MOTT MACDONALD

Development at West Kowloon Cultural District

Quarterly Environmental Monitoring and Audit (EM&A) Report (November 2018 - January 2019)

March 2019

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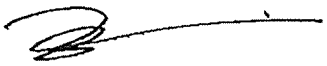
This Quarterly EM&A Report has been reviewed and certified by the Environmental Team Leader (ETL) and verified by the Independent Environmental Checker (IEC).

Certified by:



Brian Tam
Environmental Team Leader (ETL)
West Kowloon Cultural District Authority

Date 11 Mar 2019

Verified by:

Fredrick Leong
Independent Environmental Checker (IEC)
Meinhardt Infrastructure & Environment Ltd

Date 11 Mar 2019

Contents

Executive summary

This Quarterly EM&A Report presents the monitoring works at both the main works of M+ Museum and Lyric Theatre Complex conducted from 1 November 2018 to 31 January 2019.

The impact stage EM&A programme for the Project includes air quality, noise, water quality, waste, landscape and visual monitoring. The recommended environmental mitigation measures were implemented on site and regular inspections were carried out to ensure that the environmental conditions are acceptable.

The EM&A programme was carried out by the ET in accordance with the EM&A Manual requirements. It is concluded from the environmental monitoring and audit works that adequate environmental mitigation measures have been implemented by the contractors where appropriate in the reporting quarter.

Exceedance of Action and Limit Levels

Four exceedances of Action Level of 24-hour TSP for Air Quality were recorded. There was no breach of Limit levels for Air Quality (1-hour TSP and 24-hour TSP) and Noise in this reporting quarter.

Implementation of Mitigation Measures

Construction phase weekly site inspections were carried out to confirm the implementation measures undertaken by the Contractors in the reporting quarter. The status of implementation of mitigation measures during the reporting quarter is shown in **Appendix C**.

Landscape and visual impact inspections were conducted as part of the abovementioned weekly site inspections during the reporting quarter. No adverse comment on landscape and visual aspects was made during these inspections.

Record of Complaints

Three environmental complaints were received during the reporting quarter.

Record of Notification of Summons and Successful Prosecutions

No notification of summons and successful prosecution were recorded in the reporting quarter.

1 Introduction

1.1 Background

Mott MacDonald Hong Kong Limited (MMHK) was commissioned to undertake the Environmental Team (ET) services (including environmental monitoring and audit (EM&A)) for the construction of M+ Museum Main Works (Contract No.: CC/2015/3A/022) and Lyric Theatre Complex including the Foundation Works (Contract No.: CC/2015/3A/014) and L1 Contract (Contract No. CC/2017/3A/030) at West Kowloon Cultural District (WKCD) (The Project) as part of the WKCD development. The Project Proponent is the West Kowloon Cultural District Authority (WKCDA). The construction works and EM&A programme for M+ Museum and Lyric Theatre Complex commenced on 31 October 2015 and 1 March 2016 respectively. The overall works for the WKCD fall under two separate categories of Designated Project (DP) of the Environmental Impact Assessment Ordinance (EIAO), namely an "engineering feasibility study of urban development projects with a study area covering more than 20 ha or involving a total population of more than 100 000" (Item 3 of Schedule 3) and "an underpass more than 100m in length under the built areas" (Item A.9, Part I, Schedule 2). An Environmental Permit No. EP-453/2013/B (EP) was issued with respect to the "Underpass Road and Austin Road Flyover Serving the West Kowloon Cultural District" which specifically includes the abovementioned category of DP under Item A.9, Part I, Schedule 2 of the EIAO. The captioned projects include part of the abovementioned underpass road located within the site boundary also falls under this same category.

The M+ museum development aims to provide an iconic presence for the M+ museum, semi-transparent vertical plane, housing education facilities, a public restaurant and museum offices. At ground and lower levels, generous access will be provided to the park and other West Kowloon Cultural District facilities, alongside a public resource centre, theatres, retail and dining, and back-of-house functions.

The 1,200-seat Lyric Theatre Complex will be Hong Kong's first world-class facility for dance performances, including ballet, contemporary and Chinese dance forms. In the run up to the opening of further major performing arts venues in the WKCD, it will also be used for a wide variety of performing arts events including drama, opera and musical performances. The Lyric Theatre Complex will act as a platform for Hong Kong's leading arts organisations, and be a new major venue to show programmes from Asia and worldwide.

The Quarterly EM&A Report is prepared in accordance with the Clause 3.4 of the Environmental Permit No. EP-453/2013/B. This Quarterly EM&A Report presents the monitoring works conducted from 1 November 2018 to 31 January 2019. The purpose of this report is to summarise the findings in the EM&A of the project over the reporting period.

1.2 Project Organisation

The organisation chart and lines of communication with respect to the on-site environmental management structure together with the contact information of the key personnel are shown in **Appendix A**.

1.3 Environmental Status in the Reporting Period

During the reporting period, construction works at M+ Museum undertaken include:

- Structure
  - Podium GF: Falsework, formwork and rebar at K-L/7-9, E-F/11-14, K-M/4-6, Stair at J/9-10

  - Podium RF: Falsework, formwork and rebar
  - Podium 2F: Scaffold & formwork dismantling
  - CSF RT/F: Scaffold & formwork dismantling
  - RDE 8-11F: Slab rebar & column preparation
- Facade
  - Installation of panels on M+ tower
  - Erection of 1MF scaffold for 1MF Installation
- MEP
  - Cast-in items as per concrete pouring schedule
  - Fix work at M+ podium, RRE and CSF
  - Remaining work at DCS plant room, Sea Water Pump Cells and Heat Exchanger plant room
- ABWF
  - RDE material delivery and block work up to 4/F
  - M+ material delivery and block work up to 11/F
- External
  - Trench reinstatement
  - FS pipe, ICT, PW connection

During the reporting period, construction works at Lyric Theatre Complex undertaken include:

- Bulk excavation works at Main Cofferdam
- Drainage work (PIW works)
- Extended basement structure construction of Area 06

The Construction Works Programme of the Project is provided in **Appendix B**. A layout plan of the Project is provided in **Figure 1**.

2 Summary of EM&A Requirements

2.1 Monitoring Requirements

In accordance with the EM&A Manual, environmental parameters including air quality, noise, landscape and visual have been monitored. The specific parameters, monitoring frequency and the respective Action and Limit levels are given in **Table 2.1**. Locations of the monitoring stations are provided in **Figure 1**.

Table 2.1: Summary of Impact EM&A Requirements

Parameters	Descriptions	Locations	Frequencies	Action level	Limit level
Air Quality	24-Hour TSP	AM1 - International Commerce Centre	At least once every 6 days	143.6 μg/m^3	260 μg/m^3
	1-Hour TSP	AM1 - International Commerce Centre	At least 3 times every 6 days	273.7 μg/m^3	500 μg/m^3
	24-Hour TSP	AM2A – Austin Road West opposite to The Harbourside Tower 1	At least once every 6 days	151.1 μg/m^3	260 μg/m^3
	1-Hour TSP	AM2A – Austin Road West opposite to The Harbourside Tower 1	At least 3 times every 6 days	274.2 μg/m^3	500 μg/m^3
Noise	Leq, 30 minutes	NM1A- Podium level of The Harbourside Tower 1	Weekly	When one documented complaint is received from any one of the sensitive receivers	75 dB(A)
Landscape & Visual	Monitor implementation of proposed mitigation measures during the construction stage	As described in Table 9.1 and 9.2 of the EM&A Manual	Bi-weekly	N/A	N/A

Given that the Project covers only a small part of the whole WKCD area (i.e. M+ Museum, Lyric Theatre Complex and respective portions of underpass road), it was proposed that the EM&A programme for the Project should only require 1 noise monitoring station and 2 air quality monitoring stations located closest to the Project area. Currently, the works under the captioned project are confined in the western part of the WKCD site. Therefore, only the monitoring stations AM1, AM2 were set up. However, the electricity supply at AM2 was suspended from 31 August 2016 and was no longer available. In order to have a more secure electricity supply, an alternative air monitoring location (AM2A) was identified at Austin Road West opposite to The Harbourside Tower 1, which is close to Lyric Theatre Complex site entrance. This alternative air monitoring location was approved by EPD on 28 September 2016. Approval from the management office of the International Commerce Centre has been granted on 29 February 2016 for conducting noise monitoring at the alternative noise monitoring location identified at the podium floor (NM1A) which is free from screening to the construction activities. Therefore, 2 air quality monitoring stations and 1 noise impact monitoring station were confirmed for the impact monitoring.

2.2 Environmental Mitigation Measures

Environmental mitigation measures have been recommended in the EM&A Manual. Summary of implementation status of the environmental mitigation measures is provided in **Appendix C**.

3 Summary of EM&A Monitoring Results

3.1 Monitoring Data

In accordance with the EM&A Manual, impact monitoring has been conducted in the reporting quarter. Meteorological data for the reporting quarter have been extracted from Hong Kong Observatory and presented in **Appendix D**. Monitoring data with graphical presentation for the reporting quarter are shown in **Appendix E**. A summary on the monitoring results are presented in **Table 3.1**.

Table 3.1: Summary of Monitoring Data

Parameter	Monitoring Location	Minimum	Maximum	Average
Air Quality				
1 hour TSP	AM1	37	136	79
1 hour TSP	AM2A	50	211	100
24 hour TSP	AM1	40	140	80
24 hour TSP	AM2A	38	253	112
Construction Noise				
Leq(30min)	NM1A	68	69	68

3.2 Monitoring Exceedances

Summary of the exceedances in the reporting quarter is tabulated in **Table 3.2**.

Table 3.2: Summary of Exceedances

Monitoring Station	Parameter	No. of Exceedance		Action Taken
		Action Level	Limit Level	
Air Quality				
AM1	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
AM2A	1 hour TSP	0	0	N/A
	24 hour TSP	4	0	N/A
Construction Noise				
NM1A	Leq(30min)	0	0	N/A

3.2.1 1-hour TSP Monitoring

All 1-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance was recorded.

3.2.2 24-hour TSP Monitoring

All 24-hour TSP monitoring was conducted as scheduled in the reporting quarter. Four exceedances of Action Level of 24-hour TSP for Air Quality were recorded, while there were no Limit Level exceedance.

3.2.3 Construction Noise Monitoring

All construction noise monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance was recorded.

3.2.4 Landscape and Visual Monitoring

All landscape and visual impact inspections were conducted as scheduled in the reporting quarter. No adverse comment on landscape and visual aspects was recorded.

4 Waste Management

4.1 M+ Museum

As advised by the Contractor, 14.8 tonnes, 1,133.4 tonnes and 607.1 tonnes of inert C&D material were disposed of as public fill to Chai Wan Public Fill Barging Point, Tuen Mun Area 38 and Tseung Kwan O Area 137 Public Fill respectively, while 716.1 tonnes of general refuse were disposed of at SENT landfill. 442.4 tonnes of metals, 1.8 tonnes of paper/cardboard packaging, 0 tonne of plastic and 525.0 tonne of timber were collected by recycling contractors in the reporting quarter. 0 tonne of inert C&D materials were reused on site. 0 tonne of inert C&D materials were reused in other projects and 2,475.8 tonnes of inert C&D materials were disposed to sorting facility. 0 tonne of chemical wastes was collected by licensed contractors in the reporting quarter.

The actual amounts of different types of waste generated by the activities of construction works at M+ Museum in the reporting quarter are shown in **Appendix F**.

4.2 Lyric Theatre Complex

As advised by the Contractor, 29,048.74 tonnes, 12,211.67 tonnes, and 14.73 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137, Tuen Mun Area 38, and Chai Wan Public Fill Barging Point respectively, while 168.2 tonnes of general refuse were disposed of at SENT landfill. 476.3 tonnes of metals, 0.4 tonnes of paper/cardboard packaging, 1.2 tonne of plastic and 0 tonne of timber were collected by recycling contractors in the reporting quarter. 0 tonne of inert C&D materials was reused on site. 318.0 tonnes of fill materials were imported for use at site and 201,421.7 tonnes of inert C&D materials were reused in other projects. 10.9 tonnes of inert C&D materials were disposed to sorting facility and 0 tonne of chemical wastes were collected by licensed contractors in the reporting quarter.

The actual amounts of different types of waste generated by the activities of construction works at Lyric Theatre Complex in the reporting quarter are shown in **Appendix F**.

5 Environmental Non-conformance

Four exceedances of Action Level of 24-hour TSP for Air Quality were recorded at monitoring station AM2A, while there was no breach of Limit Level for Air Quality and Action or Limit Levels for Noise monitoring in the reporting quarter. Details of the exceedances are as follows:

The measured 24-hr TSP level on 8 Nov and 20 Nov 2018 was 152 μg/m^3 and 181 μg/m^3 respectively. Investigation revealed that the contractors have already implemented dust mitigation measures to reduce the dust impact from the construction activities. The poor ambient air quality on 8 Nov 2018 and the dusty construction work without proper mitigation measures conducted near AM2A monitoring station by another contractor on 8 Nov and 20 Nov 2018 might have contributed to the exceedance of 24-hr TSP. It is believed that with proper mitigation measures implemented by the other contractor for construction activities located near the AM2A monitoring station, the exceedance could have been avoided. Therefore, the exceedance is deemed non-project related.

While on 22 Dec 2018 and 14 Jan 2019, the measured level was at 253 μg/m^3 and 171 μg/m^3 respectively. It is revealed that the contractors have already implemented dust mitigation measures to reduce the dust impact from their construction works. Uncovered debris was found on 19 Dec 2018 during weekly site inspection, but it was no longer found on site on 22 Dec 2018. Therefore, it is deemed that the contribution from the uncovered debris to the exceedance on 22 Dec 2018 was minor. Moreover, it should be noted that there have been construction works carried out by another contractor at Austin Road West during the concerned monitoring period with no dust mitigation measures provided. This may also have contributed to the 24-hr TSP exceedance during the concerned monitoring period.

Nonetheless, the contractors were reminded to strengthen the implementation of dust control measures.

Three environmental complaints and no notifications of summons or successful prosecution were received in the reporting quarter.

On 17 Dec 2018, EPD referred a letter from the office of District Councilor Mr. Derek Hung. The environmental-related issues of the complaint included construction noise was generated from 7 a.m. every day and insufficient dust mitigation measures were provided which led to dust to nearby residents. Investigation results revealed that no noisy works were conducted at 7 a.m. every day for both construction sites. The contractors have already been implementing various noise and dust mitigation measures to reduce noise and dust impact to nearby residents.

Another environmental complaint was received from EPD on 8 Jan 2019. The environmental-related issues of the complaint includes muddy water from wheel washing flowed out of the site; the volume of the broadcast system at site entrance was too loud; and no dust suppression measures were provided. It is deemed that the concerned construction site entrance of Gammon Construction Limited mentioned in the complaint is likely the site entrance of Lyric Theatre Complex. The concerned contractor has been implementing various mitigation measures to prevent muddy water from flowing out of the site boundary. For the broadcast system at the concerned site entrance, the contractor has already carried out follow up actions in response to the complaint. It is also noted that the contractors of both construction sites have been implementing dust suppression measures. As the concerned Austin Road West was used by various contractors, it did not directly imply the complaint was only attributable to Lyric Theatre Complex.

The third environmental complaint was received from Buildings Department on 22 Jan 2019. The environmental-related issues of the complaint to Lyric Theatre Complex include vehicles being washed at the site entrance leading to muddy water being discharged to the street; and dust generated during site operation was not properly addressed. It is revealed that the contractor has been implementing various mitigation measures to prevent muddy water from flowing out of the site boundary and has already implemented immediate actions to further control the wheel washing performed at the site

entrance. The contractor has also been implementing dust suppression measures to control dust generated from construction works.

Moreover, it should be noted that besides the construction sites of Lyric Theatre Complex and M+ Museum, there have been construction works carried out by another contractor at Austin Road West, which may also have contributed to the abovementioned nuisance. Nevertheless, the contractors were reminded to strengthen the implementation of the recommended mitigation measures to reduce the environmental nuisance to the nearby residents.

The cumulative statistics on complaints, notifications of summons and successful prosecutions were provided in **Appendix G**.

6 Comments, Recommendations and Conclusion

6.1 Comments

Based on the observations made during site audits and landscape inspections, and construction dust and noise monitoring results, no non-compliances and exceedances of air quality and noise limits were recorded.

6.2 Recommendations

Reviewing the implementation of the recommended mitigation measures in the EM&A Manual, it was observed that they were effective and efficient in controlling the potential impacts due to construction of the project during the reporting period. Review of the effectiveness and efficiency of the EM&A programme will continue, and recommendations will be provided to remediate any potential impacts due to the project and to improve the EM&A programme if deficiencies of the existing EM&A programme are identified.

6.3 Conclusion

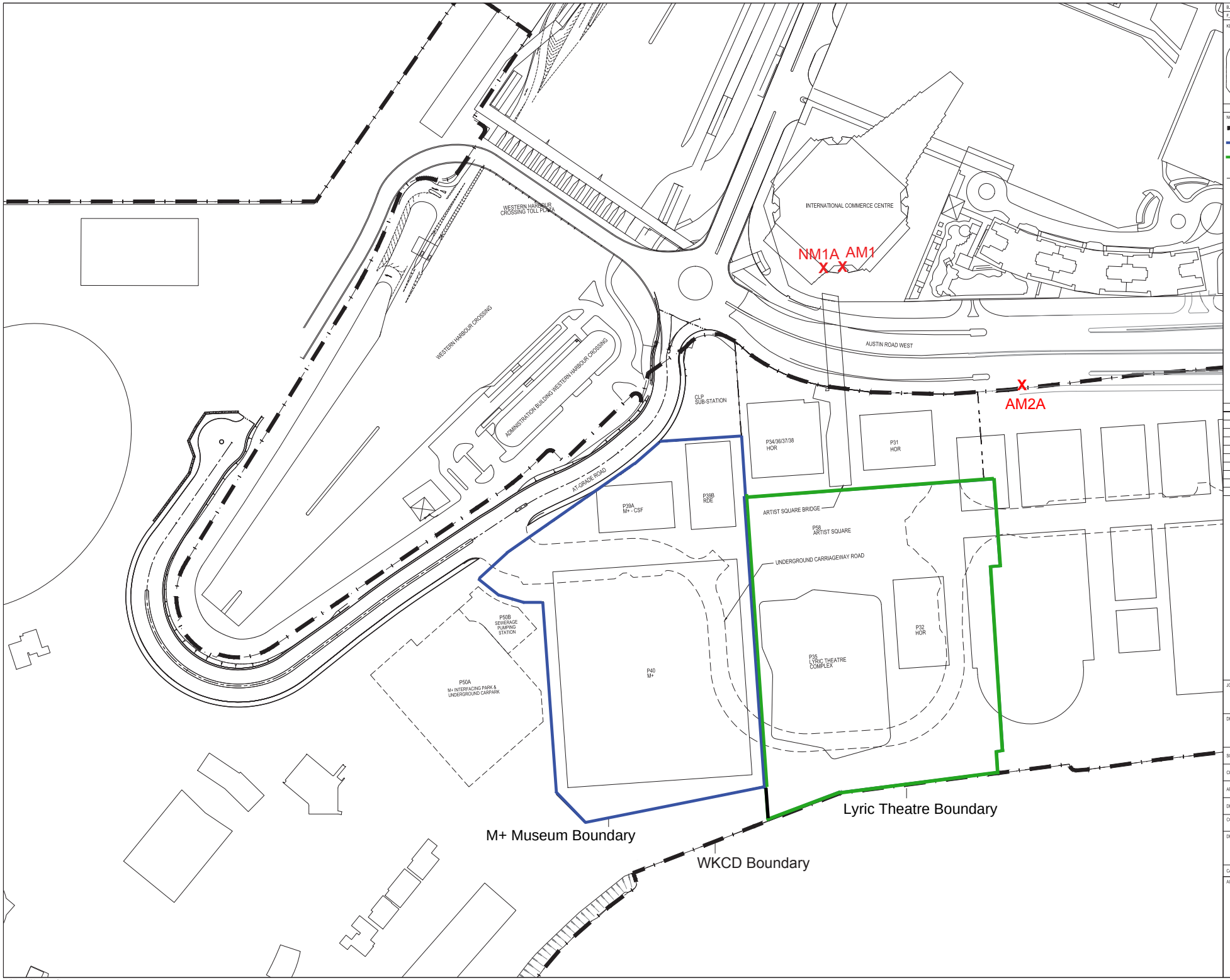
The EM&A programme as recommended in the EM&A Manual has been undertaken since the construction works of M+ Museum main works commenced on 31 October 2015, and the construction of Lyric Theatre Complex commenced on 1 March 2016.

Monitoring of air quality and noise with respect to the Project is underway. In particular, the 1-hour TSP, 24-hour TSP, noise level (as Leq, 30 minutes) under monitoring have been checked against established Action and Limit levels. Four exceedances of Action Level of 24-hour TSP for Air Quality were recorded. There was no breach of Limit levels for Air Quality (1-hour TSP and 24-hour TSP) and Noise in this reporting quarter.

Three environmental complaints were received during the reporting quarter. No notification of summons and no successful prosecution were received during the reporting quarter.

Weekly construction phase site inspections and bi-weekly landscape and visual impact inspections were conducted during the reporting quarter as required. It was observed that the Contractor had implemented all possible and feasible mitigation measures to mitigate the potential environmental impacts during construction phase works.

Figure 1 Site Layout Plan and Monitoring Stations



B.D. REF:

F.S.D. REF:

KEY PLAN

KEY PLAN

NOTES:

WKCD BOUNDARY

M+ MUSEUM BOUNDARY

LYRIC THEATRE BOUNDARY

BOUNDARY OF UNDERPASS ROAD SERVING THE PLANNED WKCD

X CONSTRUCTION AIR/NOISE MONITORING STATION

REV.	DATE	DESCRIPTION	INITIAL

JOB TITLE: **M+ MUSEUM FOR VISUAL CULTURE (MAIN CONTRACT WORKS) & LYRIC THEATRE COMPLEX**

DRAWING TITLE: **PROPOSED LOCATIONS OF CONSTRUCTION AIR/NOISE MONITORING STATIONS**

SCALE	1:100	PRINTED	A1
CHECKED		DATE	
APPROVED		DATE	
DRAWN	TY	DATE	16-10-2015

CONTRACT NO.

DRAWING NO. **FIGURE 1** REV. XA

CAD REF NAME: XXXXX-AUT-PMS-DWG-P00-L000-0000-XXX.dwg

AUTHORITY

westKowloon 西九文化區

A1 (841mm x 594mm) Sheet Size

Appendices

A. Project Organisation
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E. Graphical Plots of the Monitoring Results
F. Waste Flow table
G. Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

A. Project Organisation

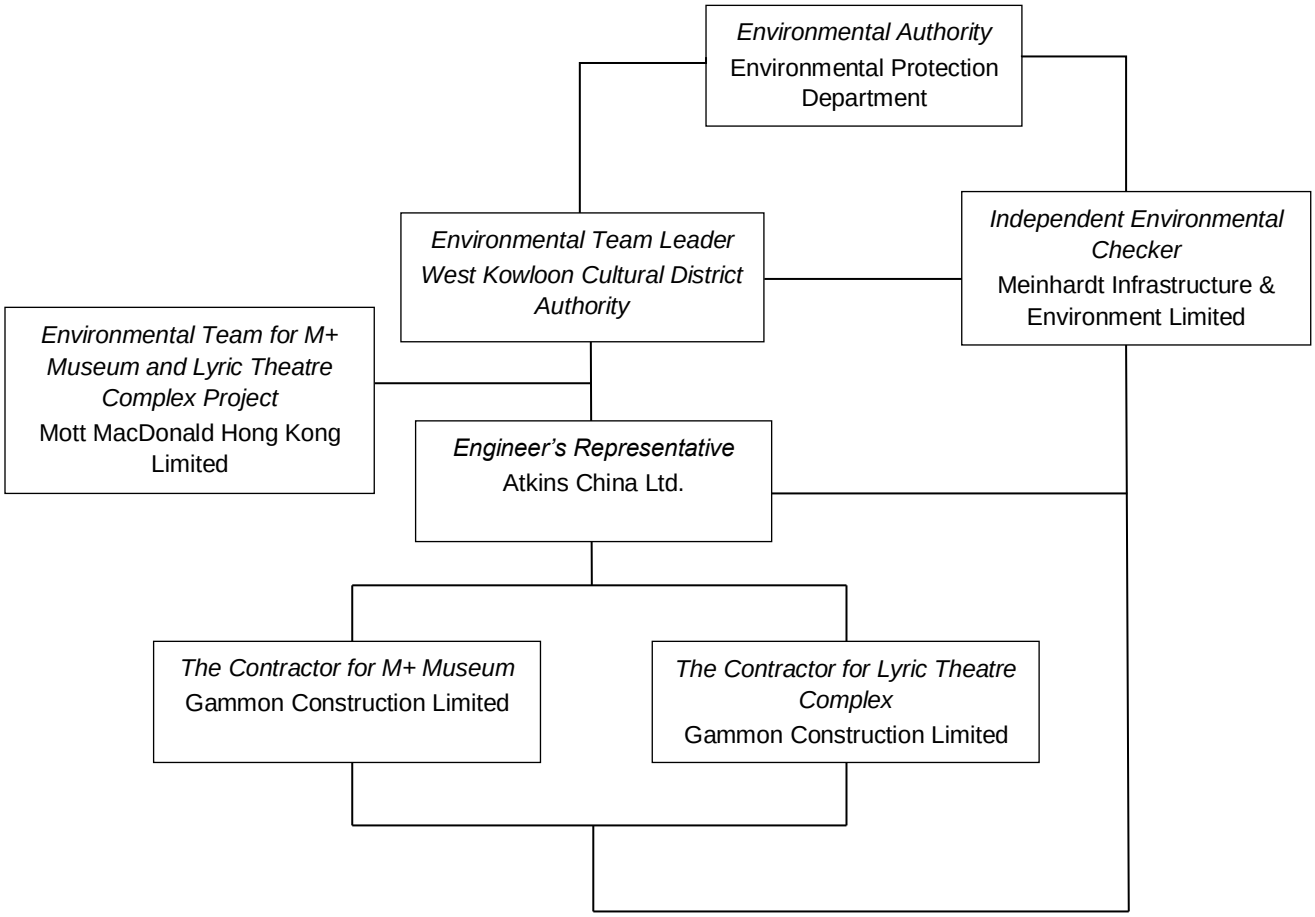


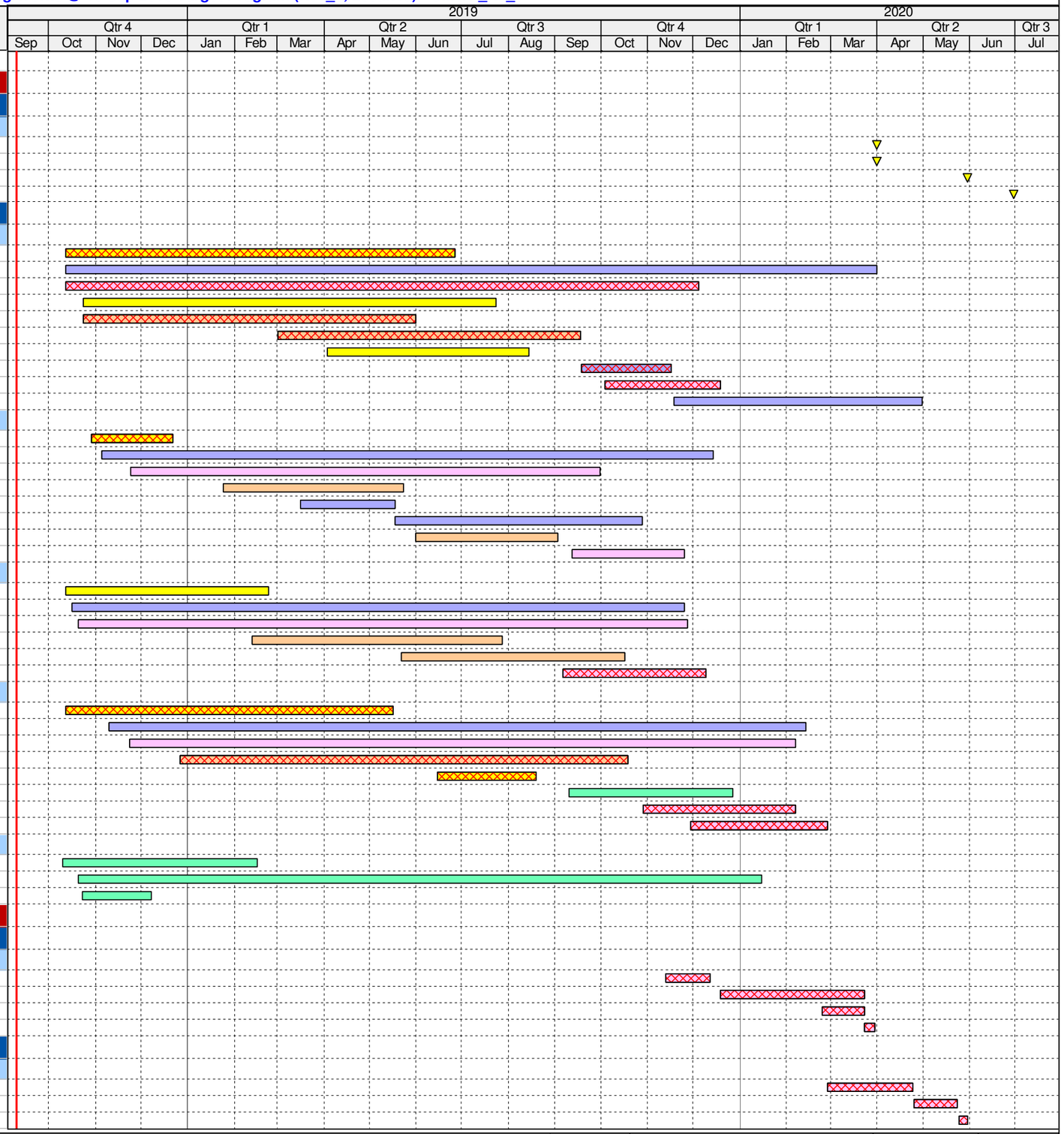
Table A-1: Contact information

Company Name	Role	Name	Telephone
Atkins China Ltd.	Assistant Resident Engineer	Ms. Gloria Lui	5506 6361
Meinhardt Infrastructure & Environment Limited	Independent Environmental Checker	Mr. Fredrick Leong	2859 1739
Gammon Construction Limited (M+ Museum)	Environmental Manager	Mr. Andy Leung	9489 0035
Gammon Construction Limited (Lyric Theatre Complex)	Environmental Manager	Ms. Sammie Chan	9864 4296
Mott MacDonald Hong Kong Ltd.	Contractor's Environmental Team Leader	Mr Brandon Wong	2828 5875
West Kowloon Cultural District Authority	Senior Environmental Specialist	Mr. Brian Tam	2200 0059

B. Construction Programme

M+ Museum

ID	Activity	OD	Start	Finish	TF
CMWP - M+ Project Remaining Works @ 10 Sep 2018 Target Program (Rev_0; 28Jan19)					
GENERAL & PRELIMINARIES (Remaining Works @ 10 SEP 2018)					
PROJECT KEY COMPLETION DATES					
Completion Obligations (*constrained dates for critical paths)					
OP1	Podium, M+ Tower & CSF - Obtain OP for the Whole of M+	0		31-Mar-20*	0
PC2	CSF - Obtain PC for H'over to Employer (Incl. Zone B2_Z07 - Loading Bays)	0		31-Mar-20*	1
OP2	RDE - Obtain OP for H'over to Employer	0		30-May-20*	1
PC1	Podium, M+ Tower & RDE - Obtain PC for H'over to Employer	0		30-Jun-20*	0
LEVEL 1 SUMMARY CONSTRUCTION PROGRAM					
Basement & Podium					
1758	[LoE] POD - RC Slabs Construction	209	12-Oct-18	26-Jun-19	5
1766	[LoE] POD - ABWF Works (Excl. Timber Finishes)	435	12-Oct-18	31-Mar-20	73
1769	[LoE] POD - MEP Works to Completion of Final Terminations	343	12-Oct-18	04-Dec-19	0
1764	[LoE] POD - RC Walls Construction	222	24-Oct-18	23-Jul-19	76
9817	[LoE] POD - EWS 1MF & 2/F Facade Installation (Excl. Louvres & Deferred Panels)	179	24-Oct-18	31-May-19	9
9818	[LoE] POD - Glass Wals & Skylights (B1/GF/L2/L3) for Weather Tight Stage	167	01-Mar-19	17-Sep-19	6
1765	[LoE] POD - Floating Slab Construction	111	03-Apr-19	14-Aug-19	40
1767	[LoE] POD - Drying Period	50	18-Sep-19	16-Nov-19	6
9816	[LoE] POD - MC's T&C for FSD Inspection	64	04-Oct-19	19-Dec-19	0
1768	[LoE] POD - ABWF Timber Finishes Post Drying Period	132	18-Nov-19	30-Apr-20	43
M+ Tower					
9789	[LoE] TW - RC Structural Works Incl. URF (Top Out 30 Nov2018)	47	29-Oct-18	22-Dec-18	0
9790	[LoE] TW - ABWF Works (Excl. Timber Finishes)	333	05-Nov-18	14-Dec-19	157
9793	[LoE] TW - MEP Works to Completion of Final Terminations	253	24-Nov-18	30-Sep-19	220
9832	[LoE] TW - EWS Facade to Weather Tight Stage (Excl. Early Works)	94	24-Jan-19	23-May-19	36
9791	[LoE] TW - Drying Period to 12/F	52	16-Mar-19	18-May-19	192
9792	[LoE] TW - ABWF Timber Finishes (4/F to 12F)	135	18-May-19	28-Oct-19	86
9834	[LoE] TW - Shop Front Glazing Podium L3 to M+ Tower 4/F Slab	78	31-May-19	02-Sep-19	16
9824	[LoE] TW - MC's T&C for FSD Inspection	60	12-Sep-19	25-Nov-19	21
CSF Building					
9829	[LoE] CSF - RC Structural Works (last concrete pour)	107	12-Oct-18	23-Feb-19	49
9830	[LoE] CSF - ABWF Works	332	16-Oct-18	25-Nov-19	97
9828	[LoE] CSF - MEP Works to Completion of Final Terminations	331	20-Oct-18	27-Nov-19	172
9833	[LoE] CSF - EWS Facade & Louvres Works to Weather Tight Stage	139	12-Feb-19	27-Jul-19	42
9842	[LoE] CSF - Roof Pre-cast Panels Installation	122	22-May-19	16-Oct-19	30
9831	[LoE] CSF - MC's T&C for FSD Inspection	78	06-Sep-19	09-Dec-19	8
RDE Tower					
9835	[LoE] RDE - RC Structural Works to Top Out (15/F Slab Cast)	175	12-Oct-18	16-May-19	0
9839	[LoE] RDE - ABWF Works	371	10-Nov-18	13-Feb-20	108
9836	[LoE] RDE - MEP Works to Completion of Final Terminations (L4 to 15MF)	354	23-Nov-18	06-Feb-20	120
9838	[LoE] RDE - EWS Facade Works to Weather Tight Stage (incl. Roof & UF)	240	27-Dec-18	18-Oct-19	14
9837	[LoE] RDE - RC Remaining Structural Works (15MF, Roof & UF)	55	15-Jun-19	19-Aug-19	0
9855	[LoE] RDE - Roof W'proof/Screed/Drains & Concrete Panels	90	10-Sep-19	27-Dec-19	57
9841	[LoE] RDE - MEP Works @ 15MF (BoH Plant Rooms)	78	29-Oct-19	06-Feb-20	0
9840	[LoE] RDE - MC's T&C for FSD Inspection	69	29-Nov-19	27-Feb-20	0
External Works					
9813	[LoE] EXT - IPA Portions	102	10-Oct-18	15-Feb-19	409
9814	[LoE] EXT - Along Building Boundaries	371	20-Oct-18	15-Jan-20	26
9810	[LoE] EXT - Promenade	40	23-Oct-18	07-Dec-18	461
COMPLETION STATUTORY INSPECTIONS & APPROVALS					
Basement, Podium, M+ Tower & CSF Building					
FSD & BD					
FSD1	FSD - FSD Inspection/Re-Inspection/Remedial Works - Advanced Layout Inspection	26	13-Nov-19	12-Dec-19	5
FSD2	FSD - FSD Inspection/Re-Inspection/Remedial Works - FS SYSTEMS INSPECTION	72	19-Dec-19	23-Mar-20	0
BD	BD - Inspection/Re-Inspection	24	24-Feb-20	23-Mar-20	0
1189	BD - Obtain OP for Basement/Podium/M+/CSF	6	23-Mar-20	30-Mar-20	0
RDE Building					
FSD & BD					
RDE_FSD	RDE_FSD - FSD Inspection/Re-Inspection/Remedial Works (layouts & systems)	48	28-Feb-20	24-Apr-20	0
RDE_BD	RDE_BD - Inspection/Re-Inspection	24	25-Apr-20	23-May-20	0
7490	RDE_BD - Obtain OP for RDE	6	25-May-20	30-May-20	0



Gammon

Milestone
Current - Other Works
Current - Struct Works
Current - MEP Works
Current - ABWF Works
Current - Facade Works
Critical Works

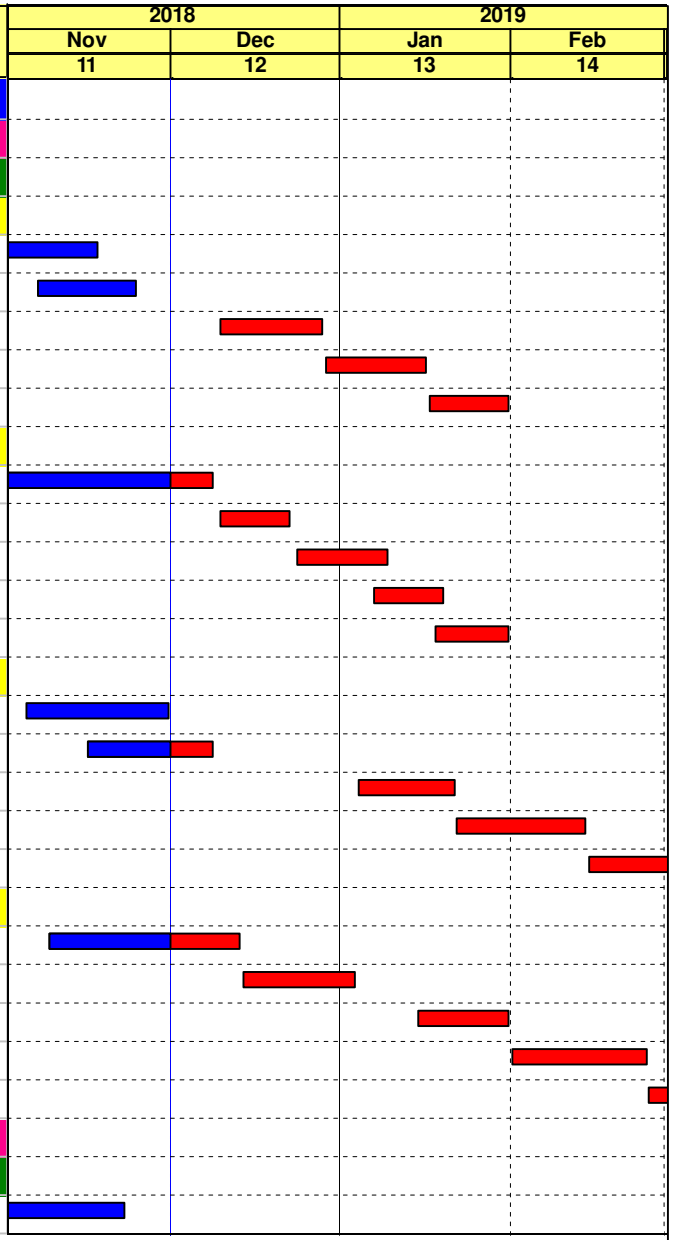
CMWP - M+ Project Remaining Works @ 10 Sep 2018 Target Program (Rev_0; 28Jan19)

Target Programme - Level 1 Summary Bar Chart

Date	Revision	Checked	Approved
28-Jan-19	CMWP Rev. 0 - Submission For Approval	NS	BG

Lyric Theatre Complex

Activity ID	Activity Name	Start Date	Finish Date
L1 Contract for Lyric Theatre Complex (3MRP)			
Cost Centre B - Excavation and Lateral Support (ELS) Stage 2			
Excavation and ELS Works (Stage 2)			
Area 1			
CB161459	Area 1: Excavate to -3.0mPD (works resume)	26-Oct-18 A	17-Nov-18 A
CB161460	Area 1: Install Waling & Strut Layer S3	07-Nov-18 A	24-Nov-18 A
CB161470	Area 1: Excavate to -6.1mPD	10-Dec-18	28-Dec-18
CB161480	Area 1: Install Waling & Strut Layer S4	29-Dec-18	16-Jan-19
CB161490	Area 1: Excavate to -9.0, -11.3, -14.2 w/ soil Berm	17-Jan-19	31-Jan-19
Area 2			
CB162459	Area 2: Excavate to -3.0mPD (works resume)	26-Oct-18 A	08-Dec-18
CB162460	Area 2: Install Waling & Strut Layer S3	10-Dec-18	22-Dec-18
CB162470	Area 2: Area 2: Excavate to -6.1mPD	24-Dec-18	09-Jan-19
CB162480	Area 2: Install Waling & Strut Layer S4	07-Jan-19	19-Jan-19
CB162490	Area 2: Excavate to -9.0, -11.3, -14.2 w/ soil Berm	18-Jan-19	31-Jan-19*
Area 3			
CB163450	Area 3: Excavate to -3.0mPD	05-Nov-18 A	30-Nov-18 A
CB163460	Area 3: Install Waling & Strut Layer S3	16-Nov-18 A	08-Dec-18
CB163470	Area 3: Excavate to -6.1mPD	04-Jan-19	21-Jan-19
CB163480	Area 3: Area 3: Install Waling & Strut Layer S4	22-Jan-19	14-Feb-19
CB163490	Area 3 Excavate to Formation Level -9.6mPD	15-Feb-19	11-Mar-19
Area 4			
CB164450	Area 4: Excavate to -3.0mPD	09-Nov-18 A	13-Dec-18
CB164460	Area 4: Install Waling & Strut Layer S3	14-Dec-18	03-Jan-19
CB164470	Area 4: Excavate to -6.1mPD	15-Jan-19	31-Jan-19
CB164480	Area 4: Install Waling & Strut Layer S4	01-Feb-19	25-Feb-19
CB164490	Area 4: Excavate to Formation Level -9.6mPD	26-Feb-19	21-Mar-19*
Cost Centre C - Basement			
Cost Centre C1 - Essential Basement Structure (Excl. AET Protection & Box Culvert)			
CC102402a	[Area 6 - L06] Construct Pile Cap / B1 Slab - 2a	12-Sep-18 A	22-Nov-18 A



