

每月天氣摘要 二零一六年十一月

Monthly Weather Summary November 2016



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二零一六年十二月出版

香港天文台編製
香港九龍彌敦道134A

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1. 二零一六年十一月天氣回顧

二零一六年十一月的天氣特徵為首三星期較暖而後期則較涼和有雨。整體來說，十一月的天氣較正常溫暖及多雨。本月的平均氣溫為22.3度，較正常數值21.8度高0.5度。香港天文台於本月錄得的總雨量為131.3毫米，較十一月正常數值37.6毫米多出三倍以上，亦是十一月份的第八最高紀錄。而本年至十一月底的累積雨量為3020.2毫米，較同期正常數值2371.7毫米多約百分之27。

受一股大陸氣流影響，本港於本月首七天普遍天晴及乾燥。隨著一道冷鋒於十一月八日橫過廣東沿岸，本港天氣轉為多雲及有幾陣雨。伴隨清勁偏北風而至的冷空氣抵達沿岸地區，本港隨後兩天氣溫下降，雨勢亦較為廣泛。

隨著東北季候風緩和，十一月十一日雨勢減弱，十一月十二日至十三日部分時間有陽光。受一個高空反氣旋影響，其後天氣轉為普遍天晴及相當溫暖，十一月十五日香港天文台的氣溫最高升至29.2度，是本月的最高氣溫。一股清勁偏東風於翌日為本港帶來較為多雲的天氣。十一月十七日天氣晴朗。一股潮濕海洋氣流於隨後數天靠近廣東沿岸地區，並帶來夾雜陽光、多雲及有幾陣雨的天氣。

十一月二十二日東風增強及雨勢轉大。一道冷鋒於翌日帶來顯著較涼的天氣。同時，隨著較乾燥的大陸氣流抵達華南沿岸地區，十一月二十四日至二十五日本港雨勢開始減弱，並短暫時間有陽光。受徘徊沿岸附近潮濕海洋氣流及一股東北季候風補充的共同影響，十一月二十六日本港再度轉為有雨。由於北風增強，當日日間氣溫開始下降，翌日早上香港天文台的氣溫最低降至12.8度，為本月的最低氣溫。

受乾燥大陸氣流影響，十一月二十七日稍後本港部分時間有陽光，而月底期間持續大致天晴及乾燥。

本月有三個熱帶氣旋影響南海及北太平洋西部。

本月兩班航機因惡劣天氣須轉飛其他地方。表 1.1 載列本月發出及取消各種警告/信號的詳情。

1. The Weather of 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.

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

表 1.1 二零一六年十一月發出的警告及信號

Table 1.1 Warnings and Signals issued in November 2016

強烈季候風信號

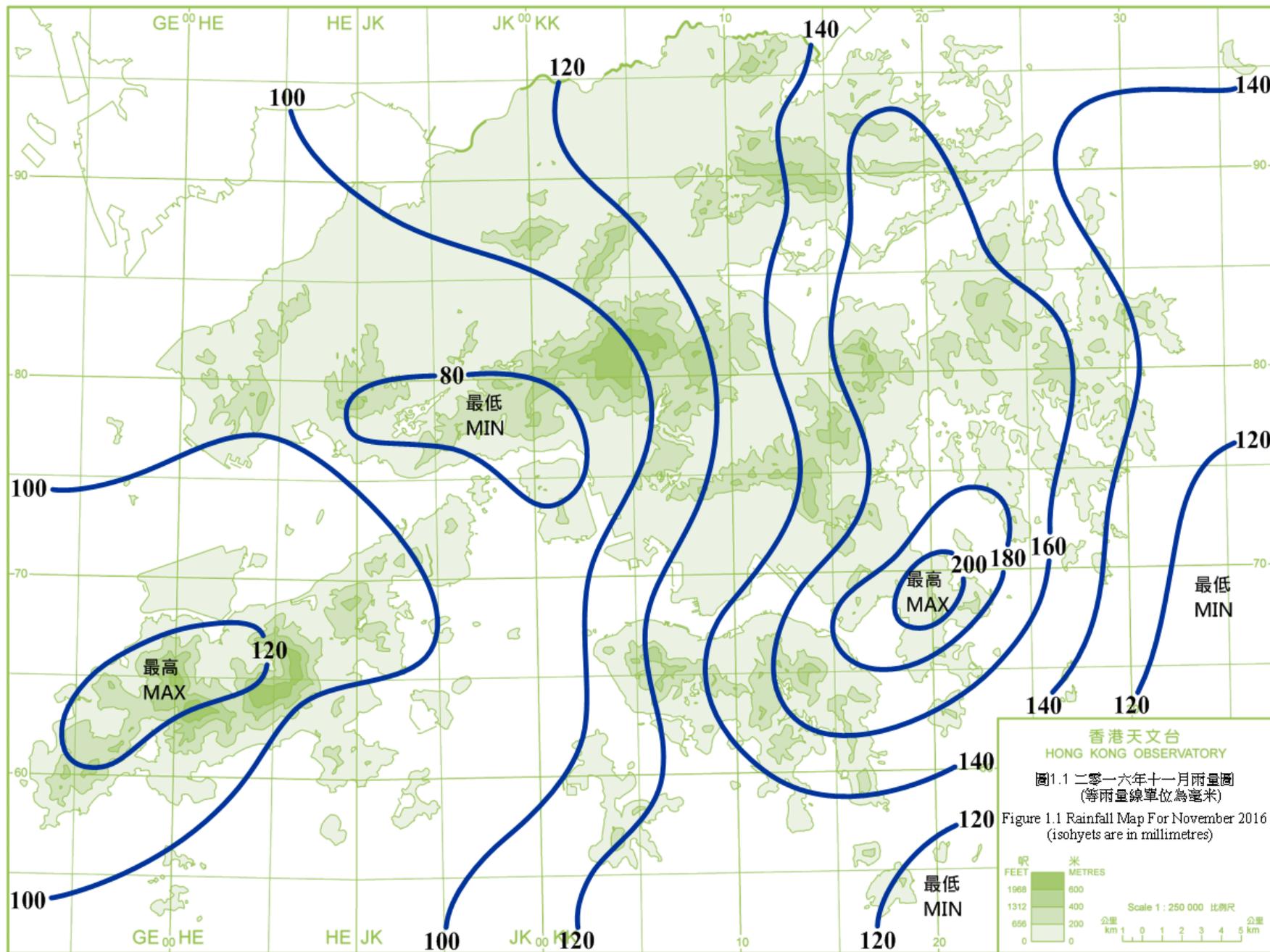
Strong Monsoon Signal

開始時間 Beginning Time		終結時間 Ending Time	
日/月 day/month	時 hour	日/月 day/month	時 hour
22/11	2245	24/11	0915
26/11	1145	27/11	0645

火災危險警告

Fire Danger Warnings

顏色 Colour	開始時間 Beginning Time		終結時間 Ending Time	
	日/月 day/month	時 hour	日/月 day/month	時 hour
黃色 Yellow	6/11	0600	6/11	1800
黃色 Yellow	13/11	1130	13/11	1800
黃色 Yellow	20/11	0945	20/11	1800
黃色 Yellow	27/11	1145	27/11	1800



香港天文台
HONG KONG OBSERVATORY
圖1.1 二零一六年十一月雨量圖
(等雨量線單位為毫米)
Figure 1.1 Rainfall Map For November 2016
(isohyets are in millimetres)

呎 FEET
米 METRES
1968 600
1312 400
656 200
0 0

公里 km 1 0 1 2 3 4 5 公里 km
Scale 1 : 250 000 比例尺

2. 二零一六年十一月熱帶氣旋概述

二零一六年十一月在北太平洋西部及南海出現了三個熱帶氣旋。

熱帶低氣壓米雷於十一月二日凌晨在雅蒲島之東北偏北約 230 公里的北太平洋西部上形成，向西北偏北及偏北方向緩慢移動。米雷於十一月四日開始加速向東北移動，並逐漸增強。翌日米雷發展為颱風，達到其最高強度，中心附近最高持續風速估計為每小時 140 公里。米雷最後於十一月七日晚上在日本東南的西北太平洋海面演變為一股溫帶氣旋。

熱帶低氣壓馬鞍於十一月九日下午在關島以東約 1 610 公里的北太平洋西部上形成，大致向西北偏西移動。馬鞍於十一月十日下午增強為熱帶風暴，達到其最高強度，中心附近最高持續風速估計為每小時 65 公里。馬鞍隨後開始逐漸減弱，十一月十二日在硫黃島東南的海域上減弱為一個低壓區。

熱帶低氣壓蝎虎於十一月二十四日下午在馬尼拉之東南約 830 公里的海域上形成，以西北偏西或西北路徑橫過菲律賓。蝎虎於十一月二十六日進入南海及增強為強烈熱帶風暴，達到其最高強度，中心附近最高持續風速估計為每小時 90 公里。十一月二十七日蝎虎轉向東北緩慢移動，在呂宋以西海域徘徊，受到東北季候風影響，翌日迅速減弱及消散。

2. Overview of Tropical Cyclones in November 2016

Three tropical cyclones occurred over the western North Pacific and the South China Sea in November 2016.

Meari formed as a tropical depression over the western North Pacific about 230 km north-northeast of Yap early in the morning on 2 November, and moved north-northwestwards and northwards slowly. Meari started to accelerate northeastwards and intensified gradually on 4 November. It developed into a typhoon the next day, reaching its peak intensity with an estimated wind of 140 km/h near its centre. Meari finally evolved into an extratropical cyclone over the western North Pacific southeast of Japan on the night of 7 November.

Ma-on formed as a tropical depression over the western North Pacific about 1 610 km east of Guam on the afternoon of 9 November and moved generally west-northwestwards. Ma-on intensified into a tropical storm on the afternoon of 10 November, reaching its peak intensity with an estimated wind of 65 km/h near its centre. It then started to weaken gradually and degenerated into an area of low pressure over the sea areas southeast of Iwo Jima on 12 November.

Tokage formed as a tropical depression about 830 km southeast of Manila on the afternoon of 24 November and moved across the Philippines on a west-northwestward to northwestward track. It entered the South China Sea on 26 November and intensified into a severe tropical storm, reaching its peak intensity with an estimated wind of 90 km/h near its centre. Tokage turned slowly to the northeast on 27 November and lingered over the sea areas west of Luzon. Affected by the northeast monsoon, Tokage weakened rapidly and dissipated the next day.

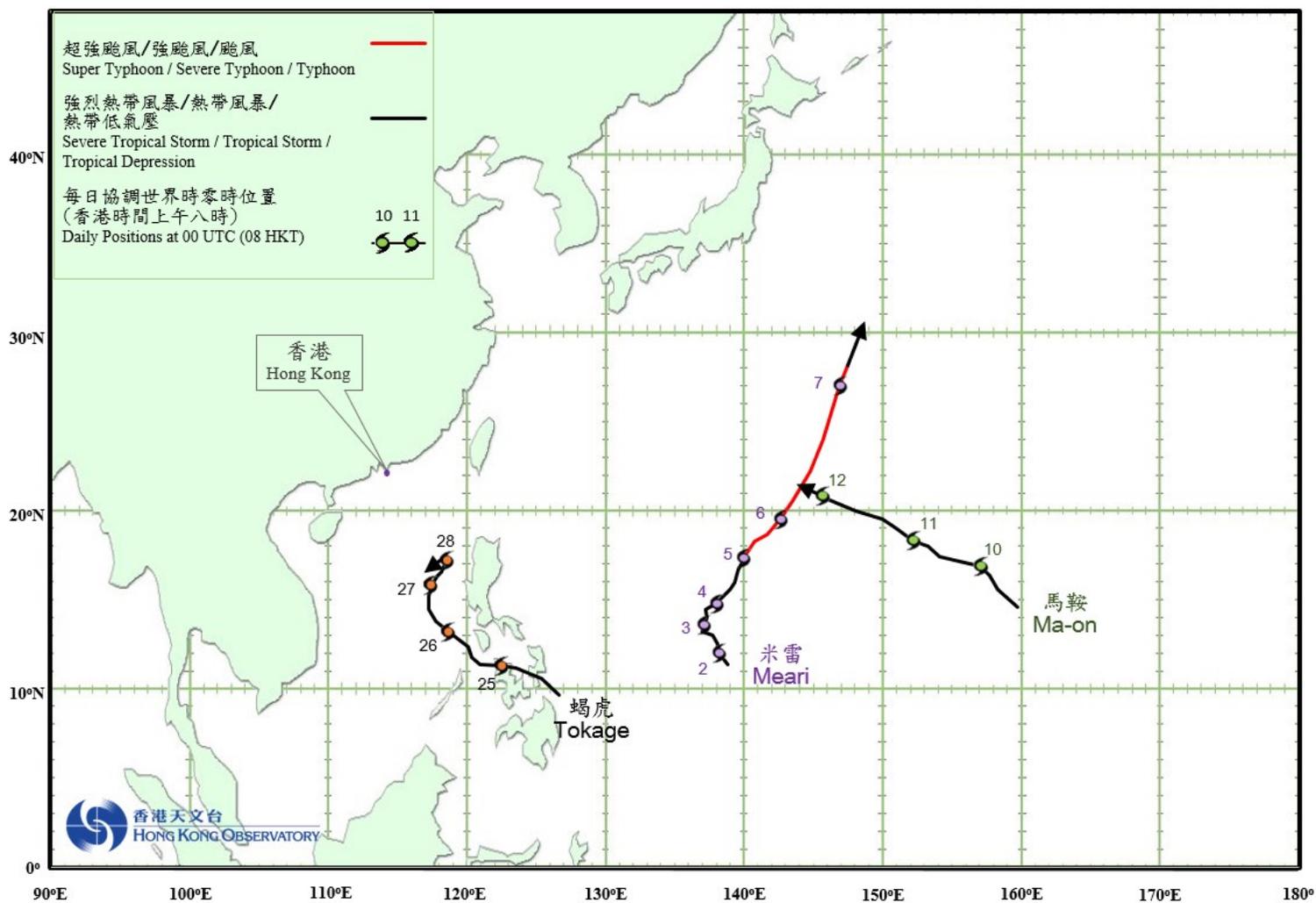
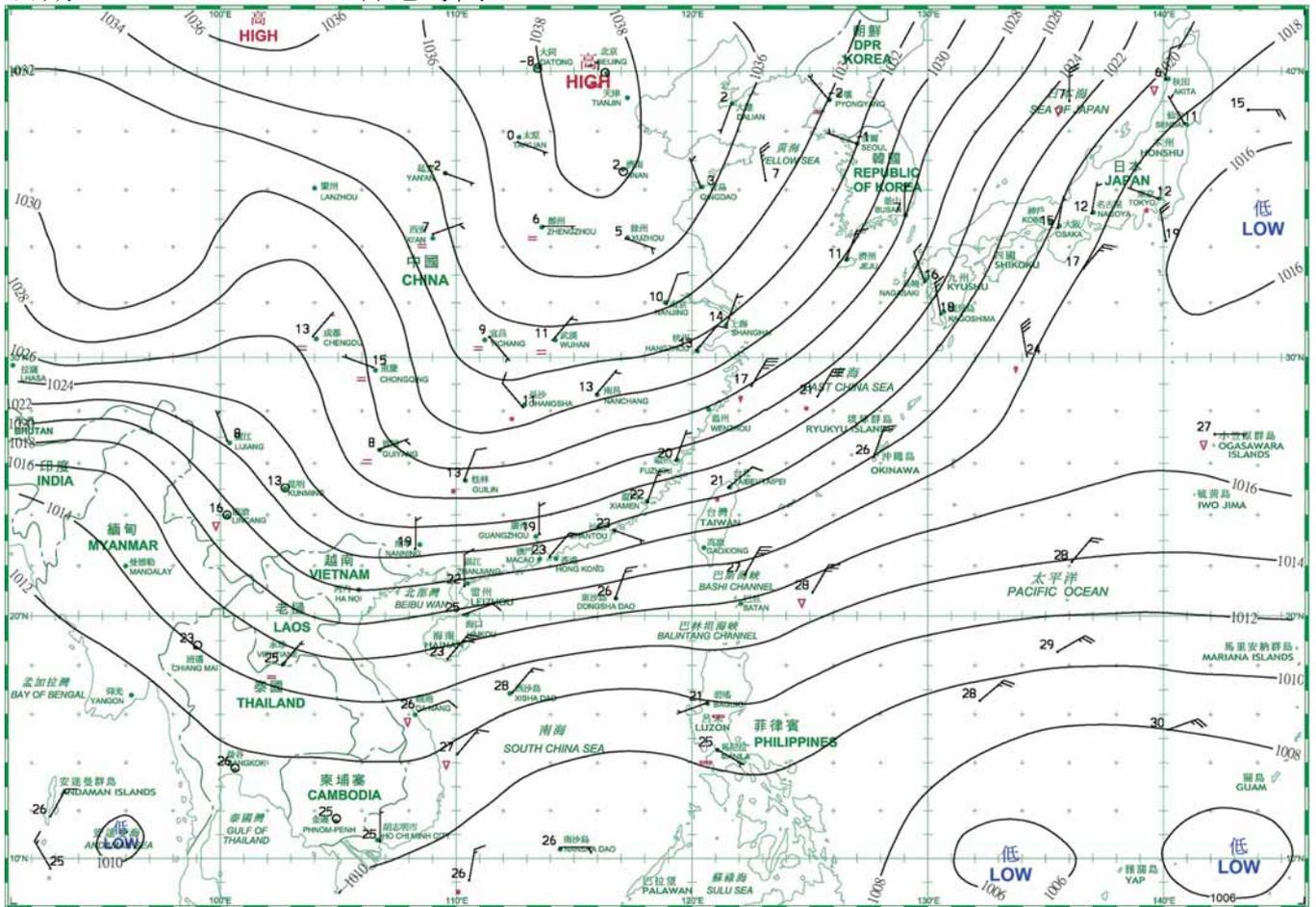


