

Appendix E

Summary of Meteorological Condition Extracted from Hong Kong Observatory

Summary of Meteorological Condition Extracted From The Hong Kong Observatory

November 2016

November 2016 was characterized by relatively warm weather during the first three weeks, followed by rainy and cooler weather in the latter part of the month. Overall, the month was warmer and much wetter than usual. The mean temperature for the month was 22.3 degrees, 0.5 degree above the normal figure of 21.8 degrees. The monthly total rainfall recorded at the Hong Kong Observatory was 131.3 millimetres, more than three times the November normal of 37.6 millimetres and the eighth highest on record for November. The accumulated rainfall of 3020.2 millimetres up to end of November was about 27 percent above the normal figure of 2371.7 millimetres for the same period.

Under the influence of a continental airstream, the weather in Hong Kong was generally fine and dry for the first seven days of the month. As a cold front moved across the coast of Guangdong on 8 November, local weather became cloudy with a few rain patches that day. Temperatures fell over the next couple of days as cool air reached the coastal areas under freshening northerly winds and rain became more widespread over the territory.

With the northeast monsoon moderating, rain eased off on 11 November and sunny periods appeared on 12 and 13 November. Under the influence of an upper-air anticyclone, the weather became generally fine and rather warm as temperatures at the Hong Kong Observatory rose to a maximum of 29.2 degrees on 15 November, the highest of the month. A freshening of easterly winds the next day brought cloudier weather, and after a fine day on 17 November, moist maritime air moved back towards the coast of Guangdong over the next few days, bringing with it a mixture of sunshine, clouds and rain patches.

Easterly winds strengthened and rain became heavier on 22 November. The arrival of a cold front the next day brought appreciably cooler weather. Meanwhile, rain started to ease off as drier continental air reached the south China coastal areas with some sunny intervals in Hong Kong on 24 and 25 November. Yet the moist maritime air was never too far away from the coast and coupled with a replenishment of the northeast monsoon, rainy weather returned on 26 November. As northerly winds strengthened, temperatures fell during the day and dropped to a minimum of 12.8 degrees at the Hong Kong Observatory the next morning, the lowest of the month.

With the setting in of dry continental air, sunny periods emerged later on 27 November and the weather remained mostly fine and dry towards the end of the month.

Three tropical cyclones occurred over the South China Sea and the western North Pacific in the month.

December 2016

With the northeast monsoon over the south China coastal areas remaining relatively weak for most of the month, December 2016 was warmer than usual. The monthly mean temperature of 19.6 degrees was 1.7 degrees above the normal figure of 17.9 degrees and the third highest for December since record began in 1884. The total rainfall recorded in the month was only 6.6 millimetres, less than one quarter of the normal figure of 26.8 millimetres. But in terms of rainfall for the whole year, the annual total of 3026.8 millimetres was about 26 percent above

the yearly normal of 2398.5 millimetres.

Under the influence of the northeast monsoon, the month started off with fine and dry conditions in Hong Kong on the first two days. The weather became cloudy on 3 December as a band of clouds covered the south China coast and the northern part of the South China Sea. Under light wind conditions, it was hazy with sunny periods over the next couple of days as temperatures climbed to a rather warm 25.9 degrees on 5 December, the highest of the month.

Apart from a lull in the northeast monsoon with relatively warm weather on 12 and 13 December, further replenishments of continental air brought a spell of generally fine and dry conditions to the territory from 6 to 16 December. Easterly winds freshened over the south China coastal areas on 11 December, but temperatures only began falling significantly as the winds turned northerly on 14 December. It was only then that the weather became appreciably cooler over the next couple of days.

After a cool and cloudier day on 17 December, the weather soon warmed up again as sunny skies emerged on 18 and 19 December. With moist maritime air edging back towards the coast of Guangdong, increasing cloudiness on 20 December was followed by a day of humid conditions and light rain on 21 December. The rain eased off the next day and the weather turned fine again as dry continental air returned to the south China coastal areas after the passage of a cold front. The strengthening of easterly winds brought patches of light rain on the night of 23 December, and the weather remained mostly cloudy till Christmas Day.

