West Kowloon Cultural District Authority

Project: West Kowloon Cultural District

Operational Odour Monitoring Report
Rev 1

Approved by

Calvin Lui

25th March 2024

Environmental Consultant

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

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This Operational Odour Monitoring Report (Rev 1) has been reviewed and certified by the Environmental Team Leader (ETL) and verified by the Independent Environmental Checker (IEC).

Certified by:

CK WU
Environmental Team Leader (ETL)
West Kowloon Cultural District Authority

Date 26 March 2024

Verified by:

Claudine LEE
Independent Environmental Checker (IEC)
Meinhardt Infrastructure and Environment Ltd

Date 3 April 2024

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1. BACKGROUND

In accordance with the Environmental Monitoring and Audit (EM&A) Manual for the "West Kowloon Cultural District" (the Project), operational odour monitoring is require under the air quality aspect (*Section 2.2 in the EM&A Manual*).

While the odour emission from the nearby New Yau Ma Tei Typhoon Shelter (NYMTTS) is not attributable to the WKCD Project, the odour mission would have potential impacts on the proposed developments within WKCD. In view of this, the key objectives of the odour monitoring are:

- to ascertain the effectiveness of the proposed improvement measures for NYMTTS in reducing the odour emissions; and
- to monitor any on-going odour impacts on the proposed developments within WKCD.

1.1. Implementation of Operational Odour Monitoring

According to *EM&A Manual Section 2.2.2*, it is proposed to conduct the odour patrol on a monthly basis during summer season (from July to September) of the following two years as a minimum:

- Year 2016 when some of the WKCD facilities such as the Park (Phases 1A and 1B) and Xiqu Center will be in operation and yet the improvement measures for Cherry Street Box Culvert are yet to be completed; and
- Year 2019 when a significant amount of the WKCD facilities will be in operation and the improvement measures for Cherry Street Box Culvert would be completed.

However, the operational odour monitoring has been postponed due to the following situations:

i) The Park and Xiqu Center were not in operation in 2016;

ii) The Park was not fully opened and the improvement measures for Cherry Street Box Culvert were not completed in 2019;

iii) The majority of the Park areas are fully opened up in early 2020, odour patrols were planned to be conducted during summer season in 2020. However, due to the COVID-19, the odour patrols have been postponed as there are high health risks for odour patrols where face masks would have to be removed to avoid any influence to the sensitivity (the Hong Kong Government has raised the response level of the COVID-19 epidemic to Emergency on 25 January 2020). Wearing face masks are required for the prevention of COVID-19 in 2020 to 2022 (until the Hong Kong Government has lowered the response level from the Emergency to Alert level on 30 May 2023).

The operational odour monitoring conducted in Summer 2023 has fulfilled the 2 criteria in the EM&A Manual, which are i) a significant amount of the WKCD facilities such as Art park, Xiqu Center, M+, Palace Museum are in operation; and ii) the improvement measures for Cherry Street Culvert have been completed.

The above considerations in Section 1.1 were reviewed and verified by ETL and IEC.

2. METHODOLOGY

2.1. Odour Patrol

As stated in the *EM&A Manual Section 2.2.2*, odour patrol should be conducted by independent trained personnel / competent persons (at least 2 odour patrol members) patrolling and sniffing along an odour patrol route surrounding the watercourse boundary of NYMTTS to determine any potential odour impacts arising from NYMTTS. The odour patrol member should participate in a set of screening tests using a certified n-butanol gas with their individual thresholds (n-butanol) that comply with the requirement of European Standard Method (EN13725) in the range of 20 to 80 ppb. They should also be free from any respiratory diseases and do not normally work at or live in the area in the vicinity of typhoon shelter.

The odour patrol route and the sniffing locations along the watercourse boundary of the NYMTTS during operation phase are shown in in **Appendix 1**.

2.2. Odour Patrol Monitoring Frequency and Schedule

According to *EM&A Manual Section 2.2.2*, the odour patrol was conducted on a monthly basis during summer season (from July to September). Each odour patrol was carried out during daytime and evening / night time covering high tide and low tide conditions. No odour patrol was conducted during rainy days.

The schedule for the odour partol are listed in **Table 2-1** and **Appendix 2**.

Table 2-1 Odour Patrol Schedule

Month	Date	Predicted Times for Tides	Tide (High/Low)
July	2023-07-14(2)	06:48	High
		13:59	Low
		21:21	High
		23:40	Low
August	2023-08-15	01:34	Low
		08:16	High
		15:54	Low
		22:41	High

Month	Date	Predicted Times for Tides	Tide (High/Low)
September	2023-09-06	01:15	High
		08:08	Low
		15:00	High
		18:51	Low

Note:

(1) The tides information at Kwai Chung was selected (which is the nearest Hong Kong Observatory (HKO) tide station from the project site), times and heights of high and low tides information is shown in **Appendix 3**.

(2) According to the HKO 9-day Weather Forecast for Hong Kong, heavy rain is expected on 17 July 2023. Therefore, the scheduled odour patrol on 17 July 2023 has been rescheduled to 14 July 2023.

2.3. Odour Patrol Route and Panel Members

Two independent trained personnel / competent persons was selected to form a patrol team to conduct the odour intensity analysis, who has participated in a set of screening tests.

The independent trained personnel / competent persons:

- have their individual odour threshold of n-butanol in nitrogen gas in the range of 20 to 80 ppb/v as required by the European Standard Method (EN 13725);
- be at least 16 year of age and willing and able to follow instructions;
- be free from any respiratory illnesses;
- be engaged for a sufficient period to build up and monitor / detect at several monitoring location;
- not be allowed to smoke, eat, drink (except water) or use chewing gum or sweets 30 min before and during odour intensity analysis;
- take great care not to cause any interference with their own perception or that of others by lack of personal hygiene or the use of perfumes, deodorants, body lotions or cosmetics; and

- not communicate with each other about the results of their choices.

Subject to the prevailing weather forecast condition, odour patrol was conducted by independent trained personnel / competent persons along the odour patrol route as shown in **Appendix 1**. During the patrol, the sequence has start from less odorous locations to stronger odorous locations. The sequence of the odour patrol route is shown in **Table 2-2**.

Table 2-2 Sequence of Odour Patrol Route

Route
H → G → F → A → B → C → D → E

The names of the two independent trained personnel / competent persons who carried out the odour patrol are listed in **Table 2-3**. The certificates for the qualified odour panel member are enclosed in **Appendix 4**.

Table 2-3 List of Odour Patrol Members

Odour Patrol Member ID	Name of Qualified Odour Panel Member
OI-1	LUI Heung Fai
OI-2	TANG Chi Shun

2.4. Odour Result Recording

The independent trained personnel / competent persons should use their nose (olfactory sensors) to sniff odours at different locations. The main odour emission sources and the areas to be affected by the odour nuisance should be identified.

The perceived odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

- 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
- 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
- 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
- 3 - Strong Identifiable, likely to have odour nuisance;
- 4 - Extreme Severe odour, and unacceptable odour level.

3. ODOUR PATROL RESULTS & FINDINGS

3.1. Results & Findings

Two independent trained personnel / competent persons (OI-1 & OI-2) have recorded the findings including time of survey, tidal condition, weather condition such as sunny, fine, cloudy and rainy, odour intensity, odour nature and possible odour sources, and also the local wind speed and direction at each location. The data record sheets are enclosed in **Appendix 5**. The odour intensity along the odour patrol route are summarized in **Table 3-1** and **Table 3-2** below.

Table 3-1 Summary of Odour Intensity Along the Odour Patrol Route (OI-1)

Location ID	Odour Intensity			Odour Characteristic
	July	August	September	
H	0	0	0	N/A
G	0	0	0	N/A
F	0	0	0	N/A
A	0	0	0	N/A
B	0	0	0	N/A
C	0	0	0	N/A
D	0	0	0	N/A
E	0	0	0	N/A

Table 3-2 Summary of Odour Intensity Along the Odour Patrol Route (OI-2)

Location ID	Odour Intensity			Odour Characteristic
	July	August	September	
H	0	0	0	N/A
G	0	0	0	N/A
F	0	0	0	N/A
A	0	0	0	N/A
B	0	0	0	N/A
C	0	0	0	N/A
D	0	0	0	N/A
E	0	0	0	N/A

In addition, some relevant meteorological data such as daily average temperature, and daily average humidity, on that surveyed day has been obtained from the nearest Hong Kong Observatory Station (King's Park Meteorological Station) for reference and enclosed in **Appendix 6**.

Photos of odour patrol points along the odour patrol route is shown in **Appendix 7**.

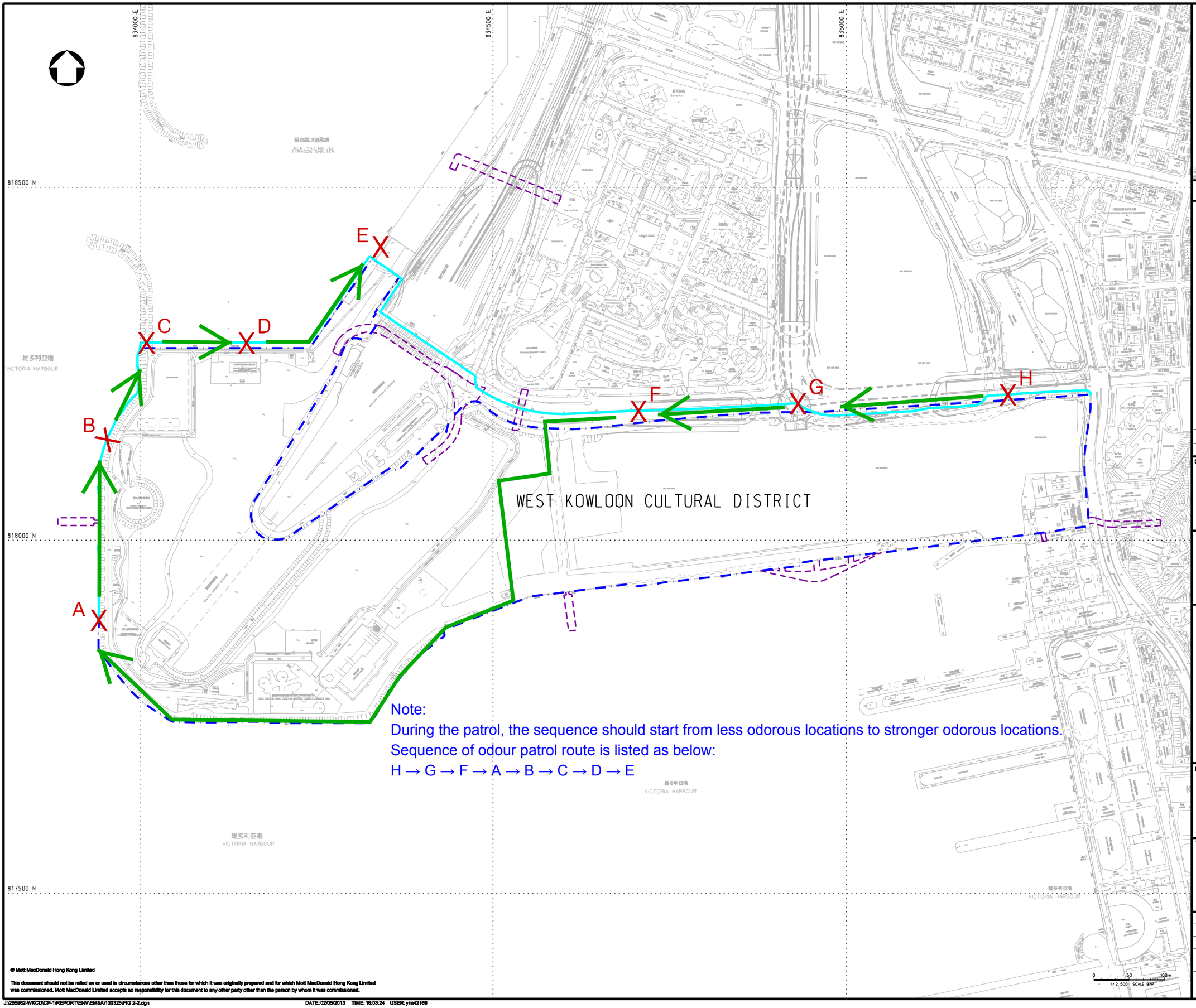
CONCLUSION

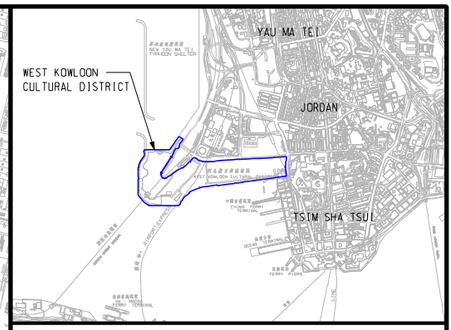
According to the odour intensity results shown in **Table 3-1** and **Table 3-2** , the odour intensities detected around the WKCD were found to be at level 0. There are no on-going odour impacts on the proposed developments within the WKCD due to the nearby NYMTTS.

