3.3 颱風妮妲(1604)：二零一六年七月二十九日至八月三日

妮妲是香港天文台在二零一六年第三個需要發出熱帶氣旋警告信號的熱帶氣旋，也是今年首個需要發出八號烈風或暴風信號的熱帶氣旋。

熱帶低氣壓妮妲於七月二十九日晚上在馬尼拉之東南偏東約 750 公里的北太平洋西部形成，初時向西北偏北方向移動。妮妲於翌日下午開始採取西北路徑移向呂宋海峽，並逐漸增強，於七月三十一日上午發展為強烈熱帶風暴，當日下午掠過呂宋北岸，晚上進入南海東北部，並採取西北偏西路徑趨向廣東沿岸。妮妲進一步增強為颱風，於八月一日下午達到其最高強度，中心附近最高持續風速為每小時 130 公里。妮妲於八月二日上午三時左右在大鵬半島附近登陸，橫過深圳，在香港以北掠過。妮妲繼續移入內陸及減弱，最後於八月三日清晨在廣西減弱為一個低壓區。

根據報章報導，在妮妲吹襲期間，廣東、廣西、湖南、貴州及雲南約有 50 萬人受災，300 多間房屋倒塌，直接經濟損失最少五億元人民幣。廣東有七市要停工停課，海陸空交通癱瘓。而深圳有逾 1.6 萬戶的電力供應受到影響。

香港天文台於七月三十一日晚上 10 時 10 分發出一號戒備信號，當時妮妲集結在香港之東南偏東約 790 公里。八月一日早上本港吹輕微至和緩西北風，隨著妮妲迅速地靠近廣東沿岸，天文台於上午 11 時 40 分發出三號強風信號，當時妮妲位於香港之東南偏東約 440 公里。黃昏時分本港風勢開始增強，吹清勁北至西北風，高地吹強風。妮妲繼續逼近珠江三角洲地區，晚上 8 時 40 分天文台發出八號西北烈風或暴風信號，當時妮妲集結在香港之東南偏東約 200 公里。晚間本港風力顯著增強，吹強風至烈風程度西至西北風。

隨著妮妲登陸並在香港以北掠過，本港開始轉吹西南風，天文台在八月二日上午 4 時 40 分改發八號西南烈風或暴風信號。妮妲於上午 5 時左右最接近香港，在天文台總部之西北偏北約 40 公里掠過。黎明前後本港普遍吹達烈風程度西南風，離岸及高地間中吹暴風。妮妲早上移入內陸並減弱，日間本港風力逐漸減弱，天文台於下午 12 時 40 分改發三號強風信號以取代八號西南烈風或暴風信號，並於當天稍後下午 5 時 10 分取消所有熱帶氣旋警告信號。

在妮妲的影響下，九龍天星碼頭、香港國際機場及昂坪錄得的最高每小時平均風速分別為每小時 47、72 及 121 公里，而最高陣風則分別為每小時 112、117 及 158 公里。尖鼻咀錄得最高潮位 3.6 米(海圖基準面以上)及最大風暴潮(天文潮高度以上) 0.9 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	984.5	2/8	上午 3 時 42 分
香港國際機場	985.7	2/8	上午 3 時 32 分
打鼓嶺	983.3	2/8	上午 3 時 56 分
大埔	982.7	2/8	上午 3 時 36 分
沙田	983.5	2/8	上午 3 時 25 分
上水	983.3	2/8	上午 3 時 58 分
流浮山	983.3	2/8	上午 3 時 46 分
長洲	984.6	2/8	上午 2 時 46 分
橫瀾島	983.5	2/8	上午 2 時 30 分

八月一日日間本港部分時間有陽光及有煙霞。晚上至翌日妮妲的雨帶為本港帶來狂風大驟雨，八月二日早上天文台曾發出黃色暴雨警告信號、山泥傾瀉警告及新界北部水浸特別報告。當日各區錄得超過 100 毫米雨量，而大嶼山的雨量更超過 200 毫米。

妮妲吹襲香港期間最少有 12 人受傷，另有超過 400 宗塌樹報告、兩宗水浸報告、一宗山泥傾瀉報告及多宗高空墜物意外。上環有一個直徑約六呎的衛星接收器遭強風吹至飛墜行人路。灣仔菲林明道一幢商業大廈外牆一幅棚架倒塌。北角孔雀道一株大樹塌下，導致兩輛私家車損毀。輕鐵天悅站及三聖站附近也有樹木塌下，列車服務一度受阻。觀塘繞道的一支燈柱在強風吹襲下折斷。大角咀有躉船受巨浪影響撞向石堃，西貢亦有遊艇擱淺岸邊。妮妲引致的風暴潮令鯉魚門、大澳、屯門、西環等低窪地區出現輕微水浸及海水倒灌。新界超過 320 公頃的農地受到影響。香港國際機場約有 500 班航班需要重新編配。

表 3.3.1 - 3.3.4 分別是妮妲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 3.3.1 - 3.3.2 分別為妮妲的路徑圖和本港的雨量分佈圖。圖 3.3.3 顯示香港各站錄得的風向和風速。圖 3.3.4 - 3.3.5 分別顯示天文台總部及打鼓嶺錄得的海平面氣壓、及鰂魚涌錄得的潮位圖。圖 3.3.6 - 3.3.7 分別為妮妲的衛星及雷達圖像。妮妲在香港造成的破壞可參見圖 3.4.8 - 3.4.11。

3.3 Typhoon Nida (1604): 29 July – 3 August 2016

Nida was the third tropical cyclone necessitating the issuance of tropical cyclone warning signals by the Hong Kong Observatory in 2016. It was also the first tropical cyclone requiring the issuance of Gale or Storm Wind Signal No. 8 in the year.

Nida formed as a tropical depression over the western North Pacific about 750 km east-southeast of Manila on the night of 29 July and moved north-northwestwards at first. Nida then took on a northwesterly track towards the Luzon Strait on the afternoon of 30 July and intensified gradually. After developing into a severe tropical storm on the morning of 31 July, it swept across the north coast of Luzon in the afternoon and entered the northeastern part of the South China Sea that night, taking on a west-northwesterly track towards the coast of Guangdong. It further intensified into a typhoon and reached its peak intensity on the afternoon of 1 August with an estimated sustained wind of 130 km/h near its centre. Nida made landfall near Dapeng Peninsula around 3 a.m. on 2 August and moved across Shenzhen, passing just to the north of Hong Kong. It continued to weaken as it moved further inland, before finally degenerating into an area of low pressure over Guangxi early in the morning of 3 August.

According to press reports, about 500 000 people were affected and more than 300 houses collapsed in Guangdong, Guangxi, Hunan, Guizhou and Yunnan during the passage of Nida, with direct economic loss exceeding 500 million RMB. Business and schools were suspended in seven cities of Guangdong. Transportation services were paralyzed. Electricity supply to more than 16 000 households was affected in Shenzhen.

The Standby Signal No. 1 was issued by the Hong Kong Observatory at 10:10 p.m. on 31 July when Nida was about 790 km east-southeast of the territory. Local winds were light to moderate from the northwest on the morning of 1 August. As Nida moved rapidly towards the coast of Guangdong, the Strong Wind Signal No. 3 was issued at 11:40 a.m. when it was about 440 km east-southeast of Hong Kong. Local winds started to strengthen significantly at dusk, becoming fresh north to northwesterly and strong on high ground. With Nida approaching the Pearl River delta region, the No. 8 Northwest Gale or Storm Signal was issued at 8:40 p.m. when it was about 200 km east-southeast of Hong Kong. Local winds strengthened further overnight and became strong to gale force from the west to northwest.

As Nida made landfall and skirted past just north of Hong Kong, local winds started to turn southwesterly and the No. 8 Southwest Gale or Storm Signal was issued at 4:40 a.m. on 2 August. Nida was closest to the territory around 5 a.m. when it was about 40 km north-northwest of the Hong Kong Observatory Headquarters. Southwesterly gales generally affected the territory near dawn with winds occasionally reaching storm force offshore and on high ground. With Nida moving inland and weakening in the morning, local winds subsided gradually during the day. The No. 8 Southwest Gale or Storm Signal was replaced by the Strong Wind Signal No. 3 at 12:40 p.m., and all tropical cyclone warning signals were cancelled at 5:10 p.m. later in the day.

