

第三節 二零二零年影響香港的熱帶氣旋

3.1 熱帶風暴鸚鵡(2002)：二零二零年六月十二日至十四日

鸚鵡是二零二零年首個影響香港的熱帶氣旋。

熱帶低氣壓鸚鵡於六月十二日凌晨在馬尼拉之西北偏北約110公里的菲律賓上空形成，並逐漸增強。日間鸚鵡向西北移動橫過南海。翌日凌晨鸚鵡發展為熱帶風暴，下午達到其最高強度，中心附近最高持續風速估計為每小時75公里。鸚鵡於六月十四日早上稍後時間在廣東陽江市登陸，下午在廣東內陸減弱為低壓區。

香港天文台在六月十二日晚上8時20分發出一號戒備信號，當時鸚鵡集結在香港之東南偏南約710公里。當晚及翌日早上本港吹輕微至和緩東至東北風。隨著鸚鵡靠近廣東沿岸，天文台在六月十三日下午3時40分發出三號強風信號，當時鸚鵡集結在香港之東南偏南約290公里。下午本港風勢逐漸增強，晚間吹清勁至強風程度的東至東南風，高地間中吹烈風。鸚鵡於六月十四日上午2時左右最接近本港，其中心在香港之西南偏南約190公里左右掠過。隨著鸚鵡逐漸減弱及遠離香港，天文台在六月十四日上午10時40分以一號戒備信號取代三號強風信號，並於當日下午1時20分取消所有熱帶氣旋警告信號。

在鸚鵡的影響下，尖鼻咀錄得最高潮位(海圖基準面以上)及最大風暴潮(天文潮高度以上)分別為2.22米及0.45米。天文台總部於六月十三日下午4時48分錄得最低瞬時海平面氣壓1002.5百帕斯卡。

六月十三日本港天氣酷熱及部分時間有陽光，亦有幾陣狂風驟雨及局部地區雷暴。受鸚鵡相關的外圍雨帶影響，六月十三日晚上及六月十四日本港有狂風驟雨，多處地區錄得超過30毫米雨量。

鸚鵡吹襲香港期間，一名市民在大嶼山下長沙海灘滑浪期間不幸遇溺身亡。一艘雙體船在西貢因大浪翻側，船上13人墮海獲救，當中一人受傷。

Section 3 TROPICAL CYCLONES AFFECTING HONG KONG IN 2020

3.1 Tropical Storm Nuri (2002): 12 to 14 June 2020

Nuri was the first tropical cyclone affecting Hong Kong in 2020.

Nuri formed as a tropical depression over the Philippines about 110 km north-northwest of Manila in the small hours of 12 June and intensified gradually. It moved generally northwestward across the South China Sea during the day. Nuri developed into a tropical storm in the small hours of 13 June and reached its peak intensity with an estimated sustained wind of 75 km/h near its centre in the afternoon. Nuri made landfall over Yangjiang of Guangdong later in the morning of 14 June and weakened into an area of low pressure over inland Guangdong in the afternoon.

The Standby Signal No. 1 was issued by the Hong Kong Observatory at 8:20 p.m. on 12 June when Nuri was about 710 km south-southeast of Hong Kong. Local winds were light to moderate east to northeasterlies that night and the next morning. As Nuri edged closer to the coast of Guangdong, the Strong Wind Signal No. 3 was issued at 3:40 p.m. on 13 June when Nuri was about 290 km south-southeast of Hong Kong. Local winds strengthened gradually in the afternoon and became fresh to strong east to southeasterlies with occasionally gales on high ground during the night. Nuri came closest to Hong Kong at around 2 a.m. on 14 June, skirting past about 190 km south-southwest of the territory. With Nuri departing from Hong Kong and weakening gradually, the No. 3 Strong wind Signal was replaced by the Standby Signal No.1 at 10:40 a.m. on 14 June, and all tropical cyclone warning signals were cancelled at 1:20 p.m. on that day.

