

### 3.5 颱風沙德爾(2017)：二零二零年十月十九日至二十五日

沙德爾是二零二零年第五個影響香港的熱帶氣旋。

熱帶低氣壓沙德爾於十月十九日早上在馬尼拉以東約920公里的北太平洋西部上形成，大致向西北偏西移動，並逐漸增強。沙德爾於十月二十日晚上橫過呂宋，翌日早上進入南海中部。日間沙德爾轉向西北方向移動。沙德爾於十月二十二日增強為颱風，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140公里。受乾燥的東北季候風影響，沙德爾隨後轉向偏西方向移動，並逐漸減弱。最後於十月二十五日晚上在越南中部以東海域減弱為一個低壓區。

根據報章報導，沙德爾吹襲菲律賓期間，當地出現洪水及山泥傾瀉，超過6000人需要撤離。

香港天文台在十月二十二日下午5時40分發出一號戒備信號，當時沙德爾集結在香港之東南偏南約600公里，天文台總部亦錄得最低瞬時海平面氣壓1009.1百帕斯卡。隨著沙德爾移近華南沿岸，天文台在十月二十三日上午12時20分發出三號強風信號，當時沙德爾位於香港之東南偏南約570公里。在沙德爾及東北季候風的共同影響下，十月二十二日晚及十月二十三日本港普遍吹清勁北至東北風，離岸及高地間中吹強風。十月二十三日高地風力更間中達烈風程度。沙德爾於十月二十三日下午8時左右最接近香港，在本港以南約490公里掠過。隨著沙德爾遠離香港及減弱，它對香港的直接威脅減低，天文台在十月二十四日上午9時10分取消所有熱帶氣旋警告信號。但在東北季候風的影響下，本港離岸仍間中吹強風，高地間中吹烈風，天文台隨即發出強烈季候風信號，直至翌日下午1時正取消。

沙德爾影響香港期間，尖鼻咀錄得最高潮位(海圖基準面以上) 2.90米，大埔滘則錄得最大風暴潮(天文潮高度以上)0.67米。

沙德爾吹襲香港期間並沒有造成嚴重破壞。受沙德爾相關的雲帶及乾燥的東北季候風影響，十月二十三日及二十四日本港雲量較多，天氣稍涼及乾燥。

### 3.5 Typhoon Saudel (2017): 19 – 25 October 2020

Saudel was the fifth tropical cyclone affecting Hong Kong in 2020.

Saudel formed as a tropical depression over the western North Pacific about 920 km east of Manila on the morning of 19 October. Saudel moved generally west-northwestwards and intensified gradually. It moved across Luzon on the night of 20 October and entered the central part of the South China Sea in the next morning. Saudel turned to move northwestwards during the day. It intensified into a typhoon on 22 October and reached its peak intensity the next day with an estimated sustained wind of 140 km/h near its centre. Affected by the dry northeast monsoon, Saudel then turned to track westwards and weakened gradually. It finally degenerated into an area of low pressure over the seas east of central Vietnam on the night of 25 October.

According to press reports, over 6000 people were evacuated because of flooding and landslips in the Philippines during the passage of Saudel.

In Hong Kong, the Standby Signal No.1 was issued at 5:40 p.m. on 22 October when Saudel was about 600 km south-southeast of the territory. The lowest instantaneous mean sea-level pressure of 1009.1 hPa was recorded at the Observatory headquarters at that time. As Saudel edged closer towards the south China coast, the Strong Wind Signal No. 3 was issued at 12:20 a.m. on 23 October when Saudel was about 570 km south-southeast of Hong Kong. Under the combined effect of Saudel and the northeast monsoon, local winds were generally fresh north to northeasterlies and occasionally reached strong force offshore and on high ground at the night of 22 October and on 23 October. Gale force winds also affected high ground at times on 23 October. Saudel came closest to the territory at around 8 p.m. on 23 October as it skirted past about 490 km south of Hong Kong. As Saudel departed from Hong Kong and weakened, its direct threat to Hong Kong diminished and all tropical cyclone warning signals were cancelled at 9:10 a.m. on 24 October. Under the influence of the northeast monsoon, strong winds still affected offshore at times with occasional gale force winds on high ground. The Observatory issued the Strong Monsoon Signal immediately afterwards and the signal lasted till 1:00 p.m. the following day.

