

> Climate > Climate Information Service > Monthly Weather Summary > The Weather of August 2024 - An exceptionally hot August

## The Weather of August 2024 - An exceptionally hot August

## 3 September 2024

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 coast of southern China, August 2024 was exceptionally hot in Hong Kong. The monthly mean temperature of 29.6 degrees, monthly mean minimum temperature of 27.7 degrees and monthly mean maximum temperature of 32.3 degrees were respectively 0.9 degrees, 1.0 degree and 1.0 degree above their normals and respectively the second, one of the second and the fourth highest on record for August. Together with the well above normal temperatures in June and July, the summer of this year from June to August was much hotter than usual. The mean minimum temperature of 27.5 degrees, mean temperature of 29.4 degrees and mean maximum temperature of 31.9 degrees were respectively the third, one of the third and the seventh highest on record for the same period. There were 18 hot nights in August 2024, the highest on record for August. The month was also drier than usual with a total rainfall of 261.5 millimetres, only about 58 percent of the normal figure of 453.2 millimetres. The accumulated rainfall up to August this year was 1583.4 millimetres, a deficit of about 18 percent compared with the normal of 1921.5 millimetres for the same period.

There were sunny periods and a few showers in Hong Kong on the first two days of the month. Dominated by an anticyclone aloft, it was generally fine and persistently very hot on 3-9 August and the temperatures at the Observatory sored to a maximum of 35.4 degrees on the afternoon of 5 August, the highest of the month. High temperatures also triggered thundery showers over the territory on the afternoons of 5-7 August. The showers were particularly heavy over Tsuen Wan and Kwai Tsing Districts on 6 August and more than 70 millimetres of rainfall were recorded.

Under the influence of a southwesterly airstream, the weather of Hong Kong was a mixture of sunny periods, showers and thunderstorms on 10 – 13 August. The showers were particularly heavy on 12 August under the influence of upper-air disturbances. More than 30 millimetres of rainfall were recorded over many places.

Under the influence of a broad trough of low pressure lingering over the coast of southern China and the northern part of the South China Sea, the weather of Hong Kong was unsettled with occasional showers and squally thunderstorms on 14 - 21 August. The showers were particularly heavy on 15, 17-19 August. More than 100 millimetres of rainfall were generally recorded over the territory and rainfall even exceeded 200 millimetres over parts of the urban areas, Tai Po and Sha Tin Districts on these four days. Under the rain, the temperatures at the Observatory dropped to a minimum of 25.2 degrees on 17 August, the lowest of the month.

With the strengthening of the anticyclone aloft, the showers eased off gradually with sunny intervals during the day on 22 - 23 August. Under light wind conditions, apart from isolated showers, it was mainly fine and very hot on 24 - 27 August. While the weather remained generally fine and very hot during the day on 28 August, showers and squally thunderstorms associated with an upper-air disturbance affected Hong Kong later in the afternoon. With the departure of the upper-air disturbance, the showers eased off with sunny periods and very hot weather during the day on 29 - 30 August. Affected by a broad trough of low pressure, it was mainly cloudy with a few showers and isolated squally thunderstorms on the last day of the month.

Six tropical cyclones occurred over the South China Sea and the western North Pacific in August 2024.

Details of issuance and cancellation of various warnings/signals in the month are summarized in Tables 1.1 to 1.3. Monthly meteorological figures and departures from normal for August are tabulated in Table 2.

## Warnings and Signals issued in August 2024

Table 1.1 Rainstorm Warning Signals

Colour	Beginning Time		Ending Time	
	Day/Month	HKT	Day/Month	HKT
Amber	6/8	1345	6/8	1445
Amber	12 / 8	0755	12 / 8	1000
Amber	15 / 8	1140	15 / 8	1240
Amber	17 / 8	0535	17 / 8	1055

Amber	18 / 8	0605	18 / 8	0900
Amber	19 / 8	1335	19 / 8	1500
Amber	20 / 8	0545	20 / 8	0645
Amber	28 / 8	1650	28 / 8	1900

