每月天氣摘要 二零一四年三月

Monthly Weather Summary March 2014

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二零一四年四月出版

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1. 二零一四年三月天氣回顧

二零一四年三月的天氣特徵為上半月天色陰暗,接近三月尾時有幾場大雨。本月總日照時間為86.0 小時,稍低於正常數值約百分之5,而三月一日至十五日共只有5小時有陽光。

本月較正常清涼及多雨。全月平均氣溫為 18.7 度,較正常數值 19.1 度低 0.4 度。本月總雨量為 207.6 毫米,為正常數值 82.2 毫米的兩倍以上,而三月二十九日至三十一日期間的雨量佔全月雨量的百分之 99。而本年至今累積雨量為 247.1 毫米,較同期正常數值 161.3 毫米多約百分之 53。

在一股海洋氣流的影響下,本港本月首天多雲、潮濕及有霧。一道冷鋒於三月二日早上橫過廣東沿岸,本港當日下午東風增強及有幾陣雨。受冷鋒過境及隨後的東北季候風的補充影響,本港於三月三日至十一日天氣清涼,天色陰暗,間中風勢頗大及有幾陣雨。天文台的氣溫於三月十日早上下降至最低的13.9度,是本月的最低氣溫。

受一股海洋氣流影響,三月十二日本港天氣轉為潮濕,有雨及幾陣霧。隨著一道冷 鋒靠近廣東沿岸,本港三月十三日早上開始有霧,當較乾燥的內陸氣流於日間移入,能 見度逐漸改善。東北季候風於其後兩日為本港帶來清涼及有幾陣雨的天氣。

隨著東北季候風緩和,三月十六日部分時間有陽光。一股海洋氣流於隨後四天再為本港帶來潮濕、有霧及較溫暖的天氣。橫瀾島的能見度於三月十九日早上曾下降至 100 米以下。

然而,在較涼的內陸氣流及較暖的海洋氣流繼續爭持下,另一道冷鋒於三月二十日 傍晚橫過本港,為本港於三月二十一日至二十四日帶來晴朗及乾燥的天氣。隨後受到一 股海洋氣流所影響,三月二十五日至二十七日本港天氣和暖、潮濕及沿岸有霧。天文台 於三月二十七日的氣溫上升至最高的 27.6 度,為本月最高氣溫。

三月二十八日,較涼的偏東風補充為本港帶來較涼、潮濕及有霧的天氣。同時,冷暖氣流在珠江口一帶匯聚並增強為一道低壓槽,並靠近廣東沿岸。三月二十九日本港開始受到驟雨及雷暴影響,三月三十日傍晚雨勢變得更大。在三至四小時間,九龍及新界廣泛地區錄得超過100毫米雨量,元朗、屯門、荃灣及沙田的雨量更超過150毫米。天文台於三月三十日下午九時至十時錄得的一小時雨量為56毫米,是自一八八四年有記錄以來三月份的最高紀錄。天文台於下午八時四十分發出自暴雨警告系統在1992年推出以來首個在三月份發出的黑色暴雨警告。大雨期間,九龍及新界有多宗水浸報告,包括港鐵九龍塘站及黃大仙站。強烈雷暴亦為本港帶來猛烈狂風及廣泛冰雹。流浮山錄得達每小時130公里的最高陣風。在猛烈狂風下,葵涌貨櫃碼頭一疊貨櫃箱倒塌,一人受傷。晚間繼續間中有大雨及狂風雷暴,本月餘下時間天氣持續不穩定。

本月有一個熱帶氣旋影響南海及北太平洋西部。

本月有十九班航機因惡劣天氣須轉飛其他地方。表 1.1 載列本月發出及取消各種警告/信號的詳情。

1. The Weather of March 2014

March 2014 was characterized by gloomy weather during the first-half of the month and heavy rain episodes towards the end of the month. While the monthly total duration of bright sunshine of 86.0 hours was slightly below normal by 5 percent, there were only 5.0 hours of bright sunshine from 1 to 15 March.

The month was also cooler and wetter than usual. The monthly mean temperature of 18.7 degrees was 0.4 degree below the normal figure of 19.1 degrees. The total rainfall of the month was 207.6 millimetres, more than double of the normal figure of 82.2 millimetres. About 99 percent of the monthly rainfall fell between 29 and 31 March. The accumulated rainfall of 247.1 millimetres since 1 January was about 53 percent above the normal figure of 161.3 millimetres for the same period.

Under the influence of a maritime airstream, the weather in Hong Kong was cloudy and humid with fog on the first day of the month. A cold front moved across the coast of Guangdong on the morning of 2 March. Local winds strengthened from the east with a few rain patches that afternoon. Following the passage of the cold front and with subsequent replenishments of the northeast monsoon, the weather in Hong Kong was cool, gloomy and occasionally windy with a few rain patches from 3 to 11 March. Temperatures at the Hong Kong Observatory dropped to a minimum of 13.9 degrees on the morning of 10 March, the lowest of the month.