Moreover, none of the detected odour intensity at any of the sniffing locations are higher than 1 due to potential odour emissions from the NYMTTS in two consecutive months. Therefore, no need to further extend the odour patrol.

In accordance with *Section 2.2 of the EM&A Manual* for the Project, the operational odour monitoring has been fulfilled and is considered to be completed.

Appendix 1 - Locations of Odour Patrol Route





KEY PLAN

LEGEND:

- PROJECT BOUNDARY
- EXTERNAL CONNECTIONS (INDICATIVE SUBJECT TO FUTURE DESIGN & ARRANGEMENT)
- ODOUR PATROL ROUTE
- X ODOUR PATROL POINT
- SEQUENCE OF ODOUR PETROL ROUTE

Rev	Date	Drawn	Description	Ch'k'd	App'd
P1	APR 13	MING	FIRST ISSUE	AM	AFK

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Project

PROJECT CONSULTANCY STUDY FOR WEST KOWLOON CULTURAL DISTRICT DEVELOPMENT PLAN

Title

PROPOSED LOCATIONS OF ODOUR PATROL ROUTE

Designed	AM		Eng check	EC	
Drawn	MING		Coordination	EC	
Dwg check	AM		Approved	AFK	
Scale at A1	1:2500	Status	PRE	Rev	P1

Drawing Number

FIGURE 2.2

Appendix 2 - Odour Patrol Schedule

July 2023 (Hong Kong)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14 Odour Patrol (July) 0648-Daytime-Hightide 1359-Daytime-Lowtide 2121-Nighttime-Hightide 2340-Nighttime-Lowtide	15
16	17 ~~Odour Patrol (July)~~ ~~0124-Nighttime-Lowtide~~ ~~0830-Daytime-Hightide~~ ~~1617-Daytime-Lowtide~~ ~~2311-Nighttime-Hightide~~	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

According to the HKO 9-day Weather Forecast for Hong Kong, heavy rain is expected on 17 July 2023. Therefore, the scheduled odour patrol on 17 July 2023 has been rescheduled to 14 July 2023.

Holidays:

1: Hong Kong Special Administrative Region Establishment Day / 香港特別行政區成立紀念日

August 2023 (Hong Kong)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15 Odour Patrol (August) 0134-Nighttime-Lowtide 0816-Daytime-Hightide 1554-Daytime-Lowtide 2241-Nighttime-Hightide	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

September 2023 (Hong Kong)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6 Odour Patrol (September) 0115-Nighttime-Hightide 0808-Daytime-Lowtide 1500-Daytime-Hightide 1851-Nighttime-Lowtide	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Holidays: 30: Day after Mid-Autumn Festival / 中秋節翌日

Appendix 3 - Tide Information at Kwai Chung in 2023 (Data from HKO)

香港天文台
HONG KONG OBSERVATORY

Tidal information at Kwai Chung in 2023
Predicted times and heights of high and low tides

Date		Time	Height(m)	Time	Height(m)	Time	Height(m)	Time	Height(m)
01	01	0516	1.58	1036	1.12	1812	2.03		
01	02	0027	1.09	0644	1.46	1115	1.23	1847	2.14
01	03	0133	0.90	0836	1.41	1151	1.30	1919	2.23
01	04	0227	0.72	0941	1.41	1223	1.35	1946	2.31
01	05	0313	0.58	1022	1.42	1240	1.36	2013	2.38
01	06	0354	0.49	1055	1.42	1301	1.36	2042	2.42
01	07	0432	0.44	1126	1.43	1336	1.35	2113	2.43
01	08	0506	0.43	1157	1.43	1417	1.33	2143	2.42
01	09	0538	0.45	1228	1.43	1504	1.31	2212	2.39
01	10	0608	0.50	1258	1.44	1604	1.31	2239	2.32
01	11	0637	0.56	1328	1.47	1657	1.32	2307	2.23
01	12	0708	0.64	1401	1.51	1749	1.34	2341	2.10
01	13	0740	0.73	1438	1.58	1844	1.36		
01	14	0021	1.94	0813	0.84	1518	1.66	1952	1.37
01	15	0109	1.74	0848	0.95	1558	1.78	2143	1.31
01	16	0208	1.52	0926	1.06	1637	1.91	2315	1.14
01	17	0541	1.39	1008	1.17	1715	2.07		
01	18	0041	0.91	0748	1.38	1056	1.26	1756	2.25
01	19	0148	0.65	0907	1.42	1149	1.31	1842	2.43
01	20	0241	0.41	1003	1.46	1250	1.32	1935	2.59
01	21	0329	0.24	1047	1.49	1357	1.29	2030	2.71
01	22	0416	0.14	1128	1.51	1455	1.23	2124	2.75
01	23	0501	0.14	1207	1.53	1548	1.16	2217	2.72
01	24	0541	0.22	1246	1.56	1639	1.10	2308	2.59
01	25	0618	0.36	1326	1.61	1729	1.09	2357	2.38
01	26	0650	0.53	1407	1.67	1822	1.11		
01	27	0045	2.12	0721	0.73	1451	1.74	1921	1.15
01	28	0134	1.82	0750	0.91	1538	1.82	2052	1.18
01	29	0237	1.53	0818	1.07	1628	1.89	2244	1.12
01	30	0507	1.32	0843	1.20	1719	1.97		

01	31	0035	0.96	1806	2.05			

Date		Time	Height(m)	Time	Height(m)	Time	Height(m)	Time	Height(m)
02	01	0152	0.78	1847	2.12				
02	02	0234	0.63	1923	2.19				
02	03	0309	0.52	1955	2.25				
02	04	0343	0.45	1040	1.39	1336	1.32	2028	2.30
02	05	0414	0.41	1059	1.41	1425	1.25	2102	2.33
02	06	0443	0.42	1120	1.43	1508	1.19	2136	2.33
02	07	0507	0.45	1135	1.47	1549	1.13	2211	2.30
02	08	0530	0.51	1139	1.52	1629	1.09	2245	2.23
02	09	0553	0.58	1159	1.58	1710	1.07	2319	2.12
02	10	0618	0.67	1228	1.65	1753	1.07	2353	1.97
02	11	0644	0.78	1259	1.73	1840	1.07		
02	12	0030	1.78	0710	0.90	1332	1.81	1938	1.08
02	13	0115	1.56	0737	1.03	1409	1.89	2104	1.05
02	14	0354	1.35	0805	1.16	1458	1.98	2248	0.94
02	15	1611	2.09						
02	16	0040	0.75	1719	2.23				
02	17	0149	0.52	1825	2.38				
02	18	0236	0.34	0957	1.49	1259	1.33	1928	2.51
02	19	0318	0.22	1028	1.53	1404	1.20	2027	2.60
02	20	0356	0.18	1058	1.57	1458	1.04	2122	2.62
02	21	0431	0.23	1128	1.63	1547	0.91	2214	2.55
02	22	0502	0.35	1157	1.70	1634	0.83	2304	2.39
02	23	0531	0.51	1222	1.78	1722	0.81	2350	2.16
02	24	0600	0.69	1242	1.85	1810	0.84		
02	25	0035	1.89	0626	0.87	1307	1.90	1905	0.91
02	26	0122	1.62	0651	1.04	1338	1.93	2023	0.97
02	27	0230	1.37	0708	1.17	1419	1.94	2214	0.96
02	28	1518	1.94						

Date		Time	Height(m)	Time	Height(m)	Time	Height(m)	Time	Height(m)
03	01	0022	0.86	1647	1.96				
03	02	0127	0.72	1805	2.01				
03	03	0207	0.61	1855	2.07				
03	04	0240	0.54	1004	1.44	1254	1.38	1936	2.13
03	05	0311	0.49	1004	1.46	1345	1.27	2014	2.17
03	06	0339	0.48	1015	1.51	1427	1.15	2052	2.20
03	07	0403	0.51	1023	1.57	1507	1.04	2130	2.20
03	08	0423	0.55	1026	1.65	1546	0.94	2210	2.17
03	09	0444	0.62	1044	1.75	1625	0.87	2250	2.09
03	10	0507	0.71	1109	1.84	1704	0.82	2331	1.97

03	11	0532	0.81	1136	1.93	1746	0.79		
03	12	0015	1.81	0556	0.93	1203	2.00	1833	0.79
03	13	0108	1.62	0621	1.06	1231	2.06	1928	0.81
03	14	0232	1.43	0642	1.19	1304	2.10	2050	0.82
03	15	1354	2.12	2237	0.76				
03	16	1520	2.14						
03	17	0026	0.62	1701	2.21				
03	18	0127	0.47	0906	1.55	1154	1.45	1818	2.30
03	19	0209	0.37	0927	1.59	1309	1.27	1926	2.39
03	20	0245	0.34	0950	1.66	1404	1.05	2025	2.42
03	21	0318	0.37	1011	1.75	1454	0.85	2119	2.39
03	22	0349	0.46	1027	1.85	1541	0.70	2210	2.28
03	23	0418	0.60	1044	1.96	1626	0.61	2258	2.11
03	24	0446	0.75	1109	2.05	1712	0.60	2345	1.90
03	25	0513	0.92	1137	2.11	1759	0.64		
03	26	0030	1.68	0538	1.06	1207	2.13	1852	0.71
03	27	0123	1.47	0555	1.19	1237	2.10	2006	0.79
03	28	0308	1.31	0507	1.26	1311	2.05	2140	0.82
03	29	1404	1.98	2323	0.78				
03	30	1531	1.93						
03	31	0035	0.71	1652	1.93				

Date		Time	Height(m)	Time	Height(m)	Time	Height(m)	Time	Height(m)
04	01	0119	0.65	1805	1.95				
04	02	0156	0.61	0911	1.54	1257	1.37	1904	1.99
04	03	0226	0.60	0909	1.59	1340	1.21	1953	2.02
04	04	0250	0.62	0917	1.67	1419	1.05	2039	2.03
04	05	0311	0.66	0921	1.78	1457	0.90	2123	2.02
04	06	0333	0.72	0936	1.90	1536	0.77	2208	1.98
04	07	0357	0.79	1000	2.03	1615	0.66	2253	1.90
04	08	0422	0.89	1028	2.14	1656	0.58	2339	1.79
04	09	0448	1.00	1056	2.22	1739	0.55		
04	10	0030	1.65	0512	1.11	1121	2.27	1828	0.56
04	11	0136	1.50	0533	1.23	1148	2.29	1928	0.60
04	12	0309	1.39	0522	1.32	1233	2.27	2057	0.63
04	13	1337	2.21	2228	0.61				
04	14	1517	2.16	2349	0.56				
04	15	1655	2.16						
04	16	0046	0.51	0822	1.65	1206	1.37	1815	2.17
04	17	0127	0.51	0840	1.73	1307	1.14	1921	2.17
04	18	0202	0.54	0855	1.84	1358	0.89	2020	2.13
04	19	0234	0.62	0911	1.96	1446	0.69	2114	2.05
04	20	0305	0.73	0932	2.10	1533	0.55	2206	1.93
04	21	0335	0.86	0958	2.21	1618	0.47	2256	1.79

