

每月天氣摘要 二零一九年七月

Monthly Weather Summary July 2019



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1. 二零一九年七月天氣回顧

由於南海北部海水溫度較正常高，二零一九年七月本港遠較正常炎熱。本月平均最低氣溫 27.7 度及平均氣溫 29.5 度，較其各自正常值 26.8 度及 28.8 度高 0.9 度及 0.7 度，分別是有記錄以來七月份的最高及其中一個第六高。另外，本月亦較正常多雲，平均雲量為百分之 79，較正常值百分之 69 多約百分之 10，是有記錄以來七月份的其中一個第五高。而本月總日照時間只有 150.5 小時，較正常值 212.0 小時少約百分之 29，是有記錄以來七月份的第七低。本月雨量為 328.5 毫米，較正常值 376.5 毫米少約百分之 13。本年首七個月的累積雨量為 1437.9 毫米，稍低於同期正常值 1473.3 毫米。

受位於南海北部的一個低壓區影響，七月一日本港部分時間有陽光，亦有驟雨及局部地區雷暴。與此同時，該低壓區於七月二日發展成一個熱帶低氣壓並命名為木恩。七月三日木恩大致向西移動及橫過海南島，移入北部灣。七月四日木恩登陸越南北部，其後移入內陸並減弱為低壓區。受木恩的相關雨帶影響，七月二日至四日本港多雲，間中有大驟雨及雷暴，這三天大部分地區錄得超過 100 毫米雨量。

在西南氣流影響下，七月五日至九日本港天氣夾雜著陽光及驟雨。受一道低壓槽影響，七月十日及十一日本港驟雨較多及有幾陣雷暴，其間大嶼山及新界部分地區錄得超過 60 毫米雨量。

受中國東南部的高空反氣旋所支配，除有幾陣驟雨外，七月十二日至十八日本港轉為天晴，天氣漸轉酷熱。在陽光充沛及微風的情況下，七月十八日天文台氣溫上升至全月最高的 35.0 度，悶熱的天氣亦在當天黃昏時分觸發雷雨。七月十九日早上天氣持續酷熱及短暫時間有陽光，高溫天氣在下午再度觸發大驟雨及狂風雷暴，多處地區錄得超過 30 毫米雨量，新界西部的雨量更超過 50 毫米。七月二十日及二十一日一道低壓槽持續為本港帶來驟雨天氣，局部地區更出現大雨，其間北區、西貢及南區錄得超過 40 毫米雨量，而沙頭角的雨量更超過 100 毫米。

受高空擾動影響，七月二十二日至二十四日本港天氣夾雜著陽光及驟雨。隨著中國東南部的高空反氣旋增強，其後三天本港天氣轉為普遍天晴及酷熱，但局部地區仍有驟雨。當高空反氣旋減弱，七月二十八日及二十九日本港大致多雲，有幾陣驟雨及雷暴。與此同時，南海北部的一個低壓區於七月三十日發展成一個熱帶氣旋，並命名為韋帕及移向海南島，本月最後兩天本港天氣逐漸轉差，風力增強，間中有狂風大驟雨及雷暴。與韋帕相關的外圍雨帶於七月三十一日為本港大部分地區帶來超過 100 毫米雨量，而將軍澳、黃大仙及大圍的雨量更超過 200 毫米。七月三十一日大雨期間，天文台氣溫下降至全月最低的 24.5 度。

本月有四個熱帶氣旋影響南海及北太平洋西部。

本月有四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



1. The Weather of July 2019

July 2019 was much hotter than usual in Hong Kong, mainly attributing to the warmer than normal sea surface temperature over the northern part of the South China Sea. The monthly mean minimum temperature of 27.7 degrees was 0.9 degree above the normal figure of 26.8 degrees, the highest on record for July. The monthly mean temperature of 29.5 degrees was 0.7 degree above the normal figure of 28.8 degrees, one of the sixth highest on record for July. The month was also cloudier than usual with the mean amount of cloud of 79%, about 10% above the normal figure of 69% and one of the fifth highest on record for July. The duration of bright sunshine in the month was only 150.5 hours, about 29% below the normal figure of 212.0 hours and the seventh lowest on record for July. The monthly rainfall was 328.5 millimetres, about 13 percent below the normal of 376.5 millimetres. The accumulated rainfall recorded in the first seven months of the year was 1437.9 millimetres, slightly lower than the normal figure of 1473.3 millimetres for the same period.

Affected by an area of low pressure over the northern part of the South China Sea, there were sunny periods and showers as well as isolated thunderstorms on the first day of the month. Meanwhile, the area of low pressure developed into a tropical depression and was named Mun on 2 July. It moved generally westward across Hainan Island and entered Beibu Wan on 3 July. Mun made landfall over the northern part of Vietnam and weakened into an area of low pressure over inland on 4 July. Under the influence of the rainbands associated with Mun, it was cloudy with occasional heavy showers and thunderstorms on 2 – 4 July. More than 100 millimetres of rainfall were recorded over most parts of the territory in these three days.

With the prevalence of a southwesterly airstream, the weather of Hong Kong was a mixture of sunshine and showers on 5 – 9 July. Under the influence of a trough of low pressure, local weather became showery with a few thunderstorms on 10 – 11 July. More than 60 millimetres of rainfall were recorded over Lantau Island and parts of the New Territories in these two days.

Dominated by an anticyclone aloft southeastern China, apart from a few showers, local weather turned fine and progressively became very hot from 12 – 18 July. With plenty of

sunshine and light winds, the maximum temperature at the Observatory soared to 35.0 degrees on 18 July, the highest of the month. The oppressive heat also triggered thundery showers in that evening. While the weather remained very hot with sunny intervals on the morning of 19 July, high temperature again triggered heavy showers and squally thunderstorms in that afternoon. More than 30 millimetres of rainfall were recorded over many places, and rainfall even exceeded 50 millimetres over the western part of the New Territories. A trough of low pressure continued to bring showery weather with localized heavy rain to Hong Kong on 20 – 21 July. During these two days, more than 40 millimetres of rainfall were recorded over North District, Sai Kung and Southern District, rainfall even exceeded 100 millimetres over Sha Tau Kok.

Affected by an upper-air disturbance, the weather of Hong Kong was a mixture of sunshine and showers on 22 – 24 July. With the strengthening of the anticyclone aloft southeastern China, local weather became generally fine and very hot apart from isolated showers in the next three days. As the anticyclone aloft weakened, it was mainly cloudy with a few showers and thunderstorms on 28 – 29 July. Meanwhile, an area of low pressure developed into a tropical cyclone over the northern part of the South China Sea on 30 July and was named Wipha. With Wipha moving towards Hainan Island, local weather deteriorated gradually and became windy with outbreaks of squally heavy showers and thunderstorms on the last two days of the month. The outer rainbands associated with Wipha brought more than 100 millimetres of rainfall to most parts of the territory on 31 July and the rainfall over Tseung Kwan O, Wong Tai Sin and Tai Wai even exceeded 200 millimetres. In the midst of the downpour, the temperature at the Observatory dropped to a minimum of 24.5 degrees on 31 July, the lowest of the month.

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

During the month, four aircraft 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 二零一九年七月發出的警告及信號
Table 1.1 Warnings and Signals issued in July 2019

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
木恩 MUN	1	2/7	1615	3/7	0540
韋帕 WIPHA	1 3 8NE 3	30/7 30/7 31/7 31/7	1540 2115 1340 2340	30/7 31/7 31/7 1/8	2115 1340 2340 1920

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	3/7	0045	3/7	0205
黃色 Amber	19/7	1405	19/7	1515
黃色 Amber	19/7	1845	19/7	1945
黃色 Amber	20/7	1210	20/7	1330
黃色 Amber	31/7	1155	31/7	1435
黃色 Amber	31/7	1730	31/7	2000
紅色 Red	31/7	2000	31/7	2130

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
31/7	2040	2/8	0915

雷暴警告

Thunderstorm Warning

開始時間 Beginning Time		終結時間 Ending Time		開始時間 Beginning Time		終結時間 Ending Time	
日/月 day/month	時 hour	日/月 day/month	時 hour	日/月 day/month	時 hour	日/月 day/month	時 hour
1/7	0225	1/7	0600	1/7	0940	1/7	1045
1/7	1245	1/7	1345	2/7	0245	2/7	0415
2/7	1023	2/7	1120	2/7	2110	3/7	1745
4/7	0050	4/7	0300	4/7	0325	4/7	0640
10/7	0215	10/7	0415	10/7	0910	10/7	1115
10/7	1155	10/7	1800	11/7	0615	11/7	0715
11/7	1425	11/7	2130	18/7	1405	18/7	1600
18/7	1735	18/7	2045	19/7	1220	19/7	1600
19/7	1755	19/7	2040	20/7	1035	20/7	1500
20/7	1545	20/7	1930	21/7	0905	21/7	1345
22/7	1015	22/7	1500	22/7	1738	23/7	0020
23/7	0420	23/7	0735	28/7	0715	28/7	1100
28/7	1330	28/7	1600	29/7	0500	29/7	1030
29/7	1420	29/7	1500	29/7	1725	29/7	1830
30/7	0525	30/7	1115	30/7	1925	30/7	2030
30/7	2125	31/7	0200	31/7	0345	31/7	1500
31/7	1845	31/7	2245				

酷熱天氣警告

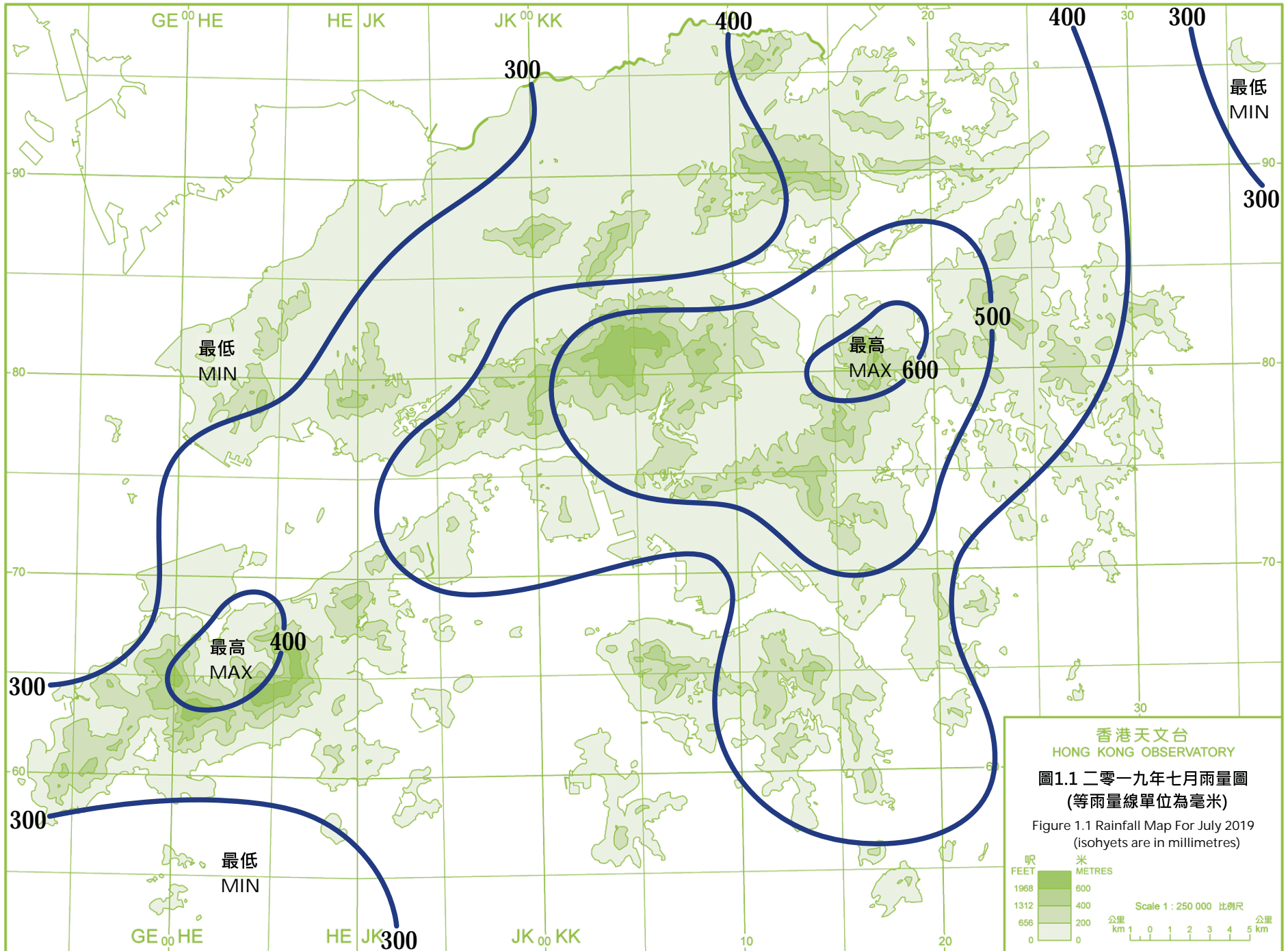
Very Hot Weather Warning

開始時間 Beginning Time		終結時間 Ending Time	
日/月 day/month	時 hour	日/月 day/month	時 hour
1/7	1350	1/7	2015
7/7	1220	7/7	1610
13/7	0645	18/7	1945
19/7	1045	19/7	1345
20/7	0950	20/7	1205
25/7	0700	27/7	1900

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
31/7	2025	31/7	2400



2.1 二零一九年七月熱帶氣旋概述

二零一九年七月在北太平洋西部及南海區域出現了四個熱帶氣旋，當中木恩及韋帕引致香港天文台需要發出熱帶氣旋警告信號，而七月三十一日韋帕影響香港期間天文台更需要發出今年首個八號烈風或暴風信號。

熱帶低氣壓木恩於七月二日下午在海口之東南約 240 公里的南海北部上形成，大致向西移動。木恩於七月三日早上橫過海南島後，進入北部灣並稍為增強，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。其後木恩採取西北路徑橫過北部灣，七月四日早上在越南北部減弱為一個低壓區。

根據報章報導，木恩對海南島海陸空交通造成嚴重影響。有關木恩的詳細資料及對香港的影響，請參閱它的熱帶氣旋報告。

熱帶低氣壓丹娜絲於七月十五日下午在馬尼拉之東北偏東約 1120 公里的北太平洋西部上形成，初時向西移動，七月十七日轉向東北偏北移動。丹娜絲於七月十八日上午增強為熱帶風暴，翌日達到其最高強度，中心附近最高持續風速估計為每小時 85 公里。七月二十日丹娜絲繼續採取東北偏北路徑橫過朝鮮半島，並逐漸減弱，最後於七月二十一日在朝鮮半島以東的海域演變為一股溫帶氣旋。

根據報章報導，與丹娜絲相關的暴雨在菲律賓造成最少四人死亡。

熱帶低氣壓百合於七月二十四日上午在硫黃島之西南偏西約 430 公里的北太平洋西部上形成，大致向北移動。七月二十六日早上百合增強為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 65 公里。其後百合逐漸減弱，七月二十七日下午在日本本州減弱為一個低壓區。

熱帶低氣壓韋帕於七月三十日下午在香港以南約 510 公里的南海北部上形成，晚間至翌日早上向北緩慢移動。韋帕於七月三十一日早上增強為熱帶風暴，其後達到最高強度時，中心附近最高持續風速估計為每小時 85 公里。韋帕於當日下午開始加速向西北偏西移向海南島。有關韋帕的詳細資料及對香港的影響，請參閱它的熱帶氣旋報告。



2.1 Overview of Tropical Cyclones in July 2019

Four tropical cyclones occurred over the western North Pacific and the South China Sea in July 2019, of which Mun and Wipha necessitated the issuance of the tropical cyclone

warning signals by the Observatory. The first No. 8 Gale or Storm Signal in the year was issued on 31 July during the passage of Wipha.

Mun formed as a tropical depression over the northern part of the South China Sea about 240 km southeast of Haikou on the afternoon of 2 July and moved generally westwards. After moving across Hainan Island on the morning of 3 July, Mun entered Beibu Wan and intensified slightly, reaching its peak intensity with an estimated sustained wind of 55 km/h near its centre. Moving northwestwards across Beibu Wan, Mun weakened into an area of low pressure over the northern part of Vietnam on the morning of 4 July.

According to press reports, Mun disrupted sea, land, air transportation in Hainan Island. For detailed information of Mun including its impact to Hong Kong, please refer to the Tropical Cyclone Report of Mun.

Danas formed as a tropical depression over the western North Pacific about 1120 km east-northeast of Manila and moved westwards at first. It turned to move north-northeastwards on 17 July. Danas intensified into a tropical storm on the morning of 18 July, reaching its peak intensity next day with an estimated sustained wind of 85 km/h near its centre. It continued to track north-northeastwards across the Korean Peninsula on 20 July and weakened gradually. Danas finally evolved into an extratropical cyclone over the sea areas east of the Korean Peninsula on 21 July.

According to press reports, the torrential rain associated with Danas caused at least four deaths in the Philippines.

Nari formed as a tropical depression over the western North Pacific about 430 km west-southwest of Iwo Jima on the morning of 24 July and moved generally northwards. It intensified into a tropical storm on the morning of 26 July, reaching its peak intensity with an estimated sustained wind of 65 km/h near its centre. Nari then weakened gradually and degenerated into an area of low pressure over Honshu of Japan on the afternoon of 27 July.

Wipha formed as a tropical depression over the northern part of the South China Sea about 510 km south of Hong Kong on the afternoon of 30 July. It drifted northwards slowly during that night and next morning. Wipha intensified into a tropical storm on the morning of 31 July later, reaching its peak intensity with an estimated maximum sustained wind of 85 km/h near its centre. It started to pick up speed to move west-northwest towards Hainan Island in the afternoon. For detailed information of Wipha including its impact to Hong Kong, please refer to the Tropical Cyclone Report of Wipha.

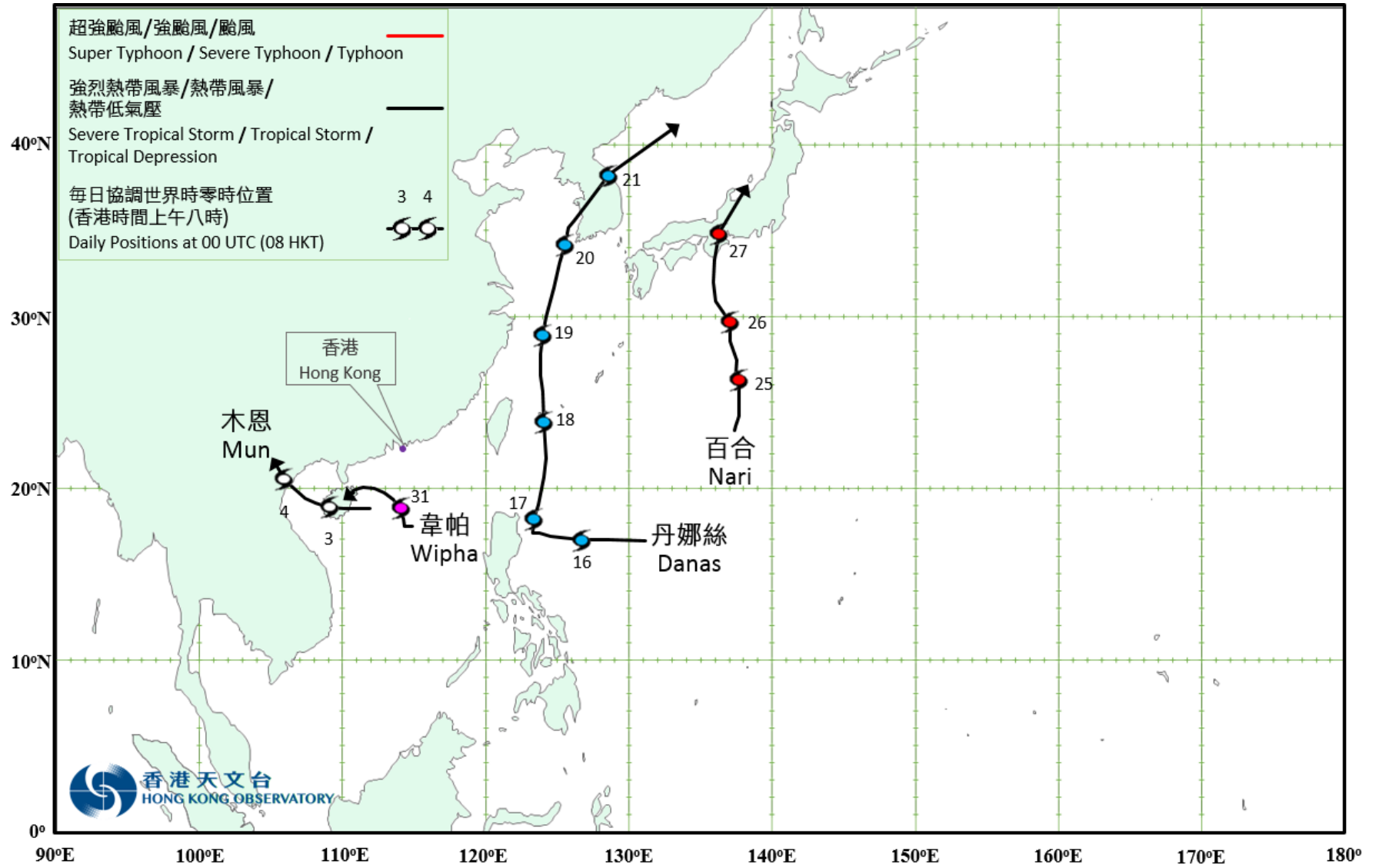


圖 2.1 二零一九年七月的熱帶氣旋路徑圖
Fig. 2.1 Tracks of tropical cyclones in July 2019

2.2 熱帶低氣壓木恩 (1904)

二零一九年七月二日至四日

木恩是香港天文台在二零一九年首個需要發出熱帶氣旋警告信號的熱帶氣旋。

熱帶低氣壓木恩於七月二日下午在海口之東南約 240 公里的南海北部上形成，大致向西移動。木恩於七月三日早上橫過海南島後，進入北部灣並稍為增強，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。其後木恩採取西北路徑橫過北部灣，七月四日早上在越南北部減弱為一個低壓區。

七月二日木恩於香港之西南偏南約 440 公里形成後，天文台於下午 4 時 15 分發出一號戒備信號，當時亦是木恩最接近香港的時候。天文台總部於當日下午 4 時 39 分錄得最低瞬時海平面氣壓 1000.3 百帕斯卡。晚間本港普遍吹和緩至清勁東至東南風，離岸及高地間中吹強風。隨著木恩對本港的威脅減退，天文台於七月三日上午 5 時 40 分取消所有熱帶氣旋警告訊號。

木恩影響香港期間，尖鼻咀錄得最高潮位(海圖基準面以上) 2.07 米及錄得最大風暴潮(天文潮高度以上) 0.38 米。

在木恩相關的雨帶影響下，七月二日及三日本港間中有狂風大驟雨及雷暴。這兩天本港普遍錄得超過 80 毫米雨量，東部地區及大嶼山的雨量更錄得超過 120 毫米。

木恩並沒有對香港造成嚴重破壞。根據報章報導，木恩對海南島海陸空交通造成嚴重影響。

2.2 Tropical Depression Mun (1904) 2 to 4 July 2019

Mun was the first tropical cyclone necessitating the issuance of tropical cyclone warning signal by the Hong Kong Observatory in 2019.

