## 3.9 超強颱風海馬(1622)：二零一六年十月十四日至二十二日

海馬是二零一六年第九個影響香港的熱帶氣旋。海馬吹襲香港期間，天文台需要發出八號烈風或暴風信號，是自一九九五年颱風斯寶以來再一次在十月份發出八號熱帶氣旋警告信號。

熱帶低氣壓海馬於十月十四日下午在關島以南約710公里的北太平洋西部上形成，大致向西北移動，並逐漸增強。海馬於十月十七日晚上發展為超強颱風，並向西北偏西移動，翌日達到其最高強度，中心附近最高持續風速估計為每小時230公里。海馬於十月二十日凌晨橫過呂宋北部及減弱為颱風，日間採取西北路徑進入南海東北部。翌日海馬轉向偏北方向移動，下午在廣東東部汕尾附近登陸，晚間在江西減弱為一個低壓區。

根據報章報導，海馬在呂宋北部造成嚴重破壞，廣泛地區出現水浸及山泥傾瀉，多間房屋倒塌，最少八人死亡，逾9萬人需要緊急疏散。海馬亦為廣東及福建帶來狂風大雨，最少180萬人受災，約600間房屋倒塌，海陸空交通大受影響，直接經濟損失超過50億元人民幣。

香港天文台在十月二十日早上8時20分發出一號戒備信號，當時海馬集結在香港之東南偏東約750公里。日間本港吹輕微至和緩偏北風。隨著海馬靠近廣東沿岸，天文台在晚上8時40分發出三號強風信號，當時海馬位於香港之東南約440公里。晚間本港風勢逐漸增強，吹清勁北至西北風，高地間中吹強風。由於海馬繼續靠近珠江口以東的沿岸地區，天文台在十月二十一日上午6時10分發出八號西北烈風或暴風信號，當時海馬集結在香港之東南偏東約230公里。本港風力顯著增強，普遍吹強風至烈風程度的西北風。海馬於下午一時左右在汕尾附近登陸並最接近香港，其中心在香港之東北偏東約110公里。隨著各區開始轉吹西南風，天文台於下午2時15分改發八號西南烈風或暴風信號。下午海馬移入內陸及減弱，本港風力逐漸緩和，天文台於下午5時20分改發三號強風信號，取代八號西南烈風或暴風信號，並於當晚10時10分取消所有熱帶氣旋警告信號。

在海馬的影響下，九龍天星碼頭、香港國際機場及流浮山錄得的最高每小時平均風速分別為每小時63、65及70公里，而最高陣風則分別為每小時88、85及110公里。橫瀾島錄得最高潮位2.89米(海圖基準面以上)，而尖鼻咀及橫瀾島則錄得最大風暴潮(天文潮高度以上) 0.65米。各站錄得的最低瞬時海平面氣壓如下：

| 站 | 最低瞬時海平面氣壓 (百帕斯卡) | 日期/月份 | 時間 |
|---|---|---|---|
| 香港天文台總部 | 990.7 | 21/10 | 上午 11 時 32 分 |
| 香港國際機場 | 992.4 | 21/10 | 下午 12 時 11 分 |
| 打鼓嶺 | 989.2 | 21/10 | 下午 12 時 26 分 |
| 大埔 | 987.8 | 21/10 | 下午 12 時 30 分 |
| 沙田 | 989.7 | 21/10 | 下午 12 時 06 分 |
| 上水 | 989.6 | 21/10 | 下午 12 時 19 分 |
| 流浮山 | 990.2 | 21/10 | 正午 12 時 |
| 長洲 | 990.3 | 21/10 | 下午 12 時 05 分 |
| 橫瀾島 | 988.3 | 21/10 | 上午 10 時 32 分 |

在海馬前方的下沉氣流影響下，十月二十日本港部分時間有陽光及有煙霞。海馬的環流於十月二十一日為本港帶來狂風大雨，各區普遍錄得超過70毫米雨量，新界東部、九龍城及黃大仙的雨量更超過100毫米。隨著海馬移入內陸，十月二十二日本港天氣好轉，部分時間有陽光。

海馬吹襲香港期間，最少有13人受傷，另有近300宗塌樹報告及多宗高空墜物意外。荔枝角消防局附近及西貢龍尾村分別有大樹塌下，壓毀三輛私家車。東鐵線大學站附近的塌樹則導致列車服務一度受阻。大圍及沙田分別有帆布篷篷及圍板被吹翻，導致兩人受傷。一人在西貢早禾坑對開海面划獨木舟時墮海，其後獲救。在強風的影響下，深圳灣公路大橋一度封閉。香港國際機場有超過730班航班取消或延誤。

表3.9.1- 3.9.4 分別是海馬影響香港期間各站錄得的最高風速、持續風力達到強風及烈風程度的時段、香港的日雨量及最高潮位資料。圖3.9.1 - 3.9.2 分別為海馬的路徑圖和本港的雨量分佈圖。圖3.9.3顯示香港各站錄得的風向和風速。圖3.9.4顯示天文台總部及大埔錄得的海平面氣壓。圖3.9.5- 3.9.6分別顯示海馬的衛星圖像及雷達圖像。海馬在香港造成的破壞可參見圖3.9.7。

## 3.9 Super Typhoon Haima (1622): 14 – 22 October 2016

Haima was the ninth tropical cyclone affecting Hong Kong in 2016. The Observatory issued the No. 8 Gale or Storm Signal during the passage of Haima, necessitating the issuance of the No. 8 Signal once again in October since Typhoon Sibyl in 1995.

Haima formed as a tropical depression over the western North Pacific about 710 km south of Guam on the afternoon of 14 October. Moving generally northwestwards, Haima intensified gradually and developed into a super typhoon on the night of 17 October. Tracking to the west-northwest, it reached its peak intensity the next day with an estimated sustained wind of 230 km/h near its centre. Haima moved across northern Luzon on the early morning of 20 October and weakened into a typhoon. It then moved northwestwards and entered the northeastern part of the South China Sea during the day. Haima turned northwards on 21 October and made landfall near Shanwei in eastern Guangdong that afternoon, before finally degenerating into an area of low pressure over Jiangxi during the night.

According to press reports, Haima wreaked havoc in northern Luzon with extensive flooding and landslides as well as the collapse of many houses. At least eight people were killed and more than 90 000 people had to be evacuated. Haima also brought heavy rain and squalls to Guangdong and Fujian. At least 1.8 million people were affected and around 600 houses collapsed. Transportation services were seriously affected and the direct economic loss exceeded 5 billion RMB.

