每月天氣摘要 二零二三年十二月

Monthly Weather Summary December 2023

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1. 二零二三年十二月天氣回顧

由於影響華南沿岸的東北季候風遠較正常弱,二零二三年十二月上半月香港異常溫暖。 縱使下半月有強烈冬季季候風影響香港,二零二三年十二月本港整體仍較正常溫暖。本月平 均氣溫 19.1 度,較正常值 18.2 度高 0.9 度,是有記錄以來十二月份的其中一個第九高。本 月亦遠較正常少雨,總雨量為 0.9 毫米,只有正常值 28.8 毫米的約百分之 3。本年總雨量為 2 774.5 毫米,較正常值 2 431.2 毫米高約百分之 14。

受東北季候風影響,除有幾陣微雨外,本月首四日香港大致多雲及乾燥,日間短暫時間有陽光。由於風勢微弱及雲層轉薄,十二月五日本港天氣轉為普遍天晴。十二月六日早上有幾陣微雨及部分地區能見度較低,隨著一股乾燥的東北季候風逐漸影響廣東,下午轉為天晴乾燥,並持續至隨後兩日。十二月七日日間天氣亦非常乾燥。在一股較潮濕的偏東氣流影響下,十二月九日雲量增多。

除十二月十一日早上雲量較多及有幾陣兩外,十二月十日至十二日本港普遍天晴及相當溫暖。在陽光充沛的情況下,天文台氣溫於十二月十二日下午上升至全月最高的 28.7 度,是有記錄以來其中一個十二月份最高氣溫。

由於一道雲帶覆蓋廣東沿岸及受一股偏東氣流影響,十二月十三日至十四日本港天氣轉為大致多雲及有幾陣雨。隨著偏東氣流緩和,翌日天氣溫暖及日間部分時間有陽光。與此同時,一道冷鋒在華中形成並於十二月十六日早上橫過廣東沿岸。當日早上本港北風增強及有幾陣雨,日間氣溫顯著下降,短暫時間有陽光。受相關的冬季季候風影響及由於一道雲帶覆蓋華南,十二月十七日本港天氣轉為多雲及寒冷。十二月十八日至十九日大致多雲,早上天氣清涼。

受一股強烈冬季季候風補充影響,十二月二十日至二十三日本港天氣寒冷及大致多雲。由於一道兩帶橫過廣東沿岸地區,十二月二十三日早上本港有幾陣雨。天文台氣溫於該早上下降至全月最低的 8.1 度。隨著雲層轉薄,十二月二十四日至二十六日本港轉為天晴乾燥。而十二月二十四日及二十五日早上天氣寒冷。此外,十二月二十四日早上大埔及打鼓嶺有結霜報告。隨著冬季季候風緩和,除有幾陣微雨外,十二月二十七日至二十九日本港天氣逐漸回暖,日間部分時間有陽光。在微風的情況下,本月最後兩日日間天氣乾燥及相當溫暖,部分時間有陽光,部分地區能見度頗低。十二月三十一日早上赤鱲角的能見度曾下降至 2 000米以下。天文台氣溫於該日下午上升至最高的 25.7 度,是有記錄以來最暖的除夕。

二零二三年十二月有一個熱帶氣旋影響南海及北太平洋西部。

本月沒有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 December 2023

With the northeast monsoon over the south China coast much weaker than normal, the weather

of Hong Kong was exceptionally warm in the first half of December 2023. While Hong Kong was affected by an intense winter monsoon in the second half of the month, December 2023 was still overall warmer than usual in Hong Kong. The monthly mean temperature of 19.1 degrees was 0.9 degrees above the normal figure of 18.2 degrees and one of the ninth highest on record for December. The month was also much drier than usual with a total rainfall of 0.9 millimetres, only about 3 percent of the normal figure of 28.8 millimetres. The annual total rainfall of 2 774.5 millimetres was about 14 percent above the annual normal of 2 431.2 millimetres.

Affected by the northeast monsoon, apart from a few light rain patches, the weather of Hong Kong was mainly cloudy and dry with sunny intervals during the day on the first four days of the month. Under light wind conditions and with the clouds thinning out, local weather became generally fine on 5 December. While there were a few light rain patches and the visibility was relatively low in some areas on the morning of 6 December, the weather turned fine and dry in the afternoon with the setting in of a dry northeast monsoon and remained so the next two days. It was also very dry during the day on 7 December. Under the influence of a relatively humid easterly airstream, the weather turned cloudier on 9 December.

Apart from cloudier weather and a few rain patches on the morning of 11 December, it was generally fine and rather warm on 10 - 12 December. With abundant sunshine, the temperature at the Observatory rose to a maximum of 28.7 degrees on the afternoon of 12 December, the highest of the month and one of the highest maximum temperature on record for December.

Under the influence of an easterly airstream and with a band of clouds covering the coast of Guangdong, the weather of Hong Kong turned mainly cloudy with a few rain patches on 13 - 14 December. With the moderation of the easterly airstream, it was warm with sunny periods during the day the next day. Meanwhile, a cold front formed over central China and moved across the coast of Guangdong on the morning of 16 December. Locally, winds strengthened from the north with a few rain patches in the morning. Temperatures fell appreciably with sunny intervals during the day. Affected by the associated winter monsoon and with a band of clouds covering southern China, the weather of Hong Kong turned cloudy and cold on 17 December. It was mainly cloudy with cool mornings on 18 - 19 December.

Affected by an intense replenishment of the winter monsoon, it was mainly cloudy and cold in Hong Kong on 20 - 23 December. With a rainband moving across the coastal areas of Guangdong, there were a few rain patches in Hong Kong on the morning of 23 December. The temperature at the Observatory dropped to a minimum of 8.1 degrees on that morning, the lowest of the month. With the clouds thinning out, the weather of Hong Kong became fine and dry on 24 - 26 December. It was also cold on the morning of 24 - 25 December. Moreover, there were frost reports in Tai Po and Ta Kwu Ling on the morning of 24 December. As the winter monsoon moderated, apart from a few light rain patches, local weather turned milder gradually with sunny periods during the day on 27 - 29 December. Under light wind conditions, the weather was dry and rather warm with sunny periods during the day on the last two days of the month. The visibility was also

rather low in some areas. The visibility at Chek Lap Kok once fell below 2 000 metres on the morning of 31 December. The temperatures at the Observatory rose to a maximum of 25.7 degrees on the afternoon of 31 December, making it the warmest New Year's Eve on record.

One tropical cyclone occurred over the South China Sea and the western North Pacific in December 2023.

During the month, no aircraft was 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 二零二三年年十二月發出的警告及信號

Table 1.1 Warnings and Signals issued in December 2023

強烈季候風信號

Strong Monsoon Signal

21-1-8-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1							
	時間 T:	終結時間					
Beginni	ng rime	Ending Time					
日/月 時		日/月	時				
day/month hour		day/month	hour				
16/12 20/12 21/12	0600 0625 0550	17/12 20/12 22/12	0745 1445 1010				

霜凍警告

Frost Warning

開始	時間	終結時間					
Beginni	ng Time	Ending Time					
日/月 時		日/月	時				
day/month hour		day/month	hour				
23/12 24/12	1630 1630	24/12 25/12	0815 0815				

寒冷天氣警告

Cold Weather Warning

	時間 ng Time	終結時間 Ending Time		
日/月	時	日/月	時	
day/month	hour	day/month	hour	
16/12	0600	18/12	0815	
19/12	1620	25/12	1320	

火災危險警告

Fire Danger Warnings

顏色 Colour	開始時間 Beginning Time		終結時間 Ending Time	
Coloui	日/月	時	日/月	時
	day/month	hour	day/month	hour
黃色 Yellow 黄色 Yellow 紅色 Red 黄色 Yellow 黄色 Yellow 红色 Red 黄色 Yellow 紅色 Red 黄色 Yellow 紅色 Red 黄色 Yellow	2/12 3/12 7/12 10/12 16/12 17/12 20/12 23/12 24/12 26/12 26/12 30/12	0600 0600 0600 0600 1100 0600 0745 1230 0600 0600 1200 1015	2/12 3/12 7/12 10/12 16/12 17/12 23/12 24/12 26/12 26/12 26/12 30/12	1850 1845 2300 1800 2330 2330 0915 0600 0600 1200 2145 1810 2245
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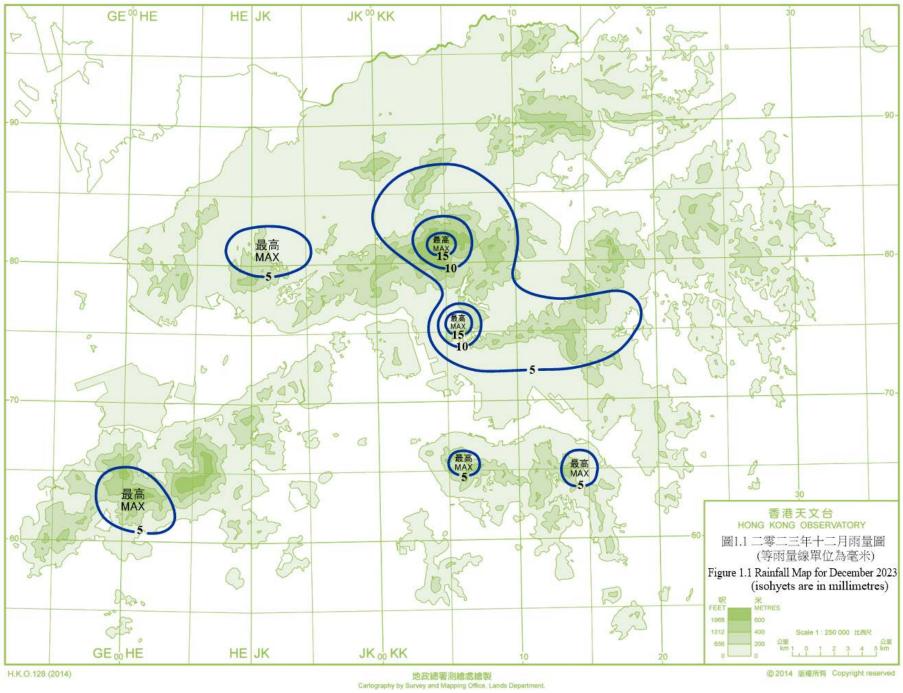




圖 1.2 二零二三年十二月二十四日在大埔的結霜 (鳴謝 Irwin Wong 提供照片)

Figure 1.2 Frost at Tai Po on 24 December 2023 (Courtesy of Irwin Wong)

2.1 二零二三年十二月的熱帶氣旋概述

二零二三年十二月在北太平洋西部出現了一個熱帶氣旋。

熱帶低氣壓杰拉華於十二月十七日凌晨在馬尼拉之東南約 1 400 公里的太平洋西部上形成,向西移向菲律賓南部。杰拉華於當日早上達到其最高強度,中心附近最高持續風速估計為每小時 55 公里。翌日杰拉華移入菲律賓棉蘭老島,並於十二月十九日凌晨在該區減弱為低壓區。

根據報章報導,杰拉華吹襲菲律賓期間,最少一人失蹤,數間房屋受損,多個城鎮停電,超過一萬一千人需要撤離。

2.1 Overview of Tropical Cyclone in December 2023

One tropical cyclone occurred over the western North Pacific in December 2023.

Jelawat formed as a tropical depression over the western North Pacific about 1 400 km southeast of Manila in the small hours on 17 December and moved westwards towards the southern part of the Philippines. Jelawat attained its peak intensity with an estimated maximum sustained wind of 55 km/h near its centre that morning. Jelawat moved into Mindanao of the Philippines the next day. Finally, it degenerated into an area of low pressure over the region in the small hours on 19 December.

According to press reports, at least one person was found missing in the Philippines during the passage of Jelawat. Several houses were damaged and electricity supply was disrupted in many towns. More than 11 000 people needed to be evacuated.