04	22	0404	1.00	1026	2.28	1703	0.46	2345	1.65
04	23	0429	1.12	1056	2.30	1751	0.50		
04	24	0039	1.51	0448	1.22	1126	2.27	1846	0.57
04	25	0149	1.39	0414	1.28	1154	2.21	1955	0.63
04	26	1220	2.12	2105	0.68				
04	27	1304	2.02	2216	0.71				
04	28	1435	1.92	2329	0.71				
04	29	1604	1.86						
04	30	0021	0.70	0823	1.57	1123	1.50	1710	1.83

Date		Time	Height(m)	Time	Height(m)	Time	Height(m)	Time	Height(m)
05	01	0058	0.71	0800	1.63	1238	1.33	1814	1.82
05	02	0125	0.73	0810	1.72	1324	1.15	1923	1.81
05	03	0149	0.76	0814	1.84	1404	0.96	2023	1.80
05	04	0214	0.82	0826	1.98	1443	0.77	2115	1.78
05	05	0241	0.88	0850	2.13	1524	0.60	2204	1.74
05	06	0310	0.97	0919	2.27	1605	0.46	2254	1.68
05	07	0338	1.06	0950	2.38	1649	0.38	2347	1.60
05	08	0405	1.15	1023	2.44	1736	0.35		
05	09	0051	1.50	0430	1.23	1059	2.46	1830	0.37
05	10	0204	1.43	0439	1.31	1145	2.43	1940	0.42
05	11	1240	2.34	2058	0.47				
05	12	1349	2.23	2206	0.52				
05	13	1520	2.12	2306	0.56				
05	14	0700	1.64	1040	1.43	1650	2.02	2357	0.61
05	15	0719	1.74	1200	1.22	1808	1.94		
05	16	0039	0.69	0740	1.86	1259	0.98	1916	1.86
05	17	0115	0.77	0803	2.00	1351	0.76	2016	1.77
05	18	0149	0.87	0827	2.14	1440	0.58	2115	1.68
05	19	0222	0.98	0853	2.25	1527	0.45	2213	1.60
05	20	0252	1.07	0921	2.33	1614	0.39	2310	1.52
05	21	0320	1.16	0952	2.37	1702	0.38		
05	22	0002	1.45	0342	1.23	1024	2.36	1752	0.40
05	23	0053	1.39	0316	1.27	1055	2.31	1844	0.45
05	24	0147	1.35	0335	1.28	1124	2.23	1937	0.51
05	25	1154	2.14	2027	0.57				
05	26	1233	2.03	2117	0.63				
05	27	1325	1.91	2205	0.68				
05	28	1508	1.79	2251	0.73				
05	29	0639	1.58	1039	1.43	1625	1.70	2331	0.78
05	30	0653	1.68	1158	1.27	1732	1.63		
05	31	0008	0.83	0656	1.81	1258	1.07	1857	1.58

Date		Time	Height(m)	Time	Height(m)	Time	Height(m)	Time	Height(m)
06	01	0042	0.89	0708	1.96	1345	0.85	2011	1.56
06	02	0116	0.96	0733	2.13	1429	0.63	2110	1.54
06	03	0149	1.03	0805	2.30	1514	0.44	2207	1.52
06	04	0222	1.10	0840	2.43	1559	0.30	2306	1.49
06	05	0255	1.16	0921	2.53	1648	0.22		
06	06	0007	1.46	0329	1.21	1008	2.58	1740	0.20
06	07	0105	1.42	0411	1.25	1058	2.56	1838	0.24
06	08	0201	1.41	0505	1.29	1150	2.49	1940	0.31
06	09	0258	1.43	0605	1.33	1247	2.35	2036	0.41
06	10	0357	1.49	0711	1.36	1352	2.18	2129	0.52
06	11	0453	1.59	0836	1.35	1515	1.99	2218	0.65
06	12	0540	1.71	1032	1.25	1642	1.80	2304	0.77
06	13	0618	1.84	1148	1.07	1802	1.64	2346	0.89
06	14	0652	1.97	1252	0.86	1914	1.52		
06	15	0025	1.00	0722	2.10	1348	0.67	2026	1.45
06	16	0101	1.09	0751	2.21	1441	0.52	2141	1.41
06	17	0135	1.15	0820	2.30	1532	0.41	2236	1.38
06	18	0207	1.20	0851	2.35	1620	0.35	2321	1.37
06	19	0233	1.23	0925	2.37	1706	0.33		
06	20	0002	1.36	0221	1.24	0959	2.35	1749	0.35
06	21	0042	1.34	0249	1.25	1033	2.30	1829	0.40
06	22	0123	1.34	0327	1.26	1105	2.23	1907	0.46
06	23	0206	1.35	0412	1.28	1136	2.14	1944	0.53
06	24	0250	1.38	0532	1.32	1210	2.03	2022	0.61
06	25	0334	1.43	0642	1.36	1250	1.89	2101	0.69
06	26	0411	1.51	0802	1.37	1339	1.74	2140	0.78
06	27	0440	1.62	0955	1.31	1540	1.57	2219	0.87
06	28	0508	1.75	1116	1.17	1706	1.45	2258	0.96
06	29	0538	1.90	1230	0.97	1852	1.39	2336	1.04
06	30	0610	2.07	1330	0.74	2014	1.38		

Date		Time	Height(m)	Time	Height(m)	Time	Height(m)	Time	Height(m)
07	01	0014	1.11	0645	2.24	1421	0.51	2122	1.40
07	02	0053	1.17	0725	2.40	1510	0.32	2225	1.41
07	03	0137	1.20	0813	2.54	1559	0.19	2318	1.42
07	04	0230	1.21	0907	2.63	1649	0.13		
07	05	0005	1.43	0326	1.20	1001	2.65	1739	0.13
07	06	0050	1.44	0420	1.17	1055	2.61	1826	0.20
07	07	0135	1.47	0514	1.15	1149	2.49	1911	0.33
07	08	0221	1.53	0610	1.16	1244	2.30	1953	0.49
07	09	0307	1.62	0710	1.17	1345	2.06	2033	0.66
07	10	0355	1.72	0831	1.17	1502	1.79	2112	0.83

07	11	0443	1.83	1017	1.10	1634	1.55	2150	0.99
07	12	0528	1.94	1139	0.96	1803	1.39	2227	1.12
07	13	0610	2.05	1254	0.79	1949	1.31	2304	1.21
07	14	0648	2.15	1359	0.63	2121	1.32	2340	1.26
07	15	0722	2.23	1452	0.50				
07	16	0755	2.29	1537	0.41	2241	1.34		
07	17	0124	1.28	0830	2.33	1617	0.36	2311	1.36
07	18	0214	1.26	0906	2.35	1654	0.36	2341	1.37
07	19	0259	1.24	0942	2.34	1727	0.38		
07	20	0011	1.39	0342	1.21	1017	2.30	1757	0.44
07	21	0039	1.42	0424	1.19	1051	2.24	1825	0.51
07	22	0104	1.45	0507	1.19	1123	2.14	1852	0.60
07	23	0130	1.50	0553	1.20	1155	2.01	1922	0.70
07	24	0203	1.58	0643	1.22	1231	1.86	1952	0.81
07	25	0241	1.66	0745	1.22	1315	1.67	2023	0.92
07	26	0320	1.76	0914	1.18	1520	1.48	2055	1.04
07	27	0400	1.88	1041	1.07	1705	1.35	2130	1.15
07	28	0440	2.02	1209	0.89	1923	1.33	2215	1.24
07	29	0522	2.17	1325	0.67	2046	1.37	2309	1.30
07	30	0609	2.33	1419	0.45	2143	1.42		
07	31	0012	1.32	0703	2.49	1507	0.29	2226	1.46

Date		Time	Height(m)	Time	Height(m)	Time	Height(m)	Time	Height(m)
08	01	0130	1.29	0802	2.61	1552	0.19	2304	1.49
08	02	0235	1.21	0901	2.69	1635	0.16	2341	1.53
08	03	0330	1.11	0956	2.69	1714	0.22		
08	04	0017	1.59	0421	1.03	1050	2.60	1749	0.34
08	05	0055	1.66	0511	0.98	1143	2.43	1822	0.51
08	06	0133	1.75	0603	0.97	1236	2.18	1853	0.70
08	07	0214	1.83	0701	1.01	1333	1.90	1924	0.89
08	08	0257	1.92	0819	1.04	1454	1.61	1953	1.07
08	09	0344	1.99	1001	1.02	1634	1.40	2021	1.21
08	10	0434	2.05	1137	0.92				
08	11	0527	2.10	1310	0.77				
08	12	0616	2.17	1404	0.64				
08	13	0659	2.23	1445	0.55				
08	14	0739	2.28	1521	0.49	2224	1.45		
08	15	0134	1.36	0816	2.32	1554	0.47	2241	1.48
08	16	0221	1.28	0853	2.34	1624	0.49	2301	1.52
08	17	0303	1.21	0930	2.33	1650	0.53	2315	1.56
08	18	0343	1.14	1007	2.29	1713	0.60	2322	1.63
08	19	0423	1.10	1044	2.22	1735	0.69	2341	1.70
08	20	0503	1.07	1121	2.12	1759	0.79		
08	21	0008	1.78	0545	1.07	1159	1.97	1824	0.90

08	22	0037	1.86	0631	1.07	1242	1.80	1849	1.02
08	23	0108	1.93	0726	1.08	1346	1.61	1913	1.15
08	24	0142	2.00	0841	1.06	1533	1.45	1936	1.27
08	25	0226	2.08	1016	0.99				
08	26	0335	2.16	1200	0.84				
08	27	0446	2.28	1320	0.65				
08	28	0551	2.41	1408	0.48	2134	1.59		
08	29	0029	1.46	0656	2.54	1449	0.37	2202	1.63
08	30	0141	1.32	0758	2.64	1527	0.33	2230	1.69
08	31	0236	1.15	0856	2.68	1601	0.37	2257	1.77

Date		Time	Height(m)	Time	Height(m)	Time	Height(m)	Time	Height(m)
09	01	0326	0.98	0952	2.63	1634	0.47	2321	1.87
09	02	0415	0.87	1045	2.49	1704	0.63	2344	1.97
09	03	0503	0.82	1137	2.28	1733	0.81		
09	04	0010	2.07	0553	0.83	1229	2.03	1802	1.00
09	05	0041	2.14	0648	0.89	1329	1.76	1829	1.17
09	06	0115	2.17	0808	0.96	1500	1.53	1851	1.32
09	07	0157	2.16	0945	0.97				
09	08	0257	2.15	1132	0.92				
09	09	0426	2.14	1253	0.81				
09	10	0543	2.16	1339	0.73				
09	11	0640	2.21	1415	0.68	2143	1.62		
09	12	0053	1.52	0725	2.25	1448	0.66	2142	1.64
09	13	0140	1.40	0806	2.28	1517	0.67	2151	1.69
09	14	0220	1.27	0845	2.29	1542	0.71	2159	1.76
09	15	0258	1.16	0924	2.28	1603	0.77	2206	1.85
09	16	0336	1.07	1003	2.23	1624	0.85	2223	1.95
09	17	0414	0.99	1044	2.16	1646	0.94	2246	2.05
09	18	0453	0.94	1125	2.05	1710	1.05	2312	2.13
09	19	0534	0.92	1210	1.91	1733	1.17	2337	2.20
09	20	0618	0.92	1302	1.75	1755	1.29		
09	21	0001	2.25	0710	0.93	1418	1.60	1808	1.40
09	22	0034	2.28	0823	0.95				
09	23	0123	2.29	1004	0.92				
09	24	0241	2.29	1144	0.82				
09	25	0427	2.34	1253	0.69	2043	1.74	2321	1.67
09	26	0544	2.43	1337	0.60	2100	1.79		
09	27	0044	1.49	0654	2.51	1414	0.57	2119	1.86
09	28	0141	1.26	0756	2.55	1448	0.59	2134	1.96
09	29	0231	1.03	0854	2.53	1520	0.68	2150	2.09
09	30	0319	0.84	0948	2.43	1550	0.82	2214	2.22