In Hong Kong, the Standby Signal No. 1 was issued at 8:20 a.m. on 20 October when Haima was about 750 km east-southeast of the territory. Local winds were light to moderate northerlies during the day. As Haima edged closer to the coast of Guangdong, the Strong Wind Signal No. 3 was issued at 8:40 p.m. that night when Haima was about 440 km southeast of Hong Kong. Local winds strengthened gradually during the night, becoming fresh north to northwesterlies and occasionally strong on high ground. With Haima approaching the coastal areas east of the Pearl River Estuary, the No. 8 Northwest Gale or Storm Signal was issued at 6:10 a.m. on 21 October when it was about 230 km east-southeast of Hong Kong. Local winds strengthened significantly and became generally strong to gale force from the northwest. Haima made landfall near Shanwei around 1 p.m. and was closest to Hong Kong with its centre about 110 km east-northeast of the territory. Local winds started to turn southwesterly and the No. 8 Southwest Gale or Storm Signal was issued at 2:15 p.m. on 21 October. With Haima moving inland and weakening in the afternoon, local winds subsided gradually. The No. 8 Southwest Gale or Storm Signal was replaced by the Strong Wind Signal No. 3 at 5:20 p.m., and all tropical cyclone warning signals were cancelled at 10:10 p.m. that night.

Under the influence of Haima, maximum hourly mean winds of 63, 65 and 70 km/h and gusts of 88, 85 and 110 km/h were recorded at Star Ferry (Kowloon), the Hong Kong International Airport and Lau Fau Shan respectively. A maximum sea level (above chart datum) of 2.89 m was recorded at Waglan Island, and a maximum storm surge (above astronomical tide) of 0.65 m was recorded at Tsim Bei Tsui and Waglan Island. The lowest instantaneous mean sea-level pressures recorded at some selected stations are as follows:

| Station | Lowest instantaneous mean sea-level pressure (hPa) | Date/Month | Time |
|---|---|---|---|
| Hong Kong Observatory Headquarters | 990.7 | 21/10 | 11:32 a.m. |
| Hong Kong International Airport | 992.4 | 21/10 | 12:11 p.m. |
| Ta Kwu Ling | 989.2 | 21/10 | 12:26 p.m. |
| Tai Po | 987.8 | 21/10 | 12:30 p.m. |
| Shatin | 989.7 | 21/10 | 12:06 p.m. |
| Sheung Shui | 989.6 | 21/10 | 12:19 p.m. |
| Lau Fau Shan | 990.2 | 21/10 | 12:00 noon |
| Cheung Chau | 990.3 | 21/10 | 12:05 p.m. |
| Waglan Island | 988.3 | 21/10 | 10:32 a.m. |

Locally, there were sunny periods and haze on 20 October under the influence of the subsiding air ahead of Haima. The circulation of Haima brought heavy rain and squalls to Hong Kong on 21 October. More than 70 millimetres of rainfall were generally recorded over the territory, and rainfall over the eastern part of the New Territories, Kowloon City and Wong Tai Sin even exceeded 100 millimetres. As Haima moved inland, local weather improved on 22 October with sunny periods.

In Hong Kong, at least 13 people were injured during the passage of Haima. There were nearly 300 reports of fallen trees and many incidents of falling objects. Trees toppled near Lai Chi Kok Fire Station and Lung Mei Tsuen in Sai Kung, damaging three private cars; while fallen trees near the University station of the East Rail Line resulted in a disruption of train services. A canopy in Tai Wai and a hoarding in Sha Tin were blown down, injuring two persons. A canoeist fell into the sea off Tso Wo Hang in Sai Kung and was later rescued. The Shenzhen Bay Bridge was closed under high winds. Over 730 flights were cancelled or delayed at the Hong Kong International Airport.

Information on the maximum wind, period of strong and gale force winds, daily rainfall and maximum sea level reached in Hong Kong during the passage of Haima is given in Tables 3.9.1 - 3.9.4 respectively. Figures 3.9.1 - 3.9.2 show respectively the track of Haima and the rainfall distribution for Hong Kong. Figure 3.4.3 shows the winds recorded at various stations in Hong Kong. Figure 3.4.4 shows the trace of mean sea-level pressure recorded at the Hong Kong Observatory's Headquarters and Tai Po. Figures 3.9.5 – 3.9.6 show respectively a satellite imagery and a radar imagery of Haima. Some damages caused by Haima in Hong Kong are illustrated in Figures 3.9.7.

表 3.9.1　在海馬影響下，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 3.9.1　Maximum gust peak speeds and maximum hourly mean winds with associated wind directions recorded at various stations when the tropical cyclone warning signals for Haima were in force

| 站（參閱圖 1.1）Station (See Fig. 1.1) | | 最高陣風 Maximum Gust | | | | | 最高每小時平均風速 Maximum Hourly Mean Wind | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 風向 Direction | | 風速 (公里/時) Speed (km/h) | 日期/月份 Date/Month | 時間 Time | 風向 Direction | | 風速 (公里/時) Speed (km/h) | 日期/月份 Date/Month | 時間 Time |
| 黃麻角(赤柱) | Bluff Head (Stanley) | 西北 | NW | 68 | 21/10 | 10:06 | 西北 | NW | 40 | 21/10 | 11:00 |
| 中環碼頭 | Central Pier | 西 | W | 85 | 21/10 | 09:31 | 西 | W | 51 | 21/10 | 12:00 |
| 長洲 | Cheung Chau | 西北偏西 | WNW | 108 | 21/10 | 12:21 | 西北偏西 | WNW | 67 | 21/10 | 13:00 |
| 長洲泳灘 | Cheung Chau Beach | 西北偏西 | WNW | 101 | 21/10 | 11:14 | 西 | W | 59 | 21/10 | 13:00 |
| | | 西 | W | 101 | 21/10 | 12:19 | | | | | |
| 青洲 | Green Island | 西北偏西 | WNW | 96 | 21/10 | 12:50 | 西北偏北 | NNW | 67 | 21/10 | 08:00 |
| 香港國際機場 | Hong Kong International Airport | 西北 | NW | 85 | 21/10 | 11:09 | 西北偏西 | WNW | 65 | 21/10 | 12:00 |
| 啟德 | Kai Tak | 西 | W | 90 | 21/10 | 09:22 | 西 | W | 43 | 21/10 | 11:00 |
| 京士柏 | King's Park | 西北偏西 | WNW | 79 | 21/10 | 13:19 | 西北偏西 | WNW | 31 | 21/10 | 13:00 |
| | | | | | | | 西北偏西 | WNW | 31 | 21/10 | 14:00 |
| 流浮山 | Lau Fau Shan | 西 | W | 110 | 21/10 | 13:19 | 西 | W | 70 | 21/10 | 13:00 |
| 北角 | North Point | 西南偏西 | WSW | 88 | 21/10 | 13:49 | 西南偏西 | WSW | 58 | 21/10 | 14:00 |
| 坪洲 | Peng Chau | 西南 | SW | 101 | 21/10 | 11:35 | 西南偏西 | WSW | 59 | 21/10 | 11:00 |
| 平洲 | Ping Chau | 西 | W | 68 | 21/10 | 13:02 | 西 | W | 38 | 21/10 | 15:00 |
| 西貢 | Sai Kung | 西北 | NW | 79 | 21/10 | 09:40 | 西北 | NW | 38 | 21/10 | 10:00 |
| 沙洲 | Sha Chau | 西 | W | 68 | 21/10 | 12:23 | 西南偏南 | SSW | 43 | 21/10 | 19:00 |
| 沙螺灣 | Sha Lo Wan | 西南偏南 | SSW | 72 | 21/10 | 16:41 | 西南偏西 | WSW | 31 | 21/10 | 14:00 |
| 沙田 | Sha Tin | 西南偏西 | WSW | 75 | 21/10 | 12:35 | 西南 | SW | 23 | 21/10 | 16:00 |
| 石崗 | Shek Kong | 西 | W | 58 | 21/10 | 11:58 | 西 | W | 22 | 21/10 | 12:00 |
| 九龍天星碼頭 | Star Ferry (Kowloon) | 西 | W | 88 | 21/10 | 12:43 | 西 | W | 63 | 21/10 | 13:00 |
| 打鼓嶺 | Ta Kwu Ling | 西南偏西 | WSW | 54 | 21/10 | 12:16 | 西南偏南 | SSW | 20 | 21/10 | 18:00 |
| 大美督 | Tai Mei Tuk | 西北偏西 | WNW | 104 | 21/10 | 12:47 | 西 | W | 63 | 21/10 | 13:00 |
| 大帽山 | Tai Mo Shan | 西北偏西 | WNW | 155 | 21/10 | 12:33 | 西北偏西 | WNW | 115 | 21/10 | 13:00 |
| 大埔滘 | Tai Po Kau | 西 | W | 88 | 21/10 | 11:50 | 西 | W | 47 | 21/10 | 13:00 |
| 塔門 | Tap Mun | 西 | W | 106 | 21/10 | 13:33 | 西 | W | 62 | 21/10 | 12:00 |
| 大老山 | Tate's Cairn | 西北偏西 | WNW | 122 | 21/10 | 10:40 | 西北 | NW | 77 | 21/10 | 10:00 |
| 將軍澳 | Tseung Kwan O | 西北偏西 | WNW | 52 | 21/10 | 10:40 | 西北偏北 | NNW | 19 | 21/10 | 07:00 |
| 青衣島蜆殼油庫 | Tsing Yi Shell Oil Depot | 西北偏西 | WNW | 85 | 21/10 | 12:29 | 西北偏西 | WNW | 51 | 21/10 | 13:00 |
| 屯門政府合署 | Tuen Mun Government Offices | 西北偏西 | WNW | 96 | 21/10 | 12:03 | 西北偏西 | WNW | 40 | 21/10 | 13:00 |
| 橫瀾島 | Waglan Island | 西 | W | 115 | 21/10 | 12:35 | 西南 | SW | 83 | 21/10 | 16:00 |
| | | | | | | | 西南 | SW | 83 | 21/10 | 17:00 |
| 濕地公園 | Wetland Park | 西北偏西 | WNW | 68 | 21/10 | 11:08 | 西北偏西 | WNW | 22 | 21/10 | 12:00 |
| 黃竹坑 | Wong Chuk Hang | 西北偏北 | NNW | 88 | 21/10 | 10:36 | 西北偏北 | NNW | 31 | 21/10 | 11:00 |

