

3.1 颱風珍珠(0601)：二零零六年五月九日至十八日

珍珠是二零零六年首個令香港天文台發出警告信號的熱帶氣旋，也是二零零六年首個在北太平洋西部形成的颱風。

珍珠在五月九日於雅蒲島西南偏西約 420 公里的北太平洋西部上發展成爲一個熱帶低氣壓，並大致向西北偏西推進。它於五月十日增強爲一個強烈熱帶風暴，次日吹襲菲律賓中部。珍珠肆虐菲律賓期間，最少造成 37 人死亡，近 8 000 人撤離，約 600 間房屋受到破壞，另 3 500 間受損，一艘渡輪翻沉。

珍珠於五月十三日進入南海，隨即達到颱風強度。它向西推進兩天後，於五月十五日轉北趨向華南沿岸。途中珍珠進一步增強，其中心附近的最高持續風速達每小時 185 公里，是有記錄以來在五月進入南海最強的颱風。珍珠導致南海上多艘越南漁船翻沉，最少有 44 名漁民死亡，超過 160 人失蹤。珍珠於五月十七日開始採取東北偏北路徑移動，翌日在汕頭附近登陸並逐漸減弱。它橫掃中國東南沿岸地區後進入東海並於同日晚上變成溫帶氣旋。珍珠所帶來的惡劣天氣在廣東和福建造成嚴重災害，共導致 19 人死亡，四人受傷，超過一千萬人受災。約 14 000 間房屋倒塌，逾 19 萬公頃農地受損，直接經濟損失約爲 70 億人民幣。另外，台灣有兩人死亡。

香港天文台於五月十五日下午 9 時 40 分發出一號戒備信號，當時珍珠位於香港以南約 750 公里。隨著珍珠移近，天文台於五月十七日上午 7 時 15 分發出本年度首個三號強風信號，當時珍珠位於香港東南偏南約 250 公里。其後本地風勢顯著增強，珍珠的外圍雨帶亦開始爲香港帶來狂風驟雨。

珍珠於五月十七日下午 2 時左右最接近香港，當時它集結在本港東南偏東約 220 公里。同日下午 4 時，香港天文台總部錄得最低每小時海平面氣壓 997.1 百帕斯卡。隨著珍珠遠離，境內風勢逐漸減弱，天文台在五月十七日晚上 9 時 15 分改發一號戒備信號，並於翌日上午 4 時 40 分取消所有熱帶氣旋警告信號。

珍珠影響香港期間，一名當值救生員在將軍澳隨著瞭望台被風吹倒墮下受傷，另一名長者在東九龍被高空墮下花盆擊傷。在天文大潮及風暴潮的共同影響下，維多利亞港錄得 2.8 米的海平面高度，上環出現輕微水浸。全港有數宗樹木及棚架倒塌的報告。香港國際機場有 60 多班航機取消，另 14 班航機延誤。一艘遊艇在西貢沉沒，部份渡輪服務一度停頓。此外，三人在開往澳門的噴射船上受傷，另一人在小西灣墮海受傷。

表 3.1.1-3.1.3 分別是珍珠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 3.1.1-3.1.4 則分別是珍珠的路徑圖、香港雨量分佈圖、衛星及雷達圖像。

3.1 Typhoon Chanchu (0601) : 9 - 18 May 2006

Chanchu was the first tropical cyclone to necessitate the issuance of warning signals in 2006. It was also the first typhoon to form over the western North Pacific in 2006.

Chanchu developed as a tropical depression over the western North Pacific about 420 km west-southwest of Yap on 9 May and tracked mainly towards the west-northwest. It intensified into a severe tropical storm on 10 May and struck the central part of the Philippines the following day. In the fury of Chanchu, at least 37 people were killed in the Philippines where about 8 000 people had to flee their homes. Some 600 houses were destroyed, another 3 500 damaged and a ferry capsized.

