

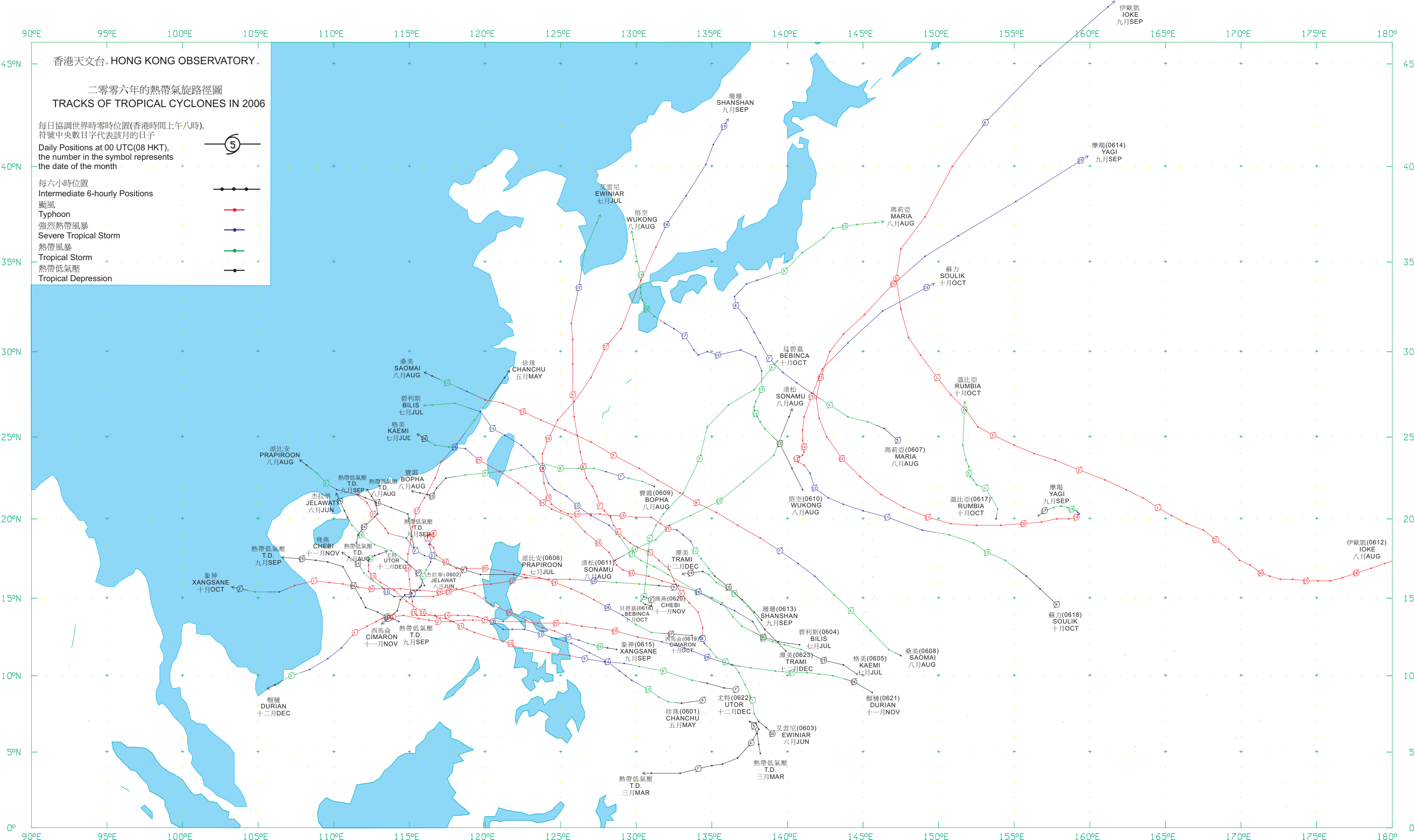


香港天文台

HONG KONG OBSERVATORY

二 零 零 六
熱 帶 氣 旋

**TROPICAL CYCLONES IN
2006**



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

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第一節

引言

Section 1

INTRODUCTION

1.1 熱帶氣旋刊物的沿革

除了在一九四零至一九四六年有過短暫中斷外，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。由於有氣象偵察機提供報告（此項服務已在一九八七年八月停辦）及氣象衛星圖片，在原本資料短缺的海洋上追蹤熱帶氣旋位置的工作比從前順利得多。因此，第三冊的覆蓋範圍東面邊界於一九八五年開始，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》，但內容則大致上維持不變。本年報由一九九七年起以中英雙語刊出，一年後加設電腦光碟版，並在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。由一九四七至一九六七年，則載列於《氣象資料第一冊》內。在一九六一年以前，熱帶氣旋的路徑只顯示每日位置。在較早期的刊物內，熱帶氣旋的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。

爲了能盡早滿足傳媒、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。這些報告可提供給有需要的人士使用。初時，天文台只就那些曾導致天文台發出暴風或烈風信號的熱帶氣旋編寫臨時報告，但自一九六八年起，所有引致天文台發出熱帶氣旋警告信號的熱帶氣旋都有編寫臨時報告。

1.2 熱帶氣旋等級

本年報根據熱帶氣旋中心附近的最高持續地面風速，把熱帶氣旋分爲以下四個級別：

- （i）熱帶低氣壓（**T.D.**）的最高持續風速爲每小時**63**公里以下。
- （ii）熱帶風暴（**T.S.**）的最高持續風速爲每小時**63**至**87**公里。
- （iii）強烈熱帶風暴（**S.T.S.**）的最高持續風速爲每小時**88**至**117**公里。
- （iv）颱風（**T.**）的最高持續風速爲每小時**118**公里或以上。

除特別列明外，在本年報內提及的最高持續風速均爲**10**分鐘內風速的平均值；每小時平均風速爲該小時前**60**分鐘內的平均風速；每日雨量爲該日香港時間午夜前**24**小時內的總雨量。

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。但由二零零零年開始，日本氣象廳會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。表1.1是二零零六年一月一日起生效的熱帶氣旋名單。這套名單經颱風委員會通過，一共有**140**個名字，分別由**14**個國家和地區提供。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，亦是向國際傳媒發熱帶氣旋消息時採用的規範名稱。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“**0601**”代表在二零零六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。在本年報內，此編號會顯示在緊隨著熱帶氣旋名稱的括弧內，例如颱風珍珠(0601)。

1.4 資料來源

本年報內的地面風資料，是由天文台所操作的測風站網絡錄得的。表1.2是該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的。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。

1.5 年報內容

本年報第二節是二零零六年所有影響北太平洋西部及南海區域的熱帶氣旋的概述。

而本年報第三節是二零零六年影響香港的熱帶氣旋的個別詳細報告，內容包括：

- (a) 該熱帶氣旋對香港造成的影響；
- (b) 發出熱帶氣旋警告信號的過程；
- (c) 香港各地錄得的最高陣風風速及最高每小時平均風速；
- (d) 香港天文台錄得的最低海平面氣壓；
- (e) 香港天文台及其他地方錄得的每日總雨量；
- (f) 香港各潮汐測量站錄得的最高潮位及最大風暴潮；及
- (g) 氣象衛星雲圖及雷達回波圖（如適用）。

有關熱帶氣旋的各種資料及統計表載於本年報第四節內。

二零零六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，則表列於本年報的第五節內。

本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。

1.1 Evolution of tropical cyclone publications

Apart from a short break 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 "Summary of Radiosonde-Radiowind Ascents" and "Surface Observations in Hong Kong" in 1981 and 1987 respectively. In 1993, both of these publications were made obsolete, and since then surface and upper-air data have been included in one revised publication entitled "Summary of Meteorological Observations in Hong Kong".

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. It contained information on tropical cyclones over the western North Pacific and the South China Sea. The first issue, which contained reports on tropical cyclones occurring in 1968, was published in 1971. Tropical cyclones within the area bounded by the Equator, 45°N, 100°E and 160°E were described. With reconnaissance aircraft reports (terminated from August 1987 onwards) and satellite pictures facilitating the tracking of tropical cyclones over the otherwise data-sparse ocean, 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 19YY" 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. Before 1961, only daily positions were plotted on the tracks. The time of the daily positions varied to some extent in the older publications but remained fixed at 0000 UTC after 1944. Details of the variation 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 have been prepared since 1960 to meet the immediate needs of the press, shipping companies and others. These reports are printed and supplied on request. Initially, provisional reports were only written on those tropical cyclones for which gale or storm signals had been issued in Hong Kong. From 1968 onwards, provisional reports were prepared for all tropical cyclones that necessitated the issuing of tropical cyclone warning signals.

1.2 Classification of tropical cyclones

In this publication, tropical cyclones are classified into the following four categories according to the maximum sustained surface winds near their centres :

- (i) A TROPICAL DEPRESSION (T.D.) has maximum sustained winds of less than 63 km/h.
- (ii) A TROPICAL STORM (T.S.) has maximum sustained winds in the range 63-87 km/h.
- (iii) A SEVERE TROPICAL STORM (S.T.S.) has maximum sustained winds in the range 88-117 km/h.
- (iv) A TYPHOON (T.) has maximum sustained winds of 118 km/h or more.

Throughout this publication, maximum sustained surface winds when used without qualification refer to wind speeds averaged over a period of 10 minutes. Mean hourly 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.

1.3 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. However, with effect from 2000, the Japan Meteorological Agency will assign names from a new list to tropical cyclones attaining tropical storm strength. Table 1.1 shows the name list effective from 1 January 2006. The name list was adopted by the Typhoon Committee. It consists of a total of 140 names contributed by 14 countries and territories. Apart from being used in forecasts and warnings issued to the international aviation and shipping communities, the names will also be used officially in information on tropical cyclones issued to the international press. Besides, Japan Meteorological Agency has been delegated since 1981 with the responsibility of assigning to each tropical cyclone in the western North Pacific and the South China Sea of tropical storm strength a numerical code of four digits. For example, the first tropical cyclone of tropical storm strength or above as classified by Japan Meteorological Agency which occurred within the region in 2006 was assigned the code "0601". In this publication, the appropriate code immediately follows the name of the tropical cyclone in bracket, e.g. Typhoon Chanchu (0601).

1.4 Data sources

Surface wind data presented in this report were obtained from a network of anemometers operated by the Hong Kong Observatory. Details of the stations are listed on Table 1.2.

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.

1.5 Content

In Section 2, an overview of all the tropical cyclones over the western North Pacific and the South China Sea in 2006 is presented.

The reports in Section 3 are individual accounts of the life history of tropical cyclones affecting Hong Kong in 2006. 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 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 imageries and radar echoes (if applicable).

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 are tabulated in Section 5.

In this publication, different times are used in different 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.

表 1.1 二零零六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 2006

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	莎莉嘉 Sarika
中國	China	龍王 Longwang	玉兔 Yutu	風神 Fengshen	杜鵑 Dajuan	海馬 Haima
朝鮮	DPR Korea	鴻雁 Kirogi	桃芝 Toraji	海鷗 Kalmaegi	彩虹 Mujigae	米雷 Meari
中國香港	HK, China	啓德 Kai-tak	萬宜 Man-yi	鳳凰 Fung-wong	彩雲 Choi-wan	馬鞍 Ma-on
日本	Japan	天秤 Tembin	天兔 Usagi	北冕 Kammuri	巨爵 Koppu	蝎虎 Tokage
老撾	Lao PDR	布拉萬 Bolaven	帕布 Pabuk	巴蓬 Phanfone	凱薩娜 Ketsana	洛坦 Nock-ten
中國澳門	Macau, China	珍珠 Chanchu	蝴蝶 Wutip	黃蜂 Vongfong	芭瑪 Parma	梅花 Muifa
馬來西亞	Malaysia	杰拉華 Jelawat	聖帕 Sepat	鸚鵡 Nuri	茉莉 Melor	苗柏 Merbok
米克羅尼西亞	Micronesia	艾雲尼 Ewiniar	菲特 Fitow	森拉克 Sinlaku	尼伯特 Nepartak	南瑪都 Nanmadol
菲律賓	Philippines	碧利斯 Bilis	丹娜絲 Danas	黑格比 Hagupit	盧碧 Lupit	塔拉斯 Talas
韓國	RO Korea	格美 Kaemi	百合 Nari	薔薇 Changmi	銀河 Mirinae	奧鹿 Noru
泰國	Thailand	派比安 Prapiroon	韋帕 Wipha	米克拉 Mekkhala	妮姐 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	桑美 Saomai	利奇馬 Lekima	巴威 Bavi	康森 Conson	桑卡 Sonca
柬埔寨	Cambodia	寶霞 Bopha	羅莎 Krosa	美莎克 Maysak	燦都 Chanthu	納沙 Nesat
中國	China	悟空 Wukong	海燕 Haiyan	海神 Haishen	電母 Dianmu	海棠 Haitang
朝鮮	DPR Korea	清松 Sonamu	楊柳 Podul	紅霞 Noul	蒲公英 Mindulle	尼格 Nalgae
中國香港	HK, China	珊珊 Shanshan	玲玲 Lingling	白海豚 Dolphin	獅子山 Lionrock	榕樹 Banyan
日本	Japan	摩揭 Yagi	劍魚 Kajiki	鯨魚 Kujira	圓規 Kompasu	天鷹 Washi
老撾	Lao PDR	象神 Xangsane	法茜 Faxai	燦鴻 Chan-hom	南川 Namtheun	麥莎 Matsa

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	溫比亞 Rumbia	塔巴 Tapah	浪卡 Nangka	莫蘭蒂 Meranti	瑪娃 Mawar
米克羅尼西亞	Micronesia	蘇力 Soulik	米娜 Mitag	蘇廸羅 Soudelor	凡亞比 Fanapi	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 Chebi	浣熊 Noguri	天鵝 Koni	鮎魚 Megi	彩蝶 Nabi
泰國	Thailand	榴槤 Durian	威馬遜 Rammasun	莫拉克 Morakot	暹芭 Chaba	卡努 Khanun
美國	U.S.A.	尤特 Utor	麥德姆 Matmo	艾濤 Etau	艾利 Aere	韋森特 Vicente
越南	Viet Nam	潭美 Trami	夏浪 Halong	環高 Vamco	桑達 Songda	蘇拉 Saola

表 1.2 本年報內各風速表的位置及海拔高度

TABLE 1.2 POSITIONS AND ELEVATIONS OF VARIOUS ANEMOMETERS MENTIONED IN THIS PUBLICATION

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)
中環碼頭	Central Pier	22°17'20"	114°09'21"	30
中環廣場	Central Plaza	22°16'53"	114°10'16"	378
赤鱗角	Chek Lap Kok	22°18'34"	113°55'19"	14
長洲	Cheung Chau	22°12'04"	114°01'36"	98
長沙灣	Cheung Sha Wan	22°20'04"	114°09'05"	30
青洲	Green Island	22°17'06"	114°06'46"	107
啓德	Kai Tak	22°18'40"	114°12'39"	16
京士柏	King's Park	22°18'43"	114°10'22"	90
流浮山	Lau Fau Shan	22°28'08"	113°59'01"	50
北角	North Point	22°17'40"	114°11'59"	26
平洲	Ping Chau	22°32'48"	114°25'42"	39
西貢	Sai Kung	22°22'32"	114°16'28"	31
沙螺灣	Sha Lo Wan	22°17'33"	113°54'16"	71
沙田	Sha Tin	22°24'09"	114°12'36"	16
石崗	Shek Kong	22°26'02"	114°05'06"	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
大尾篤	Tai Mei Tuk	22°28'36"	114°14'06"	71
大帽山	Tai Mo Shan	22°24'38"	114°07'28"	966
塔門	Tap Mun	22°28'17"	114°21'39"	35
大老山	Tate's Cairn	22°21'28"	114°13'04"	587
鯽魚湖	Tsak Yue Wu	22°24'11"	114°19'24"	23
將軍澳	Tseung Kwan O	22°18'56"	114°15'20"	52
青衣 (青柏樓)	Ching Pak House, Tsing Yi	22°20'53"	114°06'33"	136
屯門	Tuen Mun	22°23'32"	113°58'27"	69
橫瀾島	Waglan Island	22°10'56"	114°18'12"	83
黃竹坑	Wong Chuk Hang	22°14'54"	114°10'15"	30

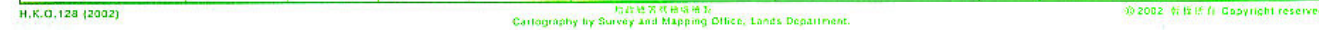


圖 1.1 本年報內提及的測風站及潮汐測量站之分佈地點。

Figure 1.1 Locations of anemometers and tide gauge stations mentioned in this publication.

第二節

二零零六年熱帶氣旋概述

Section 2

TROPICAL CYCLONE OVERVIEW FOR 2006

2.1 二零零六年的熱帶氣旋回顧

2.1.1 北太平洋西部（包括南海區域）的熱帶氣旋

二零零六年共有27個熱帶氣旋影響北太平洋西部及南海區域（即由赤道至北緯45度、東經100至180度所包括的範圍）。其中有一個熱帶氣旋於北太平洋中部形成後，橫過國際換日線進入北太平洋西部。除了2004年，過去九年（1998-2006年）在該海域的熱帶氣旋數目都少於1961-1990年的30年平均數31個。此外，全年有14個熱帶氣旋達到颱風強度，比正常數目少兩個。

本年首個熱帶氣旋在三月形成。圖2.1是二零零六年在北太平洋西部及南海區域的熱帶氣旋出現次數之每月分佈。

二零零六年內有七個熱帶氣旋吹襲中國，三個影響台灣，四個影響日本（包括琉球群島），一個登陸南韓，另有七個橫過菲律賓及三個登陸越南。

二零零六年風力最強的熱帶氣旋是桑美（0608），最高風速估計約為每小時215公里，而最低中心氣壓則約為920百帕斯卡。

西馬侖（0619）是二零零六年路徑最特別的熱帶氣旋。西馬侖在十月廿七日形成後，一直受到高層副熱帶高壓脊南部的偏西引導氣流影響，大致向西北偏西移動。隨著南海高層副熱帶高壓脊減弱，西馬侖由十一月一日至二日幾乎停留不動。其後西馬侖受到強烈東北季候風的影響，轉向西南偏南移動及在南海上消散。

2.1.2 香港責任範圍內的熱帶氣旋

在二零零六年的27個熱帶氣旋中，有16個影響香港責任範圍（即北緯10至30度、東經105至125度所包括的地區），與1961-1990年的30年平均16.4個相約（表2.1）。這16個熱帶氣旋中，有五個在香港責任範圍內形成。在二零零六年，香港天文台總共發出460個供船舶使用的熱帶氣旋警告（表4.2）。

2.1.3 南海區域內的熱帶氣旋

二零零六年共有13個熱帶氣旋影響南海區域（即北緯10至25度、東經105至120度所包括的地區），當中有四個在南海形成，其餘九個從北太平洋西部進入南海。

2.1.4 影響香港的熱帶氣旋

二零零六年有七個熱帶氣旋影響香港（圖2.2），接近正常（表2.2）。這七個熱帶氣旋是珍珠（0601）、杰拉華（0602）、派比安（0606）、寶霞（0609）、八月及九月的熱帶低氣壓及西馬侖（0619）。

在本年五月的珍珠、八月的派比安及九月的熱帶低氣壓影響香港期間，天文台都發出了三號強風信號，這亦是今年發出的最高信號。而六月的杰拉華，八月的寶霞及熱帶低氣壓及十月的西馬侖亦導致天文台發出一號戒備信號。

2.1.5 熱帶氣旋的雨量

二零零六年各熱帶氣旋為香港帶來的雨量（即該熱帶氣旋在出現於香港**600**公里範圍內至其消散或離開香港**600**公里範圍之後**72**小時期間，天文台錄得的雨量）共為**1 007.3**毫米，約佔該年總雨量**2 627.8**毫米的百分之**38**，比正常的**737.9**毫米多約百分之**37**。

九月十二日至十三日影響香港的熱帶低氣壓為香港帶來**265.6**毫米的雨量，是**2006**年為香港帶來最多雨量的熱帶氣旋。

2.2 每月概述

這一節逐月介紹二零零六年北太平洋西部及南海區域的熱帶氣旋概況。影響香港的各熱帶氣旋則詳述於第三節。

一月及二月

二零零六年一月及二月並無熱帶氣旋影響北太平洋西部及南海區域。

三月

一熱帶低氣壓於三月四日在雅蒲島以南約**510**公里處形成。隨後兩天，它在北太平洋西部上緩慢地移動，於三月六日轉向西南偏西推進，並在翌日減弱為一個低壓區。

四月

二零零六年四月並無熱帶氣旋影響北太平洋西部及南海區域。

五月

珍珠(0601)在五月九日於雅蒲島西南偏西約 **420** 公里的北太平洋西部上發展成為一個熱帶低氣壓。它大致向西北偏西推進，橫越菲律賓中部。珍珠在五月十三日進入南海並增強為颱風。珍珠進入南海後初時向西推進，於五月十五日轉北趨向華南沿岸。珍珠在五月十五日至十六日初時的中心最高持續風速達每小時 **185** 公里，是有記錄以來在五月進入南海最強的熱帶氣旋。珍珠在五月十七日開始採取東北偏北路徑移動及於翌日早上在汕頭附近登陸並逐漸減弱。珍珠在橫掃中國東南沿岸地區後，於五月十八日傍晚進入東海，並變成溫帶氣旋。

六月

杰拉華(0602)在六月二十七日清晨於西沙島之東南偏東約 **410** 公里處發展成為一個熱帶低氣壓，然後大致向西北方向移動，橫過南海中部，並於當晚增強為熱帶風暴。杰拉華在翌日掠過海南島東北沿岸區域及於晚上減弱為熱帶低氣壓。杰拉華在二十九日早上於湛江附近登陸，並於當天在廣東西部進一步減弱為一個低壓區。

艾雲尼(0603)在六月三十日早上於雅蒲島之東南偏南約 **380** 公里的北太平洋西部上發展成爲一個熱帶低氣壓。它大致向西北偏北方向移動，並於七月三日增強成爲颱風。艾雲尼於七月八日橫過琉球群島，並轉向北移動，越過東海。在浙江沿海地區，超過 **7 600** 名寧波居民需要疏散，八千多艘漁船要回到寧波及舟山暫避。艾雲尼於七月十日早上減弱爲一個強烈熱帶風暴，然後在南韓西南海岸登陸，並進一步減弱爲熱帶風暴。它於當天稍後變成一個溫帶氣旋。艾雲尼影響南韓期間，造成八人死亡或失蹤，**12** 人受傷。逾 **2 200** 公頃農田被淹，數百間學校停課，**55** 班航班取消及三萬艘船隻回岸暫避。

七月

碧利斯(0604)在七月八日晚上於雅蒲島之東北約 **410** 公里的北太平洋西部上發展成爲一個熱帶低氣壓，並大致向西北方向移動。碧利斯於十一日晚上增強爲強烈熱帶風暴，並於翌日掠過呂宋海峽東部。它的外圍環流爲菲律賓北部帶來暴雨及山泥傾瀉，造成 **14** 人死亡，七人失蹤，兩萬人流離失所。碧利斯於十三日晚上掠過台灣北部，大風及豪雨引致三人死亡，兩人失蹤，農業損失逾一億元新台幣。碧利斯於七月十四日穿越台灣海峽並在福建登陸。它進入內陸後逐漸減弱及於翌日在江西消散。碧利斯在福建、浙江、湖南、江西、廣東及廣西造成嚴重災害，共導致 **621** 人死亡，**208** 人失蹤及 **19** 萬人被洪水圍困。約 **21** 萬間房屋倒塌，農作物受災面積在 **96** 萬公頃以上，直接經濟損失超過 **240** 億元人民幣。

格美(0605)在七月十八日晚上於關島以南約 **380** 公里的北太平洋西部上發展成爲一個熱帶低氣壓。它向西北偏西方向移動並逐漸增強，在七月二十一日達颱風強度。格美於七月二十五日清晨橫過台灣南部，引致六人受傷，**475** 人需要疏散。島上 **81 000** 多戶停電及超過 **40** 班航班取消，農作物損失達 **7 738** 萬新台幣。格美在同日穿越台灣海峽及減弱爲一個強烈熱帶風暴。格美在當天下午於福建登陸並繼續減弱，及後格美於七月二十六日在內陸消散。格美在安徽、福建、江西、湖南及廣東造成嚴重破壞，共導致 **28** 人死亡，**36** 人失蹤及 **10** 萬人被洪水圍困。約 **12** 萬間房屋倒塌及逾 **48** 萬公頃農作物受到破壞，直接經濟損失超過 **11** 億元人民幣。

派比安(0606)在七月三十一日下午於馬尼拉之東北約 **260** 公里處發展成爲一個熱帶低氣壓，並向西移動，橫過呂宋。派比安進入南海後，於八月一日轉向西北偏西方向移動及於翌日增強爲一個颱風，並趨向廣東西部海岸。派比安在八月三日晚上於湛江以東登陸，隨後開始減弱，於翌日晚上在廣西消散。

八月

瑪莉亞(0607)在八月五日早上於硫黃島以東約 **610** 公里的北太平洋西部上發展成爲一個熱帶低氣壓。它向西北偏西方向移動並在八月六日增強成爲一個強烈熱帶風暴。瑪莉亞在兩天後轉向東北推進，掠過日本本州南面海域，於八月九日減弱爲熱帶風暴及在八月十日晚上變成一個溫帶氣旋。瑪莉亞掠過本州南面海域期間，一架飛往東京的航機在高空遇到湍流，機上五名乘客受傷。

桑美(0608)在八月五日下午於關島之東南約 **380** 公里的北太平洋西部上發展成爲一個熱帶低氣壓，然後大致向西北方向移動並逐漸增強，於八月七日下午達颱風強度。桑美其後穩定地向西北偏西推進，直趨中國東部海岸。桑美在八月九日晚上至八月十日早上時的中心附近最高持續風速估計爲每小時 **215** 公里，是 **2006** 年最強的熱帶氣旋。桑美於八月十日晚上在浙江登陸。它進入內陸後開始減弱及於翌日在江西消散。桑美在浙江、福建及江西造成嚴重災害，共導致最少 **460** 人死亡，**1 350** 人受傷，**50** 人失蹤，約有 **200** 萬

人疏散，六萬間房屋倒塌，直接經濟損失超過 238 億元人民幣。另外，福建有 1 000 艘漁船受到破壞，浙江沿海地區通信系統中斷，兩省共有 60 多條公路封閉。

寶霞(0609)在八月六日下午於沖繩島那霸之東南約 590 公里的北太平洋西部上發展成爲一個熱帶低氣壓，並向西北偏西移動。寶霞於八月七日日間曾一度增強至強烈熱帶風暴。但它當晚減弱爲一個熱帶風暴，並向西推進，趨向台灣南部。寶霞掠過台灣南部後逐漸靠近廣東東部沿海地區，並於八月九日晚上進一步減弱爲一個熱帶低氣壓。受到桑美的影響，寶霞在八月十日移動緩慢及不規則。寶霞於當天晚上減弱爲一個低壓區。

悟空(0610)在八月十二日晚上於硫黃島以南約 330 公里的北太平洋西部上發展成爲一個熱帶低氣壓後蜿蜒向西北方向推進，於八月十五日增強爲一個強烈熱帶風暴。悟空在兩天後減弱爲一個熱帶風暴並隨後在九州東南海岸登陸。悟空橫掃九州後，在八月十九日晚上變成一個溫帶氣旋。悟空肆虐日本期間，導致三人死亡及三人受傷，另一人失蹤。約有 110 人疏散，三間房屋損壞，約 200 用戶的電力中斷。另外，有 65 班航班取消。

清松(0611)在八月十四日清晨於沖繩島那霸以南約 980 公里的北太平洋西部上發展成爲一個熱帶低氣壓後向東北偏東移動，並於當天增強至熱帶風暴。清松在翌日晚上開始減弱，隨後於八月十六日在小笠原群島以西海面消散。

一個熱帶低氣壓在八月二十三日晚上於海口之東南約 210 公里的南海北部上形成。它初時向北移動，隨後採取東北的路徑。該熱帶低氣壓在二十四日晚上轉向西北方向推進，並於翌日清晨在廣東西部的陽江附近登陸及減弱爲一個低壓區。

颱風**伊歐凱(0612)**在北太平洋中部形成，並於八月二十七日越過國際換日線進入北太平洋西部。伊歐凱初時向西南偏西移動，三天後轉向西北偏西推進。伊歐凱於九月五日在日本以東的北太平洋西部轉向東北移動。它在九月六日早上減弱爲強烈熱帶風暴及在當天晚上變成一個溫帶氣旋。

九月

珊珊(0613)在九月九日下午於於雅浦島以北約 460 公里的北太平洋西部上發展成爲一個熱帶低氣壓，並向西北方向移動。它在十二日增強成爲一個颱風後採取偏西的路徑，三天後轉向北推進及掠過台灣以東海域。珊珊其後向東北偏北推進並於十七日越過日本九州西北部。珊珊在十八日減弱爲強烈熱帶風暴及在翌日變成一個溫帶氣旋。珊珊肆虐日本期間，導致九人死亡及超過 320 人受傷，一人失蹤，約有 12 000 人疏散，40 間房屋被摧毀，190 間房屋受到破壞及約 38 萬用戶的電力中斷。另外，有數百班航班受到影響，一列火車脫軌翻側。南韓東南部亦受到珊珊影響，有一人受傷，約 3 000 用戶的電力中斷，南韓與日本之間的渡輪服務需要停航。

一個熱帶低氣壓在九月十二日下午於西沙之東北偏東約 350 公里的南海北部上形成。它初時向北移動，但隨後轉向西北偏西方向推進，於翌日晚上於廣東西部沿海附近減弱爲一個低壓區。

摩羯(0614)在九月十七日清晨於關島之東北偏東約 1 450 公里的北太平洋西部上發展成爲一個熱帶低氣壓，然後緩慢向東推進。摩羯在兩天後轉向西移動，並增強成爲一個颱風。摩羯在二十一日採取西北的路徑及於兩天後橫過小笠原群島並轉向東北推進。摩羯在二十四日減弱爲強烈熱帶風暴及於翌日變成一個溫帶氣旋。

一個熱帶低氣壓在九月二十二日晚上於西沙之東南偏南約 **420** 公里的南海中部形成，並大致向西北方向移動。該熱帶低氣壓在二十四日轉向西推進，於翌日在越南北部海岸登陸，並減弱為一個低壓區。

象神(0615)在九月二十五日晚上於馬尼拉之東南偏東約 **900** 公里的北太平洋西部上發展成為一個熱帶低氣壓，然後向西北偏西移動。象神在兩天後增強成為一個颱風，並橫掃菲律賓。象神肆虐菲律賓期間，導致超過 **207** 人死亡，**22** 人失蹤，近二百萬人無家可歸，另 **4 300** 萬人受停電影響，經濟損失達二億四千萬美元。象神進入南海後，在九月二十九日採取偏西的路徑，橫過南海中部。象神於十月一日在越南中部峴港附近登陸。它進入內陸後減弱，翌日在泰國境內消散。象神在越南造成嚴重災害，共導致 **42** 人死亡，七人失蹤，數千人受傷，**20** 萬人需要疏散，一萬五千間房屋倒塌，另五萬間房屋被水淹，越南中部多個城市的電力供應及通訊中斷。另外，**48** 班航班需要取消，**560** 艘船隻沉沒或毀壞，經濟損失約六億三千萬美元。中國海南亦受到象神影響，有一人死亡及 **12** 人受傷，**200** 人無家可歸。**70** 間房屋受到破壞，七千棵樹木被吹斷，經濟損失約 **80** 萬美元。另外，瓊州海峽的渡輪服務需要暫停。

十月

貝碧嘉(0616)在十月二日清晨於沖繩島那霸之東南偏南約 **1 270** 公里的北太平洋西部上發展成為一個熱帶低氣壓並移動緩慢。貝碧嘉於翌日增強成為一個熱帶風暴，並加速向北推進。它在十月四日轉向東北移動，於兩天後變成一個溫帶氣旋。

一個名為**溫比亞(0617)**的熱帶低氣壓在十月三日下午於硫黃島之東南偏東約 **1 390** 公里的北太平洋西部上形成後向西北偏北移動，並於當晚增強成為一個熱帶風暴。溫比亞在十月五日轉向北移動，於翌日在海上消散。

蘇力(0618)在十月九日早上於關島以東約 **1 410** 公里的北太平洋西部上發展成為一個熱帶低氣壓，並大致向西北偏西移動。蘇力在十二日增強成為一個颱風，於翌日轉向東北偏北推進，掠過小笠原群島。蘇力在十月十五日減弱為一個強烈熱帶風暴，並轉向東北移動，於翌日變成一個溫帶氣旋。

西馬侖(0619)在十月二十七日清晨於馬尼拉以東約 **1 390** 公里處的北太平洋西部上發展成為一個熱帶低氣壓並向西移動。它在當天增強成為一個熱帶風暴後採取西北偏西的路徑，趨向呂宋。西馬侖在二十八日增強成為一個颱風，並於翌日晚上橫過呂宋。西馬侖在十月卅日進入南海，然後在翌日轉向西北推進。它於十一月一日開始移動緩慢，然後更幾乎停留不動。西馬侖於十一月二日晚上減弱為強烈熱帶風暴，並轉向西南偏南移動及繼續減弱。它於十一月六日在西沙島東南偏南的南海中部消散。

十一月

飛燕(0620)在十一月九日於馬尼拉以東約 **1 240** 公里之北太平洋西部上發展成為一個熱帶低氣壓，並向西移動。它於當日黃昏增強為一股熱帶風暴，並在翌日早上再增強為一股強烈熱帶風暴。飛燕在十一月十日下午進一步增強成為一股颱風，並在翌日橫過呂宋。菲律賓有一人死亡，八人受傷，另外有三人失蹤。多條村落受水浸影響，超過 **8 000** 人要疏散。飛燕在進入南海後轉向西南偏西移動，並在十一月十二日黃昏減弱為強烈熱帶風暴。飛燕隨後在十一月十三日轉向西北移動，並於當日下午減弱為熱帶風暴。它在十一月十四日繼續減弱為熱帶低氣壓，然後在下午於海南島東南的海面消散。

榴槤(0621)在十一月廿六日在雅蒲島以東 830 公里的北太平洋西部上發展為熱帶低氣壓，並大致向西北偏西移動。它於當日下午增強為熱帶風暴。榴槤在十一月廿八日增強為強烈熱帶風暴，然後在翌日進一步增強成為颱風及向西移動。它在十一月三十日橫過菲律賓中部，與榴槤相連的暴雨引起廣泛地區山泥傾瀉，超過 570 人喪生，746 人失蹤。此外，接近 12 萬房屋被毀及超過 100 萬人受影響。該區電力供應、通訊網絡及食水供應均被切斷。估計農作物損失高達一千萬美元。榴槤於十二月一日進入南海中部，並向西移動。它在十二月三日轉向西南偏西移動及於翌日轉向西南移動。榴槤在十二月四日下午減弱為強烈熱帶風暴，於翌日早上進一步減弱為熱帶風暴，並掠過越南南部沿岸。榴槤為越南南部帶來大風雨，造成 67 人死亡、約 31 人失蹤及超過 450 人受傷。此外、超過 120 000 間房屋被毀，超過 1 000 艘魚船沉沒，電力及通訊線路被嚴重破壞及不少樹木被吹倒。榴槤在十二月五日下午減弱為熱帶低氣壓，並於當日稍後在越南南部沿岸地區消散。

十二月

尤特(0622)於十二月七日在馬尼拉東南偏東 1 800 公里的北太平洋西部上發展為熱帶低氣壓，並向西北偏西移動。它於十二月八日清晨增強為熱帶風暴，黃昏時再增強為強烈熱帶風暴，於翌日中午進一步增強為颱風後於同日下午開始橫過菲律賓中部。菲律賓至少有七人死亡、15 人失蹤、超過九萬人需要疏散。尤特引致公共設施及電線被吹倒、渡假設備及房屋受破壞，並帶來嚴重水浸及幾宗山泥傾瀉。尤特於十二月十日下午進入南海，並繼續向西北偏西移動。它於十二月十二日轉向西北移動，於翌日移動減慢及轉向北。受到東北季候風的影響，尤特在十二月十四日迅速減弱及轉向東北偏東移動。它於早上先減弱為熱帶風暴，下午進一步減弱為熱帶低氣壓，並在晚上在西沙東北的南海上消散。

熱帶低氣壓**潭美(0623)**於十二月十七日在雅蒲島東北 310 公里的北太平洋西部上形成，並向西北移動。它於翌日清晨增強為熱帶風暴，然後轉向西北偏西移動。潭美於十二月十九日早上減弱為熱帶低氣壓，並於下午在呂宋以東的北太平洋西部上消散。

2.1 Review of tropical cyclones in 2006

2.1.1 Tropical cyclones over the western North Pacific (including the South China Sea)

In 2006, 27 tropical cyclones affected the western North Pacific and the South China Sea (i.e. the area bounded by the Equator, 45°N, 100°E and 180°), with one of them formed over the central part of the North Pacific and crossed the International Date Line into the western North Pacific. In the past 9 years (1998-2006), with the exception of 2004, the annual number of tropical cyclones in this ocean basin has been less than the 30-year (1961-1990) average of 31. Throughout the year, 14 tropical cyclones attained typhoon strength, two less than the normal figure.

The first tropical cyclone of the year formed in March. The monthly frequencies of the occurrence of tropical cyclones in the western North Pacific and the South China Sea in 2006 are shown in Figure 2.1.

During the year, seven tropical cyclones hit mainland China, three affected Taiwan, four affected Japan (including Ryukyu Islands), one made landfall over South Korea, seven traversed the Philippines, another three made landfall over Vietnam.

The most intense tropical cyclone in 2006 was Saomai (0608). Saomai had a maximum wind speed of about 215 km/h and a minimum sea-level pressure of about 920 hPa when it was located over the sea to the northeast of Taiwan.

Cimaron (0619) was the tropical cyclone with the most peculiar track in 2006. After forming over the western North Pacific on 27 October, Cimaron generally took on a west-northwesterly course under the influence of the westerly steering current south of the upper subtropical ridge of high pressure. Following the weakening of the upper subtropical ridge over the South China Sea, Cimaron became almost stationary from 1 to 2 November. Thereafter, Cimaron turned south-southwestwards and dissipated over the South China Sea under the influence of the intense northeast monsoon.

2.1.2 Tropical cyclones in Hong Kong's area of responsibility

Amongst those 27 tropical cyclones in 2006, 16 occurred inside Hong Kong's area of responsibility (i.e. the area bounded by 10°N, 30°N, 105°E and 125°E). This was near the 30-year (1961-1990) annual average of 16.4 (Table 2.1). Five of these 16 tropical cyclones developed within Hong Kong's area of responsibility. Altogether, 460 tropical cyclone warnings to ships and vessels were issued by the Hong Kong Observatory in 2006 (Table 4.2).

2.1.3 Tropical cyclones over the South China Sea

There were 13 tropical cyclones affecting the South China Sea (i.e. the area bounded by 10°N, 25°N, 105°E and 120°E) in 2006. Four of them formed over the area. Nine moved into the area from the western North Pacific.

2.1.4 Tropical cyclones affecting Hong Kong

Seven tropical cyclones affected Hong Kong in 2006 (Figure 2.2), which is near normal (Table 2.2). These seven tropical cyclones were Chanchu (0601), Jelawat (0602), Prapiroon (0606), Bopha (0609), the tropical depressions in August and September and Cimaron (0619).

The highest signal issued this year was Strong Wind Signal No. 3 when Chanchu, Prapiroon and the tropical depression affected Hong Kong in May, August and September respectively.

Jelawat in June, Bopha and the tropical depression in August and Cimaron in October to November only necessitated the issuance of the Standby Signal No. 1 in Hong Kong.

2.1.5 Tropical cyclone rainfall

Tropical cyclone rainfall (the total rainfall recorded at the Hong Kong Observatory from the time when a tropical cyclone is centred within 600 km of Hong Kong to 72 hours after it has dissipated or moved farther than 600 km away from Hong Kong) in 2006 was 1 007.3 mm. This is 37% above the normal of 737.9 mm and accounts for some 38% of the year's total rainfall of 2 627.8 mm.