Under the influence of Nida, maximum hourly mean winds of 47, 72 and 121 km/h and gusts of 112, 117 and 158 km/h were recorded at Star Ferry (Kowloon), the Hong Kong International Airport and Ngong Ping respectively. A maximum sea level (above chart datum) of 3.6 m and a maximum storm surge (above astronomical tide) of 0.9 m were recorded at Tsim Bei Tsui. The lowest instantaneous mean sea-level pressures recorded at some selected stations are as follows:-

Station	Lowest instantaneous mean sea-level pressure (hPa)	Date/Month	Time
Hong Kong Observatory Headquarters	984.5	2/8	3:42 a.m.
Hong Kong International Airport	985.7	2/8	3:32 a.m.
Ta Kwu Ling	983.3	2/8	3:56 a.m.
Tai Po	982.7	2/8	3:36 a.m.
Shatin	983.5	2/8	3:25 a.m.
Sheung Shui	983.3	2/8	3:58 a.m.
Lau Fau Shan	983.3	2/8	3:46 a.m.
Cheung Chau	984.6	2/8	2:46 a.m.
Waglan Island	983.5	2/8	2:30 a.m.

Locally, there were sunny periods and haze during the day on 1 August. The rainbands of Nida brought heavy squally showers to Hong Kong that night and the next day. Amber Rainstorm Warning, Landslip Warning and Special Announcement on Flooding in the Northern New Territories were issued by the Observatory on the morning of 2 August. More than 100 millimetres of rainfall were generally recorded over the territory, and rainfall over Lantau Island even exceeded 200 millimetres.

In Hong Kong, at least 12 people were injured during the passage of Nida. There were more than 400 reports of fallen trees, two reports of flooding, one report of landslide and many incidents of falling objects. A satellite dish of around six feet was blown down to the pavement under strong winds in Sheung Wan. The scaffolding of a commercial building at Fleming Road in Wan Chai collapsed. A tree at Peacock Road in North Point fell down, damaging two private cars. Some trees also collapsed near Tin Yuet and Sam Shing Light Rail stations, resulting in a disruption of train services. A lamp post in Kwun Tong Bypass fell down under high winds. A barge rammed against the seafront under high waves in Tai Kok Tsui and a yacht ran aground in Sai Kung. Storm surge triggered by Nida caused minor flooding and backflow of sea water in some low lying areas in Lei Yue Mun, Tai O, Tuen Mun and Sai Wan. More than 320 hectares of farmland in the New Territories were affected. Around 500 flights were re-scheduled 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 Nida is given in Tables 3.3.1 - 3.3.4 respectively. Figures 3.3.1 - 3.4.2 show respectively the track of Nida and the rainfall distribution for Hong Kong. Figure 3.3.3 shows the winds recorded at various stations in Hong Kong. Figures 3.3.4 – 3.3.5 show repectively trace of mean sea-level pressure recorded at the Hong Kong Observatory's Headquarters and Ta Kwu Ling, and tide and storm surge recorded at Quarry Bay. Figures 3.3.6 – 3.4.7 show respectively a satellite imagery and a radar imagery of Nida. Some damages caused by Nida in Hong Kong are illustrated in Figures 3.3.8 – 3.3.11

表 3.3.1　在妮妲影響下，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 when tropical cyclone warning signals for Nida 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)	西南	SW	83	2/8	05:46	西南偏南	SSW	43	2/8	08:00
中環碼頭	Central Pier	西南偏西	WSW	96	2/8	05:30	西	W	51	2/8	03:00
長洲	Cheung Chau	西北偏西	WNW	104	2/8	03:01	西南偏南	SSW	68	2/8	06:00
長洲泳灘	Cheung Chau Beach	西北偏西	WNW	99	2/8	01:28	西南	SW	59	2/8	06:00
青洲	Green Island	西南偏南	SSW	128	2/8	06:18	西南偏南	SSW	99	2/8	07:00
香港國際機場	Hong Kong International Airport	西南	SW	117	2/8	06:45	西南	SW	72	2/8	07:00
啟德	Kai Tak	西北	NW	96	2/8	00:29	西北偏西	WNW	47	2/8	01:00
京士柏	King's Park	西南偏西	WSW	92	2/8	05:52	西南偏西	WSW	36	2/8	06:00
流浮山	Lau Fau Shan	南	S	108	2/8	07:09	西北偏西	WNW	63	2/8	03:00
昂坪	Ngong Ping	西南	SW	158	2/8	07:31	西南偏南	SSW	121	2/8	09:00
北角	North Point	西南偏西	WSW	75	2/8	05:03	西	W	41	2/8	04:00
坪洲	Peng Chau	西北偏西	WNW	99	2/8	01:57	西北偏西	WNW	59	2/8	02:00
平洲	Ping Chau	西北偏北	NNW	59	2/8	00:28	西北	NW	20	2/8	01:00
西貢	Sai Kung	西北偏北	NNW	87	1/8	23:06	南	S	49	2/8	07:00
沙洲	Sha Chau	西南偏南	SSW	110	2/8	06:49	西南偏南	SSW	77	2/8	08:00
沙螺灣	Sha Lo Wan	西南偏南	SSW	104	2/8	06:56	西南偏南	SSW	52	2/8	08:00
沙田	Sha Tin	西南偏南	SSW	87	2/8	05:52	西南偏南	SSW	36	2/8	07:00
石崗	Shek Kong	南	S	67	2/8	10:04	西北	NW	25	2/8	01:00
							南	S	25	2/8	08:00
九龍天星碼頭	Star Ferry (Kowloon)	西南偏西	WSW	112	2/8	05:18	西	W	47	2/8	04:00
打鼓嶺	Ta Kwu Ling	東南偏南	SSE	63	2/8	10:31	東南偏南	SSE	27	2/8	10:00
							東南偏南	SSE	27	2/8	11:00
大美督	Tai Mei Tuk	西南	SW	104	2/8	06:04	西南偏西	WSW	58	2/8	07:00
大帽山	Tai Mo Shan	西南	SW	158	2/8	06:45	西南偏南	SSW	101	2/8	08:00
大埔滘	Tai Po Kau	南	S	70	2/8	06:09	西北偏西	WNW	34	2/8	01:00
塔門	Tap Mun	西北	NW	81	2/8	01:22	西北偏西	WNW	41	2/8	03:00
大老山	Tate's Cairn	西北	NW	128	2/8	01:45	西北偏北	NNW	75	1/8	23:00
將軍澳	Tseung Kwan O	南	S	70	2/8	06:11	西北偏北	NNW	25	1/8	23:00
青衣島蜆殼油庫	Tsing Yi Shell Oil Depot	東南偏南	SSE	79	2/8	06:27	南	S	47	2/8	07:00
屯門政府合署	Tuen Mun Government Offices	西北偏西	WNW	92	2/8	04:02	南	S	31	2/8	08:00
橫瀾島	Waglan Island	西南偏南	SSW	121	2/8	05:23	西南偏南	SSW	94	2/8	06:00
濕地公園	Wetland Park	西南	SW	68	2/8	07:05	西北	NW	31	2/8	03:00
黃竹坑	Wong Chuk Hang	西北偏西	WNW	75	2/8	00:01	西北偏西	WNW	30	2/8	01:00

表 3.3.2　在妮妲影響下，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 3.3.2　Periods during which sustained strong and gale force winds were attained at the eight reference anemometers in the tropical cyclone warning system when tropical cyclone warning signals for Nida 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	1/8	2321	2/8	1320	2/8	0316	2/8	0840
香港國際機場	Hong Kong International Airport	1/8	2257	2/8	1444	2/8	0203	2/8	0931
啟德	Kai Tak	1/8	2318	2/8	0144	-			
流浮山	Lau Fau Shan	1/8	2204	2/8	1146	2/8	0133	2/8	0927
西貢	Sai Kung	1/8	2252	2/8	0935	-			
沙田	Sha Tin	2/8	0537	2/8	0803	-			
青衣島蜆殼油庫	Tsing Yi Shell Oil Depot	2/8	0159	2/8	1003	-			

