

第一節 引言

1.1 熱帶氣旋刊物的沿革

除了在一九四零至一九四六年因二次大戰而中斷外，天文台自一八八四年以來便一直進行地面氣象觀測，並將整理好的數據撮列於由天文台出版的《氣象資料》年刊內。天文台在一九四七年開始進行高空氣象觀測後，該年刊便分成兩冊：分別是《氣象資料第一冊（地面觀測）》及《氣象資料第二冊（高空觀測）》。一九八一年，年刊第二冊改稱為《無線電探空儀觀測摘要》，而第一冊亦於一九八七年改稱為《香港地面觀測年報》。一九九三年，該兩刊物由一本名為《香港氣象觀測摘要》的新刊物所取代。這份摘要載列了地面及高空的氣象數據。

一八八四至一九三九年期間，部分對香港造成破壞的颱風的報告，曾以附錄形式載於《氣象資料》年刊內。而在一九四七至一九六七年出版的《天文台年報》，更擴充了有關熱帶氣旋的內容，收納所有導致香港吹烈風的熱帶氣旋的報告。其後，年刊系列加推《氣象資料第三冊（熱帶氣旋摘要）》，以記載每年北太平洋西部及南海區域所有熱帶氣旋的資料。此冊第一期在一九七一年出版，內容包括一九六八年赤道至北緯45度、東經100至160度範圍內所有熱帶氣旋的報告。由一九八五年開始，第三冊的覆蓋範圍東面邊界由東經160度伸展至180度。一九八七年，第三冊改稱為《熱帶氣旋年報》，內容大致上維持不變。年報由一九九七年起以中英雙語刊印，一年後加設電腦光碟版，二零零零年以網上版取代印刷版。

在一九三九年及以前，每年北太平洋西部及南海區域的熱帶氣旋的路徑圖都收錄於《氣象資料》年刊內。一九四七至一九六七年的路徑圖則載列於《氣象資料第一冊》內。在早期的刊物內，熱帶氣旋的路徑只顯示每日位置，而每日定位時間在某程度上還未統一。但到了一九四四年以後，則一直維持以每日協調世界時(UTC)零時作定位。此項改變的資料詳載於天文台出版的《技術記錄第十一號第一冊》內。由一九六一年開始，所有熱帶氣旋的路徑圖都顯示每六小時的位置。

為了能回應傳媒、航運界及其他有關人士或團體的需求，天文台自一九六零年開始就影響香港的個別熱帶氣旋編寫臨時報告，盡早為有需要的人士提供資料。初時，天文台只就那些曾導致天文台發出烈風或暴風信號以上的熱帶氣旋編寫臨時報告。自一九六八年起，天文台為所有引致天文台發出熱帶氣旋警告信號的熱帶氣旋編寫臨時報告。

1.2 熱帶氣旋等級

為了讓市民對較強的颱風特別提高警覺，天文台在二零零九年開始將「颱風」分為三級，即「颱風」、「強颱風」和「超強颱風」。根據熱帶氣旋中心附近的最高持續地面風速，熱帶氣旋共分為以下六個級別：

- (i) 熱帶低氣壓 (T.D.) 的最高持續風速為每小時63公里以下。
- (ii) 熱帶風暴 (T.S.) 的最高持續風速為每小時63至87公里。
- (iii) 強烈熱帶風暴 (S.T.S.) 的最高持續風速為每小時88至117公里。
- (iv) 颱風# (T.) 的最高持續風速為每小時118至149公里。
- (v) 強颱風* (S.T.) 的最高持續風速為每小時150至184公里。
- (vi) 超強颱風* (SuperT.) 的最高持續風速為每小時185公里或以上。

1.3 熱帶氣旋命名

從一九四七年至一九九九年，北太平洋西部及南海區域的熱帶氣旋非正式地採用美國軍方「聯合颱風警報中心」所編訂的名單上的名字。由二零零零年開始，日本氣象廳根據一套新名單為每個達到熱帶風暴強度的熱帶氣旋命名。這套名單（表1.1）經颱風委員會通過，共有140個名字，分別由亞太區內14個國家或地區提供。這些名字除了用於為國際航空及航海界發放的預測和警報外，也是向國際傳媒發放熱帶氣旋消息時採用的規範名稱。而名單會每年檢討和更新，通常導致嚴重傷亡的熱帶氣旋會依照受影響國家或地區的要求而被刪除。提供該名字的國家或地區會建議新名字取代。