With the return of a maritime airstream, local weather became humid with rain and fog patches on 12 March. As a cold front approached the coast of Guangdong, it started off foggy on the morning of 13 March, but the visibility improved gradually as drier continental air took over in the day time. The northeast monsoon brought cooler weather to Hong Kong with rain patches over the next two days.

With the moderation of the northeast monsoon, there were sunny periods on 16 March. A maritime airstream again brought humid and foggy weather with warmer temperatures in the ensuing four days. The visibility at Waglan Island once fell below 100 metres on the morning of 19 March.

But the battle between the cooler continental air and warmer maritime air continued as the passage of another cold front on the evening of 20 March brought fine and dry weather from 21 to 24 March. Then it was the turn of maritime air to bring warm and humid conditions with coastal fog from 25 to 27 March. Temperatures at the Hong Kong Observatory rose to a maximum of 27.6 degrees on 27 March, the highest of the month.

An easterly replenishment of cooler air led to cooler, humid and foggy weather on 28 March. Meanwhile, the convergence of contrasting air masses near the Pearl River Delta intensified as a trough of low pressure approached the coast of Guangdong. Showers and thunderstorms started to affect Hong Kong on 29 March, and became even more intense on the evening of 30 March. Over a period of 3 to 4 hours, more than 100 millimetres of rainfall were recorded in Kowloon and the New Territories. Rainfall in Yuen Long, Tuen Mun, Tsuen Wan and Shatin exceeded 150 millimetres. The hourly rainfall of 56 millimetres recorded at the Hong Kong Observatory between 9 and 10 p.m. on 30 March was the highest in March since record began in 1884. The Black Rainstorm Warning was issued at 8:40 p.m., the first time in March since the Rainstorm Warning System commenced operation in 1992. There were flooding reports in Kowloon and the New Territories including the MTR stations at Kowloon Tong and Wong Tai Sin. Intense thunderstorms also brought widespread hail and severe squalls to the territory. A maximum gust exceeding 130 kilometres per hour was reported at Lau Fau Shan, and one person was injured as stacked containers at the Kwai Chung Container Terminals toppled over. Outbreaks of heavy rain and squally thunderstorms continued throughout the night as the unsettled weather persisted till the end of the month.

One tropical cyclone occurred over the South China Sea and the western North Pacific in the month..

During the month, nineteen aircrafts were diverted due to adverse weather. Details of the issuance and cancellation of various warnings/signals in the month are summarized in Table 1.1.

表 1.1 二零一四年三月發出的警告及信號

Table 1.1 Warnings and Signals issued in March 2014

強烈季候風信號

Strong Monsoon Signal

	時間 ng Time	終結時間 Ending Time		
日/月	日/月 時		時	
day/month	hour	day/month	hour	
2/2	0000	4.72	0200	
3/3	0800	4/3	0300	
6/3	0225	8/3	0930	
10/3	0345	11/3	1205	
11/3	2235	12/3	0545	
20/3	2120	21/3	1015	
30/3 1945		31/3	1035	

暴雨警告信號

Rainstorm Warnings

顏色	開始	诗間	終結時間	
	Beginn	ing Time	Ending Time	
Colour	日/月	時	日/月	時
	day/month	hour	day/month	hour
黃色 Amber	29/3	1110	29/3	1220
黃色 Amber	30/3	1945	30/3	2015
紅色 Red	30/3	2015	30/3	2040
黑色 Black	30/3	2040	30/3	2230
黃色 Amber	30/3	2230	31/3	0150
黃色 Amber	31/3	0840	31/3	1140

雷暴警告

Thunderstorm Warning

	nuncerstorm warming								
開始時間		終結時間		開始時間		終結時間			
Beginning Time		ng Time	Ending	Ending Time		Beginning Time		g Time	
日/月 時		時	日/月	時	日/月	時	日/月	時	
	day/month	hour	day/month	hour	day/month	hour	day/month	hour	
	29/3	0706	29/3	1330	29/3	1450	29/3	1630	
	30/3	0345	30/3	0600	30/3	1720	31/3	0400	
	31/3	0750	31/3	1400	31/3	1450	1/4	0200	

新界北水浸特別報告

Special Announcement on Flooding in the northern New Territories

	時間 ng Time	終結時間 Ending Time		
日/月 day/month	時 hour	日/月 day/month	時 hour	
30/3	2020	31/3	0230	

