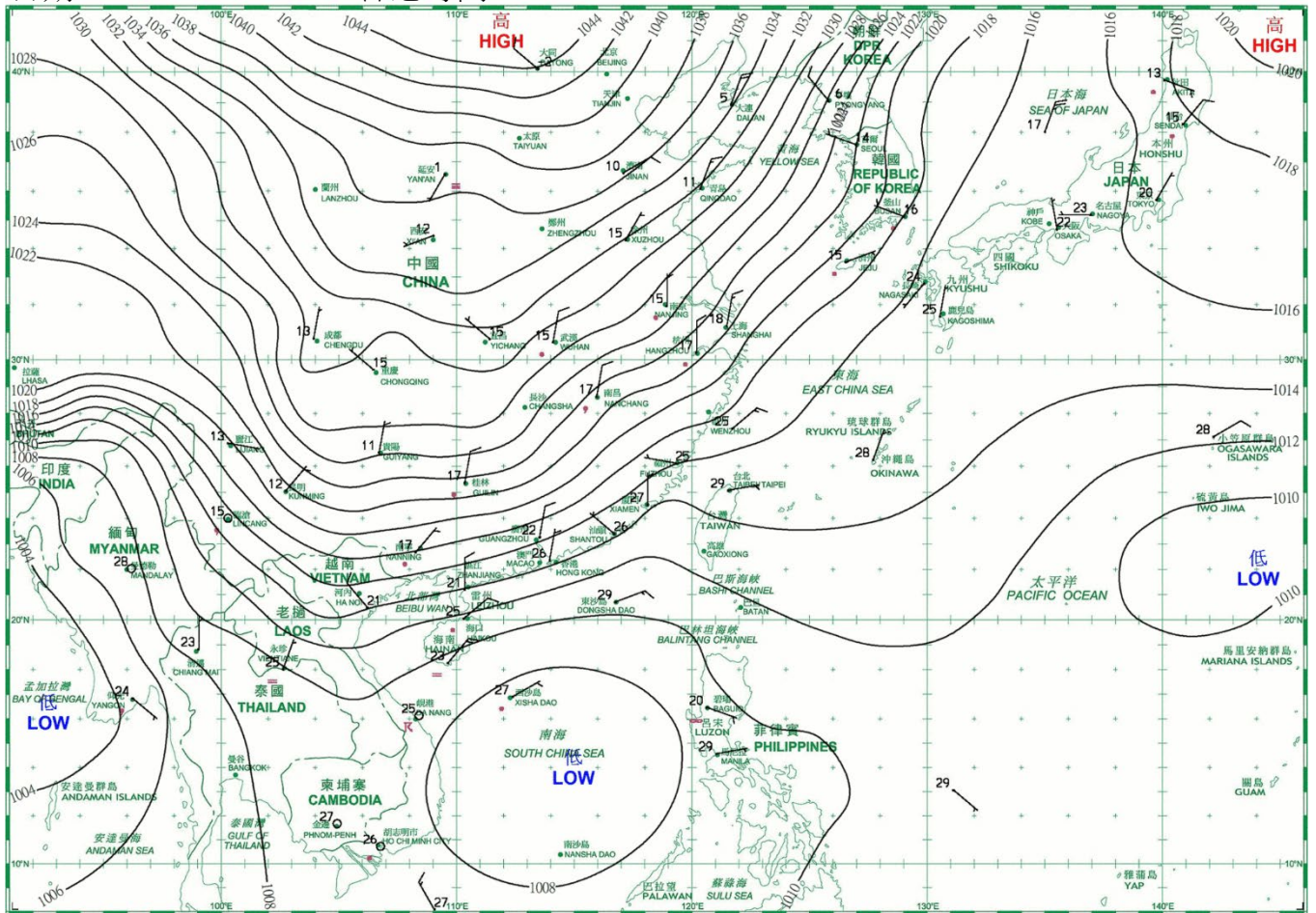
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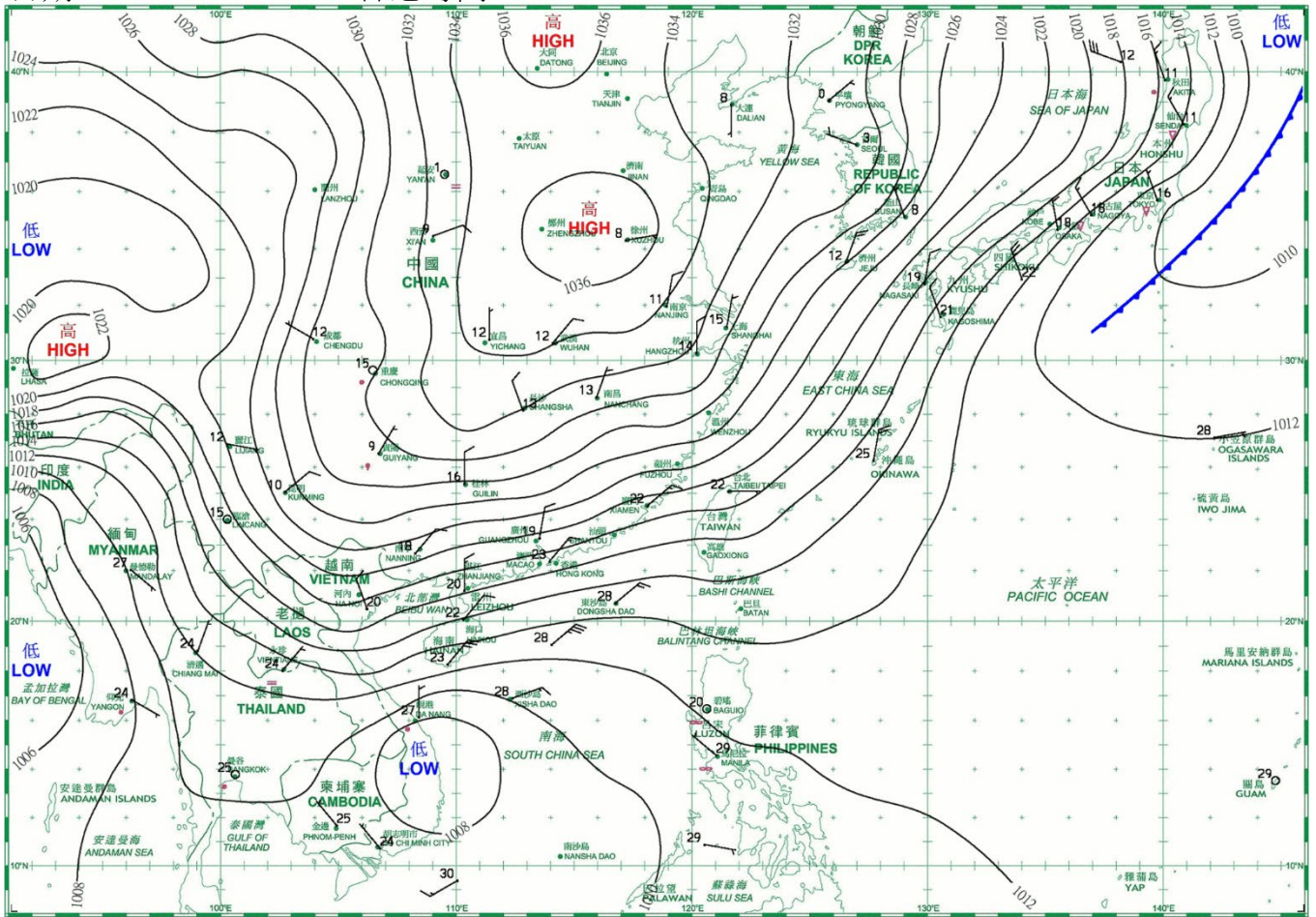
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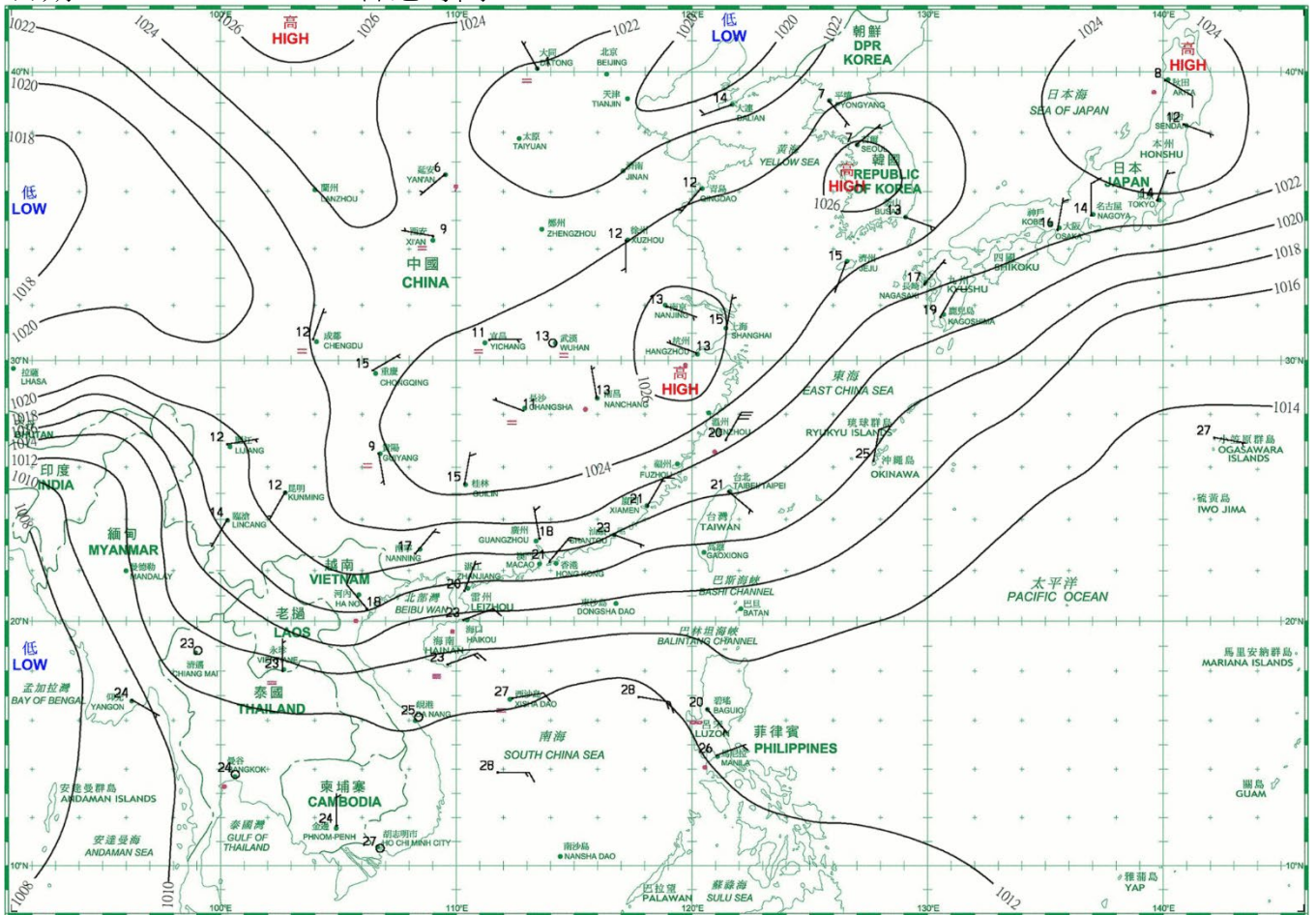