On 13 May, Chanchu attained typhoon strength upon entering the South China Sea. Moving westwards for two days, it turned to the north on 15 May. Heading towards the south China coast, Chanchu strengthened further and the maximum sustained wind speed near its centre reached 185 km/h. Chanchu was the most intense typhoon on record to enter the South China Sea in May. In the South China Sea, several Vietnamese fishing boats capsized in the fury of Chanchu. At least 44 fishermen were killed and more than 160 reported missing. Chanchu took on a north-northeastward course on 17 May. It made landfall near Shantou the next day and weakened gradually thereafter. On 18 May, Chanchu rampaged through the coastal areas of southeastern China and entered the East China Sea. It became an extratropical cyclone that evening. The adverse weather brought by Chanchu inflicted severe damage in Guangdong and Fujian. Altogether, 19 people were killed, another four were injured and ten million people or more were affected in the two provinces. About 14 000 houses collapsed and over 190 thousand hectares of farmland were damaged. The direct economic loss was approximately RMB\$ 7 billion. In Taiwan, Chanchu caused two deaths.

In Hong Kong, the Standby Signal No. 1 was issued at 9.40 p.m. on 15 May when Chanchu was 750 km to the south of Hong Kong. With Chanchu edging closer to Hong Kong, the Strong Wind Signal No. 3 was issued for the first time this year at 7.15 a.m. on 17 May, when Chanchu was about 250 km to the south-southeast. Locally, winds strengthened significantly and squally showers set in as Hong Kong came under the influence of Chanchu's outer rainbands.

Chanchu was closest to Hong Kong at around 2 p.m. on 17 May when it was centred about 220 km to the east-southeast. The lowest hourly sea-level pressure of 997.1 hPa was recorded at the Hong Kong Observatory Headquarters at 4 p.m. the same day. As Chanchu moved away, the No. 3 Signal was replaced by the Standby Signal No.1 at 9.15 p.m. on 17 May. All tropical cyclone warning signals were cancelled at 4.40 a.m. the next day.

During the passage of Chanchu, a duty lifeguard was injured as the guard post collapsed in strong winds in Tseung Kwan O. An elderly was hit and injured by a fallen flower pot in east Kowloon. Another person was reported fallen into the sea at Siu Sai Wan and suffered injuries. Three persons were injured on board the jetfoil bound for Macau. Minor flooding occurred in Sheung Wan as high tide together with storm surge brought sea levels to reach 2.8 metres at the Victoria Harbour. Several cases of fallen trees and scaffoldings were reported. At the Hong Kong International Airport, more than 60 flights were cancelled and another 14 delayed. A yacht sank in Sai Kung. Several ferry services were suspended.

Information on wind, rainfall and tide during the passage of Chanchu is given in Tables 3.1.1-3.1.3. Figures 3.1.1-3.1.4 show the track of Chanchu, rainfall distribution in Hong Kong, cloud imagery and radar imagery respectively.

表 3.1.1 在珍珠影響下，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 during the issuing of the tropical cyclone warning signal for Chanchu