Mun formed as a tropical depression over the northern part of the South China Sea about 240 km southeast of Haikou on the afternoon of 2 July and moved generally westward. After moving across Hainan Island on the morning of 3 July, Mun entered Beibu Wan and slightly intensified, reaching its peak intensity with an estimated sustained wind of 55 km/h near its centre. Moving northwestwards across Beibu Wan, Mun weakened into an area of low pressure over the northern part of Vietnam on the morning of 4 July.

After the formation of Mun about 440 km south-southwest of Hong Kong on 2 July, the Hong Kong Observatory issued the Standby Signal No. 1 at 4:15 p.m. It was also closest to Hong Kong at that time. At the Observatory Headquarters, the lowest instantaneous mean sea-level pressure of 1000.3 hPa was recorded at 4:39 p.m. that day. Local winds were generally moderate to fresh east to southeasterlies during that night, occasionally strong offshore and on high ground. As the threat of Mun to Hong Kong diminished, all tropical cyclone warning signals were cancelled at 5:40 a.m. on 3 July.

Under the influence of Mun, a maximum sea level (above chart datum) of 2.07 m and a maximum storm surge of 0.38 m (above astronomical tide) were recorded at Tsim Bei Tsui.

Under the influence of rainbands associated with Mun, there were occasional heavy squally showers and thunderstorms on 2 and 3 July. More than 80 millimetres of rainfall were generally recorded over the territory during these two days, and rainfall even exceeded 120 millimetres over Lantau Island and the eastern part of Hong Kong.

Mun did not cause any significant damage in Hong Kong. According to press report, Mun disrupted sea, land, air transportation in Hainan Island.

表 2.2.1 在木恩影響下，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 Mun were in force

站 Station (https://www.hko.gov.hk/tc/informtc/station2019.htm , https://www.hko.gov.hk/en/informtc/station2019.htm)		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
黃麻角(赤柱)	Bluff Head (Stanley)	南	S	59	3/7	04:22	東	E	23	2/7	17:00
中環碼頭	Central Pier	東	E	41	2/7	17:56	東南偏東	ESE	23	2/7	17:00
長洲	Cheung Chau	東南偏東	ESE	83	2/7	23:59	東	E	34	2/7	17:00
長洲泳灘	Cheung Chau Beach	東	E	72	2/7	23:59	東	E	38	2/7	17:00
青洲	Green Island	東南偏南	SSE	65	3/7	04:36	東北偏東	ENE	41	2/7	17:00
							東北偏東	ENE	41	2/7	19:00
香港國際機場	Hong Kong International Airport	東南偏東	ESE	43	2/7	17:16	東	E	31	2/7	17:00
啟德	Kai Tak	東南偏東	ESE	47	2/7	21:43	東	E	22	2/7	17:00
京士柏	King's Park	東	E	41	2/7	21:47	東	E	16	2/7	17:00
南丫島	Lamma Island	東南偏東	ESE	47	3/7	04:28	東	E	25	2/7	17:00
流浮山	Lau Fau Shan	東北偏東	ENE	41	2/7	19:10	東北偏東	ENE	25	2/7	20:00
北角	North Point	東	E	45	2/7	21:42	東	E	22	2/7	17:00
坪洲	Peng Chau	東	E	47	2/7	16:25	東	E	34	2/7	18:00
平洲	Ping Chau	東南	SE	25	2/7	22:15	東	E	9	2/7	22:00
西貢	Sai Kung	東南	SE	47	2/7	21:52	東北偏東	ENE	13	2/7	19:00
沙洲	Sha Chau	東南	SE	56	3/7	00:28	東南	SE	31	2/7	18:00
沙螺灣	Sha Lo Wan	東北偏東	ENE	47	2/7	17:04	東	E	20	2/7	17:00
沙田	Sha Tin	東南偏東	ESE	51	3/7	04:55	東	E	12	2/7	17:00
石崗	Shek Kong	東	E	40	2/7	19:39	東	E	23	2/7	18:00
九龍天星碼頭	Star Ferry (Kowloon)	東	E	43	2/7	21:44	東	E	22	2/7	17:00
打鼓嶺	Ta Kwu Ling	東南偏東	ESE	41	2/7	17:08	東	E	20	2/7	18:00
大美督	Tai Mei Tuk	東	E	56	2/7	22:11	東北偏東	ENE	27	2/7	20:00
大帽山	Tai Mo Shan	東南偏東	ESE	81	2/7	16:15	東	E	62	2/7	17:00
		東	E	81	2/7	16:53					
大埔滘	Tai Po Kau	東南偏東	ESE	54	2/7	22:14	東	E	22	2/7	17:00
塔門東	Tap Mun East	東南偏東	ESE	56	2/7	21:57	東南偏東	ESE	40	2/7	17:00
大老山	Tate's Cairn	南	S	70	3/7	04:46	東	E	36	2/7	17:00
將軍澳	Tseung Kwan O	西南	SW	47	3/7	04:43	北	N	9	2/7	19:00
青衣島蜆殼油庫	Tsing Yi Shell Oil Depot	東	E	45	2/7	22:02	東南偏東	ESE	14	2/7	18:00
							東	E	14	2/7	19:00
							東	E	14	3/7	01:00
屯門政府合署	Tuen Mun Government Offices	東南偏南	SSE	43	3/7	00:27	東南偏南	SSE	12	2/7	23:00
橫瀾島	Waglan Island	南	S	72	3/7	04:26	東	E	45	2/7	17:00
濕地公園	Wetland Park	東南	SE	27	2/7	16:55	東南偏東	ESE	13	2/7	17:00
黃竹坑	Wong Chuk Hang	西	W	45	3/7	04:31	東	E	19	2/7	17:00

昂坪 - 沒有資料 Ngong Ping - data not available

表 2.2.2 木恩影響香港期間，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 Mun

站 (參閱圖 2.2.2) Station (See Fig. 2.2.2)			七月二日 2 Jul	七月三日 3 Jul	總雨量(毫米) Total rainfall (mm)
香港天文台 Hong Kong Observatory (HKO)			19.1	79.1	98.2
香港國際機場 Hong Kong International Airport (HKA)			19.4	86.8	106.2
長洲 Cheung Chau (CCH)			25.0	59.5	84.5
H23	香港仔 Aberdeen		26.5	69.0	95.5
N05	粉嶺 Fanling		5.0	55.0	60.0
N13	糧船灣 High Island		16.5	72.0	88.5
K04	佐敦谷 Jordan Valley		31.5	97.0	128.5
N06	葵涌 Kwai Chung		15.5	78.0	93.5
H12	半山區 Mid Levels		24.5	71.5	96.0
N09	沙田 Sha Tin		15.0	93.0	108.0
H19	筲箕灣 Shau Kei Wan		36.5	102.5	139.0
SEK	石崗 Shek Kong		4.5	58.5	63.0
K06	蘇屋邨 So Uk Estate		19.5	75.5	95.0
R31	大美督 Tai Mei Tuk		10.0	95.0	105.0
R21	踏石角 Tap Shek Kok		[10.0]	[94.5]	[104.5]
N17	東涌 Tung Chung		31.5	128.0	159.5
TMR	屯門水庫 Tuen Mun Reservoir		10.5	88.3	98.8

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

表 2.2.3 木恩影響香港期間，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 Mun

站 Station (https://www.hko.gov.hk/tc/informtc/station2019.htm , https://www.hko.gov.hk/en/informtc/station2019.htm)		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	1.61	2/7	22:37	0.22	2/7	23:40
石壁	Shek Pik	1.71	2/7	22:13	0.30	2/7	19:09
大廟灣	Tai Miu Wan	1.60	2/7	22:20	0.28	2/7	22:13
大埔滘	Tai Po Kau	1.67	2/7	22:23	0.35	2/7	17:53
尖鼻咀	Tsim Bei Tsui	2.07	2/7	23:35	0.38	2/7	23:38

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

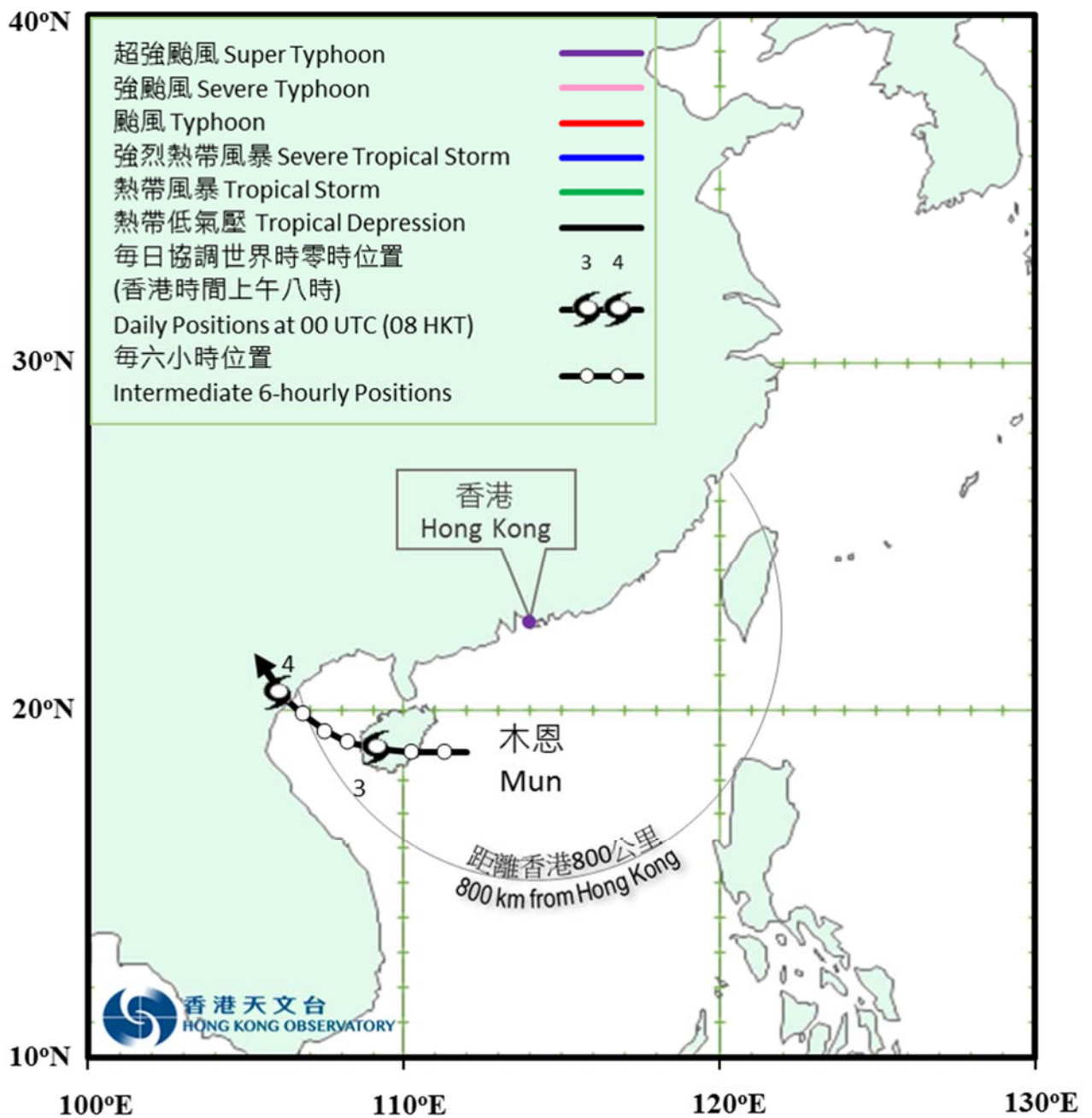


圖 2.2.1 二零一九年七月二日至四日木恩的路徑圖。

Figure 2.2.1 Track of Mun: 2 – 4 July 2019.

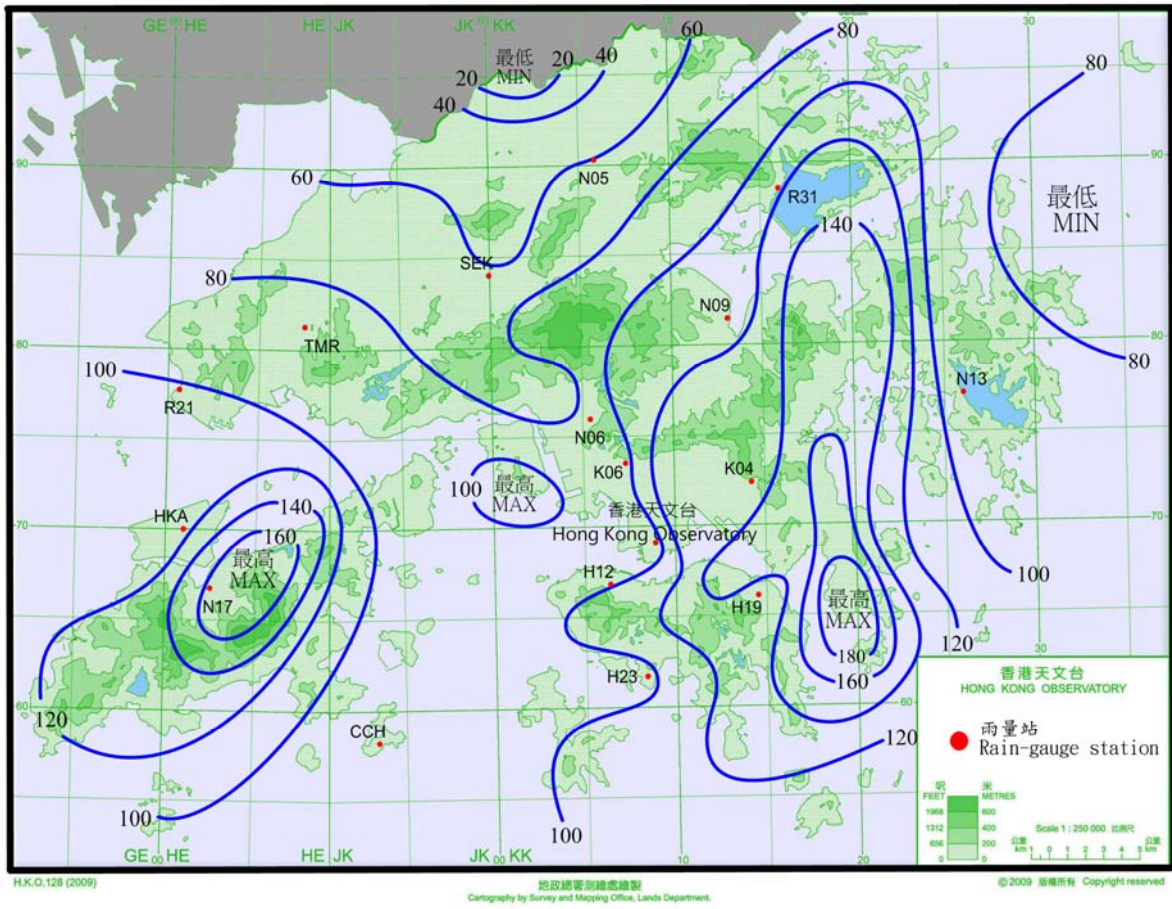


圖 2.2.2 二零一九年七月二日至三日的雨量分佈(等雨量線單位為毫米)。
 Figure 2.2.2 Rainfall distribution on 2 - 3 July 2019 (isohyets in millimetres).

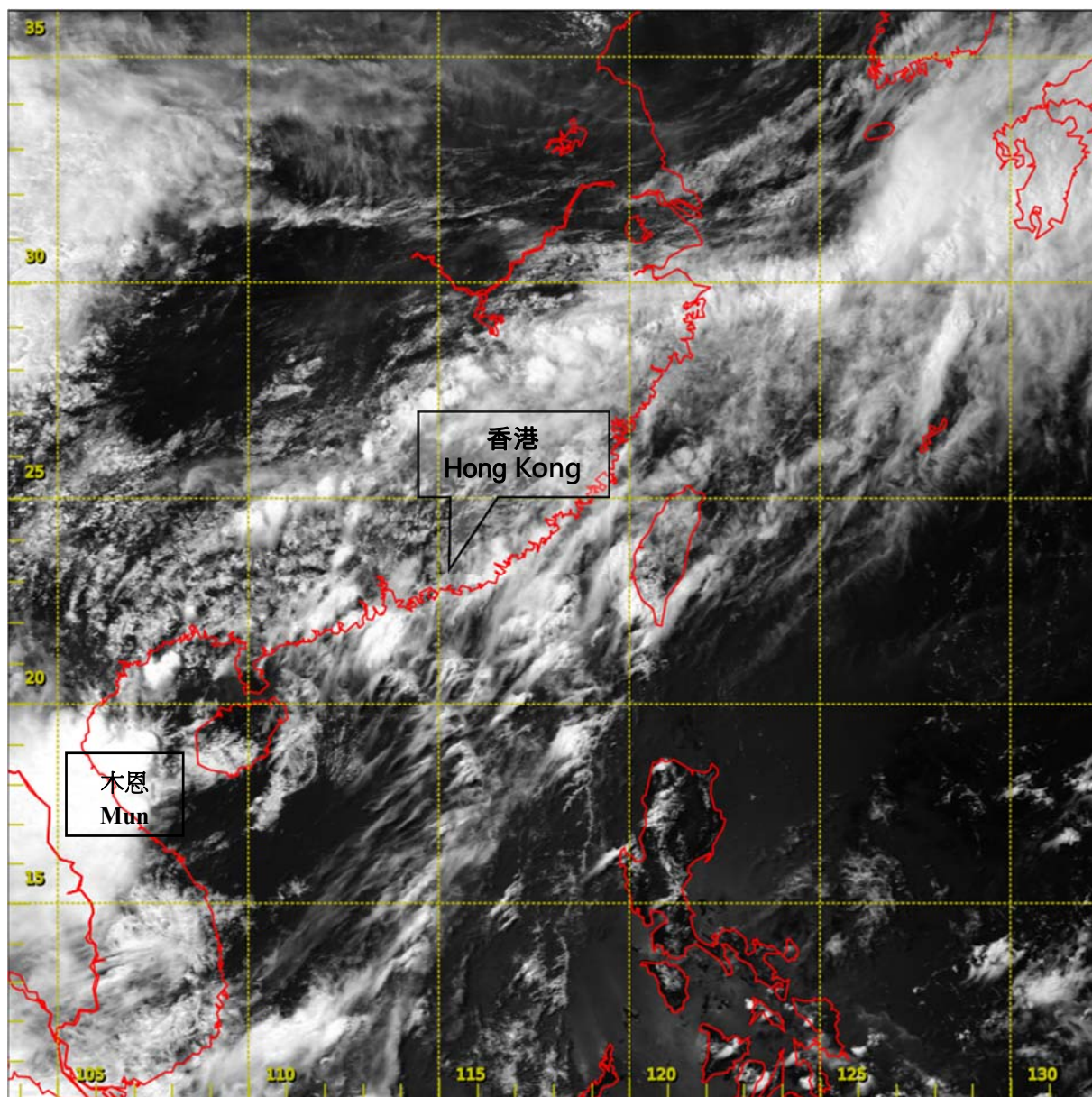


圖 2.2.3 二零一九年七月三日下午 2 時左右的可見光衛星圖片，當時木恩達到其最高強度，中心附近最高持續風速估計為每小時 55 公里。

Figure 2.2.3 Visible satellite imagery around 2 p.m. on 3 July 2019, when Mun was at peak intensity with estimated maximum sustained winds of 55 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 (JMA).]