Remaining Work
Critical Remaining Work
Actual Work
Milestone

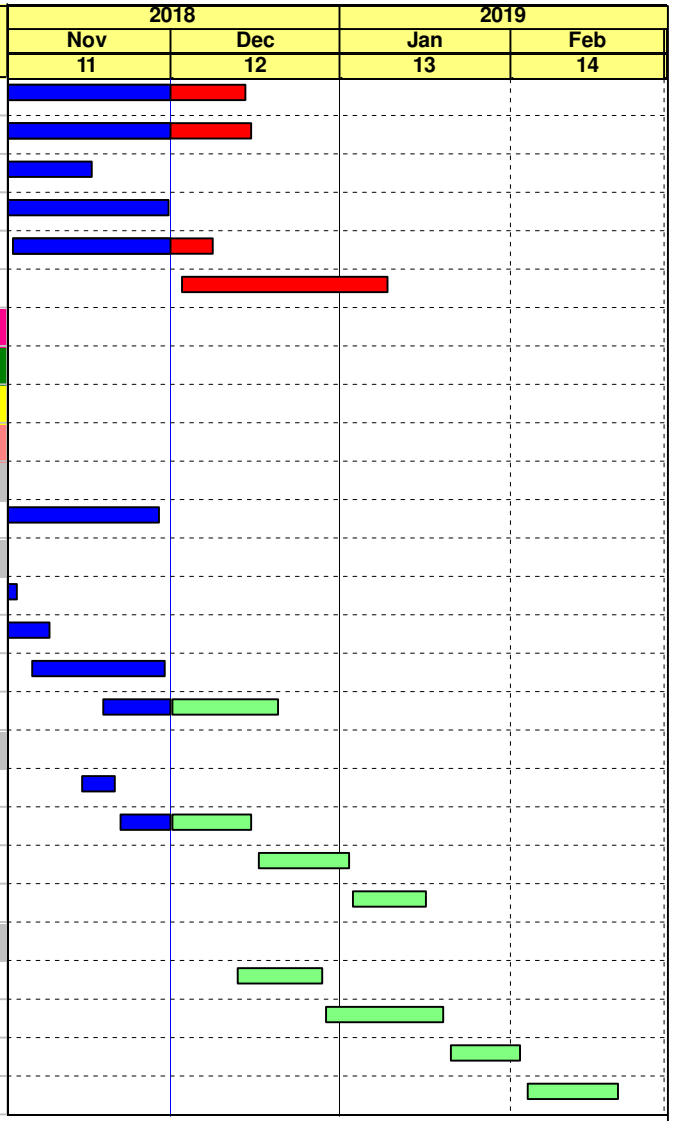
Project ID: L13MRP-20181130

Layout: L1-3MRP (Env)

West Kowloon Cultural District Authority
L1 Contract for Lyric Theatre Complex & Extended Basement
Three Month Rolling Programme (3MRP) - Status as of 30 Nov 2018

Gammon

Activity ID	Activity Name	Start Date	Finish Date
CC102405	[Area 6 - L06] Construct Pile Cap / B1 Slab -5	13-Sep-18 A	14-Dec-18
CC102401b	[Area 6 - L06] Construct Pile Cap / B1 Slab - 1b	10-Oct-18 A	15-Dec-18
CC102402b	[Area 6 - L06] Construct Pile Cap / B1 Slab - 2B	19-Oct-18 A	16-Nov-18 A
CC102404	[Area 6 - L06] Construct Pile Cap / B1 Slab - 4	24-Oct-18 A	30-Nov-18 A
CC102403	[Area 6 - L06] Construct Pile Cap / B1 Slab - 3	02-Nov-18 A	08-Dec-18
CC102410	[Area 6 - L06] Remove Strut Layer S2	03-Dec-18	09-Jan-19
Cost Centre D - Public Infrastructure Works (PIW)			
Cost Centre D2 - Austin Road West Lay-by			
Cost Centre D2.2 Drainage			
MC30-Ch.170 to MC30-Ch.00			
MC30-Ch.100 to MC30-Ch.60 (MH SF_1.3 to SF1.2)			
CD220148	MC30-Ch170-00: 1350mm dia Drainage (SF1.3 to SF1.2) - Construct Manhole	10-Oct-18 A	29-Nov-18 A
MC30-Ch.60 to MC30-Ch.40 (MH SF_1.2 to SF_1.2B)			
CD220152	MC30-Ch170-00: 1350mm dia Drainage (SF1.2 to SF1.2B) - Sheet Pile	22-Oct-18 A	03-Nov-18 A
CD220154	MC30-Ch170-00: 1350mm dia Drainage (SF1.2 to SF1.2B) - Excavation & ELS	24-Oct-18 A	09-Nov-18 A
CD220156	MC30-Ch170-00: 1350mm dia Drainage (SF1.2 to SF1.2B) - Install Drainage	06-Nov-18 A	30-Nov-18 A
CD220158	MC30-Ch170-00: 1350mm dia Drainage (SF1.2 to SF1.2B) - Construct Manhole	19-Nov-18 A	20-Dec-18
MC30-Ch.40 to MC30-Ch.30 (MH SF_1.2B to SF_1.2A)			
CD220162	MC30-Ch170-00: 1350mm dia Drainage (SF1.2B to SF1.2A) - Sheet Pile	15-Nov-18 A	21-Nov-18 A
CD220164	MC30-Ch170-00: 1350mm dia Drainage (SF1.2B to SF1.2A) - Excavation & ELS	22-Nov-18 A	15-Dec-18
CD220166	MC30-Ch170-00: 1350mm dia Drainage (SF1.2B to SF1.2A) - Install Drainage	17-Dec-18	02-Jan-19
CD220168	MC30-Ch170-00: 1350mm dia Drainage (SF1.2B to SF1.2A) - Construct Manhole	03-Jan-19	16-Jan-19
MC30-Ch.30 to MC30-Ch.00 (MH SF_1.2A to SF_1.2A_A)			
CD220172	MC30-Ch170-00: 1350mm dia Drainage (SF1.2A to SF1.2A_2) - Sheet Pile	13-Dec-18	28-Dec-18
CD220174	MC30-Ch170-00: 1350mm dia Drainage (SF1.2A to SF1.2A_2) - Excavation & ELS	29-Dec-18	19-Jan-19
CD220176	MC30-Ch170-00: 1350mm dia Drainage (SF1.2A to SF1.2A_2) - Install Drainage	21-Jan-19	02-Feb-19
CD220178	MC30-Ch170-00: 1350mm dia Drainage (SF1.2A to SF1.2A_2) - Construct Manhole	04-Feb-19	20-Feb-19*



Remaining Work
Critical Remaining Work
Actual Work
Milestone

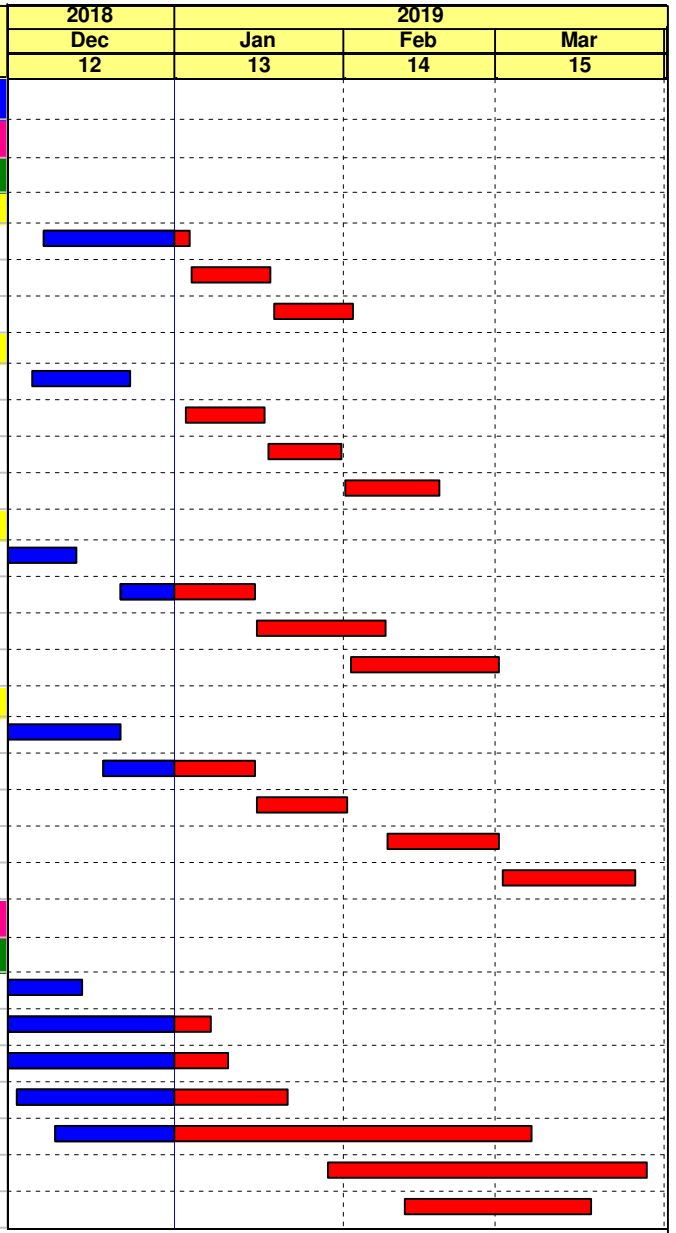
Project ID: L13MRP-20181130

Layout: L1-3MRP (Env)

West Kowloon Cultural District Authority
L1 Contract for Lyric Theatre Complex & Extended Basement
Three Month Rolling Programme (3MRP) - Status as of 30 Nov 2018

Gammon

Activity ID	Activity Name	Start Date	Finish Date
L1 Contract for Lyric Theatre Complex (3MRP)			
Cost Centre B - Excavation and Lateral Support (ELS) Stage 2			
Excavation and ELS Works (Stage 2)			
Area 1			
CB161470	Area 1: Excavate to -6.1mPD	08-Dec-18 A	03-Jan-19
CB161480	Area 1: Install Waling & Strut Layer S4	04-Jan-19	18-Jan-19
CB161490	Area 1: Excavate to -9.0, -11.3, -14.2 w/ soil Berm	19-Jan-19	02-Feb-19
Area 2			
CB162460	Area 2: Install Waling & Strut Layer S3	06-Dec-18 A	24-Dec-18 A
CB162470	Area 2: Area 2: Excavate to -6.1mPD	03-Jan-19	17-Jan-19
CB162480	Area 2: Install Waling & Strut Layer S4	18-Jan-19	31-Jan-19
CB162490	Area 2: Excavate to -9.0, -11.3, -14.2 w/ soil Berm	01-Feb-19	18-Feb-19*
Area 3			
CB163460	Area 3: Install Waling & Strut Layer S3	16-Nov-18 A	14-Dec-18 A
CB163470	Area 3: Excavate to -6.1mPD	22-Dec-18 A	15-Jan-19
CB163480	Area 3: Area 3: Install Waling & Strut Layer S4	16-Jan-19	08-Feb-19
CB163490	Area 3 Excavate to Formation Level -9.6mPD	02-Feb-19	01-Mar-19
Area 4			
CB164450	Area 4: Excavate to -3.0mPD	09-Nov-18 A	22-Dec-18 A
CB164460	Area 4: Install Waling & Strut Layer S3	19-Dec-18 A	15-Jan-19
CB164470	Area 4: Excavate to -6.1mPD	16-Jan-19	01-Feb-19
CB164480	Area 4: Install Waling & Strut Layer S4	09-Feb-19	01-Mar-19
CB164490	Area 4: Excavate to Formation Level -9.6mPD	02-Mar-19	26-Mar-19*
Cost Centre C - Basement			
Cost Centre C1 - Essential Basement Structure (Excl. AET Protection & Box Culvert)			
CC102405	[Area 6 - L06] Construct Pile Cap / B1 Slab -5	13-Sep-18 A	15-Dec-18 A
CC102401b	[Area 6 - L06] Construct Pile Cap / B1 Slab - 1b	10-Oct-18 A	07-Jan-19
CC102403	[Area 6 - L06] Construct Pile Cap / B1 Slab - 3	02-Nov-18 A	10-Jan-19
CC102410	[Area 6 - L06] Remove Strut Layer S2	03-Dec-18 A	21-Jan-19
CC102420	[Area 6 - L06] Construct B1-B1M Columns & Structural Walls	10-Dec-18 A	07-Mar-19
CC102430	[Area 6 - L06] Construct B1M Beam & Slab	29-Jan-19	28-Mar-19
CC100100	[South - L01] Blinding Layer for Pile Cap / B2 Slab at Central Portion	12-Feb-19	18-Mar-19



Remaining Work
Critical Remaining Work
Actual Work
Milestone

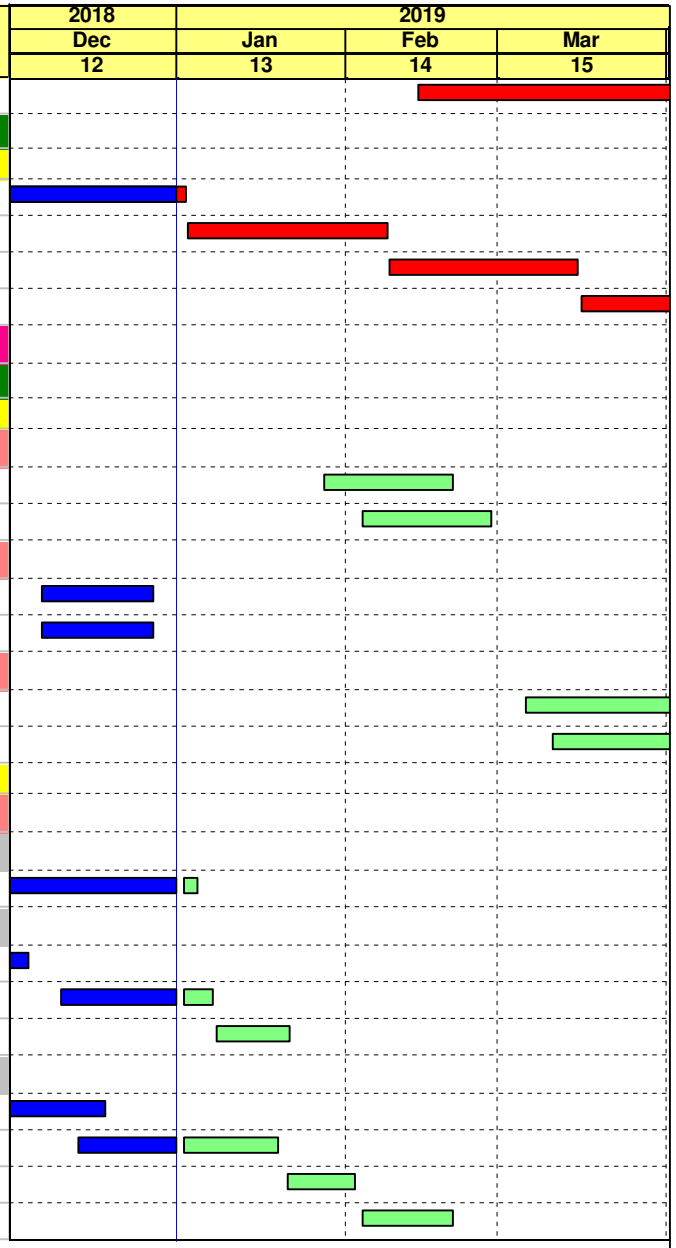
Project ID: L13MRP-20181231

Layout: L1-3MRP (Env)

West Kowloon Cultural District Authority
L1 Contract for Lyric Theatre Complex & Extended Basement
Three Month Rolling Programme (3MRP) - Status as of 31 Dec 2018

Gammon

Activity ID	Activity Name	Start Date	Finish Date
CC100200	[South - L01] Construct Central Pile Cap / B2 Slab at -11.3mPD & -14.2mPD	14-Feb-19	16-Apr-19
CAI No. 012 Advance Works for Artist Square Bridge			
P34 Stair & Lift Tower			
CAI12240	Construct Protection Slab	26-Nov-18 A	02-Jan-19
CAI12244	Construct Bored Pile PC1-1	03-Jan-19	08-Feb-19
CAI12248	Construct Bored Pile PC1-2	09-Feb-19	15-Mar-19
CAI12254	Construct Bored Pile PC1-3	16-Mar-19	24-Apr-19
Cost Centre D - Public Infrastructure Works (PIW)			
Cost Centre D2 - Austin Road West Lay-by			
Cost Centre D2.1 Roadworks and Remaining			
MC30-Ch.170 to MC30-Ch.150			
CD210720	MC30-Ch170-150: DN450 Freshwater (0+171 - 0+164)	28-Jan-19	20-Feb-19
CD210725	MC30-Ch170-150: DN450 Salt Water (0+171 - 0+162)	04-Feb-19	27-Feb-19
MC30-Ch.150 to MC30-Ch.100			
CD210620	MC30-Ch150-100: DN450 Freshwater (0+164 - 0+114)	07-Dec-18 A	27-Dec-18 A
CD210625	MC30-Ch150-100: DN450 Salt Water (0+162 - 0+112)	07-Dec-18 A	27-Dec-18 A
MC30-Ch.100 to MC30-Ch.50			
CD210520	MC30-Ch100-50: DN450 Freshwater (0+114 - 0+64)	06-Mar-19	10-Apr-19
CD210525	MC30-Ch100-50: DN450 Salt Water (0+112 - 0+62)	11-Mar-19	15-Apr-19
Cost Centre D2.2 Drainage			
MC30-Ch.170 to MC30-Ch.00			
MC30-Ch.60 to MC30-Ch.40 (MH SF_1.2 to SF_1.2B)			
CD220158	MC30-Ch170-00: 1350mm dia Drainage (SF1.2 to SF1.2B) - Construct Manhole	19-Nov-18 A	04-Jan-19
MC30-Ch.40 to MC30-Ch.30 (MH SF_1.2B to SF_1.2A)			
CD220164	MC30-Ch170-00: 1350mm dia Drainage (SF1.2B to SF1.2A) - Excavation & ELS	22-Nov-18 A	05-Dec-18 A
CD220166	MC30-Ch170-00: 1350mm dia Drainage (SF1.2B to SF1.2A) - Install Drainage	11-Dec-18 A	07-Jan-19
CD220168	MC30-Ch170-00: 1350mm dia Drainage (SF1.2B to SF1.2A) - Construct Manhole	08-Jan-19	21-Jan-19
MC30-Ch.30 to MC30-Ch.00 (MH SF_1.2A to SF_1.2A_A)			
CD220172	MC30-Ch170-00: 1350mm dia Drainage (SF1.2A to SF1.2A_2) - Sheet Pile	01-Dec-18 A	19-Dec-18 A
CD220174	MC30-Ch170-00: 1350mm dia Drainage (SF1.2A to SF1.2A_2) - Excavation & ELS	14-Dec-18 A	19-Jan-19
CD220176	MC30-Ch170-00: 1350mm dia Drainage (SF1.2A to SF1.2A_2) - Install Drainage	21-Jan-19	02-Feb-19
CD220178	MC30-Ch170-00: 1350mm dia Drainage (SF1.2A to SF1.2A_2) - Construct Manhole	04-Feb-19	20-Feb-19*



Remaining Work
Critical Remaining Work
Actual Work
Milestone

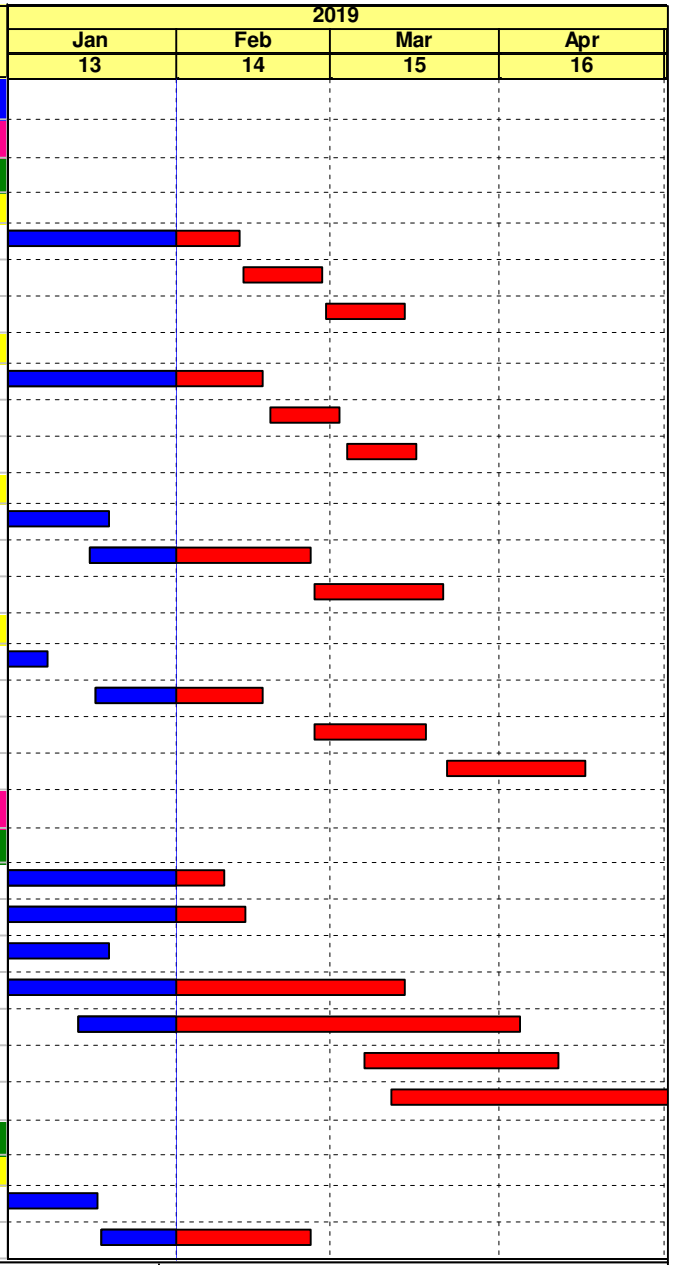
Project ID: L13MRP-20181231

Layout: L1-3MRP (Env)

West Kowloon Cultural District Authority
L1 Contract for Lyric Theatre Complex & Extended Basement
Three Month Rolling Programme (3MRP) - Status as of 31 Dec 2018

Gammon

Activity ID	Activity Name	Start Date	Finish Date
L1 Contract for Lyric Theatre Complex (3MRP) - Enviromental			
Cost Centre B - Excavation and Lateral Support (ELS) Stage 2			
Excavation and ELS Works (Stage 2)			
Area 1			
CB161470	Area 1: Excavate to -6.1mPD	08-Dec-18 A	12-Feb-19
CB161480	Area 1: Install Waling & Strut Layer S4	13-Feb-19	27-Feb-19
CB161490	Area 1: Excavate to -9.0, -11.3, -14.2 w/ soil Berm	28-Feb-19	14-Mar-19
Area 2			
CB162470	Area 2: Area 2: Excavate to -6.1mPD	21-Dec-18 A	16-Feb-19
CB162480	Area 2: Install Waling & Strut Layer S4	18-Feb-19	02-Mar-19
CB162490	Area 2: Excavate to -9.0, -11.3, -14.2 w/ soil Berm	04-Mar-19	16-Mar-19*
Area 3			
CB163470	Area 3: Excavate to -6.1mPD	22-Dec-18 A	19-Jan-19 A
CB163480	Area 3: Area 3: Install Waling & Strut Layer S4	16-Jan-19 A	25-Feb-19
CB163490	Area 3 Excavate to Formation Level -9.6mPD	26-Feb-19	21-Mar-19
Area 4			
CB164460	Area 4: Install Waling & Strut Layer S3	19-Dec-18 A	08-Jan-19 A
CB164470	Area 4: Excavate to -6.1mPD	17-Jan-19 A	16-Feb-19
CB164480	Area 4: Install Waling & Strut Layer S4	26-Feb-19	18-Mar-19
CB164490	Area 4: Excavate to Formation Level -9.6mPD	22-Mar-19	16-Apr-19*
Cost Centre C - Basement			
Cost Centre C1 - Essential Basement Structure (Excl. AET Protection & Box Culvert)			
CC102401b	[Area 6 - L06] Construct Pile Cap / B1 Slab - 1b	10-Oct-18 A	09-Feb-19
CC102403	[Area 6 - L06] Construct Pile Cap / B1 Slab - 3	02-Nov-18 A	13-Feb-19
CC102410	[Area 6 - L06] Remove Strut Layer S2	03-Dec-18 A	19-Jan-19 A
CC102420	[Area 6 - L06] Construct B1-B1M Columns & Structural Walls	10-Dec-18 A	14-Mar-19
CC102430	[Area 6 - L06] Construct B1M Beam & Slab	14-Jan-19 A	04-Apr-19
CC100100	[South - L01] Blinding Layer for Pile Cap / B2 Slab at Central Portion	07-Mar-19	11-Apr-19
CC100200	[South - L01] Construct Central Pile Cap / B2 Slab at -11.3mPD & -14.2mPD	12-Mar-19	17-May-19
CAI No. 012 Advance Works for Artist Square Bridge			
P34 Stair & Lift Tower			
CAI12240	Construct Protection Slab	26-Nov-18 A	17-Jan-19 A
CAI12244	Construct Bored Pile BP-2	18-Jan-19 A	25-Feb-19



Remaining Work
Critical Remaining Work
Actual Work
Milestone

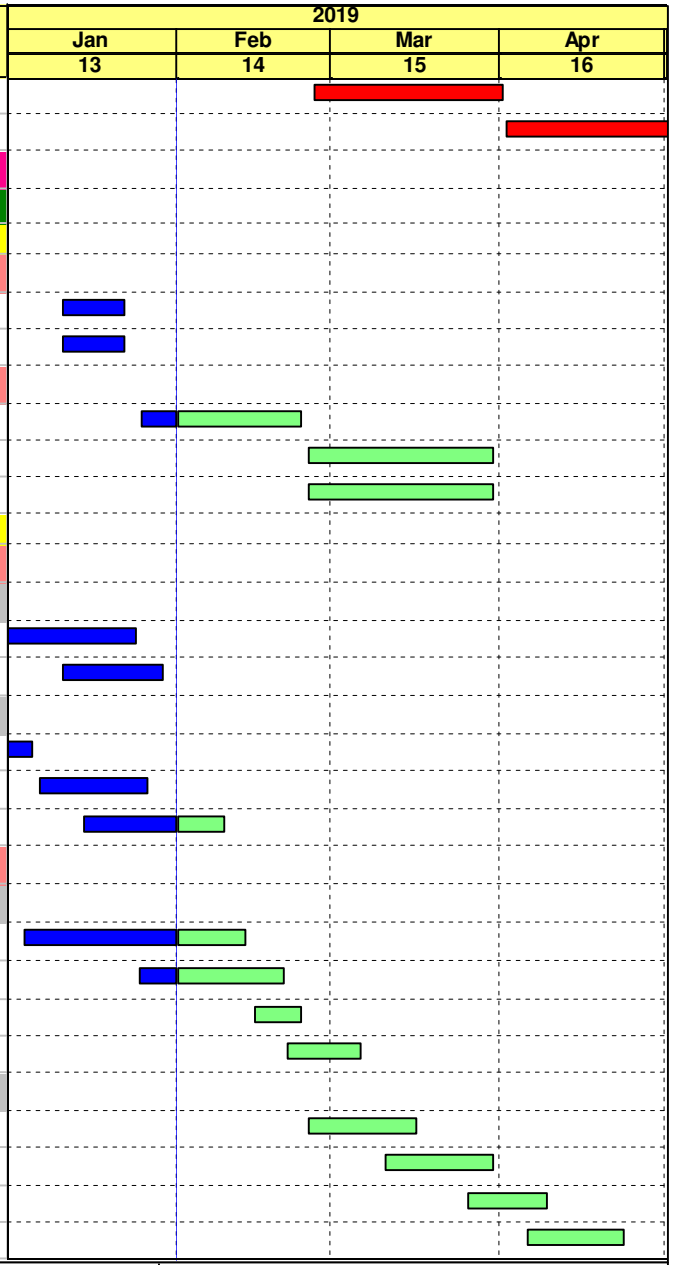
Project ID:
L13MRP-20190131-Env

Layout: L1-3MRP (Env)

West Kowloon Cultural District Authority
L1 Contract for Lyric Theatre Complex & Extended Basement
Three Month Rolling Programme (3MRP) - Status as of 31 Jan 2019

Gammon

Activity ID	Activity Name	Start Date	Finish Date
CAI12248	Construct Bored Pile BP-3	26-Feb-19	01-Apr-19
CAI12254	Construct Bored Pile BP-1	02-Apr-19	11-May-19
Cost Centre D - Public Infrastructure Works (PIW)			
Cost Centre D2 - Austin Road West Lay-by			
Cost Centre D2.1 Roadworks and Remaining			
MC30-Ch.100 to MC30-Ch.50			
CD210520	MC30-Ch100-50: DN450 Freshwater (0+114 - 0+64)	11-Jan-19 A	22-Jan-19 A
CD210525	MC30-Ch100-50: DN450 Salt Water (0+112 - 0+62)	11-Jan-19 A	22-Jan-19 A
MC30-Ch.50 to MC30-Ch.00			
CD210410	MC30-Ch50-00: Road Drainage (WL3.1 to SF_1.2A)	26-Jan-19 A	23-Feb-19
CD210420	MC30-Ch50-00: DN450 Freshwater (0+64 - 0+14)	25-Feb-19	30-Mar-19
CD210425	MC30-Ch50-00: DN450 Salt Water (0+062 - 0+12)	25-Feb-19	30-Mar-19
Cost Centre D2.2 Drainage			
MC30-Ch.170 to MC30-Ch.00			
MC30-Ch.40 to MC30-Ch.30 (MH SF_1.2B to SF_1.2A)			
CD220166	MC30-Ch170-00: 1350mm dia Drainage (SF1.2B to SF1.2A) - Install Drainage	11-Dec-18 A	24-Jan-19 A
CD220168	MC30-Ch170-00: 1350mm dia Drainage (SF1.2B to SF1.2A) - Construct Manhole	11-Jan-19 A	29-Jan-19 A
MC30-Ch.30 to MC30-Ch.00 (MH SF_1.2A to SF_1.2A_2)			
CD220174	MC30-Ch170-00: 1350mm dia Drainage (SF1.2A to SF1.2A_2) - Excavation & ELS	14-Dec-18 A	05-Jan-19 A
CD220176	MC30-Ch170-00: 1350mm dia Drainage (SF1.2A to SF1.2A_2) - Install Drainage	07-Jan-19 A	26-Jan-19 A
CD220178	MC30-Ch170-00: 1350mm dia Drainage (SF1.2A to SF1.2A_2) - Construct Manhole	15-Jan-19 A	09-Feb-19*
MC20-Ch.140 to MC20-Ch.00			
MC20-Ch.140 to MC20-Ch.120 (MH SF_1.2A_2 to SF_1.1)			
CD2201820	MC20-Ch140-00: 1800mm dia Drainage (SF1.2A_2 to SF1.1) - Sheet Pile	04-Jan-19 A	13-Feb-19
CD2201840	MC20-Ch140-00: 1800mm dia Drainage (SF1.2A_2 to SF1.1) - Excavation & Els	25-Jan-19 A	20-Feb-19
CD2201860	MC20-Ch140-00: 1800mm dia Drainage (SF1.2A_2 to SF1.1) - Install Drainage	15-Feb-19	23-Feb-19
CD2201880	MC20-Ch140-00: 1800mm dia Drainage (SF1.2A_2 to SF1.1) - Construct Manhole	21-Feb-19	06-Mar-19
MC20-Ch.120 to MC20-Ch.80 (MH SF_1.1 to SF_1.1A)			
zD2201820	MC20-Ch140-00: 1800mm dia Drainage (SF1.1 to SF1.1A)) - Sheet Pile	25-Feb-19	16-Mar-19
zD2201840	MC20-Ch140-00: 1800mm dia Drainage (SF1.1 to SF1.1A) - Excavation & Els	11-Mar-19	30-Mar-19
zD2201860	MC20-Ch140-00: 1800mm dia Drainage (SF1.1 to SF1.1A) - Install Drainage	26-Mar-19	09-Apr-19
zD2201880	MC20-Ch140-00: 1800mm dia Drainage (SF1.1 to SF1.1A) - Construct Manhole	06-Apr-19	23-Apr-19



Remaining Work
Critical Remaining Work
Actual Work
Milestone

Project ID:
L13MRP-20190131-Env

Layout: L1-3MRP (Env)

West Kowloon Cultural District Authority
L1 Contract for Lyric Theatre Complex & Extended Basement
Three Month Rolling Programme (3MRP) - Status as of 31 Jan 2019

Gammon

C. Environmental Mitigation Measures – Implementation Status

Table C-1: Environmental Mitigation Measures Implementation Status

		Implementation Stage					
		M+ Museum			Lyric Theatre Complex		
EM&A Ref.	Recommendation Measures	Nov 2018	Dec 2018	Jan 2019	Nov 2018	Dec 2018	Jan 2019
Air Quality Impact (Construction)							
2.1 & 10.3.1	**General Dust Control Measures** Frequent water spraying for active construction areas (12 times a day or once every one hour), including Heavy construction activities such as construction of buildings or roads, drilling, ground excavation, cut and fill operations (i.e., earth moving)	✓	✓	Obs	Rem	✓	✓
2.1 & 10.3.1	**Best Practice For Dust Control** The relevant best practices for dust control as stipulated in the Air Pollution Control (construction Dust) Regulation should be adopted to further reduce the construction dust impacts from the Project. These best practices include:						
	Good Site Management						
	▪ Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain high standard of housekeeping to prevent emission of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or by-products should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning.	Rem	Rem/ Obs	Rem/ Obs	✓	✓	✓
	Disturbed Parts of the Roads						
	▪ Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or	✓	✓	✓	✓	✓	✓
	▪ Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.	✓	✓	✓	✓	✓	✓
	Exposed Earth						
	▪ Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seating with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies.	N/A	N/A	N/A	N/A	N/A	N/A
	Loading, Unloading or Transfer of Dusty Materials						

EM&A Ref.	Recommendation Measures	Implementation Stage					
		M+ Museum			Lyric Theatre Complex		
		Nov 2018	Dec 2018	Jan 2019	Nov 2018	Dec 2018	Jan 2019
	▪ All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet.	✓	✓	✓	✓	✓	✓
	Debris Handling						
	▪ Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides.	✓	✓	✓	✓	Obs	✓
	▪ Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped.	✓	✓	✓	✓	✓	✓
	Transport of Dusty Materials						
	▪ Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards.	✓	✓	✓	✓	✓	✓
	Wheel washing						
	▪ Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels.	Obs	Obs	✓	✓	✓	✓
	Use of vehicles						
	▪ The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site.	✓	✓	✓	✓	✓	✓
	▪ Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels.	✓	✓	✓	✓	✓	✓
	▪ Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle.	✓	✓	✓	✓	✓	✓
	Site hoarding						
	▪ Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit.	✓	✓	✓	✓	✓	✓
2.1 & 10.3.1	**Best Practicable Means for Cement Works (Concrete Batching Plant)** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2(93) should be followed and implemented to further reduce the construction dust impacts of the Project. These best practices include: Exhaust from Dust Arrestment Plant						

EM&A Ref.	Recommendation Measures	Implementation Stage					
		M+ Museum			Lyric Theatre Complex		
		Nov 2018	Dec 2018	Jan 2019	Nov 2018	Dec 2018	Jan 2019
	▪ Wherever possible the final discharge point from particulate matter arrestment plant, where is not necessary to achieve dispersion from residual pollutants, should be at low level to minimise the effect on the local community in the case of abnormal emissions and to facilitate maintenance and inspection	✓	✓	✓	✓	✓	✓
	Emission Limits						
	▪ All emissions to air, other than steam or water vapour, shall be colourless and free from persistent mist or smoke	✓	✓	✓	✓	✓	✓
	Engineering Design/Technical Requirements						
	▪ As a general guidance, the loading, unloading, handling and storage of fuel, raw materials, products, wastes or by-products should be carried out in a manner so as to prevent the release of visible dust and/or other noxious or offensive emissions	✓	✓	✓	✓	✓	✓
-	**Non-Road Mobile Machinery (NRMM):** All NRMMs operating on-site which are subject to emission control of Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation are approved/exempted (as the case may be) and affixed with the requisite approval/exemption labels.	✓	✓	Obs	✓	✓	✓
Noise Impact (Construction)							
3.1 & 10.4.1	**Good Site Practice** Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction:						
	▪ only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works;	✓	✓	✓	✓	✓	✓
	▪ machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum;	✓	✓	✓	✓	✓	✓
	▪ plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs;	✓	✓	✓	✓	✓	✓
	▪ mobile plant should be sited as far away from NSRs as possible; and	✓	✓	✓	✓	✓	✓
	▪ material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities.	✓	✓	✓	✓	✓	✓
3.1 & 10.4.1	**Adoption of Quieter PME** The recommended quieter PME adopted in the assessment were taken from the EPD's QPME Inventory and "*Sound Power Levels of Other Commonly Used PME*" are presented in **Table 4.26** in the EIA report. It should	✓	✓	✓	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage					
		M+ Museum			Lyric Theatre Complex		
		Nov 2018	Dec 2018	Jan 2019	Nov 2018	Dec 2018	Jan 2019
	be noted that the silenced PME selected for assessment can be found in Hong Kong.						
3.1 & 10.4.1	**Use of Movable Noise Barriers** Movable noise barriers can be very effective in screening noise from particular items of plant when constructing the Project. Noise barriers located along the active works area close to the noise generating component of a PME could produce at least 10 dB(A) screening for stationary plant and 5 dB(A) for mobile plant provided the direct line of sight between the PME and the NSRs is blocked.	N/A	N/A	N/A	✓	✓	✓
3.1 & 10.4.1	**Use of Noise Enclosure/ Acoustic Shed** The use of noise enclosure or acoustic shed is to cover stationary PME such as air compressor and concrete pump. With the adoption of the noise enclosure, the PME could be completely screened, and noise reduction of 15 dB(A) can be achieved according to the EIAO Guidance Note No.9/2010.	N/A	N/A	N/A	N/A	N/A	N/A
3.1 & 10.4.1	**Use of Noise Insulating Fabric** Noise insulating fabric can also be adopted for certain PME (e.g. drill rig, pilling machine etc). The fabric should be lapped such that there are no openings or gaps on the joints. According to the approved Tsim Sha Tsui Station Northern Subway EIA report (AEIAR-127/2008), a noise reduction of 10 dB(A) can be achieved for the PME lapped with the noise insulating fabric.	N/A	N/A	N/A	✓	Obs	✓
3.1 & 10.4.1	**Scheduling of Construction Works outside School Examination Periods** During construction phase, the contractor should liaise with the educational institutions (including NSRs LCS and CRGPS) to obtain the examination schedule and avoid the noisy construction activities during school examination periods.	N/A	N/A	N/A	N/A	N/A	N/A
Water Quality Impact (Construction)							
4.1 & 10.5.1	**Construction site runoff and drainage** The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended to protect water quality and sensitive uses of the coastal area, and when properly implemented should be sufficient to adequately control site discharges so as to avoid water quality impacts: ▪ At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site drainage system should be undertaken by the WKCDA's Contractor prior to the commencement of construction;	✓	✓	Obs	✓	✓	✓
	▪ Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM standards under the WPCO. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be	✓	✓	✓	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage					
		M+ Museum			Lyric Theatre Complex		
		Nov 2018	Dec 2018	Jan 2019	Nov 2018	Dec 2018	Jan 2019
	undertaken by the WKCDA's Contractor prior to the commencement of construction.						
	▪ All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	✓	✓	Rem/ Obs	Obs	Obs/ Rem	Obs
	▪ Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities.	✓	✓	✓	✓	✓	✓
	▪ All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exit where practicable. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains.	✓	✓	✓	✓	✓	✓
	▪ Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.	✓	✓	✓	✓	✓	✓
	▪ Manholes (including newly constructed ones) should be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and stormwater runoff being directed into foul sewers.	✓	✓	✓	✓	Obs	✓
	▪ Precautions should be taken at any time of the year when rainstorms are likely. Actions should be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC Note PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes.	✓	✓	✓	✓	✓	✓
	▪ Bentonite slurries used in piling or slurry walling should be reconditioned and reused wherever practicable. Temporary enclosed storage locations should be provided on-site for any unused bentonite that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries.	N/A	N/A	N/A	N/A	N/A	N/A
	Barging facilities and activities						
	Recommendations for good site practices during operation of the proposed barging point include:						
	▪ All vessels should be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or	N/A	N/A	N/A	N/A	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage					
		M+ Museum			Lyric Theatre Complex		
		Nov 2018	Dec 2018	Jan 2019	Nov 2018	Dec 2018	Jan 2019
	propeller wash;						
	▪ Loading of barges and hoppers should be controlled to prevent splashing of material into the surrounding water. Barges or hoppers should not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation;	N/A	N/A	N/A	N/A	N/A	N/A
	▪ All hopper barges should be fitted with tight fitting seals to their bottom openings to prevent leakage of material; and	N/A	N/A	N/A	N/A	N/A	N/A
	▪ Construction activities should not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site.	N/A	N/A	N/A	N/A	N/A	N/A
4.1 & 10.5.1	**Sewage effluent from construction workforce** Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	✓	✓	✓	✓	✓	✓
4.1 & 10.5.1	**General construction activities**						
	▪ Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used.	✓	✓	✓	✓	✓	✓
	▪ Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event.	✓	✓	obs	✓	✓	✓
Waste Management Implications (Construction)							
6.1 & 10.7.1	**Good Site Practices** Recommendations for good site practices during the construction activities include:						
	▪ Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site	✓	✓	✓	✓	✓	✓
	▪ Training of site personnel in proper waste management and chemical handling procedures	✓	✓	✓	✓	✓	✓
	▪ Provision of sufficient waste disposal points and regular collection of waste	✓	✓	✓	✓	Obs	✓
	▪ Appropriate measures to minimise windblown litter and dust/odour during transportation of waste by either covering trucks or by transporting wastes in enclosed containers	✓	Obs	✓	✓	✓	✓
	▪ Provision of wheel washing facilities before the trucks leaving the works area so as to minimise dust						