The tropical depression which affected Hong Kong on 12-13 September brought 265.6 mm of rainfall to Hong Kong, which was the tropical cyclone bringing the most rainfall to Hong Kong in 2006.

2.2 Monthly overview

A monthly overview of tropical cyclones is given in this Section. Detailed reports on tropical cyclones affecting Hong Kong are presented in Section 3.

JANUARY AND FEBRUARY

No tropical cyclone occurred over the western North Pacific and the South China Sea in January and February.

MARCH

A tropical depression formed about 510 km south of Yap on 4 March. Drifting slowly over the western North Pacific in the next two days, it turned to the west-southwest on 6 March and weakened into an area of low pressure the following day.

APRIL

No tropical cyclone occurred over the western North Pacific and the South China Sea in April.

MAY

Chanchu (0601) developed as a tropical depression over the western North Pacific about 420 km west-southwest of Yap on 9 May. Tracking mainly towards the west-northwest, it traversed the central Philippines. Chanchu entered the South China Sea and strengthened into a typhoon on 13 May. Moving westwards initially after entering South China Sea, Chanchu turned to the north and headed towards the south China coast on 15 May. The maximum sustained winds near the centre reached 185 km/h from 15 May to early 16 May, and it was the most intense tropical cyclone on record to have entered the South China Sea in May. It took on a north-northeastward course on 17 May and weakened gradually following landfall near Shantou the next morning. Chanchu rampaged through the coastal areas of southeastern China during the day on 18 May. That evening, it entered the East China Sea and became an extratropical cyclone.

JUNE

Jelawat (0602) developed as a tropical depression about 410 km east-southeast of Xisha Dao in the early morning of 27 June and moved generally northwest across the central part of the South China Sea. It intensified into a tropical storm that night. The next day, Jelawat skirted the northeastern coast of Hainan. It weakened into a tropical depression that night. Jelawat made landfall near Zhanjiang in the morning of 29 June and weakened further into an area of low pressure over the western part of Guangdong later that day.

Ewiniar (0603) formed as a tropical depression over the western North Pacific about 380 km south-southeast of Yap in the morning of 30 June. It moved generally towards the north-northwest and strengthened gradually to a typhoon on 3 July. Ewiniar traversed the Ryukyu Islands on 8 July and turned north afterwards, moving across the East China Sea. In the coastal areas of Zhejiang, more than 7 600 Ningbo residents were evacuated and over eight thousand fishing vessels returned to Ningbo and Zhoushan for shelter. In the morning of 10 July, Ewiniar weakened into a severe tropical storm. It then landed over the southwestern coast of South Korea and weakened further into a tropical storm. Ewiniar became an extratropical cyclone later that day. In Ewiniar's rage over South Korea, eight people were killed or reported missing and a dozen injured. More than 2 200 hectares of farmland were flooded and hundreds of schools were closed. In addition, 55 flights were cancelled and 30 000 vessels returned to shore to seek shelter.

JULY

Bilis (0604) formed as a tropical depression over the western North Pacific about 410 km northeast of Yap in the night of 8 July and moved generally towards the northwest. In the night of 11 July, Bilis strengthened into a severe tropical storm and skirted the eastern part of Luzon Strait the next day. Its outer circulation brought heavy rain and landslides to the northern part of the Philippines. In the fury of Bilis, 14 people were killed, another seven were reported missing and 20 000 people lost their homes. In the night of 13 July, Bilis skirted northern Taiwan. High winds and heavy rain led to three deaths and two people missing. Agricultural losses on the island exceeded NT\$ 100 million. After traversing Taiwan Strait, Bilis made landfall over Fujian on 14 July. Moving inland, it weakened gradually and dissipated over Jiangxi the next day. Bilis inflicted severe damage to Fujian, Zhejiang, Hunan, Jiangxi, Guangdong and Guangxi. Altogether, 621 people were killed, another 208 were reported missing and 190 000 people were trapped by flood water. About 210 000 houses toppled, over 960 000 hectares of crops were affected and the direct economic losses exceeded RMB\$ 24 billion.

Kaemi (0605) developed into a tropical depression over the western North Pacific about 380 km south of Guam on 18 July. It moved towards the west-northwest and intensified gradually, reaching typhoon strength on 21 July. Kaemi moved across southern Taiwan in the early morning of 25 July. During its passage, six people were injured and 475 evacuated. Power supply to 81 000 homes on the island was suspended and more than 40 flights were cancelled. Agricultural losses reached NT\$ 77.38 million. Kaemi weakened into a severe tropical storm while traversing Taiwan Strait on the same day. It made landfall over Fujian that afternoon and continued to weaken afterwards. Kaemi finally dissipated over inland on 26 July. Kaemi brought severe damage to Anhui, Fujian, Jiangxi, Hunan and Guangdong. Altogether, 28 people were killed, another 36 were reported missing and 100 000 people were trapped by flood water. About 120 000 houses toppled, more than 480 000 hectares of crops were damaged and the direct economic losses exceeded RMB\$ 1.1 billion.

[Prapiroon \(0606\)](#) developed as a tropical depression about 260 km northeast of Manila in the afternoon of 31 July and moved westwards across Luzon. After entering the South China Sea, Prapiroon turned west-northwest on 1 August. It strengthened into a typhoon the next day and headed towards the western coast of Guangdong. Prapiroon made landfall to the east of Zhanjiang in the night of 3 August and started to weaken afterwards. It dissipated over Guangxi the following night.

AUGUST

In the morning of 5 August, [Maria \(0607\)](#) formed as a tropical depression over the western North Pacific about 610 km east of Iwo Jima. It moved west-northwest and intensified into a severe tropical storm on 6 August. Maria turned northeast two days later and skirted the seas south of Honshu, Japan. It weakened into a tropical storm on 9 August and became an extratropical cyclone the following night. During Maria's passage over the seas south of Honshu, an aircraft heading for Tokyo encountered turbulence and five passengers on board were injured.

[Saomai \(0608\)](#) developed as a tropical depression over the western North Pacific about 380 km southeast of Guam in the morning of 5 August. It moved generally northwest and intensified into a typhoon in the afternoon of 7 August. Saomai then took a steady west-northwesterly track towards the coast of eastern China. It became the most intense tropical cyclone in 2006 with estimated maximum sustained winds of 215 km/h in the evening of 9 August and the morning of 10 August. Saomai made landfall over Zhejiang in the night of 10 August. Moving inland, Saomai started to weaken and dissipated over Jiangxi the next day. Saomai brought severe damage to Zhejiang, Fujian and Jiangxi. In these provinces altogether, at least 460 people were killed, 1 350 injured and another 50 reported missing. About two million people were evacuated, 60 000 houses toppled and the direct economic losses exceeded RMB\$ 23.8 billion. In addition, one thousand fishing vessels were damaged in Fujian and the telecommunication system in coastal areas of Zhejiang was disrupted. More than 60 roads were closed in the two provinces.

[Bopha \(0609\)](#) developed as a tropical depression over the western North Pacific about 590 km southeast of Naha, Okinawa in the afternoon of 6 August and moved west-northwest. Bopha briefly attained the strength of a severe tropical storm during the day on 7 August. However, it weakened into a tropical storm that night and took a westerly track heading towards southern Taiwan. After skirting southern Taiwan, Bopha edged towards the coastal waters of eastern Guangdong. It weakened further into a tropical depression in the night of 9 August. Under the influence of Saomai, Bopha's movement was slow and erratic on 10 August. Bopha weakened into an area of low pressure that night.

A tropical depression named [Wukong \(0610\)](#) formed over the western North Pacific about 330 km south of Iwo Jima in the night of 12 August. While meandering towards the northwest, Wukong strengthened into a severe tropical storm on 15 August. Wukong weakened into a tropical storm two days later and made landfall over the southeast coast of Kyushu afterwards. After rampaging through Kyushu, Wukong became an extratropical cyclone in the night of 19 August. In the fury of Wukong, three people were killed, three injured and another one reported missing in Japan. About 110 people were evacuated and three houses were damaged. Electricity supply to about 200 families was suspended. In addition, 65 flights were cancelled.

[Sonamu \(0611\)](#) developed as a tropical depression over the western North Pacific about 980 km south of Naha, Okinawa in the early morning of 14 August and moved east-northeast. It strengthened into a tropical storm the same day. However, Sonamu started to weaken the following night and dissipated over the seas west of the Ogasawara Islands on 16 August.

A tropical depression developed over the northern part of the South China Sea about 210 km southeast of Haikou in the night of 23 August. It moved north initially but took a northeasterly track afterwards. The tropical depression turned northwest the following night, heading towards the western part of Guangdong. In the early morning of 25 August, the tropical depression made landfall near Yangjiang and weakened into an area of low pressure.

Having formed over the central part of the North Pacific, Typhoon [Ioke \(0612\)](#) crossed the International Date Line and entered the western North Pacific on 27 August. Ioke initially moved west-southwest, and turned west-northwest three days later. It turned northeast over the western North Pacific to the east of Japan on 5 September and weakened into a severe tropical storm in the morning of 6 September. Ioke became an extratropical cyclone that night.

[SEPTEMBER](#)

[Shanshan \(0613\)](#) developed as a tropical depression over the western North Pacific about 460 km north of Yap in the afternoon of 9 September, and moved northwest. It strengthened into a typhoon on 12 September and then took on a westerly track. Three days later, Shanshan turned north, skirting the seas east of Taiwan. Afterwards, Shanshan moved north-northeast and traversed northwestern Kyushu, Japan on 17 September. Shanshan weakened into a severe tropical storm on 18 September. It became an extratropical cyclone the following day. In the fury of Shanshan, nine people were killed in Japan, more than 320 injured and another one reported missing. About 12 000 people were evacuated. 40 houses were destroyed and another 190 damaged. Electricity supply to about 380 000 families was suspended. In addition, hundreds of flights were affected. A train was blown off the track and overturned. The southeastern part of South Korea was also affected by Shanshan. One person was injured and electricity supply to about 3 000 families was suspended. Ferry service between South Korea and Japan was suspended.

[A tropical depression](#) developed over the northern part of the South China Sea about 350 km east-northeast of Xisha in the afternoon of 12 September. It moved north initially but then took a west-northwesterly track. The tropical depression weakened into an area of low pressure over coastal waters of western Guangdong the following night.

[Yagi \(0614\)](#) developed as a tropical depression over the western North Pacific about 1450 km east-northeast of Guam in the early morning of 17 September and moved east slowly. Yagi turned west two days later and strengthened into a typhoon. Yagi took on a northwesterly track on 21 September. Two days later, it traversed the Ogasawara Islands and then turned northeast. Yagi weakened into a severe tropical storm on 24 September. It became an extratropical cyclone the next day.

[A tropical depression](#) developed over the central part of the South China Sea about 420 km south-southeast of Xisha in the night of 22 September and moved generally northwest. The tropical depression turned west on 24 September. It made landfall over the northern coast of Vietnam the next day and weakened into an area of low pressure.

[Xangsane \(0615\)](#) developed as a tropical depression over the western North Pacific about 900 km east-southeast of Manila in the night of 25 September and moved west-northwest. It strengthened into a typhoon two days later and rampaged through the Philippines. In the fury of Xangsane, over 207 people were killed in the Philippines, another 22 reported missing. Near two million people were made homeless, and another 43 million affected by power outage. Economic losses reached US\$ 240 million. After entering the South China Sea, Xangsane took on a westerly track on 29 September towards the central part of Vietnam across the central part of the South China Sea. Xangsane made landfall over central Vietnam near Da Nang on 1 October. Moving inland, Xangsane weakened and finally dissipated in Thailand the next day. Xangsane inflicted severe damage to Vietnam. Altogether, 42 people were killed, thousands injured and another seven

reported missing. 200 000 people were evacuated, 15 000 houses toppled and another 50 000 were flooded. In central Vietnam, electricity supply and telecommunication were disrupted. In addition, 48 flights were cancelled and 560 vessels sank or were damaged. Economic losses were about US\$ 630 million. Hainan, China was also affected by Xangsane. One person was killed, 12 were injured and 200 made homeless. 70 houses were damaged and seven thousand trees were blown down. Economic losses were about US\$ 800 000. In addition, ferry service across the Qiongzhou Haixia was suspended.

OCTOBER

[Bebinca \(0616\)](#) developed as a tropical depression over the western North Pacific about 1 270 km south-southeast of Naha, Okinawa early on 2 October, and moved slowly. Bebinca strengthened into a tropical storm the next day and accelerated to the north. It turned northeast on 4 October and became an extratropical cyclone two days later.

A tropical depression named [Rumbia \(0617\)](#) formed over the western North Pacific about 1 390 km east-southeast of Iwo Jima in the afternoon of 3 October. It moved north-northwest and strengthened into a tropical storm that night. Rumbia turned north on 5 October and dissipated over sea the next day.

[Soulik \(0618\)](#) developed as a tropical depression over the western North Pacific about 1 410 km east of Guam in the morning of 9 October and moved generally west-northwest. It strengthened into a typhoon on 12 October and turned north-northeast the next day, skirting the Ogasawara Islands. Soulik weakened into a severe tropical storm on 15 October and took on a northeasterly course. It became an extratropical cyclone the next day.

[Cimaron \(0619\)](#) developed as a tropical depression over the western North Pacific about 1 390 km east of Manila early on 27 October and moved west. After strengthening into a tropical storm the same day, Cimaron took on a west-northwesterly track towards Luzon. Cimaron strengthened into a typhoon on 28 October and traversed Luzon the following night. Cimaron entered the South China Sea on 30 October and turned towards northwest the next day. It slowed down on 1 November and became almost stationary. Cimaron weakened into a severe tropical storm in the night of 2 November and took on a south-southwesterly course and continued to weaken. It dissipated over the central part of the South China Sea to the south-southeast of Xisha on 6 November.

NOVEMBER

[Chebi \(0620\)](#) developed as a tropical depression over the western North Pacific about 1 240 km east of Manila on 9 November and moved west. Chebi intensified into a tropical storm in the evening and then a severe tropical storm in the next morning. It further intensified into a typhoon in the afternoon of 10 November and traversed Luzon the next day. In the Philippines, 1 person was killed, eight injured and three others missing. Many villages were affected by floods and more than 8 000 people were evacuated from their homes. After entering the South China Sea, Chebi turned to a west-southwest track and weakened into a severe tropical storm in the evening of 12 November. It then turned to a northwesterly track on 13 November and weakened to a tropical storm in the afternoon. Chebi continued to weaken to a tropical depression in the morning of 14 November and dissipated over the sea to the southeast of Hainan in the evening.

[Durian \(0621\)](#) developed as a tropical depression over the western North Pacific about 830 km east of Yap on 26 November and moved generally west-northwest. It intensified into a tropical storm in the afternoon. Durian intensified into a severe tropical storm on 28 November and further into a typhoon the next day. While moving west, it crossed the central part of the Philippines on 30 November. Heavy rain associated with Durian triggered widespread mudslides in the region. Over 570 people were killed and 746 missing. In addition, up to 120 000 houses were destroyed and over one million people affected. Power, communications and water supply were interrupted in the region. The damage to crops was estimated to be as high as US\$10 million. Typhoon Durian entered the central part of the South China Sea on 1 December on a westerly track. It changed to a west-southwesterly track on 3 December and then a southwesterly track the next day. Durian weakened into a severe tropical storm in the afternoon of 4 December and further into a tropical storm in the morning of 5 December, skirting the coasts of the southern part of Vietnam. Durian brought heavy rain and high winds to the southern part of Vietnam. 67 people were killed, 31 others missing and more than 450 people were injured. More than 120 000 homes were destroyed and over 1 000 fishing boats sank. In addition, power and communication lines were severely damaged and many trees were uprooted. Durian weakened into a tropical depression in the afternoon of 5 December and dissipated over the coastal areas of the southern part of Vietnam later in the afternoon.

DECEMBER

[Utor \(0622\)](#) developed as a tropical depression over the western North Pacific about 1 800 km east-southeast of Manila on 7 December. Moving west-northwestwards, Utor intensified into a tropical storm in the early morning and then a severe tropical storm in the evening of 8 December. It further intensified into a typhoon at noon the next day and started crossing the central Philippines in the afternoon. In the Philippines, at least seven were killed, 15 people missing and over 90 000 people were evacuated. Utor knocked out utilities and power lines, damaged resorts and houses, and caused severe flooding and several mudslides. Utor entered the South China Sea in the afternoon of 10 December and continued to move west-northwestwards. It turned to a northwesterly track on 12 December and then slowed down the next day as it turned to move northwards. Under the influence of the northeast monsoon, Utor weakened rapidly on 14 December and turned to move east-northeastwards. It first weakened into a tropical storm in the morning, then weakened further into a tropical depression in the afternoon. It dissipated over the South China Sea to the northeast of Xisha at night.

[Trami \(0623\)](#) developed as a tropical depression over the western North Pacific about 310 km northeast of Yap on 17 December and moved northwestwards. It intensified into a tropical storm in the early morning of 18 December and then turned on a west-northwesterly track. Trami weakened into a tropical depression in the morning of 19 December and dissipated over the western North Pacific to the east of Luzon in the afternoon.

Note: Casualties and damage figures were compiled from press reports.

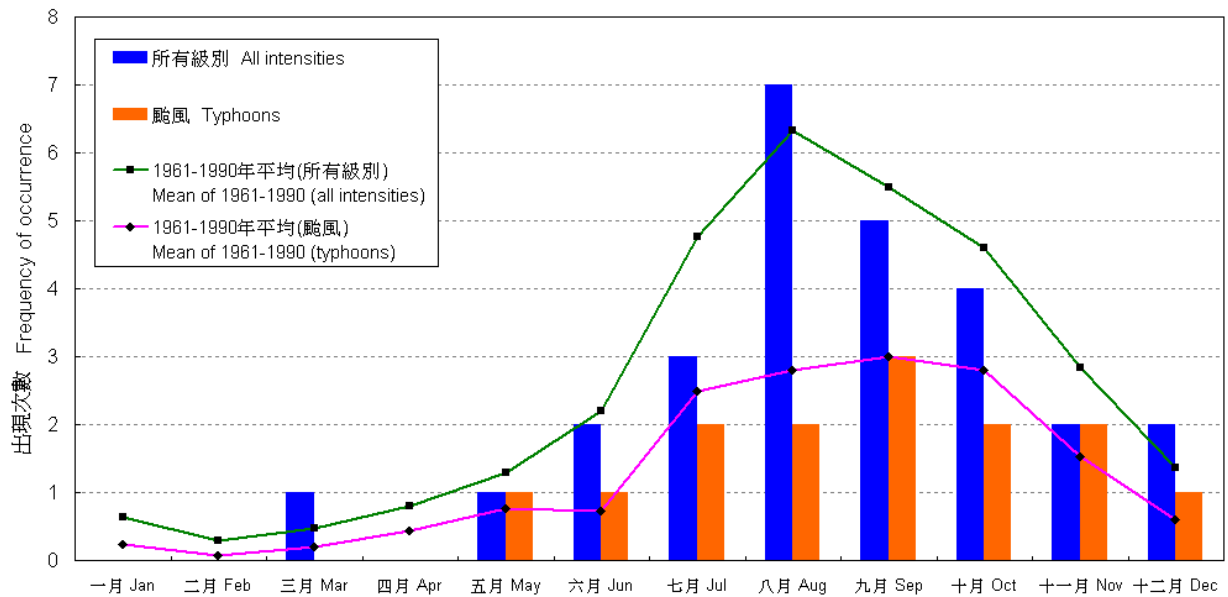


圖 2.1 二零零六年在北太平洋西部及南海區域的熱帶氣旋出現次數之每月分佈 (以熱帶氣旋在該月初次出現為準)。

Figure 2.1 Monthly frequencies of the occurrence of tropical cyclones in the western North Pacific and the South China Sea in 2006 (based on the first occurrence of the tropical cyclone in the month).

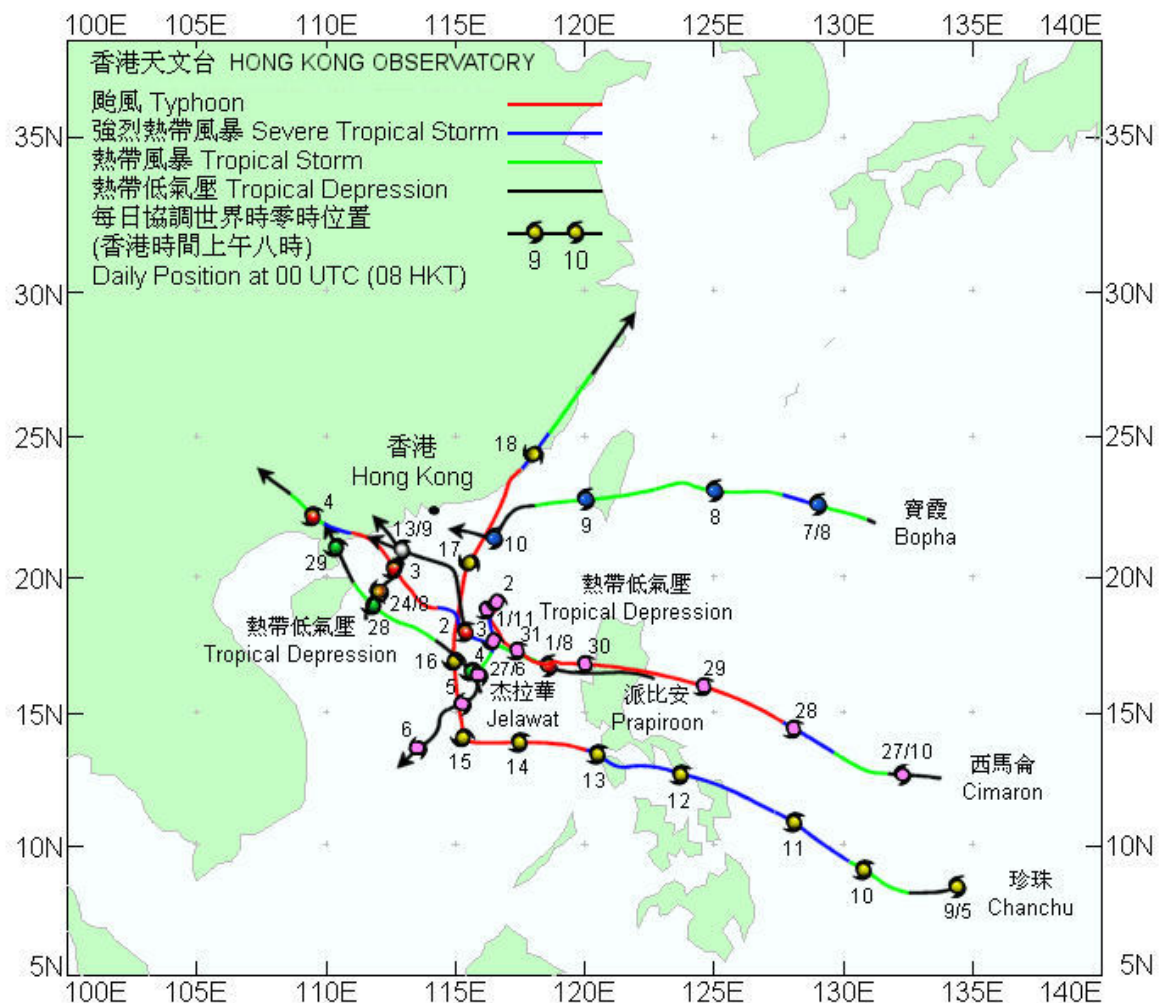


圖 2.2 二零零六年七個影響香港的熱帶氣旋的路徑圖。

Figure 2.2 Tracks of the seven tropical cyclones affecting Hong Kong in 2006.

表 2.1 在香港責任範圍內 (10°-30°N, 105°-125°E)熱帶氣旋出現之每月分佈
(以熱帶氣旋在該月初次出現為準)

TABLE 2.1 MONTHLY DISTRIBUTION OF THE OCCURRENCE OF TROPICAL CYCLONES IN HONG KONG'S AREA OF RESPONSIBILITY (10° - 30°N, 105° - 125°E), BASED ON THE FIRST OCCURRENCE OF THE TROPICAL CYCLONE IN THE MONTH

年份 Year	月份 Month												共 Total
	一月	二月	三月	四月	五月	六月	七月	八月	九月	十月	十一月	十二月	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1961					3	5	2	5	4	3	1	1	24
1962					3		4	5	4	1	3		20
1963						3	3	3	2			2	13
1964					1	1	5	3	6	3	6	1	26
1965	1				2	3	4	3	2		1		16
1966					2		5	2	3	2	2	1	17
1967			1	1		1	2	6	1	2	3		17
1968							2	4	2	1	3		12
1969							3	3	4	1			11
1970		1				2	2	3	4	5	3		20
1971				1	2	2	5	3	3	4			20
1972	1					3	2	4	2	1	1	1	15
1973							4	4	2	4	3		17
1974						3	2	4	2	4	4	2	21
1975	1					1		3	2	3	1	1	12
1976					1	1	1	4	1		1	1	10
1977						1	4	1	3		1		10
1978	1			1		2	2	4	5	4	1		20
1979				1	2	1	3	5	2	2	1	1	18
1980			1		3	1	5	2	3	1	1		17
1981						3	3	3	1	1	3	1	15
1982			2		1	1	3	3	3	1		2	16
1983						1	3	1	3	5	2		15
1984						2	2	4	2	2	2		14
1985						2	2	2	4	4	1		15
1986					1	1	1	4	1	3	3	2	16
1987						1	3	2	1	1	3	1	12
1988	1				1	3	1	1	2	5	2	1	17
1989					2	1	4	2	4	3	1		17
1990					1	4	2	3	3	3	2		18
1991				1	1	1	3	2	2	1	3		14
1992						2	3	2	2	2			11
1993						1	1	2	3	2	2	3	14
1994				1	1	2	6	5	2	2		1	20
1995						1	1	5	5	3	1	1	17
1996		1		1	2		3	3	2	1	2		15
1997					1		1	4	1	2	1		10
1998							1	3	4	3	3	1	15
1999				1		1	1	2	3	2	1	1	12
2000					2	1	3	5	3	3	2	1	20
2001					1	2	4	2	2	1	1	1	14
2002	1					1	3	2	3				10
2003				1	1	2	2	3	1	1	1		12
2004			1		1	3	2	2	2	1	2	1	15
2005			1				2	3	4	3	2		15
2006					1	1	3	3	4	1	2	1	16
正常 Normal	0.2	0.0	0.1	0.1	0.8	1.6	2.8	3.2	2.7	2.3	1.8	0.6	16.4

表 2.2 影響香港的熱帶氣旋之每月分佈

TABLE 2.2 MONTHLY DISTRIBUTION OF TROPICAL CYCLONES AFFECTING HONG KONG

年份 Year	月份 [#] Month [#]												共 Total
	一月	二月	三月	四月	五月	六月	七月	八月	九月	十月	十一月	十二月	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1961					1		3		2				6
1962							2	1		1			4
1963						1	1	1	1				4
1964					1	1		1	4	3			10
1965						1	2		2		1		6
1966					1		3	1	1				6
1967				1		1	1	3		1	1		8
1968							1	3	2				6
1969							1		2	1			4
1970							1	2	1	2			6
1971					1	2	3	1	1	1			9
1972						2	1	1			1		5
1973							2	3	2	2			9
1974						2	1		2	4	1	1	11
1975						1		1	2	3			7
1976						1	1	2	1				5
1977						1	3	1	3				8
1978				1			1	2	2	2			8
1979							2	2	2				6
1980					1	1	4	1	2	1			10
1981						1	2	1	1				5
1982						1	2		1	1			5
1983							3		2	2			7
1984						1	1	2	1				5
1985						1	1		2	1			5
1986							1	2		1			4
1987						1		2	1	1			5
1988					1	1	1		1	2			6
1989					1	1	2		1	2			7
1990					1	2	1	1	1				6
1991							3	1	2				6
1992						1	3	1					5
1993						1	1	2	3	1	1		9
1994						2		1	1				4
1995							1	4	2	1			8
1996							2	2	2	1			7
1997							1	1					2
1998								2	1	2			5
1999				1		1	1	1	3	1			8
2000						1	2	2	1		1		7
2001						2	2	1	1				6
2002								2	1				3
2003							2	1	1				4
2004						1	1	1					3
2005								1	2				3
2006					1	1		3	1	1			7
正常 Normal	0.0	0.0	0.0	0.1	0.3	0.8	1.6	1.1	1.4	1.0	0.1	0.0	6.4

[#] 熱帶氣旋警告信號首次發出的月份。[#] The month that the tropical cyclone warning signal was first issued.

表 2.3 二零零六年香港熱帶氣旋警告信號的意義

TABLE 2.3 MEANING OF TROPICAL CYCLONE WARNING SIGNALS IN HONG KONG IN 2006

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，稍後可能影響本港。 A tropical cyclone is centred within about 800 km of Hong Kong and may later affect Hong Kong.
強風 Strong Wind	3		維多利亞港內吹強風或將有強風，持續風力每小時41至62公里，陣風更可能超過每小時110公里。 Strong wind is expected or blowing in the Victoria Harbour, with a sustained speed of 41-62 kilometres per hour (km/h), and gusts which may exceed 110 km/h.
西北 烈風或暴風 NW'LY Gale or Storm	8 西北 NW		維多利亞港內風力已達或將達每小時63至117公里之烈風或暴風程度，由所指之方向吹襲，而陣風可能超過每小時180公里。 Gale or storm force wind is expected or blowing in the Victoria Harbour, with a sustained wind speed of 63-117 km/h from the quarter indicated and gusts which may exceed 180 km/h.
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		烈風或暴風的風力現正或預料會顯著加強。 Gale or storm force wind is increasing or expected to increase significantly in strength.
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.

第三節

二零零六年影響香港的熱帶氣旋

Section 3

TROPICAL CYCLONES AFFECTING HONG KONG IN 2006

3.1 颱風珍珠(0601)：二零零六年五月九日至十八日

珍珠是二零零六年首個令香港天文台發出警告信號的熱帶氣旋，也是二零零六年首個在北太平洋西部形成的颱風。

珍珠在五月九日於雅蒲島西南偏西約 420 公里的北太平洋西部上發展成爲一個熱帶低氣壓，並大致向西北偏西推進。它於五月十日增強爲一個強烈熱帶風暴，次日吹襲菲律賓中部。珍珠肆虐菲律賓期間，最少造成 37 人死亡，近 8 000 人撤離，約 600 間房屋受到破壞，另 3 500 間受損，一艘渡輪翻沉。

珍珠於五月十三日進入南海，隨即達到颱風強度。它向西推進兩天後，於五月十五日轉北趨向華南沿岸。途中珍珠進一步增強，其中心附近的最高持續風速達每小時 185 公里，是有記錄以來在五月進入南海最強的颱風。珍珠導致南海上多艘越南漁船翻沉，最少有 44 名漁民死亡，超過 160 人失蹤。珍珠於五月十七日開始採取東北偏北路徑移動，翌日在汕頭附近登陸並逐漸減弱。它橫掃中國東南沿岸地區後進入東海並於同日晚上變成溫帶氣旋。珍珠所帶來的惡劣天氣在廣東和福建造成嚴重災害，共導致 19 人死亡，四人受傷，超過一千萬人受災。約 14 000 間房屋倒塌，逾 19 萬公頃農地受損，直接經濟損失約爲 70 億人民幣。另外，台灣有兩人死亡。

香港天文台於五月十五日下午 9 時 40 分發出一號戒備信號，當時珍珠位於香港以南約 750 公里。隨著珍珠移近，天文台於五月十七日上午 7 時 15 分發出本年度首個三號強風信號，當時珍珠位於香港東南偏南約 250 公里。其後本地風勢顯著增強，珍珠的外圍雨帶亦開始爲香港帶來狂風驟雨。

珍珠於五月十七日下午 2 時左右最接近香港，當時它集結在本港東南偏東約 220 公里。同日下午 4 時，香港天文台總部錄得最低每小時海平面氣壓 997.1 百帕斯卡。隨著珍珠遠離，境內風勢逐漸減弱，天文台在五月十七日晚上 9 時 15 分改發一號戒備信號，並於翌日上午 4 時 40 分取消所有熱帶氣旋警告信號。

珍珠影響香港期間，一名當值救生員在將軍澳隨著瞭望台被風吹倒墮下受傷，另一名長者在東九龍被高空墮下花盆擊傷。在天文大潮及風暴潮的共同影響下，維多利亞港錄得 2.8 米的海平面高度，上環出現輕微水浸。全港有數宗樹木及棚架倒塌的報告。香港國際機場有 60 多班航機取消，另 14 班航機延誤。一艘遊艇在西貢沉沒，部份渡輪服務一度停頓。此外，三人在開往澳門的噴射船上受傷，另一人在小西灣墮海受傷。

表3.1.1-3.1.3分別是珍珠影響香港時各站錄得的最高風速、日雨量及最高潮汐資料。圖3.1.1-3.1.4則分別是珍珠的路徑圖、香港雨量分佈圖、衛星及雷達圖像。

3.1 Typhoon Chanchu (0601) : 9 - 18 May 2006

Chanchu was the first tropical cyclone to necessitate the issuance of warning signals in 2006. It was also the first typhoon to form over the western North Pacific in 2006.

Chanchu developed as a tropical depression over the western North Pacific about 420 km west-southwest of Yap on 9 May and tracked mainly towards the west-northwest. It intensified into a severe tropical storm on 10 May and struck the central part of the Philippines the following day. In the fury of Chanchu, at least 37 people were killed in the Philippines where about 8 000 people had to flee their homes. Some 600 houses were destroyed, another 3 500 damaged and a ferry capsized.

On 13 May, Chanchu attained typhoon strength upon entering the South China Sea. Moving westwards for two days, it turned to the north on 15 May. Heading towards the south China coast, Chanchu strengthened further and the maximum sustained wind speed near its centre reached 185 km/h. Chanchu was the most intense typhoon on record to enter the South China Sea in May. In the South China Sea, several Vietnamese fishing boats capsized in the fury of Chanchu. At least 44 fishermen were killed and more than 160 reported missing. Chanchu took on a north-northeastward course on 17 May. It made landfall near Shantou the next day and weakened gradually thereafter. On 18 May, Chanchu rampaged through the coastal areas of southeastern China and entered the East China Sea. It became an extratropical cyclone that evening. The adverse weather brought by Chanchu inflicted severe damage in Guangdong and Fujian. Altogether, 19 people were killed, another four were injured and ten million people or more were affected in the two provinces. About 14 000 houses collapsed and over 190 thousand hectares of farmland were damaged. The direct economic loss was approximately RMB\$ 7 billion. In Taiwan, Chanchu caused two deaths.

In Hong Kong, the Standby Signal No. 1 was issued at 9.40 p.m. on 15 May when Chanchu was 750 km to the south of Hong Kong. With Chanchu edging closer to Hong Kong, the Strong Wind Signal No. 3 was issued for the first time this year at 7.15 a.m. on 17 May, when Chanchu was about 250 km to the south-southeast. Locally, winds strengthened significantly and squally showers set in as Hong Kong came under the influence of Chanchu's outer rainbands.

Chanchu was closest to Hong Kong at around 2 p.m. on 17 May when it was centred about 220 km to the east-southeast. The lowest hourly sea-level pressure of 997.1 hPa was recorded at the Hong Kong Observatory Headquarters at 4 p.m. the same day. As Chanchu moved away, the No. 3 Signal was replaced by the Standby Signal No.1 at 9.15 p.m. on 17 May. All tropical cyclone warning signals were cancelled at 4.40 a.m. the next day.

During the passage of Chanchu, a duty lifeguard was injured as the guard post collapsed in strong winds in Tseung Kwan O. An elderly was hit and injured by a fallen flower pot in east Kowloon. Another person was reported fallen into the sea at Siu Sai Wan and suffered injuries. Three persons were injured on board the jetfoil bound for Macau. Minor flooding occurred in Sheung Wan as high tide together with storm surge brought sea levels to reach 2.8 metres at the Victoria Harbour. Several cases of fallen trees and scaffoldings were reported. At the Hong Kong International Airport, more than 60 flights were cancelled and another 14 delayed. A yacht sank in Sai Kung. Several ferry services were suspended.

Information on wind, rainfall and tide during the passage of Chanchu is given in Tables 3.1.1-3.1.3. Figures 3.1.1-3.1.4 show the track of Chanchu, rainfall distribution in Hong Kong, cloud imagery and radar imagery respectively.

表 3.1.1 在珍珠影響下，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 3.1.1 Maximum gust peak speeds and maximum hourly mean winds with associated wind directions recorded at various stations during the issuing of the tropical cyclone warning signal for Chanchu

站 (參閱圖 1.1)	Station (See Fig. 1.1)	最高陣風 Maximum Gust		日期/月份 Date/Month	時間 Time	最高每小時平均風速 Maximum Hourly Wind		日期/月份 Date/Month	時間 Time
		風向 Direction	風速(公里/時) Speed (km/h)			風向 Direction	風速(公里/時) Speed (km/h)		
中環碼頭	Central Pier	西北偏西 WNW	75	17/5	18:51	西 W	43	18/5	00:00
						西 W	43	18/5	02:00
中環廣場	Central Plaza	-	115	17/5	05:25	-	65	17/5	06:00
赤鱗角	Chek Lap Kok	西北偏北 NNW	72	17/5	19:18	西北偏北 NNW	56	17/5	18:00
長洲	Cheung Chau	北 N	92	17/5	06:19	西北偏北 NNW	62	17/5	18:00
長沙灣	Cheung Sha Wan	東北偏北 NNE	63	17/5	17:30	北 N	25	16/5	21:00
青洲	Green Island	北 N	103	17/5	09:09	北 N	70	17/5	10:00
啓德	Kai Tak	北 N	104	17/5	11:32	北 N	41	17/5	11:00
京士柏	King's Park	北 N	76	17/5	08:52	北 N	34	17/5	07:00
流浮山	Lau Fau Shan	北 N	81	17/5	11:21	北 N	47	17/5	10:00
北角	North Point	北 N	85	17/5	10:02	北 N	43	17/5	11:00
平洲	Ping Chau	北 N	87	17/5	12:22	西北偏西 WNW	22	18/5	01:00
西貢	Sai Kung	北 N	94	17/5	12:27	北 N	51	17/5	12:00
沙螺灣	Sha Lo Wan	西北 NW	47	17/5	21:29	東北偏東 ENE	22	16/5	21:00
						東北偏東 ENE	22	17/5	00:00
沙田	Sha Tin	東北偏北 NNE	67	17/5	11:12	北 N	25	17/5	12:00
石崗	Shek Kong	西北 NW	45	17/5	15:09	東北 NE	20	17/5	04:00
						東北偏東 ENE	20	17/5	05:00
九龍天星碼頭	Star Ferry (Kowloon)	西北偏西 WNW	63	17/5	19:15	西北偏西 WNW	38	18/5	00:00
打鼓嶺	Ta Kwu Ling	東北偏北 NNE	75	17/5	05:41	東北偏北 NNE	36	17/5	06:00
大尾篤	Tai Mei Tuk	北 N	106	17/5	12:28	東北偏北 NNE	52	17/5	05:00
大帽山	Tai Mo Shan	西北偏北 NNW	118	17/5	17:13	西北偏北 NNW	79	17/5	16:00
塔門	Tap Mun	西北偏北 NNW	77	17/5	11:18	西 W	43	18/5	04:00
大老山	Tate's Cairn	西北偏北 NNW	146	17/5	11:15	西北偏北 NNW	96	17/5	12:00
鯉魚湖	Tsak Yue Wu	東北 NE	79	17/5	07:13	東北偏北 NNE	34	17/5	09:00
將軍澳	Tseung Kwan O	西北偏北 NNW	85	17/5	15:50	西北偏北 NNW	31	17/5	14:00
青衣 (青柏樓)	Ching Pak House, Tsing Yi	北 N	96	17/5	11:11	北 N	45	17/5	09:00
屯門	Tuen Mun	西北偏西 WNW	67	17/5	21:15	東北偏北 NNE	22	17/5	01:00
橫瀾島	Waglan Island	北 N	106	17/5	12:29	北 N	83	17/5	13:00
黃竹坑	Wong Chuk Hang	東北偏北 NNE	68	17/5	06:52	西北 NW	31	18/5	00:00

表 3.1.2 珍珠影響香港期間，香港天文台總部及其他各站所錄得的日雨量（單位為毫米）

Table 3.1.2 Daily rainfall amounts in millimetres recorded at the Hong Kong Observatory Headquarters and other stations during the passage of Chanchu

站 (參閱圖 3.1.2) Station (see Fig. 3.1.2)	五月十五日 15 May	五月十六日 16 May	五月十七日 17 May	五月十八日 18 May	總雨量 Total
香港天文台 Hong Kong Observatory	微量 Trace	1.6	15.0	微量 Trace	16.6
H12 半山區 Mid Levels	0.0	2.0	10.0	0.0	12.0
H19 筲箕灣 Shau Kei Wan	0.0	2.5	10.0	1.0	13.5
H21 淺水灣 Repulse Bay	0.0	1.5	10.0	0.0	11.5
K04 佐敦谷 Jordan Valley	0.0	3.0	22.5	0.5	26.0
K06 蘇屋邨 So Uk Estate	0.0	3.5	23.5	0.0	27.0
N05 粉嶺 Fanling	0.0	2.5	21.0	0.5	24.0
N06 葵涌 Kwai Chung	0.0	3.0	26.0	0.0	29.0
N09 沙田 Sha Tin	0.0	4.5	39.0	0.0	43.5
N12 元朗 Yuen Long	0.0	2.0	15.0	0.0	17.0
N13 糧船灣 High Island	0.0	6.5	23.0	0.0	29.5
N17 東涌 Tung Chung	0.0	5.5	20.5	0.0	26.0
R21 踏石角 Tap Shek Kok	0.0	1.0	24.0	0.0	25.0
R26 石崗 Shek Kong	[0.0]	4.0	26.0	0.5	[30.5]
R31 大尾篤 Tai Mei Tuk	0.0	4.0	23.5	0.0	27.5

註： [] 基於不齊全的每小時雨量數據。

Note : [] based on incomplete hourly data.