Despite a fine and relatively warm day on 26 December during another break in the northeast monsoon, the passage of a cold front brought strengthening northerly winds that night and falling temperatures the next day. Windy conditions were enhanced by the presence of a weakening tropical cyclone Nock-Ten over the central part of the South China Sea, with winds reaching gale force on high ground in Hong Kong. Under the influence of the intense northeast monsoon, a continental airstream brought fine and very dry weather to the territory on 27 December, while the first issuance of the Cold Weather Warning this winter saw temperatures plummeting to a minimum of 11.5 degrees the next morning, the lowest in the month.

After a cloudy day on 28 December, the northeast monsoon started to subside and temperatures gradually recovered with sunny periods towards the end of the month.

Two tropical cyclones occurred over the South China Sea and the western North Pacific in the month.

January 2017

With no significant cold surge affecting the coastal areas of Guangdong, January 2017 became the warmest January in Hong Kong with record-breaking monthly mean temperature of 18.5 degrees and monthly mean minimum temperature of 17.0 degrees, 2.2 degrees and 2.5 degrees above their respective normals. The month was drier than usual in terms of rainfall amount with only 7.8 millimetres in total, less than one-third of the normal of 24.7 millimetres for January.

Under the influence of an easterly maritime airstream, the weather in Hong Kong was mild with a mixture of sunshine and cloudy episodes for the first five days in the month. The weather turned generally fine on 6 January and with abundant sunshine over the next couple of days,

temperatures at the Hong Kong Observatory rose to a maximum of 25.5 degrees on 8 January, the highest of the month. The arrival of a replenishment of the northeast monsoon that night brought cloudier and slightly cooler weather in the next two days.

With a strengthening easterly airstream and cloud bands associated with a low pressure area over the South China Sea moving in towards the coastal areas of Guangdong, a spell of cloudy and misty weather set in over the territory on 11 January. As replenishments of the northeast monsoon reached the south China coast under an overcast sky, local weather turned progressively cooler with rain patches on 12 - 16 January. With the northeast monsoon moderating gradually and the weather warming up again, the lingering cloud bands started to dissipate and gave way to mainly fine weather on 19 January.

Following the arrival of a significant replenishment of the northeast monsoon, northerly winds of continental origin brought dry and cooler weather to Hong Kong on 20 - 22 January. Under clear skies, temperatures at the Hong Kong Observatory fell to a minimum of 13.6 degrees on the morning of 22 January, the lowest of the month. With relative humidity falling below 40 percent during the day over a sunny weekend, hill fires were reported in Siu Lek Yuen of Sha Tin. Despite a strengthening easterly airstream on 24 January, fine weather persisted on 23-27 January. Affected by a moist easterly airstream, local weather became cloudy on 28 January with rain patches and poor visibility in some areas over the Chinese New Year holiday period. It also turned appreciably cooler by the end of the month as a fresh to strong easterly airstream brought a replenishment of the northeast monsoon to the south China coastal areas on the night of 30 January.

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

February 2017

February 2017 was brighter than usual, with the duration of sunshine in the month more than 40 percent above normal. The month was also relatively mild with a mean temperature of 17.0 degrees, 0.2 degree above the normal of 16.8 degrees. The monthly total rainfall was 19.9 millimetres, less than half of the normal of 54.4 millimetres. The accumulated rainfall of 27.7 millimetres in the first two months of the year was about 65 percent below the normal of 78.9 millimetres for the same period.

The month had a mild start with sunny periods on the first day. A freshening easterly airstream brought cloudier conditions and slightly cooler weather over the next couple of days. With the northeast monsoon moderating and humid maritime air moving in towards the coast of Guangdong, the weather was a mixture of sunshine, haze, mist and some rain patches on 4 and 5 February. Easterly winds strengthened on 6 February and once again brought cloudier and slightly cooler weather to Hong Kong over the next couple of days.