昂坪 - 沒有資料　Ngong Ping - data not available

表 3.9.2　在海馬影響下，熱帶氣旋警告信號系統的八個參考測風站在熱帶氣旋警告信號生效時錄得持續風力達到強風及烈風程度的時段

Table 3.9.2　Periods during which sustained strong and gale force winds were attained at the eight reference anemometers in the tropical cyclone warning system when tropical cyclone warning signals for Haima were in force

| 站 (參閱圖 1.1) Station (See Fig. 1.1) | | 最初達到強風* 時間 Start time when strong wind speed* was attained | | 最後達到強風* 時間 End time when strong wind speed* was attained | | 最初達到烈風# 時間 Start time when gale force wind speed# was attained | | 最後達到烈風# 時間 End time when gale force wind speed# was attained | |
|---|---|---|---|---|---|---|---|---|---|
| | | 日期/月份 Date/Month | 時間 Time | 日期/月份 Date/Month | 時間 Time | 日期/月份 Date/Month | 時間 Time | 日期/月份 Date/Month | 時間 Time |
| 長洲 | Cheung Chau | 21/10 | 0726 | 21/10 | 1533 | 21/10 | 1104 | 21/10 | 1313 |
| 香港國際機場 | Hong Kong International Airport | 21/10 | 0339 | 21/10 | 2132 | 21/10 | 1051 | 21/10 | 1151 |
| 啟德 | Kai Tak | 21/10 | 0729 | 21/10 | 1311 | - | | | |
| 流浮山 | Lau Fau Shan | 21/10 | 0518 | 21/10 | 1803 | 21/10 | 1047 | 21/10 | 1351 |
| 西貢 | Sai Kung | 21/10 | 0947 | 21/10 | 0951 | - | | | |
| 青衣島蜆殼油庫 | Tsing Yi Shell Oil Depot | 21/10 | 1051 | 21/10 | 1433 | - | | | |

沙田及打鼓嶺的持續風力未達到強風程度。

The sustained wind speed did not attain strong force at Sha Tin and Ta Kwu Ling.

- 未達到指定的風速

- not attaining the specified wind speed

* 十分鐘平均風速達每小時 41-62 公里

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

# 十分鐘平均風速達每小時 63-87 公里

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

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

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

表 3.9.3　海馬掠過期間，香港天文台總部及其他各站所錄得的日雨量
Table 3.9.3　Daily rainfall amounts recorded at the Hong Kong Observatory Headquarters and other stations during the passage of Haima

| 站 (參閱圖 3.10.2) Station (See Fig. 3.10.2) | | | 十月二十日 20 Oct | 十月二十一日 21 Oct | 總雨量(毫米) Total rainfall (mm) |
|---|---|---|---|---|---|
| 香港天文台 Hong Kong Observatory | | | 0.0 | 72.5 | 72.5 |
| 香港國際機場 Hong Kong International Airport (HKA) | | | 0.0 | 24.4 | 24.4 |
| 長洲 Cheung Chau (CCH) | | | [0.0] | [41.5] | [41.5] |
| H23 | 香 港 仔 | Aberdeen | 0.0 | 67.5 | 67.5 |
| N05 | 粉 嶺 | Fanling | 0.5 | 83.0 | 83.5 |
| N13 | 糧 船 灣 | High Island | 0.0 | 91.0 | 91.0 |
| K04 | 佐 敦 谷 | Jordan Valley | 0.0 | 90.0 | 90.0 |
| N06 | 葵 涌 | Kwai Chung | 0.0 | 95.0 | 95.0 |
| H12 | 半 山 區 | Mid Levels | 0.0 | 76.0 | 76.0 |
| N09 | 沙 田 | Sha Tin | 0.5 | 95.5 | 96.0 |
| H19 | 筲 箕 灣 | Shau Kei Wan | 0.0 | 91.0 | 91.0 |
| SEK | 石 崗 | Shek Kong | [0.0] | [61.0] | [61.0] |
| K06 | 蘇 屋 邨 | So Uk Estate | 0.0 | 96.0 | 96.0 |
| R31 | 大 美 督 | Tai Mei Tuk | [0.0] | 122.5 | [122.5] |
| R21 | 踏 石 角 | Tap Shek Kok | 0.0 | 42.0 | 42.0 |
| TMR | 屯 門 水 庫 | Tuen Mun Reservoir | 0.0 | 37.2 | 37.2 |
| N17 | 東 涌 | Tung Chung | [0.0] | [0.0] | [0.0] |