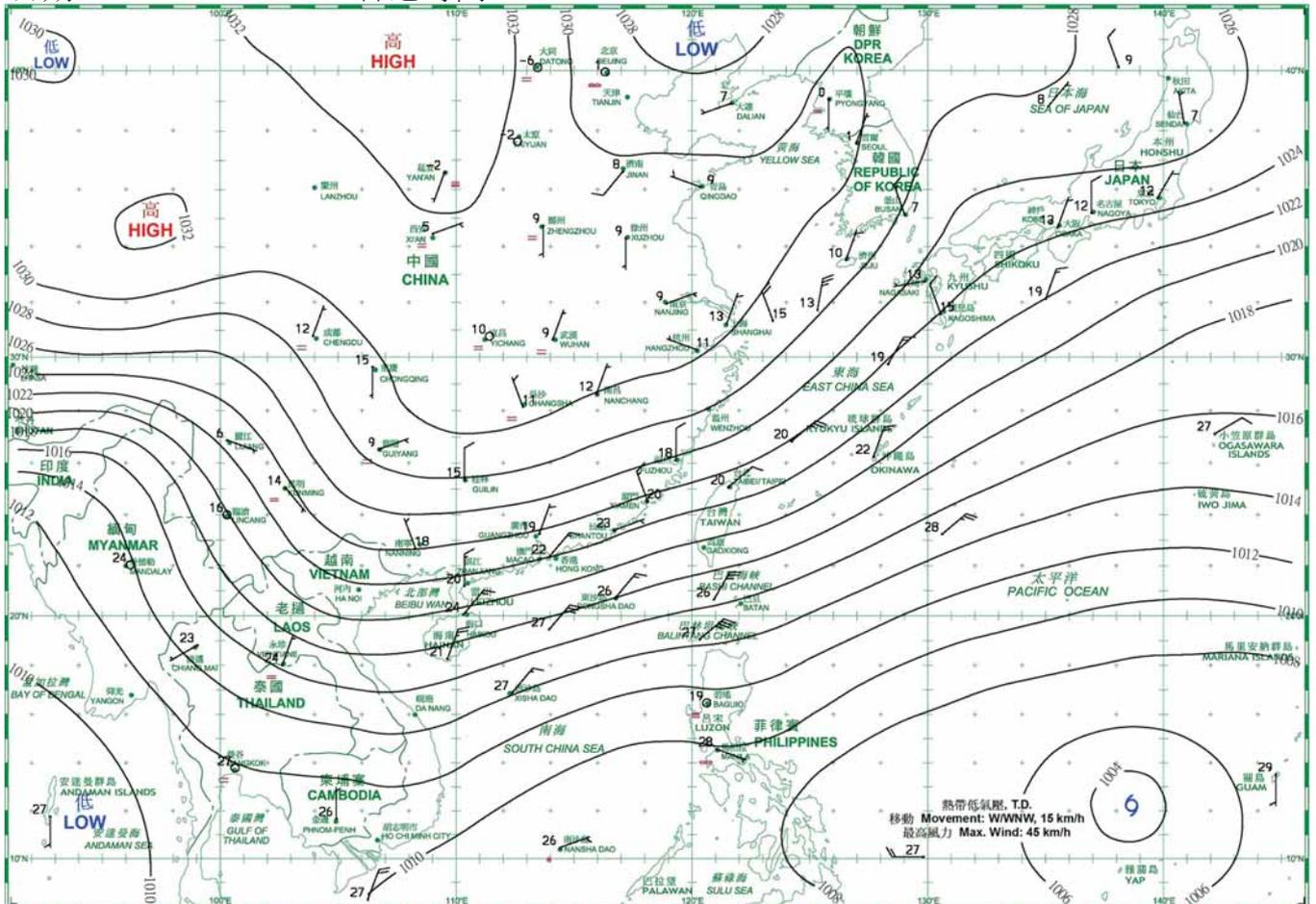
圖 2.1 二零一六年十一月的熱帶氣旋路徑圖
 Fig. 2.1 Tracks of tropical cyclones in November 2016

3. 二零一六年十一月每日天氣圖 Daily Weather Maps for November 2016

日期/Date: 01.11.2016 香港時間/HK Time: 08:00

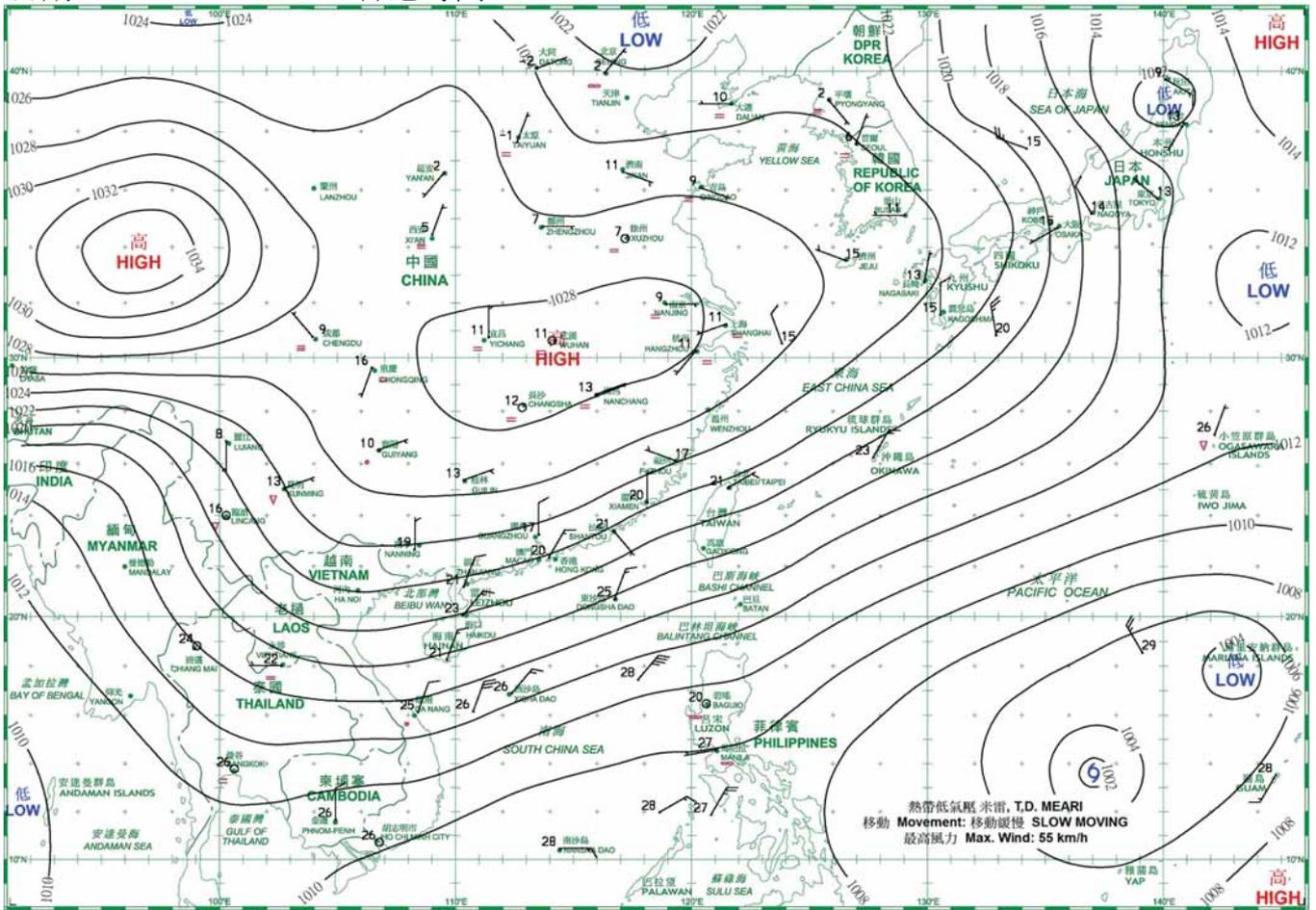


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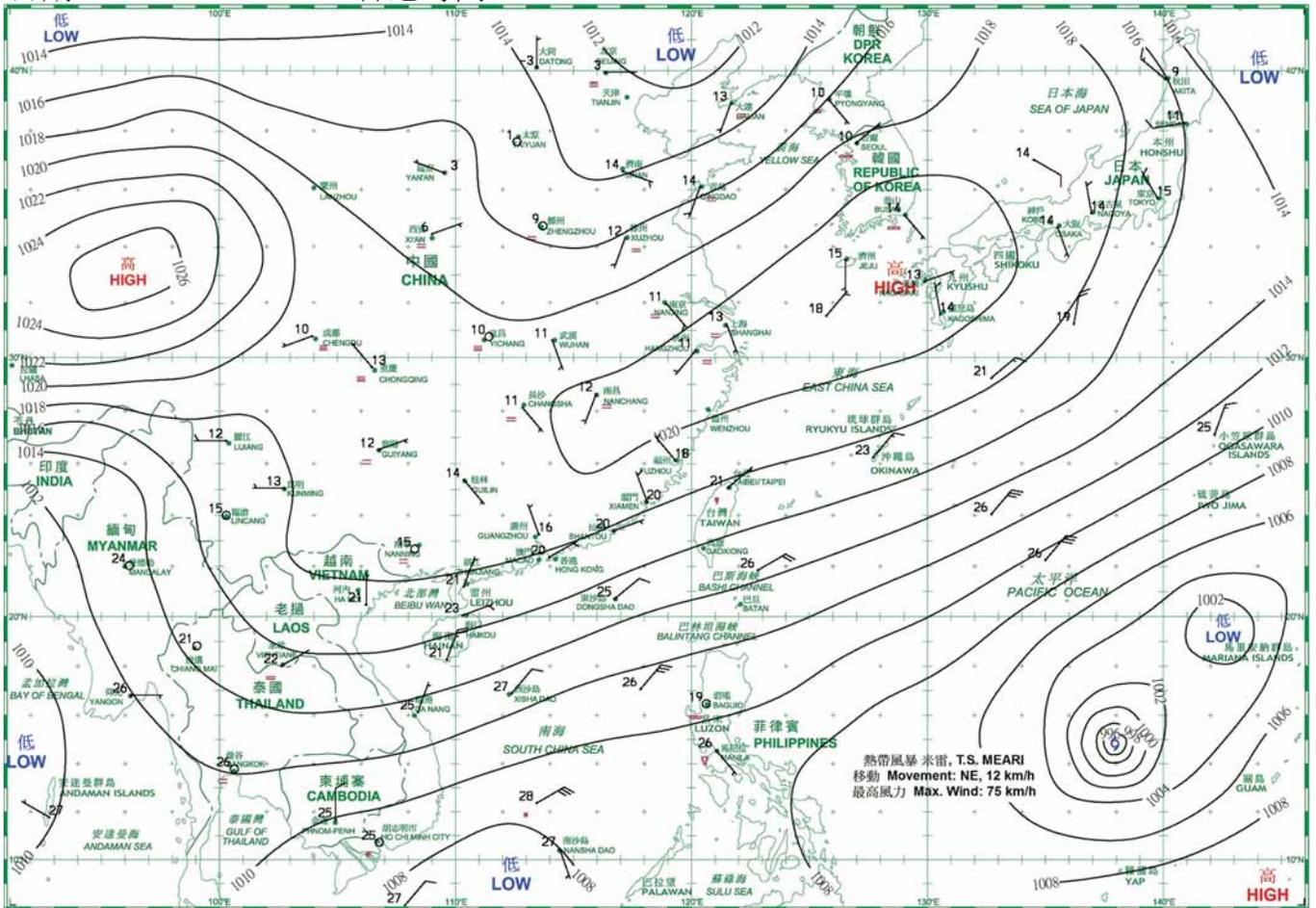


- 等壓線 Isobar(hPa)
- 暖鋒 Warm Front
- 靜止鋒 Stationary Front
- 消散中的冷鋒 Dissipating Cold Front
- 冷鋒 Cold Front
- 錮囚鋒 Occlusion
- 槽軸 (線) Axis of Trough
- 熱帶氣旋中心 Centre of Tropical Cyclone