With a cold front moving across the coastal areas of Guangdong on the night of 8 February, local winds strengthened from the north and temperatures fell significantly overnight. Under the influence of an intense winter monsoon following the passage of the cold front, the weather became cold and dry in the next three days. After a chilly morning on 11 February, the lingering clouds were finally cleared away and a spell of sunny weather lasted for more than a week till 18 February. With plenty of sunshine and the northeast monsoon subsiding, the weather became rather warm on 16 – 18 February as daytime temperatures climbed to the mid-

twenties.

Affected by a moist maritime airstream, the weather turned generally cloudy with a few rain patches and relatively low visibility on 19 February. Warm conditions returned the next day as the clouds thinned out and temperatures at the Hong Kong Observatory rose to a maximum of 25.5 degrees, the highest of the month. The maritime airstream also brought foggy weather to Hong Kong on the morning of 21 February with visibility at Waglan Island falling below 200 metres. With the setting in of a fresh to strong easterly airstream that day, the weather turned cooler and cloudy with rain patches, and a few thunderstorms also affected Hong Kong on the morning of 22 February.

Following the passage of a cold front early on 23 February, an intense northeast monsoon brought overcast sky, light rain patches and cold mornings that persisted for the next three days. Temperatures at the Hong Kong Observatory fell to a minimum of 10.6 degrees on the morning of 26 February, the lowest of the month. Under the influence of a dry continental airstream, there were sunny periods with cool mornings towards the end of the month.

There was no tropical cyclone over the South China Sea and the western North Pacific in the month.

March 2017

Going into a season of transition between the northeast monsoon and the mild and humid maritime airstream over the south China coast, local weather in March 2017 was marked by fluctuating temperatures. While the monthly mean temperature of 19.3 degrees was only 0.2 degree above the normal of 19.1 degrees, total rainfall in the month, 48.0 millimetres, was about 42 percent below the March normal of 82.2 millimetres. The accumulated rainfall of 75.7 millimetres in the first three months of the year was about 53 percent below the normal of 161.3 millimetres for the same period.

With the northeast monsoon bringing a continental airstream to southern China, the weather in Hong Kong was generally fine and dry on the first four days in the month, with the daytime relative humidity falling below 30 percent on 2 March.

As the northeast monsoon subsided and a maritime airstream set in, the weather turned cloudier on 5 March and a spell of cloudy conditions persisted in the next fortnight. Coastal fog on the morning of 6 March brought the visibility down to around 100 metres at Waglan Island. Meanwhile, a replenishment of the northeast monsoon reached the coast of Guangdong later that day and brought cooler weather over the next couple of days. More than 10 millimetres of rain fell over the northeastern part of the New Territories on 8 March. Under the influence of a moist easterly airstream, there were mist and light rain patches in the next four days. Morning fog on 13 March with visibility below 1000 metres in the harbour was followed by a relatively warm day with sunny intervals.

After another foggy start on 14 March, a cold front crossed the coast of Guangdong later in the morning and brought overcast sky with widespread rain. Easterly winds strengthened and conditions remained rather windy over the next couple of days with cooler temperatures. As the northeast monsoon gradually subsided, a maritime airstream moved in towards the coast of Guangdong and there were some light rain patches and coastal fog in Hong Kong on 17-18 March. Affected by an upper-air disturbance, rain turned heavier on 19 March with more than

30 millimetres falling over the New Territories.

Apart from some mist or fog patches, the cloudy spell ended as the weather in Hong Kong turned fine and very warm on 20-21 March. With abundant sunshine, temperatures at the Hong Kong Observatory climbed to a maximum of 27.6 degrees on 21 March, the highest of the month. The clouds and light rain returned the next day as a freshening easterly airstream brought a replenishment of the northeast monsoon and cooler weather to the coast of Guangdong. As the monsoon winds subsided, there were sunny periods with some mist on 23-24 March. A cold front then moved across the coast of Guangdong on 25 March. Under cloudy sky with some light rain patches, temperatures over the territory fell significantly and temperatures at the Hong Kong Observatory dropped to a minimum of 13.8 degrees the next morning, the lowest of the month and a temperature swing of nearly 14 degrees in a matter of five days.