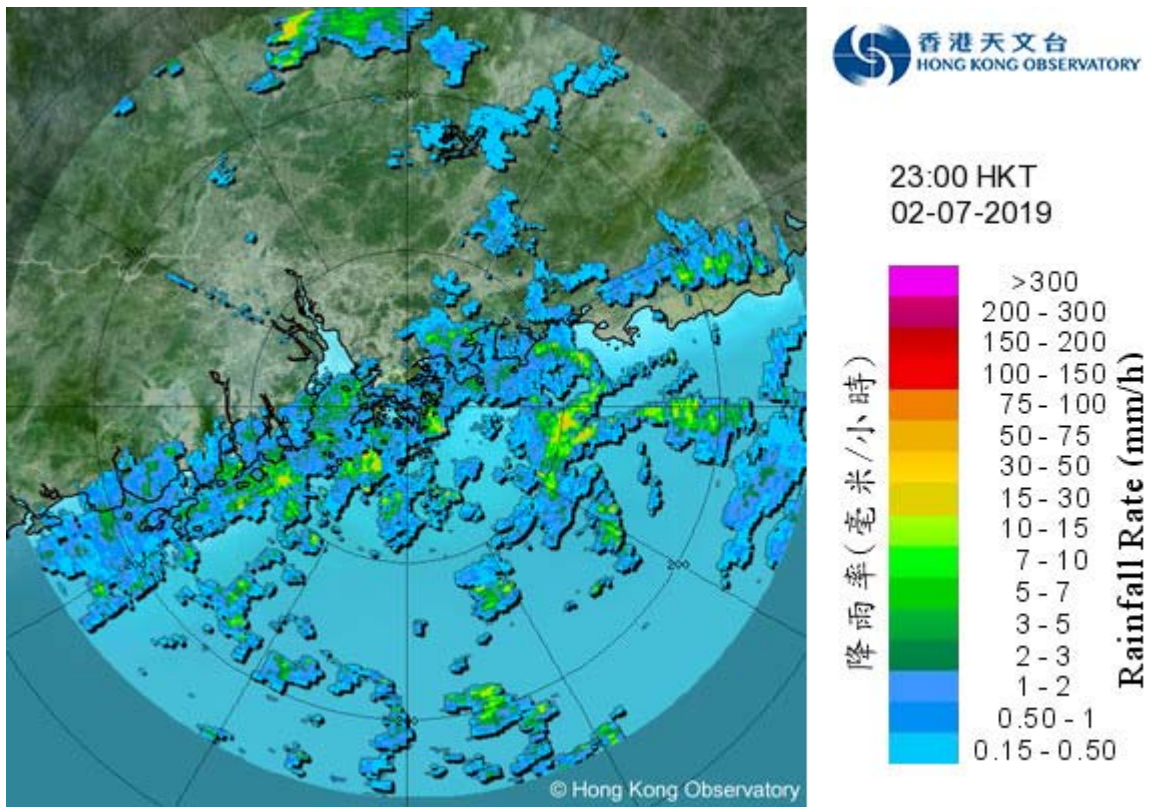
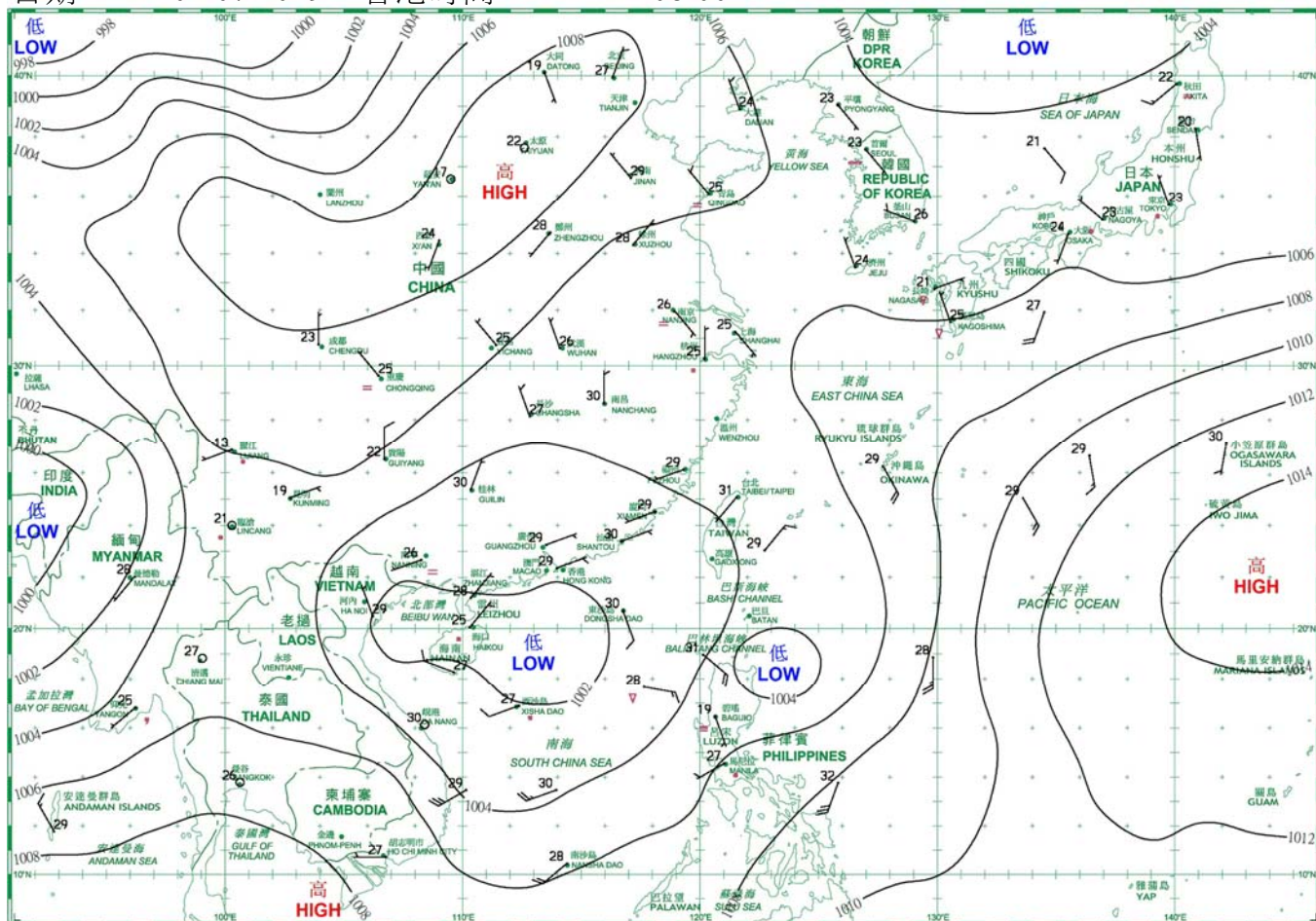


圖 2.2.4 二零一九年七月二日晚上 11 時的雷達回波圖像，當時與木恩相關的雨帶正影響廣東沿岸及南海北部。

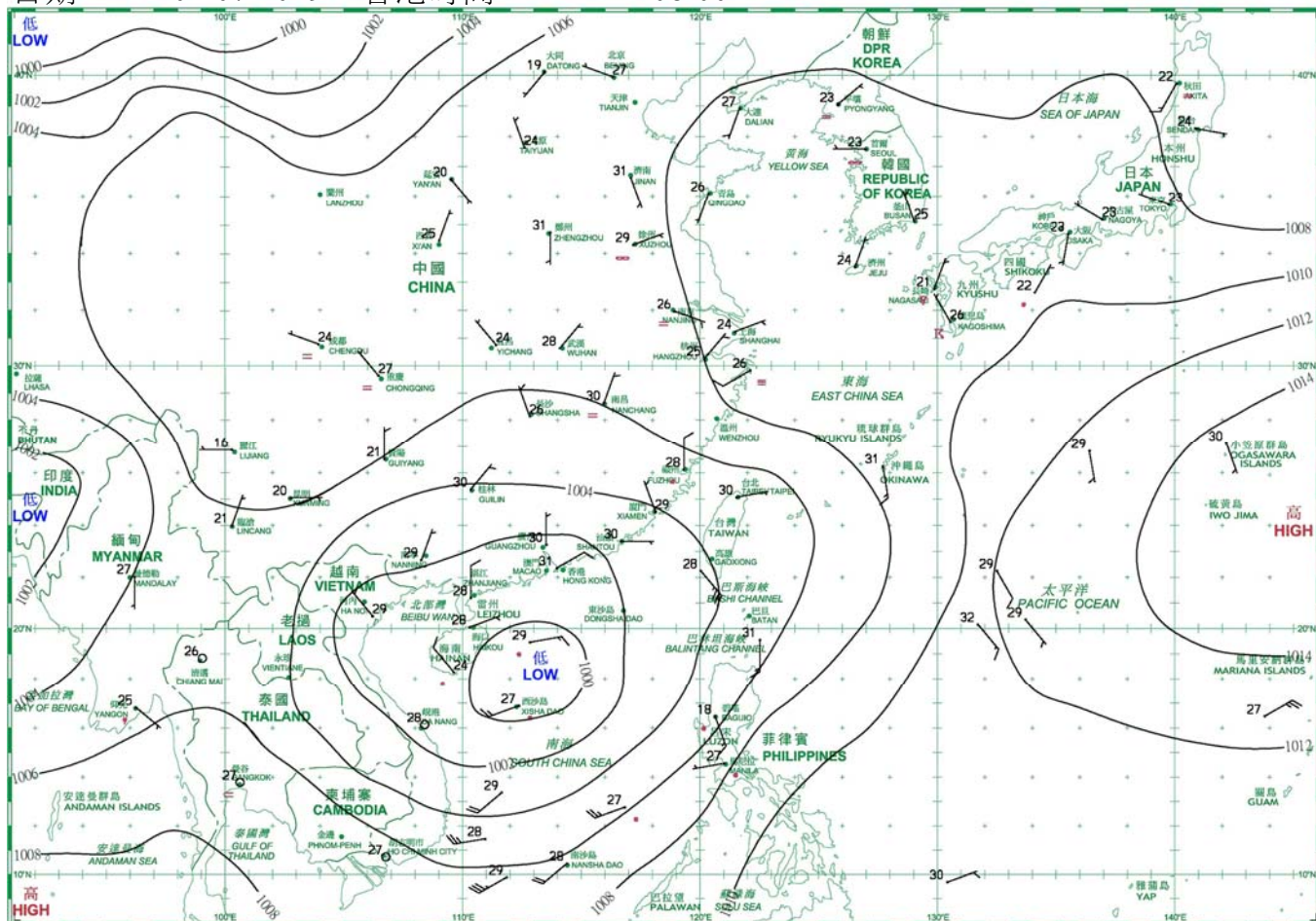
Figure 2.2.4 Image of radar echoes at 11:00 p.m. on 2 July 2019. The rainbands associated with Mun were affecting the coast of Guangdong and the northern part of the South China Sea at that time.

3. 二零一九年七月每日天氣圖 Daily Weather Maps for July 2019

日期/Date: 01.07.2019 香港時間/HK Time: 08:00

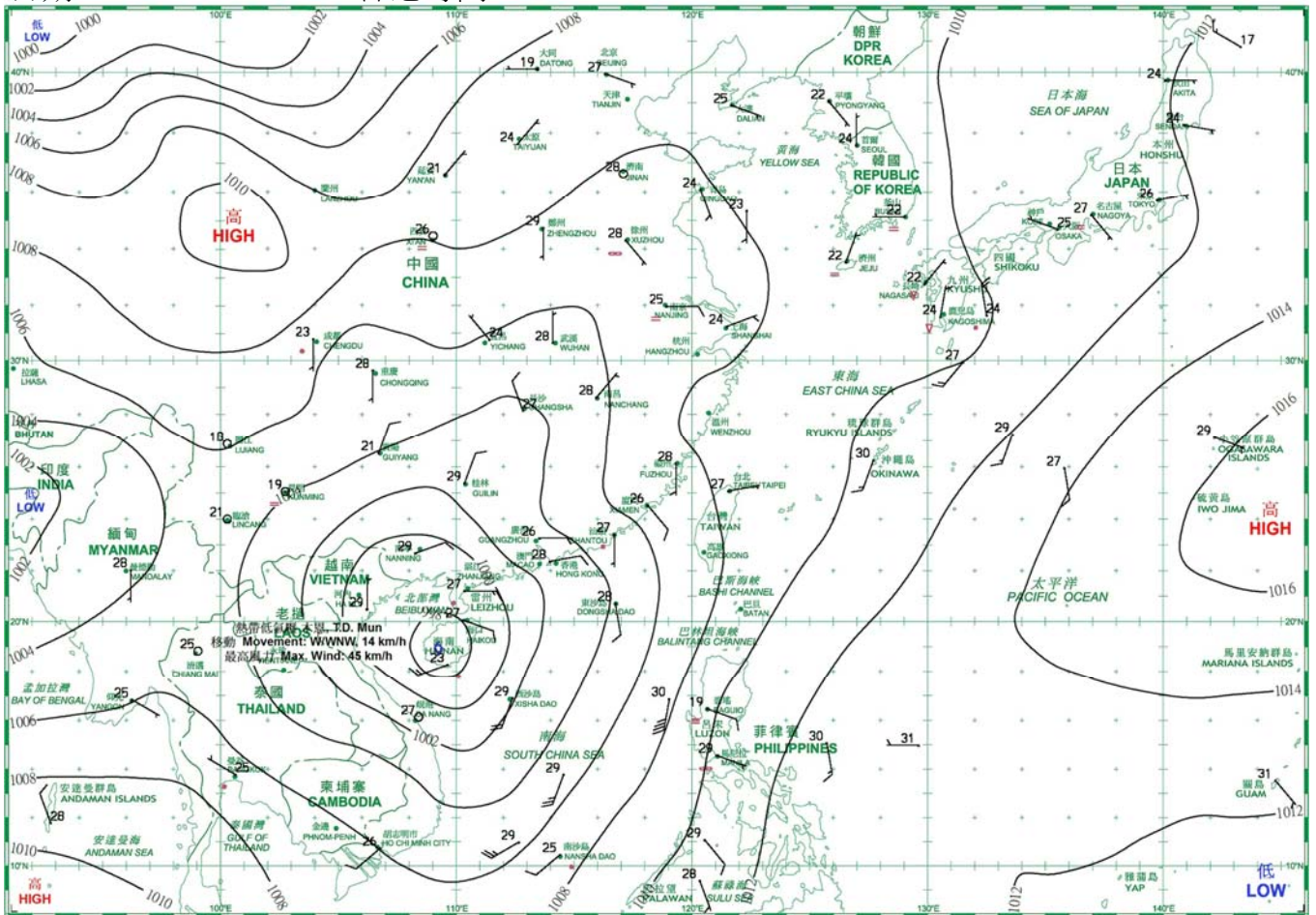


日期/Date: 02.07.2019 香港時間/HK Time: 08:00

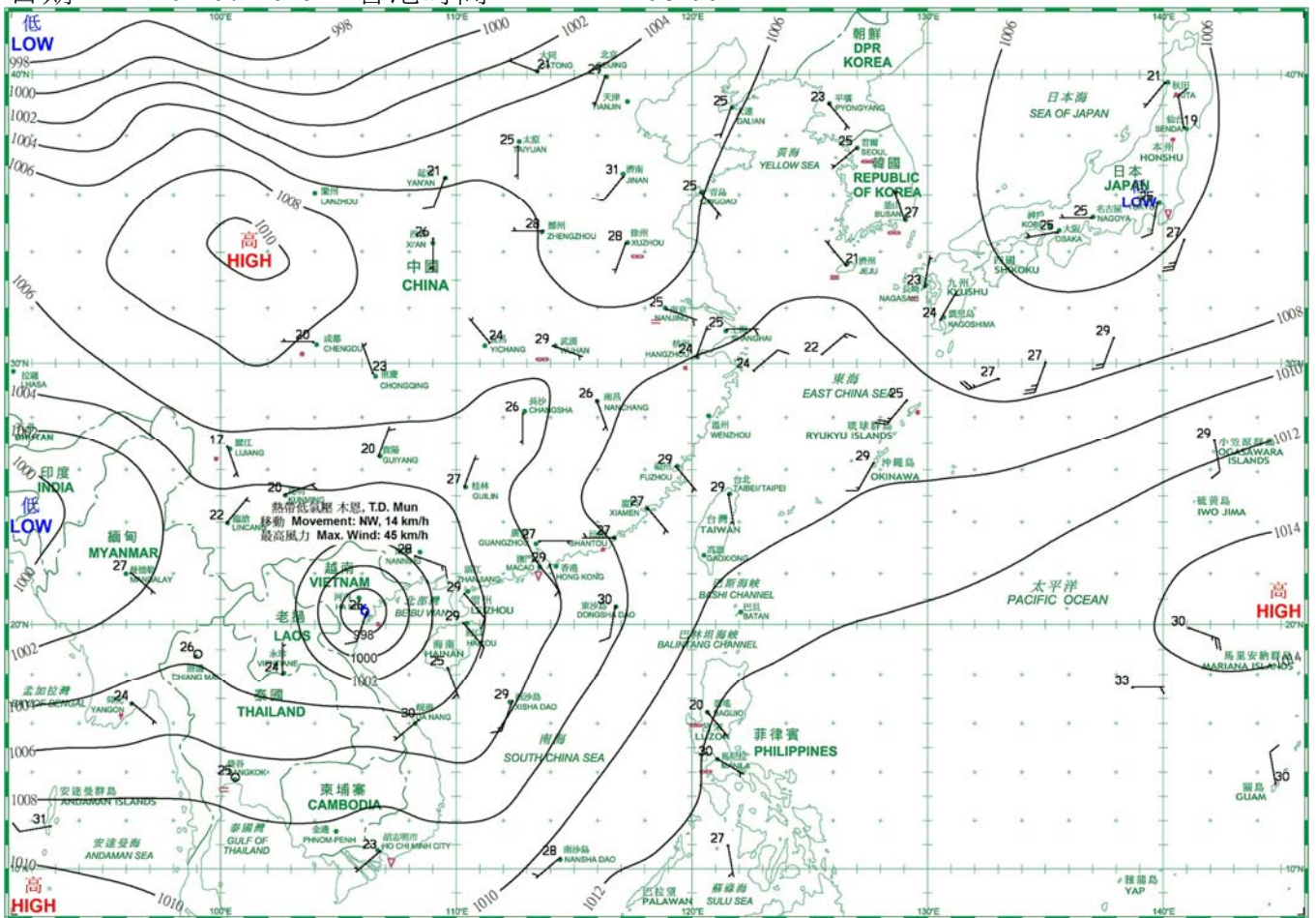


- 等壓線 Isobar(hPa)
- 暖鋒 Warm Front
- 靜止鋒 Stationary Front
- 消散中的冷鋒 Dissipating Cold Front
- 冷鋒 Cold Front
- 錮囚鋒 Occlusion
- 槽軸 (線) Axis of Trough
- 熱帶氣旋中心 Centre of Tropical Cyclone