EM&A Ref.	Recommendation Measures	Implementation Stage					
		M+ Museum			Lyric Theatre Complex		
		Nov 2018	Dec 2018	Jan 2019	Nov 2018	Dec 2018	Jan 2019
	introduction to public roads	✓	✓	✓	✓	✓	✓
	■ Well planned delivery programme for offsite disposal such that adverse environmental impact from transporting the inert or non-inert C&D materials is not anticipated	✓	✓	✓	✓	✓	✓
6.1 & 10.7.1	**Waste Reduction Measures** Recommendations to achieve waste reduction include:						
	■ Sort inert C&D material to recover any recyclable portions such as metals	✓	✓	✓	✓	✓	✓
	■ Segregation and storage of different types of waste in different containers or skips to enhance reuse or recycling of materials and their proper disposal	✓	✓	✓	✓	✓	✓
	■ Encourage collection of recyclable waste such as waste paper and aluminium cans by providing separate labelled bins to enable such waste to be segregated from other general refuse generated by the work force	✓	✓	✓	✓	✓	✓
	■ Proper site practices to minimise the potential for damage or contamination of inert C&D materials	✓	✓	✓	✓	✓	✓
	■ Plan the use of construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste	✓	✓	✓	✓	✓	✓
6.1 & 10.7.1	**Inert and Non-inert C&D Materials** In order to minimise impacts resulting from collection and transportation of inert C&D material for off-site disposal, the excavated materials should be reused on-site as fill material as far as practicable. In addition, inert C&D material generated from excavation works could be reused as fill materials in local projects that require public fill for reclamation.	✓	✓	✓	✓	✓	✓
	■ The surplus inert C&D material will be disposed of at the Government's PFRFs for beneficial use by other projects in Hong Kong.	✓	✓	✓	✓	✓	✓
	■ Liaison with the CEDD Public Fill Committee (PFC) on the allocation of space for disposal of the inert C&D materials at PFRF is underway. No construction work is allowed to proceed until all issues on management of inert C&D materials have been resolved and all relevant arrangements have been endorsed by the relevant authorities including PFC and EPD.	✓	✓	✓	✓	✓	✓
	■ The C&D materials generated from general site clearance should be sorted on site to segregate any inert materials for reuse or disposal of at PFRFs whereas the non-inert materials will be disposed of at the designated landfill site.	✓	✓	✓	✓	✓	✓
	■ In order to monitor the disposal of inert and non-inert C&D materials at respectively PFRFs and the designated landfill site, and to control fly-tipping, it is recommended that the Contractor should follow the Technical Circular (Works) No.6/2010 for Trip Ticket System for Disposal of Construction & Demolition	✓	✓	✓	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage					
		M+ Museum			Lyric Theatre Complex		
		Nov 2018	Dec 2018	Jan 2019	Nov 2018	Dec 2018	Jan 2019
	Materials issued by Development Bureau. In addition, it is also recommended that the Contractor should prepare and implement a Waste Management Plan detailing their various waste arising and waste management practices in accordance with the relevant requirements of the Technical Circular (Works) No. 19/2005 Environmental Management on Construction Site.						
6.1 & 10.7.1	**Chemical Waste**						
	▪ If chemical wastes are produced at the construction site, the Contractor will be required to register with the EPD as a chemical waste producer and to follow the guidelines stated in the "Code of Practice on the Packaging Labelling and Storage of Chemical Wastes". Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor should use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Obs	✓	Obs	✓	✓	✓
	▪ Potential environmental impacts arising from the handling activities (including storage, collection, transportation and disposal of chemical waste) are expected to be minimal with the implementation of appropriate mitigation measures as recommended.	✓	✓	✓	✓	✓	✓
6.1 & 10.7.1	**General Refuse** General refuse should be stored in enclosed bins or compaction units separated from inert C&D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from inert C&D materials. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.	✓	✓	✓	✓	✓	✓
Land Contamination (Construction)							
7.1 & 10.8.1	The potential for land contamination issues at the TST Fire Station due to its future relocation will be confirmed by site investigation after land acquisition. Where necessary, mitigation measures for minimising potential exposure to contaminated materials (if any) or remediation measures will be identified. If contaminated land is identified (e.g., during decommissioning of fuel oil storage tanks) after the commencement of works, mitigation measures are proposed in order to minimise the potentially adverse effects on the health and safety of construction workers and impacts arising from the disposal of potentially contaminated materials. The following measures are proposed for excavation and transportation of contaminated material: ▪ To minimize the chance for construction workers to come into contact with any contaminated materials, bulk earth-moving excavation equipment should be employed;	N/A	N/A	N/A	N/A	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage					
		M+ Museum			Lyric Theatre Complex		
		Nov 2018	Dec 2018	Jan 2019	Nov 2018	Dec 2018	Jan 2019
	▪ Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when interacting directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site;	N/A	N/A	N/A	N/A	N/A	N/A
	▪ Stockpiling of contaminated excavated materials on site should be avoided as far as possible;	N/A	N/A	N/A	N/A	N/A	N/A
	▪ The use of contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out;	N/A	N/A	N/A	N/A	N/A	N/A
	▪ Vehicles containing any contaminated excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater;	N/A	N/A	N/A	N/A	N/A	N/A
	▪ Truck bodies and tailgates should be sealed to stop any discharge;	N/A	N/A	N/A	N/A	N/A	N/A
	▪ Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping;	N/A	N/A	N/A	N/A	N/A	N/A
	▪ Speed control for trucks carrying contaminated materials should be exercised;	N/A	N/A	N/A	N/A	N/A	N/A
	▪ Observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and	N/A	N/A	N/A	N/A	N/A	N/A
	▪ Maintain records of waste generation and disposal quantities and disposal arrangements.	N/A	N/A	N/A	N/A	N/A	N/A
Ecological Impact (Construction)							
	No mitigation measure is required.						
Landscape and Visual Impact (Construction)							
Table 9.1 & 10.8 (CM1)	Trees should be retained in situ on site as far as possible. Should tree removal be unavoidable due to construction impacts, trees will be transplanted or felled with reference to the stated criteria in the Tree Removal Applications to be submitted to relevant government departments for approval in accordance to ETWB TCW No. 29/2004 and 3/2006.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 & 10.8 (CM2)	Compensatory tree planting shall be incorporated to the proposed project and maximize the new tree, shrubs and other vegetation planting to compensate tree felled and vegetation removed. Also, implementation of compensatory planting should be of a ratio not less than 1:1 in terms of quality and quantity within the site.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 & 10.8 (CM3)	Buffer trees for screening purposes to soften the hard architectural and engineering structures and facilities.	N/A	N/A	N/A	N/A	N/A	N/A

		Implementation Stage					
		M+ Museum			Lyric Theatre Complex		
EM&A Ref.	Recommendation Measures	Nov 2018	Dec 2018	Jan 2019	Nov 2018	Dec 2018	Jan 2019
Table 9.1 & 10.8 (CM4)	Softscape treatments such as vertical green wall panel /planting of climbing and/or weeping plants, etc, to maximize the green coverage and soften the hard architectural and engineering structures and facilities.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 & 10.8 (CM5)	Roof greening by means of intensive and extensive green roof to maximize the green coverage and improve aesthetic appeal and visual quality of the building/structure.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 & 10.8 (CM6)	Sensitive streetscape design should be incorporated along all new roads and streets.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 & 10.8 (CM7)	Structure, ornamental planting shall be provided along amenity strips to enhance the landscape quality.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 & 10.8 (CM8)	Landscape design shall be incorporated to architectural and engineering structures in order to provide aesthetically pleasing designs.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM9)	Minimize the structure of marine facilities to built on the seabed and foreshore in order to minimize the affected extent to the waterbody	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP1)	Use of decorative screen hoarding/boards	✓	✓	✓	✓	✓	✓
Table 9.2 & 10.9 (MCP2)	Early introduction of landscape treatments	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP3)	Adoption of light colour for the temporary ventilation shafts for the basement during the transition period.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP4)	Control of night time lighting	✓	✓	✓	✓	✓	✓
Table 9.2 & 10.9	Use of greenery such as grass cover for the temporary open areas will help achieve the visual balance and soften the hard edges of the structures.	N/A	N/A	N/A	N/A	N/A	N/A

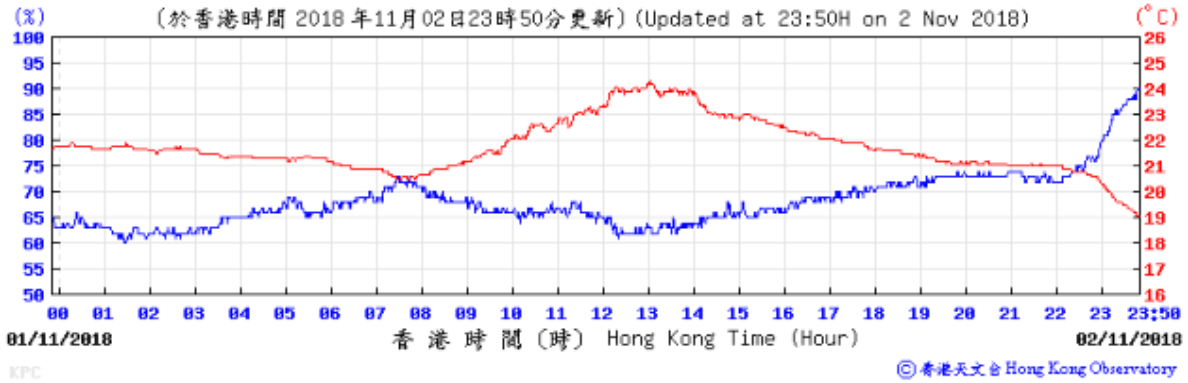
EM&A Ref.	Recommendation Measures	Implementation Stage					
		M+ Museum			Lyric Theatre Complex		
		Nov 2018	Dec 2018	Jan 2019	Nov 2018	Dec 2018	Jan 2019
(MCP5)							

N/A - Not Applicable
✓ - Implemented
Obs - Observed
Rem - Reminder

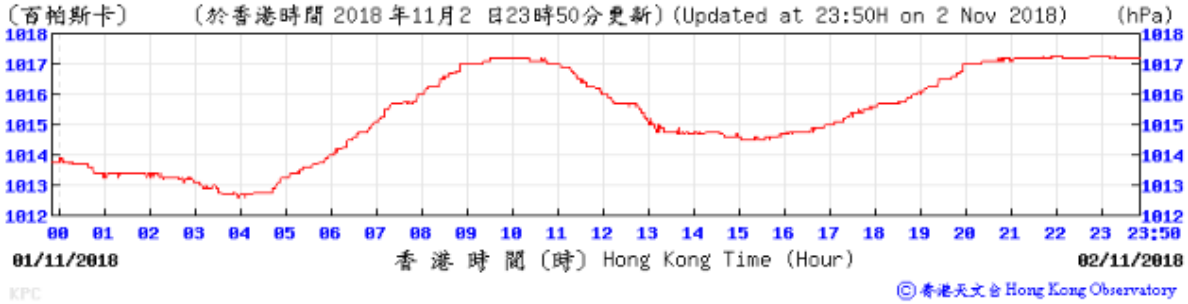
D. Meteorological Data Extracted from Hong Kong Observatory

Table D-1: Extract of Meteorological Observations for King's Park Automatic Weather Station in the reporting quarter

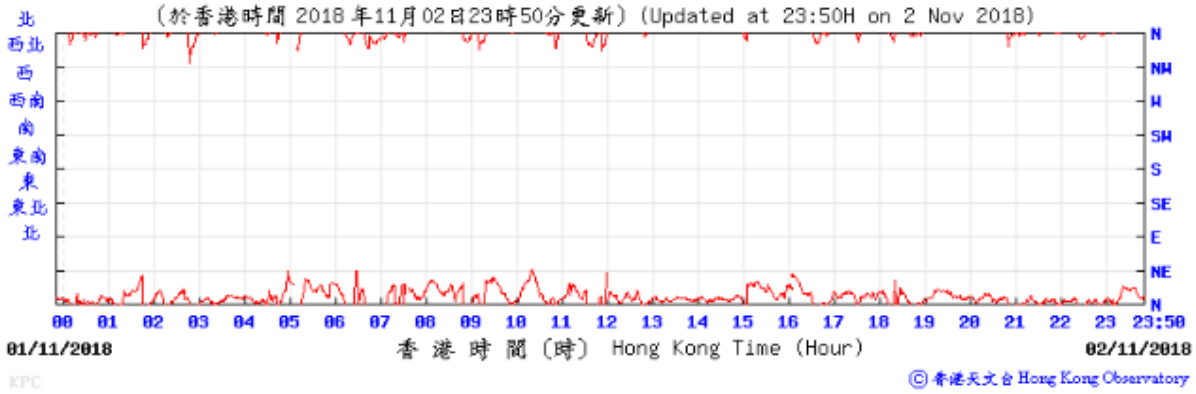
Tempearture/Humidity:



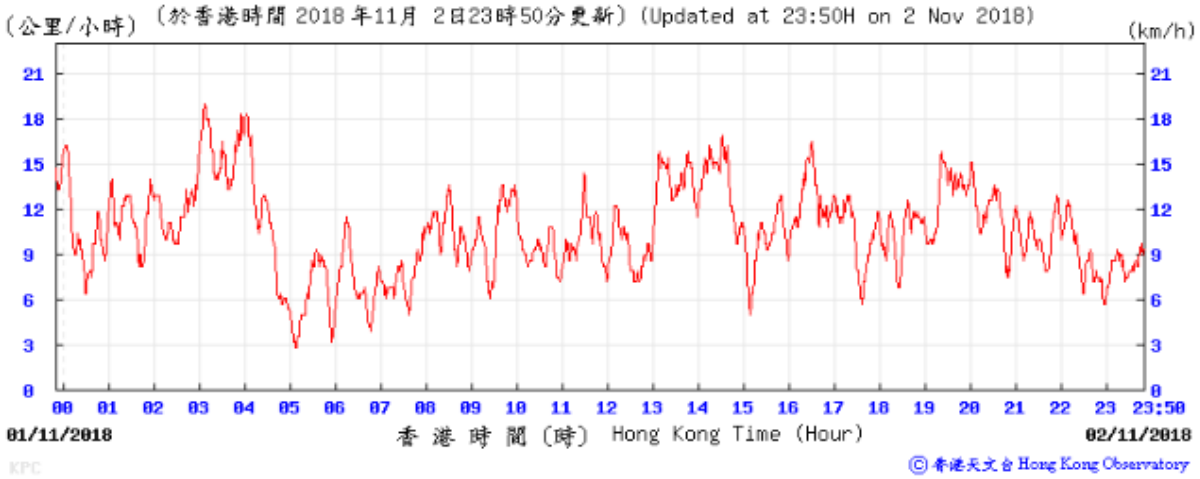
Pressure:



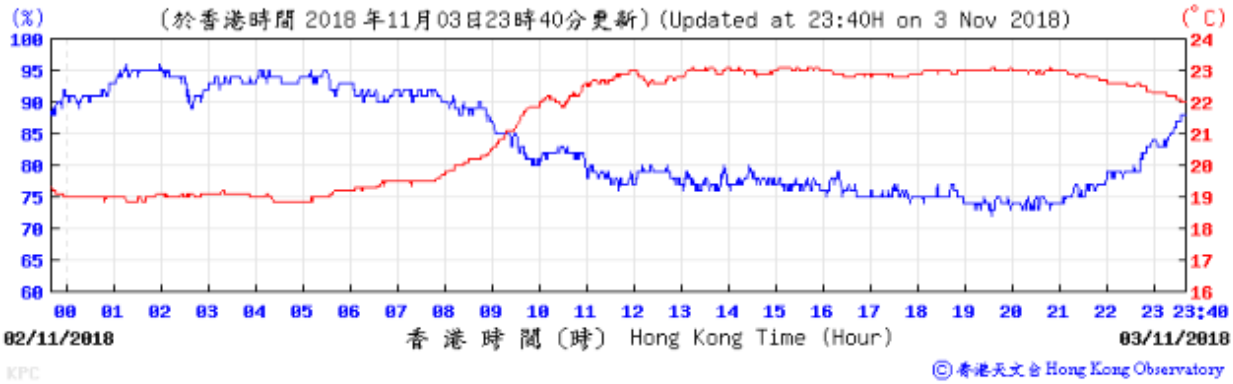
Wind Direction:



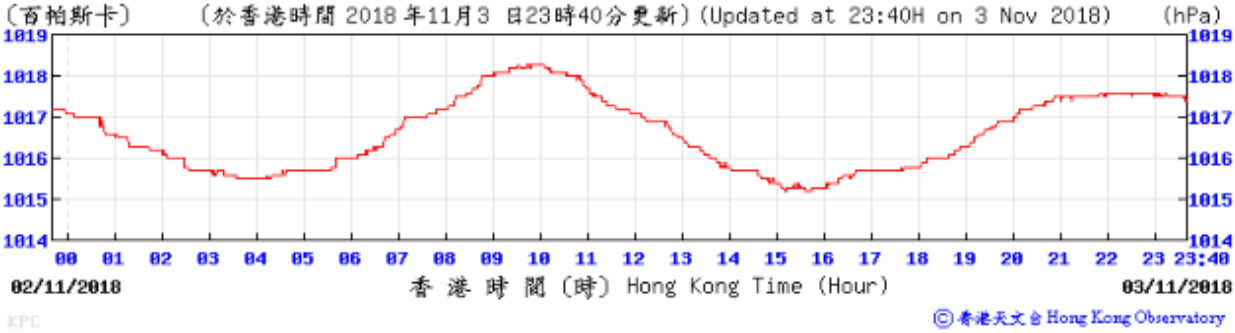
Wind Speed:



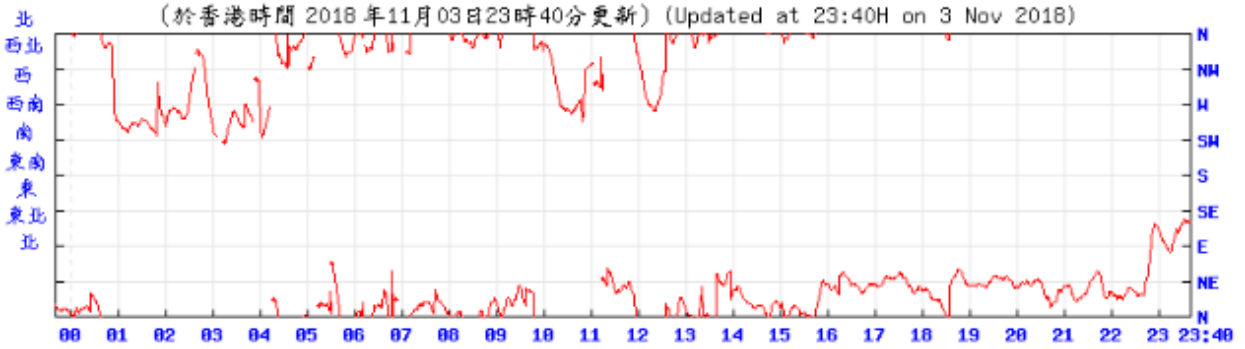
Tempearture/Humidity:



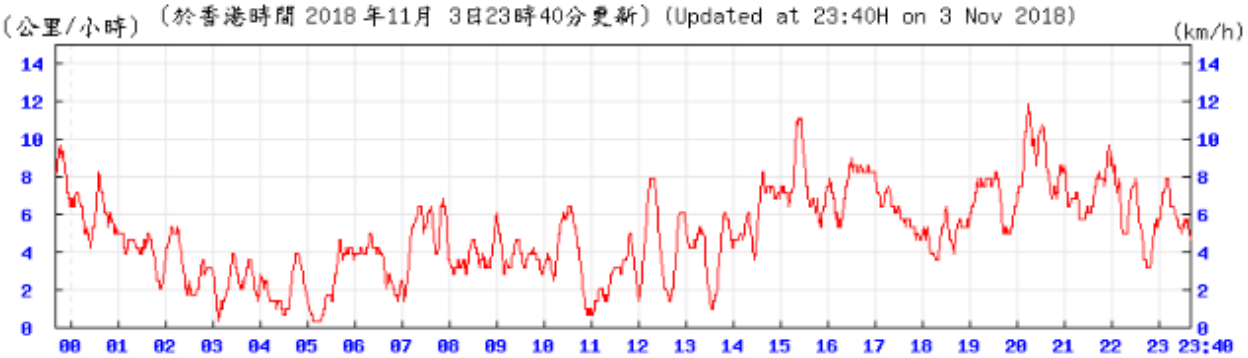
Pressure:



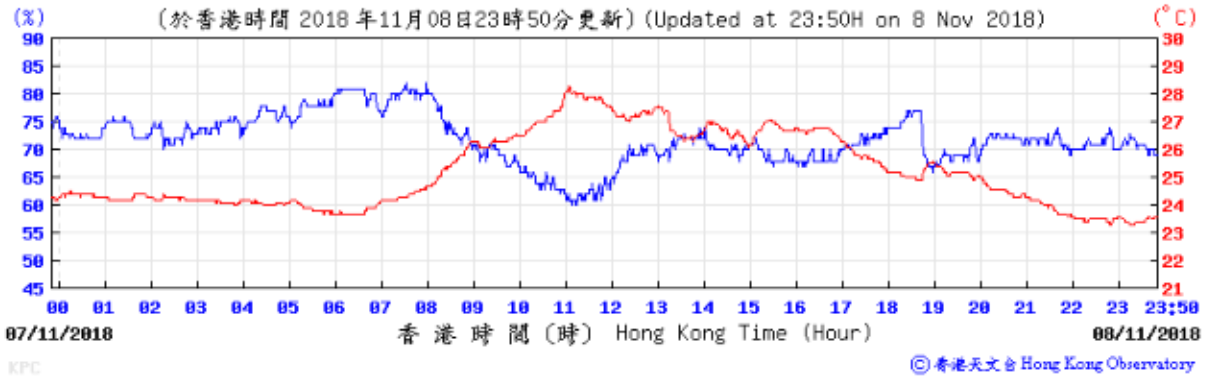
Wind Direction:



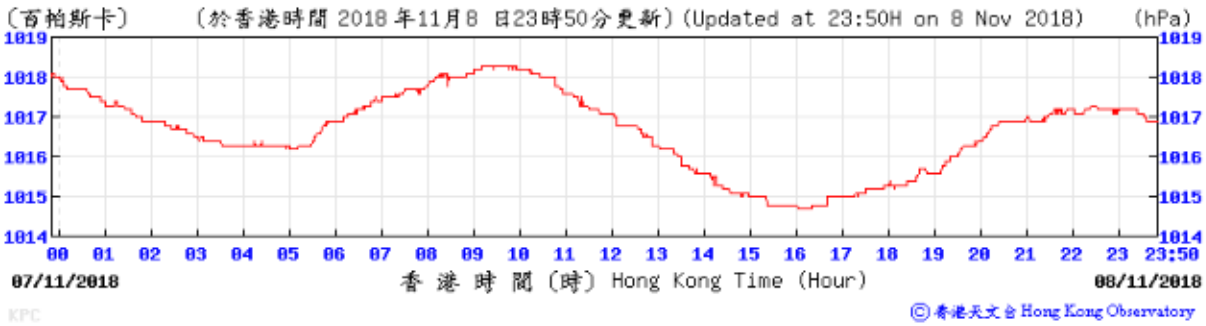
Wind Speed:



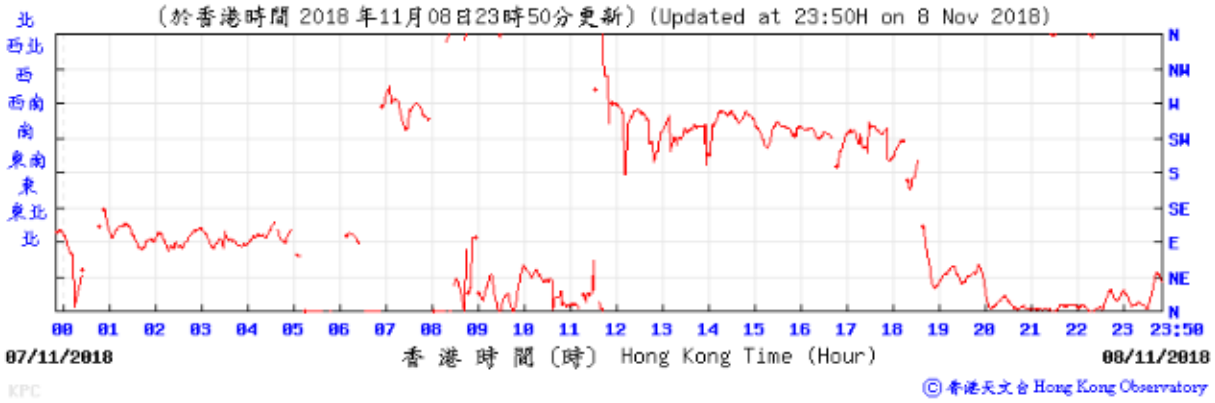
Tempearture/Humidity:



Pressure:



Wind Direction:



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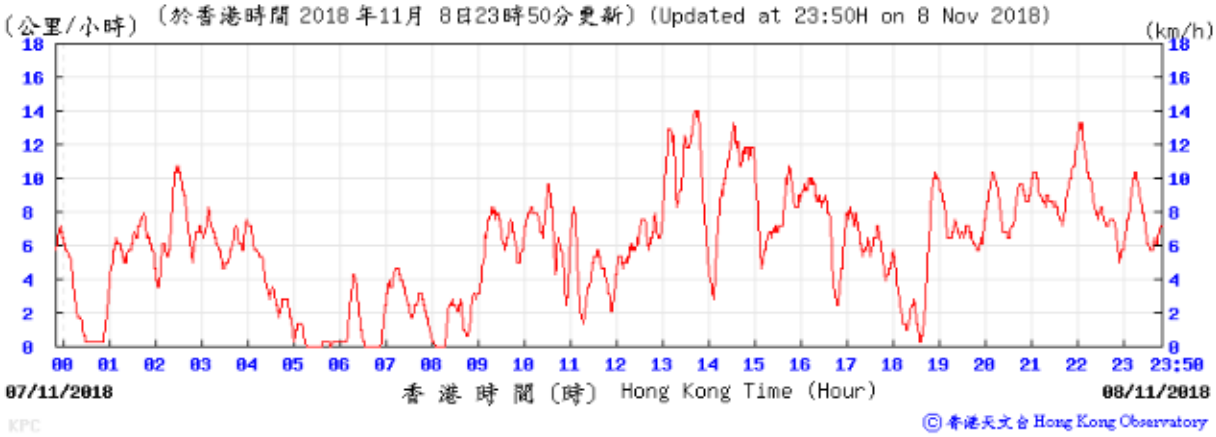

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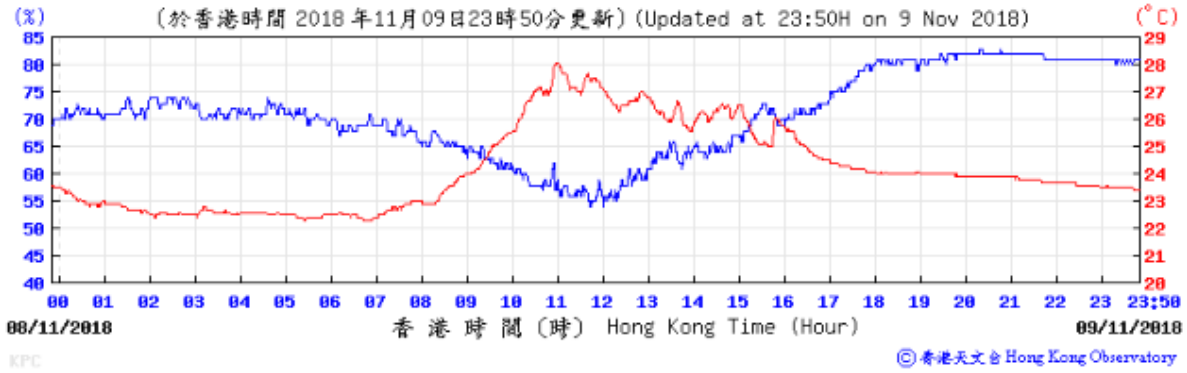

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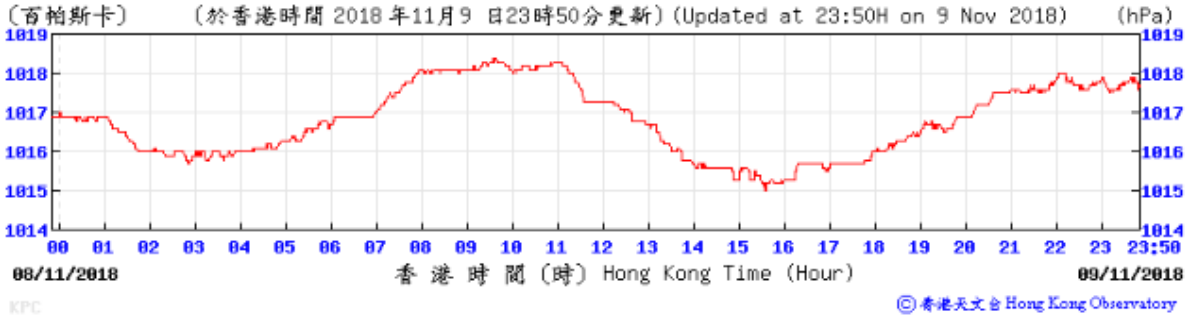

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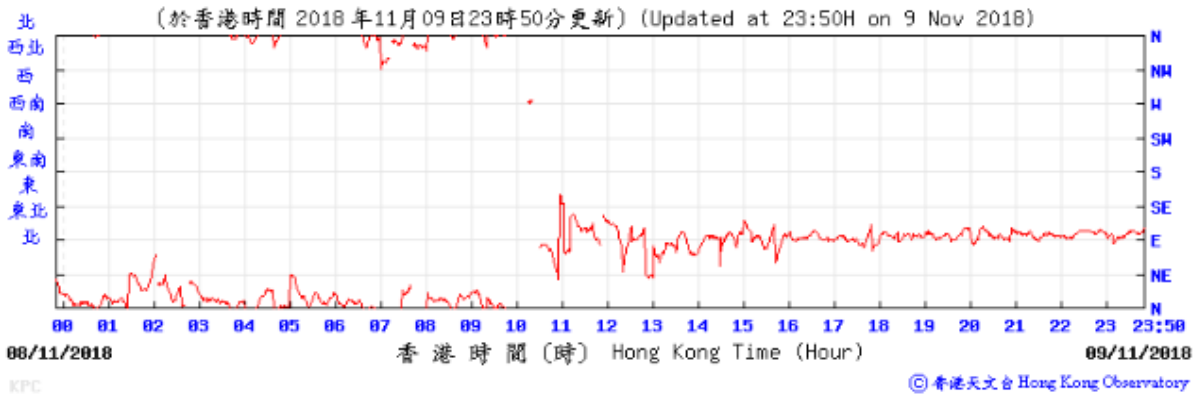

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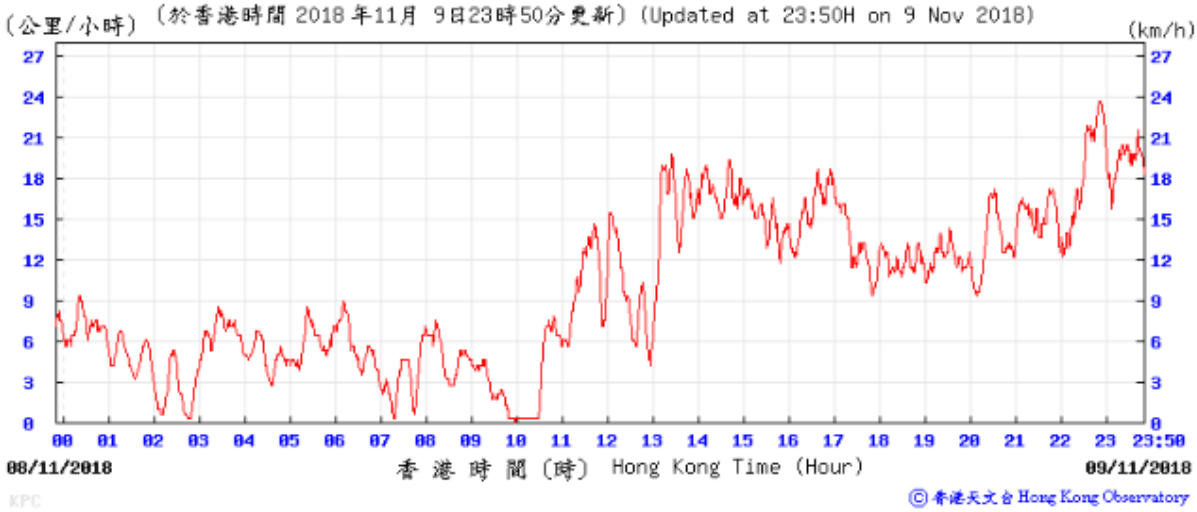

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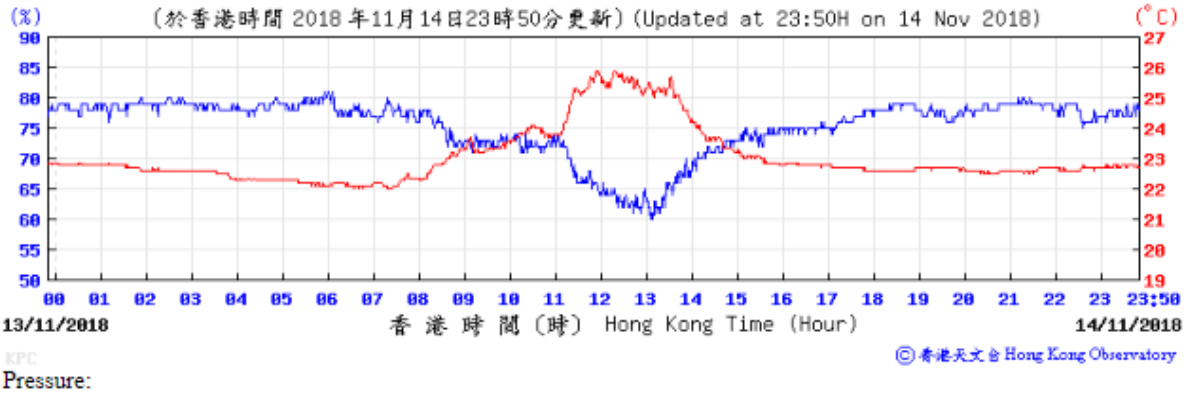

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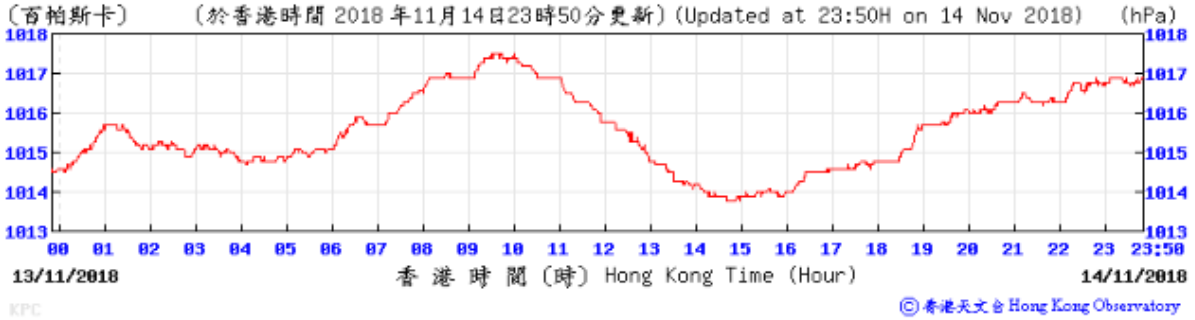

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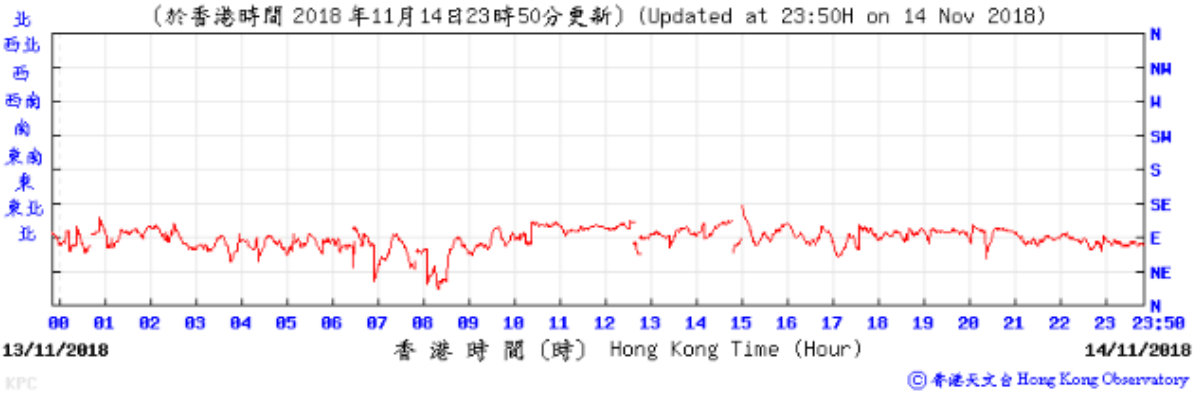

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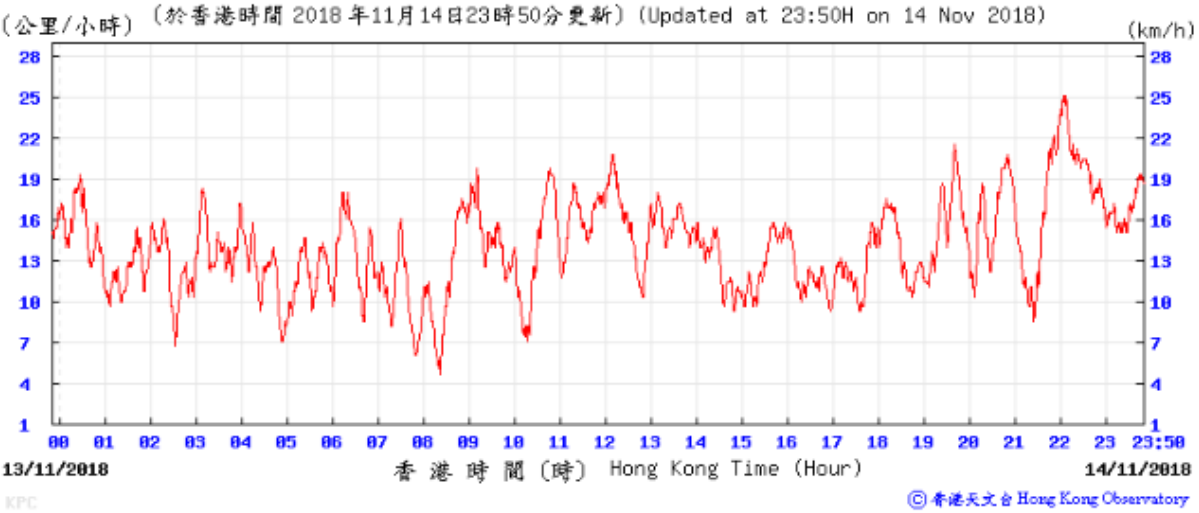

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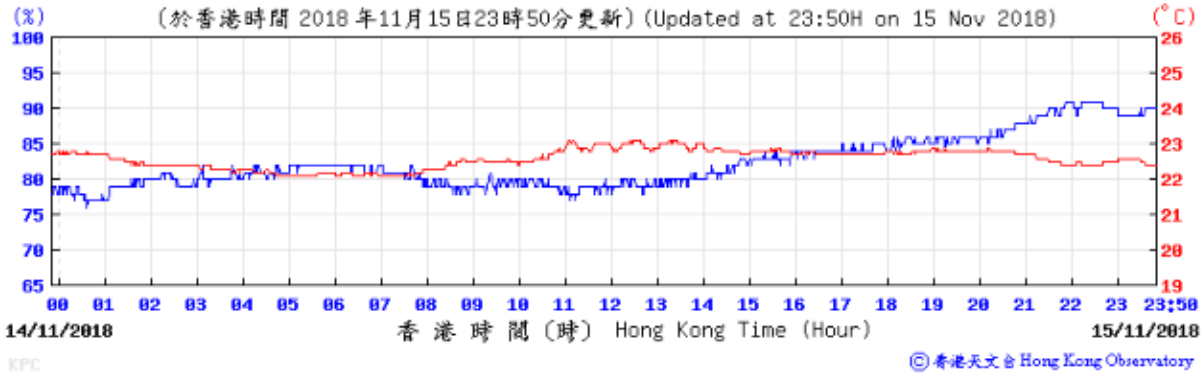