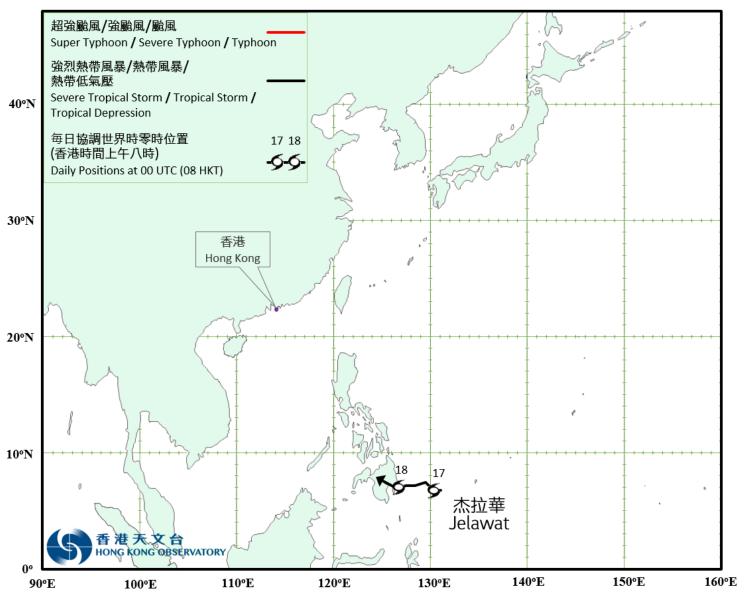
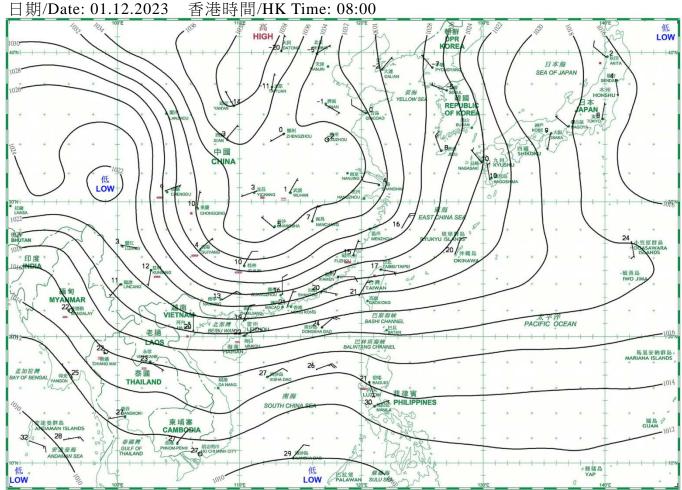
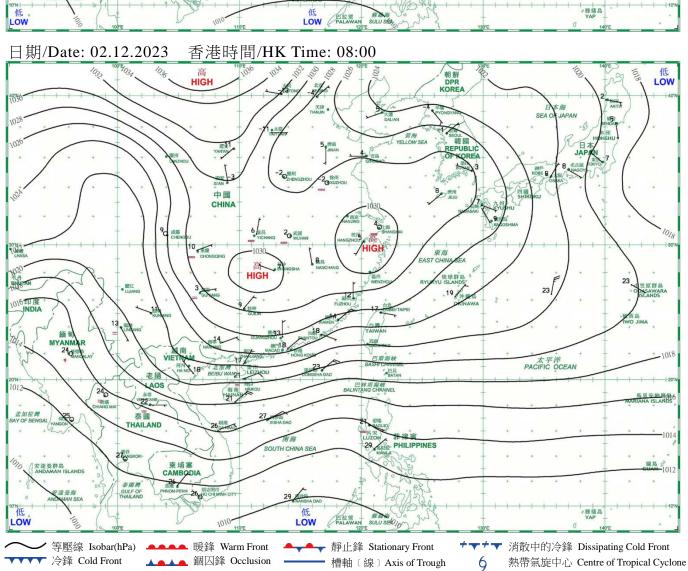


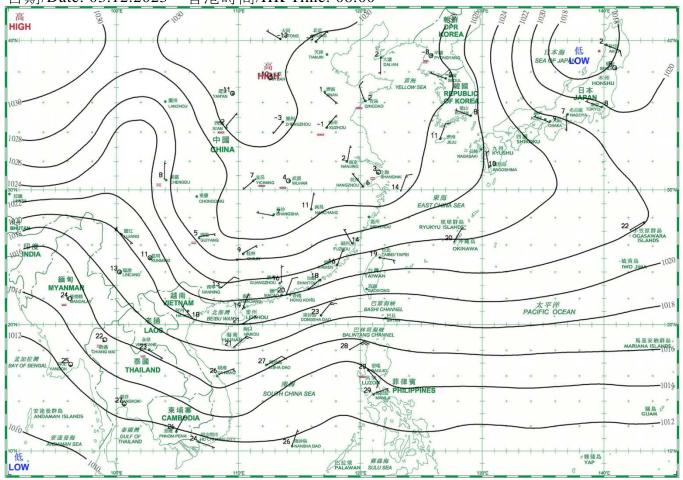
圖 2.1 二零二三年十二月的熱帶氣旋暫定路徑圖

Fig. 2.1 Provisional Tropical Cyclone Track in December 2023

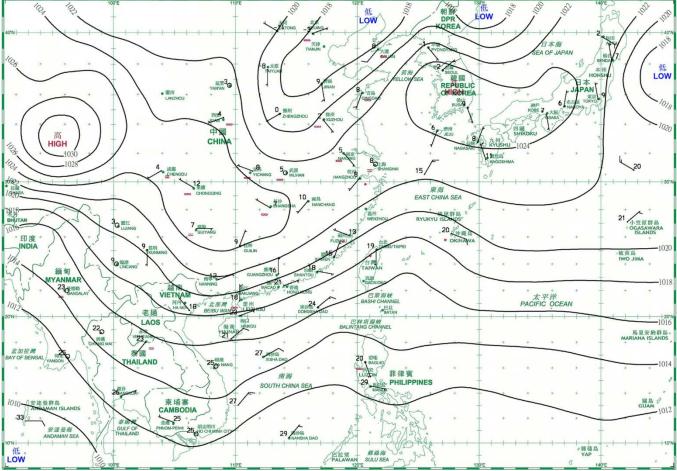




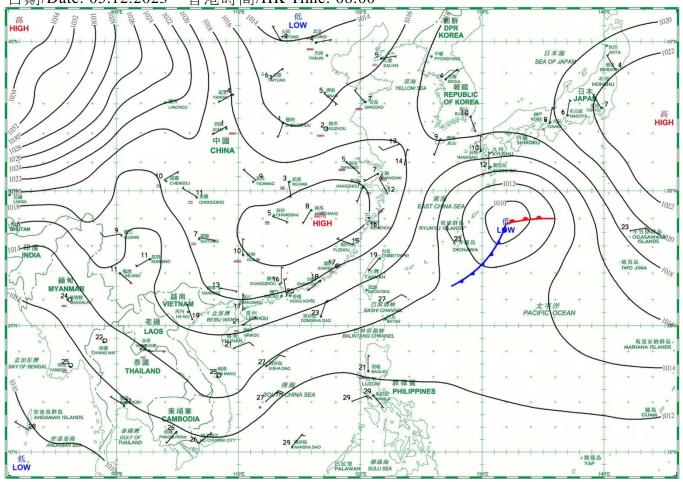
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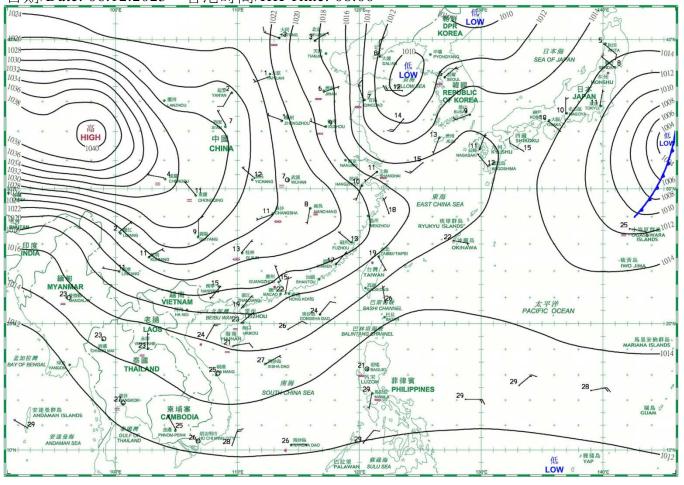


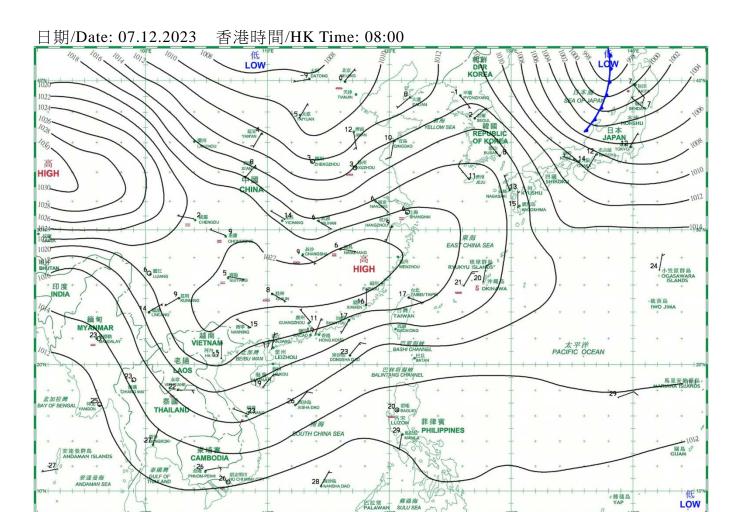


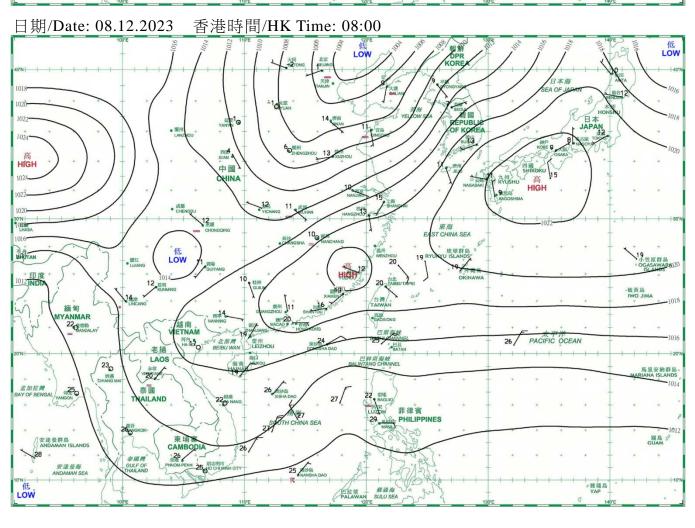
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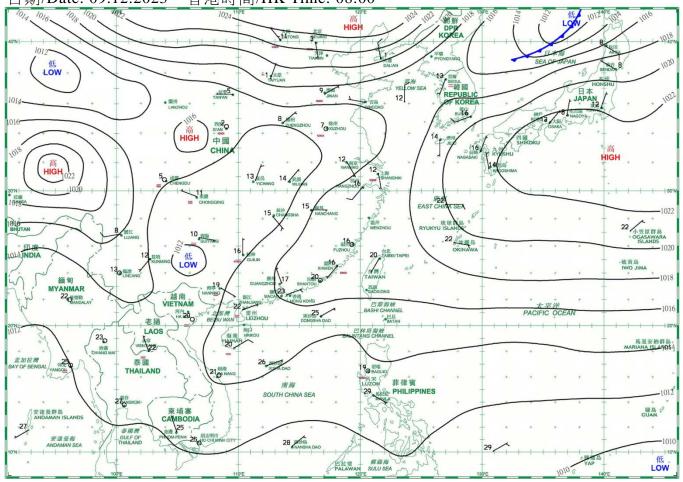


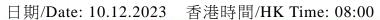


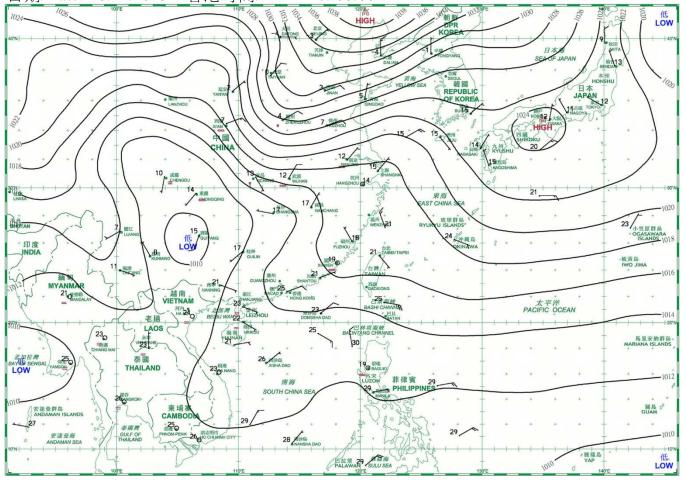




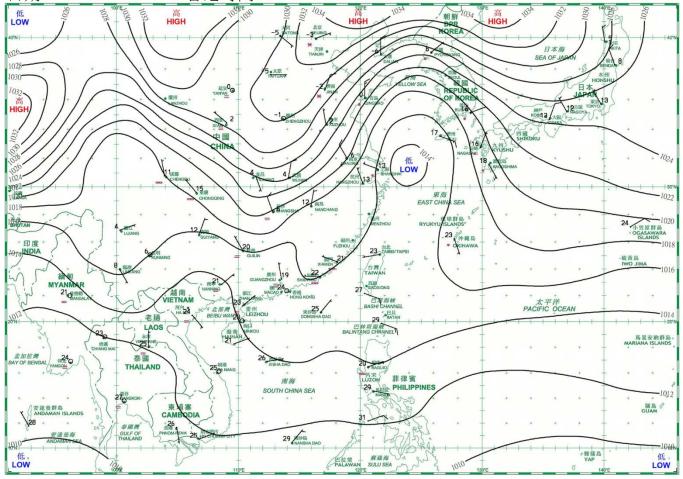
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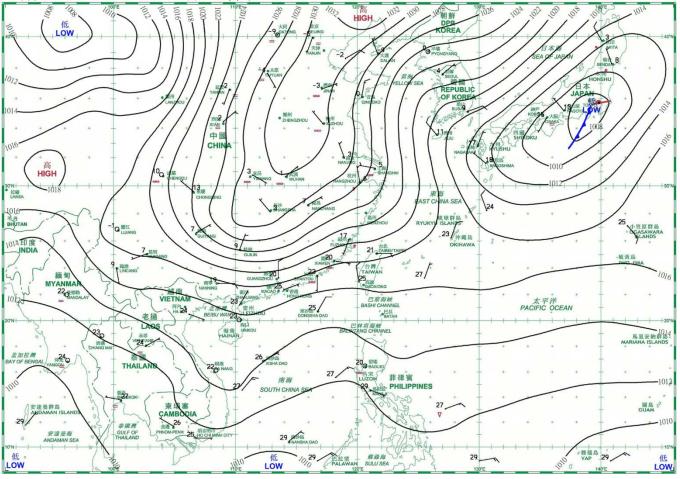