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

表 3.9.4　海馬掠過期間，香港各潮汐站所錄得的最高潮位及最大風暴潮
Table 3.9.4　Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of Haima

| 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 | 2.74 | 21/10 | 00:28 | 0.54 | 21/10 | 13:44 |
| 石壁 | Shek Pik | 2.75 | 21/10 | 01:01 | 0.48 | 21/10 | 14:15 |
| 大埔滘 | Tai Po Kau | 2.80 | 21/10 | 01:28 | 0.57 | 21/10 | 14:16 |
| 大廟灣 | Tai Miu Wan | 2.75 | 21/10 | 01:34 | 0.64 | 21/10 | 13:37 |
| 尖鼻咀 | Tsim Bei Tsui | 2.88 | 21/10 | 00:19 | 0.65 | 21/10 | 14:42 |
| 橫瀾島 | Waglan Island | 2.89 | 21/10 | 01:13 | 0.65 | 21/10 | 13:37 |

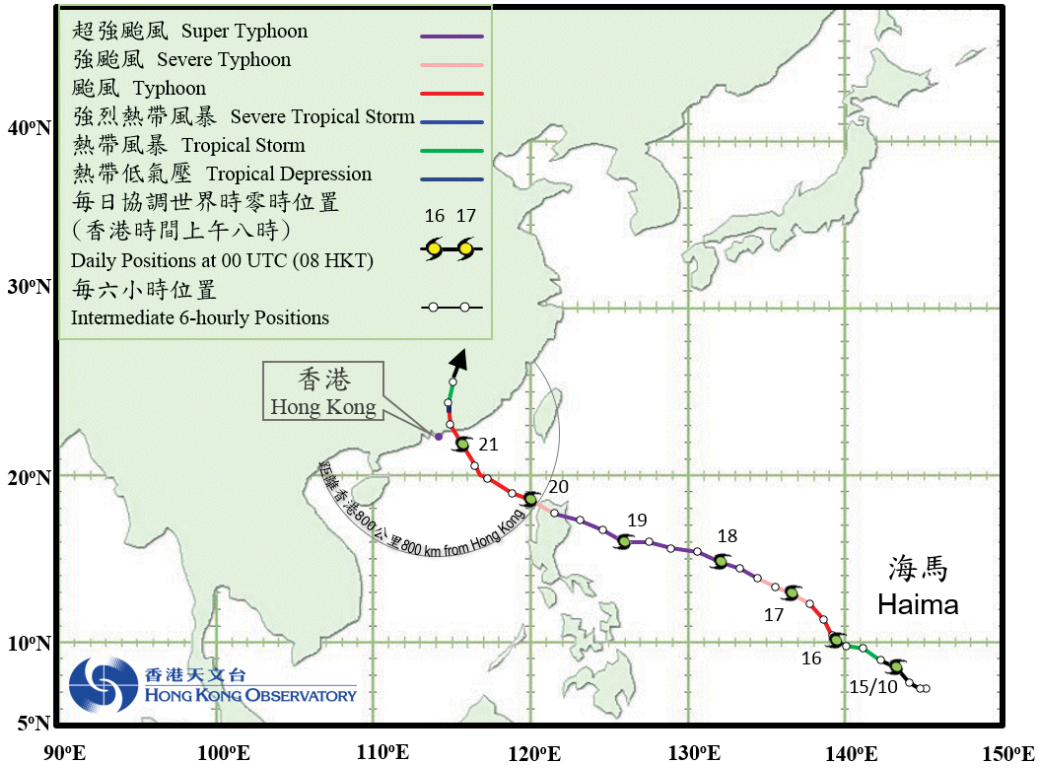


圖 3.9.1a 二零一六年十月十四日至二十二日海馬(1622)的路徑圖。
Figure 3.9.1a Track of Haima (1622) on 14 – 22 October 2016.

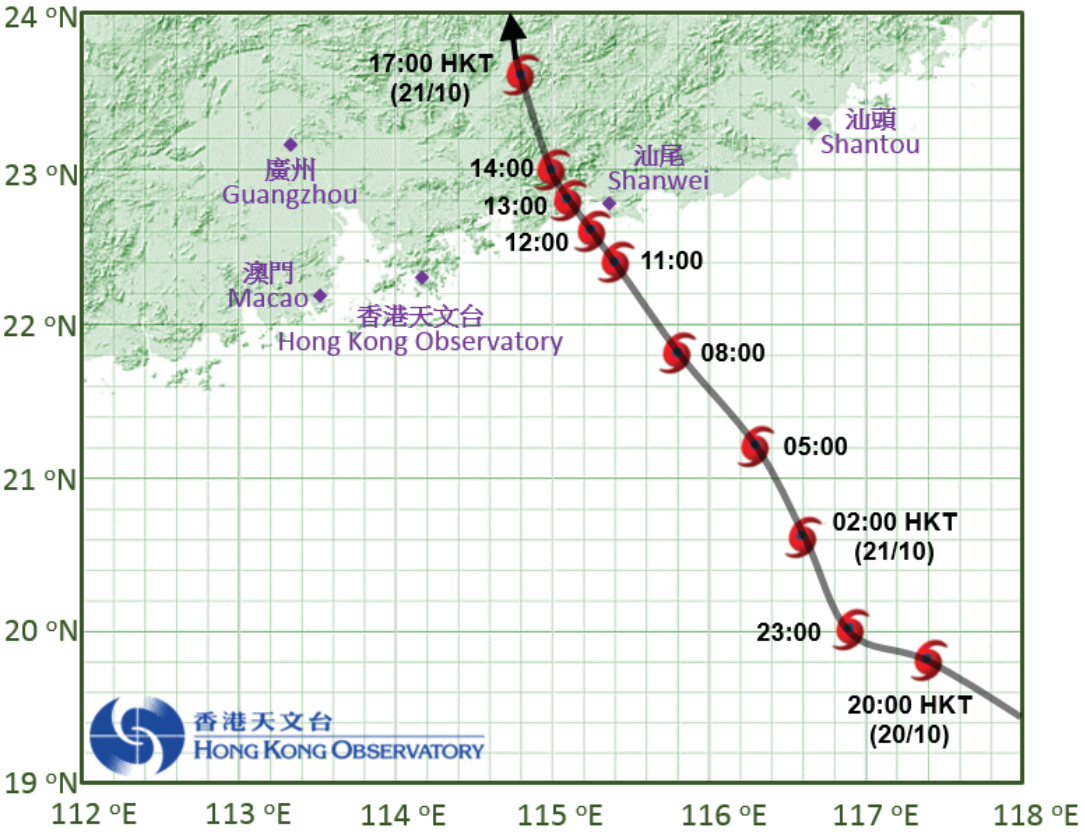


圖 3.9.1b 海馬接近香港時的路徑圖。
Figure 3.9.1b Track of Haima near Hong Kong.