另外，日本氣象廳在一九八一年起已獲委託為每個在北太平洋西部及南海區域出現而達到熱帶風暴強度的熱帶氣旋編配一個四位數字編號。例如編號“2001”代表在二零零零年區內第一個被日本氣象廳分類為熱帶風暴或更強的熱帶氣旋。在年報內，此編號會顯示在熱帶氣旋名稱後的括弧內，例如強颱風黃蜂（2001）。

二零零九年以前颱風的最高持續風速為每小時118公里或以上。

* 二零零九年新增等級。

1.4 資料來源

年報內的海平面氣壓及地面風資料，是根據天文台氣象站及測風站網絡所錄得的數據。表1.2及1.3分別是該些網絡內各站的位置及海拔高度。

熱帶氣旋產生的最大風暴潮是由裝置在香港多處的潮汐測量器量度。圖1.1是本年報內提及的各個風速表及潮汐測量站的分佈地點。

年報內的雨量資料來自天文台氣象站和雨量站網絡及土力工程處的雨量站。

除特別列明外，年報內提及的最高持續風速均為10分鐘內風速的平均值；每小時平均風速為該小時前60分鐘內的平均風速；每日雨量為當天香港時間午夜前24小時內的總雨量。

1.5 年報內容

年報第二節是二零二零年所有影響北太平洋西部及南海區域的熱帶氣旋的概述。

年報第三節是二零二零年影響香港的熱帶氣旋的個別詳細報告，內容包括：

- (i) 該熱帶氣旋對香港造成的影響；
- (ii) 發出熱帶氣旋警告信號的過程；
- (iii) 香港各地錄得的最高陣風風速及最高每小時平均風速；
- (iv) 香港天文台錄得的最低平均海平面氣壓；
- (v) 香港天文台及其他地方錄得的每日總雨量；
- (vi) 香港各潮汐測量站錄得的最高潮位及最大風暴潮；及
- (vii) 氣象衛星雲圖及雷達圖像。

有關熱帶氣旋的各種資料及統計表載於年報第四節內。

二零二零年每個熱帶氣旋的每六小時位置，連同當時的最低中心氣壓及最高持續風速，則表列於年報第五節內。

年報依照內文需要採用了不同的時間系統。正式的時間以協調世界時（即UTC）為準。至於在熱帶氣旋的敘述中，用作表示每天各時段的詞彙，例如“上午”、“下午”、“早上”、“黃昏”等則是指香港時間。香港時間為協調世界時加八小時。

1.6 香港的熱帶氣旋警告系統

表1.4是香港熱帶氣旋警告信號的定義。

由二零零七年開始，發出3號和8號信號的參考範圍由維多利亞港擴展至由八個涵蓋全港並接近海平面的參考測風站組成的網絡(圖1.1顯示2020年所採用的八個參考測風站)。這些測風站處於較為空曠的位置，地理上的考慮也包括山脈地勢的自然分隔，可概括地反映全港的風勢。

當參考網絡中半數或以上的測風站錄得或預料持續風速達到指標的風速限值，而且風勢可能持續時，天文台會考慮發出3號或8號信號。

Section 1 INTRODUCTION

1.1 Evolution of tropical cyclone publications

Apart from a disruption due to World War II during 1940-1946, surface observations of meteorological elements since 1884 have been summarized and published in the Observatory's annual publication "Meteorological Results". Upper-air observations began in 1947 and from then onwards the annual publication was divided into two parts, namely "Meteorological Results Part I - Surface Observations" and "Meteorological Results Part II - Upper-air Observations". These two publications were re-titled "Surface Observations in Hong Kong" and "Summary of Radiosonde-Radiowind Ascents" in 1987 and 1981 respectively. In 1993, both publications were merged into one revised publication entitled "Summary of Meteorological Observations in Hong Kong", including surface as well as upper-air data.