山泥傾瀉警告

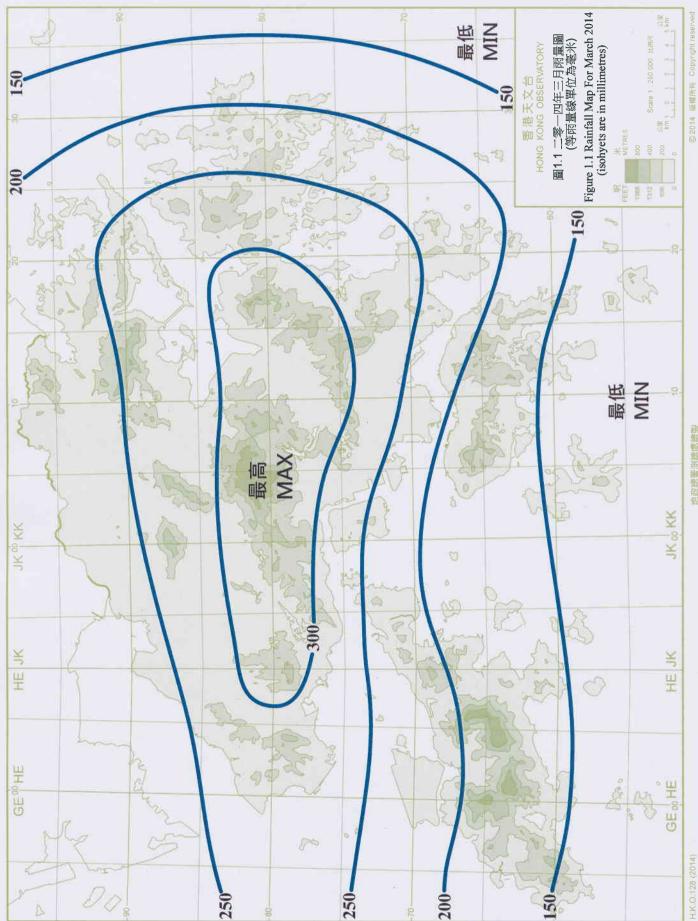
Landslip Warning

Landship Warning								
	時間 ng Time	終結時間 Ending Time						
日/月	時	日/月	時					
day/month hour		day/month	hour					
30/3	2350	31/3	0500					
31/3 0915		31/3	1530					

火災危險警告

Fire Danger Warnings

颜色	開始時間			終結時間		
Colour	Beginning Time			Ending Time		
Colour	日/月	時	日/月	時		
	day/month	hour	day/month	hour		
黃色 Yellow	15/3	1200	16/3	2000		
黃色 Yellow	22/3	0600	23/3	2110		



HK 0.128 (2014)

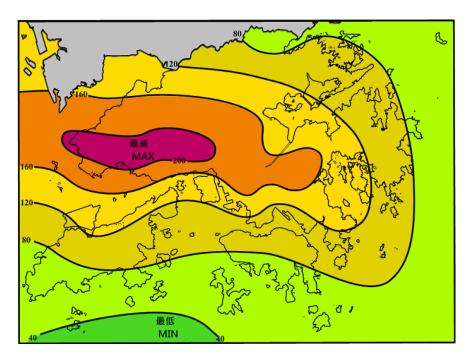


圖 1.2 2014年3月30日雨量圖 (等雨量線單位為毫米)。

Figure 1.2 Rainfall Map on 30 March 2014 (isohyets are in millimetres).

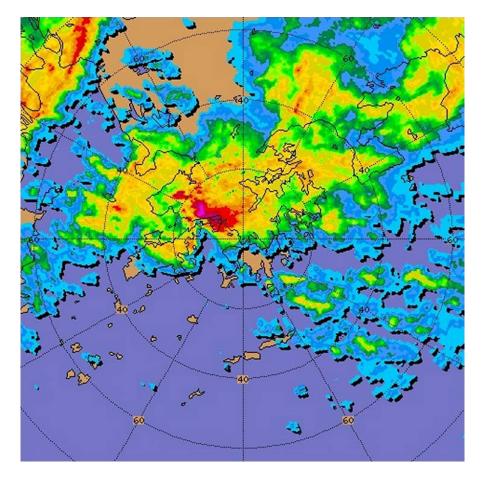


圖 1.3 雷達圖像顯示在2014年3月30日下午8時00分,冰雹及雷暴帶正橫過香港

Figure 1.3 Radar image showing heavy rain and hail-bearing thunderstorms crossing the territory at 8:00 p.m. on 30 March 2014



圖 1.4 2014年3月30日下午8時40分左右在荃灣拾獲的冰雹 (圖片由 Ms. Susanna Cheung 提供)

Figure 1.4 A hail stone picked up in Tsuen Wan at around 8:40 p.m. on 30 March 2014 (Courtesy of Ms Susanna Cheung)

2.1 二零一四年三月熱帶氣旋概述

二零一四年三月在北太平洋西部出現了一個熱帶氣旋,名叫法茜。

熱帶低氣壓<u>法茜</u>於二月二十八日在關島之東南約650公里的北太平洋西部上空形成,初時移動緩慢。<u>法茜</u>於三月一日向偏北方向移動,並增強為熱帶風暴,兩天後再增強為強烈熱帶風暴,並加速向東北偏北移動。它於三月五日凌晨在關島東北的太平洋上進一步增強為颱風及達到其最高強度,中心附近最高持續風速為每小時120公里,並向東北移動。隨後法茜逐漸減弱,翌日在北太平洋西部上演變為溫帶氣旋。

2.1 Overview of Tropical Cyclones in March 2014

One tropical cyclone, named Faxai, occurred over the western North Pacific in March 2014.