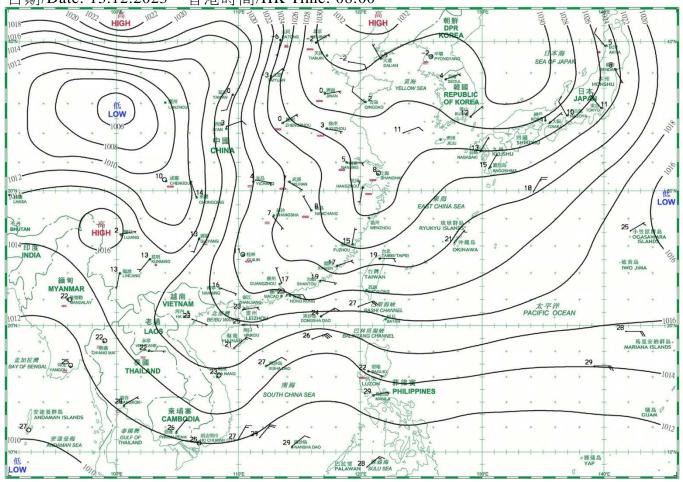
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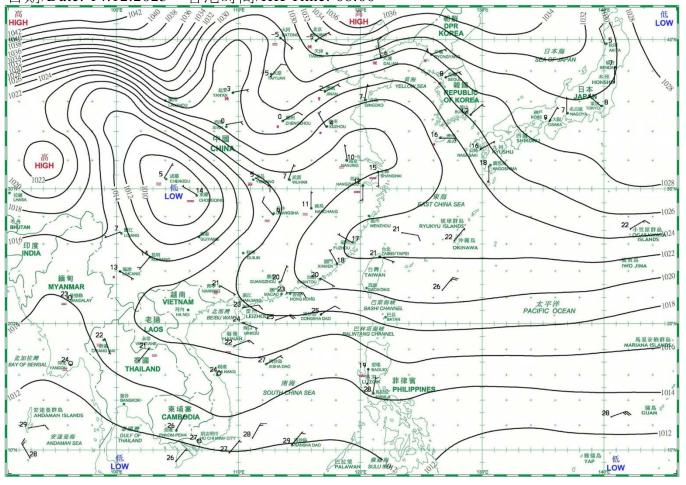
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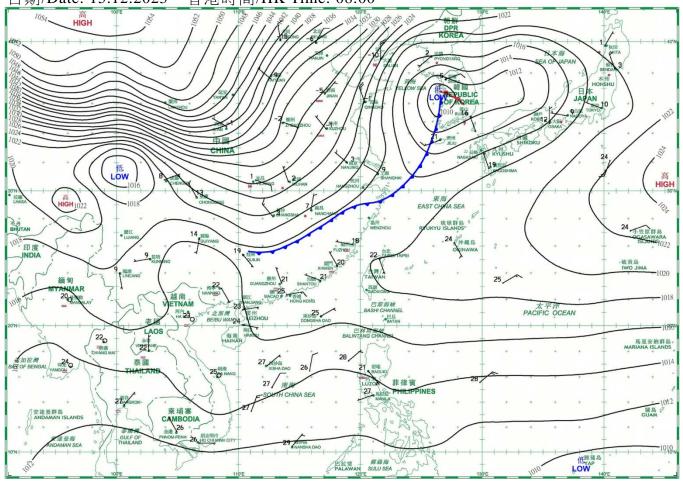
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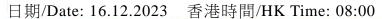


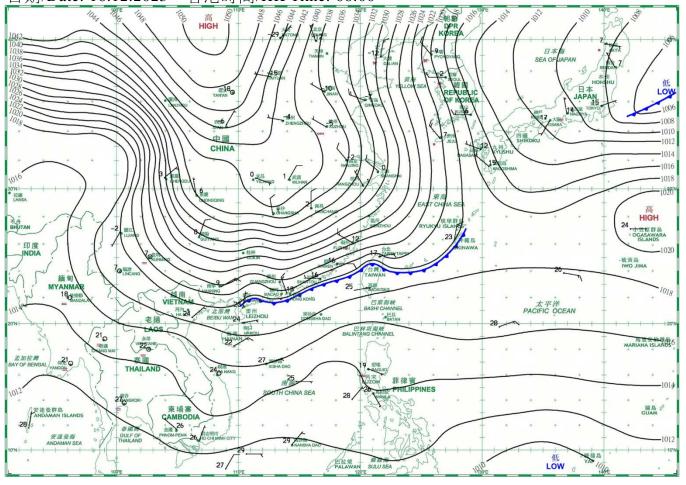
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日期/Date: 15.12.2023 香港時間/HK Time: 08:00



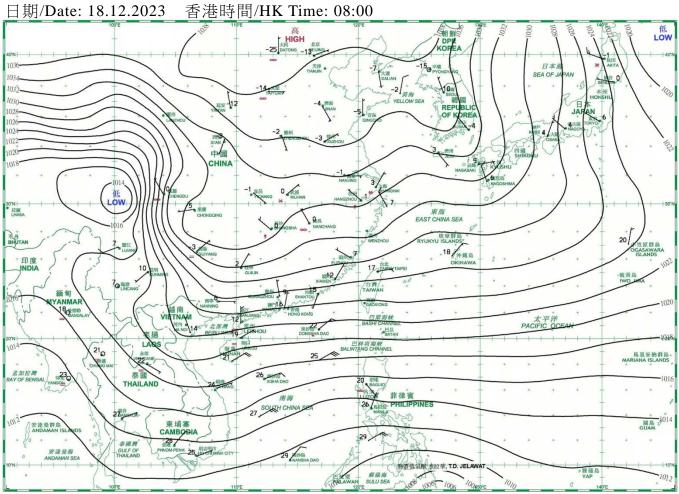




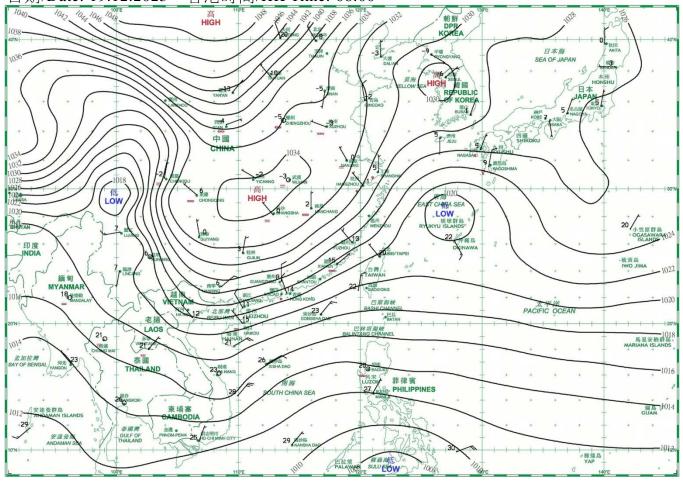
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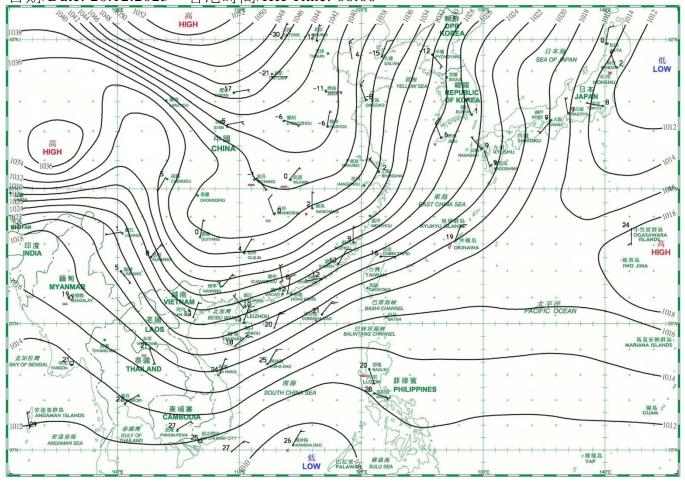
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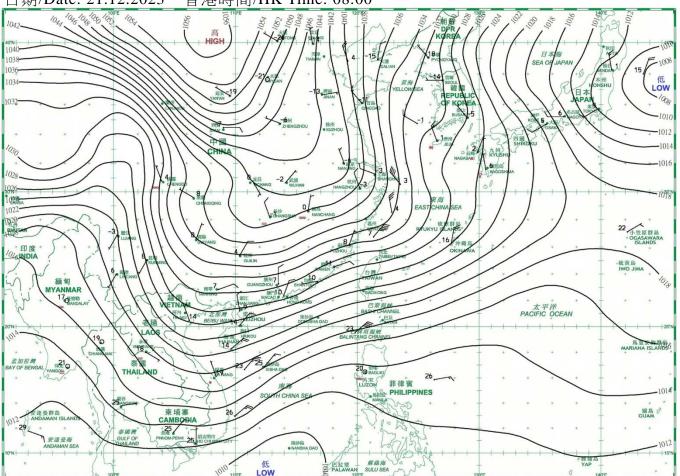
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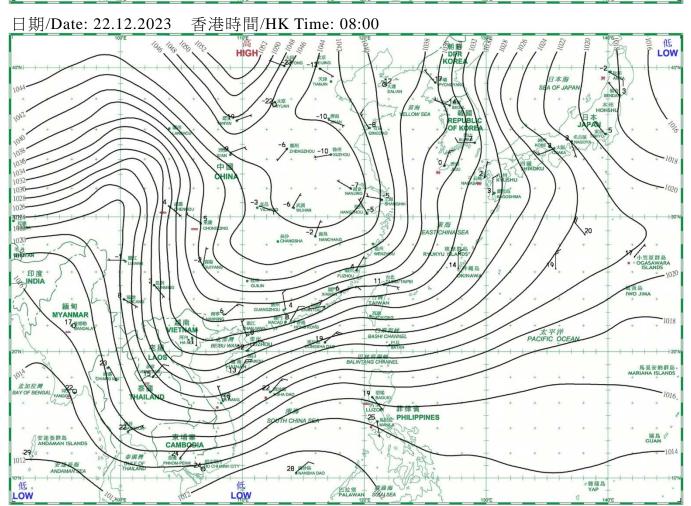