表 3.1.3 珍珠影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮

Table 3.1.3 Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of Chanchu

站 (參閱圖1.1) Station (see Fig. 1.1)	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/月 Date/Month	時間 Time	高度 (米) Height (m)	日/月 Date/Month	時間 Time
鰂魚涌 Quarry Bay	2.82	17/5	11:52	0.59	17/5	06:11
石壁 Shek Pik	2.97	17/5	11:15	0.67	16/5	14:06
大埔滘 Tai Po Kau	2.90	17/5	12:44	0.77	17/5	15:47
尖鼻咀 Tsim Bei Tsui	3.02	16/5	11:00	0.51	17/5	07:15

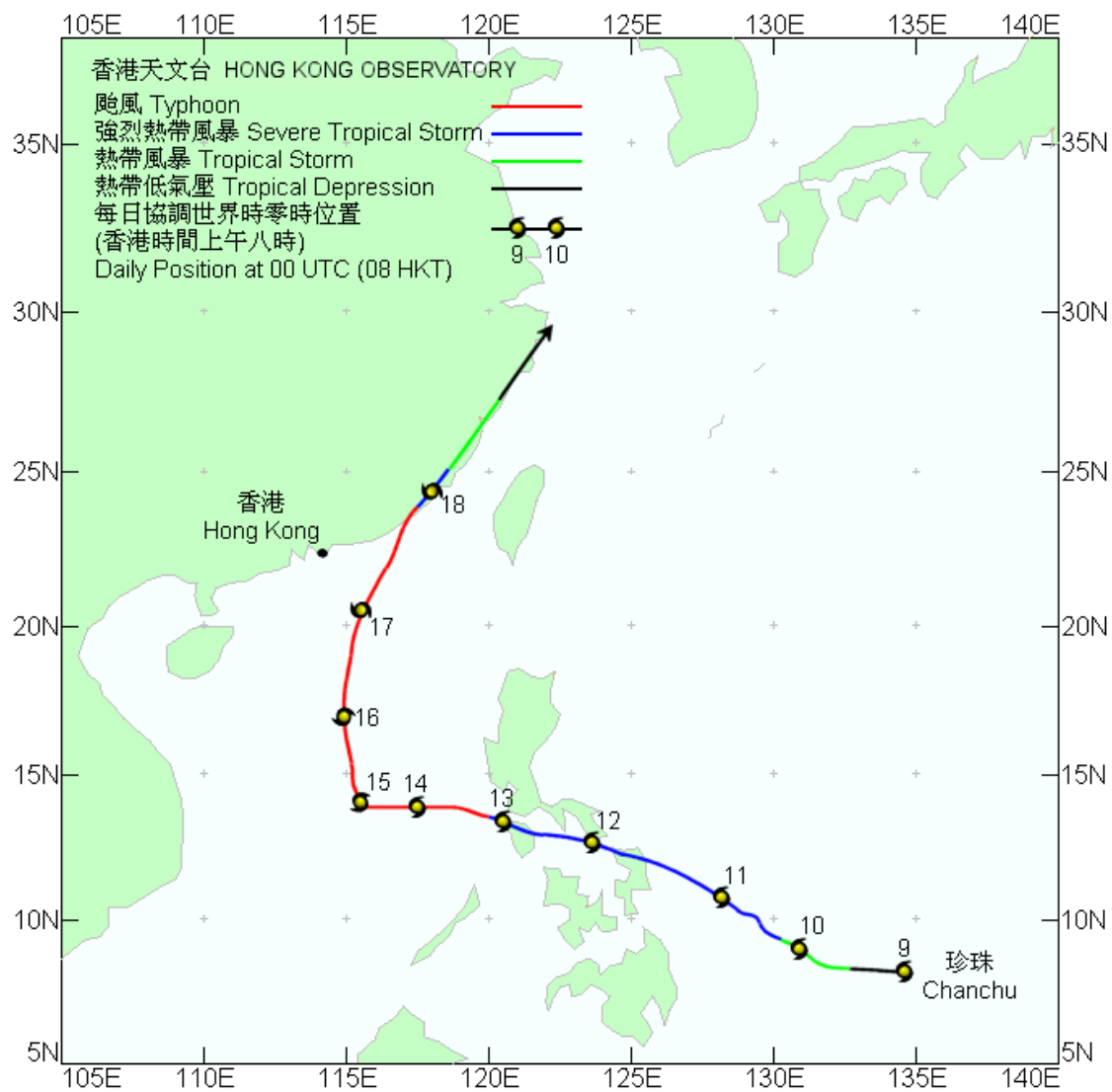


圖 3.1.1 珍珠 (0601) 在二零零六年五月九日至十八日的路徑圖。

Figure 3.1.1 Track of Chan Chu (0601) on 9 - 18 May 2006.

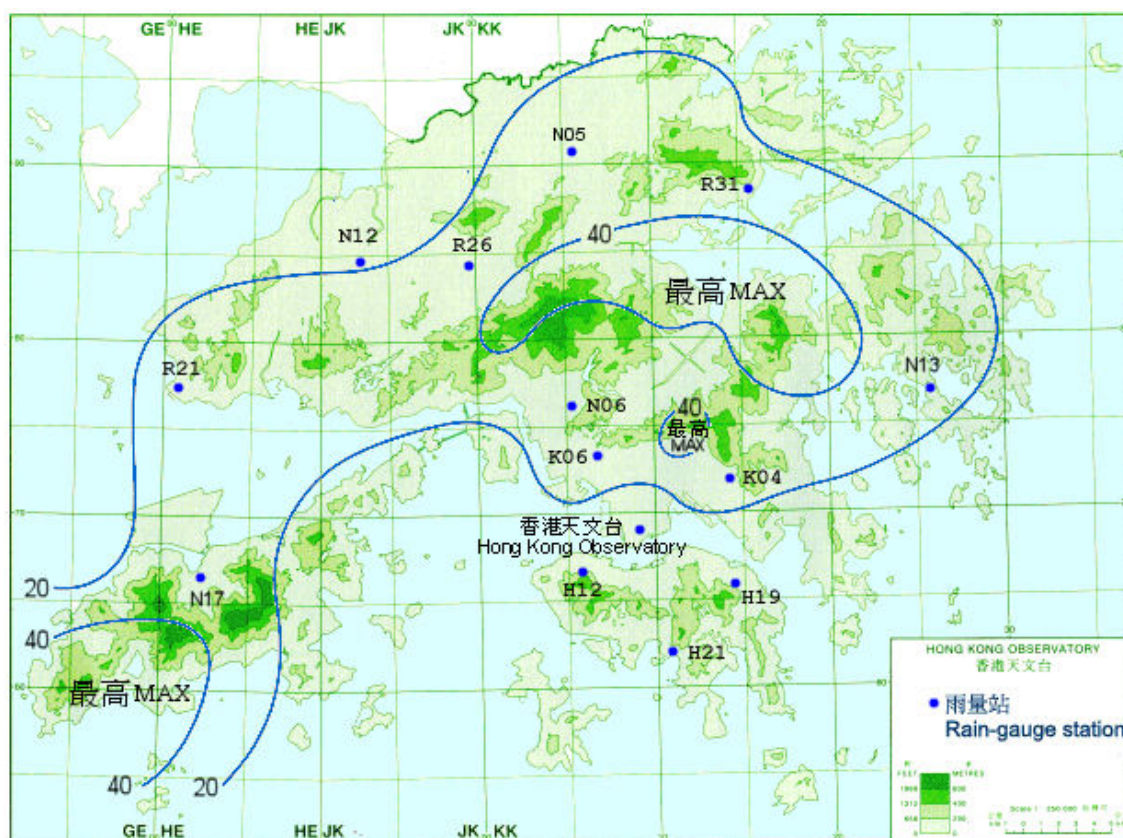


圖 3.1.2 二零零六年五月十五日至十八日的雨量分佈（等雨量線單位為毫米）。
 Figure 3.1.2 Rainfall distribution on 15 - 18 May 2006 (isohyets are in millimetres).

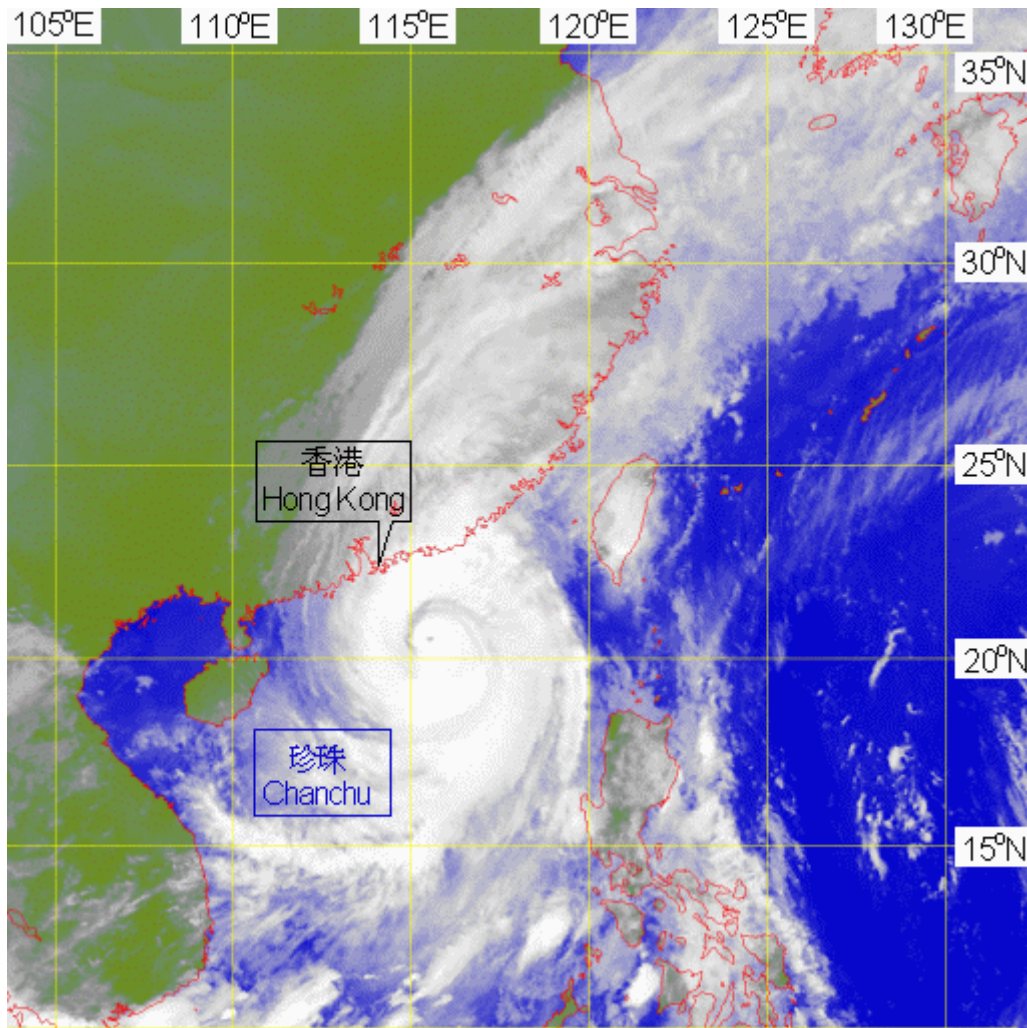


圖 3.1.3 珍珠在二零零六年五月十七日約上午八時的紅外線衛星圖片。
 [此衛星圖像接收自日本氣象廳的多用途輸送衛星-1R (MTSAT-1R) 。]

Figure 3.1.3 Infra-red imagery at around 8 a.m. on 17 May 2006 of Chanchu.
 [The satellite imagery was originally captured with Multi-functional Transport Satellite-1R (MTSAT-1R) of Japan Meteorological Agency (JMA).]

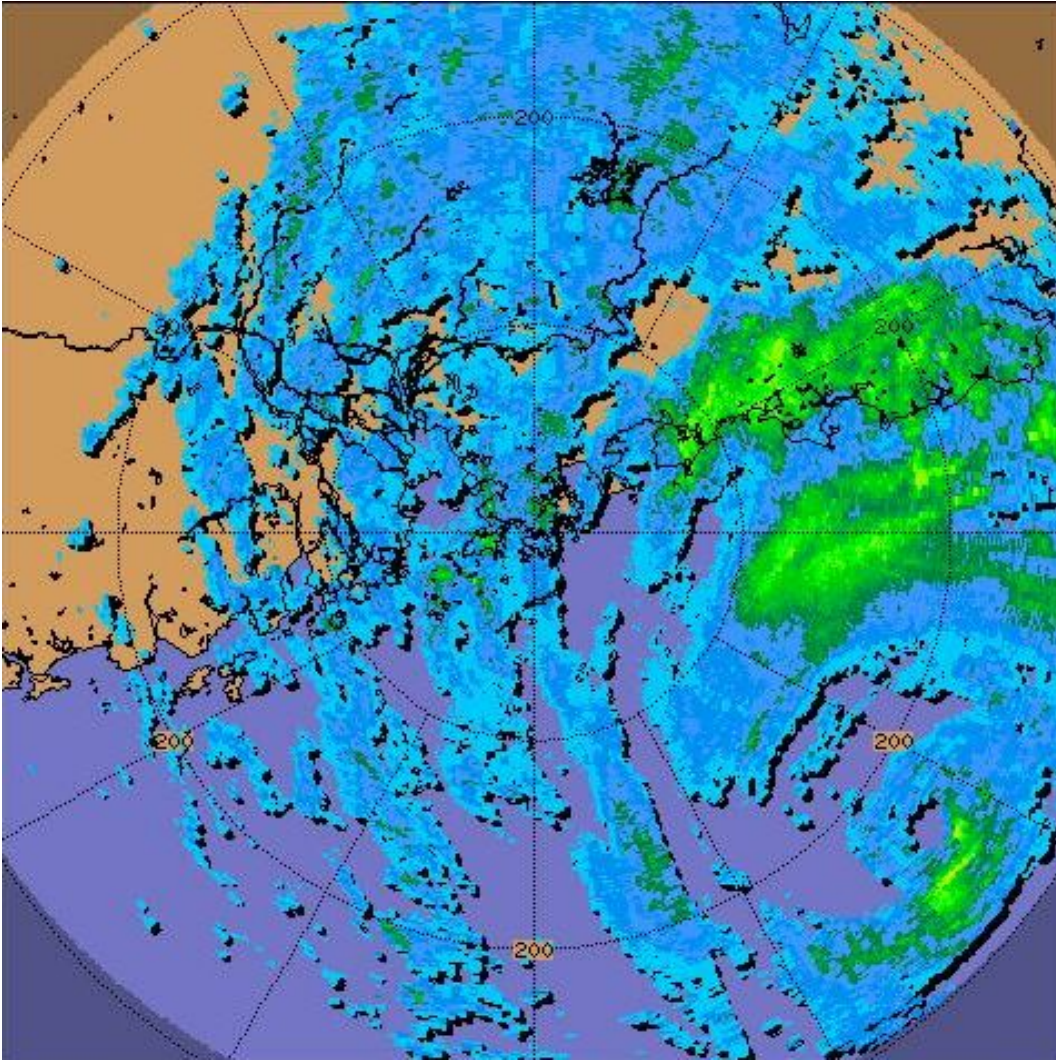


圖 3.1.4 珍珠在二零零六年五月十七日中午的雷達回波圖像。
Figure 3.1.4 Radar echoes captured at noon on 17 May 2006 of Chanchu.

3.2 熱帶風暴杰拉華(0602)：二零零六年六月二十七日至二十九日

杰拉華是二零零六年首個在南海區域形成的熱帶氣旋。

杰拉華在六月二十七日清晨於西沙島之東南偏東約 410 公里處發展成爲一個熱帶低氣壓。它然後大致向西北方向移動，橫過南海中部，並於當晚增強爲熱帶風暴。隨著杰拉華逐漸逼近海南島，在六月二十八日瓊州海峽所有客運渡輪、火車渡輪全面停航，超過 19 000 艘海上作業船回港避風。杰拉華在當天下午掠過海南島東北沿岸區域，爲海口帶來大雨並引致水浸。杰拉華於同日晚上減弱爲熱帶低氣壓。它在六月二十九日早上在湛江附近登陸，並於當天在廣東西部進一步減弱爲一個低壓區。

香港天文台於六月二十七日上午 9 時 40 分發出一號戒備信號，當時杰拉華位於香港之東南偏南 620 公里。同日下午四時及五時，香港天文台總部錄得最低每小時海平面氣壓 1 005.0 百帕斯卡。杰拉華在香港 400 公里以外掠過，它的外圍雨帶爲香港帶來狂風驟雨及雷暴，而離岸海域亦受強風影響。天文台在六月二十八日下午 6 時 40 分取消所有熱帶氣旋警告信號。

杰拉華影響香港期間，一名印尼女傭在石澳遇溺喪生，香港仔一棵樹木被吹倒。

表3.2.1-3.2.3分別是杰拉華影響香港時各站錄得的最高風速、日雨量及最高潮汐資料。圖3.2.1-3.2.3則分別是杰拉華的路徑圖、香港雨量分佈圖及衛星雲圖。

3.2 Tropical Storm Jelawat (0602) : 27 - 29 June 2006

Jelawat was the first tropical cyclone to form in the South China Sea in 2006.

Jelawat developed as a tropical depression about 410 km east-southeast of Xisha Dao in the early morning of 27 June. Moving generally northwest across the central part of the South China Sea, it intensified into a tropical storm that night. With Jelawat approaching Hainan, all ferry and train services across Qiongzhou Haixia were suspended on 28 June, and more than 19 000 vessels had to return to harbour for shelter. That afternoon, Jelawat skirted the northeastern coast of Hainan, bringing heavy rain to Haikou which led to flooding in the city. Jelawat weakened into a tropical depression that night. In the morning of 29 June, Jelawat made landfall near Zhanjiang. It weakened further into an area of low pressure over the western part of Guangdong later that day.

In Hong Kong, the Standby Signal No. 1 was issued at 9.40 a.m. on 27 June when Jelawat was 620 km to its south-southeast. The lowest hourly sea-level pressure of 1 005.0 hPa were recorded at the Hong Kong Observatory Headquarters at 4 p.m. and 5 p.m. the same day. Jelawat maintained a distance of over 400 km from Hong Kong during its passage. Jelawat's outer rainbands brought squally showers and thunderstorms to the territory and offshore waters were affected by strong winds. All tropical cyclone warning signals were cancelled at 6.40 p.m. on 28 June.

During the passage of Jelawat, an Indonesian domestic helper drowned at Shek O. A tree was blown down in Aberdeen.

Information on wind, rainfall and tide during the passage of Jelawat is given in Tables 3.2.1-3.2.3. Figures 3.2.1-3.2.3 show the track of Jelawat, rainfall distribution in Hong Kong and cloud imagery respectively.

表 3.2.1 在杰拉華影響下，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 3.2.1 Maximum gust peak speeds and maximum hourly mean winds with associated wind directions recorded at various stations during the issuing of the tropical cyclone warning signal for Jelawat

站 (參閱圖 1.1)	Station (See Fig. 1.1)	最高陣風 Maximum Gust		日期/月份 Date/Month	時間 Time	最高每小時平均風速 Maximum Hourly Wind		日期/月份 Date/Month	時間 Time
		風向 Direction	風速(公里/時) Speed (km/h)			風向 Direction	風速(公里/時) Speed (km/h)		
中環碼頭	Central Pier	東 E	43	28/6	08:49	東 E	23	27/6	12:00
		東南偏東 ESE	43	28/6	09:00	東 E	23	27/6	13:00
中環廣場	Central Plaza	-	68	28/6	09:01	-	40	28/6	12:00
赤鱗角	Chek Lap Kok	東南偏東 ESE	52	28/6	08:52	東南偏東 ESE	25	28/6	08:00
長洲	Cheung Chau	東南偏東 ESE	79	28/6	08:59	東南偏東 ESE	43	28/6	08:00
長沙灣	Cheung Sha Wan	東 E	36	28/6	10:49	東 E	14	27/6	13:00
青洲	Green Island	南 S	76	28/6	09:04	東 E	30	27/6	17:00
啓德	Kai Tak	東南偏南 SSE	56	28/6	11:09	東南偏東 ESE	30	28/6	11:00
京士柏	King's Park	東南偏南 SSE	45	28/6	11:10	東南偏東 ESE	16	28/6	07:00
流浮山	Lau Fau Shan	東 E	34	27/6	12:05	東 E	19	27/6	17:00
北角	North Point	東 E	58	28/6	08:41	東 E	23	27/6	13:00
平洲	Ping Chau	南 S	31	28/6	13:40	東 E	9	27/6	10:00
西貢	Sai Kung	南 S	67	28/6	11:19	東南 SE	23	28/6	11:00
沙螺灣	Sha Lo Wan	東 E	47	28/6	07:20	東 E	20	28/6	04:00
沙田	Sha Tin	東南偏南 SSE	34	28/6	09:41	東南偏南 SSE	14	28/6	11:00
		東南 SE	34	28/6	09:55				
石崗	Shek Kong	東南偏東 ESE	40	28/6	11:35	東 E	19	27/6	14:00
九龍天星碼頭	Star Ferry (Kowloon)	東南 SE	49	28/6	09:03	東 E	25	27/6	13:00
打鼓嶺	Ta Kwu Ling	東南偏東 ESE	36	28/6	10:00	東南偏東 ESE	16	28/6	10:00
大尾篤	Tai Mei Tuk	東 E	45	28/6	09:33	東 E	30	28/6	10:00
大帽山	Tai Mo Shan	東南 SE	75	28/6	11:30	東南偏東 ESE	51	28/6	11:00
塔門	Tap Mun	東南偏東 ESE	45	28/6	13:14	東南偏東 ESE	27	28/6	08:00
		東南偏南 SSE	45	28/6	13:35				
大老山	Tate's Cairn	東南偏南 SSE	79	28/6	11:24	東南偏東 ESE	36	28/6	05:00
						東南偏東 ESE	36	28/6	06:00
鯉魚湖	Tsak Yue Wu	西南偏西 WSW	34	28/6	11:31	東北偏東 ENE	12	27/6	11:00
將軍澳	Tseung Kwan O	西南偏南 SSW	58	28/6	11:09	東南 SE	13	28/6	11:00
青衣 (青柏樓)	Ching Pak House, Tsing Yi	東南 SE	58	28/6	09:12	東南 SE	31	28/6	02:00
屯門	Tuen Mun	東南 SE	49	28/6	09:30	東南偏東 ESE	19	28/6	10:00
橫瀾島	Waglan Island	東南偏南 SSE	76	28/6	10:49	東南偏東 ESE	38	28/6	11:00
黃竹坑	Wong Chuk Hang	東南偏東 ESE	62	28/6	10:48	東南偏東 ESE	22	28/6	09:00

表 3.2.2 杰拉華影響香港期間，香港天文台總部及其他各站所錄得的日雨量（單位為毫米）
Table 3.2.2 Daily rainfall amounts in millimetres recorded at the Hong Kong Observatory Headquarters and other stations during the passage of Jelawat

站 (參閱圖 3.2.2) Station (see Fig. 3.2.2)	六月二十七日 27 Jun	六月二十八日 28 Jun	六月二十九日 29 Jun	總雨量 Total
香港天文台 Hong Kong Observatory	0.1	51.0	16.6	67.7
H12 半山區 Mid Levels	3.5	47.5	4.5	55.5
H19 筲箕灣 Shau Kei Wan	1.0	14.5	12.5	28.0
H21 淺水灣 Repulse Bay	0.0	46.0	6.5	52.5
K04 佐敦谷 Jordan Valley	10.0	37.0	6.0	53.0
K06 蘇屋邨 So Uk Estate	0.0	41.5	12.0	53.5
N05 粉嶺 Fanling	0.0	23.0	13.0	36.0
N06 葵涌 Kwai Chung	0.0	44.5	15.5	60.0
N09 沙田 Sha Tin	[2.0]	27.0	[6.0]	[35.0]
N12 元朗 Yuen Long	0.0	46.0	14.5	60.5
N13 糧船灣 High Island	10.5	[13.5]	4.0	[28.0]
N17 東涌 Tung Chung	0.5	47.5	14.0	62.0
R21 踏石角 Tap Shek Kok	0.5	28.5	8.5	37.5
R26 石崗 Shek Kong	0.0	34.0	8.0	42.0
R31 大尾篤 Tai Mei Tuk	1.5	18.0	[16.0]	[35.5]

註： [] 基於不齊全的每小時雨量數據。

Note : [] based on incomplete hourly data.

表 3.2.3 杰拉華影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮
Table 3.2.3 Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of Jelawat

站 (參閱圖 1.1) Station (see Fig. 1.1)	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/月 Date/Month	時間 Time	高度 (米) Height (m)	日/月 Date/Month	時間 Time
鰂魚涌 Quarry Bay	2.36	28/6	08:58	0.12	28/6	01:08
石壁 Shek Pik	2.67	28/6	09:58	0.28	28/6	09:58
大廟灣 Tai Miu Wan	2.45	28/6	08:57	0.24	28/6	08:57
大埔滘 Tai Po Kau	2.40	28/6	08:43	0.35	27/6	14:06
尖鼻咀 Tsim Bei Tsui	3.03	28/6	10:40	0.41	28/6	10:40

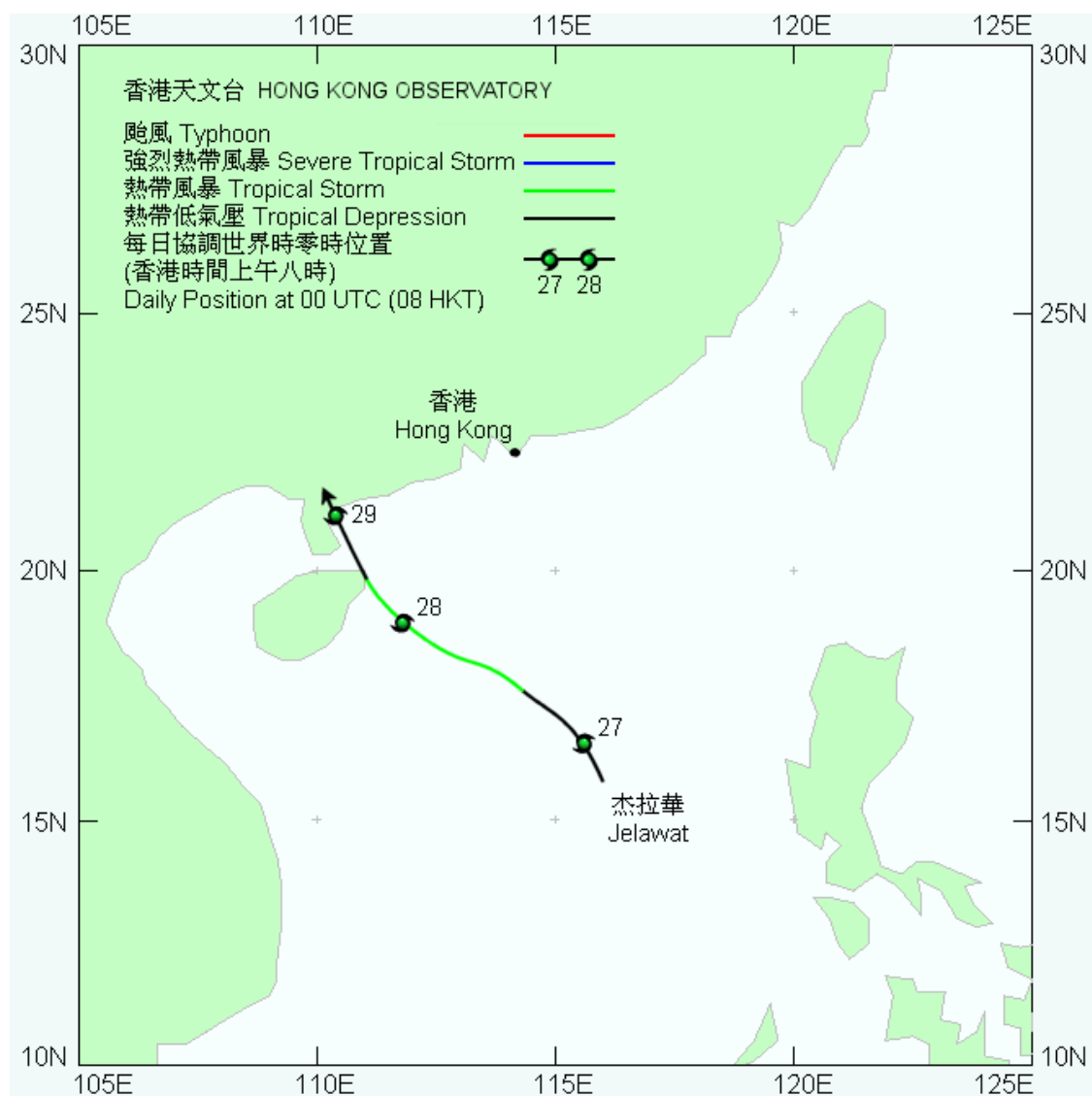


圖 3.2.1 杰拉華 (0602) 在二零零六年六月二十七日至二十九日的路徑圖。
Figure 3.2.1 Track of Jelawat (0602) on 27 - 29 June 2006.

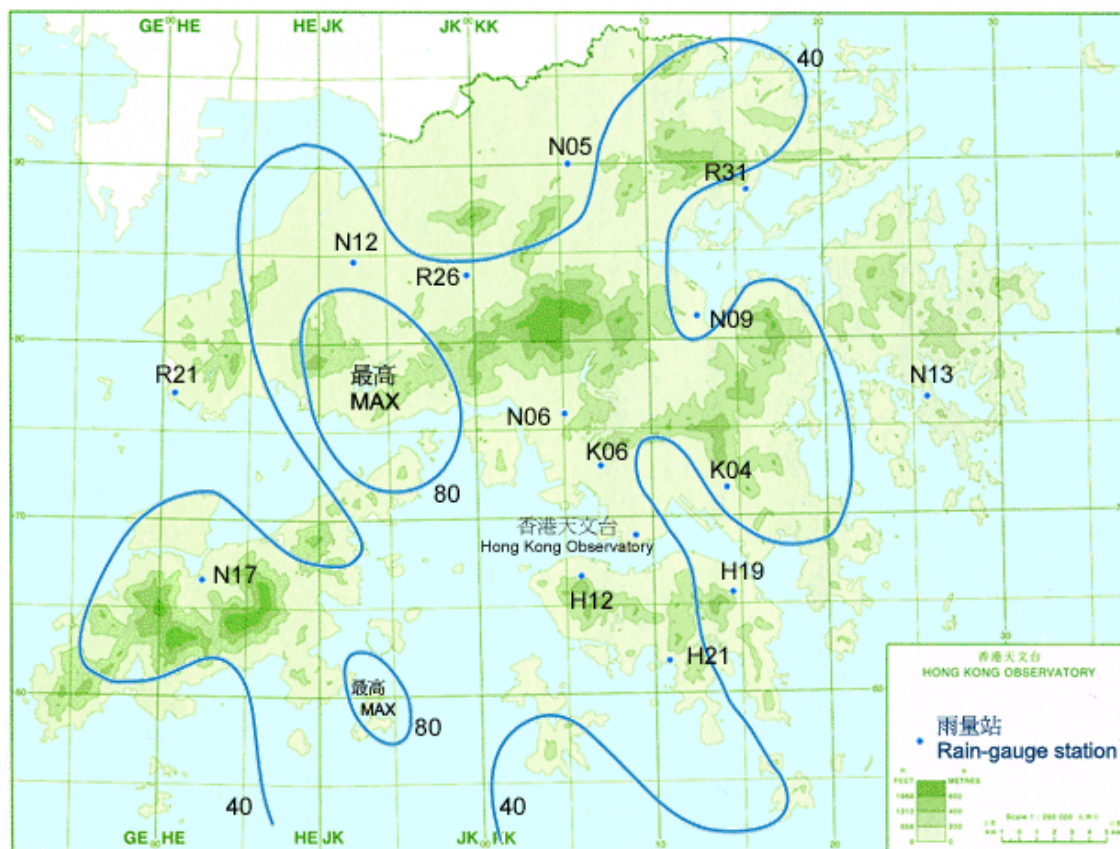


圖 3.2.2 二零零六年六月二十七日至二十九日的雨量分佈（等雨量線單位為毫米）。
 Figure 3.2.2 Rainfall distribution on 27 - 29 June 2006 (isohyets are in millimeters).

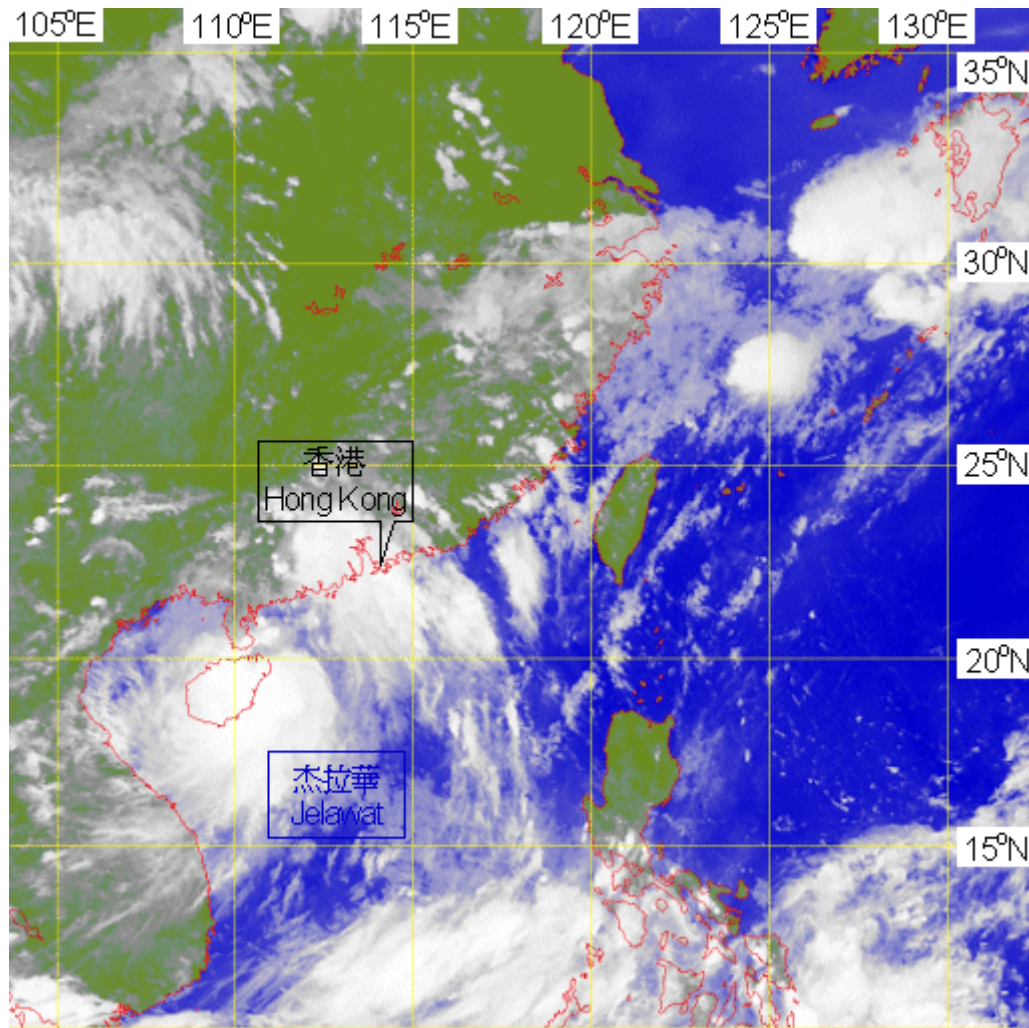


圖 3.2.3 杰拉華在二零零六年六月二十八日約下午二時的紅外線衛星圖片。
〔此衛星圖像接收自日本氣象廳的多用途輸送衛星-1R(MTSAT-1R)。〕

Figure 3.2.3 Infra-red imagery at around 2 p.m. on 28 June 2006 of Jelawat.
[The satellite imagery was originally captured with Multi-functional Transport Satellite-1R (MTSAT-1R) of Japan Meteorological Agency (JMA).]

3.3 颱風派比安 (0606)：二零零六年七月三十一日至八月四日

派比安是二零零六年第二個引致香港天文台發出三號強風信號的熱帶氣旋。

派比安在七月三十一日下午於馬尼拉之東北約 260 公里處發展成爲一個熱帶低氣壓，並向西移動，橫過呂宋。派比安吹襲菲律賓期間，共造成六人死亡，兩人失蹤，14 000 人疏散，農業損失約爲 64 萬美元。

派比安進入南海後，於八月一日轉向西北偏西方向移動。它翌日增強爲一個颱風，並趨向廣東西部海岸。派比安在八月三日晚上於湛江以東登陸，隨後開始減弱及於翌日晚上在廣西消散。派比安帶來的惡劣天氣在廣東、廣西及海南造成嚴重災害，共導致 80 人死亡，9 人失蹤，逾 84 萬人疏散。約有 29 000 間房屋倒塌，直接經濟損失超過 72 億元人民幣。另外，兩艘躉船在上川島附近遇險，需要香港政府飛行服務隊派機救援。

香港天文台於八月一日下午 12 時 10 分發出一號戒備信號，當時派比安位於香港之東南約 710 公里。隨著派比安移近，天文台於翌日下午 4 時 20 分發出三號強風信號，當時派比安位於香港以南約 370 公里。其後港內風勢顯著增強。

派比安於八月三日下午 2 時左右最接近香港，當時它集結在本港之西南約 260 公里。天文台總部在當日下午 5 時錄得最低每小時海平面氣壓 996.7 百帕斯卡。受到派比安的雨帶影響，本港間中有大雨及狂風。隨著派比安當晚在湛江附近登陸及減弱，港內風勢逐漸減弱，天文台在八月四日早上 5 時 40 分改發一號戒備信號，並於同日下午 3 時 40 分取消所有熱帶氣旋警告信號。

派比安影響香港期間，葵涌及屯門有貨櫃箱倒下，引致一人受傷。另有七人在香港各處被墮下物件擊傷及有多宗招牌搖搖欲墮的報告。在馬灣及屯門分別發生撞船意外。全港約有七百宗塌樹報告，另 1 600 棵樹木受到損壞。香港國際機場有 381 班航班取消，另 725 班航班延誤。另外，全港有五宗水浸報告，七宗山泥傾瀉，新界有超過 200 公頃農地受到破壞。

表3.3.1-3.3.3分別是派比安影響香港時各站錄得的最高風速、日雨量及最高潮汐資料。圖3.3.1-3.3.4則分別是派比安的路徑圖、香港雨量分佈圖、衛星圖像及雷達圖像。

3.3 Typhoon Prapiroon (0606) : 31 July - 4 August 2006

Prapiroon was the second tropical cyclone to necessitate the issuance of Strong Wind Signal No. 3 in the year.