Faxai formed as a tropical depression over the western North Pacific about 650 km southeast of Guam on 28 February and moved slowly initially. Faxai took on a northerly track on 1 March and intensified into a tropical storm. It intensified into a severe tropical storm two days later and speeded up towards the north-northeast. Moving northeastwards, Faxai intensified further into a typhoon over the Pacific to the northeast of Guam in the small hours on 5 March, reaching its peak intensity with estimated sustained winds of 120 km/h near its centre. It weakened gradually thereafter and became an extratropical cyclone over the western North Pacific the following day.

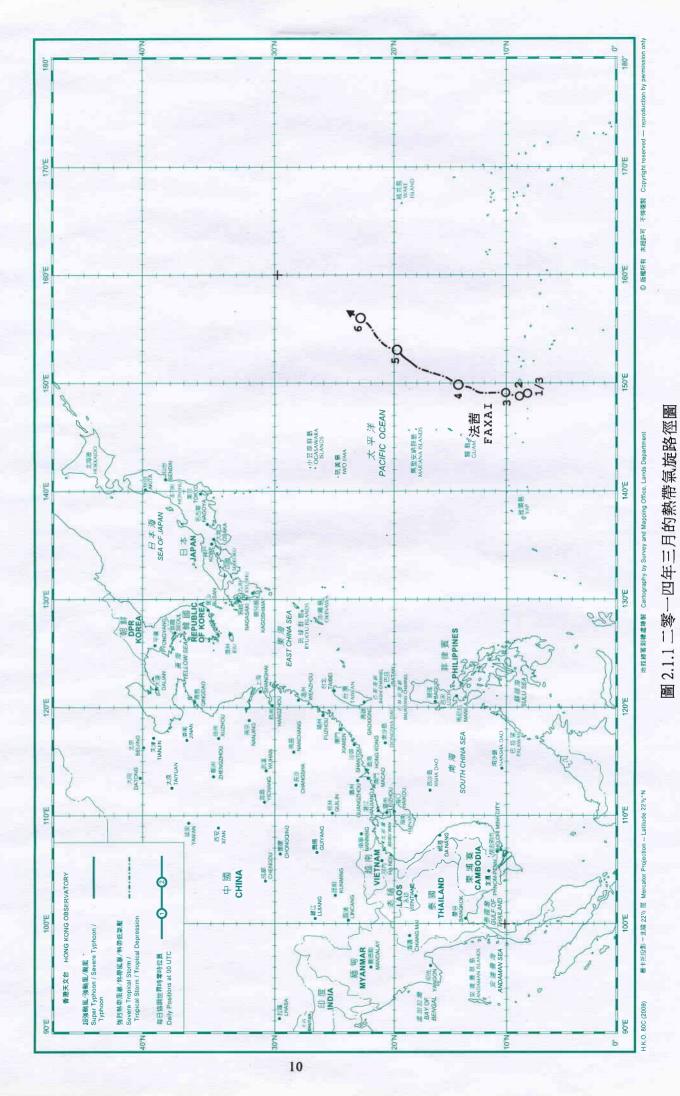
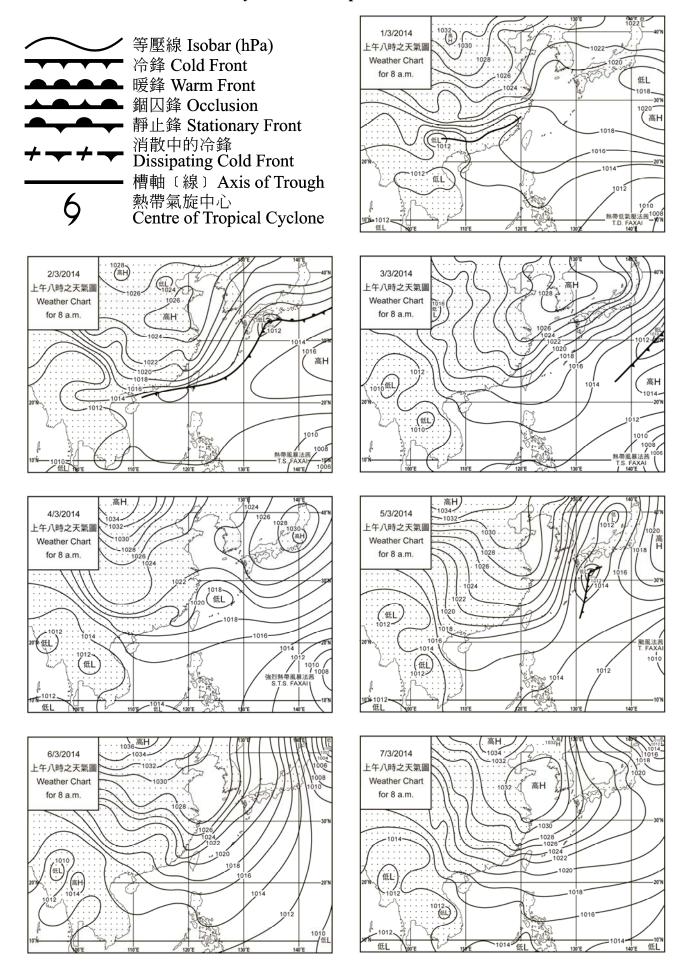
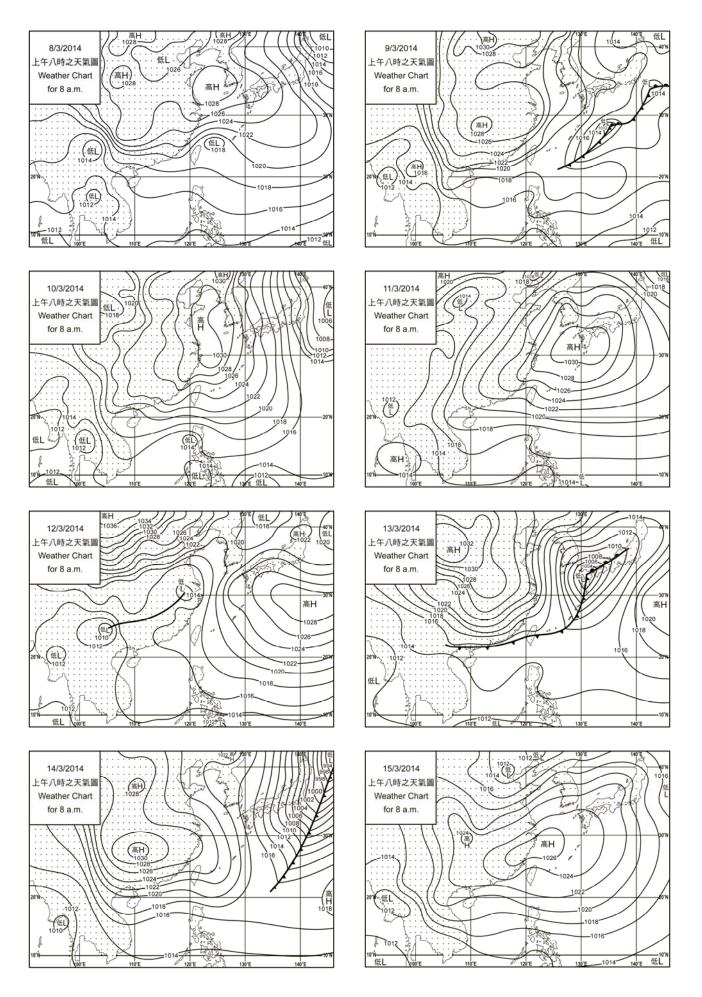