日期/Date: 20.12.2023 香港時間/HK Time: 08:00

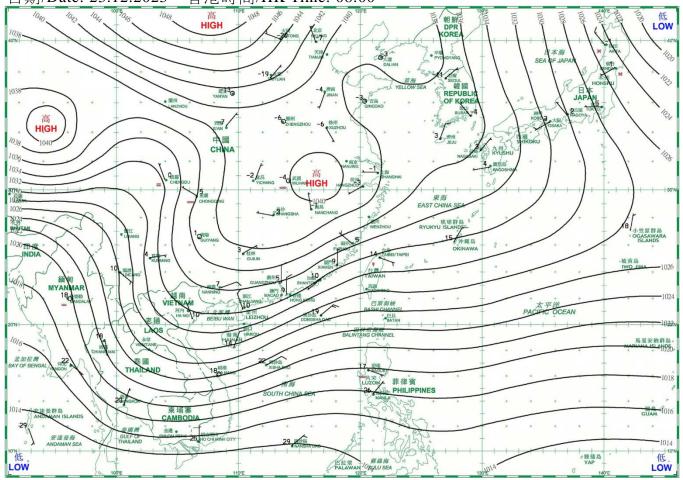




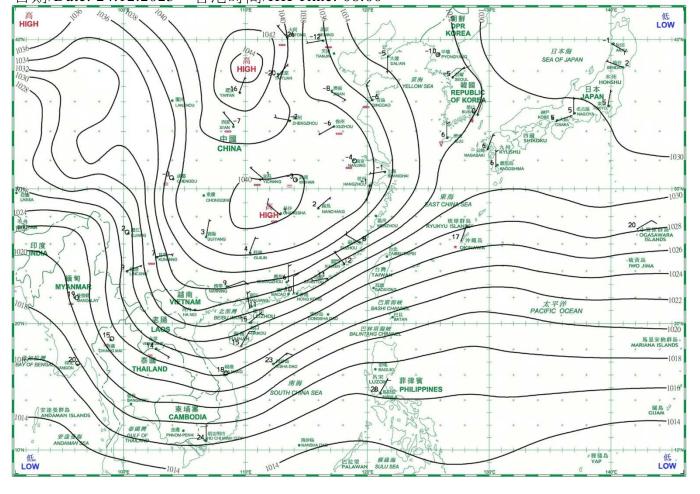




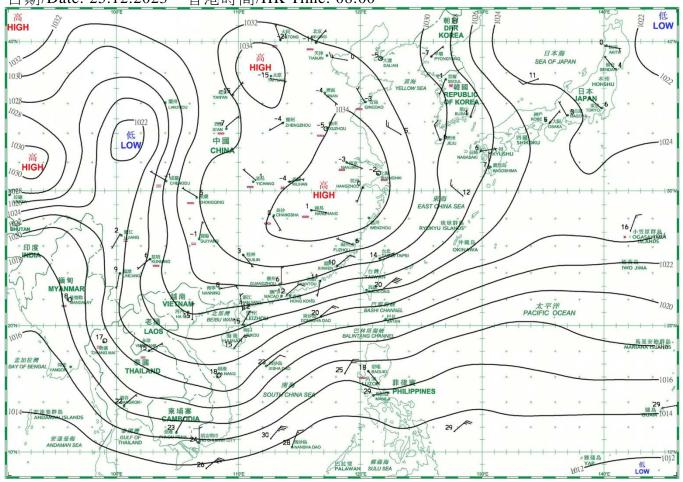
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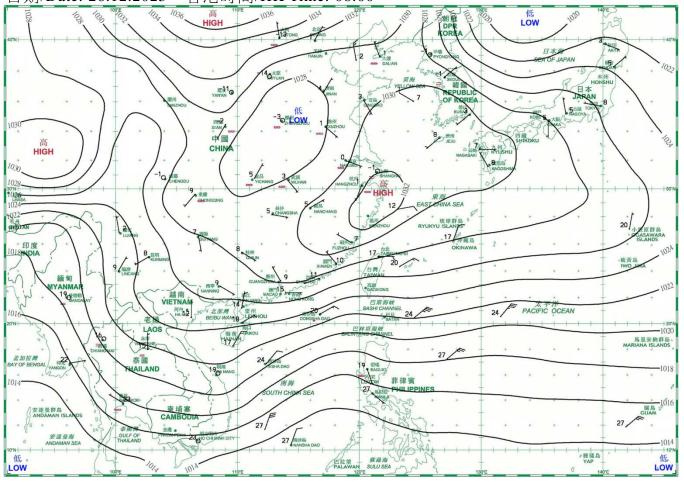
日期/Date: 24.12.2023 香港時間/HK Time: 08:00



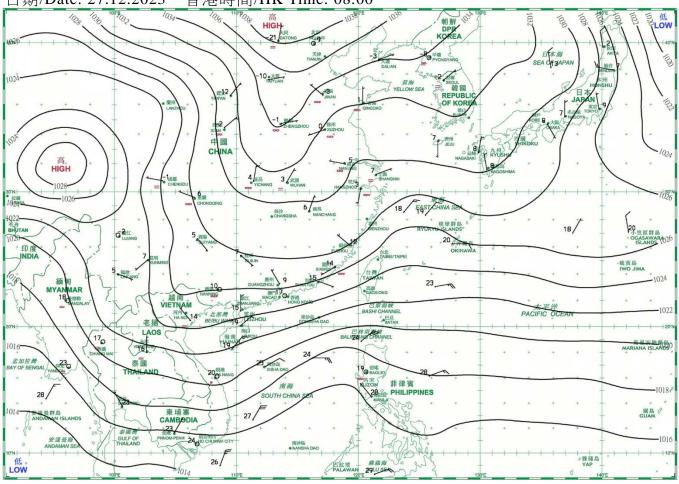
日期/Date: 25.12.2023 香港時間/HK Time: 08:00



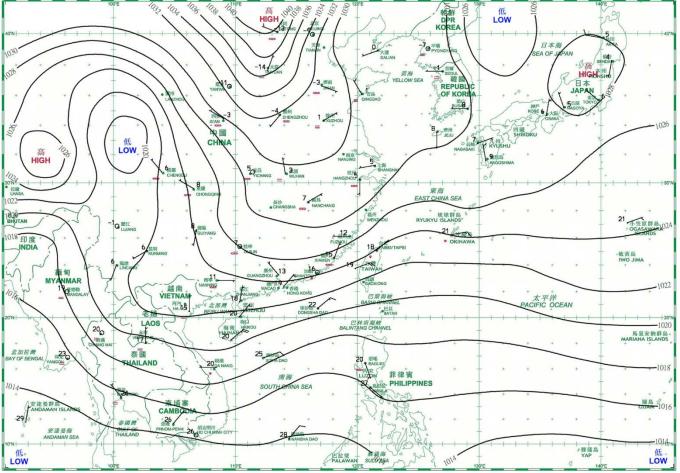




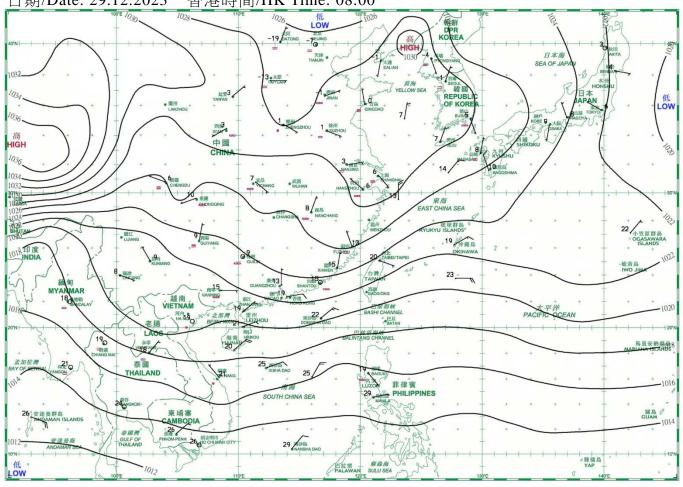
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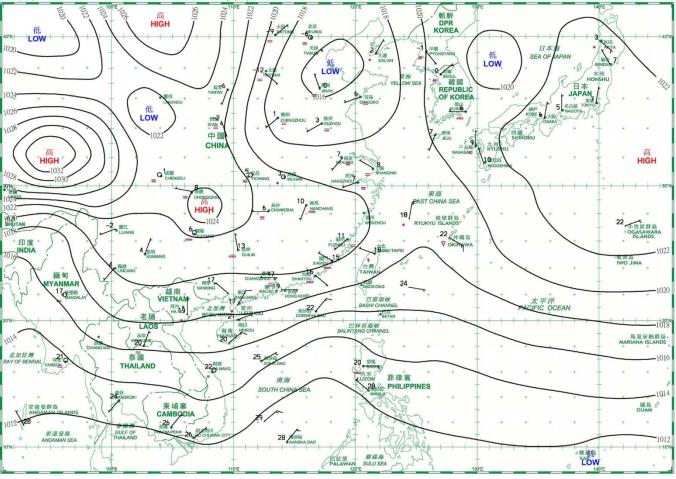
香港時間/HK Time: 08:00 日期/Date: 28.12.2023



香港時間/HK Time: 08:00 日期/Date: 29.12.2023



香港時間/HK Time: 08:00 日期/Date: 30.12.2023



日期/Date: 31.12.2023 香港時間/HK Time: 08:00 高 HIGH HIGH 日本海 SEA OF JAPAN 低 LOW CHINA 高HIGH · 武器 WUHAN 11 南岛 22 沖繩 HIGH 緬甸 YANMAR 16 受物粉 MANDAI 太平洋 PACIFIC OCEAN 東記記』 巴林坦海峡 BALINTANG CHANNEL VIZO IANE HANAN HANAN 泰國 THAILAND 19 母 BAG EX LUZON 菲律文 29 馬尼拉 PHILIPPINES MANUA -1014 東埔寨 CAMBODIA 企造 35 业选 35 NOM-PENH 26 NC

PLOW SULU SEA

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4.1.1 二零二三年十二月香港氣象觀測摘錄(一)

4.1.1 Extract of Meteorological Observations in Hong Kong (Part 1), December 2023

日期	平均氣壓	氣 溫 Air Temperature		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
十二月 December	百帕斯卡 hPa	°C	°C	°C	°C	%	%	毫米 mm
1	1021.5	23.2	21.5	19.6	15.5	69	85	-
2	1021.7	21.5	20.0	18.2	14.4	70	79	-
3	1020.4	23.3	21.4	20.1	16.4	73	87	Tr
4	1017.2	24.4	21.9	20.5	17.3	76	66	Tr
5	1015.6	24.1	21.7	19.7	16.7	73	57	-
6	1017.6	22.5	21.5	19.9	14.7	67	81	Tr
7	1017.8	25.1	21.0	18.4	9.1	47	30	-
8	1016.7	24.0	21.4	19.2	15.1	68	56	-
9	1014.6	24.9	22.9	21.6	19.3	80	80	-
10	1013.8	26.3	23.9	22.5	20.1	80	76	Tr
11	1014.6	27.3	24.2	22.3	21.5	85	68	0.3
12	1016.2	28.7	24.7	22.3	20.9	80	42	0.3
13	1019.4	23.2	22.3	21.6	19.1	82	93	Tr
14	1018.7	24.6	23.1	21.7	19.6	81	88	Tr
15	1016.3	26.9	24.4	23.2	20.9	81	79	-
16	1020.5	23.9	18.9	13.5	13.4	71	85	0.1
17	1024.9	15.2	13.4	11.4	7.9	69	88	-
18	1022.1	19.0	17.3	14.8	13.7	80	88	Tr
19	1021.2	19.0	16.8	14.7	12.4	75	72	-
20	1023.3	15.6	13.6	10.8	7.1	65	67	-
21	1027.1	12.3	10.9	9.8	4.6	65	86	-
22	1030.1	12.3	10.5	8.6	0.9	51	88	-
23	1029.9	13.3	11.0	8.1	2.9	58	64	0.2
24	1028.6	16.5	13.3	10.1	3.6	52	23	-
25	1026.7	18.2	14.9	12.1	4.8	51	50	-
26	1025.2	19.6	16.6	14.5	9.4	63	65	-
27	1024.0	21.8	18.7	16.6	11.1	62	88	Tr
28	1022.3	23.6	20.1	18.2	15.0	73	74	Tr
29	1021.1	21.0	19.4	18.3	15.7	79	72	-
30	1018.3	23.0	20.7	18.3	15.0	70	79	Tr
31	1018.0	25.7	21.8	19.0	16.7	73	59	-
平均/總值 Mean/Total	1020.8	21.6	19.1	17.1	13.4	70	71	0.9
正常* Normal*	1020.1	20.4	18.2	16.2	12.4	70	57	28.8
觀測站 Station								

天文台於十二月十日 14 時 26 分錄得本月最低氣壓 1012.3 百帕斯卡。

The minimum pressure recorded at the Hong Kong Observatory was 1012.3 hectopascals at 1426 HKT on 10 December.

天文台於十二月十二日 12 時 44 分錄得本月最高氣溫 28.7°C。

The maximum air temperature recorded at the Hong Kong Observatory was 28.7 $^{\rm o}$ C at 1244 HKT on 12 December.

天文台於十二月二十三日 10 時 9 分錄得本月最低氣溫 8.1 ° C。

The minimum air temperature recorded at the Hong Kong Observatory was 8.1 $^{\rm o}$ C at 1009 HKT on 23 December.