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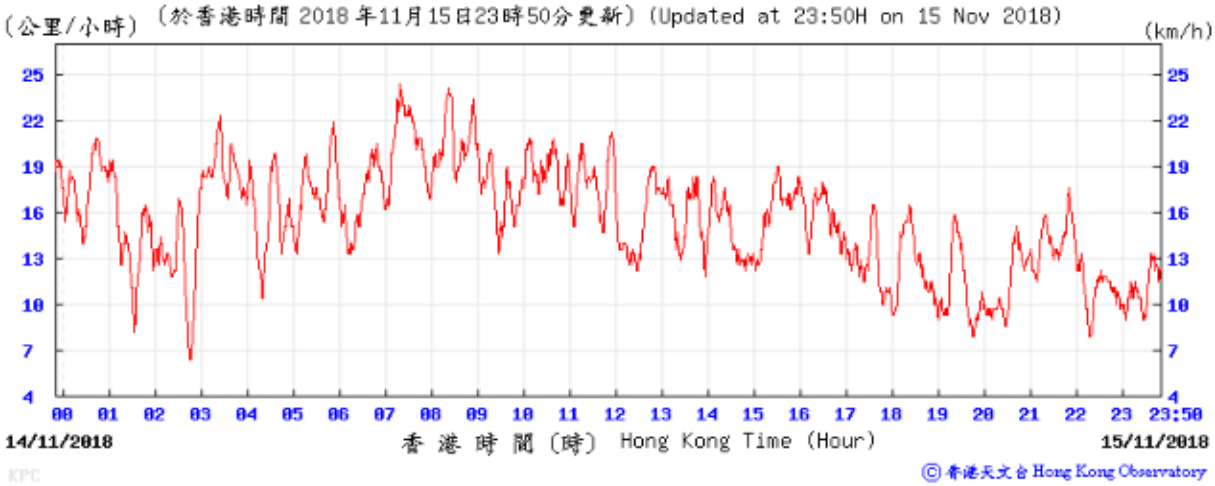

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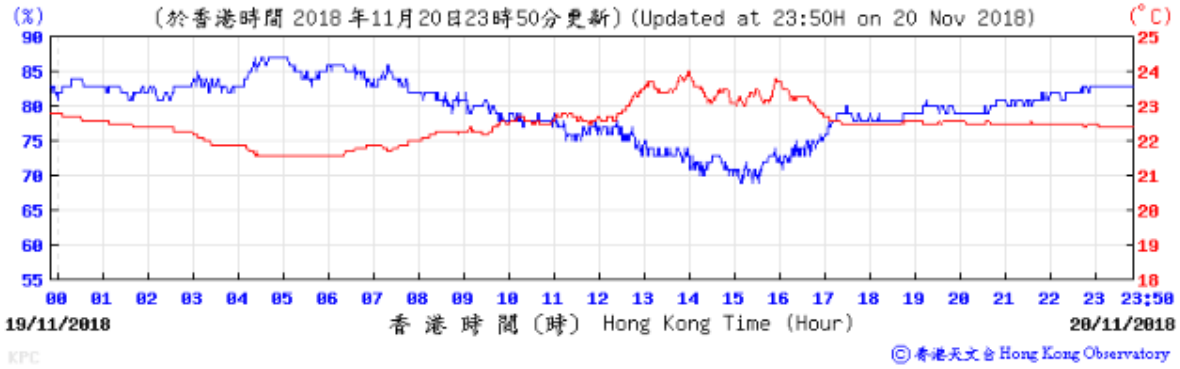

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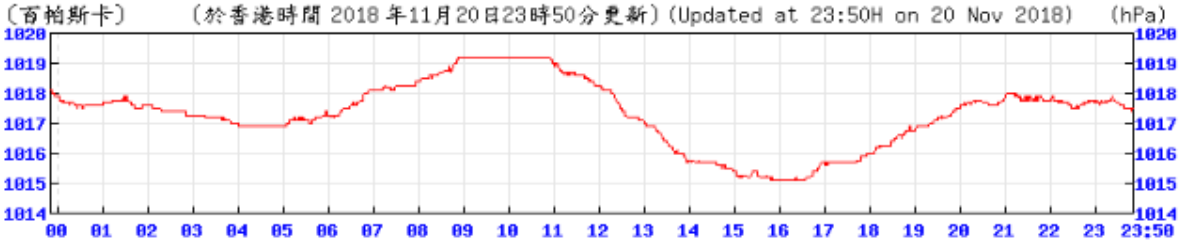

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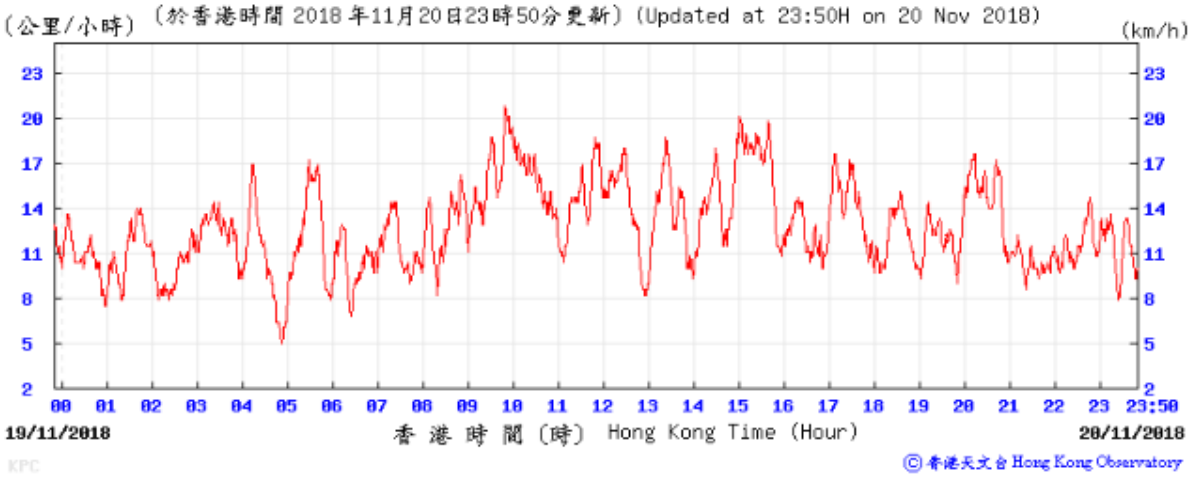

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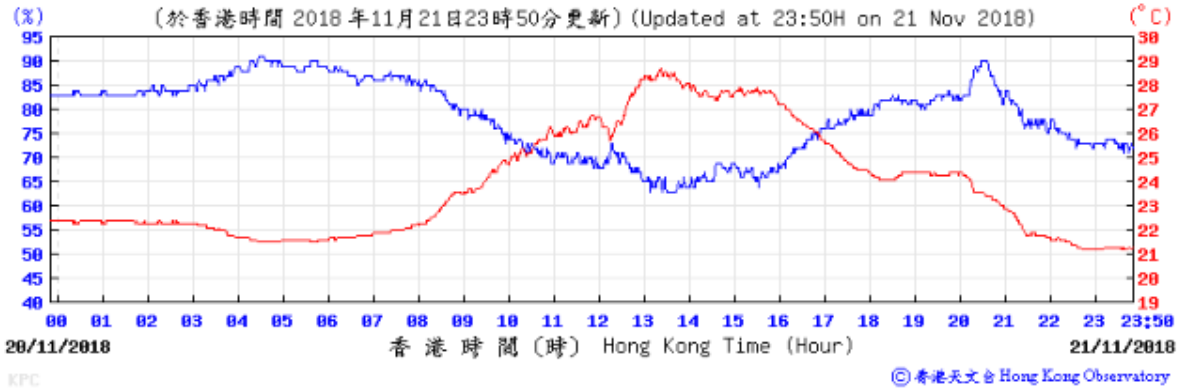

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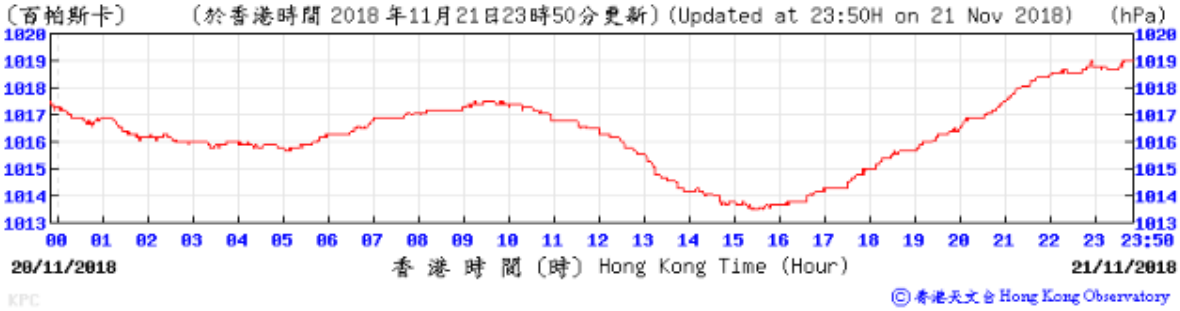

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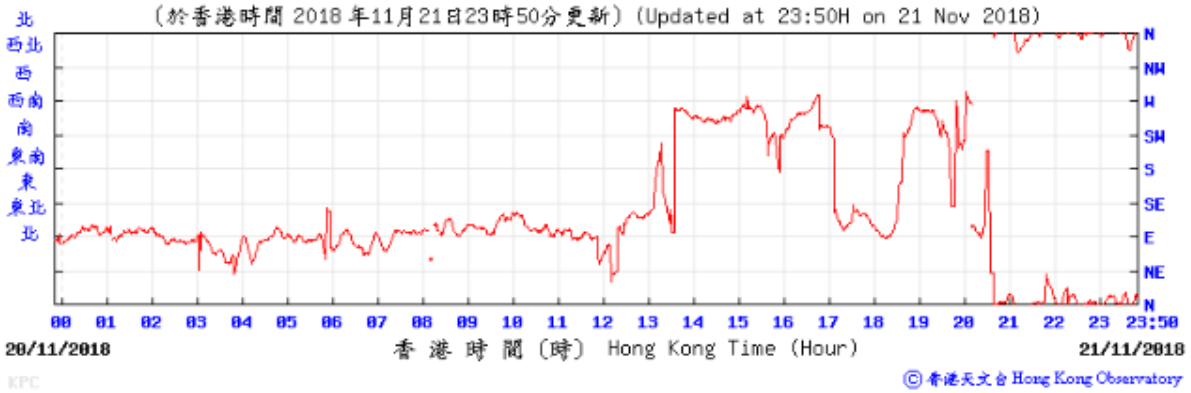

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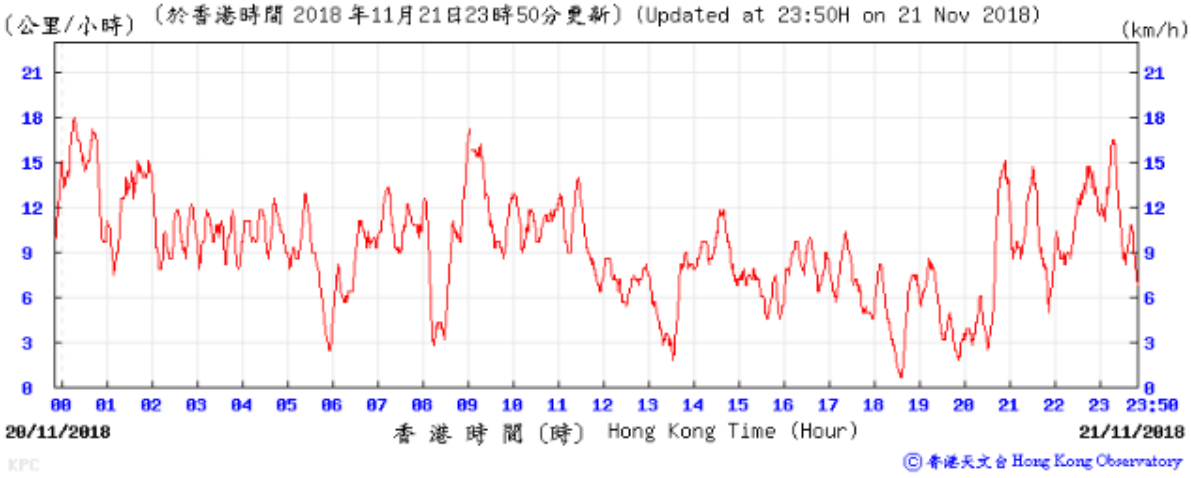

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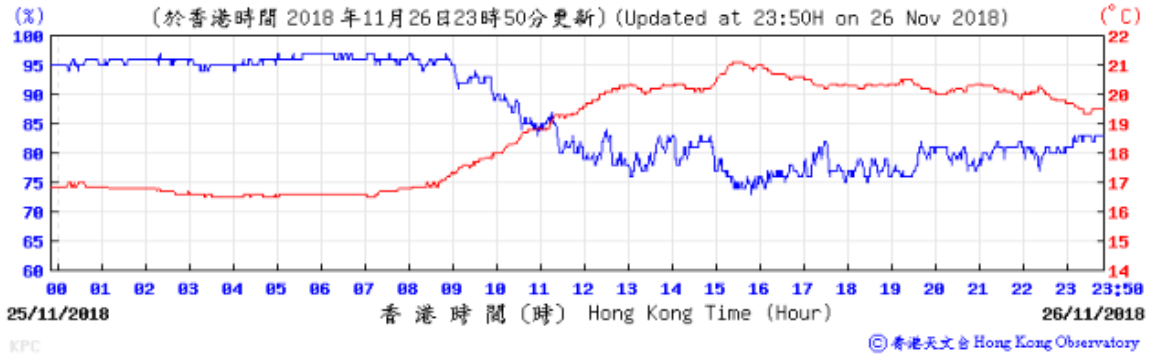

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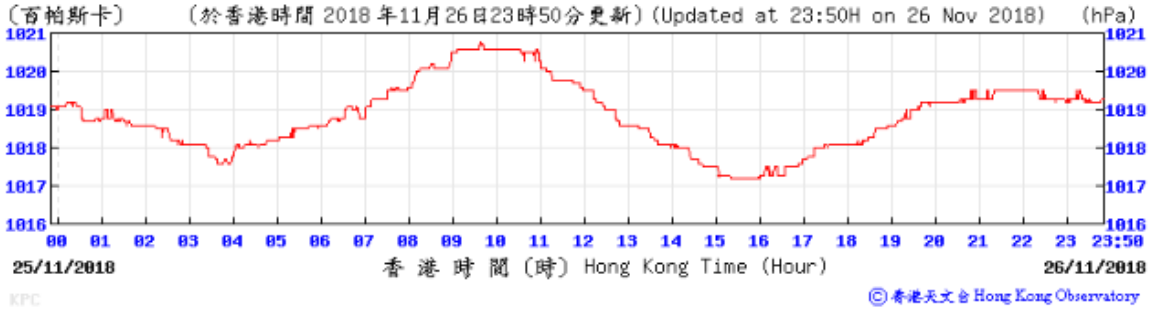

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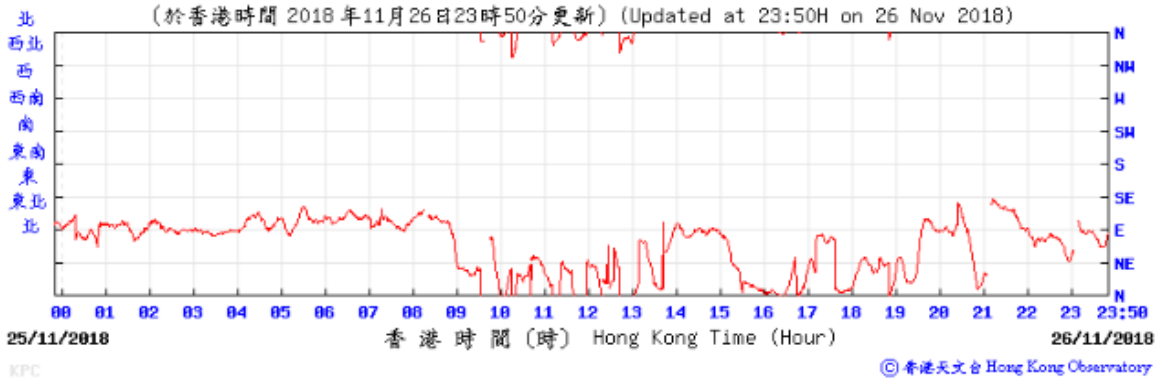

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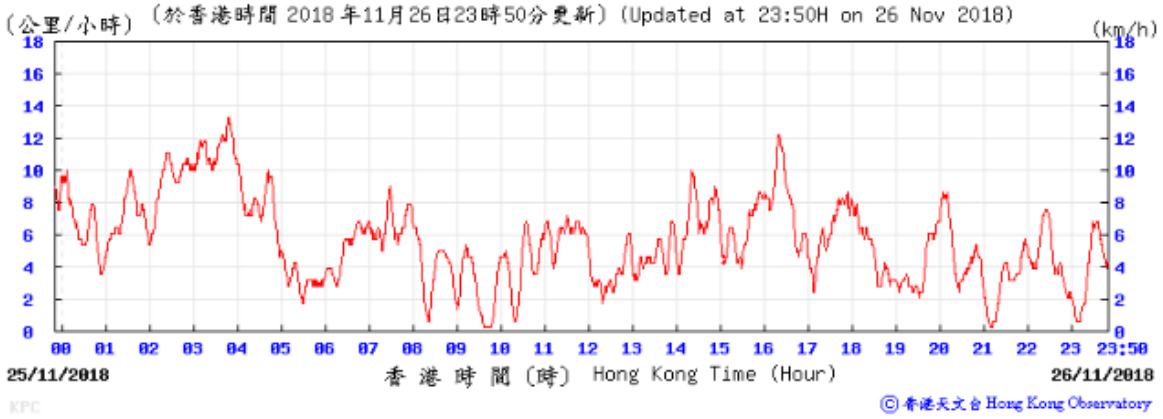

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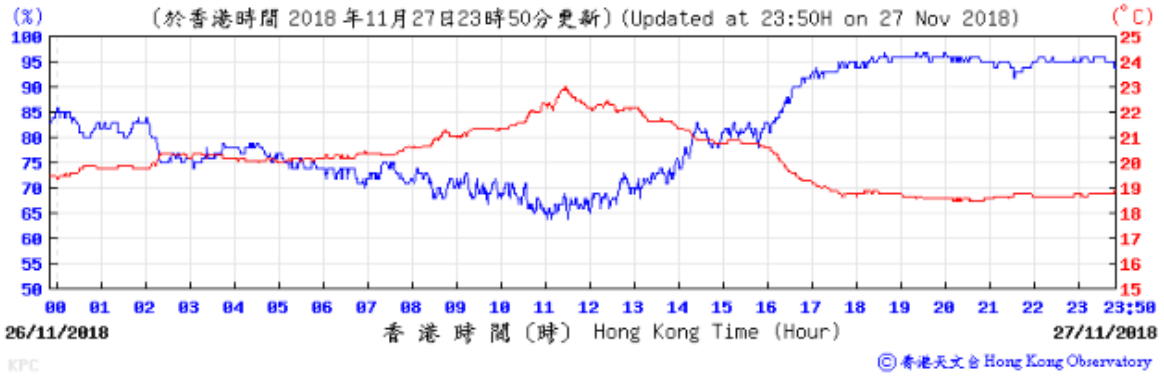

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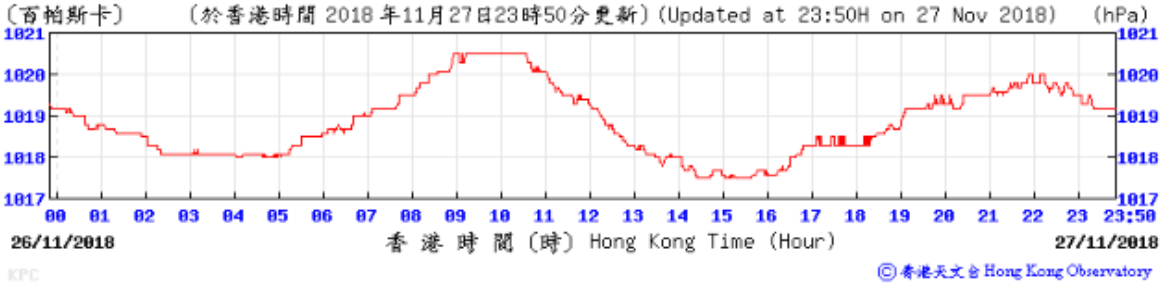

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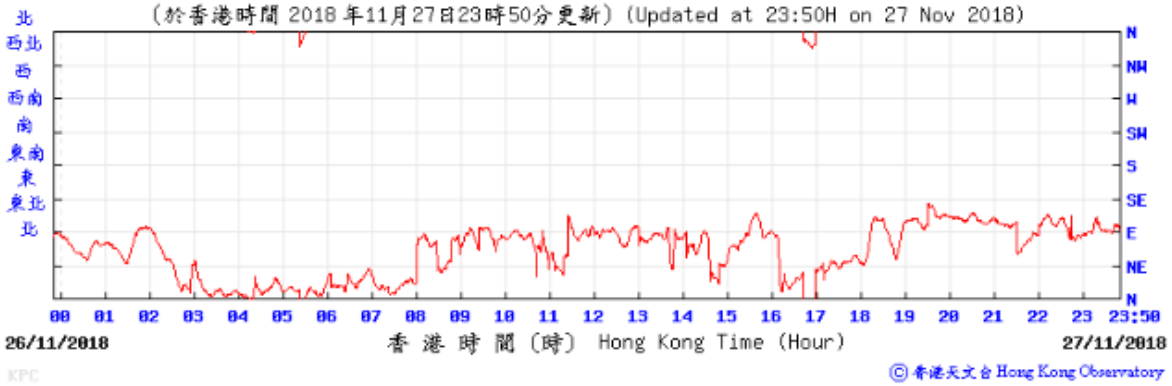

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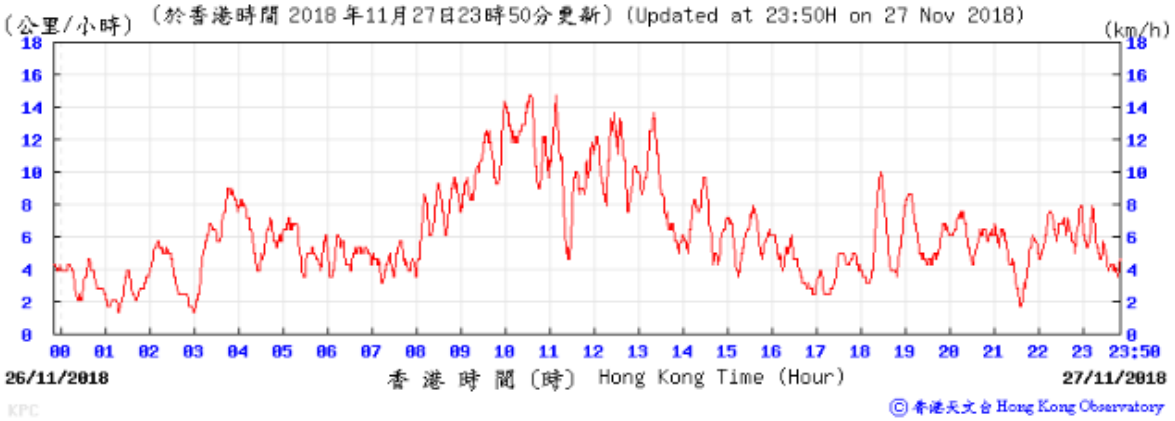

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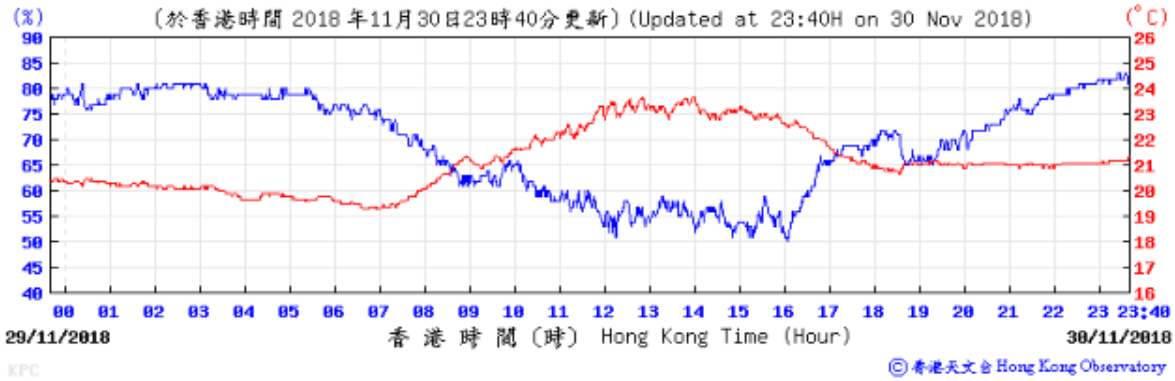

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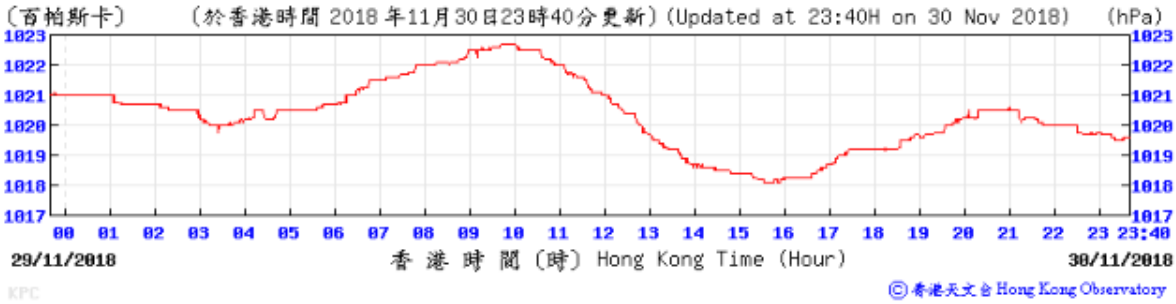

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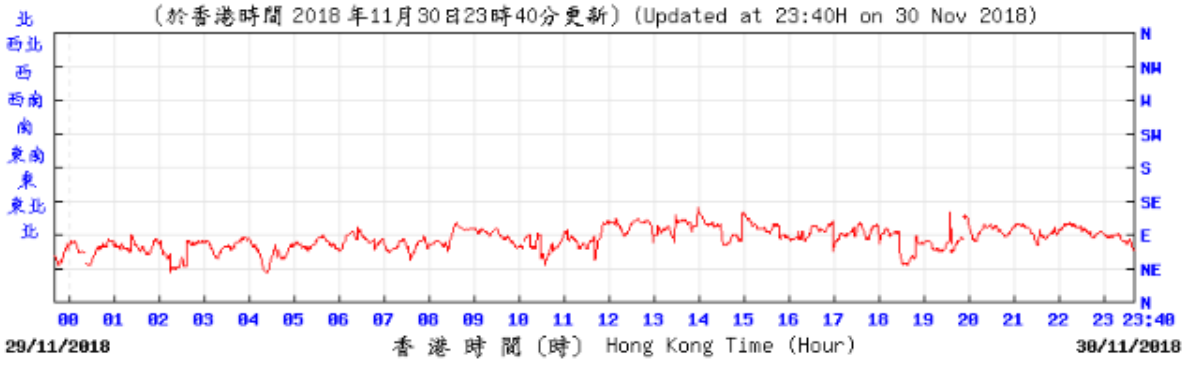

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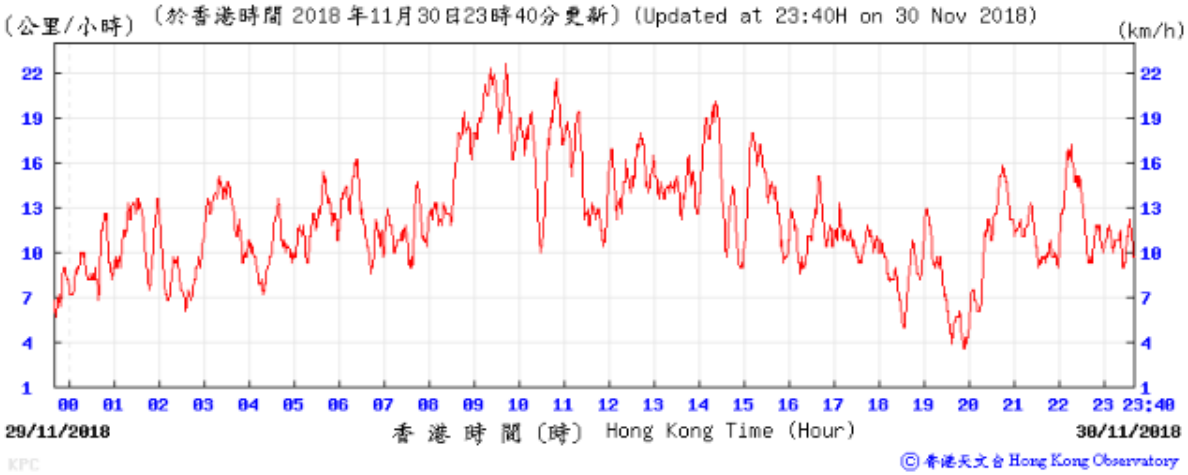

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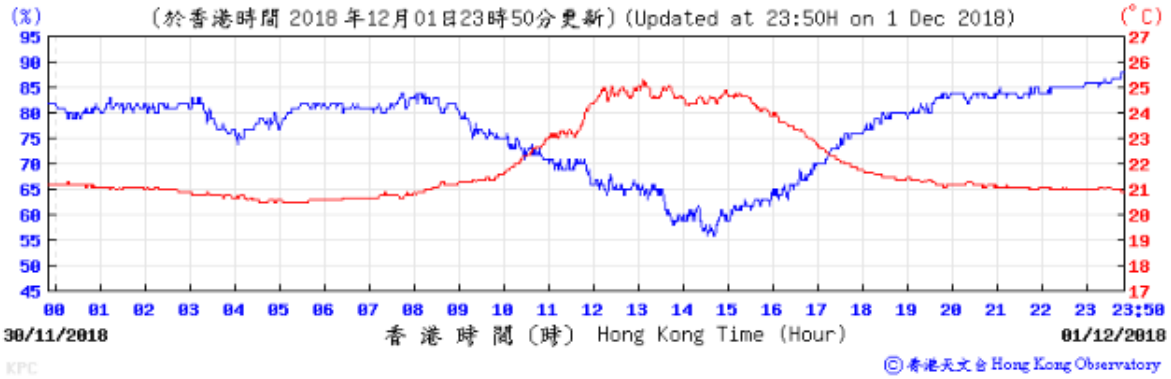

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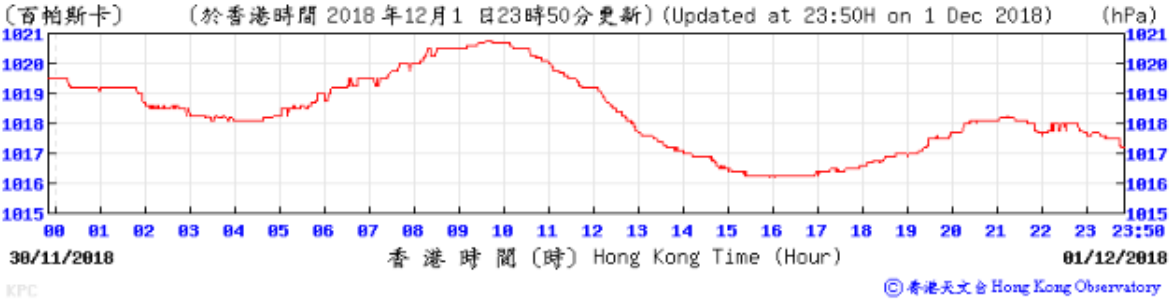

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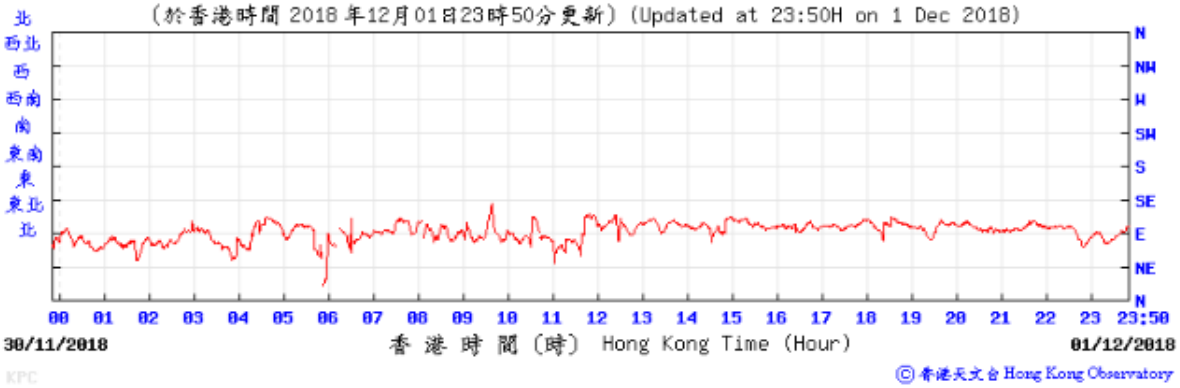

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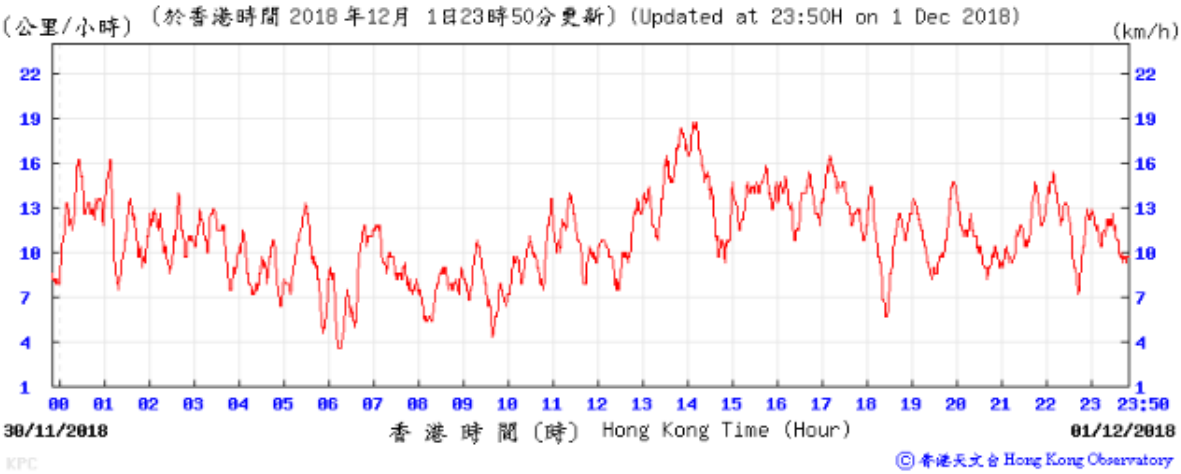

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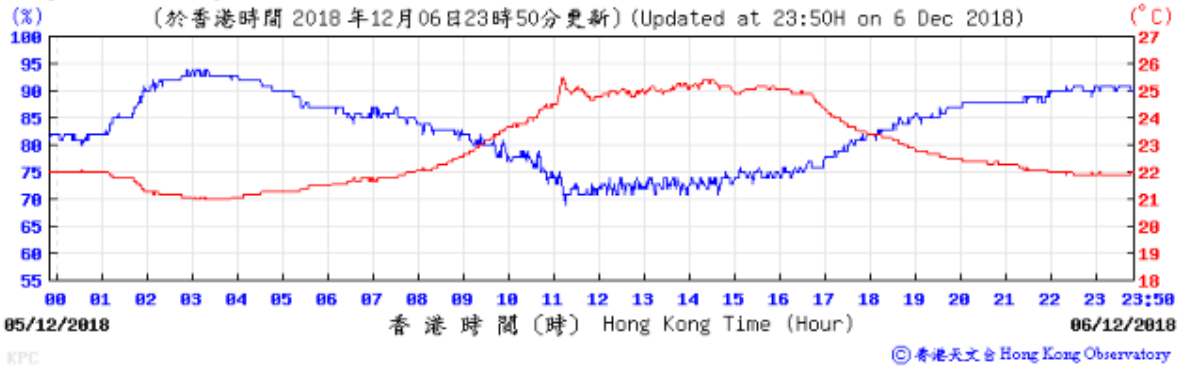

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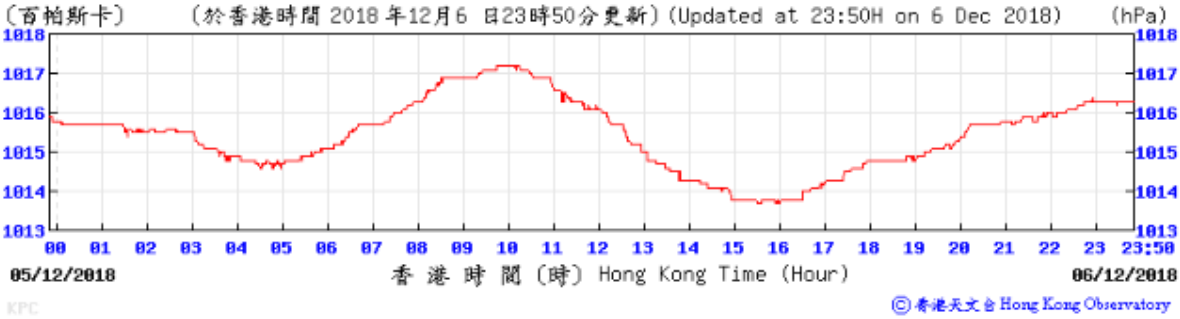

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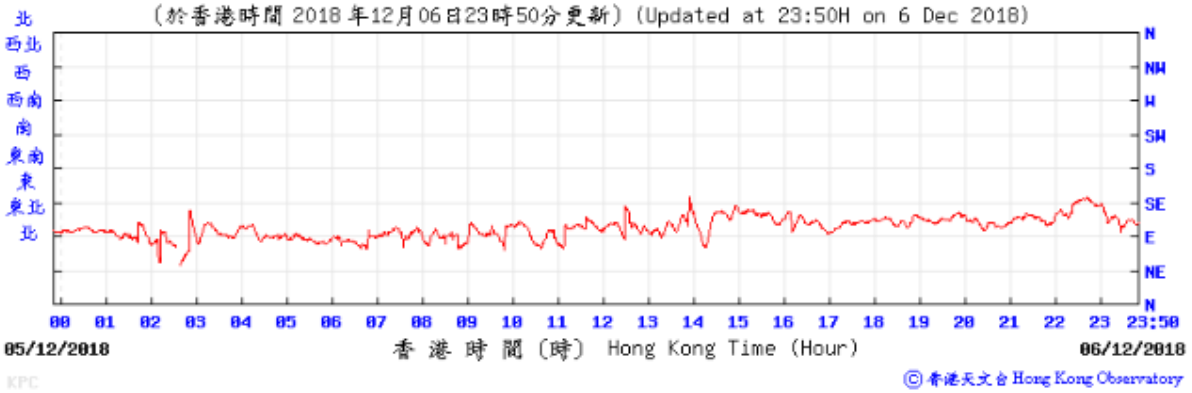

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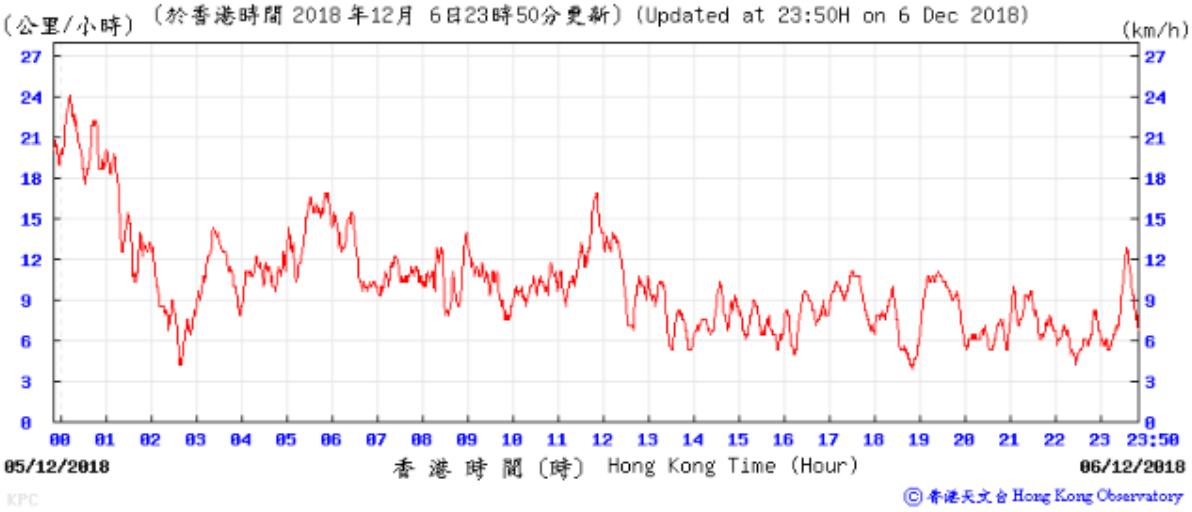