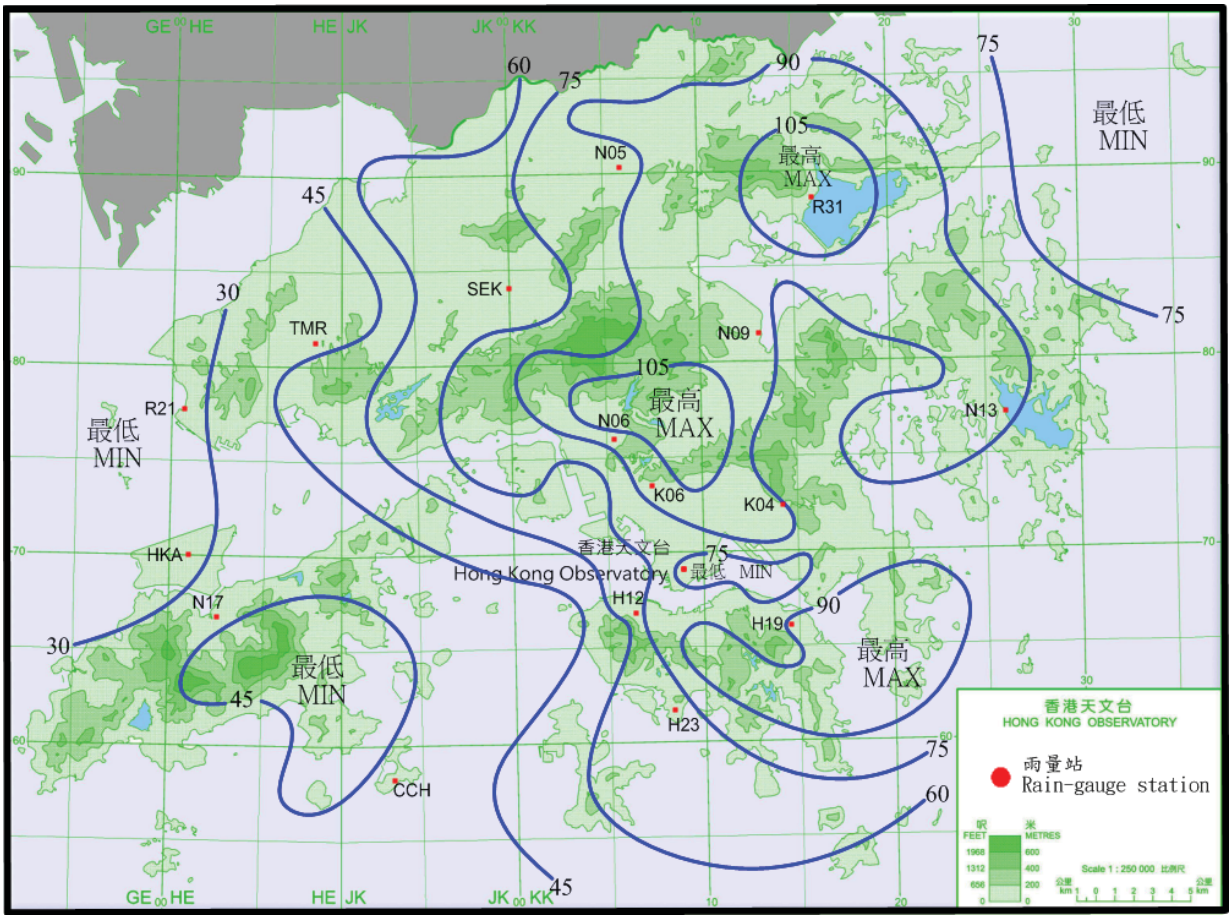


圖 3.9.2　　二零一六年十月二十日至二十一日的雨量分佈(等雨量線單位為毫米)。

Figure 3.9.2　Rainfall distribution on 20 - 21 October 2016 (isohyets in millimetres).

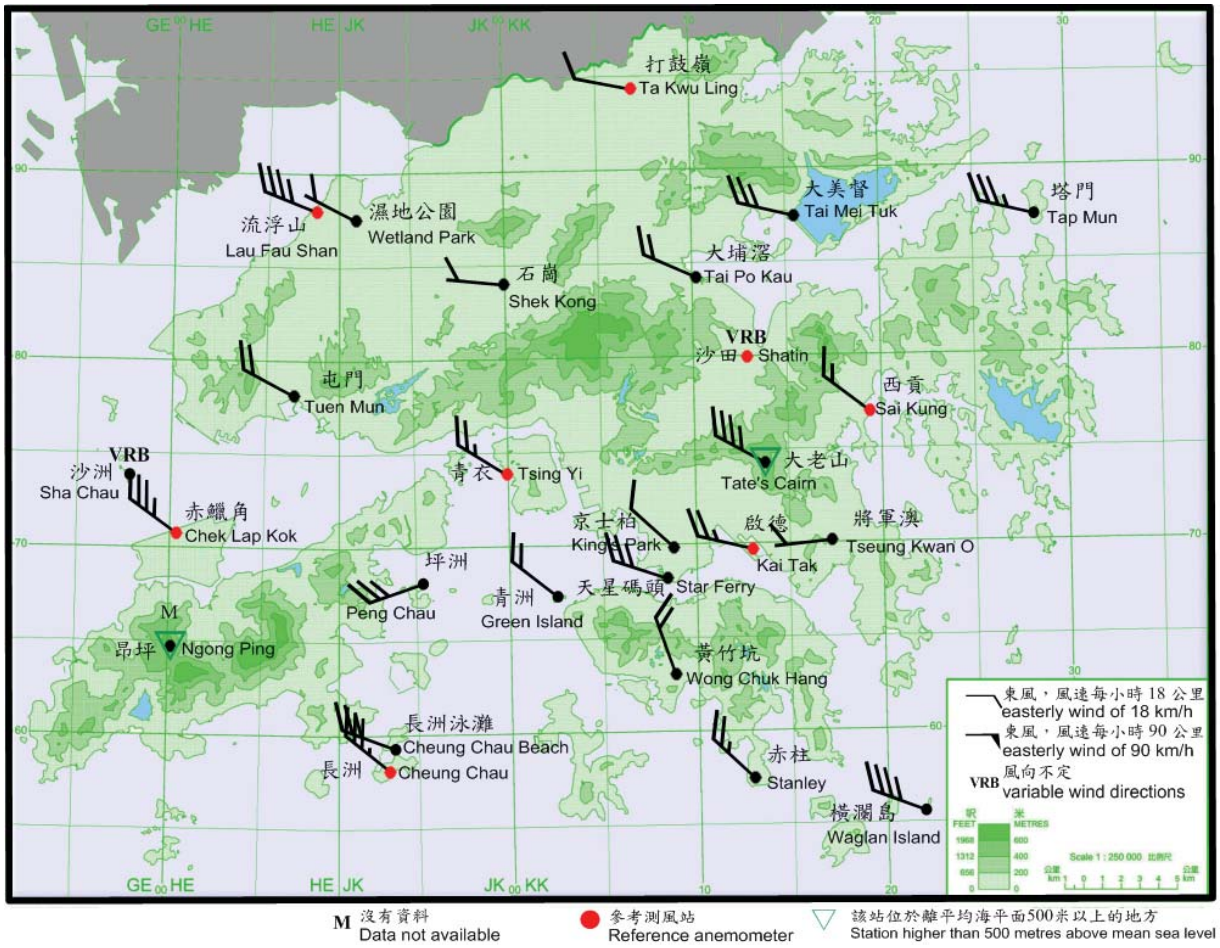


圖 3.9.3　二零一六年十月二十一日上午 11 時香港各站錄得的十分鐘平均風向和風速。當時颱風海馬集結在香港以東約 130 公里。

Figure 3.9.3　10-minute mean wind direction and speed recorded at various stations in Hong Kong at 11:00 a.m. on 21 October 2016. Typhoon Haima was about 130 km east of Hong Kong at the time.