京士柏於十二月十六日 7 時 32 分錄得本月最高1分鐘平均降雨率 12 毫米/小時。

 $The \ maximum \ 1-minute \ mean \ rainfall \ rate \ recorded \ at \ King's \ Park \ was \ 12 \ millimetres \ per \ hour \ at \ 0732 \ HKT \ on \ 16 \ December.$

^{* 1991-2020} 氣候平均值 (除特別列明外) (http://www.hko.gov.hk/tc/cis/normal/1991_2020/normals.htm)

^{* 1991-2020} Climatological normal, unless otherwise specified (http://www.hko.gov.hk/en/cis/normal/1991_2020/normals.htm)

Tr - 微量 (降雨量少於 0.05 毫米)

Tr - Trace of rainfall (amount less than 0.05 mm)

4.1.2 二零二三年十二月香港氣象觀測摘錄(二)

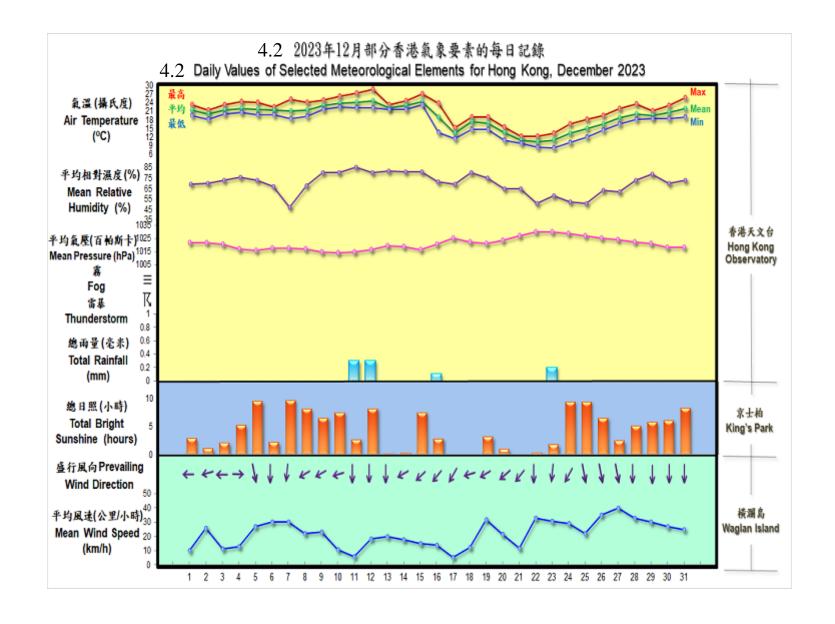
4.1.2 Extract of Meteorological Observations in Hong Kong (Part 2), December 2023

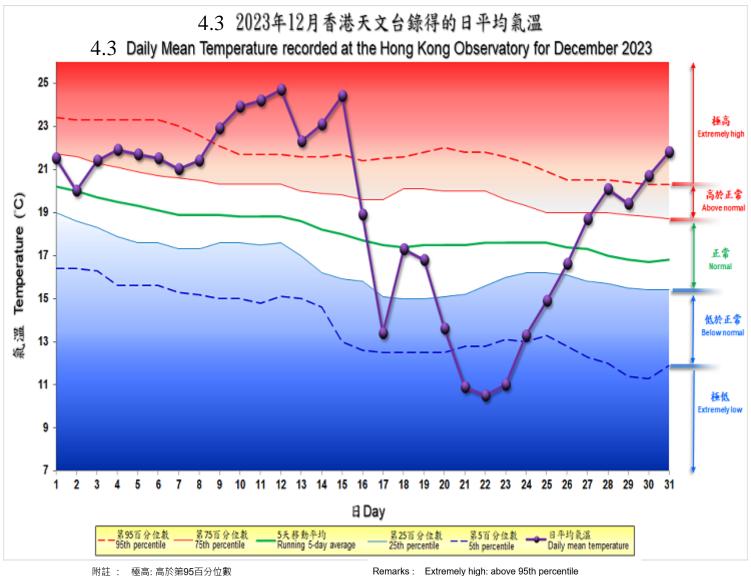
日期 Date	出現低能見度的時數# Number of hours of Reduced Visibility#	總日照 Total Bright Sunshine	每日太陽總輻射 Daily Global Solar Radiation	總蒸發量 Total Evaporation	盛行風向 Prevailing Wind Direction	平均風速 Mean Wind Speed
十二月 December	小時 hours	小時 hours	兆焦耳/米 ² MJ/m ²	毫米 mm	度 degrees	公里/小時 km/h
1	0	2.9	8.85	3.4	010	30.0
2	0	1.1	6.40	1.6	070	22.2
3	0	2.1	9.34	1.8	070	23.4
4	1	5.2	10.79	2.3	080	10.9
5	0	9.5	14.97	2.0	360	5.8
6	2	2.2	6.03	3.5	360	18.5
7	0	9.7	17.40	2.3	360	19.8
8	0	8.1	15.42	2.0	070	17.6
9	0	6.5	14.25	2.1	060	14.9
10	0	7.5	15.25	1.7	050	14.2
11	0	2.7	10.18	1.8	040	5.1
12	1	8.2	15.21	2.7	080	12.4
13	0	0.2	4.74	1.6	070	31.8
14	0	0.3	7.75	1.5	060	21.5
15	0	7.5	14.11	2.9	050	12.0
16	0	2.8	9.74	5.2	360	32.7
17	0	-	4.67	1.5	010	30.8
18	0	-	3.76	0.5	040	29.0
19	0	3.2	8.48	3.2	350	22.2
20	0	1.0	6.40	3.0	350	34.9
21	0	-	4.35	2.7	350	39.8
22	0	0.4	7.05	2.2	360	33.0
23	0	1.8	7.17	1.4	360	30.3
24	0	9.4	16.92	2.4	360	26.9
25	0	9.4	17.11	1.8	360	24.8
26	0	6.5	13.01	1.8	060	23.4
27	0	2.5	9.56	1.9	040	16.4
28	1	5.1	12.28	1.9	050	21.8
29	0	5.8	12.47	2.3	060	29.5
30	7	6.1	12.54	1.5	040	8.2
31	13	8.3	15.47	3.1	040	8.4
平均/總值 Mean/Total	25	136.0	10.70	69.6	360	21.7
正常* Normal*	[181.9] §	161.6	10.91	80.9	010	26.4
觀測站 Station	香港國際機場 Hong Kong International Airport		京士柏 King's Park		横瀾. Waglan l	

横瀾島於十二月二十二日 1 時 20 分錄得本月最高陣風 63 公里/小時,風向 360 度。

The maximum gust peak speed recorded at Waglan Island was 63 kilometres per hour from 360 degrees at 0120 HKT on 22 December.

- # 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.
- ^ 如橫瀾島未能提供數據,則以長洲或其他鄰近氣象站的數據作補充,以計算盛行風向和平均風速。
- ^ In case the data are not available from Waglan Island, observations of Cheung Chau or other nearby weather stations will be incorporated in computing the Prevailing Wind Direction and Mean Wind Speed.
- * 1991-2020 氣候平均值(除特別列明外)(http://www.hko.gov.hk/tc/cis/normal/1991_2020/normals.htm)
- * 1991-2020 Climatological normal, unless otherwise specified (http://www.hko.gov.hk/en/cis/normal/1991_2020/normals.htm)
- § 1997-2022 平均值
- § 1997-2022 Mean value





N註: 極局: 局於第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1991至 2020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 1991 to 2020

5. 二零二三年天氣概況

根據世界氣象組織的初步評估,2023 年可能是全球有記錄以來最暖的一年。全球平均海平面在2023 年繼續上升,創下歷史新高。年內北極海冰覆蓋範圍持續低於平均水平,而9月份的全年最低值是有衛星記錄以來的第六低。2023 年各類極端天氣事件在全球多處肆虐,當中包括影響歐洲、北非、華南、日本及東南亞大部分地區等世界多處的熱浪;非州西北部、大非洲之角地區、伊比利亞半島部分地區、中亞及亞洲西南部的部分地區、中美洲多處、南美州北部、加拿大及美國部分地區的嚴重乾旱;極端降雨引致的嚴重水浸亦影響中國、印度、巴基斯坦、尼泊爾、希臘、保加利亞南部、土耳其部分地區、利比亞東北部、西班牙及新西蘭北島;以及熱帶氣旋在莫桑比克、馬拉維、馬達加斯加、津巴布韋、斯里蘭卡、緬甸、印度、孟加拉、菲律賓及中國帶來的嚴重破壞及重大傷亡。而山火亦在希臘、夏威夷和加拿大肆虐,造成嚴重破壞。

2022年的拉尼娜事件持續至2023年1月。赤道太平洋中部及東部水溫在隨後的月份持續上升。一次厄爾尼諾事件在2023年8月形成,並持續至年底。

本港方面,由於全年十二個月都較正常溫暖,2023年是有記錄以來其中一個第二暖的一年,全年平均氣溫達 24.5度,較 1991-2020年正常值[1]高 1.0度。而全年平均最低氣溫 22.6度及平均最高氣溫 27.2度分別為自 1884年有記錄以來其中一個最高及其中一個第二高。而夏季(6月至8月)的平均氣溫達 29.7度,是有記錄以來最高。香港天文台於7月 27日錄得全年最高氣溫 36.1度,是有記錄以來其中一個第三高。2023年的酷熱天氣[2]日數、熱夜[3]數目及極端酷熱天氣[4]日數分別為 54天、56天及4天,是有記錄以來其中一個最多、第二多及其中一個第五多。

天文台於 12 月 23 日錄得全年最低氣溫 8.1 度。全年寒冷天氣^[5]日數為 14 天,較 1991-2020 年正常值少 1.2 天。

2023 年春季及夏季的雨量較少,而秋季則非常多雨。主要歸因於秋季的破紀錄雨量,2023 年本港的全年雨量為2,774.5 毫米,較1991-2020 年正常值2,431.2 毫米高約百分之14。年內天文台曾發出八次紅色暴雨警告及兩次

黑色暴雨警告。2023年的雷暴日數為40天,較1991-2020年正常值少約2天。

2023年共有19個熱帶氣旋影響北太平洋西部及南海,較長期(1961-2020年)平均的約30個為少。全年有11個熱帶氣旋達到颱風或以上強度^[6],低於長期平均的約15個,當中有5個熱帶氣旋達到超強颱風強度(中心附近最高十分鐘持續風速達到每小時185公里或以上)。本港方面,年內有5個熱帶氣旋令天文台需要發出熱帶氣旋警告信號,稍少於長期年平均的約6個。天文台在9月蘇拉、10月小犬及7月泰利吹襲本港期間分別發出十號颶風信號、九號烈風或暴風風力增強信號及八號烈風或暴風信號。

有關各月份的詳細天氣論述,可參考「每月天氣摘要」網頁: https://www.weather.gov.hk/tc/wxinfo/pastwx/mws/mws.htm

2023 年本港發生的重要天氣事件扼述如下:

最熱的八月

主要受南海北部海面溫度較正常溫暖及於華南沿岸較正常強的低層西南氣流影響,2023年8月香港遠較正常炎熱。該月平均氣溫29.7度及平均最低氣溫27.8度,分別較其各自正常值高1.0度及1.1度,兩者均為有記錄以來8月的最高紀錄。此外,該月平均最高氣溫32.4度較正常值高1.1度,亦是有記錄以來8月的其中一個第二高。2023年8月熱夜數目共15天,是8月有記錄以來的其中一個最多。

最熱的夏季

香港在 2023 年 6 月至 8 月經歷了有記錄以來最熱的夏季,期間平均氣溫為破紀錄的 29.7 度。而平均最高氣溫 32.4 度及平均最低氣溫 27.6 度皆是同期有記錄以來第二高。

超強颱風蘇拉及破紀錄暴雨襲港的九月

2023 年 9 月香港屢受極端天氣影響,當中包括 9 月 1 日至 2 日超強颱風蘇拉猛烈襲港及 9 月 7 日至 8 日的驚人暴雨。主要歸因於上半月與蘇拉及低壓槽相關的大雨,天文台錄得的 9 月總雨量創歷史新高,達 1067.1 毫米,

是 9 月份正常值 321.4 毫米的三倍以上,輕易打破了 1952 年 9 月創下 844.2 毫米的紀錄。

(a) 9月1日至2日超強颱風蘇拉直接襲港

蘇拉中心附近的最高持續風速達每小時230公里,是自1950年以來影響南海第二強的熱帶氣旋。香港在蘇拉吹襲期間發出十號颶風信號,是繼2018年9月超強颱風山竹襲港後的首次。超強颱風蘇拉於9月1日大致向西移動,橫過廣東沿岸海域,並於當晚在香港東南偏南約40公里掠過。蘇拉的暴風至颶風於9月1日至2日影響本港多處地區。橫瀾島及長洲分別錄得最高60分鐘平均風速為每小時154公里及116公里。蘇拉引發的風暴潮亦導致本港部分沿岸低窪地區出現水浸,包括沙田、大埔及大澳。西貢的水位於9月1日午夜曾升至海圖基準面以上約4.5米。

