Development at West Kowloon Cultural District

Quarterly Environmental Monitoring and Audit (EM&A) Report
(November 2023 – January 2024)

February 2024

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:

CK WU

Environmental Team Leader (ETL)

West Kowloon Cultural District Authority

Date 28 February 2024

Verified by:

Claudine LEE

Independent Environmental Checker (IEC)

Meinhardt Infrastructure and Environment Ltd

Date 28 February 2024

This Report Consists of:

Part-1: EM&A at Lyric Theatre Complex

and

Part-2: EM&A for Foundation Works in Zone 2B & 2C

Part-1: EM&A at Lyric Theatre Complex

MOTT MACDONALD

Lyric Theatre Complex

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Contents

Executive summary

This Quarterly EM&A Report presents the monitoring works at Lyric Theatre Complex conducted from 1 November 2023 to 31 January 2024. The construction works and EM&A programme for M+ Museum was commenced on 31 October 2015 and completed on 28 February 2021; while the construction works and EM&A programme for Lyric Theatre Complex (L1 and L2 Contracts) was commenced on 1 March 2016, and the EM&A programme for L1 Contract was completed on 30 June 2021.

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

There was no breach of Action and 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 were made during these inspections.

Record of Complaints

No complaint was received during the reporting quarter.

Record of Notifications of Summons and Successful Prosecutions

No notifications of summons and successful prosecutions 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), L1 Contract (Contract No. CC/2017/3A/030) and L2 Contract (Contract No. CC/2017/3A/031) 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 was commenced on 31 October 2015 and completed on 28 February 2021; while the construction works and EM&A programme for Lyric Theatre Complex (L1 and L2 Contracts) was commenced on 1 March 2016, and the EM&A programme for L1 Contract was completed on 30 June 2021.

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 1 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 2023 to 31 January 2024. 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 Status of Construction Works in the Reporting Period

During the reporting period, construction works at L2 undertaken include:

- LTC construction
  Structure (Slab, wall, columns and beam)
  - Falsework and formwork erection
  - Reinforcement work
  - Concrete work

  ABWF & MEP work

  Façade work
- ASDA and Lyric Theatre Promenade
  - Structure, ABWF and MEP works
- Remaining Works for M+ Promenade
  - Hacking existing R.C. footing for modification of ICT cable and CLP works
  - Construction of additional CLP draw pit
  - Open up CLP draw pits (E & F) at M+ park for CLP inspection
- DCS cofferdam (Cofferdam A)
  - Backfilling
- DCS cofferdam (Cofferdam B)
  - Seawater pipework installation
- Extended basement
  - ABWF & MEP works
- Underpass and Associated Area
  - Structure works
  - ABWF & MEP works
- M+ Day 2 Works
  - Removing of existing waring slab, RC kerb and railing

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 and Mitigation Measures

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	AM2 - The Harbourside Tower 1	At least once every 6 days	151.1 μg/m^3	260 μg/m^3
	1-Hour TSP	AM2 - The Harbourside Tower 1	At least 3 times every 6 days	274.2 μg/m^3	500 μg/m^3
Noise	Leq, 30 minutes	NM1- 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

In the context of the monitoring activities at M+ Museum and the Lyric Complex, three monitoring stations had been considered, including AM1 (International Commerce Centre), AM2 (The Harbourside Tower 1) for air monitoring, and NM1 (The Harbourside Tower 1) for noise monitoring. Other monitoring locations were so far away from M+ Museum and the Lyric Complex and could not be representative for impact monitoring.

The Harbourside management office formally rejected our proposal of setting up air quality and noise monitoring equipment on its premises at the podium level of Tower 1 (AM2/NM1) on 10 November 2015. Nevertheless, a suitable air quality monitoring location at AM2 was identified on the ground floor in front of The Harbourside Tower 1, which is at the same location as that of baseline monitoring for consistency. No management approval is required on the ground floor for conducting the air monitoring. However, the electricity supply at AM2 was suspended from 31 August 2016. 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. Due to the works programme, the air monitoring location AM2A has been relocated to the alternative monitoring location AM2B at the 1st floor of Gammon's site office, which was approved by EPD on 21 February 2019. In view of the upcoming construction works to be undertaken at the air monitoring station AM2B, AM2B was no longer available for conducting the impact air quality monitoring. Hence, an alternative air monitoring location was identified on the ground floor in front of The Harbourside Tower 1 (AM2) which is at the same location as the baseline monitoring and this previously approved monitoring location had also been used for the EM&A Programme from November 2015 to August 2016, the relocation was approved by EPD on 27 May 2021.

Alternative noise monitoring location was identified at The Arch (NM2); however, The Arch management office formally rejected our proposal of setting up noise monitoring equipment on its premises on 23 November 2015. On the other hand, noise monitoring at G/F of Harbourside could not be representative. However, 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.

In short, 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 Results

3.1 Monitoring Data

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 is presented in **Table 3.1**.

Table 3.1: Summary of Monitoring Data

Parameter	Monitoring Location	Minimum	Maximum	Average
Air Quality				
1 hour TSP	AM1	19	63	37
	AM2	26	86	49
24 hour TSP	AM1	13	64	30
	AM2	23	75	43
Construction Noise				
Leq(30min)	NM1A	65	67	66

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
AM2	1 hour TSP	0	0	N/A
	24 hour TSP	0	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. No Action/ Limit Level exceedance was recorded.

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 were recorded.

4 Waste Management

4.1 Lyric Theatre Complex

As advised by the Contractor (L2 Contract), 1,113.7 tonnes, 336.0 tonnes and 0.0 tonne 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, while 1,119.7 tonnes of general refuse were disposed of at SENT and WENT landfill. 11.1 tonnes of metals, 0.0 tonne of paper/cardboard packaging, 0.0 tonne of plastic and 0.0 tonne of timber were collected by recycling contractors in the reporting quarter. 0.0 tonne of inert C&D materials was reused on site. 0.0 tonne of fill materials was imported for use at site and 0.0 tonne of inert C&D materials was reused in other projects. 0.0 tonne of inert C&D materials were disposed to sorting facility and 0.0 tonne of chemical waste were collected by licensed contractors in the reporting quarter.

The actual amount 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

There was no breach of Action or Limit levels for Air Quality (1-hour TSP and 24-hour TSP) and Noise in the reporting quarter.

No complaint was received in the reporting quarter. No notifications of summons and successful prosecutions were received in the reporting quarter.

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, landscape inspections, and construction dust and noise monitoring results, no non-compliances and exceedances of air quality and noise were recorded in the reporting quarter.

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

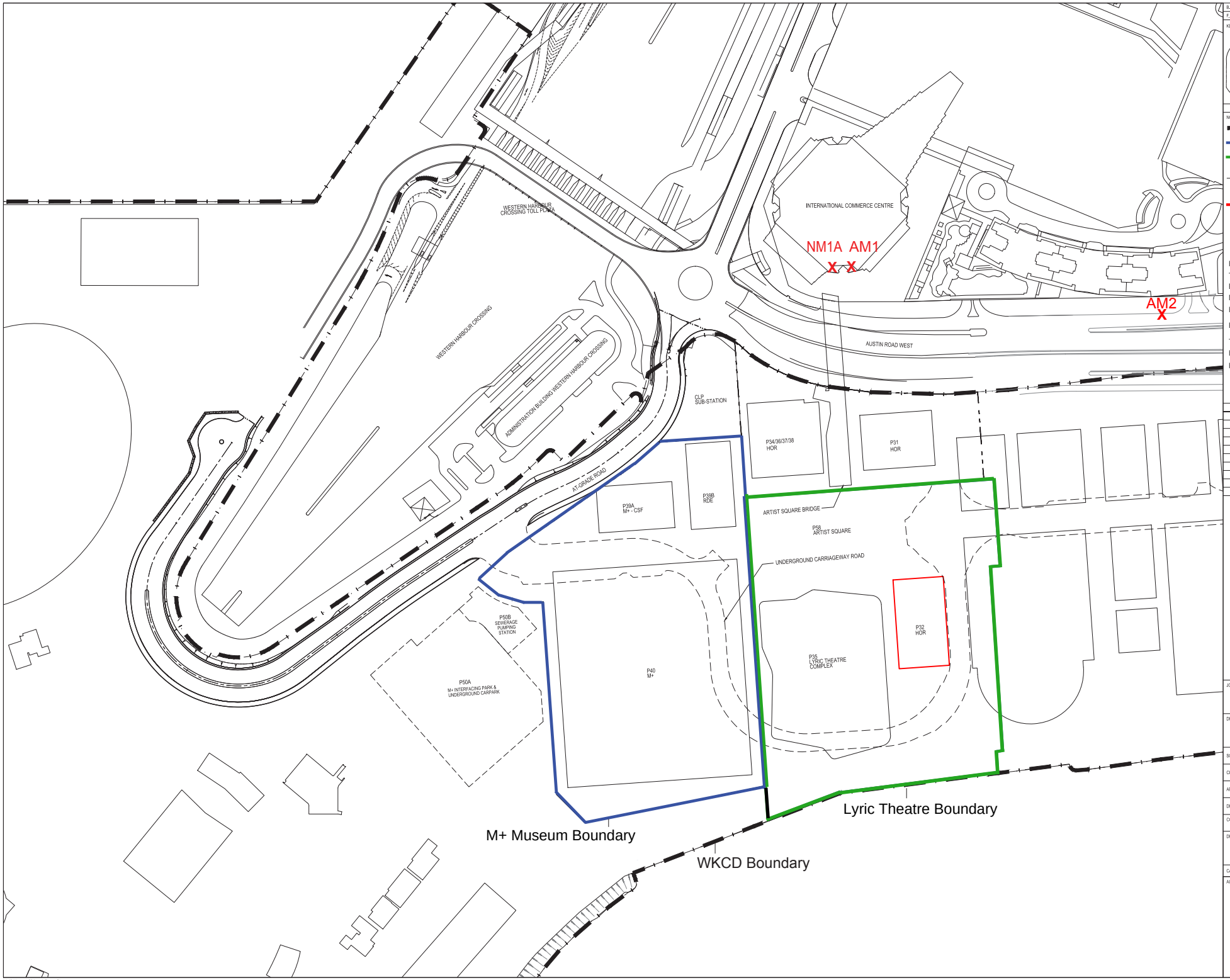
The EM&A programme as recommended in the EM&A Manual has been undertaken. The construction works and EM&A programme for M+ Museum was commenced on 31 October 2015 and completed on 28 February 2021; while the construction works and EM&A programme for Lyric Theatre Complex (L1 and L2 Contracts) was commenced on 1 March 2016, and the EM&A programme for L1 Contract was completed on 30 June 2021.