Date		Time	Height(m)	Time	Height(m)	Time	Height(m)	Time	Height(m)
10	01	0406	0.73	1041	2.27	1620	0.98	2242	2.34
10	02	0453	0.69	1134	2.07	1649	1.15	2313	2.40
10	03	0543	0.72	1231	1.86	1716	1.30	2345	2.42
10	04	0639	0.80	1344	1.67	1736	1.43		
10	05	0018	2.38	0758	0.88				
10	06	0055	2.31	0921	0.93				
10	07	0150	2.22	1051	0.93				
10	08	0321	2.14	1207	0.89				
10	09	0450	2.12	1255	0.85	2106	1.77		
10	10	0008	1.71	0608	2.13	1332	0.84	2047	1.79
10	11	0101	1.55	0706	2.14	1403	0.86	2045	1.85
10	12	0138	1.39	0753	2.15	1429	0.89	2054	1.93
10	13	0213	1.23	0837	2.15	1450	0.95	2100	2.03
10	14	0249	1.09	0919	2.12	1511	1.02	2112	2.15
10	15	0325	0.96	1001	2.08	1534	1.10	2134	2.27
10	16	0402	0.85	1044	2.01	1558	1.19	2158	2.37
10	17	0442	0.78	1128	1.92	1622	1.30	2218	2.45
10	18	0523	0.75	1217	1.81	1642	1.40	2218	2.50
10	19	0609	0.75	1321	1.69	1647	1.49	2242	2.51
10	20	0703	0.78	1451	1.61	1641	1.56	2326	2.48
10	21	0821	0.83						
10	22	0050	2.41	0953	0.83				
10	23	0226	2.34	1109	0.80				
10	24	0418	2.31	1209	0.77	1955	1.89	2339	1.64
10	25	0542	2.32	1253	0.77	2008	1.97		
10	26	0043	1.39	0653	2.32	1330	0.81	2022	2.08
10	27	0135	1.12	0755	2.28	1404	0.89	2040	2.23
10	28	0225	0.88	0853	2.21	1437	1.00	2103	2.38
10	29	0312	0.70	0950	2.10	1508	1.13	2130	2.50
10	30	0359	0.60	1048	1.97	1538	1.27	2200	2.58
10	31	0447	0.58	1148	1.83	1606	1.39	2231	2.60

Date		Time	Height(m)	Time	Height(m)	Time	Height(m)	Time	Height(m)
11	01	0538	0.61	1249	1.71	1626	1.49	2302	2.56
11	02	0636	0.69	1351	1.61	1541	1.54	2330	2.47
11	03	0744	0.77	2319	2.36				
11	04	0848	0.84						
11	05	0030	2.24	0953	0.89				
11	06	0206	2.10	1102	0.93				
11	07	0350	2.02	1156	0.95	2000	1.83		
11	08	0005	1.71	0503	1.96	1235	0.98	1940	1.89
11	09	0054	1.53	0630	1.93	1304	1.02	1951	1.98

11	10	0130	1.34	0735	1.91	1327	1.07	1958	2.09
11	11	0204	1.15	0827	1.89	1350	1.13	2004	2.23
11	12	0238	0.97	0914	1.87	1416	1.20	2023	2.37
11	13	0315	0.80	1000	1.84	1443	1.27	2047	2.49
11	14	0353	0.67	1047	1.80	1509	1.35	2110	2.59
11	15	0434	0.59	1137	1.74	1531	1.42	2116	2.66
11	16	0518	0.55	1238	1.67	1537	1.48	2141	2.68
11	17	0606	0.57	1347	1.62	1550	1.53	2222	2.64
11	18	0705	0.61	2332	2.54				
11	19	0819	0.67						
11	20	0057	2.42	0927	0.73				
11	21	0221	2.28	1027	0.79	1834	1.85	2200	1.68
11	22	0409	2.15	1119	0.85	1851	1.96	2333	1.47
11	23	0538	2.06	1204	0.94	1912	2.08		
11	24	0036	1.22	0652	1.97	1243	1.03	1936	2.23
11	25	0131	0.96	0759	1.89	1319	1.13	2000	2.38
11	26	0222	0.74	0906	1.81	1353	1.23	2027	2.51
11	27	0311	0.58	1014	1.74	1426	1.33	2056	2.60
11	28	0401	0.49	1111	1.68	1456	1.40	2127	2.64
11	29	0451	0.47	1201	1.62	1518	1.47	2159	2.62
11	30	0542	0.50	1250	1.57	1444	1.49	2230	2.55

Date		Time	Height(m)	Time	Height(m)	Time	Height(m)	Time	Height(m)
12	01	0632	0.56	2255	2.46				
12	02	0721	0.64	2307	2.35				
12	03	0807	0.73	2344	2.21				
12	04	0852	0.81						
12	05	0031	2.06	0937	0.89				
12	06	0127	1.90	1020	0.97	1824	1.78	2231	1.64
12	07	0401	1.75	1100	1.04	1840	1.88		
12	08	0036	1.45	0522	1.65	1137	1.10	1849	2.00
12	09	0119	1.24	0719	1.60	1211	1.17	1850	2.14
12	10	0155	1.02	0821	1.60	1245	1.23	1910	2.30
12	11	0231	0.81	0916	1.60	1317	1.29	1938	2.45
12	12	0309	0.63	1010	1.60	1348	1.34	2009	2.58
12	13	0350	0.48	1104	1.59	1416	1.38	2044	2.68
12	14	0433	0.39	1156	1.58	1441	1.41	2126	2.73
12	15	0519	0.36	1247	1.56	1512	1.42	2218	2.72
12	16	0608	0.38	1338	1.55	1613	1.45	2311	2.65
12	17	0701	0.45	1430	1.57	1733	1.47		
12	18	0005	2.52	0754	0.55	1523	1.63	1838	1.50
12	19	0101	2.33	0846	0.68	1617	1.72	1950	1.51
12	20	0209	2.11	0934	0.81	1706	1.84	2150	1.45
12	21	0357	1.88	1021	0.95	1749	1.98	2320	1.26

12	22	0533	1.69	1105	1.09	1826	2.12		
12	23	0032	1.04	0659	1.58	1147	1.20	1859	2.26
12	24	0136	0.81	0835	1.52	1227	1.29	1930	2.38
12	25	0232	0.62	0948	1.50	1306	1.35	2001	2.48
12	26	0324	0.48	1037	1.50	1343	1.38	2033	2.53
12	27	0412	0.40	1118	1.49	1416	1.40	2107	2.55
12	28	0456	0.38	1155	1.48	1359	1.39	2142	2.53
12	29	0536	0.41	1232	1.47	1431	1.38	2215	2.47
12	30	0613	0.46	1310	1.46	1512	1.38	2244	2.39
12	31	0646	0.55	1348	1.47	1601	1.39	2306	2.28

Version 31 . 3 . 2023

Appendix 4 - Qualified Odour Panel Member Certificates

ALS Life Sciences | Environmental

Certificate No.: C23042

Certificate for a Qualified Odour Panellist

This is to certify that

LUI HEUNG FAI

has participated in twelve (12) sets of individual N-Butanol screening test
during 07 June 2023 – 15 June 2023

with Individual Threshold : 35 ppb/v
Standard Deviation : 1.2 ppb/v

and

fulfill the Requirement of the European Standard Method of Air Quality -
Determination of Odour Concentration by Dynamic Olfactometry (BS EN 13725:2022) –

The Requirement of the Odour Threshold of n-Butanol in Nitrogen Gas in the Range of 20 – 80 ppb/v with at least 12 sets of individual threshold estimates and standard deviation less than 2.3

15 June 2023	15 June 2024	
Issue Date	**Valid Until**	**Chan Wai Hung, Mannix**

Certificate for a Qualified Odour Panellist

This is to certify that

TANG CHI SHUN

has participated in twelve (12) sets of individual N-Butanol screening test
during 07 June 2023 – 15 June 2023

with Individual Threshold : 36 ppb/v
Standard Deviation : 1.3 ppb/v

and

fulfill the Requirement of the European Standard Method of Air Quality -
Determination of Odour Concentration by Dynamic Olfactometry (BS EN 13725:2022) –

The Requirement of the Odour Threshold of n-Butanol in Nitrogen Gas in the Range of 20 – 80 ppb/v with at least 12 sets of individual threshold estimates and standard deviation less than 2.3

15 June 2023	15 June 2024	
Issue Date	**Valid Until**	**Chan Wai Hung, Mannix**

Appendix 5 - Odour Patrol Record Sheet

APEX Testing & Certification Ltd
上峰檢測認證有限公司

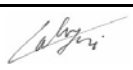
Odour Patrol Record Sheet

General Information	
Project Name	Odour Assessment for West Kowloon Cultural District
Date	14/07/2023
Weather	Sunny
Temperature (°C)	28.7
Hunmidity (%)	78

Location ID	Time	Odour Intensity		Odour Characteristics	Wind Direction	Wind Speed	Remarks
		OI-1	OI-2				
H	06:48	0	0	Not detected	Calm	0	
G	06:58	0	0	Not detected	Calm	0	
F	07:05	0	0	Not detected	Calm	0	
A	07:25	0	0	Not detected	Calm	0	
B	07:33	0	0	Not detected	Calm	0	
C	07:40	0	0	Not detected	Calm	0	
D	07:47	0	0	Not detected	Calm	0	
E	07:55	0	0	Not detected	Calm	0	

Note:

1. Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
   - 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
   - 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
   - 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
   - 3 - Strong Identifiable, likely to have odour nuisance;
   - 4 - Extreme Severe odour, and unacceptable odour level.
2. OI-1 & OI-2: Odour intensity detected by panel member 1 & 2

	Name	Signature	Date
Recorded by	Tang C.S.		14/07/2023
Checked by	Lui H.F.		14/07/2023

APEX Testing & Certification Ltd
上峰檢測認證有限公司

Odour Patrol Record Sheet

General Information	
Project Name	Odour Assessment for West Kowloon Cultural District
Date	14/07/2023
Weather	Sunny
Temperature (°C)	33.0
Hunmidity (%)	58

Location ID	Time	Odour Intensity		Odour Characteristics	Wind Direction	Wind Speed	Remarks
		OI-1	OI-2				
H	13:59	0	0	Not detected	Calm	0	
G	14:08	0	0	Not detected	Calm	0	
F	14:15	0	0	Not detected	Calm	0	
A	14:34	0	0	Not detected	Calm	0	
B	14:42	0	0	Not detected	Calm	0	
C	14:49	0	0	Not detected	Calm	0	
D	14:57	0	0	Not detected	Calm	0	
E	15:05	0	0	Not detected	Calm	0	

Note:

1. Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
   - 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
   - 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
   - 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
   - 3 - Strong Identifiable, likely to have odour nuisance;
   - 4 - Extreme Severe odour, and unacceptable odour level.
2. OI-1 & OI-2: Odour intensity detected by panel member 1 & 2