蘇拉於 9 月 1 日至 2 日為本港帶來狂風大驟雨。本港大部分地區在這兩日錄得超過 150 毫米雨量,而中西區、灣仔區及荃灣區的雨量更超過 250 毫米。根據初步資料,全港有超過 3,000 宗塌樹報告、21 宗水浸報告及 7 宗山泥傾瀉報告,亦有約 40 宗棚架、招牌及窗户受損報告,而部分地方一度停電。香港國際機場有 460 班航班取消。超過 80 人在蘇拉襲港期間受傷,但沒有人死亡。

(b) 9月7日至8日的破紀錄暴雨

受在廣東沿岸與海葵殘餘相關的低壓槽影響,本港天氣於 9 月 7 日晚上開始轉壞,有大雨及狂風雷暴。持續不斷的傾盆大雨一直影響本港至翌日。在滂沱大雨期間,香港天文台總部於 9 月 7 日晚上 11 時至午夜 12 時期間錄得 158.1 毫米雨量,是自 1884 年有記錄以來最高的一小時雨量。天文台總部亦在這場驚人暴雨期間錄得兩小時雨量 201.0 毫米及 12 小時雨量 605.8 毫米,均打破其各自的紀錄。而 9 月 7 日下午 4 時至翌日下午 4 時的 24 小時雨量達 638.5 毫米,約為本港全年平均總雨量的四分之一,僅次於 1889年 5 月 30 日歷史雨災的紀錄。

天文台發出黑色暴雨警告信號持續生效達 16 小時 35 分鐘,是自 1992 年設立暴雨警告系統以來的最長紀錄。9 月 7 日至 8 日本港多處錄得超過 400 毫米雨量,而港島東區及南區的雨量更超過 800 毫米。本港多處出現水浸及山泥傾瀉,造成大規模交通受阻及設施損壞。根據初步資料,全港有超過

200 宗山泥傾瀉報告及 60 宗水浸報告,而部分地方一度停電停水。暴雨期間至少有兩人死亡,超過 140 人受傷。

10月8日至9日強颱風小犬襲港

強颱風小犬於 10月6日至7日緩慢橫過南海北部,靠近珠江口。小犬在 10月8日減弱為颱風,並於當晚在香港以南約70公里掠過。隨著小犬移向珠江口一帶,本港天氣於10月8日顯著轉壞,而八號烈風或暴風信號於當日下午發出。當晚本地風力顯著增強,離岸及高地達暴風程度。九號烈風或暴風風力增強信號亦在當晚發出,當時小犬緊密及風力達颶風程度的眼壁在香港以南近距離掠過。小犬亦於10月8日至9日為本港帶來狂風大驟雨,天文台需要在10月9日上午發出黑色暴雨警告。天文台在10月9日錄得369.7毫米雨量,是十月份總雨量正常值120.3毫米的三倍以上,亦是有記錄以來十月份的最高日雨量。此外,10月8日下午3時至翌日下午3時的24小時雨量達439.8毫米,打破了10月份的最高紀錄。

最多雨的秋季

主要歸因於 9 月及 10 月的破紀錄暴雨,2023 年 9 月至 11 月的秋季異常多雨,總雨量達 1616.4 毫米,是有記錄以來同期的最高。

附註:

- [1] 1961-1990 年、1971-2000 年、1981-2010 年及 1991-2020 年氣候平均值,可參考: https://www.weather.gov.hk/tc/cis/normal.htm。除特別註明外,本文採用 1991-2020 年氣候平均值。
- [2] 酷熱天氣指當日最高氣溫達 33.0 度或以上。
- [3] 熱夜指當日最低氣溫在28.0度或以上。
- [4] 極端酷熱天氣指當日最高氣溫達 35.0 度或以上。
- [5] 寒冷天氣指當日最低氣溫在 12.0 度或以下。
- [6] 熱帶氣旋分級資料可參考: https://www.weather.gov.hk/tc/informtc/class.htm。

表 5.1.1 2023 年破紀錄高溫天氣事件摘要

	破紀錄事件(自 1884 年有記錄以來)	日期 / 週期	新紀錄
1.	最高『雨水』日最高氣溫	2023年2月19日	26.6°C
2.	最高5月份日最低氣溫	2023年5月31日	29.6°C
3.	最高 5 月份日平均氣溫(與 2021 年 5 月 23 日並列最高)	2023年5月31日	31.4°C
4.	最高春季絕對最低氣溫	2023年3月至5月	16.4°C
5.	最高7月份最高氣溫(與2022年7月並列最高)	2023年7月27日	36.1°C
6.	最高7月份日平均氣溫	2023年7月27日	32.2°C
7.	最高8月份絕對最低氣溫	2023 年 8 月	25.7°C
8.	最高8月份平均氣溫	2023 年 8 月	29.7°C
9.	最高8月份平均最低氣溫	2023 年 8 月	27.8°C
10.	最多8月份熱夜數目(與2009年8月並列最高)	2023 年 8 月	15 天
11.	最高夏季絕對最低氣溫	2023年6月至8月	25.1°C
12.	最高夏季平均氣溫	2023年6月至8月	29.7°C
13.	最多9月份連續酷熱天氣日數	2023年9月21日至	10 天
		30 日	
14.	最高『中秋節』日最高氣溫	2023年9月29日	33.7°C
15.	最高 10 月份最高氣溫	2023年10月4日	34.6°C
16.	最高 10 月份日平均氣溫	2023年10月4日	30.8°C
17.	最多10月份酷熱天氣日數	2023 年 10 月	3 天
18.	最高 11 月份日平均氣溫	2023年11月6日	27.6°C
19.	最高 11 月份日最低氣溫(與 1972 年 11 月 4 日、2008 年 11	2023年11月10日	25.6°C
	月 1 日及 2011 年 11 月 6 日並列最高)		
20.	最高秋季平均最低氣溫(與2015年9月至11月及2022年9	2023年9月至11月	24.4°C
	月至11月並列最高)		
21.	最高 12 月份最高氣溫(與 1953 年 12 月並列最高)	2023年12月12日	28.7°C
22.	最高『除夕』日最高氣溫	2023年12月31日	25.7°C
23.	最高全年平均最低氣溫(與 2019 年及 2021 年並列最高)	2023 年	22.6°C
1	最多全年酷熱天氣日數(與 2021 年並列最多)	2023 年	54 天

表 5.1.2 2023 年破紀錄雨量事件摘要

破紀錄事件(自 1884 年有記錄以來)	日期 / 週期	新紀錄
1. 最高1小時雨量 (所有月份)	2023年9月7日	158.1 毫米
	23:00 至 24:00	
2. 最高2小時雨量 (所有月份)	2023年9月7日23:00至	201.0 毫米
	2023年9月8日01:00	
3. 最高 12 小時雨量 (所有月份)	2023年9月7日22:00至	605.8 毫米
	2023年9月8日10:00	
4. 最高 9 月份 1 小時雨量	2023年9月7日	158.1 毫米
	23:00 至 24:00	
5. 最高 9 月份 2 小時雨量	2023年9月7日23:00至	201.0 毫米
	2023年9月8日01:00	
6. 最高 9 月份 3 小時雨量	2023年9月7日23:00至	237.3 毫米
	2023年9月8日02:00	
7. 最高 9 月份 6 小時雨量	2023年9月7日23:00至	334.9 毫米
	2023年9月8日05:00	
8. 最高 9 月份 12 小時雨量	2023年9月7日22:00至	605.8 毫米
	2023年9月8日10:00	
9. 最高 9 月份 24 小時雨量	2023年9月7日16:00至	638.5 毫米
	2023年9月8日16:00	
10. 最高 9 月份日總雨量	2023年9月8日	425.0 毫米
11. 最高 9 月份月總雨量	2023 年 9 月	1067.1 毫米
12. 最高 10 月份 24 小時雨量	2023年10月8日15:00至	439.8 毫米
	2023年10月9日15:00	
13. 最高 10 月份日總雨量	2023年10月9日	369.7 毫米
14. 最高秋季總雨量	2023年9月至11月	1616.4 毫米
15. 最多雨的熱帶氣旋	2023年9月4日至2023年	641.1 毫米
	9月8日	
	(海葵及其殘餘)	

5. The Year's Weather – 2023

Globally, 2023 is likely to be the warmest year on record according to the World Meteorological Organization's preliminary assessment. Global mean sea level continued to rise, reaching a new record high in 2023. Over the Arctic, sea-ice extent remained well below average in the year and the minimum sea-ice extent in September was the sixth lowest in the satellite record. In 2023, different parts of the world were ravaged by various extreme weather events, including heatwaves in many parts of the world, including Europe, North Africa, southern China, Japan and much of Southeast Asia; severe drought in northwestern Africa, the Greater Horn of Africa region, parts of the Iberian Peninsula, parts of central and southwest Asia, many parts of Central America, northern South America, parts of Canada and the United States; extreme rainfall triggered severe flooding in China, India, Pakistan, Nepal, Greece, southern Bulgaria, parts of Turkey, northeastern Libya, Spain, and the North Island of New Zealand; and severe damages and heavy casualties brought by tropical cyclones in Mozambique, Malawi, Madagascar, Zimbabwe, Sri Lanka, Myanmar, India, Bangladesh, the Philippines and China. Rampant wildfires also wreaked great havoc in Greece, Hawaii and Canada.

The La Niña event of 2022 lasted till January 2023. Sea surface temperatures of the central and eastern equatorial Pacific continued to increase in the following months. An El Niño event was established in August 2023 and persisted through to the end of the year.

In Hong Kong, with all twelve months warmer than usual, 2023 was one of the second warmest years on record with the annual mean temperature reaching 24.5 degrees, 1.0 degree above the 1991-2020 normal^[1]. The annual mean minimum temperature of 22.6 degrees and annual mean maximum temperature of 27.2 degrees were respectively one of the highest and one of the second highest since records began in 1884. In particular, the mean temperature for summer (June to August) reached 29.7 degrees, the highest on record. The highest temperature recorded at the Hong Kong Observatory in the year was 36.1 degrees on 27 July, one of the third highest on record. There were 54 Very Hot Days^[2], 56 Hot Nights^[3] and 4 Extremely Hot Days^[4] in Hong Kong in 2023, respectively ranking one of the highest, the second highest and one of the fifth highest on record.

The lowest temperature recorded at the Observatory in the year was 8.1 degrees on 23 December. The number of Cold Days^[5] in the year was 14 days, 1.2 days less than the 1991-2020 normal.

2023 was characterised by dry spring and summer, and very wet autumn. Mainly attributing to the record-breaking rainfall in autumn, the annual total rainfall in 2023 was 2774.5

millimetres, about 14 percent above the 1991-2020 normal of 2431.2 millimetres. Eight red rainstorm warnings and two black rainstorm warnings were issued by the Observatory in the year. The number of days with thunderstorms reported in Hong Kong was 40 days in 2023, about 2 days less than the 1991-2020 normal.

A total of 19 tropical cyclones occurred over the western North Pacific and the South China Sea in 2023, less than the long-term (1961-2020) average of about 30. There were 11 tropical cyclones reaching typhoon intensity^[6] or above during the year, less than the long-term average of about 15, and five of them reached super typhoon intensity (with maximum 10-minute wind speed of 185 km/h or above near the centre). In Hong Kong, five tropical cyclones necessitated the issuance of tropical cyclone warning signals, slightly less than the long-term average of about six in a year. The Hurricane Signal No. 10 was issued during the passage of Saola in September, the Increasing Gale or Storm Signal No. 9 was issued during the passage of Koinu in October and the Gale or Storm Signal No. 8 was issued during the passage of Talim in July.

Detailed description of the weather for individual months is available on the Monthly Weather Summary webpage:

https://www.weather.gov.hk/en/wxinfo/pastwx/mws/mws.htm

Some significant weather events in Hong Kong in 2023 are highlighted below:

Hottest August

Mainly attributing to the warmer than normal sea surface temperature over the northern part of the South China Sea and a stronger than usual southwesterly flow in the lower atmosphere over the south China coast, August 2023 was much hotter than usual in Hong Kong. The monthly mean temperature of 29.7 degrees and monthly mean minimum temperature of 27.8 degrees were respectively 1.0 degree and 1.1 degrees above their normal and both were the highest on record for August. Moreover, the monthly mean maximum temperature of 32.4 degrees was 1.1 degrees above normal and one of the second highest on record for August. There were 15 hot nights in August 2023, one of the highest on record for August.

Hottest summer

Hong Kong experienced the hottest summer on record from June to August 2023 with a record-breaking high mean temperature of 29.7 degrees. The mean maximum temperature of 32.4 degrees and mean minimum temperature of 27.6 degrees were both the second highest on record for the same period.

A September with the strike of Super Typhoon Saola and record-breaking rainstorm

In terms of extreme weather, September 2023 was an eventful month in Hong Kong with the ferocious strike by Super Typhoon Saola on 1-2 September and the phenomenal rainstorm on 7-8 September. Mainly attributing to the heavy rain associated with Saola and troughs of low pressure in the first half of the month, the Observatory recorded an all-time high September rainfall of 1067.1 millimetres, more than three times of the September normal of 321.4 millimetres and easily breaking the previous record of 844.2 millimetres set way back in September 1952.