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

No complaint was received in the reporting quarter. No notifications of summons and successful prosecutions 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

AREA HANDED OVER TO SUN HUNG KAI PROPERTIES

X CONSTRUCTION AIR/NOISE MONITORING STATIONS

REMARKS 1:

THE AIR MONITORING STATION AM2B HAS BEEN RELOCATED TO THE ALTERNATIVE MONITORING STATION AM2 AT THE G/F OF HARBOURSIDE ON 1 JUNE 2021

REMARKS 2:

THE SITE P32 (DELINEATED IN RED) WAS HANDED OVER TO SUN HUNG KAI PROPERTIES ON 31 JANUARY 2023.

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		DATE	
CONTRACT NO.			

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

CAD REF NAME: XXXXX-AUT-PMS-DWG-P00-L00D-0000-XXX.dwg

AUTHORITY

westKowloon 西九文化區

A1 (841mm x 594mm) Sheet Size

Appendices

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B. Construction Programme
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D. Meteorological Data Extracted from Hong Kong Observatory
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

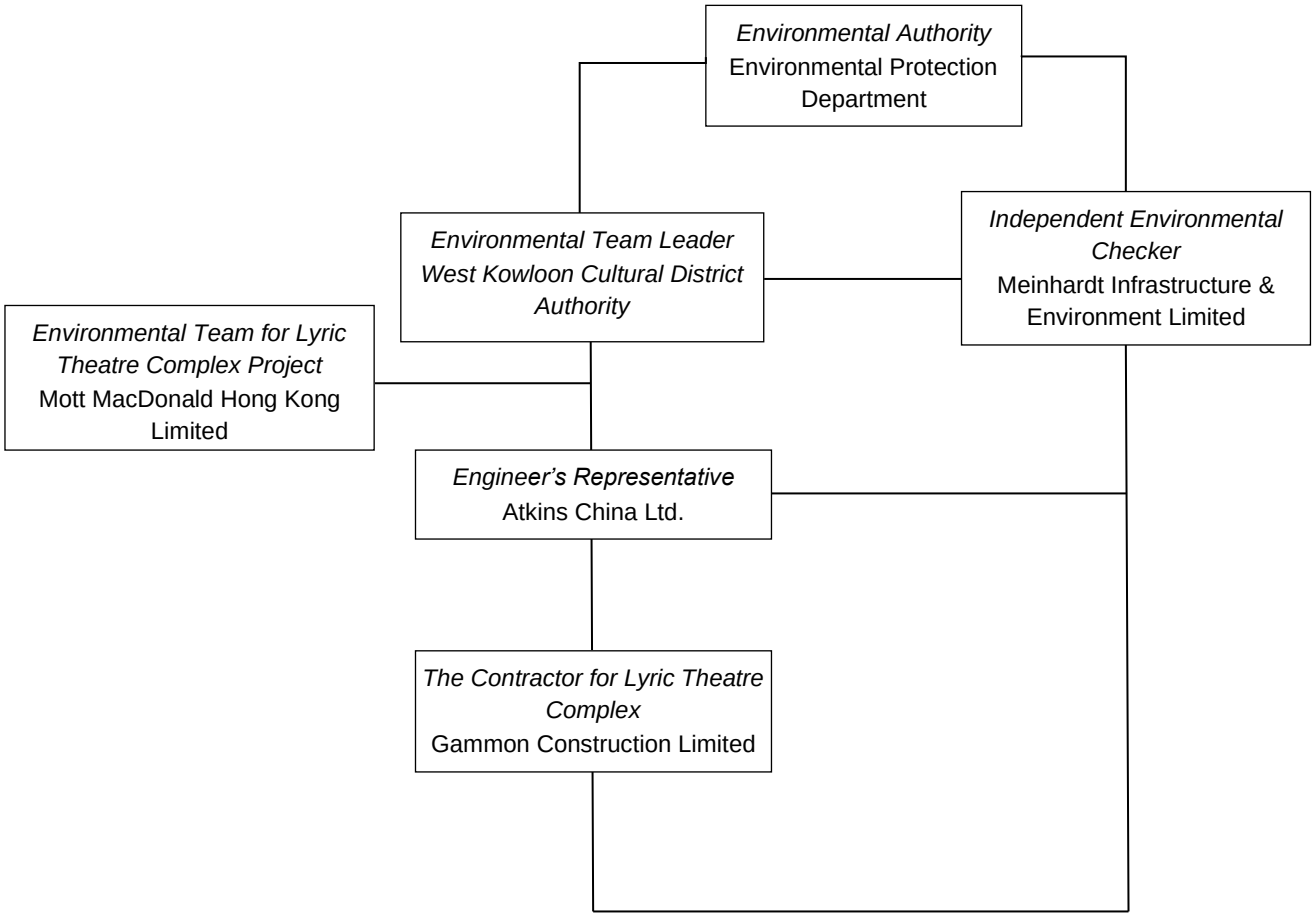


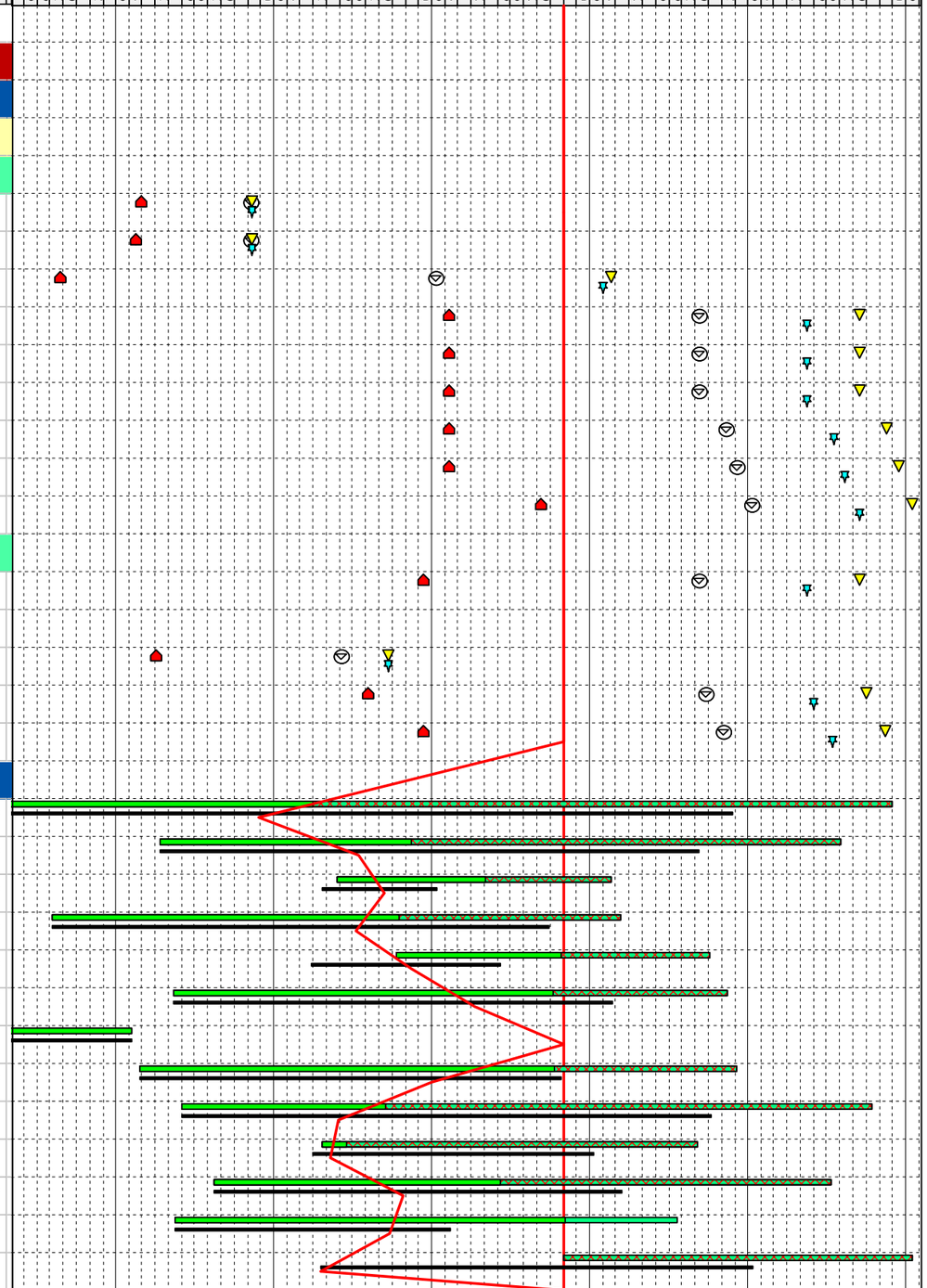
Table A-1: Contact information

Company Name	Role	Name	Telephone	Email
Atkins China Ltd.	Project Manager	Mr. Simha LytheRao	2204 8259	Simha.Lytherao@atkinsglobal.com
Meinhardt Infrastructure & Environment Limited	Independent Environmental Checker	Ms. Claudine Lee	2859 5409	claudinelee@meinhardt.com.hk
Gammon Construction Limited (L2)	Environmental Manager	Ms. Fiona Law	9156 7654	fiona.cm.law@gammonconstruction.com
Mott MacDonald Hong Kong Ltd.	Contractor's Environmental Team Leader	Mr. Thomas Chan	2828 5757	thomas.chan@mottmac.com
West Kowloon Cultural District Authority	Senior Project Manager (Safety, Health and Environment)	Mr. C.K. Wu	5506 9178	ck.wu@wkcda.hk

B. Construction Programme

TASK filter: L2 UPD: Summary Level 1 Program.

ID	Activity	RD	BL Rev 0 Finish	BL Rev 02 Start	BL Rev 02 Finish	Start	Finish	LoE SUMM TF (approx)	BL R2 VAR	LM VAR	Planned EV %	Actual EV %
*L2 CMWP_R02_20 - IFA 27Apr22 - ***LIVE*** (UPDATE: 31Oct2023)*												
GENERAL & PRELIMINARIES												
Contract Significant Dates												
Commencement & Completion Dates - CMWP_Rev_01												
Section Keydates												
KD05A	Complete Required Pedestrian Access Corridor and Floor Finishes at AURW	0	28-Feb-21		12-Nov-21		12-Nov-21 A		0	0		100%
KD05B	Complete Required Pedestrian Access Corridor & associated top slab at Avenue Level [if instructed]	0	14-Feb-21		12-Nov-21		12-Nov-21 A		0	0		100%
KD05	PC for HO of the Remaining Works for M+ Promenade South	0	24-Aug-20		13-Jan-23		20-Feb-24*	-403	-403	-19		0%
KD08	PC for HO Loc ICT/Risers Rms to APC for ICT Sys Instn Wrks	0	10-Feb-23		10-Sep-24		15-Sep-25*	-370	-370	-122		0%
KD10	PC for HO of ASDA, Lyric Theatre Promenade South to Authority	0	10-Feb-23		10-Sep-24		15-Sep-25*	-370	-370	-122		0%