Under the influence of Nuri, a maximum sea level (above chart datum) of 2.22 m and a maximum storm surge of 0.45 m (above astronomical tide) were recorded at Tsim Bei Tsui. At the Observatory Headquarters, the lowest instantaneous mean sea-level pressure of 1002.5 hPa was recorded at 4:48 p.m. on 13 June.

The weather of Hong Kong was very hot with sunny periods on 13 June. There were also a few squally showers and isolated thunderstorms. Under the influence of the outer rainbands associated with Nuri, there were squally showers on the night of 13 June and on 14 June. More than 30 millimetres of rainfall were recorded over many places in Hong Kong.

In Hong Kong, a person was tragically drowned in the rough seas while surfing in Lower Cheung Sha Beach of Lantau Island during the passage of Nuri. A catamaran was overturned under rough sea conditions. 13 people on board fell into sea and were later rescued. One of them was injured.

表 3.1.1 在鸚鵡影響下，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 when the tropical cyclone warning signals for Nuri 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		
中環碼頭	Central Pier	東南偏東	ESE	63	13/6	23:28	東南偏東	ESE	33	13/6	23:00
長洲	Cheung Chau	東	E	71	13/6	22:23	東	E	54	14/6	01:00
長洲泳灘	Cheung Chau Beach	東	E	69	14/6	00:48	東	E	50	13/6	23:00
青洲	Green Island	南	S	69	14/6	05:56	東北偏東	ENE	45	13/6	20:00
香港國際機場	Hong Kong International Airport	東南	SE	65	14/6	06:43	東	E	34	14/6	02:00
啟德	Kai Tak	東北偏東	ENE	62	13/6	21:44	東南偏東	ESE	30	14/6	03:00
京士柏	King's Park	東	E	57	13/6	23:50	東	E	28	13/6	23:00
南丫島	Lamma Island	東南	SE	63	14/6	05:58	東	E	32	13/6	23:00
流浮山	Lau Fau Shan	東南	SE	51	14/6	06:33	東北偏東	ENE	28	13/6	20:00
北角	North Point	東北偏東	ENE	57	13/6	18:26	東	E	35	13/6	21:00
坪洲	Peng Chau	東南	SE	58	14/6	06:00	東	E	36	13/6	22:00
平洲	Ping Chau	東南	SE	42	14/6	02:45	東	E	10	13/6	16:00
							東	E	10	13/6	20:00
西貢	Sai Kung	東南偏南	SSE	64	14/6	06:10	東南偏南	SSE	36	14/6	04:00
沙洲	Sha Chau	南	S	66	14/6	09:28	東南	SE	40	14/6	02:00
沙螺灣	Sha Lo Wan	東南偏東	ESE	69	14/6	03:55	東南偏東	ESE	26	14/6	02:00
							東南偏東	ESE	26	14/6	05:00
沙田	Sha Tin	東南偏南	SSE	48	14/6	01:42	東南	SE	19	14/6	02:00
							東南偏南	SSE	19	14/6	05:00
九龍天星碼頭	Star Ferry (Kowloon)	東南偏東	ESE	59	14/6	02:19	東	E	33	13/6	23:00
		東南偏東	ESE	59	14/6	06:05					
打鼓嶺	Ta Kwu Ling	東	E	51	13/6	23:08	東	E	21	14/6	00:00
大美督	Tai Mei Tuk	東	E	68	13/6	22:48	東	E	46	13/6	23:00
大帽山	Tai Mo Shan	東南偏東	ESE	103	13/6	21:47	東南偏東	ESE	75	14/6	00:00
大埔滘	Tai Po Kau	東南	SE	55	14/6	01:57	東	E	32	13/6	22:00
塔門東	Tap Mun East	東南偏東	ESE	73	13/6	22:34	東南偏東	ESE	52	13/6	23:00
大老山	Tate's Cairn	-	-	84	13/6	22:25	-	-	58	13/6	22:00
將軍澳	Tseung Kwan O	東南偏東	ESE	53	14/6	01:44	東南偏東	ESE	15	14/6	02:00
青衣島蜆殼油庫	Tsing Yi Shell Oil Depot	東南	SE	56	14/6	06:18	東南偏東	ESE	26	14/6	05:00
屯門政府合署	Tuen Mun Government Offices	東南偏南	SSE	51	14/6	06:25	東南偏南	SSE	24	14/6	07:00
橫瀾島	Waglan Island	東北偏東	ENE	75	13/6	18:57	東南偏東	ESE	54	14/6	02:00
濕地公園	Wetland Park	東南偏東	ESE	35	13/6	16:12	東	E	15	13/6	17:00
黃竹坑	Wong Chuk Hang	東	E	67	14/6	01:35	東	E	23	13/6	23:00