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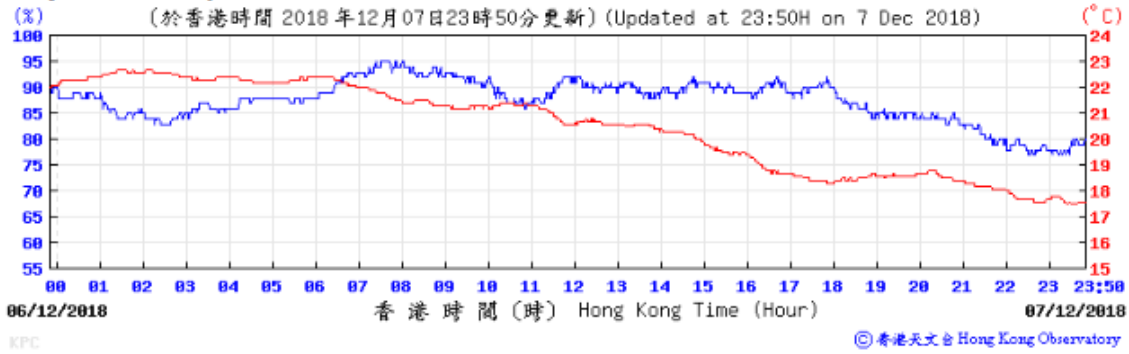

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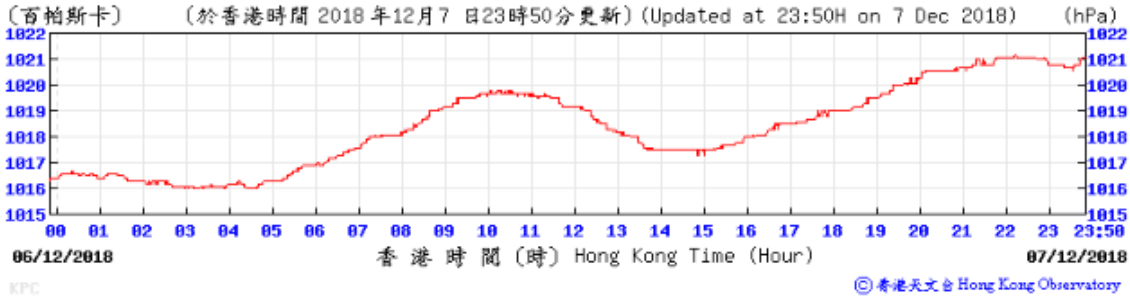

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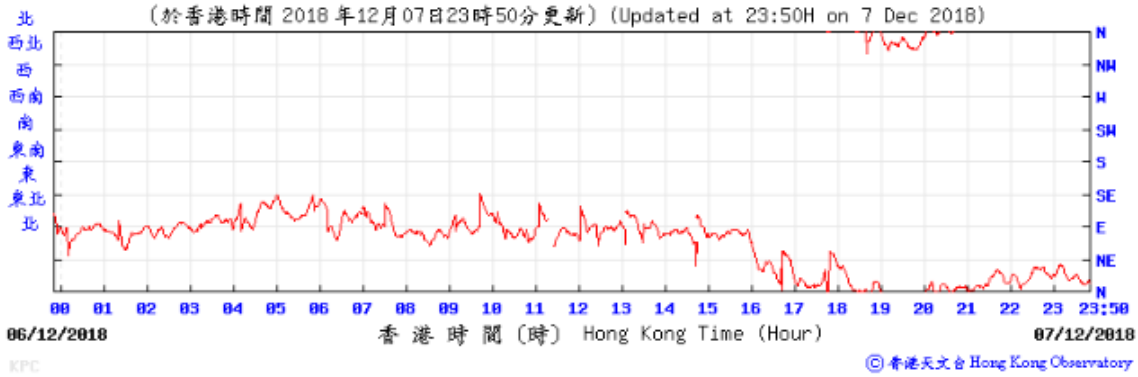

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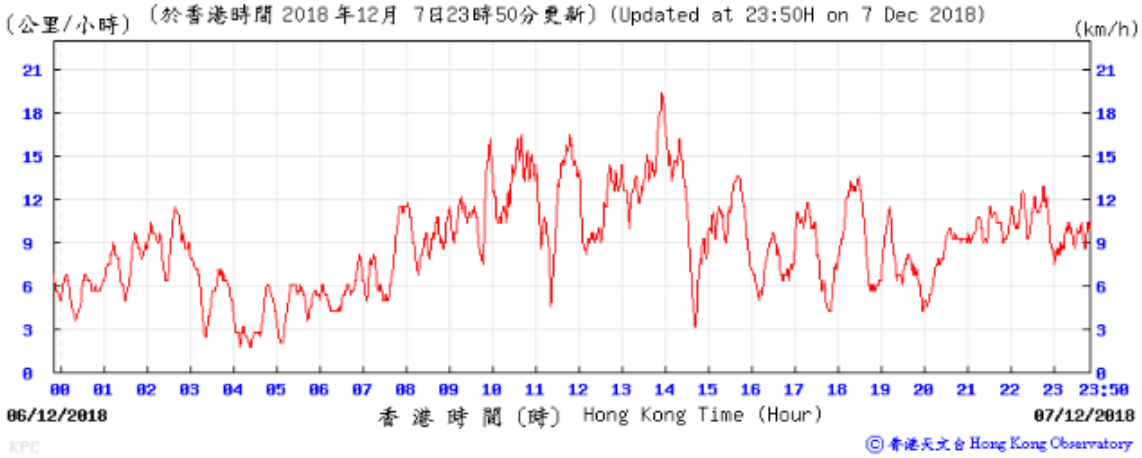

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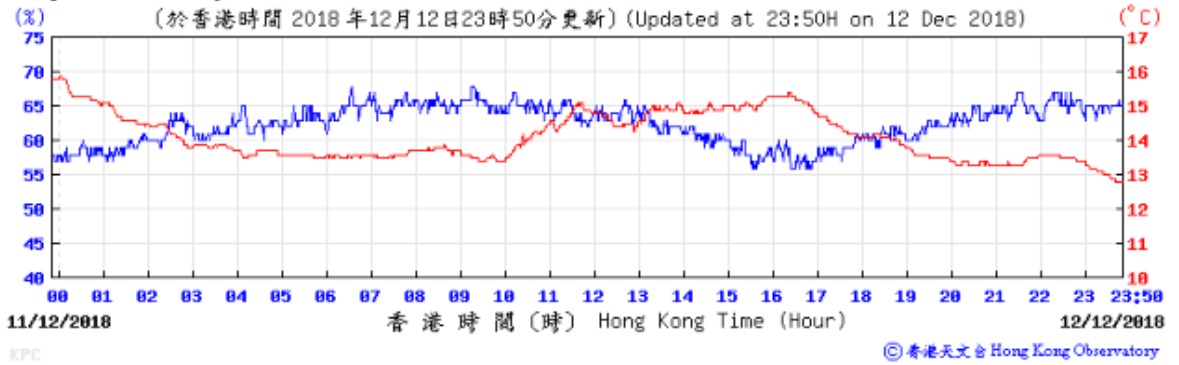

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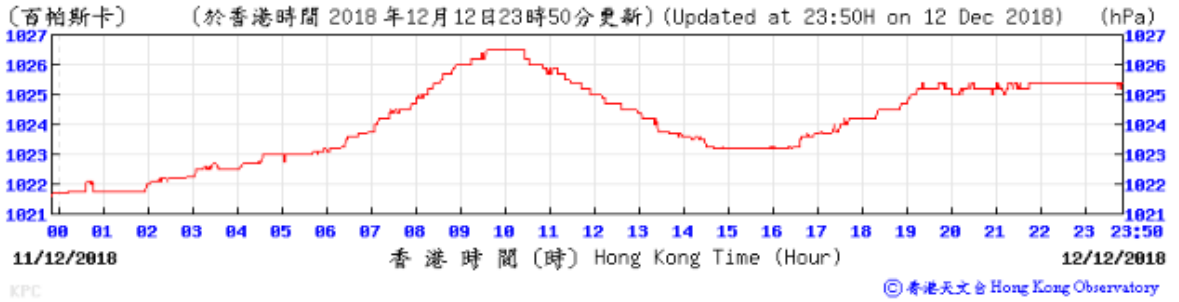

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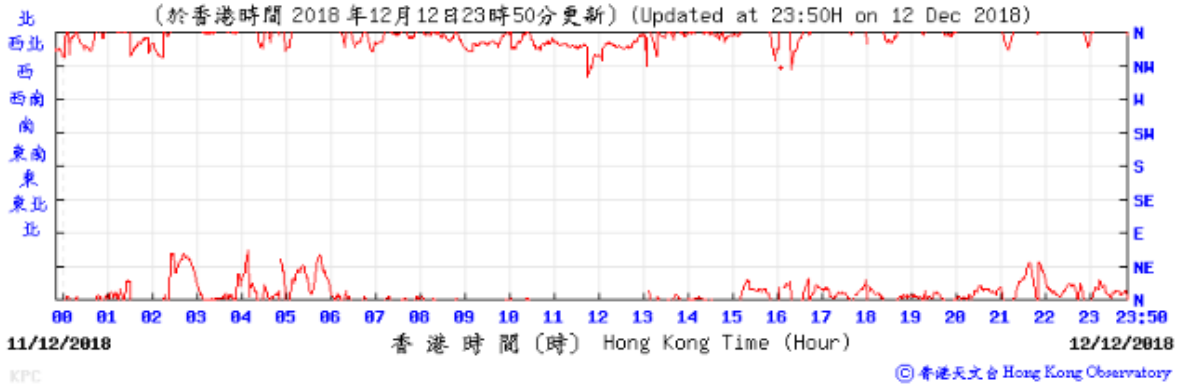

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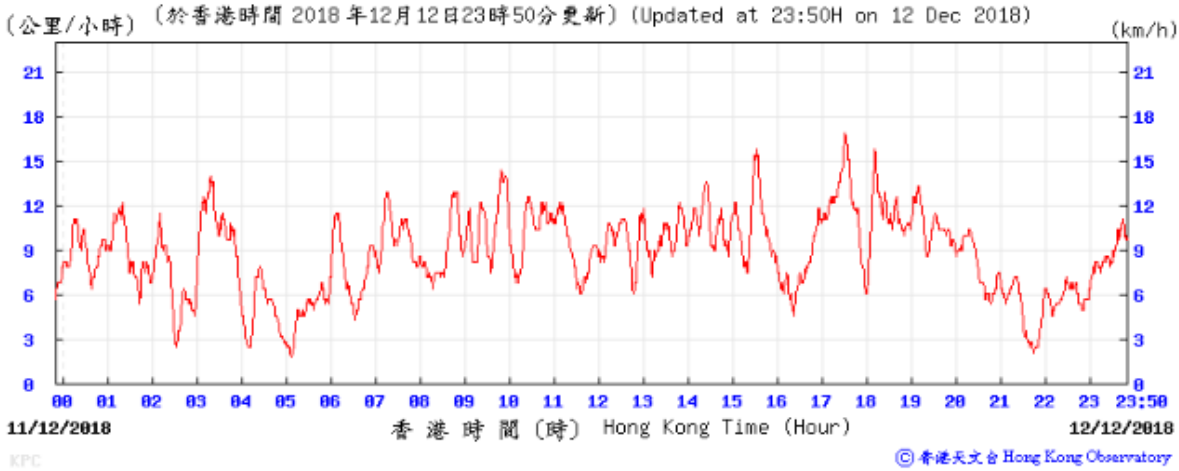

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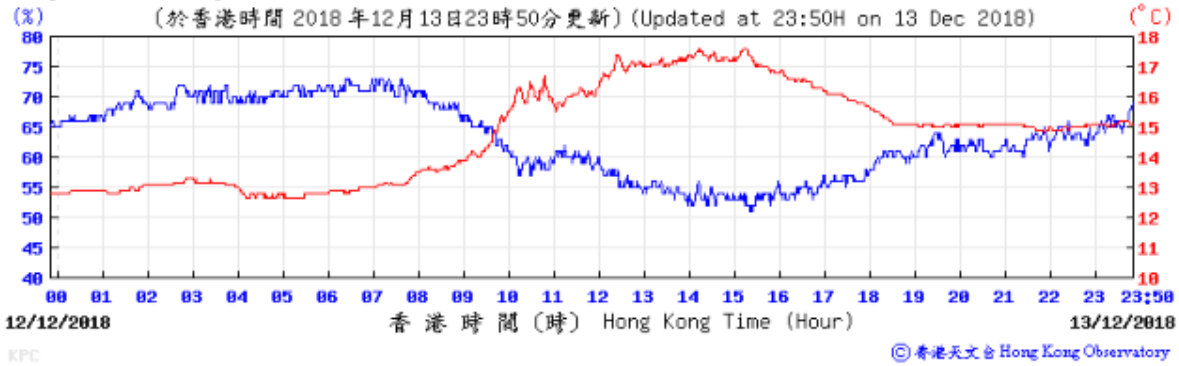

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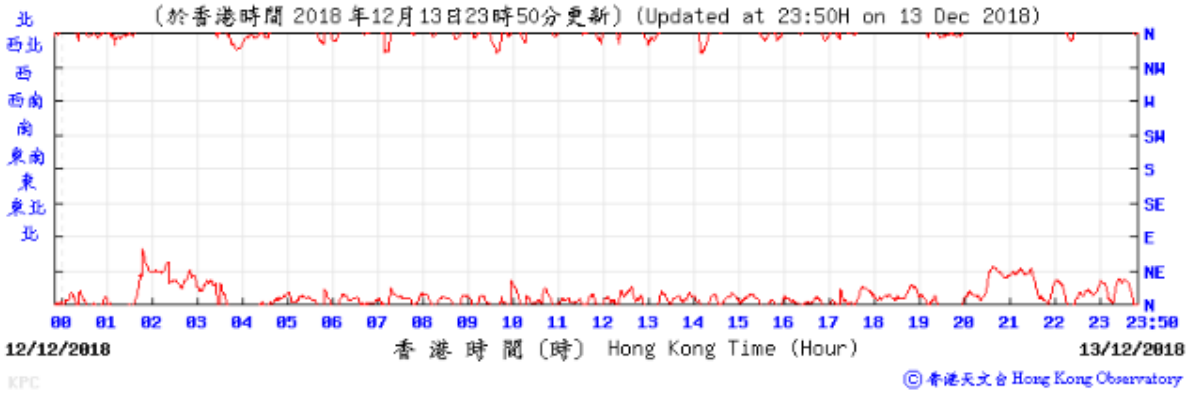

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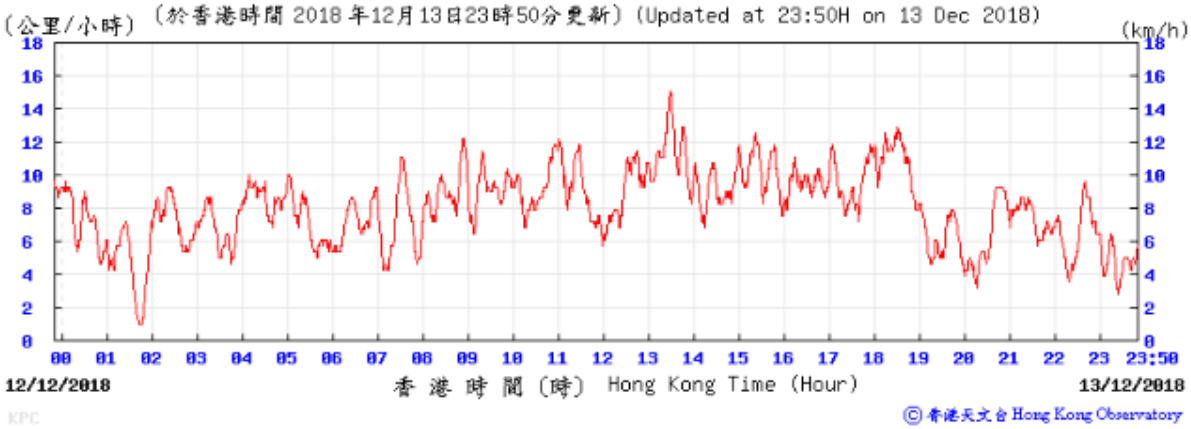

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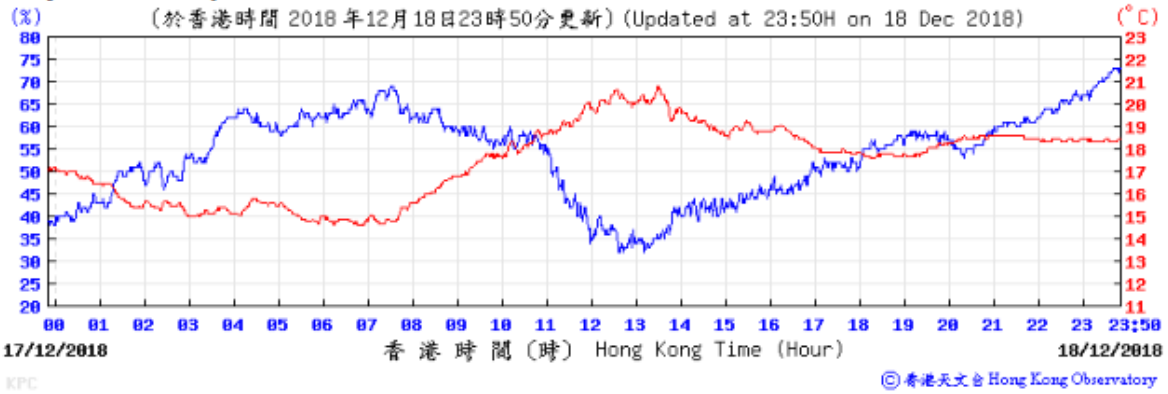

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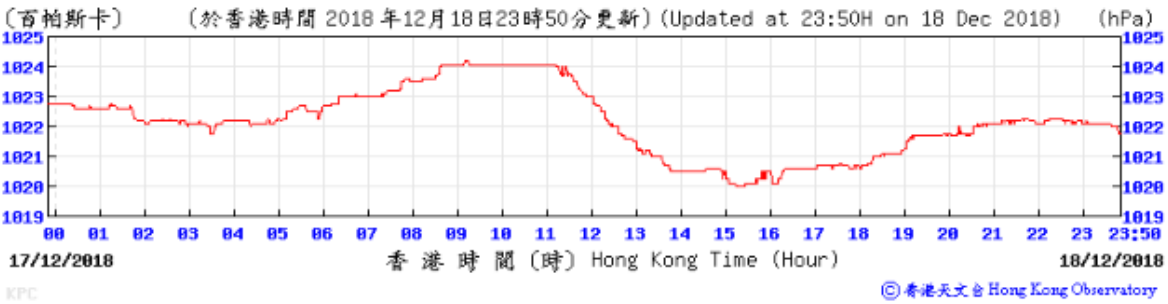

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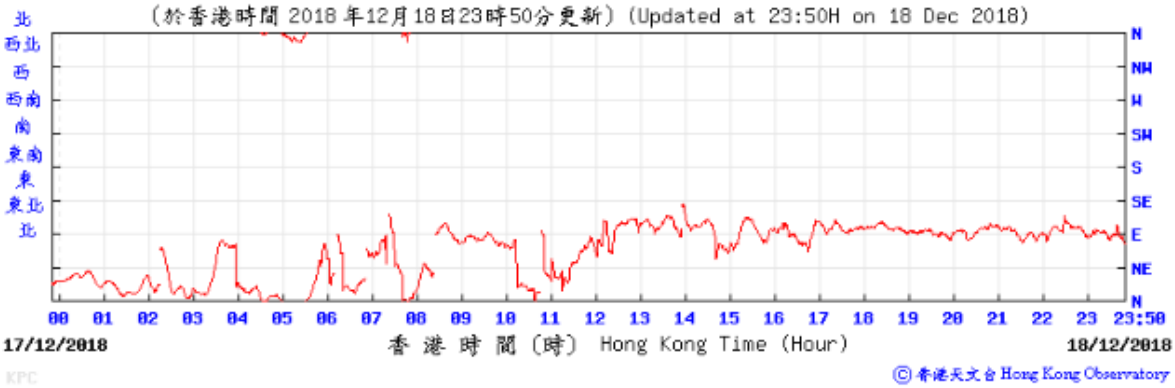

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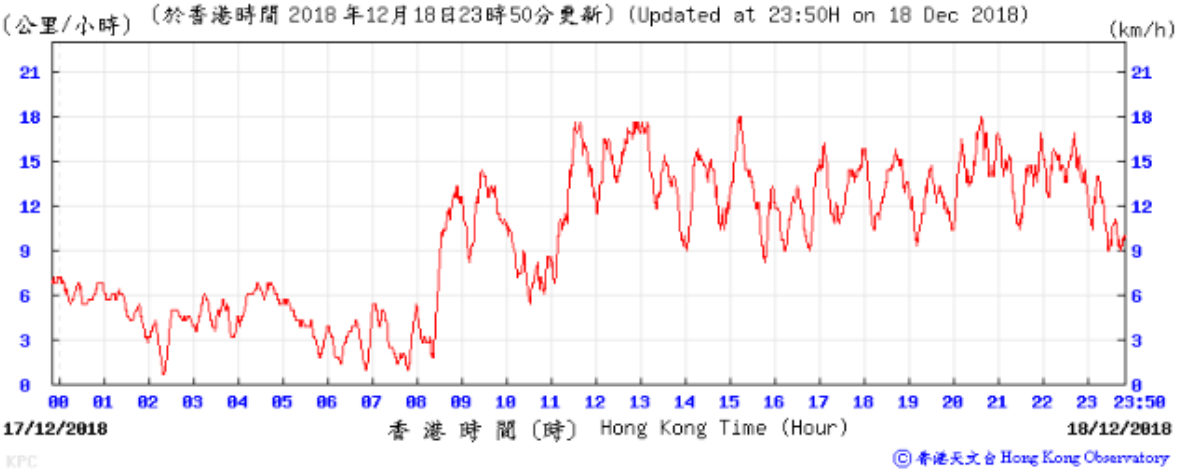

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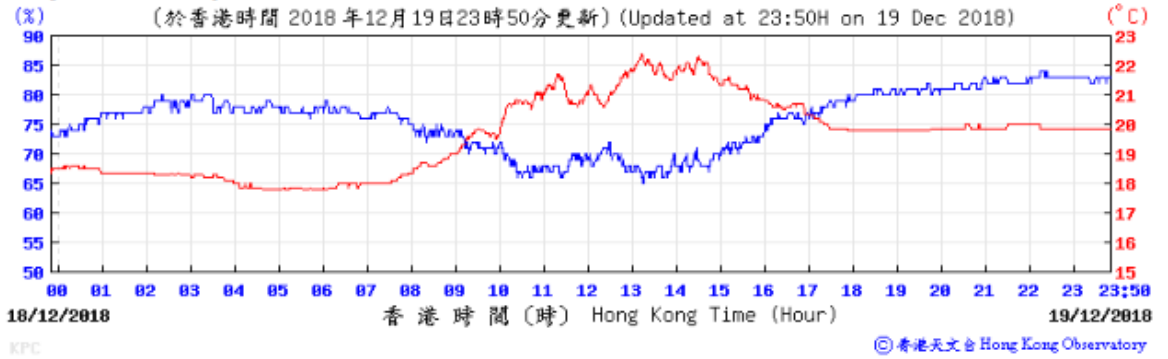

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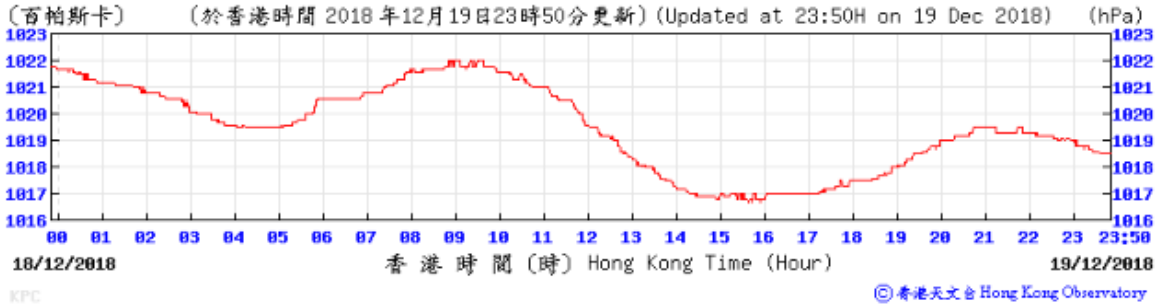

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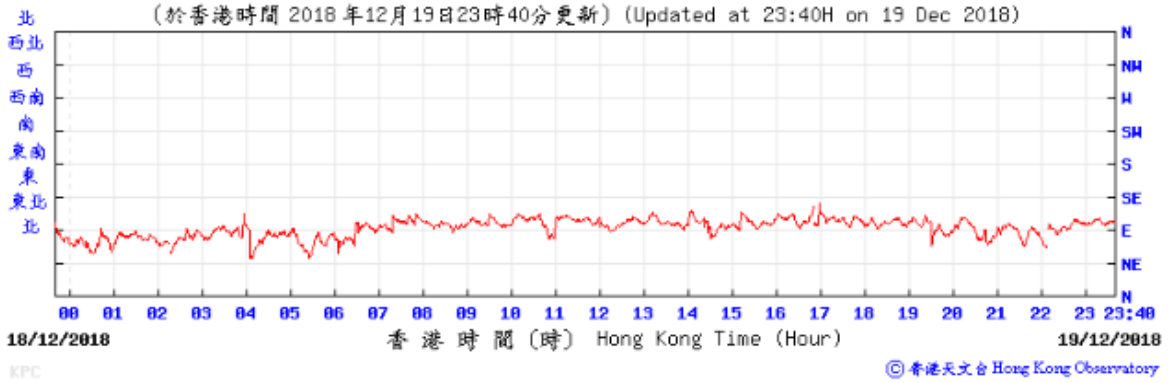

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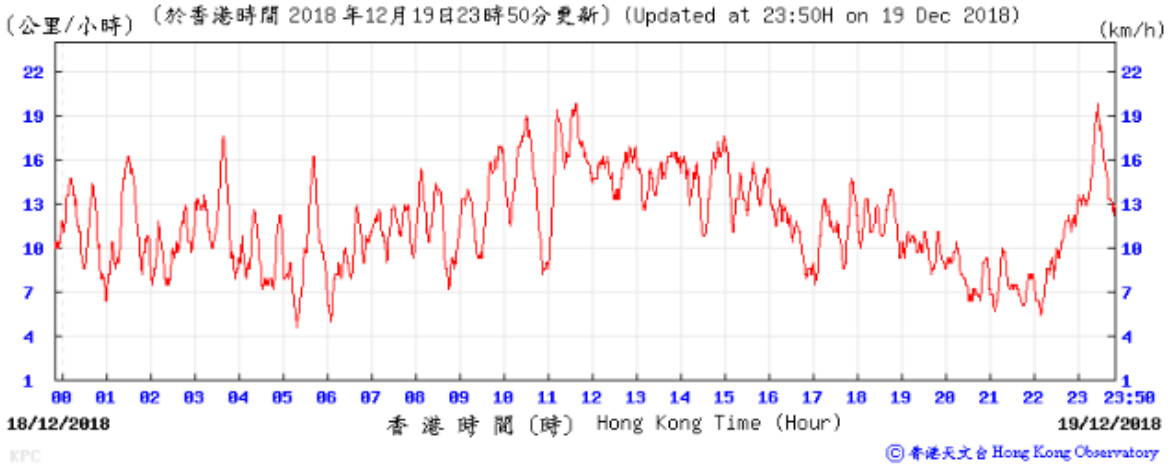

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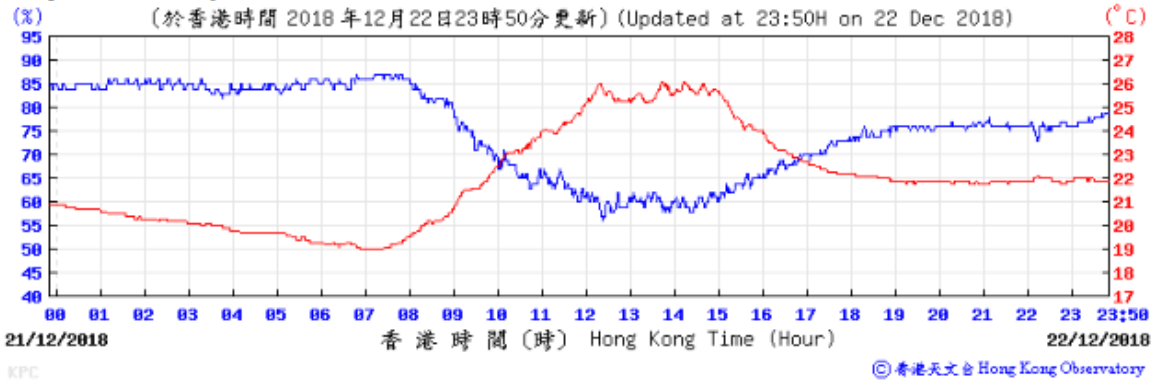

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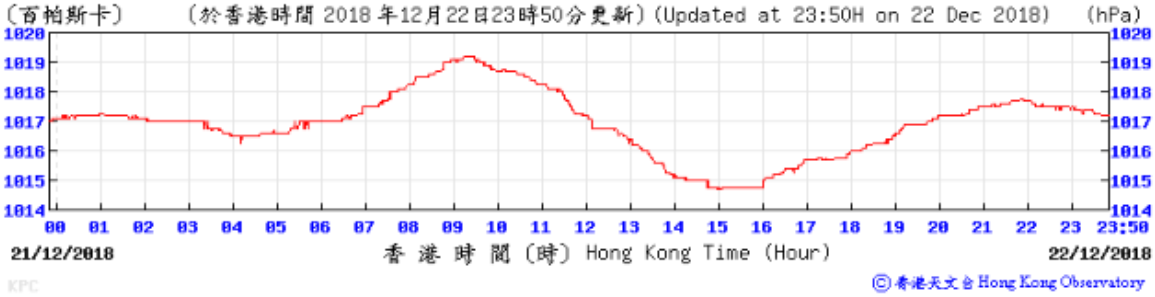

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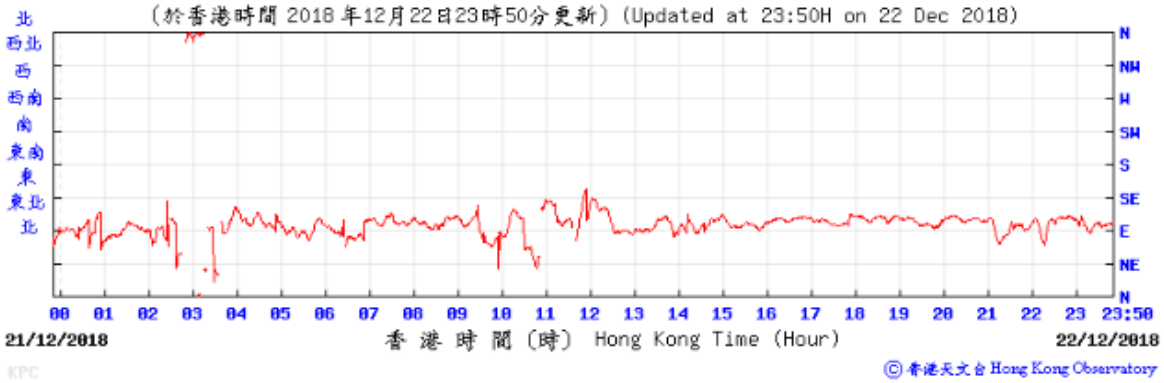

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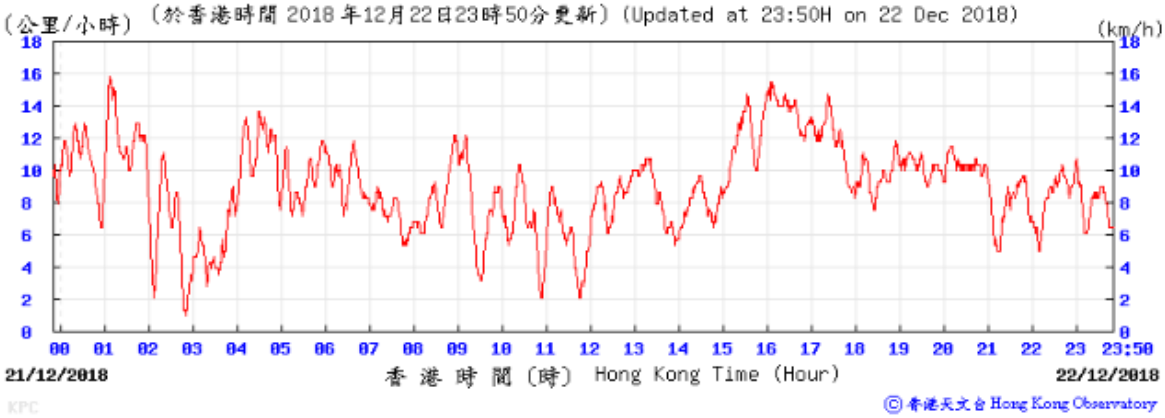

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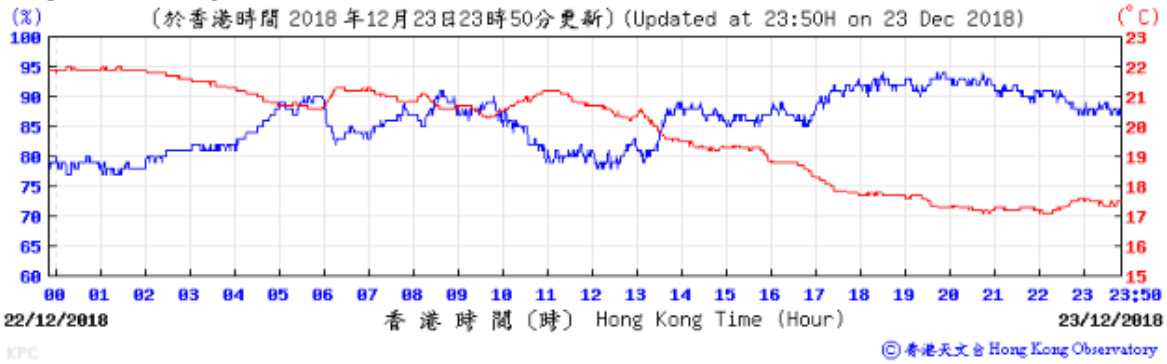

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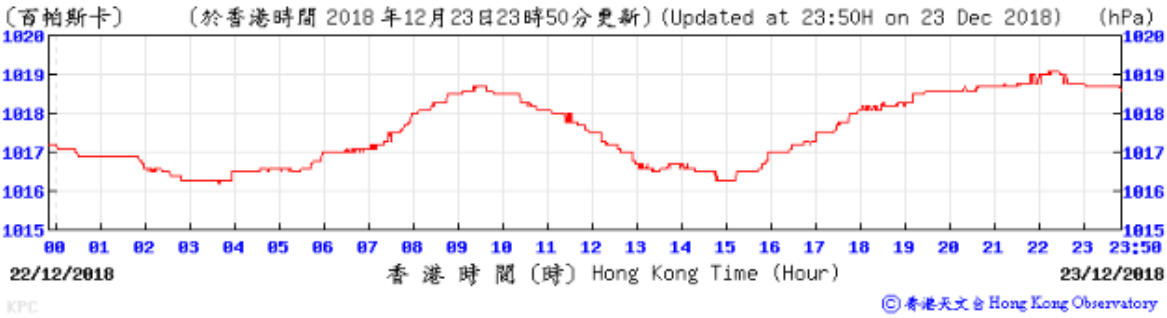

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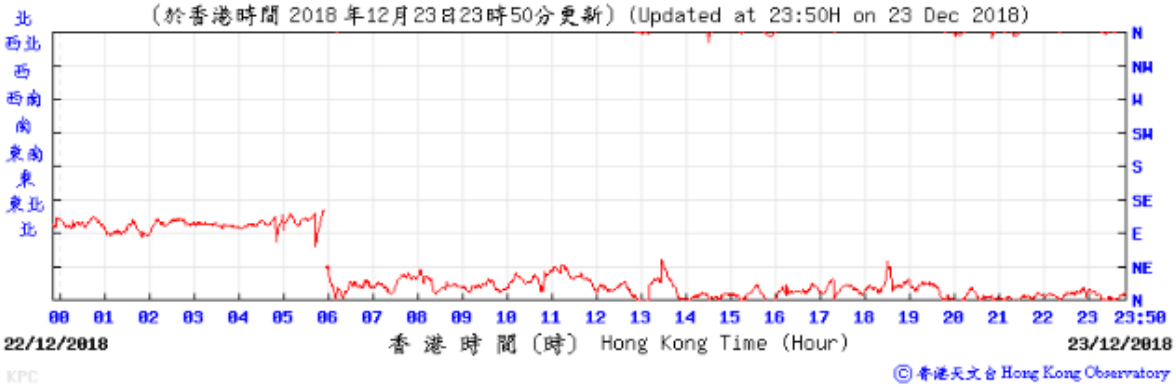

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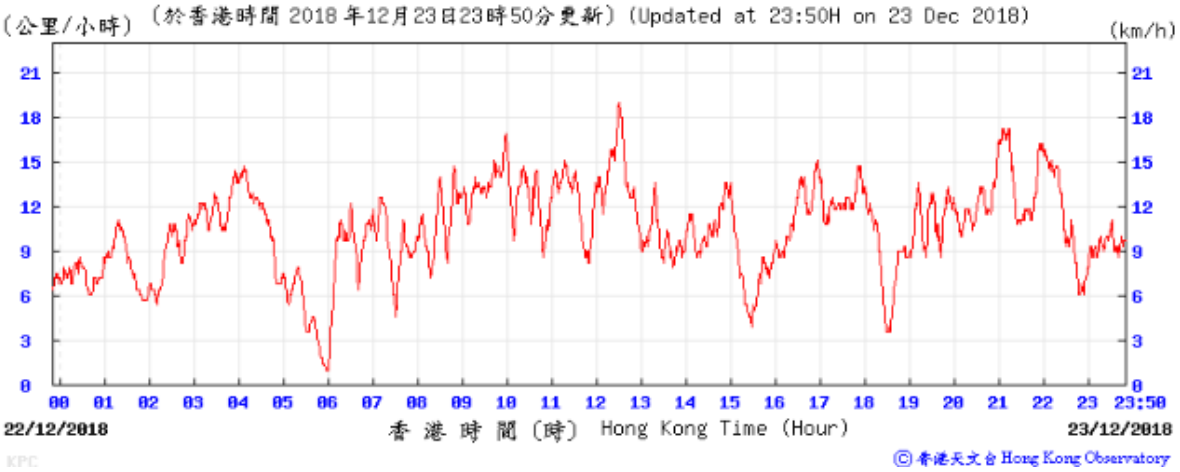

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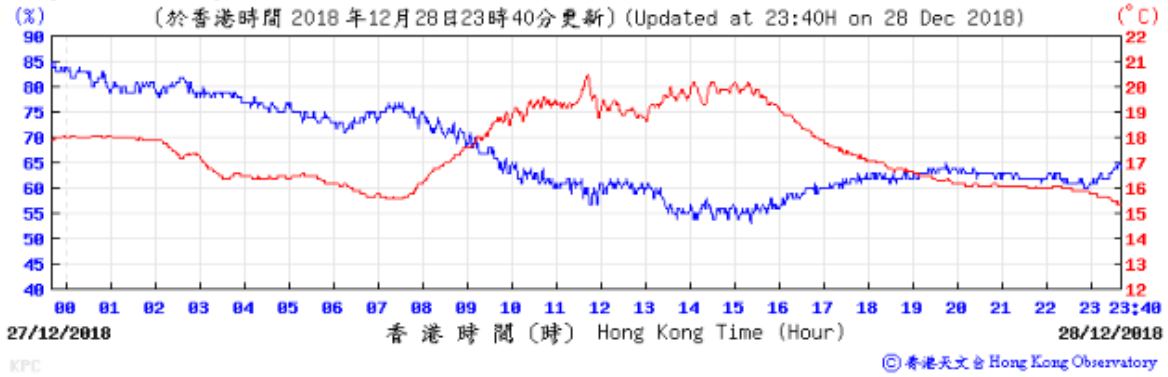

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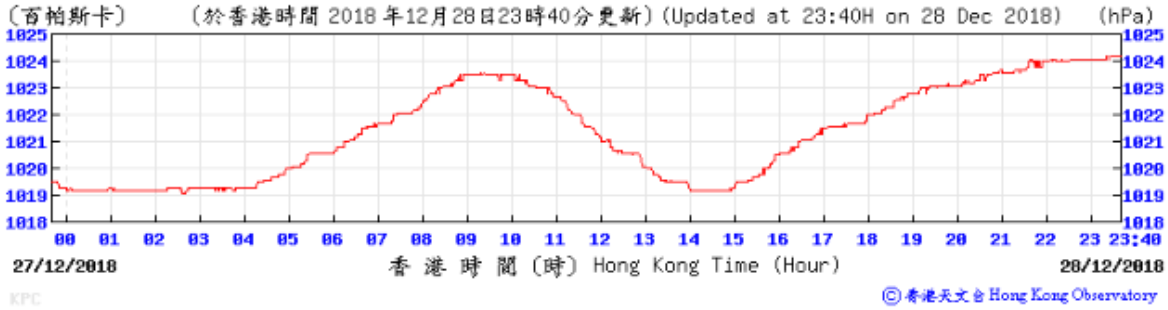

