

3.3 颱風艾利（0417）：二零零四年八月二十日至二十七日

艾利是今年第三個令香港天文台發出警告信號的熱帶氣旋。

艾利在八月二十日早上於雅蒲島西北偏北約 550 公里的太平洋上形成。它初時向北移動，同日下午增強為一熱帶風暴，隨後採取西北路徑推進。艾利於八月二十二日達颱風強度。艾利於八月二十四日轉向西移動，次日掠過台灣北部沿岸。受到艾利吹襲，台灣有 24 人死亡，另九人失蹤，91 萬戶停水、36 萬用戶的電力受中斷，經濟損失逾四億元新台幣。

艾利於八月二十五日穿越台灣海峽，於廈門附近登陸。隨後，艾利轉向西南移動，橫過福建沿岸地區。翌日清晨艾利減弱為一強烈熱帶風暴，隨後進一步減弱為一熱帶風暴，並轉向西推進，直趨廣東。它於八月二十七日在廣東中部減弱成一個低壓區。艾利在吹襲福建省期間，導致兩人死亡，約有 4 萬 7 千公頃農田受到破壞，經濟損失超過 20 億元人民幣。

香港天文台在八月二十六日上午 10 時 15 分發出一號戒備信號，當時艾利位於香港東北偏東約 330 公里。受到艾利影響，本港天氣變得不穩定及有狂風驟雨。香港天文台總部於八月二十七日上午 3 時錄得每小時最低海平面氣壓為 992.7 百帕斯卡。一小時後，艾利最接近本港，當時它位於香港西北偏北約 120 公里。隨後艾利減弱為一低壓區，所有熱帶氣旋警告信號於八月二十七日上午 4 時 10 分除下。

與艾利的殘餘相關的陰雨天氣在本月餘下時間持續影響華南沿岸。本港雨勢於八月二十九日最大，當日大嶼山及荃灣地區錄得約 200 毫米的雨量。

表 3.3.1-3.3.3 分別是艾利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 3.3.1-3.3.3 則分別是艾利的路徑圖、香港雨量分佈圖及衛星雲圖。

3.3 Typhoon Aere (0417) : 20 – 27 August 2004

Aere was the third tropical cyclone that necessitated the issuance of warning signals this year.

Aere developed as a tropical depression over the Pacific about 550 km north-northwest of Yap on the morning of 20 August. It moved northwards at first and intensified into a tropical storm that afternoon. Aere then adopted a northwest course and attained typhoon strength on 22 August. It turned westwards on 24 August and skirted the coast of northern Taiwan the following day. In Taiwan, Aere caused 24 deaths and left nine people missing. Water supply to 910 000 households was cut off, and power supply to 360 000 households was disrupted. The economic loss was estimated to be at least NT\$ 400 million.

On 25 August, Aere crossed the Taiwan Strait and made landfall near Xiamen. Adopting a southwest course, it traversed the coastal areas of Fujian and weakened into a severe tropical storm early next morning. Aere weakened further into a tropical storm as it turned west towards Guangdong. It degenerated into an area of low pressure over central Guangdong on 27 August. During the passage of Aere, two people were killed in Fujian and about 47 000 hectares of farmland were ruined. The economic losses exceeded RMB\$ 2 billion.

In Hong Kong, the Standby Signal No. 1 was issued at 10.15 a.m. on 26 August when Aere was about 330 km to the east-northeast. As Hong Kong came under the influence of Aere, local weather became unstable with squally showers. The lowest hourly sea-level pressure of 992.7 hPa was recorded at the Hong Kong Observatory Headquarters at 3 a.m. on 27 August. Aere came closest to Hong Kong an hour later when it was about 120 km to the north-northwest. All tropical cyclone warning signals were cancelled at 4.10 a.m. as Aere weakened into an area of low pressure.

Cloudy and rainy weather associated with the remnant of Aere continued to affect the south China coast for the rest of the month. Locally, rain was particularly heavy on 29 August. About 200 millimetres of rainfall were recorded on Lantau Island and in Tsuen Wan that day.

Information on wind, rainfall and tide during the passage of Aere is given in Tables 3.3.1-3.3.3. Figures 3.3.1-3.3.3 show the track of Aere, rainfall distribution in Hong Kong and cloud imagery respectively.