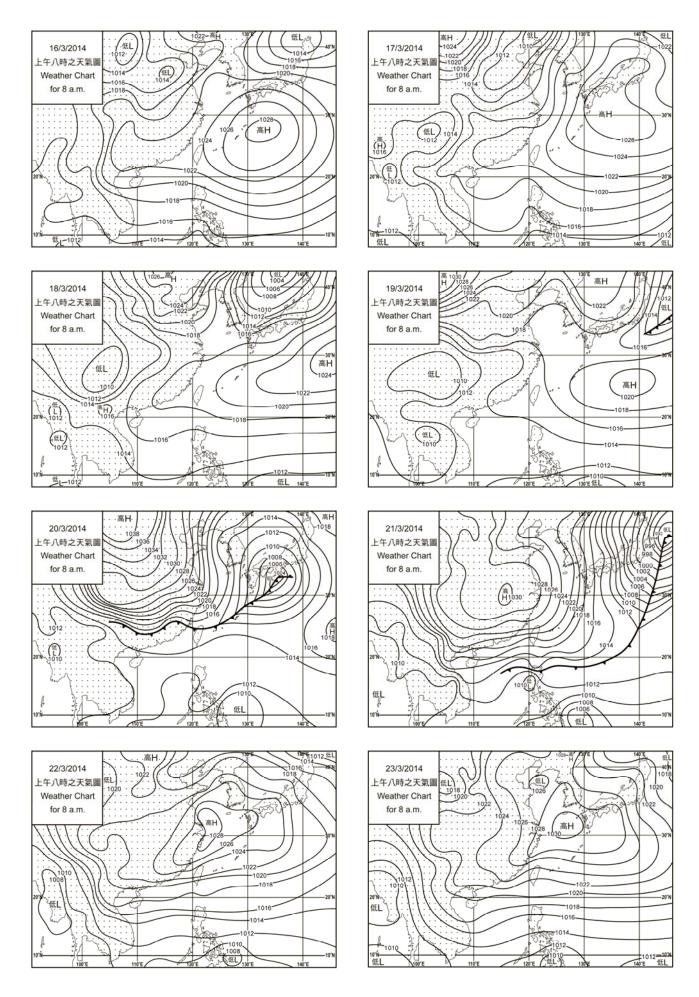
Figure 2.1.1 Track of tropical cyclones in March 2014