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 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 3.3.3　　妮妲影響香港期間，香港天文台總部及其他各站所錄得的日雨量
Table 3.3.3　Daily rainfall amounts recorded at the Hong Kong Observatory Headquarters and other stations during the passage of Nida

站 (參閱圖 3.3.2) Station (See Fig. 3.3.2)			七月三十一日 31 Jul	八月一日 1 Aug	八月二日 2 Aug	總雨量(毫米) Total rainfall (mm)
香港天文台 Hong Kong Observatory			1.2	4.6	121.0	126.8
香港國際機場 Hong Kong International Airport (HKA)			0.0	1.4	177.6	179.0
長洲 Cheung Chau (CCH)			0.0	0.5	100.5	101.0
H23	香 港 仔	Aberdeen	0.0	1.5	87.0	88.5
N05	粉 嶺	Fanling	0.0	1.0	134.5	135.5
N13	糧 船 灣	High Island	0.5	1.5	107.5	109.5
K04	佐 敦 谷	Jordan Valley	0.0	4.5	102.5	107.0
N06	葵 涌	Kwai Chung	0.0	4.0	153.5	157.5
H12	半 山 區	Mid Levels	0.0	3.5	132.5	136.0
N09	沙 田	Sha Tin	2.5	0.0	117.0	119.5
H19	筲 箕 灣	Shau Kei Wan	0.0	1.0	126.0	127.0
SEK	石 崗	Shek Kong	0.0	0.5	144.5	145.0
K06	蘇 屋 邨	So Uk Estate	0.0	4.5	117.5	122.0
R31	大 美 督	Tai Mei Tuk	0.0	0.0	76.0	76.0
R21	踏 石 角	Tap Shek Kok	15.5	0.0	138.5	154.0
TMR	屯門水庫	Tuen Mun Reservoir	4.5	0.0	146.1	150.6
N17	東 涌	Tung Chung	0.0	0.5	298.5	299.0

表 3.3.4　　妮妲影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮
Table 3.3.4　Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of Nida

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	2.93	2/8	08:22	0.58	2/8	08:22
石壁	Shek Pik	3.08	2/8	08:06	0.63	2/8	08:06
大埔滘	Tai Po Kau	2.76	2/8	08:12	0.63	2/8	13:20
大廟灣	Tai Miu Wan	2.83	2/8	08:09	0.64	2/8	04:21
尖鼻咀	Tsim Bei Tsui	3.60	2/8	09:49	0.90	2/8	09:49
橫瀾島	Waglan Island	2.92	2/8	08:01	0.63	2/8	04:21

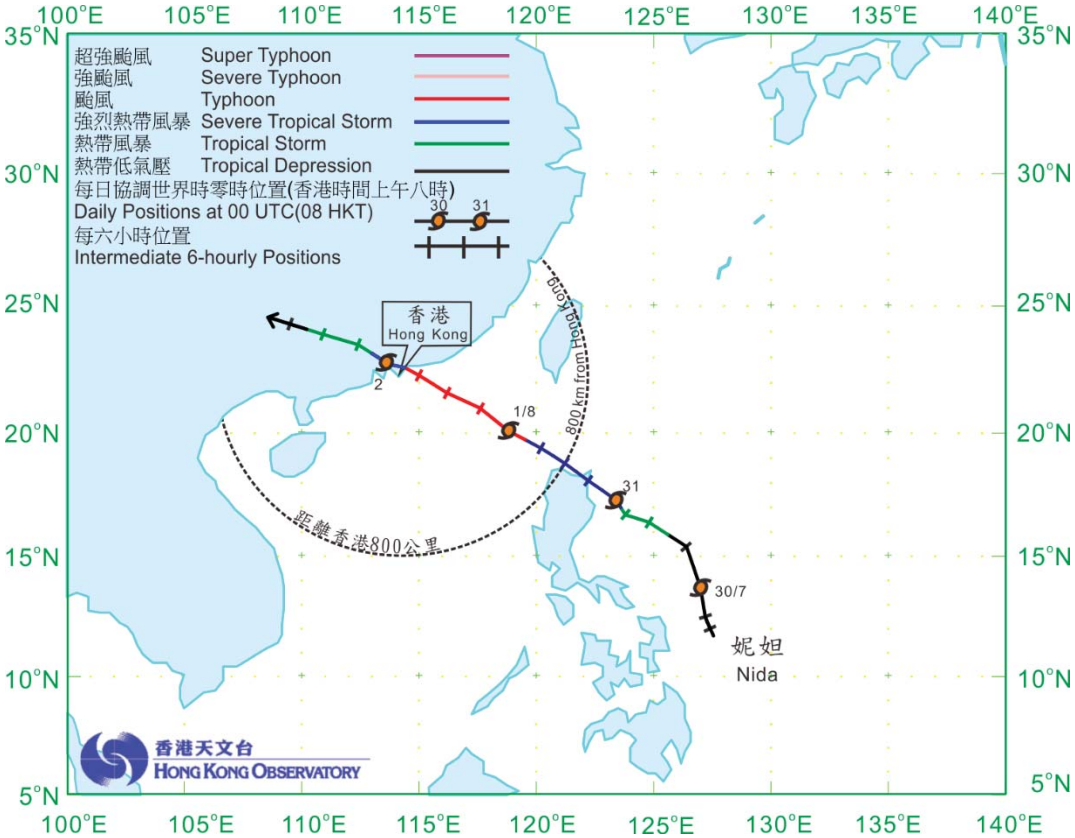

圖 3.3.1a 二零一六年七月二十九日至八月三日妮妲(1604)的路徑圖。

Figure 3.3.1a Track of Nida (1604) on 29 July – 3 August 2016.

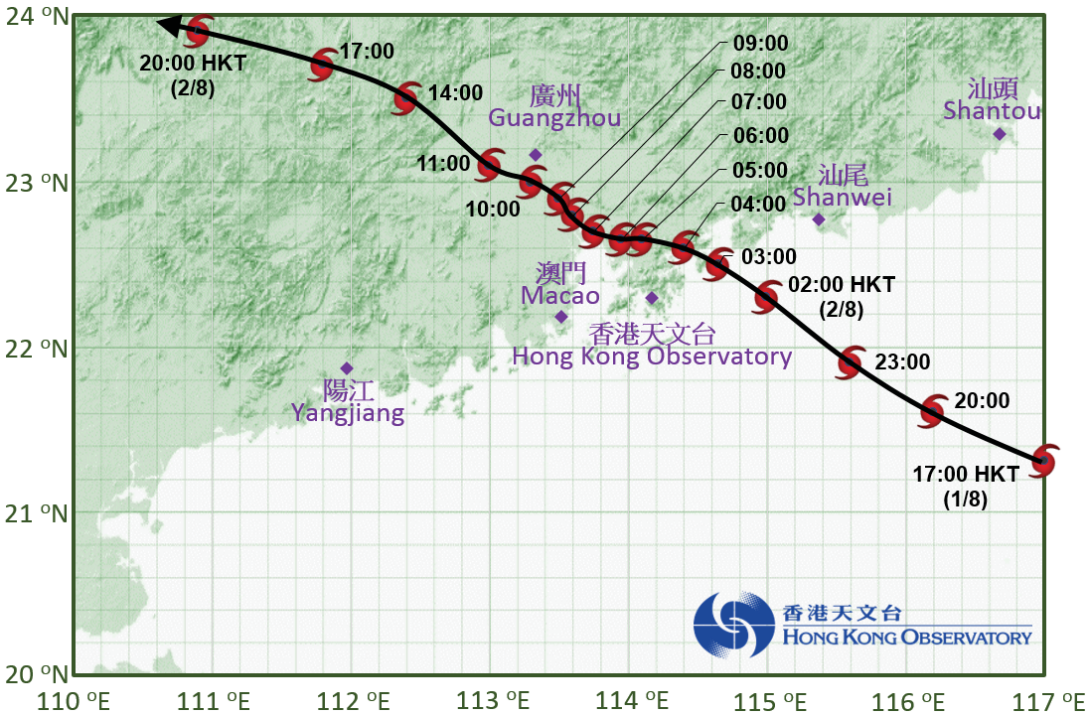

圖 3.3.1b 妮妲接近香港時的路徑圖。

Figure 3.3.1b Track of Nida near Hong Kong.