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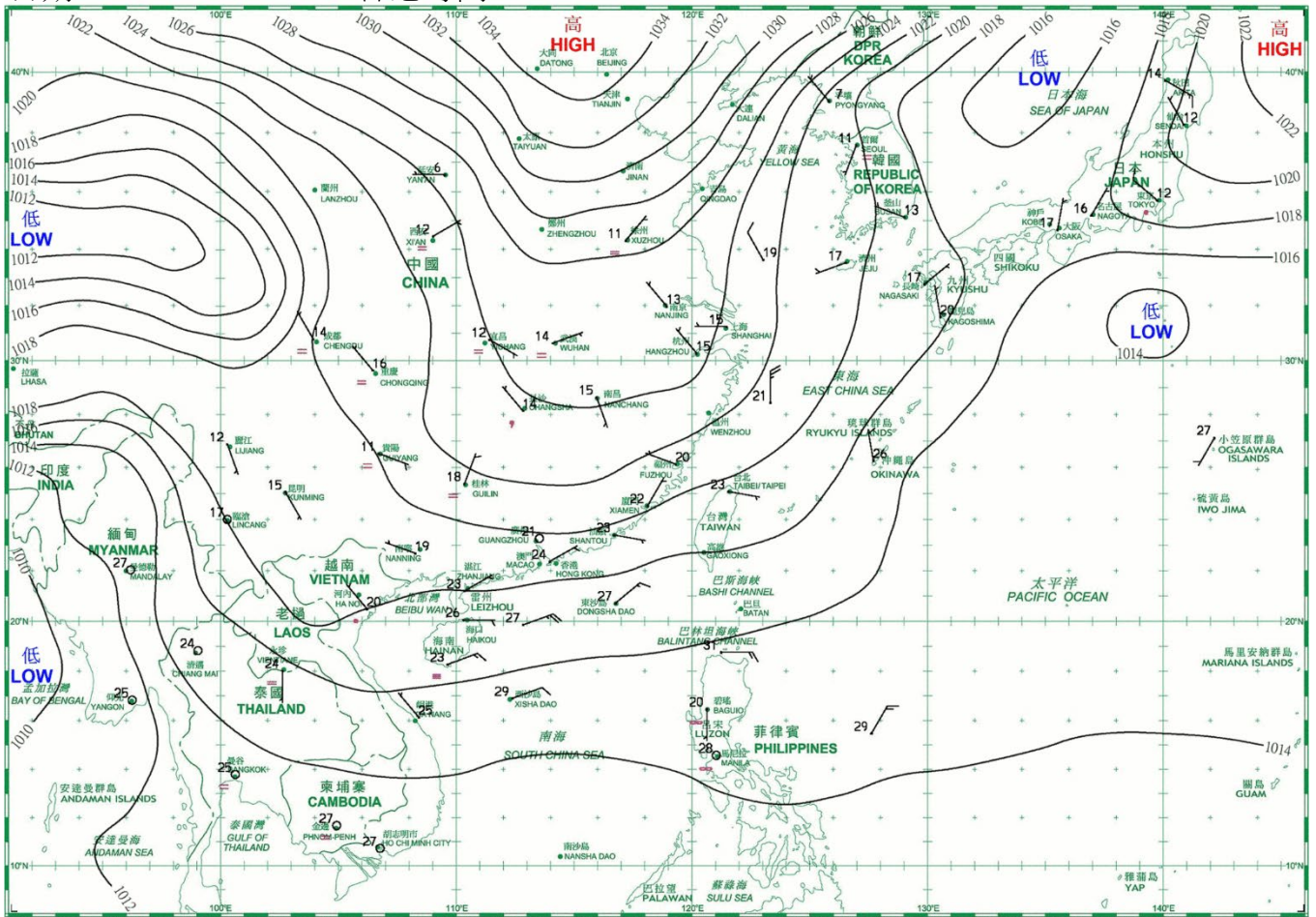
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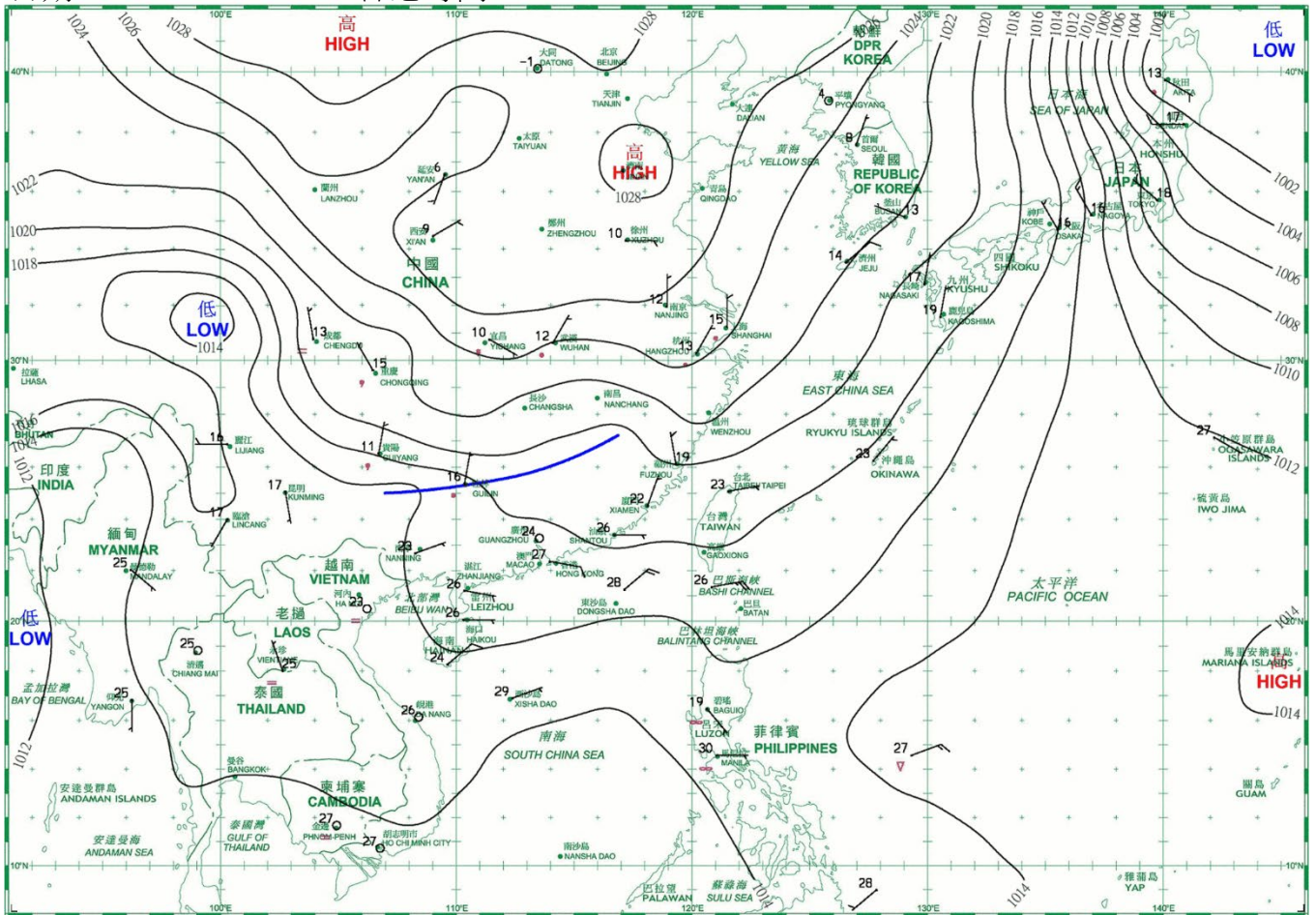
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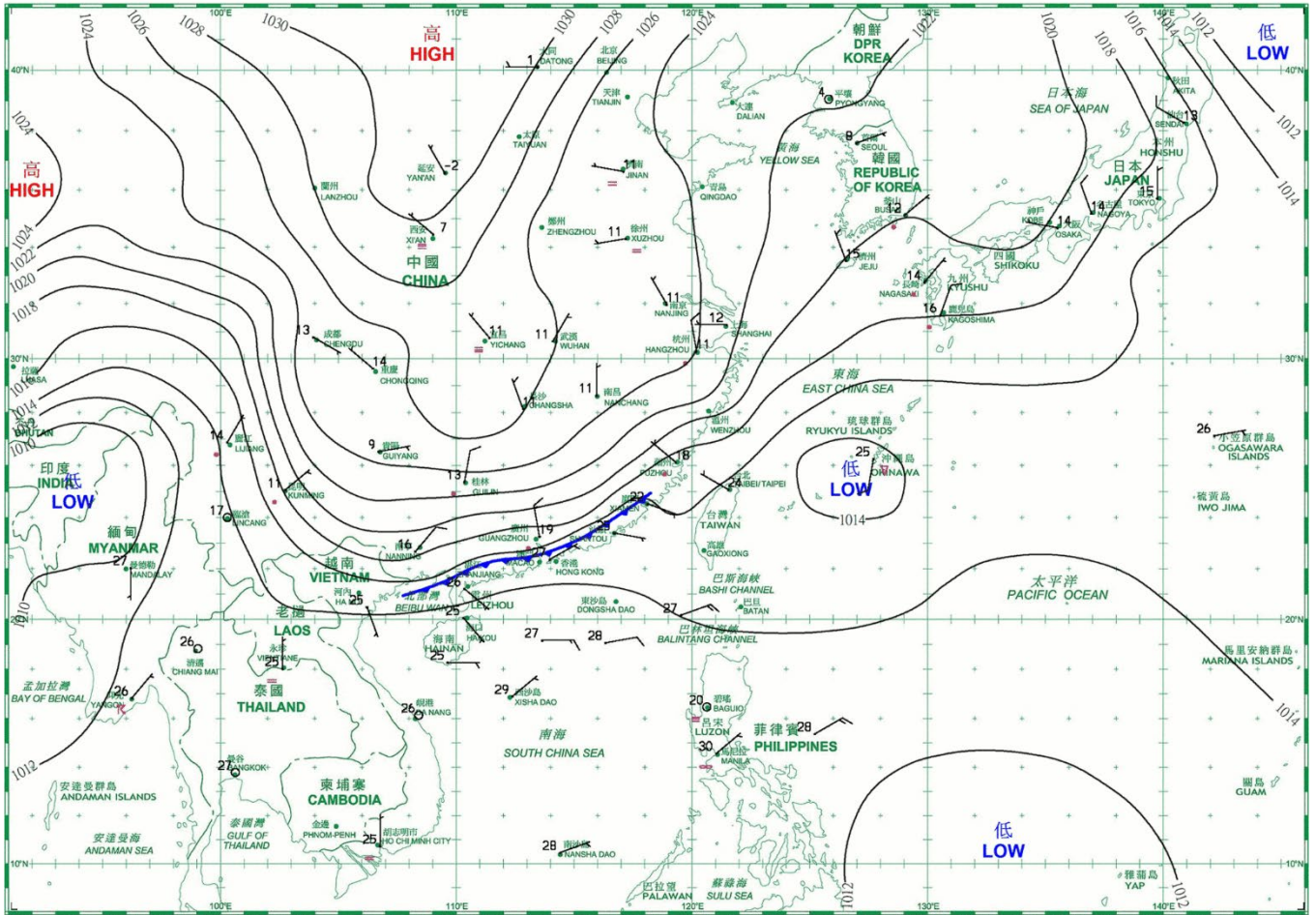