During the passage of Saudel, a maximum sea level (above chart datum) of 2.90 m was recorded at Tsim Bei Tsui and a maximum storm surge (above astronomical tide) of 0.67 m was recorded at Tai Po Kau.

Saudel did not cause significant damage in Hong Kong. Affected by the cloud bands associated with Saudel and a dry northeast monsoon, local weather turned cloudier, slightly cooler and remained dry on 23 – 24 October.

表 3.5.1 在沙德爾影響下，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 when the tropical cyclone warning signals for Saudel 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)	東北偏北	NNE	47	22/10	23:15	東北偏東	ENE	17	24/10	03:00
中環碼頭	Central Pier	東北	NE	50	22/10	21:17	東北	NE	24	23/10	09:00
長洲	Cheung Chau	東北偏北	NNE	59	22/10	19:54	北	N	39	22/10	20:00
長洲泳灘	Cheung Chau Beach	東北	NE	55	23/10	06:55	東北偏北	NNE	30	22/10	20:00
青洲	Green Island	東北偏北	NNE	76	22/10	20:56	東北偏北	NNE	53	22/10	21:00
香港國際機場	Hong Kong International Airport	東北偏北	NNE	25	23/10	01:00	東北偏北	NNE	25	23/10	08:00
		東北偏北	NNE	25	23/10	08:00	東北偏北	NNE	25	23/10	09:00
		東北偏北	NNE	25	23/10	09:00	東北偏北	NNE	25	23/10	09:00
啟德	Kai Tak	北	N	45	22/10	18:40	北	N	15	22/10	19:00
京士柏	King's Park	東北偏北	NNE	55	22/10	20:34	北	N	21	23/10	07:00
		東北偏北	NNE	55	22/10	20:34	北	N	21	23/10	08:00
		東北偏北	NNE	55	22/10	20:34	北	N	21	23/10	10:00
南丫島	Lamma Island	北	N	46	22/10	20:26	北	N	20	23/10	00:00
流浮山	Lau Fau Shan	北	N	58	23/10	10:29	北	N	33	23/10	11:00
昂坪	Ngong Ping	東北偏東	ENE	77	22/10	20:43	東北偏東	ENE	53	22/10	21:00
北角	North Point	東北偏北	NNE	50	22/10	19:36	東北偏北	NNE	22	22/10	21:00
坪洲	Peng Chau	東北偏北	NNE	57	22/10	18:38	東北偏北	NNE	33	22/10	20:00
平洲	Ping Chau	東北偏北	NNE	35	22/10	19:20	北	N	8	22/10	20:00
西貢	Sai Kung	東北偏北	NNE	56	22/10	19:15	東北偏北	NNE	36	22/10	18:00
沙洲	Sha Chau	北	N	60	22/10	18:02	北	N	43	22/10	19:00
沙螺灣	Sha Lo Wan	東北偏東	ENE	41	22/10	23:12	東北偏東	ENE	18	23/10	00:00
沙田	Sha Tin	東北偏北	NNE	46	22/10	22:03	東北	NE	19	22/10	21:00
九龍天星碼頭	Star Ferry (Kowloon)	東南	SE	33	22/10	19:30	東	E	9	24/10	02:00
打鼓嶺	Ta Kwu Ling	東北偏北	NNE	49	23/10	08:17	東北偏北	NNE	21	23/10	07:00
		東北偏北	NNE	49	23/10	08:17	東北偏北	NNE	21	23/10	08:00
大美督	Tai Mei Tuk	東北	NE	66	22/10	20:05	東北	NE	37	22/10	21:00
大帽山	Tai Mo Shan	東北偏東	ENE	83	23/10	19:18	東北偏東	ENE	66	23/10	08:00
大埔滘	Tai Po Kau	東北偏北	NNE	40	22/10	19:22	東北偏北	NNE	14	23/10	09:00
塔門東	Tap Mun East	北	N	48	22/10	18:15	北	N	23	22/10	18:00
大老山	Tate's Cairn	東北	NE	88	22/10	19:35	東北偏北	NNE	66	22/10	21:00
將軍澳	Tseung Kwan O	東北偏北	NNE	46	22/10	21:12	東北偏北	NNE	14	22/10	21:00
青衣島蜆殼油	Tsing Yi Shell Oil Depot	西北偏北	NNW	43	22/10	19:11	西北偏北	NNW	16	22/10	23:00
屯門政府合署	Tuen Mun Government Offices	東北偏北	NNE	49	22/10	21:11	東北偏北	NNE	19	22/10	22:00
		東北偏北	NNE	49	22/10	21:42					
		東北偏北	NNE	49	23/10	00:24					
橫瀾島	Waglan Island	北	N	58	22/10	18:50	北	N	48	22/10	20:00
濕地公園	Wetland Park	東北	NE	38	23/10	08:19	東北偏北	NNE	14	23/10	09:00
黃竹坑	Wong Chuk Hang	北	N	51	22/10	20:27	西北偏北	NNW	14	22/10	21:00