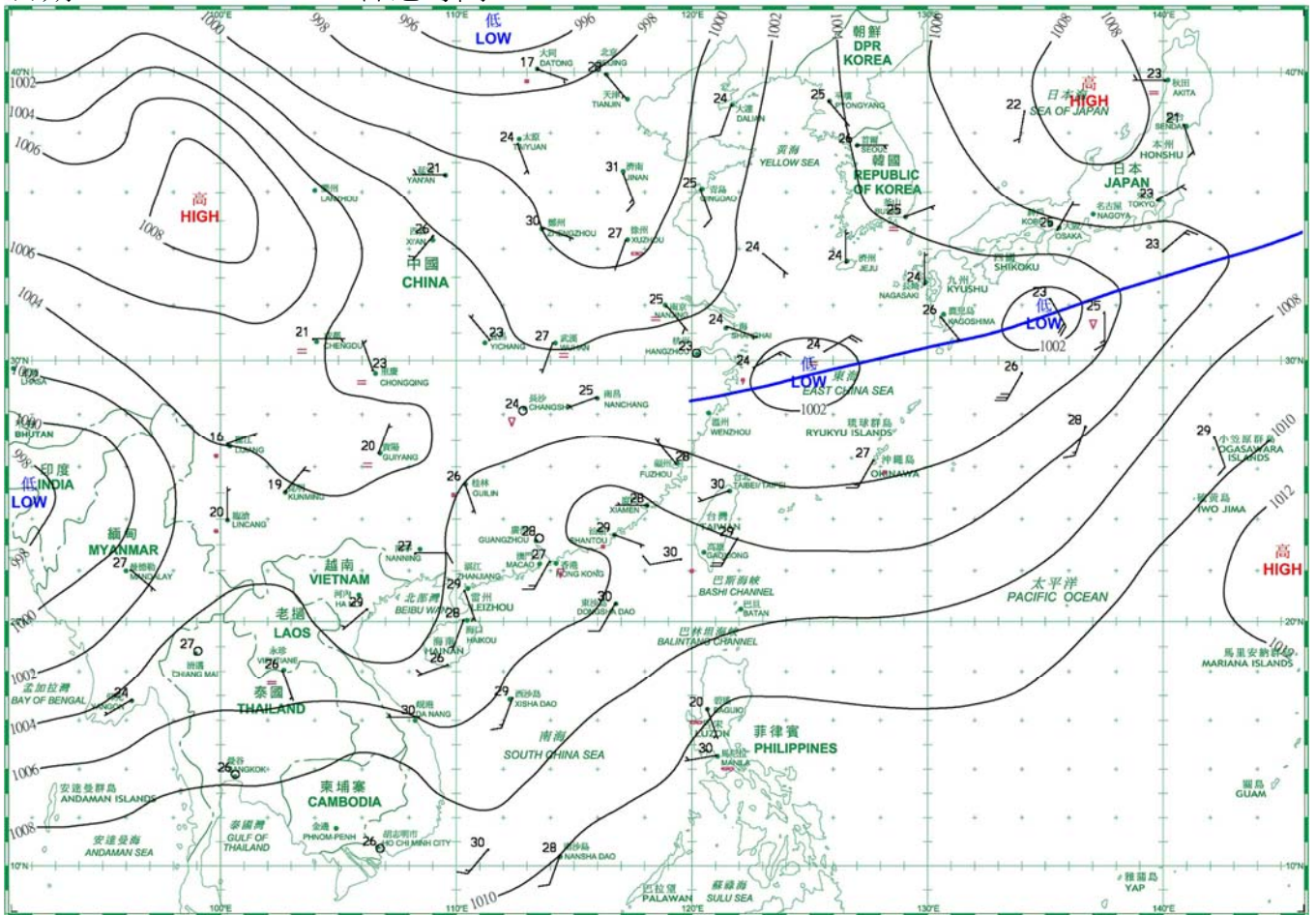
日期/Date: 03.07.2019 香港時間/HK Time: 08:00



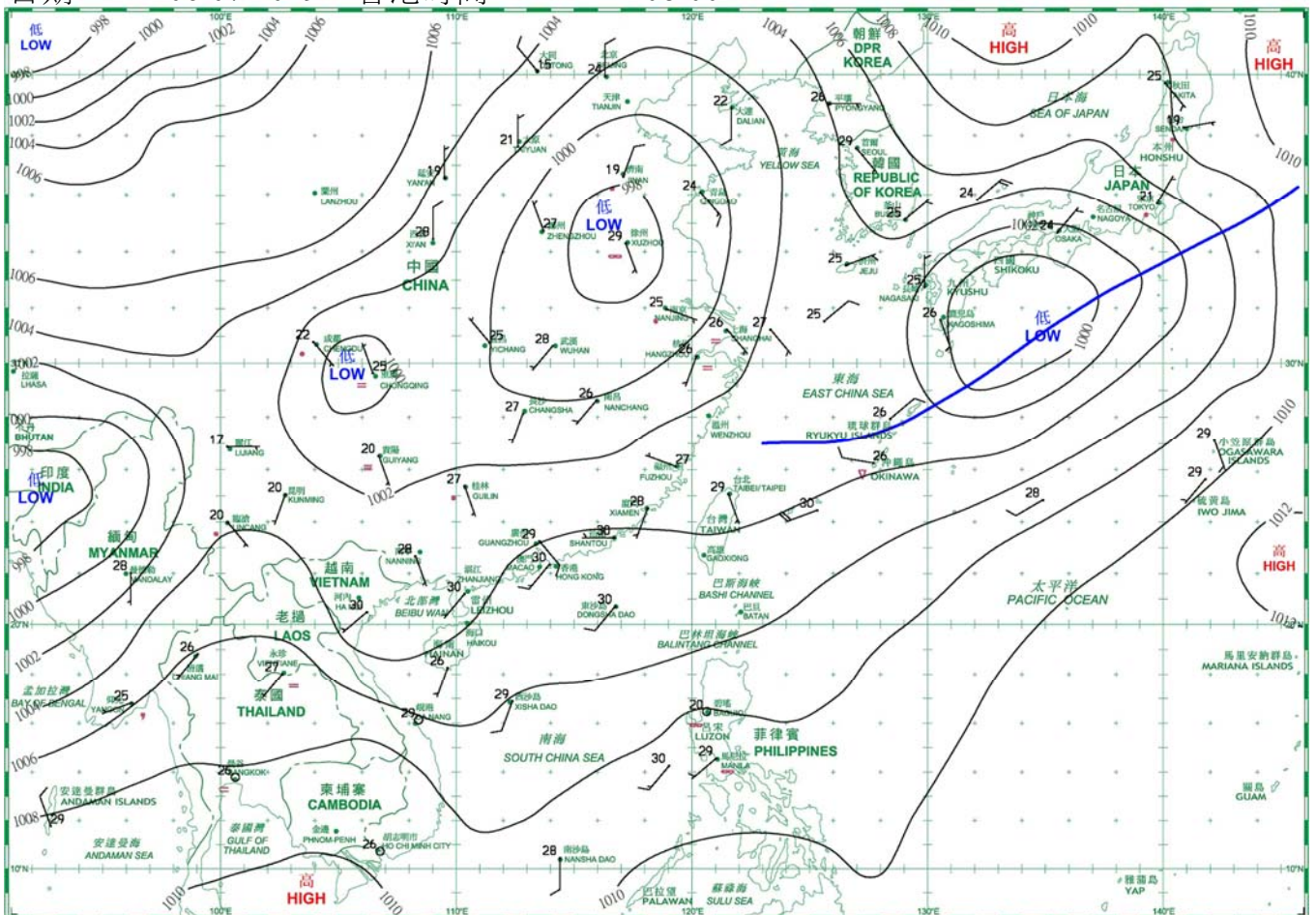
日期/Date: 04.07.2019 香港時間/HK Time: 08:00



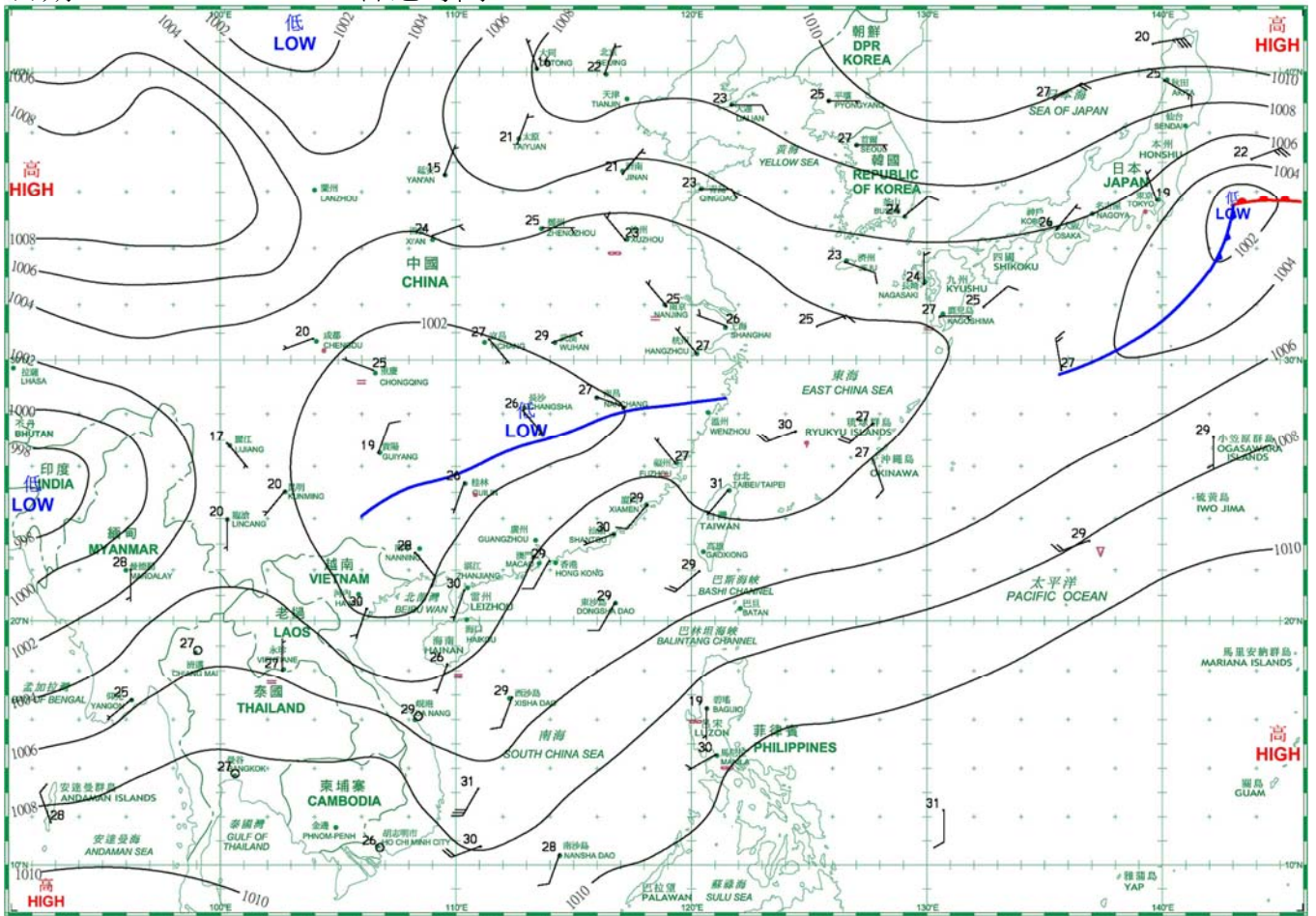
日期/Date: 05.07.2019 香港時間/HK Time: 08:00



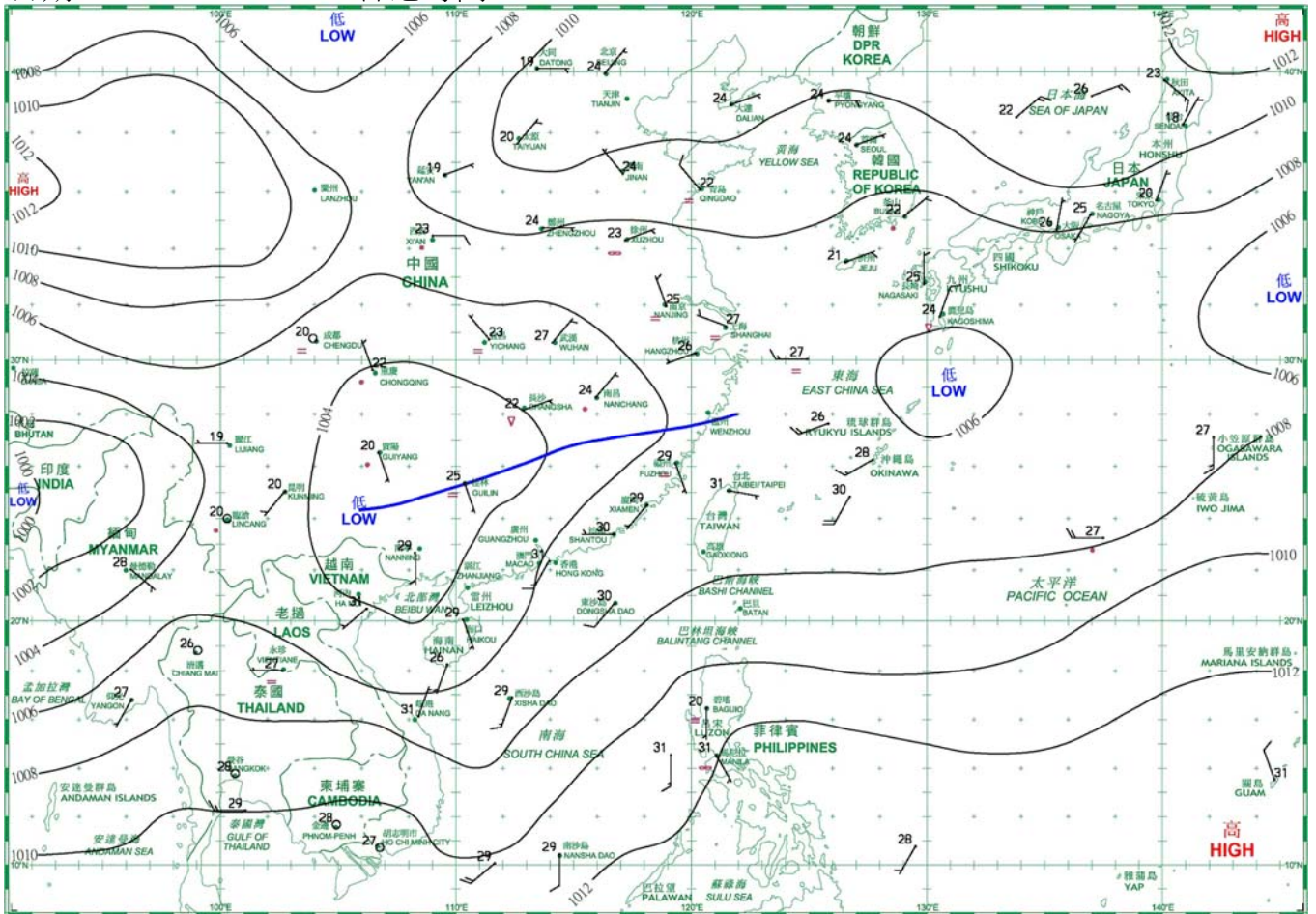
日期/Date: 06.07.2019 香港時間/HK Time: 08:00



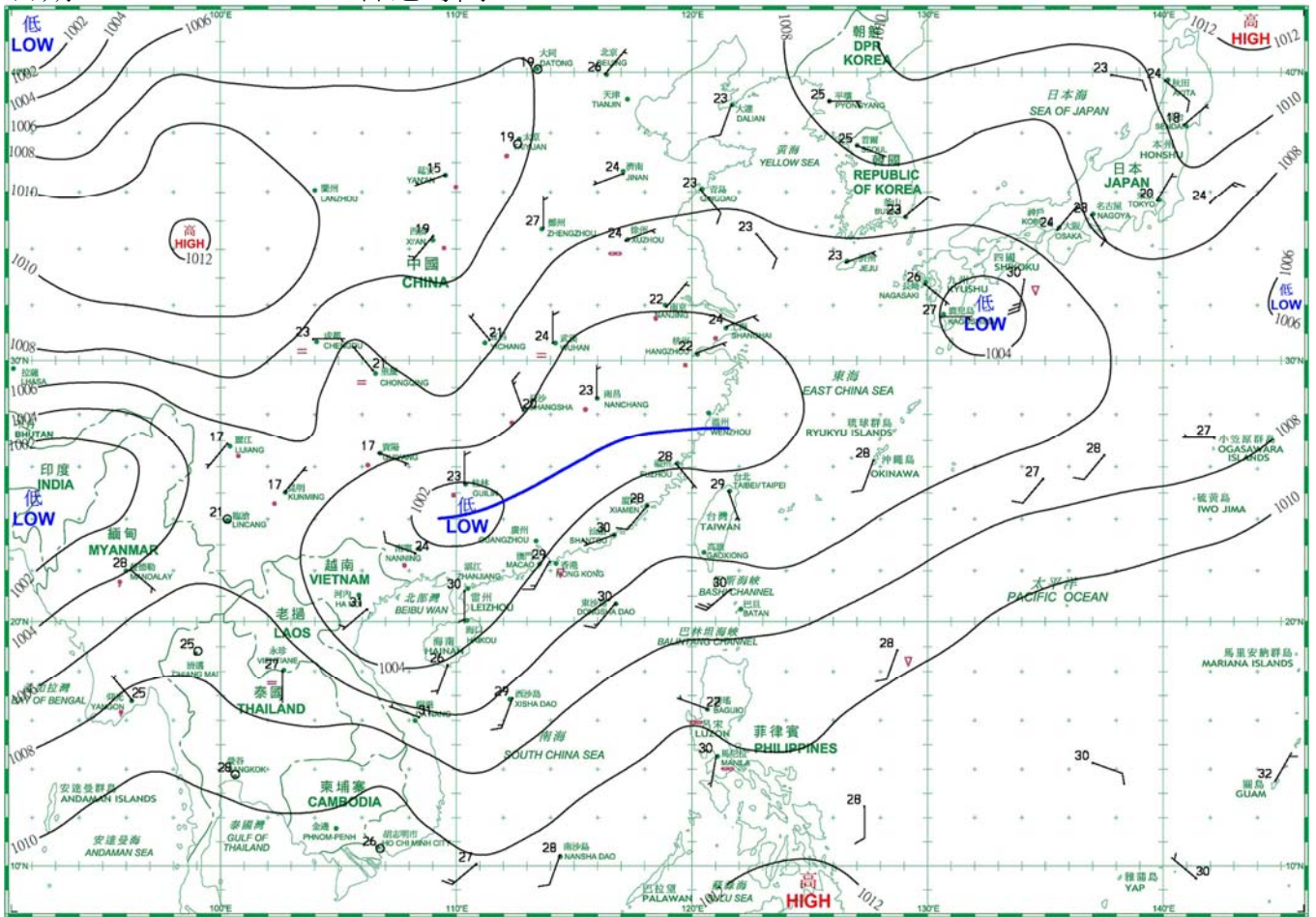
日期/Date: 07.07.2019 香港時間/HK Time: 08:00



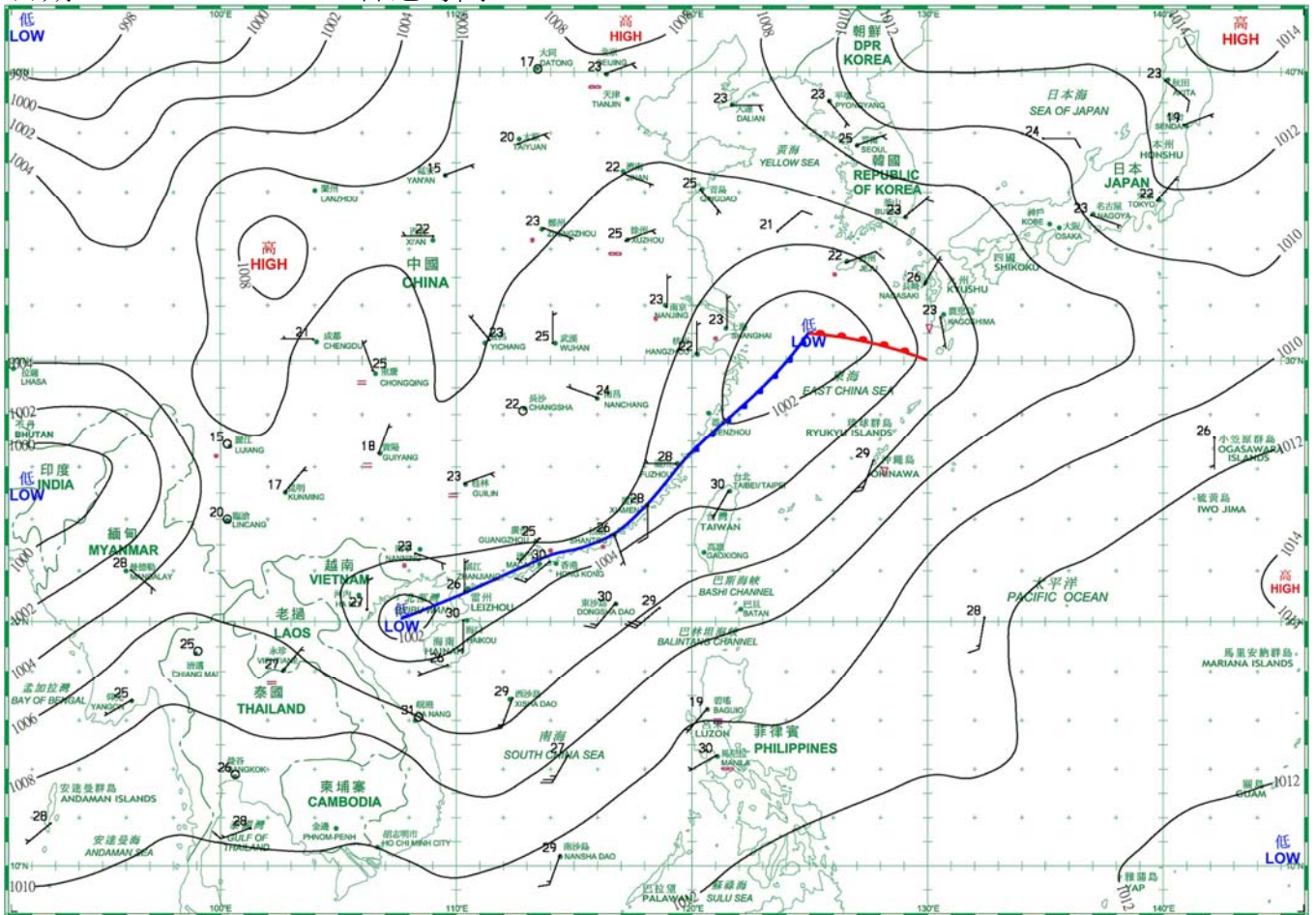
日期/Date: 08.07.2019 香港時間/HK Time: 08:00