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)		
		中環碼頭	Central Pier			西北偏西 WNW	75		
						西 W	43	18/5	02:00
中環廣場	Central Plaza	-	115	17/5	05:25	-	65	17/5	06:00
赤鱗角	Chek Lap Kok	西北偏北 NNW	72	17/5	19:18	西北偏北 NNW	56	17/5	18:00
長洲	Cheung Chau	北 N	92	17/5	06:19	西北偏北 NNW	62	17/5	18:00
長沙灣	Cheung Sha Wan	東北偏北 NNE	63	17/5	17:30	北 N	25	16/5	21:00
青洲	Green Island	北 N	103	17/5	09:09	北 N	70	17/5	10:00
啓德	Kai Tak	北 N	104	17/5	11:32	北 N	41	17/5	11:00
京士柏	King's Park	北 N	76	17/5	08:52	北 N	34	17/5	07:00
流浮山	Lau Fau Shan	北 N	81	17/5	11:21	北 N	47	17/5	10:00
北角	North Point	北 N	85	17/5	10:02	北 N	43	17/5	11:00
平洲	Ping Chau	北 N	87	17/5	12:22	西北偏西 WNW	22	18/5	01:00
西貢	Sai Kung	北 N	94	17/5	12:27	北 N	51	17/5	12:00
沙螺灣	Sha Lo Wan	西北 NW	47	17/5	21:29	東北偏東 ENE	22	16/5	21:00
						東北偏東 ENE	22	17/5	00:00
沙田	Sha Tin	東北偏北 NNE	67	17/5	11:12	北 N	25	17/5	12:00
石崗	Shek Kong	西北 NW	45	17/5	15:09	東北 NE	20	17/5	04:00
						東北偏東 ENE	20	17/5	05:00
九龍天星碼頭	Star Ferry (Kowloon)	西北偏西 WNW	63	17/5	19:15	西北偏西 WNW	38	18/5	00:00
打鼓嶺	Ta Kwu Ling	東北偏北 NNE	75	17/5	05:41	東北偏北 NNE	36	17/5	06:00
大尾篤	Tai Mei Tuk	北 N	106	17/5	12:28	東北偏北 NNE	52	17/5	05:00
大帽山	Tai Mo Shan	西北偏北 NNW	118	17/5	17:13	西北偏北 NNW	79	17/5	16:00
塔門	Tap Mun	西北偏北 NNW	77	17/5	11:18	西 W	43	18/5	04:00
大老山	Tate's Cairn	西北偏北 NNW	146	17/5	11:15	西北偏北 NNW	96	17/5	12:00
鯉魚湖	Tsak Yue Wu	東北 NE	79	17/5	07:13	東北偏北 NNE	34	17/5	09:00
將軍澳	Tseung Kwan O	西北偏北 NNW	85	17/5	15:50	西北偏北 NNW	31	17/5	14:00
青衣 (青柏樓)	Ching Pak House, Tsing Yi	北 N	96	17/5	11:11	北 N	45	17/5	09:00
屯門	Tuen Mun	西北偏西 WNW	67	17/5	21:15	東北偏北 NNE	22	17/5	01:00
橫瀾島	Waglan Island	北 N	106	17/5	12:29	北 N	83	17/5	13:00
黃竹坑	Wong Chuk Hang	東北偏北 NNE	68	17/5	06:52	西北 NW	31	18/5	00:00

表 3.1.2 珍珠影響香港期間，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 3.1.2 Daily rainfall amounts in millimetres recorded at the Hong Kong Observatory Headquarters and other stations during the passage of Chanchu

站 (參閱圖 3.1.2) Station (see Fig. 3.1.2)	五月十五日 15 May	五月十六日 16 May	五月十七日 17 May	五月十八日 18 May	總雨量 Total
香港天文台 Hong Kong Observatory	微量 Trace	1.6	15.0	微量 Trace	16.6
H12 半山區 Mid Levels	0.0	2.0	10.0	0.0	12.0
H19 筲箕灣 Shau Kei Wan	0.0	2.5	10.0	1.0	13.5
H21 淺水灣 Repulse Bay	0.0	1.5	10.0	0.0	11.5
K04 佐敦谷 Jordan Valley	0.0	3.0	22.5	0.5	26.0
K06 蘇屋邨 So Uk Estate	0.0	3.5	23.5	0.0	27.0
N05 粉嶺 Fanling	0.0	2.5	21.0	0.5	24.0
N06 葵涌 Kwai Chung	0.0	3.0	26.0	0.0	29.0
N09 沙田 Sha Tin	0.0	4.5	39.0	0.0	43.5
N12 元朗 Yuen Long	0.0	2.0	15.0	0.0	17.0
N13 糧船灣 High Island	0.0	6.5	23.0	0.0	29.5
N17 東涌 Tung Chung	0.0	5.5	20.5	0.0	26.0
R21 踏石角 Tap Shek Kok	0.0	1.0	24.0	0.0	25.0
R26 石崗 Shek Kong	[0.0]	4.0	26.0	0.5	[30.5]
R31 大尾篤 Tai Mei Tuk	0.0	4.0	23.5	0.0	27.5

註： [] 基於不齊全的每小時雨量數據。

Note : [] based on incomplete hourly data.