Table 1.2 Thunderstorm Warning

Beginning Time		Ending Time	
Day/Month	HKT	Day/Month	НКТ
1/8	0415	1/8	0645
2/8	1501	2/8	1615
5/8	1340	5/8	1830
6/8	1155	6/8	1630
7/8	1246	7/8	1600
7/8	1624	7/8	1745
10 / 8	1345	10 / 8	1545
11 / 8	1110	11 / 8	1300
12 / 8	0223	12 / 8	0520
13 / 8	0040	13 / 8	0600
13 / 8	1130	13 / 8	1730
14 / 8	0455	14 / 8	0700
14 / 8	0820	14 / 8	1230
15 / 8	0950	15 / 8	1645
16 / 8	1010	16 / 8	1630
17 / 8	0135	17 / 8	0300
17 / 8	0445	17 / 8	1100
17 / 8	2240	18 / 8	0145
18 / 8	0440	18 / 8	1130
18 / 8	1725	18 / 8	2300
19 / 8	0430	19 / 8	1130
19 / 8	1225	19 / 8	1630
20 / 8	0455	20 / 8	1030
20 / 8	1450	20 / 8	1800
21 / 8	0306	21 / 8	1200
22 / 8	1340	22 / 8	1445
25 / 8	1405	25 / 8	1510
26 / 8	1302	26 / 8	1430
28 / 8	1445	28 / 8	2000
29 / 8	1448	29 / 8	1700
29 / 8	1909	29 / 8	2130
30 / 8	1245	30 / 8	1530
30 / 8	2340	31 / 8	0700
31 / 8	0840	31 / 8	1700

Table 1.3 Very Hot Weather Warning

Beginning Time		Ending Time		
Day/Month	HKT	Day/Month	HKT	
1 / 8	1320	6/8	1350	
7/8	0645	11 / 8	1800	
13 / 8	1355	13 / 8	1620	
24 / 8	1045	28 / 8	1730	
29 / 8	1115	30 / 8	1815	

Table 2 Figures and Departures from Normal - August 2024

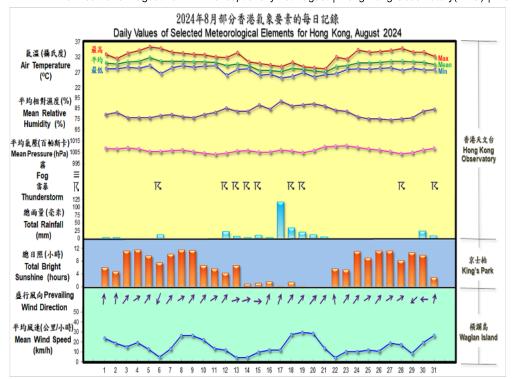
Meteorological Element	Figure of the Month	Departure from Normal*
Mean Daily Maximum Air Temperature	32.3 degrees C	1.0 degree above normal
Mean Air Temperature	29.6 degrees C	0.9 degrees above normal
Mean Daily Minimum Air Temperature	27.7 degrees C	1.0 degree above normal
Mean Dew Point Temperature	25.9 degrees C	0.8 degrees above normal
Mean Relative Humidity	81 %	normal
Mean Cloud Amount	74 %	4 % above normal
Total Rainfall	261.5 mm	191.7 mm below normal
Number of hours of Reduced Visibility∆	0 hour	38.0 hours below normal§
Total Bright Sunshine Duration	197.3 hours	15.2 hours above normal
Mean Daily Global Solar Radiation	17.51 Megajoule / square metre	1.78 Megajoule above normal
Total Evaporation	123.6 mm	6.1 mm below normal

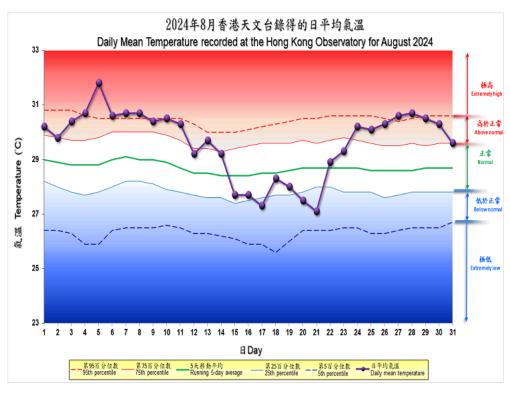
Remarks: All measurements were made at the Hong Kong Observatory except sunshine, solar radiation and evaporation which were recorded at King's Park Meteorological Station and visibility which was observed at the Hong Kong International Airport.

Δ 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 web page 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.

- \* Departure from 1991 2020 climatological normal, except for number of hours of reduced visibility
- § Departure from mean value between 1997 and 2023





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

Extract of Meteorological Observations in Hong Kong for August 2024