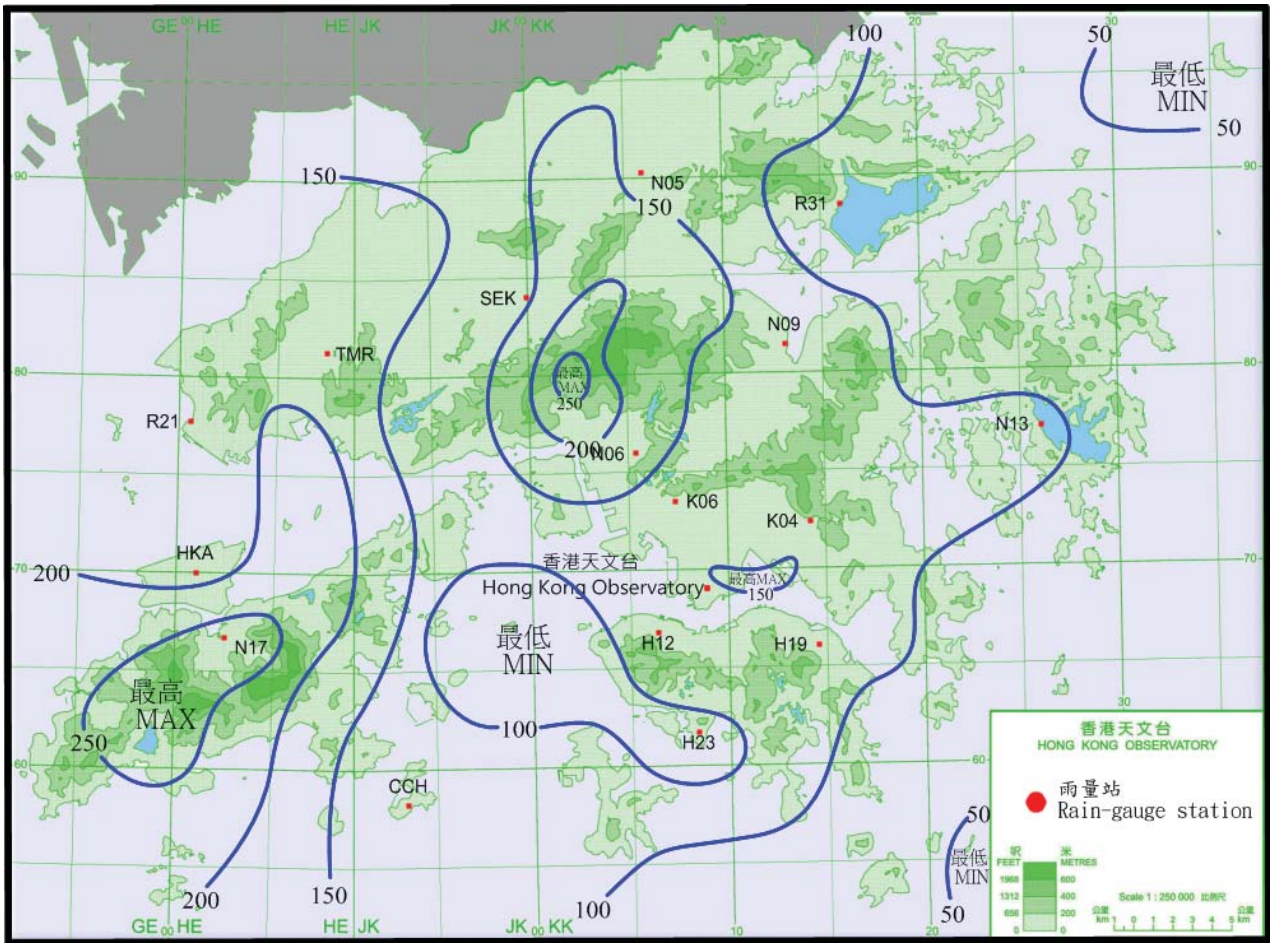

圖 3.3.2　　二零一六年七月三十一日至八月二日的雨量分佈(等雨量線單位為毫米)。

Figure 3.3.2　Rainfall distribution on 31 July - 2 August 2016 (isohyets in millimetres).

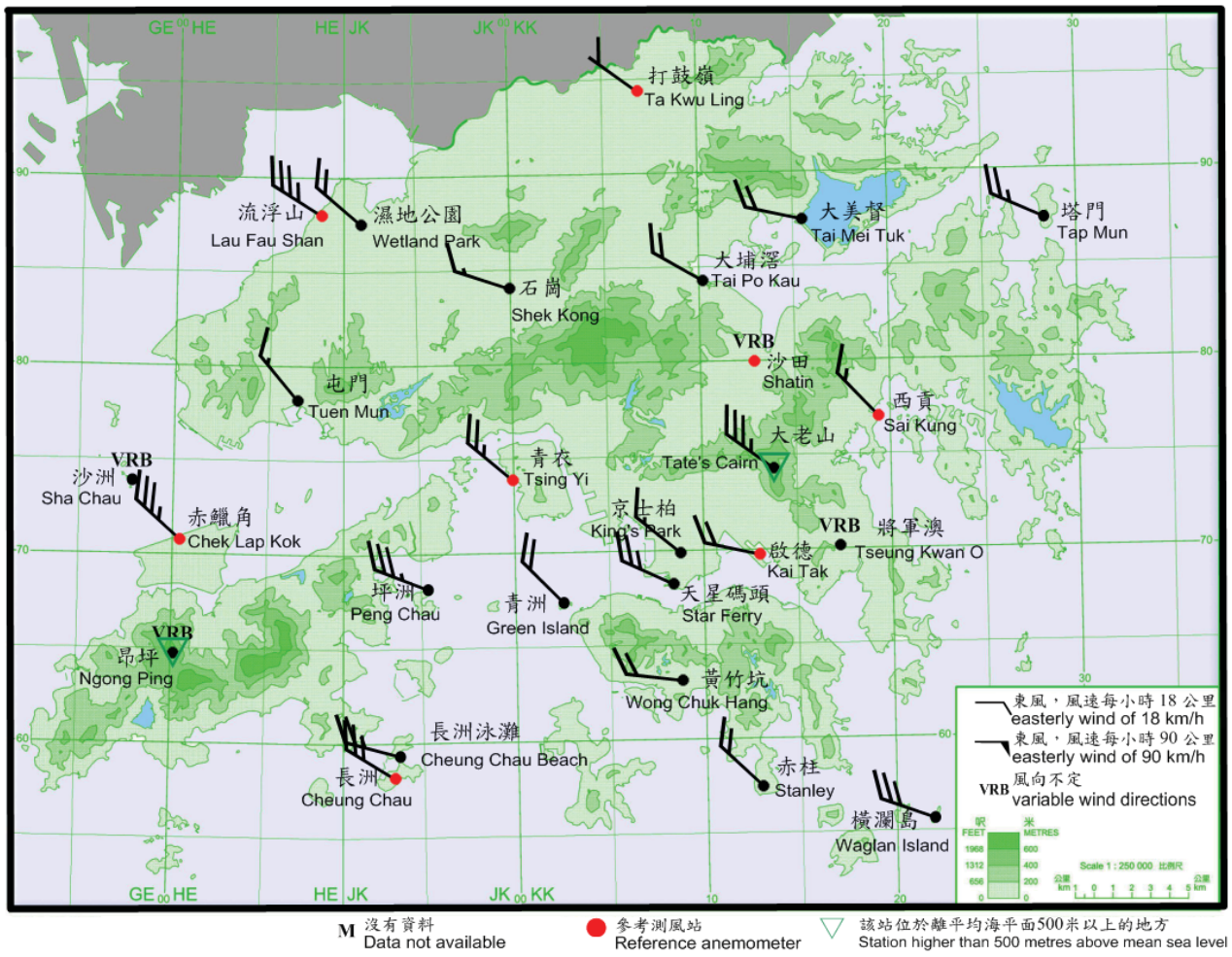

圖 3.3.3a　二零一六年八月二日上午 2 時 30 分香港各站錄得的十分鐘平均風向和風速。當時颱風妮妲集結在天文台總部以東約 80 公里。

Figure 3.3.3a　10-minute mean wind direction and speed recorded at various stations in Hong Kong at 2:30 a.m. on 2 August 2016. Typhoon Nida was about 80 km east of the Observatory Headquarters.