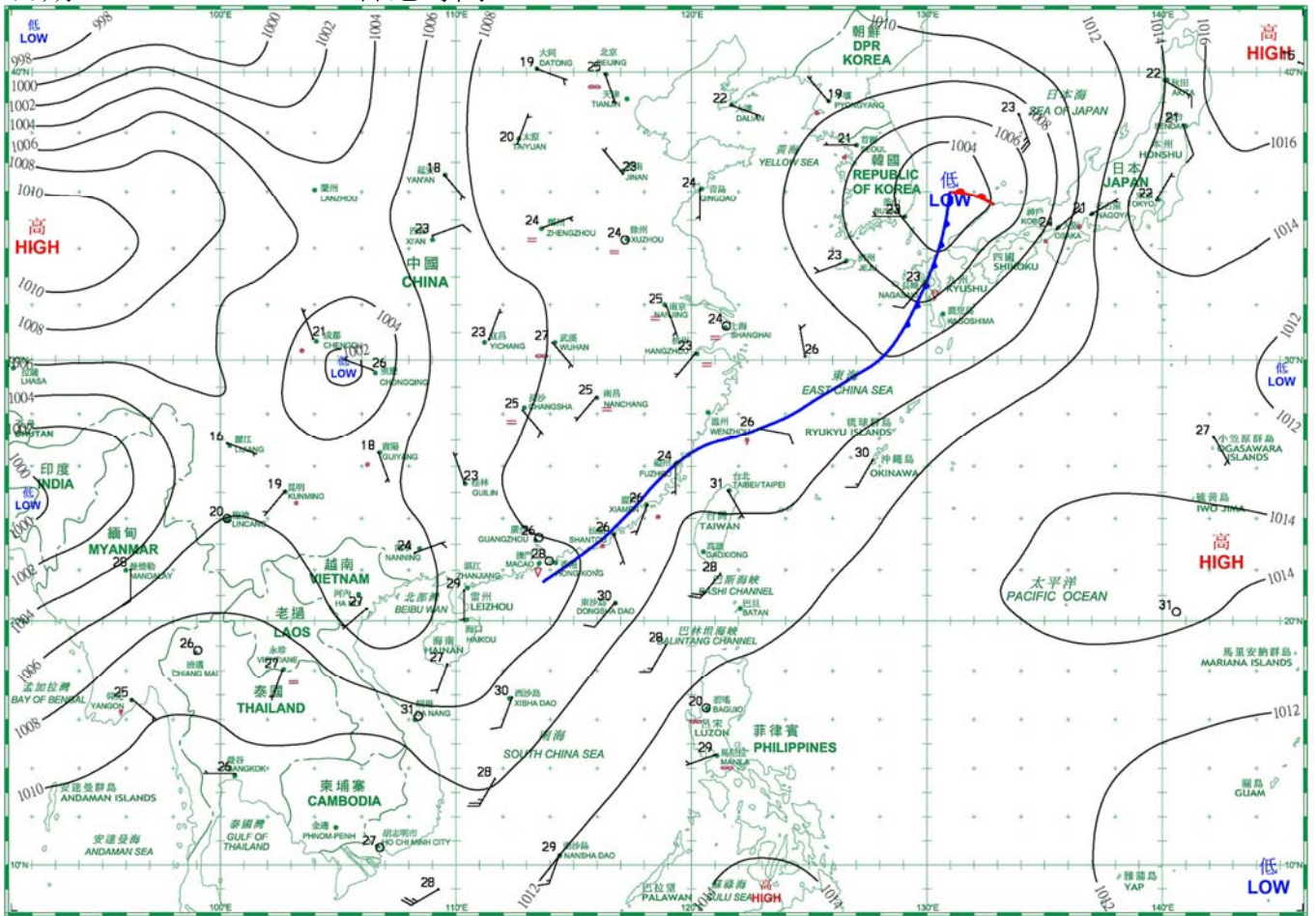
日期/Date: 09.07.2019 香港時間/HK Time: 08:00



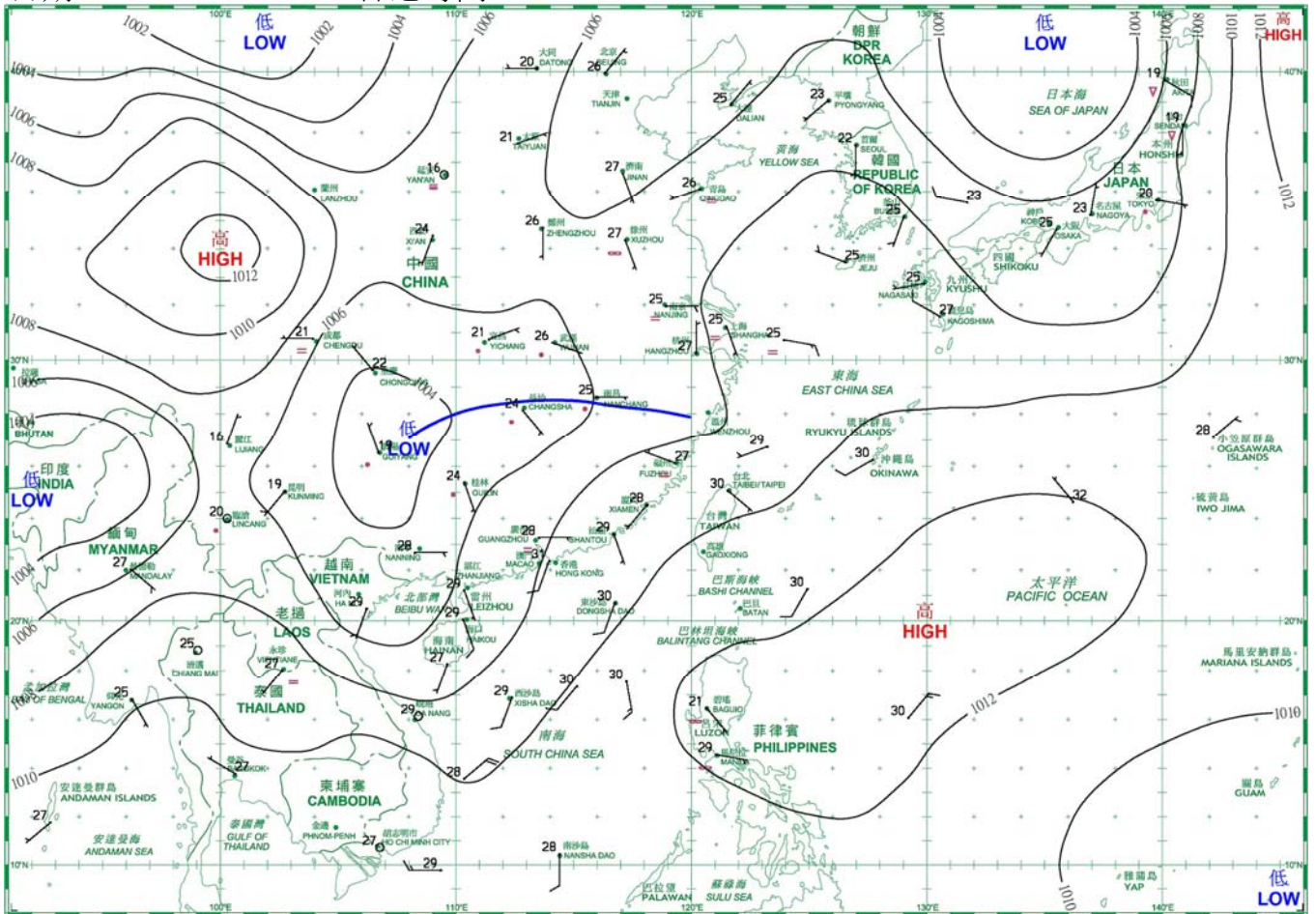
日期/Date: 10.07.2019 香港時間/HK Time: 08:00



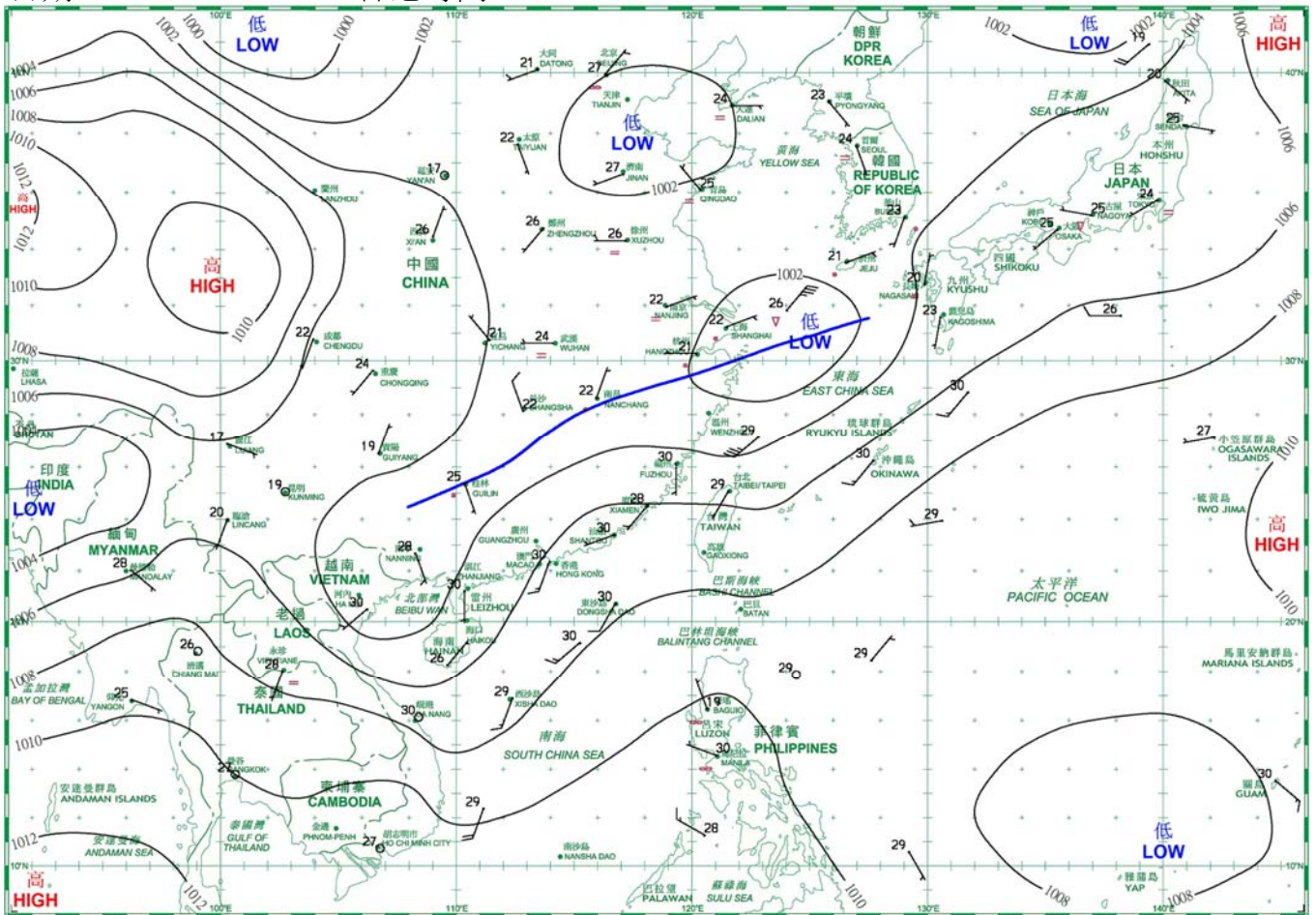
日期/Date: 11.07.2019 香港時間/HK Time: 08:00



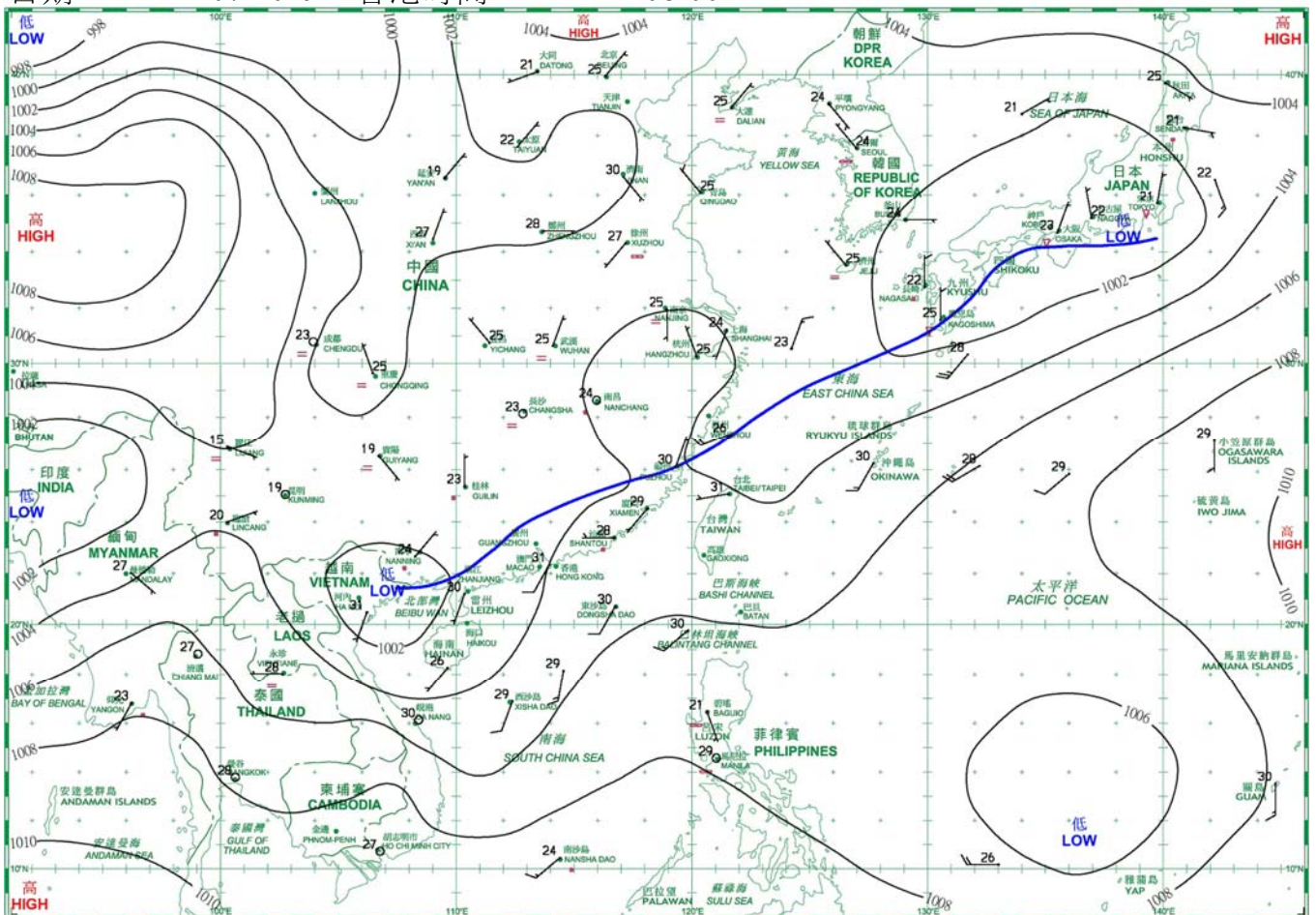
日期/Date: 12.07.2019 香港時間/HK Time: 08:00



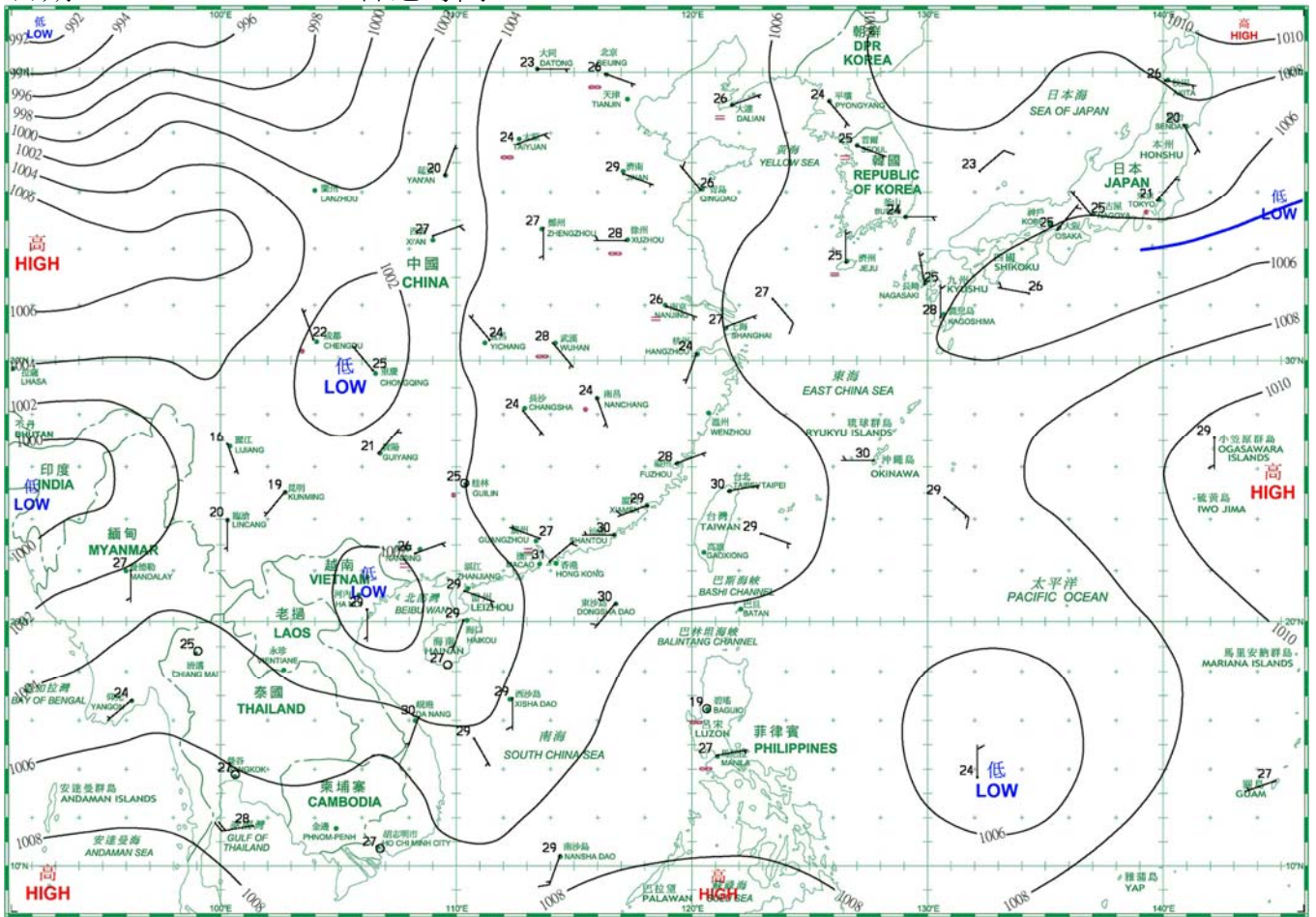
日期/Date: 13.07.2019 香港時間/HK Time: 08:00



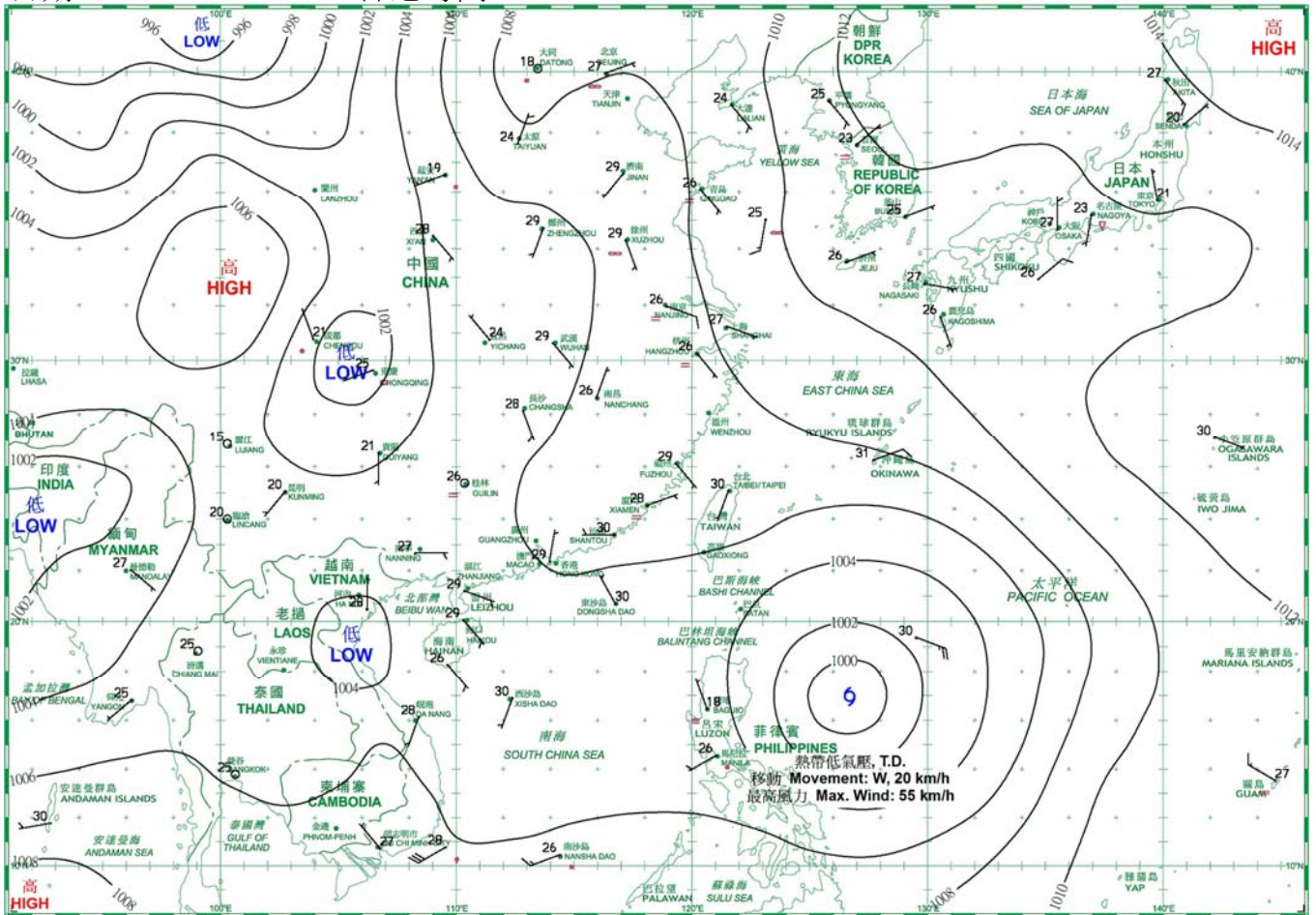
日期/Date: 14.07.2019 香港時間/HK Time: 08:00



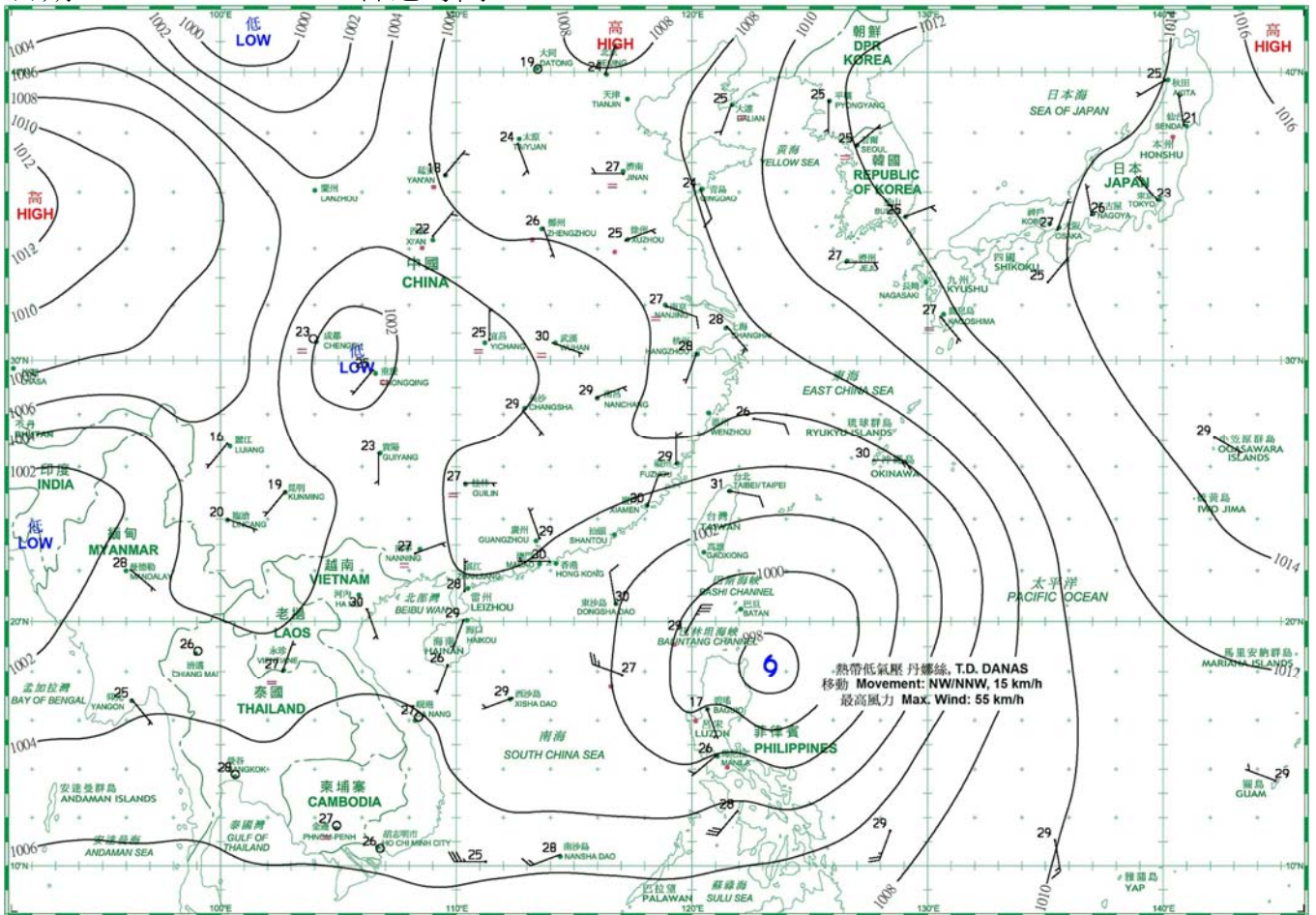