(a) Direct strike of Super Typhoon Saola on 1 – 2 September

With a maximum sustained wind of 230 km/h near its centre, Saola was the second most intense tropical cyclone affecting the South China Sea since 1950. The Hurricane Signal No. 10 was issued in Hong Kong during the passage of Saola, again since Super Typhoon Mangkhut hit Hong Kong in September 2018. Super Typhoon Saola moved generally westwards across the coastal waters of Guangdong on 1 September and skirted past about 40 kilometres to the south-southeast of Hong Kong that night. The storm to hurricane force winds of Saola impacted many places in Hong Kong on 1 – 2 September. The maximum 60-minute mean wind speeds recorded at Waglan Island and Cheung Chau were 154 km/h and 116 km/h respectively. The storm surge induced by Saola also resulted in flooding in some low-lying coastal areas of Hong Kong, including Sha Tin, Tai Po, and Tai O. The water level at Sai Kung rose to about 4.5 mCD at midnight on 1 September.

Saola brought squally heavy showers to Hong Kong on 1-2 September. More than 150 millimetres of rainfall were recorded over most parts of the territory and rainfall even exceeded 250 millimetres over Central and Western, Wan Chai and Tsuen Wan Districts on these two days. According to preliminary reports, there were over 3,000 reports of fallen trees, 21 reports of flooding and 7 reports of landslides in Hong Kong. There were also about 40 reports of damaged scaffolding, signboards and windows. Power supply was temporarily interrupted in some places. 460 flights were cancelled at the Hong Kong International Airport. While more than 80 people were injured, there was no fatality in Hong Kong during the passage of Saola.

(b) Record-breaking rainstorm on 7 – 8 September

Under the influence of a trough of low pressure associated with the remnant of tropical cyclone Haikui over the coast of Guangdong, the weather of Hong Kong started to deteriorate with heavy rain and squally thunderstorms on the night of 7 September. The incessant downpour continued to affect the territory till the next day. During the torrential rain, the Hong Kong Observatory Headquarters registered a record-breaking hourly rainfall of 158.1 millimetres from 11 p.m. to midnight on 7 September, the highest since records began in 1884. The 2-hour total rainfall of 201.0 millimetres and 12-hour total rainfall of 605.8 millimetres recorded

at the Observatory Headquarters during this phenomenal rainstorm also broke their respective records. Moreover, the 24-hour rainfall from 4 p.m. on 7 September to 4 p.m. next day reached 638.5 millimetres, about a quarter of the normal annual total rainfall of Hong Kong and just next to the highest records kept by the historical rainstorm on 30 May 1889.

The Black Rainstorm Warning was in force for 16 hours and 35 minutes, setting the longest record since the introduction of the rainstorm warning system in 1992. More than 400 millimetres of rainfall were recorded over many parts of the territory and rainfall even exceeded 800 millimetres over the Eastern District and Southern District of Hong Kong Island on 7-8 September. Flash floods and landslides affected many parts of the territory, causing widespread traffic disruption and damage to infrastructures. According to preliminary reports, there were over 200 reports of landslides and 60 reports of flooding. Power and water supply were temporarily interrupted in some places. At least two people were killed and more than 140 were injured during the rainstorm.

Strike of Severe Typhoon Koinu on 8 – 9 October

Severe Typhoon Koinu moved slowly across the northern part of the South China Sea and edged towards the Pearl River Estuary on 6 – 7 October. Koinu weakened into a typhoon on 8 October and skirted past about 70 kilometres to the south of Hong Kong that night. With Koinu moving towards the vicinity of the Pearl River Estuary, the weather of Hong Kong deteriorated significantly on 8 October and the Gale or Storm Signal No. 8 was issued on that afternoon. Local winds strengthened significantly and reached storm force offshore and on high ground that night. The Increasing Gale or Storm Signal No. 9 was also issued that night when the compact and hurricane force wind bearing eyewall of Koinu skirted past closely to the south of Hong Kong. Koinu also brought squally heavy showers to Hong Kong on 8 – 9 October and necessitated the issuance of the Black Rainstorm Warning on the morning of 9 October. The rainfall recorded at the Observatory on 9 October reached 369.7 millimetres, more than three times of October's monthly total normal figure of 120.3 millimetres and the highest daily rainfall on record for October. Moreover, the 24-hour rainfall from 3 p.m. on 8 October to 3 p.m. next day reached 439.8 millimetres, breaking the highest record for October.

Wettest autumn

Mainly attributing to the record-breaking rainstorms in September and October, the autumn of 2023 from September to November was exceptionally wet with a total rainfall of 1616.4 millimetres, the highest on record for the same period.

Notes:

- [1] Climatological normals for the reference period of 1961-1990, 1971-2000, 1981-2010 and 1991-2020 are available at: https://www.weather.gov.hk/en/cis/normal.htm Climatological normals of 1991-2020 are referenced in the text unless otherwise stated.
- [2] "Very Hot Day" refers to the condition with the daily maximum temperature equal to or higher than 33.0 degrees.
- [3] "Hot Night" refers to the condition with the daily minimum temperature equal to or higher than 28.0 degrees.
- [4] "Extremely Hot Day" refers to the condition with the daily maximum temperature equal to or higher than 35.0 degrees.
- [5] "Cold Day" refers to the condition with the daily minimum temperature equal to or lower than 12.0 degrees.
- [6] Information on the classification of Tropical Cyclones is available at: https://www.weather.gov.hk/en/informtc/class.htm

Table 5.1.3 Summary of record-breaking high temperature events in 2023

	Record-breaking Events	Date / Period	New
	(since records began in 1884)		Record
1.	Highest Daily Maximum Temperature for Spring Showers	19 February 2023	26.6°C
2.	Highest Daily Minimum Temperature for May	31 May 2023	29.6°C
3.	Highest Daily Mean Temperature for May (on par with 23 May	31 May 2023	31.4°C
	2021)		
4.	Highest Seasonal Absolute Minimum Temperature for Spring	March to May 2023	16.4°C
5.	Highest Maximum Temperature for July (on par with July 2022)	27 July 2023	36.1℃
6.	Highest Daily Mean Temperature for July	27 July 2023	32.2°C
7.	Highest Monthly Absolute Minimum Temperature for August	August 2023	25.7°C
8.	Highest Mean Temperature for August	August 2023	29.7°C
9.	Highest Mean Minimum Temperature for August	August 2023	27.8°C
10.	Highest Number of Hot Nights for August (on par with August 2009)	August 2023	15 Days
11.	Highest Seasonal Absolute Minimum Temperature for Summer	June to August 2023	25.1°C
12.	Highest Mean Temperature for Summer	June to August 2023	29.7°C
13.	Highest Number of Consecutive Very Hot Days for September	21-30 September 2023	10 Days
14.	Highest Daily Maximum Temperature for Mid-Autumn Festival	29 September 2023	33.7°C
15.	Highest Maximum Temperature for October	4 October 2023	34.6°C
16.	Highest Daily Mean Temperature for October	4 October 2023	30.8°C
17.	Highest Number of Very Hot Days for October	October 2023	3 Days
18.	Highest Daily Mean Temperature for November	6 November 2023	27.6°C
19.	Highest Daily Minimum Temperature for November (on par with 4 November 1972, 1 November 2008 and 6 November 2011)	10 November 2023	25.6°C
20.	Highest Mean Minimum Temperature for Autumn (on par with September to November in 2015 and September to November in 2022)	September to November 2023	24.4°C
21.	Highest Maximum Temperature for December (on par with December 1953)	12 December 2023	28.7°C
22.	Highest Daily Maximum Temperature for New Year's Eve	31 December 2023	25.7°C
23.	Highest Annual Mean Minimum Temperature (on par with 2019 and 2021)	2023	22.6°C
24.	Highest Annual Number of Very Hot Days (on par with 2021)	2023	54 Days

Table 5.1.4 Summary of record-breaking rainfall events in 2023

	Record-breaking Events	Date / Period	New
	(since records began in 1884)		Record
1.	Highest 1-Hour Total Rainfall (All Months)	7 September 2023 23:00 to	158.1 mm
		24:00	
2.	Highest 2-Hour Total Rainfall (All Months)	7 September 2023 23:00 to	201.0 mm
		8 September 2023 01:00	
3.	Highest 12-Hour Total Rainfall (All Months)	7 September 2023 22:00 to	605.8 mm
		8 September 2023 10:00	
4.	Highest 1-Hour Total Rainfall for September	7 September 2023 23:00 to	158.1 mm
		24:00	
5.	Highest 2-Hour Total Rainfall for September	7 September 2023 23:00 to	201.0 mm
		8 September 2023 01:00	
6.	Highest 3-Hour Total Rainfall for September	7 September 2023 23:00 to	237.3 mm
		8 September 2023 02:00	
7.	Highest 6-Hour Total Rainfall for September	7 September 2023 23:00 to	334.9 mm
		8 September 2023 05:00	
8.	Highest 12-Hour Total Rainfall for September	7 September 2023 22:00 to	605.8 mm
		8 September 2023 10:00	
9.	Highest 24-Hour Total Rainfall for September	7 September 2023 16:00 to	638.5 mm
		8 September 2023 16:00	
10.	Highest Daily Total Rainfall for September	8 September 2023	425.0 mm
11.	Highest Monthly Total Rainfall for September	September 2023	1067.1 mm
12.	Highest 24-Hour Total Rainfall for October	8 October 2023 15:00 to	439.8 mm
		9 October 2023 15:00	
13.	Highest Daily Total Rainfall for October	9 October 2023	369.7 mm
14.	Highest Total Rainfall for Autumn	September to November 2023	1616.4 mm
15.	Wettest Tropical Cyclone	4 September 2023 to	641.1 mm
		8 September 2023	
		(Haikui and its remnant)	

表 5.2.1 二零二三年香港氣象觀測摘要(一)

Table 5.2.1 Summary of Meteorological Observations in Hong Kong (Part1), 2023

月份 Month	平均氣壓 Mean Pressure	A i i 平均日最高 Mean Daily Maximum	氣 溫 Temperat 平均 Mean	ure 平均日最低 Mean Daily Minimum	平均 露點溫度 Mean Dew Point Temperature	平均 相對濕度 Mean Relative Humidity	平均雲量 Mean Amount of Cloud	總兩量 Total Rainfall
	百帕斯卡 hPa	°C	°C	°C	°C	%	%	毫米 mm
一 月 January	1020.3	19.4	17.0	14.9	10.4	67	68	18.2
二月 February	1019.2	22.0	18.9	16.8	13.7	73	60	1.6
三月 March	1017.0	24.2	21.3	19.4	16.5	76	61	70.3
四 月 April	1012.0	26.0	23.6	21.7	20.3	82	82	77.5
五 月 May	1009.9	29.2	26.6	24.9	23.1	81	75	182.8
六月 June	1006.5	31.9	29.2	27.1	25.9	83	82	490.9
七月 July	1006.0	33.0	30.1	28.0	25.8	78	74	175.2
八月 August	1004.6	32.4	29.7	27.8	25.6	79	81	140.7
九月 September	1008.0	31.2	28.5	26.9	24.9	81	74	1067.1
十月 October	1014.0	29.1	26.4	24.8	21.7	76	79	546.0
十一月 November	1018.5	26.1	23.5	21.6	17.3	69	50	3.3
十二月 December	1020.8	21.6	19.1	17.1	13.4	70	71	0.9
平均/總值 Mean/Total	1013.1	27.2	24.5	22.6	19.9	76	71	2774.5
氣候平均值 Climatological normal (1991-2020)	1012.9	26.0	23.5	21.6	19.3	78	68	2431.2
氣候平均值 Climatological normal (1981-2010)	1012.9	25.6	23.3	21.4	19.0	78	68	2398.5
觀測站 Station					文台 g Observatory			

天文台於九月一日 21 時 45 分錄得本年最低氣壓 986.7 百帕斯卡。

The annual maximum air temperature recorded at the Hong Kong Observatory was 36.1 degrees Celsius at 1252 HKT on 27 July.

天文台於十二月二十三日 10 時 9 分錄得本年最低氣溫 8.1 ℃。

The annual minimum air temperature recorded at the Hong Kong Observatory was 8.1 degrees C at 1009 HKT on 23 December.

天文台於九月七日 23 時 46 分錄得本年最高1分鐘平均降雨率 235 毫米/小時。

The annual maximum 1-minute mean rainfall rate recorded at the Hong Kong Observatory was 235 millimetres per hour at 2346 HKT on 7 September.