Prapiroon developed as a tropical depression about 260 km northeast of Manila in the afternoon of 31 July and moved westwards across Luzon. During the passage of Prapiroon, six people were killed in the Philippines, another two were reported missing and 14 000 people were evacuated. Agricultural losses were about US\$ 640 000.

After entering the South China Sea, Prapiroon turned west-northwest on 1 August. It strengthened into a typhoon the next day and headed towards the western coast of Guangdong. Prapiroon made landfall to the east of Zhanjiang in the night of 3 August and started to weaken afterwards. It dissipated over Guangxi the following night. The adverse weather brought by Prapiroon inflicted severe damage to Guangdong, Guangxi and Hainan. Altogether, 80 people were killed, another nine were reported missing and more than 840 000 people were evacuated. About 29 000 houses toppled and the direct economic losses were over RMB\$ 7.2 billion. In addition, two barges near Shangchuan Dao ran into emergency and requested the Hong Kong Government Flying Service for rescue operation.

In Hong Kong, the Standby Signal No. 1 was issued at 12.10 p.m. on 1 August when Prapiroon was 710 km to its southeast. With Prapiroon edging closer to Hong Kong, the Strong Wind Signal No. 3 was issued at 4.20 p.m. the next day, when Prapiroon was about 370 km to the south. Winds over the harbour area strengthened subsequently.

Prapiroon was closest to Hong Kong at around 2 p.m. on 3 August when it was centred about 260 km to the southwest. The lowest hourly sea-level pressure of 996.7 hPa was recorded at the Hong Kong Observatory Headquarters at 5 p.m. the same day. Under the influence of Prapiroon's rainbands, occasional heavy rain with squalls affected the territory. As Prapiroon made landfall near Zhanjiang that night and weakened, winds over the harbour area gradually subsided. The No. 3 Signal was replaced by the Standby Signal No. 1 at 5.40 a.m. on 4 August. All tropical cyclone warning signals were cancelled at 3.40 p.m. the same day.

During the passage of Prapiroon, a number of containers at Kwai Chung and Tuen Mun were blown down, leading to one injury. Another seven people in various places in Hong Kong were wounded by fallen objects and there were numerous reports of signpost with imminent danger of falling. There were two vessel collisions, one at Ma Wan and the other at Tuen Mun. About seven hundred trees were blown down, and another 1 600 damaged. At the Hong Kong International Airport, 381 flights were cancelled and another 725 delayed. Besides, there were five reports of flooding and seven cases of landslides. In the New Territories, over 200 hectares of farmland were damaged.

Information on wind, rainfall and tide during the passage of Prapiroon is given in Tables 3.3.1-3.3.3. Figures 3.3.1-3.3.4 show the track of Prapiroon, rainfall distribution in Hong Kong, cloud imagery and radar imagery respectively.

表 3.3.1 在派比安影響下，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 3.3.1 Maximum gust peak speeds and maximum hourly mean winds with associated wind directions recorded at various stations during the issuing of the tropical cyclone warning signal for Prapiroon.

站 (參閱圖 1.1)	Station (See Fig. 1.1)	最高陣風 Maximum Gust		日期/月份 Date/Month	時間 Time	最高每小時平均風速 Maximum Hourly Wind		日期/月份 Date/Month	時間 Time
		風向 Direction	風速(公里/時) Speed (km/h)			風向 Direction	風速(公里/時) Speed (km/h)		
中環碼頭	Central Pier	東南偏東 ESE	101	3/8	17:14	東 E	54	3/8	07:00
中環廣場	Central Plaza	東北 NE	173	3/8	17:13	東南偏東 ESE	83	3/8	18:00
赤鱗角	Chek Lap Kok	東南 SE	113	3/8	17:29	東南偏東 ESE	72	3/8	17:00
長洲	Cheung Chau	東南偏東 ESE	158	3/8	17:00	東 E	103	3/8	17:00
長沙灣	Cheung Sha Wan	東北偏東 ENE	79	2/8	20:27	東北偏東 ENE	30	2/8	19:00
青洲	Green Island	東南偏東 ESE	193	3/8	17:12	東南偏東 ESE	72	3/8	17:00
啓德	Kai Tak	東南偏東 ESE	96	3/8	07:02	東南 SE	58	3/8	18:00
京士柏	King's Park	東南偏東 ESE	103	3/8	06:39	東南偏東 ESE	43	3/8	17:00
流浮山	Lau Fau Shan	東南偏東 ESE	101	3/8	08:38	東 E	41	3/8	04:00
北角	North Point	東 E	103	3/8	09:03	東 E	47	3/8	09:00
平洲	Ping Chau	東 E	103	3/8	12:35	東南偏東 ESE	23	3/8	10:00
西貢	Sai Kung	東南偏南 SSE	110	3/8	17:26	東南偏南 SSE	56	3/8	18:00
沙螺灣	Sha Lo Wan	東 E	124	3/8	15:07	東 E	62	3/8	17:00
		東 E	124	3/8	15:57				
沙田	Sha Tin	東南 SE	83	3/8	17:28	東南偏南 SSE	30	3/8	19:00
						東南 SE	30	4/8	06:00
石崗	Shek Kong	東 E	126	3/8	17:12	東 E	38	3/8	09:00
九龍天星碼頭	Star Ferry (Kowloon)	東南 SE	110	3/8	17:22	東南偏東 ESE	58	3/8	18:00
打鼓嶺	Ta Kwu Ling	東南偏東 ESE	90	3/8	09:24	東南偏東 ESE	36	3/8	17:00
大帽山	Tai Mo Shan	東南偏東 ESE	161	3/8	17:16	東南偏東 ESE	110	3/8	18:00
塔門	Tap Mun	東南偏東 ESE	96	3/8	06:37	東南 SE	49	3/8	19:00
大老山	Tate's Cairn	東北偏東 ENE	130	3/8	09:16	東 E	81	3/8	00:00
鯉魚湖	Tsak Yue Wu	東北偏東 ENE	65	3/8	09:21	東 E	20	3/8	10:00
青衣 (青柏樓)	Ching Pak House, Tsing Yi	東南 SE	158	3/8	16:46	東南偏東 ESE	75	3/8	17:00
屯門	Tuen Mun	東南 SE	133	3/8	17:26	東南 SE	38	3/8	19:00
橫瀾島	Waglan Island	東南 SE	130	3/8	17:06	東南 SE	79	3/8	18:00
黃竹坑	Wong Chuk Hang	東南 SE	117	3/8	17:13	東南偏東 ESE	52	3/8	18:00

表 3.3.2 派比安影響香港期間，香港天文台總部及其他各站所錄得的日雨量(單位為毫米)

Table 3.3.2 Daily rainfall amounts in millimetres recorded at the Hong Kong Observatory Headquarters and other stations during the passage of Prapiroon.

站 (參閱圖 3.3.2) Station (see Fig. 3.3.2)	八月一日 1 Aug	八月二日 2 Aug	八月三日 3 Aug	八月四日 4 Aug	總雨量 Total
香港天文台 Hong Kong Observatory	0.0	26.0	54.2	18.0	98.2
H12 半山區 Mid Levels	0.0	31.5	73.0	22.0	126.5
H19 筲箕灣 Shau Kei Wan	0.0	24.0	44.5	13.5	82.0
H21 淺水灣 Repulse Bay	0.0	29.0	59.5	13.0	101.5
K04 佐敦谷 Jordan Valley	[0.0]	25.0	65.0	13.5	[103.5]
K06 蘇屋邨 So Uk Estate	[0.0]	25.5	[63.0]	23.0	[111.5]
N05 粉嶺 Fanling	0.0	16.5	71.5	43.0	131.0
N06 葵涌 Kwai Chung	0.0	27.5	85.5	33.5	146.5
N09 沙田 Sha Tin	0.0	36.0	102.0	24.5	162.5
N12 元朗 Yuen Long	0.0	25.5	77.0	32.0	134.5
N13 糧船灣 High Island	0.0	15.5	37.0	11.5	64.0
N17 東涌 Tung Chung	0.0	18.0	133.5	31.0	182.5
R21 踏石角 Tap Shek Kok	0.0	5.0	84.5	33.5	123.0
R26 石崗 Shek Kong	0.0	38.0	142.5	27.0	207.5
R31 大尾篤 Tai Mei Tuk	0.0	17.5	67.5	10.0	95.0

註： [] 基於不齊全的每小時雨量數據。

Note : [] based on incomplete hourly data.

表 3.3.3 派比安影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮

Table 3.3.3 Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of Prapiroon

站 (參閱圖 1.1) Station (see Fig. 1.1)	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	2.29	3/8	03:48	0.64	3/8	17:48
石壁 Shek Pik	2.71	3/8	04:26	0.91	3/8	07:49
大埔滘 Tai Po Kau	2.31	3/8	00:51	0.71	3/8	08:47
尖鼻咀 Tsim Bei Tsui	2.65	3/8	02:48	0.90	3/8	19:05

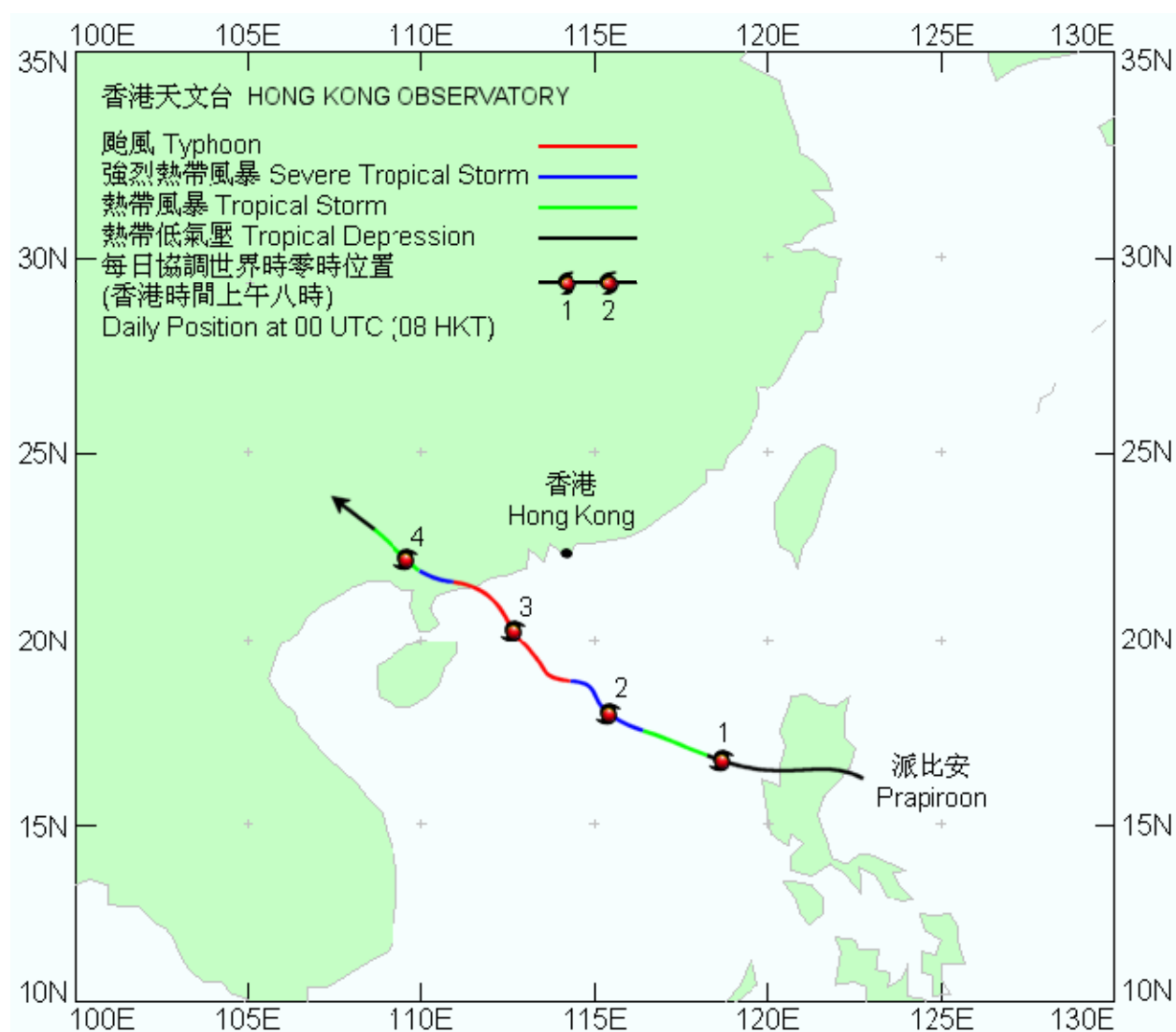


圖 3.3.1 派比安 (0606) 在二零零六年七月三十一日至八月四日的路徑圖。

Figure 3.3.1 Track of Prapiroon (0606) on 31 July - 4 August 2006.

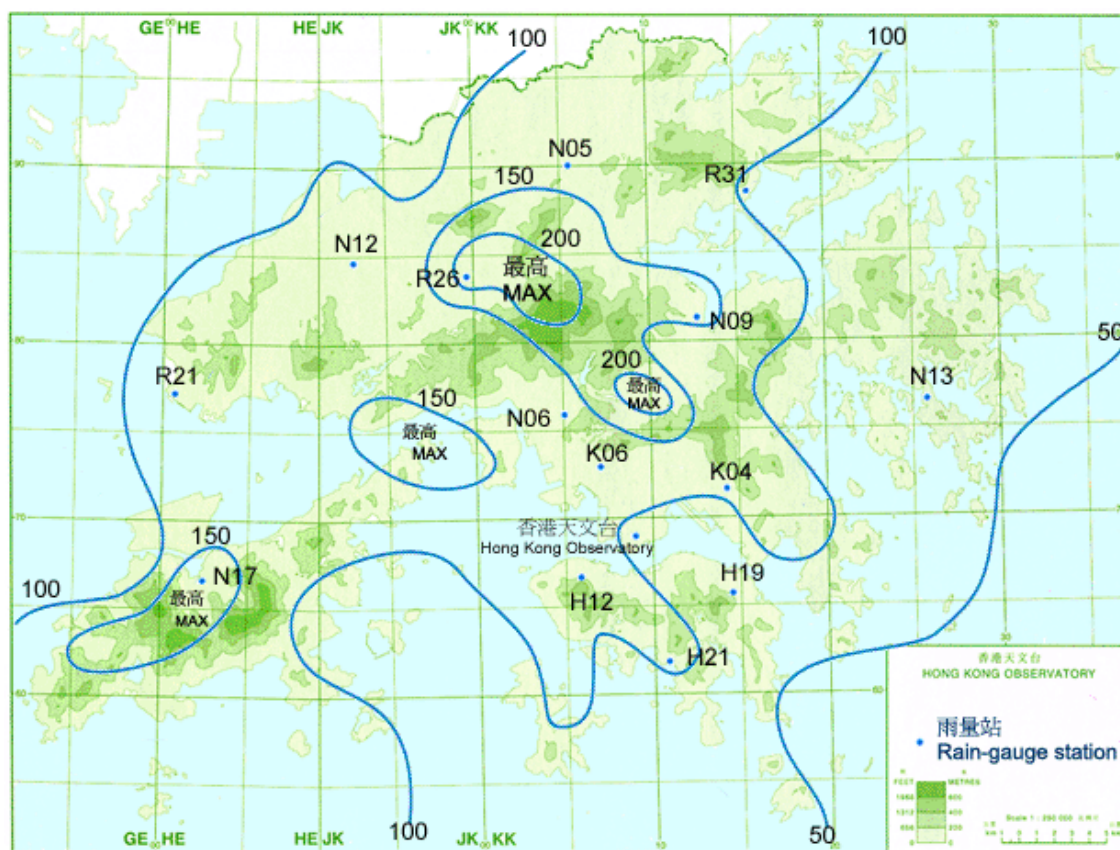


圖 3.3.2 二零零六年八月一日至四日的雨量分佈（等雨量線單位為毫米）。

Figure 3.3.2 Rainfall distribution on 1 - 4 August 2006 (isohyets are in millimeters).

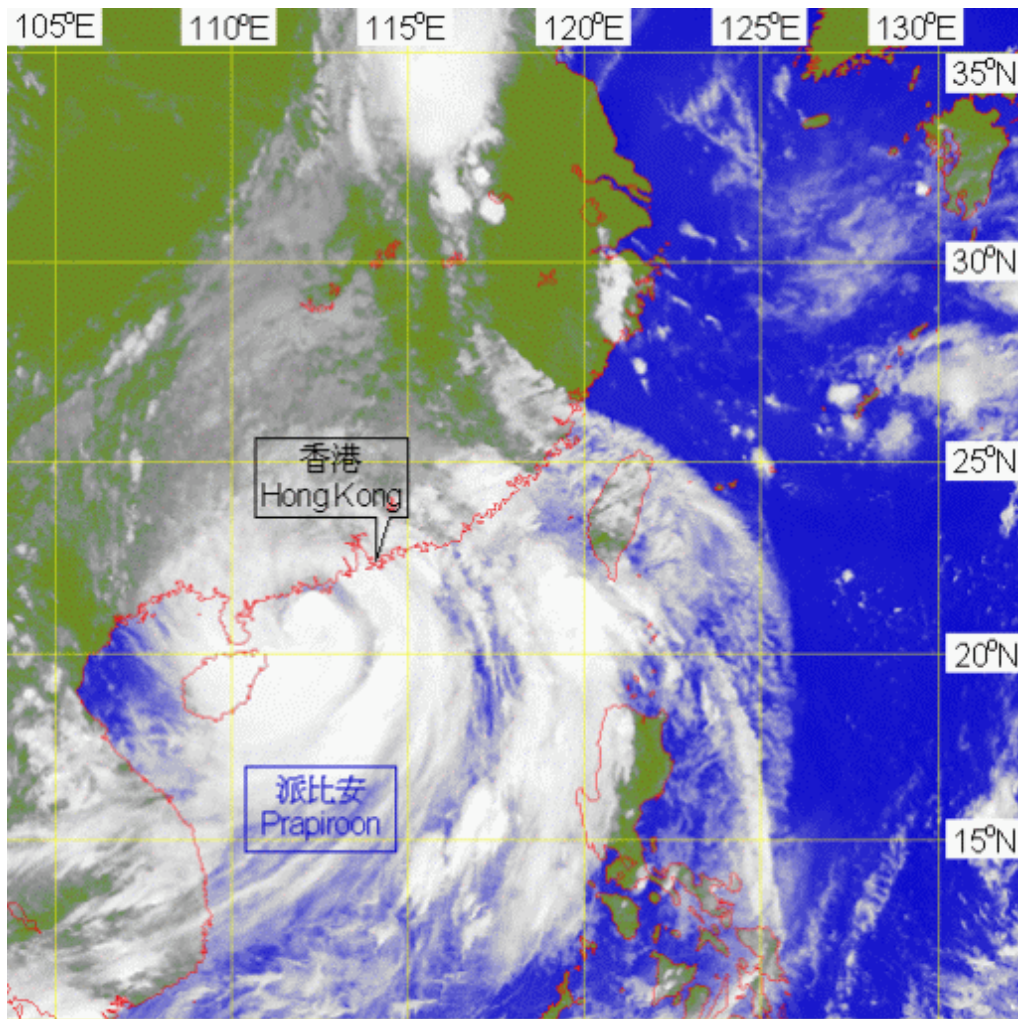


圖 3.3.3 派比安在二零零六年八月三日約下午二時的紅外線衛星圖片。
〔此衛星圖像接收自日本氣象廳的多用途輸送衛星-1R (MTSAT-1R)。〕

Figure 3.3.3 Infra-red imagery at around 2 p.m. on 3 August 2006 of Prapiroon.
[The satellite imagery was originally captured with Multi-functional Transport Satellite-1R (MTSAT-1R) of Japan Meteorological Agency (JMA).]

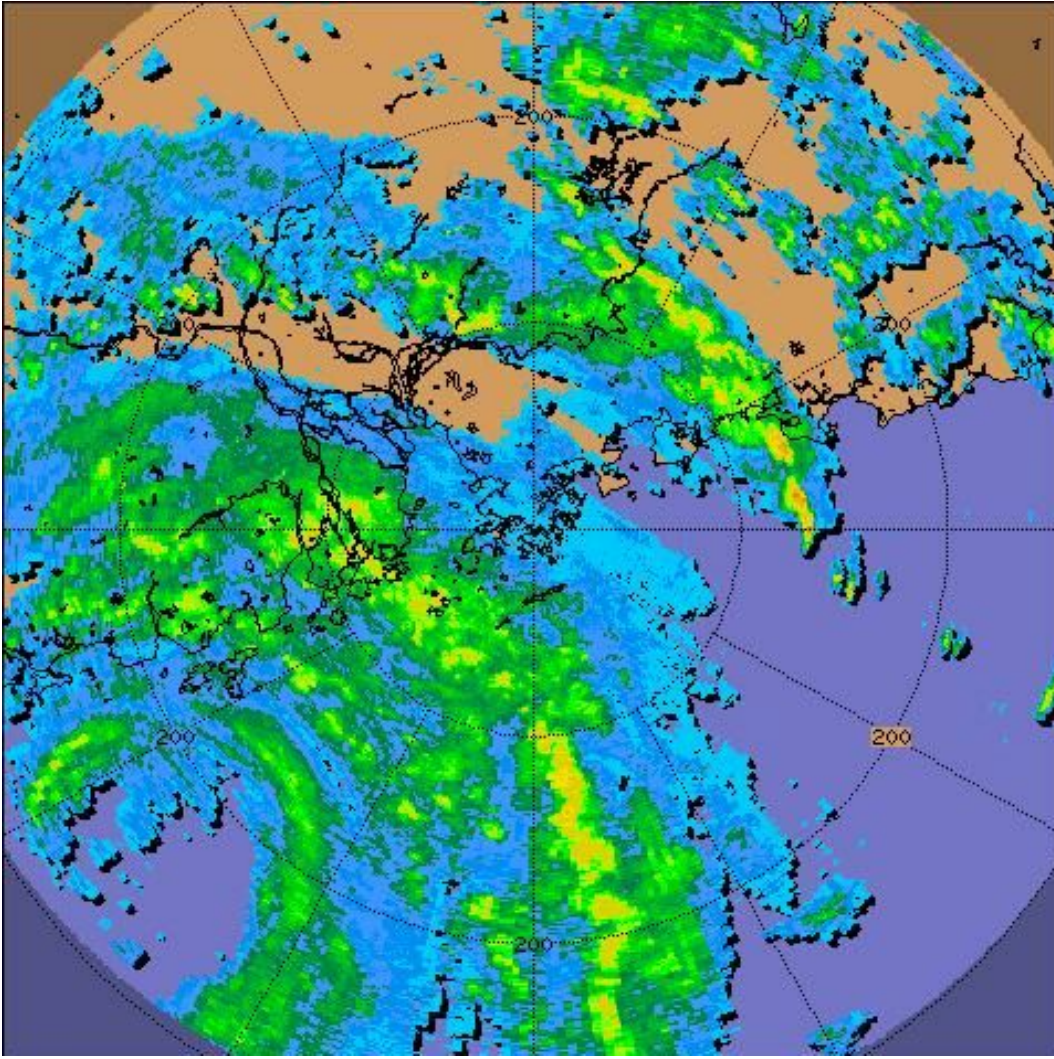


圖 3.3.4 派比安在二零零六年八月三日下午二時的雷達回波圖像。
Figure 3.3.4 Radar echoes captured at 2 p.m. on 3 August 2006 of Prapiroon.

3.4 強烈熱帶風暴寶霞(0609)：二零零六年八月六日至十日

寶霞是二零零六年第四個引致香港天文台發出警告信號的熱帶氣旋。

寶霞在八月六日下午於沖繩島那霸之東南約 590 公里的北太平洋西部上發展成爲一個熱帶低氣壓，並向西北偏西移動。寶霞於八月七日日間曾一度增強至強烈熱帶風暴。但它當晚減弱爲一個熱帶風暴，並向西推進，趨向台灣南部。

寶霞掠過台灣南部後，逐漸靠近廣東東部沿海地區，並於八月九日晚上進一步減弱爲一個熱帶低氣壓。由於受到另一個熱帶氣旋桑美的影響，寶霞在八月十日移動緩慢及不規則。寶霞於當天晚上減弱爲一個低壓區。

香港天文台於八月九日上午 8 時 40 分發出一號戒備信號，當時寶霞位於香港以東約 590 公里。受到寶霞的外圍雨帶影響，本港在八月十日清晨有大雨及雷暴。黃色暴雨警告信號在當天早上零時 10 分發出，至 1 時 40 分取消。在熱帶氣旋警告信號生效期間，香港天文台總部於八月十日下午 6 時錄得最低每小時海平面氣壓 998.5 百帕斯卡。寶霞在同日晚上 8 時左右最接近香港，當時它集結在本港之東南偏東約 180 公里。隨著寶霞在當晚減弱爲一個低壓區，天文台於晚上 10 時 10 分取消所有熱帶氣旋警告信號。

寶霞影響香港期間，香港國際機場有 10 班航班取消，另 19 班航班延遲。另外，一條沙田至大埔的架空高壓電纜於八月十日清晨受到雷擊，九龍及新界部分地方受電壓驟降影響，共有 17 宗乘客被困升降機事故發生。

表3.4.1-3.4.3分別是寶霞影響香港時各站錄得的最高風速、日雨量及最高潮汐資料。圖3.4.1-3.4.3則分別是寶霞的路徑圖、香港雨量分佈圖及衛星雲圖。

3.4 Severe Tropical Storm Bopha (0609) : 6 - 10 August 2006

Bopha was the fourth tropical cyclone to necessitate the issuance of tropical cyclone warning signal in 2006.

Bopha developed as a tropical depression over the western North Pacific about 590 km southeast of Naha, Okinawa in the afternoon of 6 August and moved west-northwest. Bopha once attained the strength of a severe tropical storm during the day on 7 August. However, it weakened into a tropical storm that night and took a westerly track heading towards southern Taiwan.

After skirting southern Taiwan, Bopha edged towards the coastal waters of eastern Guangdong. It weakened further into a tropical depression in the night of 9 August. Under the influence of another tropical cyclone Saomai, Bopha's movement was slow and erratic on 10 August. Bopha weakened into an area of low pressure that night.

In Hong Kong, the Standby Signal No. 1 was issued at 8.40 a.m. on 9 August when Bopha was 590 km to the east. Under the influence of Bopha's outer rainbands, heavy rain with thunderstorms affected the territory in the small hours on 10 August. The Amber Rainstorm Warning Signal was issued at 0.10 a.m. and cancelled at 1.40 a.m. During the passage of Bopha, the lowest hourly sea-level pressure of 998.5 hPa was recorded at the Hong Kong Observatory Headquarters at 6 p.m. on 10 August. Bopha was closest to Hong Kong at around 8 p.m. the same day when it was centred about 180 km to the east-southeast. As Bopha weakened into an area of low pressure that night, all tropical cyclone warning signals were cancelled at 10.10 p.m.

During the passage of Bopha, 10 flights were cancelled and another 19 delayed at the Hong Kong International Airport. In addition, an elevated high voltage electric cable running between Shatin and Tai Po was struck by lightning in the early morning of 10 August. This led to a sudden voltage drop being experienced in some locations in Kowloon and the New Territories. A total of 17 incidents of passengers being trapped in elevators were reported.

Information on wind, rainfall and tide during the passage of Bopha is given in Tables 3.4.1-3.4.3. Figures 3.4.1-3.4.3 show the track of Bopha, rainfall distribution in Hong Kong and cloud imagery respectively.

表 3.4.1 在寶霞影響下，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 3.4.1 Maximum gust peak speeds and maximum hourly mean winds with associated wind directions recorded at various stations during the issuing of the tropical cyclone warning signal for Bopha

站 (參閱圖 1.1)	Station (See Fig. 1.1)	最高陣風 Maximum Gust		日期/月份 Date/Month	時間 Time	最高每小時平均風速 Maximum Hourly Wind		日期/月份 Date/Month	時間 Time
		風向 Direction	風速(公里/時) Speed (km/h)			風向 Direction	風速(公里/時) Speed (km/h)		
中環碼頭	Central Pier	東北偏東 ENE	62	10/8	00:09	東 E	19	10/8	01:00
		東北偏東 ENE	62	10/8	00:10				
中環廣場	Central Plaza	-	110	10/8	00:07	-	22	10/8	01:00
赤鱗角	Chek Lap Kok	東北偏東 ENE	70	10/8	00:28	南 S	23	9/8	18:00
長洲	Cheung Chau	東北 NE	87	10/8	00:32	西 W	25	9/8	20:00
長沙灣	Cheung Sha Wan	北 N	31	10/8	00:08	西南 SW	12	9/8	15:00
						西南 SW	12	9/8	18:00
青洲	Green Island	東北偏東 ENE	59	10/8	00:12	西北 NW	23	10/8	13:00
啓德	Kai Tak	東 E	65	10/8	00:04	東南偏東 ESE	22	10/8	01:00
京士柏	King's Park	東北 NE	43	10/8	00:13	西南偏西 WSW	12	9/8	14:00
						西南偏西 WSW	12	9/8	15:00
流浮山	Lau Fau Shan	東 E	70	10/8	00:10	東 E	20	10/8	01:00
北角	North Point	東北偏東 ENE	58	10/8	00:06	西 W	16	9/8	14:00
平洲	Ping Chau	西北偏北 NNW	38	10/8	09:48	西北偏西 WNW	7	9/8	12:00
						西 W	7	9/8	14:00
						西南偏西 WSW	7	9/8	15:00
西貢	Sai Kung	東 E	38	9/8	23:51	北 N	16	10/8	14:00
沙螺灣	Sha Lo Wan	東 E	65	10/8	00:33	東 E	23	10/8	01:00
沙田	Sha Tin	北 N	58	9/8	23:57	西南 SW	13	9/8	18:00
石崗	Shek Kong	東北偏東 ENE	54	10/8	00:02	西北偏西 WNW	7	9/8	14:00
九龍天星碼頭	Star Ferry (Kowloon)	東 E	47	10/8	00:09	西 W	22	9/8	11:00
						西 W	22	9/8	14:00
打鼓嶺	Ta Kwu Ling	東北 NE	52	9/8	23:49	西南偏西 WSW	9	10/8	00:00
大帽山	Tai Mo Shan	東北偏北 NNE	77	10/8	00:02	東北 NE	43	10/8	01:00
塔門	Tap Mun	東南偏東 ESE	51	9/8	23:33	西北 NW	14	10/8	08:00
大老山	Tate's Cairn	東 E	62	9/8	23:59	東北偏北 NNE	34	10/8	05:00
鯽魚湖	Tsak Yue Wu	東南偏東 ESE	40	9/8	23:47	東北 NE	12	10/8	07:00
將軍澳	Tseung Kwan O	北 N	38	9/8	23:56	西北偏北 NNW	9	10/8	14:00
青衣 (青柏樓)	Ching Pak House, Tsing Yi	東北偏北 NNE	52	10/8	00:11	西 W	19	9/8	13:00
屯門	Tuen Mun	東北 NE	56	10/8	00:16	西北 NW	12	9/8	13:00
橫瀾島	Waglan Island	東北偏東 ENE	67	10/8	00:06	西 W	27	9/8	20:00
黃竹坑	Wong Chuk Hang	東南偏東 ESE	56	10/8	00:15	東南 SE	13	10/8	01:00

表 3.4.2 寶霞影響香港期間，香港天文台總部及其他各站所錄得的日雨量（單位為毫米）

Table 3.4.2 Daily rainfall amounts in millimetres recorded at the Hong Kong Observatory Headquarters and other stations during the passage of Bopha

站 Station	八月九日 9 Aug	八月十日 10 Aug	總雨量 Total
香港天文台 Hong Kong Observatory	微量 Trace	45.6	45.6
H12 半山區 Mid Levels	0.5	43.0	43.5
H19 筲箕灣 Shau Kei Wan	0.0	42.5	42.5
H21 淺水灣 Repulse Bay	0.0	44.5	44.5
K04 佐敦谷 Jordan Valley	[2.5]	42.5	[45.0]
K06 蘇屋邨 So Uk Estate	0.0	42.5	42.5
N05 粉嶺 Fanling	4.0	29.5	33.5
N06 葵涌 Kwai Chung	0.0	32.5	32.5
N09 沙田 Sha Tin	[0.0]	[36.0]	[36.0]
N12 元朗 Yuen Long	0.0	41.0	41.0
N13 糧船灣 High Island	16.0	19.5	35.5
N17 東涌 Tung Chung	0.0	26.5	26.5
R21 踏石角 Tap Shek Kok	0.0	37.0	37.0
R26 石崗 Shek Kong	0.0	32.5	32.5
R31 大尾篤 Tai Mei Tuk	26.0	[23.5]	[49.5]

註： [] 基於不齊全的每小時雨量數據。

Note : [] based on incomplete hourly data.

表 3.4.3 寶霞影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮

Table 3.4.3 Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of Bopha

站 (參閱圖1.1) Station (see Fig. 1.1)	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/月 Date/Month	時間 Time	高度 (米) Height (m)	日/月 Date/Month	時間 Time
鰂魚涌 Quarry Bay	2.66	10/8	10:11	0.35	10/8	17:16
石壁 Shek Pik	2.89	10/8	10:12	0.35	10/8	12:18
大埔滘 Tai Po Kau	2.71	10/8	10:32	0.48	10/8	13:09
尖鼻咀 Tsim Bei Tsui	3.25	10/8	09:57	0.41	10/8	07:08

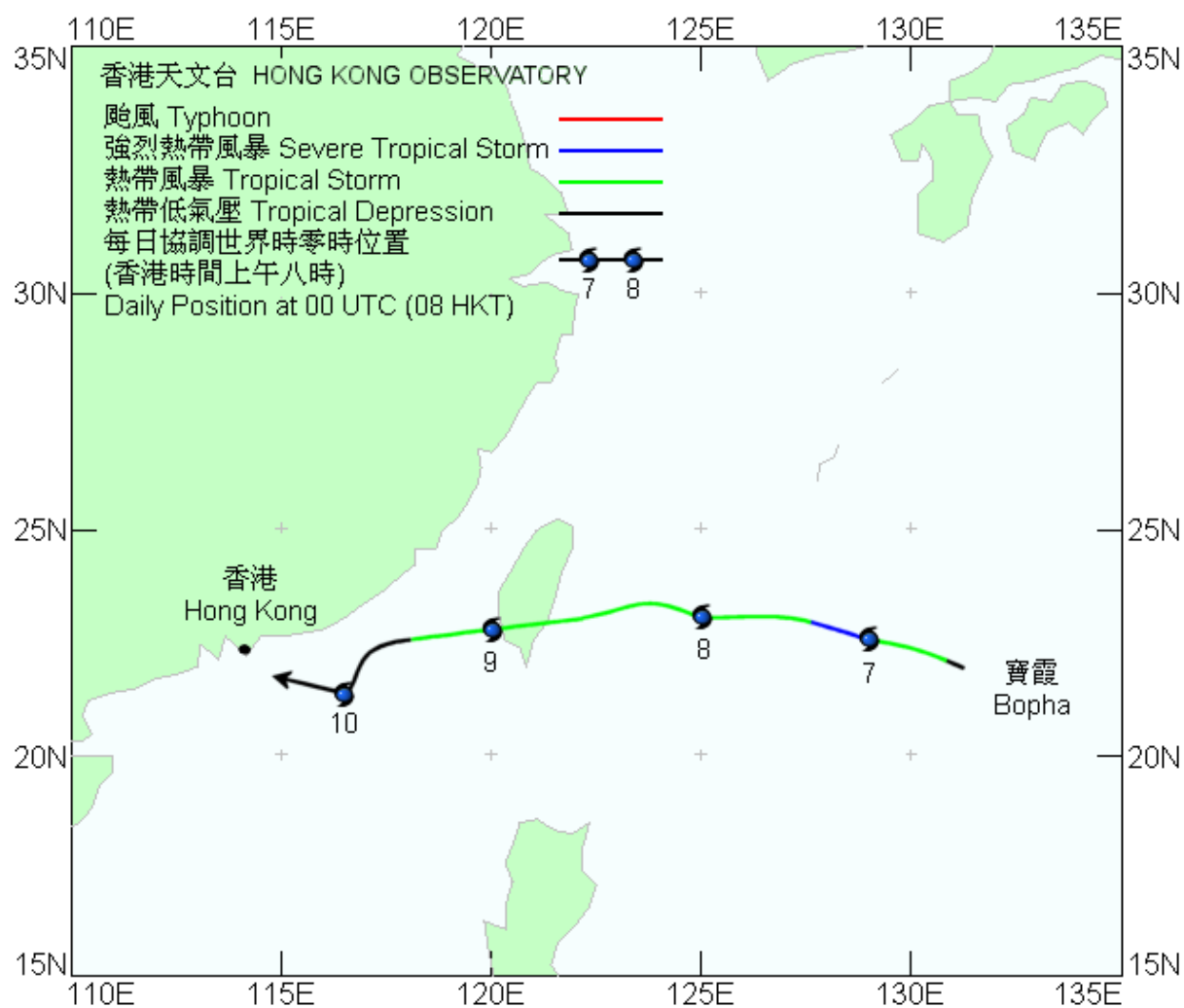


圖 3.4.1 寶霞(0609)在二零零六年八月六日至十日的路徑圖。

Figure 3.4.1 Track of Bopha (0609) on 6 - 10 August 2006.