註：　昂坪、沙洲、沙田及將軍澳當時錄得的十分鐘平均風速分別為每小時 33、27、14 及 16 公里。

Note:　The 10-minute mean wind speeds recorded at that time at Ngong Ping, Sha Chau, Shatin and Tseung Kwan O were 33, 27, 14 and 16 km/h respectively.

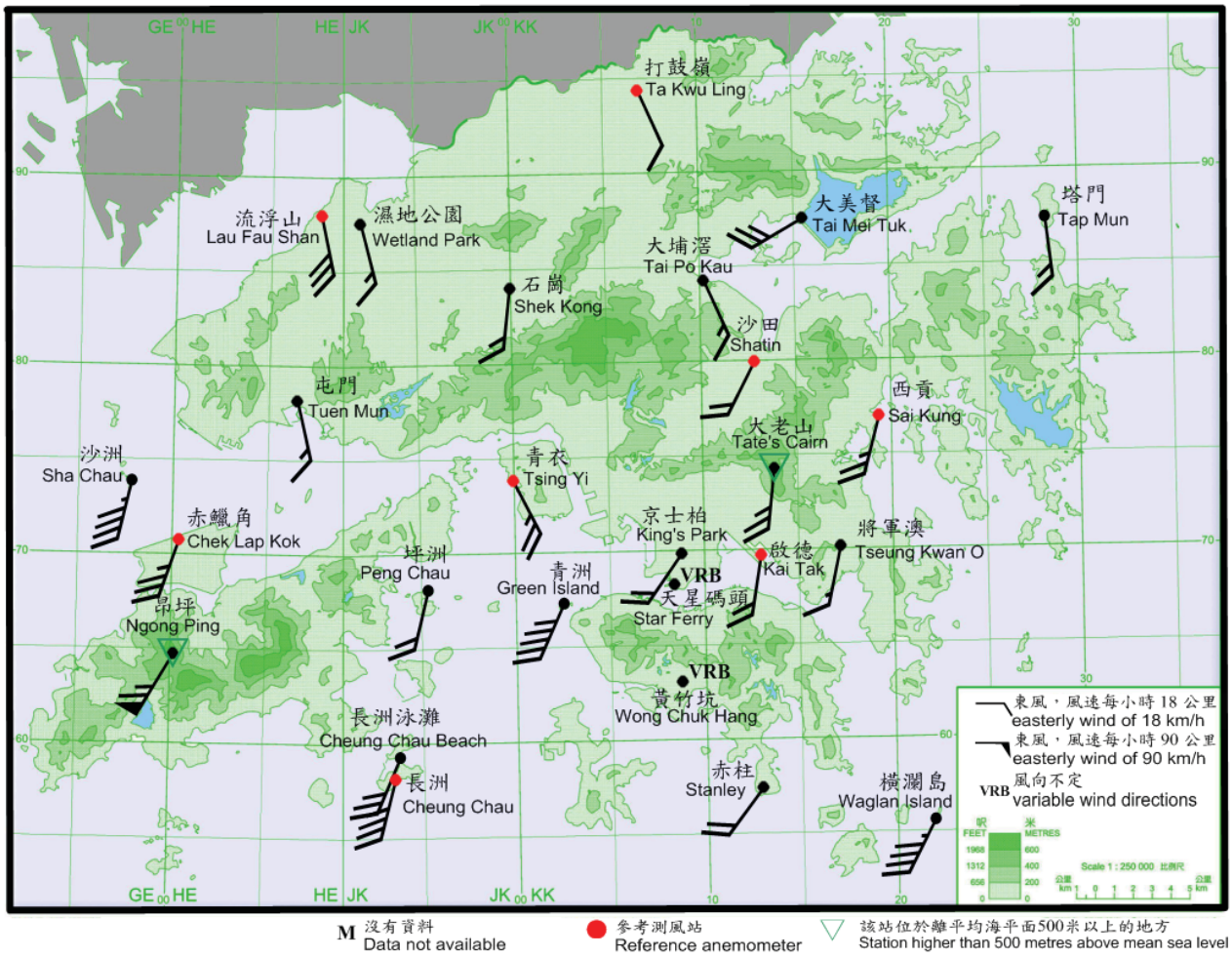

圖 3.3.3b　二零一六年八月二日上午 8 時 20 分香港各站錄得的十分鐘平均風向和風速。當時妮妲已減弱為強烈熱帶風暴並集結在天文台總部之西北約 80 公里。

Figure 3.3.3b　10-minute mean wind direction and speed recorded at various stations in Hong Kong at 8:20 a.m. on 2 August 2016. Nida had already weakened into a severe tropical storm and was about 80 km northwest of the Observatory Headquarters.

註:　天星碼頭及黃竹坑當時錄得的十分鐘平均風速分別為每小時 23 及 12 公里。

Note:　The 10-minute mean wind speeds recorded at that time at Star Ferry and Wong Chuk Hang were 23 and 12 km/h respectively.

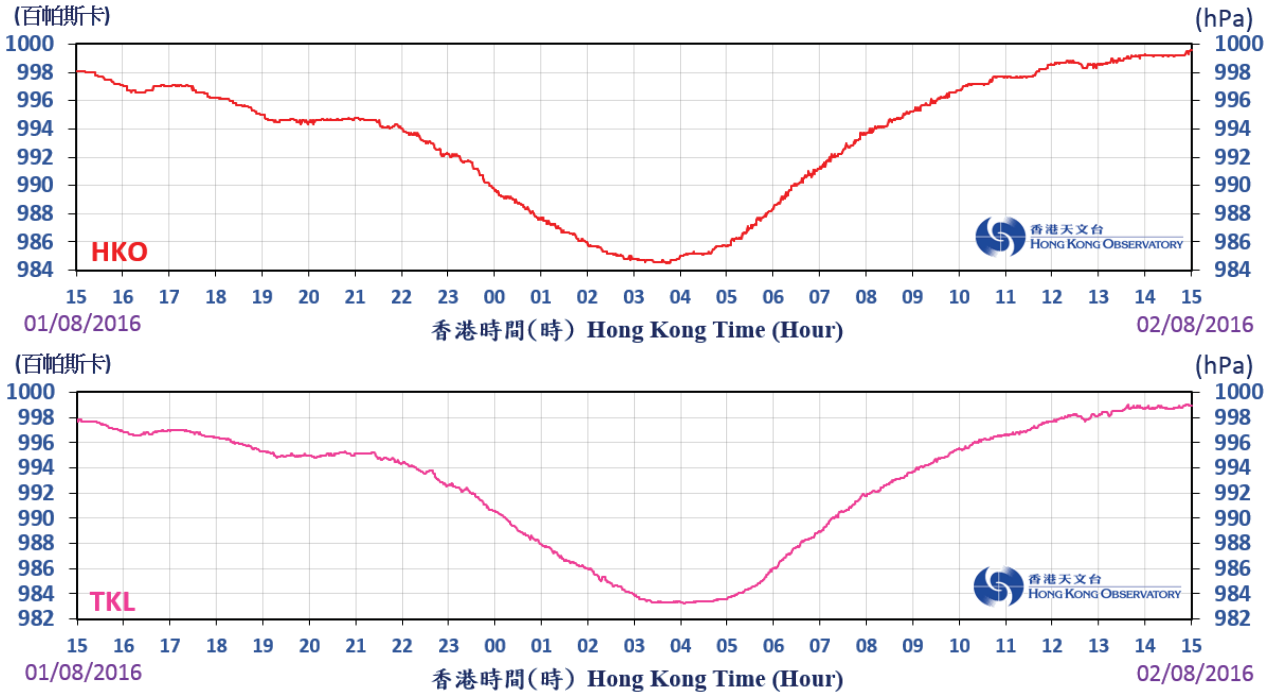

圖 3.3.4　二零一六年八月一日至二日天文台總部(上圖)及打鼓嶺(下圖)錄得的海平面氣壓。

Figure 3.3.4　Traces of mean sea-level pressure recorded at the Observatory Headquarters (top panel) and Ta Kwu Ling (bottom panel) on 1 – 2 August 2016.