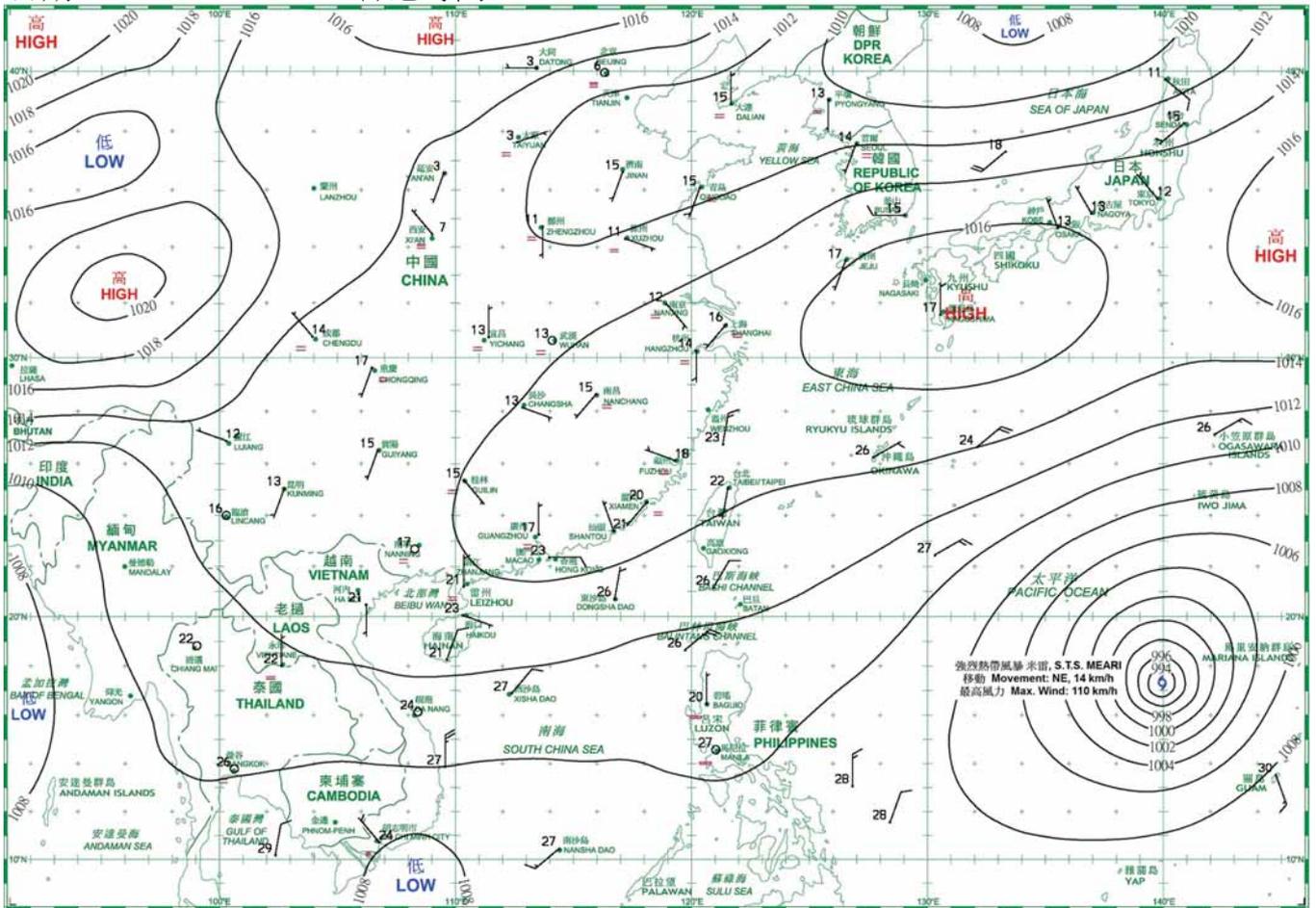
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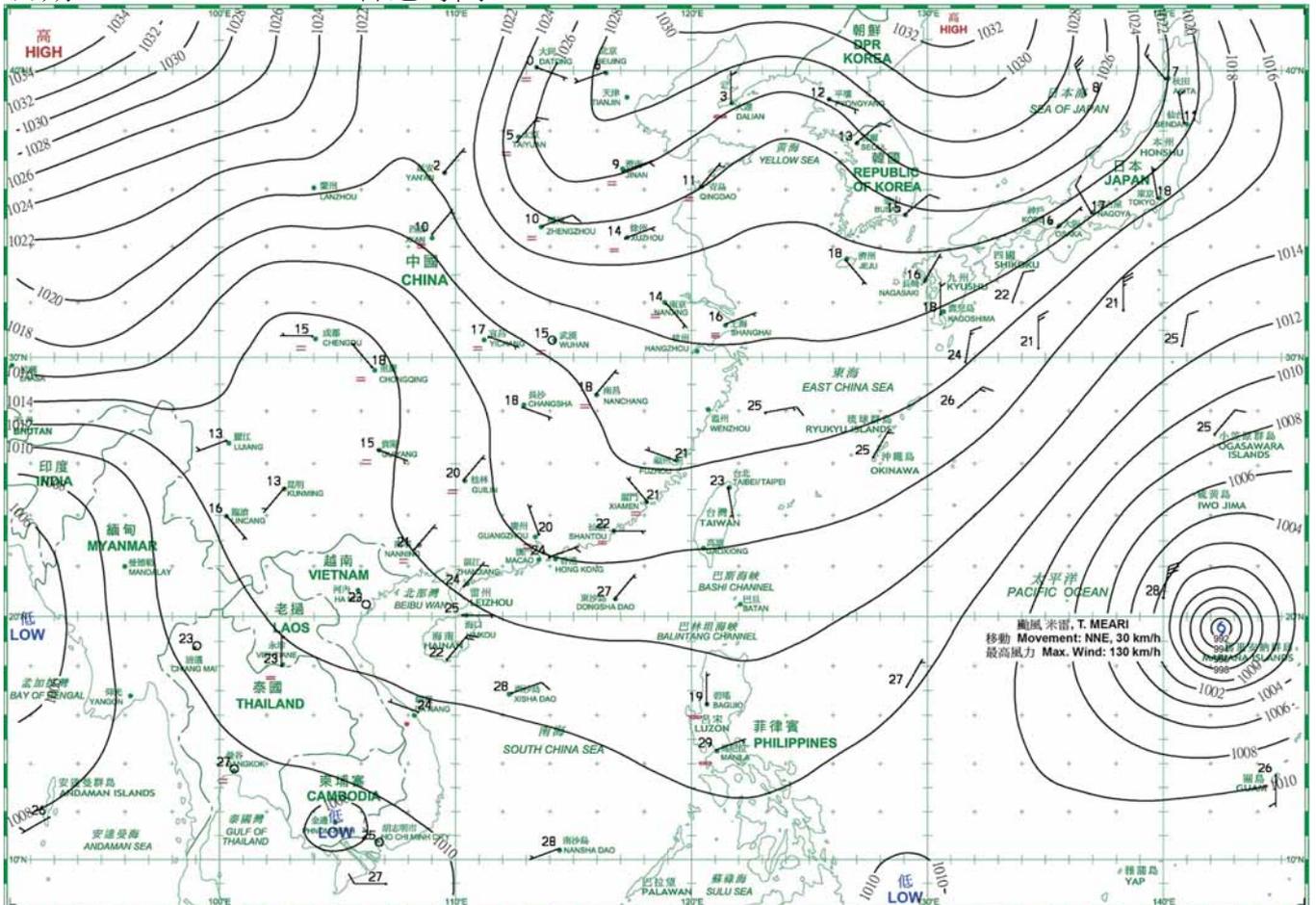
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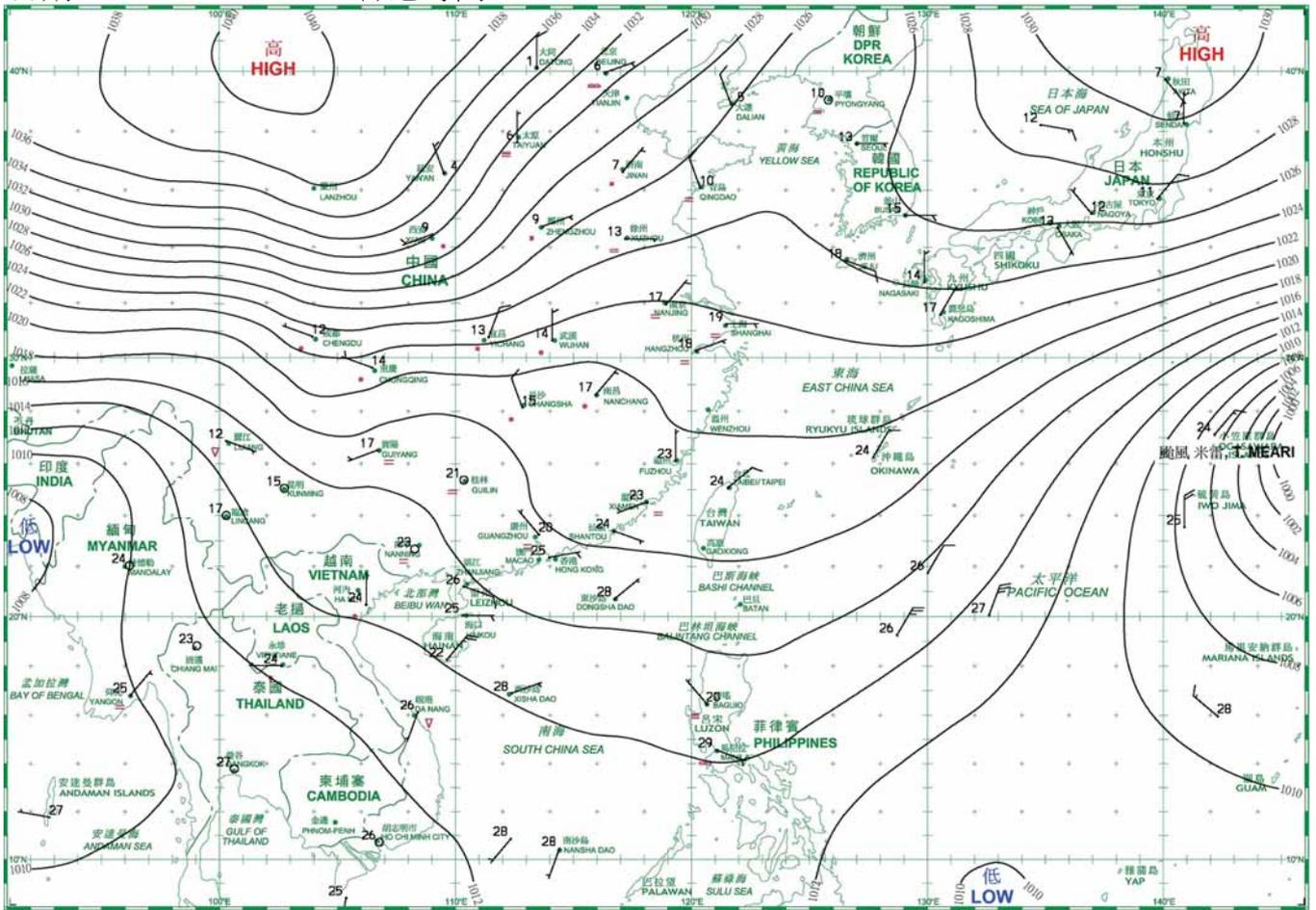
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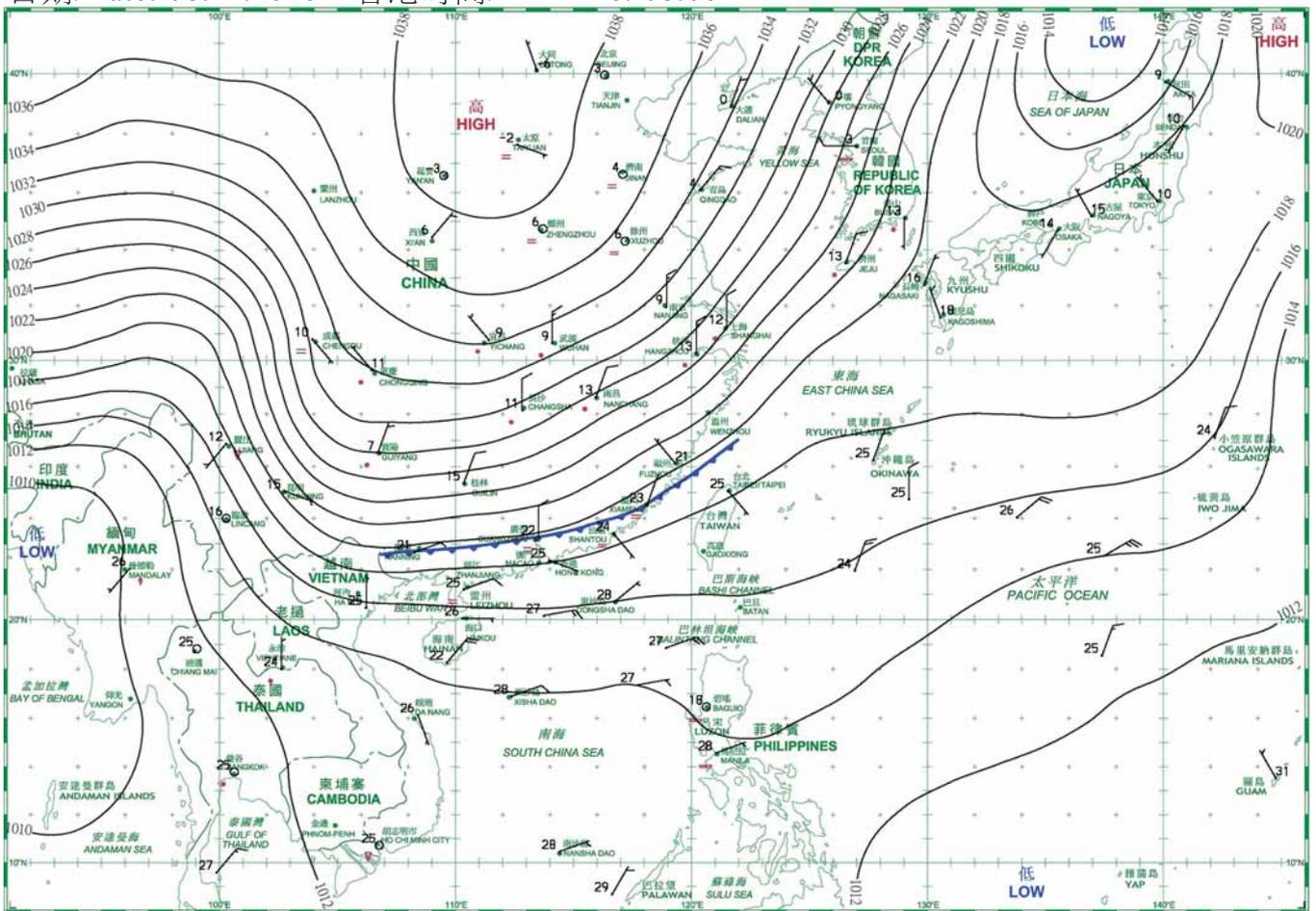
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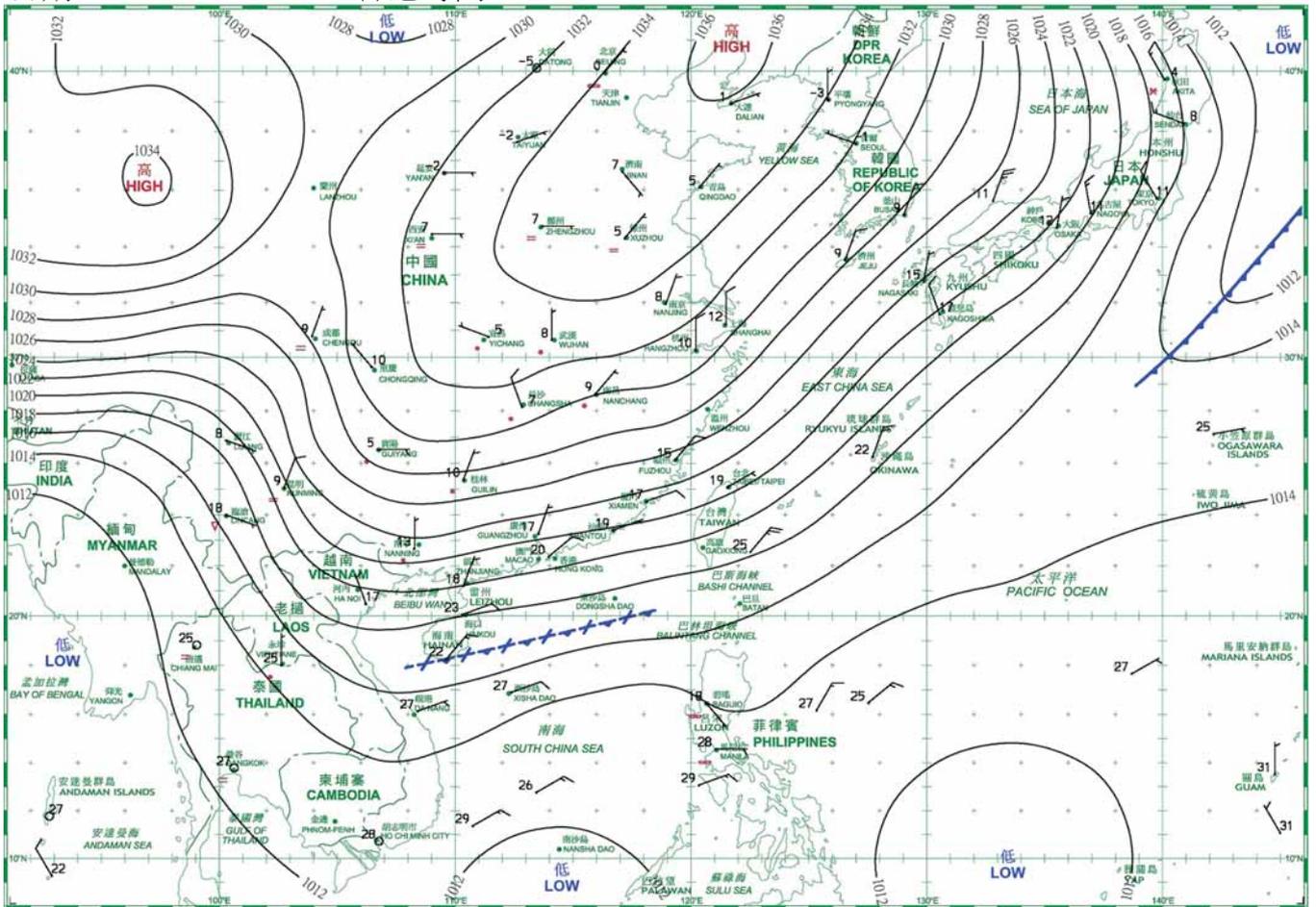
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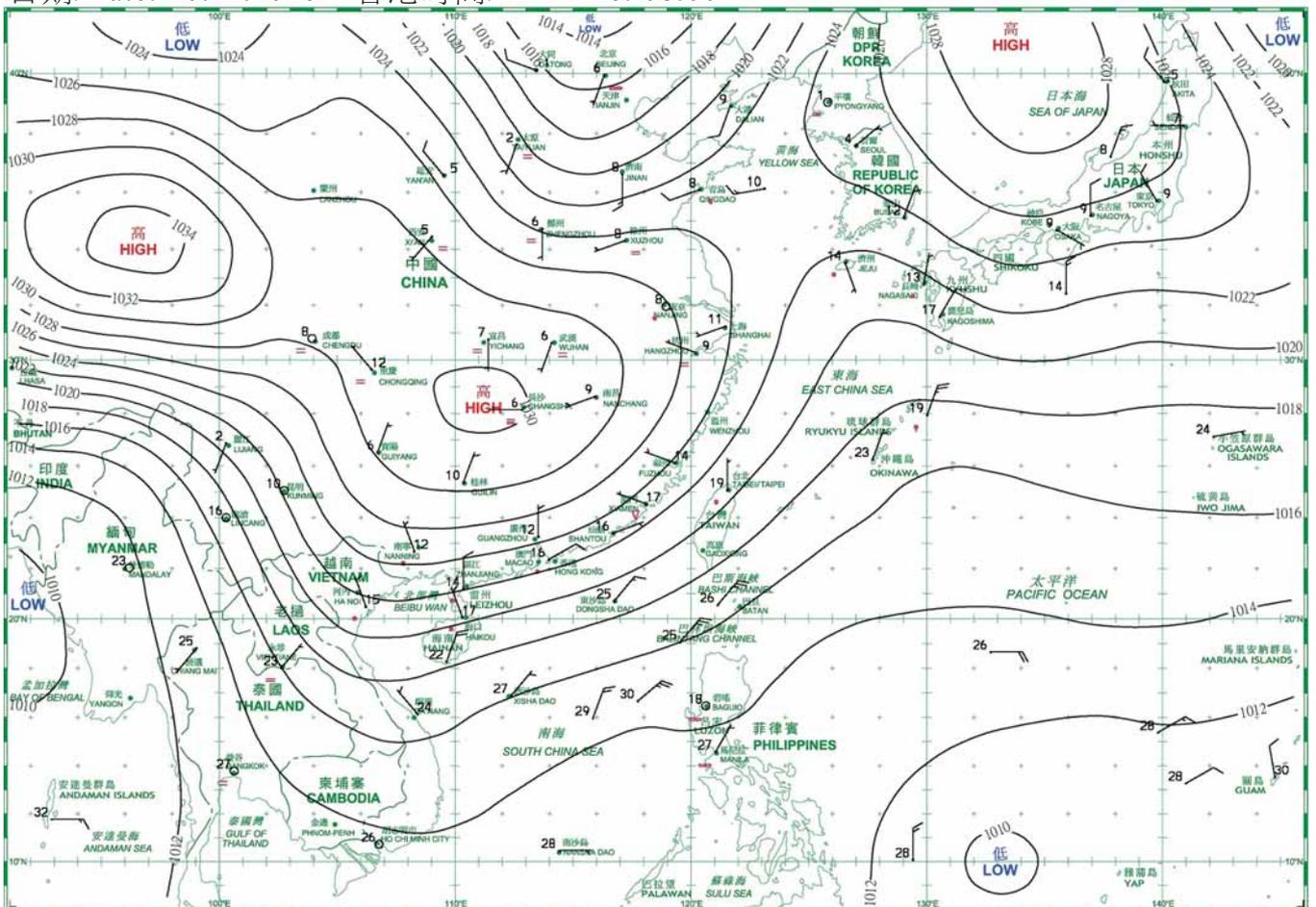