With a continental air mass spreading to the south China coast, local weather turned mainly fine and dry on 27 March. As a maritime airstream pushed back towards the coast of Guangdong, local weather became warmer and more humid with mist patches over the next three days. While it was foggy on the morning of 31 March, a cold front moved across the coast of Guangdong during the day, bringing cooler and rainy weather with a few thunderstorms to the territory.

April 2017

April 2017 was warmer than usual with a mean temperature of 23.3 degrees, 0.7 degree above the normal of 22.6 degrees. The month was also drier than usual in terms of rainfall with 58.8 millimetres recorded in the month, only about one-third of the normal of 174.7 millimetres. The accumulated rainfall recorded in the first four months of the year was 134.5 millimetres, a deficit of 60 percent compared to the normal of 336.1 millimetres for the same period.

Under the influence of a continental airstream brought by the northeast monsoon, the weather in Hong Kong was sunny and dry on the first four days of the month. The month started off with a cool morning on 1 April and the minimum temperature of 15.5 degrees recorded at the Hong Kong Observatory was the lowest of the month. With the moderation of the northeast monsoon, the weather turned cloudier on 5 April with a mixture of sunny periods, coastal fog patches and isolated showers over the next five days. Temperatures climbed steadily during the period, leading to a rather warm night on 9 April under the influence of a southerly airstream.

Upon the passage of a trough of low pressure, widespread rain affected the territory on 11 April. Rain was heavy at times on 12 April, with more than 30 millimetres falling in some places, before easing off the next day. Meanwhile, the weather turned cooler as well, as a replenishment of the northeast monsoon reached the south China coast. Following the moderation of the northeast monsoon, the weather was mainly fine from 14 to 19 April apart from some mist and haze. With plenty of sunshine, daytime conditions became rather hot with temperatures at the Hong Kong Observatory rising to a maximum of 30.7 degrees on 18 April, the highest of the month.

The setting in of unsettled weather associated with a southerly airstream on 20 April marked the beginning of a showery spell that lasted for more than a week. Thundery showers brought over 3000 lightning strokes to the territory on 21 April ahead of the passage of a cold front later that day. The weather then became appreciably cooler on 22 and 23 April. A freshening of easterly winds on 24 April was followed by more showers and squally thunderstorms the next day. After a lull in the northeast monsoon and a relatively warm day on 26 April, the passage of

a trough of low pressure brought another replenishment of the northeast monsoon to the coast of Guangdong and cooler weather to Hong Kong over the next couple of days.

With the northeast monsoon subsiding, the weather was generally fine and rather warm on the last two days of the month.

Two tropical cyclones occurred over the South China Sea and the western North Pacific in the month.

May 2017

Due to the heavy rain on the morning of 24 May, the month was wetter than usual. The total rainfall recorded in the month was 399.3 millimetres, about 31 percent above of the normal figure of 304.7 millimetres. The accumulated rainfall recorded in the first five months of the year was 533.8 millimetres, a deficit of about 17 percent compared to the normal figure of 640.8 millimetres for the same period.

Under the influence of a maritime airstream, the weather in Hong Kong was hot with sunny periods on the first three days of the month. There was also coastal fog on the morning of 2 May. Upon the passage of a trough of low pressure, local weather deteriorated with heavy showers and squally thunderstorms on 4 May. More than 30 millimetres of rainfall were recorded over widespread areas. With the weakening of the trough of low pressure, the weather became mainly fine and hot in the next couple of days apart from some mist and haze.

A fresh easterly airstream brought cloudier weather and a few showers to the territory on 7-8 May. With the passage of a trough of low pressure, there were thundery showers on the early morning of 9 May. Under light wind condition, the visibility was rather low on the next day. With the setting up of a ridge of high pressure over the coast of Guangdong and the northern part of the South China Sea, the weather became mainly fine and hot on 11 May, with temperatures at the Hong Kong Observatory rising to a maximum of 31.6 degrees, the highest of the month.