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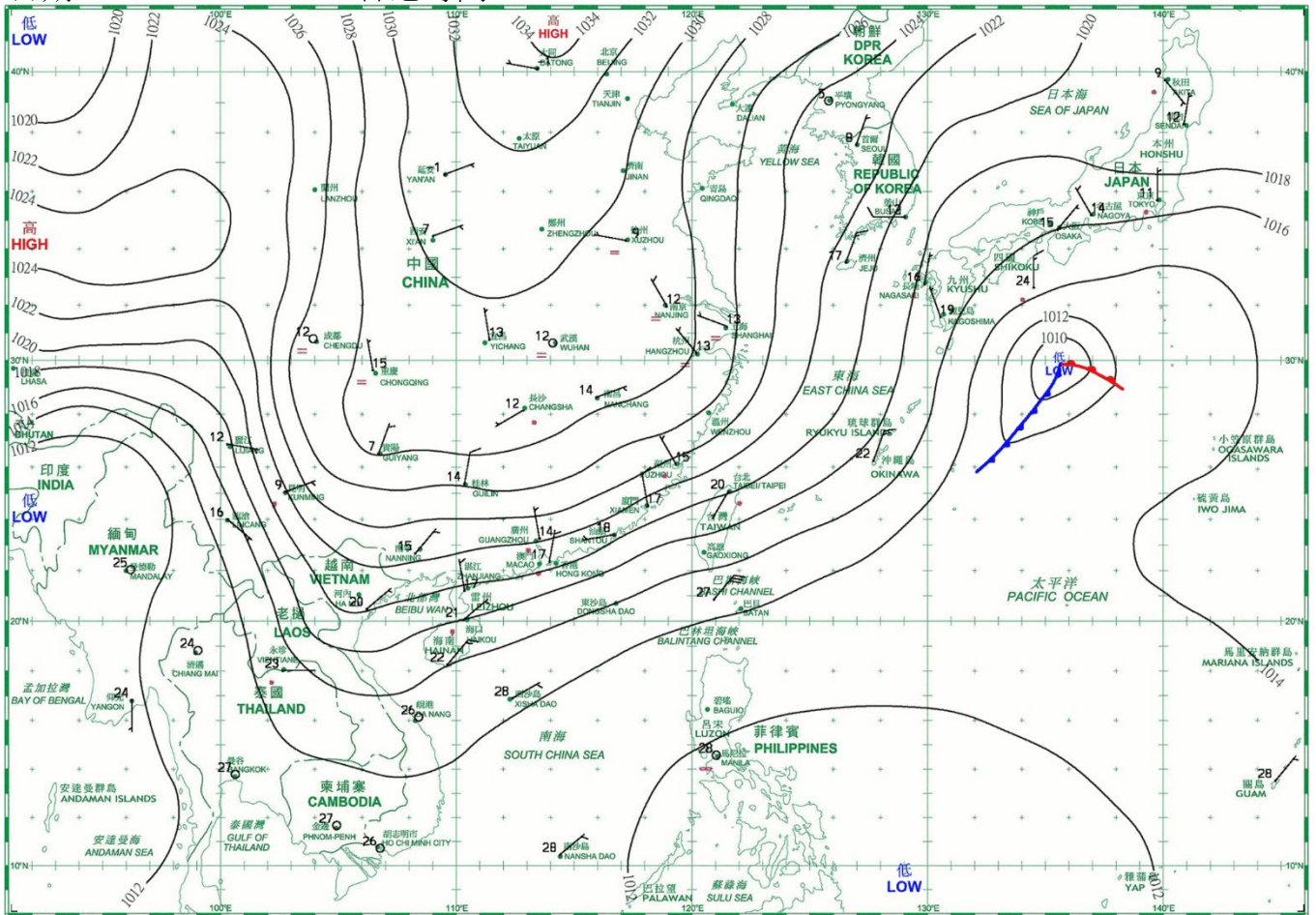
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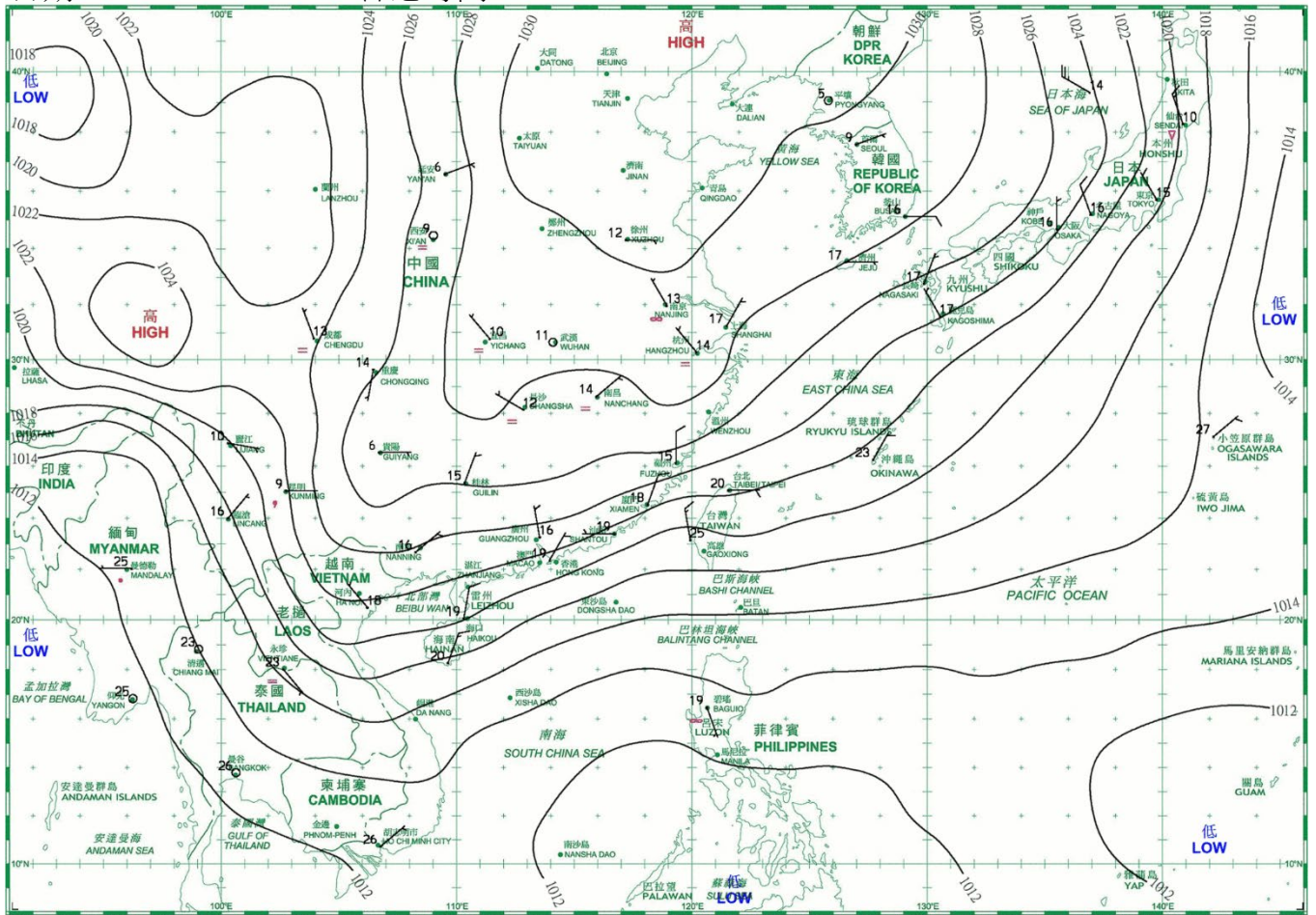
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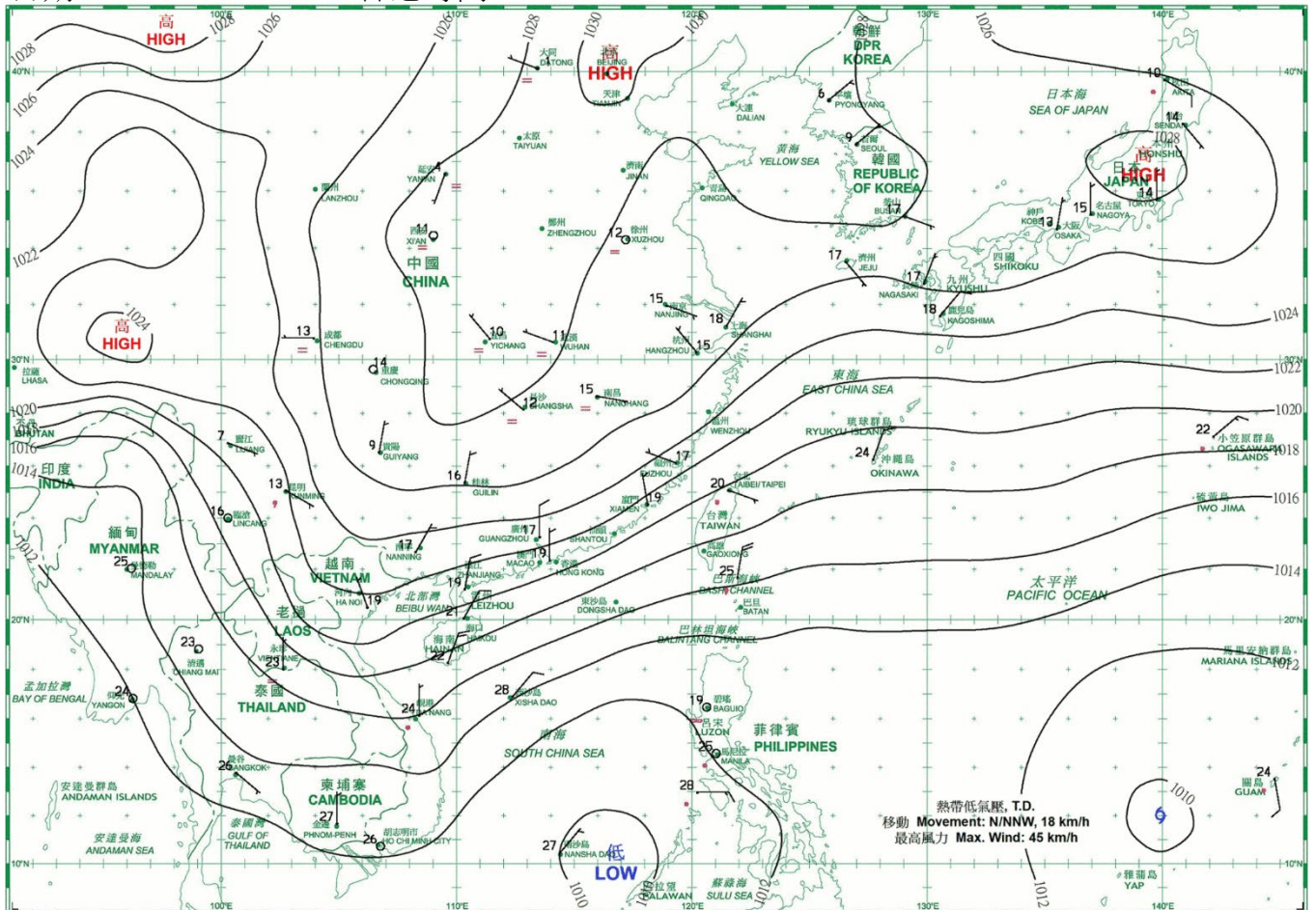