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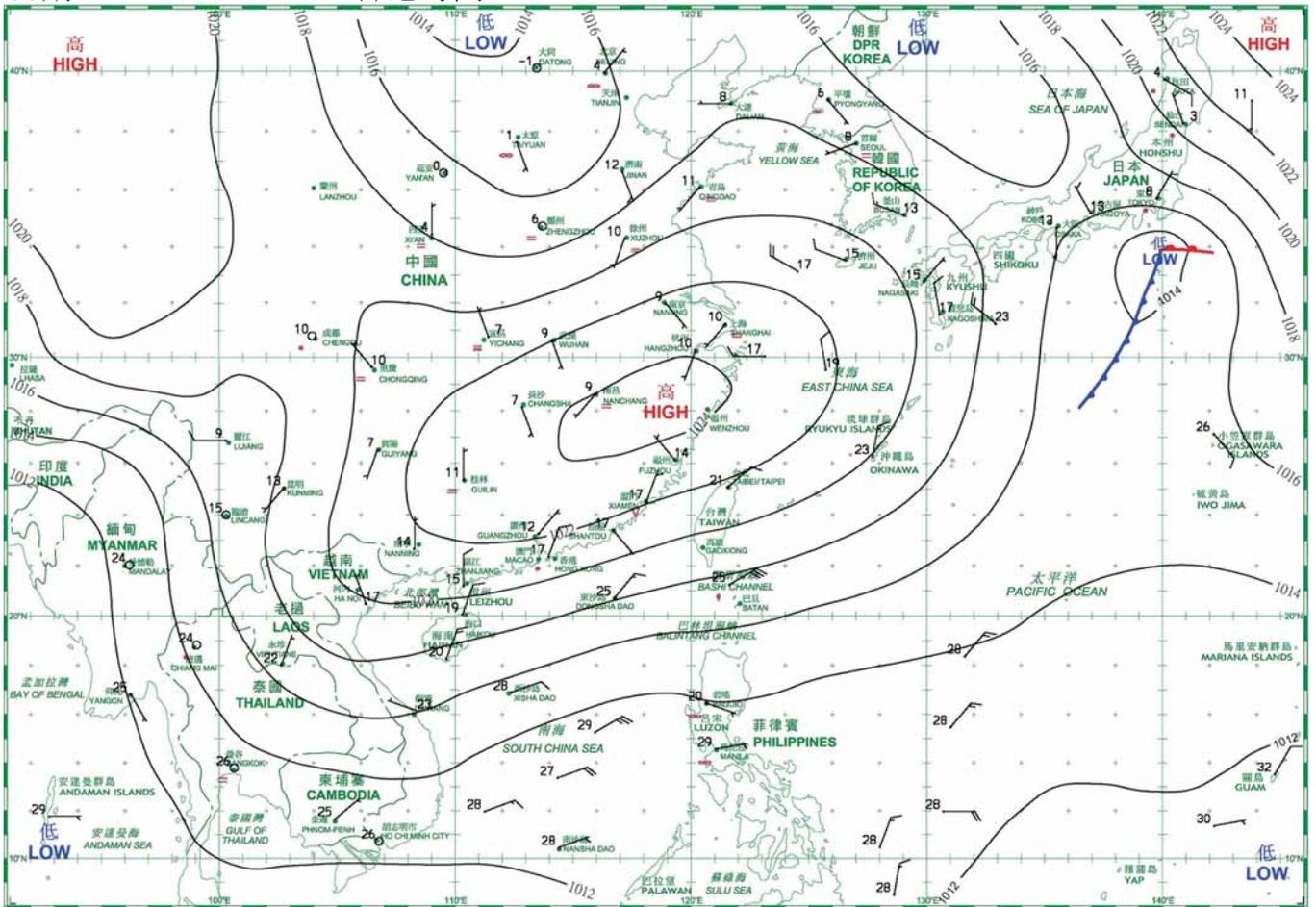
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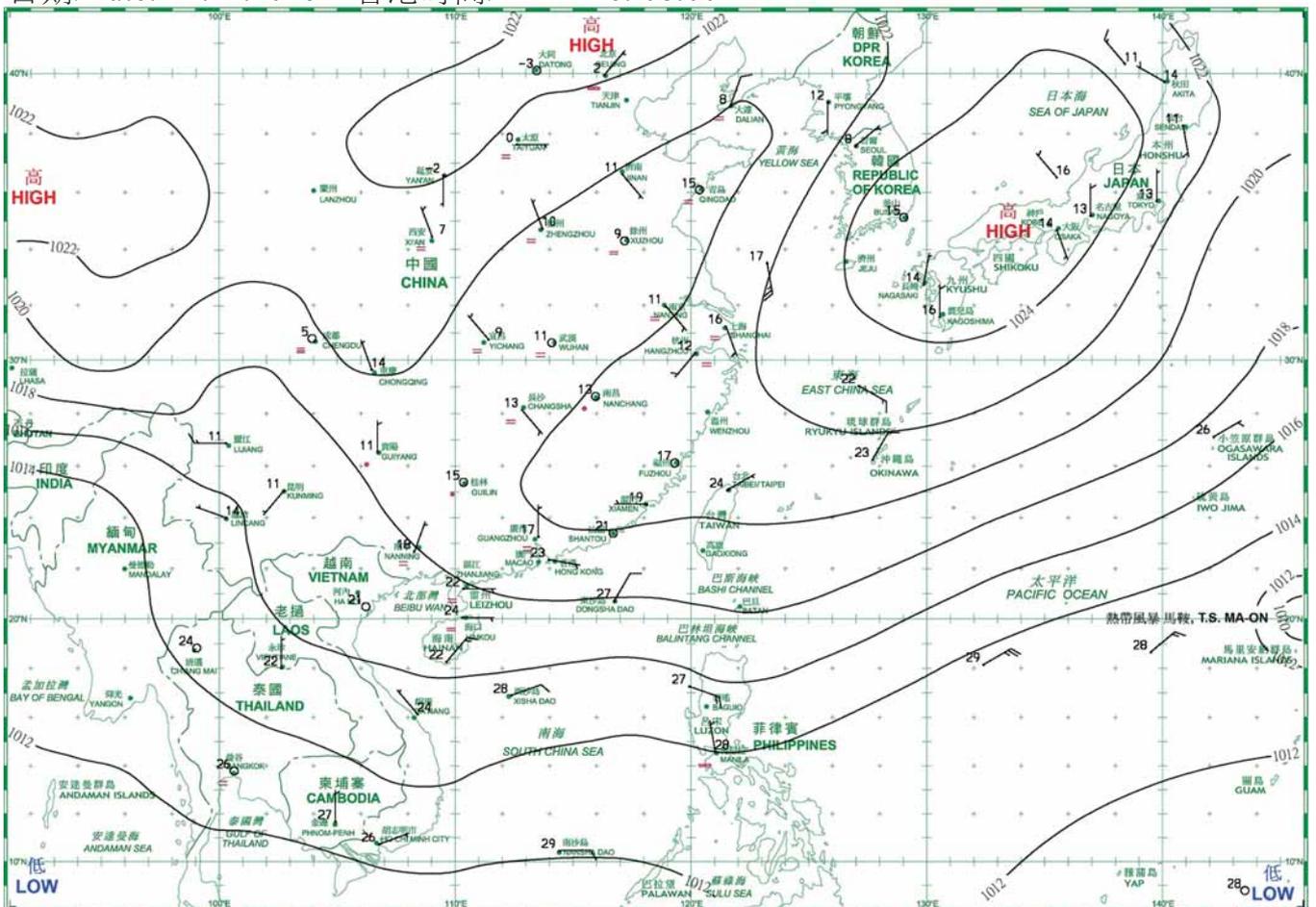
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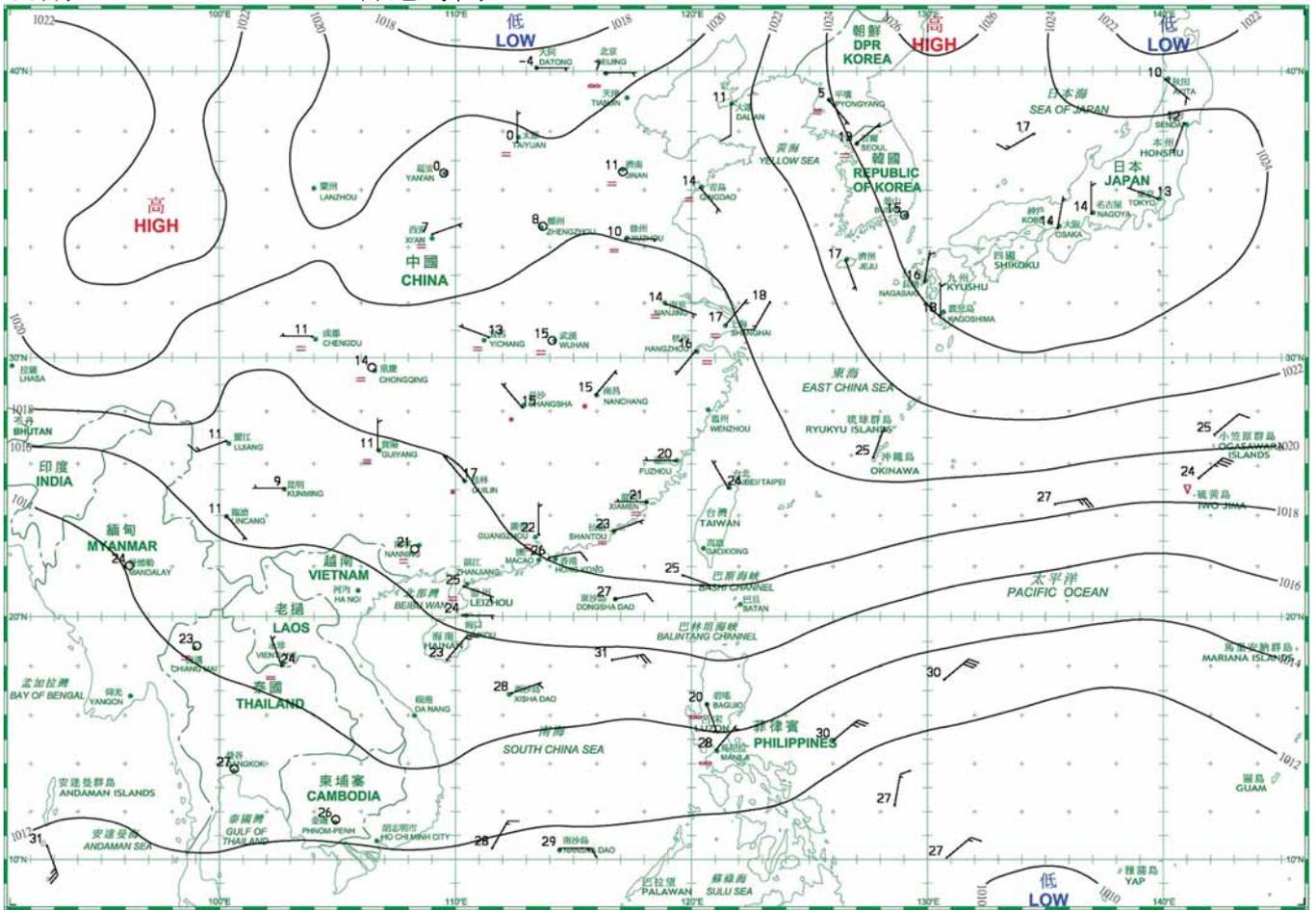
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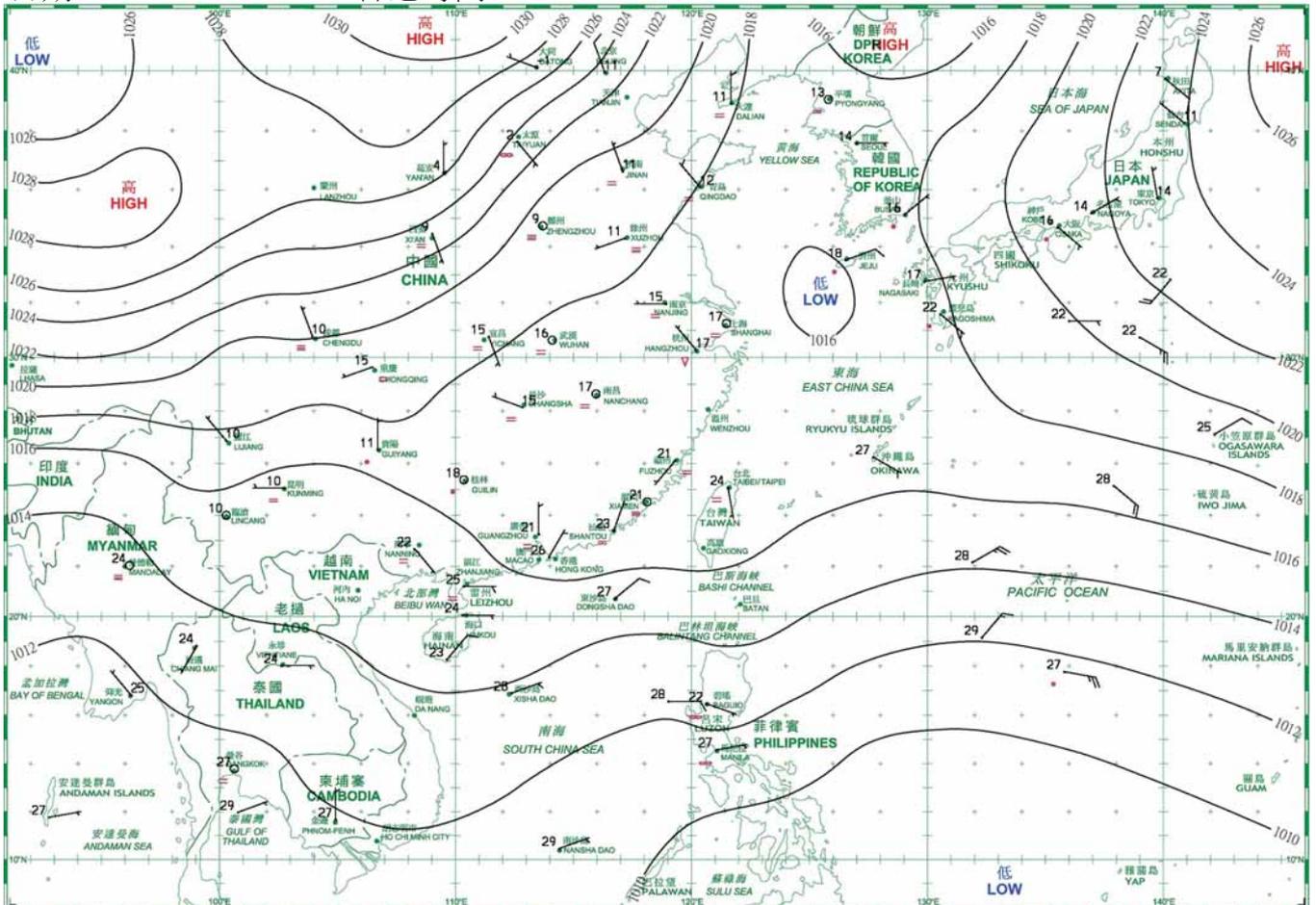
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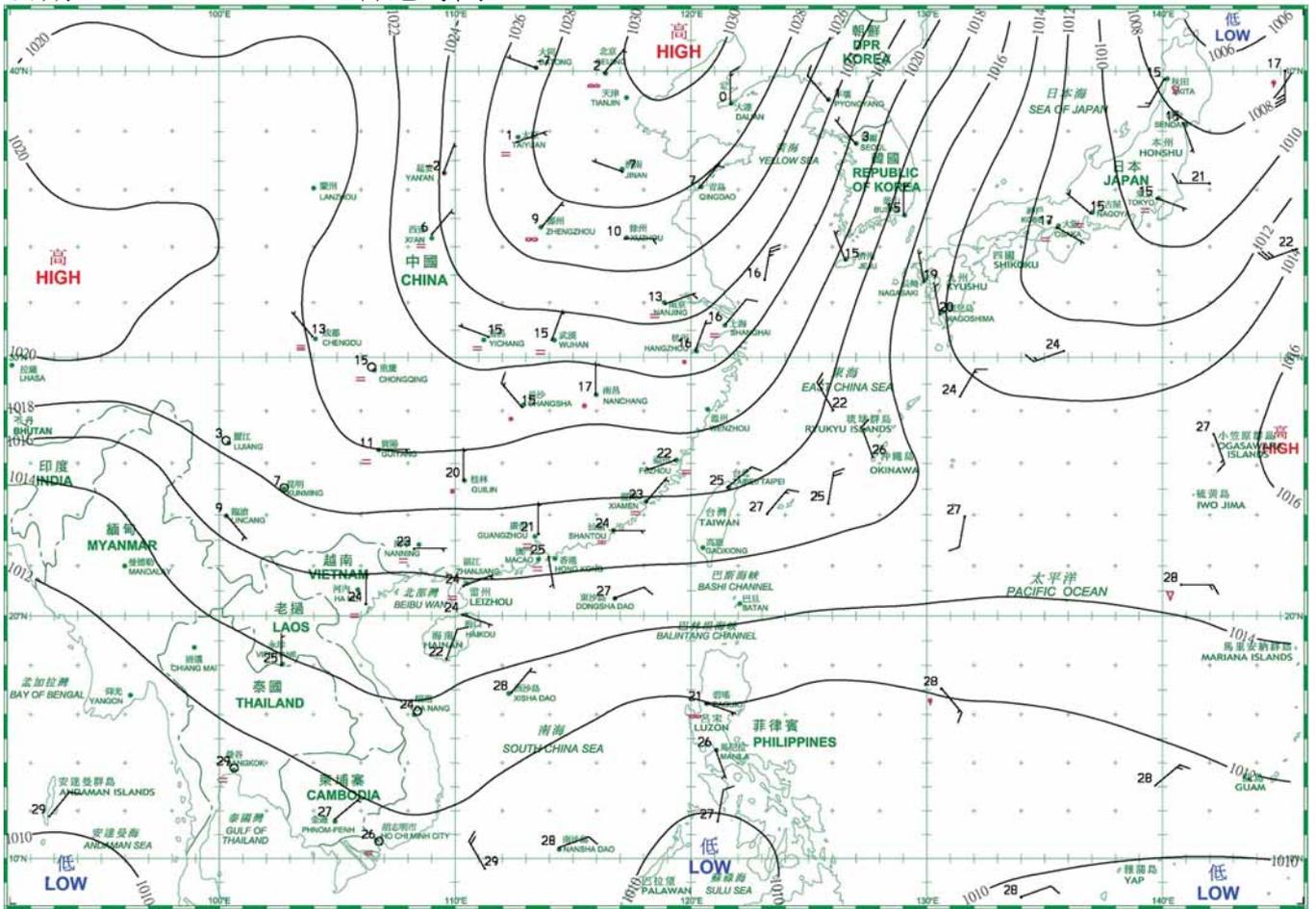