日期/Date: 15.07.2019 香港時間/HK Time: 08:00



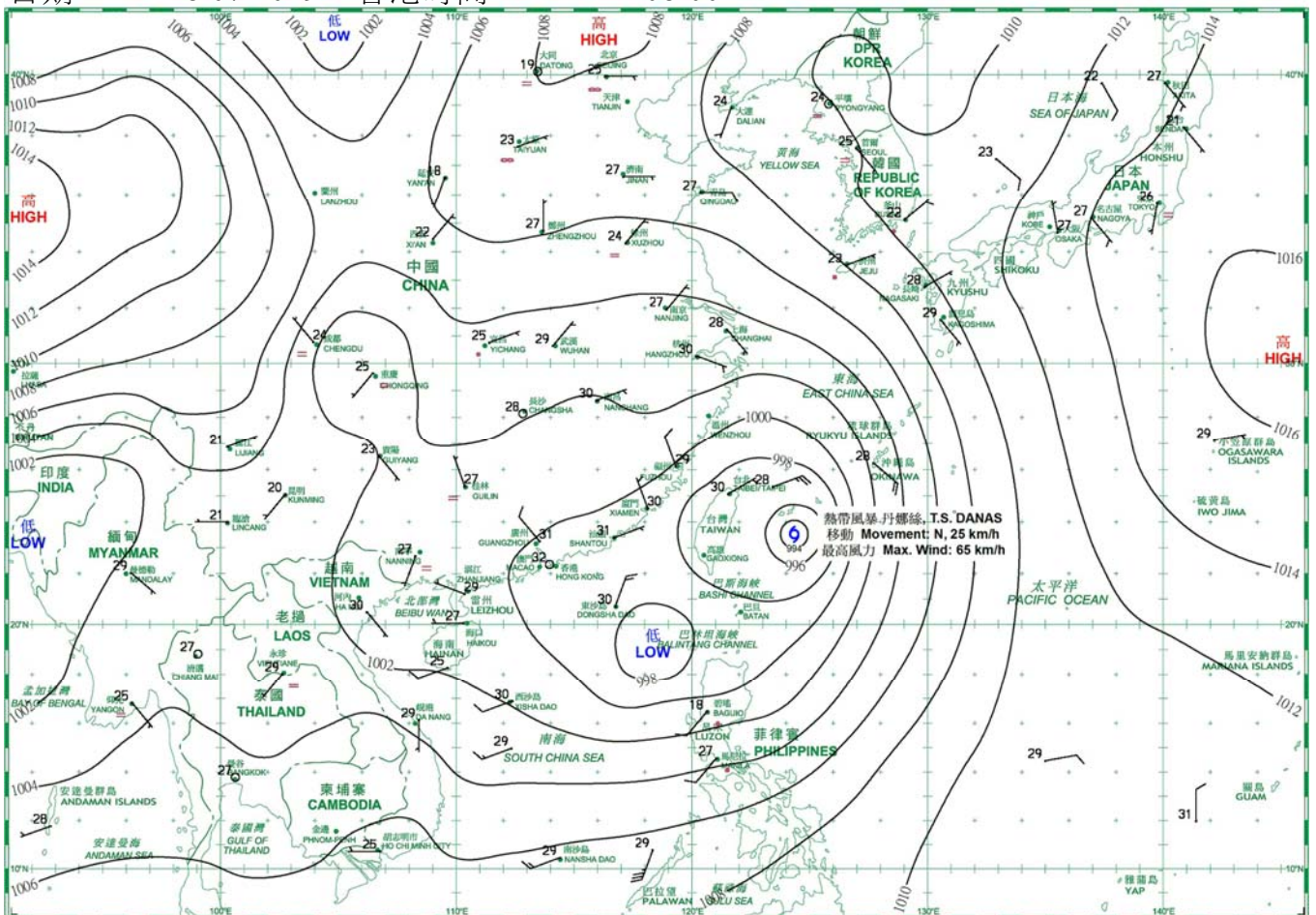
日期/Date: 16.07.2019 香港時間/HK Time: 08:00



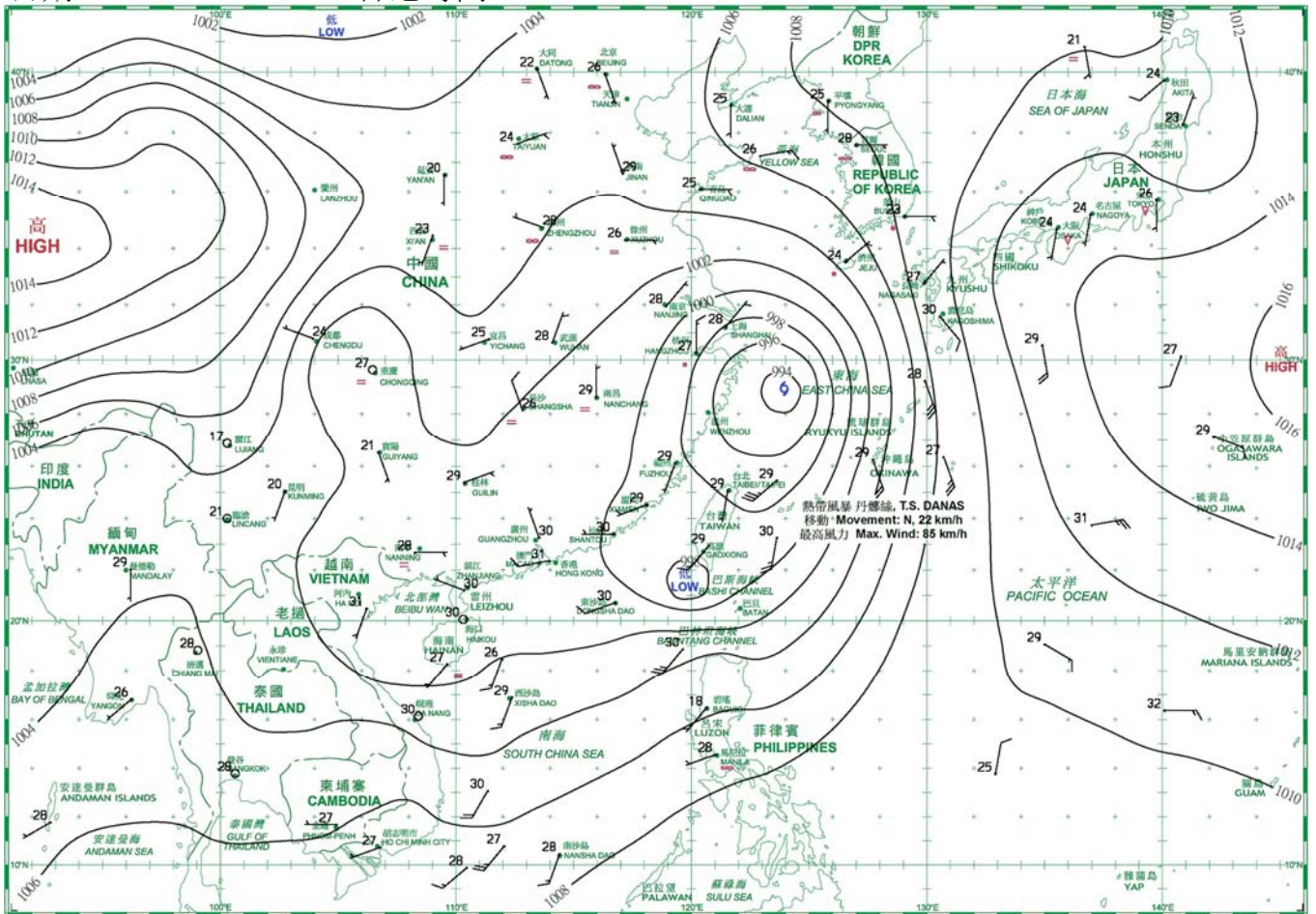
日期/Date: 17.07.2019 香港時間/HK Time: 08:00



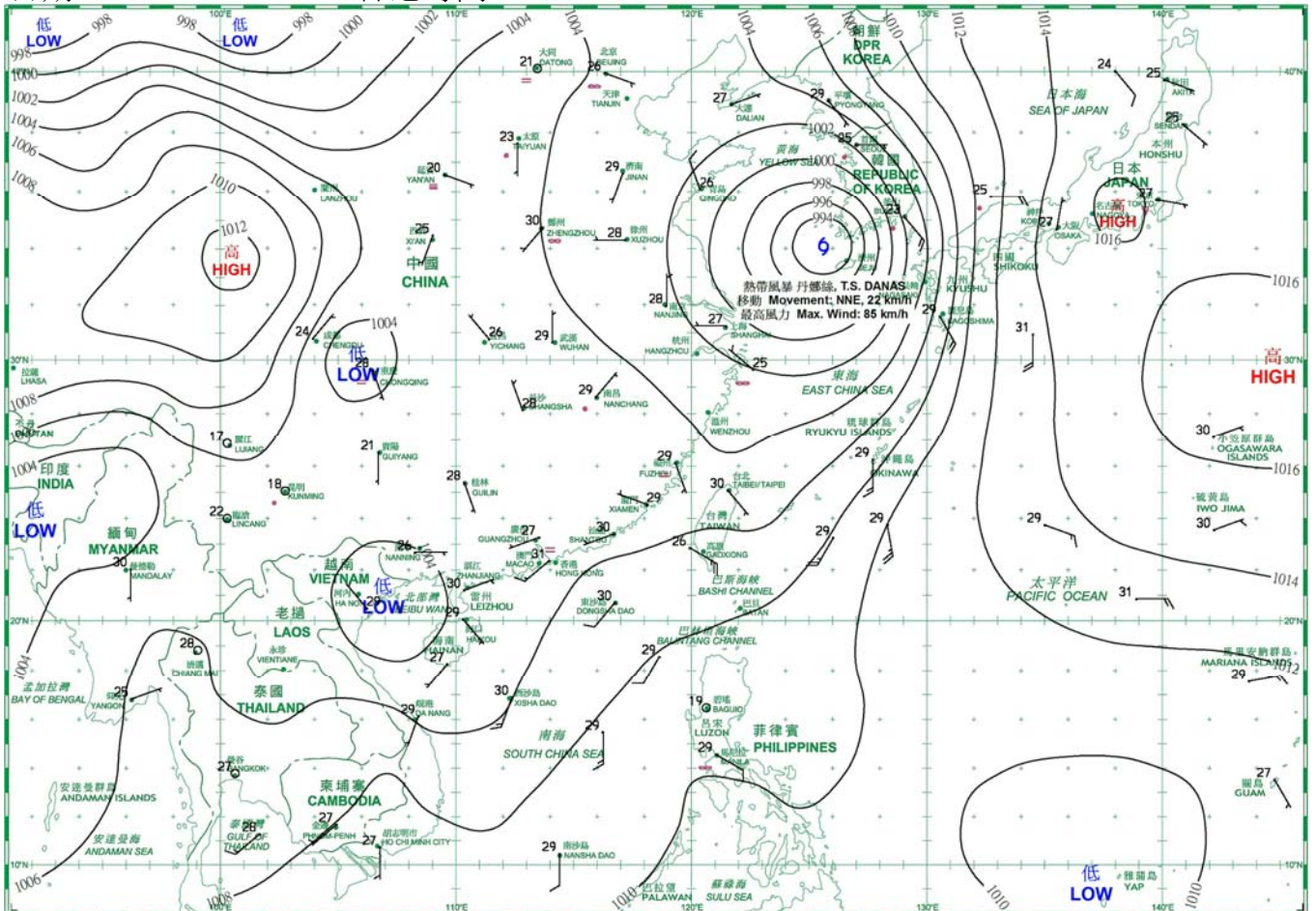
日期/Date: 18.07.2019 香港時間/HK Time: 08:00



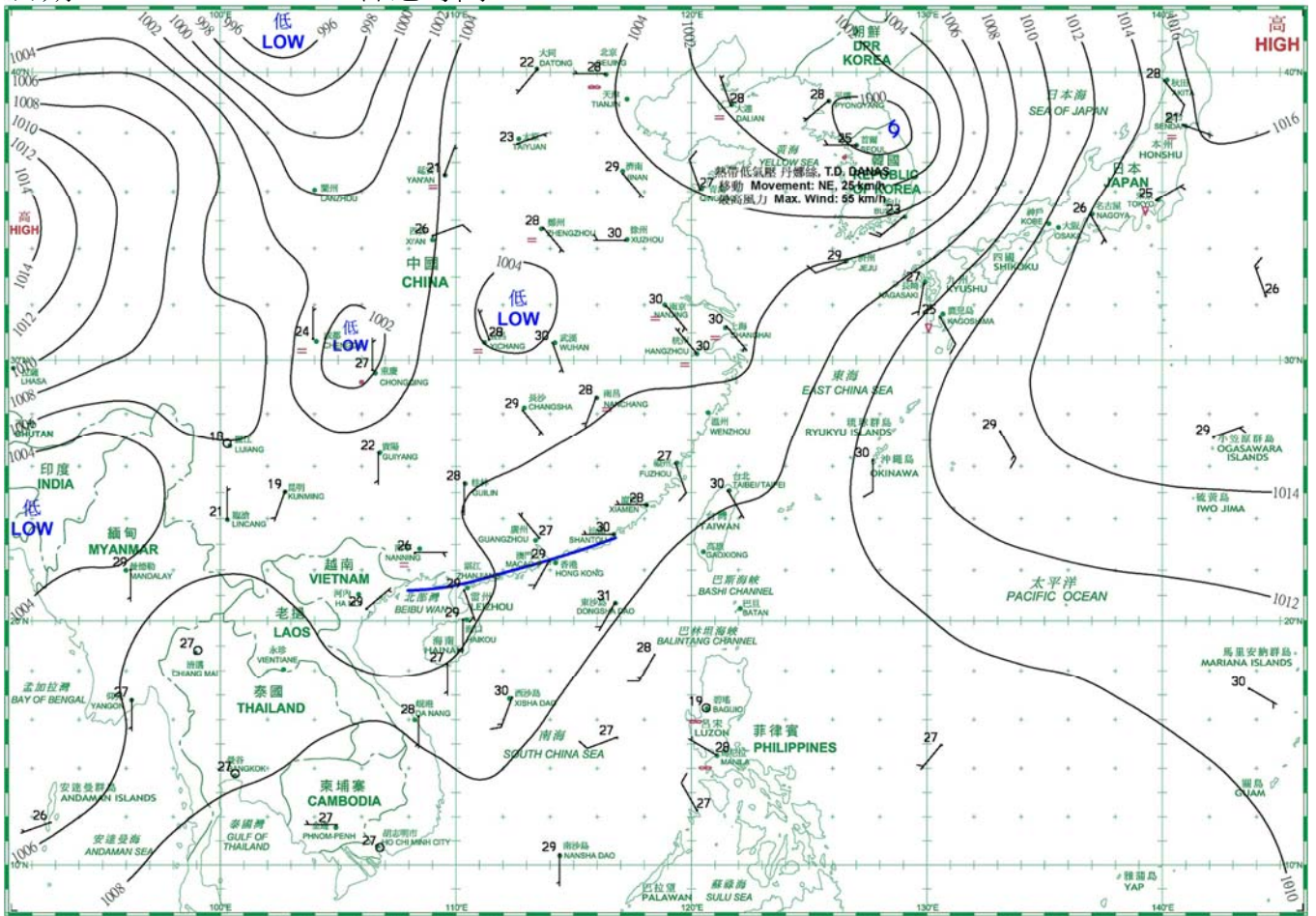
日期/Date: 19.07.2019 香港時間/HK Time: 08:00



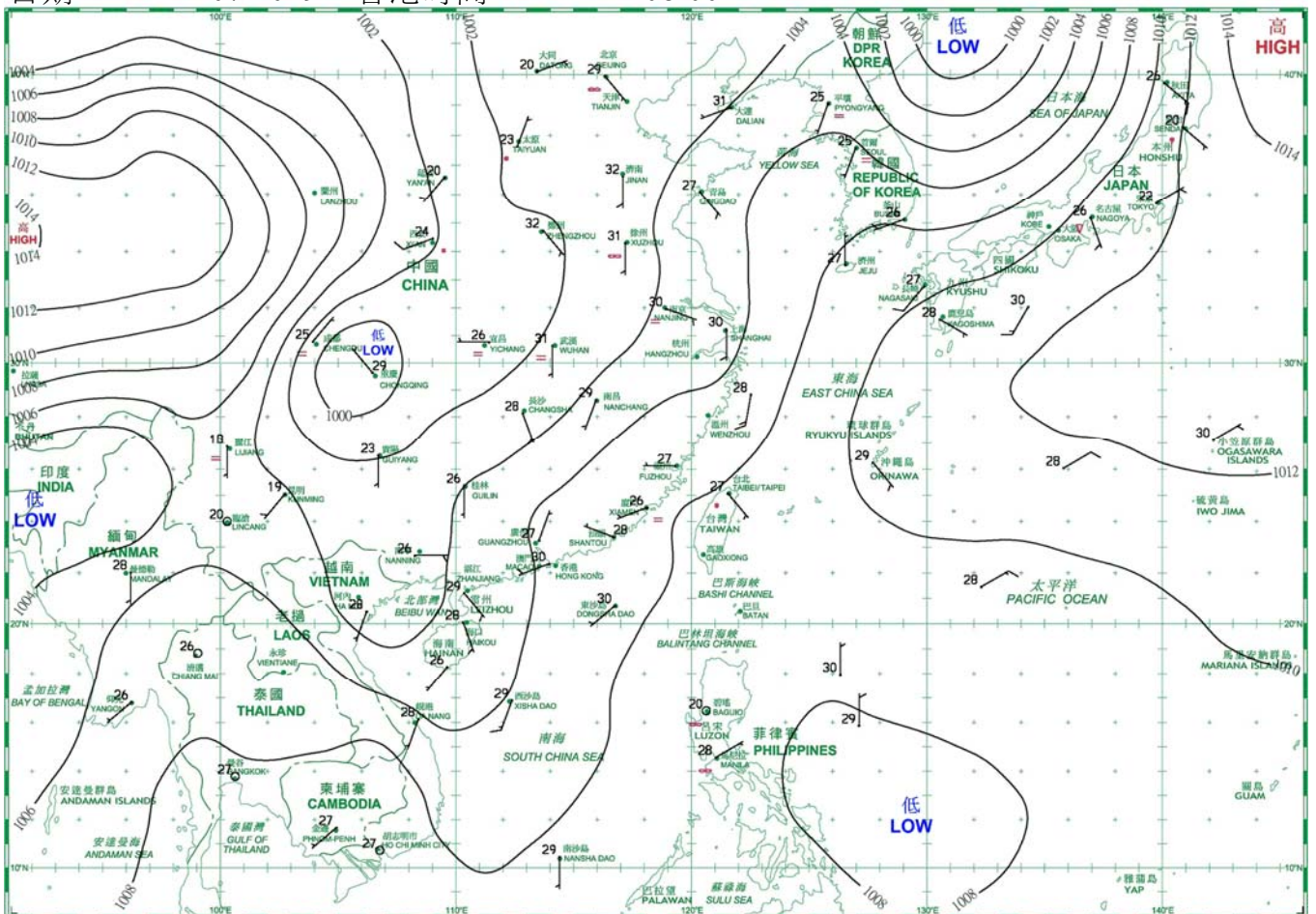
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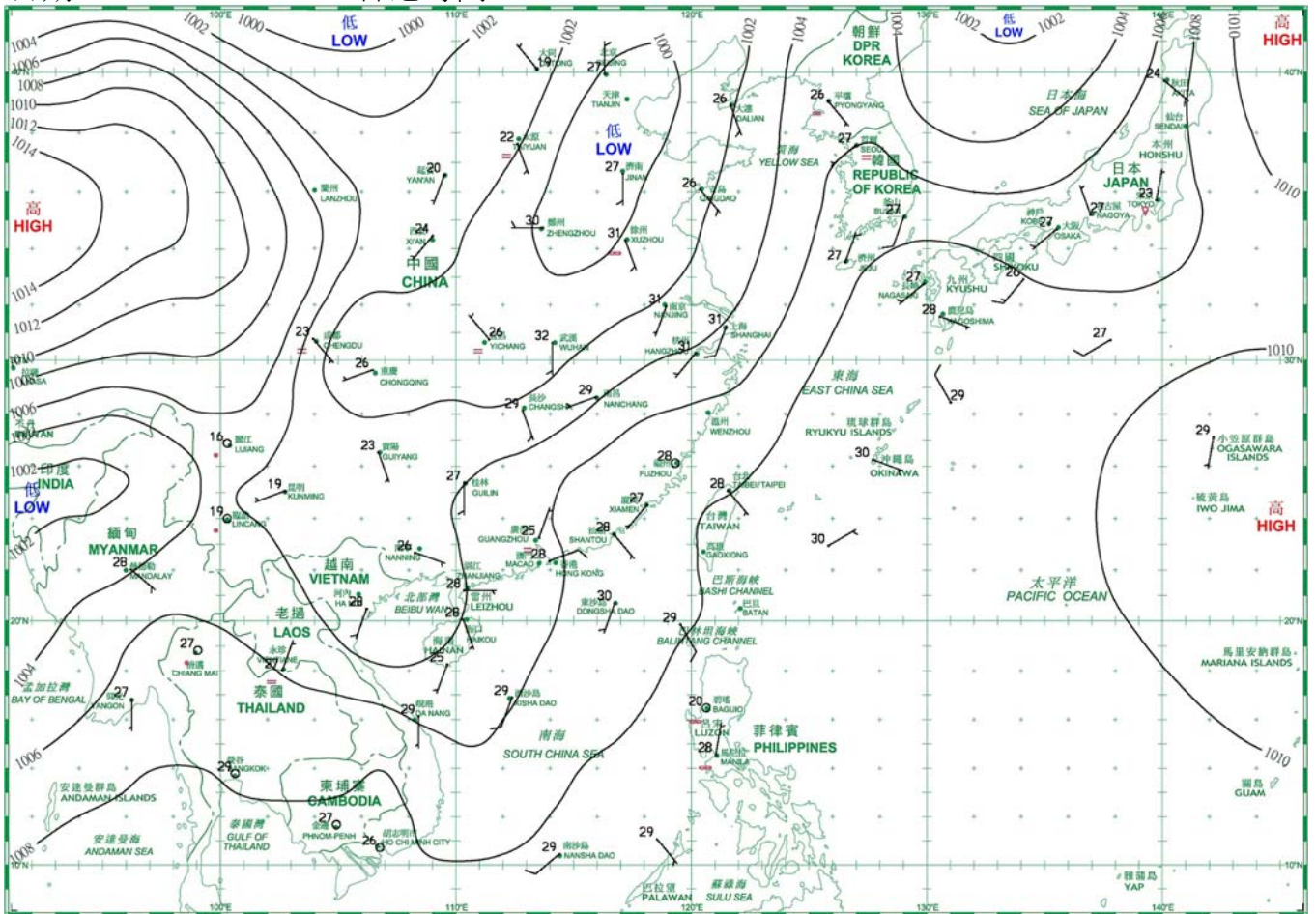