註：　沙洲及沙田當時錄得的十分鐘平均風速分別為每小時 16 及 23 公里。

Note:　The 10-minute mean wind speeds recorded at that time at Sha Chau and Shatin were 16 and 23 km/h respectively.

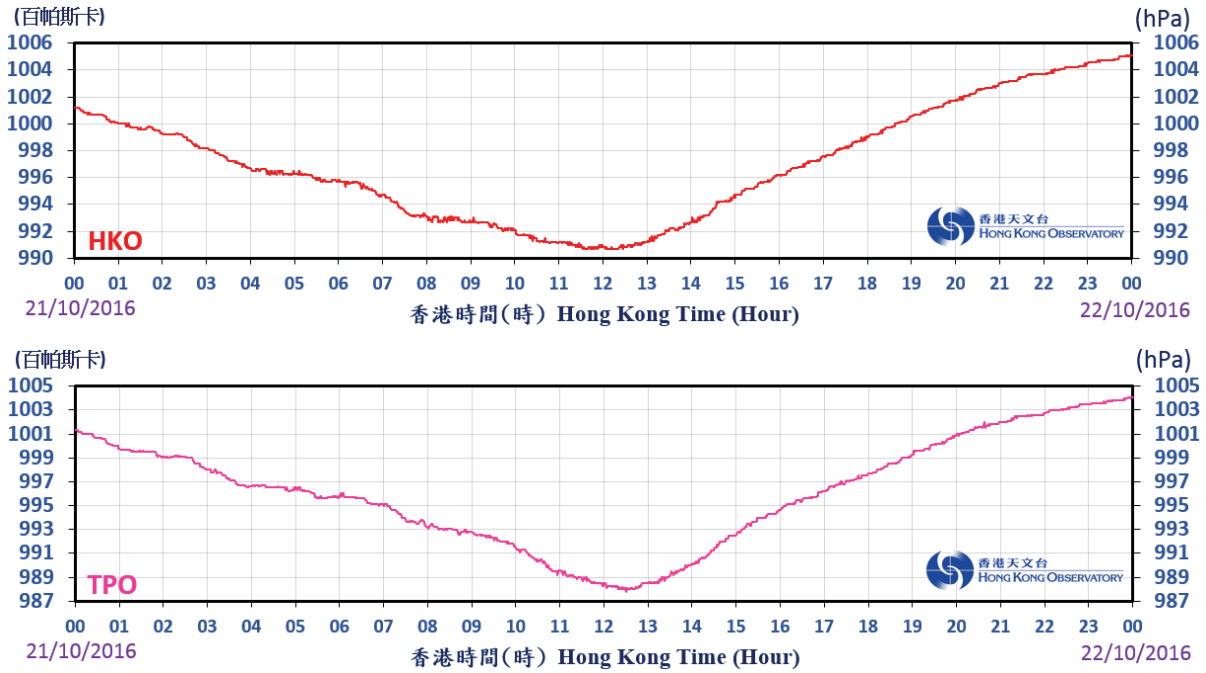


圖 3.9.4　二零一六年十月二十一日天文台總部(上圖)及大埔(下圖)錄得的海平面氣壓。

Figure 3.9.4　Traces of mean sea-level pressure recorded at the Observatory Headquarters (top panel) and Tai Po (bottom panel) on 21 October 2016.