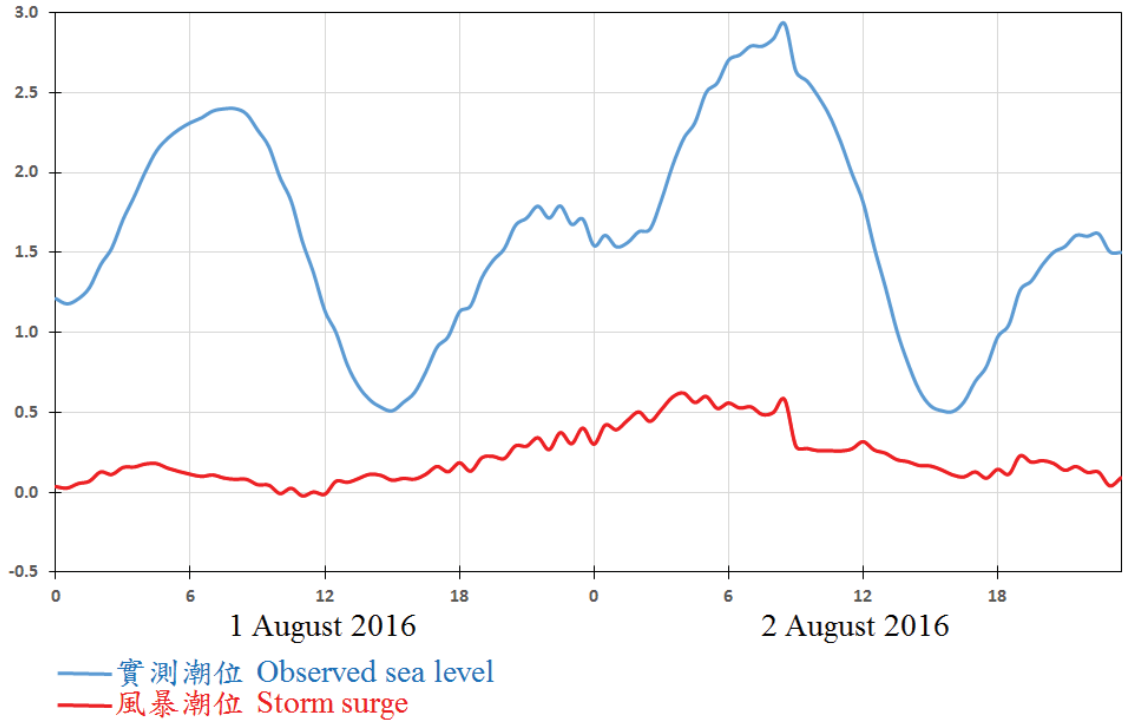

圖 3.3.5　二零一六年八月一日至二日鰂魚涌錄得的潮位圖(海平面為海圖基準面以上，單位為米) 。

Figure 3.3.5　Tide and storm surge recorded at Quarry Bay on 1 – 2 August 2016 (sea level in metres above chart datum).

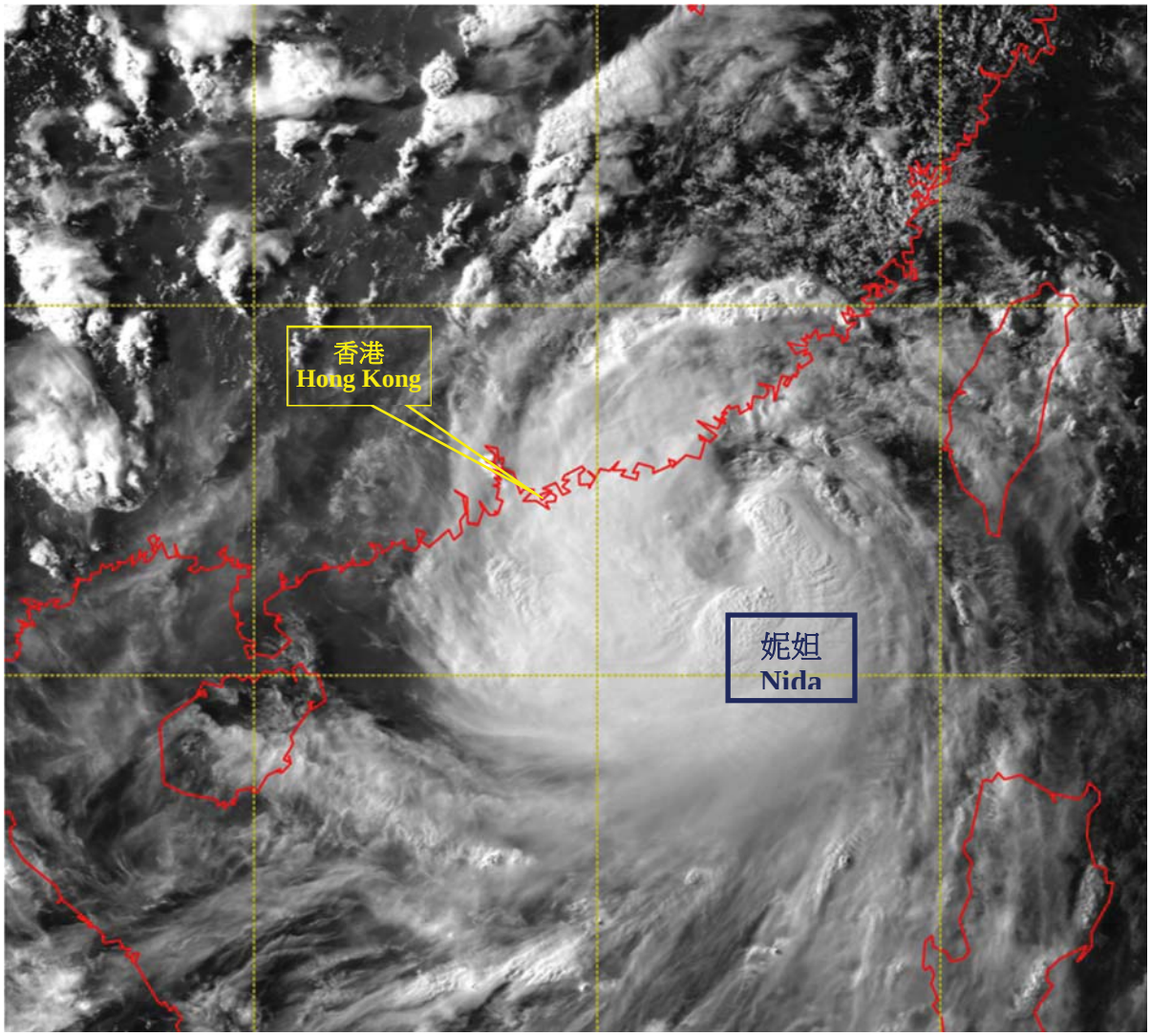

圖 3.3.6　二零一六年八月一日下午 5 時左右的可見光衛星圖片，當時妮妲達到其最高強度，中心附近最高持續風速估計為每小時 130 公里。

Figure 3.3.6　Visible satellite imagery around 5 p.m. on 1 August 2016, when Nida was at peak intensity with estimated maximum sustained winds of 130 km/h near its centre.