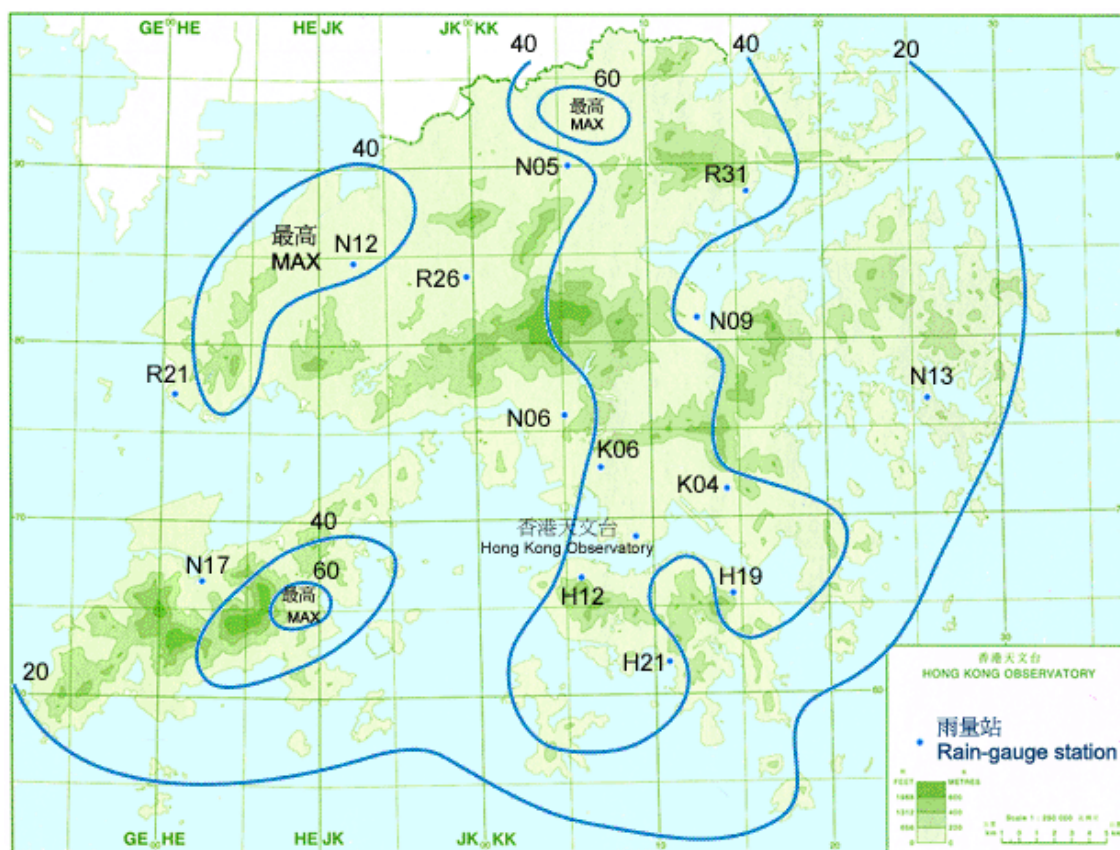


圖 3.4.2 二零零六年八月九日至十日的雨量分佈（等雨量線單位為毫米）。

Figure 3.4.2 Rainfall distribution on 9 - 10 August 2006 (isohyets are in millimeters).

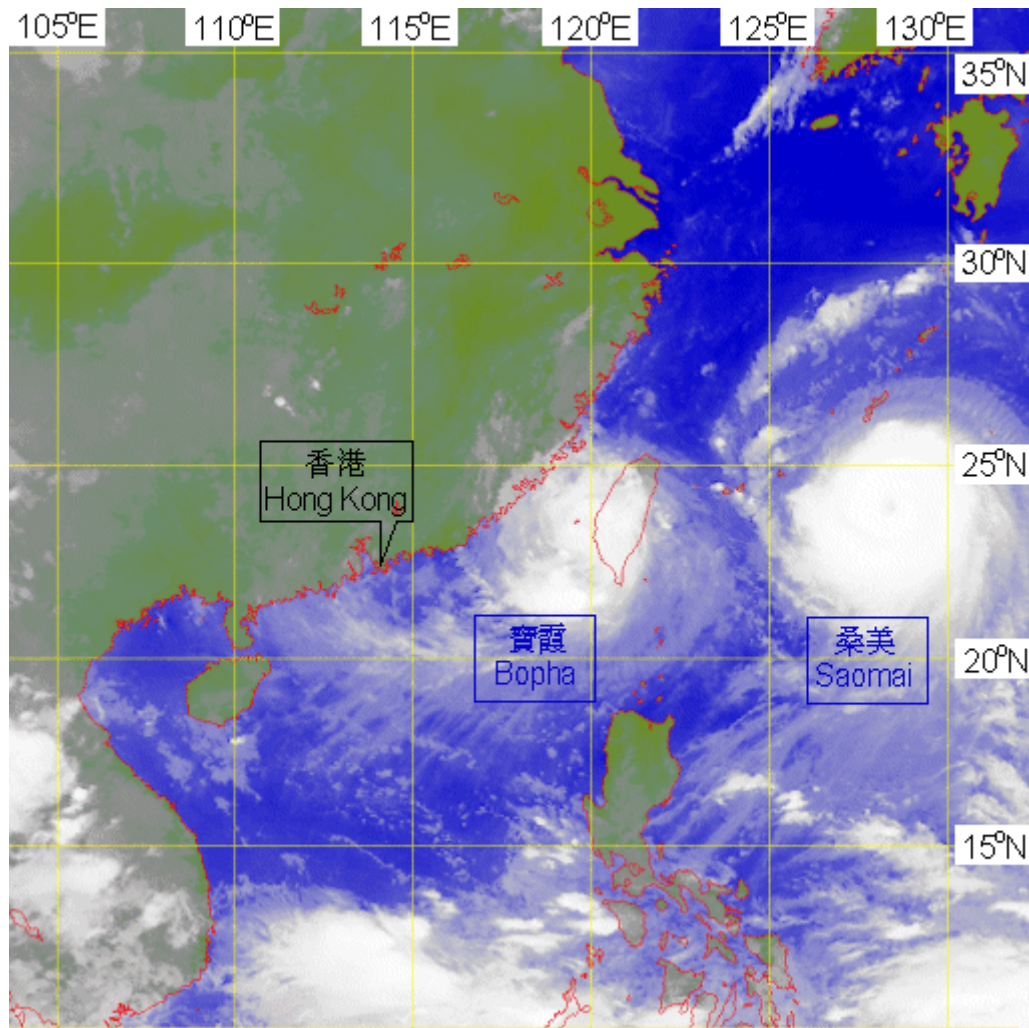


圖 3.4.3 寶霞在二零零六年八月九日約上午八時的紅外線衛星圖片。
〔此衛星圖像接收自日本氣象廳的多用途輸送衛星-1R (MTSAT-1R)。〕

Figure 3.4.3 Infra-red imagery at around 8 a.m. on 9 August 2006 of Bopha.
[The satellite imagery was originally captured with Multi-functional Transport Satellite-1R (MTSAT-1R) of Japan Meteorological Agency (JMA).]

3.5 熱帶低氣壓：二零零六年八月二十三日至二十五日

一個在南海北部形成的熱帶低氣壓成為二零零六年第五個引致香港天文台發出警告信號的熱帶氣旋。

這熱帶低氣壓在八月二十三日晚上於海口之東南約 **210** 公里的南海北部形成。它初時向北移動，但隨後採取東北的路徑。這熱帶低氣壓在二十四日晚上轉向西北方向推進。它於翌日清晨於陽江附近登陸，並減弱為一個低壓區。

香港天文台於八月二十四日上午 **11 時 10 分**發出一號戒備信號，當時這熱帶低氣壓位於香港之西南偏南約 **310** 公里。香港天文台總部在當天下午 **5 時**錄得最低每小時海平面氣壓 **1 004.1** 百帕斯卡。這熱帶低氣壓在同日晚上 **10 時**左右最接近香港，當時它集結在本港之西南約 **190** 公里。隨著這熱帶低氣壓在八月二十五日清晨於陽江附近登陸並減弱為一個低壓區，天文台在早上 **6 時 20 分**取消所有熱帶氣旋警告信號。

這熱帶低氣壓掠過香港時，它的外圍雨帶為本港帶來驟雨及狂風雷暴，離岸海域間中吹強風。一名女子在西貢清水灣遇溺，幸獲救生員救起。

表**3.5.1-3.5.3**分別是熱帶低氣壓影響香港時各站錄得的最高風速、日雨量及最高潮汐資料。圖**3.5.1-3.5.3**則分別是熱帶低氣壓的路徑圖、香港雨量分佈圖及衛星雲圖。

3.5 Tropical Depression : 23 - 25 August 2006

A tropical depression formed over the northern part of the South China Sea and became the fifth tropical cyclone to necessitate the issuance of tropical cyclone warning signal in the year.

The tropical depression developed over the northern part of the South China Sea about 210 km southeast of Haikou in the night of 23 August. It moved north initially but took on a northeasterly track afterwards. The tropical depression turned northwest the following night. It made landfall near Yangjiang in western Guangdong in the early morning of 25 August and weakened into an area of low pressure.

In Hong Kong, the Standby Signal No. 1 was issued at 11.10 a.m. on 24 August when the tropical depression was 310 km to the south-southwest. The lowest hourly sea-level pressure of 1 004.1 hPa was recorded at the Hong Kong Observatory Headquarters at 5 p.m. on the same day. The tropical depression was closest to Hong Kong at around 10 p.m. that night when it was centred about 190 km to the southwest. As the tropical depression made landfall near Yangjiang and weakened into an area of low pressure in the early morning of 25 August, all tropical cyclone warning signals were cancelled at 6.20 a.m.

During its passage, the tropical depression's outer rainbands brought showers and squally thunderstorms to the territory. Also, offshore waters were affected by occasional strong winds. A woman was saved from drowning by lifeguards at Clear Water Bay, Sai Kung.

Information on wind, rainfall and tide during the passage of the tropical depression is given in Tables 3.5.1-3.5.3. Figures 3.5.1-3.5.3 show the track of the tropical depression, rainfall distribution in Hong Kong and cloud imagery respectively.

表 3.5.1 在熱帶低氣壓影響下，本港各站在熱帶氣旋警告信號生效時所錄得的最高陣風、最高每小時平均風速及風向

Table 3.5.1 Maximum gust peak speeds and maximum hourly mean winds with associated wind directions recorded at various stations during the issuing of the tropical cyclone warning signal for the tropical depression

站 (參閱圖 1.1)	Station (See Fig. 1.1)	最高陣風 Maximum Gust		日期/月份 Date/Month	時間 Time	最高每小時平均風速 Maximum Hourly Wind		日期/月份 Date/Month	時間 Time
		風向 Direction	風速(公里/時) Speed (km/h)			風向 Direction	風速(公里/時) Speed (km/h)		
中環碼頭	Central Pier	東 E	43	25/8	02:42	東 E	23	24/8	17:00
中環廣場	Central Plaza	-	62	25/8	01:03	-	38	24/8	23:00
赤鱗角	Chek Lap Kok	東南偏南 SSE	49	25/8	02:37	東南偏東 ESE	30	24/8	16:00
長洲	Cheung Chau	東南偏東 ESE	62	24/8	21:18	東南偏東 ESE	40	24/8	23:00
長沙灣	Cheung Sha Wan	東 E	36	24/8	18:30	東北偏東 ENE	14	24/8	17:00
青洲	Green Island	-	72	25/8	01:03	-	36	25/8	03:00
啓德	Kai Tak	東南 SE	54	24/8	22:23	東南偏東 ESE	23	24/8	23:00
京士柏	King's Park	東南偏南 SSE	40	25/8	03:06	東南偏東 ESE	14	24/8	16:00
流浮山	Lau Fau Shan	東 E	36	24/8	15:39	東 E	20	24/8	14:00
		東 E	36	24/8	15:41				
北角	North Point	東 E	41	24/8	15:25	東 E	25	24/8	16:00
平洲	Ping Chau	東南偏南 SSE	41	25/8	03:43	東南偏南 SSE	12	25/8	04:00
西貢	Sai Kung	東南偏南 SSE	62	25/8	01:05	東南偏南 SSE	36	25/8	03:00
沙螺灣	Sha Lo Wan	南 S	54	25/8	02:58	南 S	22	25/8	03:00
						南 S	22	25/8	04:00
沙田	Sha Tin	東南 SE	34	25/8	01:11	北 N	12	24/8	14:00
石崗	Shek Kong	東南偏南 SSE	36	25/8	01:28	東 E	14	24/8	14:00
九龍天星碼頭	Star Ferry (Kowloon)	東南偏東 ESE	41	25/8	02:20	東 E	23	24/8	16:00
打鼓嶺	Ta Kwu Ling	東 E	34	24/8	23:06	東南偏東 ESE	14	24/8	17:00
大尾篤	Tai Mei Tuk	東 E	70	24/8	22:53	東 E	31	24/8	23:00
大帽山	Tai Mo Shan	東南偏東 ESE	67	24/8	23:06	東 E	47	24/8	17:00
塔門	Tap Mun	東南偏東 ESE	51	25/8	00:09	東南 SE	25	25/8	02:00
大老山	Tate's Cairn	東南偏南 SSE	77	25/8	01:12	東南偏南 SSE	40	25/8	01:00
鯉魚湖	Tsak Yue Wu	南 S	36	24/8	22:37	東 E	9	24/8	15:00
將軍澳	Tseung Kwan O	-	51	25/8	00:58	-	13	24/8	19:00
青衣 (青柏樓)	Ching Pak House, Tsing Yi	東南 SE	54	25/8	01:12	東南 SE	25	24/8	23:00
屯門	Tuen Mun	南 S	45	25/8	02:42	東南偏南 SSE	19	25/8	04:00
橫瀾島	Waglan Island	東南偏南 SSE	58	24/8	22:00	南 S	45	25/8	03:00
黃竹坑	Wong Chuk Hang	東 E	40	24/8	18:03	東南偏東 ESE	16	24/8	16:00

表 3.5.2 熱帶低氣壓影響香港期間，香港天文台總部及其他各站所錄得的日雨量(單位為毫米)
Table 3.5.2 Daily rainfall amounts in millimetres recorded at the Hong Kong Observatory Headquarters and other stations during the passage of the tropical depression

站 (參閱圖 3.5.2) Station (see Fig. 3.5.2)	八月二十四日 24 Aug	八月二十五日 25 Aug	總雨量 Total
香港天文台 Hong Kong Observatory	38.8	20.6	59.4
H12 半山區 Mid Levels	20.5	45.0	65.5
H19 筲箕灣 Shau Kei Wan	58.5	15.0	73.5
H21 淺水灣 Repulse Bay	21.5	9.0	30.5
K04 佐敦谷 Jordan Valley	[31.5]	[31.0]	[62.5]
K06 蘇屋邨 So Uk Estate	45.0	60.5	105.5
N05 粉嶺 Fanling	34.0	76.5	110.5
N06 葵涌 Kwai Chung	33.5	56.0	89.5
N12 元朗 Yuen Long	20.0	[21.0]	[41.0]
N13 糧船灣 High Island	26.0	21.0	47.0
N17 東涌 Tung Chung	26.0	13.5	39.5
R21 踏石角 Tap Shek Kok	17.5	23.0	40.5
R26 石崗 Shek Kong	24.0	46.5	70.5
R31 大尾篤 Tai Mei Tuk	[33.0]	42.5	[75.5]

註： [] 基於不齊全的每小時雨量數據。

Note : [] based on incomplete hourly data.

表 3.5.3 熱帶低氣壓影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮
Table 3.5.3 Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of the tropical depression

站 (參閱圖1.1) Station (see Fig. 1.1)	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/月 Date/Month	時間 Time	高度 (米) Height (m)	日/月 Date/Month	時間 Time
鰂魚涌 Quarry Bay	2.00	24/8	11:10	0.13	24/8	14:43
石壁 Shek Pik	2.22	24/8	11:10	0.13	24/8	12:49
大埔滘 Tai Po Kau	2.10	24/8	11:10	0.29	24/8	13:42
尖鼻咀 Tsim Bei Tsui	2.55	24/8	11:10	0.23	25/8	05:52

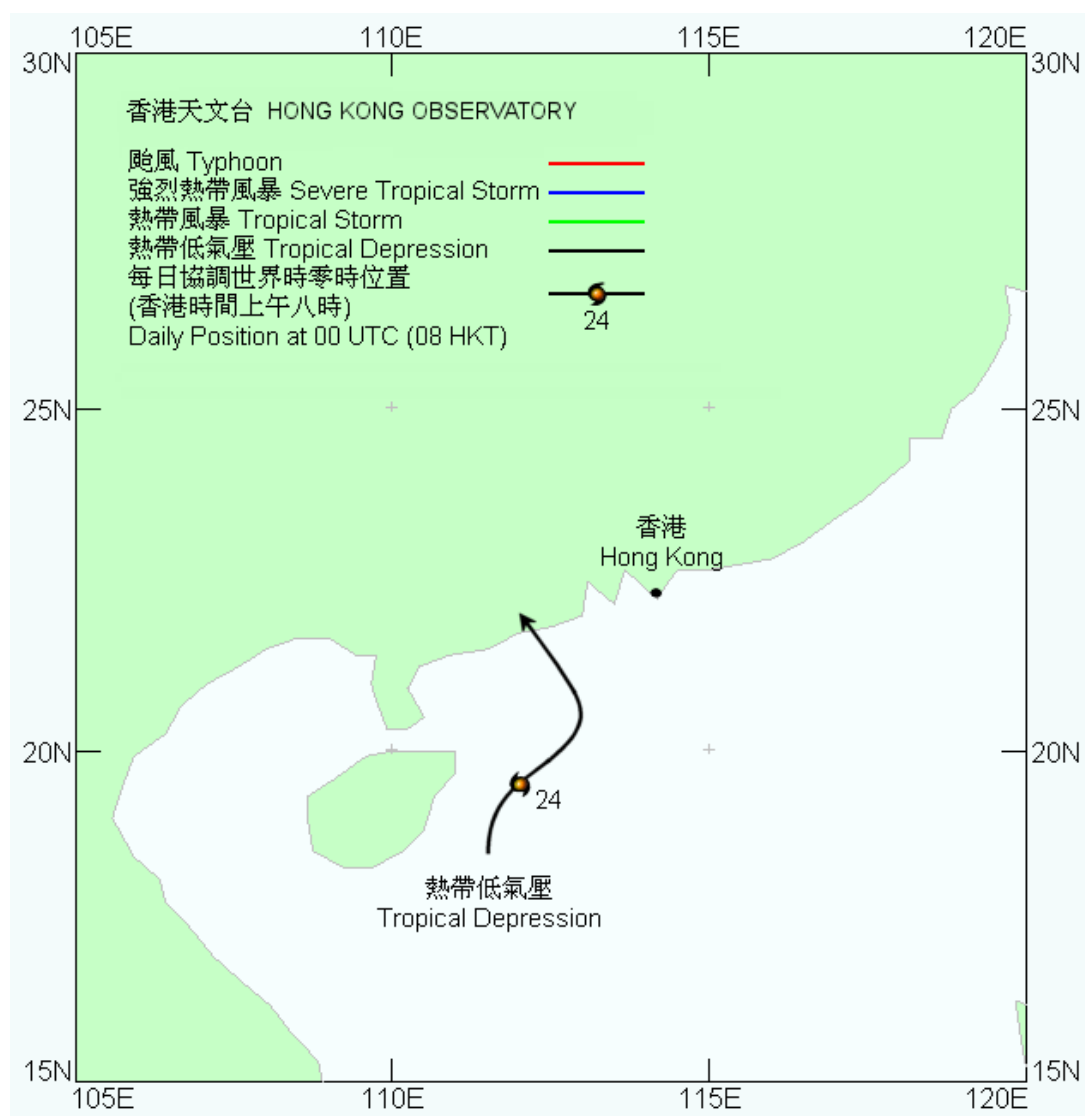


圖 3.5.1 熱帶低氣壓在二零零六年八月二十三日至二十五日的路徑圖。
 Figure 3.5.1 Track of the tropical depression on 23 - 25 August 2006.

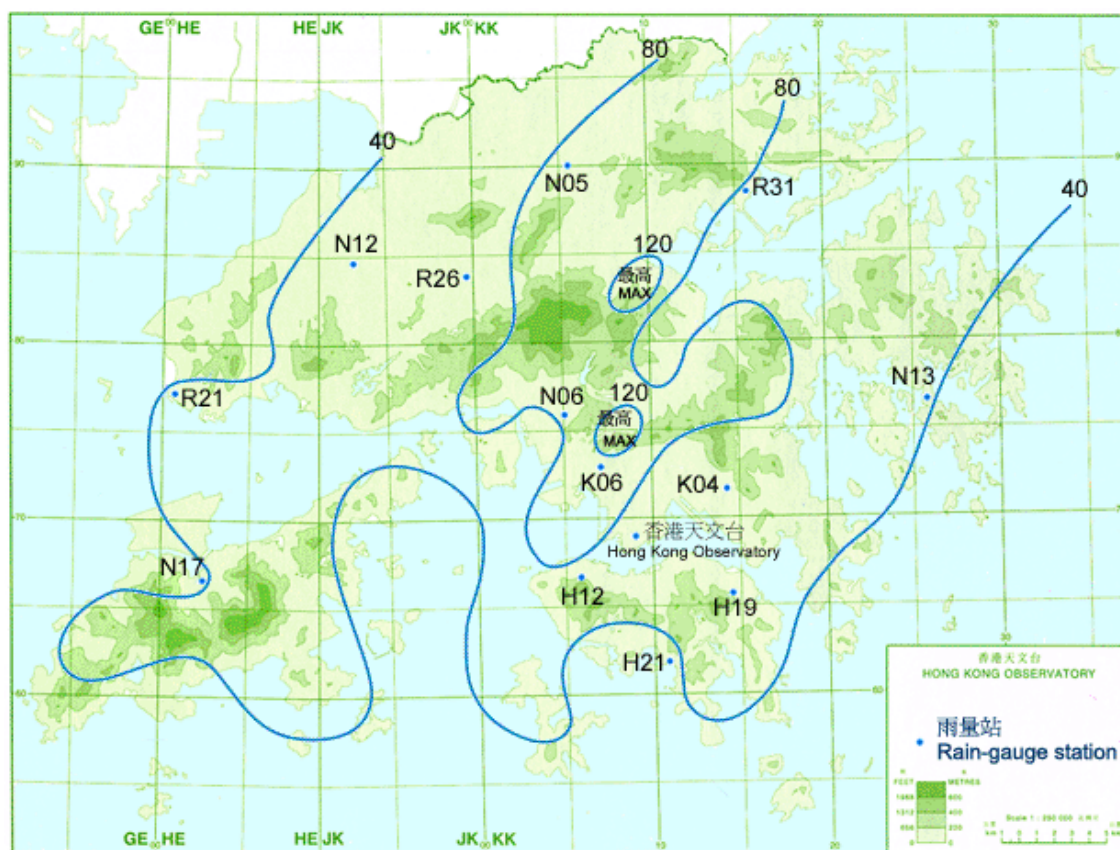


圖 3.5.2 二零零六年八月二十四日至二十五日的雨量分佈（等雨量線單位為毫米）。
 Figure 3.5.2 Rainfall distribution on 24 - 25 August 2006 (isohyets are in millimeters).

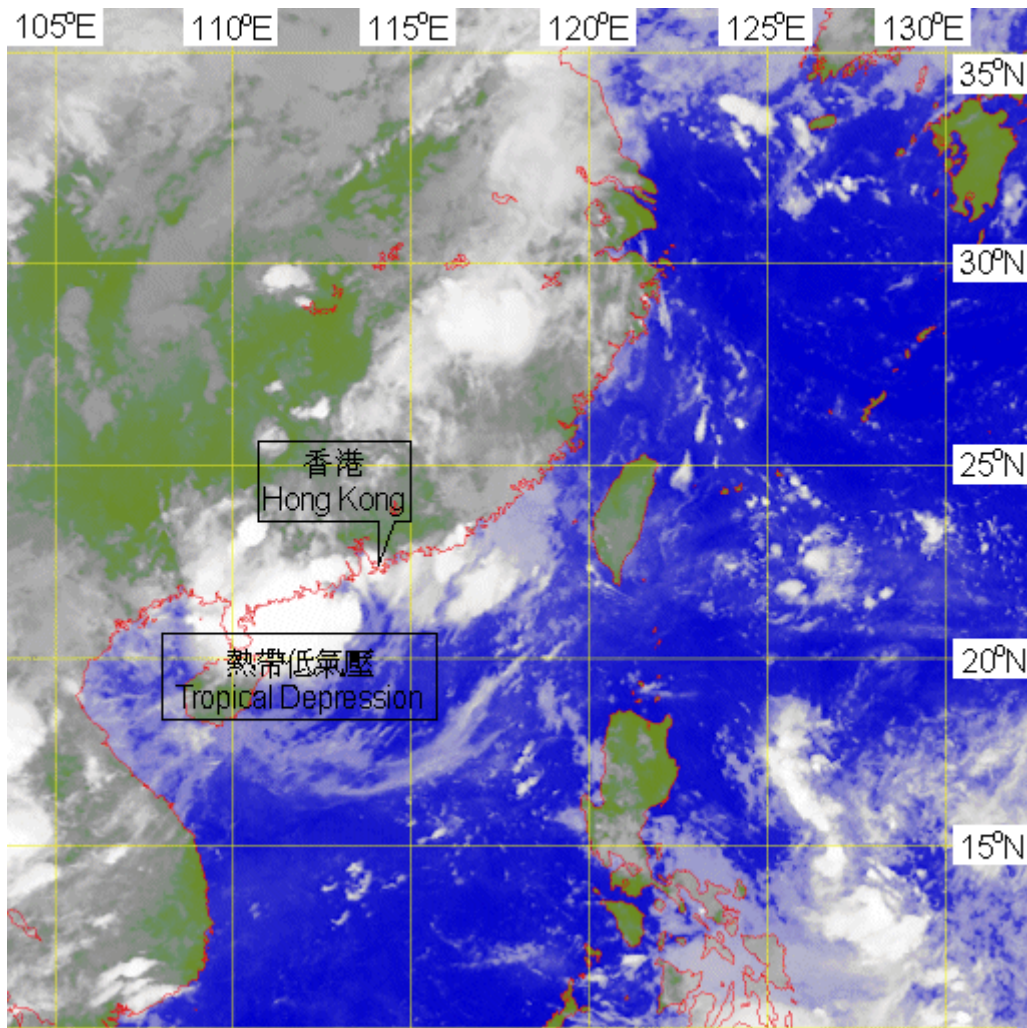


圖 3.5.3 熱帶低氣壓在二零零六年八月二十五日約上午二時的紅外線衛星圖片。
 [此衛星圖像接收自日本氣象廳的多用途輸送衛星-1R (MTSAT-1R)。]

Figure 3.5.3 Infra-red imagery at around 2 a.m. on 25 August 2006 of the tropical depression.
 [The satellite imagery was originally captured with Multi-functional Transport Satellite-1R (MTSAT-1R) of Japan Meteorological Agency (JMA).]

3.6 熱帶低氣壓：二零零六年九月十二日至十三日

一個在南海北部形成的熱帶低氣壓成為 2006 年第三個引致香港天文台發出三號強風信號的熱帶氣旋。

這熱帶低氣壓在九月十二日下午於西沙之東北偏東約 350 公里的南海北部上形成。它初時向北移動，但隨後轉向西北偏西方向推進，並於翌日晚上於廣東西部沿海附近減弱為一個低壓區。

香港天文台於九月十二日下午 1 時 40 分發出一號戒備信號，當時這熱帶低氣壓位於香港之東南偏南約 470 公里。由於同時受到東北季候風影響，香港離岸海域間中吹強風。隨著這熱帶低氣壓移近，天文台於翌日上午 10 時 35 分發出三號強風信號，當時這熱帶低氣壓位於香港之西南約 210 公里。這熱帶低氣壓影響香港期間，天文台總部在十三日上午 5 時錄得最低每小時海平面氣壓 1 006.9 百帕斯卡。這熱帶低氣壓於同日上午 2 時左右最接近香港，當時它集結在本港之西南偏南約 180 公里。

受到這熱帶低氣壓的雨帶影響，本港天氣變得不穩定，有大雨及狂風雷暴。天文台於九月十三日曾三度發出黃色暴雨警告信號，而紅色暴雨警告信號和山泥傾瀉警告分別在當天早上 9 時 30 分及 11 時 45 分發出。隨著這熱帶低氣壓當日下午逐漸遠離本港及減弱，本地風勢逐漸緩和，天文台在當日下午 2 時 40 分改發一號戒備信號，並於同日下午 4 時 10 分取消所有熱帶氣旋警告信號。

這熱帶低氣壓為香港多處地方帶來超過 200 毫米雨量。全港共有 32 宗水浸報告，九宗山泥傾瀉報告及 20 宗塌樹報告，部份道路需要封閉。新界多處有人被洪水圍困，消防員在新田石湖圍及小磡村救出 20 多名村民。九廣東鐵服務受到阻延，部份離島渡輪需要停航。香港國際機場有 18 班航班取消，另 277 班航班延誤。此外，一人在開往深圳的噴射船上受傷。

表3.6.1-3.6.3分別是熱帶低氣壓影響香港時各站錄得的最高風速、日雨量及最高潮汐資料。圖3.6.1-3.6.4則分別是熱帶低氣壓的路徑圖、香港雨量分佈圖、衛星雲圖及雷達圖像。

3.6 Tropical Depression : 12 - 13 September 2006

A tropical depression over the northern part of the South China Sea became the third tropical cyclone to necessitate the issuance of the Strong Wind Signal No. 3 in 2006.

The tropical depression developed over the northern part of the South China Sea about 350 km east-northeast of Xisha in the afternoon of 12 September. It moved north initially but then took a west-northwesterly track. The tropical depression weakened into an area of low pressure over coastal waters of western Guangdong the following night.

In Hong Kong, the Standby Signal No. 1 was issued at 1.40 p.m. on 12 September when the tropical depression was 470 km to the south-southeast. Under the combined influence of the northeast monsoon, winds offshore became occasionally strong. With the tropical depression edging closer to Hong Kong, the Strong Wind Signal No. 3 was issued at 10.35 a.m. the next day, when it was about 210 km to the southwest. During the tropical depression's passage, the lowest hourly sea-level pressure at the Hong Kong Observatory Headquarters was 1 006.9 hPa, recorded at 5 a.m. on 13 September. The tropical depression was closest to Hong Kong at around 2 a.m. the same day when it was centred about 180 km to the south-southwest.

As Hong Kong came under the influence of the tropical depression's outer rainbands, local weather became unstable with heavy rain and squally thunderstorms. The Amber Rainstorm Warning Signal was issued three times on 13 September. The Red Rainstorm Warning Signal and the Landslip Warning were issued at 9.30 a.m. and 11.45 a.m. respectively the same day. With the tropical depression moving away from Hong Kong and weakening, local winds gradually subsided. The No. 3 Signal was replaced by the Standby Signal No. 1 at 2.40 p.m. on 13 September. All tropical cyclone warning signals were cancelled at 4.10 p.m. the same day.

The tropical depression brought more than 200 millimetres of rainfall to many parts of Hong Kong. There were 32 reports of flooding, nine reports of landslides and 20 trees were blown down in the territory. Some roads had to be closed. A number of people were trapped by flood water in various parts of the New Territories. More than 20 villagers at Shek Wu Wai and Siu Hum Tsuen in San Tin were rescued from flood water by firemen. Service of the KCR East Rail was interrupted and ferry service to some outlying islands was suspended. At the Hong Kong International Airport, 18 flights were cancelled and another 277 delayed. In addition, one person was injured in the jetfoil bound for Shenzhen.

Information on wind, rainfall and tide during the passage of the tropical depression is given in Tables 3.6.1-3.6.3. Figures 3.6.1-3.6.4 show the track of the tropical depression, rainfall distribution in Hong Kong, cloud imagery and radar imagery respectively.

表 3.6.1 在熱帶低氣壓影響下，本港各站在熱帶氣旋警告信號生效時所錄得的最高陣風、最高每小時平均風速及風向

Table 3.6.1 Maximum gust peak speeds and maximum hourly mean winds with associated wind directions recorded at various stations during the issuing of the tropical cyclone warning signal for the tropical depression

站 (參閱圖 1.1)	Station (See Fig. 1.1)	最高陣風		日期/月份 Date/Month	時間 Time	最高每小時平均風速		日期/月份 Date/Month	時間 Time
		Maximum Gust				Maximum Hourly Wind			
		風向 Direction	風速(公里/時) Speed (km/h)			風向 Direction	風速(公里/時) Speed (km/h)		
中環碼頭	Central Pier	東 E	59	13/9	06:39	東 E	36	13/9	08:00
中環廣場	Central Plaza	東北偏北 NNE	113	13/9	08:23	東北 NE	63	13/9	09:00
赤鱗角	Chek Lap Kok	東北 NE	49	13/9	03:35	東北 NE	36	13/9	04:00
長洲	Cheung Chau	東南偏東 ESE	85	13/9	11:59	東南偏東 ESE	47	13/9	13:00
長沙灣	Cheung Sha Wan	東北偏北 NNE	54	13/9	08:07	東北 NE	19	13/9	09:00
青洲	Green Island	- -	72	13/9	06:53	- -	49	13/9	08:00
		- -	72	13/9	06:54				
啓德	Kai Tak	東 E	81	13/9	08:35	東北偏東 ENE	30	13/9	09:00
京士柏	King's Park	東北偏東 ENE	67	13/9	08:38	東北偏東 ENE	23	13/9	09:00
流浮山	Lau Fau Shan	東北 NE	36	13/9	02:46	東北偏北 NNE	20	12/9	17:00
						東北 NE	20	13/9	03:00
北角	North Point	東北偏東 ENE	62	13/9	08:29	東北偏東 ENE	31	13/9	09:00
平洲	Ping Chau	東 E	45	13/9	12:47	東 E	13	13/9	06:00
西貢	Sai Kung	東北偏東 ENE	68	13/9	09:48	東北 NE	38	13/9	10:00
沙螺灣	Sha Lo Wan	東 E	40	13/9	13:56	東北 NE	22	13/9	02:00
沙田	Sha Tin	北 N	38	13/9	12:00	北 N	19	13/9	09:00
石崗	Shek Kong	東北偏東 ENE	38	13/9	14:45	東 E	16	13/9	15:00
九龍天星碼頭	Star Ferry (Kowloon)	東 E	58	13/9	07:53	東南偏東 ESE	27	13/9	11:00
打鼓嶺	Ta Kwu Ling	東北偏北 NNE	36	12/9	20:12	東北偏北 NNE	19	12/9	16:00
大尾篤	Tai Mei Tuk	東北偏北 NNE	88	13/9	09:47	東北偏北 NNE	45	13/9	10:00
大帽山	Tai Mo Shan	東 E	99	13/9	10:17	東 E	65	13/9	09:00
塔門	Tap Mun	東北偏東 ENE	58	13/9	12:49	東北偏東 ENE	25	13/9	12:00
大老山	Tate's Cairn	東北偏東 ENE	106	13/9	11:37	東北偏東 ENE	63	13/9	09:00
鯽魚湖	Tsak Yue Wu	東北 NE	43	13/9	06:12	東北 NE	22	12/9	14:00
將軍澳	Tseung Kwan O	東南 SE	54	13/9	09:51	東北偏北 NNE	22	13/9	09:00
青衣 (青柏樓)	Ching Pak House, Tsing Yi	東北偏東 ENE	68	13/9	08:04	東北偏東 ENE	38	13/9	08:00
屯門	Tuen Mun	東北偏北 NNE	41	13/9	02:50	東北偏北 NNE	20	13/9	04:00
橫瀾島	Waglan Island	東 E	94	13/9	06:13	東 E	68	13/9	07:00
黃竹坑	Wong Chuk Hang	東南 SE	65	13/9	06:27	東南偏東 ESE	27	13/9	07:00

表 3.6.2 熱帶低氣壓影響香港期間，香港天文台總部及其他各站所錄得的日雨量(單位為毫米)
Table 3.6.2 Daily rainfall amounts in millimetres recorded at the Hong Kong Observatory Headquarters and other stations during the passage of the tropical depression

站 (參閱圖 3.6.2) Station (see Fig. 3.6.2)		九月十二日 12 Sep	九月十三日 13 Sep	總雨量 Total
香港天文台 Hong Kong Observatory		5.0	248.3	253.3
H12 半山區	Mid Levels	[11.0]	238.0	[249.0]
H19 筲箕灣	Shau Kei Wan	5.5	303.0	308.5
H21 淺水灣	Repulse Bay	8.0	229.0	237.0
K04 佐敦谷	Jordan Valley	[10.0]	[335.0]	[345.0]
K06 蘇屋邨	So Uk Estate	5.5	[283.0]	[288.5]
N05 粉嶺	Fanling	13.5	206.0	219.5
N06 葵涌	Kwai Chung	11.5	293.5	305.0
N12 元朗	Yuen Long	9.0	151.0	160.0
N13 糧船灣	High Island	9.5	166.0	175.5
N17 東涌	Tung Chung	26.0	[183.5]	[209.5]
R21 踏石角	Tap Shek Kok	28.5	137.5	166.0
R26 石崗	Shek Kong	15.5	287.5	303.0
R31 大尾篤	Tai Mei Tuk	15.5	145.5	161.0

註： [] 基於不齊全的每小時雨量數據。

Note : [] based on incomplete hourly data.

表 3.6.3 熱帶低氣壓影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮
Table 3.6.3 Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of the tropical depression

站 (參閱圖1.1) Station (see Fig. 1.1)		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/月 Date/Month	時間 Time	高度 (米) Height (m)	日/月 Date/Month	時間 Time
鰂魚涌	Quarry Bay	2.38	13/9	00:51	0.30	13/9	06:41
石壁	Shek Pik	2.54	13/9	00:55	0.32	13/9	08:29
大廟灣	Tai Miu Wan	2.48	13/9	01:13	0.36	13/9	06:47
大埔滘	Tai Po Kau	2.55	13/9	01:43	0.38	13/9	06:33
尖鼻咀	Tsim Bei Tsui	2.63	13/9	00:42	0.33	13/9	11:00

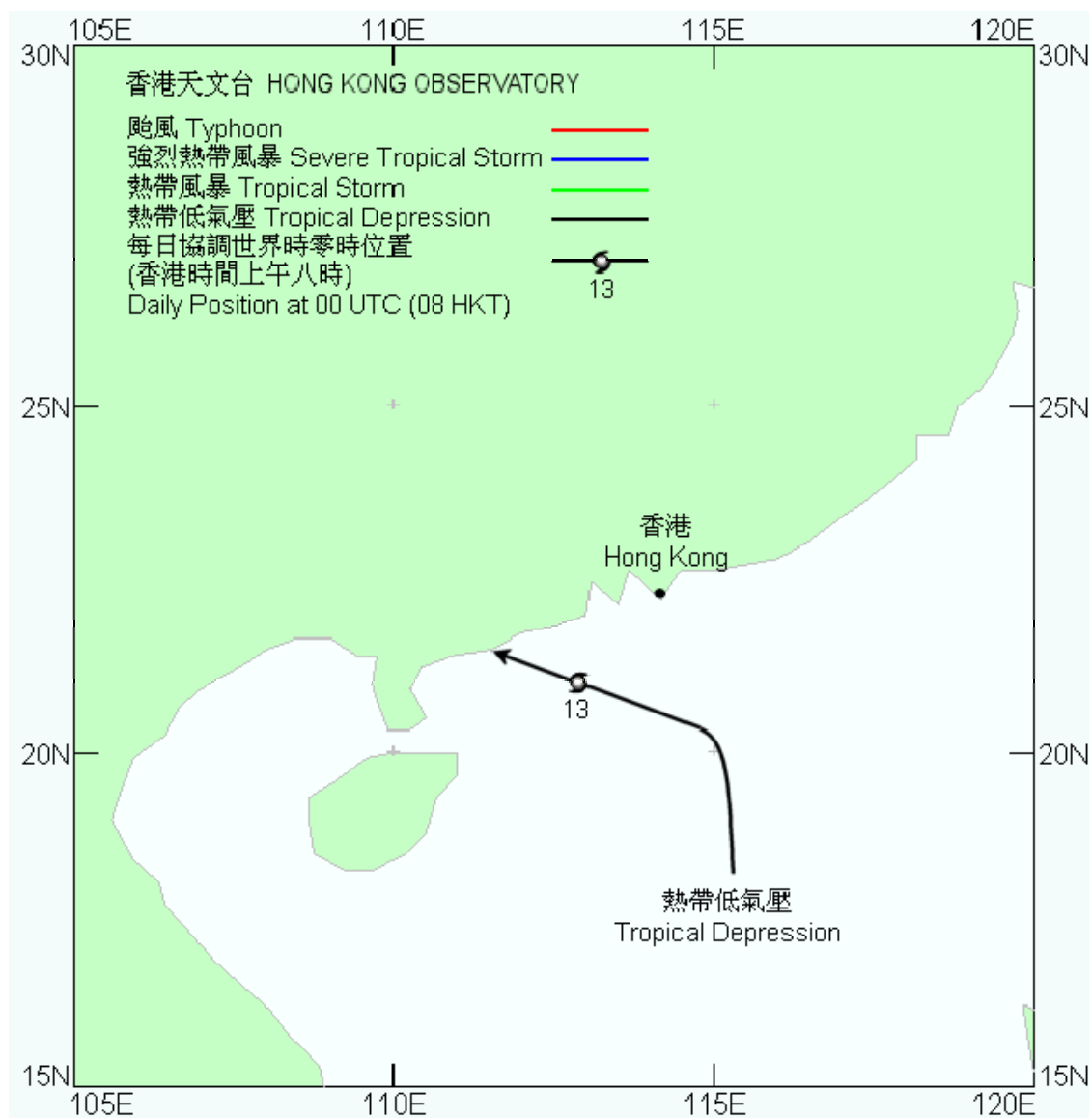


圖 3.6.1 熱帶低氣壓在二零零六年九月十二日至十三日的路徑圖。
 Figure 3.6.1 Track of the tropical depression on 12 - 13 September 2006.