During the period 1884-1939, reports on some destructive typhoons were printed as Appendices to the "Meteorological Results". This practice was extended and accounts of all tropical cyclones which caused gales in Hong Kong were included in the publication "Director's Annual Departmental Reports" from 1947 to 1967 inclusive. The series "Meteorological Results Part III - Tropical Cyclone Summaries" was subsequently introduced to provide information on tropical cyclones over the western North Pacific and the South China Sea. The first issue, published in 1971, contained reports on tropical cyclones in 1968 within the area bounded by the Equator, 45°N, 100°E and 160°E. The eastern boundary of the area of coverage was extended from 160°E to 180° from 1985 onwards. In 1987, the series was re-titled as "Tropical Cyclones in YYYY" but its contents remained largely the same. Starting from 1997, the series was published in both Chinese and English. The CD-ROM version of the publication first appeared in 1998 and the printed version was replaced by the Internet version in 2000.

Tracks of tropical cyclones in the western North Pacific and the South China Sea were published in "Meteorological Results" up to 1939 and in "Meteorological Results Part I" from 1947 to 1967. In earlier publications, only daily positions were plotted on the tracks and the time of the daily positions varied to some extent, but then remained fixed at 0000 UTC after 1944. Details of the changes are given in the Observatory's publication "Technical Memoir No. 11, Volume 1". From 1961 onwards, six-hourly positions are shown on the tracks of all tropical cyclones.

Provisional reports on individual tropical cyclones affecting Hong Kong were prepared since 1960 to provide early information to meet the needs of the press, shipping companies and others. These reports were printed and supplied on request. Initially, provisional reports were only available for tropical cyclones for which gale or storm signals or above had been issued in Hong Kong. From 1968 onwards, provisional reports were prepared for all tropical cyclones that necessitated the issuance of tropical cyclone warning signals.

1.2 Classification of tropical cyclones

To enhance public awareness of stronger typhoons, the Observatory further categorised 'Typhoon' into 'Typhoon', 'Severe Typhoon' and 'Super Typhoon' starting from the 2009 tropical cyclone season. Tropical cyclones are now classified into the following six categories according to the maximum sustained surface winds near their centres:

- (a) A TROPICAL DEPRESSION (T.D.) has maximum sustained winds of less than 63 km/h.
- (b) A TROPICAL STORM (T.S.) has maximum sustained winds in the range 63-87 km/h.
- (c) A SEVERE TROPICAL STORM (S.T.S.) has maximum sustained winds in the range 88-117 km/h.
- (d) A TYPHOON# (T.) has maximum sustained winds of 118-149 km/h.
- (e) A SEVERE TYPHOON* (S.T.) has maximum sustained winds of 150-184 km/h.
- (f) A SUPER TYPHOON* (SuperT.) has maximum sustained winds of 185 km/h or more.

1.3 Naming of tropical cyclones

Over the western North Pacific and the South China Sea between 1947 and 1999, tropical cyclone names were assigned by the U.S. Armed Forces' Joint Typhoon Warning Center according to a pre-determined but unofficial list. With effect from 2000, the Japan Meteorological Agency has been assigned the responsibility to name tropical cyclones attaining tropical storm intensity according to a new list adopted by the Typhoon Committee. It contains a total of 140 names contributed by 14 countries or territories within the Asia Pacific region (Table 1.1). Apart from being used in forecasts and warnings issued to the international aviation and shipping communities, the names are also used officially in information on tropical cyclones issued to the international press. The list is reviewed every year, and usually names of tropical cyclones that have caused serious damage or casualty will be retired upon the requests of countries or territories affected. Countries or territories providing those names will then propose new names as replacement.

Besides, since 1981, Japan Meteorological Agency has been delegated with the responsibility of assigning to each tropical cyclone in the western North Pacific and the South China Sea attaining tropical storm intensity a numerical code of four digits. For example, the first tropical cyclone of tropical storm intensity or above, as classified by Japan Meteorological Agency, within the region in 2020 was assigned the code "2001". In this report, the associated code immediately follows the name of the tropical cyclone in bracket, e.g. Severe Typhoon Vongfong (2001).

Prior to 2009, the maximum sustained winds of typhoon was defined to be 118 km/h or more.

* New categories adopted since 2009.

1.4 Data sources

Mean sea level pressure and surface wind data presented in this report were obtained from a network of meteorological stations and anemometers operated by the Hong Kong Observatory. Details of such stations are listed in Tables 1.2 and 1.3.

Maximum storm surges caused by tropical cyclones were measured by tide gauges installed at several locations around Hong Kong. The locations of anemometers and tide gauges mentioned in this report are shown in Figure 1.1.