黃麻角(赤柱)、昂坪、石崗 - 沒有資料
大老山 - 沒有風向資料

Bluff Head (Stanley), Ngong Ping, Shek Kong - data not available
Tate's Cairn - wind direction not available

表 3.1.2 在鸚鵡影響下，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程度的時段

Table 3.1.2 Periods during which sustained strong winds were attained at the eight reference anemometers in the tropical cyclone warning system when tropical cyclone warning signals for Nuri were in force

站 (參閱圖 1.1) Station (See Fig. 1.1)		最初達到強風*時間		最後達到強風*時間	
		Start time when strong wind speed* was attained		End time when strong wind speed* was attained	
		日期/月份 Date/Month	時間 Time	日期/月份 Date/Month	時間 Time
長洲	Cheung Chau	13/6	20:20	14/6	07:38
香港國際機場	Hong Kong International Airport	14/6	09:24	14/6	09:30
西貢	Sai Kung	14/6	01:41	14/6	06:23

啟德、流浮山、沙田、打鼓嶺及青衣島蜆殼油庫的持續風力未達到強風程度。

The sustained wind speed did not attain strong force at Kai Tak, Lau Fau Shan, Sha Tin, Ta Kwu Ling and Tsing Yi Shell Oil Depot.

* 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

註： 本表列出持續風力達到強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 winds. Winds might fluctuate above or below the specified wind speeds in between the times indicated.

表 3.1.3 鸚鵡影響香港期間，香港天文台總部及其他各站所錄得的日雨量
Table 3.1.3 Daily rainfall amounts recorded at the Hong Kong Observatory Headquarters and other stations during the passage of Nuri

站 (參閱圖 3.1.2) Station (See Fig. 3.1.2)			六月十二日 12 Jun	六月十三日 13 Jun	六月十四日 14 Jun	總雨量(毫米) Total rainfall (mm)
香港天文台 Hong Kong Observatory (HKO)			0.0	11.7	29.3	41.0
香港國際機場 Hong Kong International Airport (HKA)			微量 Trace	3.6	14.5	18.1
長洲 Cheung Chau (CCH)			[0.0]	[5.5]	7.0	[12.5]
H23	香港仔	Aberdeen	0.0	10.5	15.5	26.0
N05	粉嶺	Fanling	0.0	12.5	15.5	28.0
N13	糧船灣	High Island	0.0	8.0	9.5	17.5
K04	佐敦谷	Jordan Valley	0.0	11.0	26.5	37.5
N06	葵涌	Kwai Chung	0.0	7.5	30.5	38.0
H12	半山區	Mid Levels	0.0	6.5	30.0	36.5
N09	沙田	Sha Tin	0.5	11.0	24.0	35.5
H19	筲箕灣	Shau Kei Wan	0.0	8.5	29.0	37.5
SEK	石崗	Shek Kong	[0.0]	[9.5]	18.5	[28.0]
K06	蘇屋邨	So Uk Estate	0.0	10.5	29.5	40.0
R31	大美督	Tai Mei Tuk	0.0	5.5	26.5	32.0
R21	踏石角	Tap Shek Kok	0.0	10.5	5.0	15.5
N17	東涌	Tung Chung	0.0	7.5	27.0	34.5
TMR	屯門水庫	Tuen Mun Reservoir	0.0	7.7	11.8	19.5

註： [] 基於不完整的每小時雨量數據。

Note: [] based on incomplete hourly data.