石崗 - 沒有資料 Shek Kong - data not available

表 3.5.2 在沙德爾影響下，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 3.5.2 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 Saudel 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	22/10	18:25	22/10	20:00
流浮山	Lau Fau Shan	23/10	10:37	23/10	10:41

香港國際機場、啟德、西貢、沙田、打鼓嶺、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 Hong Kong International Airport, Kai Tak, Sai Kung, 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 3.5.3 沙德爾影響香港期間，香港天文台總部及其他各站所錄得的日雨量  
Table 3.5.3 Daily rainfall amounts recorded at the Hong Kong Observatory Headquarters and other stations during the passage of Saudel

站 (參閱圖 1.1) Station (See Fig. 1.1)			十月二十二日 22 Oct	十月二十三日 23 Oct	十月二十四日 24 Oct	總雨量(毫米) Total rainfall (mm)
香港天文台 Hong Kong Observatory (HKO)			0.0	0.0	微量 Trace	微量 Trace
香港國際機場 Hong Kong International Airport (HKA)			0.0	0.0	微量 Trace	微量 Trace
長洲 Cheung Chau (CCH)			0.0	0.0	0.0	0.0
H23	香港仔 Aberdeen		0.0	0.0	0.0	0.0
N05	粉嶺 Fanling		0.0	0.0	0.0	0.0
N13	糧船灣 High Island		0.0	0.0	0.0	0.0
K04	佐敦谷 Jordan Valley		0.0	0.0	0.0	0.0
N06	葵涌 Kwai Chung		0.0	0.0	0.0	0.0
H12	半山區 Mid Levels		0.0	0.0	0.0	0.0
N09	沙田 Sha Tin		0.0	0.0	0.0	0.0
H19	筲箕灣 Shau Kei Wan		0.0	0.0	0.0	0.0
SEK	石崗 Shek Kong		0.0	0.0	0.0	0.0
K06	蘇屋邨 So Uk Estate		0.0	0.0	0.0	0.0
R31	大美督 Tai Mei Tuk		0.0	0.0	0.0	0.0
R21	踏石角 Tap Shek Kok		0.0	0.0	[0.0]	[0.0]
N17	東涌 Tung Chung		0.0	0.0	0.0	0.0
TMR	屯門水庫 Tuen Mun Reservoir		0.0	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 3.5.4 沙德爾影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮  
Table 3.5.4 Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of Saudel

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	2.78	24/10	02:00	0.55	23/10	14:34
石壁	Shek Pik	2.83	24/10	01:55	0.60	23/10	14:40
大廟灣	Tai Miu Wan	2.78	24/10	02:08	0.60	24/10	08:15
大埔滘	Tai Po Kau	2.89	23/10	02:27	0.67	23/10	13:57
尖鼻咀	Tsim Bei Tsui	2.90	24/10	03:31	0.60	24/10	04:26