 $The annual \ minimum \ pressure \ recorded \ at \ the \ Hong \ Kong \ Observatory \ was \ 986.7 \ hectopascals \ at \ 2145 \ HKT \ on \ 1 \ September.$

天文台於七月二十七日 12 時 52 分錄得本年最高氣溫 36.1 ℃。

Tr - 微量 (降雨量少於 0.05 毫米)

Tr - Trace of rainfall (amount less than 0.05 mm)

表 5.2.2 二零二三年香港氣象觀測摘要(二)

Table 5.2.2 Summary of Meteorological Observations in Hong Kong (Part2), 2023

月份 Month	出現低能見度的時數# Number of hours of Reduced Visibility#		總日照 平均每日 Total Bright 太陽總輻射 Sunshine Mean Daily Global Solar Radiation		總蒸發量 Total Evaporation	盛行風向 Prevailing Wind Direction	平均風速 Mean Wind Speed
		時 urs	小時 hours	兆焦耳/米 ² MJ/m ²	毫米 mm	度 degrees	公里/小時 km/h
一月 January	29	24	134.1	11.44	78.4	010	24.8
二月 February	31	22	163.8	14.64	82.8	070	26.0
三月 March	67	9	156.8	13.13	80.4	080	22.1
四月 April	67	15	92.3	11.02	65.3	080	22.3
五月 May	44	7	131.9	14.59	91.9	080	19.8
六月 June	10	0	147.4 &	15.17 &	87.5	090	17.6
七月 July	4	0	219.2	19.13	124.7	230	18.6
八月 August	0	0	166.4 &	16.02 &	108.5	230	14.6
九月 September	4	0	170.5	15.31	85.1	070	19.6
十月 October	11	0	138.9	12.25	92.7	070	28.4
十一月 November	5	2	208.2	14.57	89.3	070	24.9
十二月 December	24	25	136.0	10.70	69.6	360	21.7
平均/總值 Mean/Total	296	104	1865.5	14.00	1056.2	070	21.7
氣候平均值 Climatological normal (1991-2020)	825.8	1041.1 §	1829.3	13.23	1204.1	070	22.9
氣候平均值 Climatological normal (1981-2010)	692.3	1041.1 §	1835.6	12.85	1227.3	080	23.3
觀測站 Station	天文台 Hong Kong Observatory	香港國際機場 Hong Kong International Airpor	t	京士柏 King's Park		横瀾 Waglan	

横瀾島於九月一日 20 時 44 分錄得本年最高陣風183公里/小時,風向 020 度。

The annual maximum gust peak speed recorded at Waglan Island was 183 kilometres per hour from 020 degrees at 2044 HKT on 1 September.

- # 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.
- § 1997-2022 平均值
- § 1997-2022 Mean value
- ^ 如橫瀾島未能提供數據,則以長洲或其他鄰近氣象站的數據作補充,以計算盛行風向和平均風速
- ^ In case the data are not available from Waglan Island, observations of Cheung Chau or other nearby weather stations will be incorporated in computing the Prevailing Wind Direction and Mean Wind Speed
- & 數據不完整
- & Data incomplete

表 5.2.3 二零二三年香港氣象觀測摘要(三) Table 5.2.3 Summary of Meteorological Observations in Hong Kong (Part3),2023

月份 Month	極端酷熱天氣日數 Number of Extremely Hot Days	酷熱天氣日數 Number of Very Hot days	熱夜日數 Number of Hot nights	寒冷天氣日數 Number of Cold days	雷暴日數 Number of days with Thunderstorm
一月 January	-	-	-	8	-
二月 February	-	-	-	-	-
三月 March	-	-	-	-	1
四月 April	-	-	-	-	3
五月 May	-	3	5	-	6
六月 June	1	7	8	-	13
七月 July	2	19	18	-	5
八月 August	1	10	15	-	8
九月 September	-	12	7	-	3
十月 October	-	3	3	-	1
十一月 November	-	-	-	-	-
十二月 December	-	-	-	6	-
平均/總值 Mean/Total	4	54	56	14	40
氣候平均值 Climatological normal (1991-2020)	0.8	17.5	23.6	15.2	42.3
氣候平均值 Climatological normal (1981-2010)	0.2	10.2	17.8	17.1	38.6
觀測站 Station		天 Hong Kong	文台 Observatory		

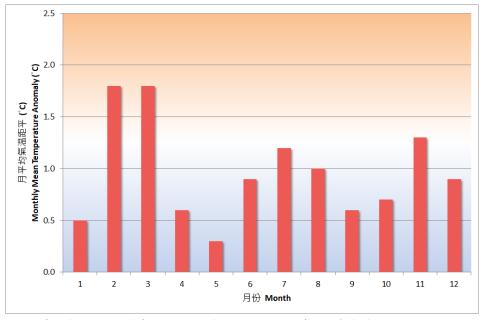


圖 5.1 2023 年香港月平均氣溫距平(與 1991-2020 年正常值相比)

Fig. 5.1 Monthly mean temperature anomalies (against the 1991-2020 normal) in Hong Kong in 2023

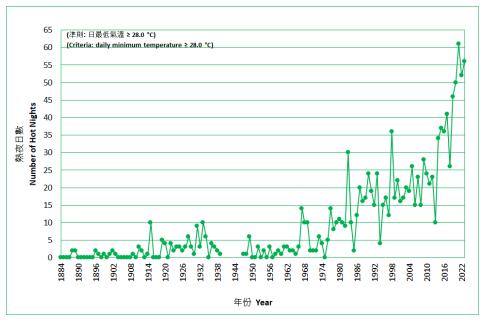


圖 5.2 香港全年熱夜數目的長期時間序列(1884-2023)

Fig. 5.2 Long-term time series of number of Hot Nights in Hong Kong 1884-2023

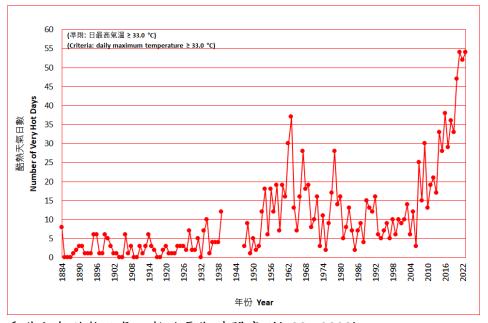


圖 5.3 香港全年酷熱天氣日數的長期時間序列(1884-2023)

Fig. 5.3 Long-term time series of number of Very Hot Days in Hong Kong 1884-2023

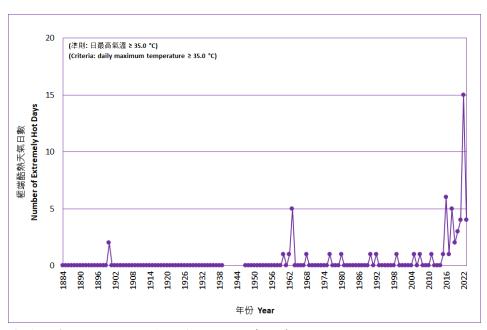


圖 5.4 香港全年極端酷熱天氣日數的長期時間序列(1884-2023)

Fig. 5.4 Long-term time series of number of Extremely Hot Days in Hong Kong 1884-2023

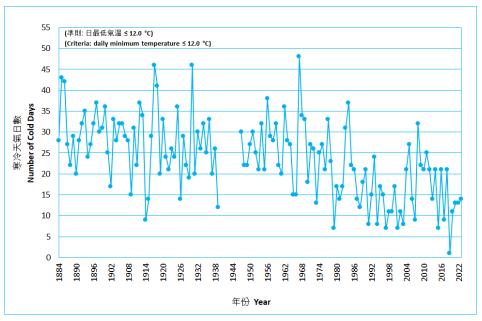


圖 5.5 香港全年寒冷天氣日數的長期時間序列(1884-2023)

Fig. 5.5 Long-term time series of number of Cold Days in Hong Kong 1884-2023

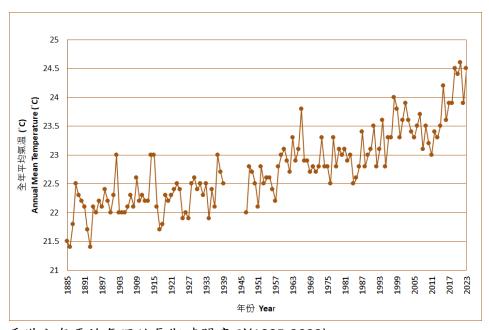


圖 5.6 香港全年平均氣溫的長期時間序列(1885-2023)

Fig. 5.6 Long-term time series of annual mean temperature in Hong Kong 1885-2023

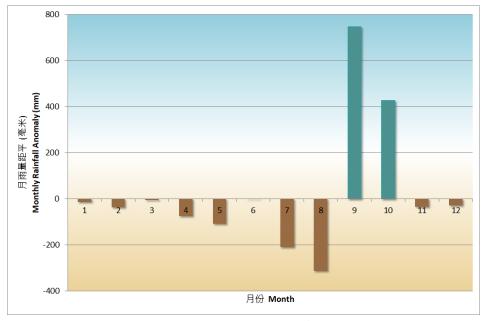


圖 5.7 2023 年香港月雨量距平(與 1991-2020 年正常值相比)

Fig. 5.7 Monthly rainfall anomalies (against the 1991-2020 normal) in Hong Kong in 2023

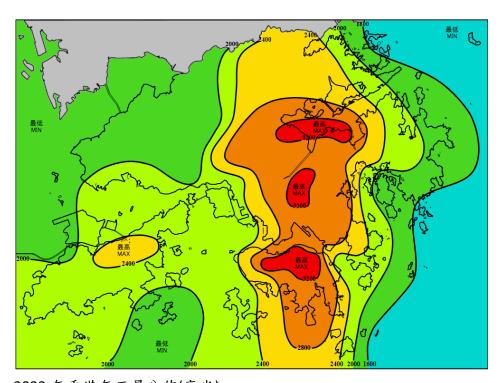


圖 5.8 2023 年香港年雨量分佈(毫米)

Fig. 5.8 Annual rainfall distribution in Hong Kong in 2023 (in millimetres)



圖 5.9 蘇拉襲港期間本港多處有樹木倒塌 (鳴謝相片來源:李子祥博士及 Dr. Martin Williams (左下相片))

Fig. 5.9 The approach of Saola resulted in fallen trees in many parts of the territory (Courtesy of Dr. T. C. Lee and Dr. Martin Williams (bottom left))



圖 5.10 蘇拉引起的風暴潮導致城門河出現水浸 (鳴謝相片來源: Poon Chi Ming) Fig. 5.10 Flooding of Shing Mun River due to storm surge induced by Saola (Courtesy of Poon Chi Ming)





圖 5.11(a)及(b) 2023 年 9 月 7 日至 8 日暴雨期間黃大仙出現嚴重水浸(鳴謝相片來源:商台新聞) Fig. 5.11(a) and (b) Serious flooding in Wong Tai Sin during the rainstorm on 7 – 8 September 2023 (Courtesy of CRHK News)



圖 5.12 2023 年 9 月 7 日至 8 日暴雨期間筲箕灣出現山泥傾瀉(鳴謝相片來源:商台新聞) Fig. 5.12 Landslide in Shau Kei Wan during the rainstorm on 7 – 8 September 2023 (Courtesy of CRHK News)

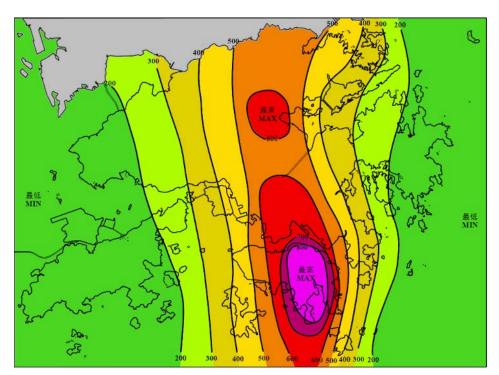


圖 5.13 24 小時雨量分佈圖(2023 年 9 月 7 日下午 4 時至 2023 年 9 月 8 日下午 4 時)
Fig. 5.13 24-hour rainfall distribution map (16:00 on 7 September 2023 to 16:00 on 8 September 2023)

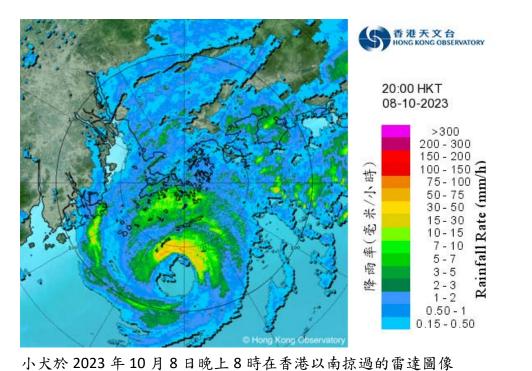


圖 5.14 小犬於 2023 年 10 月 8 日晚上 8 時在香港以南掠過的雷達圖像 Fig. 5.14 Radar imagery of Koinu skirting to the south of Hong Kong at 8 p.m. on 8 October 2023