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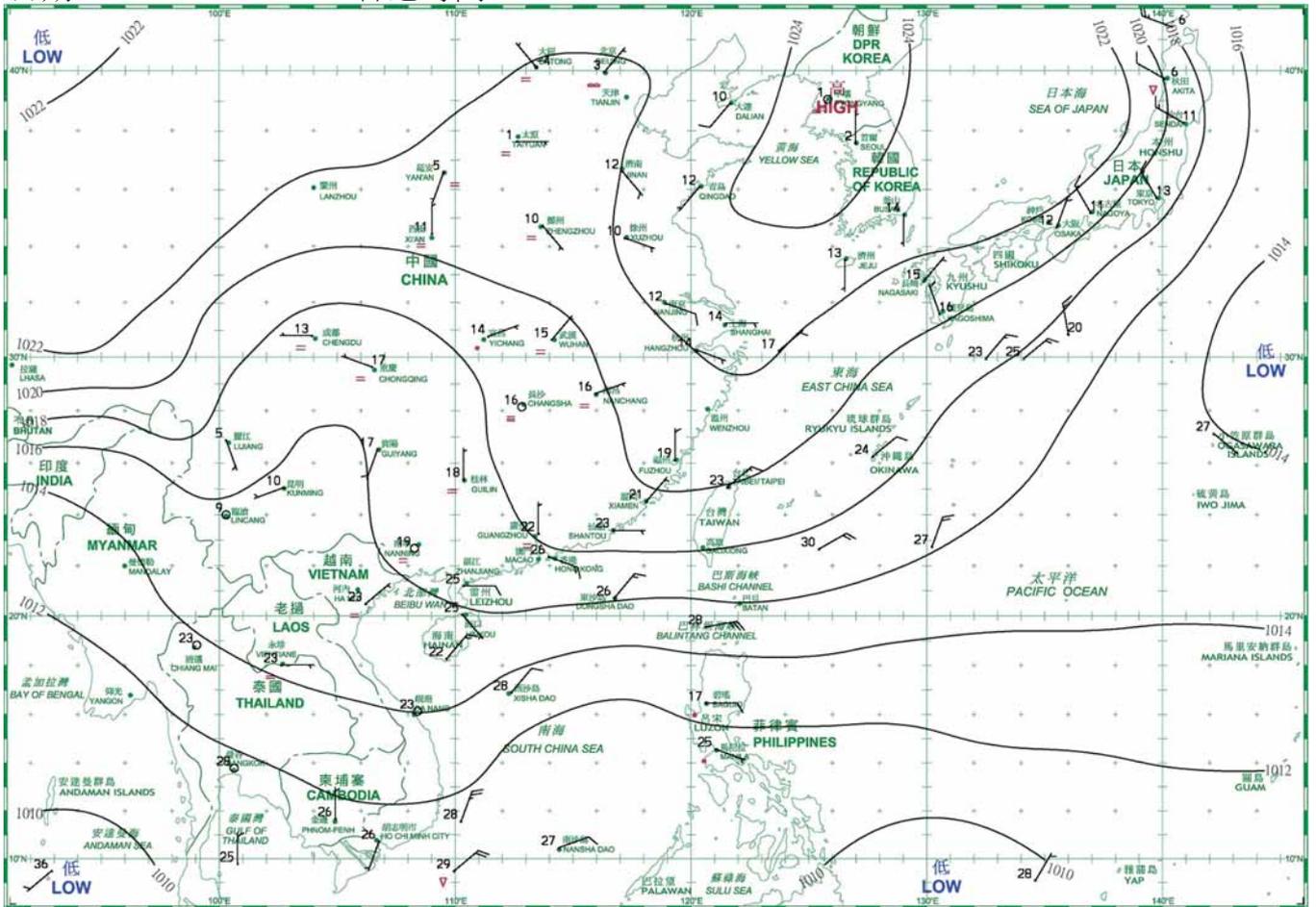
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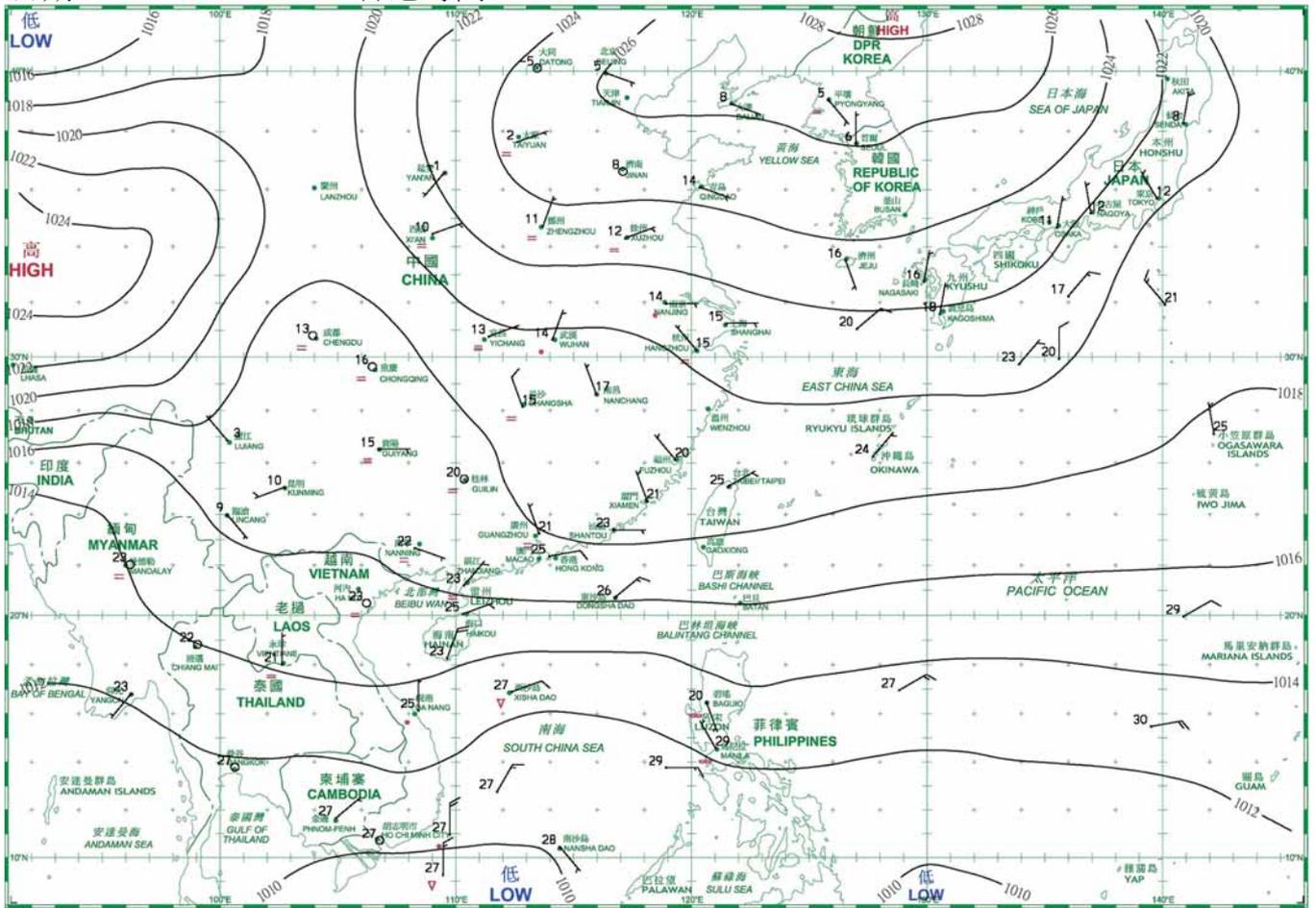
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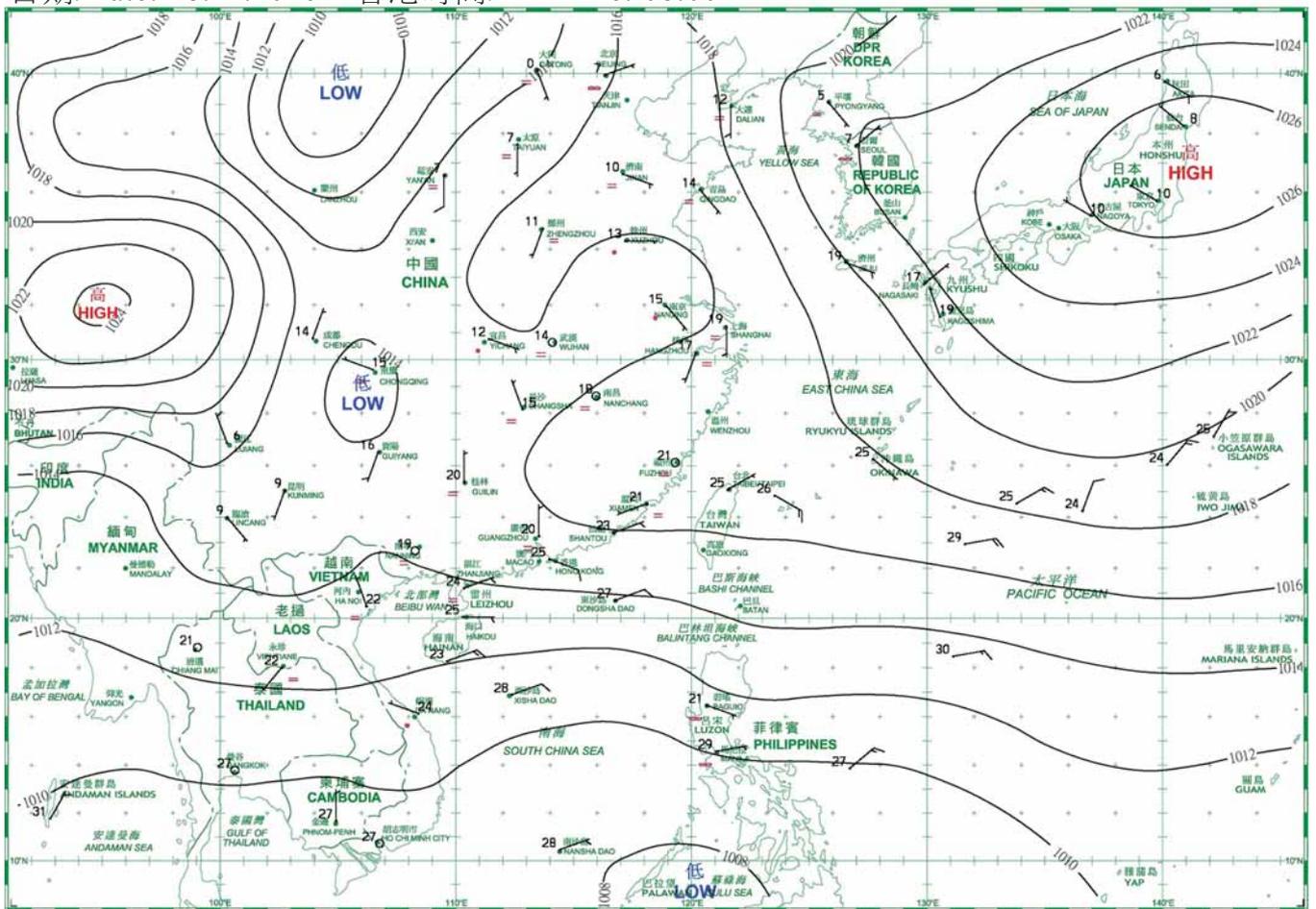
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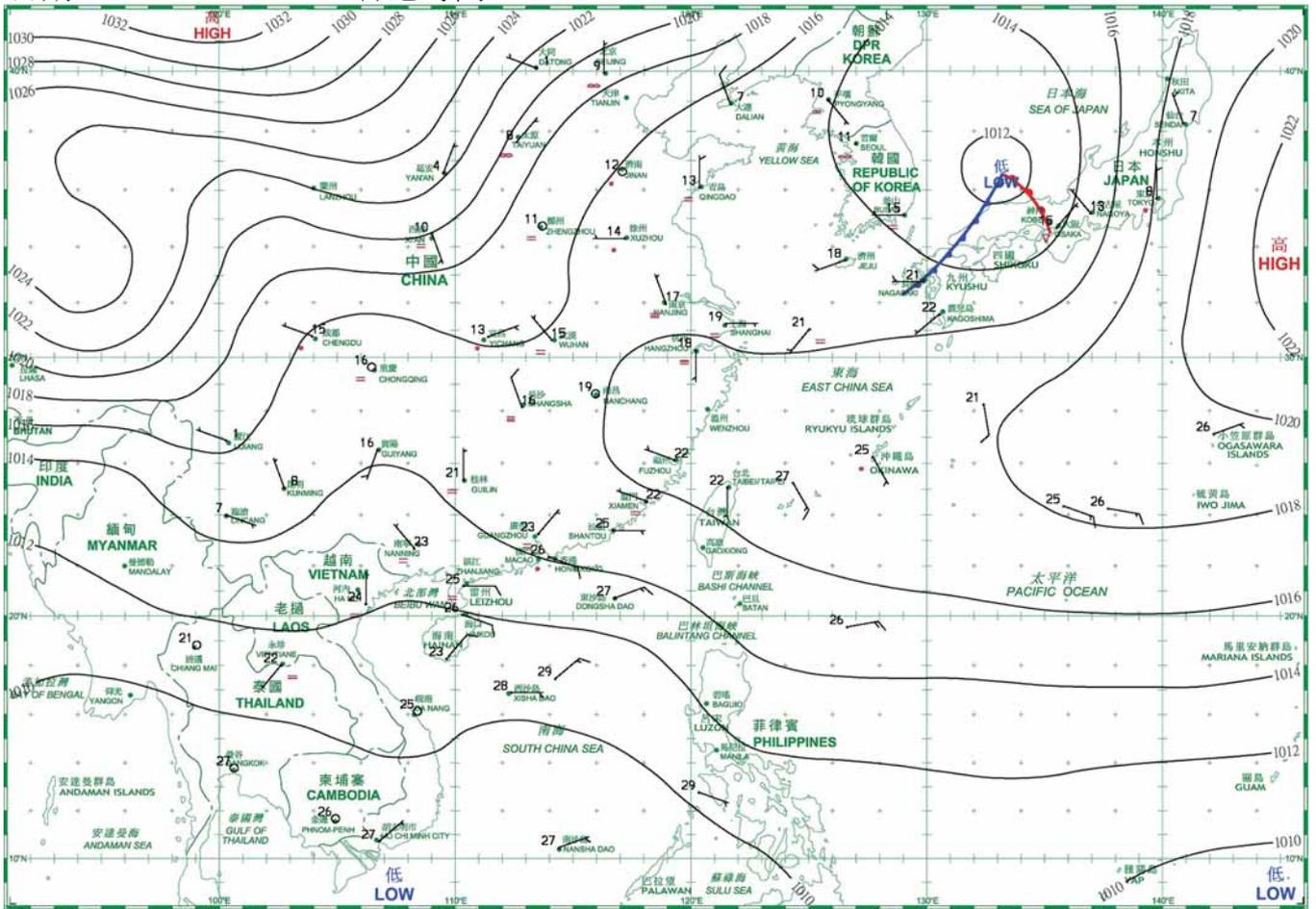
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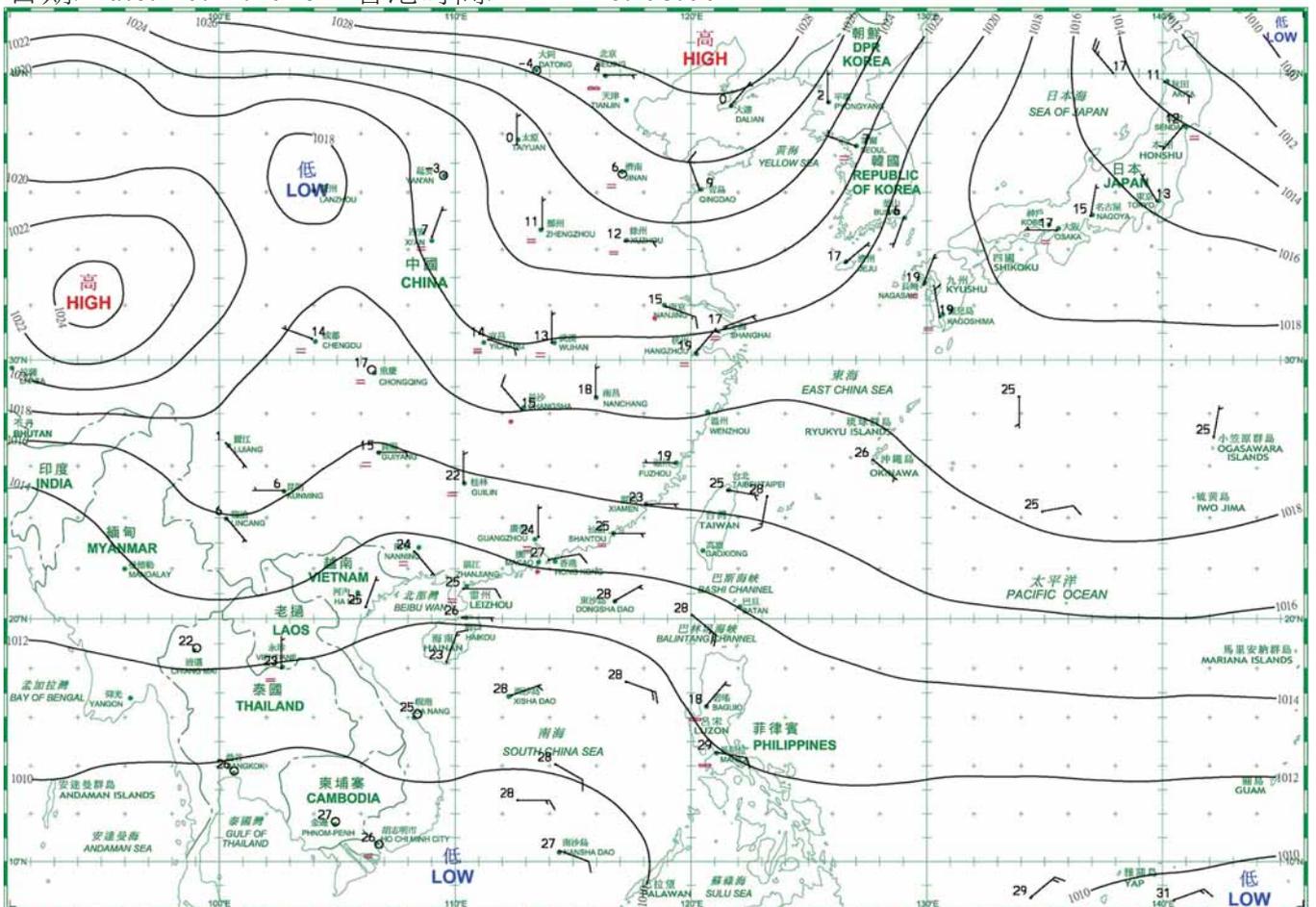