With a trough of low pressure lingering over the coastal areas of Guangdong and the northern part of the South China Sea, the weather became more showery in mid May. The showers were heavy at times on 15 May, bringing over 50 millimetres of rainfall to Kowloon and Shatin. With the trough of low pressure moving to the northern part of the South China Sea and the onset of a relatively dry easterly airstream, mainly fine weather returned on 17 May. Under the influence of a maritime airstream, the weather turned generally cloudy with a few showers over the next six days.

With the passage of a trough of low pressure across the coast of Guangdong, local weather deteriorated with heavy showers and squally thunderstorms on 24 May. The heavy rain, which necessitated the issuance of the first Black Rainstorm Warning this year, brought more than 70 millimetres of rainfall to widespread areas with rainfall exceeding 300 millimetres in Kwai Tsing and Sham Shui Po. Serious flooding were reported in many places over the territory including Lai Chi Kok, Tseung Kwan O, Ho Man Tin, central and western parts of the Hong Kong Island.

With the trough of low pressure moving towards the northern part of the South China Sea, local weather improved with sunny intervals on 25 May. An easterly airstream brought mainly cloudy weather with one or two isolated showers to the territory the next day. Affected by a dry

continental airstream, it was mainly fine and dry on 27-29 May. With the continental airstream weakening and being gradually replaced by a southwesterly airstream, the weather was hot with a few showers towards the end of the month.

June 2017

As a result of the very hot weather in early June and the rainy spell in mid-June, the month was overall warmer and wetter than usual. The monthly mean temperature was 28.8 degrees, 0.9 degree above the normal of 27.9 degrees. The total rainfall recorded in the month was 656.0 millimetres, about 44 percent above the June normal of 456.1 millimetres. The accumulated rainfall recorded in the first half year was 1189.8 millimetres, a surplus of 8 percent compared to the normal of 1096.9 millimetres for the same period.

Under the influence of an active southwest monsoon, the weather was mainly cloudy and showery on the first two days of the month. The weather turned brighter on 3 June, and with winds subsiding and more sunshine, the weather became very hot on 5 – 7 June. Despite the fine conditions, a lingering trough over the inland areas of Guangdong also led to some significant development of showery activities along the coast that affected the territory on 6 and 7 June. Generally fine weather persisted till 11 June with temperature at the Hong Kong Observatory that day soaring to a maximum of 34.1 degrees, the highest of the month.

Meanwhile, an area of low pressure over the South China Sea developed into a tropical storm, named Merbok, on 11 June. Merbok moved across the northern part of the South China Sea on 12 June and intensified further into a severe tropical storm that night. It traversed the eastern part of Hong Kong waters and made landfall over the Dapeng Peninsula before midnight. With the approach of Merbok, local winds strengthened significantly with heavy squally showers later on 12 June, leading to the issuance of the No.8 Gale or Storm Signal for the first time in June since 2012. As Merbok weakened over land, its rainbands continued to affect the south China coastal region with gusty winds and heavy rain, with temperature at the Hong Kong Observatory falling to the month's lowest of 24.3 degrees in rain and the issuance of the Red Rainstorm Warning Signal on the morning of 13 June. More than 150 millimetres of rainfall were generally recorded over the territory on 13 – 14 June, with rainfall over the urban areas exceeding 250 millimetres.

Under the influence of an enhanced southwest monsoon in the wake of Merbok on 15 and 16 June and with the development of a lingering trough of low pressure along the coastal areas of the Guangdong, the weather remained unstable and rainy till 21 June. In particular, outbreaks of heavy rain and squally thunderstorms on 17 June brought more than 100 millimetres of rainfall to the territory and again led to the issuance of the Red Rainstorm Warning Signal.

After the dissipation of the trough, the weather turned fine and hot on 22 June. A mixture of sunshine and showers then persisted for the next five days. Despite the development of another trough over southern China, showery activities over the coastal region gradually subsided and daytime conditions became very hot as generally fine weather prevailed over the territory towards the end of the month.

July 2017

With a trough of low pressure lingering over the south China coastal region in the early part of the month and frequent tropical cyclone activities over the northern part of the South China Sea in the latter half, July 2017 was cloudier with more rain than usual. The monthly total

rainfall was 570.0 millimetres, more than 50 percent above the normal figure of 376.5 millimetres. The accumulated rainfall recorded in the first seven months of the year was 1759.8 millimetres, nearly 20 percent above the normal figure of 1473.3 millimetres for the same period.