表 3.1.4 鸚鵡影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮
Table 3.1.4 Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of Nuri

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	1.99	13/6	12:40	0.26	14/6	01:58
石壁	Shek Pik	2.03	13/6	15:07	0.28	14/6	01:32
大廟灣	Tai Miu Wan	1.98	13/6	12:34	0.30	14/6	01:34
大埔滘	Tai Po Kau	2.03	13/6	12:36	0.40	14/6	00:12
尖鼻咀	Tsim Bei Tsui	2.22	13/6	15:43	0.45	14/6	03:59

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

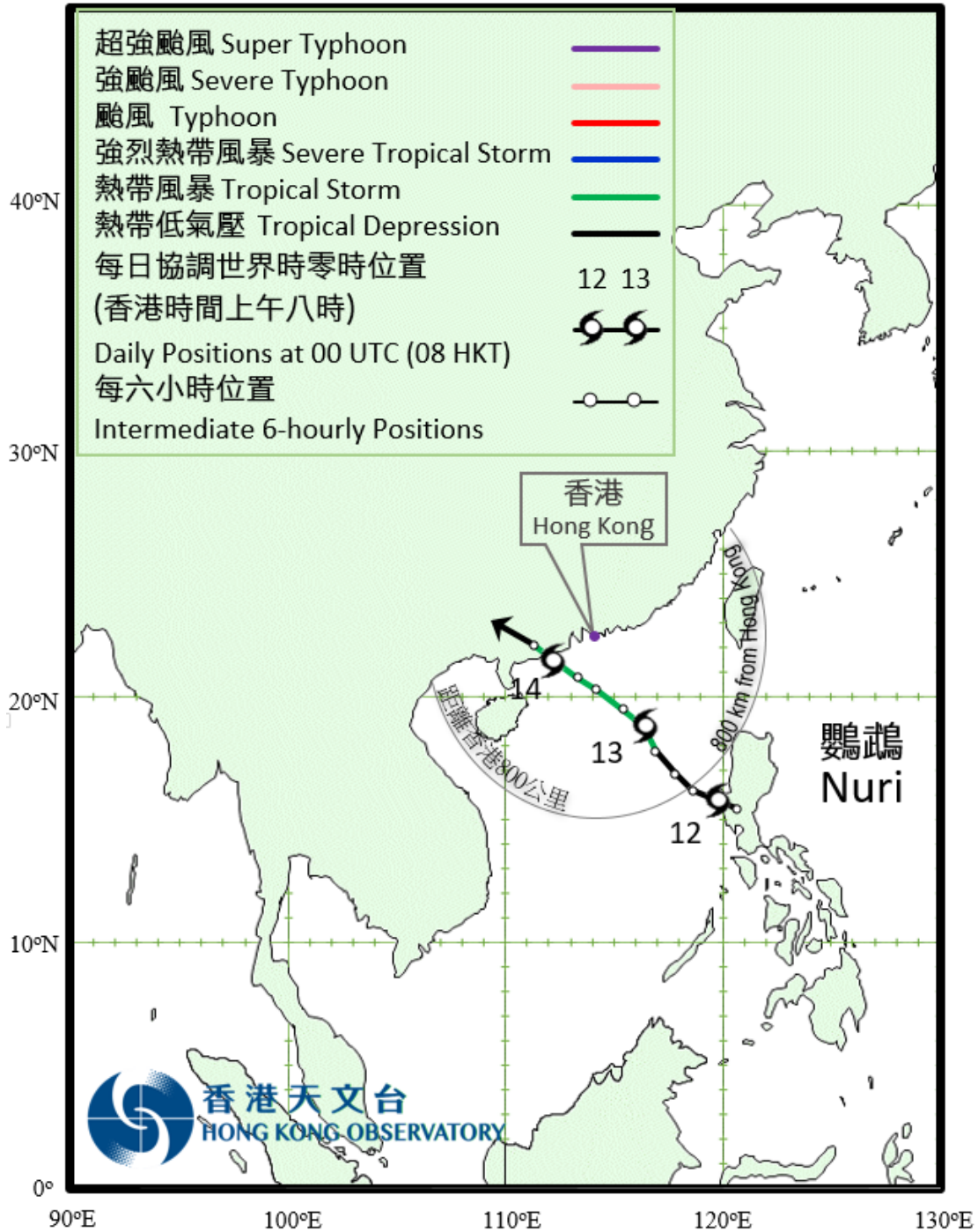


圖 3.1.1 二零二零年六月十二日至十四日鸚鵡的路徑圖。

Figure 3.1.1 Track of Nuri: 12 – 14 June 2020.

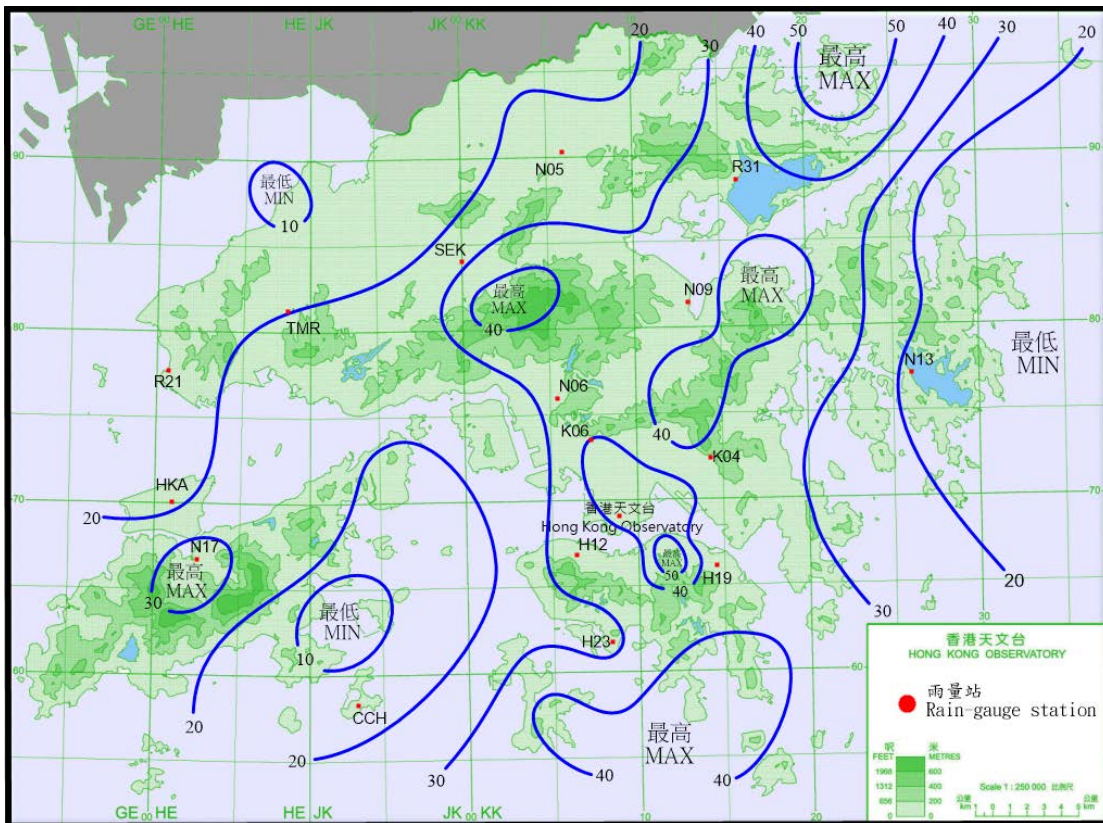


圖 3.1.2 二零二零年六月十二日至十四日的雨量分佈
(等雨量線單位為毫米)。

Figure 3.1.2 Rainfall distribution on 12 - 14 June 2020 (isohyets in millimetres).