KD09	PC for HO of RDE areas for Tenancy Fit-out Wrks	0	10-Feb-23		10-Sep-24		15-Sep-25*	-370	-370	-122		0%
KD11	PC for HO of Extended Basement for HO to Authority & HO of Carriageway to Relevant Govt Authority	0	10-Feb-23		12-Nov-24		17-Nov-25*	-370	-370	-123		0%
KD07	PRACTICAL COMPLETION for C'Way 3A (M+ Day 2 Works)	0	10-Feb-23		09-Dec-24		13-Dec-25*	-337	-369	-122		0%
KD13	PRACTICAL COMPLETION for Lyric Theatre, EB & C'Way 3B (Incl. Provisional PPE License)	0	08-Sep-23		10-Jan-25		15-Jan-26*	-370	-370	-122		0%
Stage Keydates												
KD03	OBTAIN OP for Lyric Theatre & Extended Basement	0	12-Dec-22		10-Sep-24		15-Sep-25*	-370	-370	-122		0%
KD01	Compl Dsgn Coor/Subm and obtn NNO for L1 Contr Bsmt constn wrks	0	20-Jul-19		20-Jul-19		20-Jul-19 A		0	0		100%
KD06	PC for Fountain Related Plantroom(s) (allow access to Project Contractor)	0	01-Apr-21		07-Jun-22		22-Sep-22 A		-106	0		0%
KD14	Complete U/G road and the associated plantrooms at Zone 3A&3B Integrated Basement	0	04-Aug-22		26-Sep-24		30-Sep-25*	-369	-369	-120		0%
KD02	Obtain BA14 Acknowledge from BD for M+ Day2 A&A Works	0	12-Dec-22		08-Nov-24		13-Nov-25*	-370	-370	-122		0%
CMWP - Summary Program - RSS												
SUM100	[LoE] CC_B - Lyric Theatre	592		02-May-20	25-Nov-24	02-May-20 A	29-Nov-25	-262	-299	-102	80.64	34.29%
SUM101	[LoE] CC_C - ASDA and Lyric Theatre Promenade	492		12-Apr-21	09-Sep-24	12-Apr-21 A	01-Aug-25	-256	-257	-97	69.62	36.95%
SUM102	[LoE] CC_D - Remaining Works for M+ Promenade South	87		23-Apr-22	13-Jan-23	26-May-22 A	20-Feb-24	-297	-297	-10	100%	54.21%
SUM103	[LoE] CC_E - DCS Cofferdam	105		07-Aug-20	29-Sep-23	07-Aug-20 A	12-Mar-24	-160	-127	-25	100%	60.99%
SUM104	[LoE] CC_F - Modification to Existing Pump Cell	250		29-Mar-22	07-Jun-23	12-Oct-22 A	02-Oct-24	-161	-354	8	100%	52.81%
SUM105	[LoE] CC_G - Extended Basement	306		15-May-21	23-Feb-24	15-May-21 A	14-Nov-24	-2	-216	9	95.58	68.54%
SUM106	[LoE] CC_H - Vibration Isolation Spring System Remaining as of 30Apr2020	0		14-Apr-20	06-Feb-21	14-Apr-20 A	06-Feb-21 A		0	0	100%	100%
SUM107	[LoE] CC_I - Underpass and Associated Area	324		24-Feb-21	25-Oct-23	24-Feb-21 A	05-Dec-24	-58	-329	9	100	69.44%
SUM108	[LoE] CC_J - M+ Day 2 Works	574		03-Jun-21	08-Oct-24	03-Jun-21 A	13-Oct-25	-273	-299	-102	77.29	29.4%
SUM109	[LoE] CC_K - Water Main at Promenade	232		01-Apr-22	08-Jan-24	23-Apr-22 A	04-Sep-24	-131	-176	-25	76.07	6.26%
SUM110	[LoE] CC_N - Lifts & Escalators	496		16-Aug-21	14-Mar-24	16-Aug-21 A	11-Jul-25	-299	-389	-102	91.57	46.31%
SUM111	[LoE] P32 Interim Development	209		17-May-21	13-Feb-23	17-May-21 A	20-Jul-24	95	-421	-25	100%	77.66%
SUM112	[LoE] Project Wide Statutory Inspections & Approval leading to OP & PC	651		19-Apr-22	10-Jan-25	01-Nov-23	15-Jan-26	-299	-299	-102	3.05	0%



Gammon

Base Line ACT
Rev_0 KD
Base Line MS
Milestone
Current - Other Works
Current - Struct Works
Current - MEP Works