圖 3.6.2 二零零六年九月十二日至十三日的雨量分佈（等雨量線單位為毫米）。
 Figure 3.6.2 Rainfall distribution on 12 - 13 September 2006 (isohyets are in millimeters).

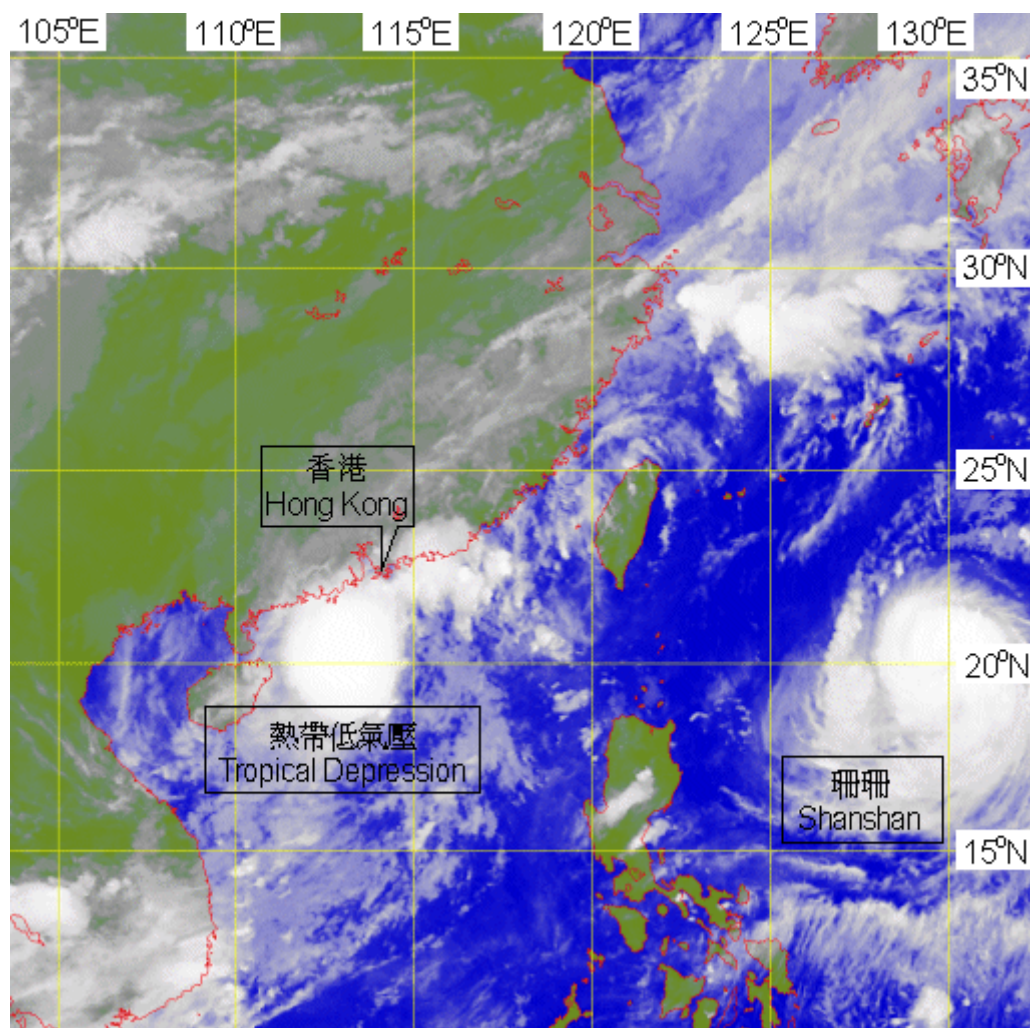


圖 3.6.3 熱帶低氣壓在二零零六年九月十三日約上午二時的紅外線衛星圖片。

〔此衛星圖像接收自日本氣象廳的多用途輸送衛星-1R (MTSAT-1R)。〕

Figure 3.6.3 Infra-red imagery at around 2 a.m. on 13 September 2006 of the tropical depression. [The satellite imagery was originally captured with Multi-functional Transport Satellite-1R (MTSAT-1R) of Japan Meteorological Agency (JMA).]

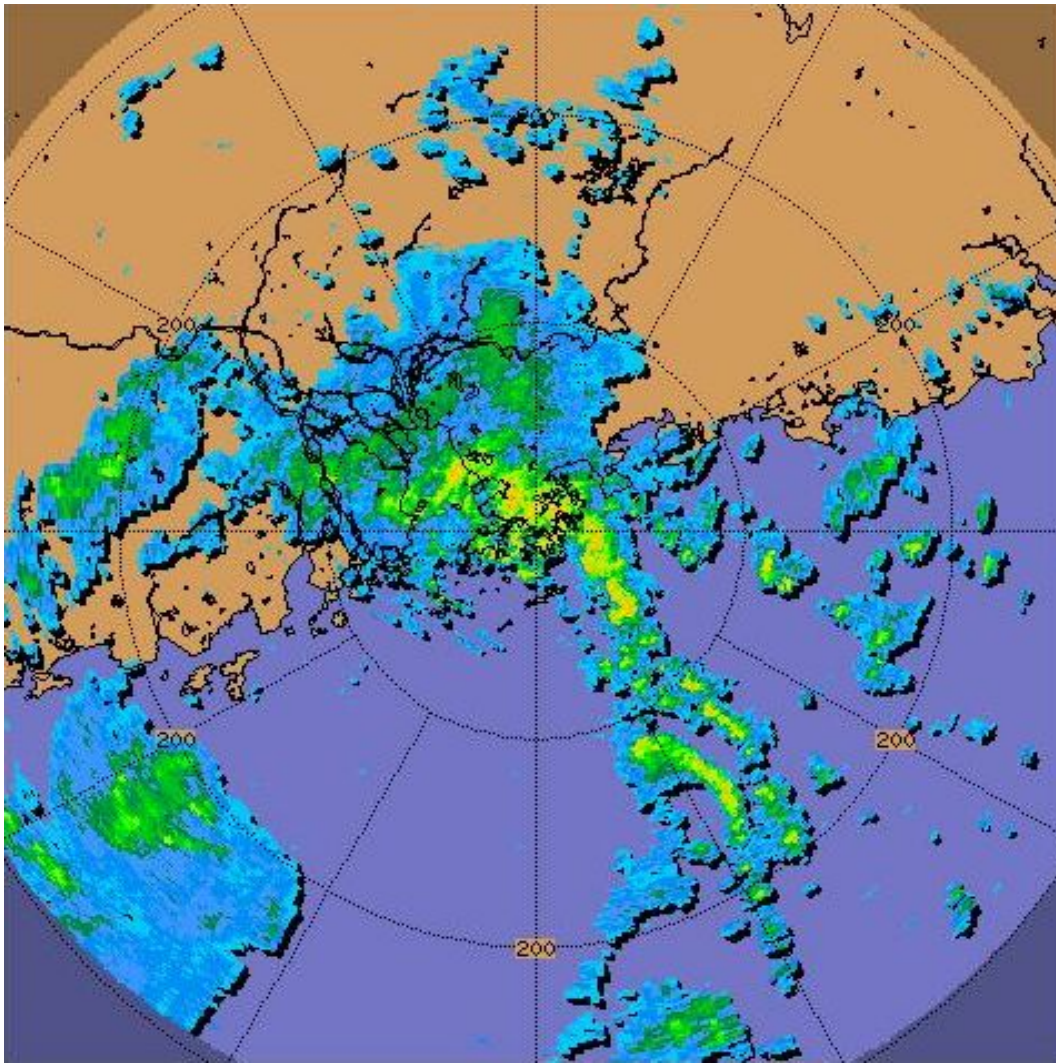


圖 3.6.4 熱帶低氣壓在二零零六年九月十三日上午九時卅分的雷達回波圖像。
Figure 3.6.4 Radar echoes captured at 9:30 a.m. on 13 September 2006 of the tropical depression.

3.7 颱風西馬侖(0619)：二零零六年十月廿七日至十一月六日

西馬侖是二零零六年第七個引致香港天文台發出熱帶氣旋警告信號的熱帶氣旋。西馬侖亦是自二零零零年以來天文台首次需要在十一月份發出熱帶氣旋警告信號的熱帶氣旋。

西馬侖在十月廿七日清晨於馬尼拉以東 **1 390** 公里處發展成一股熱帶低氣壓。它初時向西移動，同日轉向西北偏西移動及增強為一股熱帶風暴。西馬侖在十月廿八日清晨進一步增強為一股強烈熱帶風暴，再於同日下午增強為一股颱風，並於翌日晚上橫過呂宋。菲律賓有 **19** 人死亡，**15** 人失蹤，另 **58** 人受傷，數千人要疏散。此外，超過 **5 000** 間房屋被破壞，農作物損失超過 **20** 億美元。

颱風西馬侖於十月卅日進入南海並於翌日轉向西北移動。它於十一月一日開始移動緩慢，有約 **36** 小時幾乎停留不動。它於十一月二日晚上減弱為一股強烈熱帶風暴，並轉向西南偏南移動及繼續減弱。西馬侖於十一月六日在西沙島東南偏南的南海中部消散。

香港天文台於十月卅一日下午 **2 時 20** 分發出一號戒備信號，當時西馬侖位於香港之東南偏南 **580** 公里。由於受到西馬侖及東北季候風的共同影響，隨後兩天本港離岸海域風勢強勁，高地間中吹烈風。西馬侖於十一月一日下午至翌日初最接近香港，當時它位於香港之東南偏南約 **430** 公里處幾乎停留不動。天文台總部在十一月一日下午 **4** 時錄得最低每小時海平面氣壓 **1 010.3** 百帕斯卡。隨著西馬侖減弱及遠離香港，天文台在十一月三日下午 **1 時 30** 分取消所有熱帶氣旋警告信號。

天文台總部在西馬侖影響香港期間祇錄得微量雨量記錄。九龍灣在十一月二日發生一宗由陣風引致的工業意外使到一名工人受傷外。此外，一人在開往澳門的噴射船上受傷，另一人在堅尼地城墮海受傷。本港並沒有嚴重破壞的報告。

表**3.7.1-3.7.2**分別是西馬侖影響香港時各站錄得的最高風速及最高潮汐資料。圖**3.7.1-3.7.2**則分別是西馬侖的路徑圖及衛星雲圖。

3.7 Typhoon Cimaron (0619) : 27 October - 6 November 2006

Cimaron was the seventh tropical cyclone to necessitate the issuance of tropical cyclone warning signal in 2006. It was also the first time requiring the issuance of tropical cyclone warning signals in November since 2000.

Cimaron developed as a tropical depression about 1 390 km east of Manila early on 27 October. It moved west at first, turning towards the west-northwest and intensified into a tropical storm on the same day. Cimaron further intensified into a severe tropical storm in the early morning on 28 October and then a typhoon in the afternoon on 28 October. It traversed Luzon on the following night. In the Philippines, 19 people were killed, 15 missing, another 58 injured and thousands evacuated. In addition, more than 5 000 houses were destroyed and agricultural losses exceeded US\$ 2 billion.

Typhoon Cimaron entered the South China Sea on 30 October and turned towards the northwest the next day. It slowed down on 1 November and became almost stationary for about 36 hours. Cimaron weakened into a severe tropical storm in the night of 2 November and took on a south-southwesterly course. Continuing to weaken, it dissipated over the central part of the South China Sea to the south-southeast of Xisha on 6 November.

In Hong Kong, the Standby Signal No. 1 was issued at 2.20 p.m. on 31 October when Cimaron was 580 km to the south-southeast. Under the combined influence of Cimaron and the northeast monsoon, strong gusty winds affected offshore waters and there were occasional gales over the high grounds on the following two days. Cimaron was closest to Hong Kong from the afternoon of 1 November to early 2 November when it was almost stationary about 430 km to the south-southeast. The lowest hourly sea-level pressure of 1 010.3 hPa was recorded at the Hong Kong Observatory Headquarters at 4 p.m. on 1 November. With Cimaron weakening and moving away from Hong Kong, all tropical cyclone warning signals were cancelled at 1.30 p.m. on 3 November.

During the passage of Cimaron, only traces of rainfall were recorded at the Hong Kong Observatory. An industrial accident was brought about by gusty winds in Kowloon Bay on 2 November and a worker was injured. Another two persons were injured in the jetfoil bound for Macau and one person was fallen into the sea at Kennedy Town and suffered injuries. There were no reports of significant damage in Hong Kong.

Information on wind and tide during the passage of the Cimaron is given in Tables 3.7.1-3.7.2. Figures 3.7.1-3.7.2 show the track of Cimaron and cloud imagery respectively.

表 3.7.1 在西馬侖影響下，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 3.7.1 Maximum gust peak speeds and maximum hourly mean winds with associated wind directions recorded at various stations during the issuing of the tropical cyclone warning signal for Cimaron

站 (參閱圖 1.1)	Station (See Fig. 1.1)	最高陣風 Maximum Gust			日期/月份 Date/Month	時間 Time	最高每小時平均風速 Maximum Hourly Wind			日期/月份 Date/Month	時間 Time
		風向 Direction	風速(公里/時) Speed (km/h)	風向 Direction			風速(公里/時) Speed (km/h)				
中環碼頭	Central Pier	東北偏北	NNE	45	1/11	19:04	東北	NE	20	1/11	13:00
中環廣場	Central Plaza	北	N	75	1/11	18:57	北	N	45	1/11	08:00
赤鱗角	Chek Lap Kok	東北偏北	NNE	56	1/11	04:56	東北偏北	NNE	34	1/11	06:00
		東北偏北	NNE	56	1/11	05:14	北	N	34	1/11	16:00
		東北	NE	56	1/11	05:15					
長洲	Cheung Chau	東北偏北	NNE	77	1/11	15:58	北	N	45	1/11	18:00
長沙灣	Cheung Sha Wan	東北偏北	NNE	59	1/11	01:56	東北偏北	NNE	23	1/11	06:00
青洲	Green Island	東北偏北	NNE	76	1/11	17:30	東北偏北	NNE	51	1/11	18:00
啓德	Kai Tak	北	N	65	1/11	19:45	北	N	31	1/11	20:00
京士柏	King's Park	北	N	58	1/11	19:12	東北偏北	NNE	23	1/11	09:00
流浮山	Lau Fau Shan	北	N	54	1/11	14:26	北	N	34	1/11	16:00
北角	North Point	東北偏北	NNE	54	1/11	19:11	東北偏北	NNE	27	1/11	20:00
平洲	Ping Chau	北	N	40	1/11	20:29	北	N	9	1/11	10:00
西貢	Sai Kung	東北偏北	NNE	68	1/11	07:57	北	N	40	1/11	09:00
							北	N	40	1/11	10:00
沙螺灣	Sha Lo Wan	東北	NE	47	1/11	05:25	東北	NE	25	1/11	06:00
沙田	Sha Tin	北	N	51	1/11	20:10	東北	NE	22	1/11	09:00
石崗	Shek Kong	-	-	-	-	-	東北偏北	NNE	23	1/11	06:00
九龍天星碼頭	Star Ferry (Kowloon)	西北	NW	36	1/11	19:28	東南偏東	ESE	20	2/11	22:00
打鼓嶺	Ta Kwu Ling	東北	NE	56	1/11	08:30	東北偏北	NNE	25	1/11	12:00
大尾篤	Tai Mei Tuk	東北偏北	NNE	70	1/11	03:20	東北偏北	NNE	45	1/11	04:00
大帽山	Tai Mo Shan	東北偏北	NNE	88	1/11	16:23	東北偏北	NNE	67	1/11	17:00
塔門	Tap Mun	北	N	56	2/11	02:15	北	N	22	1/11	11:00
大老山	Tate's Cairn	西北偏北	NNW	87	1/11	19:33	北	N	67	1/11	06:00
鯽魚湖	Tsak Yue Wu	東北偏北	NNE	62	1/11	20:50	東北偏北	NNE	30	1/11	03:00
將軍澳	Tseung Kwan O	東北	NE	52	1/11	15:20	東北	NE	16	1/11	09:00
青衣 (青柏樓)	Ching Pak House, Tsing Yi	北	N	63	1/11	15:53	北	N	30	1/11	16:00
屯門	Tuen Mun	東北偏北	NNE	52	1/11	10:13	東北偏北	NNE	14	2/11	09:00
							東北偏北	NNE	14	2/11	10:00
橫瀾島	Waglan Island	北	N	63	1/11	20:08	北	N	51	1/11	18:00
黃竹坑	Wong Chuk Hang	東北偏東	ENE	52	1/11	18:59	西北偏北	NNW	19	1/11	20:00

表 3.7.2 西馬侖影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮

Table 3.7.2 Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of Cimaron

站 (參閱圖1.1) Station (see Fig. 1.1)	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/月 Date/Month	時間 Time	高度 (米) Height (m)	日/月 Date/Month	時間 Time
	Height (m)	Date/Month	Time	Height (m)	Date/Month	Time
鰂魚涌 Quarry Bay	2.27	2/11	06:13	0.32	2/11	12:21
石壁 Shek Pik	2.40	1/11	04:32	0.38	2/11	20:09
大埔滘 Tai Po Kau	2.37	1/11	05:13	0.40	2/11	11:05
尖鼻咀 Tsim Bei Tsui	2.58	2/11	21:06	0.46	2/11	21:06

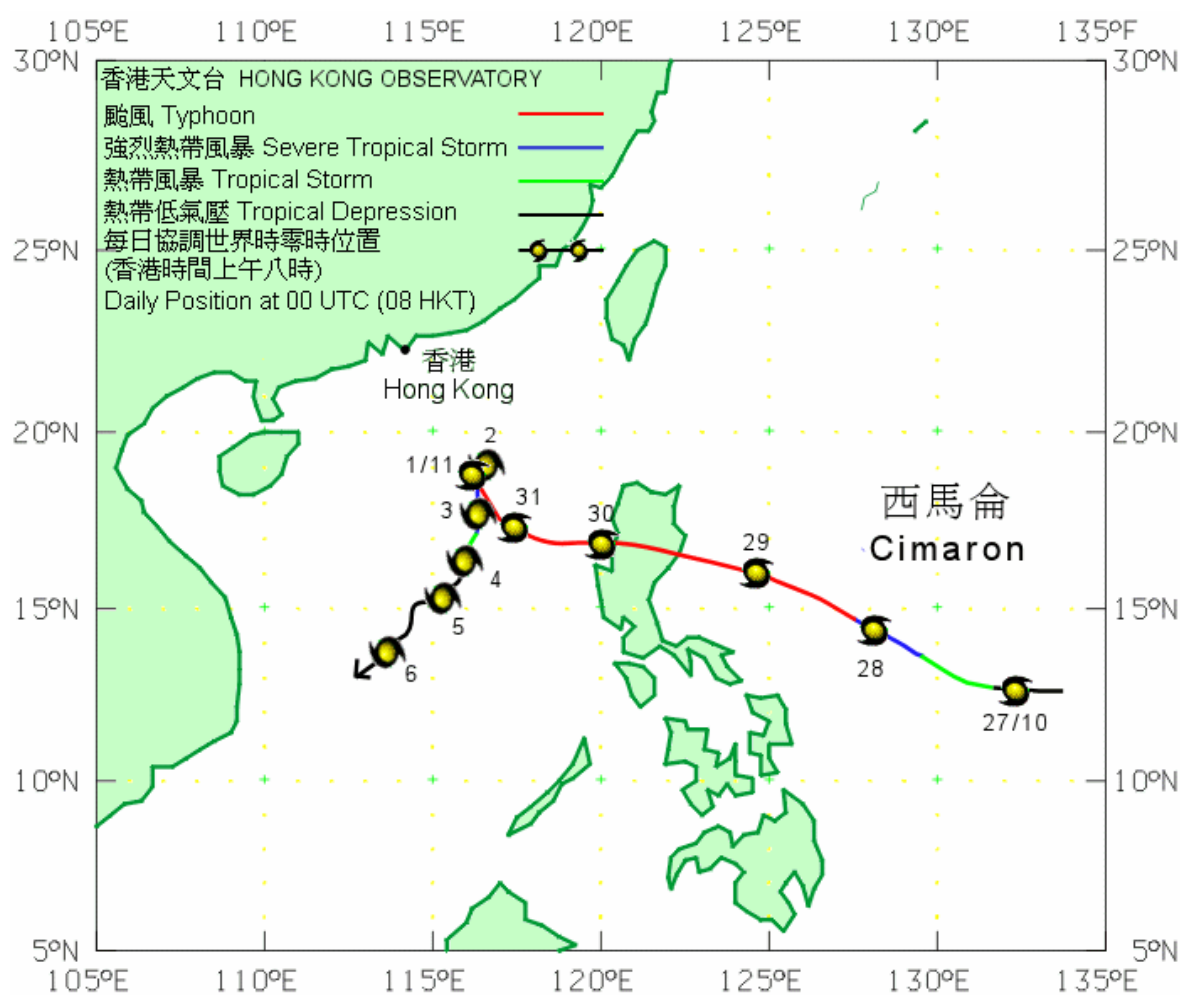


圖 3.7.1 西馬侖 (0619) 在二零零六年十月二十七日至十一月六日的路徑圖。

Figure 3.7.1 Track of Cimaron (0619) on 27 October - 6 November 2006.

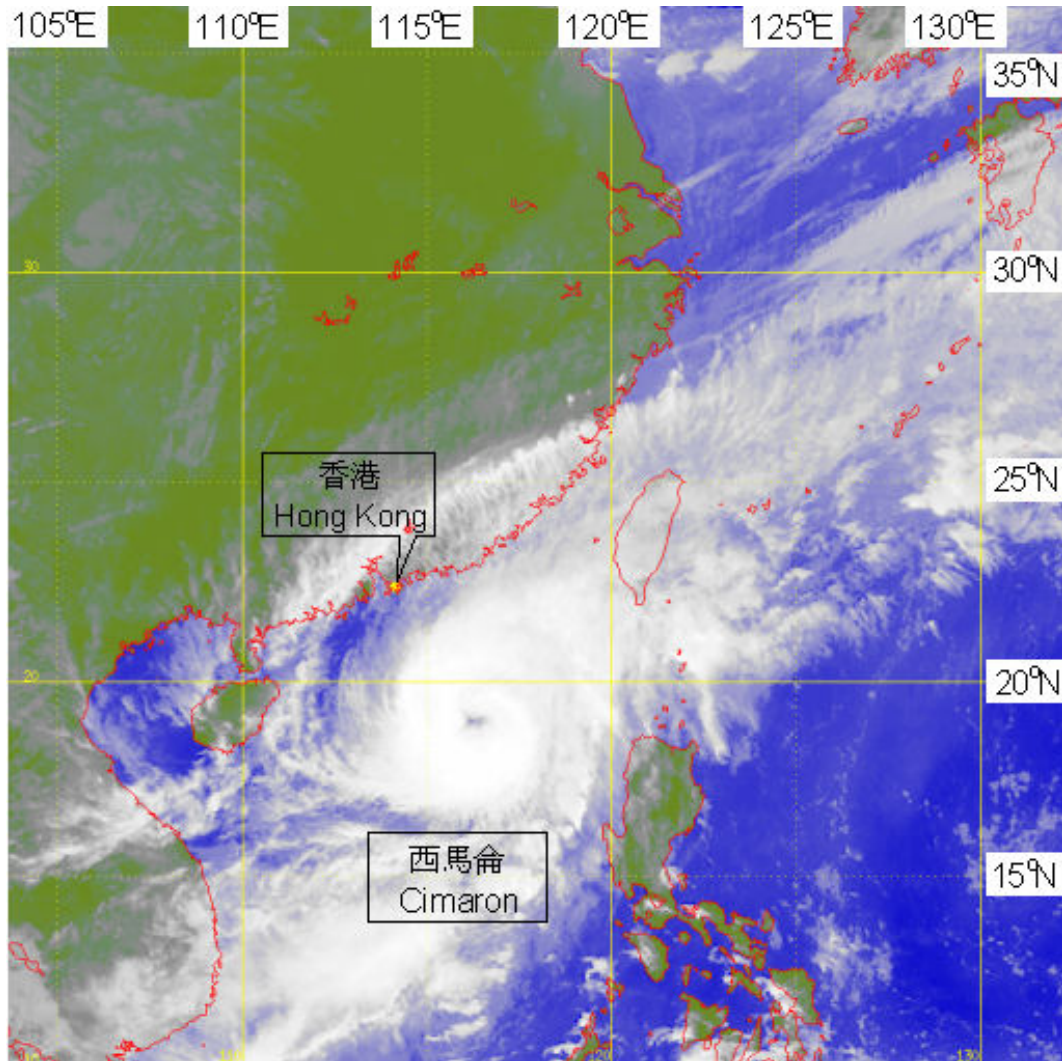


圖 3.7.2 西馬侖在二零零六年十一月一日約下午二時的紅外線衛星圖片。
 [此衛星圖像接收自日本氣象廳的多用途輸送衛星-1R (MTSAT-1R)。]

Figure 3.7.2 Infra-red imagery at around 2 p.m. on 1 November 2006 of Cimaron.
 [The satellite imagery was originally captured with Multi-functional Transport Satellite-1R (MTSAT-1R) of Japan Meteorological Agency (JMA).]

第四節

熱帶氣旋統計表

Section 4

TROPICAL CYCLONE STATISTICS AND TABLES

表4.1是二零零六年在北太平洋西部及南海區域（即由赤道至北緯45度、東經100度至180度所包括的範圍）的熱帶氣旋一覽。表內所給出的日期只說明某熱帶氣旋在上述範圍內出現的時間，因而不一定包括整個風暴過程。這個限制對表內其他元素亦同樣適用。

表4.2是天文台在二零零六年為船舶發出的熱帶氣旋警告的次數、時段、首個及末個警告發出的時間。當有熱帶氣旋位於香港責任範圍內時（即由北緯10至30度、東經105至125度所包括的範圍），天文台會發出這些警告。表內使用的時間為協調世界時。

表4.3是天文台在二零零六年所發出熱帶氣旋警告信號的次數及其時段的摘要。表內亦提供每次熱帶氣旋警告信號生效的時間和發出警報的次數。表內使用的時間為香港時間。

表4.4是一九五六至二零零六年間熱帶氣旋警告信號發出的次數及其時段的摘要。

表4.5是一九五六至二零零六年間每年位於香港責任範圍內以及每年引致天文台需要發出熱帶氣旋警告信號的熱帶氣旋總數。

表4.6是天文台在一九五六至二零零六年間發出各種熱帶氣旋警告信號的最長、最短及平均時段。

表4.7是二零零六年當熱帶氣旋影響香港時本港的氣象觀測摘要。資料包括熱帶氣旋最接近香港時的位置及時間和當時估計熱帶氣旋中心附近的最低氣壓、京士柏及橫瀾島錄得的最高風速、香港天文台錄得的最低平均海平面氣壓以及香港各潮汐測量站錄得的最大風暴潮（即實際水位高出潮汐表中預計的部分，單位為米）。

表4.8.1是二零零六年位於香港600公里範圍內的熱帶氣旋及其為香港所帶來的雨量。

表4.8.2是一八八四至一九三九年以及一九四七至二零零六年間十個為香港帶來最多雨量的熱帶氣旋和有關的雨量資料。

表4.9是天文台自一九四六年以來，發出十號颶風信號時所錄得的氣象資料。內容包括熱帶氣旋吹襲香港時的最近距離及方位、天文台錄得的最低海平面氣壓、香港各站錄得的最高60分鐘平均風速和最高陣風。

表4.10是二零零六年間熱帶氣旋在香港所造成的損失。資料參考了各政府部門和公共事業機構所提供的報告及本地報章的報導。

表4.11是一九六零至二零零六年間熱帶氣旋在香港所造成的人命傷亡及破壞。資料參考了各政府部門和公共事業機構所提供的報告及本地報章的報導。

TABLE 4.1 is a list of tropical cyclones in 2006 in the western North Pacific and the South China Sea (i.e. the area bounded by the Equator, 45°N, 100°E and 180°). The dates cited are the residence times of each tropical cyclone within the above-mentioned region and as such might not cover the full life-span. This limitation applies to all other elements in the table.

TABLE 4.2 gives the number of tropical cyclone warnings for shipping issued by the Hong Kong Observatory in 2006, the durations of these warnings and the times of issue of the first and last warnings for all tropical cyclones in Hong Kong's area of responsibility (i.e. the area bounded by 10°N, 30°N, 105°E and 125°E). Times are given in hours and minutes in UTC.

TABLE 4.3 presents a summary of the occasions/durations of the issuing of tropical cyclone warning signals in 2006. The sequence of the signals displayed and the number of tropical cyclone warning bulletins issued for each tropical cyclone are also given. Times are given in hours and minutes in Hong Kong Time.

TABLE 4.4 presents a summary of the occasions/durations of the issuing of tropical cyclone warning signals from 1956 to 2006 inclusive.

TABLE 4.5 gives the annual number of tropical cyclones in Hong Kong's area of responsibility between 1956 and 2006 and also the annual number of tropical cyclones necessitated the issuing of tropical cyclone warning signals in Hong Kong.

TABLE 4.6 shows the maximum, mean and minimum durations of the tropical cyclone warning signals issued during the period 1956-2006.

TABLE 4.7 is a summary of meteorological information for each tropical cyclone affecting Hong Kong in 2006. Information on the nearest approach together with an estimate of the minimum central pressure of each tropical cyclone during its closest approach, the maximum winds at King's Park and Waglan Island, the minimum mean sea-level pressure recorded at the Hong Kong Observatory and the maximum storm surge (the excess, in metres, of the actual water level over that predicted in the Tide Tables) recorded at various tide stations in Hong Kong are included.

TABLE 4.8.1 tabulates the amount of rainfall associated with each tropical cyclone that came within 600 km of Hong Kong in 2006.

TABLE 4.8.2 highlights the 10 wettest tropical cyclones in Hong Kong for the period 1884-1939 and 1947-2006.

TABLE 4.9 provides some meteorological information for those typhoons requiring the issuing of the Hurricane Signal No. 10 in Hong Kong since 1946. The information presented includes the distances and bearings of nearest approach, the minimum mean sea-level pressures recorded at the Hong Kong Observatory and the maximum 60-minute mean winds and maximum gust peak speeds recorded at some stations in Hong Kong.

TABLE 4.10 contains damage caused by tropical cyclones in 2006. The information is based on reports from various government departments, public utility companies and local newspapers.

TABLE 4.11 presents casualties and damage caused by tropical cyclones in Hong Kong : 1960-2006. The information is based on reports from various government departments, public utility companies and local newspapers.

表 4.1 二零零六年在北太平洋西部及南海區域的熱帶氣旋一覽

TABLE 4.1 LIST OF TROPICAL CYCLONES IN THE WESTERN NORTH PACIFIC AND THE SOUTH CHINA SEA IN 2006

熱帶氣旋名稱	Name of tropical cyclone	編號 Code	路徑起點 Beginning of track		最高強度 (估計) Peak intensity (estimated)		路徑終點 End of track				DISP: 消散 Dissipated XT: 變為溫帶氣旋 Extratropical
			日期/月份 時間 ⁺ Date/Month Time ⁺	位置 Position 北緯 東經 ° N ° E	風力 (公里每小時) Winds (km/h)	氣壓 (百帕斯卡) Pressure (hPa)	日期/月份 時間 ⁺ Date/Month Time ⁺	位置 Position 北緯 東經 ° N ° E			
熱帶低氣壓	Tropical Depression		4 / 3 0600	4.9 138.2	55	1000	7 / 3 1200	3.6 131.0		DISP	
颱風珍珠	Typhoon Chanchu	(0601)	9 / 5 0000	8.4 134.4	185	935	18 / 5 1200	28.5 121.3		XT	
熱帶風暴杰拉華	Tropical Storm Jelawat	(0602)	26 / 6 1800	15.8 116.0	75	990	29 / 6 0000	21.1 110.4		DISP	
颱風艾雲尼	Typhoon Ewiniar	(0603)	30 / 6 0000	6.2 139.0	185	935	10 / 7 1200	37.1 127.4		XT	
強烈熱帶風暴碧利斯	Severe Tropical Storm Bilis	(0604)	8 / 7 1200	12.0 140.8	100	975	14 / 7 1800	26.9 116.5		DISP	
颱風格美	Typhoon Kaemi	(0605)	18 / 7 1200	10.1 144.6	140	960	26 / 7 0000	24.9 116.0		DISP	
颱風派比安	Typhoon Prapiroon	(0606)	31 / 7 0600	16.3 122.7	130	965	4 / 8 1200	23.3 108.2		DISP	
強烈熱帶風暴瑪莉亞	Severe Tropical Storm Maria	(0607)	5 / 8 0000	24.8 147.3	110	975	10 / 8 1200	37.1 145.8		XT	
颱風桑美	Typhoon Saomai	(0608)	5 / 8 0600	11.3 147.5	215	920	11 / 8 0600	28.6 116.5		DISP	
強烈熱帶風暴寶霞	Severe Tropical Storm Bopha	(0609)	6 / 8 0600	22.0 131.2	90	980	10 / 8 1200	21.6 115.7		DISP	
強烈熱帶風暴悟空	Severe Tropical Storm Wukong	(0610)	12 / 8 1200	21.8 141.0	90	978	19 / 8 1200	36.2 129.8		XT	
熱帶風暴清松	Tropical Storm Sonamu	(0611)	13 / 8 1800	17.4 128.6	75	992	15 / 8 1800	26.2 140.1		DISP	
熱帶低氣壓	Tropical Depression		23 / 8 1200	18.5 111.5	55	998	24 / 8 1800	21.4 112.5		DISP	
颱風伊歐凱	Typhoon Ioke	(0612)	27 / 8 1200	17.2 179.5	195	920	6 / 9 1200	47.6 161.2		XT	
颱風珊珊	Typhoon Shanshan	(0613)	9 / 9 0600	13.6 138.3	195	925	19 / 9 0000	42.0 135.8		XT	
熱帶低氣壓	Tropical Depression		12 / 9 0600	18.2 115.3	55	998	13 / 9 0600	21.3 112.1		DISP	
颱風摩羯	Typhoon Yagi	(0614)	16 / 9 1800	20.2 156.6	195	920	25 / 9 0000	40.3 159.4		XT	
熱帶低氣壓	Tropical Depression		22 / 9 1200	13.5 114.3	55	996	25 / 9 0000	17.5 107.9		DISP	
颱風象神	Typhoon Xangsane	(0615)	25 / 9 1200	11.7 128.7	195	930	2 / 10 0000	15.6 103.8		DISP	
熱帶風暴貝碧嘉	Tropical Storm Bebinca	(0616)	1 / 10 1800	15.1 130.5	75	988	6 / 10 0000	29.1 139.0		XT	
熱帶風暴溫比亞	Tropical Storm Rumbia	(0617)	3 / 10 0600	20.0 153.8	75	990	6 / 10 0000	26.6 151.7		DISP	
颱風蘇力	Typhoon Soulik	(0618)	9 / 10 0000	14.6 157.8	150	955	16 / 10 0000	33.6 149.2		XT	
颱風西馬侖	Typhoon Cimaron	(0619)	26 / 10 1800	12.6 133.7	195	930	6 / 11 0000	13.7 113.6		DISP	
颱風飛燕	Typhoon Chebi	(0620)	9 / 11 0000	15.7 132.5	185	935	14 / 11 0600	17.6 111.0		DISP	
颱風榴槿	Typhoon Durian	(0621)	25 / 11 1800	8.9 145.6	185	935	5 / 12 0600	9.4 106.1		DISP	
颱風尤特	Typhoon Utor	(0622)	7 / 12 0000	9.1 136.6	160	950	14 / 12 1200	17.8 113.0		DISP	
熱帶風暴潭美	Tropical Storm Trami	(0623)	17 / 12 0600	11.6 139.9	65	995	19 / 12 0000	16.6 133.6		DISP	

⁺ 時間為協調世界時 ⁺ Times are given in UTC

表 4.2 二零零六年為船舶發出的熱帶氣旋警告

TABLE 4.2 TROPICAL CYCLONE WARNINGS FOR SHIPPING ISSUED IN 2006

熱帶氣旋	Tropical cyclone	發出警告 的次數 No. of warnings issued	發出的日期及時間 Date and time of issue of				時段 (小時) Duration (hours)
			首次警告 First warning		末次警告 Last warning		
			日期/月份 時間 ⁺ Date/Month Time ⁺	日期/月份 時間 ⁺ Date/Month Time ⁺	日期/月份 時間 ⁺ Date/Month Time ⁺	日期/月份 時間 ⁺ Date/Month Time ⁺	
* 颱風珍珠	* Typhoon Chanchu	56	11 / 5	1800	18 / 5	1500	165
* 熱帶風暴杰拉華	* Tropical Storm Jelawat	19	26 / 6	2100	29 / 6	0300	54
強烈熱帶風暴碧利斯	Severe Tropical Storm Bilis	19	12 / 7	0900	14 / 7	1500	54
颱風格美	Typhoon Kaemi	17	23 / 7	1800	25 / 7	1800	48
* 颱風派比安	* Typhoon Prapiroon	33	31 / 7	0600	4 / 8	0300	93
* 強烈熱帶風暴寶霞	* Severe Tropical Storm Bopha	20	8 / 8	0600	10 / 8	1500	57
颱風桑美	Typhoon Saomai	11	9 / 8	1500	10 / 8	2100	30
* 熱帶低氣壓	* Tropical Depression	13	23 / 8	0900	24 / 8	2100	36
* 熱帶低氣壓	* Tropical Depression	12	12 / 9	0300	13 / 9	1200	33
颱風珊珊	Typhoon Shanshan	15	14 / 9	1200	16 / 9	0600	42
熱帶低氣壓	Tropical Depression	23	22 / 9	1200	25 / 9	0600	66
颱風象神	Typhoon Xangsane	37	27 / 9	0300	1 / 10	1200	105
* 颱風西馬侖	* Typhoon Cimaron	66	29 / 10	0000	6 / 11	0000	192
颱風飛燕	Typhoon Chebi	33	10 / 11	0900	14 / 11	0900	96
颱風榴槿	Typhoon Durian	42	29 / 11	2100	5 / 12	0000	123
颱風尤特	Typhoon Utor	44	9 / 12	1200	14 / 12	1800	126
	共 Total	460					1320

* 這些熱帶氣旋引致天文台需要發出熱帶氣旋警告信號。

* Tropical cyclones for which tropical cyclone warning signals were issued in Hong Kong.

⁺ 時間為協調世界時。

⁺ Times are given in UTC.