Rainfall data presented in this report were obtained from a network of meteorological and rainfall stations operated by the Hong Kong Observatory, as well as raingauges operated by the Geotechnical Engineering Office.

Throughout this report, maximum sustained surface winds when used without qualification refer to wind speeds averaged over a period of 10 minutes. Hourly mean winds are winds averaged over a 60-minute interval ending on the hour. Daily rainfall amounts are computed over a 24-hour period ending at midnight Hong Kong Time.

1.5 Content

In Section 2, an overview of all the tropical cyclones over the western North Pacific and the South China Sea in 2020 is presented.

The reports in Section 3 are individual accounts of the life history of tropical cyclones affecting Hong Kong in 2020. They include the following information:-

- (a) the effects of the tropical cyclone on Hong Kong;
- (b) the sequence of display of tropical cyclone warning signals;
- (c) the maximum gust peak speeds and maximum hourly mean winds recorded in Hong Kong;
- (d) the lowest mean sea level pressure recorded at the Hong Kong Observatory;
- (e) the daily amounts of rainfall recorded at the Hong Kong Observatory and selected locations;
- (f) the times and heights of the maximum sea level and maximum storm surge recorded at various tide stations in Hong Kong;
- (g) satellite and radar imageries.

Statistics and information relating to tropical cyclones are presented in various tables in Section 4.

Six-hourly positions together with the corresponding estimated minimum central pressures and maximum sustained surface winds for individual tropical cyclones in 2020 are tabulated in Section 5.

In this report, different time references are used depending on the contexts. The official reference times are given in Co-ordinated Universal Time and labelled UTC. Times of the day expressed as “a.m.”, “p.m.”, “morning”, “evening” etc. in the tropical cyclone narratives are in Hong Kong Time which is eight hours ahead of UTC.

1.6 Hong Kong's Tropical Cyclone Warning System

Table 1.4 shows the meaning of tropical cyclone warning signals in Hong Kong.

Starting from 2007, the reference for the issuance of No.3 and No.8 signals has been expanded from the Victoria Harbour to a network of eight near-sea level reference anemometers covering the whole of Hong Kong. The eight reference anemometers adopted in 2020 are depicted in Figure 1.1. The reference anemometers have good exposure and geographical distribution, taking into account the physical separation created by Hong Kong's natural terrain. Together, they are used to represent the overall wind condition in Hong Kong.

The Observatory will consider issuing the No. 3 or No. 8 signal, as the case may be, when half or more anemometers in the reference network register or are expected to register sustained strong winds or gale/storm force winds, and that the windy conditions are expected to persist.