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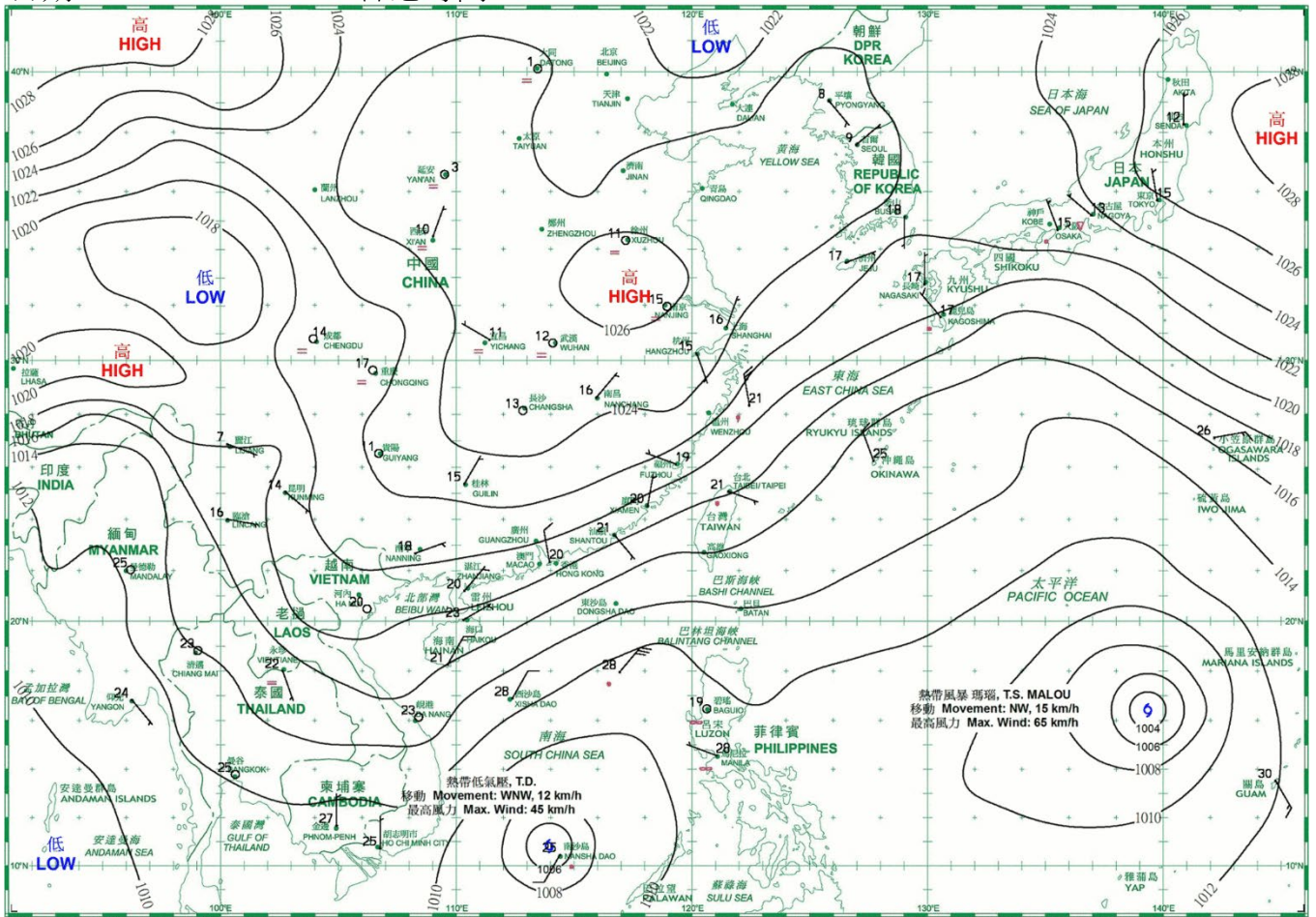
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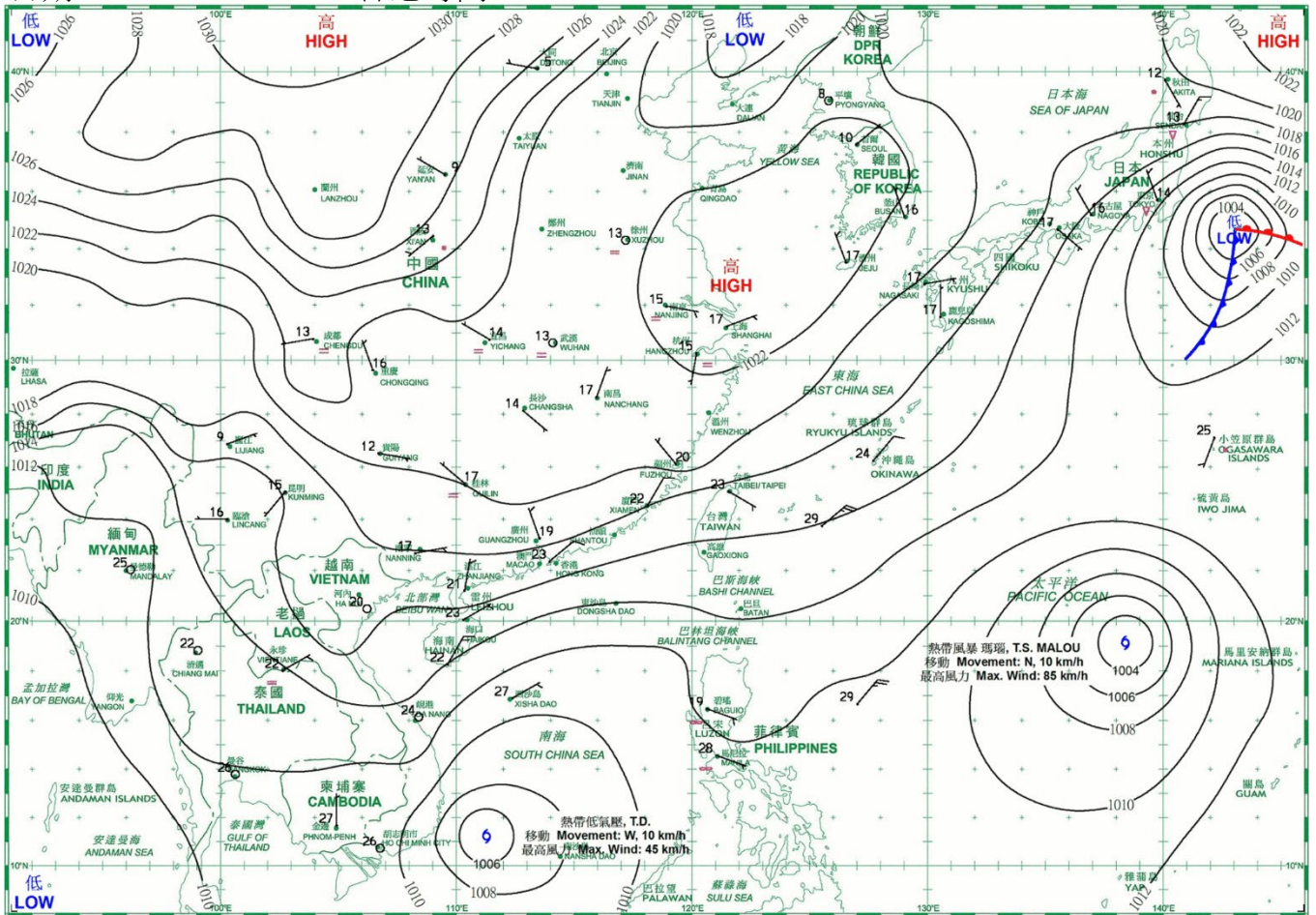
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