表 3.1.3 珍珠影響香港期間，香港各潮汐站所錄得的最高潮位及最大風暴潮
Table 3.1.3 Times and heights of the maximum sea level and the maximum storm surge recorded at tide stations in Hong Kong during the passage of Chanchu

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/月 Date/Month	時間 Time	高度 (米) Height (m)	日/月 Date/Month	時間 Time
	鰂魚涌 Quarry Bay	2.82	17/5	11:52	0.59	17/5
石壁 Shek Pik	2.97	17/5	11:15	0.67	16/5	14:06
大埔滘 Tai Po Kau	2.90	17/5	12:44	0.77	17/5	15:47
尖鼻咀 Tsim Bei Tsui	3.02	16/5	11:00	0.51	17/5	07:15

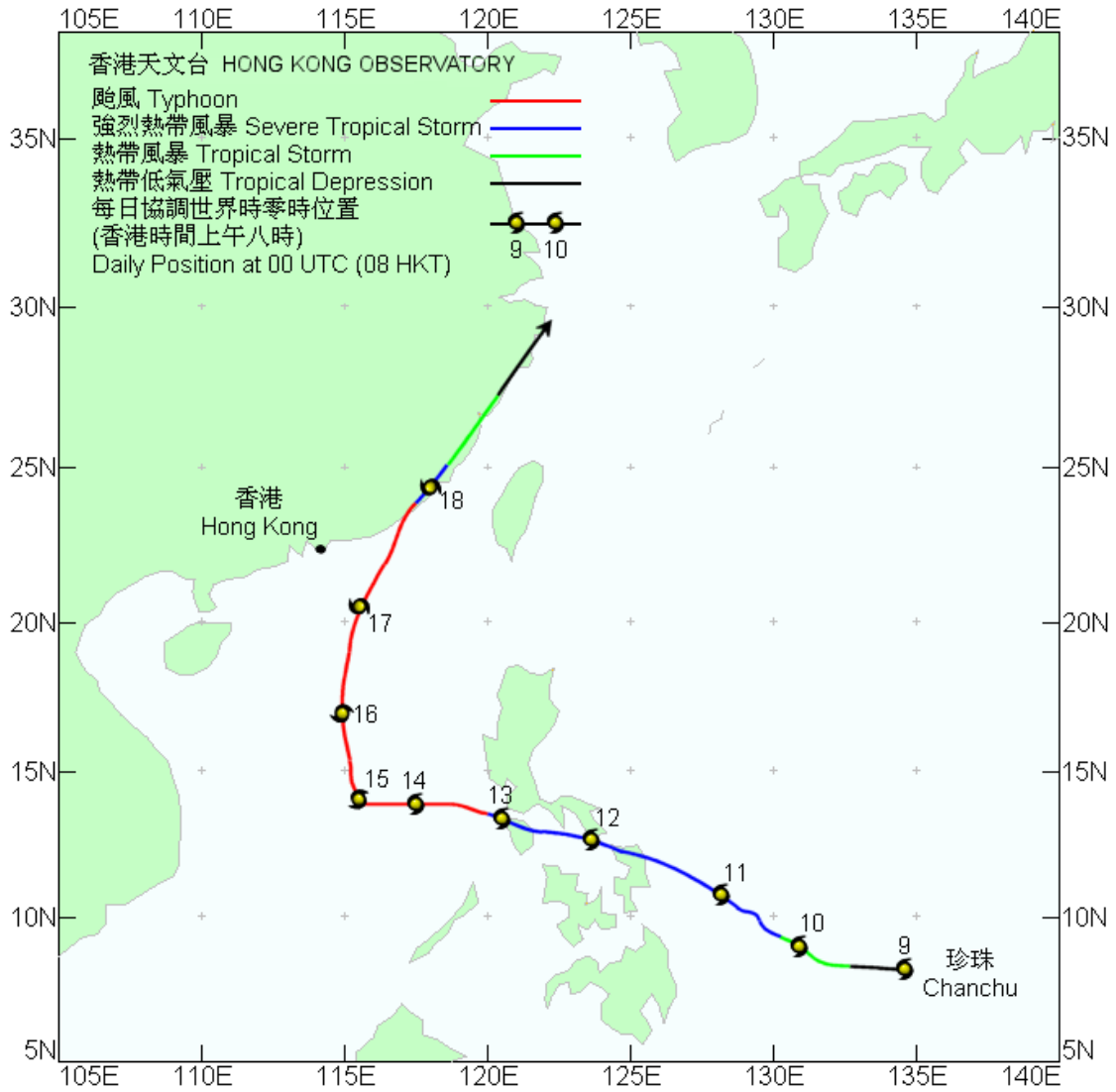


圖 3.1.1 珍珠 (0601) 在二零零六年五月九日至十八日的路徑圖。
 Figure 3.1.1 Track of Chanchu (0601) on 9 - 18 May 2006.

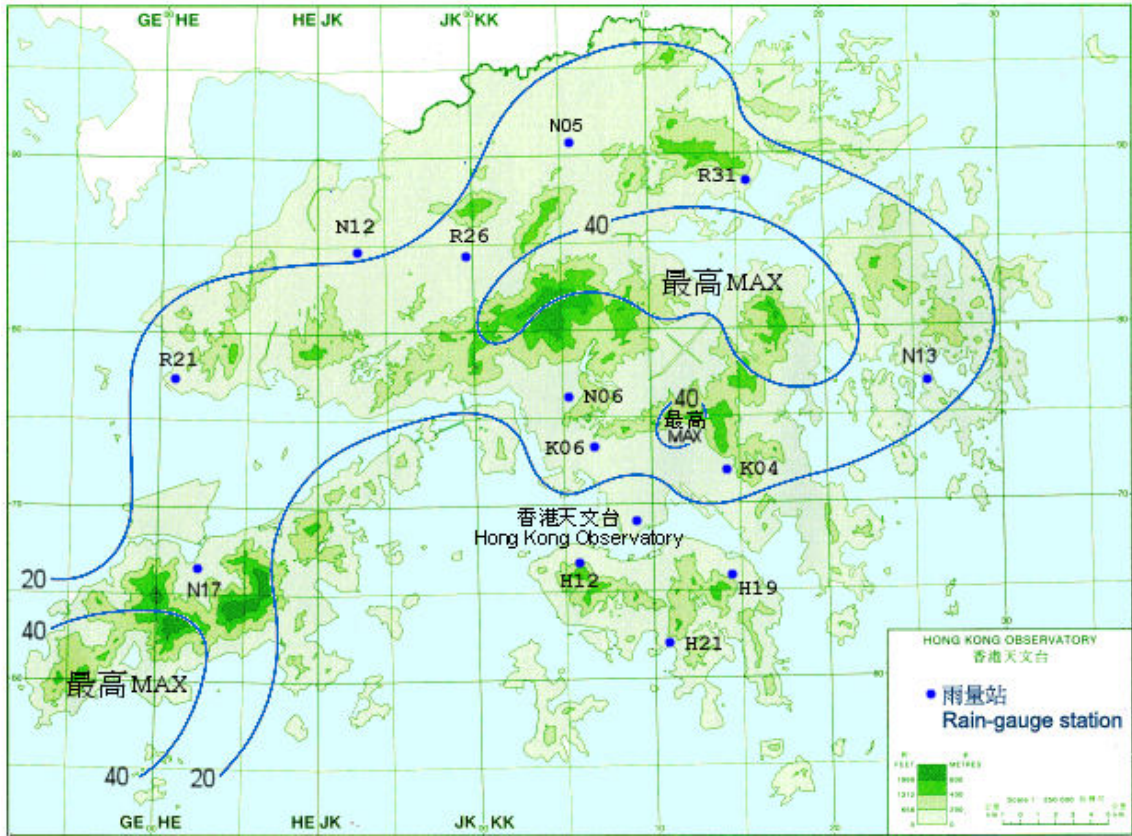


圖 3.1.2 二零零六年五月十五日至十八日的雨量分佈（等雨量線單位為毫米）。
 Figure 3.1.2 Rainfall distribution on 15 - 18 May 2006 (isohyets are in millimetres).