An active southwest monsoon brought cloudy and showery weather to Hong Kong on the first three days of the month, with some isolated heavy downpour affecting mostly the New Territories. Under the influence of a broad trough of low pressure over the coast of Guangdong and the northern part of the South China Sea, the weather became even more unsettled with occasional heavy showers and squally thunderstorms that lasted till 8 July despite some interludes of sunshine. With the setting in of the subtropical ridge over southeastern China, showery activities gradually eased off after 9 July. While hot and mainly fine weather prevailed in Hong Kong over the next five days, some isolated heavy showers did affect the Sai Kung areas on 12 July.

Meanwhile, easterly winds along the coastal areas of Guangdong gradually strengthened as an area of low pressure near Hainan Island eventually developed into a tropical cyclone named Talas on 15 July. Even though Talas moved away towards the coast of Vietnam, local weather turned cloudy and showery once again on 16 July. The weather deteriorated further over the next couple of days as enhanced easterly flow in the wake of Talas brought outbreaks of heavy rain and squally thunderstorms to Hong Kong that required the issuance of rainstorm warnings on 17 – 18 July, with more than 400 millimetres of rain falling over the eastern part of Hong Kong Island and the northeastern part of the New Territories during the 2-day stormy episode. The lowest temperature in the month at the Hong Kong Observatory, 24.4 degrees, was recorded in rain on 17 July.

A mixture of sunshine and showers then prevailed on 19 – 22 July, culminating in a very hot day on 22 July as a couple of tropical cyclones, Roke and Sonca, hovered over the northern part of the South China Sea. With Roke making landfall over the eastern part of Hong Kong on the morning of 23 July, local weather deteriorated with outbreaks of heavy squally showers. Showery weather continued to affect the territory the next day as Roke soon dissipated inland and Sonca headed towards the coast of Vietnam.

The establishment of an anticyclone over southeastern China brought fine and very hot conditions to Hong Kong on 25 and 26 July. With yet another tropical cyclone brewing over the northern part of the South China Sea, local weather turned cloudier with isolated showers on 27 July. The developing cyclone was eventually named Haitang and headed towards Taiwan in quick succession following the passage of another tropical cyclone Nesat that moved in from the western North Pacific. With both cyclones passing at a distance to the east of Hong Kong, subsiding air over the Guangdong region led to prolonged sunshine and very hot conditions in the territory towards the end of the month. Oppressive heat under a hazy sky saw temperature at the Hong Kong Observatory soaring to the month's highest of 34.8 degrees on 30 July. The mean temperature that day was 31.8 degrees, one of the highest for July since record began in 1884.

August 2017

August 2017 was hotter than normal and the prolonged heat was relieved by the successive strikes of tropical cyclones Hato and Pakhar within a 5-day period during the latter part of the

month. Both cyclones led to the raising of Gale or Storm Signal No.8, with Hato even necessitating the issuance of the Hurricane Signal No.10 on 23 August, the first time since July 2012. The mean temperature recorded in the month was 29.3 degrees, the seventh highest for August on record and 0.7 degree above the August normal of 28.6 degrees. Due to the rain brought by Hato and in particular Pakhar, the monthly total rainfall amounted to 489.1 millimetres, about 13 percent more than the normal figure of 432.2 millimetres. The accumulated rainfall this year up to August was 2248.9 millimetres, a surplus of 18 percent compared to the normal figure of 1905.5 millimetres for the same period.

Under the influence of an active southwest monsoon, the weather in Hong Kong was generally cloudy with morning showers that affected mostly the southeastern part of the territory on the first two days of the month. The showers got heavier and became more widespread on the morning of 3 August, leading to the issuance of the Red Rainstorm Warning Signal. After another showery morning on 4 August, particularly over the southern and southeastern part of the territory, the weather turned sunny and very hot on 5 August as a ridge of high pressure extended over southeastern China. Generally fine and very hot conditions then persisted for another three days.