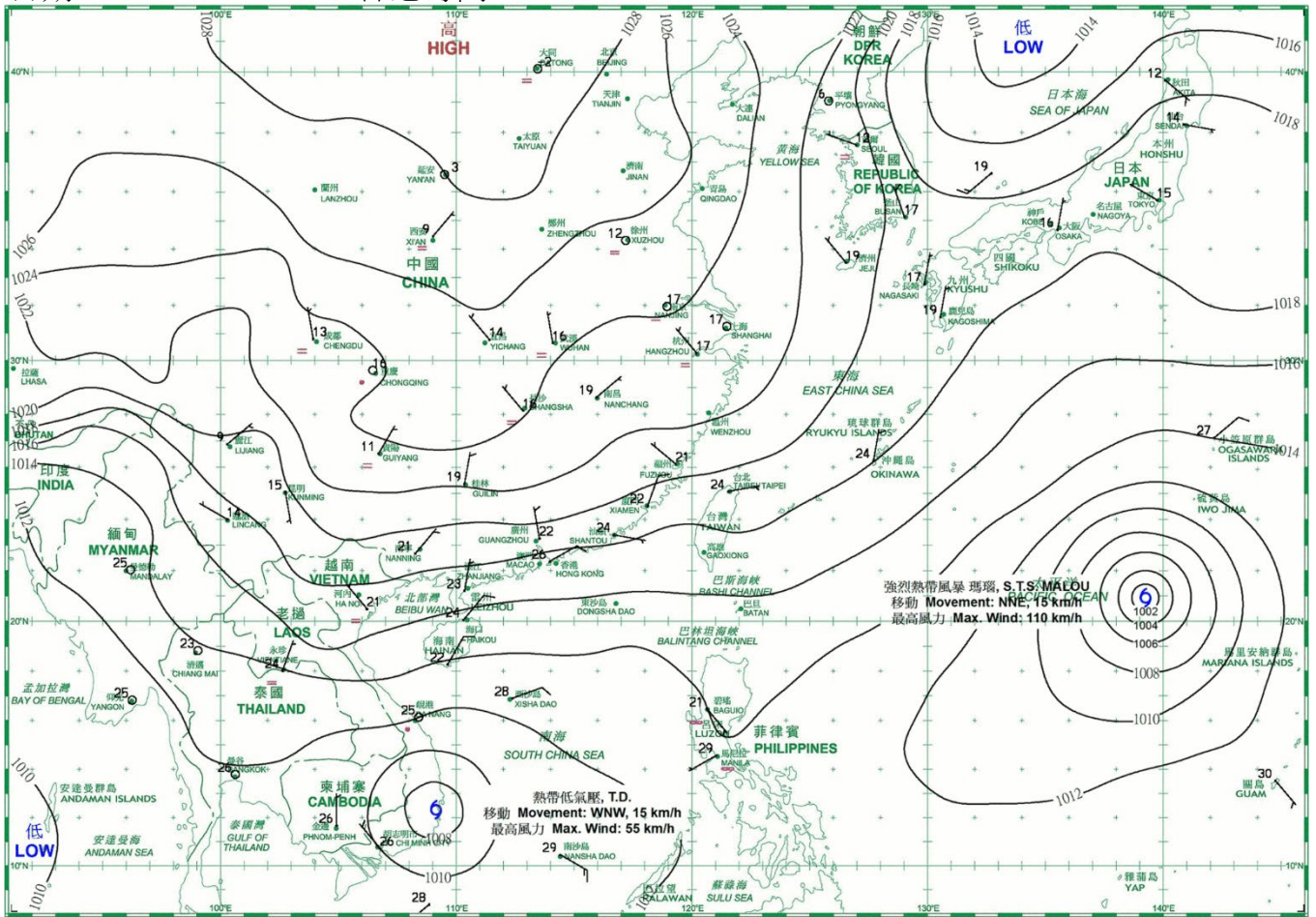
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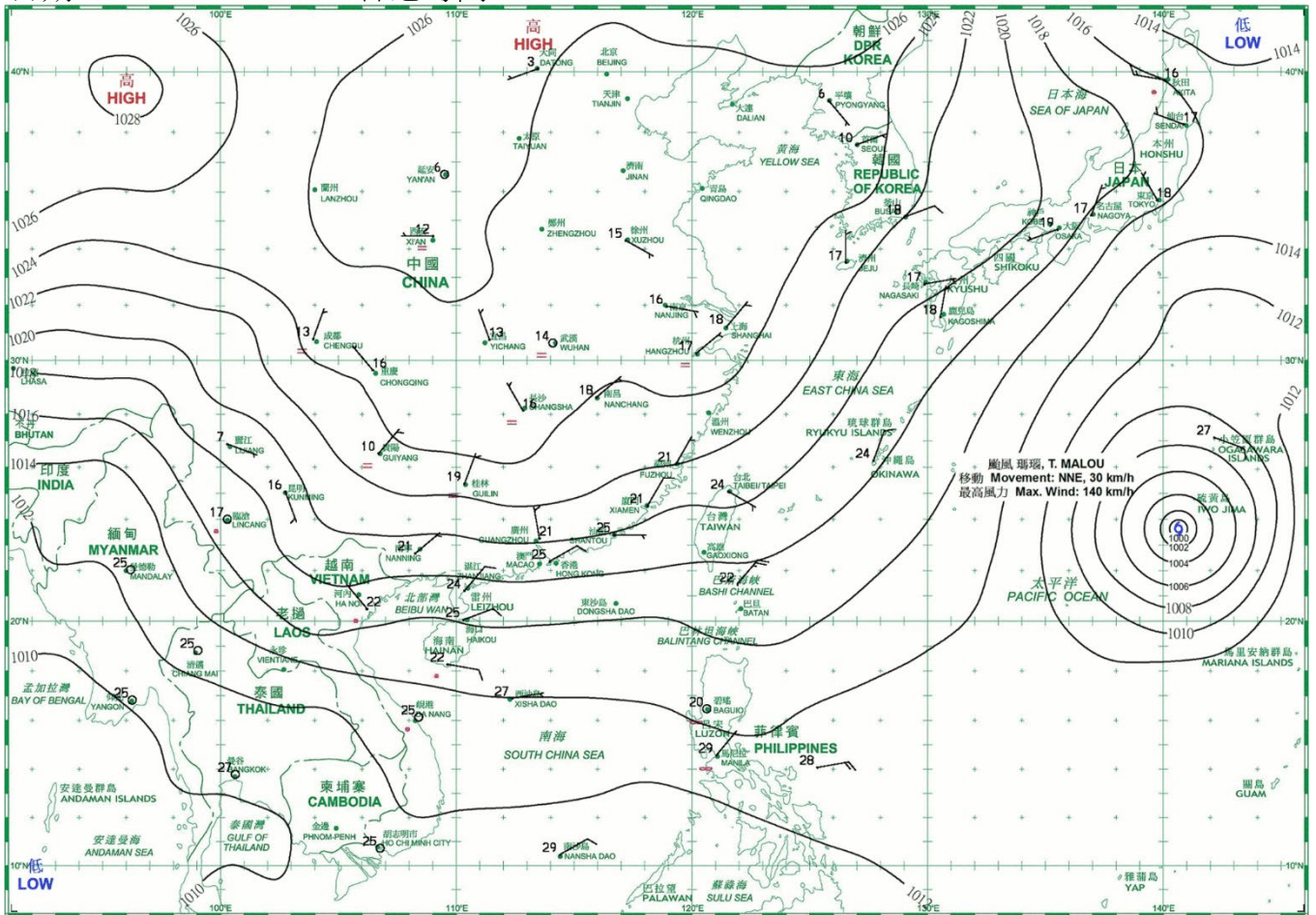
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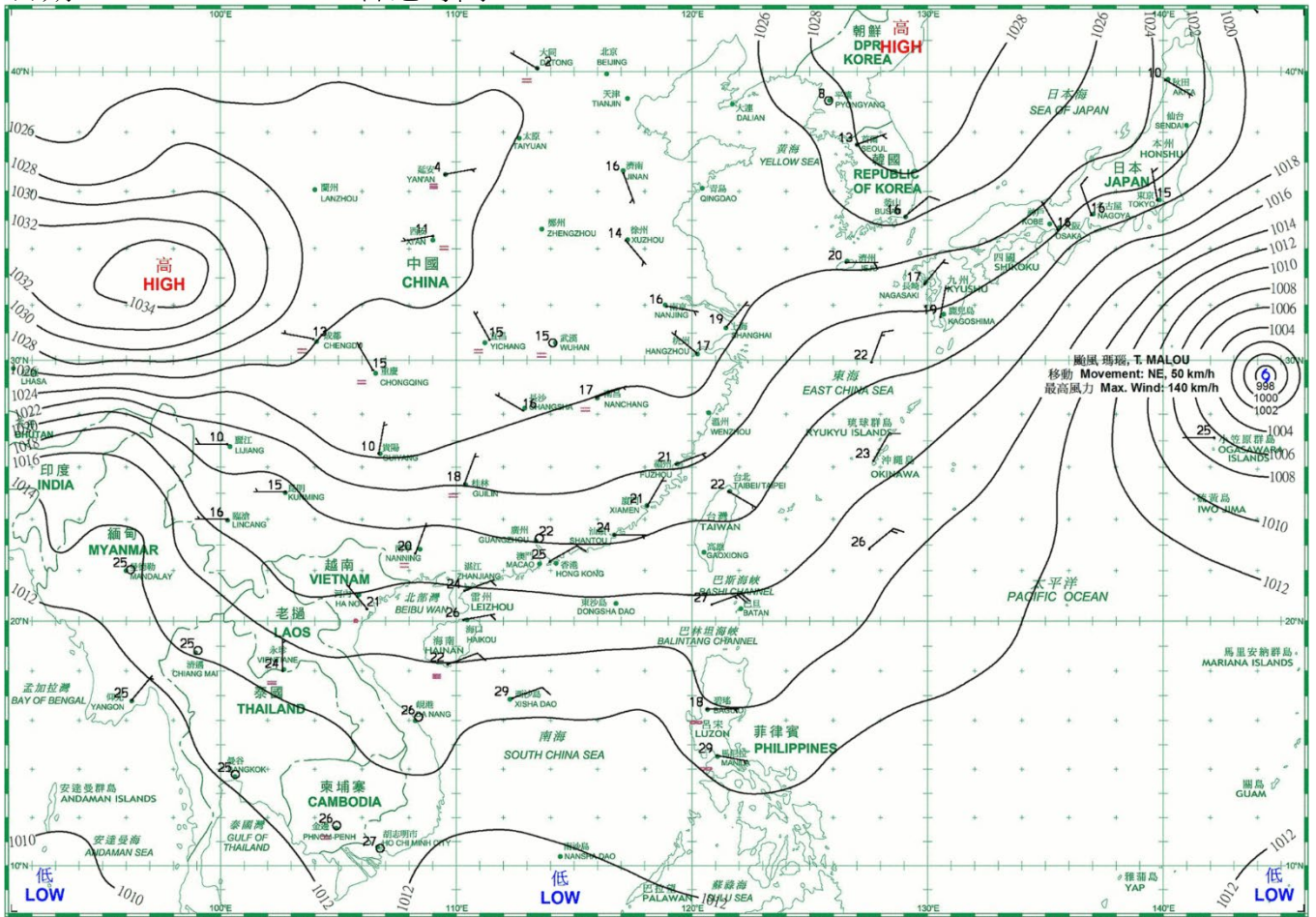