表 1.1 二零二零年一月一日起生效的熱帶氣旋名單

TABLE 1.1 Tropical cyclone name list effective from 1 January 2020

| 來源 | Contributed by | I | II | III | IV | V |
|--------|---------------------|------------------|------------------|-----------------|-----------------|------------------|
| | | 名字 Name | 名字 Name | 名字 Name | 名字 Name | 名字 Name |
| 柬埔寨 | Cambodia | 達維 Damrey | 康妮 Kong-rey | 娜基莉 Nakri | 科羅旺 Krovanh | 翠絲 Trases |
| 中國 | China | 海葵 Haikui | 玉兔 Yutu | 風神 Fengshen | 杜鵑 Dajuan | 木蘭 Mulan |
| 朝鮮 | DPR Korea | 鴻雁 Kirogi | 桃芝 Toraji | 海鷗 Kalmaegi | 舒力基 Surigae | 米雷 Meari |
| 中國香港 | Hong Kong, China | 鴛鴦 Yun-yeung | 萬宜 Man-yi | 鳳凰 Fung-wong | 彩雲 Choi-wan | 馬鞍 Ma-on |
| 日本 | Japan | 小犬 Koinu | 天兔 Usagi | 北冕 Kammuri | 小熊 Koguma | 蝎虎 Tokage |
| 老撾 | Lao PDR | 布拉萬 Bolaven | 帕布 Pabuk | 巴蓬 Phanfone | 薔琵 Champi | 軒嵐諾 Hinnamnor |
| 中國澳門 | Macau, China | 三巴 Sanba | 蝴蝶 Wutip | 黃蜂 Vongfong | 煙花 In-fa | 梅花 Muifa |
| 馬來西亞 | Malaysia | 杰拉華 Jelawat | 聖帕 Sepat | 鸚鵡 Nuri | 查帕卡 Cempaka | 苗柏 Merbok |
| 米克羅尼西亞 | Micronesia | 艾雲尼 Ewiniar | 木恩 Mun | 森拉克 Sinlaku | 尼伯特 Nepartak | 南瑪都 Nanmadol |
| 菲律賓 | Philippines | 馬力斯 Maliksi | 丹娜絲 Danas | 黑格比 Hagupit | 盧碧 Lupit | 塔拉斯 Talas |
| 韓國 | RO Korea | 格美 Gaemi | 百合 Nari | 薔薇 Jangmi | 銀河 Mirinae | 奧鹿 Noru |
| 泰國 | Thailand | 派比安 Prapiroon | 韋帕 Wipha | 米克拉 Mekkhala | 妮妲 Nida | 玫瑰 Kulap |
| 美國 | U.S.A. | 瑪莉亞 Maria | 范斯高 Francisco | 海高斯 Higos | 奧麥斯 Omais | 洛克 Roke |
| 越南 | Viet Nam | 山神 Son-Tinh | 利奇馬 Lekima | 巴威 Bavi | 康森 Conson | 桑卡 Sonca |
| 柬埔寨 | Cambodia | 安比 Ampil | 羅莎 Krosa | 美莎克 Maysak | 燦都 Chanthu | 納沙 Nesat |
| 中國 | China | 悟空 Wukong | 白鹿 Bailu | 海神 Haishen | 電母 Dianmu | 海棠 Haitang |
| 朝鮮 | DPR Korea | 雲雀 Jongdari | 楊柳 Podul | 紅霞 Noul | 蒲公英 Mindulle | 尼格 Nalgae |
| 中國香港 | Hong Kong, China | 珊珊 Shanshan | 玲玲 Lingling | 白海豚 Dolphin | 獅子山 Lionrock | 榕樹 Banyan |
| 日本 | Japan | 摩羯 Yagi | 劍魚 Kajiki | 鯨魚 Kujira | 圓規 Kompasu | 山貓 Yamaneko |
| 老撾 | Lao PDR | 麗琵 Leepi | 法茜 Faxai | 燦鴻 Chan-hom | 南川 Namtheun | 帕卡 Pakhar |

表 1.1 (續)

TABLE 1.1 (cont'd)

| 來源 | Contributed by | I | II | III | IV | V |
|--------|----------------|----------------|----------------|---------------|----------------|----------------|
| | | 名字 Name | 名字 Name | 名字 Name | 名字 Name | 名字 Name |
| 中國澳門 | Macau, China | 貝碧嘉 Bebinca | 琵琶 Peipah | 蓮花 Linfa | 瑪瑙 Malou | 珊瑚 Sanvu |
| 馬來西亞 | Malaysia | 普拉桑 Pulasan | 塔巴 Tapah | 浪卡 Nangka | 妮亞圖 Nyatoh | 瑪娃 Mawar |
| 米克羅尼西亞 | Micronesia | 蘇力 Soulik | 米娜 Mitag | 沙德爾 Saudel | 雷伊 Rai | 古超 Guchol |
| 菲律賓 | Philippines | 西馬侖 Cimaron | 海貝思 Hagibis | 莫拉菲 Molave | 馬勒卡 Malakas | 泰利 Talim |
| 韓國 | RO Korea | 飛燕 Jebi | 浣熊 Neoguri | 天鵝 Goni | 鮎魚 Megi | 杜蘇芮 Doksuri |
| 泰國 | Thailand | 山陀兒 Krathon | 博羅依 Bualoi | 艾莎尼 Atsani | 暹芭 Chaba | 卡努 Khanun |
| 美國 | U.S.A. | 百里嘉 Barijat | 麥德姆 Matmo | 艾濤 Etau | 艾利 Aere | 蘭恩 Lan |
| 越南 | Viet Nam | 潭美 Trami | 夏浪 Halong | 環高 Vamco | 桑達 Songda | 蘇拉 Saola |

註： 在二零二零年，西北太平洋和南海的熱帶氣旋名單上新增了兩個新名字「普拉桑」及「山陀兒」，分別取代舊有名字「溫比亞」及「山竹」。

Note: In 2020, two new names "Pulasan" and "Krathon" have been adopted for tropical cyclones in the western North Pacific and the South China Sea, replacing "Rumbia" and "Mangkhut" respectively.