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

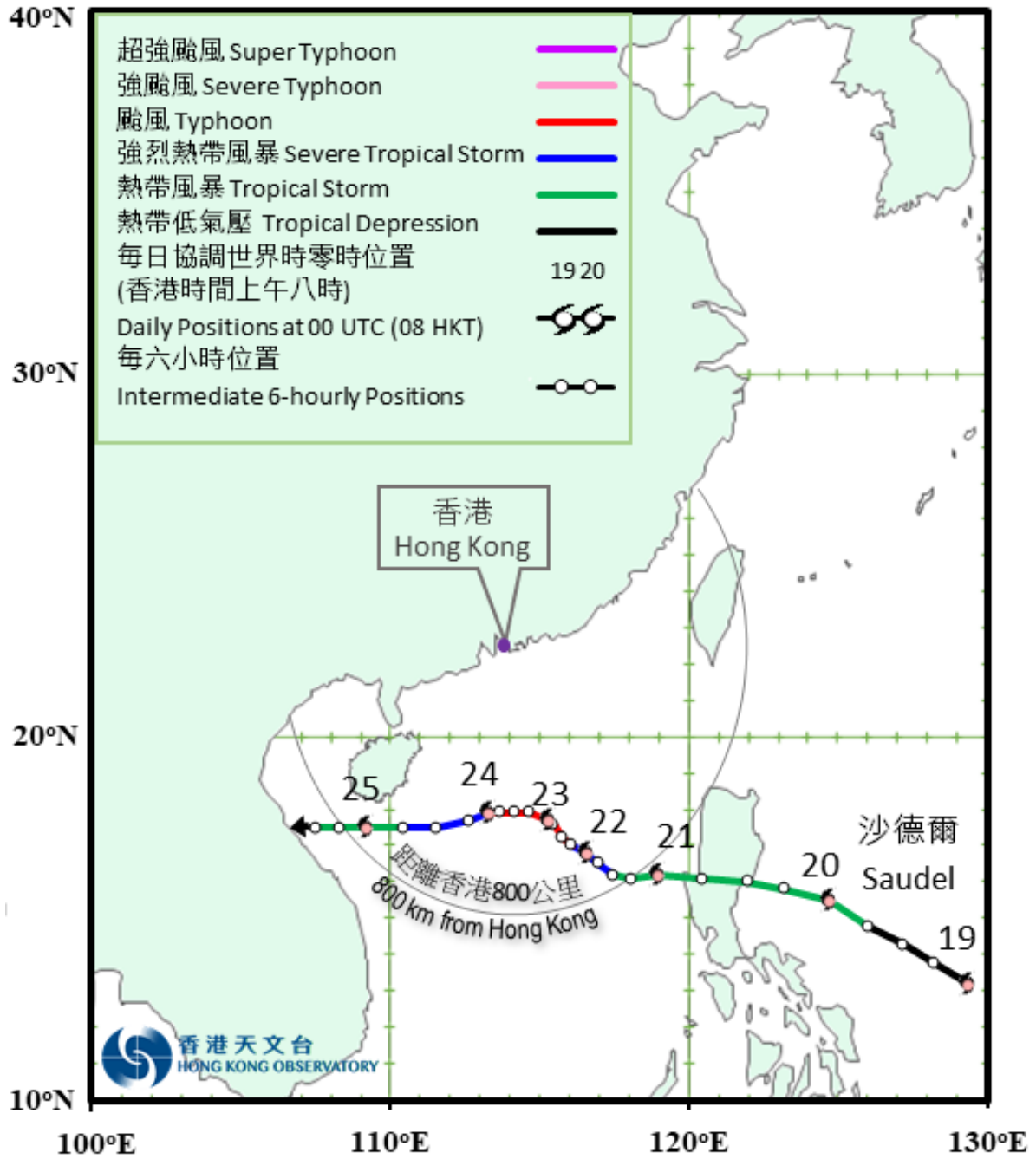


圖 3.5.1 二零二零年十月十九日至二十五日沙德爾的路徑圖。

Figure 3.5.1 Track of Saudel: 19 – 25 October 2020.