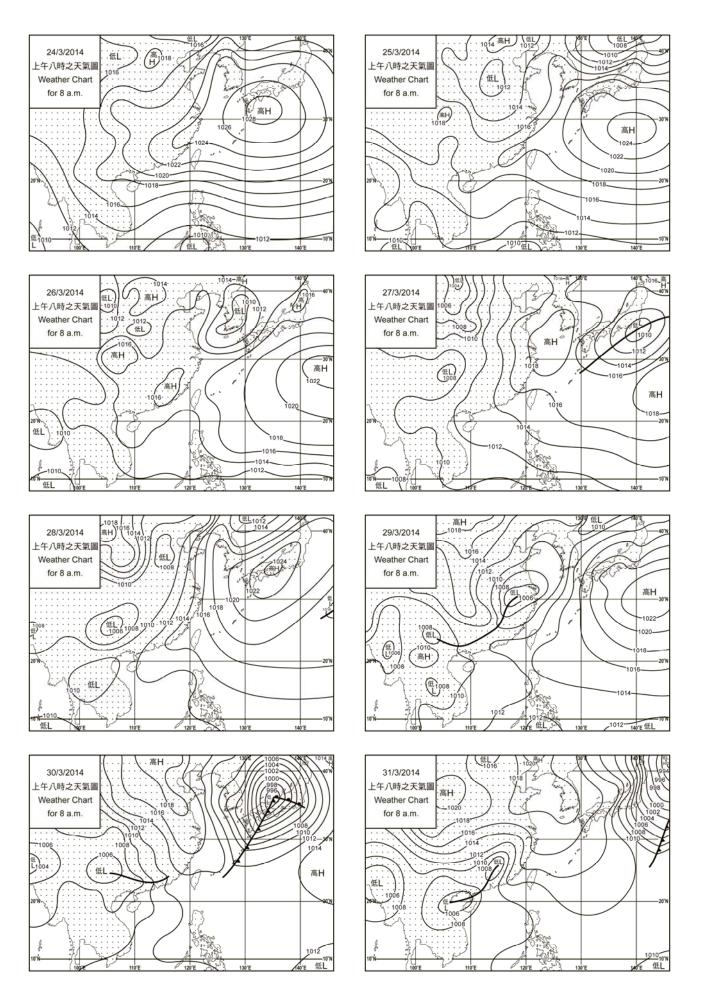
3. 二零一四年三月每日天氣圖

3. Daily Weather Maps for March 2014









4.1.1 二零一四年三月香港氣象觀測摘錄(一)

4.1.1 Extract of Meteorological Observations in Hong Kong (Part 1), March 2014

日期	平均氣壓			u r e	平均 露點溫度	平均 相對濕度	平均雲量 Mean	總雨量
Date	Mean Pressure	最高 Maximum	平均 Mean	最低 Minimum	Mean Dew Point Temperature	Mean Relative Humidity	Amount of Cloud	Total Rainfall
三 月 March	百帕斯卡 hPa	°C	°C	°C	°C	%	%	毫米 mm
1	1014.6	22.1	20.0	18.4	18.1	89	86	-
2	1014.6	21.7	19.0	16.0	17.6	91	90	0.6
3	1017.0	16.3	15.8	15.4	13.8	87	89	Tr
4	1017.5	18.2	16.8	15.4	15.4	91	94	0.1
5	1018.7	17.6	16.7	15.9	14.3	86	89	0.1
6	1018.2	15.9	15.3	14.8	13.2	88	88	Tr
7	1020.3	15.1	14.6	14.1	12.6	88	89	0.1
8	1018.8	16.2	15.1	14.2	14.1	94	94	0.9
9	1020.9	15.5	14.8	14.2	12.5	87	88	Tr
10	1022.1	15.6	14.4	13.9	11.1	81	88	Tr
11	1020.2	15.9	15.0	14.1	12.7	86	88	0.3
12	1014.7	19.5	17.7	15.4	17.1	96	93	0.1
13	1016.2	22.2	20.2	19.0	15.8	77	85	0.3
14	1022.2	19.9	17.1	14.7	12.1	73	84	0.4
15	1022.1	17.5	16.0	14.7	9.8	67	90	Tr
16	1021.0	19.9	18.1	16.3	12.4	70	82	-
17	1018.9	22.9	20.4	18.4	18.4	88	86	Tr
18	1016.0	25.0	21.9	19.9	20.0	89	85	-
19	1013.6	26.8	22.7	20.4	20.1	86	48	-
20	1014.2	25.2	21.5	18.7	18.0	81	31	-
21	1020.4	18.7	16.5	15.5	10.6	69	88	Tr
22	1021.0	20.8	17.3	15.2	10.8	67	53	-
23	1022.0	22.0	18.4	15.9	12.6	70	42	-
24	1019.4	23.1	19.5	16.6	14.0	72	45	-
25	1015.5	26.5	21.9	18.9	16.6	73	37	-
26	1013.9	26.2	22.6	20.6	19.2	82	55	Tr
27	1012.7	27.6	23.5	20.6	20.1	82	53	-
28	1012.1	23.3	22.2	21.2	20.8	92	88	Tr
29	1011.4	23.5	21.8	20.7	20.8	94	87	19.0
30	1010.4	26.0	22.6	19.1	21.0	91	90	103.1
31	1009.7	21.2	20.0	18.9	19.7	98	93	82.6
平均/總值 Mean/Total	1017.1	20.9	18.7	17.0	15.7	83	77	207.6
正常* Normal*	1016.0	21.4	19.1	17.2	15.7	82	79	82.2
觀測站 Station				天文台 Hong Kong Ob				

天文台於三月三十日 20 時 16 分錄得本月最低氣壓 1007.3 百帕斯卡。

The minimum pressure recorded at the Hong Kong Observatory was 1007.3 hectopascals at 2016 HKT on 30 March.