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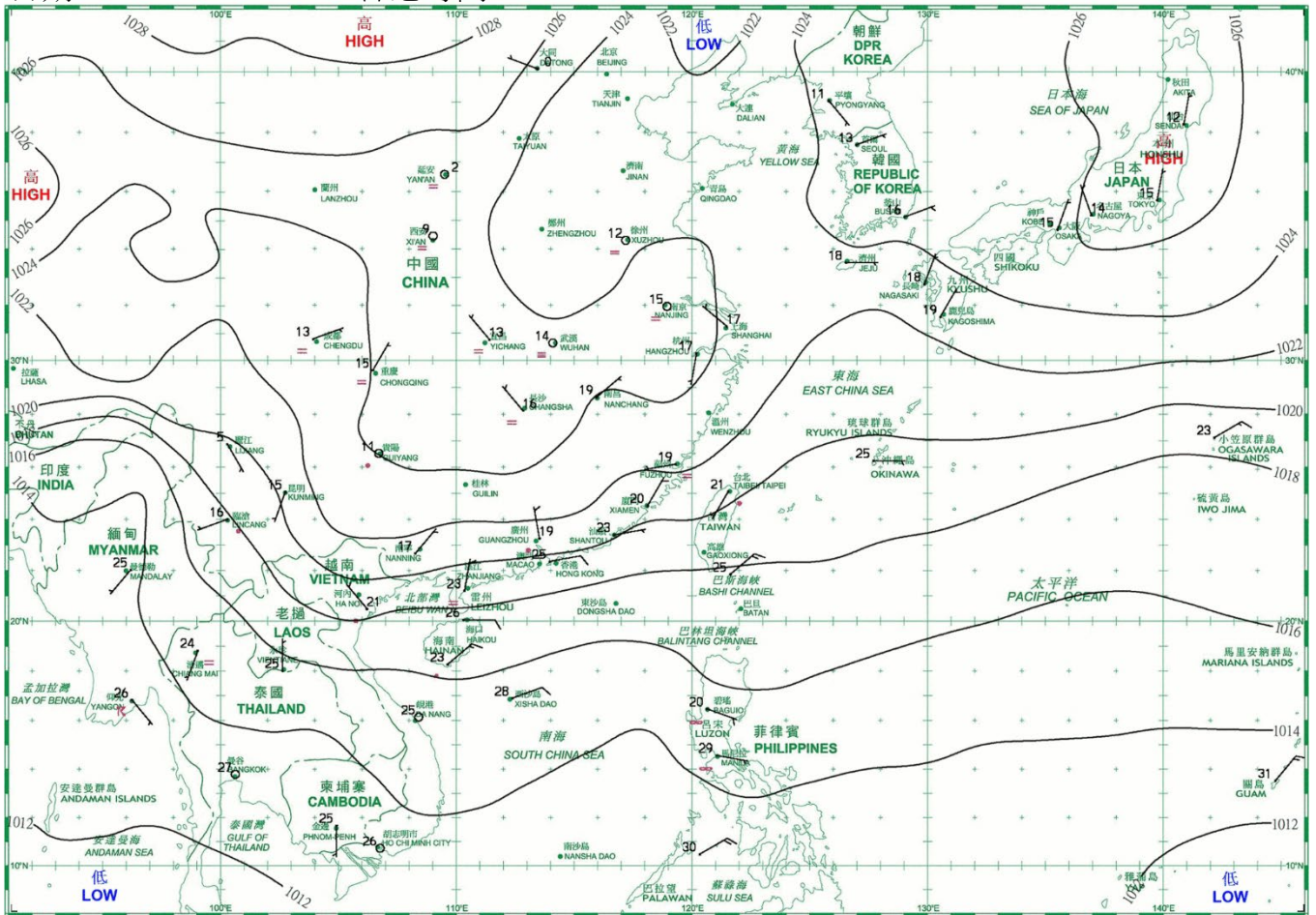
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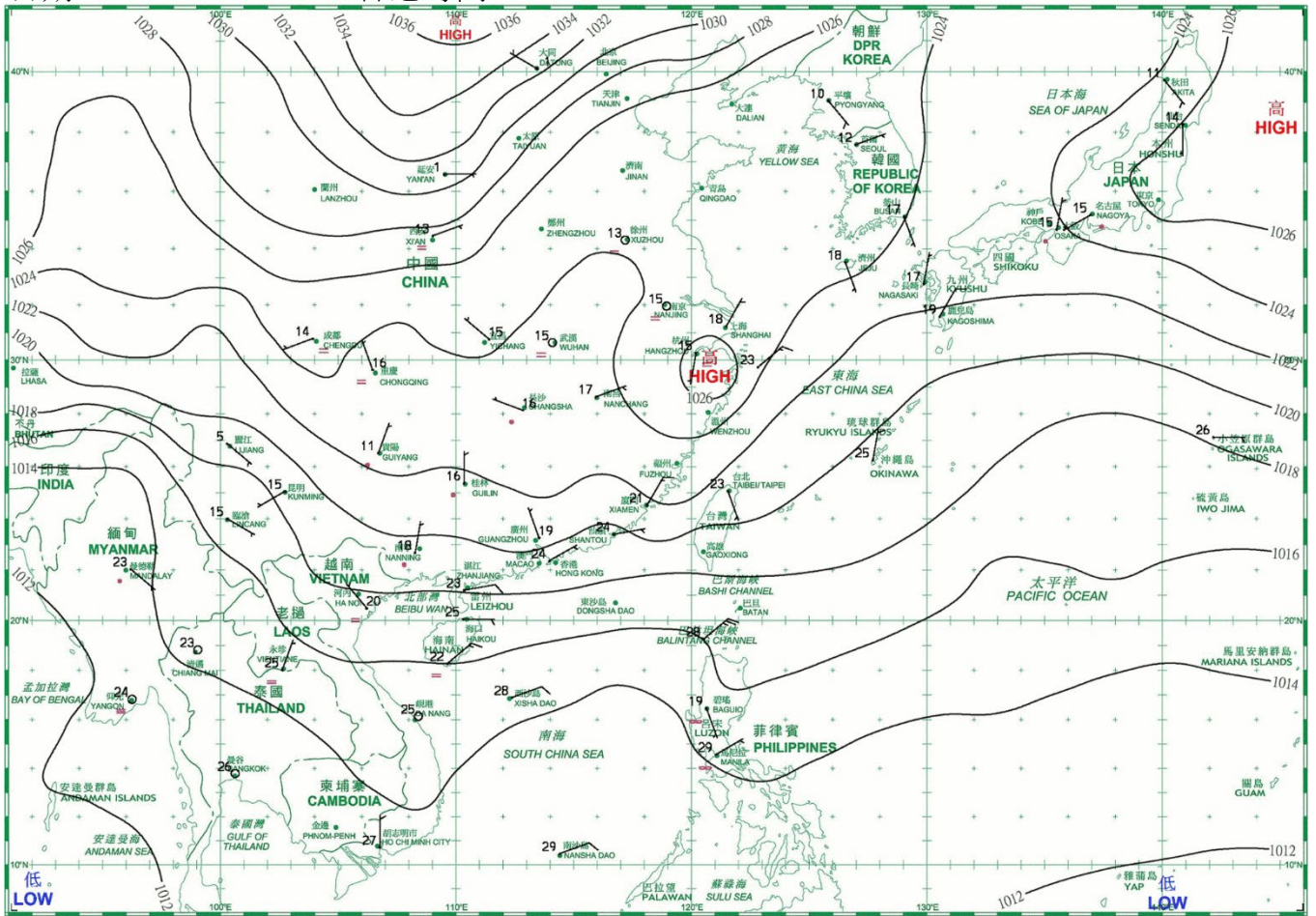
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日期/Date: 30.10.2021 香港時間/HK Time: 08:00



