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.

		最高陣風				最高每小時平均風速					
站	Station	N	1 aximur	n Gust	日期/月份	時間	Maximum Hourly Wind		日期/月份	時間	
(參閱圖 1.1)	(See Fig. 1.1)	風向	[風速(公里/時)	Date/Month	Time	風向 風速(公里		風速(公里/時)	Date/Month	Time
		Directi	on	Speed (km/h)			Direct	ion	Speed (km/h)		
中環碼頭	Central Pier	東南偏東	ESE	101	3/8	17:14	東	Е	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
赤鱲角	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	Е	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	Е	103	3/8	09:03	東	E	47	3/8	09:00
平洲	Ping Chau	東	Е	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	Е	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
鯽魚湖	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
横瀾島	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(單位爲毫米)
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)		八月一日	八月二日	八月三日	八月四日	總雨量
Station (see Fig. 3.3.2)		1 Aug	2 Aug	3 Aug	4 Aug	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

		最高潮	位 (海圖基準	面以上)	最大風暴潮 (天文潮高度以上)			
站 (參閱圖 1.1)		Ma	aximum sea le	vel	Maximum storm surge			
Station (see Fig. 1.1)		(ab	ove chart datu	m)	(above astronomical tide)			
		高度(米)	日期/月份	時間	高度(米)	日期/月份	時間	
		Height (m)	Date/Month	Time	Height (m)	Date/Month	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	

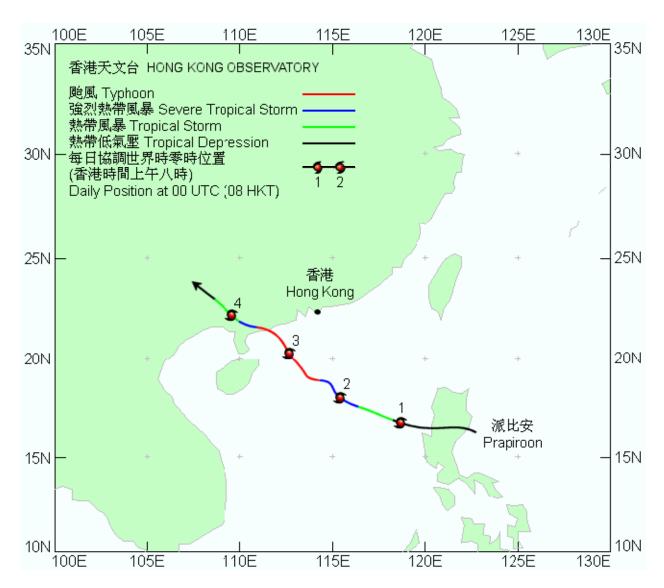


圖 3.3.1 派比安(0606)在二零零六年七月三十一日至八月四日的路徑圖。

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

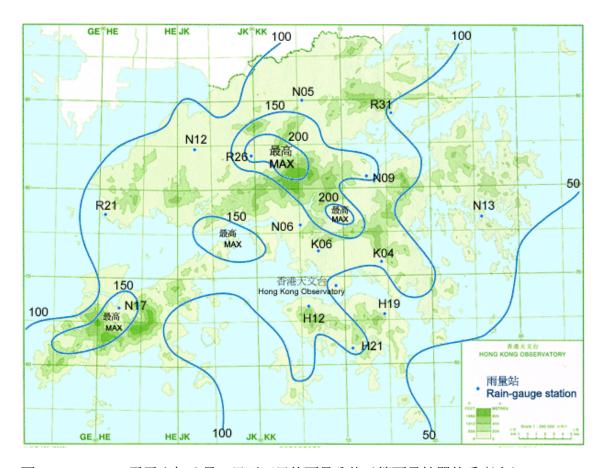


圖 3.3.2 二零零六年八月一日至四日的雨量分佈(等雨量線單位爲毫米)。 Figure 3.3.2 Rainfall distribution on 1 - 4 August 2006 (isohyets are in millimeters).

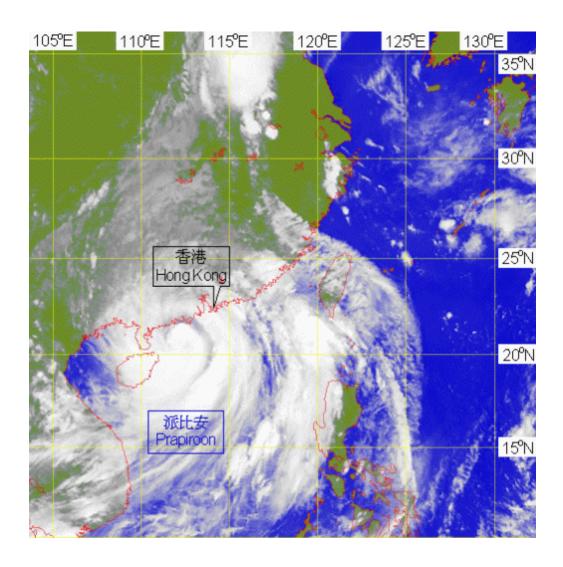


圖 3.3.3 派比安在二零零六年八月三日約下午二時的紅外線衛星圖片。 〔此衛星圖像接收自日本氣象廳的多用途輸送衛星-1R (MTSAT-1R)。〕

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).]

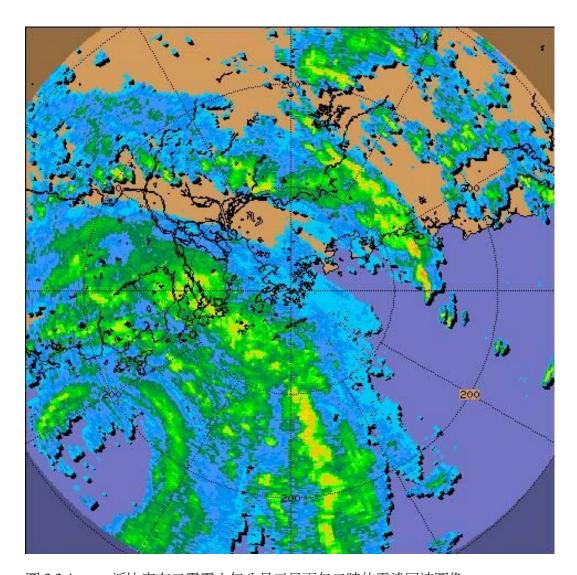


圖 3.3.4 派比安在二零零六年八月三日下午二時的雷達回波圖像。 Figure 3.3.4 Radar echoes captured at 2 p.m. on 3 August 2006 of Prapiroon.