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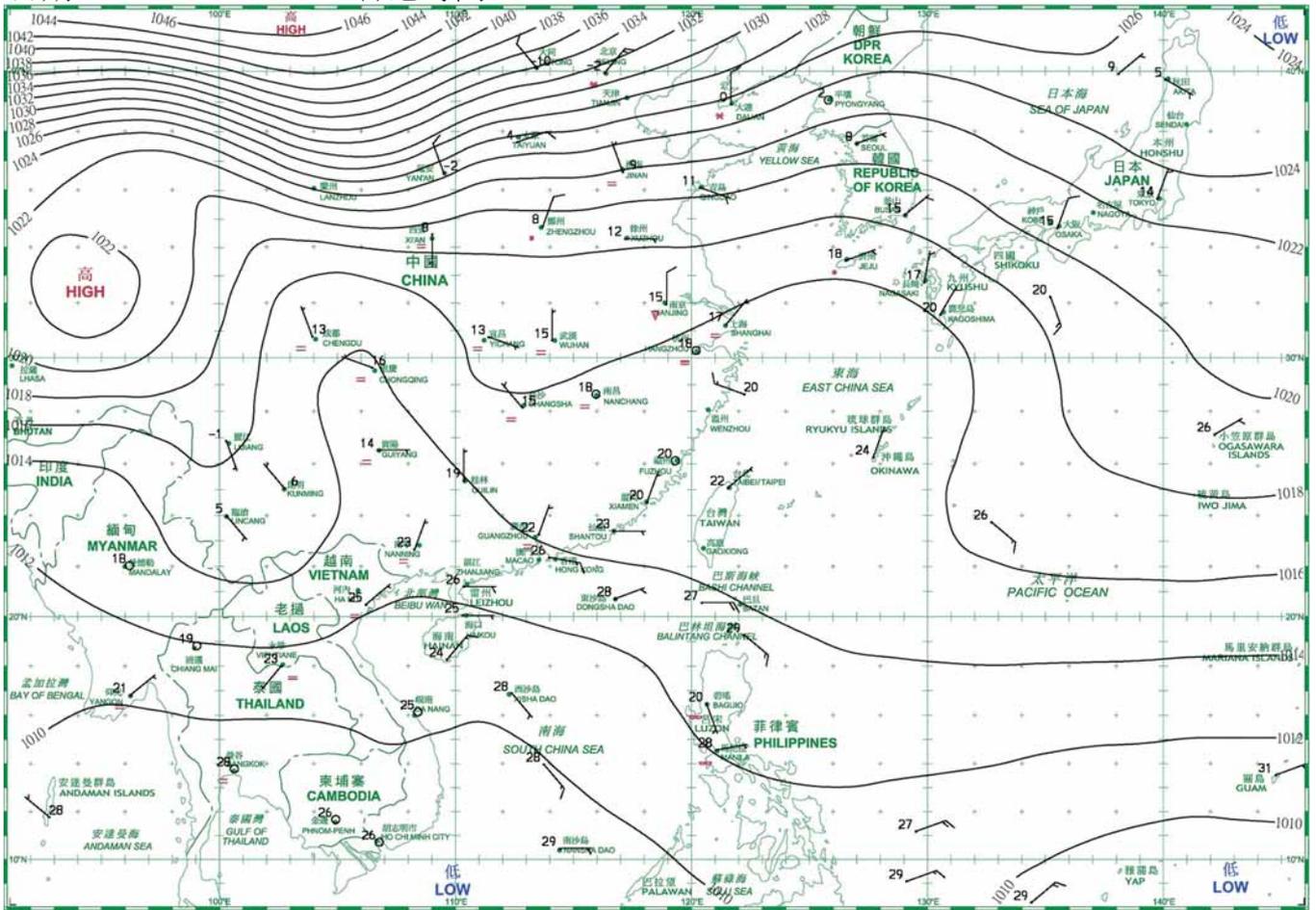
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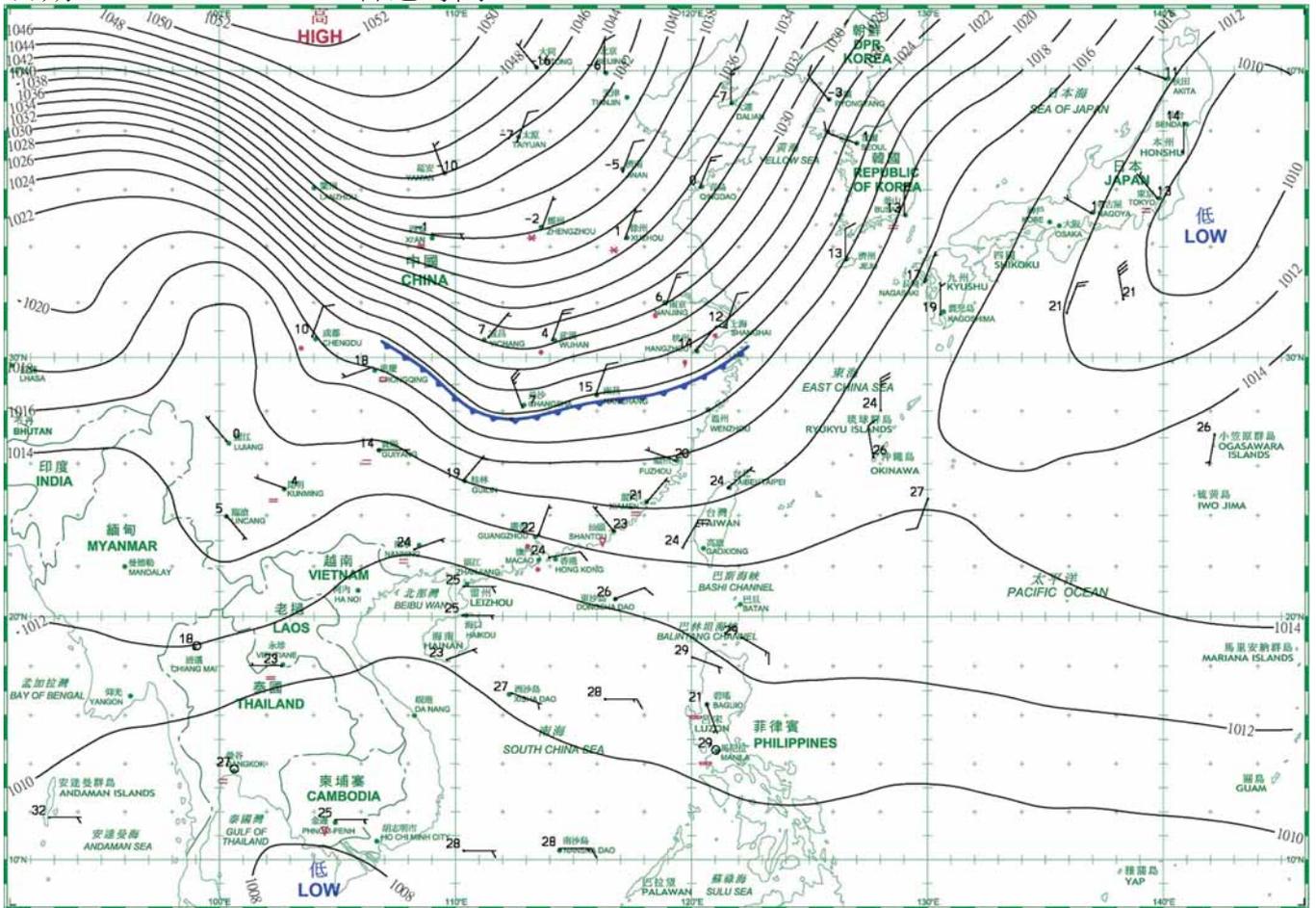
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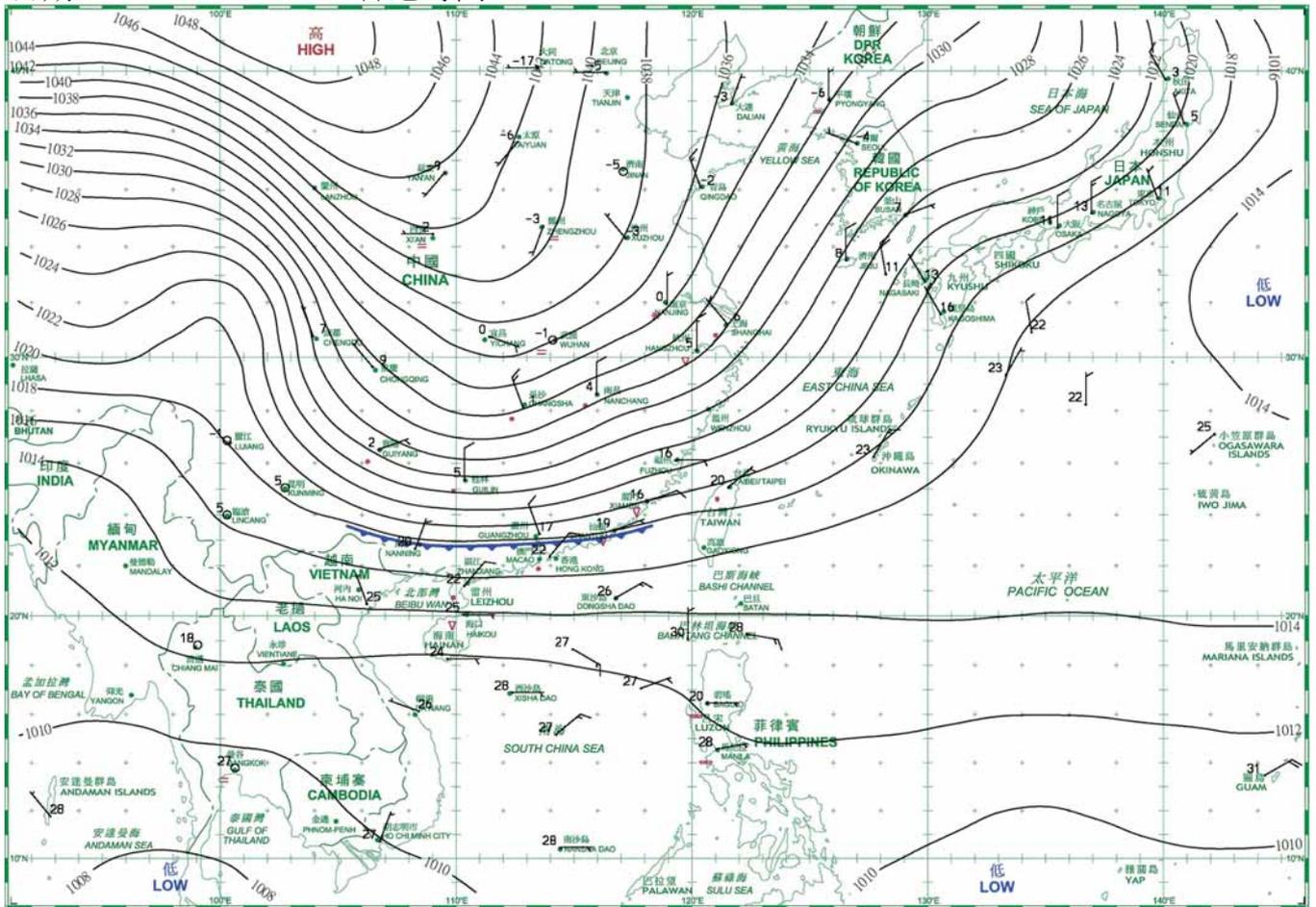
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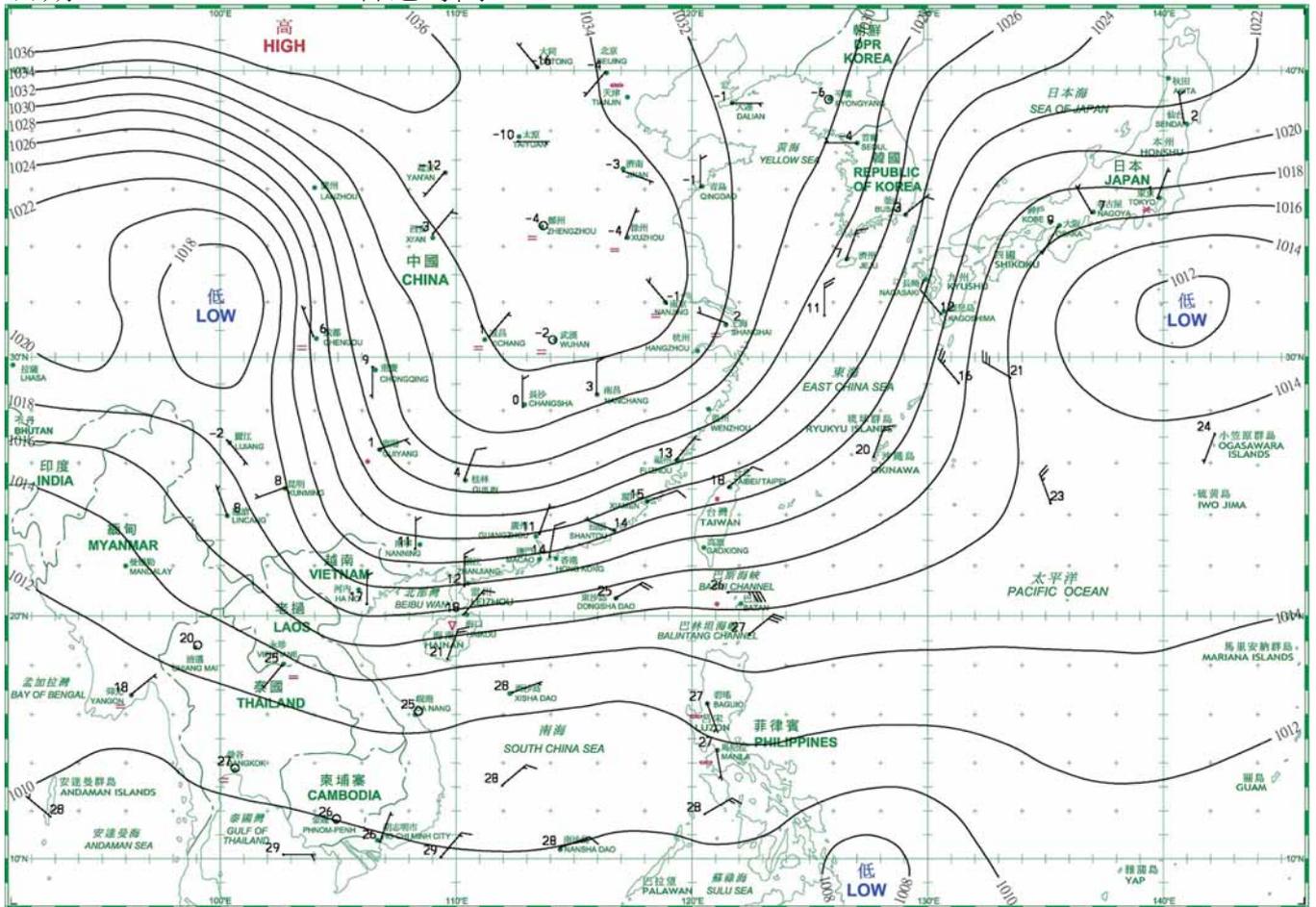
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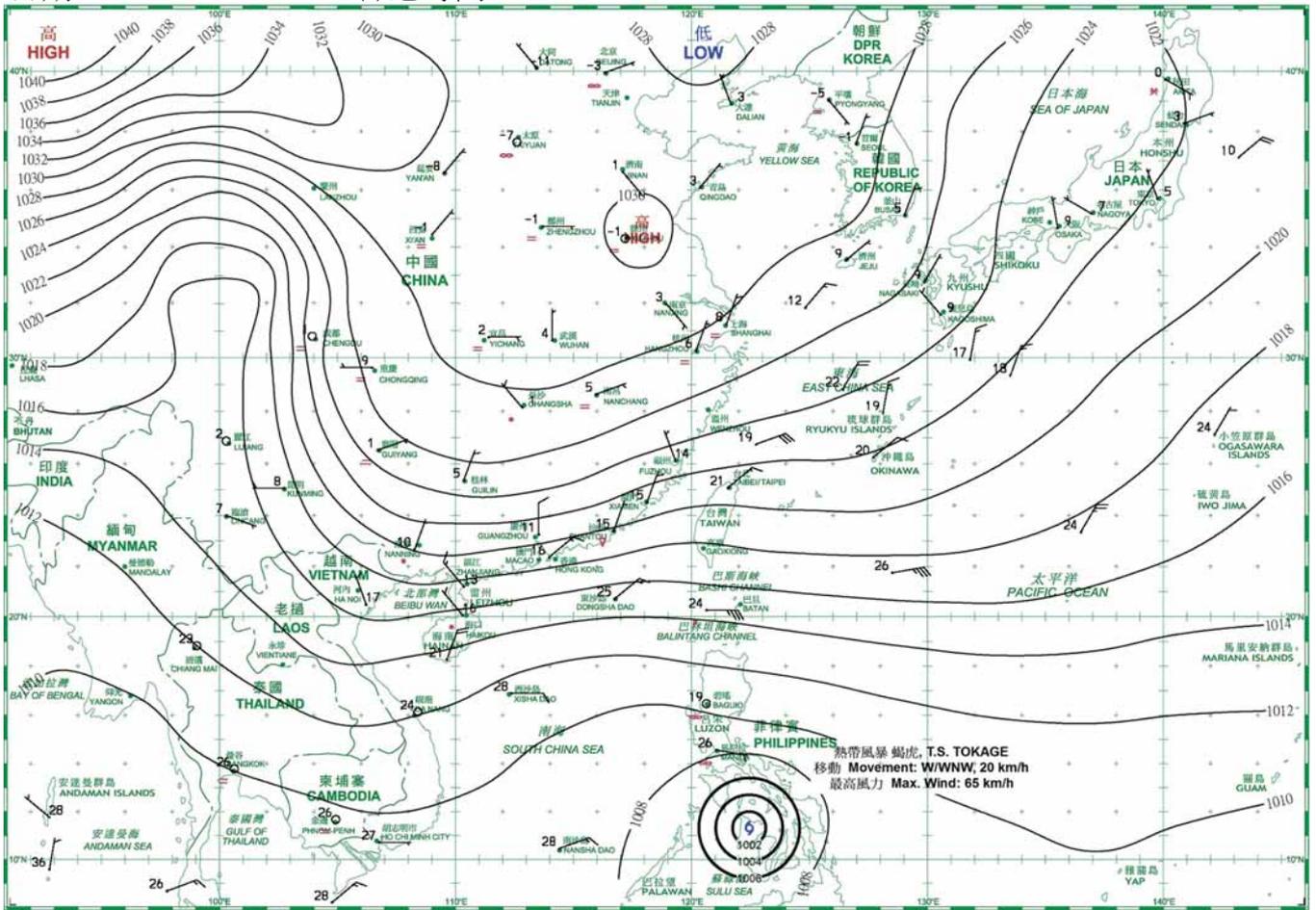
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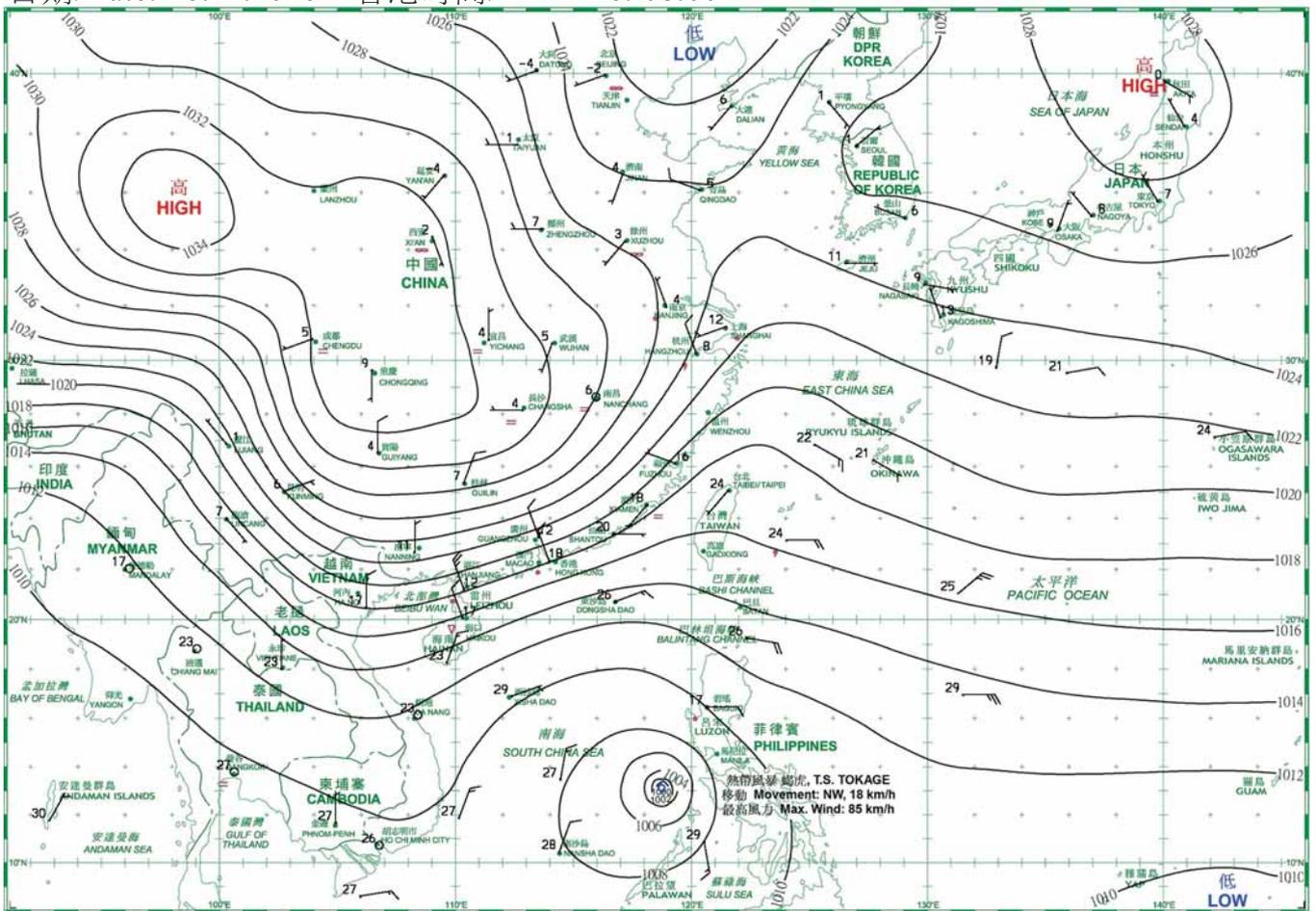