日期/Date: 31.10.2021 香港時間/HK Time: 08:00



4.1.1 二零二一年十月香港氣象觀測摘錄(一)

4.1.1 Extract of Meteorological Observations in Hong Kong (Part 1), October 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				
十月 October	百帕斯卡 hPa	°C	°C	°C	°C	%	%	毫米 mm
1	1009.1	33.1	30.3	28.8	26.1	79	65	Tr
2	1011.0	32.9	30.0	28.3	24.8	74	68	-
3	1012.4	29.9	28.8	27.0	24.9	79	82	1.9
4	1012.5	32.7	29.8	28.1	23.7	71	51	-
5	1011.4	32.8	30.1	28.7	23.7	69	45	Tr
6	1008.5	31.7	29.5	27.6	23.2	69	63	Tr
7	1005.7	30.8	28.8	25.0	23.8	75	88	43.9
8	1004.6	26.8	25.5	24.7	24.4	94	96	329.7
9	1004.9	27.9	26.5	25.3	25.0	91	97	130.3
10	1008.0	27.9	26.8	25.3	24.2	86	89	45.1
11	1005.4	32.7	28.5	26.0	21.8	68	66	-
12	1001.3	26.4	25.1	23.6	18.2	65	84	0.2
13	1002.5	27.4	25.8	22.9	23.9	89	90	57.7
14	1009.2	30.0	27.8	26.1	25.3	86	88	13.3
15	1010.4	27.6	26.2	25.2	23.4	85	92	4.6
16	1013.8	30.3	26.8	24.3	21.4	73	57	Tr
17	1018.0	28.0	24.2	22.2	17.9	68	82	-
18	1018.3	27.7	23.9	20.9	18.1	70	59	-
19	1017.8	28.9	25.7	23.5	20.9	75	39	-
20	1015.9	29.8	26.8	25.0	22.5	78	49	0.1
21	1014.9	28.2	24.2	19.3	20.5	80	76	0.7
22	1019.2	20.5	19.3	18.2	15.1	77	88	Tr
23	1020.1	22.7	20.5	18.3	15.8	75	95	-
24	1018.9	26.6	22.1	19.8	16.1	69	61	-
25	1016.6	27.5	23.1	19.7	16.4	66	49	-
26	1015.8	28.3	25.1	22.7	19.1	69	68	-
27	1016.7	27.0	25.6	24.9	21.1	76	86	Tr
28	1017.9	28.0	25.7	24.2	21.3	77	87	0.1
29	1018.2	27.7	25.5	23.9	20.9	76	84	1.1
30	1018.8	26.2	24.4	23.0	20.8	81	88	2.4
31	1018.7	26.1	24.3	23.4	19.5	75	75	-
平均/總值 Mean/Total	1012.8	28.5	26.0	24.1	21.4	76	74	631.1
氣候平均值 Climatological normal (1991-2020)	1014.0	28.1	25.7	23.9	20.2	73	58	120.3
氣候平均值 Climatological normal (1981-2010)	1014.1	27.8	25.5	23.7	20.2	73	58	100.9
觀測站 Station	天文台 Hong Kong Observatory							

天文台於十月十三日 3 時 4 分錄得本月最低氣壓 997.3 百帕斯卡。

The minimum pressure recorded at the Hong Kong Observatory was 997.3 hectopascals at 0304 HKT on 13 October.

天文台於十月一日 13 時 29 分錄得本月最高氣溫 33.1 °C。

The maximum air temperature recorded at the Hong Kong Observatory was 33.1 °C at 1329 HKT on 1 October.

天文台於十月二十二日 6 時 24 分錄得本月最低氣溫 18.2 °C。

The minimum air temperature recorded at the Hong Kong Observatory was 18.2 °C at 0624 HKT on 22 October.

京士柏於十月十三日 14 時 54 分錄得本月最高1分鐘平均降雨率 190 毫米/小時。

The maximum 1-minute mean rainfall rate recorded at King's Park was 190 millimetres per hour at 1454 HKT on 13 October.