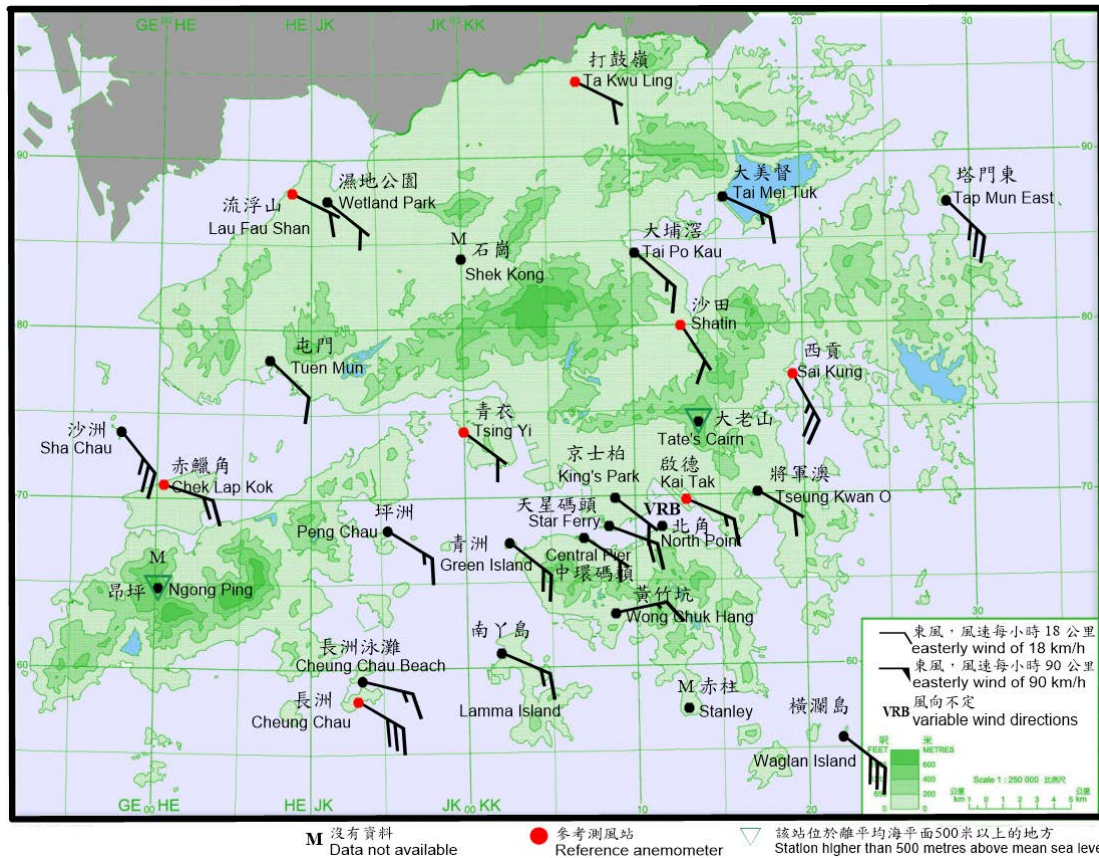


圖 3.1.3 二零二零年六月十四日上午1時50分香港各站錄得的十分鐘平均風向和風速。當時西貢、長洲、沙洲、塔門東及橫瀾島的風力達到強風程度。

Figure 3.1.3 10-minute mean wind direction and speed recorded at various stations in Hong Kong at 1:50 a.m. on 14 June 2020. Winds reached strong force at Sai Kung, Cheung Chau, Sha Chau, Tap Mun East and Waglan Island at that time.

註： 大老山並沒有風向資料。北角及大老山當時錄得的十分鐘平均風速分別為每小時10及27公里。

Note: Wind direction information is not available for Tate's Cairn. The 10-minute mean wind speeds recorded at North Point and Tate's Cairn were 10 km/h and 27 km/h respectively at that time.