Legend:
RD = Remaining Duration; BL = Base Line; LoE = Level of Effort Activity Type; LM = Last Month; SUMM = Summary; TF = Total Float; VAR = Variance

L2 CMWP_R02_20 - IFA 27Apr22 - ***LIVE*** (UPDATE: 31Oct2023)

Date	Revision	Checked	Approved
14-Nov-23	CMWP Rev_02_20 - Update DD 31Oct23	NS	IH

C. Environmental Mitigation Measures – Implementation Status

Table C-1: Environmental Mitigation Measures Implementation Status

EM&A Ref.	Recommendation Measures	Implementation Stage L2 Nov 2023	Dec 2023	Jan 2024
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	Obs	✓
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.	Obs	Obs	Rem
	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
	Loading, Unloading or Transfer of Dusty Materials			

EM&A Ref.	Recommendation Measures	Implementation Stage L2 Nov 2023	Dec 2023	Jan 2024
	• 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.	✓	✓	✓
	• 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.	✓	✓	✓
	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 L2 Nov 2023	Dec 2023	Jan 2024
	• 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	N/A	N/A	N/A
	Emission Limits			
	• All emissions to air, other than steam or water vapour, shall be colourless and free from persistent mist or smoke	N/A	N/A	N/A
	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	N/A	N/A	N/A
	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.	✓	✓	✓
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.	✓	✓	✓
	Adoption of Quieter PME			

EM&A Ref.	Recommendation Measures	Implementation Stage L2 Nov 2023	Dec 2023	Jan 2024
3.1 & 10.4.1	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 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.	✓	✓	✓
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.	✓	✓	✓
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.	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

EM&A Ref.	Recommendation Measures	Implementation Stage L2 Nov 2023	Dec 2023	Jan 2024
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;	✓	✓	✓
	• 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 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	✓	Rem
	• 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.	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage L2 Nov 2023	Dec 2023	Jan 2024
	• 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.	✓	✓	✓
	• 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
	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 propeller wash;	N/A	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage L2 Nov 2023	Dec 2023	Jan 2024
	• 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
	• 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
	• 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
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	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	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage L2 Nov 2023	Dec 2023	Jan 2024
	• Provision of sufficient waste disposal points and regular collection of waste	✓	Obs	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	✓	✓	✓
	• Provision of wheel washing facilities before the trucks leaving the works area so as to minimise dust 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	✓	✓	Obs
	• 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 wastes	✓	✓	✓
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.	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage L2 Nov 2023	Dec 2023	Jan 2024
	• 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 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.	✓	✓	✓
	• 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.	✓	✓	Obs

EM&A Ref.	Recommendation Measures	Implementation Stage L2 Nov 2023	Dec 2023	Jan 2024
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
	• 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
	• Stockpiling of contaminated excavated materials on site should be avoided as far as possible;	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
	• 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
	• Truck bodies and tailgates should be sealed to stop any discharge;	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
	• Speed control for trucks carrying contaminated materials should be exercised;	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

EM&A Ref.	Recommendation Measures	Implementation Stage L2 Nov 2023	Dec 2023	Jan 2024
	• Maintain records of waste generation and disposal quantities and disposal arrangements.	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
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
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
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
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
Table 9.1 & 10.8 (CM6)	Sensitive streetscape design should be incorporated along all new roads and streets.	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
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
Table 9.1 (CM9)	Minimize the structure of marine facilities to be built on the seabed and foreshore in order to minimize the affected extent to the waterbody	N/A	N/A	N/A

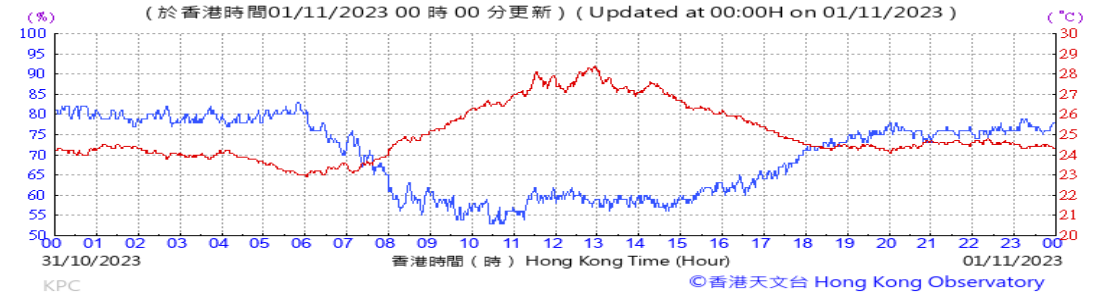
EM&A Ref.	Recommendation Measures	Implementation Stage L2 Nov 2023	Dec 2023	Jan 2024
Table 9.2 & 10.9 (MCP1)	Use of decorative screen hoarding/boards	✓	✓	✓
Table 9.2 & 10.9 (MCP2)	Early introduction of landscape treatments	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP3)	Adoption of light colour for the temporary ventilation shafts for the basement during the transition period.	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP4)	Control of night time lighting	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP5)	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	-	Not Applicable
✓	-	Implemented
Obs	-	Observed
Rem	-	Reminder

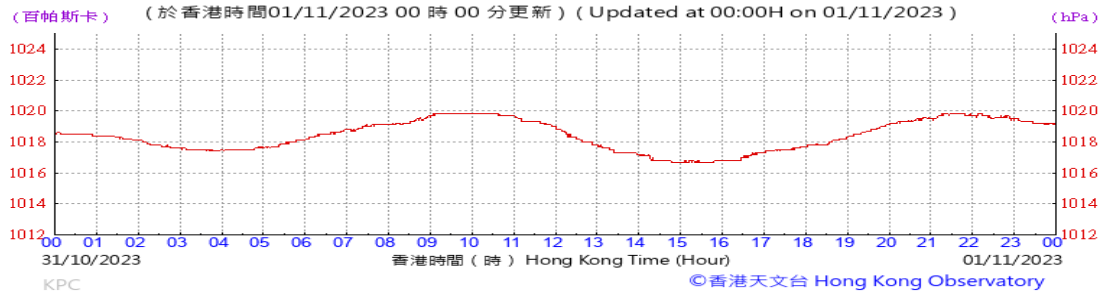
D. Meteorological Data Extracted from Hong Kong Observatory

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

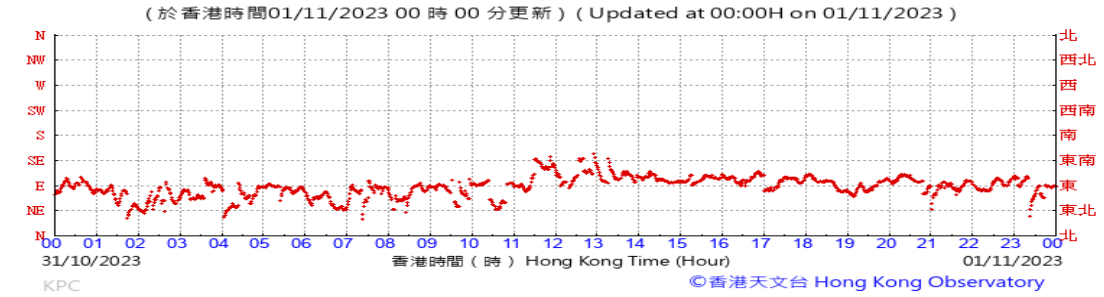
Temperature/Humidity:



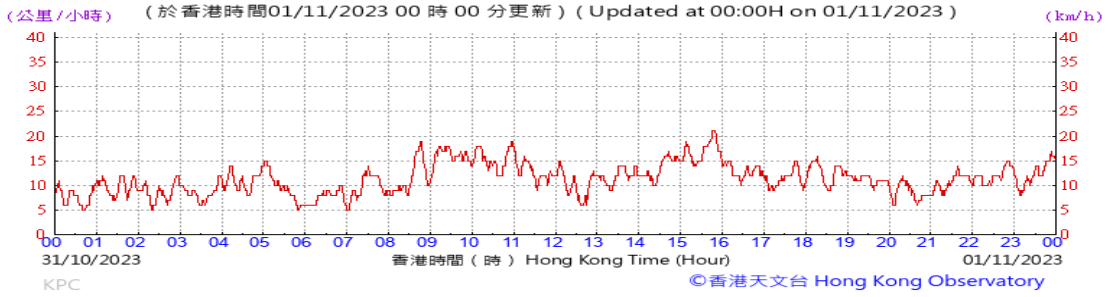
Pressure:



Wind Direction:



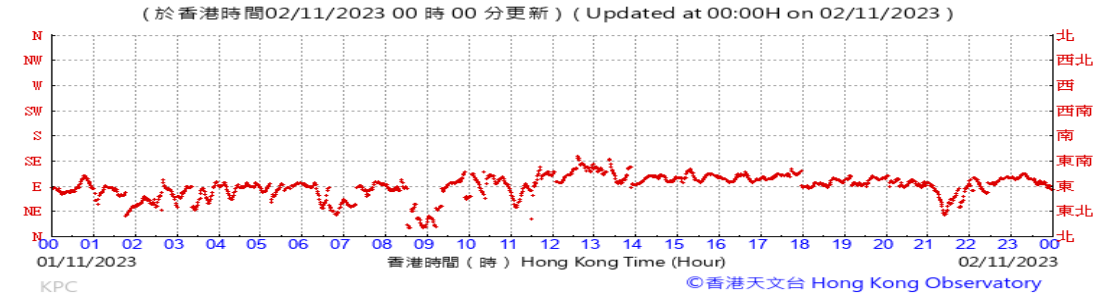
Wind Speed:



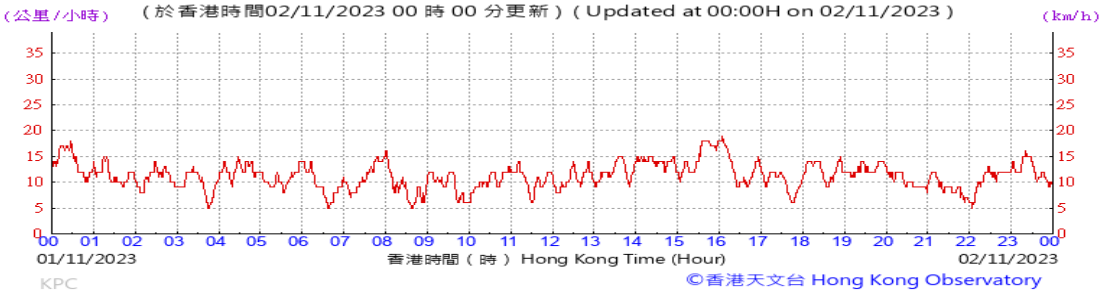
Temperature/Humidity:

Pressure:

Wind Direction:



Wind Speed:



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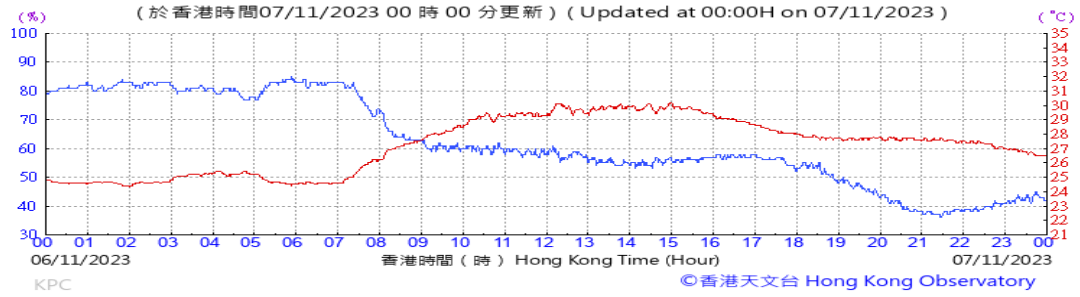
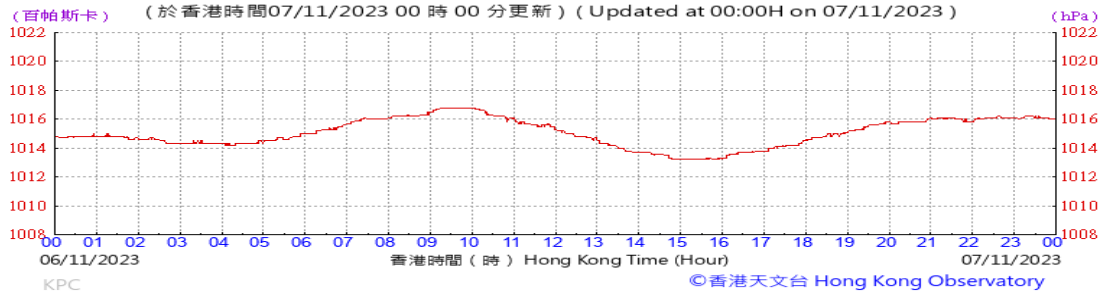
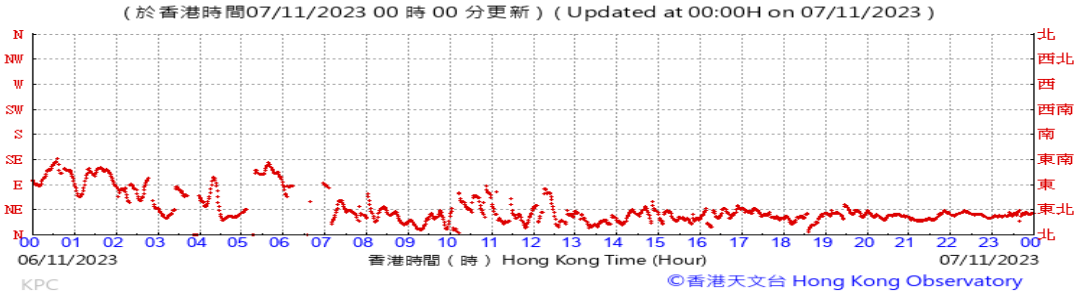


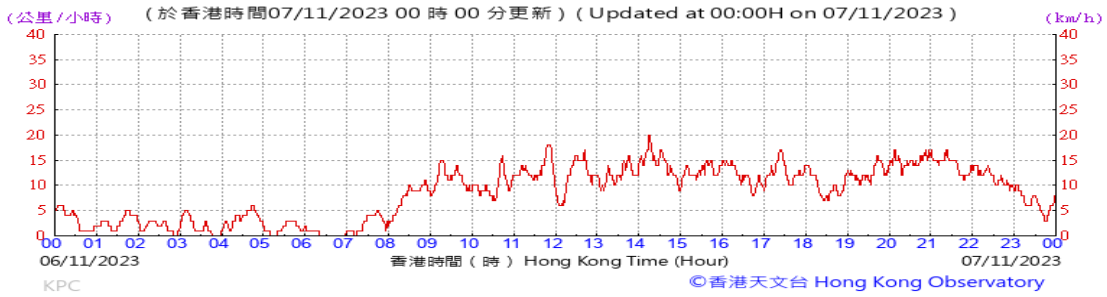
Pressure:



Wind Direction:



Wind Speed:



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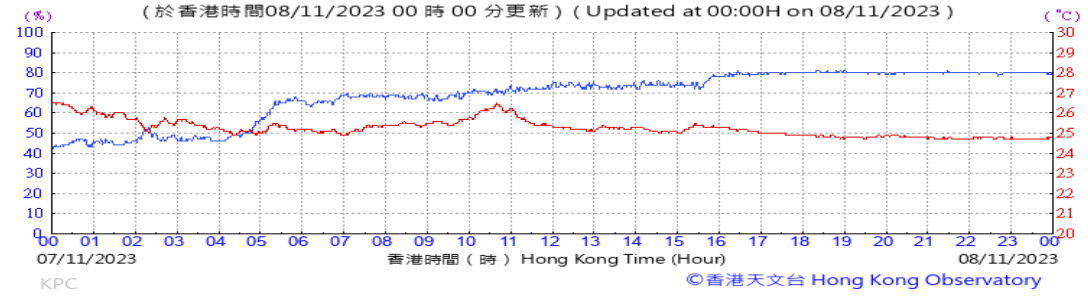
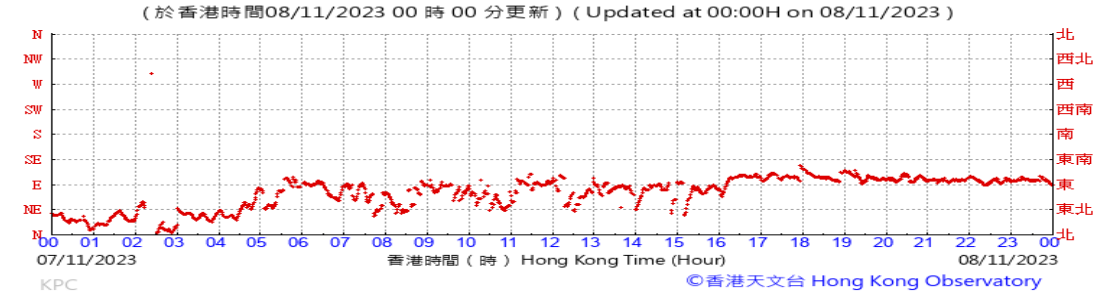
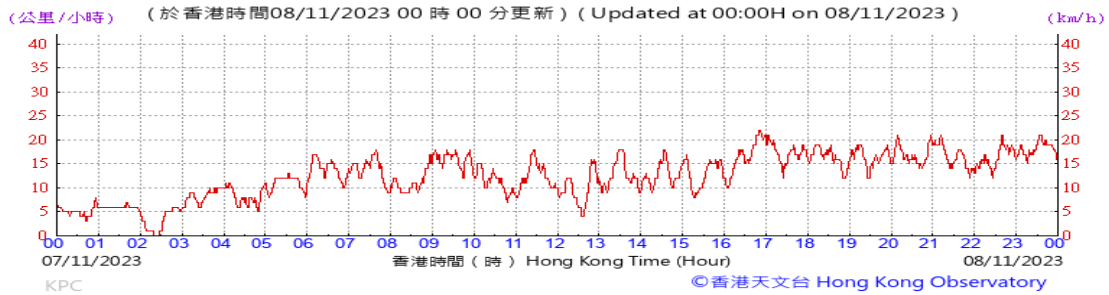