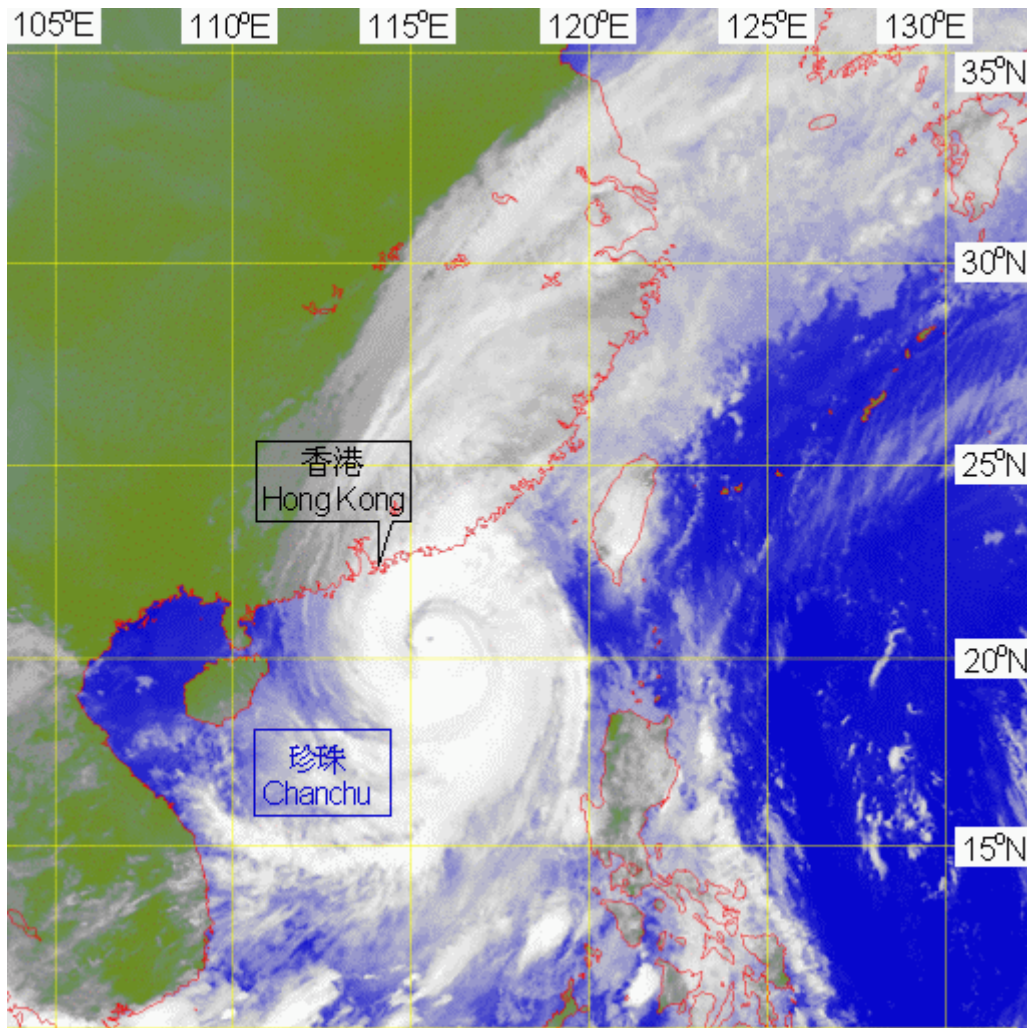


圖 3.1.3 珍珠在二零零六年五月十七日約上午八時的紅外線衛星圖片。
 [此衛星圖像接收自日本氣象廳的多用途輸送衛星-1R (MTSAT-1R)。]

Figure 3.1.3 Infra-red imagery at around 8 a.m. on 17 May 2006 of Chanchu.
 [The satellite imagery was originally captured with Multi-functional Transport Satellite-1R (MTSAT-1R) of Japan Meteorological Agency (JMA).]