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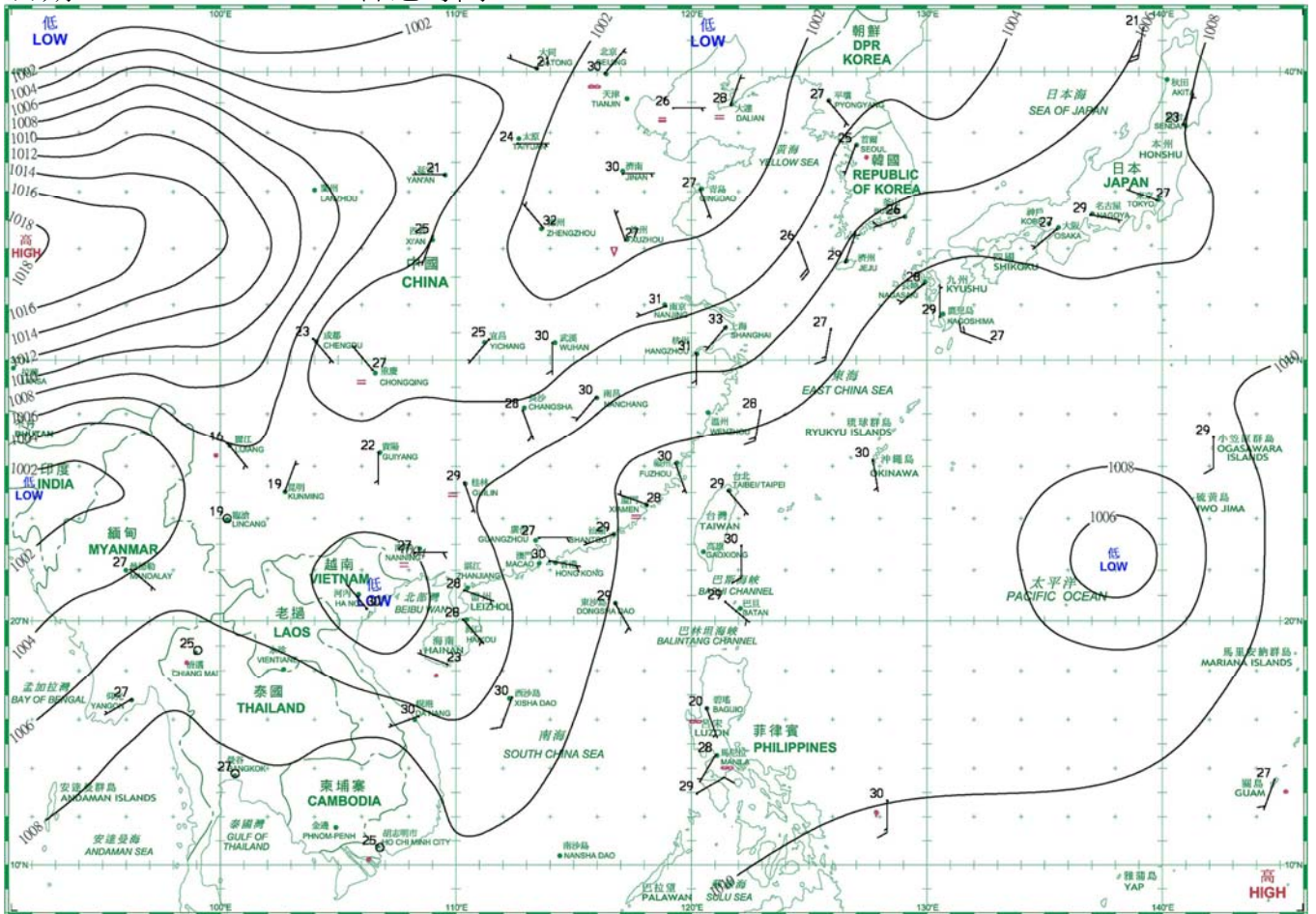
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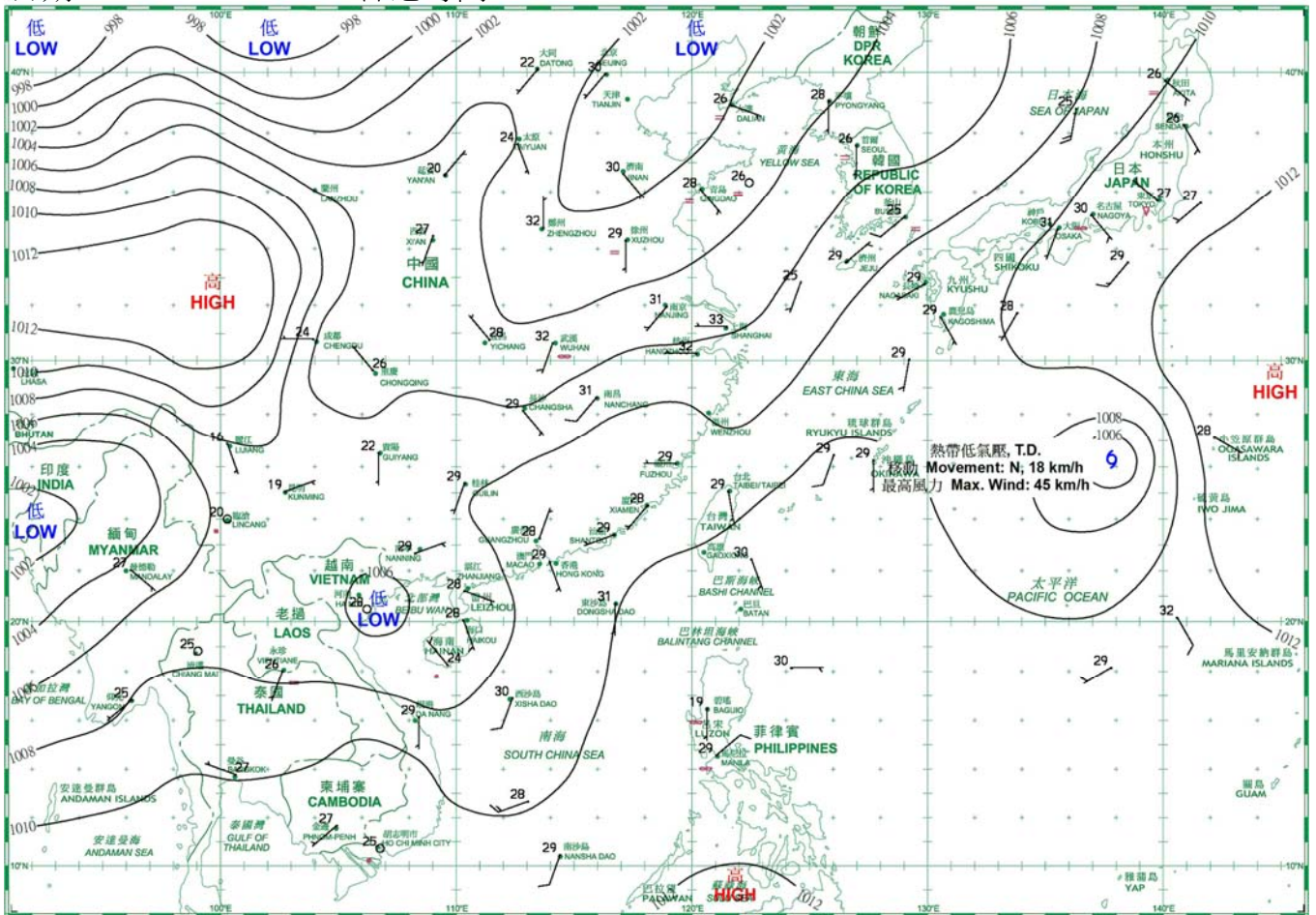
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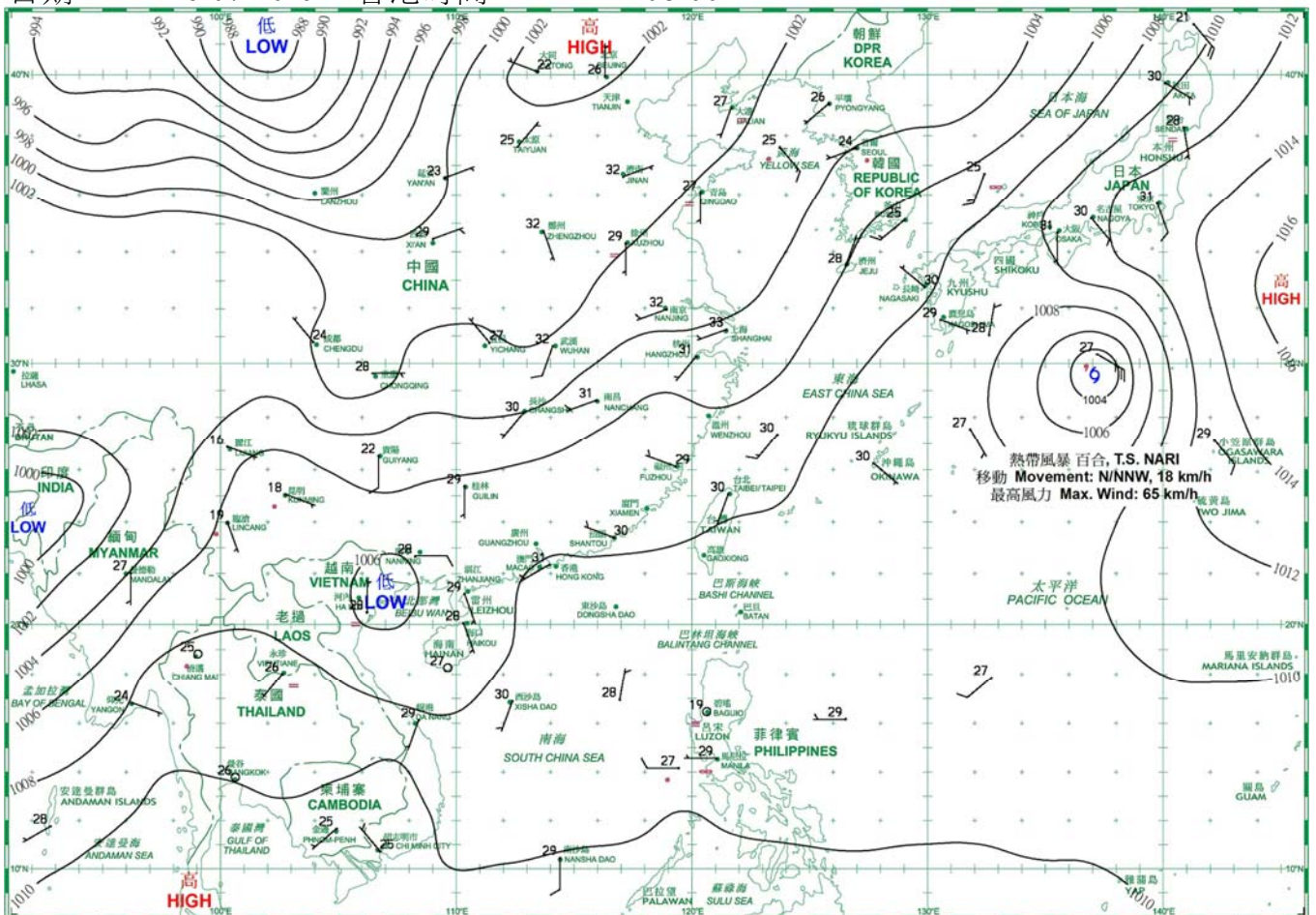
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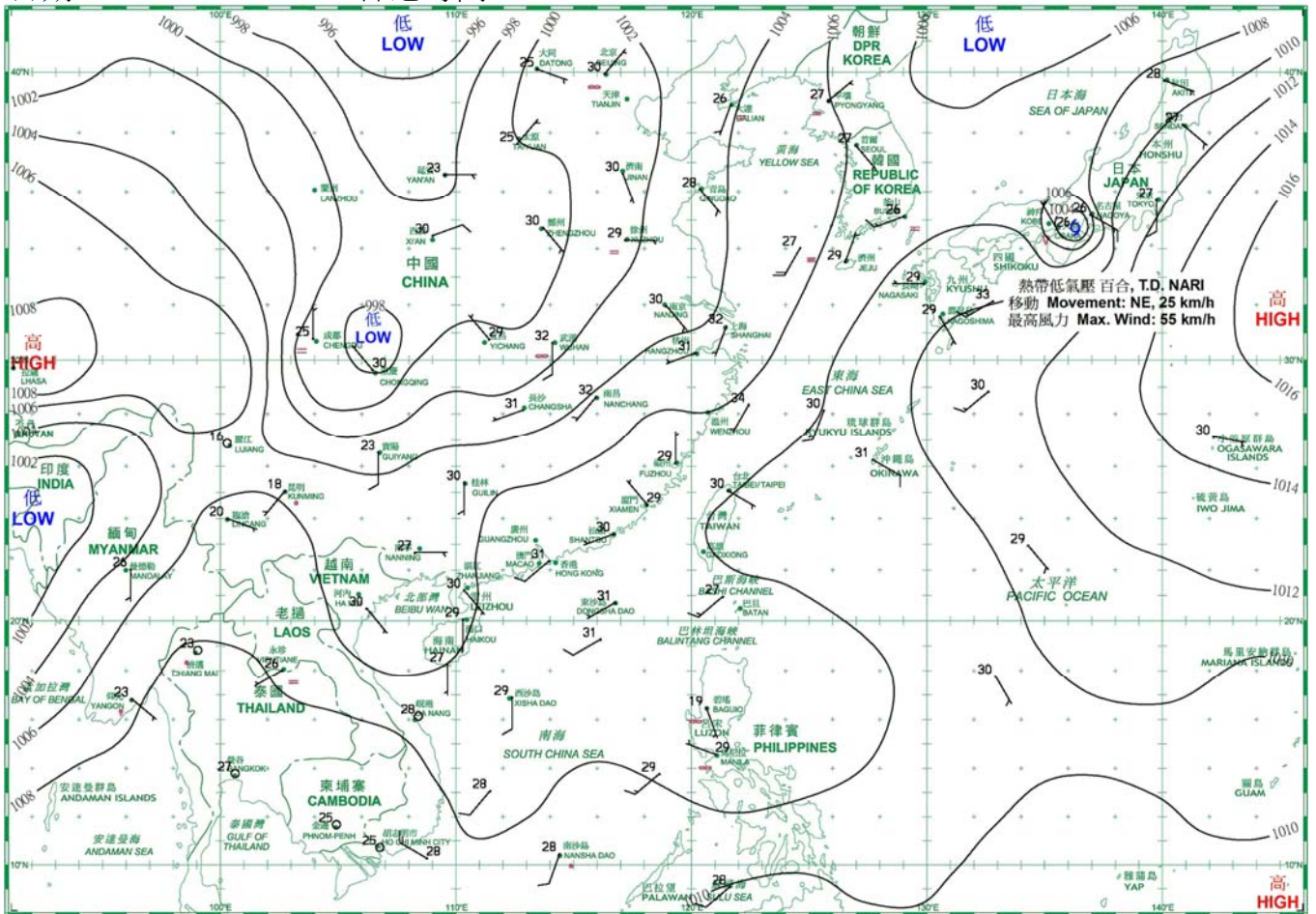
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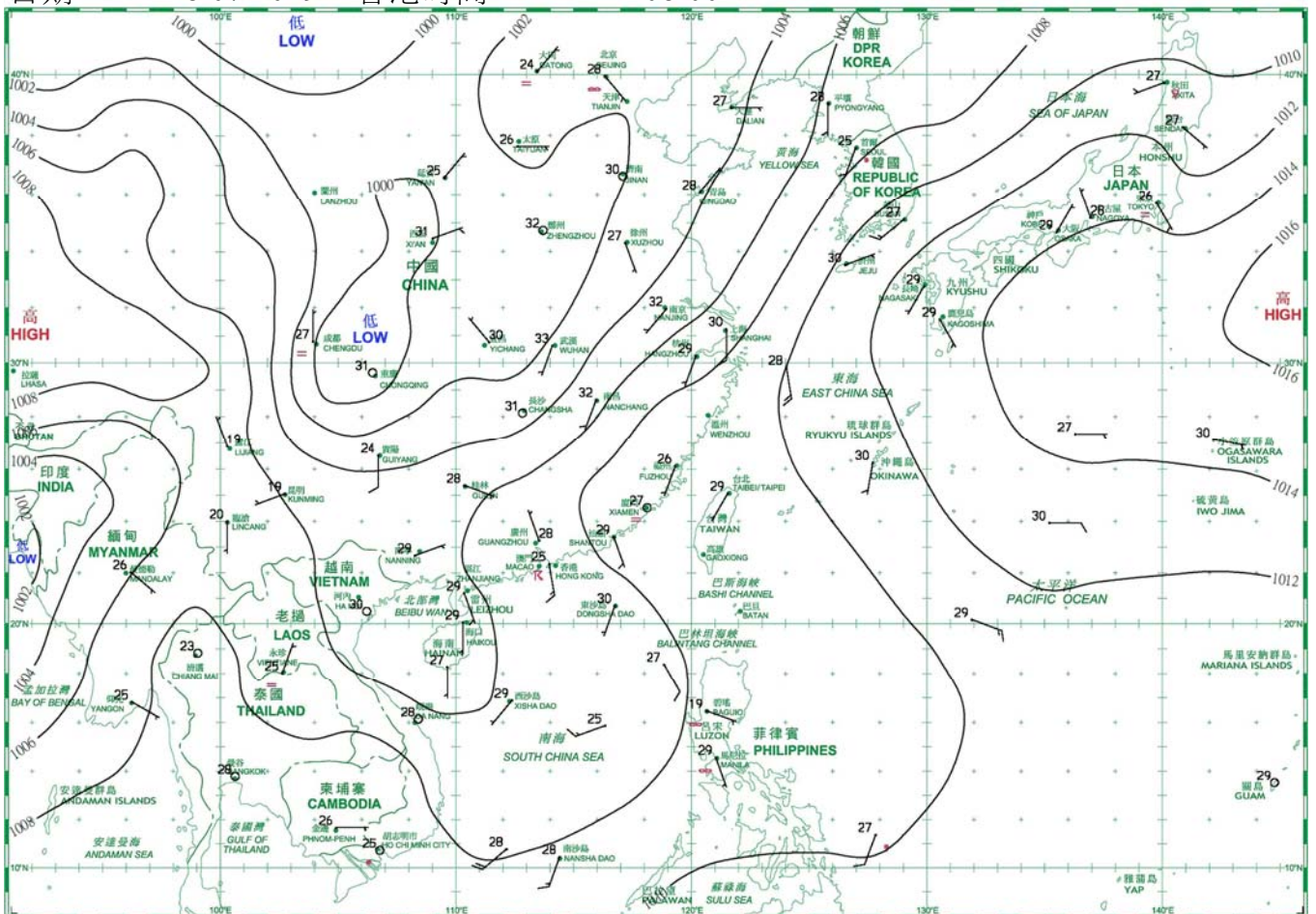
日期/Date: 26.07.2019 香港時間/HK Time: 08:00