表 4.3 天文台在二零零六年所發出的熱帶氣旋警告信號及發出警報的次數
TABLE 4.3 TROPICAL CYCLONE WARNING SIGNALS ISSUED IN HONG KONG AND NUMBER OF WARNING BULLETINS ISSUED IN 2006

摘要 SUMMARY

信號 Signal	次數 No. of occasions	總時段 Total duration	
		時 h	分 min
1	10	262	25
3	3	55	25
8 西北 NW	-	-	-
8 西南 SW	-	-	-
8 東北 NE	-	-	-
8 東南 SE	-	-	-
9	-	-	-
10	-	-	-
共 Total	13	317	50

詳情 DETAILS

熱帶氣旋 Tropical cyclone	警報發出的次數 No. of warning bulletins issued	信號 Signal	發出 Issued		取消 Cancelled	
			日期/月份 Date/Month	時間* Time *	日期/月份 Date/Month	時間* Time *
颱風珍珠 Typhoon Chanchu	59	1	15 / 5	2140	17 / 5	0715
		3	17 / 5	0715	17 / 5	2115
		1	17 / 5	2115	18 / 5	0440
熱帶風暴杰拉華 Tropical Storm Jelawat	36	1	27 / 6	0940	28 / 6	1840
颱風派比安 Typhoon Prapiroon	79	1	1 / 8	1210	2 / 8	1620
		3	2 / 8	1620	4 / 8	0540
		1	4 / 8	0540	4 / 8	1540
強烈熱帶風暴寶霞 Severe Tropical Storm Bopha	39	1	9 / 8	0840	10 / 8	2210
熱帶低氣壓 Tropical Depression	21	1	24 / 8	1110	25 / 8	0620
熱帶低氣壓 Tropical Depression	27	1	12 / 9	1340	13 / 9	1035
		3	13 / 9	1035	13 / 9	1440
		1	13 / 9	1440	13 / 9	1610
颱風西馬侖 Typhoon Cimaron	73	1	31 / 10	1420	3 / 11	1330

* 香港時間（協調世界時加八小時）

* Hong Kong Time (UTC + 8 hours)

表 4.4 一九五六至二零零六年間每年各熱帶氣旋警告信號的發出次數及總時段
 TABLE 4.4 FREQUENCY AND TOTAL DURATION OF DISPLAY OF TROPICAL CYCLONE
 WARNING SIGNALS : 1956-2006

信號 Signals 年份 Year	1	3	8 西北 NW	8 西南 SW	8 東北 NE	8 東南 SE	9	10	總時段 Total duration 時 分 h min
1956	5	4	0	0	0	0	0	0	191 25
1957	4	9	1	1	2	2	0	1	295 45
1958	4	5	0	0	1	0	0	0	214 5
1959	1	1	0	0	0	0	0	0	36 35
1960	11	7	0	2	2	2	1	1	432 35
1961	6	7	1	2	1	0	1	1	192 55
1962	4	3	0	1	1	0	1	1	158 10
1963	4	5	0	0	1	0	0	0	175 50
1964	11	14	1	3	5	3	3	2	570 15
1965	7	6	0	0	1	1	0	0	239 40
1966	6	5	0	0	2	2	0	0	284 40
1967	8	6	0	0	2	1	0	0	339 10
1968	7	7	0	1	1	0	1	1	290 10
1969	4	2	0	0	0	0	0	0	110 15
1970	6	8	2	1	2	0	0	0	286 45
1971	9	10	1	3	2	2	1	1	323 25
1972	8	6	0	0	1	1	0	0	288 20
1973	8	6	1	1	1	0	1	0	416 50
1974	12	10	0	0	2	1	1	0	525 20
1975	8	6	1	0	0	1	1	1	292 20
1976	6	6	0	0	1	2	0	0	351 30
1977	8	6	0	0	1	0	0	0	395 10
1978	8	9	1	1	3	2	0	0	462 10
1979	5	5	1	0	2	2	1	1	281 15
1980	10	8	0	0	1	1	0	0	414 5
1981	5	4	0	0	1	1	0	0	202 20
1982	7	4	0	0	0	0	0	0	247 35
1983	8	7	0	1	2	2	1	1	289 42
1984	6	6	0	0	1	0	0	0	280 2
1985	5	4	1	0	0	1	0	0	193 35
1986	6	7	0	1	1	0	0	0	305 0
1987	6	1	0	0	0	0	0	0	165 45
1988	6	4	0	0	0	0	0	0	204 10
1989	7	8	0	0	2	2	0	0	306 10
1990	6	4	0	0	0	0	0	0	245 10
1991	8	6	0	0	1	1	0	0	349 55
1992	5	5	0	0	1	1	0	0	167 5
1993	8	9	0	0	2	4	0	0	325 40
1994	4	3	0	0	0	0	0	0	138 10
1995	8	6	2	2	1	1	0	0	348 50
1996	7	2	0	0	0	1	0	0	189 0
1997	2	3	0	1	1	0	1	0	97 30
1998	5	2	0	0	0	0	0	0	188 35
1999	10	13	4	3	2	0	2	1	520 0
2000	7	3	0	0	0	0	0	0	329 5
2001	6	6	1	1	2	1	0	0	253 35
2002	3	2	0	0	0	1	0	0	144 25
2003	4	5	1	1	1	1	1	0	158 0
2004	3	2	1	1	1	0	0	0	77 35
2005	3	1	0	0	0	0	0	0	142 45
2006	10	3	0	0	0	0	0	0	317 50
共 Total	325	281	20	27	54	40	17	12	13756 9
平均 Mean	6.4	5.5	0.4	0.5	1.1	0.8	0.3	0.2	269 44

表 4.5 一九五六至二零零六年間每年位於香港責任範圍內以及每年引致天文台需要發出熱帶氣旋警告信號的熱帶氣旋總數

TABLE 4.5 ANNUAL NUMBER OF TROPICAL CYCLONES IN HONG KONG'S AREA OF RESPONSIBILITY AND THE NUMBER THAT NECESSITATED THE DISPLAY OF TROPICAL CYCLONE WARNING SIGNALS IN HONG KONG : 1956-2006

年份 Year	每年位於香港責任範圍內的熱帶氣旋總數 Annual number of tropical cyclones in Hong Kong's area of responsibility	每年引致天文台需要發出熱帶氣旋警告信號的熱帶氣旋總數 Annual number of tropical cyclones necessitating the display of signals in Hong Kong
1956	23	5
1957	12	6
1958	15	5
1959	18	2
1960	18	9
1961	24	6
1962	20	4
1963	13	4
1964	26	10
1965	16	6
1966	17	6
1967	17	8
1968	12	6
1969	11	4
1970	20	6
1971	20	9
1972	15	5
1973	17	9
1974	21	11
1975	12	7
1976	10	5
1977	10	8
1978	20	8
1979	18	6
1980	17	10
1981	15	5
1982	16	5
1983	15	7
1984	14	5
1985	15	5
1986	16	4
1987	12	5
1988	17	6
1989	17	7
1990	18	6
1991	14	6
1992	11	5
1993	14	9
1994	20	4
1995	17	8
1996	15	7
1997	10	2
1998	15	5
1999	12	8
2000	20	7
2001	14	6
2002	10	3
2003	12	4
2004	15	3
2005	15	3
2006	16	7
共 Total	807	307
平均 Mean	15.8	6.0

表 4.6 天文台在一九五六至二零零六年間發出熱帶氣旋警告信號的時段

TABLE 4.6 DURATION OF TROPICAL CYCLONE WARNING SIGNALS ISSUED IN HONG KONG : 1956-2006

信號 Signal	次數 Number of occasions	每次時段 Duration of each occasion			每年總時段 Total duration per year		
		平均 Mean 時 分 h min	最長 Maximum 時 分 h min	最短 Minimum 時 分 h min	平均 Mean 時 分 h min	最長 Maximum 時 分 h min	最短 Minimum 時 分 h min
一號或以上 1 or higher	319	43 7	161 0 (桃麗達Tilda, 1964)	4 30 (熱帶低氣壓 T.D.,2000)	269 44	570 15 (1964)	36 35 (1959)
三號或以上 3 or higher	211	30 21	124 15 (瑪麗Mary, 1960)	4 5 (熱帶低氣壓 T.D.,2006)	125 34	306 35 (1974)	15 5 (2004)
八號或以上 8 or higher	72	15 23	66 50 (瑪麗Mary, 1960)	2 40 (雲茵Wynne, 1984)	21 43	100 55 (1964)	0 0
8 西北 NW	20	6 1	15 45	1 30	2 21	18 0	0 0
8 西南 SW	27	4 55	10 45	2 30	2 36	16 10	0 0
8 東北 NE	54	8 4	35 35	2 35	8 32	40 20	0 0
8 東南 SE	40	7 20	21 45	0 20	5 45	31 15	0 0
九號或以上 9 or higher	18	7 1	12 25 (約克York, 1999)	2 0 (杜鵑Dajuan, 2003)	2 29	19 25 (1964)	0 0
十號 10	12	6 34	11 0 (約克York, 1999)	2 30 (愛麗斯Alice, 1961)	1 33	12 10 (1964)	0 0

註：() 內為創造該記錄的熱帶氣旋名稱及年份

Note: () are the years and the names of the tropical cyclones which created the record

表 4.7 二零零六年當熱帶氣旋影響香港時本港的氣象觀測摘要

TABLE 4.7 A SUMMARY OF METEOROLOGICAL OBSERVATIONS RECORDED IN HONG KONG DURING THE PASSAGES OF TROPICAL CYCLONES IN 2006

熱帶氣旋 名稱 Name of tropical cyclone	當最接近香港時 Nearest approach to Hong Kong							香港天文台錄得的最低 海平面氣壓(百帕斯卡) Minimum M.S.L. pressure (hPa) at the Hong Kong Observatory				最大風暴潮(米) Maximum storm surge (metres)				
	月份 Month	日期 Date	時間* Hour*	方位 Direction	距離 (公里) Distance (km)	移動方向 及速度 (公里每小時) Movement (km/h)	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	月份 Month	日期 Date	時間* Hour*	瞬時 Inst. 每小時 Hourly	鰂魚涌 Quarry Bay	石壁 Shek Pik	大廟灣 Tai Miu Wan	大埔滘 Tai Po Kau	尖鼻咀 Tsim Bei Tsui
颱風珍珠 Typhoon Chanchu	5	17	14	東南偏東 ESE	220	東北偏北 NNE 20	950	5	17	16:02 16:09	996.8	0.59	0.67	-	0.77	0.51
								5	17	16:00	997.1					
熱帶風暴杰拉華 Tropical Storm Jelawat	6	29	2	西南偏西 WSW	410	西北 NW 15	998	6	27	16:08-16:16 16:20 16:22-16:45	1004.7	0.12	0.28	0.24	0.35	0.41
								6	27	16:00 17:00	1005.0					
颱風派比安 Typhoon Prapiroon	8	3	14	西南 SW	260	西北 NW 15	965	8	3	16:37 -16:40 16:53-17:01	996.7	0.64	0.91	-	0.71	0.90
								8	3	17:00	996.7					
強烈熱帶風暴寶霞 Severe Tropical Storm Bopha	8	10	20	東南偏東 ESE	180	西 W 15	998	8	10	17:43 17:45 17:47	998.3	0.35	0.35	-	0.48	0.41
								8	10	18:00	998.5					
熱帶低氣壓 Tropical Depression	8	24	22	西南 SW	190	西北偏北 NNW 12	998	8	24	15:22 15:24-15:44 16:49-17:08	1004.1	0.13	0.13	-	0.29	0.23
								8	24	17:00	1004.1					
熱帶低氣壓 Tropical Depression	9	13	2	西南偏南 SSW	180	西北偏西 WNW 12	998	9	13	04:42 06:20-06:24	1006.8	0.30	0.32	0.36	0.38	0.33
								9	13	05:00	1006.9					
颱風西馬侖 Typhoon Cimaron	11	1	20	東南偏南 SSE	430	東北偏東 ENE 2	945	11	1	15:50-15:51 15:54 15:56 16:00	1010.3	0.32	0.38	-	0.40	0.46
								11	1	16:00	1010.3					

* 香港時間 (協調世界時加八小時)

* Hong Kong Time (UTC + 8 hours)

表 4.7 (續)
TABLE 4.7 (cont'd)

熱帶氣旋 名稱 Name of tropical cyclone	月份 Month	最高60分鐘平均風向及風速 (公里每小時) Maximum 60-min mean wind in points and km/h			最高10分鐘平均風向及風速 (公里每小時) Maximum 10-min mean wind in points and km/h			最高陣風風向及風速 (公里每小時) Maximum gust peak speed in km/h with direction in points		
		京士柏 King's Park	赤鱲角 Chek Lap Kok	橫瀾島 Waglan Island	京士柏 King's Park	赤鱲角 Chek Lap Kok	橫瀾島 Waglan Island	京士柏 King's Park	赤鱲角 Chek Lap Kok	橫瀾島 Waglan Island
颱風珍珠 Typhoon Chanchu	5	北 34 N	西北偏北 56 NNW	北 85 N	北 41 N	西北偏北 59 NNW	北 90 N	北 76 N	西北偏北 72 NNW	北 106 N
熱帶風暴杰拉華 Tropical Storm Jelawat	6	東南偏東 16 ESE	東 27 E	東南偏東 40 ESE	東南偏南 20 SSE	東南偏東 31 ESE	東南 56 SE	東南偏南 45 SSE	東南偏東 52 ESE	東南偏南 76 SSE
颱風派比安 Typhoon Prapiroon	7 - 8	東南偏東 45 ESE	東南偏東 75 ESE	東南 81 SE	東南偏東 51 ESE	東南偏東 79 ESE	東南 103 SE	東南偏東 103 ESE	東南 113 SE	東南 130 SE
強烈熱帶風暴寶霞 Severe Tropical Storm Bopha	8	西南偏西 12 WSW	西南偏西 27 WSW	東南偏東 30 ESE	東, 東北偏東 22 E, ENE	東北偏東 49 ENE	東 43 E	東北 43 NE	東北偏東 70 ENE	東北偏東 67 ENE
熱帶低氣壓 Tropical Depression	8	東南偏東 14 ESE	東 30 E	南 45 S	東南偏南 20 SSE	東南偏南 34 SSE	東南, 南 49 SE, S	東南偏南 40 SSE	東南偏南 49 SSE	東南偏南 58 SSE
熱帶低氣壓 Tropical Depression	9	東北偏東 25 ENE	東北 36 NE	東 68 E	東北偏東 34 ENE	東北 38 NE	東 76 E	東北偏東 67 ENE	東北 49 NE	東 94 E
颱風西馬侖 Typhoon Cimaron	10-11	東北偏北 25 NNE	東北偏北 40 NNE	北 52 N	東北偏北 30 NNE	東北偏北 45 NNE	北 54 N	北 58 N	東北偏北, 東北 56 NNE, NE	北 63 N

表 4.8.1 二零零六年位於香港600公里範圍內的熱帶氣旋及其為本港帶來的雨量期間，天文台錄得的雨量
TABLE 4.8.1 RAINFALL ASSOCIATED WITH EACH TROPICAL CYCLONE THAT CAME WITHIN 600 KM OF HONG KONG IN 2006

熱帶氣旋 名稱 Name of tropical cyclone	熱帶氣旋位於 香港600公里 範圍內的時期 Period when tropical cyclone within 600 km of Hong Kong (T ₁ → T ₂) 日期/月份 時間* Date/Month Time*	香港天文台錄得的雨量(毫米) Rainfall at the Hong Kong Observatory (mm)				
		(i) 在香港600公里內 within 600 km of Hong Kong (T ₁ → T ₂)	(ii) 在 T ₂ 之後 的24小時內 24-hour period after T ₂	(iii) 在 T ₂ 之後 的48小時內 48-hour period after T ₂	(iv) 在 T ₂ 之後 的72小時內 72-hour period after T ₂	(i) + (iv) 共 Total T ₁ → (T ₂ +72 小時 hours)
颱風珍珠 T. Chanchu	(T ₁) 16 / 5 0900 - (T ₂) 18 / 5 1200	16.6	0.0	微量 Trace	17.7	34.3
熱帶風暴杰拉華 T.S. Jelawat	(T ₁) 27 / 6 1200 - (T ₂) 29 / 6 0800	67.2	2.6	4.4	5.9	73.1
強烈熱帶風暴碧利斯 # S.T.S. Bilis #	(T ₁) 15 / 7 0000 - (T ₂) 15 / 7 0200	2.4	11.3	200.2	205.5	207.9
颱風格美 # T. Kaemi #	(T ₁) 25 / 7 0700 - (T ₂) 26 / 7 0800	微量 Trace	64.1	120.8	187.8	187.8
颱風派比安 T. Prapiroon	(T ₁) 1 / 8 2000 - (T ₂) 4 / 8 1800	97.9	5.7	10.8	10.9	108.8
強烈熱帶風暴寶霞 T.S. Bopha	(T ₁) 9 / 8 0900 - (T ₂) 10 / 8 2000	44.1	5.2	5.2	5.2	49.3
熱帶低氣壓 T.D.	(T ₁) 23 / 8 2000 - (T ₂) 25 / 8 0200	42.3	18.8	19.3	21.6	63.9
熱帶低氣壓 T.D.	(T ₁) 12 / 9 1400 - (T ₂) 13 / 9 1400	193.4	68.3	71.2	72.2	265.6
颱風西馬侖 T. Cimaron	(T ₁) 31 / 10 1300 - (T ₂) 3 / 11 1300	微量 Trace	0.0	0.0	0.0	微量 Trace
颱風尤特 # T. Utor #	(T ₁) 13 / 12 2200 - (T ₂) 14 / 12 2000	5.8	7.7	10.8	10.8	16.6
					共 Total	1007.3

* 香港時間（協調世界時加八小時）

T₁ - 熱帶氣旋首次出現於香港600公里範圍內的時間。

T₂ - 熱帶氣旋在香港600公里範圍內消散或離開該範圍的時間。

該熱帶氣旋並未導致天文台需要發出熱帶氣旋警告信號。

* Hong Kong Time (UTC + 8 hours)

T₁ - The time when a tropical cyclone was first centred within 600 km of Hong Kong.

T₂ - The time when a tropical cyclone was dissipated within or moved outside 600 km of Hong Kong.

Tropical cyclone without issuing of tropical cyclone warning signal in Hong Kong.

表 4.8.2 一八八四至一九三九年及一九四七至二零零六年間十個為香港帶來最多雨量的熱帶氣旋
TABLE 4.8.2 TEN WETTEST TROPICAL CYCLONES IN HONG KONG (1884-1939, 1947-2006)

熱帶氣旋 Tropical Cyclone			香港天文台錄得的雨量(毫米) Rainfall at the Hong Kong Observatory (mm)				
年份 Year	月份 Month	名稱 Name	(i) 在香港600公里內 within 600 km of Hong Kong (T ₁ → T ₂)	(ii) 在 T ₂ 之後的 24 小時內 24-hour period after T ₂	(iii) 在 T ₂ 之後的 48 小時內 48-hour period after T ₂	(iv) 在 T ₂ 之後的 72 小時內 72-hour period after T ₂	(i) + (iv) 共 Total T ₁ → (T ₂ +72 小時 hours)
1999	8	森姆 Sam	368.1	178.9	248.1	248.4	616.5
1926	7	-	34.8 #	534.0 #	561.1 #	562.2 #	597.0
1916	6	-	494.8 #	27.9 #	59.4 #	67.2 #	562.0
1965	9	愛娜斯 Agnes	404.6	8.9	64.3	126.1	530.7
1978	7	愛娜斯 Agnes	502.4	12.3	12.3	16.6	519.0
1976	8	愛倫 Ellen	90.7	394.2	421.0	425.4	516.1
1993	9	黛蒂 Dot	459.6	37.9	37.9	37.9	497.5
1982	8	黛蒂 Dot	41.2	322.5	403.1	450.5	491.7
1995	8	海倫 Helen	241.4	146.2	235.2	239.5	480.9
1904	8	-	446.5 #	- #	3.7 #	26.7 #	473.2

T₁ - 熱帶氣旋首次出現於香港600公里範圍內的時間。

T₂ - 熱帶氣旋在香港600公里範圍內消散或離開該範圍的時間。

對於一九六一年以前的熱帶氣旋，欄(i)顯示當它位於香港600公里範圍內的日子裡，天文台所錄得的總日雨量，欄(ii)至(iv)分別是指其後一至三天累積的日雨量。

T₁ - The time when a tropical cyclone was first centred within 600 km of Hong Kong.

T₂ - The time when a tropical cyclone was dissipated within or moved outside 600 km of Hong Kong.

For years prior to 1961, column (i) is the sum of daily rainfall on those days when a tropical cyclone was centred within 600 km of Hong Kong, columns (ii) to (iv) show respectively the accumulated daily rainfall on the following one to three days.

表 4.9 一九四六至二零零六年間引致天文台需要發出十號颶風信號的颶風

TABLE 4.9 TYPHOONS REQUIRING THE ISSUING OF THE HURRICANE SIGNAL NO. 10 DURING THE PERIOD 1946-2006

颱風 名稱 Name of typhoon	當最接近天文台時 Nearest approach to the Hong Kong Observatory			最低平均 海平面氣壓 (百帕斯卡) Minimum M.S.L. pressure (hPa)		最高60分鐘平均風向及風速 (公里每小時) Maximum 60-min mean wind in points and km/h						最高陣風風向及風速 (公里每小時) Maximum gust peak speed in km/h with direction in points							
	日期/月份 年份 Date/Month Year	方位 (公里) Direction Distance (km)	距離	每小時 Hourly	瞬時 Inst.	香港天文台 Hong Kong Observatory	京士柏 King's Park	啓德 機場 Kai Tak Airport	橫瀾島 Waglan Island	長洲 Cheung Chau	大老山 Tate's Caim	青洲 Green Island	香港天文台 Hong Kong Observatory	京士柏 King's Park	啓德 機場 Kai Tak Airport	橫瀾島 Waglan Island	長洲 Cheung Chau	大老山 Tate's Caim	青洲 Green Island
-	18 / 7 1946	南 S	70	985.7	-	東北 NE	-	-	-	-	-	-	-	-	-	-	-	-	-
姬羅莉亞 Gloria	22 / 9 1957	西南 SW	55	986.2	984.3	東南偏東 ESE 115	-	東南偏東 ESE 72	東 E 113	-	-	-	東 E 187	-	東北偏東 ENE 158	東北偏東 ENE 185	-	-	-
瑪麗 Mary	9 / 6 1960	西北偏西 WNW	10	974.3	973.8	東南偏南 SSE 96	-	東南偏南 SSE 92	西南偏南 SSW 112	-	-	-	東南偏南 SSE 191	-	東南 SE 164	西南偏南 SSW 194	-	-	-
愛麗斯 Alice	19 / 5 1961		0	981.6	981.1	東北偏東 ENE 83	-	東 E 70	東南偏東 ESE 90	東北偏東 ENE 76	-	-	東 E 166	-	東北偏東 ENE 139	西南 SW 128	東北偏東 ENE 135	-	-
溫黛 Wanda	1 / 9 1962	西南偏南 SSW	20	955.1	953.2	北 N 133	-	北 N 108	西北 NW 148	西北 NW 118	東南 SE 189	-	北 N 259	-	北 N 229	西北偏北 NNW 216	西北 NW 232	東南偏東 ESE 284	-
露比 Ruby	5 / 9 1964	西南 SW	30	971.0	968.2	東 E 110	-	北 N 118	東北偏東 ENE 148	東北 NE 113	東南偏東 ESE 167	-	東北偏北 NNE 227	-	西北 NW 203	東 E 230	東北偏北 NNE 216	東 E 268	-
黛蒂 Dot	13 / 10 1964	東 E	35	978.9	977.3	西北偏北 NNW 88	-	北 N 67	北 N 117	西北偏北 NNW 96	東北偏北 NNE 157	-	北 N 175	-	北 N 198	北 N 184	西北偏西 WNW 205	東北 NE 220	-
雪麗 Shirley	21 / 8 1968		0	968.7	968.6	北 N 68	-	北 N 75	東北偏北 NNE 124	西南偏南 SSW 90	東北偏北 NNE 126	-	北 N 133	-	北 N 151	東北 NE 209	西南偏南 SSW 167	東北偏北 NNE 203	-
露絲 Rose	17 / 8 1971	西南偏西 WSW	20	984.5	982.8	東南 SE 103	-	東南 SE 122	東南偏東 ESE 140	東南 SE 131	南 S 148	-	東南偏東 ESE 224	-	東南偏東 ESE 211	東南偏東 ESE 189	東南 SE 194	南 S 221	-
愛茜 Elsie	14 / 10 1975	南 S	50	996.4	996.2	東北偏東 ENE 58	北 N 75	西北偏北 NNW 67	東北偏北 NNE 118	北 N 106	東北 NE 130	西北偏北 NNW 118	東北 NE 140	北 N 137	北 N 140	東北偏東 ENE 176	東北 NE 158	東北偏北 NNE 180	東北 NE 167
荷貝 Hope	2 / 8 1979	西北偏北 NNW	10	961.8	961.6	西 W 75	西北偏西 WNW 79	西 W 115	西南 SW 144	西南偏南 SSW 117	西北 NW 115	西 W 108	西 W 175	西北偏西 WNW 166	西北偏西 WNW 182	西南 SW 198	西南偏西 WSW 185	西北偏西 WNW 229	西 W 167
愛倫 Ellen	9 / 9 1983	西南 SW	45	983.9	983.1	東 E 92	東 E 88	東 E 112	東南偏東 ESE 169	東南偏東 ESE 171	東 E 126	南 S 137	東 E 185	東 E 167	東 E 203	東 E 227	東南偏南 SSE 238	東北偏東 ENE 218	南 S 220*
約克 York	16 / 9 1999	西南偏南 SSW	20	976.8	976.1	東 E 63	北 N 68	東北偏北 NNE 59	東北偏北 NNE 153	東北偏北 NNE 113	-	-	東 E 137	東北偏北 NNE 149	東北偏東 ENE 142	東北偏北 NNE 234	東北 NE 182	-	-

* 估計，超出風速記錄圖的上限。
estimated, exceeding upper limit of anemogram.

表 4.10 二零零六年熱帶氣旋在香港所造成的損失

TABLE 4.10 DAMAGE CAUSED BY TROPICAL CYCLONES IN HONG KONG IN 2006

熱帶氣旋名稱 Name of tropical cyclone	月份 Month	物質損毀 Damage in physical terms					金錢損失（百萬港元） Damage in monetary terms (million HK\$)					
		農業 Agriculture	公用建設 Public works facilities	公用業務 Public utilities	物業單位 Property	山泥傾瀉及 斜坡倒塌 Landslip and collapse of slope	農業 Agriculture	公用建設 Public works facilities	公用業務 Public utilities	私人物業 Private property	其他 Others	共 Total
颱風珍珠 T. Chanchu	5	-	-	-	2 個 2 units	1 宗 1 case	-	-	-	-	-	-
颱風派比安 T. Prapiroon	8	農地: 212 公頃 農作物: 3 392 噸 Farmland: 212 hectares Crops: 3 392 tons	道路: 5 處 停車場: 2 Road: 5 sites Carpark: 2	3.7 米衛星天綫: 1 3.7m Satellite antenna: 1	-	7 宗 7 cases	53.4	0.156	0.015	-	-	53.571
強烈熱帶風暴寶霞 S.T.S. Bopha	8	-	空曠地區: 2 處 道路: 1 處 Open area: 2 sites Road: 1 site	-	-	3 宗 3 cases	-	-	-	-	-	-

備註：資料由各有關政府部門及公共事業機構提供，同時亦參考了本地報章上的損毀報導。

N.B.: Based on information supplied by relevant government departments and public utility companies. Damage reports in the local press were also examined and collated.

表 4.11 一九六零至二零零六年間熱帶氣旋在香港所造成的人命傷亡及破壞

TABLE 4.11 CASUALTIES AND DAMAGE CAUSED BY TROPICAL CYCLONES IN HONG KONG : 1960-2006

年份 Year	日期 / 月份 Date / Month	Name of tropical cyclone	熱帶氣旋 名稱	死亡人數 Persons dead	失蹤人數 Persons missing	受傷人數 Persons injured	遇事越洋 船舶 Ocean-going vessels in trouble	受到毀壞 或翻沉的 小艇數目 Small craft sunk or wrecked	受到損壞 的小艇 數目 Small craft damaged
1960	4 / 6 - 12 / 6	T. Mary	瑪麗	45	11	127	6	352	462
1961	17 / 5 - 21 / 5 7 / 9 - 10 / 9	T. Alice	愛麗斯	4	0	20	*	*	*
		S.T.S. Olga	奧嘉	7	0	0	0	1	0
1962	28 / 8 - 2 / 9	T. Wanda	溫黛	130	53	*	36	1 297	756
1963	1 / 9 - 9 / 9	T. Faye	菲爾	3	0	51	0	2	0
1964	26 / 5 - 28 / 5 2 / 8 - 9 / 8 2 / 9 - 6 / 9 4 / 9 - 10 / 9 7 / 10 - 13 / 10	T. Viola	維奧娜	0	0	41	5	18	18
		T. Ida	艾黛	5	4	56	3	7	60
		T. Ruby	露比	38	6	300	20	32	282
		T. Sally	莎莉	9	0	24	0	0	0
		T. Dot	黛蒂	26	10	85	2	31	59
1965	6 / 7 - 16 / 7 25 / 9 - 28 / 9	T. Freda	法妮黛	2	0	16	0	1	0
		T.S. Agnes	愛娜斯	5	0	3	0	0	0
1966	12 / 7 - 14 / 7	S.T.S. Lola	露娜	1	0	6	0	*	6
1967	19 / 8 - 22 / 8	S.T.S. Kate	姬蒂	0	0	3	3	1	0
1968	17 / 8 - 22 / 8	T. Shirley	雪麗	0	0	4	1	*	3
1969	22 / 7 - 29 / 7	T. Viola	維奧娜	0	0	0	0	3	0
1970	1 / 8 - 3 / 8 8 / 9 - 14 / 9	T.D. -	-	2 ⁺	0	0	0	0	0
		T. Georgia	喬治亞	0	0	0	2	0	*
1971	15 / 6 - 18 / 6 16 / 7 - 22 / 7 10 / 8 - 17 / 8	T. Freda	法妮黛	2	0	30	8	0	0
		T. Lucy	露茜	0	0	38	10	2	13
		T. Rose	露絲	110	5	286	34	303	*
1972	4 / 11 - 9 / 11	T. Pamela	柏美娜	1	0	8	3	0	0
1973	14 / 7 - 20 / 7	T. Dot	黛蒂	1	0	38	14	*	*
1974	7 / 6 - 14 / 6 18 / 7 - 22 / 7 15 / 10 - 19 / 10 21 / 10 - 27 / 10	T. Dinah	戴娜	0	0	0	1	*	*
		T. Ivy	艾菲	0	0	0	2	*	*
		T. Carmen	嘉曼	1	0	0	5	*	*
		T. Della	黛娜	0	0	0	2	*	*
1975	10 / 8 - 14 / 8 9 / 10 - 14 / 10 16 / 10 - 23 / 10	T.D. -	-	2	1	0	3	1	*
		T. Elsie	愛茜	0	0	46	7	2	1
		S.T.S. Flossie	霍蘿茜	0	0	0	1	*	*
1976	22 / 6 - 4 / 7 21 / 7 - 26 / 7 5 / 8 - 6 / 8 21 / 8 - 24 / 8 15 / 9 - 21 / 9	T. Ruby	露比	3	2	2	0	0	0
		S.T.S. Violet	維奧莉	2	1	1	0	0	0
		S.T.S. Clara	嘉麗	0	0	4	0	0	0
		T.S. Ellen	愛倫	27	3	65	0	4	7
		T. Iris	愛莉斯	0	0	27	6	0	1
1977	4 / 7 - 6 / 7 3 / 9 - 5 / 9 22 / 9 - 25 / 9	T.D. -	-	0	0	2	0	0	0
		T.S. Carla	嘉娜	0	0	1	1	0	0
		S.T.S. Freda	法妮黛	1	0	37	2	0	0
1978	24 / 7 - 30 / 7 9 / 8 - 12 / 8 23 / 8 - 28 / 8 22 / 9 - 26 / 9 7 / 10 - 16 / 10 17 / 10 - 29 / 10	S.T.S. Agnes	愛娜斯	3	0	134	0	25	42
		T.S. Bonnie	邦妮	0	0	0	2	0	0
		S.T.S. Elaine	伊蘭	1	0	51	8	5	8
		S.T.S. Kit	吉蒂	0	7	0	0	1	0
		S.T.S. Nina	蓮娜	0	0	2	0	0	0
		T. Rita	麗姐	0	0	3	1	5	0
1979	1 / 7 - 6 / 7 26 / 7 - 30 / 7 28 / 7 - 3 / 8 6 / 8 - 9 / 8 16 / 9 - 24 / 9	T. Ellis	艾利斯	0	0	0	0	2	0
		T.S. Gordon	戈登	0	0	0	0	2	0
		T. Hope	荷貝	12	0	260	29	167	207
		T.D. -	-	0	0	0	0	3	0
		S.T.S. Mac	麥克	1	0	67	2	12	0

表 4.11 (續)
TABLE 4.11 (cont'd)

年份 Year	日期 / 月份 Date / Month	Name of tropical cyclone	熱帶氣旋 名稱	死亡人數 Persons dead	失蹤人數 Persons missing	受傷人數 Persons injured	遇事越洋 船舶 Ocean-going vessels in trouble	受到毀壞 或翻沉的 小艇數目 Small craft sunk or wrecked	受到損壞 的小艇 數目 Small craft damaged
1980	5 / 7 - 12 / 7	S.T.S. Ida	艾黛	0	0	0	1	0	0
	18 / 7 - 23 / 7	T. Joe	喬伊	2	1	59	4	0	1
	20 / 7 - 28 / 7	T. Kim	甘茵	0	0	0	0	2	1
	29 / 10 - 2 / 11	T.S. Cary	卡里	0	0	0	0	0	2
1981	3 / 7 - 7 / 7	S.T.S. Lynn	林茵	0	0	32	0	0	3
1982	27 / 6 - 2 / 7	T.S. Tess	戴絲	0	0	16	0	1	0
	22 / 7 - 30 / 7	T. Andy	安迪	0	0	0	0	0	1
	5 / 9 - 16 / 9	T. Irving	伊文	0	0	0	0	0	2
1983	12 / 7 - 19 / 7	T. Vera	維娜	0	0	0	0	1	0
	29 / 8 - 9 / 9	T. Ellen	愛倫	10	12	333	44	135	225
	10 / 10 - 14 / 10	T. Joe	喬伊	0	0	58	2	0	3
	20 / 10 - 26 / 10	S.T.S. Lex	力士	0	0	0	0	0	1
1984	27 / 8 - 7 / 9	T. Ike	艾克	0	0	1	0	0	0
1985	19 / 6 - 25 / 6	T. Hal	哈爾	0	1	13	0	4	2
	1 / 9 - 7 / 9	T. Tess	戴絲	2	0	12	6	1	3
	13 / 10 - 22 / 10	T. Dot	黛蒂	0	0	1	0	0	0
1986	3 / 7 - 12 / 7	T. Peggy	蓓姬	1	0	26	3	0	3
	9 / 8 - 12 / 8	T.D. -	-	0	0	3	0	1	5
	18 / 8 - 6 / 9	T. Wayne	韋恩	3	1	15 ⁺	0	3	0
	11 / 10 - 19 / 10	T. Ellen	愛倫	0	0	4	1	2	1
1987	16 / 10 - 27 / 10	T. Lynn	林茵	0	0	1	0	0	0
1988	14 / 7 - 20 / 7	T. Warren	華倫	0	1	12	1	2	1
	19 / 9 - 22 / 9	T. Kit	吉蒂	0	0	0	0	0	1
	18 / 10 - 23 / 10	T. Pat	帕特	2	0	1	0	0	0
	21 / 10 - 29 / 10	T. Ruby	露比	0	0	4	0	0	0
1989	16 / 5 - 21 / 5	T. Brenda	布倫達	6	1	119	0	3	5
	11 / 7 - 19 / 7	T. Gordon	戈登	2	0	31	1	0	8
	8 / 10 - 14 / 10	T. Dan	丹尼	0	0	0	1	0	1
1990	15 / 5 - 19 / 5	T. Marian	瑪麗安	0	0	0	0	0	1
	15 / 6 - 19 / 6	S.T.S. Nathan	彌敦	5	1	1	1	0	2
	21 / 6 - 30 / 6	T. Percy	珀西	1	0	0	0	0	0
	27 / 7 - 31 / 7	S.T.S. Tasha	泰莎	0	0	1	0	1	0
	25 / 8 - 30 / 8	T. Becky	貝姬	0	1	0	0	0	0
	10 / 9 - 20 / 9	T. Ed	義德	0	0	1	0	0	0
1991	15 / 7 - 20 / 7	T. Amy	艾美	0	0	1	1	0	2
	20 / 7 - 24 / 7	S.T.S. Brendan	布倫登	0	0	17	1	1	13
	13 / 8 - 18 / 8	T. Fred	弗雷德	0	0	0	0	1	0
1992	9 / 7 - 14 / 7	T. Eli	艾里	0	0	23	0	0	1
	17 / 7 - 18 / 7	T.S. Faye	菲爾	2	0	24	1	0	3
	19 / 7 - 23 / 7	S.T.S. Gary	加里	0	0	18	2	0	0
1993	21 / 6 - 28 / 6	T. Koryn	高蓮	0	0	183	0	0	2
	16 / 8 - 21 / 8	T. Tasha	泰莎	0	0	35	0	0	7
	9 / 9 - 14 / 9	T. Abe	艾貝	1	0	0	0	0	0
	15 / 9 - 17 / 9	S.T.S. Becky	貝姬	1	0	130	0	0	10
	23 / 9 - 27 / 9	T. Dot	黛蒂	0	1	48	0	1	0
	28 / 10 - 5 / 11	T. Ira	艾拉	2	0	30	0	1	0
1994	23 / 6 - 25 / 6	T.S. Sharon	莎朗	0	0	5	0	1	1
	25 / 8 - 29 / 8	S.T.S. Harry	夏里	1	0	2	0	0	2
1995	7 / 8 - 12 / 8	S.T.S. Helen	海倫	3	0	35	0	0	0
	25 / 8 - 1 / 9	T. Kent	肯特	0	0	5	0	0	0
	28 / 9 - 4 / 10	T. Sibyl	斯寶	0	0	14	0	0	0

表 4.11 (續)
TABLE 4.11 (cont'd)

年份 Year	日期 / 月份 Date / Month	Name of tropical cyclone	熱帶氣旋 名稱	死亡人數 Persons dead	失蹤人數 Persons missing	受傷人數 Persons injured	遇事越洋 船舶 Ocean-going vessels in trouble	受到毀壞 或翻沉的 小艇數目 Small craft sunk or wrecked	受到損壞 的小艇 數目 Small craft damaged
1996	5 / 9 - 10 / 9	T. Sally	莎莉	2	0	4	0	0	0
	18 / 9 - 23 / 9	S.T.S. Willie	威利	0	1	0	0	0	0
1997	31 / 7 - 3 / 8	T. Victor	維克托	1	0	58	0	0	0
	20 / 8 - 23 / 8	T. Zita	思蒂	0	0	3	0	0	0
1998	7 / 8 - 11 / 8	S.T.S. Penny	彭妮	1	0	1	0	0	0
	12 / 9 - 14 / 9	T.D. -	-	0	0	10	0	0	0
	15 / 10 - 27 / 10	T. Babs	寶絲	0	0	14	0	0	0
1999	28 / 4 - 2 / 5	T. Leo	利奧	0	0	14	0	0	0
	2 / 6 - 8 / 6	T. Maggie	瑪姬	0	0	5	0	2	0
	25 / 7 - 28 / 7	T.S. -	-	0	0	18	0	0	0
	19 / 8 - 23 / 8	T. Sam	森姆	4	0	328	0	0	0
	12 / 9 - 17 / 9	T. York	約克	2	0	500	3	*	*
	24 / 9 - 26 / 9	S.T.S. Cam	錦雯	1	0	23	0	0	0
2000	15 / 7 - 16 / 7	T.D. -	-	0	1	6	0	0	0
	27 / 8 - 1 / 9	S.T.S. Maria	瑪莉亞	2	0	0	0	0	0
	5 / 9 - 10 / 9	T. Wukong	悟空	0	0	1	0	0	1
2001	30 / 6 - 3 / 7	T. Durian	榴槤	0	0	1	0	0	0
	1 / 7 - 8 / 7	T. Utor	尤特	1	0	1	0	1	0
	23 / 7 - 26 / 7	T. Yutu	玉兔	0	0	10	0	0	0
	28 / 8 - 1 / 9	T.S. Fitow	菲特	2	0	0	0	0	0
2002	15 / 8 - 20 / 8	S.T.S. Vongfong	黃蜂	0	0	2	0	0	1
	10 / 9 - 13 / 9	S.T.S. Hagupit	黑格比	0	0	32	0	0	3
2003	16 / 7 - 23 / 7	S.T.S. Koni	天鵝	0	0	15	0	0	0
	17 / 7 - 25 / 7	T. Imbudo	伊布都	1	0	45	0	2	8
	17 / 8 - 26 / 8	T. Krovanh	科羅旺	0	0	11	0	0	2
	29 / 8 - 3 / 9	T. Dujuan	杜鵑	0	4	24	0	1	4
2004	14 / 7 - 16 / 7	T.S. Kompas	圓規	0	0	12	0	0	0
2005	10 / 8 - 14 / 8	S.T.S. Sanvu	珊瑚	0	0	0	0	0	1
	16 / 9 - 19 / 9	T.S. Vicente	韋森特	2	0	0	0	0	0
	21 / 9 - 28 / 9	T. Damrey	達維	0	0	5	0	0	1
2006	9 / 5 - 18 / 5	T. Chanchu	珍珠	0	0	6	0	1	0
	27 / 6 - 29 / 6	T.S. Jelawat	杰拉華	1	0	0	0	0	0
	31 / 7 - 4 / 8	T. Prapiroon	派比安	0	0	8	0	1	4
	6 / 8 - 10 / 8	S.T.S. Bopha	寶霞	0	0	0	0	0	1
	23 / 8 - 25 / 8	T.D. -	-	0	0	0	0	0	1
	12 / 9 - 13 / 9	T.D. -	-	0	0	1	0	0	0
	27 / 10 - 6 / 11	T. Cimaron	西馬侖	0	0	4	0	0	0

備註：資料由各有關政府部門及公共事業機構提供，同時亦參考了本地報章上的損毀報導。

N.B.: Based on information supplied by relevant government departments and public utility companies. Damage reports in the local press were also examined and collated.