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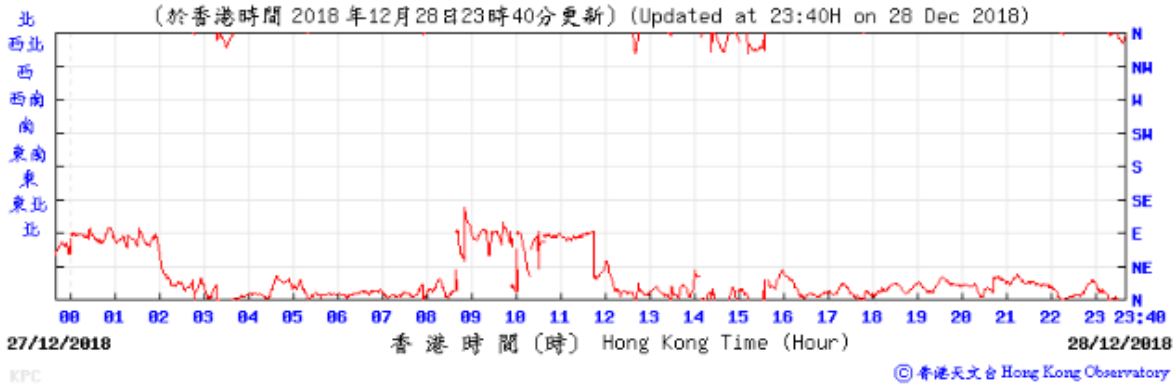

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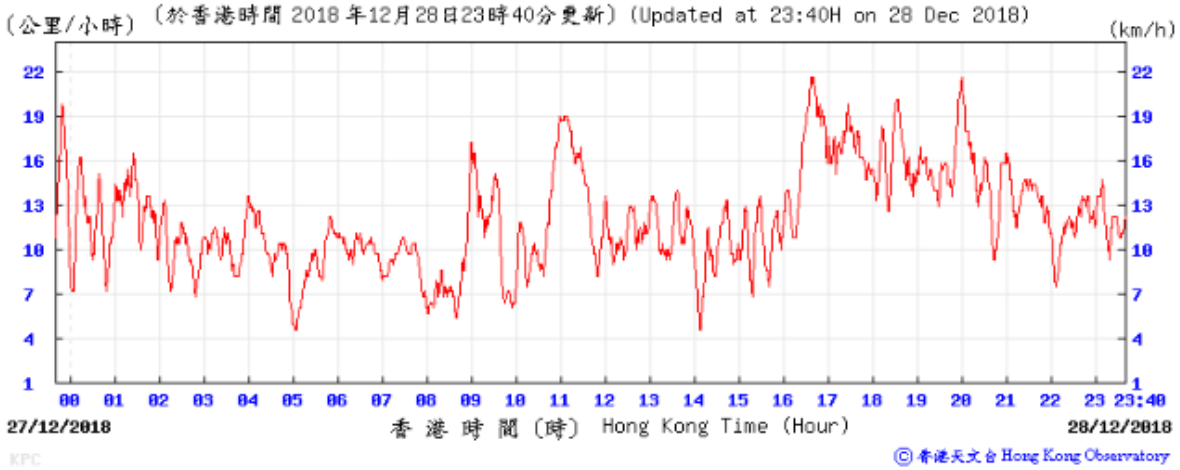

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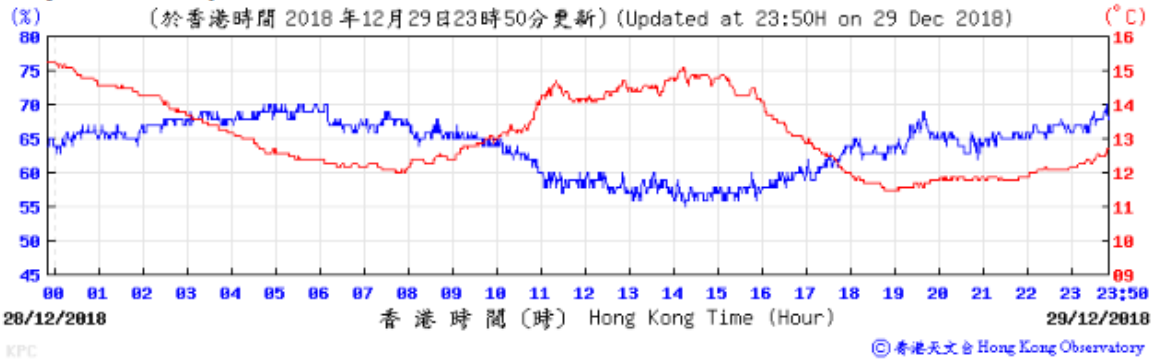

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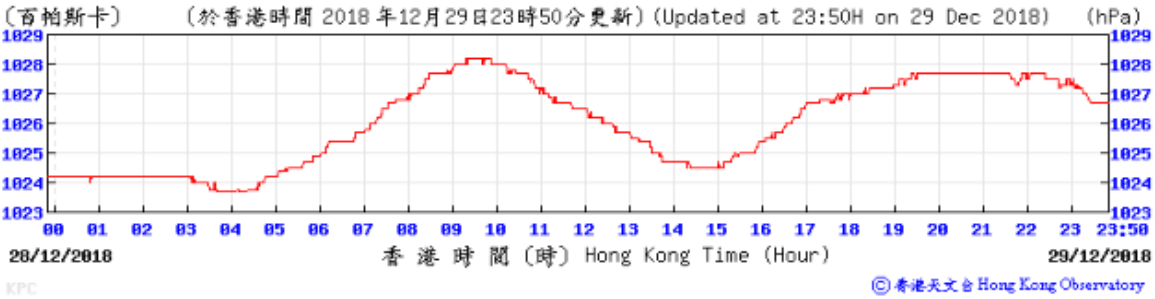

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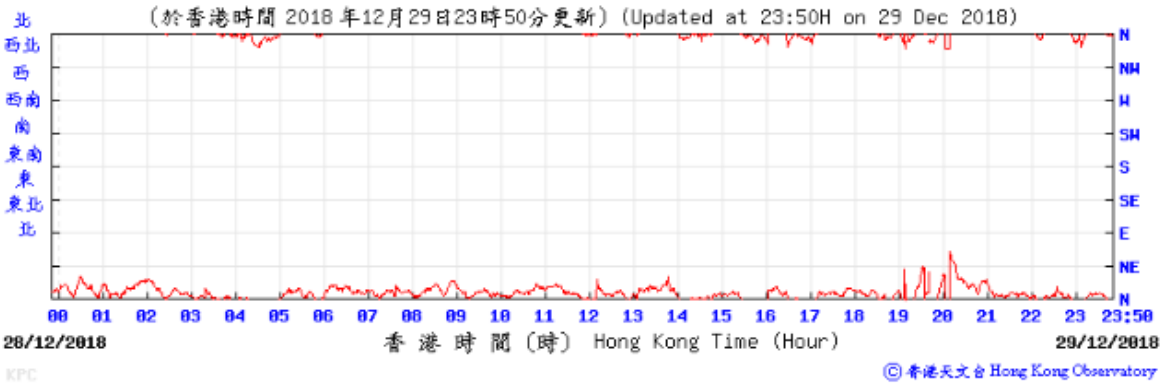

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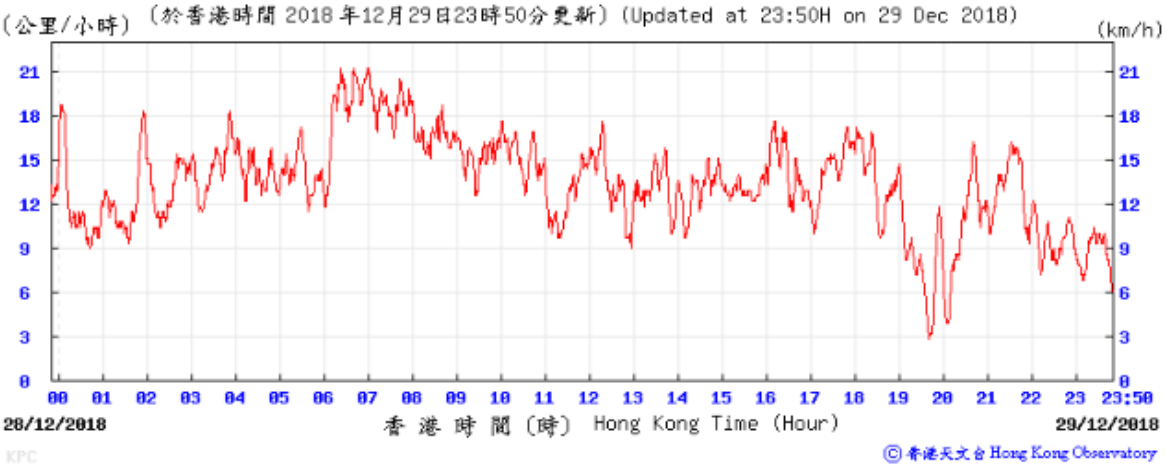

Remarks: The pressure data of 13 December 2018 for King's Park Automatic Weather Station is not available.

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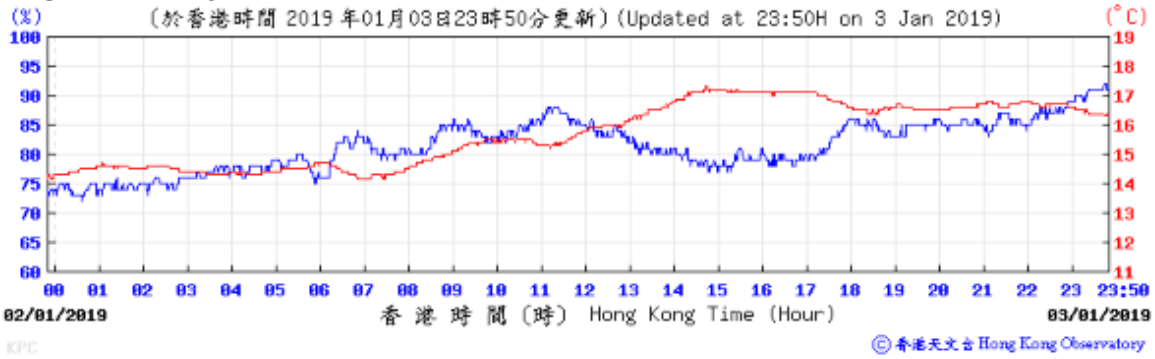

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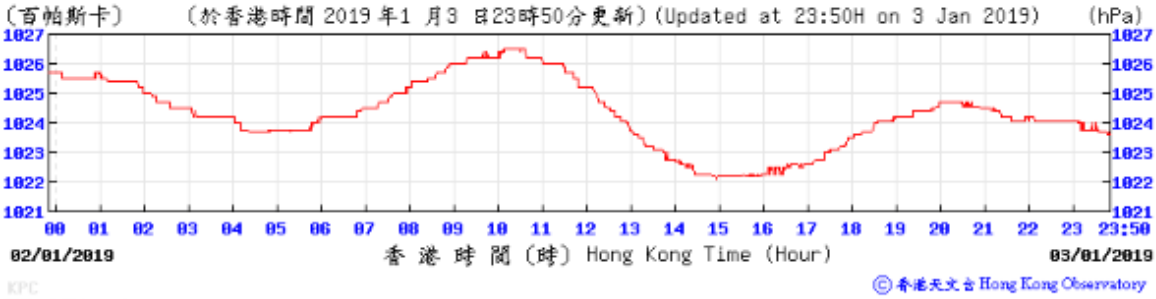

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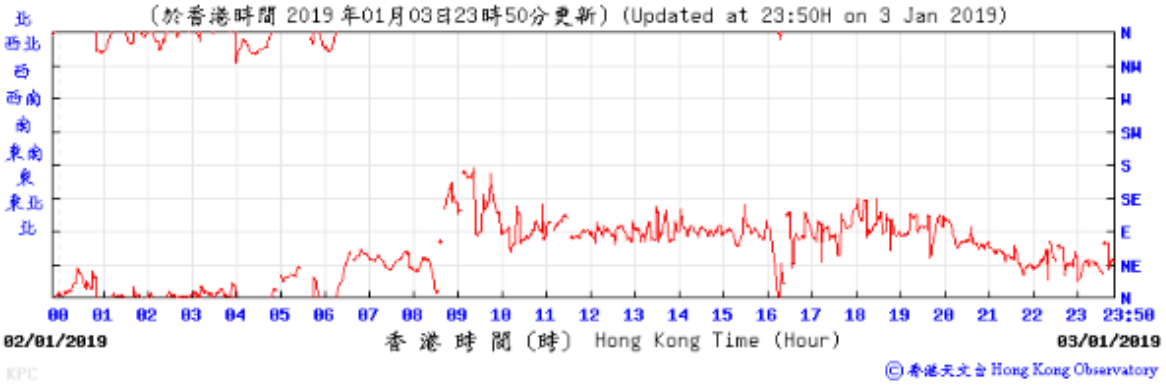

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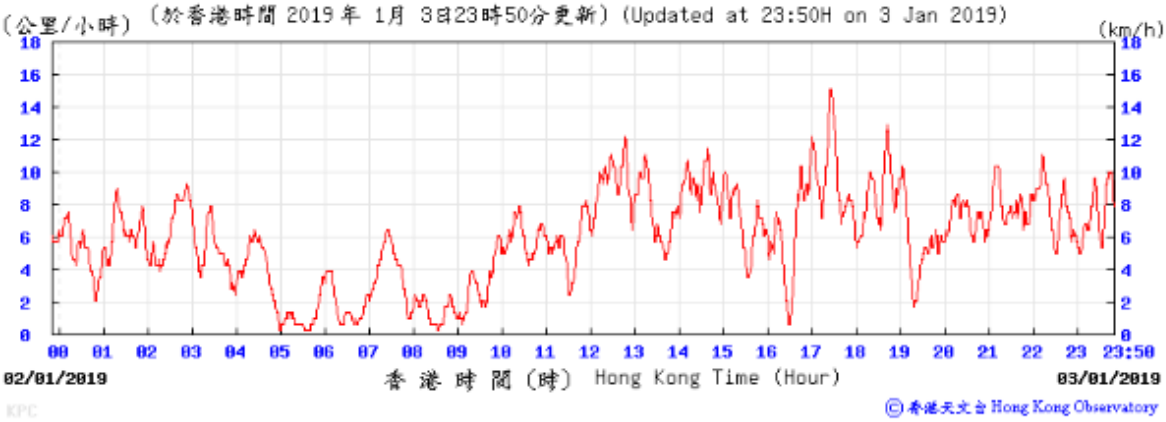

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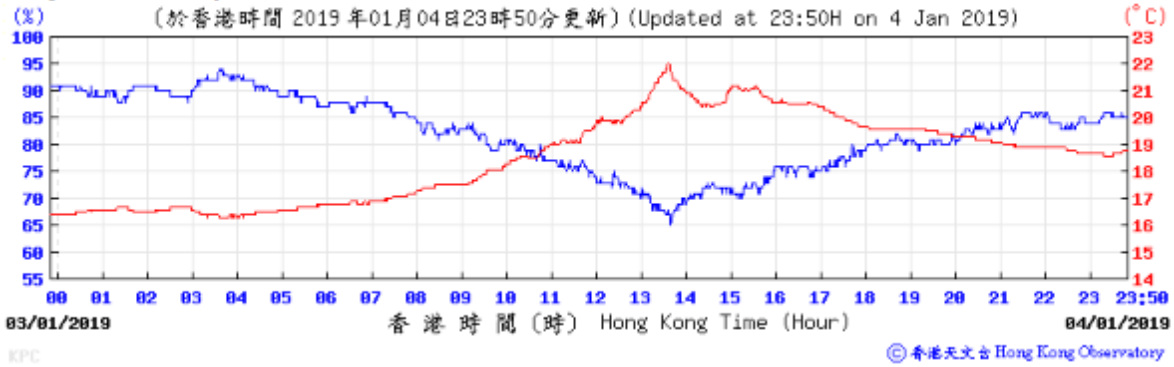

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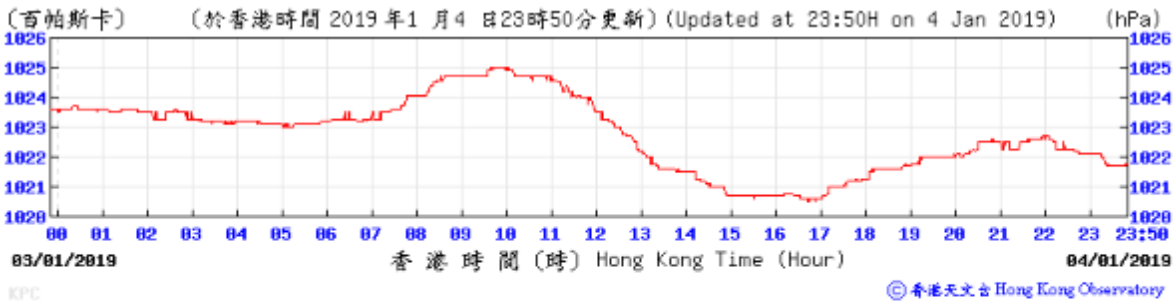

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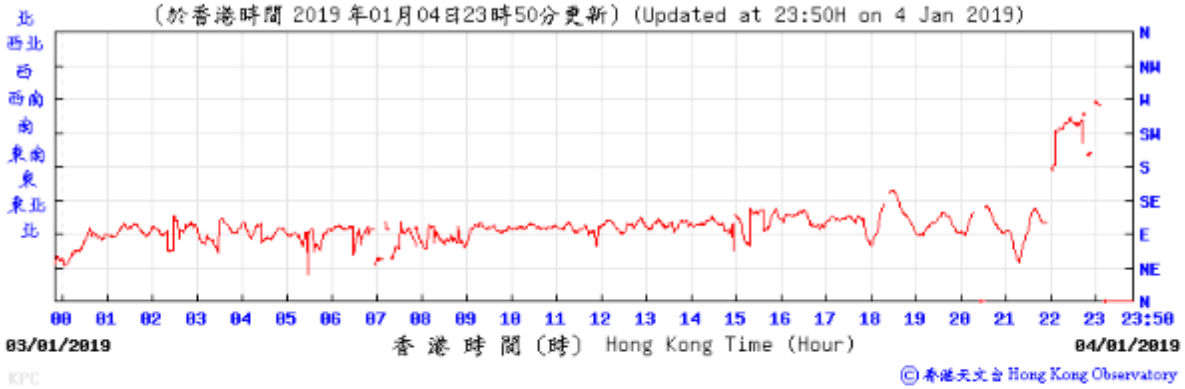

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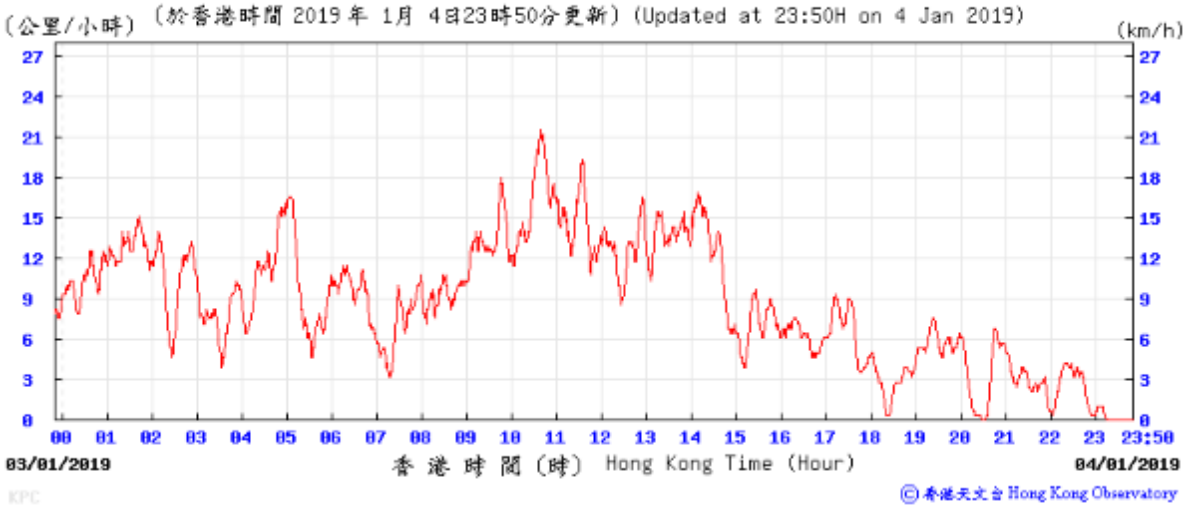

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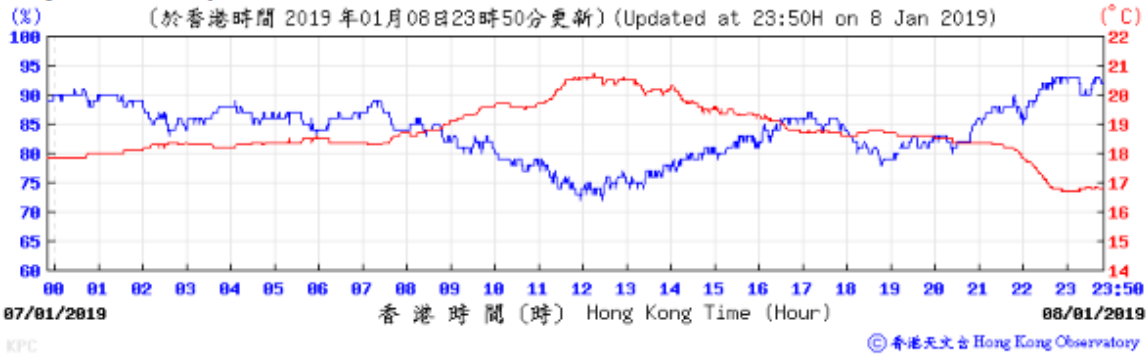

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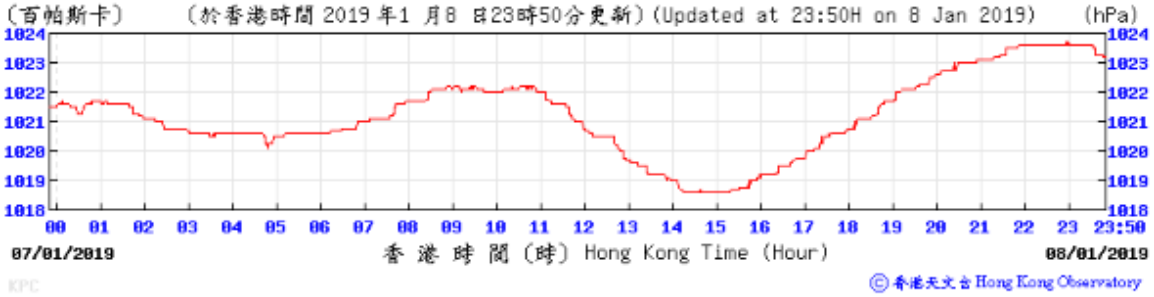

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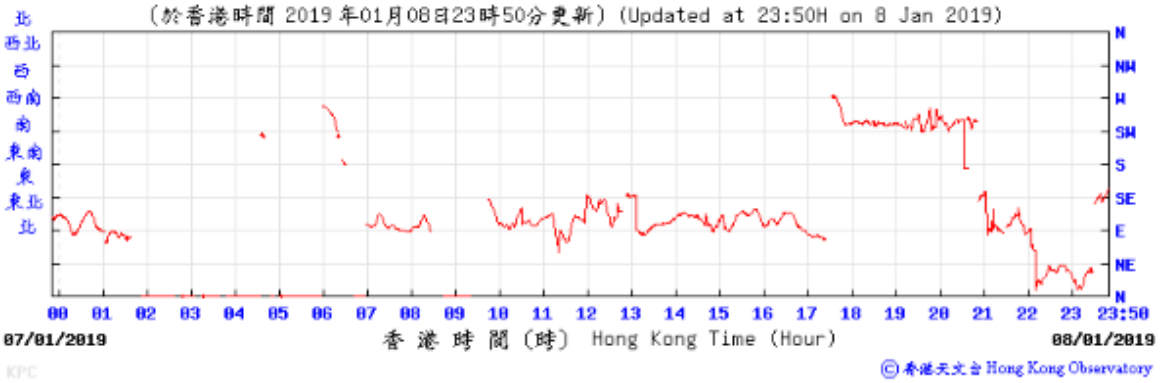

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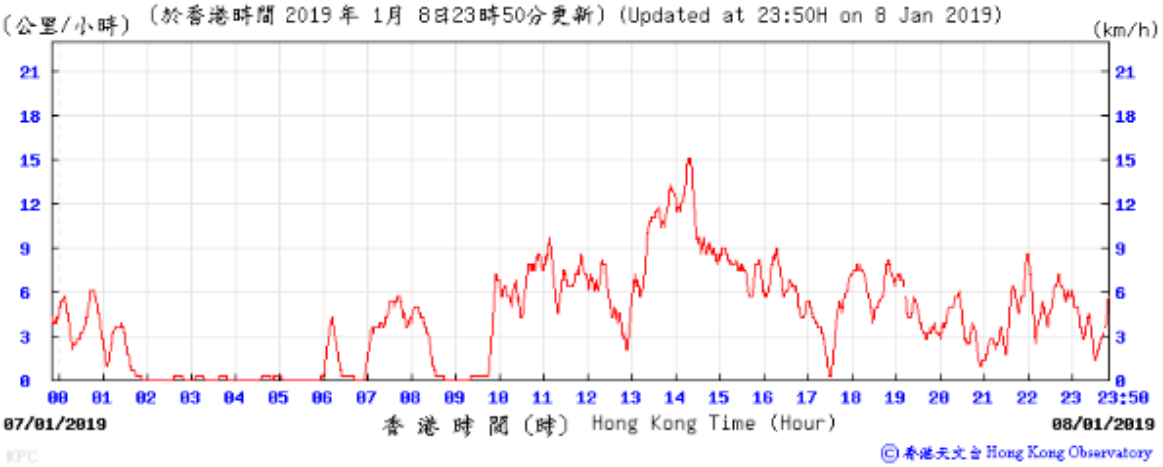

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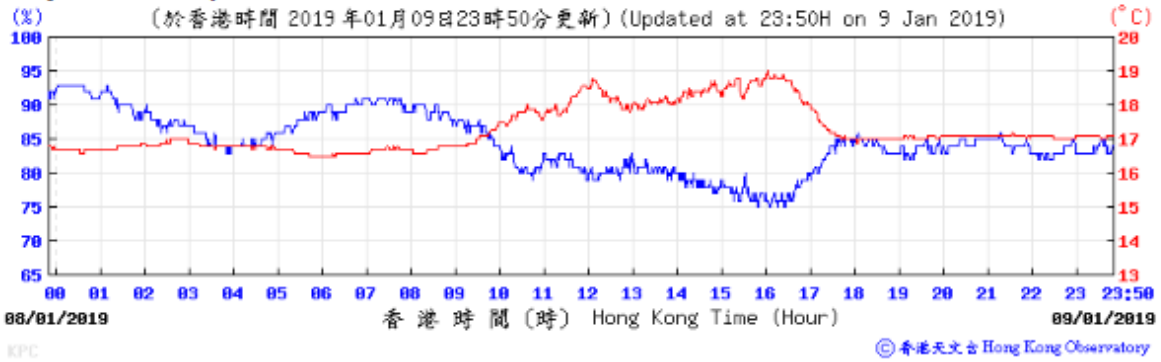

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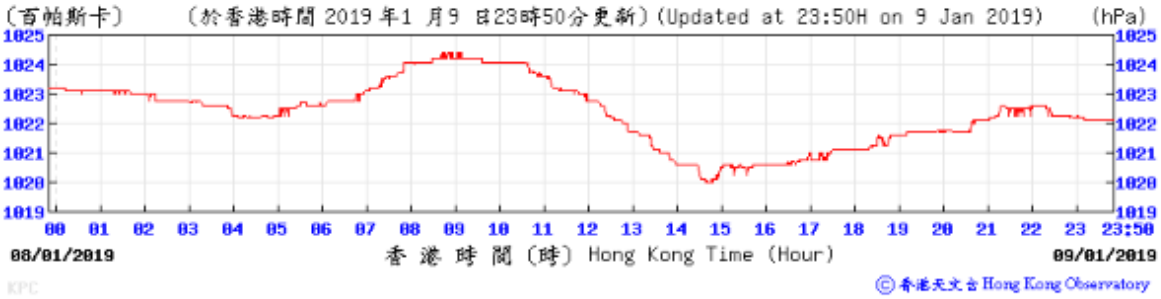
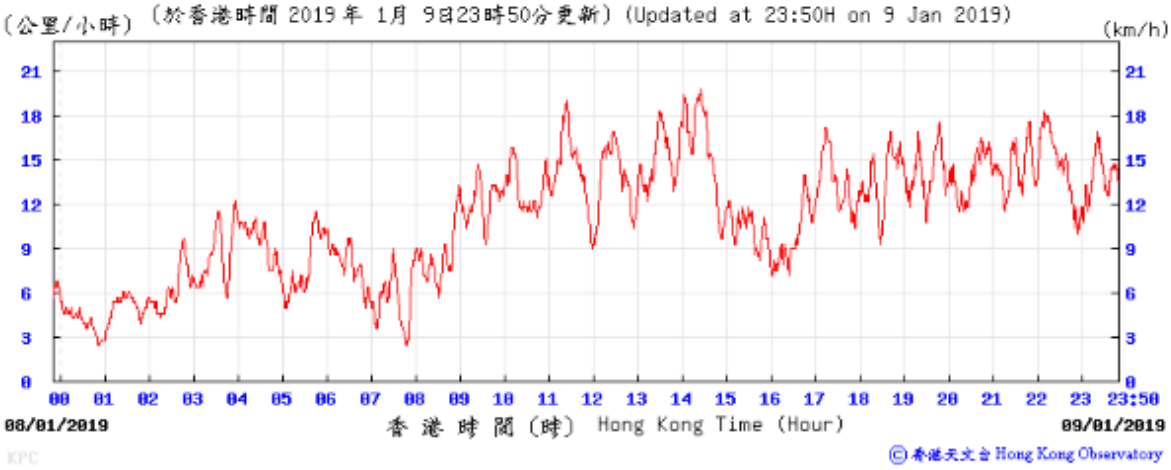


Wind Direction:

Wind Speed:



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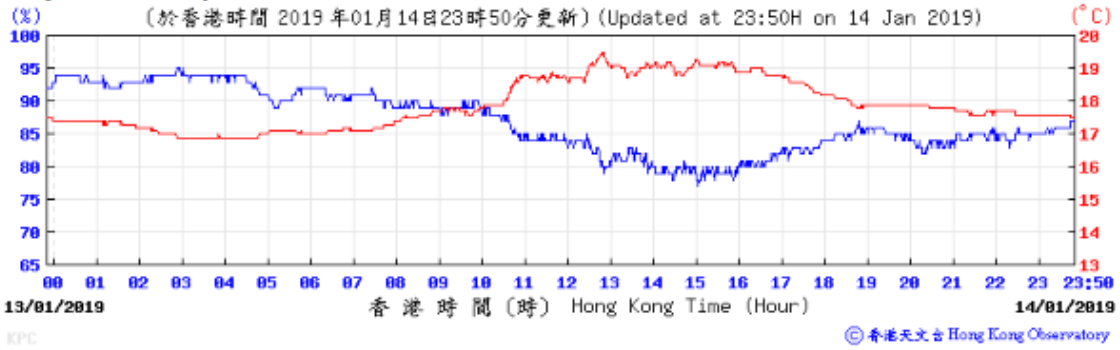

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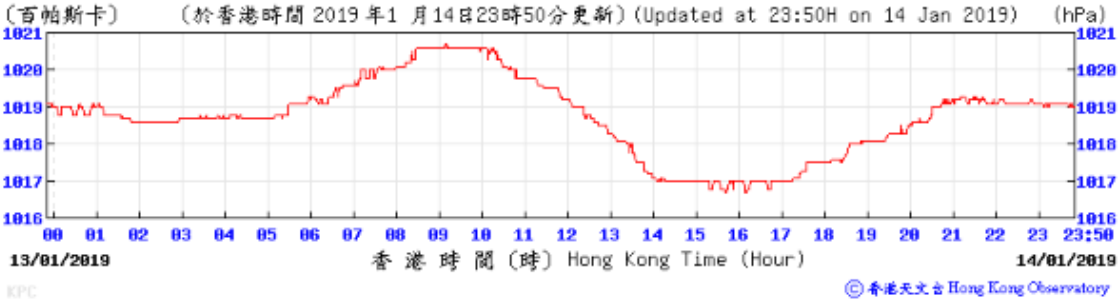

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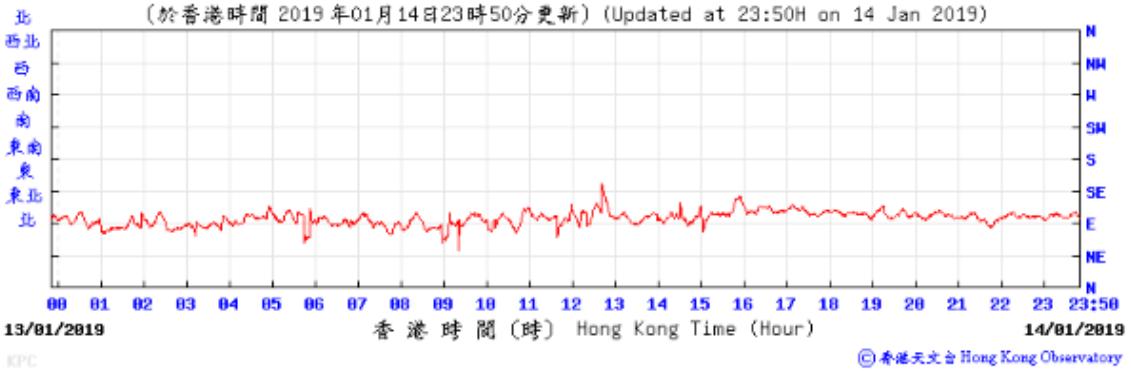

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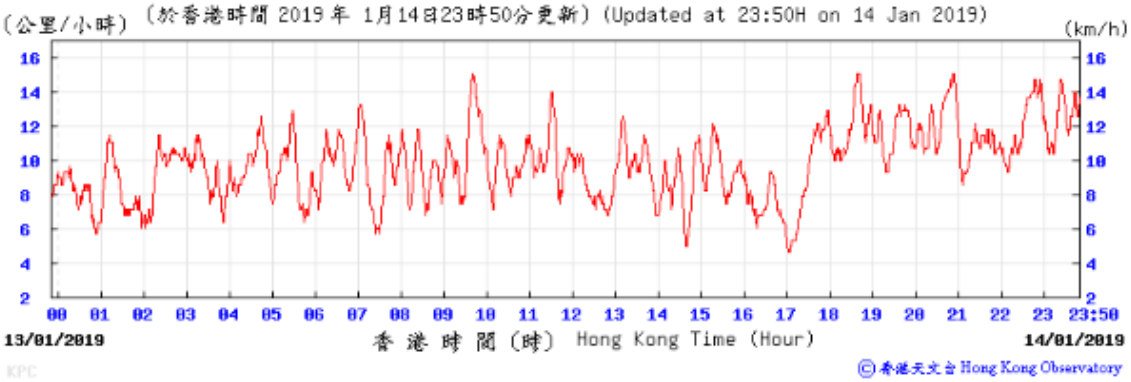

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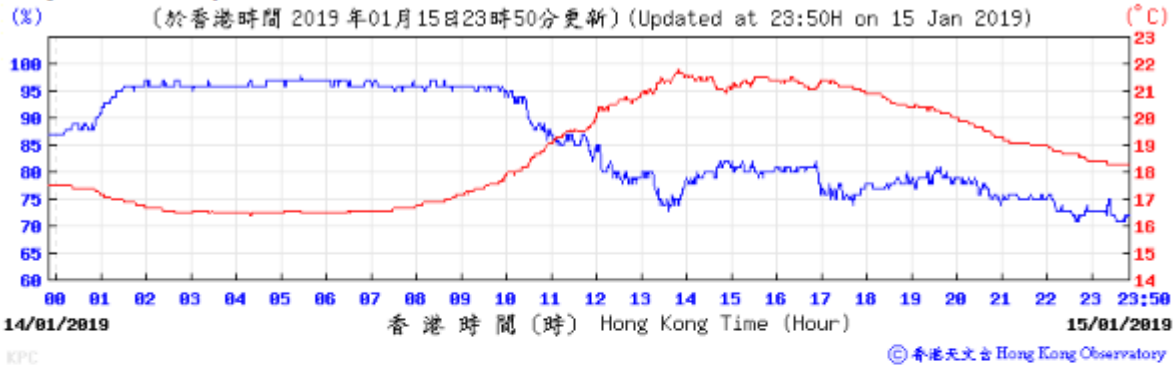

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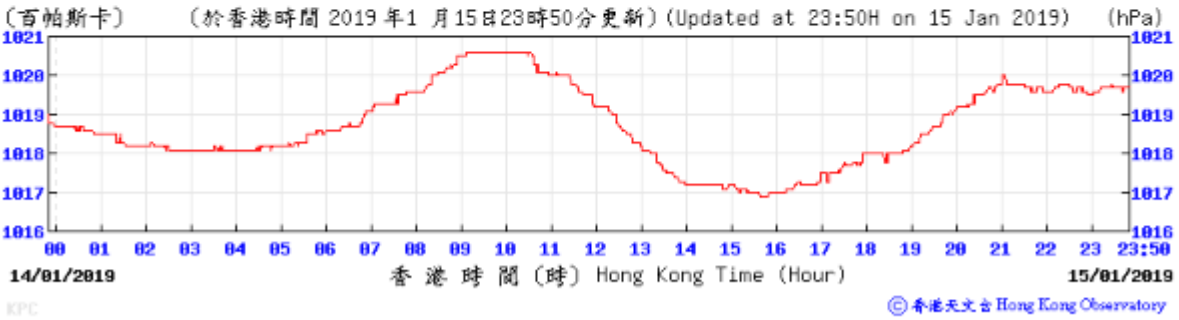

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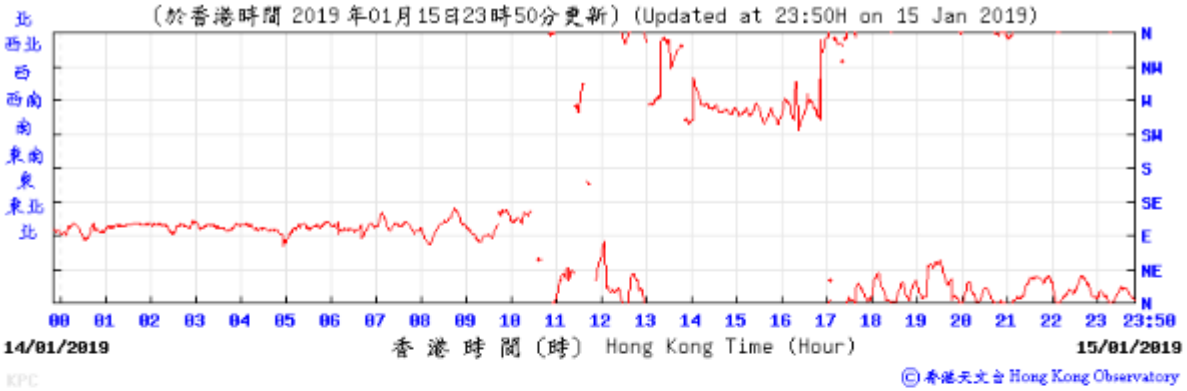

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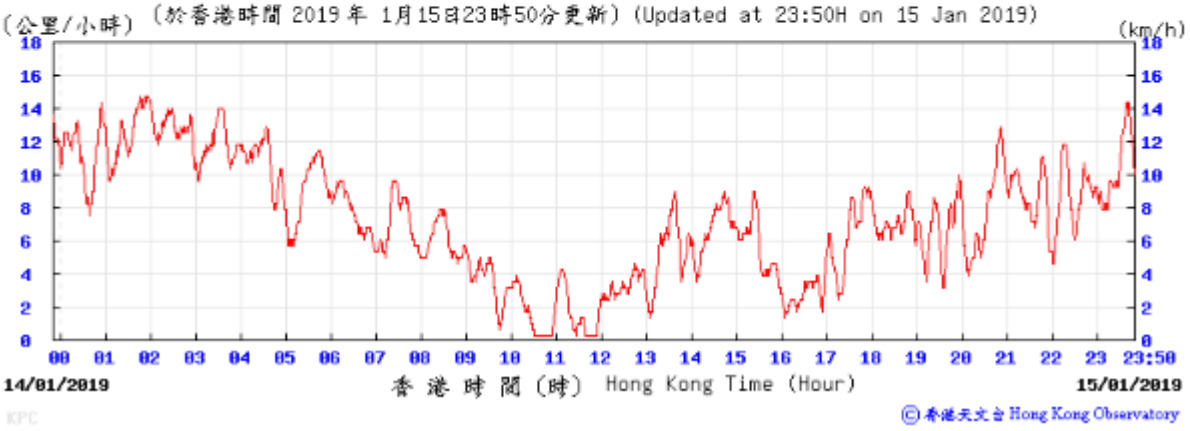