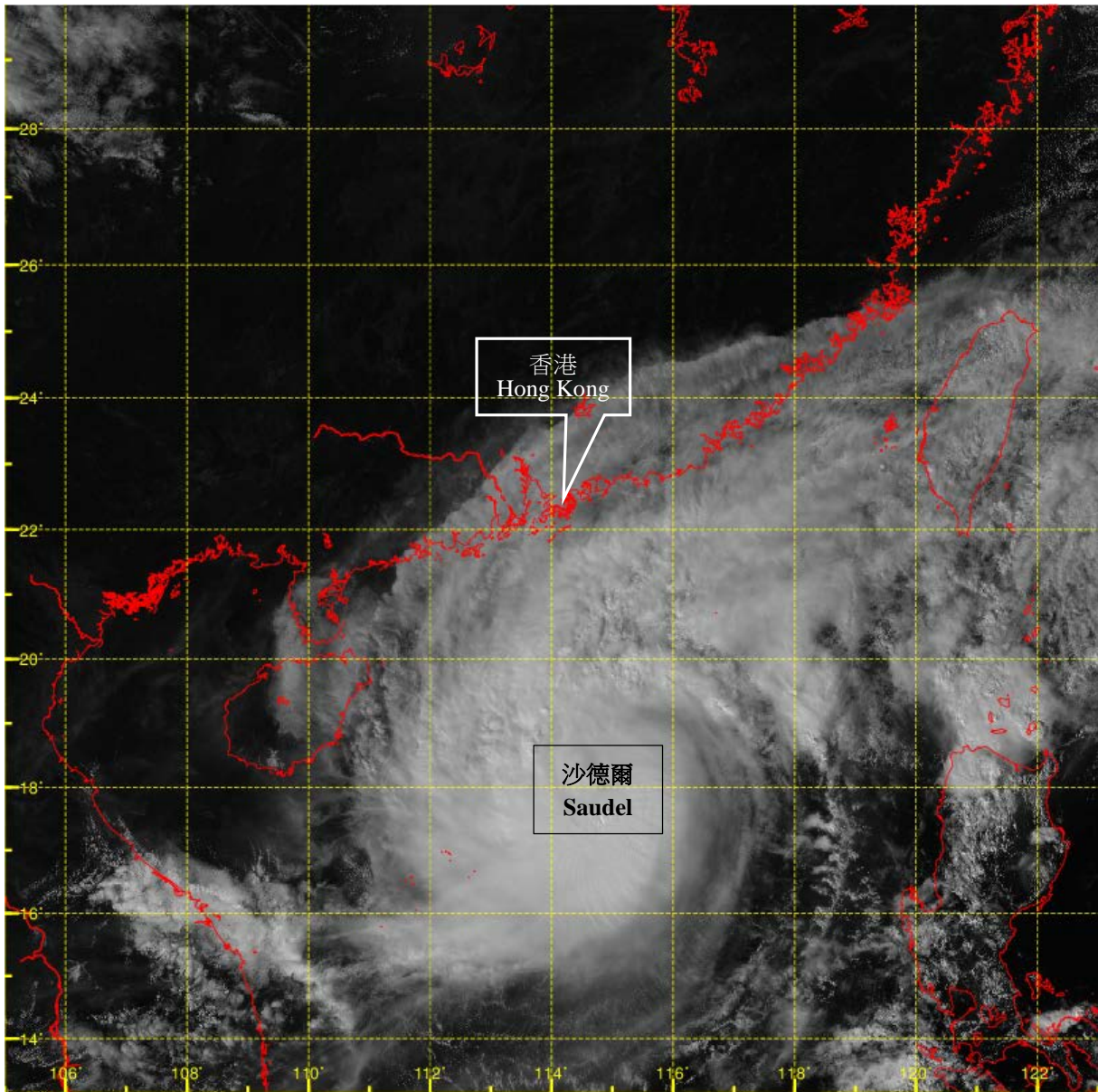


圖 3.5.2 二零二零年十月二十三日下午2時的可見光衛星圖片，當時沙德爾達到其最高強度，中心附近最高持續風速估計為每小時140公里。

Figure 3.5.2 Visible satellite imagery at around 2 p.m. on 23 October 2020, when Saudel was at its peak intensity with an estimated maximum sustained wind of 140 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).]