Pressure:

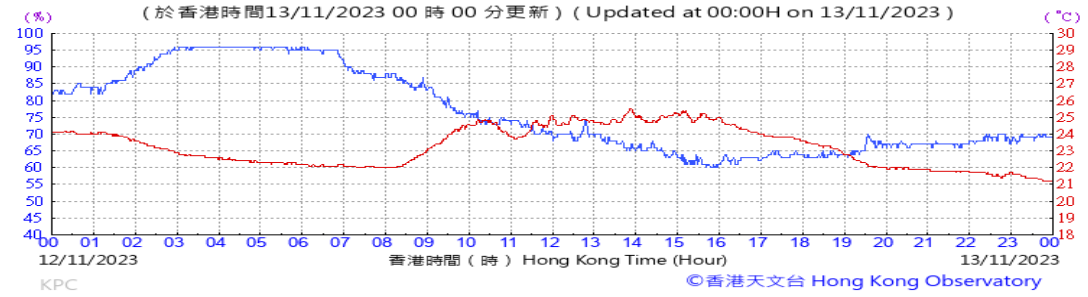
Wind Direction:



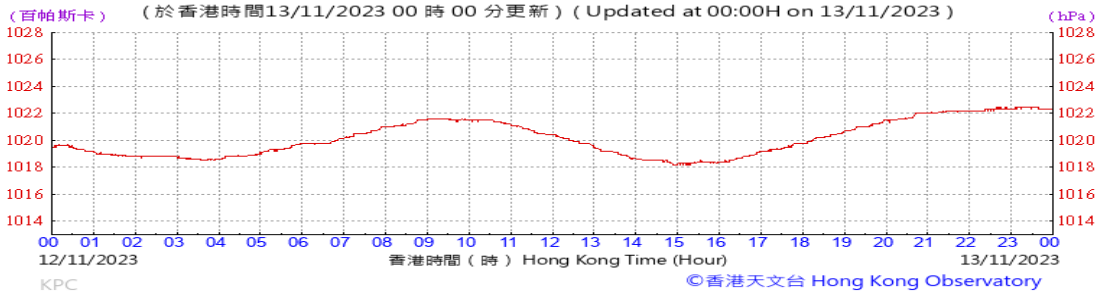
Wind Speed:



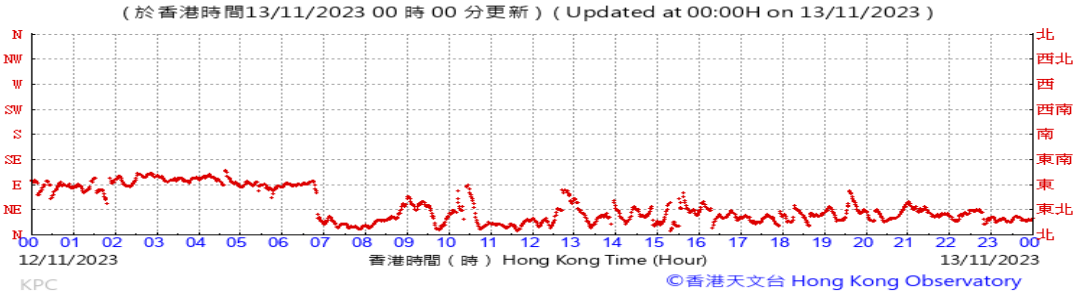
Temperature/Humidity:



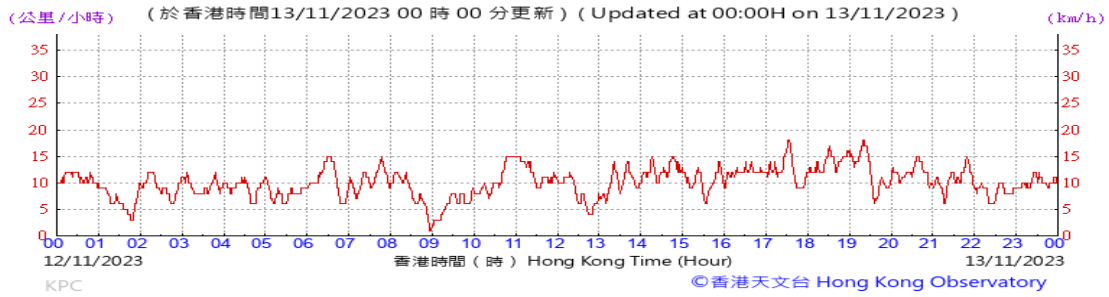
Pressure:



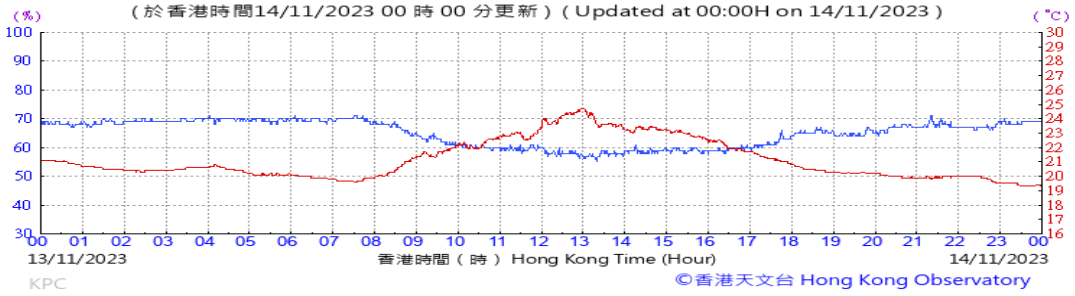
Wind Direction:



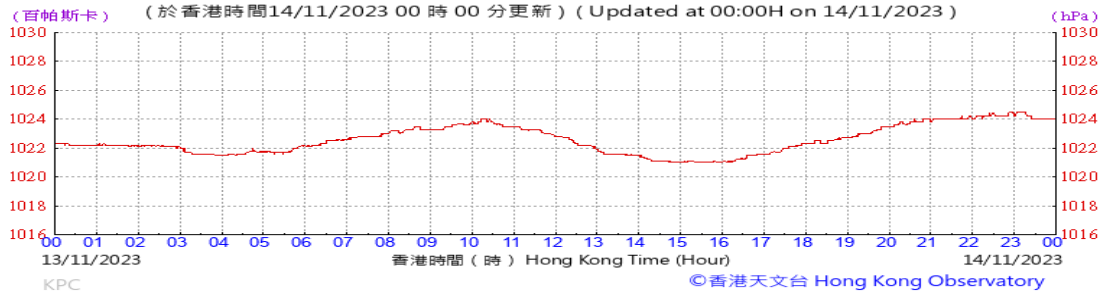
Wind Speed:



Temperature/Humidity:



Pressure:



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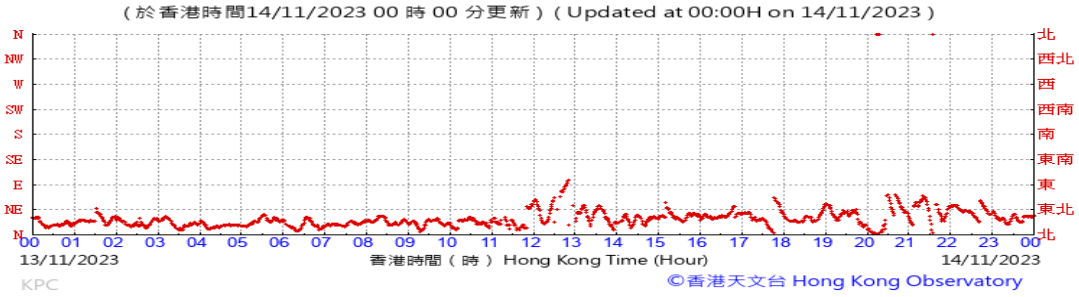