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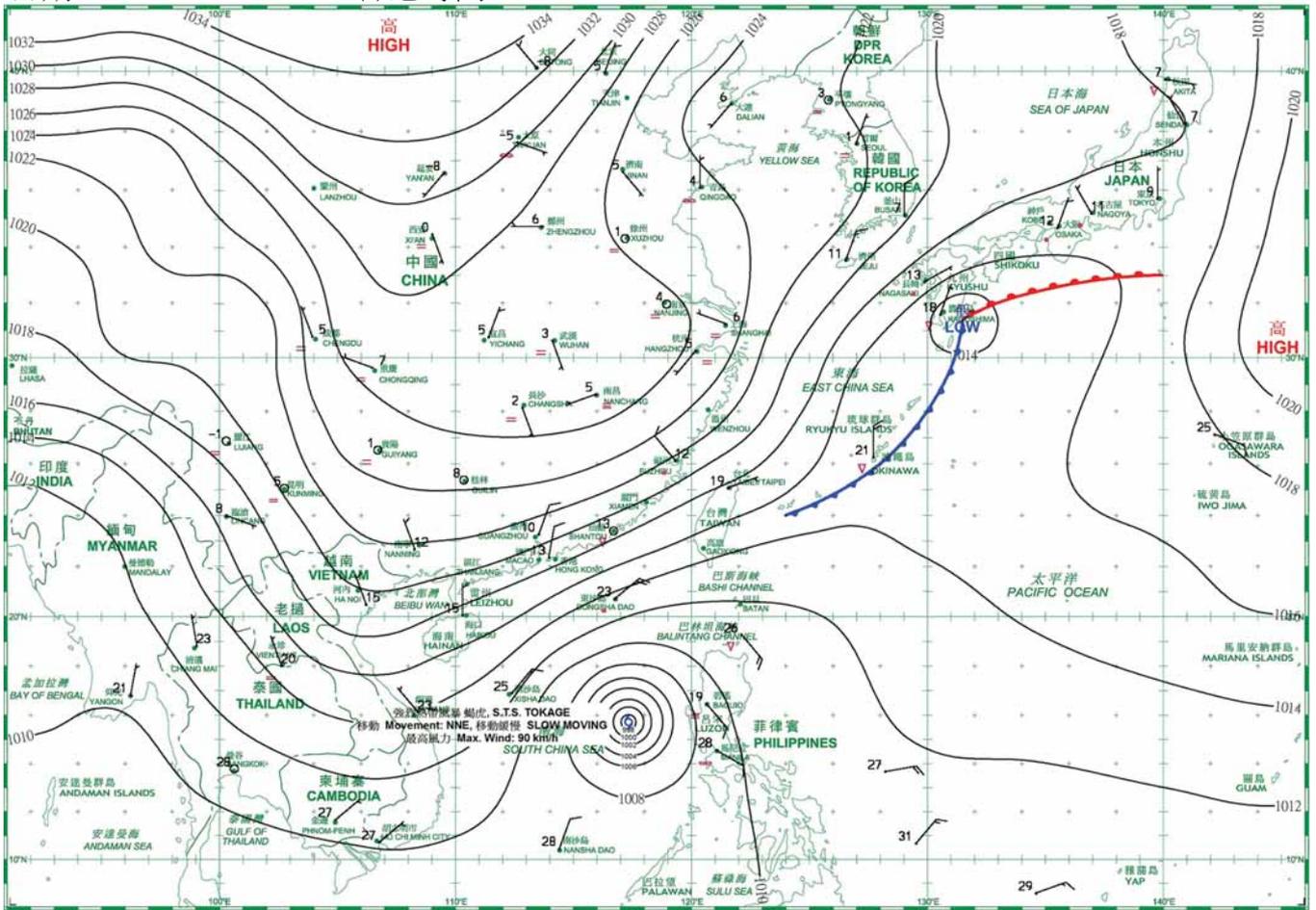
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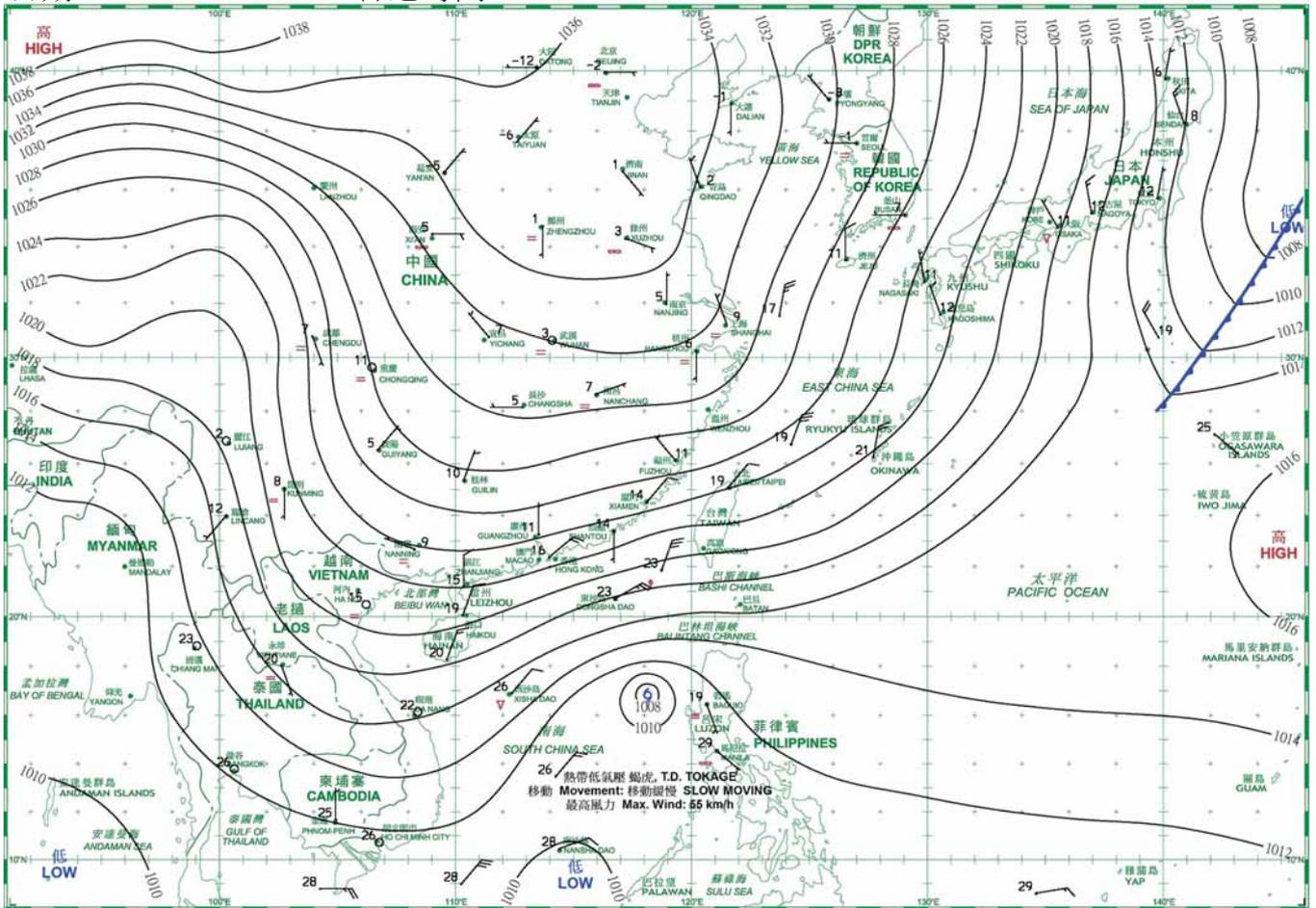
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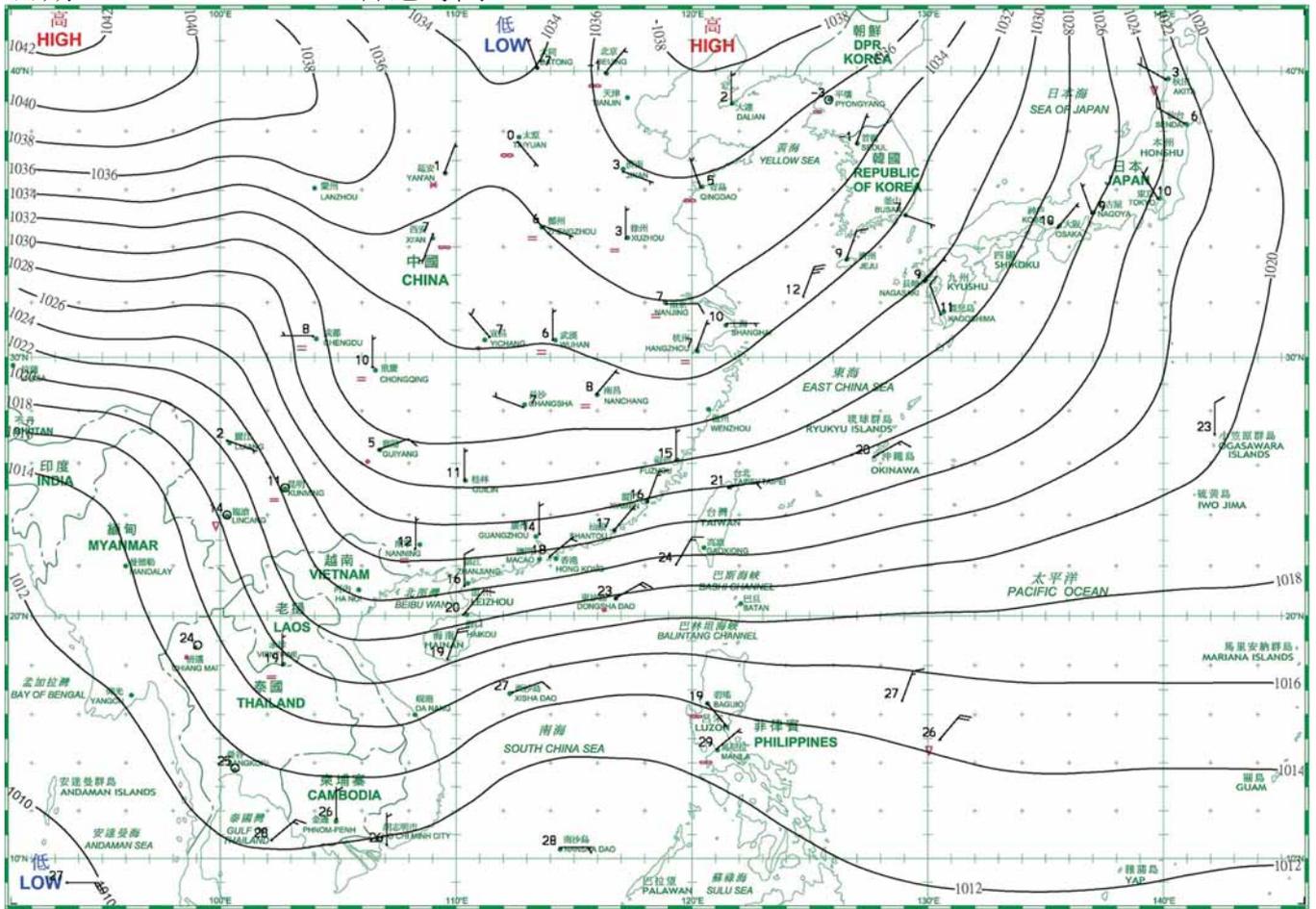
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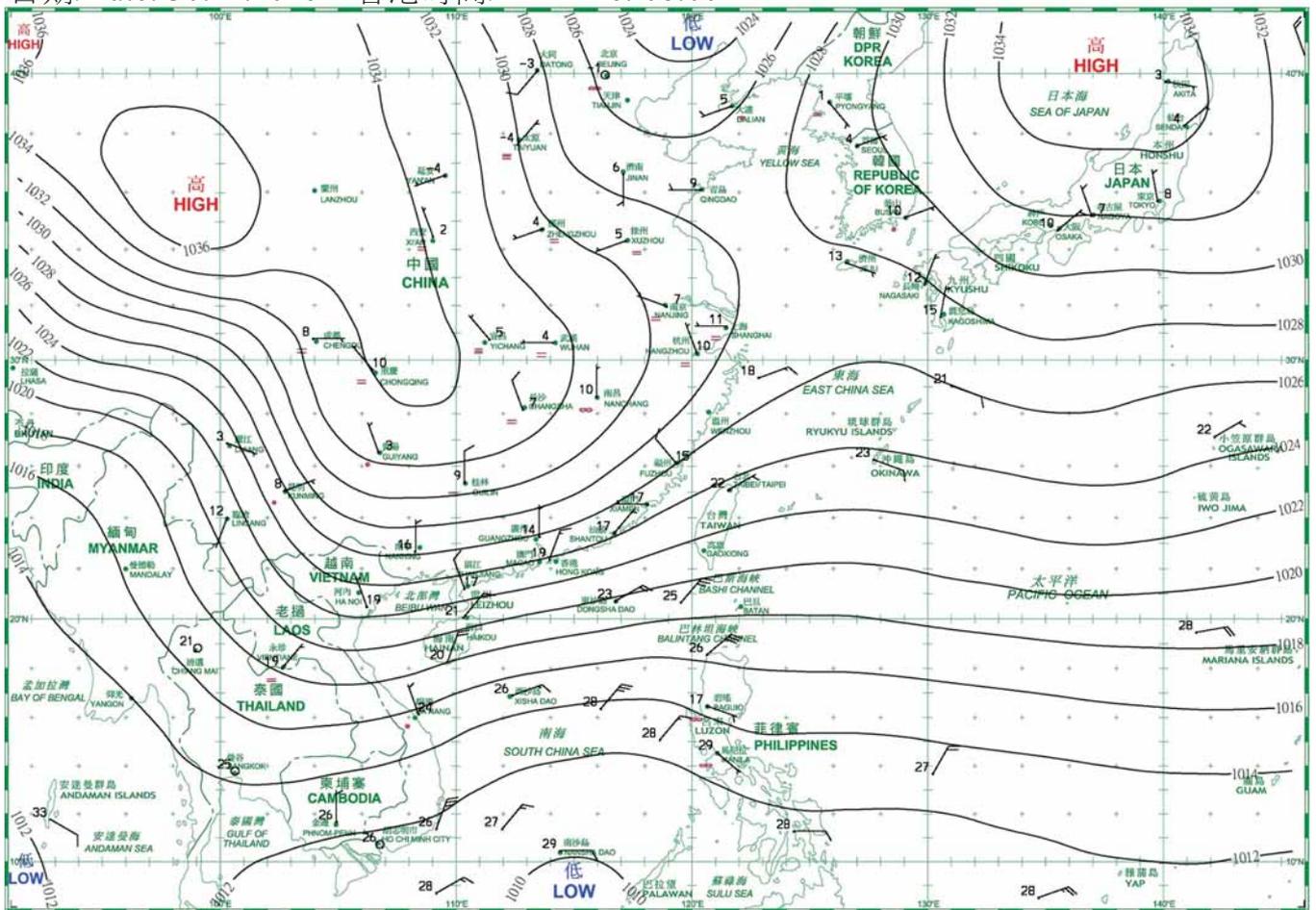
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日期/Date: 29.11.2016 香港時間/HK Time: 08:00