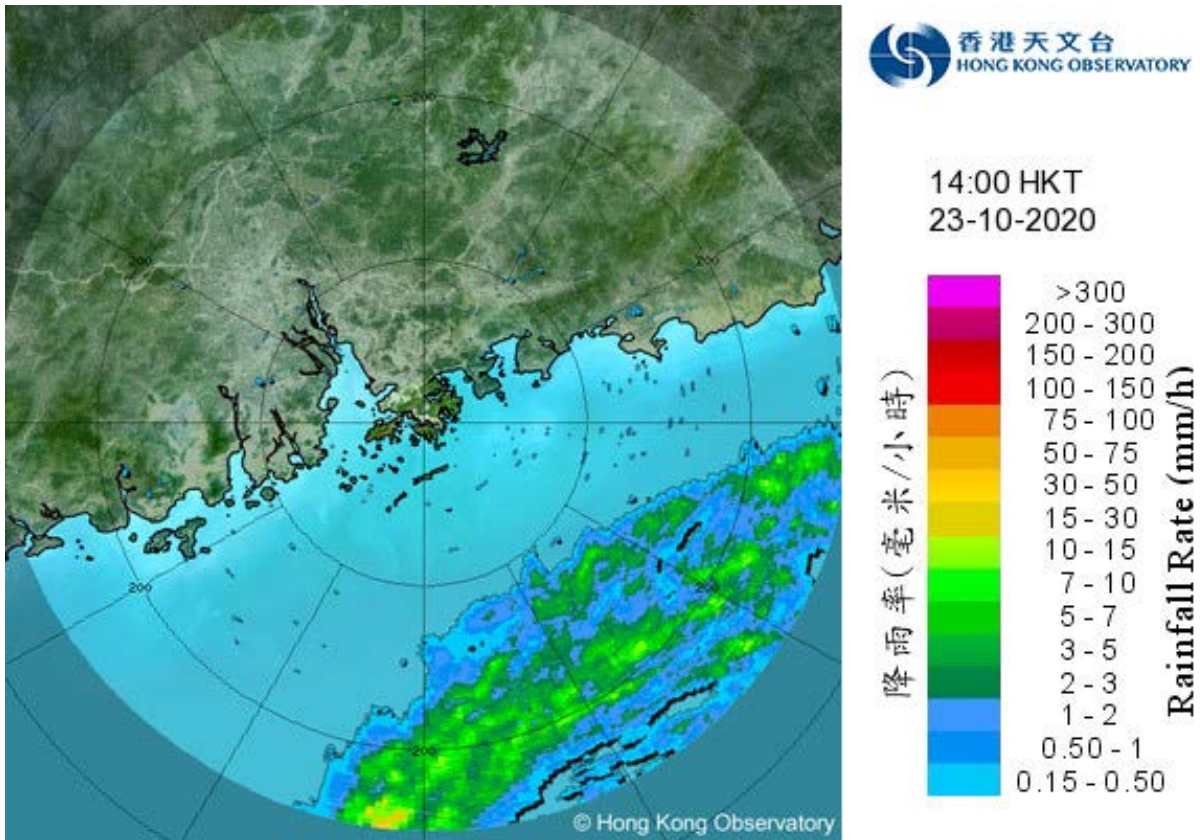


圖 3.5.3 二零二零年十月二十三日下午2時的雷達回波圖像，當時與沙德爾相關的雨帶正影響南海北部。

Figure 3.5.3 Radar echoes captured at 2 p.m. on 23 October 2020. The rainbands associated with Saudel were affecting the northern part of the South China Sea at the time.