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

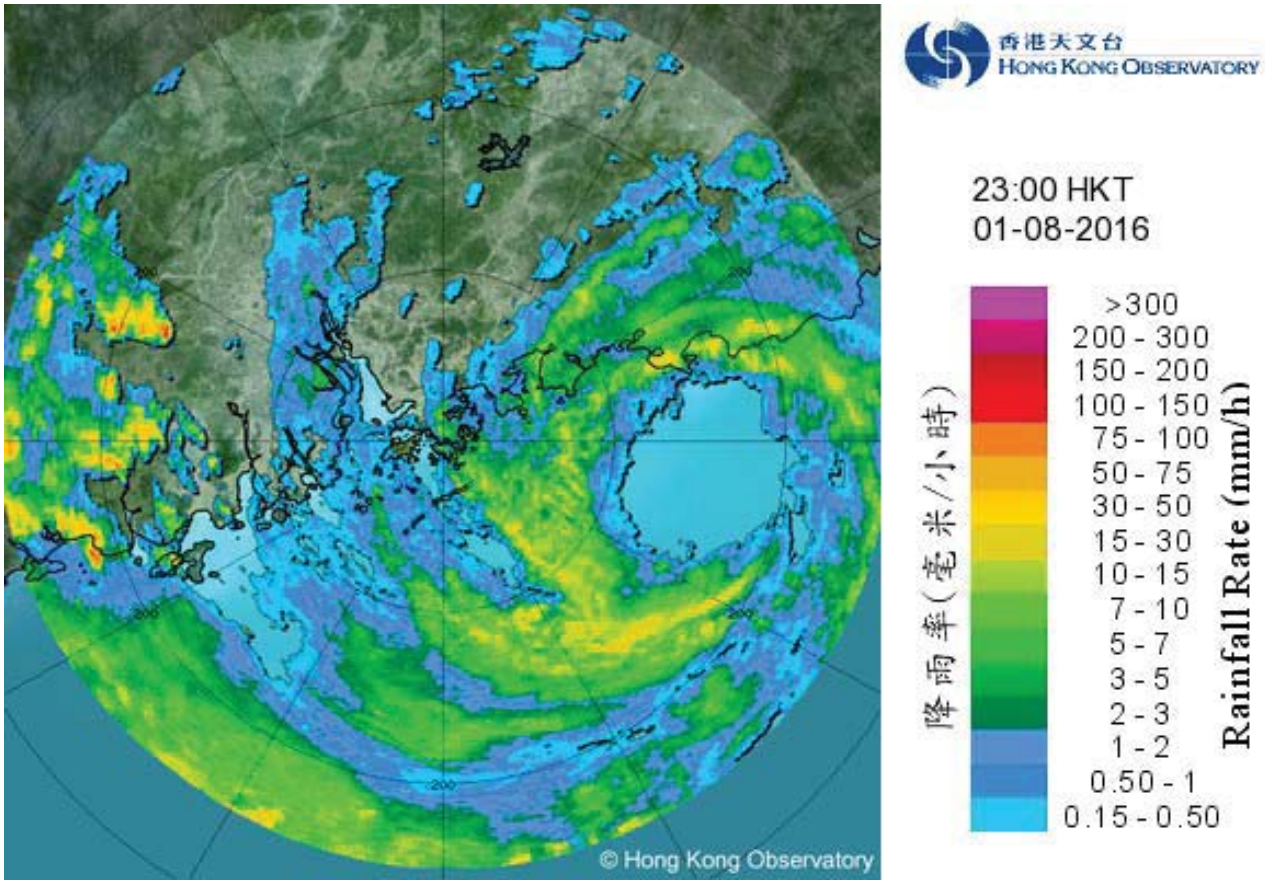

圖 3.3.7a　二零一六年八月一日晚上 11 時正的雷達回波圖像。颱風妮妲直徑約 100 公里的風眼清晰可見。

Figure 3.3.7a　Image of radar echoes at 11 p.m. on 1 August 2016 which clearly shows the eye of Nida with a diameter of about 100 km.

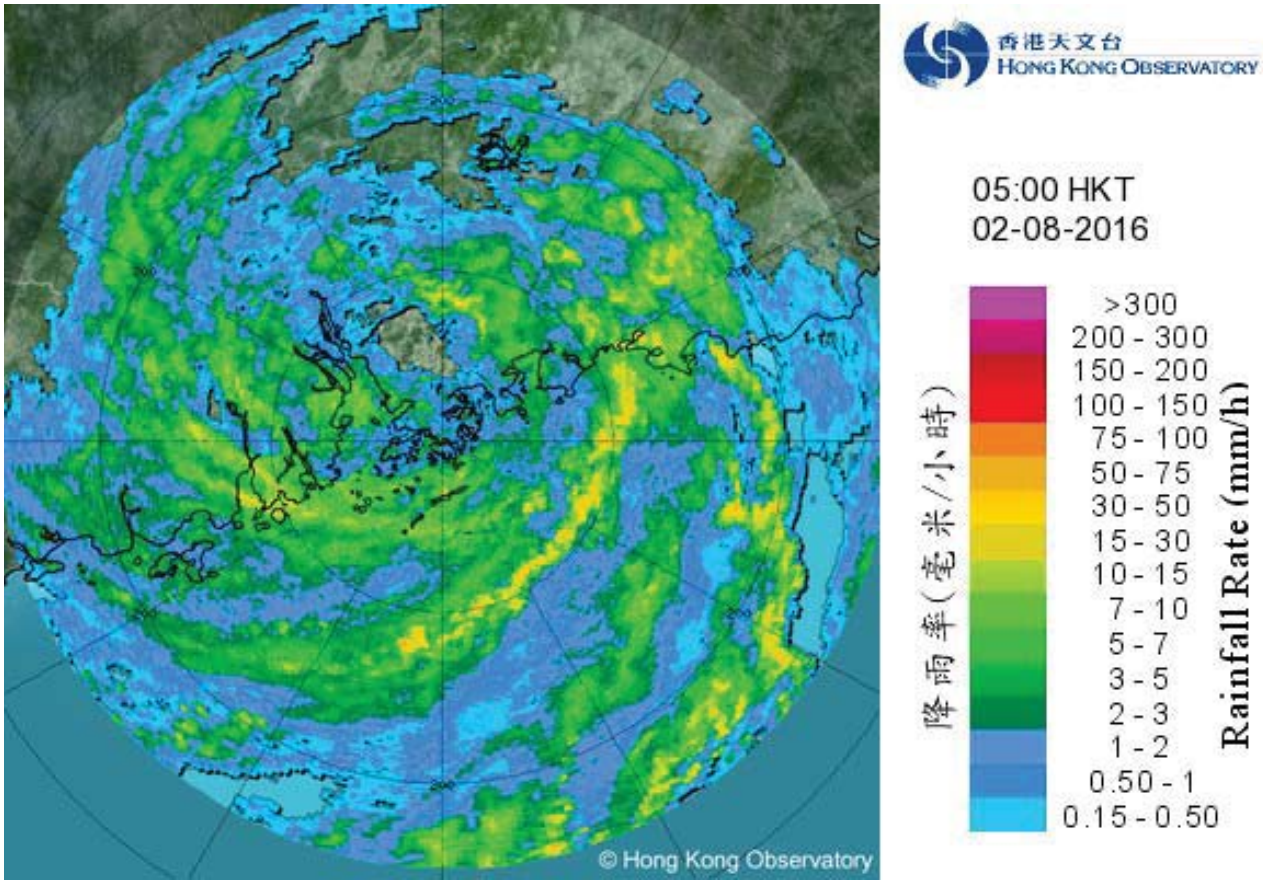

圖 3.3.7b　二零一六年八月二日上午 5 時正的雷達回波圖像。當時妮妲已減弱為強烈熱帶風暴，並最接近香港，其中心在天文台總部之西北偏北約 40 公里。

Figure 3.3.7b　Image of radar echoes at 5 a.m. on 2 August 2016 when Nida was closest to Hong Kong. Nida had weakened into a severe tropical storm by then and its centre was about 40 km north-northwest of the Observatory Headquarters.