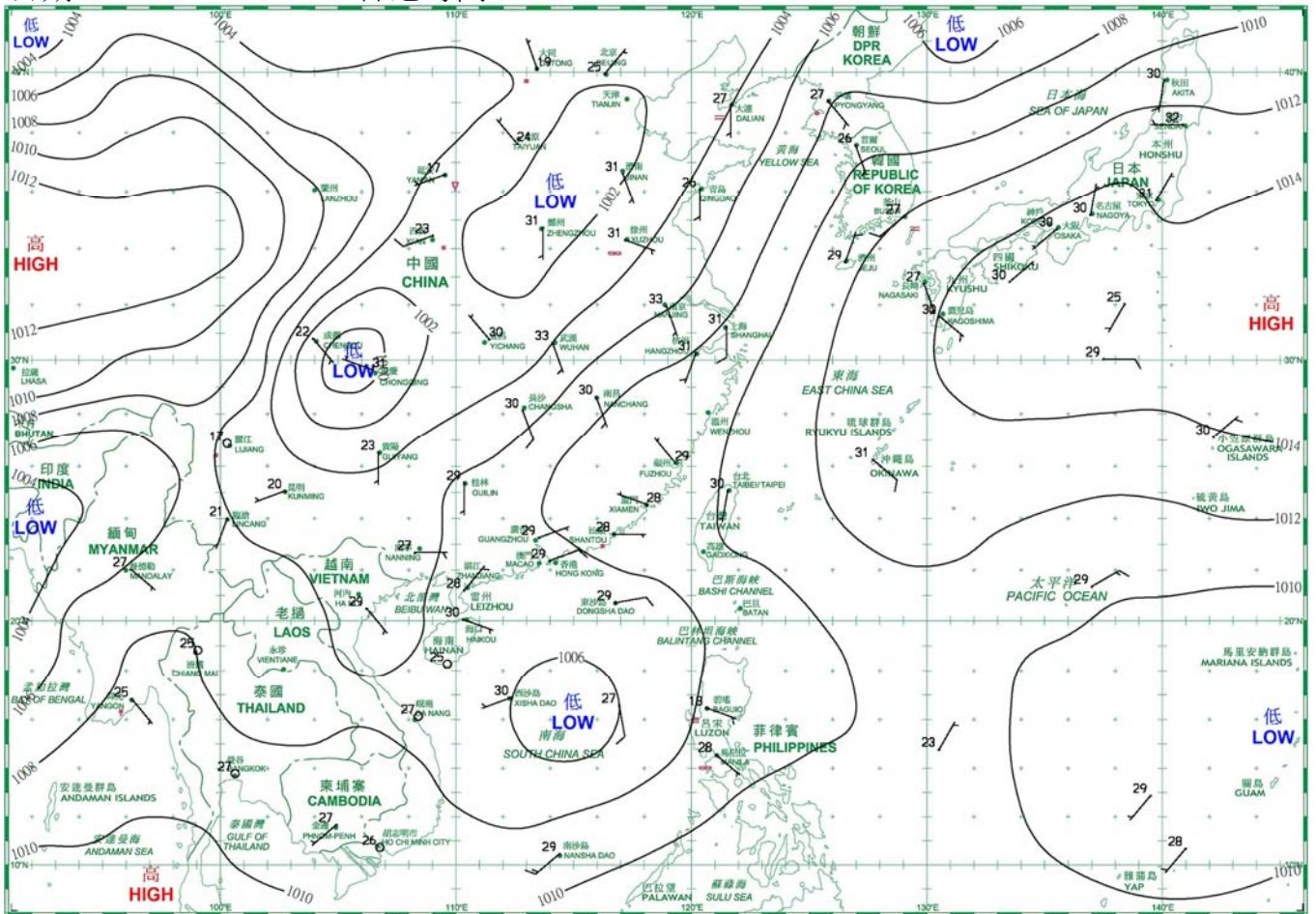
日期/Date: 27.07.2019 香港時間/HK Time: 08:00



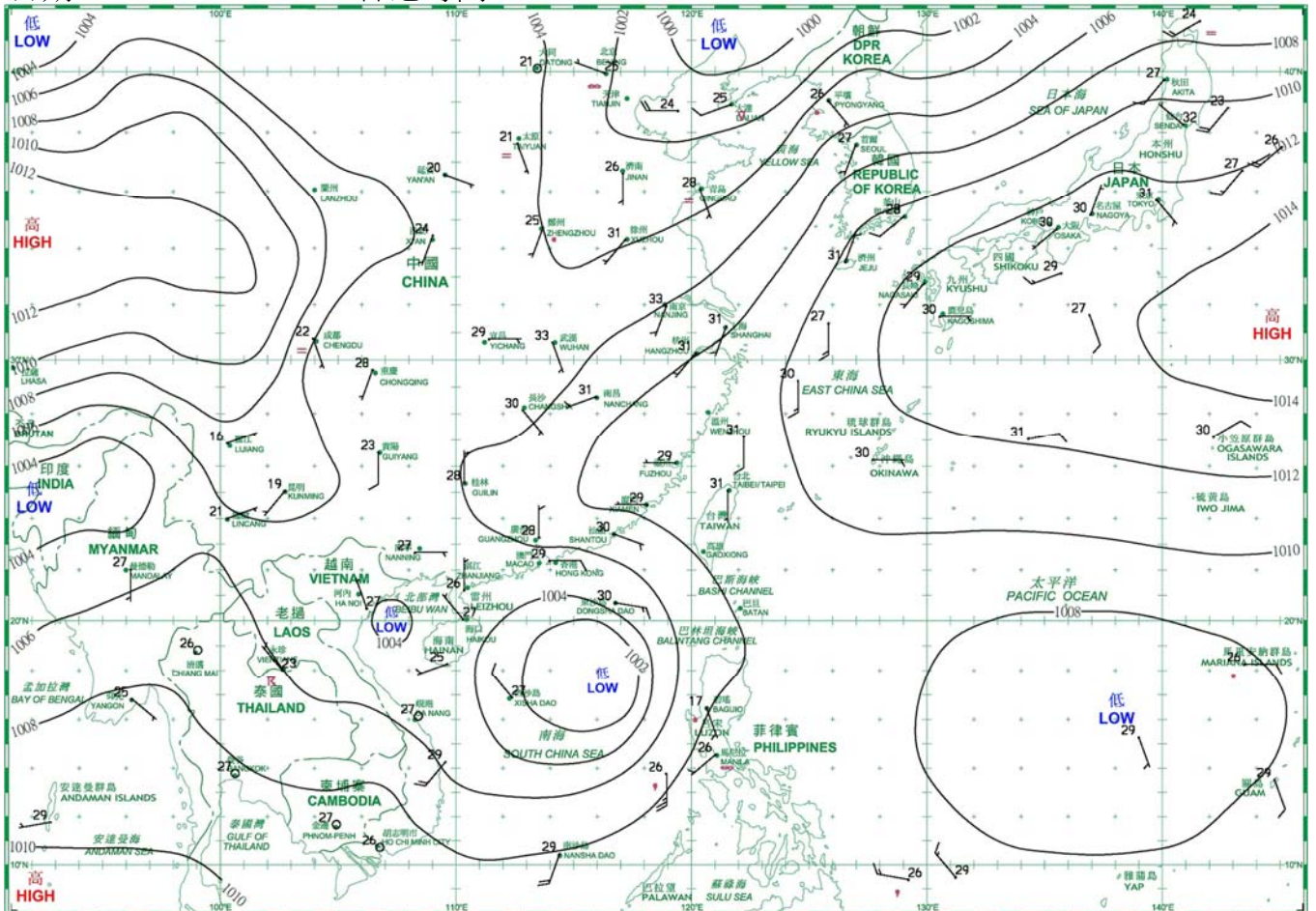
日期/Date: 28.07.2019 香港時間/HK Time: 08:00

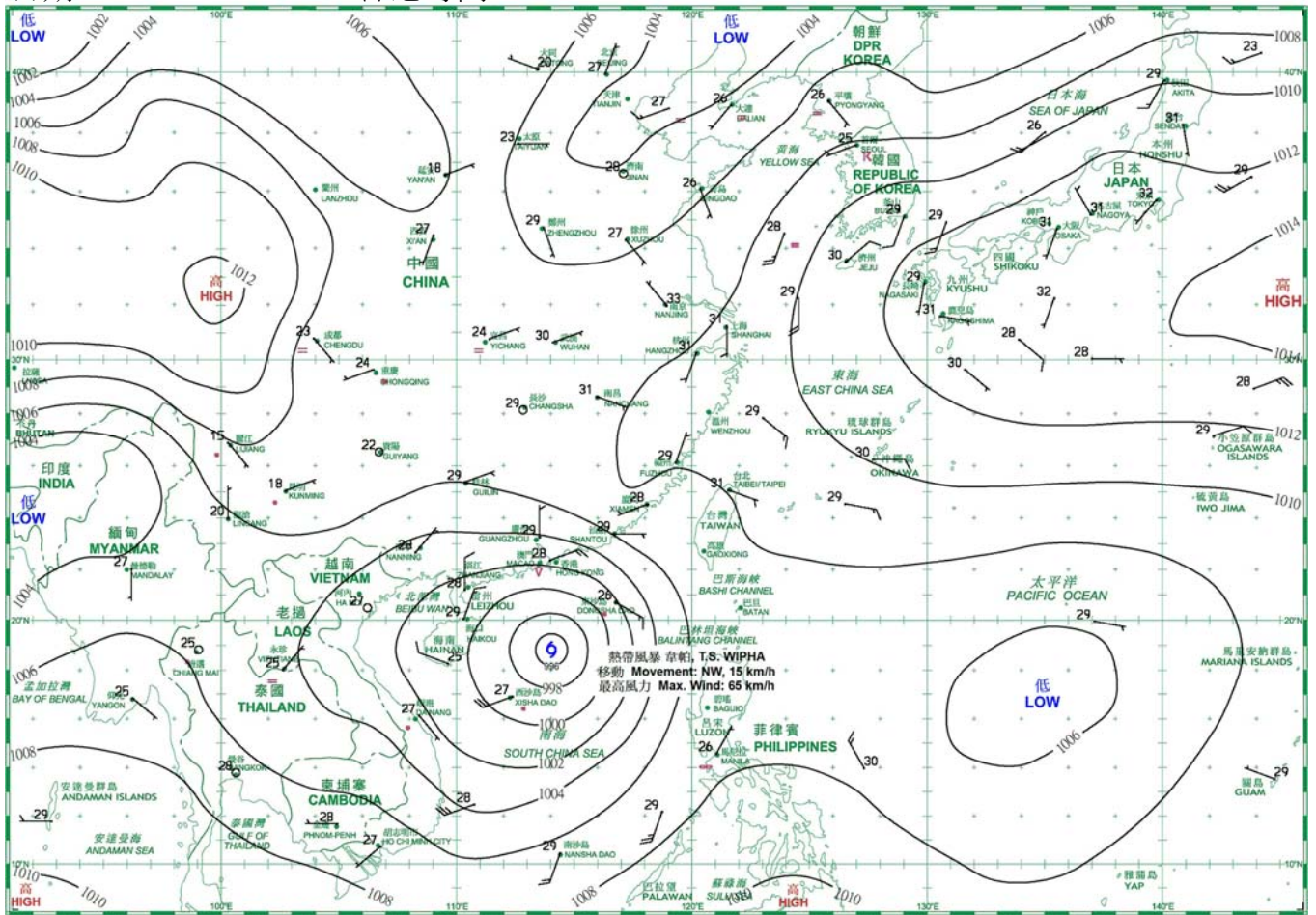


日期/Date: 29.07.2019 香港時間/HK Time: 08:00



日期/Date: 30.07.2019 香港時間/HK Time: 08:00





4.1.1 二零一九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 2019

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	1001.6	33.2	30.0	26.8	26.5	82	72	15.3
2	1001.4	31.1	28.9	26.3	26.0	85	82	19.1
3	1004.0	28.7	26.6	25.5	25.7	95	93	79.1
4	1006.3	32.3	29.1	27.0	26.0	84	85	13.0
5	1004.9	32.0	29.5	26.8	25.4	79	83	1.3
6	1003.5	31.6	29.8	27.9	25.9	80	85	1.5
7	1004.7	31.4	29.7	28.9	26.0	81	88	4.3
8	1005.6	32.3	30.1	29.1	26.1	79	85	0.1
9	1003.4	31.7	30.0	28.7	26.1	80	88	6.0
10	1003.5	30.2	28.6	26.5	26.0	86	88	14.3
11	1007.5	30.9	28.8	27.5	26.1	86	87	6.0
12	1007.4	32.3	29.9	28.1	26.0	80	82	2.6
13	1005.4	32.2	30.1	29.2	25.6	77	88	Tr
14	1004.0	32.3	30.1	29.2	26.0	79	85	Tr
15	1004.8	33.7	30.4	28.7	26.0	77	74	-
16	1004.7	33.4	30.3	28.4	25.5	76	47	-
17	1001.4	33.1	30.5	28.3	26.5	79	66	-
18	998.7	35.0	31.3	29.6	26.4	75	53	Tr
19	1001.2	32.8	29.5	26.9	26.3	83	73	22.6
20	1005.2	31.9	28.6	26.6	26.1	87	85	6.4
21	1006.4	31.5	29.3	27.3	26.1	83	85	0.1
22	1005.5	31.5	29.2	27.1	25.7	82	88	0.4
23	1005.3	32.7	29.5	27.2	25.8	80	75	Tr
24	1006.6	33.1	30.0	28.4	26.3	81	68	Tr
25	1008.0	32.6	30.1	28.3	25.9	79	62	1.0
26	1006.9	33.5	30.7	28.8	25.8	76	63	Tr
27	1005.8	33.3	30.6	29.0	25.7	76	78	-
28	1006.6	32.3	29.6	28.0	25.7	80	77	0.5
29	1006.6	31.4	28.8	27.4	25.4	82	79	1.0
30	1004.5	31.5	28.9	26.7	25.6	82	84	12.8
31	1002.0	28.1	26.2	24.5	24.6	91	91	121.1
平均/總值 Mean/Total	1004.6	32.1	29.5	27.7	25.9	81	79	328.5
正常* Normal*	1005.7	31.4	28.8	26.8	25.1	81	69	376.5
觀測站 Station	天文台 Hong Kong Observatory							

天文台於七月十八日 17 時 18 分錄得本月最低氣壓 996.6 百帕斯卡。

The minimum pressure recorded at the Hong Kong Observatory was 996.6 hectopascals at 1718 HKT on 18 July.

天文台於七月十八日 14 時 24 分錄得本月最高氣溫 35.0 °C。

The maximum air temperature recorded at the Hong Kong Observatory was 35.0 °C at 1424 HKT on 18 July.

天文台於七月三十一日 19 時 43 分錄得本月最低氣溫 24.5 °C。

The minimum air temperature recorded at the Hong Kong Observatory was 24.5 °C at 1943 HKT on 31 July.

京士柏於七月三十日 23 時 31 分錄得本月最高1分鐘平均降雨率 146 毫米/小時。

The maximum 1-minute mean rainfall rate recorded at King's Park was 146 millimetres per hour at 2331 HKT on 30 July.

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

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

Tr - 微量 (降雨量少於 0.05 毫米)

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

4.1.2 二零一九年七月香港氣象觀測摘錄(二)

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

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	8.5	24.32	6.4	080	27.7
2	0	3.5	14.26	3.3	070	32.7
3	0	-	4.03	1.2	170	19.5
4	0	2.4	12.59	2.3	190	28.9
5	0	7.4	21.72	4.9	230	31.4
6	0	3.8	16.52	4.5	230	31.2
7	0	1.8	10.94	2.1	210	30.8
8	0	1.7	11.13	3.9	210	31.1
9	0	3.5	16.03	3.8	220	38.2
10	0	-	5.81	1.1	230	29.8
11	0	1.1	9.40	2.8	190	15.1
12	0	6.1	18.59	4.6	210	29.2
13	0	6.5	19.96	4.9	220	35.5
14	0	2.4	12.19	3.1	220	29.9
15	0	9.6	21.11	4.6	190	11.5
16	0	10.9	24.34	5.6	220	9.8
17	0	6.2	16.59	3.8	290	14.2
18	1	9.5	20.40	4.9	280	14.0
19	0	1.9	8.93	2.9	250	24.1
20	0	2.8	10.83	2.4	240	21.4
21	0	6.2	15.97	3.3	240	10.8
22	0	1.5	11.59	2.6	110	8.8
23	0	6.8	18.54	3.8	020	12.4
24	0	6.3	18.99	3.3	160	13.8
25	0	7.1	17.42	3.9	230	17.6
26	0	11.4	26.56	5.9	240	17.8
27	0	10.4	24.78	5.6	240	19.0
28	0	3.0	12.64	3.3	220	10.9
29	0	3.3	13.50	2.8	060	27.0
30	0	4.8	16.14	3.5	070	46.7
31	0	0.1	4.96	3.3	080	59.9
平均/總值 Mean/Total	1	150.5	15.51	114.4	230	24.2
正常* Normal*	13.5 §	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 13 時 48 分錄得本月最高陣風 117 公里/小時，風向 080 度。

The maximum gust peak speed recorded at Waglan Island was 117 kilometres per hour from 080 degrees at 1348 HKT on 31 July.

低能見度是指能見度低於 8 公里，不包括出現霧、薄霧或降水。

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

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

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

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

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

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

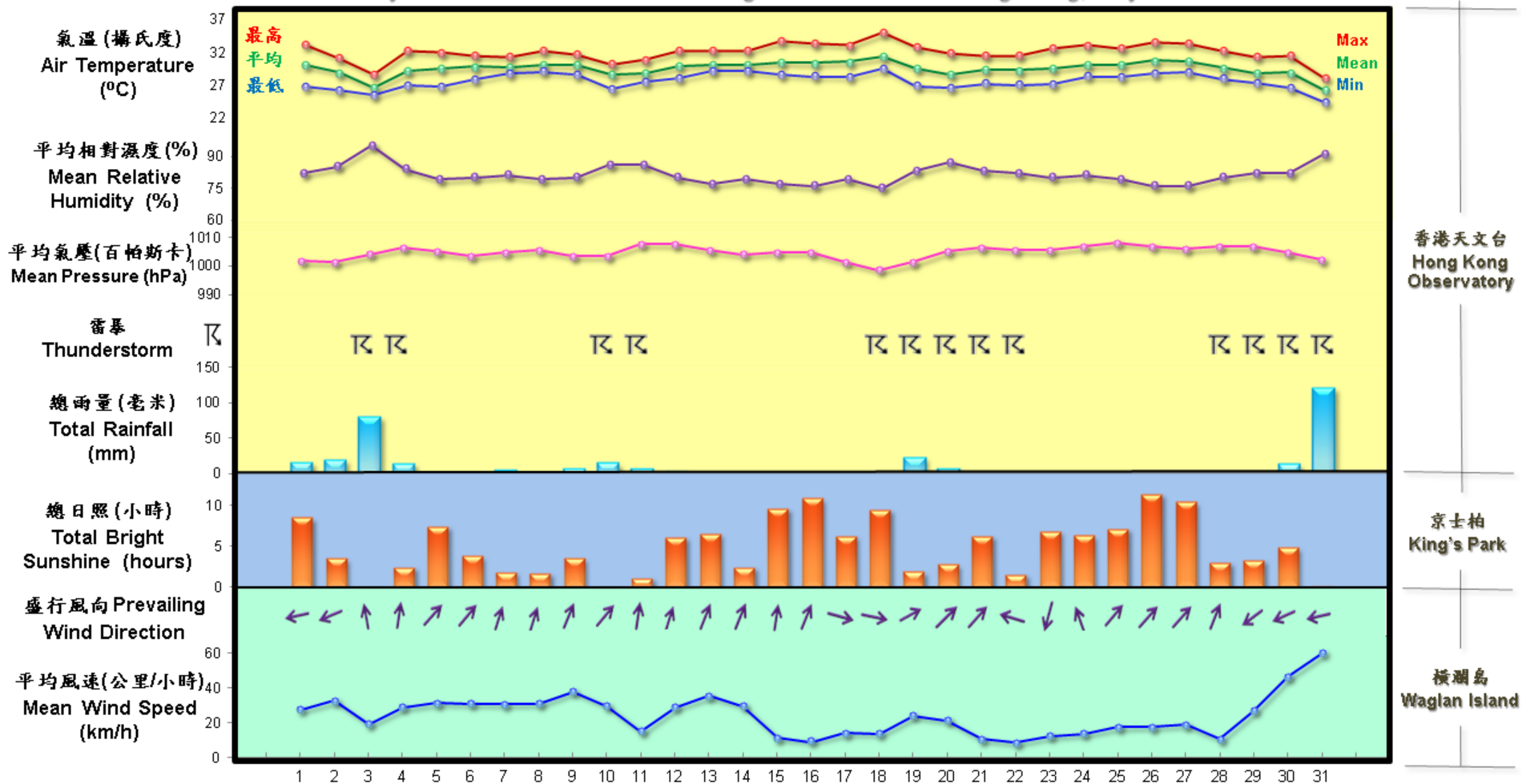
* 1981-2010 Climatological normal, unless otherwise specified (<http://www.hko.gov.hk/wxinfo/climat/normal/enormal107.htm>)

§ 1997-2018 平均值

§ 1997-2018 Mean value

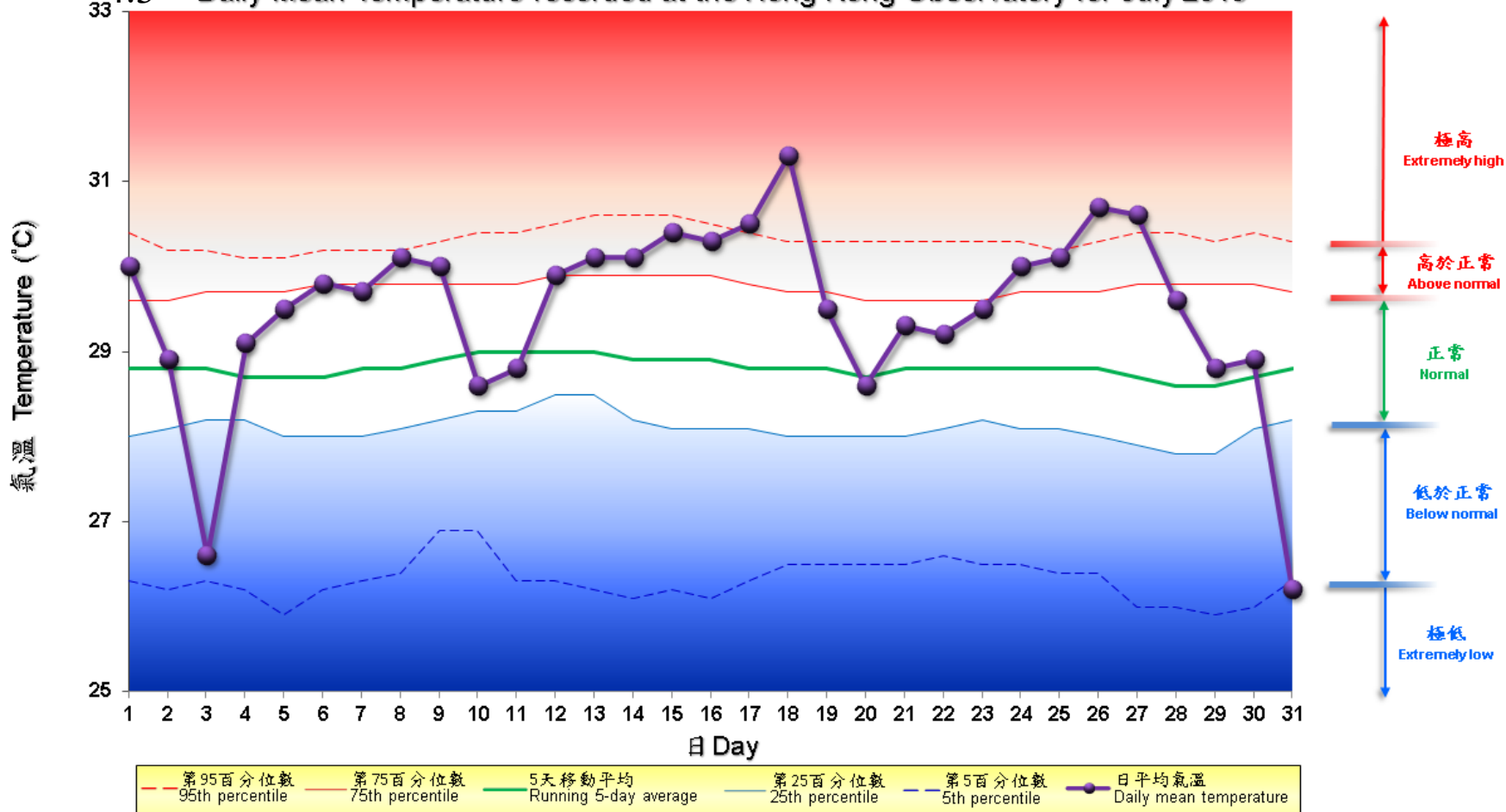
4.2 2019年7月部分香港氣象要素的每日記錄

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



4.3 2019年7月香港天文台錄得的日平均氣溫

4.3 Daily Mean Temperature recorded at the Hong Kong Observatory for July 2019



備註:

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

Remarks:

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