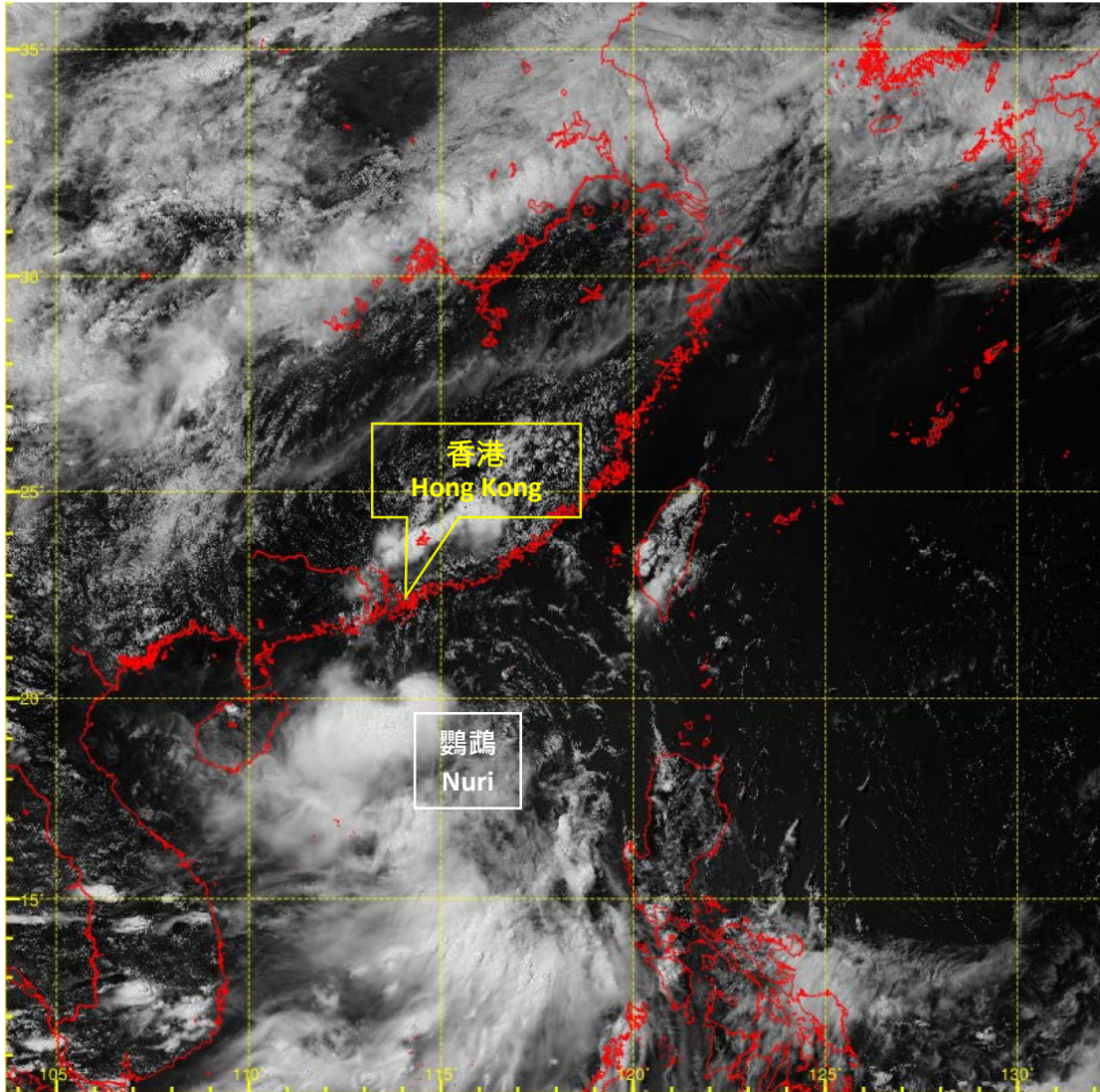


圖 3.1.4 二零二零年六月十三日下午2時左右的可見光衛星圖片，當時鸚鵡達到其最高強度，中心附近最高持續風速估計為每小時75公里。

Figure 3.1.4 Visible satellite imagery around 2 p.m. on 13 June 2020, when Nuri was at its peak intensity with an estimated sustained wind of 75 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).]