	Name	Signature	Date
Recorded by	Tang C.S.		14/07/2023
Checked by	Lui H.F.		14/07/2023

APEX Testing & Certification Ltd
上峰檢測認證有限公司

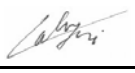
Odour Patrol Record Sheet

General Information	
Project Name	Odour Assessment for West Kowloon Cultural District
Date	14/07/2023
Weather	Fine
Temperature (°C)	29.2
Hunmidity (%)	79

Location ID	Time	Odour Intensity		Odour Characteristics	Wind Direction	Wind Speed	Remarks
		OI-1	OI-2				
H	21:21	0	0	Not detected	Calm	0	
G	21:30	0	0	Not detected	Calm	0	
F	21:37	0	0	Not detected	Calm	0	
A	21:55	0	0	Not detected	Calm	0	
B	22:03	0	0	Not detected	Calm	0	
C	22:10	0	0	Not detected	Calm	0	
D	22:18	0	0	Not detected	Calm	0	
E	22:26	0	0	Not detected	Calm	0	

Note:

1. Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
   - 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
   - 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
   - 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
   - 3 - Strong Identifiable, likely to have odour nuisance;
   - 4 - Extreme Severe odour, and unacceptable odour level.
2. OI-1 & OI-2: Odour intensity detected by panel member 1 & 2

	Name	Signature	Date
Recorded by	Tang C.S.		14/07/2023
Checked by	Lui H.F.		14/07/2023

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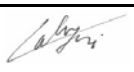
Odour Patrol Record Sheet

General Information	
Project Name	Odour Assessment for West Kowloon Cultural District
Date	14/07/2023
Weather	Fine
Temperature (°C)	28.9
Hunmidity (%)	82

Location ID	Time	Odour Intensity		Odour Characteristics	Wind Direction	Wind Speed	Remarks
		OI-1	OI-2				
H	23:40	0	0	Not detected	Calm	0	
G	23:50	0	0	Not detected	Calm	0	
F	23:58	0	0	Not detected	Calm	0	
A	00:17	0	0	Not detected	Calm	0	
B	00:25	0	0	Not detected	Calm	0	
C	00:33	0	0	Not detected	Calm	0	
D	00:40	0	0	Not detected	Calm	0	
E	00:47	0	0	Not detected	Calm	0	

Note:

1. Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
   - 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
   - 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
   - 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
   - 3 - Strong Identifiable, likely to have odour nuisance;
   - 4 - Extreme Severe odour, and unacceptable odour level.
2. OI-1 & OI-2: Odour intensity detected by panel member 1 & 2

	Name	Signature	Date
Recorded by	Tang C.S.		15/07/2023
Checked by	Lui H.F.		15/07/2023

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Odour Patrol Record Sheet

General Information	
Project Name	Odour Assessment for West Kowloon Cultural District
Date	15/08/2023
Weather	Fine
Temperature (°C)	27.0
Hunmidity (%)	94

Location ID	Time	Odour Intensity		Odour Characteristics	Wind Direction	Wind Speed	Remarks
		OI-1	OI-2				
H	01:34	0	0	Not detected	Calm	0	
G	01:44	0	0	Not detected	Calm	0	
F	01:52	0	0	Not detected	Calm	0	
A	02:10	0	0	Not detected	Calm	0	
B	02:18	0	0	Not detected	Calm	0	
C	02:25	0	0	Not detected	Calm	0	
D	02:33	0	0	Not detected	Calm	0	
E	02:40	0	0	Not detected	Calm	0	

Note:

1. Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
   - 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
   - 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
   - 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
   - 3 - Strong Identifiable, likely to have odour nuisance;
   - 4 - Extreme Severe odour, and unacceptable odour level.
2. OI-1 & OI-2: Odour intensity detected by panel member 1 & 2

	Name	Signature	Date
Recorded by	Tang C.S.		15/08/2023
Checked by	Lui H.F.		15/08/2023

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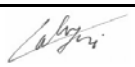
Odour Patrol Record Sheet

General Information	
Project Name	Odour Assessment for West Kowloon Cultural District
Date	15/08/2023
Weather	Fine
Temperature (°C)	28.9
Hunmidity (%)	86

Location ID	Time	Odour Intensity		Odour Characteristics	Wind Direction	Wind Speed	Remarks
		OI-1	OI-2				
H	08:16	0	0	Not detected	Calm	0	
G	08:27	0	0	Not detected	Calm	0	
F	08:34	0	0	Not detected	Calm	0	
A	08:52	0	0	Not detected	Calm	0	
B	09:00	0	0	Not detected	Calm	0	
C	09:08	0	0	Not detected	Calm	0	
D	09:16	0	0	Not detected	Calm	0	
E	09:24	0	0	Not detected	Calm	0	

Note:

1. Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
   - 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
   - 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
   - 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
   - 3 - Strong Identifiable, likely to have odour nuisance;
   - 4 - Extreme Severe odour, and unacceptable odour level.
2. OI-1 & OI-2: Odour intensity detected by panel member 1 & 2

	Name	Signature	Date
Recorded by	Tang C.S.		15/08/2023
Checked by	Lui H.F.		15/08/2023

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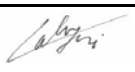
Odour Patrol Record Sheet

General Information	
Project Name	Odour Assessment for West Kowloon Cultural District
Date	15/08/2023
Weather	Cloudy
Temperature (°C)	31.2
Hunmidity (%)	74

Location ID	Time	Odour Intensity		Odour Characteristics	Wind Direction	Wind Speed	Remarks
		OI-1	OI-2				
H	15:54	0	0	Not detected	Calm	0	
G	16:03	0	0	Not detected	Calm	0	
F	16:10	0	0	Not detected	Calm	0	
A	16:29	0	0	Not detected	Calm	0	
B	16:37	0	0	Not detected	Calm	0	
C	16:45	0	0	Not detected	Calm	0	
D	16:52	0	0	Not detected	Calm	0	
E	16:59	0	0	Not detected	Calm	0	

Note:

1. Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
   - 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
   - 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
   - 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
   - 3 - Strong Identifiable, likely to have odour nuisance;
   - 4 - Extreme Severe odour, and unacceptable odour level.
2. OI-1 & OI-2: Odour intensity detected by panel member 1 & 2

	Name	Signature	Date
Recorded by	Tang C.S.		15/08/2023
Checked by	Lui H.F.		15/08/2023

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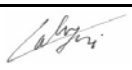
Odour Patrol Record Sheet

General Information	
Project Name	Odour Assessment for West Kowloon Cultural District
Date	15/08/2023
Weather	Cloudy
Temperature (°C)	28.8
Hunmidity (%)	83

Location ID	Time	Odour Intensity		Odour Characteristics	Wind Direction	Wind Speed	Remarks
		OI-1	OI-2				
H	22:41	0	0	Not detected	Calm	0	
G	22:51	0	0	Not detected	Calm	0	
F	22:58	0	0	Not detected	Calm	0	
A	23:17	0	0	Not detected	Calm	0	
B	23:25	0	0	Not detected	Calm	0	
C	23:32	0	0	Not detected	Calm	0	
D	23:39	0	0	Not detected	Calm	0	
E	23:47	0	0	Not detected	Calm	0	

Note:

1. Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
   - 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
   - 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
   - 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
   - 3 - Strong Identifiable, likely to have odour nuisance;
   - 4 - Extreme Severe odour, and unacceptable odour level.
2. OI-1 & OI-2: Odour intensity detected by panel member 1 & 2

	Name	Signature	Date
Recorded by	Tang C.S.		15/08/2023
Checked by	Lui H.F.		15/08/2023

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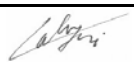
Odour Patrol Record Sheet

General Information	
Project Name	Odour Assessment for West Kowloon Cultural District
Date	06/09/2023
Weather	Fine
Temperature (°C)	29.3
Hunmidity (%)	72

Location ID	Time	Odour Intensity		Odour Characteristics	Wind Direction	Wind Speed	Remarks
		OI-1	OI-2				
H	01:15	0	0	Not detected	Calm	0	
G	01:25	0	0	Not detected	Calm	0	
F	01:32	0	0	Not detected	Calm	0	
A	01:50	0	0	Not detected	Calm	0	
B	01:58	0	0	Not detected	Calm	0	
C	02:05	0	0	Not detected	Calm	0	
D	02:12	0	0	Not detected	Calm	0	
E	02:20	0	0	Not detected	Calm	0	

Note:

1. Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
   - 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
   - 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
   - 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
   - 3 - Strong Identifiable, likely to have odour nuisance;
   - 4 - Extreme Severe odour, and unacceptable odour level.
2. OI-1 & OI-2: Odour intensity detected by panel member 1 & 2

	Name	Signature	Date
Recorded by	Tang C.S.		06/09/2023
Checked by	Lui H.F.		06/09/2023

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Odour Patrol Record Sheet

General Information	
Project Name	Odour Assessment for West Kowloon Cultural District
Date	06/09/2023
Weather	Fine
Temperature (°C)	28.8
Hunmidity (%)	69

Location ID	Time	Odour Intensity		Odour Characteristics	Wind Direction	Wind Speed	Remarks
		OI-1	OI-2				
H	08:08	0	0	Not detected	Calm	0	
G	08:18	0	0	Not detected	Calm	0	
F	08:25	0	0	Not detected	Calm	0	
A	08:44	0	0	Not detected	Calm	0	
B	08:52	0	0	Not detected	Calm	0	
C	08:59	0	0	Not detected	Calm	0	
D	09:07	0	0	Not detected	Calm	0	
E	09:15	0	0	Not detected	Calm	0	

Note:

1. Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
   - 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
   - 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
   - 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
   - 3 - Strong Identifiable, likely to have odour nuisance;
   - 4 - Extreme Severe odour, and unacceptable odour level.
2. OI-1 & OI-2: Odour intensity detected by panel member 1 & 2

	Name	Signature	Date
Recorded by	Tang C.S.		06/09/2023
Checked by	Lui H.F.		06/09/2023

APEX Testing & Certification Ltd
上峰檢測認證有限公司

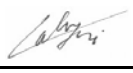
Odour Patrol Record Sheet

General Information	
Project Name	Odour Assessment for West Kowloon Cultural District
Date	06/09/2023
Weather	Fine
Temperature (°C)	29.9
Hunmidity (%)	70

Location ID	Time	Odour Intensity		Odour Characteristics	Wind Direction	Wind Speed	Remarks
		OI-1	OI-2				
H	15:00	0	0	Not detected	Calm	0	
G	15:09	0	0	Not detected	Calm	0	
F	15:16	0	0	Not detected	Calm	0	
A	15:36	0	0	Not detected	Calm	0	
B	15:44	0	0	Not detected	Calm	0	
C	15:51	0	0	Not detected	Calm	0	
D	15:59	0	0	Not detected	Calm	0	
E	16:07	0	0	Not detected	Calm	0	

Note:

1. Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
   - 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
   - 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
   - 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
   - 3 - Strong Identifiable, likely to have odour nuisance;
   - 4 - Extreme Severe odour, and unacceptable odour level.
2. OI-1 & OI-2: Odour intensity detected by panel member 1 & 2

	Name	Signature	Date
Recorded by	Tang C.S.		06/09/2023
Checked by	Lui H.F.		06/09/2023

APEX Testing & Certification Ltd
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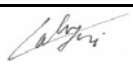
Odour Patrol Record Sheet

General Information	
Project Name	Odour Assessment for West Kowloon Cultural District
Date	06/09/2023
Weather	Cloudy
Temperature (°C)	29.8
Hunmidity (%)	66