表 1.2 年報內各氣壓表的海拔高度及所處氣象站的位置

TABLE 1.2 Elevations of various barometers and positions of weather stations mentioned in this annual report

| 站 Station | | 位置 Position | | 氣壓表的海拔高度(米) |
|-----------|------------------------------------|------------------|-------------------|---|
| | | 北緯 Latitude N | 東經 Longitude E | Elevation of barometer above M.S.L. (m) |
| 香港天文台總部 | Hong Kong Observatory Headquarters | 22°18'07" | 114°10'27" | 40 |
| 長洲 | Cheung Chau | 22°12'04" | 114°01'36" | 79 |
| 香港國際機場 | Hong Kong International Airport | 22°18'34" | 113°55'19" | 7 |
| 京士柏 | King's Park | 22°18'43" | 114°10'22" | 66 |
| 流浮山 | Lau Fau Shan | 22°28'08" | 113°59'01" | 36 |
| 橫瀾島 | Waglan Island | 22°10'56" | 114°18'12" | 60 |

表 1.3 年報內各風速表的海拔高度及所處氣象站的位置

TABLE 1.3 Elevations of various anemometers and positions of the weather stations mentioned in this annual report

| 站 Station | | 位置 Position | | 風速表的海拔高度(米) |
|-----------|----------------------------------|------------------|-------------------|--|
| | | 北緯 Latitude N | 東經 Longitude E | Elevation of anemometer above M.S.L. (m) |
| 黃麻角(赤柱) | Bluff Head (Stanley) | 22°11'51" | 114°12'43" | 103 |
| 中環碼頭 | Central Pier | 22°17'20" | 114°09'21" | 30 |
| 長洲* | Cheung Chau* | 22°12'04" | 114°01'36" | 99 |
| 長洲泳灘 | Cheung Chau Beach | 22°12'39" | 114°01'45" | 27 |
| 青洲 | Green Island | 22°17'06" | 114°06'46" | 107 |
| 香港國際機場* | Hong Kong International Airport* | 22°18'34" | 113°55'19" | 14# |
| 啟德* | Kai Tak* | 22°18'35" | 114°12'48" | 16 |
| 京士柏 | King's Park | 22°18'43" | 114°10'22" | 90 |
| 南丫島 | Lamma Island | 22°13'34" | 114°06'31" | 17 |
| 流浮山* | Lau Fau Shan* | 22°28'08" | 113°59'01" | 50 |
| 昂坪 | Ngong Ping | 22°15'31" | 113°54'46" | 607 |
| 北角 | North Point | 22°17'40" | 114°11'59" | 26 |
| 坪洲 | Peng Chau | 22°17'28" | 114°02'36" | 47 |
| 平洲 | Ping Chau | 22°32'48" | 114°25'42" | 39 |
| 西貢* | Sai Kung* | 22°22'32" | 114°16'28" | 32 |
| 沙洲 | Sha Chau | 22°20'45" | 113°53'28" | 31 |
| 沙螺灣 | Sha Lo Wan | 22°17'28" | 113°54'25" | 71 |
| 沙田* | Sha Tin* | 22°24'09" | 114°12'36" | 16 |
| 石崗 | Shek Kong | 22°26'10" | 114°05'05" | 26 |
| 九龍天星碼頭 | Star Ferry (Kowloon) | 22°17'35" | 114°10'07" | 18 |
| 打鼓嶺* | Ta Kwu Ling* | 22°31'43" | 114°09'24" | 28 |
| 大美督 | Tai Mei Tuk | 22°28'31" | 114°14'15" | 71 |
| 大帽山 | Tai Mo Shan | 22°24'38" | 114°07'28" | 966 |
| 大埔滘 | Tai Po Kau | 22°26'33" | 114°11'03" | 11 |
| 塔門東 | Tap Mun East | 22°28'06" | 114°21'47" | 48 |
| 大老山 | Tate's Cairn | 22°21'28" | 114°13'04" | 587 |
| 將軍澳 | Tseung Kwan O | 22°18'57" | 114°15'20" | 52 |
| 青衣島蜆殼油庫* | Tsing Yi Shell Oil Depot* | 22°20'48" | 114°05'11" | 43 |
| 屯門政府合署 | Tuen Mun Government Offices | 22°23'26" | 113°58'36" | 69 |
| 橫瀾島 | Waglan Island | 22°10'56" | 114°18'12" | 83 |
| 濕地公園 | Wetland Park | 22°28'00" | 114°00'32" | 15 |
| 黃竹坑 | Wong Chuk Hang | 22°14'52" | 114°10'25" | 30 |