* 缺乏數據 Data unavailable.

+ 被雷電擊中 Struck by lightning.

第五節

二零零六年熱帶氣旋的位置及強度數據

Section 5

**TROPICAL CYCLONE POSITION AND
INTENSITY DATA, 2006**

以下是二零零六年位於北太平洋西部及 南海區域（即由赤道至北緯45度、東經100度至180度所包括的範圍）的熱帶氣旋。其每六小時之位置及強度刊於本節。

熱帶氣旋名稱	頁
熱帶低氣壓：三月四至七日	110
颱風珍珠(0601)	111
熱帶風暴杰拉華(0602)	112
颱風艾雲尼(0603)	113
強烈熱帶風暴碧利斯(0604)	114
颱風格美(0605)	115
颱風派比安(0606)	116
強烈熱帶風暴瑪莉亞(0607)	117
颱風桑美(0608)	118
強烈熱帶風暴寶霞(0609)	119
強烈熱帶風暴悟空(0610)	120
熱帶風暴清松(0611)	121
熱帶低氣壓：八月二十三至二十五日	122
颱風伊歐凱(0612)	123
颱風珊珊(0613)	124
熱帶低氣壓：九月十二至十三日	125
颱風摩羯(0614)	126
熱帶低氣壓：九月二十二至二十五日	127
颱風象神(0615)	128
熱帶風暴貝碧嘉(0616)	129
熱帶風暴溫比亞(0617)	130
颱風蘇力(0618)	131
颱風西馬侖(0619)	132
颱風飛燕(0620)	133
颱風榴槤(0621)	134
颱風尤特(0622)	135
熱帶風暴潭美(0623)	136

在本節，風速均取10分鐘內的平均值，單位為米每秒（1米每秒約為1.94海里或3.6公里每小時）。熱帶氣旋的強度分為：-

- (a) T.D.: - 熱帶低氣壓
- (b) T.S.: - 熱帶風暴
- (c) S.T.S.: - 強烈熱帶風暴
- (d) T.: - 颱風

Six-hourly position and intensity data are tabulated in this section for the following tropical cyclones in 2006 over the western North Pacific and the South China Sea (i.e. the area bounded by the Equator, 45°N, 100°E and 180°).

Name of tropical cyclone	Page
Tropical Depression of 4 - 7 March	110
Typhoon Chanchu (0601)	111
Tropical Storm Jelawat (0602)	112
Typhoon Ewiniar (0603)	113
Severe Tropical Storm Bilis (0604)	114
Typhoon Kaemi (0605)	115
Typhoon Prapiroon (0606)	116
Severe Tropical Storm Maria (0607)	117
Typhoon Saomai (0608)	118
Severe Tropical Storm Bopha (0609)	119
Severe Tropical Storm Wukong (0610)	120
Tropical Storm Sonamu (0611)	121
Tropical Depression of 23 - 25 August	122
Typhoon Ioke (0612)	123
Typhoon Shanshan (0613)	124
Tropical Depression of 12 -13 September	125
Typhoon Yagi (0614)	126
Tropical Depression of 22 - 25 September	127
Typhoon Xangsane (0615)	128
Tropical Storm Bebinca (0616)	129
Tropical Storm Rumbia (0617)	130
Typhoon Soulik (0618)	131
Typhoon Cimaron (0619)	132
Typhoon Chebi (0620)	133
Typhoon Durian (0621)	134
Typhoon Utor (0622)	135
Tropical Storm Trami (0623)	136

In this section, surface winds refer to wind speeds averaged over a period of 10 minutes given in the unit of m/s (1 m/s is about 1.94 knots or 3.6 km/h). Intensities of tropical cyclones are classified as follows:-

- (a) T.D. : - tropical depression
- (b) T.S. : - tropical storm
- (c) S.T.S. : - severe tropical storm
- (d) T. : - typhoon

熱帶低氣壓由三月四至七日的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
THE TROPICAL DEPRESSION OF 4 - 7 MARCH

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
三月 Mar	4	0600	T.D.	1002	13	4.9	138.2
		1200	T.D.	1000	16	5.5	138.1
		1800	T.D.	1000	16	6.2	138.0
	5	0000	T.D.	1000	16	6.7	137.8
		0600	T.D.	1000	16	7.0	137.5
		1200	T.D.	1000	16	6.9	137.9
	6	1800	T.D.	1002	13	6.5	138.1
		0000	T.D.	1002	13	5.6	137.6
		0600	T.D.	1002	13	4.6	136.7
	7	1200	T.D.	1002	13	4.2	135.7
		1800	T.D.	1002	13	4.1	135.0
		0000	T.D.	1002	13	3.9	134.1
		0600	T.D.	1002	13	3.6	132.9
		1200	T.D.	1002	13	3.6	131.0

消散
Dissipated

颱風珍珠(0601)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON CHANCHU (0601)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
五月 May	9	0000	T.D.	1002	13	8.4	134.4
		0600	T.D.	1000	16	8.2	133.0
		1200	T.S.	996	18	8.3	132.1
		1800	T.S.	992	21	8.6	131.5
	10	0000	T.S.	988	23	9.1	130.8
		0600	S.T.S.	984	25	9.7	129.7
		1200	S.T.S.	980	28	10.0	129.3
		1800	S.T.S.	980	28	10.3	128.9
	11	0000	S.T.S.	980	28	10.9	128.1
		0600	S.T.S.	980	28	11.5	126.9
		1200	S.T.S.	980	28	12.1	125.7
		1800	S.T.S.	980	28	12.4	124.7
	12	0000	S.T.S.	980	28	12.7	123.7
		0600	S.T.S.	980	28	13.0	122.6
		1200	S.T.S.	980	28	13.0	121.8
		1800	S.T.S.	980	28	13.0	121.2
	13	0000	S.T.S.	975	31	13.5	120.5
		0600	T.	970	33	13.8	119.5
		1200	T.	970	33	13.9	118.9
		1800	T.	970	33	13.9	118.2
	14	0000	T.	965	36	13.9	117.5
		0600	T.	960	39	13.9	116.7
		1200	T.	950	43	13.9	116.0
		1800	T.	940	49	13.9	115.5
	15	0000	T.	935	51	14.1	115.3
		0600	T.	935	51	14.8	115.2
		1200	T.	935	51	15.3	115.1
		1800	T.	935	51	16.2	115.0
	16	0000	T.	940	49	16.9	114.9
		0600	T.	945	46	17.8	114.9
		1200	T.	945	46	18.7	115.1
		1800	T.	945	46	19.5	115.2
	17	0000	T.	945	46	20.5	115.5
		0600	T.	950	43	21.3	116.0
		1200	T.	955	41	22.5	116.7
		1800	T.	965	36	23.5	117.1
	18	0000	S.T.S.	984	25	24.4	118.0
		0600	T.S.	1000	18	26.0	119.3
		1200	T.D.	1002	13	28.5	121.3

變為溫帶氣旋
Became Extratropical

消散
Dissipated

颱風艾雲尼(0603)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON EWINIAR (0603)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
六月 Jun	30	0000	T.D.	1000	13	6.2	139.0
		0600	T.D.	1000	13	6.6	138.6
		1200	T.D.	996	16	7.0	138.1
		1800	T.S.	992	18	7.5	137.8
七月 Jul	1	0000	T.S.	988	21	8.4	137.7
		0600	T.S.	984	23	9.4	137.2
		1200	T.S.	984	23	10.2	136.8
		1800	T.S.	984	23	10.7	136.4
	2	0000	T.S.	984	23	10.9	135.9
		0600	T.S.	984	23	11.2	135.3
		1200	T.S.	984	23	11.7	134.9
		1800	S.T.S.	980	25	12.1	134.5
	3	0000	S.T.S.	975	31	12.4	134.4
		0600	T.	965	36	13.1	134.4
		1200	T.	960	39	14.1	134.1
		1800	T.	955	41	14.7	133.5
	4	0000	T.	950	43	15.3	133.0
		0600	T.	945	46	16.1	132.5
		1200	T.	940	49	16.8	132.2
		1800	T.	935	51	17.4	131.5
	5	0000	T.	935	51	17.9	130.9
		0600	T.	935	51	18.2	130.1
		1200	T.	940	49	18.5	129.6
		1800	T.	945	46	18.8	129.2
	6	0000	T.	945	46	19.2	128.8
		0600	T.	945	46	19.6	128.5
		1200	T.	945	46	20.1	128.3
		1800	T.	945	46	20.5	127.9
	7	0000	T.	945	46	20.8	127.6
		0600	T.	945	46	21.4	127.4
		1200	T.	945	46	22.0	127.1
		1800	T.	945	46	22.5	126.7
	8	0000	T.	945	46	23.2	126.5
		0600	T.	950	43	24.1	126.3
		1200	T.	955	41	25.1	126.1
		1800	T.	955	41	26.2	125.9
	9	0000	T.	960	41	27.5	125.8
		0600	T.	965	39	29.3	125.8
		1200	T.	970	36	30.7	125.8
		1800	T.	975	33	31.6	125.7
	10	0000	S.T.S.	984	28	33.6	126.2
		0600	T.S.	992	23	35.6	126.6
		1200	T.S.	996	18	37.1	127.4

變為溫帶氣旋
Became Extratropical

強烈熱帶風暴碧利斯(0604)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
SEVERE TROPICAL STORM BILIS (0604)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
七月 Jul	8	1200	T.D.	998	13	12.0	140.8
		1800	T.D.	996	16	12.2	139.4
	9	0000	T.D.	996	16	12.5	138.4
		0600	T.S.	992	18	13.2	137.0
		1200	T.S.	992	18	13.8	136.4
		1800	T.S.	992	18	14.7	135.7
	10	0000	T.S.	992	18	15.4	134.1
		0600	T.S.	988	21	16.5	132.1
		1200	T.S.	988	21	17.0	131.2
		1800	T.S.	984	23	17.4	130.3
	11	0000	T.S.	984	23	17.8	129.7
		0600	T.S.	984	23	18.9	128.9
		1200	S.T.S.	980	25	19.6	128.2
		1800	S.T.S.	980	25	20.2	127.0
	12	0000	S.T.S.	980	25	20.8	126.1
		0600	S.T.S.	975	28	21.4	125.4
		1200	S.T.S.	975	28	21.8	124.6
		1800	S.T.S.	975	28	22.2	124.2
	13	0000	S.T.S.	975	28	23.1	123.8
		0600	S.T.S.	975	28	23.8	123.2
		1200	S.T.S.	975	28	24.5	122.4
		1800	S.T.S.	975	28	25.1	121.3
	14	0000	S.T.S.	975	28	25.5	120.5
		0600	S.T.S.	980	25	26.5	119.7
		1200	T.S.	985	23	27.0	118.0
		1800	T.S.	988	18	26.9	116.5

消散
Dissipated

颱風格美(0605)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON KAEMI (0605)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
七月 Jul	18	1200	T.D.	1002	13	10.1	144.6
		1800	T.D.	1000	16	10.7	143.7
	19	0000	T.D.	1000	16	11.0	142.4
		0600	T.S.	996	18	11.7	140.9
		1200	T.S.	996	18	12.0	139.8
		1800	T.S.	992	21	12.2	139.0
	20	0000	T.S.	988	23	12.4	138.4
		0600	S.T.S.	984	25	13.5	137.7
		1200	S.T.S.	980	28	14.2	136.5
		1800	S.T.S.	980	28	14.6	135.6
	21	0000	S.T.S.	975	31	15.4	134.1
		0600	T.	970	33	15.8	132.8
		1200	T.	965	36	16.1	131.7
		1800	T.	960	39	16.4	130.8
	22	0000	T.	960	39	16.6	129.7
		0600	T.	960	39	16.8	129.1
		1200	T.	960	39	17.1	128.7
		1800	T.	960	39	17.9	128.2
	23	0000	T.	960	39	18.5	127.5
		0600	T.	960	39	19.2	126.6
		1200	T.	960	39	20.1	125.7
		1800	T.	960	39	20.6	124.4
	24	0000	T.	960	39	21.0	123.8
		0600	T.	960	39	21.6	123.0
		1200	T.	960	39	22.2	122.2
		1800	T.	965	36	22.9	121.0
	25	0000	T.	970	33	23.6	119.6
		0600	S.T.S.	980	28	24.3	118.7
		1200	T.S.	988	23	24.4	117.6
		1800	T.S.	990	21	24.5	116.7
	26	0000	T.D.	994	16	24.9	116.0

消散
Dissipated

颱風派比安(0606)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON PRAPIROON (0606)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
七月 Jul	31	0600	T.D.	998	13	16.3	122.7
		1200	T.D.	998	13	16.5	121.9
		1800	T.D.	996	16	16.5	119.7
八月 Aug	1	0000	T.D.	996	16	16.8	118.6
		0600	T.S.	992	18	17.1	117.7
		1200	T.S.	988	23	17.5	116.7
	2	1800	S.T.S.	984	25	17.7	116.0
		0000	S.T.S.	980	28	18.0	115.4
		0600	S.T.S.	975	31	18.8	114.8
	3	1200	T.	970	33	19.1	113.6
		1800	T.	970	33	19.4	113.4
		0000	T.	965	36	20.3	112.6
	4	0600	T.	965	36	21.0	112.2
		1200	T.	970	33	21.5	111.5
		1800	S.T.S.	980	28	21.8	110.2
		0000	T.S.	988	23	22.2	109.5
		0600	T.S.	992	18	22.8	108.9
		1200	T.D.	998	13	23.3	108.2

消散
Dissipated

強烈熱帶風暴瑪莉亞(0607)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
SEVERE TROPICAL STORM MARIA (0607)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
八月 Aug	5	0000	T.D.	1000	16	24.8	147.3
		0600	T.D.	1000	16	25.5	146.4
		1200	T.S.	996	18	25.9	145.3
		1800	T.S.	996	18	26.2	144.0
	6	0000	T.S.	992	21	26.9	142.8
		0600	S.T.S.	984	25	27.6	141.6
		1200	S.T.S.	980	28	28.2	140.6
		1800	S.T.S.	980	28	28.8	139.7
	7	0000	S.T.S.	980	28	29.6	138.8
		0600	S.T.S.	975	31	30.5	138.2
		1200	S.T.S.	975	31	31.1	137.8
		1800	S.T.S.	975	31	31.9	137.3
	8	0000	S.T.S.	980	28	32.6	136.6
		0600	S.T.S.	984	25	33.1	136.5
		1200	S.T.S.	984	25	33.8	137.3
		1800	S.T.S.	984	25	34.0	138.0
	9	0000	T.S.	988	23	34.5	139.8
		0600	T.S.	992	21	35.5	141.0
		1200	T.S.	992	21	36.3	142.4
		1800	T.S.	992	21	36.8	143.0
	10	0000	T.S.	996	18	36.9	143.8
		0600	T.S.	996	18	37.0	144.6
		1200	T.S.	996	18	37.1	145.8

變為溫帶氣旋
Became Extratropical

颱風桑美(0608)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON SAOMAI (0608)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
八月 Aug	5	0600	T.D.	1000	16	11.3	147.5
		1200	T.S.	996	18	11.7	146.7
		1800	T.S.	992	21	12.9	145.5
	6	0000	T.S.	992	21	14.2	144.2
		0600	T.S.	988	23	15.2	143.1
		1200	S.T.S.	984	25	16.4	141.8
	7	1800	S.T.S.	984	25	17.2	140.7
		0000	S.T.S.	975	31	18.0	139.5
		0600	T.	970	33	18.8	138.2
	8	1200	T.	970	33	19.6	136.7
		1800	T.	965	36	20.4	135.3
		0000	T.	960	39	21.0	134.0
	9	0600	T.	960	39	21.6	132.9
		1200	T.	960	39	22.4	131.4
		1800	T.	955	41	23.1	130.2
	10	0000	T.	950	43	23.9	128.5
		0600	T.	935	51	24.7	127.0
		1200	T.	920	59	25.4	125.3
	11	1800	T.	920	59	26.0	123.7
		0000	T.	920	59	26.5	122.5
		0600	T.	925	57	27.0	121.2
		1200	T.	940	49	27.2	120.0
		1800	S.T.S.	980	28	27.7	118.8
		0000	T.S.	996	18	28.2	117.5
		0600	T.D.	998	13	28.6	116.5

消散
Dissipated

消散
Dissipated

強烈熱帶風暴悟空(0610)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
SEVERE TROPICAL STORM WUKONG (0610)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
八月 Aug	12	1200	T.D.	998	13	21.8	141.0
		1800	T.D.	994	16	23.1	140.3
	13	0000	T.D.	994	16	24.6	139.5
		0600	T.S.	990	18	25.5	138.5
		1200	T.S.	986	21	25.9	138.2
		1800	T.S.	982	23	26.2	138.0
	14	0000	T.S.	982	23	26.4	137.9
		0600	T.S.	982	23	26.6	137.8
		1200	T.S.	982	23	26.8	137.8
		1800	T.S.	982	23	27.1	137.9
	15	0000	T.S.	982	23	27.8	138.3
		0600	S.T.S.	978	25	28.9	138.3
		1200	S.T.S.	978	25	29.7	137.9
		1800	S.T.S.	978	25	30.1	136.9
	16	0000	S.T.S.	978	25	29.8	135.4
		0600	S.T.S.	978	25	30.0	134.7
		1200	S.T.S.	978	25	29.8	134.1
		1800	S.T.S.	978	25	30.1	133.8
	17	0000	S.T.S.	978	25	30.9	133.2
		0600	S.T.S.	978	25	31.3	132.5
		1200	S.T.S.	978	25	31.6	131.9
		1800	T.S.	982	23	32.0	131.2
	18	0000	T.S.	982	23	32.4	130.7
		0600	T.S.	982	23	32.9	130.4
		1200	T.S.	982	23	33.3	130.3
		1800	T.S.	986	21	33.6	130.3
	19	0000	T.S.	986	21	34.3	130.3
		0600	T.S.	990	18	35.3	130.0
		1200	T.S.	990	18	36.2	129.8

變為溫帶氣旋
Became Extratropical

消散
Dissipated

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
八月 Aug	23	1200	T.D.	1000	13	18.5	111.5
		1800	T.D.	1000	13	19.0	111.6
	24	0000	T.D.	1000	13	19.5	112.0
		0600	T.D.	1000	13	20.3	112.9
		1200	T.D.	998	16	21.0	112.8
		1800	T.D.	998	16	21.4	112.5
消散 Dissipated							

颱風伊歐凱(0612)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON IOKE (0612)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
八月 Aug	27	1200	T.	925	51	17.2	179.5
		1800	T.	925	51	16.9	178.6
	28	0000	T.	925	51	16.6	177.6
		0600	T.	925	51	16.3	176.7
		1200	T.	925	51	16.1	175.9
		1800	T.	925	51	16.1	175.1
	29	0000	T.	925	51	16.1	174.3
		0600	T.	925	51	16.2	173.4
		1200	T.	925	51	16.2	172.6
		1800	T.	925	51	16.4	171.9
	30	0000	T.	920	54	16.6	171.3
		0600	T.	920	54	17.1	170.6
		1200	T.	920	54	17.4	169.9
		1800	T.	920	54	18.1	169.2
	31	0000	T.	920	54	18.7	168.3
		0600	T.	920	54	19.3	167.5
		1200	T.	925	51	19.7	166.4
		1800	T.	925	51	20.2	165.4
九月 Sep	1	0000	T.	925	51	20.7	164.5
		0600	T.	930	51	21.3	163.5
		1200	T.	930	51	21.8	162.4
		1800	T.	935	49	22.4	161.0
	2	0000	T.	940	49	23.0	159.3
		0600	T.	945	46	23.6	157.7
		1200	T.	945	43	24.0	156.3
		1800	T.	945	43	24.5	155.0
	3	0000	T.	945	43	25.1	153.6
		0600	T.	945	43	25.6	152.6
		1200	T.	950	43	26.6	151.8
		1800	T.	950	43	27.5	150.8
	4	0000	T.	955	41	28.5	149.9
		0600	T.	955	41	29.8	148.8
		1200	T.	960	39	30.8	148.0
		1800	T.	960	36	32.4	147.5
	5	0000	T.	965	33	34.1	147.2
		0600	T.	965	33	35.7	147.5
		1200	T.	965	33	37.4	149.1
		1800	T.	970	33	40.0	150.9
	6	0000	S.T.S.	975	31	42.2	153.1
		0600	S.T.S.	980	28	44.9	156.7
		1200	S.T.S.	980	28	47.6	161.2

變為溫帶氣旋
Became Extratropical

颱風珊珊(0613)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON SHANSHAN (0613)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
九月 Sep	9	0600	T.D.	1005	13	13.6	138.3
		1200	T.D.	1004	13	14.1	137.8
		1800	T.D.	1004	13	14.9	137.0
	10	0000	T.D.	1004	13	15.7	136.1
		0600	T.D.	1000	16	16.4	135.2
		1200	T.S.	996	18	16.9	134.8
	11	1800	T.S.	994	21	17.5	134.3
		0000	T.S.	990	23	18.0	133.9
		0600	S.T.S.	985	25	18.6	133.6
	12	1200	S.T.S.	980	28	19.0	133.1
		1800	S.T.S.	975	31	19.3	132.7
		0000	T.	965	36	19.4	132.1
	13	0600	T.	960	39	19.7	131.6
		1200	T.	960	39	20.1	131.0
		1800	T.	955	41	20.1	130.0
	14	0000	T.	955	41	20.2	129.1
		0600	T.	955	41	20.2	128.3
		1200	T.	955	41	20.3	127.6
	15	1800	T.	955	41	20.3	127.0
		0000	T.	955	41	20.3	126.1
		0600	T.	955	41	20.3	125.5
	16	1200	T.	955	41	20.5	125.0
		1800	T.	942	46	20.9	124.4
		0000	T.	942	46	21.3	124.2
	17	0600	T.	940	49	22.2	123.9
		1200	T.	930	51	23.1	123.8
		1800	T.	925	54	24.0	123.8
	18	0000	T.	925	54	24.9	124.2
		0600	T.	930	51	26.0	124.8
		1200	T.	930	51	27.1	125.9
	19	1800	T.	935	49	28.5	127.0
		0000	T.	940	46	30.3	128.0
		0600	T.	950	41	31.3	129.0
	20	1200	T.	955	39	34.0	130.3
		1800	T.	965	33	35.8	131.3
		0000	S.T.S.	975	31	37.0	132.0
	21	0600	S.T.S.	980	28	38.5	133.3
		1200	S.T.S.	980	28	40.1	134.6
		1800	S.T.S.	980	28	41.1	135.1
	22	0000	S.T.S.	985	25	42.0	135.8

變為溫帶氣旋
Became Extratropical

熱帶低氣壓由九月十二至十三日的每六小時位置及強度
**SIX-HOURLY POSITION AND INTENSITY DATA OF
 THE TROPICAL DEPRESSION OF 12 -13 SEPTEMBER**

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
九月 Sep	12	0600	T.D.	1000	13	18.2	115.3
		1200	T.D.	1000	13	20.3	114.9
		1800	T.D.	998	16	20.7	113.8
	13	0000	T.D.	998	16	21.0	112.9
		0600	T.D.	998	16	21.3	112.1

消散
Dissipated

颱風摩羯(0614)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON YAGI (0614)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
九月 Sep	16	1800	T.D.	1006	13	20.2	156.6
		0000	T.D.	1004	16	20.5	157.0
	17	0600	T.S.	1002	18	20.7	157.6
		1200	T.S.	1000	18	20.8	158.1
		1800	T.S.	995	21	20.7	158.5
		0000	T.S.	990	23	20.6	158.8
	18	0600	T.S.	990	23	20.5	159.1
		1200	S.T.S.	985	25	20.4	159.2
		1800	S.T.S.	980	28	20.3	159.3
		0000	T.	970	33	20.1	159.1
	19	0600	T.	960	39	20.0	158.6
		1200	T.	960	39	20.0	157.8
		1800	T.	950	43	19.8	156.8
		0000	T.	940	46	19.7	155.6
	20	0600	T.	940	46	19.6	154.1
		1200	T.	940	46	19.6	152.5
		1800	T.	940	46	19.7	150.8
		0000	T.	940	46	20.1	149.3
	21	0600	T.	930	49	20.7	147.7
		1200	T.	920	54	21.5	146.2
		1800	T.	920	54	22.6	144.8
		0000	T.	920	54	23.7	143.6
	22	0600	T.	922	51	25.0	142.6
		1200	T.	925	49	26.1	142.1
		1800	T.	940	43	27.3	141.9
		0000	T.	950	41	28.5	142.2
	23	0600	T.	950	41	30.0	142.8
		1200	T.	955	39	31.0	143.7
		1800	T.	955	39	32.1	145.1
		0000	T.	965	36	33.8	147.0
	24	0600	S.T.S.	975	31	35.3	149.1
		1200	S.T.S.	980	28	36.4	151.3
		1800	S.T.S.	985	25	38.2	155.1
		0000	S.T.S.	985	25	40.3	159.4

變為溫帶氣旋
Became Extratropical

熱帶低氣壓由九月二十二至二十五日的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
THE TROPICAL DEPRESSION OF 22 - 25 SEPTEMBER

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
九月 Sep	22	1200	T.D.	1000	13	13.5	114.3
		1800	T.D.	1000	13	13.7	113.9
	23	0000	T.D.	996	16	13.8	113.5
		0600	T.D.	996	16	14.1	112.9
		1200	T.D.	996	16	14.4	112.1
		1800	T.D.	996	16	15.0	111.8
	24	0000	T.D.	996	16	15.8	111.3
		0600	T.D.	996	16	17.0	110.6
		1200	T.D.	996	16	17.3	109.6
		1800	T.D.	996	16	17.4	108.8
	25	0000	T.D.	996	16	17.5	107.9

消散
Dissipated

颱風象神(0615)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON XANGSANE (0615)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
九月 Sep	25	1200	T.D.	1000	13	11.7	128.7
		1800	T.D.	998	16	11.8	128.1
	26	0000	T.S.	996	18	11.9	127.6
		0600	T.S.	992	21	12.0	127.2
		1200	T.S.	988	23	12.1	126.8
		1800	S.T.S.	984	25	12.3	126.2
	27	0000	S.T.S.	975	31	12.5	125.5
		0600	T.	965	36	12.9	124.6
		1200	T.	960	39	13.1	123.8
		1800	T.	955	41	13.6	122.7
	28	0000	T.	955	41	14.1	121.6
		0600	T.	955	41	14.6	120.4
		1200	T.	955	41	15.3	119.3
		1800	T.	955	41	15.6	118.1
	29	0000	T.	955	41	15.4	117.0
		0600	T.	955	41	15.5	115.7
		1200	T.	950	43	15.6	114.4
		1800	T.	940	49	15.6	113.3
	30	0000	T.	930	54	15.6	112.5
		0600	T.	930	54	15.7	111.6
		1200	T.	935	51	15.9	110.6
		1800	T.	940	49	16.0	109.7
十月 Oct	1	0000	T.	950	43	16.1	108.7
		0600	T.	965	36	15.8	107.4
		1200	S.T.S.	980	28	15.4	106.4
		1800	T.S.	992	21	15.4	104.8
	2	0000	T.D.	1000	13	15.6	103.8

消散
Dissipated

熱帶風暴貝碧嘉(0616)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TROPICAL STORM BEBINCA (0616)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
十月 Oct	1	1800	T.D.	996	16	15.1	130.5
		0000	T.D.	996	16	14.9	131.0
	2	0600	T.D.	996	16	14.5	131.0
		1200	T.D.	996	16	14.6	130.6
		1800	T.S.	992	18	14.8	130.3
		0000	T.S.	992	18	15.1	130.5
	3	0600	T.S.	992	18	15.9	130.6
		1200	T.S.	992	18	17.0	130.7
		1800	T.S.	988	21	18.0	130.8
		0000	T.S.	988	21	18.8	130.9
	4	0600	T.S.	988	21	19.6	131.3
		1200	T.S.	988	21	20.3	131.8
		1800	T.S.	988	21	21.6	133.1
		0000	T.S.	988	21	23.7	134.2
	5	0600	T.S.	988	21	25.6	134.7
		1200	T.S.	988	21	26.9	136.1
		1800	T.S.	988	21	27.8	137.8
		0000	T.S.	988	21	29.1	139.0

變為溫帶氣旋
Became Extratropical

[illegible]

颱風蘇力(0618)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON SOULIK (0618)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
十月 Oct	9	0000	T.D.	1000	16	14.6	157.8
		0600	T.D.	1000	16	15.6	156.7
		1200	T.D.	1000	16	16.4	155.8
		1800	T.S.	996	18	17.4	154.4
	10	0000	T.S.	996	18	17.9	153.2
		0600	T.S.	992	21	18.5	152.3
		1200	T.S.	988	23	19.0	150.7
		1800	S.T.S.	984	25	19.3	148.9
	11	0000	S.T.S.	980	28	20.1	146.6
		0600	S.T.S.	975	31	20.5	145.0
		1200	S.T.S.	975	31	20.9	143.7
		1800	S.T.S.	975	31	21.3	142.7
	12	0000	S.T.S.	975	31	21.9	141.8
		0600	S.T.S.	975	31	22.8	141.5
		1200	T.	970	33	23.3	141.1
		1800	T.	965	36	23.5	140.7
	13	0000	T.	960	39	23.7	140.6
		0600	T.	955	41	23.8	140.8
		1200	T.	955	41	23.9	141.0
		1800	T.	955	41	24.1	141.1
	14	0000	T.	955	41	24.4	141.1
		0600	T.	955	41	24.8	141.0
		1200	T.	955	41	25.4	141.0
		1800	T.	960	39	26.2	141.1
	15	0000	T.	965	36	27.4	141.6
		0600	T.	970	33	29.0	142.3
		1200	S.T.S.	975	31	30.5	144.0
		1800	S.T.S.	980	28	32.3	146.3
	16	0000	S.T.S.	984	25	33.6	149.2

變為溫帶氣旋
Became Extratropical

颱風西馬侖(0619)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON CIMARON (0619)

				估計最低 中心氣壓 (百帕斯卡)	估計 最高風速 (米每秒)		
		時間 (協調世界時)		Estimated minimum central pressure (hPa)	Estimated maximum surface winds (m/s)	北緯	東經
月份 Month	日期 Date	Time (UTC)	強度 Intensity			Lat. ° N	Long. ° E
十月 Oct	26	1800	T.D.	1004	13	12.6	133.7
		27	0000	T.D.	1000	16	12.7
	28	0600	T.S.	997	18	12.8	131.0
		1200	T.S.	992	21	13.3	130.0
		1800	S.T.S.	985	25	13.9	129.1
		0000	S.T.S.	982	28	14.4	128.1
		0600	T.	975	33	14.9	127.2
		1200	T.	970	36	15.3	126.4
		1800	T.	955	41	15.6	125.7
	29	0000	T.	945	49	16.0	124.6
		0600	T.	930	54	16.3	123.6
		1200	T.	930	54	16.5	122.6
	30	1800	T.	940	49	16.7	121.3
		0000	T.	950	43	16.9	120.0
		0600	T.	955	41	16.9	118.8
	31	1200	T.	955	41	16.8	118.5
		1800	T.	955	41	16.9	118.1
		0000	T.	955	41	17.3	117.4
		0600	T.	955	41	17.7	116.8
		1200	T.	955	41	18.2	116.6
		1800	T.	950	43	18.4	116.4
十一月 Nov		1	0000	T.	950	43	18.8
	0600		T.	945	46	18.9	116.2
	1200		T.	945	46	19.0	116.3
	2	1800	T.	945	46	19.0	116.4
		0000	T.	950	43	19.1	116.6
		0600	T.	955	41	19.1	116.6
	3	1200	T.	965	36	18.9	116.6
		1800	S.T.S.	975	31	18.4	116.3
		0000	S.T.S.	980	28	17.7	116.5
		0600	S.T.S.	985	25	17.3	116.4
		1200	T.S.	990	23	17.1	116.3
	4	1800	T.S.	992	21	16.8	116.1
		0000	T.S.	995	18	16.4	115.9
		0600	T.D.	997	16	15.8	115.8
	5	1200	T.D.	998	16	15.7	115.7
		1800	T.D.	998	16	15.5	115.5
		0000	T.D.	1000	16	15.3	115.2
		0600	T.D.	1000	16	15.2	114.7
		1200	T.D.	1000	16	14.9	114.4
		1800	T.D.	1000	16	14.2	114.2
		6	0000	T.D.	1002	13	13.7
消散 Dissipated							

颱風飛燕(0620)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON CHEBI (0620)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E
十一月 Nov	9	0000	T.D.	1008	13	15.7	132.5
		0600	T.D.	1004	16	15.8	131.5
		1200	T.S.	1000	18	15.9	130.2
		1800	T.S.	990	23	16.0	128.7
	10	0000	S.T.S.	980	28	16.1	127.2
		0600	T.	960	39	16.2	125.6
		1200	T.	935	51	16.2	124.2
		1800	T.	935	51	16.3	122.8
	11	0000	T.	940	49	16.1	121.8
		0600	T.	955	41	15.9	120.4
		1200	T.	960	39	15.8	119.3
		1800	T.	965	36	15.6	118.5
	12	0000	T.	965	36	15.4	117.6
		0600	T.	970	33	15.1	116.6
		1200	S.T.S.	975	31	15.1	115.3
		1800	S.T.S.	980	28	15.1	114.0
	13	0000	S.T.S.	980	28	15.4	113.5
		0600	T.S.	985	23	15.7	113.2
		1200	T.S.	988	23	16.1	112.6
		1800	T.S.	995	18	16.6	112.0
	14	0000	T.D.	1000	16	17.2	111.6
		0600	T.D.	1004	13	17.6	111.0

消散
Dissipated

颱風榴槿(0621)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON DURIAN (0621)

		時間 (協調世界時)		估計最低 中心氣壓 (百帕斯卡) Estimated minimum central pressure (hPa)	估計 最高風速 (米每秒) Estimated maximum surface winds (m/s)	北緯 Lat. °N	東經 Long. °E	
月份 Month	日期 Date	Time (UTC)	強度 Intensity					
十一月 Nov	25	1800	T.D.	1005	13	8.9	145.6	
		26	0000	T.D.	1002	16	9.6	144.4
	26	0600	T.S.	998	18	10.0	143.0	
		1200	T.S.	996	18	10.1	142.1	
		1800	T.S.	996	18	10.2	141.3	
		27	0000	T.S.	992	21	10.2	140.3
			0600	T.S.	992	21	10.3	139.2
			1200	T.S.	990	23	10.5	137.6
			1800	S.T.S.	985	25	10.7	136.3
		28	0000	S.T.S.	980	28	11.2	134.7
	0600		S.T.S.	980	28	11.8	133.2	
	1200		S.T.S.	975	31	12.2	131.7	
	1800		T.	965	36	12.5	130.1	
	29	0000	T.	955	41	12.9	128.6	
		0600	T.	940	49	13.1	127.3	
		1200	T.	935	51	13.2	126.4	
		1800	T.	935	51	13.4	125.4	
	30	0000	T.	940	49	13.4	124.7	
		0600	T.	945	46	13.4	123.5	
		1200	T.	950	43	13.5	122.4	
		1800	T.	955	41	13.5	121.2	
	十二月 Dec	1	0000	T.	960	39	13.6	120.0
			0600	T.	965	36	13.6	119.2
			1200	T.	970	33	13.6	118.6
			1800	T.	970	33	13.5	117.7
		2	0000	T.	970	33	13.5	116.9
0600			T.	970	33	13.6	116.3	
1200			T.	970	33	13.7	115.6	
1800			T.	960	39	13.9	114.6	
3		0000	T.	955	41	13.8	113.9	
		0600	T.	955	41	13.7	113.2	
		1200	T.	955	41	13.5	112.8	
		1800	T.	960	39	13.2	112.2	
4		0000	T.	965	36	12.8	111.4	
		0600	S.T.S.	975	31	11.8	110.5	
		1200	S.T.S.	980	28	11.1	109.6	
		1800	S.T.S.	975	31	10.4	108.4	
5		0000	T.S.	985	23	10.0	107.2	
		0600	T.D.	997	17	9.4	106.1	

消散
Dissipated

颱風尤特(0622)的每六小時位置及強度
SIX-HOURLY POSITION AND INTENSITY DATA OF
TYPHOON UTOR (0622)

月份 Month	日期 Date	時間 (協調世界時) Time (UTC)	強度 Intensity	估計最低 中心氣壓 (百帕斯卡)	估計 最高風速 (米每秒)	北緯 Lat. ° N	東經 Long. ° E
				Estimated minimum central pressure (hPa)	Estimated maximum surface winds (m/s)		
十二月 Dec	7	0000	T.D.	1005	13	9.1	136.6
		0600	T.D.	1002	13	9.2	135.8
		1200	T.D.	1000	16	9.5	134.7
		1800	T.S.	995	18	9.7	133.7
	8	0000	T.S.	990	21	10.3	131.8
		0600	T.S.	990	21	10.6	130.2
		1200	S.T.S.	985	25	10.8	129.2
		1800	S.T.S.	982	28	10.9	127.9
	9	0000	S.T.S.	975	31	11.1	126.6
		0600	T.	970	33	11.3	125.6
		1200	T.	975	33	11.5	124.2
		1800	T.	970	33	11.9	122.9*
	10	0000	T.	960	39	12.1	121.7
		0600	T.	960	39	12.4	120.6
		1200	T.	965	36	12.8	119.3
		1800	T.	965	36	13.0	118.8
	11	0000	T.	965	36	13.2	118.4
		0600	T.	965	36	13.5	117.9
		1200	T.	960	39	13.7	117.4
		1800	T.	960	39	13.8	116.8
	12	0000	T.	960	39	14.1	115.9
		0600	T.	955	41	14.8	114.8
		1200	T.	950	43	15.5	114.0
		1800	T.	950	43	16.0	113.1
	13	0000	T.	950	43	16.4	112.6
		0600	T.	955	41	16.7	112.3
		1200	T.	965	36	17.1	112.3
		1800	S.T.S.	980	28	17.4	112.3
	14	0000	T.S.	995	18	17.5	112.4
		0600	T.D.	1000	16	17.7	112.7
		1200	T.D.	1002	13	17.8	113.0
消散 Dissipated							

* 最近修訂日期: 2016年6月22日

* Last revision date: 22 June 2016

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