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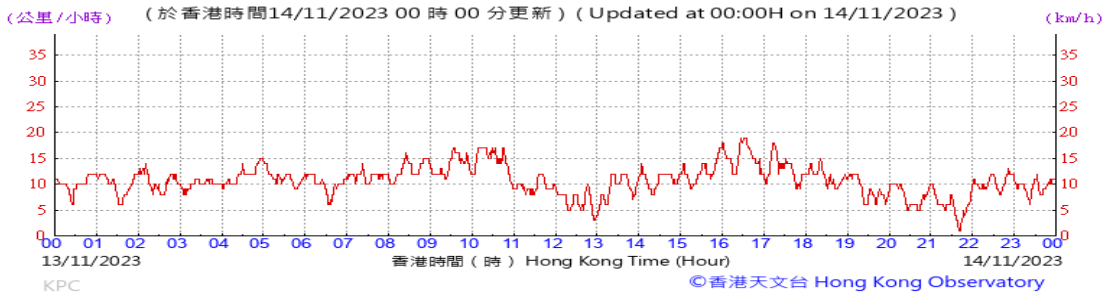

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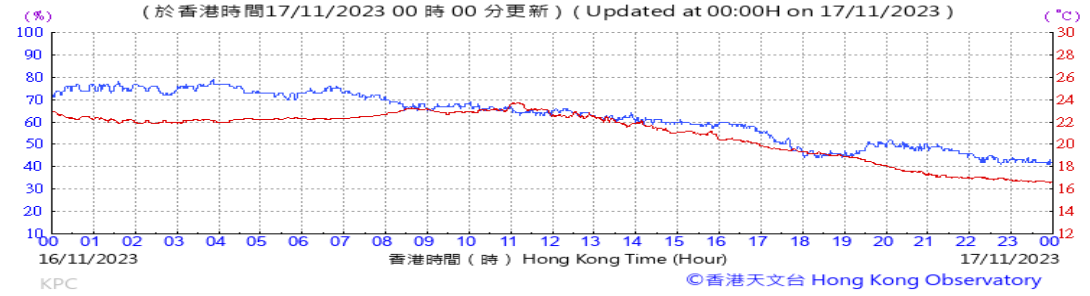

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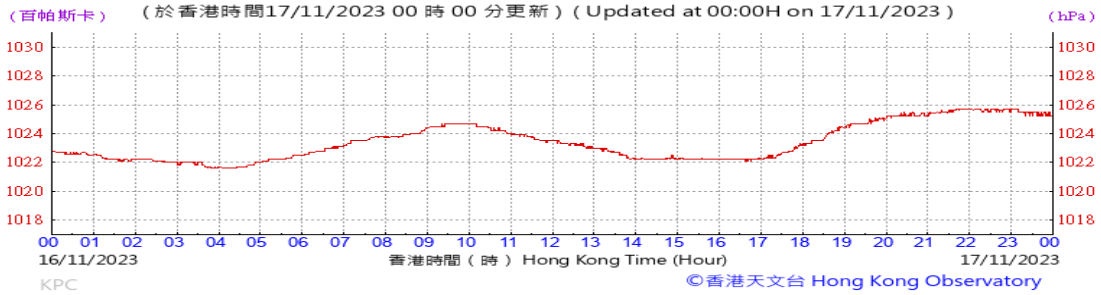

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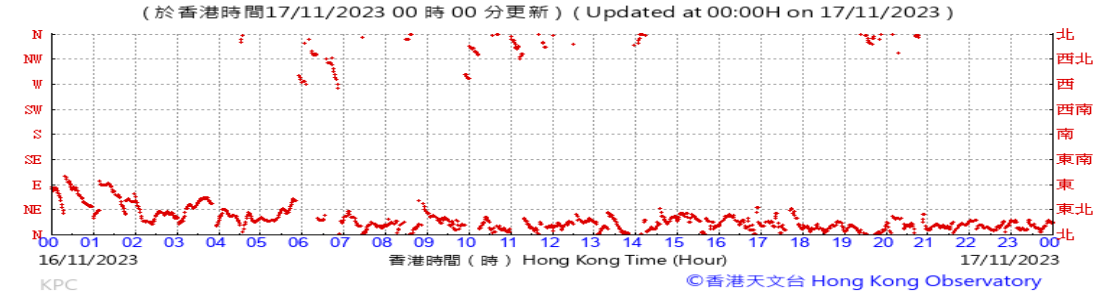

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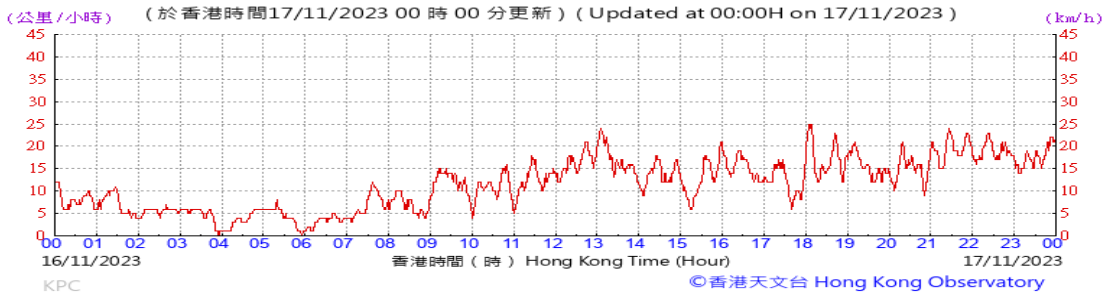

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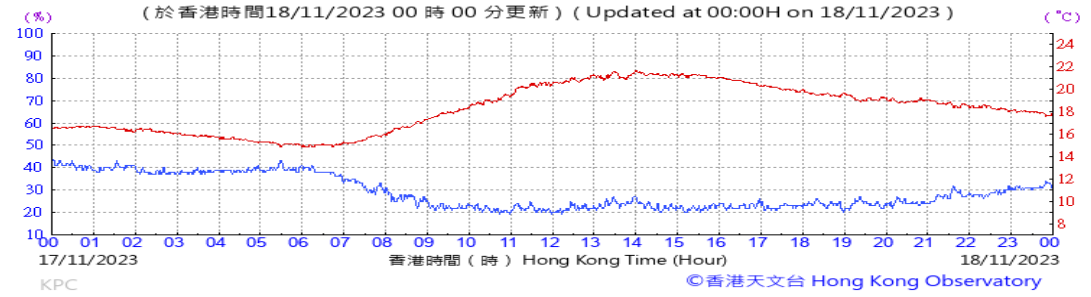

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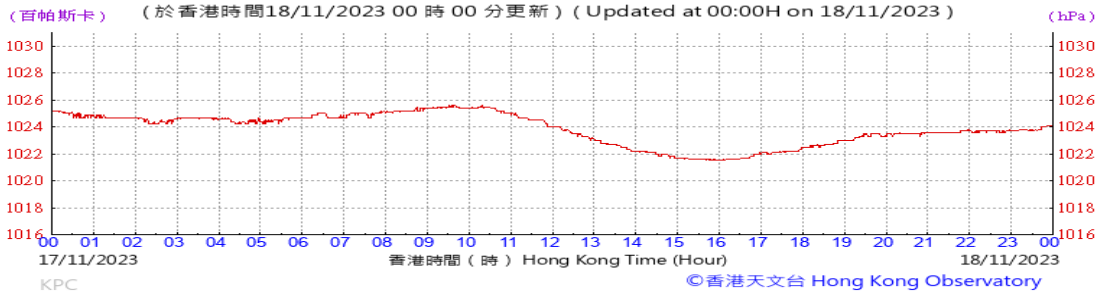

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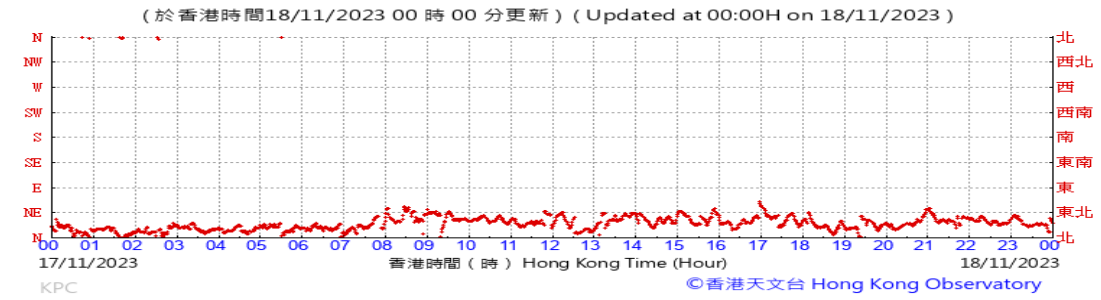