天文台於三月二十七日 14 時 48 分錄得本月最高氣溫 27.6 $^{\circ}$ C $^{\circ}$

The maximum air temperature recorded at the Hong Kong Observatory was 27.6 $\,^{\rm o}$ C at 1448 HKT on 27 March.

天文台於三月十日 7 時 41 分錄得本月最低氣溫 13.9°C。

The minimum air temperature recorded at the Hong Kong Observatory was 13.9 ° C at 0741 HKT on 10 March.

天文台於三月三十日 20 時 35 分錄得本月最高瞬時降雨率 374 毫米/小時。

The maximum instantaneous rate of rainfall recorded at the Hong Kong Observatory was 374 millimetres per hour at 2035 HKT on 30 March.

- * 1981-2010 氣候平均值 (除特別列明外) (http://www.hko.gov.hk/wxinfo/climat/normal/cnormal03.htm)
- * 1981-2010 Climatological normal, unless otherwise specified (http://www.hko.gov.hk/wxinfo/climat/normal/enormal03.htm)
- Tr 微量 (降雨量少於 0.05 毫米)

 $[\]mbox{Tr}$ - \mbox{Trace} of rainfall (amount less than 0.05 mm)

4.1.2 二零一四年三月香港氣象觀測摘錄(二)

4.1.2 Extract of Meteorological Observations in Hong Kong (Part 2), March 2014

日期 Date	出現低能見度的時數# Number of hours of Reduced Visibility#	總日照 Total Bright Sunshine	每日太陽總輻射 Daily Global Solar Radiation	總蒸發量 Total Evaporation	盛行風向 Prevailing Wind Direction	平均風速 Mean Wind Speed
三 月 March	小時 hours	小時 hours	兆焦耳/米 ² MJ/m ²	毫米 mm	度 degrees	公里/小時 km/h
1	0	0.9	8.79	2.0	050	13.8
2	3	1.4	7.24	2.0	080	21.8
3	0	-	4.58	1.4	070	42.3
4	2	-	5.61	1.0	050	22.4
5	1	-	4.34	2.3	070	30.0
6	3	-	3.69	0.4	070	43.2
7	0	-	3.50	1.4	080	46.3
8	0	-	4.11	1.4	060	29.2
9	0	-	3.57	1.8	040	24.2
10	1	-	4.99	1.6	070	45.5
11	14	-	3.37	0.4	060	39.4
12	0	-	3.76	0.3	040	14.7
13	0	1.3	7.78	3.2	030	19.8
14	0	1.1	8.72	1.5	060	31.3
15	7	0.3	5.32	3.9	060	29.2
16	6	2.6	11.19	2.0	050	24.9
17	4	1.5	9.55	N.A.	050	18.2
18	1	4.6	14.86	2.7	050	12.8
19	1	9.1	19.64	N.A.	040	6.8
20	5	9.0	16.30	5.1	040	14.3
21	0	-	4.53	2.7	030	26.7
22	8	8.0	20.88	5.9	070	32.9
23	0	10.7	22.54	3.1	070	33.1
24	0	8.9	20.48	4.0	060	25.0
25	0	9.9	21.84	3.8	040	14.4
26	0	7.5	18.14	4.1	040	7.4
27	0	8.6	20.98	4.3	160	11.5
28	3	-	7.13	1.7	050	18.5
29	0	0.2	3.23	2.4	040	9.5
30	0	0.2	4.62	N.A.	100	20.7
31	0	0.2	1.59	2.0	110	18.9
平均/總值 Mean/Total	59	86.0	9.58	68.4^	060	24.1
正常* Normal*	122.7 §	90.8	9.96	70.5	060	23.0
觀測站 Station	香港國際機場 Hong Kong International Airport		京士柏 King's Park		横 瀾 Waglan	