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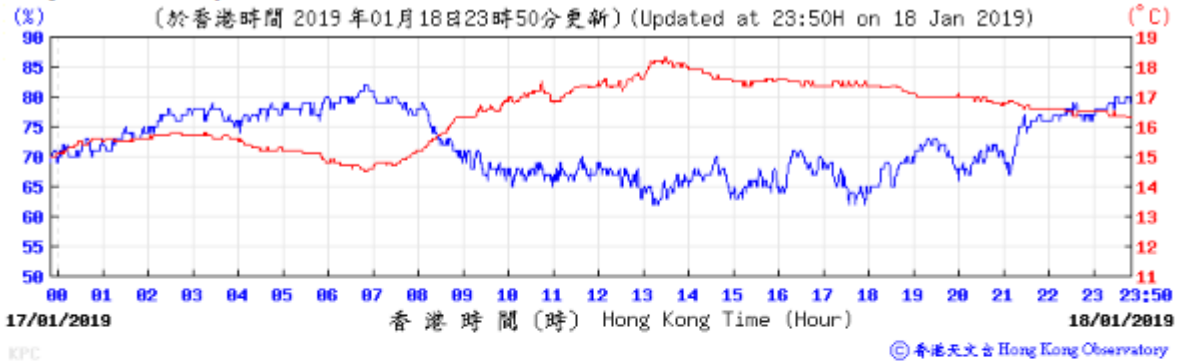

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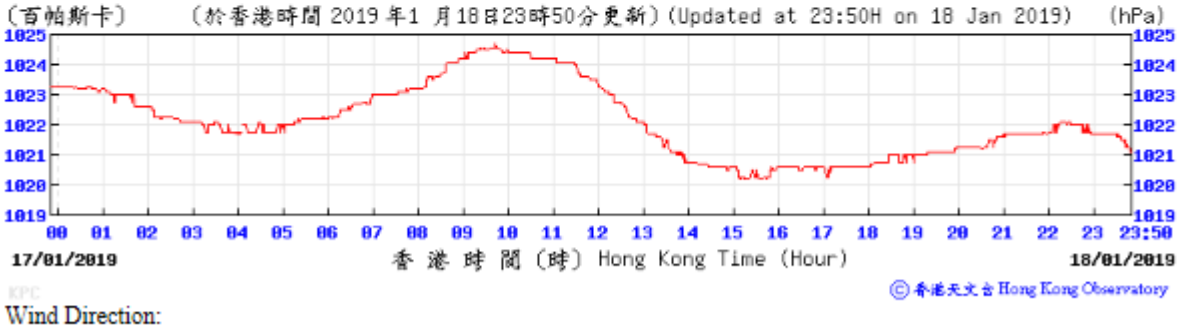

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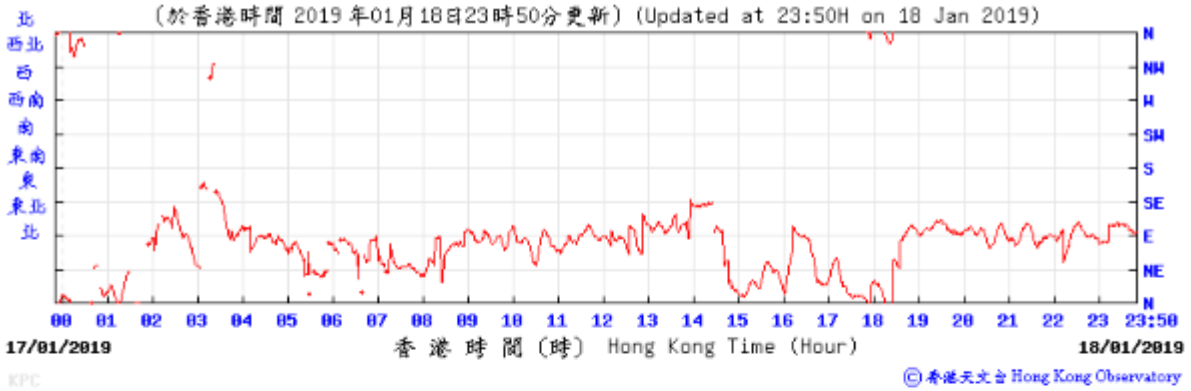

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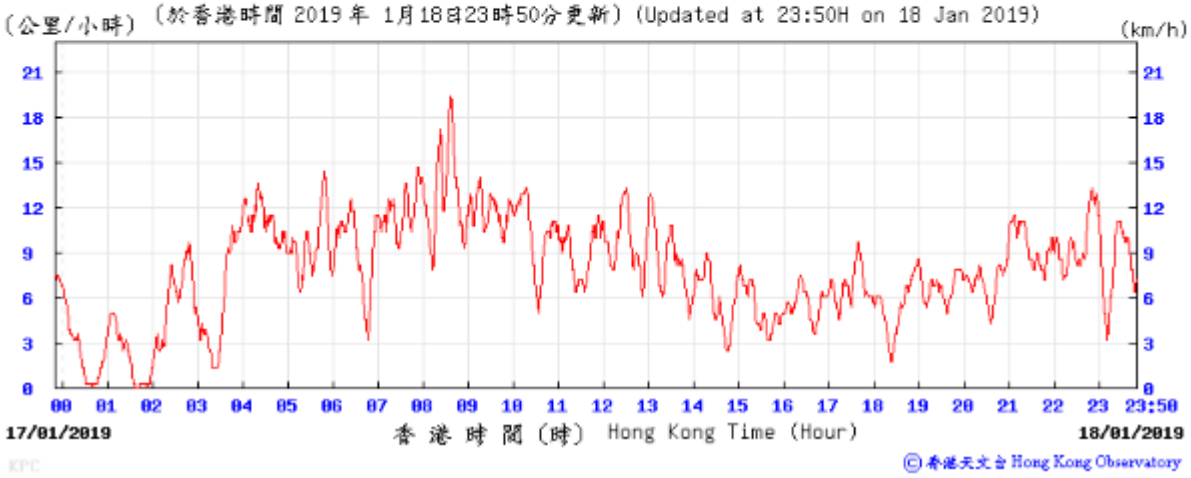

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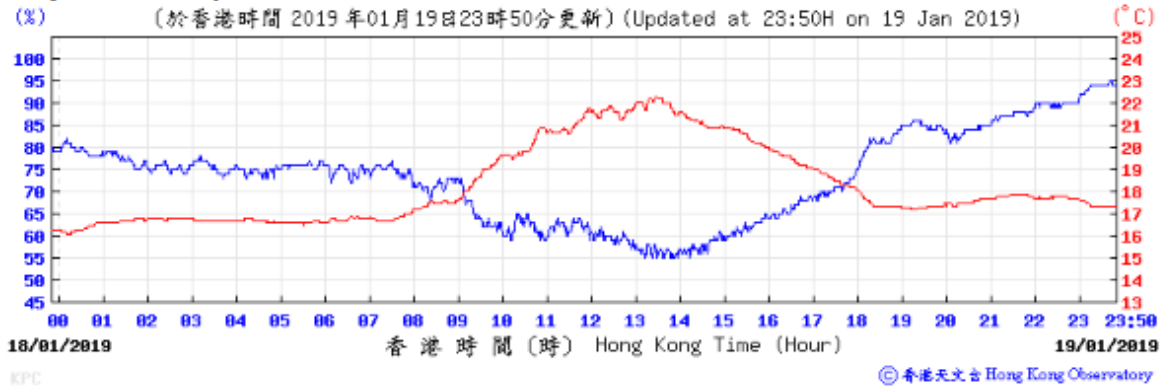

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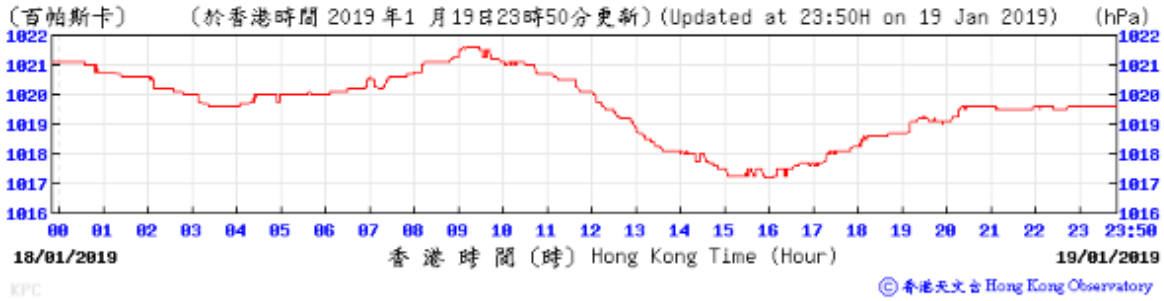

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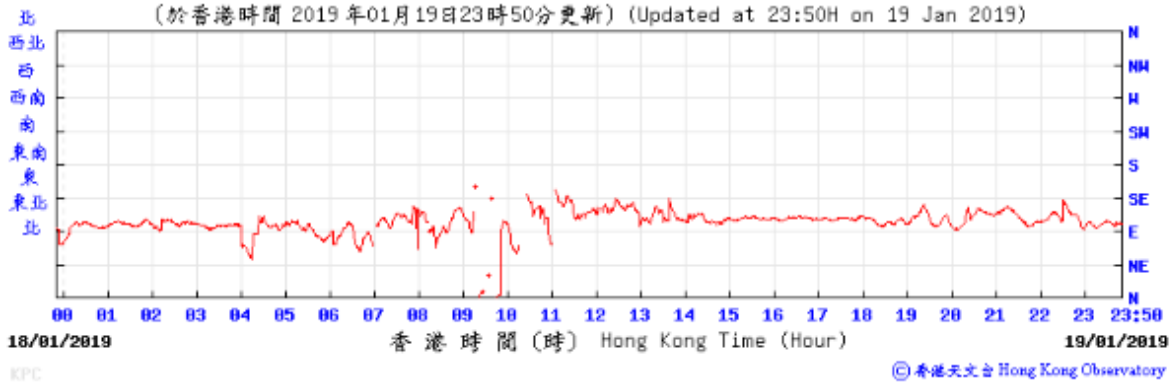

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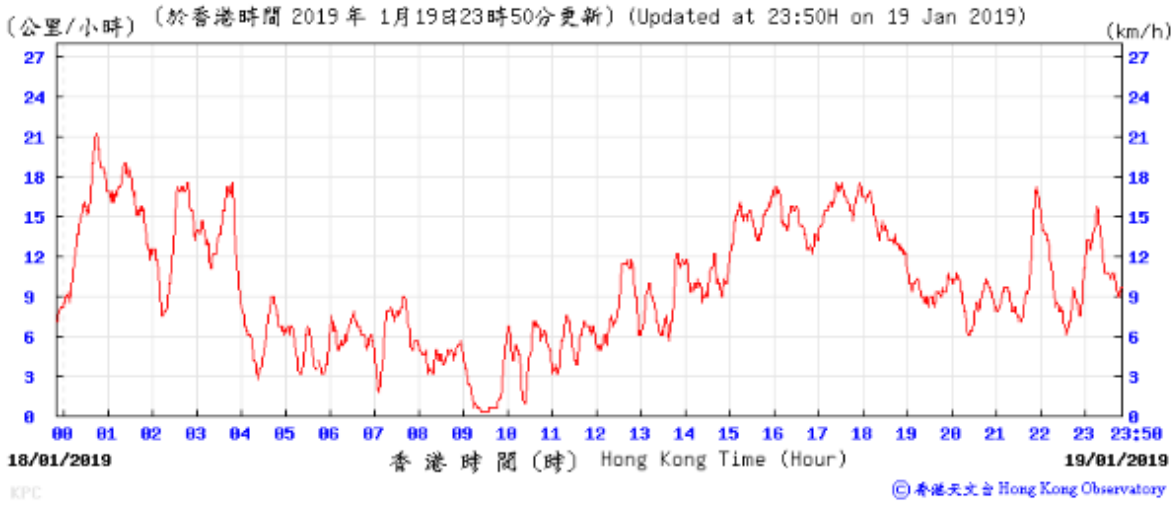

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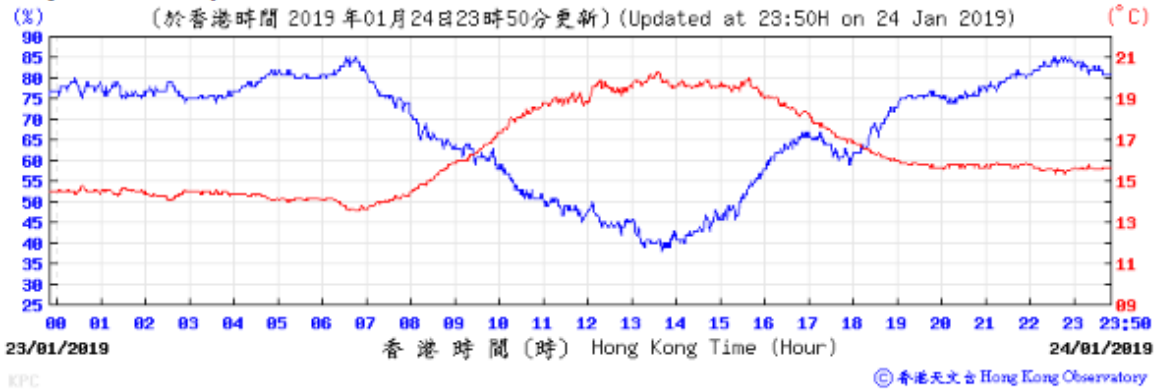

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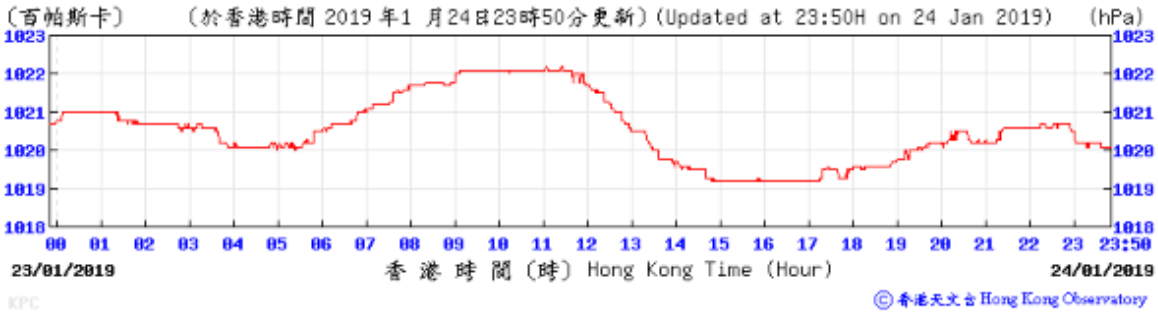

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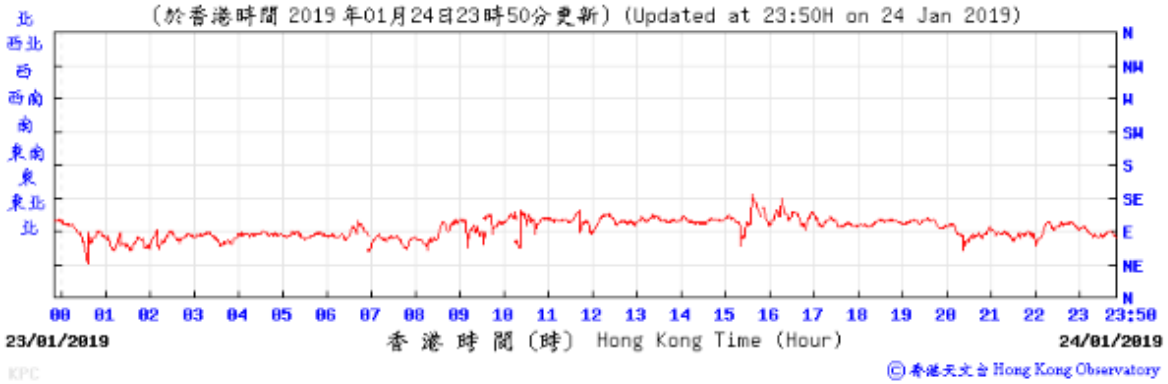

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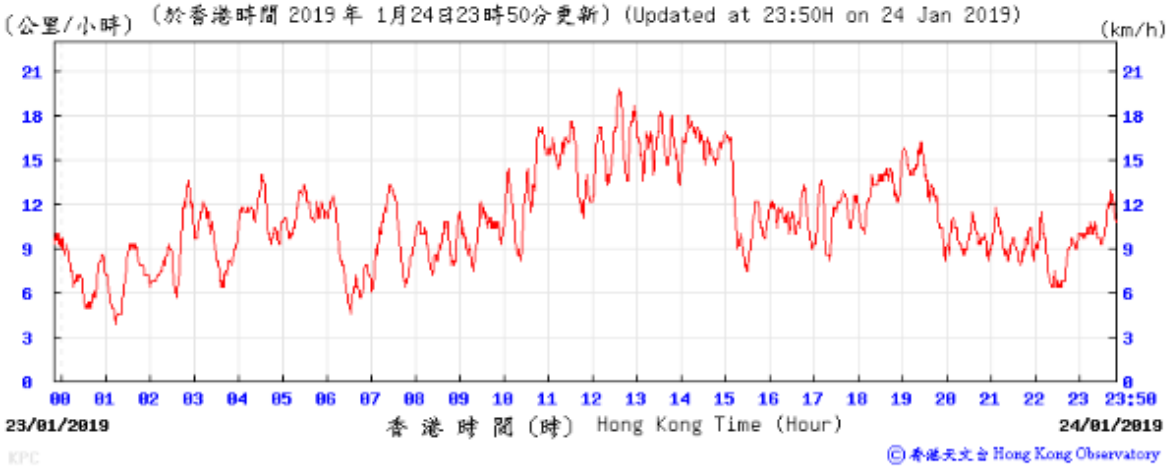

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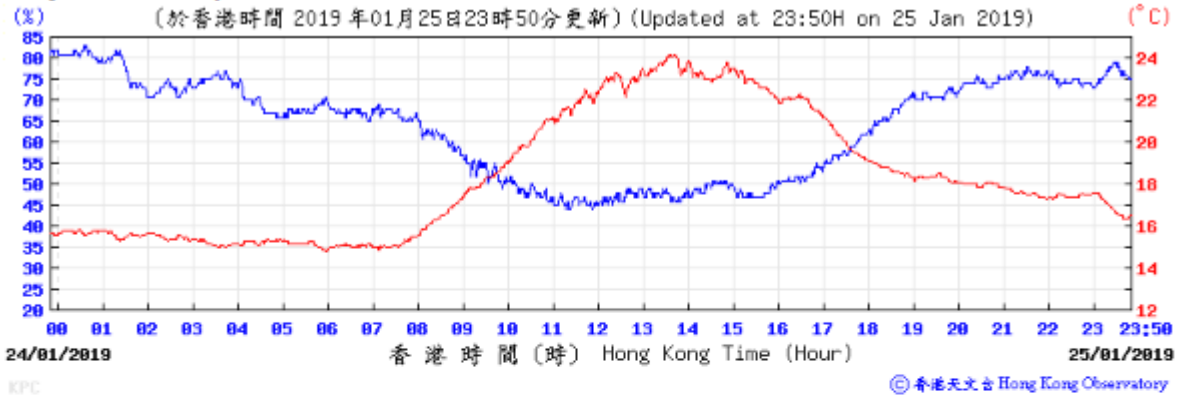

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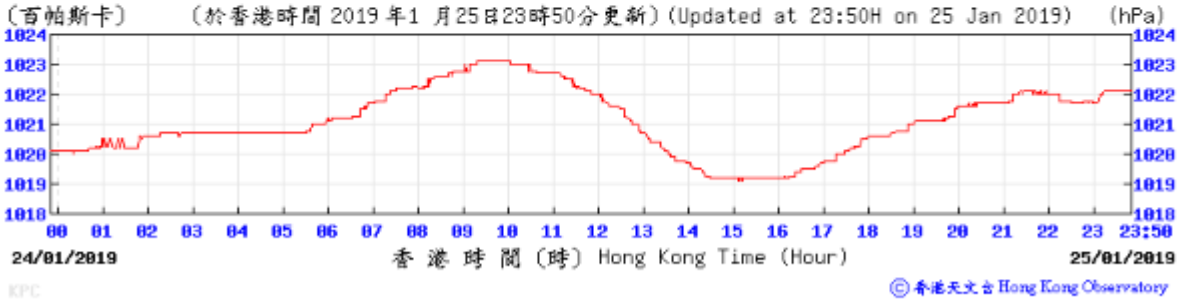

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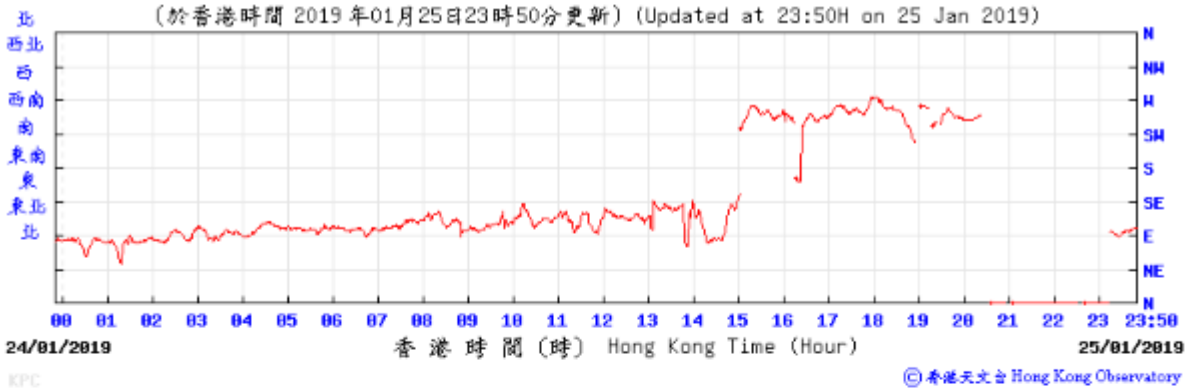

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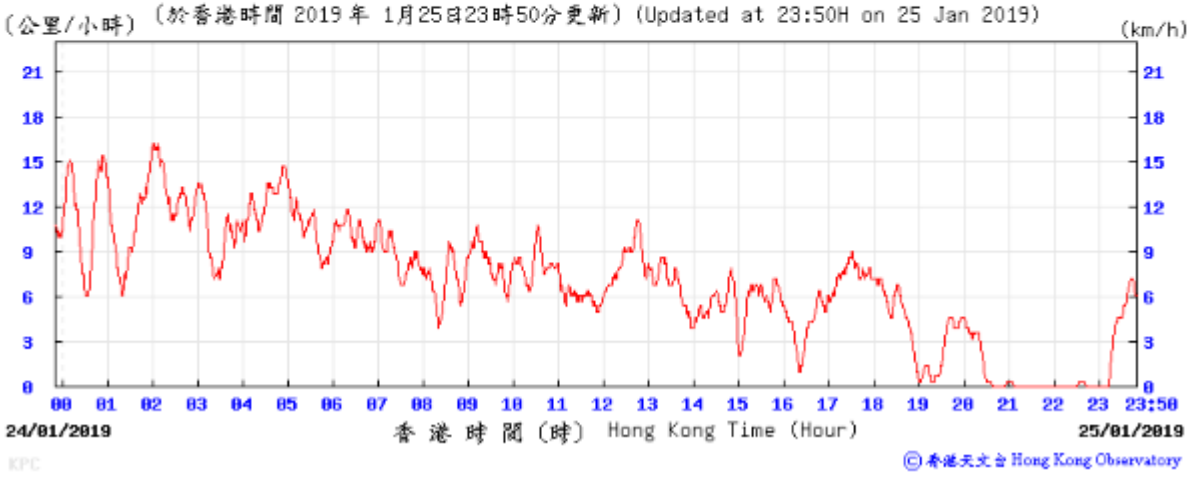

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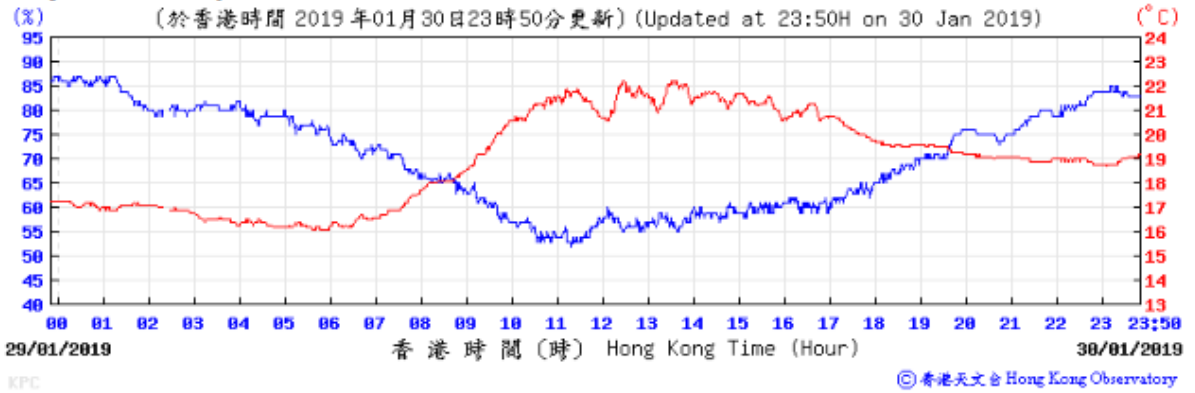

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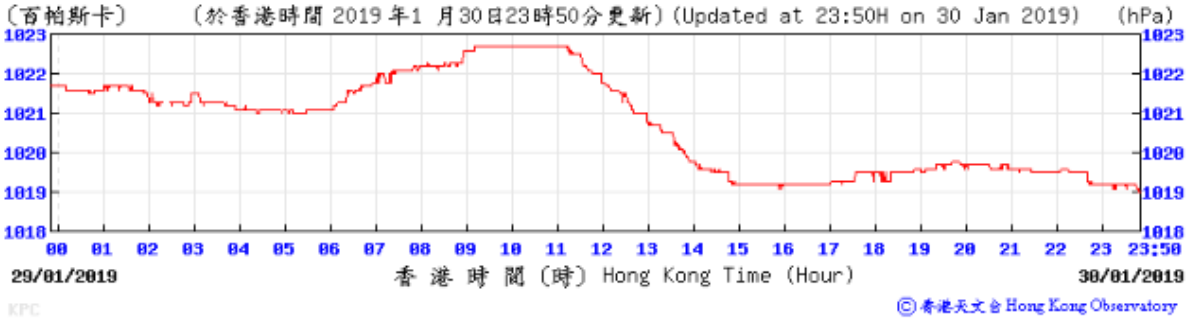
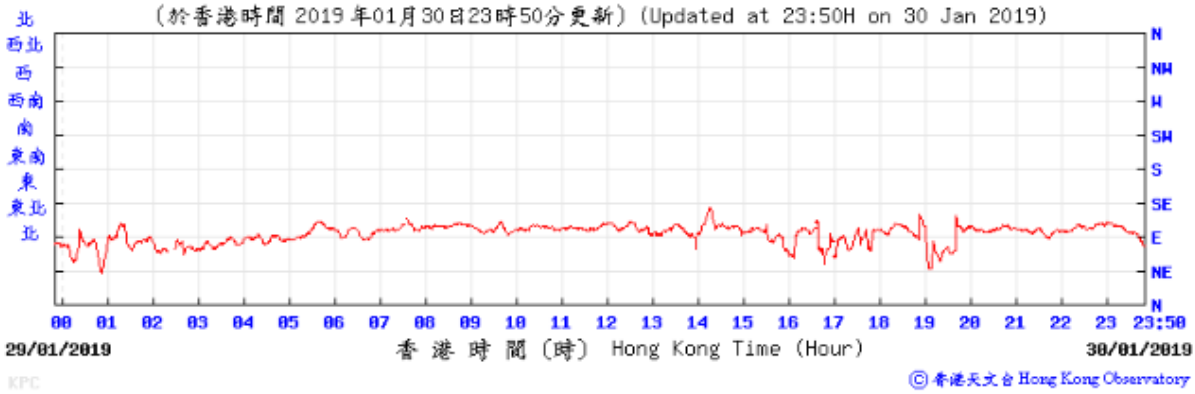
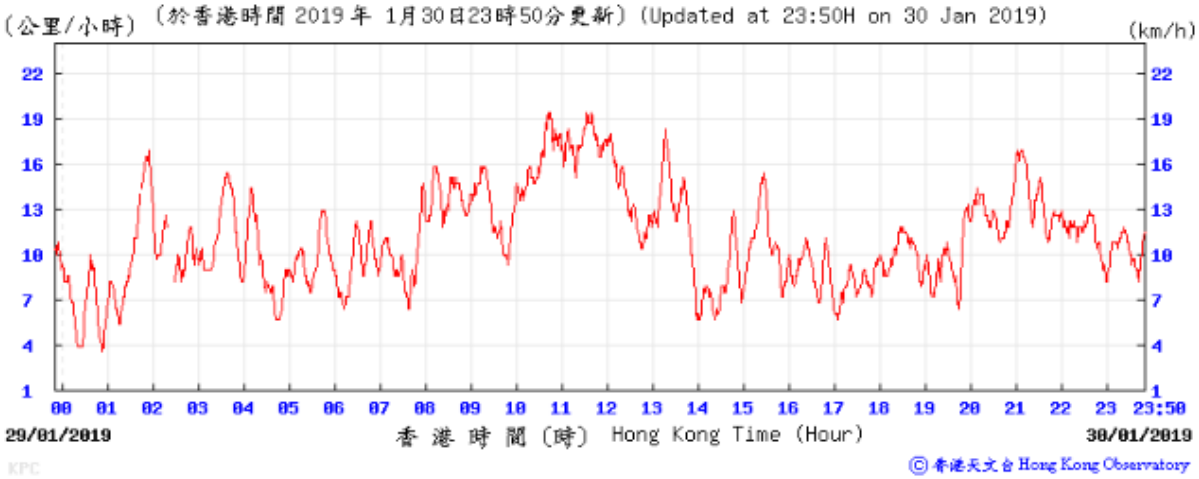


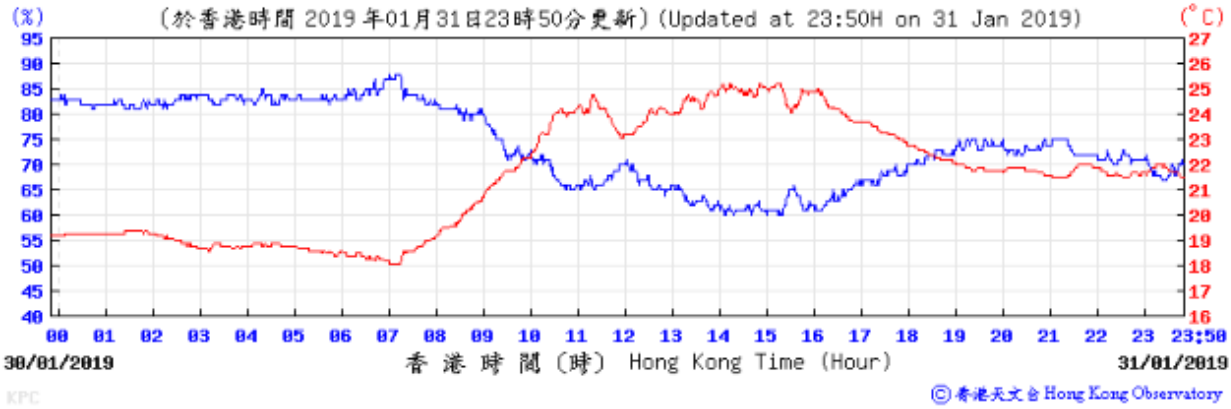
Wind Direction:



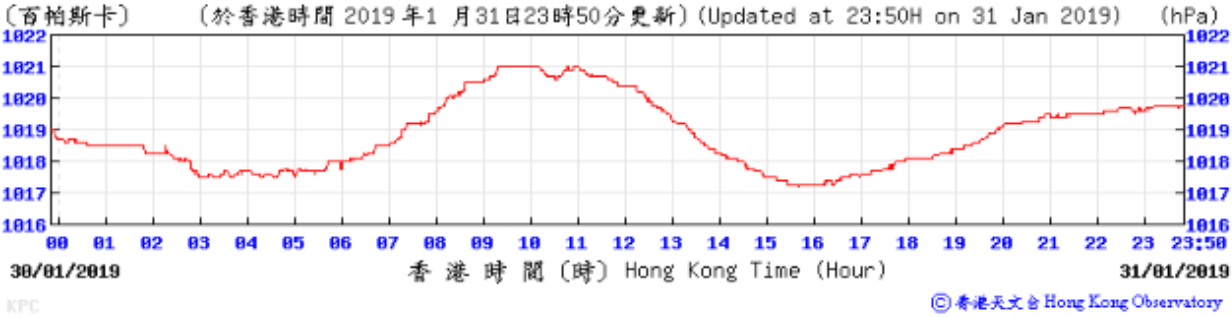
Wind Speed:



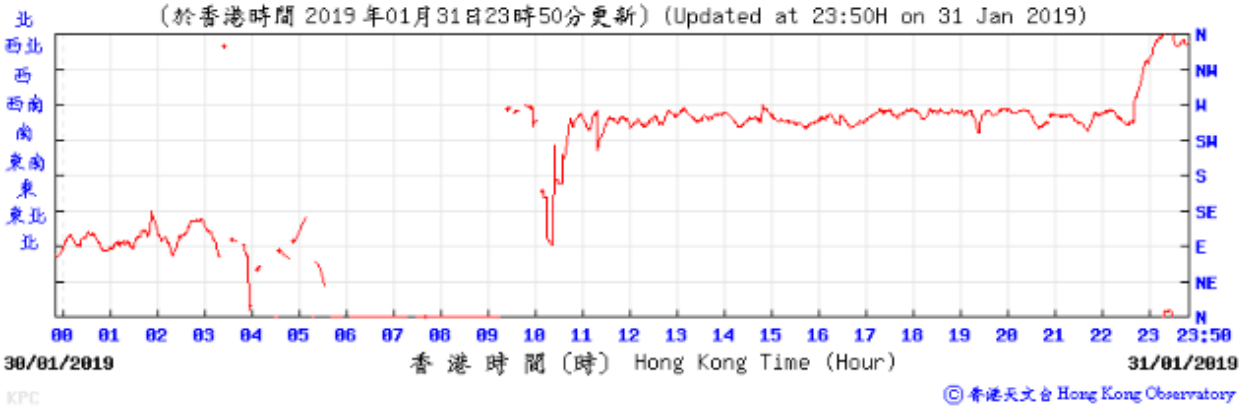
Tempearture/Humidity:



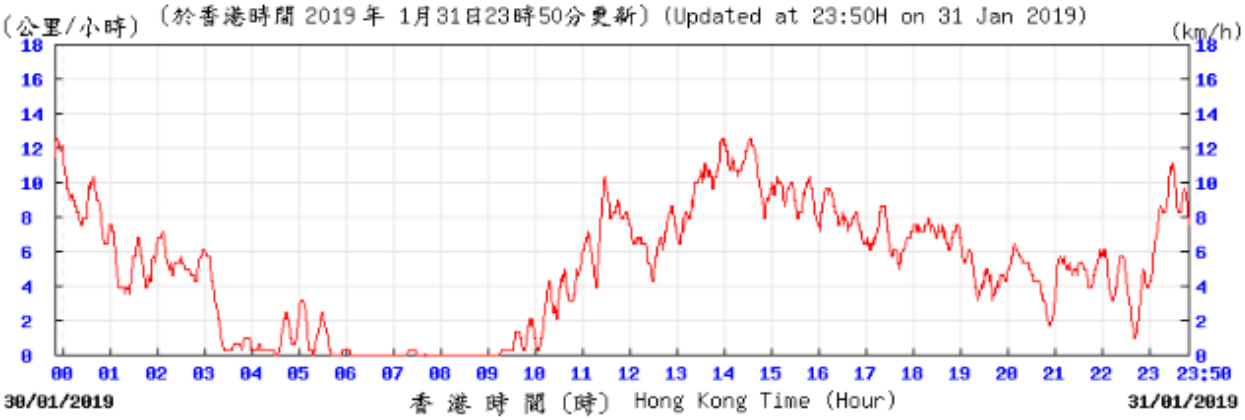
Pressure:



Wind Direction:



Wind Speed:

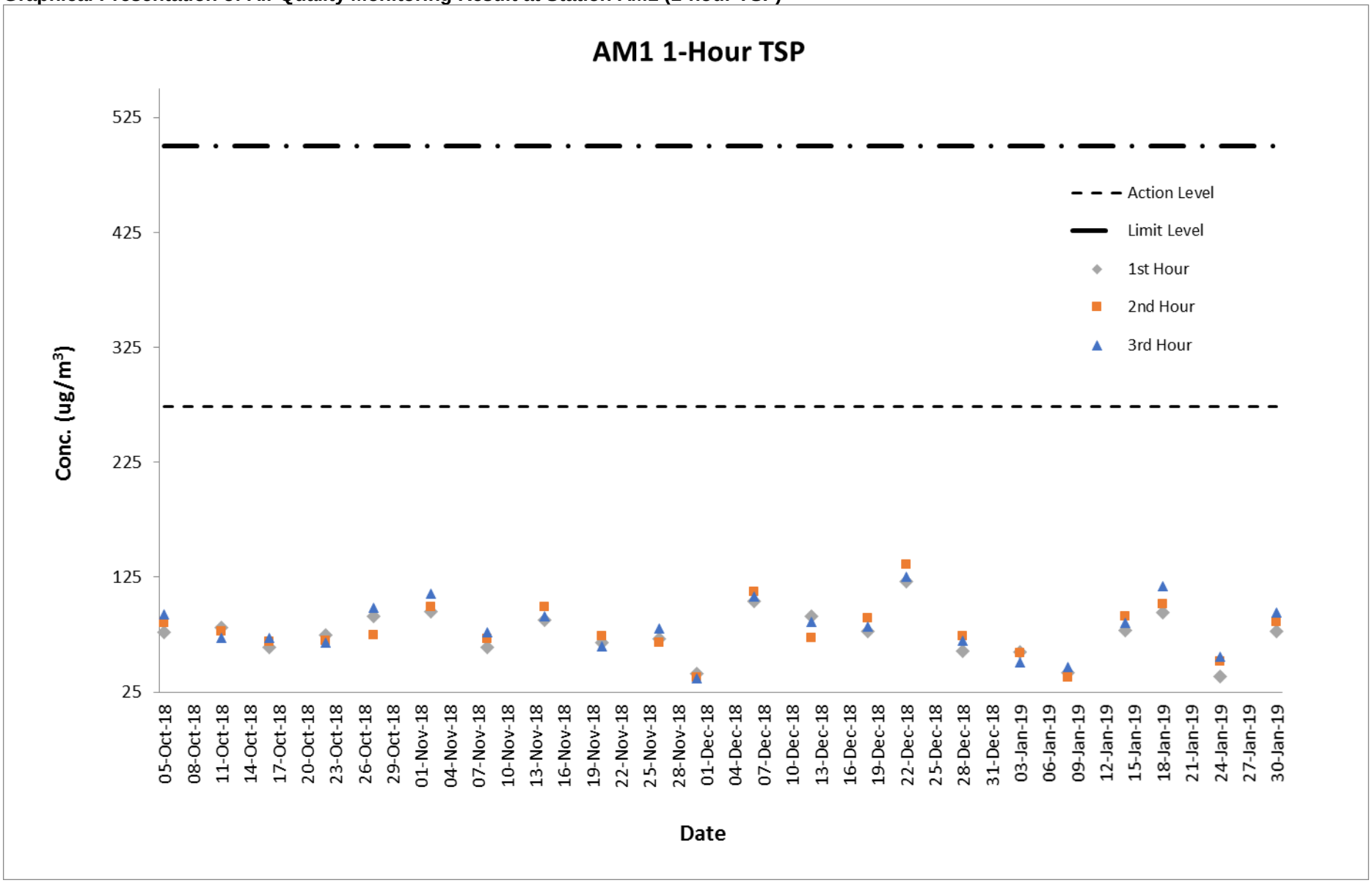


E. Graphical Plots of the Monitoring Results

Air Quality Monitoring Result at Station AM1 (1-hour TSP)

Date	Weather Condition	Time	Conc. (μg/m^3)			Action Level (μg/m3)	Limit Level (μg/m^3)
			1st Hour	2nd Hour	3rd Hour		
02-Nov-18	Cloudy	8:04 - 11:04	95	99	111	273.7	500
08-Nov-18	Fine	7:58 - 10:58	64	71	77	273.7	500
14-Nov-18	Fine	7:50 - 10:50	88	99	91	273.7	500
20-Nov-18	Cloudy	7:50 - 10:50	68	74	65	273.7	500
26-Nov-18	Cloudy	7:52 - 10:52	71	68	80	273.7	500
30-Nov-18	Sunny	8:02 - 11:02	41	38	37	273.7	500
06-Dec-18	Cloudy	8:03 - 11:03	104	112	108	273.7	500
12-Dec-18	Cloudy	7:52 - 10:52	91	72	86	273.7	500
18-Dec-18	Sunny	7:50 - 10:50	78	89	82	273.7	500
22-Dec-18	Sunny	8:02 - 11:02	121	136	125	273.7	500
28-Dec-18	Sunny	7:50 - 10:50	61	74	70	273.7	500
03-Jan-19	Cloudy	7:50 - 10:50	60	59	51	273.7	500
08-Jan-19	Cloudy	7:52 - 10:52	42	38	47	273.7	500
14-Jan-19	Cloudy	8:02 - 11:02	79	91	85	273.7	500
18-Jan-19	Cloudy	8:12 - 11:12	94	102	117	273.7	500
24-Jan-19	Sunny	8:05 - 11:05	39	52	56	273.7	500
30-Jan-19	Sunny	8:05 - 11:05	78	86	94	273.7	500