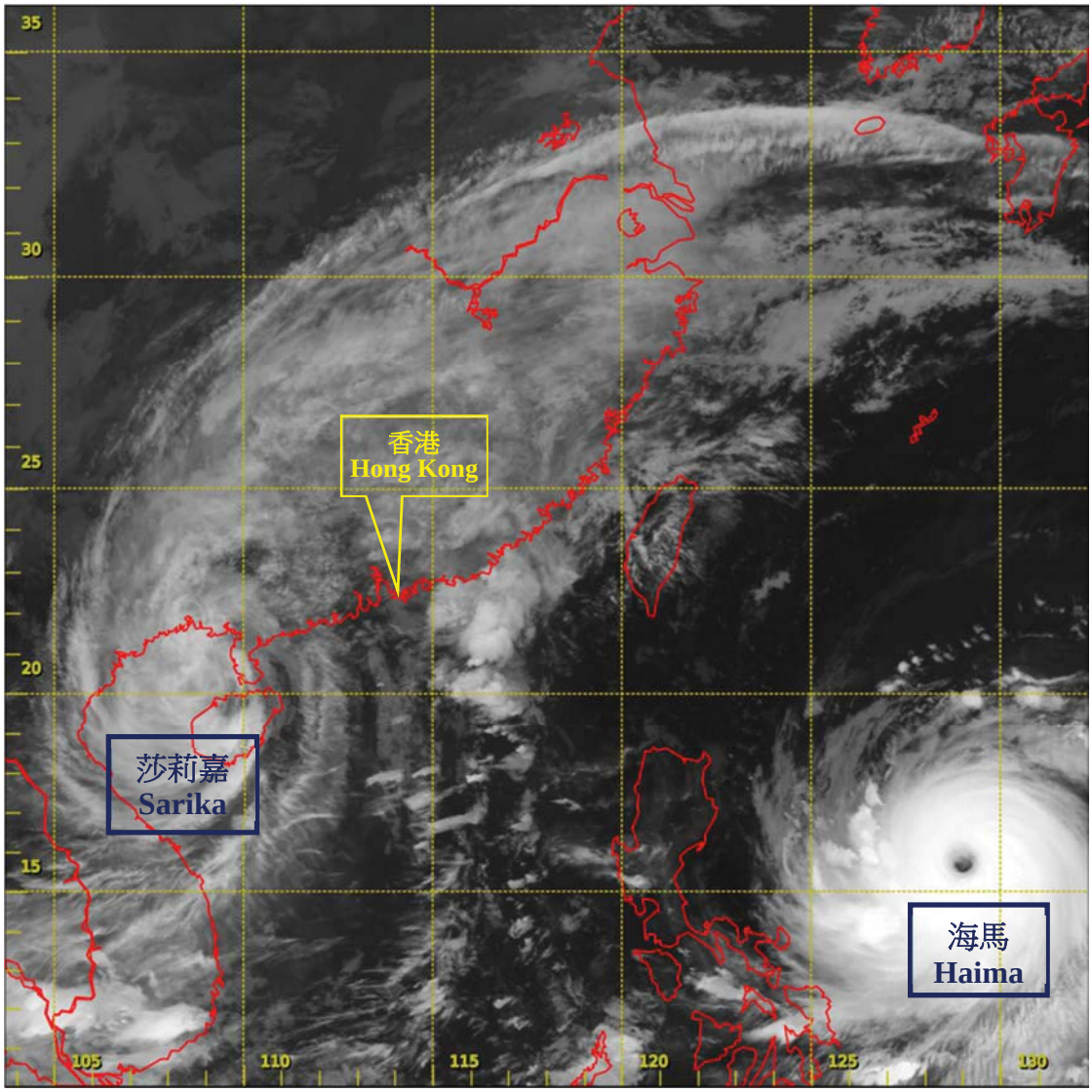


圖 3.9.5a　二零一六年十月十八日晚上 8 時左右的紅外線衛星圖片，當時海馬達到其最高強度，中心附近最高持續風速估計為每小時 230 公里。同時，強烈熱帶風暴莎莉嘉正橫過北部灣。

Figure 3.9.5a　Infra-red satellite imagery around 8 p.m. on 18 October 2016, when Haima was at peak intensity with estimated maximum sustained winds of 230 km/h near its centre. Meanwhile, Severe Tropical Storm Sarika was moving across Beibu Wan.

〔此衛星圖像接收自日本氣象廳的向日葵 8 號衛星。〕

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

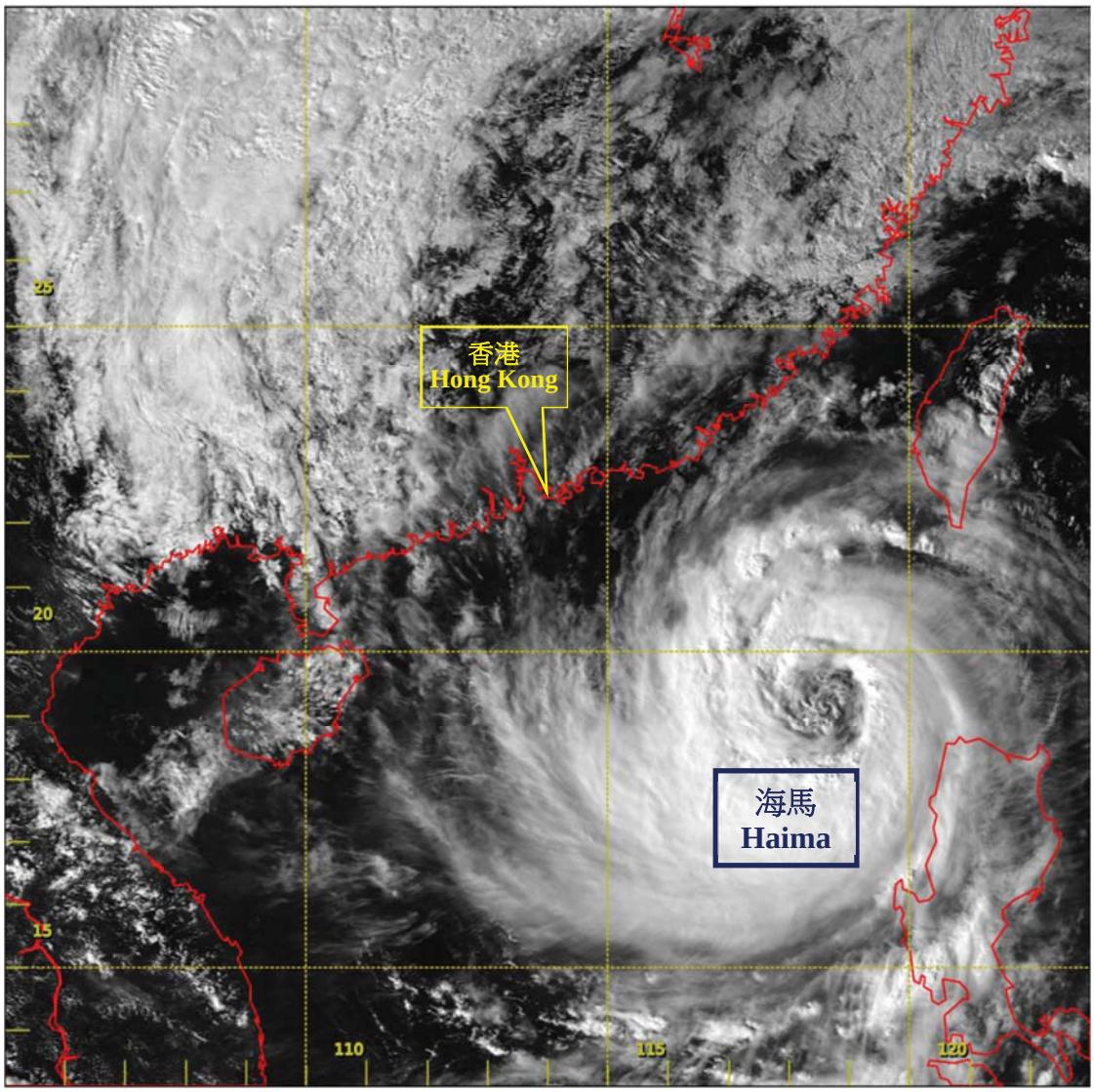


圖 3.9.5b　二零一六年十月二十日下午 3 時左右的可見光衛星圖片，海馬直徑約 130 公里的風眼清晰可見。

Figure 3.9.5b　Visible satellite imagery around 3 p.m. on 20 October 2016, showing clearly the eye of Haima with a diameter of about 130 km.