表 3.3.1 在艾利影響下，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 Aere

站 (參閱圖 1.1)	Station (see Fig. 1.1)	最高陣風 Maximum Gust		日期/月份 Date/Month	時間 Time	最高每小時平均風速 Maximum Hourly Wind		日期/月份 Date/Month	時間 Time
		風向 Direction	風速(公里/時) Speed (km/h)			風向 Direction	風速(公里/時) Speed (km/h)		
中環	Central	西北偏北 NNW	34	26/8	13:03	西北 NW	12	26/8	11:00
中環廣場	Central Plaza	-	63	26/8	15:54	-	45	26/8	21:00
		-	63	26/8	20:00				
香港國際機場	Hong Kong International Airport	西北偏北 NNW	49	26/8	12:43	西北 NW	25	26/8	15:00
長洲	Cheung Chau	西北偏北 NNW	68	26/8	13:03	西北偏北 NNW	38	26/8	13:00
長沙灣	Cheung Sha Wan	北 N	31	26/8	12:45	西南偏南 SSW	9	26/8	18:00
青洲	Green Island	西北偏西 WNW	38	27/8	03:14	西 W	22	27/8	04:00
啓德	Kai Tak	西北 NW	41	26/8	13:04	西北偏西 WNW	23	27/8	00:00
京士柏	King's Park	西 W	34	26/8	13:16	西北偏西 WNW	12	27/8	04:00
流浮山	Lau Fau Shan	西北偏西 WNW	47	26/8	14:17	西北 NW	31	27/8	03:00
北角	North Point	西 W	41	26/8	10:26	西 W	25	26/8	17:00
		西 W	41	26/8	17:08				
平洲	Ping Chau	西北偏西 WNW	41	26/8	13:06	西北偏西 WNW	16	26/8	14:00
西貢	Sai Kung	西北 NW	45	26/8	16:00	西北 NW	19	26/8	11:00
						西北 NW	19	26/8	12:00
沙螺灣	Sha Lo Wan	西南 SW	31	26/8	19:20	西南 SW	19	26/8	17:00
						西南 SW	19	26/8	18:00
沙田	Sha Tin	西南偏西 WSW	31	26/8	19:00	北 N	12	26/8	13:00
石崗	Shek Kong	西北偏西 WNW	27	26/8	12:44	西北偏西 WNW	12	27/8	03:00
		西北偏西 WNW	27	27/8	02:27				
九龍天星碼頭	Star Ferry, Kowloon	西 W	36	26/8	13:06	西 W	27	26/8	17:00
打鼓嶺	Ta Kwu Ling	西北 NW	31	26/8	12:00	西北 NW	12	26/8	13:00
大尾篤	Tai Mei Tuk	西 W	65	26/8	21:26	西北偏西 WNW	31	26/8	13:00
大帽山	Tai Mo Shan	西北 NW	70	26/8	14:46	西北 NW	52	26/8	16:00
塔門	Tap Mun	西 W	58	26/8	22:18	西北偏西 WNW	31	26/8	13:00
大老山	Tate's Cairn	西南偏西 WSW	65	26/8	22:18	西 W	38	26/8	23:00
鯽魚湖	Tsak Yue Wu	西北偏西 WNW	36	26/8	13:29	西北偏北 NNW	12	26/8	11:00
		西北偏西 WNW	36	26/8	15:39	西北 NW	12	26/8	16:00
將軍澳	Tseung Kwan O	西 W	31	26/8	15:28	西 W	12	26/8	19:00
青衣	Tsing Yi	西北 NW	45	26/8	11:49	西北偏西 WNW	20	27/8	00:00
						西北偏西 WNW	20	27/8	02:00
屯門	Tuen Mun	西北 NW	49	26/8	14:14	西北 NW	22	26/8	15:00
橫瀾島	Waglan Island	西北偏西 WNW	49	26/8	16:08	西北偏西 WNW	31	26/8	17:00
黃竹坑	Wong Chuk Hang	西北偏西 WNW	51	26/8	15:45	西北 NW	22	26/8	16:00

表 3.3.2 艾利影響香港期間，香港天文台總部及其他各站所錄得的日雨量(單位為毫米)

Table 3.3.2 Daily rainfall amounts in millimetres recorded at the Hong Kong Observatory Headquarters and other stations during the passage of Aere