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 二零二一年十月香港氣象觀測摘錄(二)

4.1.2 Extract of Meteorological Observations in Hong Kong (Part 2), October 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
十月 October	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	6.9	14.76	3.7	230	12.0
2	0	8.2	17.59	4.5	110	9.4
3	0	2.9	8.91	3.2	090	25.0
4	0	8.5	19.01	5.3	080	36.1
5	0	10.5	22.39	6.6	080	43.0
6	0	6.9	17.53	5.3	070	48.5
7	0	0.4	8.49	1.4	070	56.0
8	0	-	0.67	0.3	090	53.3
9	0	0.2	3.43	0.1	100	58.8
10	0	-	4.78	1.9	080	46.8
11	0	10.7	21.61	6.9	360	35.1
12	0	0.6	6.20	2.8	360	62.4
13	0	0.2	3.67	0.5	080	61.4
14	0	5.2	13.81	3.0	080	32.5
15	0	-	4.32	1.0	060	26.9
16	0	8.6	17.91	5.9	010	35.5
17	0	8.2	18.85	5.2	010	40.8
18	0	4.6	14.13	2.8	010	25.0
19	0	9.7	18.71	2.9	080	20.5
20	0	10.3	21.10	3.8	090	21.9
21	0	1.8	6.03	3.3	360	20.3
22	0	-	5.63	2.4	360	33.6
23	0	0.8	9.09	2.5	010	24.0
24	0	7.8	17.52	4.2	360	28.1
25	0	7.4	18.18	3.3	360	25.5
26	0	8.6	17.69	3.4	050	26.5
27	0	1.3	8.06	2.9	070	32.0
28	0	4.8	13.24	2.8	080	34.0
29	0	8.4	18.06	4.0	080	32.1
30	1	1.5	9.66	3.3	060	26.4
31	0	4.1	8.89	2.7	070	34.2
平均/總值 Mean/Total	1	149.1	12.58	101.9	080	34.4
氣候平均值 Climatological normal (1991-2020)	116.0 §	197.8	14.52	122.6	080	26.3
氣候平均值 Climatological normal (1981-2010)	116.0 §	193.9	14.05	123.9	080	27.4
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 [^]	

橫瀾島於十月十三日 4 時 37 分錄得本月最高陣風 110 公里/小時，風向 050 度。

The maximum gust peak speed recorded at Waglan Island was 110 kilometres per hour from 050 degrees at 0437 HKT on 13 October.

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。

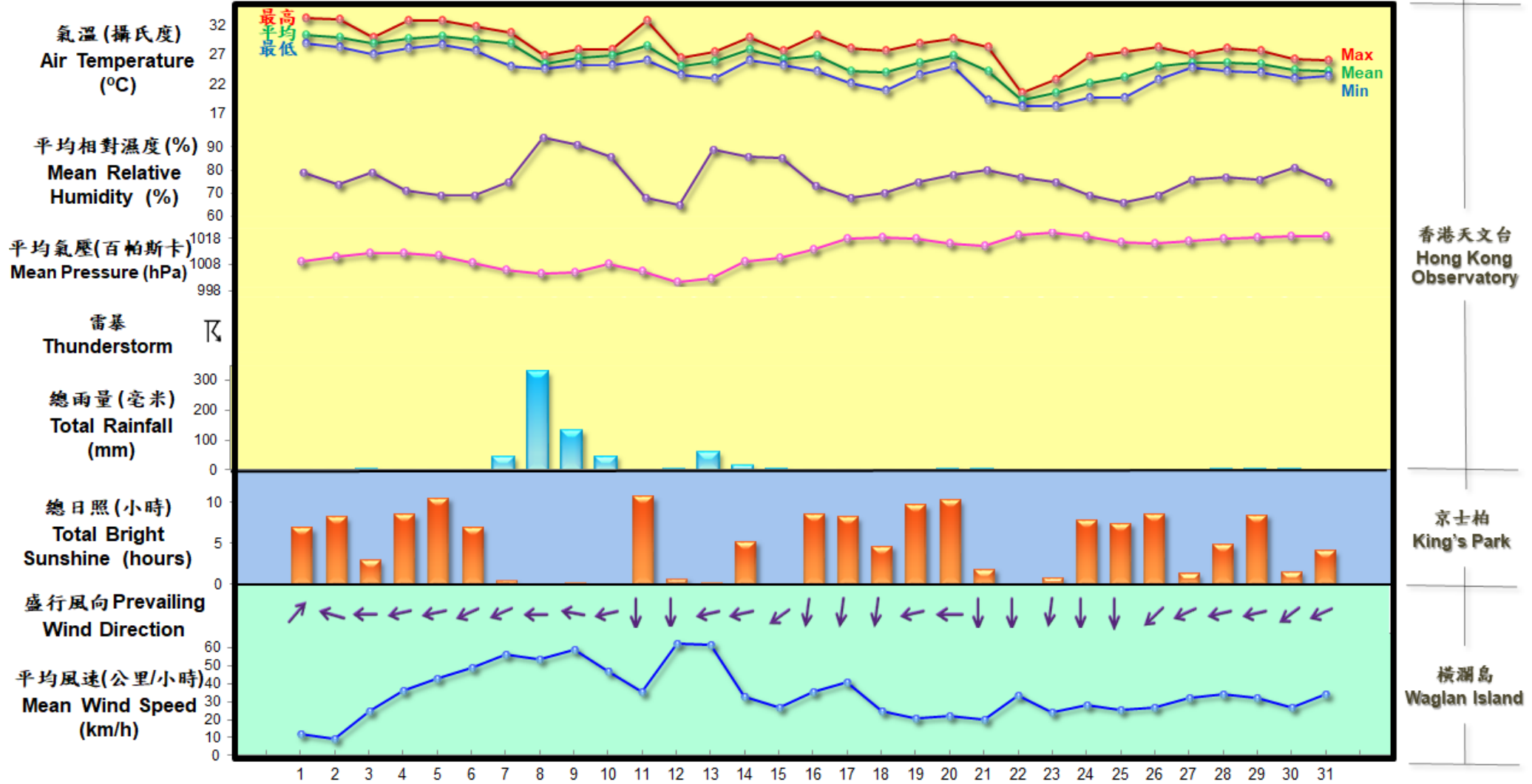
[^] In case the data are not available from Waglan Island, observations of Cheung Chau or other nearby weather stations will be incorporated in computing the Prevailing Wind Direction and Mean Wind Speed.

§ 1997-2020 平均值

§ 1997-2020 Mean value

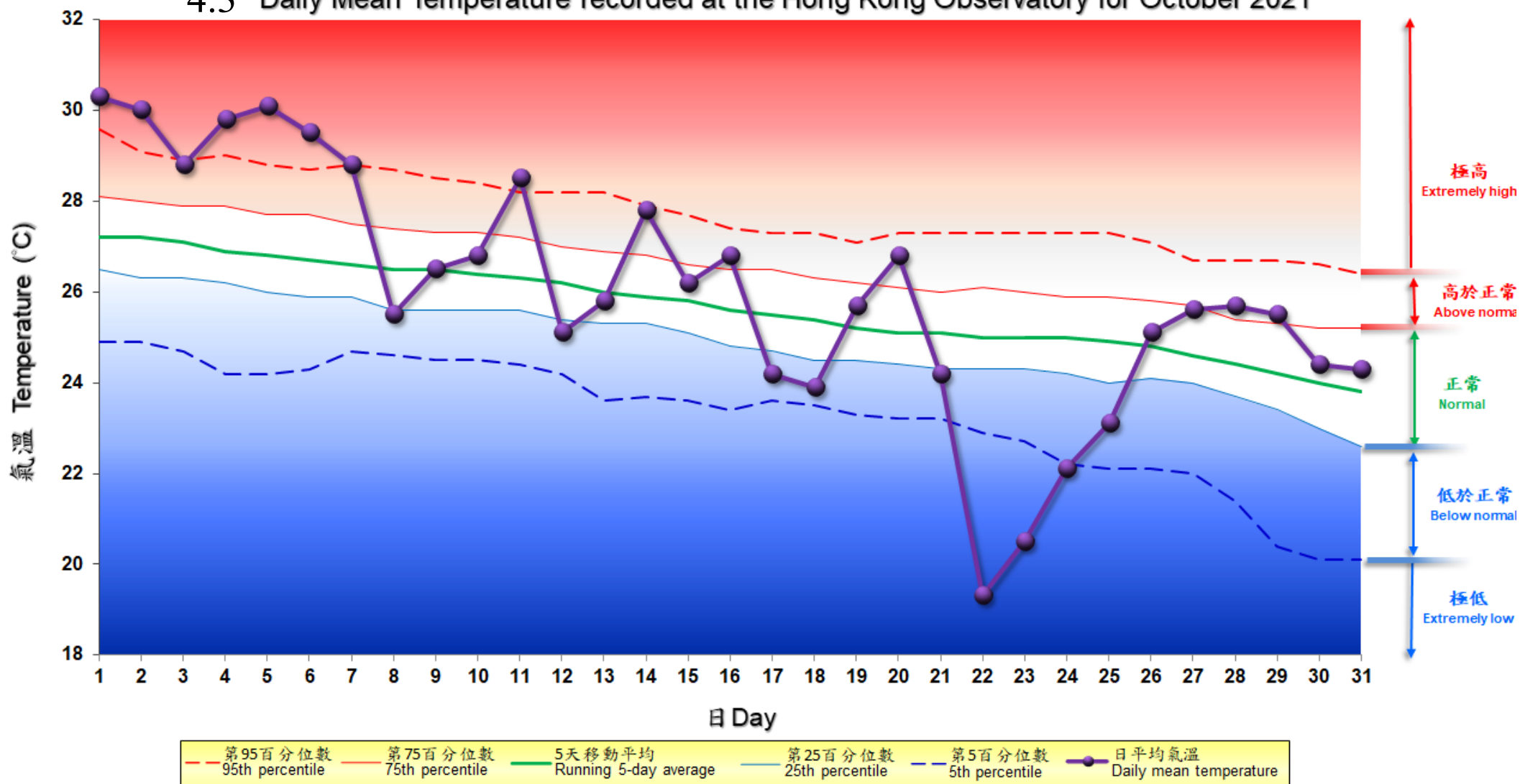
4.2 2021年10月部分香港氣象要素的每日記錄

4.2 Daily Values of Selected Meteorological Elements for Hong Kong, October 2021



4.3 2021年10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 October 2021



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