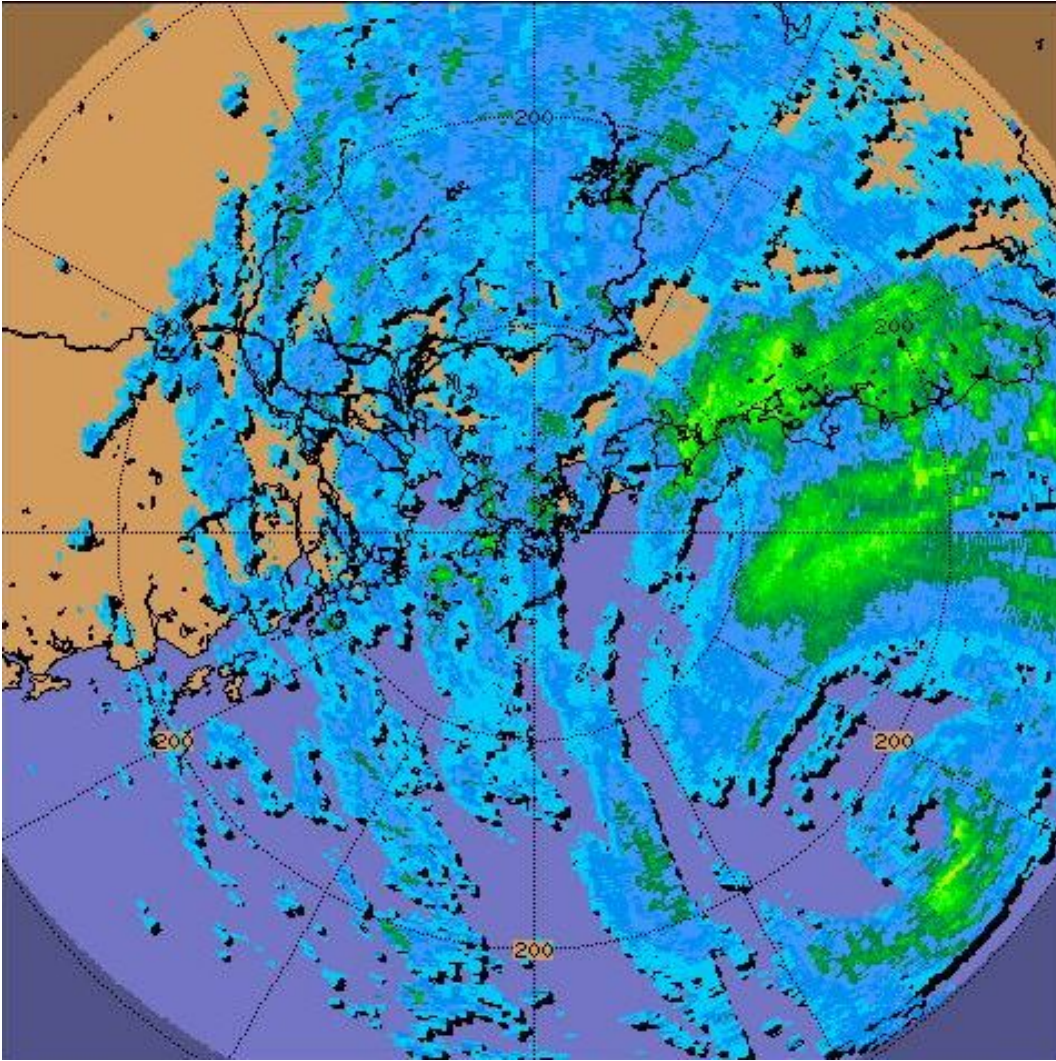


圖 3.1.4 珍珠在二零零六年五月十七日中午的雷達回波圖像。
Figure 3.1.4 Radar echoes captured at noon on 17 May 2006 of Chanchu.