日期/Date: 30.11.2016 香港時間/HK Time: 08:00



4.1.1 二零一六年十一月香港氣象觀測摘錄(一)

4.1.1 Extract of Meteorological Observations in Hong Kong (Part 1), November 2016

日期 Date	平均氣壓 Mean Pressure	氣 溫 Air Temperature			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	總雨量 Total Rainfall
		最高 Maximum	平均 Mean	最低 Minimum				
十一月 November	百帕斯卡 hPa	°C	°C	°C	°C	%	%	毫米 mm
1	1019.7	25.3	23.9	22.5	18.0	69	76	-
2	1020.3	24.8	22.8	21.0	16.6	68	63	-
3	1019.3	24.8	21.8	20.1	15.0	66	54	-
4	1015.2	25.3	22.4	19.6	16.1	68	22	-
5	1013.0	26.9	23.8	21.7	19.6	77	56	-
6	1015.1	26.9	24.2	22.4	20.4	79	44	-
7	1016.6	28.4	25.3	23.4	21.8	81	52	-
8	1017.4	28.1	24.6	22.1	20.9	80	61	4.8
9	1019.5	22.1	20.7	19.0	17.3	81	88	1.3
10	1020.1	19.0	17.7	17.0	14.6	82	88	1.9
11	1018.8	22.3	20.0	17.1	16.5	80	92	Tr
12	1017.9	25.1	23.3	21.6	20.4	84	78	0.2
13	1016.9	26.9	24.7	23.8	21.9	85	65	-
14	1015.4	28.1	25.4	23.3	22.3	83	38	-
15	1015.8	29.2	25.7	23.8	22.2	81	38	Tr
16	1017.2	26.1	24.6	23.9	21.0	81	68	Tr
17	1016.6	27.5	24.8	23.6	20.7	78	59	Tr
18	1014.2	26.8	24.8	23.5	21.6	83	81	Tr
19	1013.1	28.0	25.8	24.0	21.6	78	80	1.4
20	1012.9	26.8	25.6	25.0	21.4	78	87	Tr
21	1012.9	25.3	24.7	24.0	21.9	85	87	0.3
22	1013.3	24.5	22.7	21.6	21.9	95	95	36.5
23	1016.2	21.6	20.5	16.7	19.3	93	92	25.9
24	1018.6	19.8	17.3	15.0	13.0	76	84	Tr
25	1016.4	22.3	20.0	17.4	16.0	78	88	0.1
26	1015.9	21.1	17.6	13.3	15.7	89	88	50.3
27	1016.9	19.9	16.2	12.8	13.1	83	75	8.6
28	1020.9	20.1	18.1	16.1	12.1	68	44	-
29	1022.3	20.5	19.2	17.5	12.6	66	82	-
30	1022.3	22.0	19.7	17.4	12.7	64	31	-
平均/總值 Mean/Total	1017.0	24.5	22.3	20.3	18.3	79	68	131.3
正常* Normal*	1017.7	24.1	21.8	19.8	16.0	71	54	37.6
觀測站 Station	天文台 Hong Kong Observatory							

天文台於十一月五日 14 時 54 分錄得本月最低氣壓 1011.0 百帕斯卡。

The minimum pressure recorded at the Hong Kong Observatory was 1011.0 hectopascals at 1454 HKT on 5 November.

天文台於十一月十五日 12 時 34 分錄得本月最高氣溫 29.2 °C。

The maximum air temperature recorded at the Hong Kong Observatory was 29.2 °C at 1234 HKT on 15 November.

天文台於十一月二十七日 3 時 35 分錄得本月最低氣溫 12.8 °C。

The minimum air temperature recorded at the Hong Kong Observatory was 12.8 °C at 0335 HKT on 27 November.

京士柏於十一月二十六日 17 時 46 分錄得本月最高1分鐘平均降雨率 78 毫米/小時。

The maximum 1-minute mean rainfall rate recorded at King's Park was 78 millimetres per hour at 1746 HKT on 26 November.

* 1981-2010 氣候平均值 (除特別列明外) (<http://www.hko.gov.hk/wxinfo/climat/normal/cnormal11.htm>)

* 1981-2010 Climatological normal, unless otherwise specified (<http://www.hko.gov.hk/wxinfo/climat/normal/enormal11.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 二零一六年十一月香港氣象觀測摘錄(二)

4.1.2 Extract of Meteorological Observations in Hong Kong (Part 2), November 2016

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
十一月 November	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	5.2	10.62	4.7	020	31.2
2	0	7.2	16.40	5.9	020	31.0
3	0	7.5	16.40	5.9	010	28.2
4	0	10.3	18.80	3.0	010	13.3
5	0	7.5	17.66	2.9	100	13.4
6	0	8.0	15.70	3.4	080	19.5
7	0	10.1	17.95	3.3	070	21.6
8	2	3.7	8.79	2.8	070	19.5
9	0	-	2.78	2.3	020	33.0
10	0	-	4.55	0.8	010	28.5
11	6	0.1	7.37	0.2	020	20.6
12	4	4.1	12.35	4.0	070	27.4
13	0	3.5	10.69	1.0	070	19.3
14	0	9.0	17.07	2.7	060	9.1
15	8	9.7	17.09	4.4	080	13.8
16	0	3.8	8.96	3.0	080	33.1
17	2	9.0	16.94	4.1	070	26.7
18	2	1.5	9.52	1.8	070	26.2
19	0	5.4	14.82	5.2	060	24.4
20	0	2.0	8.00	1.6	070	32.6
21	0	0.4	4.37	0.6	080	36.7
22	0	-	2.67	0.5	070	40.3
23	0	-	2.25	1.0	050	42.1
24	0	3.1	10.49	3.3	020	35.5
25	0	2.9	10.26	2.1	050	35.1
26	1	-	3.32	N.A.	360	36.5
27	0	5.6	13.20	3.4	360	27.5
28	0	8.9	16.98	3.7	010	31.9
29	0	1.3	5.27	2.8	020	27.0
30	0	8.5	16.17	4.3	020	25.8
平均/總值 Mean/Total	25	138.3	11.25	84.7&	070	27.0
正常* Normal*	135.8 §	180.1	12.28	99.5	080	27.0
觀測站 Station	香港國際機場 Hong Kong International Airport	京士柏 King's Park	橫瀾島^ Waglan Island^			

橫瀾島於十一月二十六日 19 時 26 分錄得本月最高陣風 67 公里/小時，風向 010 度。

The maximum gust peak speed recorded at Waglan Island was 67 kilometres per hour from 010 degrees at 1926 HKT on 26 November.

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.

* 1981-2010 氣候平均值 (除特別列明外) (<http://www.hko.gov.hk/wxinfo/climat/normal/cnormal11.htm>)

* 1981-2010 Climatological normal, unless otherwise specified (<http://www.hko.gov.hk/wxinfo/climat/normal/enormal11.htm>)

§ 1997-2015 平均值

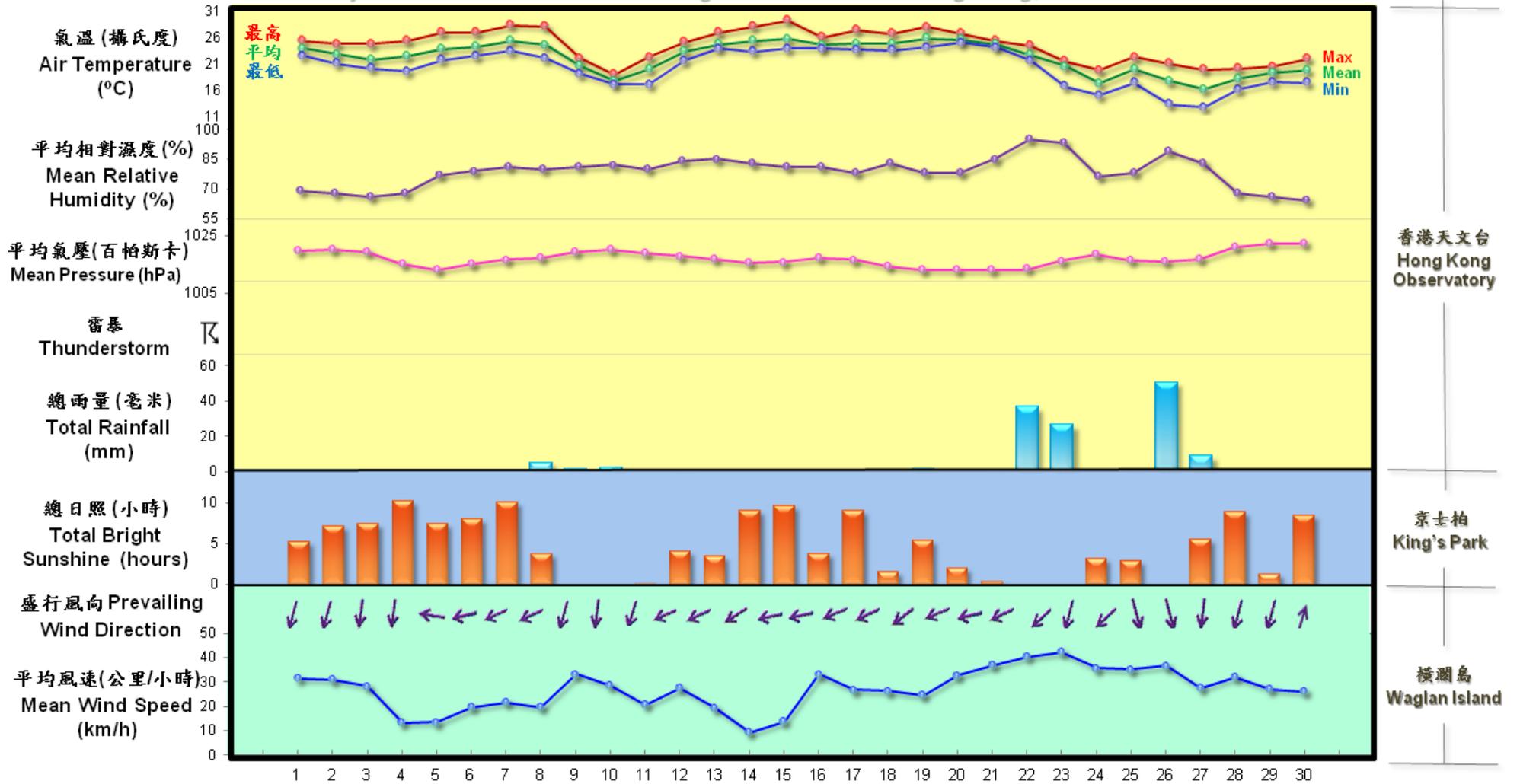
§ 1997-2015 Mean value

& 數據不完整

& Data incomplete

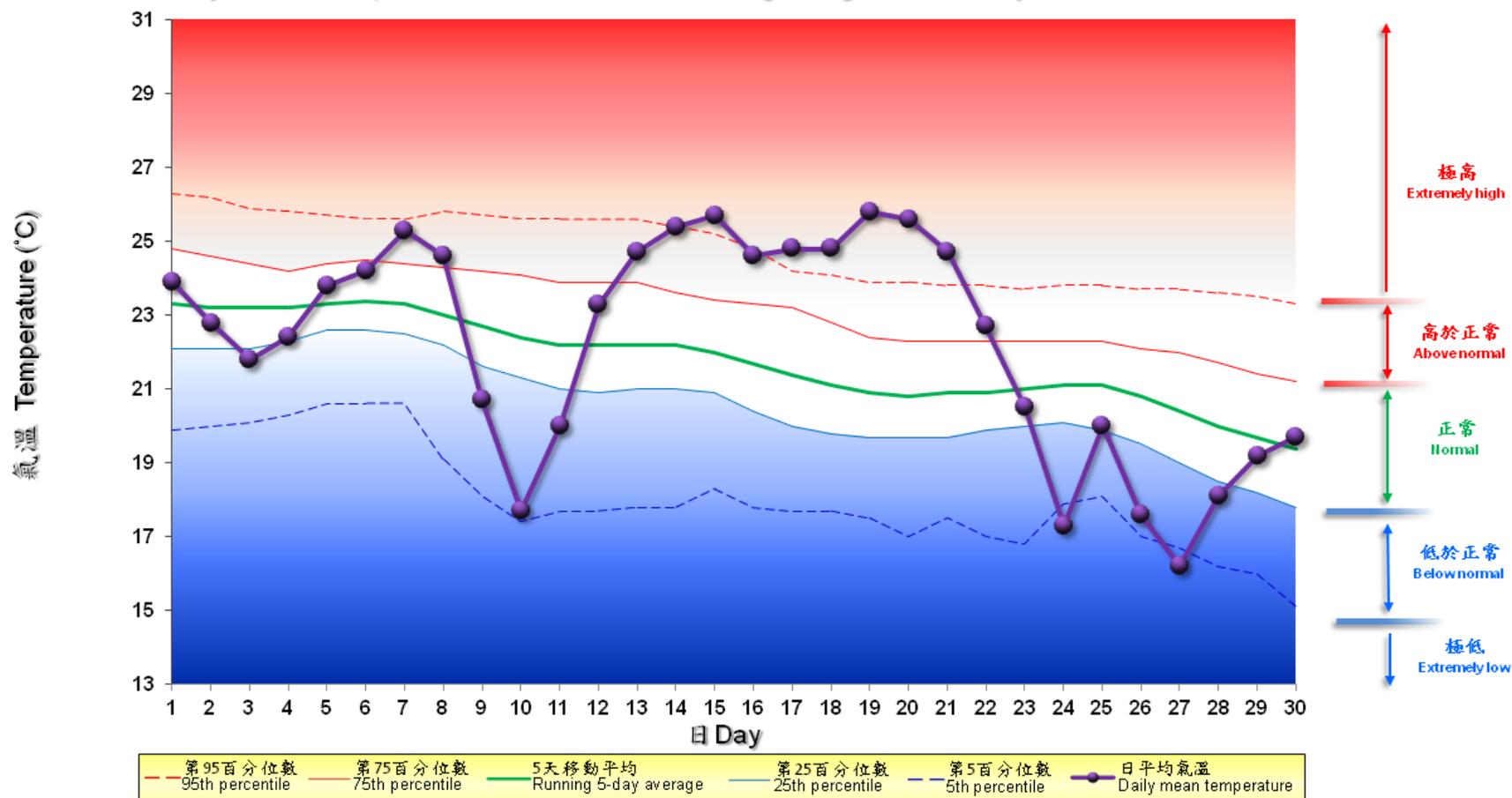
4.2 2016年11月部分香港氣象要素的每日記錄

4.2 Daily Values of Selected Meteorological Elements for Hong Kong, November 2016



4.3 2016年11月香港天文台錄得的日平均氣溫

4.3 Daily Mean Temperature recorded at the Hong Kong Observatory for November 2016



備註:

極高: 高於第 95 百分位數
 高於正常: 介乎第 75 和第 95 百分位數之間
 正常: 介乎第 25 和第 75 百分位數之間
 低於正常: 介乎第 5 和第 25 百分位數之間
 極低: 低於第 5 百分位數
 百分位數值及 5 天移動平均值是基於 1981 至 2010 年的數據計算所得

Remarks:

Extremely high: above 95th percentile
 Above normal: between 75th and 95th percentile
 Normal: between 25th and 75th percentile
 Below normal: between 5th and 25th percentile
 Extremely low: below 5th percentile
 Percentile and 5-day running average values are computed based on the data from 1981 to 2010