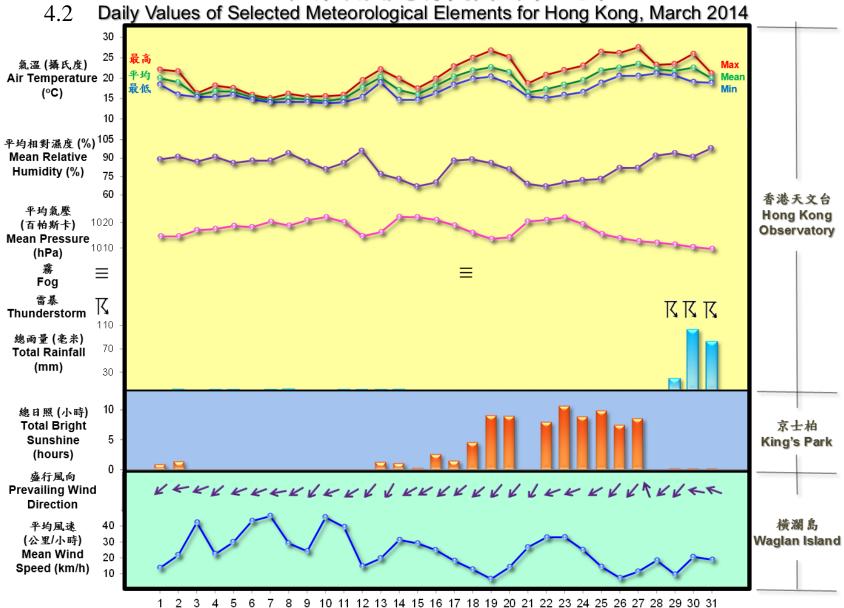
橫瀾島於三月三十一日 9 時 41 分錄得本月最高陣風 94 公里/小時,風向 010 度。

The maximum gust peak speed recorded at Waglan Island was 94 kilometres per hour from 010 degrees at 0941 HKT on 31 March.

- # 低能見度是指能見度低於 8 公里,不包括出現霧、薄霧或降水。
 - 在2004年及以前,香港國際機場的能見度讀數是基於專業氣象觀測員每小時的觀測數據。在2005年及以後,讀數是採用位於機場 南跑道中間的能見度儀表在每小時前10分鐘的平均數據。這與使用儀器觀測來改進能見度評估的國際趨勢是一致的。
 - 在2007年10月10日前曾出現於此摘錄內香港國際機場2005年及以後的低能見度時數資料乃基於專業氣象觀測員每小時的觀測數據。 有關資料已於2007年10月10日起改為以機場南跑道中間之能見度儀表在每小時前10分鐘的平均數據計算。
- # Reduced visibility refers to visibility below 8 kilometres when there is no fog, mist, or precipitation.
 - The visibility readings at the Hong Kong International Airport are based on hourly observations by professional meteorological observers in 2004 and before, and average readings over the 10-minute period before the clock hour of the visibility meter near the middle of the south runway from 2005 onwards. The change of the data source in 2005 is an improvement of the visibility assessment using instrumented observations following the international trend.
 - Before 10 October 2007, the number of hours of reduced visibility at the Hong Kong International Airport in 2005 and thereafter displayed in this summary was based on hourly visibility observations by professional meteorological observers. Since 10 October 2007, the data have been revised using the average visibility readings over the 10-minute period before the clock hour, as recorded by the visibility meter near the middle of the south runway.
- * 1981-2010 氣候平均值 (除特別列明外) (http://www.hko.gov.hk/wxinfo/climat/normal/cnorma103.htm)
- * 1981-2010 Climatological normal, unless otherwise specified (http://www.hko.gov.hk/wxinfo/climat/normal/enormal03.htm)
- § 1997-2013 平均值
- § 1997-2013 Mean value
- ^ 共 28 日之總值

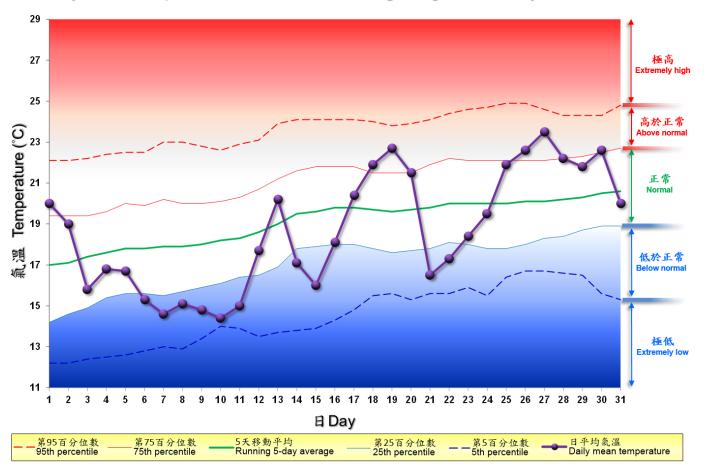
[^] Total for 28 days

4.2 2014年3月部分香港氣象要素的每日記錄



4.3 2014年3月香港天文台錄得的日平均氣溫

4.3 Daily Mean Temperature recorded at the Hong Kong Observatory for March 2014



備註:

極高: 高於第95百分位數

高於正常:介乎第75和第95百分位數之間 正常:介乎第25和第75百分位數之間 低於正常:介乎第5和第25百分位數之間

極低: 低於第5百分位數

百分位數值及 5 天移動平均值是基於 1981 至

2010年的數據計算所得

Remarks:

Extremely high: above 95th percentile

Above normal: between 75th and 95th percentile Normal: between 25th and 75th percentile Below normal: between 5th and 25th percentile

Extremely low: below 5th percentile

Percentile and 5-day running average values are computed

based on the data from 1981 to 2010