站(參閱圖 3.3.2) Station (see Fig. 3.3.2)	八月 二十五日 25 Aug	八月 二十六日 26 Aug	八月 二十七日 27 Aug	八月 二十八日 28 Aug	八月 二十九日 29 Aug	八月 三十日 30 Aug	總雨量 Total
香港天文台 Hong Kong Observatory	0.0	12.0	5.7	21.8	114.7	14.3	168.5
K04 佐敦谷 Jordan Valley	0.0	6.5	13.0	[28.0]	109.0	[16.5]	[173.0]
K06 蘇屋邨 So Uk Estate	0.0	2.0	13.0	[19.0]	123.0	[16.5]	[173.5]
N05 粉嶺 Fanling	[0.0]	1.5	17.0	[12.5]	146.0	[17.0]	[194.0]
N06 葵涌 Kwai Chung	0.0	1.0	8.5	[22.0]	157.5	[16.5]	[205.5]
N09 沙田 Sha Tin	0.5	2.0	9.0	[15.0]	157.0	[13.0]	[196.5]
N13 糧船灣 High Island	0.0	1.0	9.0	[30.5]	95.5	[21.0]	[157.0]
N17 東涌 Tung Chung	0.0	19.5	10.0	[65.5]	206.5	[21.5]	[323.0]
R21 踏石角 Tap Shek Kok	0.0	7.5	3.0	[46.0]	167.5	[13.5]	[237.5]
R26 石崗 Shek Kong	0.0	4.5	18.5	[16.5]	118.5	[23.5]	[181.5]

註： [] 基於不完整的每小時雨量數據。

Note : [] based on incomplete hourly data.

表 3.3.3 艾利影響香港期間，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 Aere

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
鯽魚涌 Quarry Bay	2.22	27/8	4:10	0.10	26/8	11:05
大埔滘 Tai Po Kau	2.20	27/8	4:10	0.16	26/8	10:15
尖鼻咀 Tsim Bei Tsui	2.13	27/8	4:10	0.17	27/8	4:07
大廟灣 Tai Miu Wan	2.24	27/8	4:10	-0.01	27/8	2:05