Location ID	Time	Odour Intensity		Odour Characteristics	Wind Direction	Wind Speed	Remarks
		OI-1	OI-2				
H	18:51	0	0	Not detected	Calm	0	
G	19:01	0	0	Not detected	Calm	0	
F	19:08	0	0	Not detected	Calm	0	
A	19:26	0	0	Not detected	Calm	0	
B	19:34	0	0	Not detected	Calm	0	
C	19:41	0	0	Not detected	Calm	0	
D	19:48	0	0	Not detected	Calm	0	
E	19:56	0	0	Not detected	Calm	0	

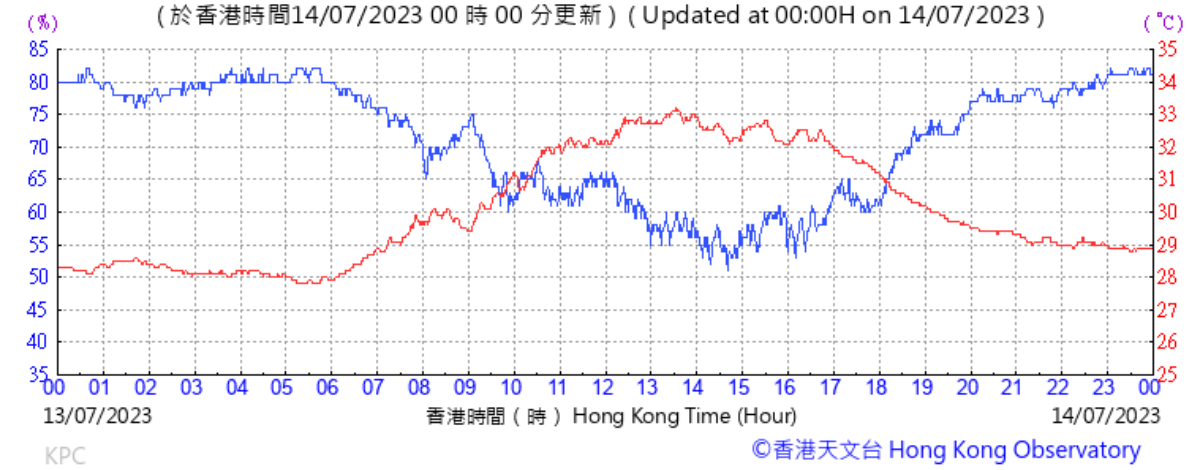
Note:

1. Odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
   - 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
   - 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
   - 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
   - 3 - Strong Identifiable, likely to have odour nuisance;
   - 4 - Extreme Severe odour, and unacceptable odour level.
2. OI-1 & OI-2: Odour intensity detected by panel member 1 & 2

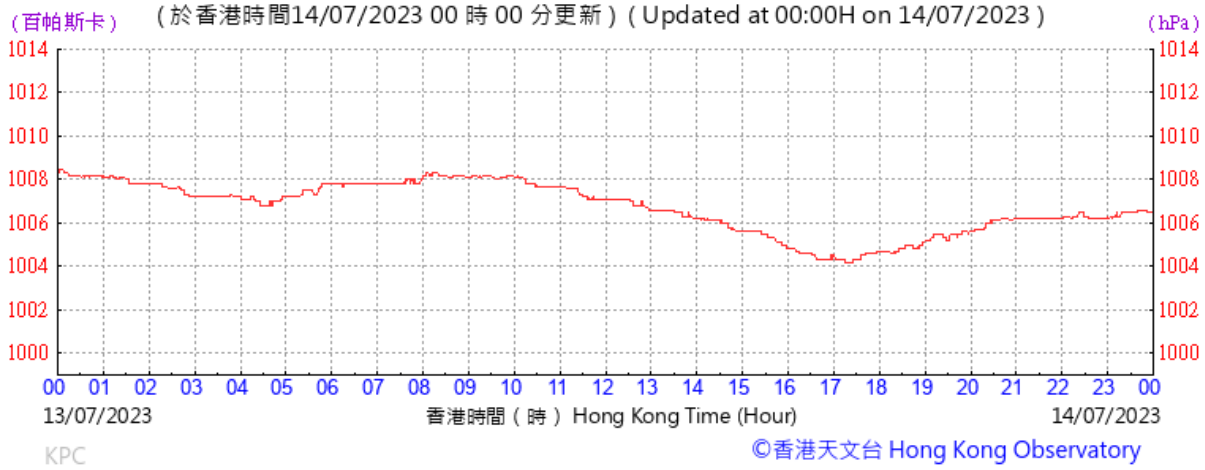
	Name	Signature	Date
Recorded by	Tang C.S.		06/09/2023
Checked by	Lui H.F.		06/09/2023

Appendix 6 - Meteorological data from HKO (King's Park Meteorological Station)

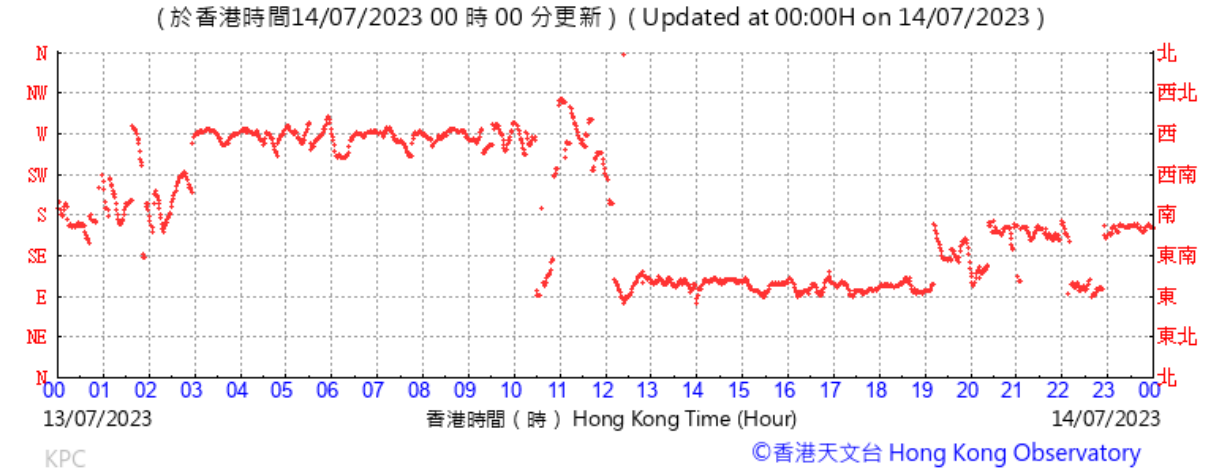
Tempearture/Humidity:



Pressure:

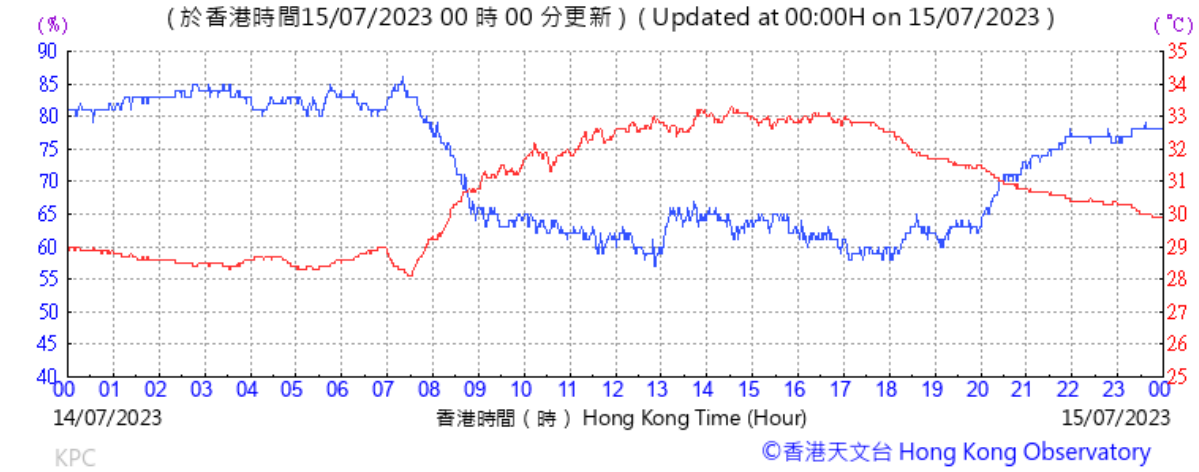


Wind Direction:

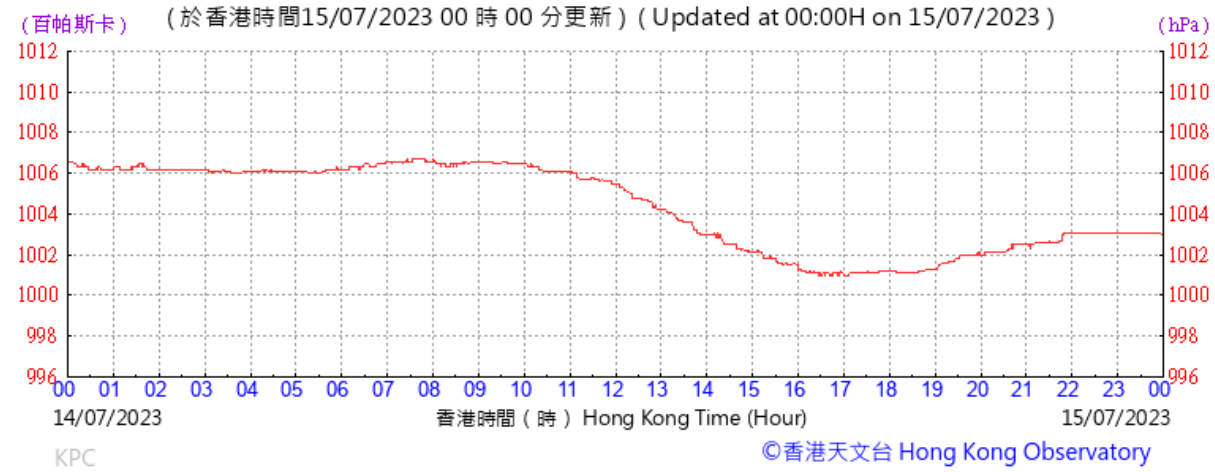


Wind Speed:

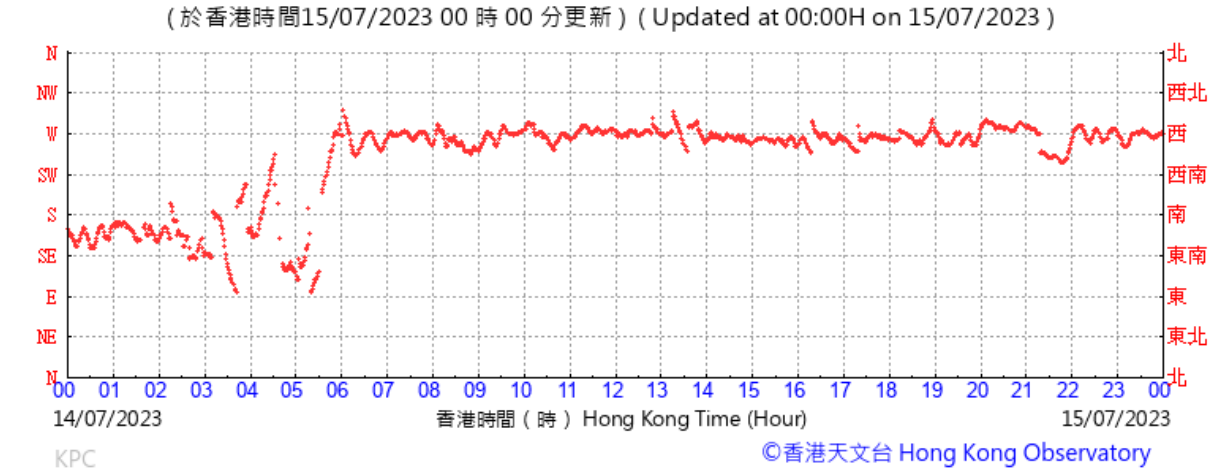
Tempearture/Humidity:



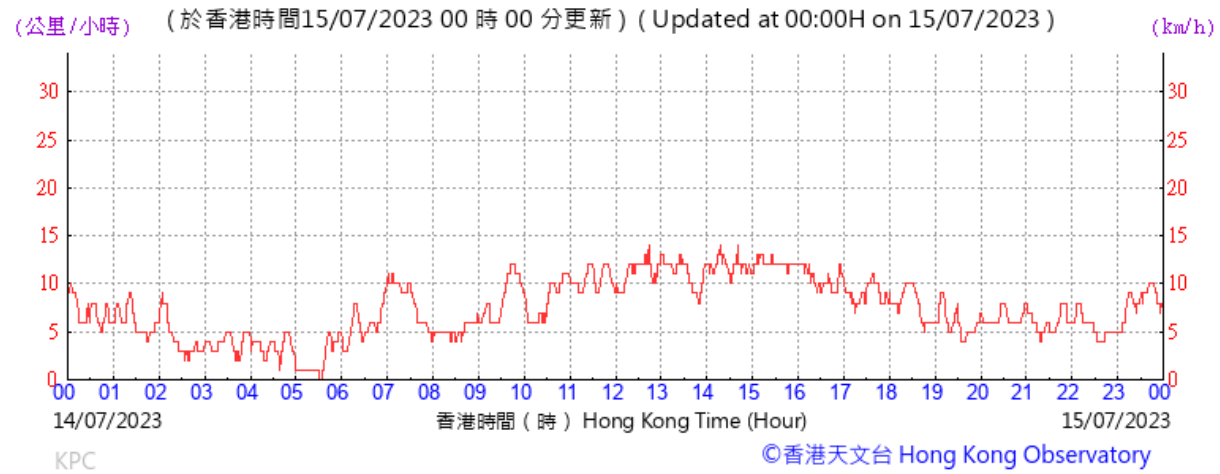
Pressure:



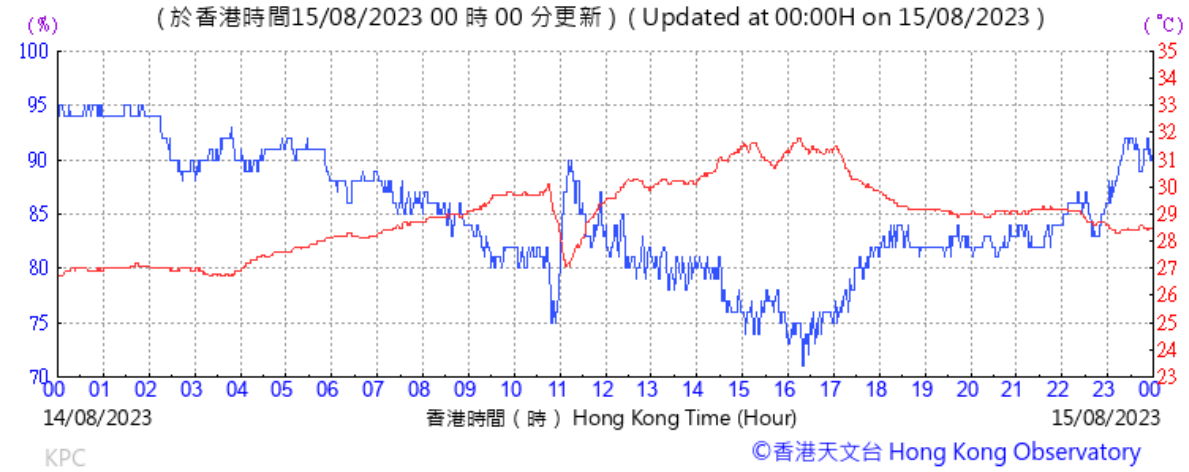
Wind Direction:



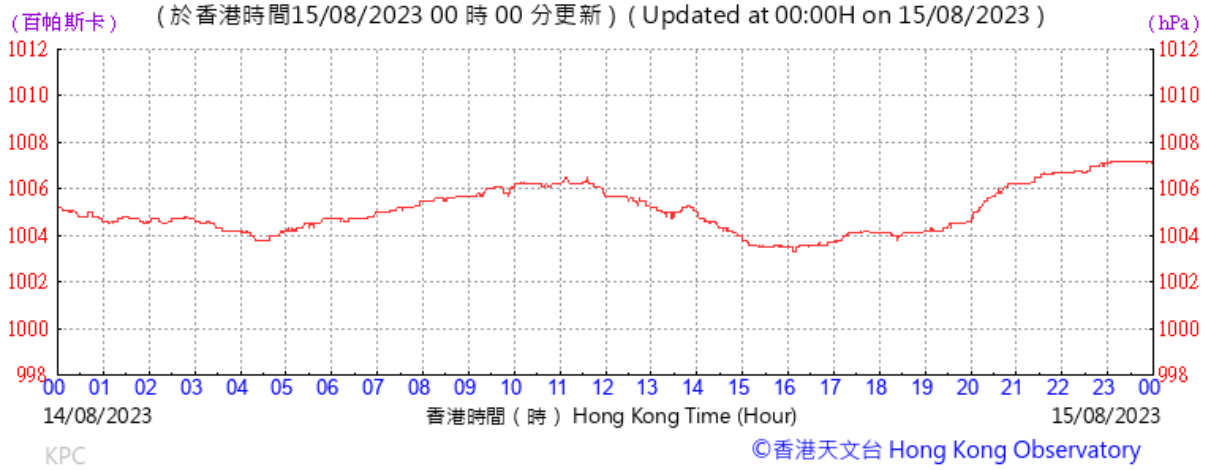
Wind Speed:



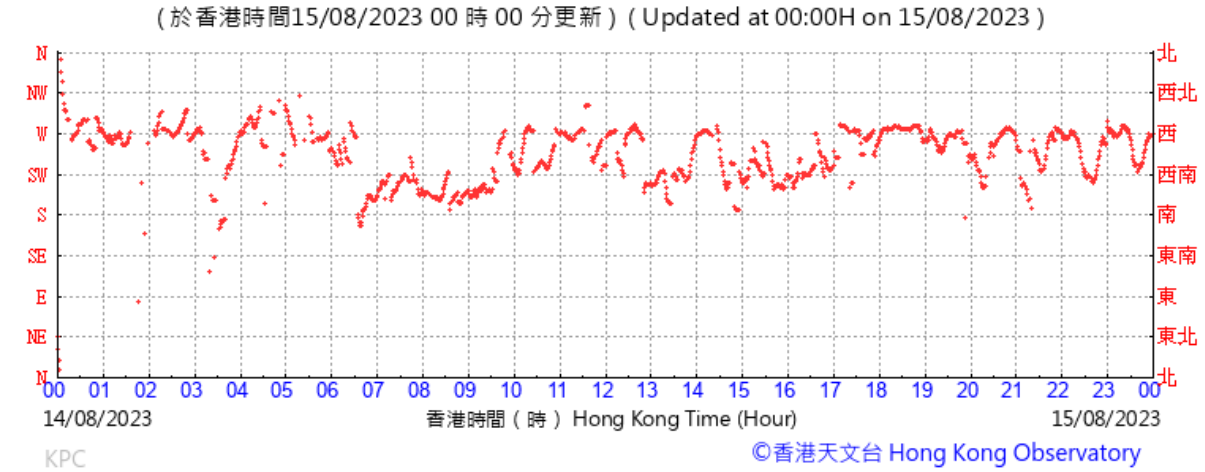
Tempearture/Humidity:



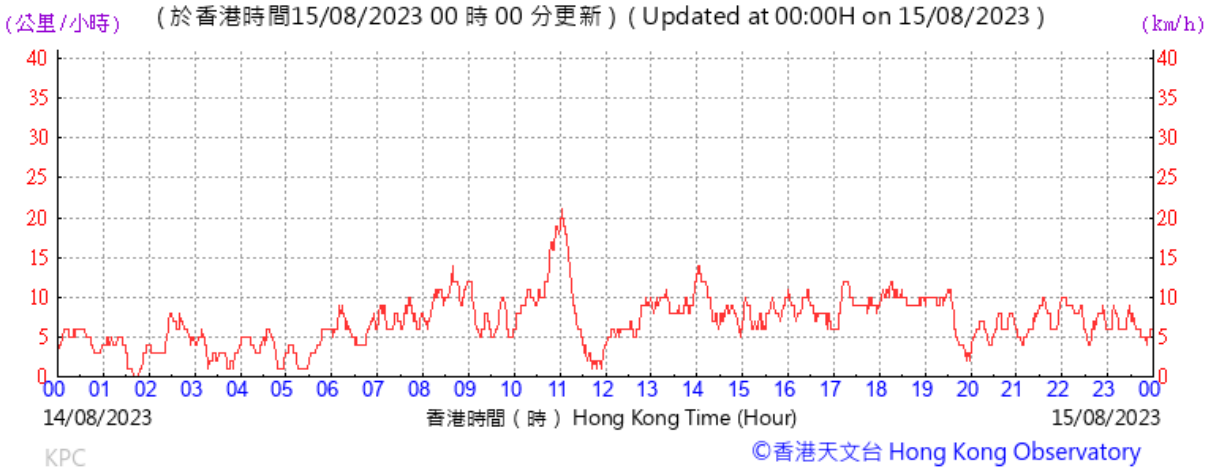
Pressure:



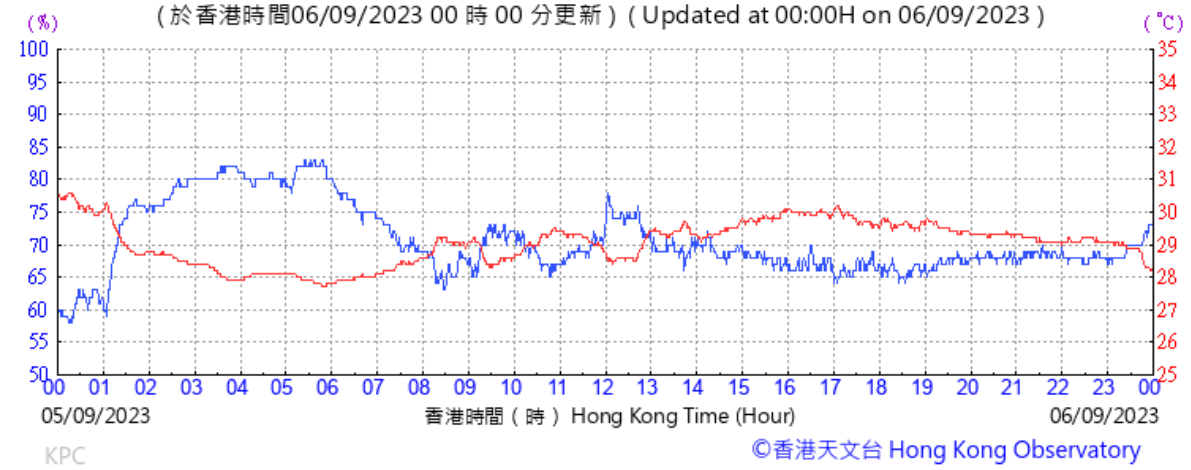
Wind Direction:



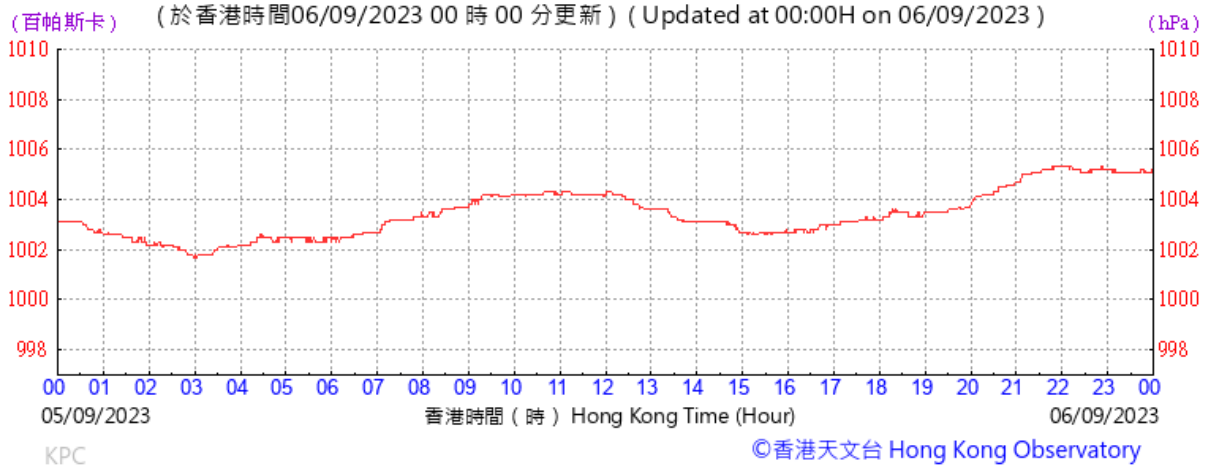
Wind Speed:



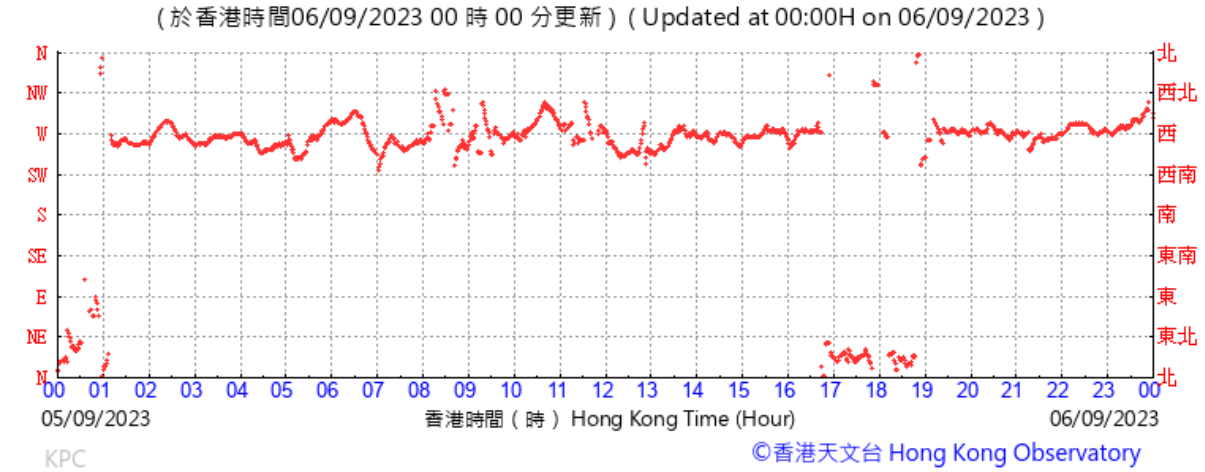
Tempearture/Humidity:



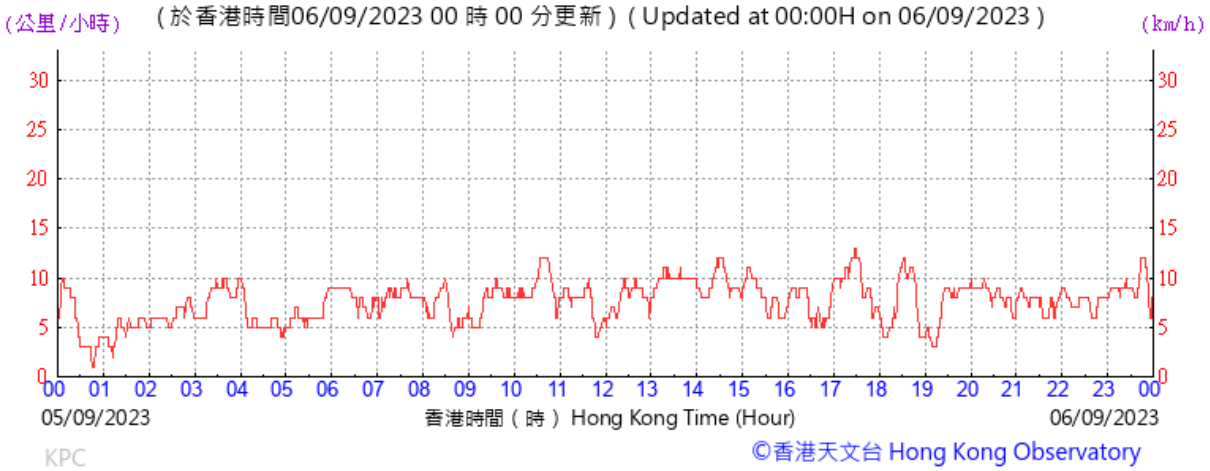
Pressure:



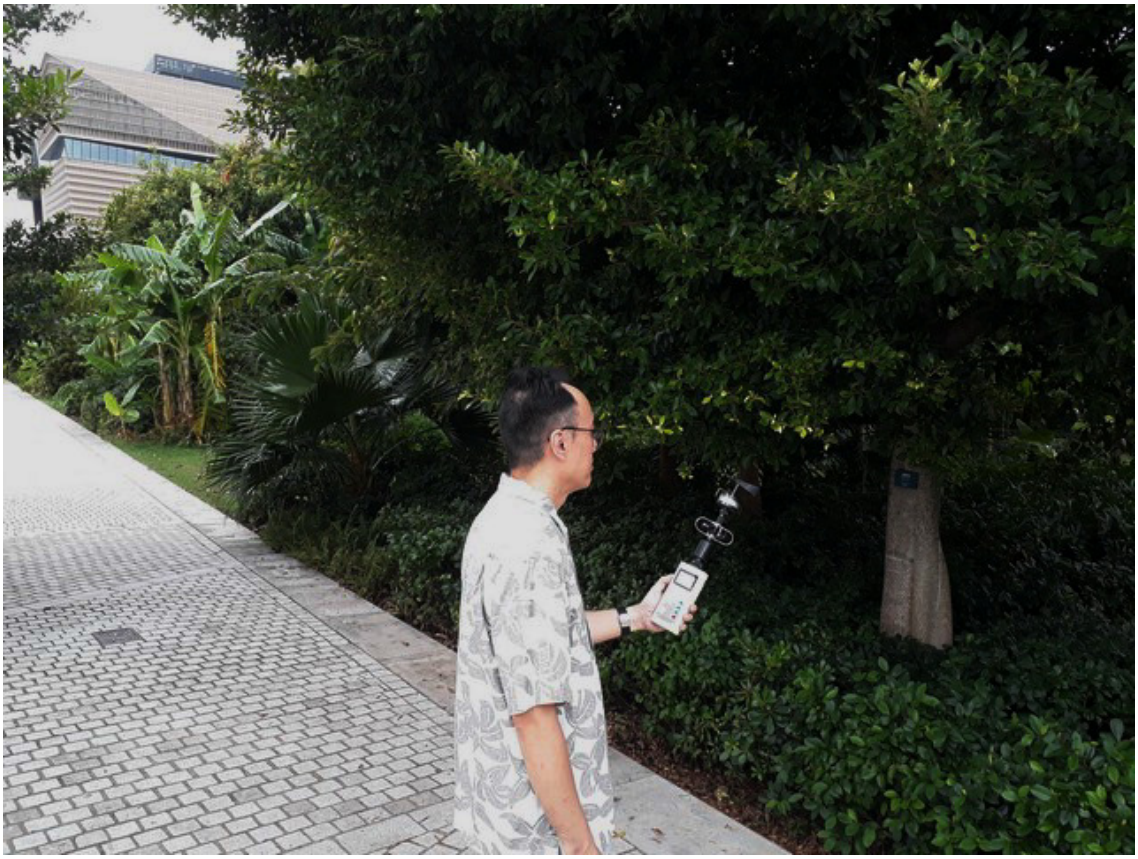
Wind Direction:



Wind Speed:



Appendix 7 - Photos of Odour Patrol Point



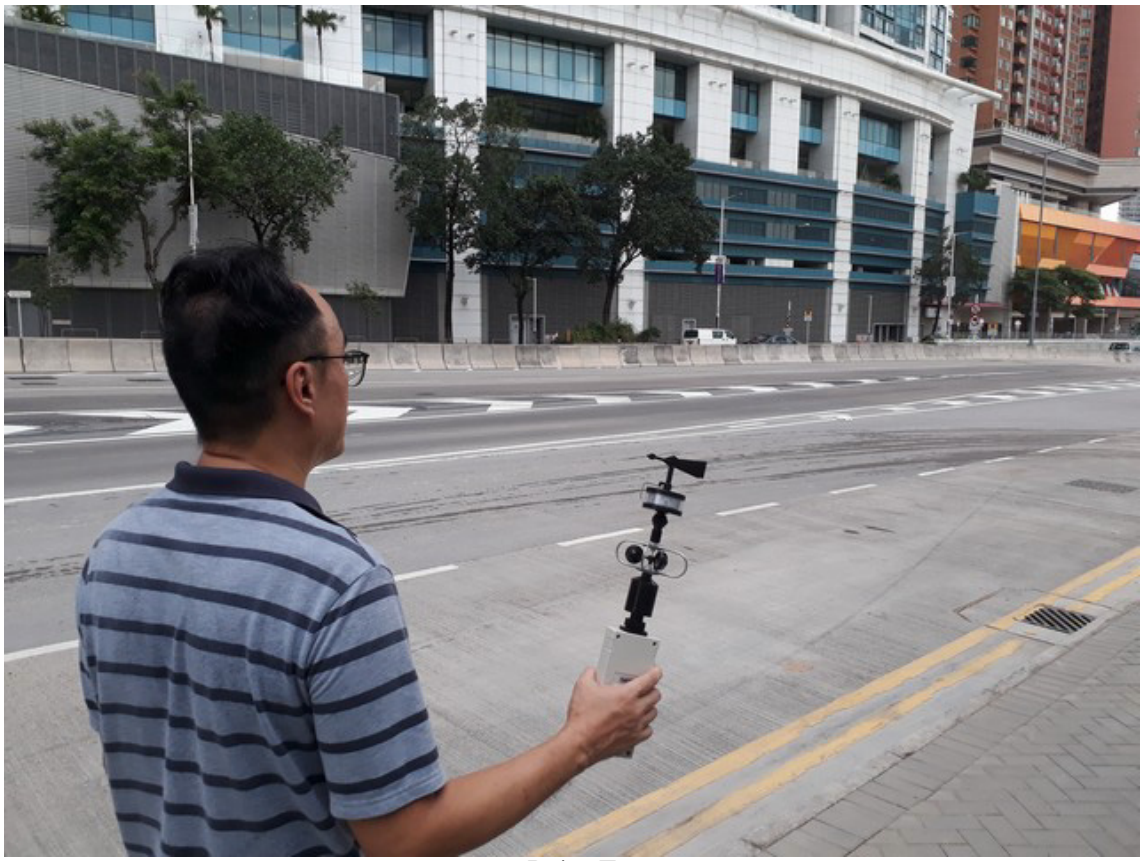
Point A

Point B

Point C

Point D

Point E



Point F

Point G

Point H