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

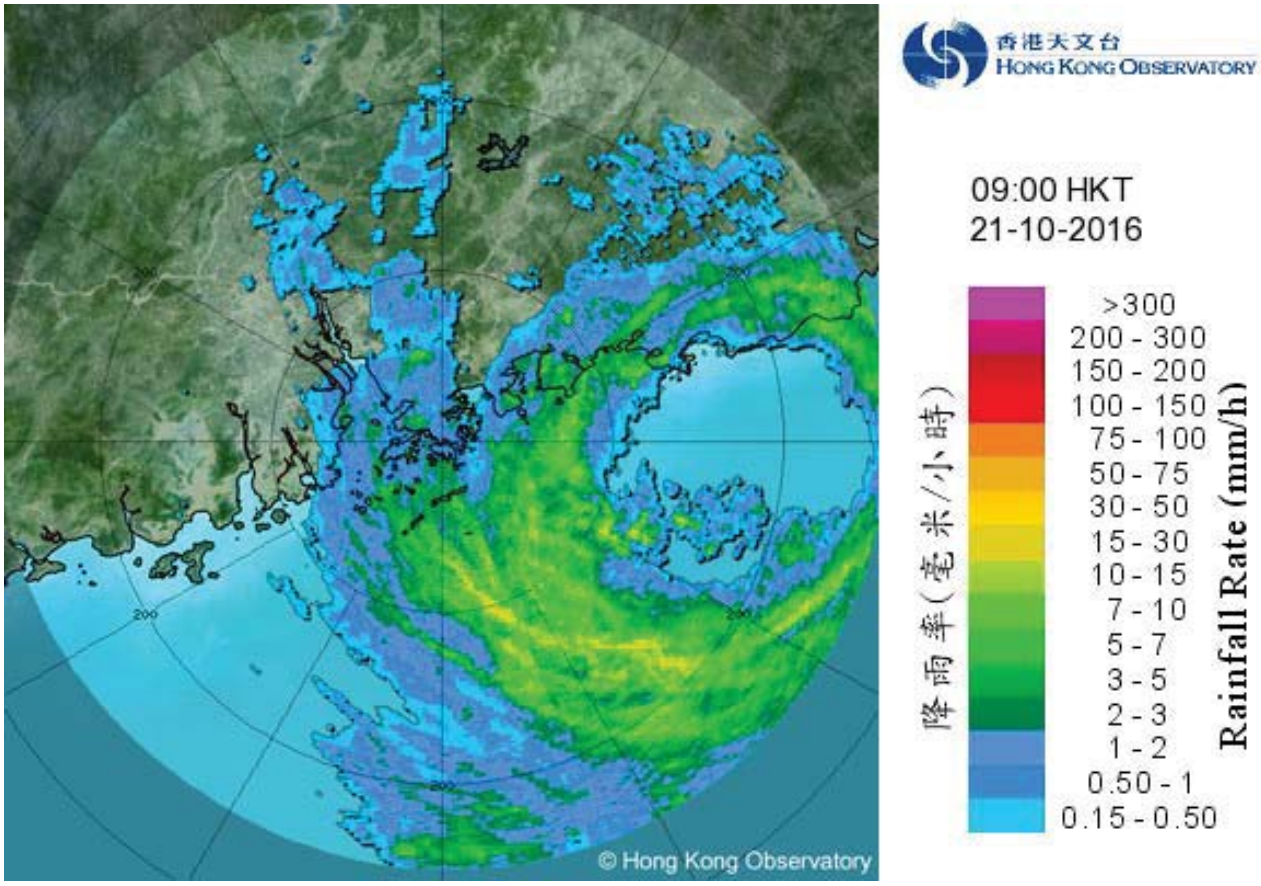


圖 3.9.6a　二零一六年十月二十一日早上 9 時正的雷達回波圖像，海馬擴張的風眼位於香港以東。

Figure 3.9.6a　Image of radar echoes at 9 a.m. on 21 October 2016, with the enlarged eye of Haima located east of Hong Kong.

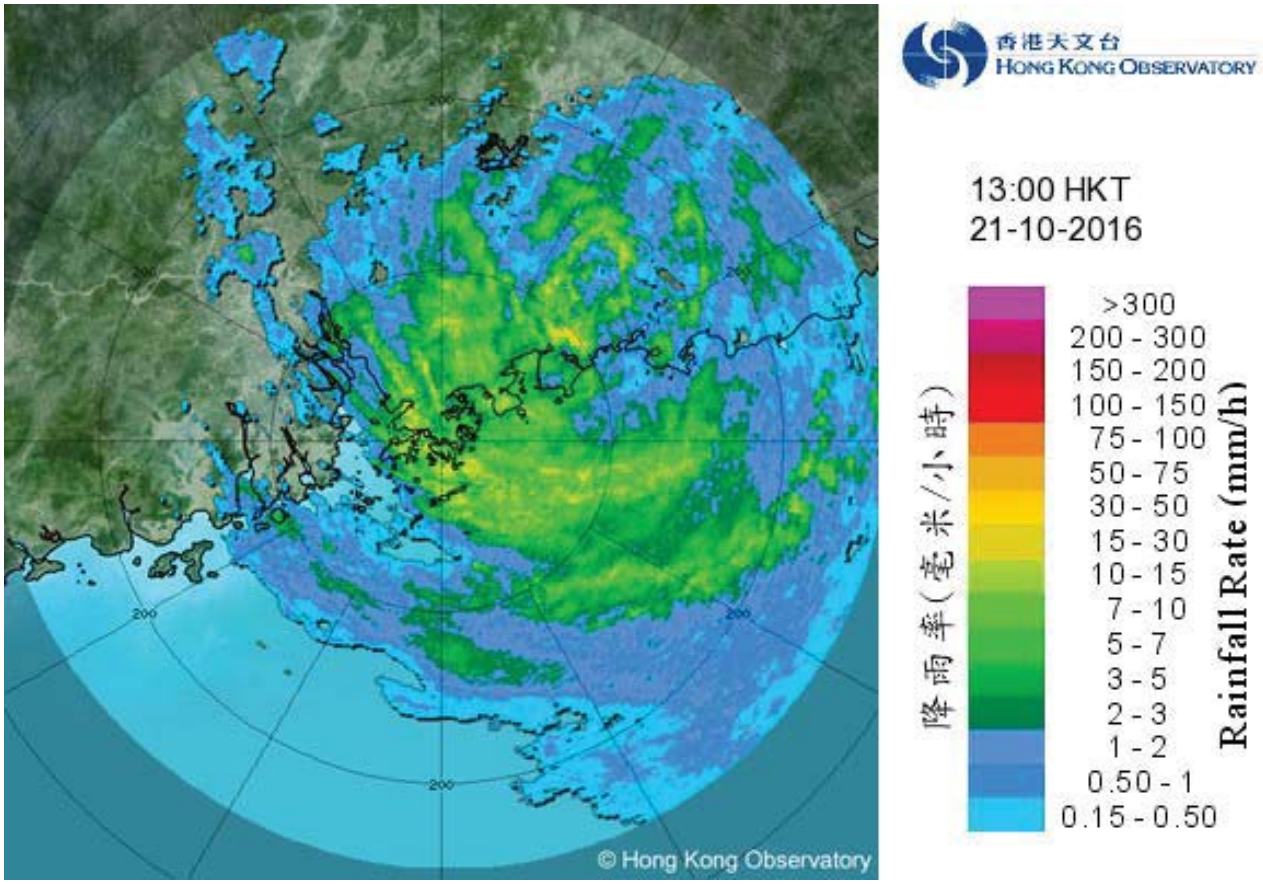


圖 3.9.6b　二零一六年十月二十一日下午 1 時正的雷達回波圖像。當時海馬最接近香港，其中心在本港之東北偏東約 110 公里。海馬的強烈雨帶亦正影響香港。

Figure 3.9.6b　Image of radar echoes at 1 p.m. on 21 October 2016 when Haima was closest to Hong Kong with its centre about 110 km east-northeast of the territory. Hong Kong was also under the influence of the intense rainbands of Haima at the time.

圖 3.9.7　荔枝角消防局附近有樹木被吹倒。(照片由市民提供)

Figure 3.9.7　Trees blown down near Lai Chi Kok Fire Station. (Photo provided by member of the public)