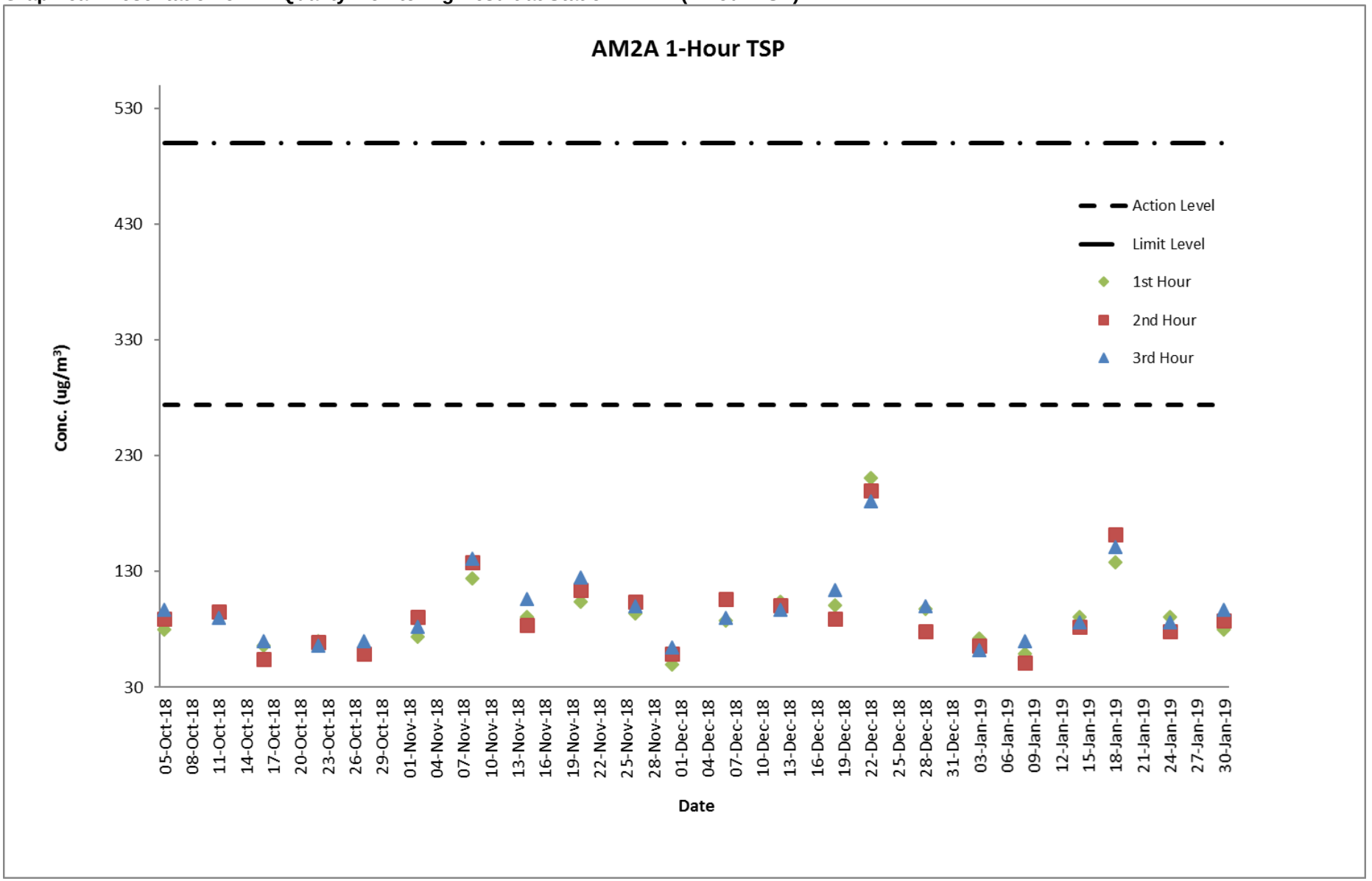
Graphical Presentation of Air Quality Monitoring Result at Station AM1 (1-hour TSP)



Air Quality Monitoring Result at Station AM2A (1-hour TSP)

Date	Weather Condition	Time	Conc. (µg/m^3)			Action Level (µg/m3)	Limit Level (µg/m^3)
			1st Hour	2nd Hour	3rd Hour		
02-Nov-18	Cloudy	8:18 - 11:18	74	91	82	274.2	500
08-Nov-18	Fine	8:10 - 11:10	124	138	141	274.2	500
14-Nov-18	Fine	8:05 - 11:05	91	84	106	274.2	500
20-Nov-18	Cloudy	8:05 - 11:05	104	114	125	274.2	500
26-Nov-18	Cloudy	8:05 - 11:05	94	104	100	274.2	500
30-Nov-18	Sunny	8:14 - 11:14	50	59	64	274.2	500
06-Dec-18	Cloudy	8:15 - 11:15	88	106	90	274.2	500
12-Dec-18	Cloudy	8:05 - 11:05	104	101	97	274.2	500
18-Dec-18	Sunny	8:04 - 11:05	101	89	114	274.2	500
22-Dec-18	Sunny	8:14 - 11:14	211	200	191	274.2	500
28-Dec-18	Sunny	8:05 - 11:05	98	78	100	274.2	500
03-Jan-19	Cloudy	8:02 - 11:02	72	66	62	274.2	500
08-Jan-19	Cloudy	8:06 - 11:06	59	51	70	274.2	500
14-Jan-19	Cloudy	8:14 - 11:14	91	82	86	274.2	500
18-Jan-19	Cloudy	8:25 - 11:25	138	162	151	274.2	500
24-Jan-19	Sunny	8:17 - 11:17	91	78	86	274.2	500
30-Jan-19	Sunny	8:19 - 11:19	80	88	97	274.2	500

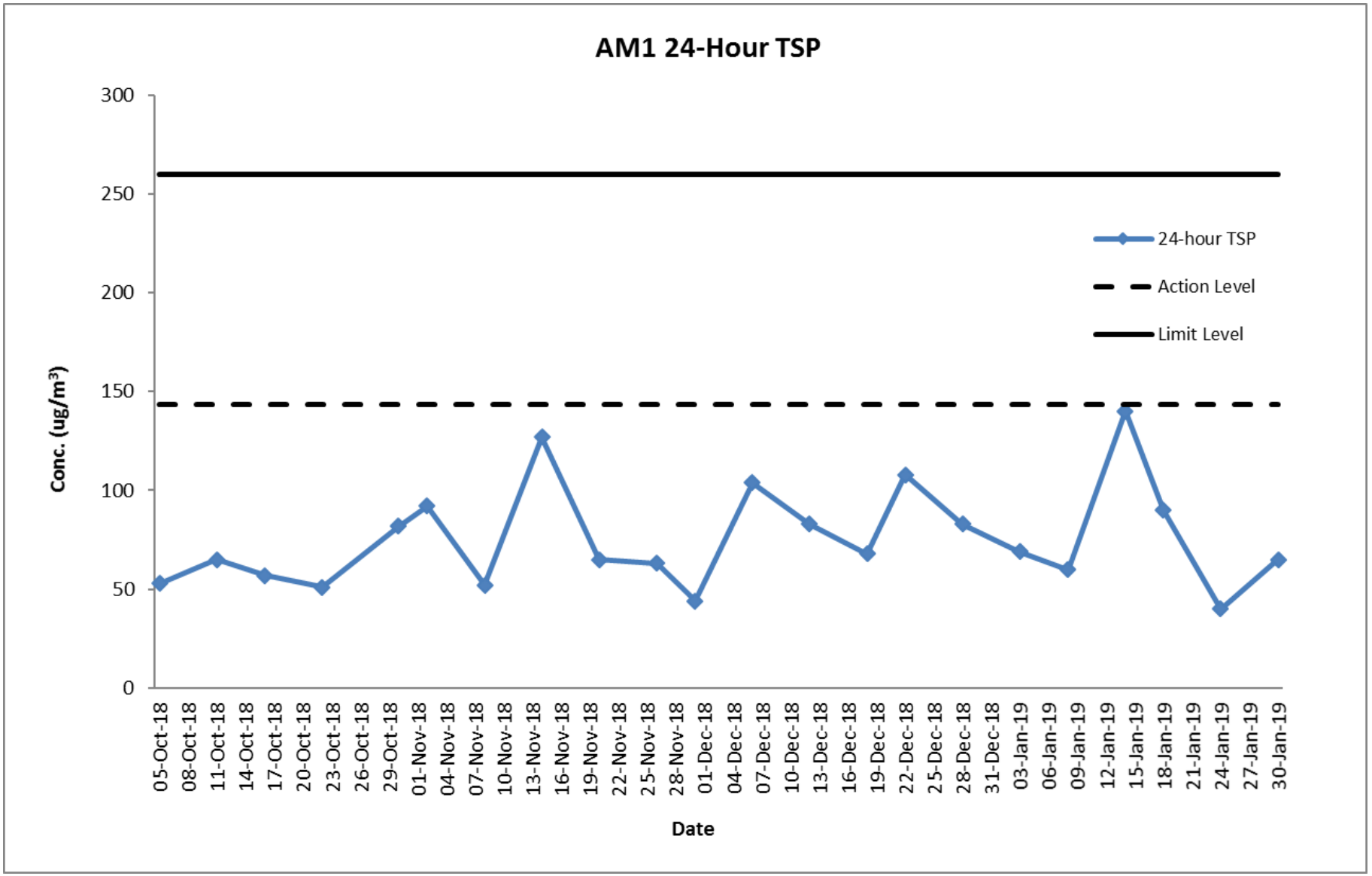
Graphical Presentation of Air Quality Monitoring Result at Station AM2A (1-hour TSP)



Air Quality Monitoring Result at Station AM1 (24-hour TSP)

Start		Finish		Filter Weight (g)		Reading		Sampling	Flow Rate (m^3/min)			Conc.	Weather	Action	Limit
Date	Time	Date	Time	Initial	Final	Initial	Final	Time (hrs)	Initial	Final	Average	(µg/m^3)	Condition	Level	Level
02-Nov-18	08:02	03-Nov-18	08:02	2.6613	2.8223	23376.38	23400.38	24	1.22	1.22	1.22	92	Cloudy	143.6	260
08-Nov-18	07:56	09-Nov-18	07:56	2.6933	2.7871	23400.38	23424.38	24	1.26	1.26	1.26	52	Fine	143.6	260
14-Nov-18	07:52	15-Nov-18	07:52	2.6719	2.8957	23424.38	23448.38	24	1.22	1.22	1.22	127	Fine	143.6	260
20-Nov-18	07:48	21-Nov-18	07:48	2.664	2.7798	23448.38	23472.38	24	1.24	1.24	1.24	65	Cloudy	143.6	260
26-Nov-18	07:50	27-Nov-18	07:50	2.6534	2.7642	23472.38	23496.38	24	1.22	1.22	1.22	63	Cloudy	143.6	260
30-Nov-18	08:00	01-Dec-18	08:00	2.644	2.7209	23496.38	23520.38	24	1.22	1.22	1.22	44	Sunny	143.6	260
06-Dec-18	08:05	07-Dec-18	08:05	2.7015	2.8939	23520.38	23544.38	24	1.28	1.28	1.28	104	Cloudy	143.6	260
12-Dec-18	07:50	13-Dec-18	07:50	2.6809	2.8337	23544.38	23568.38	24	1.28	1.28	1.28	83	Cloudy	143.6	260
18-Dec-18	07:52	19-Dec-18	07:52	2.6950	2.8207	23568.38	23592.38	24	1.28	1.28	1.28	68	Sunny	143.6	260
22-Dec-18	08:00	23-Dec-18	08:00	2.6787	2.8777	23592.38	23616.38	24	1.28	1.28	1.28	108	Sunny	143.6	260
28-Dec-18	07:52	29-Dec-18	07:52	2.6697	2.8226	23616.38	23640.38	24	1.28	1.28	1.28	83	Sunny	143.6	260
03-Jan-19	07:48	04-Jan-19	07:48	2.6708	2.7980	23640.38	23664.38	24	1.28	1.28	1.28	69	Cloudy	143.6	260
08-Jan-19	07:50	09-Jan-19	07:50	2.7149	2.8263	23664.38	23688.38	24	1.28	1.28	1.28	60	Cloudy	143.6	260
14-Jan-19	08:00	15-Jan-19	08:00	2.6820	2.9397	23688.38	23712.38	24	1.28	1.28	1.28	140	Cloudy	143.6	260
18-Jan-19	08:10	19-Jan-19	08:10	2.6969	2.8626	23712.38	23736.38	24	1.28	1.28	1.28	90	Cloudy	143.6	260
24-Jan-19	08:07	25-Jan-19	08:07	2.6823	2.7565	23760.38	23784.38	24	1.28	1.28	1.28	40	Sunny	143.6	260
30-Jan-19	08:07	31-Jan-19	08:07	2.6870	2.8063	23760.38	23784.38	24	1.28	1.28	1.28	65	Sunny	143.6	260

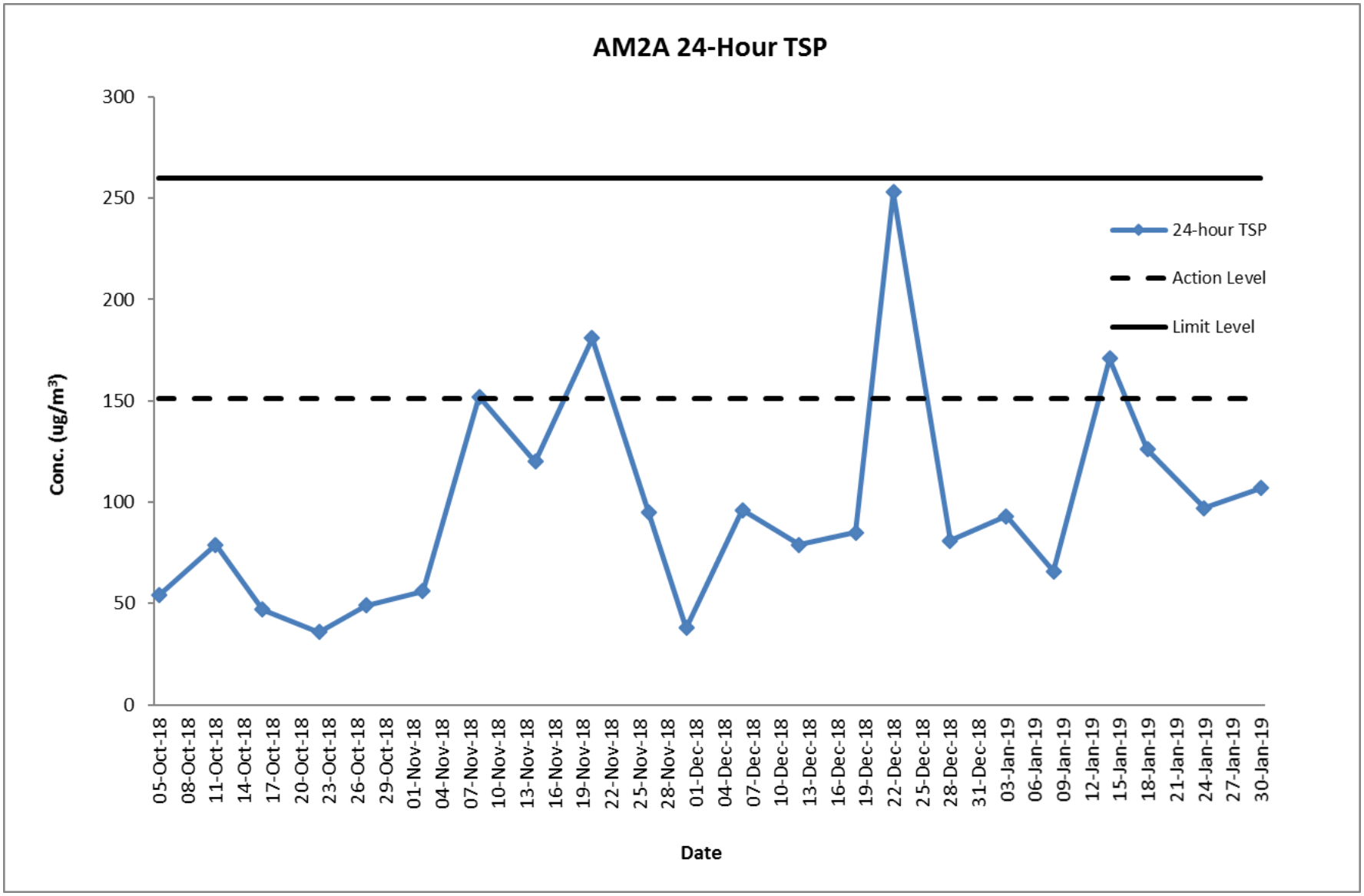
Graphical Presentation of Air Quality Monitoring Result at Station AM1 (24-hour TSP)



Air Quality Monitoring Result at Station AM2A (24-hour TSP)

Start		Finish		Filter Weight (g)		Reading		Sampling	Flow Rate (m^3/min)			Conc.	Weather	Action	Limit
Date	Time	Date	Time	Initial	Final	Initial	Final	Time (hrs)	Initial	Final	Average	(µg/m^3)	Condition	Level	Level
02-Nov-18	08:15	03-Nov-18	08:15	2.6846	2.7895	19031.59	19055.59	24	1.29	1.29	1.29	56	Cloudy	151.1	260
08-Nov-18	08:08	09-Nov-18	08:08	2.6924	2.9701	19055.59	19079.59	24	1.27	1.27	1.27	152	Fine	151.1	260
14-Nov-18	08:03	15-Nov-18	08:03	2.6749	2.8950	19079.59	19103.59	24	1.27	1.27	1.27	120	Fine	151.1	260
20-Nov-18	08:02	21-Nov-18	08:02	2.6708	3.0077	19103.59	19127.59	24	1.29	1.29	1.29	181	Cloudy	151.1	260
26-Nov-18	08:02	27-Nov-18	08:02	2.6881	2.8623	19127.05	19151.05	24	1.27	1.27	1.27	95	Cloudy	151.1	260
30-Nov-18	08:12	01-Dec-18	08:12	2.6610	2.7297	19151.05	19175.05	24	1.27	1.27	1.27	38	Sunny	151.1	260
06-Dec-18	08:13	07-Dec-18	08:13	2.6569	2.8310	19175.05	19199.05	24	1.26	1.26	1.26	96	Cloudy	151.1	260
12-Dec-18	08:02	13-Dec-18	08:02	2.6758	2.8219	19199.05	19223.05	24	1.28	1.28	1.28	79	Cloudy	151.1	260
18-Dec-18	08:02	19-Dec-18	08:02	2.7072	2.8683	19223.05	19247.05	24	1.31	1.31	1.31	85	Sunny	151.1	260
22-Dec-18	08:12	23-Dec-18	08:12	2.6950	3.1721	19247.05	19271.05	24	1.31	1.31	1.31	253	Sunny	151.1	260
28-Dec-18	08:02	29-Dec-18	08:02	2.6816	2.8306	19271.05	19295.05	24	1.28	1.28	1.28	81	Sunny	151.1	260
03-Jan-19	08:00	04-Jan-19	08:00	2.6718	2.8430	19295.05	19319.05	24	1.28	1.28	1.28	93	Cloudy	151.1	260
08-Jan-19	08:04	09-Jan-19	08:04	2.6752	2.7976	19319.05	19343.05	24	1.28	1.28	1.28	66	Cloudy	151.1	260
14-Jan-19	08:12	15-Jan-19	08:12	2.6932	3.0090	19343.05	19367.05	24	1.28	1.28	1.28	171	Cloudy	151.1	260
18-Jan-19	08:22	19-Jan-19	08:22	2.6839	2.9156	19367.05	19391.05	24	1.28	1.28	1.28	126	Cloudy	151.1	260
24-Jan-19	08:20	25-Jan-19	08:20	2.6825	2.8617	19415.05	19439.05	24	1.28	1.28	1.28	97	Sunny	151.1	260
30-Jan-19	08:17	31-Jan-19	08:17	2.6793	2.8759	19415.05	19439.05	24	1.28	1.28	1.28	107	Sunny	151.1	260

Graphical Presentation of Air Quality Monitoring Result at Station AM2A (24-hour TSP)



Noise Monitoring Result at Station NM1A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
02-Nov-18	10:28	68.4	64.7	69
02-Nov-18	10:33	67.9	63.5	
02-Nov-18	10:38	68.5	64.7	
02-Nov-18	10:43	67.4	63.2	
02-Nov-18	10:48	66.7	62.6	
02-Nov-18	10:53	67.5	63.7	
08-Nov-18	10:18	68.7	64.5	68
08-Nov-18	10:23	66.9	62.4	
08-Nov-18	10:28	67.4	63.2	
08-Nov-18	10:33	66.2	62.7	
08-Nov-18	10:38	67.9	63.0	
08-Nov-18	10:43	66.2	62.5	
14-Nov-18	10:15	67.1	63.4	69
14-Nov-18	10:20	66.4	62.5	
14-Nov-18	10:25	68.4	64.1	
14-Nov-18	10:30	67.9	63.5	
14-Nov-18	10:35	68	63.6	
14-Nov-18	10:40	68.2	64.2	
20-Nov-18	10:14	68.4	64.7	69
20-Nov-18	10:19	66.5	62.5	
20-Nov-18	10:24	67.4	63.0	
20-Nov-18	10:29	68.5	64.2	
20-Nov-18	10:34	67.6	63.8	
20-Nov-18	10:39	66.7	62.7	
26-Nov-18	10:10	67.2	63.4	69
26-Nov-18	10:15	68.4	64.1	
26-Nov-18	10:20	67.4	63.9	
26-Nov-18	10:25	66.5	62.7	
26-Nov-18	10:30	66.7	62.5	
26-Nov-18	10:35	68	64.2	
06-Dec-18	10:20	67.5	63.4	69
06-Dec-18	10:25	66.7	62.5	
06-Dec-18	10:30	68.4	64.7	
06-Dec-18	10:35	67.5	63.2	
06-Dec-18	10:40	66.7	62.5	
06-Dec-18	10:45	68.4	64.7	
12-Dec-18	10:10	67.4	63.1	68
12-Dec-18	10:15	68.52	64.0	
12-Dec-18	10:20	66.7	62.4	
12-Dec-18	10:25	66.9	62.7	
12-Dec-18	10:30	67.5	63.4	
12-Dec-18	10:35	66.4	62.7	
18-Dec-18	10:15	68.1	64.4	69
18-Dec-18	10:20	67.9	63.5	
18-Dec-18	10:25	66.4	62.6	
18-Dec-18	10:30	67	63.7	
18-Dec-18	10:35	68.2	64.7	
18-Dec-18	10:40	67.9	63.5	

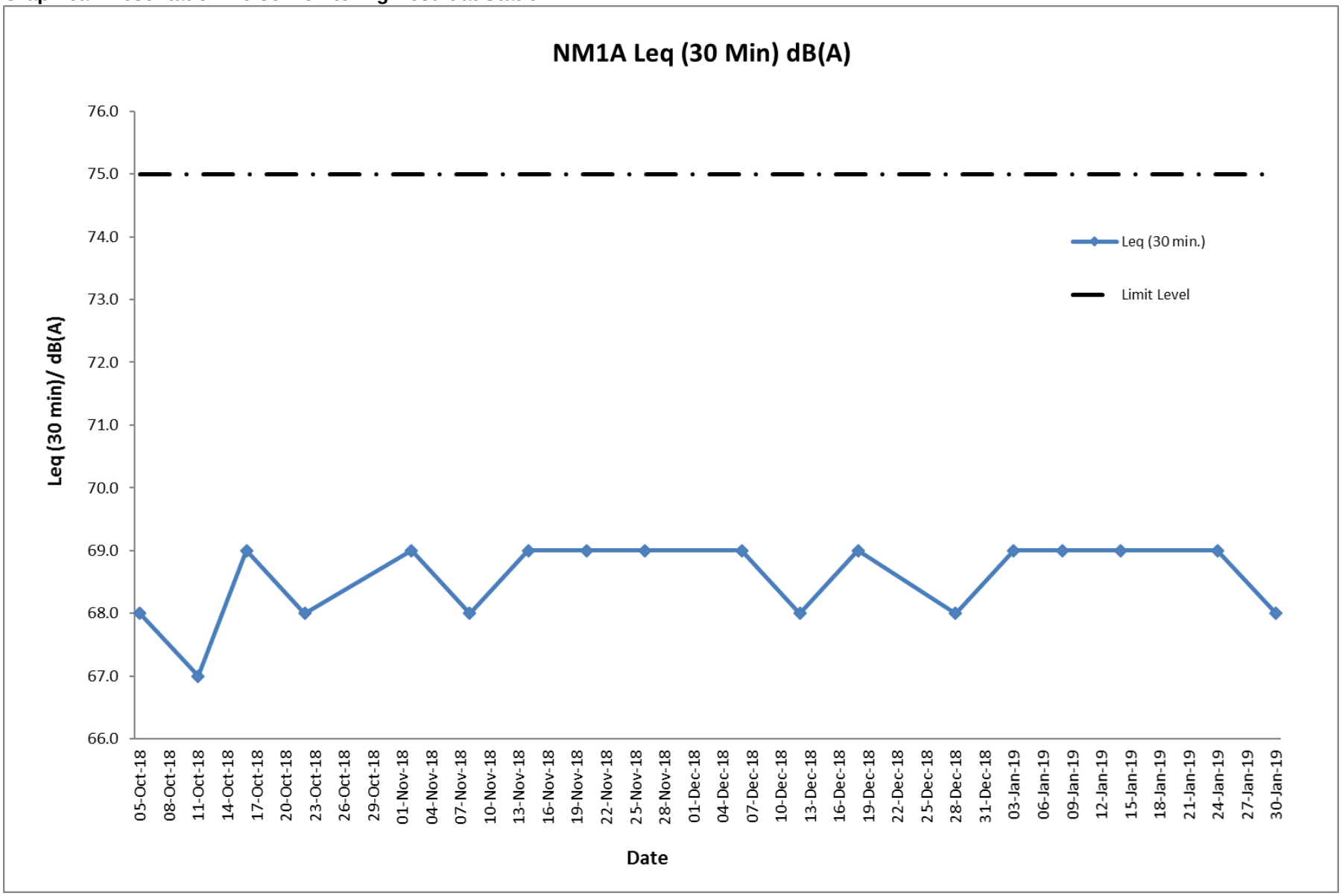
Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
28-Dec-18	10:10	67.2	63.4	68
28-Dec-18	10:15	66.8	62.6	
28-Dec-18	10:20	68.7	64.3	
28-Dec-18	10:25	68.9	64.7	
28-Dec-18	10:30	66.7	62.5	
28-Dec-18	10:35	66.5	62.6	
03-Jan-19	10:09	67.0	63.1	69
03-Jan-19	10:14	68.4	64.2	
03-Jan-19	10:19	68.7	64.5	
03-Jan-19	10:24	66.5	62.7	
03-Jan-19	10:29	67.4	63.8	
03-Jan-19	10:34	67.5	63.9	
08-Jan-19	10:12	68.1	64.1	69
08-Jan-19	10:17	66.7	62.5	
08-Jan-19	10:22	67.9	63.6	
08-Jan-19	10:27	68.4	64.2	
08-Jan-19	10:32	66.3	62.7	
08-Jan-19	10:37	67.2	63.1	
14-Jan-19	10:18	66.0	62.9	69
14-Jan-19	10:23	67.4	63.7	
14-Jan-19	10:28	68.1	64.4	
14-Jan-19	10:33	68.2	64.7	
14-Jan-19	10:38	66.3	62.7	
14-Jan-19	10:43	67.0	63.8	
24-Jan-19	10:27	68.4	64.1	69
24-Jan-19	10:32	67.9	63.4	
24-Jan-19	10:37	68.3	64.9	
24-Jan-19	10:42	66.7	62.5	
24-Jan-19	10:47	67.5	63.3	
24-Jan-19	10:52	66.9	62.2	
30-Jan-19	10:27	68.2	64.4	68
30-Jan-19	10:32	67.5	63.2	
30-Jan-19	10:37	66.3	62.1	
30-Jan-19	10:42	66.2	62.4	
30-Jan-19	10:47	67.7	63.9	
30-Jan-19	10:52	66.8	62.9	

Remarks:

+3dB (A) correction was applied to free-field measurement.

The station set-up of a free-field measurement at Station NM1A.

Graphical Presentation Noise Monitoring Result at Station NM1A



F. Waste Flow table

M+ Museum

Table F-1: Monthly Waste Flow Table for M+ Museum

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
2015													
Nov	46607.4	0.0	0.0	8240.0	38367.4	0.0	0.0	76.2	0.0	0.0	0.0	0.0	67.6
Dec	29652.9	0.0	0.0	29621.4	31.5	0.0	0.0	26.3	0.0	0.0	0.0	1.0	66.0
Sub-total (2015)	76260.3	0.0	0.0	37861.4	38398.9	0.0	0.0	102.5	0.0	0.0	0.0	1.0	133.6
2016													
Jan	21077.4	0.0	6352.0	14576.0	149.4	0.0	0.0	18.8	0.0	0.0	0.0	0.0	23.2
Feb	7626.2	0.0	3424.0	4048.0	154.2	0.0	0.0	59.8	0.0	0.0	0.0	0.0	20.5
Mar	10442.5	0.0	1600.0	7888.0	954.5	0.0	0.0	29.7	0.0	0.0	0.0	0.0	46.3
Apr	30413.2	0.0	6352.0	23408.0	653.2	0.0	0.0	25.8	0.1	0.0	27.8	0.0	34.5
May	24083.5	0.0	112.0	23216.0	755.5	0.0	0.0	61.5	0.4	0.0	33.6	0.0	62.3
Jun	7880.1	0.0	4736.0	2384.0	760.1	0.0	0.0	106.6	0.1	0.0	14.6	0.0	52.8
Jul	5893.1	0.0	2656.0	2240.0	997.1	0.0	0.0	77.6	0.0	0.0	33.6	0.0	83.1
Aug	13709.6	0.0	0.0	12432.0	1277.6	0.0	0.0	111.3	0.2	0.0	38.5	0.0	104.9
Sep	6702.0	0.0	0.0	5648.0	1000.1	53.9	0.0	104.2	0.0	0.0	45.5	0.2	107.9
Oct	2103.6	0.0	0.0	496.0	1595.4	12.2	0.0	83.0	0.4	0.0	73.5	0.0	108.2
Nov	3302.7	0.0	0.0	2384.0	855.5	63.2	0.0	88.4	0.6	0.0	63.0	0.0	129.1
Dec	899.8	0.0	0.0	736.0	126.8	37.0	0.0	48.3	0.6	0.0	70.0	0.0	89.0
Sub-total (2016)	134133.5	0.0	25232.0	99456.0	9279.3	166.3	0.0	814.9	2.3	0.0	400.1	0.2	861.8
2017													
Jan	675.2	0.0	0.0	432.0	237.9	5.3	0.0	79.5	1.0	0.0	70.0	0.0	79.7
Feb	927.7	0.0	0.0	768.0	125.6	34.0	0.0	70.5	0.6	0.0	84.0	0.0	81.4
Mar	1856.7	0.0	0.0	1280.0	466.9	109.8	0.0	62.8	0.4	0.0	98.0	0.0	148.5
Apr	642.4	0.0	0.0	160.0	324.9	157.5	0.0	87.5	0.7	0.0	175.0	0.0	102.5
May	1118.2	0.0	0.0	528.0	416.4	173.7	0.0	118.3	0.0	0.0	280.0	0.0	139.0
June	650.0	0.0	0.0	0.0	451.6	198.4	0.0	199.7	1.4	0.0	350.0	0.0	98.7
Jul	1762.0	0.0	0.0	0.0	1466.6	295.4	0.0	36.9	1.2	0.0	244.0	0.0	164.2
Aug	1231.5	0.0	0.0	0.0	867.5	364.0	0.0	50.9	0.9	0.0	59.0	0.0	186.9
Sep	1681.7	0.0	0.0	0.0	1342.0	339.7	0.0	52.3	0.7	0.0	77.0	0.0	265.3
Oct	483.6	0.0	0.0	0.0	242.5	241.1	0.0	374.8	0.6	0.0	24.1	0.0	128.5
Nov	822.8	0.0	0.0	0.0	344.5	478.3	0.0	948.5	0.7	0.0	140.0	0.2	219.1
Dec	601.3	0.0	0.0	0.0	236.2	365.1	0.0	903.6	0.8	0.0	320.0	0.0	241.9
Sub-total (2017)	12453.0	0.0	0.0	3168.0	6522.6	2762.4	0.0	2985.3	8.9	0.0	1921.1	0.2	1855.5

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
2018													
Jan	1015.3	0.0	0.0	0.0	574.1	441.2	0.0	773.3	1.5	0.0	100.0	0.0	183.6
Feb	847.6	0.0	0.0	0.0	608.3	239.3	0.0	34.0	1.0	0.0	25.0	0.0	154.9
Mar	1507.0	0.0	0.0	0.0	1102.1	404.9	0.0	39.5	1.5	0.0	120.0	0.0	264.1
Apr	2942.8	0.0	0.0	0.0	2542.4	400.4	0.0	60.1	0.3	0.0	100.0	0.0	252.5
May	2109.2	0.0	0.0	0.0	1593.3	515.9	0.0	37.0	0.4	0.0	70.0	0.0	311.4
Jun	1697.6	0.0	0.0	0.0	1162.4	535.2	0.0	47.0	0.3	0.0	105.0	0.0	188.2
Jul	945.5	0.0	0.0	0.0	646.1	299.4	0.0	15.2	0.4	0.0	150.0	0.0	277.6
Aug	730.8	0.0	0.0	0.0	461.4	269.4	0.0	0.0	0.0	0.0	40.0	0.0	109.1
Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oct	1193.1	0.0	0.0	0.0	895.7	297.5	0.0	129.3	2.7	0.0	200.0	0.0	116.6
Nov	1608.9	0.0	0.0	0.0	841.1	767.7	0.0	43.6	1.1	0.0	245.0	0.0	213.9
Dec	1143.4	0.0	0.0	0.0	341.9	801.5	0.0	256.7	0.8	0.0	180.0	0.0	198.2
Sub-total (2018)	15741.0	0.0	0.0	0.0	10768.7	4972.3	0.0	1435.7	9.9	0.0	1335.0	0.0	2270.2
2019													
Jan	1478.9	0.0	0.0	0.0	572.3	906.6	0.0	142.1	0.0	0.0	100.0	0.0	303.9
Sub-total (2019)	1478.9	0.0	0.0	0.0	572.3	906.6	0.0	142.1	0.0	0.0	100.0	0.0	303.9
Total	**240066.7**	**0.0**	**25232.0**	**140485.4**	**65541.7**	**8807.6**	**0.0**	**5480.5**	**21.2**	**0.0**	**3756.2**	**1.4**	**5425.0**

Note:

-14.8 tonnes, 1,133.4 tonnes and 607.1 tonnes of inert C&D material were disposed of as public fill to Chai Wan Public Fill Barging Point, Tuen Mun Area 38 and Tseung Kwan O Area 137 Public Fill respectively in the reporting quarter.

-For inert C&D materials reused in other projects, the projects refer to (1) Green Valley; (2) Advance Works for Shek Wu Hui Sewage Treatment Works (3) Design and Construction of Kai Tak Cable Tunnel, CLP; (4) MTR Contract 1002 Whampoa Station and Overrun Tunnel; (5) CEDD Tuen Mun Area 54 Contract No. CV/2015/03; (6) Union Construction Ltd.'s site; (7) Foundation Works at Marriot Hotel at Ocean Park.

Lyric Theatre Complex

Table F-2: Monthly Waste Flow Table for Lyric Theatre Complex

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facilty	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)
2016													
Mar	2702.1	0.0	0.0	0.0	2702.1	0.0	0.0	4.5	0.1	0.0	0.0	0.0	30.6
Apr	8631.5	0.0	0.0	0.0	8631.5	0.0	0.0	16.0	0.0	0.0	0.0	0.0	19.2
May	12487.8	0.0	0.0	0.0	12487.8	0.0	0.0	34.0	0.0	0.0	0.0	0.7	60.5
Jun	8600.8	0.0	0.0	0.0	8600.8	0.0	0.0	31.4	0.2	0.0	0.0	0.5	13.5
Jul	12624.2	0.0	0.0	0.0	12624.2	0.0	0.0	19.6	0.0	0.0	0.0	2.0	9.9
Aug	14419.9	0.0	0.0	0.0	14419.9	0.0	0.0	43.9	0.0	0.0	0.0	0.0	11.1
Sep	13671.3	0.0	0.0	0.0	13671.3	0.0	0.0	59.8	0.0	0.0	0.0	1.6	12.4
Oct	13088.9	0.0	0.0	0.0	13088.9	0.0	0.0	36.9	0.2	1.5	0.0	0.0	15.2
Nov	12424.7	0.0	0.0	0.0	12424.7	0.0	0.0	74.7	0.0	0.0	0.0	1.4	10.2
Dec	12487.6	0.0	0.0	0.0	12487.6	0.0	0.0	13.9	0.0	0.0	0.0	1.3	9.0
Sub-total (2016)	111138.8	0.0	0.0	0.0	111138.8	0.0	0.0	334.5	0.4	1.5	0.0	7.6	191.6
2017													
Jan	9607.8	0.0	0.0	0.0	9607.8	0.0	0.0	29.5	0.0	0.0	0.0	0.0	7.3
Feb	9108.2	0.0	0.0	0.0	9108.2	0.0	0.0	50.2	0.2	0.0	0.0	0.7	9.8
Mar	11361.7	0.0	0.0	0.0	11361.7	0.0	0.0	16.1	0.0	0.0	0.0	1.4	8.5
Apr	2591.5	0.0	0.0	0.0	2591.5	0.0	0.0	35.7	0.0	0.0	0.0	0.0	4.7
May	2579.3	0.0	0.0	99.0	2480.3	0.0	0.0	20.9	0.1	0.0	0.0	0.5	10.0
Jun	476.0	0.0	0.0	341.0	129.7	5.3	0.0	0.0	0.0	0.0	0.0	0.0	7.6
Jul	3419.0	0.0	0.0	804.0	2615.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.8
Aug	3730.9	0.0	0.0	1377.5	2353.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4
Sep	2108.2	0.0	0.0	1133.5	974.7	0.0	0.0	34.6	0.2	0.0	0.0	0.0	10.8
Oct	9159.0	0.0	0.0	7868.0	1291.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	9.3
Nov	5095.4	0.0	0.0	4352.0	725.2	18.1	0.0	0.0	0.0	0.0	0.0	0.0	38.8
Dec	3856.2	0.0	0.0	3076.0	780.2	0.0	0.0	0.0	0.2	0.0	0.0	0.4	8.4
Sub-total (2017)	63093.1	0.0	0.0	19051.0	44018.7	23.4	0.0	187.1	0.7	0.0	0.0	3.8	137.3

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facilty	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)
2018													
Jan	4083.7	0.0	0.0	1455.0	2628.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Mar	6120.2	0.0	0.0	5782.0	338.2	0.0	0.0	0.0	0.0	1.0	0.0	0.5	17.6
Apr	14460.3	0.0	0.0	12484.1	1976.3	0.0	0.0	0.0	0.0	0.2	0.0	0.0	7.6
May	59783.7	0.0	0.0	46989.0	12794.7	0.0	0.0	59.6	0.0	0.0	0.0	0.0	9.4
Jun	53117.5	0.0	0.0	37642.8	15474.7	0.0	0.0	51.5	0.2	0.0	0.0	0.0	12.8
Jul	89901.5	0.0	0.0	85317.1	4584.4	0.0	165.1	114.6	0.0	0.0	0.0	0.0	41.3
Aug	35137.3	0.0	0.0	33731.6	1405.7	0.0	214.3	148.1	0.0	0.0	0.0	0.0	48.5
Sep	4815.3	0.0	0.0	4619.1	109.2	87.0	174.6	40.0	0.0	0.0	0.0	0.0	179.2
Oct	19021.9	0.0	0.0	11301.0	7564.7	156.1	0.0	106.3	0.4	0.0	0.0	0.0	450.4
Nov	104165.3	0.0	0.0	79811.6	24348.4	5.3	0.0	54.5	0.0	0.6	0.0	0.0	28.9
Dec	62987.1	0.0	0.0	51284.4	11697.1	5.6	0.0	95.1	0.0	0.6	0.0	0.0	63.1
Sub-total (2018)	453593.7	0.0	0.0	370417.7	82922.0	254.0	553.9	669.7	0.5	2.4	0.0	0.5	862.7
2019													
Jan	75555.4	0.0	0.0	70325.7	5229.7	0.0	318.0	326.7	0.4	0.0	0.0	0.0	76.3
Sub-total (2019)	75555.4	0.0	0.0	70325.7	5229.7	0.0	318.0	326.7	0.4	0.0	0.0	0.0	76.3
Total	**704252.9**	**0.0**	**0.0**	**459794.4**	**243309.1**	**277.4**	**871.9**	**1517.9**	**2.0**	**3.9**	**0.0**	**11.9**	**1267.9**

Note:

-29,048.74, 12,211.67, and 14.73 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137, Tuen Mun Area 38, and Chai Wan Public Fill Barging Point respectively in the reporting quarter.

G. Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Cumulative statistics for complaints, notifications of summons and successful prosecutions for the Project account for period starting from the date of commencement of construction works (i.e. 31 October 2015 for M+ Museum main works and 1 March 2016 for Lyric Theatre Complex) to the end of the reporting quarter and are summarized in the in the **Table G-1** and **Table G-2** below respectively.

Table G-1: Statistics for complaints, notifications of summons and successful prosecutions for M+ Museum Main Works

Reporting Period	Cumulative Statistics		
	Complaints	**Notifications of summons**	**Successful prosecutions**
This reporting quarter	2	0	0
From 31 October 2015 to end of the reporting quarter	6	1	0

Table G-2: Statistics for complaints, notifications of summons and successful prosecutions for Lyric Theatre Complex

Reporting Period	Cumulative Statistics		
	Complaints	**Notifications of summons**	**Successful prosecutions**
This reporting quarter	3	0	0
From 1 March 2016 to end of the reporting quarter	8	0	0