所指風速表在北跑道近中間位置

Refer to the wind sensor at the middle of the north runway

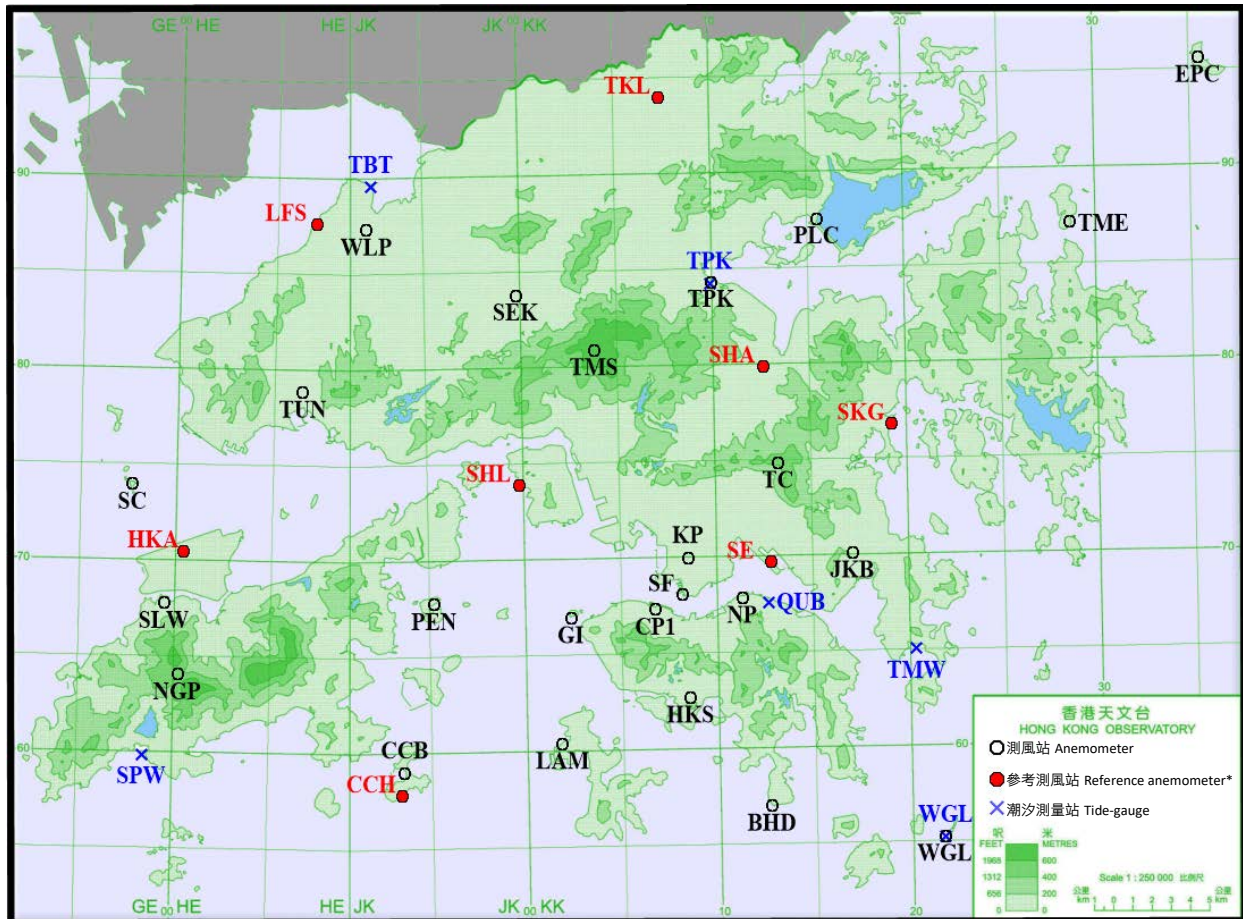
* 參考測風站

* Reference anemometer

表 1.4 二零二零年香港熱帶氣旋警告信號的意義

TABLE 1.4 Meaning of tropical cyclone warning signals in Hong Kong in 2020

| 信號 Signals | | 顯示符號 Symbol Display | 信號的意義 Meaning of Signals |
|--|------------|------------------------|--|
| 戒備 Standby | 1 | | 有一熱帶氣旋集結於香港約800公里的範圍內，可能影響本港。 A tropical cyclone is centred within about 800 km of Hong Kong and may affect the territory. |
| 強風 Strong Wind | 3 | | 香港近海平面處現正或預料會普遍吹強風，持續風力達每小時41至62公里，陣風更可能超過每小時110公里，且風勢可能持續。 Strong wind is expected or blowing generally in Hong Kong near sea level, with a sustained speed of 41-62 kilometres per hour (km/h), and gusts which may exceed 110 km/h, and the wind condition is expected to persist. |
| 西北 烈風或暴風 NW'LY Gale or Storm | 8 西北 NW | | 香港近海平面處現正或預料會普遍受烈風或暴風從信號所示方向吹襲，持續風力達每小時63至117公里，陣風更可能超過每小時180公里，且風勢可能持續。 Gale or storm force wind is expected or blowing generally in Hong Kong near sea level, with a sustained wind speed of 63-117 km/h from the quarter indicated and gusts which may exceed 180 km/h, and the wind condition is expected to persist. |
| 西南 烈風或暴風 SW'LY Gale or Storm | 8 西南 SW | | |
| 東北 烈風或暴風 NE'LY Gale or Storm | 8 東北 NE | | |
| 東南 烈風或暴風 SE'LY Gale or Storm | 8 東南 SE | | |
| 烈風或暴風 風力增強 Increasing Gale or Storm | 9 | | |
| 颶風 Hurricane | 10 | | 風力現正或預料會達到颶風程度，持續風力達每小時118公里或以上，陣風更可能超過每小時220公里。 Hurricane force wind is expected or blowing with sustained speed reaching upwards from 118 km/h and gusts that may exceed 220 km/h. |