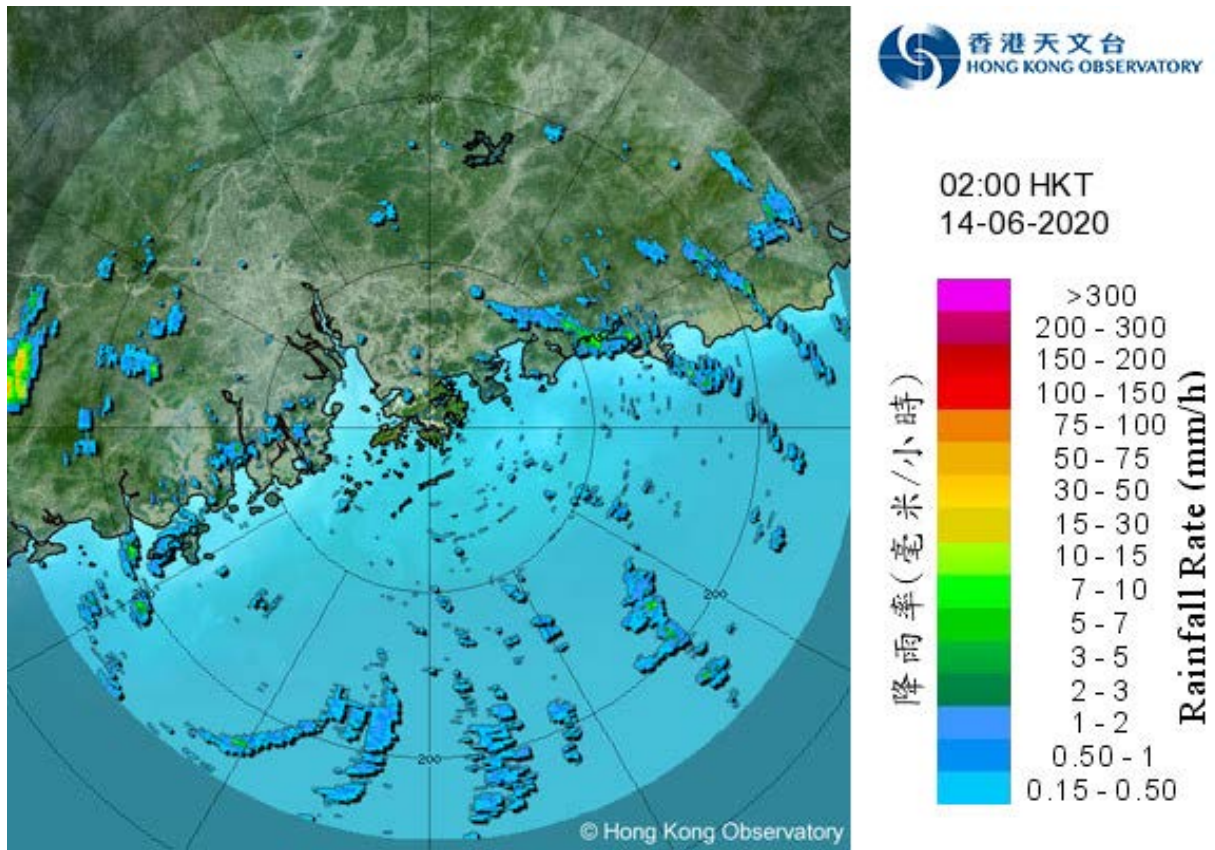


圖 3.1.5 二零二零年六月十四日上午 2 時的雷達回波圖像，當時鸚鵡最接近本港，其中心在香港之西南偏南約 190 公里左右掠過。

Figure 3.1.5 Image of radar echoes at 2 a.m. on 14 June 2020 when Nuri came closest to Hong Kong, skirting past about 190 km south-southwest of the territory.