With a freshening of the southwest monsoon, the weather turned cloudy on 9 August and showery activities increased. A southwest-to-northeast corridor of heavier showers extended from Tsuen Wan to the Tolo Harbour on 10 August, and then shifted eastwards the next day running from Hong Kong Island to Sai Kung. As the monsoon winds subsided, convective development became less active on 12 August despite some localized showers over Lantau Island. A spell of fine weather then prevailed for the next ten days, with a ridge of high pressure extending westwards from the Pacific to cover southeastern China on 16 – 18 August. Despite an outbreak of thundery showers due to intense day heating at Tai Po on 18 August, showers during the fine spell were mostly isolated and the territory enjoyed two shower-free days on 20 and 21 August.

With prolonged sunshine, daytime temperatures at the Hong Kong Observatory reached 33 degrees or higher during the latter part of the fine spell. As Hato headed towards Hong Kong, subsidence effect ahead of its circulation brought hazy skies and oppressive heat on 22 August. The maximum temperature at the Hong Kong Observatory that afternoon soared to an all-time record-breaking high of 36.6 degrees. Squally showers associated with the outer rainbands of Hato then started to affect the territory later that day. The situation deteriorated further overnight as stormy weather battered the city during the passage of Hato on the morning of 23 August. Hurricane force winds affected Cheung Chau and the southeastern part of the territory, and a maximum gust of 193 kilometres per hour was recorded at Waglan Island. As the approach of Hato coincided with the astronomical high tide, storm surge induced by Hato resulted in unusually high water level and serious flooding in many parts of the territory, including Tai O, Heng Fa Chuen, Lei Yue Mun, Sha Tin and Lau Fau Shan. The water level at Quarry Bay rose to a maximum of 3.57 metres that morning, the second highest after the record high of 3.96 metres set by Super Typhoon Wanda in 1962. With Hato making landfall over Zhuhai to the west of Macau in the afternoon and weakening further inland, local winds subsided significantly later in the day.

The weather was a mixture of sunshine and scattered showers over the next couple of days, with some heavy showers affecting Tuen Mun and Shek Kong on 25 August. Ahead of the visit of Pakhar, oppressively hot and hazy conditions affected Hong Kong once again on 26 August.

Rain and squalls associated with the intense rainbands north of Pakhar started to affect the territory later that evening. Stormy weather persisted for most of the day on 27 August as Pakhar skirted past just to the southwest of Hong Kong, with winds persistently reaching storm force over the northeastern and southern parts of the territory and occasionally attaining hurricane force on high ground. Temperature at the Hong Kong Observatory fell to the month's lowest of 24.0 degrees in rain that day. Heavy showers and some squally thunderstorms continued to affect the territory the next day as winds gradually subsided. As the lingering rainbands associated with Pakhar finally cleared away, the weather turned sunny on 29 August. Hot conditions with a mixture of sunshine, haze and thundery evening showers then persisted towards the end of the month.

September 2017

Hong Kong's weather was unseasonably hot in September 2017. The monthly mean temperature was 29.0 degrees, 1.3 degrees above the normal figure of 27.7 degrees and one of the hottest September since record began in 1884. The month was also drier than usual with a total rainfall of 192.4 millimetres, about 59 percent of the normal figure of 327.6 millimetres. The accumulated rainfall this year up to September was 2441.3 millimetres, a surplus of 9 percent compared to the normal figure of 2233.1 millimetres for the same period.

Under the influence of a continental airstream, the weather in Hong Kong was hazy with sunny periods and evening thunderstorms on the first day of the month. Meanwhile, the tropical depression over the northeastern part of the South China Sea was named Mawar and intensified into a tropical storm. While lingering over the northeastern part of the South China Sea, Mawar further intensified into a severe tropical storm the next day. Mawar drifted towards the coast of eastern Guangdong slowly on 3 September and made landfall near Shanwei and weakened into a tropical storm on that night. Mawar moved across inland Guangdong on the morning of 4 September and weakened into an area of low pressure progressively during that day. Affected by the rainbands associated with Mawar, there were squally heavy showers and thunderstorms over the territory on 2-4 September. Local winds strengthened while Mawar skirting more than 100 kilometres to the northeast of Hong Kong on the morning of 4 September. Temperatures at the Hong Kong Observatory also fell to a minimum of 25.3 degrees in that morning, the lowest of the month.