* 熱帶氣旋警告系統的參考測風站網絡

*Network of reference anemometers in the tropical cyclone warning system

| 測風站 Anemometers | | 測風站 Anemometers | |
|-----------------|------------------------------|--------------------------------------|--|
| BHD | 黃麻角(赤柱) Bluff Head (Stanley) | TMS | 大帽山 Tai Mo Shan |
| CCB | 長洲泳灘 Cheung Chau Beach | TUN | 屯門政府合署 Tuen Mun Government Offices |
| CP1 | 中環碼頭 Central Pier | WLP | 濕地公園 Wetland Park |
| EPC | 平洲 Ping Chau | WGL | 橫瀾島 Waglan Island |
| GI | 青洲 Green Island | 參考測風站* Reference anemometers* | |
| HKS | 黃竹坑 Wong Chuk Hang | CCH | 長洲 Cheung Chau |
| JKB | 將軍澳 Tseung Kwan O | LFS | 流浮山 Lau Fau Shan |
| KP | 京士柏 King's Park | HKA | 香港國際機場 Hong Kong International Airport |
| LAM | 南丫島 Lamma Island | SE | 啟德 Kai Tak |
| NGP | 昂坪 Ngong Ping | SHA | 沙田 Sha Tin |
| NP | 北角 North Point | SHL | 青衣島蜆殼油庫 Tsing Yi Shell Oil Depot |
| PEN | 坪洲 Peng Chau | SKG | 西貢 Sai Kung |
| PLC | 大美督 Tai Mei Tuk | TKL | 打鼓嶺 Ta Kwu Ling |
| SC | 沙洲 Sha Chau | 潮汐測量站 Tide-gauge | |
| SEK | 石崗 Shek Kong | QUB | 鯽魚涌 Quarry Bay |
| SF | 九龍天星碼頭 Star Ferry (Kowloon) | SPW | 石壁 Shek Pik |
| SLW | 沙螺灣 Sha Lo Wan | TBT | 尖鼻咀 Tsim Bei Tsui |
| TME | 塔門東 Tap Mun East | TMW | 大廟灣 Tai Miu Wan |
| TC | 大老山 Tate's Cairn | TPK | 大埔滘 Tai Po Kau |
| TPK | 大埔滘 Tai Po Kau | WGL | 橫瀾島 Waglan Island |

圖1.1 年報內提及的測風站及潮汐測量站之分佈地點

Figure 1.1 Locations of anemometers and tide gauge stations mentioned in this annual report