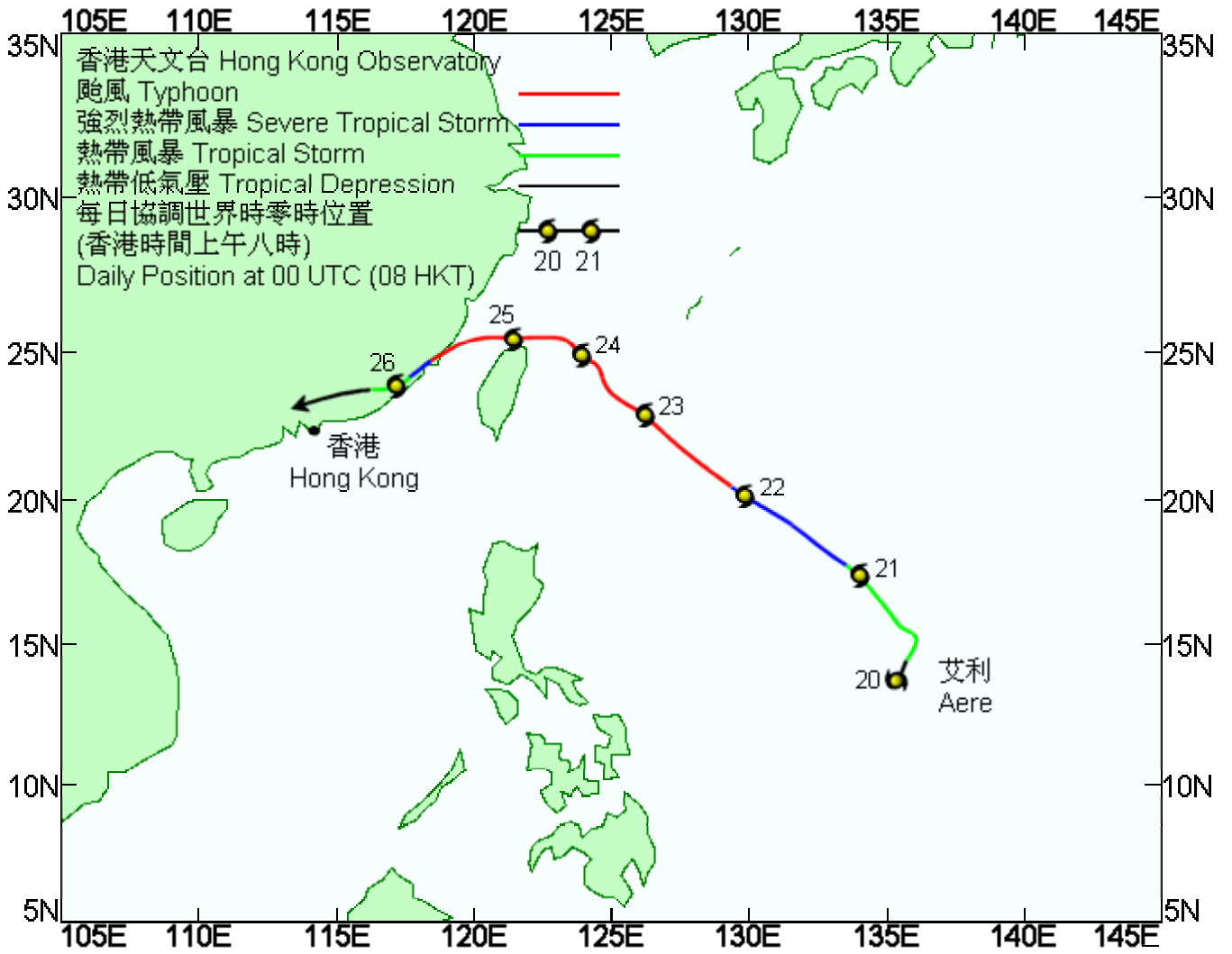


圖 3.3.1 二零零四年八月二十日至二十七日艾利 (0417) 的路徑圖。
 Figure 3.3.1 Track of Aere (0417) : 20 - 27 August 2004.

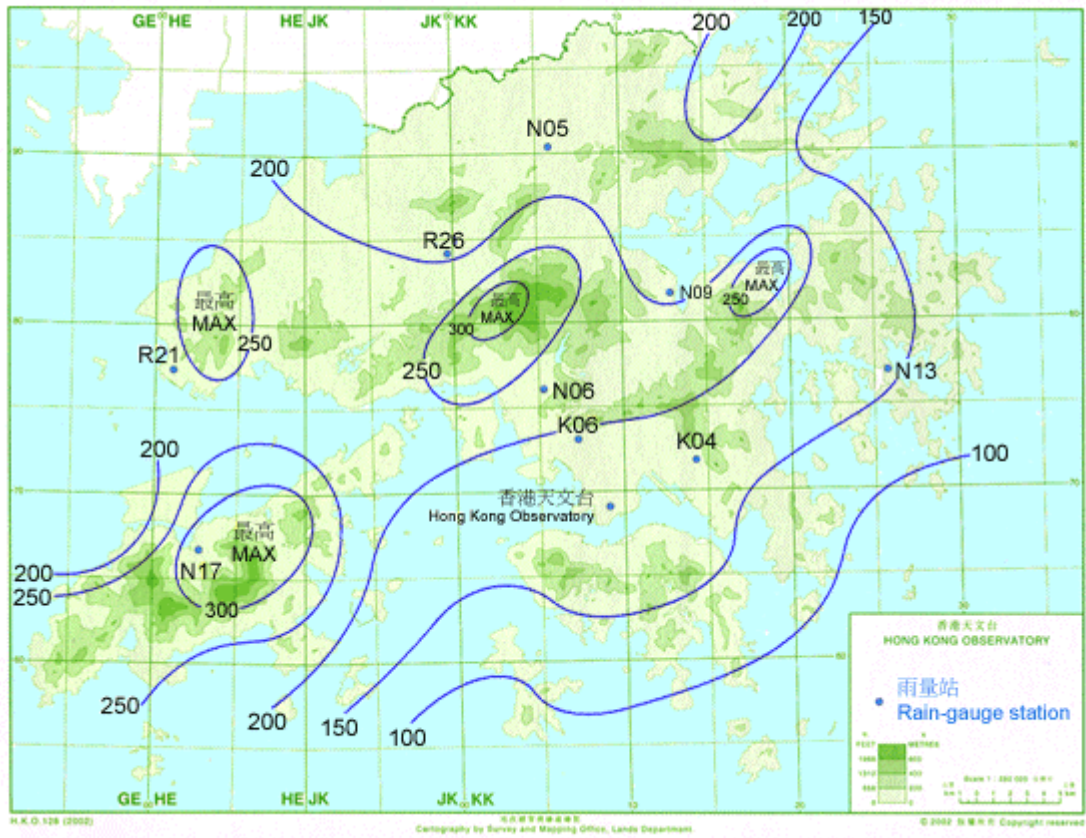


圖 3.3.2 二零零四年八月二十五日至三十日的雨量分佈（等雨量線單位為毫米）。
 Figure 3.3.2 Rainfall distribution on 25-30 August 2004 (isohyets are in millimetres).