With a southerly airstream prevailing over the coast of Guangdong and the northern part of the South China Sea, local weather was a mixture of sunshine and showers on the ensuing six days. Under the influence of the anticyclone aloft, the weather in Hong Kong turned generally fine and hot apart from isolated showers on 11 September. While it was sunny and hazy on the morning of 12 September, convective activities triggered by high temperatures brought thundery showers to the territory in the afternoon. Affected by the northeast monsoon, it was mainly fine with isolated showers on 13-14 September.

Under the dominance of the anticyclone aloft, local weather was sunny and very hot with some haze on the ensuing five days. With the anticyclone aloft weakening gradually, there were some showers and thunderstorms on 20-21 September. The showery activities over the northern part of the South China Sea and the coast of Guangdong brought heavy and thundery morning showers to Hong Kong on the next two days.

Meanwhile, an area of low pressure over the central part of the South China Sea intensified into a tropical depression on the night of 23 September. The tropical depression moved west-

northwest across the northern part of South China Sea on 24 September and made landfall over Hainan Island that night. Affected by the outer rainbands of the tropical depression, there were a few squally showers and thunderstorms on 24 September. Dominated by the anticyclone aloft, it remained generally fine and hot on 25-29 September. With abundant sunshine, temperatures at the Observatory soared to a maximum of 34.1 degrees on the afternoon of 28 September, the highest of the month. Affected by a fresh northeast monsoon, local weather became mainly cloudy with showers and a few thunderstorms in the morning on 30 September.

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

October 2017

With cooler air from the north only reaching the south China coastal areas later in the month, there were fine and unseasonably hot days in the first half of October 2017. The Very Hot Weather Warning was issued on a couple of occasions, the first time such warnings were required in the month of October. Overall, the monthly mean temperature was 26.3 degrees, 0.8 degree above the normal figure of 25.5 degrees. The monthly total rainfall was 99.6 millimetres, near the October normal of 100.9 millimetres. The accumulated rainfall this year up to October was 2540.9 millimetres, about 9 percent higher than the normal figure of 2334.0 millimetres for the same period.

Under the influence of a fresh easterly airstream, the weather in Hong Kong was mainly cloudy and showery on the first day of the month. Showery conditions persisted till the next morning and with winds moderating, the weather soon turned sunny and very hot. Temperature at the Hong Kong Observatory rose to a maximum of 33.5 degrees, the highest of the month, on the afternoon of 3 October. Despite the recurrence of cloudy and showery interludes associated with a strengthening of the northeast monsoon on 4 October and again on 9 October, the weather remained mostly fine and hot till 13 October, when the arrival of a northerly airstream brought cooler temperatures to Hong Kong over the next couple of days.

Meanwhile, clouds and rain associated with an approaching tropical cyclone, Khanun, were also moving in towards the territory. The passage of Khanun over the northern part of the South China Sea, combined with the influence of the northeast monsoon, brought a day of stormy weather on 15 October when the Tropical Cyclone Gale or Storm Signal No.8 was issued for the fifth time this year, a joint record with the years 1964 and 1999. Despite Khanun moving away and weakening, windy and rainy weather continued to affect Hong Kong till 17 October.

With winds moderating, the weather turned sunny on 18 October and a spell of fine weather then prevailed for the rest of the month as a continental airstream dominated over the south China coastal areas. Conditions got progressively drier with daytime relative humidity dropping below 50 per cent towards the end of the month. Meanwhile, freshening northerly winds brought replenishment of cooler air to the coast of Guangdong that caused temperature at the Hong Kong Observatory falling twice to around 20 degrees during the period. The lowest temperature of the month, 19.0 degrees, was recorded on the morning of 31 October.

Five tropical cyclones occurred over the South China Sea and the western North Pacific in the month.