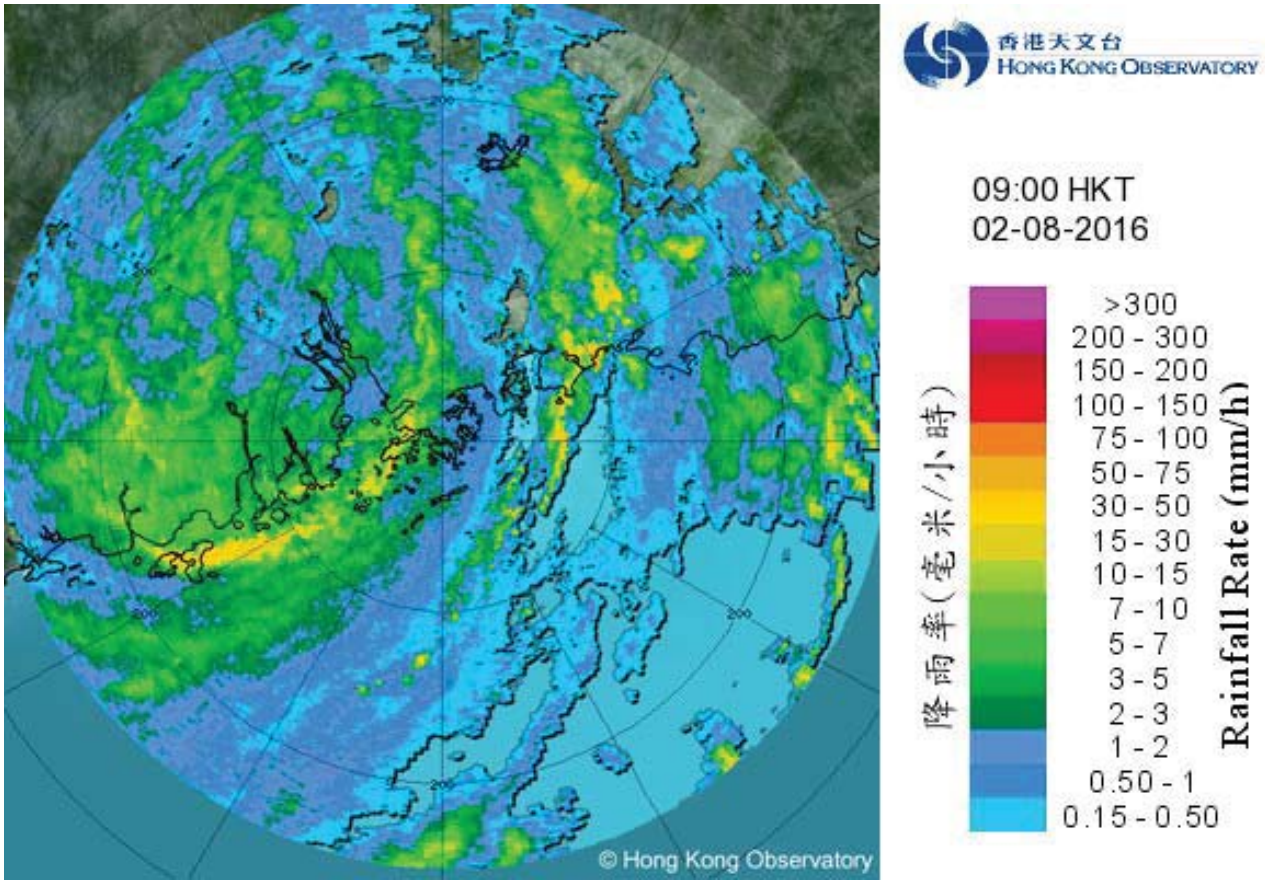

圖 3.3.7c　二零一六年八月二日上午 9 時正的雷達回波圖像。妮妲的強烈雨帶影響香港。當時黃色暴雨警告信號、山泥傾瀉警告及新界北部水浸特別報告正在生效。

Figure 3.3.7c　Image of radar echoes at 9 a.m. on 2 August 2016. Hong Kong was under the influence of the intense rainbands of Nida. Amber Rainstorm Warning, Landslip Warning and Special Announcement on Flooding in Northern New Territories were in force at the time.

圖 3.3.8 灣仔菲林明道一幢商業大廈外牆一幅棚架倒塌。(相片由中國日報提供)

Figure 3.3.8 The scaffolding of a commercial building at Fleming Road in Wan Chai collapsed. (Photo courtesy of China Daily)

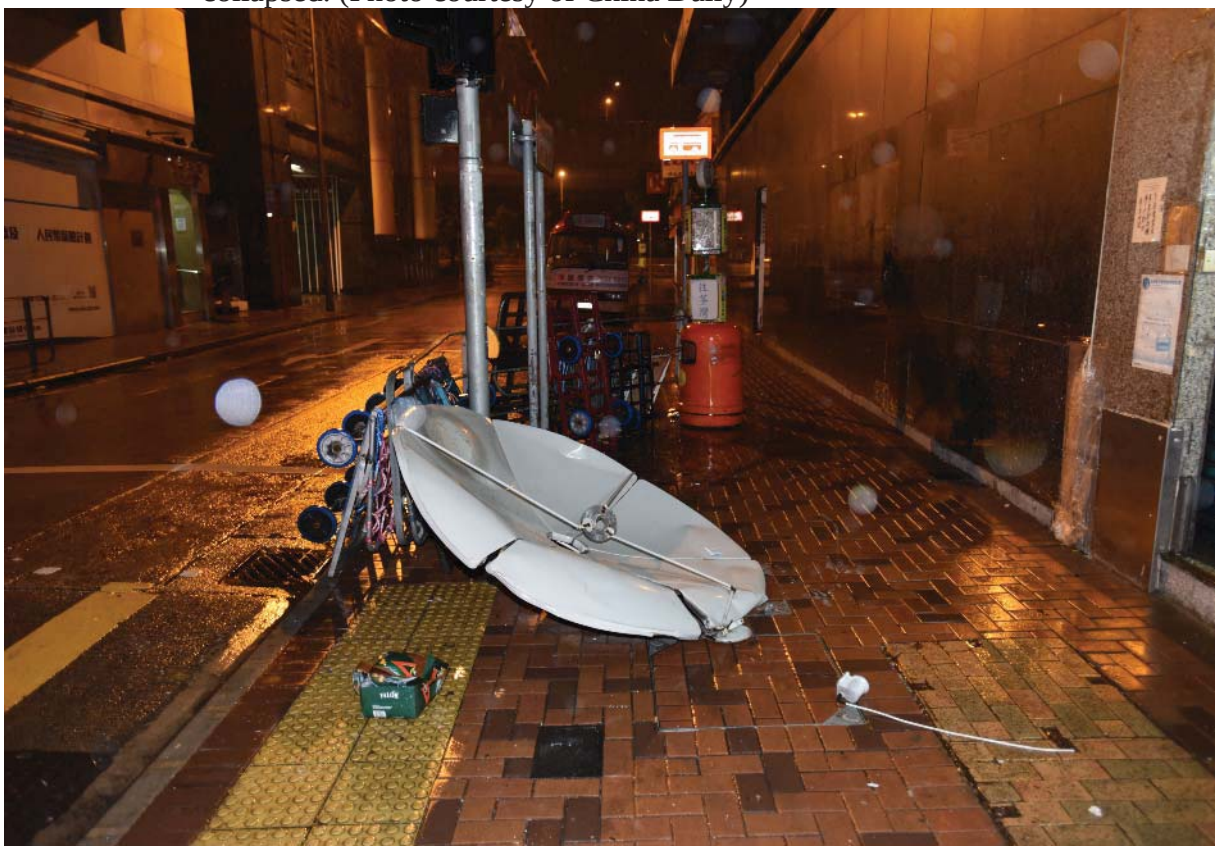

圖 3.3.9 上環有一個直徑約六呎的衛星接收器遭強風吹至飛墜行人路。(相片由星島日報提供)

Figure 3.3.9 A satellite dish of around six feet was blown down to the pavement under strong winds in Sheung Wan. (Photo courtesy of Sing Tao Daily)

圖 3.3.10　在妮妲的影響下，白加道發生山泥傾瀉。(相片由土力工程處及土木工程拓展署提供)

Figure 3.3.10　Landslide at Barker Road under the influence of Nida. (Photo courtesy of the Geotechnical Engineering Office and the Civil Engineering and Development Department)

圖 3.3.11　妮妲吹襲香港期間，西灣河鯉景灣附近有樹木被吹倒。(相片由彭栩怡提供)

Figure 3.3.11　Tree blown down near Lei King Wan in Sai Wan Ho during the passage of Nida. (Photo courtesy of Huey Pang)