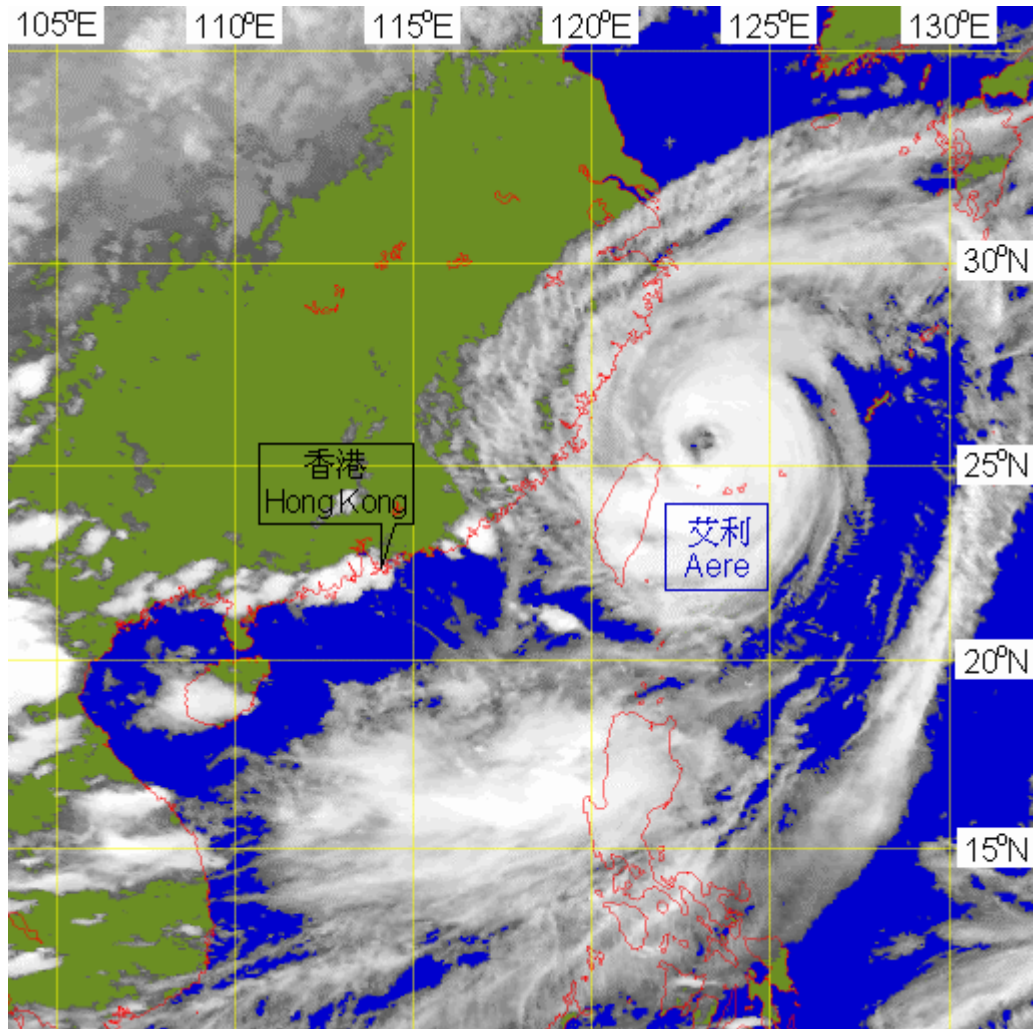


圖 3.3.3 颱風艾利在二零零四年八月二十四日約下午八時的紅外線衛星圖片。
 [此衛星圖像接收自地球同步業務環境衛星(GOES-9)。GOES-9是日本氣象廳(JMA)和美國國家海洋及大氣管理局(NOAA)轄下的國家環境衛星數據及資訊服務處(NESDIS)合作下的成果]

Figure 3.3.3 Infra-red imagery at around 8 p.m. on 24 August 2004 of Typhoon Aere.
 [The satellite imagery was originally captured with Geostationary Operational Environmental Satellite (GOES-9) which is operated by the joint effort of Japan Meteorological Agency (JMA) and National Environmental Satellite Data and Information Service (NESDIS) of US National Oceanic and Atmospheric Administration (NOAA)]