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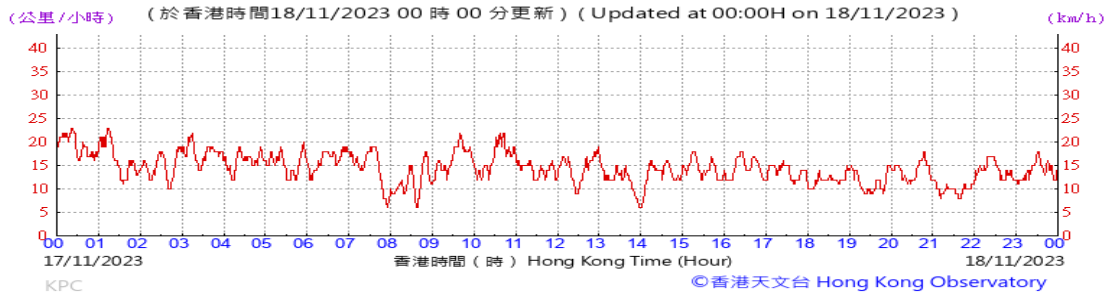

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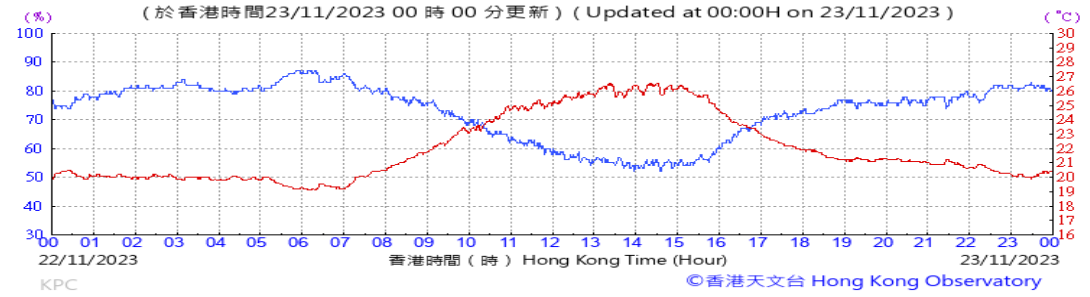

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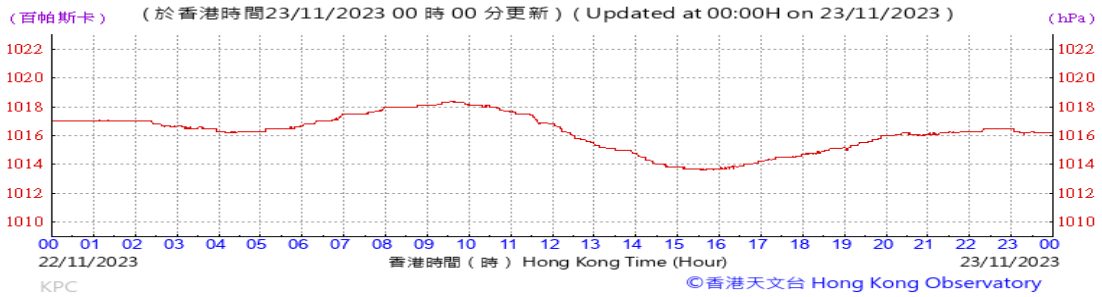

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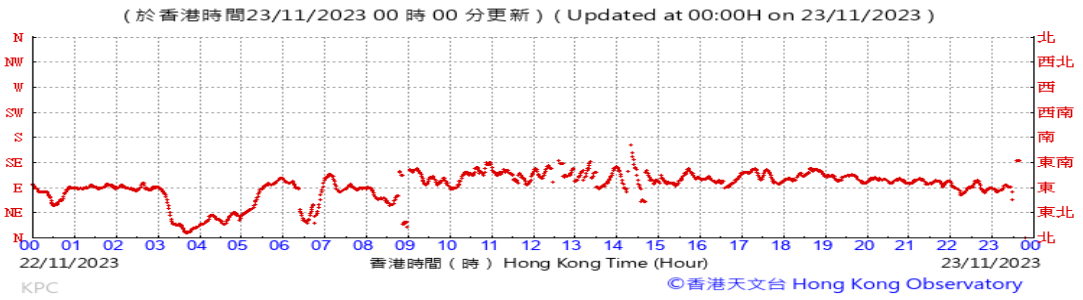

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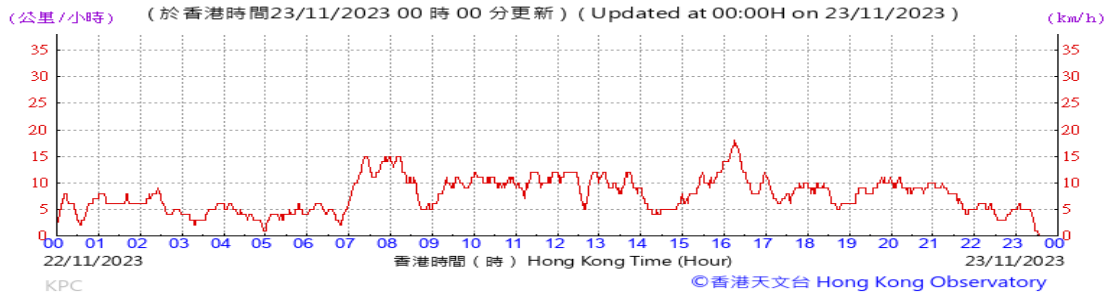

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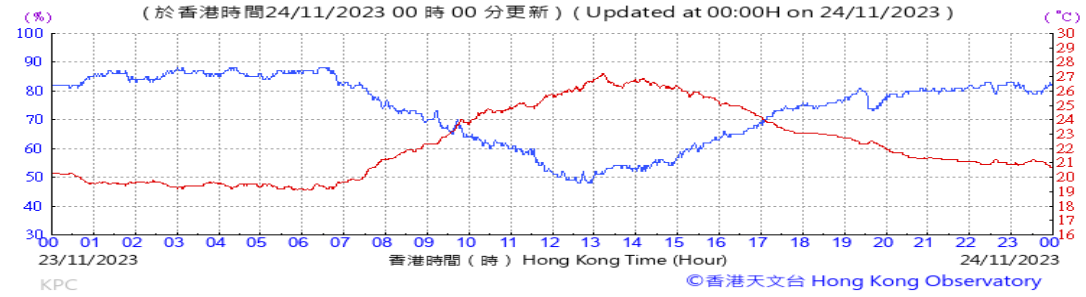

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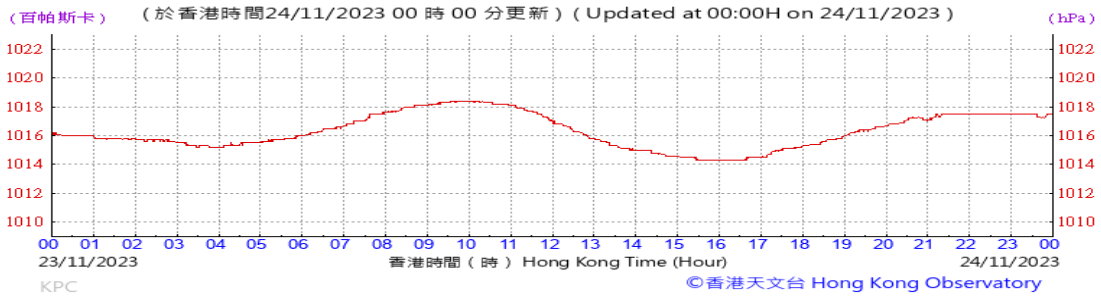

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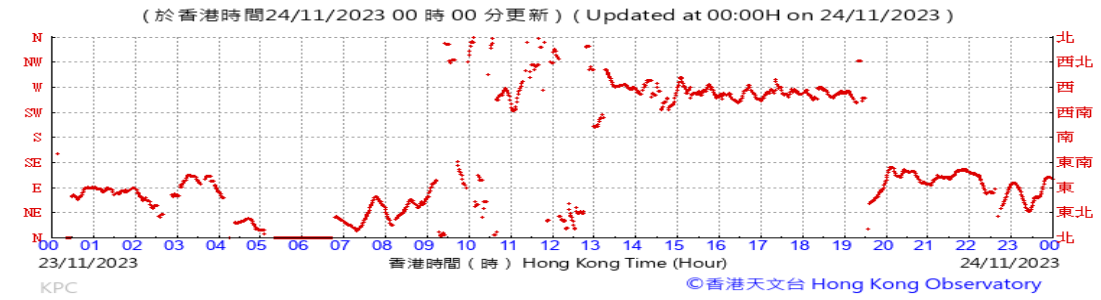

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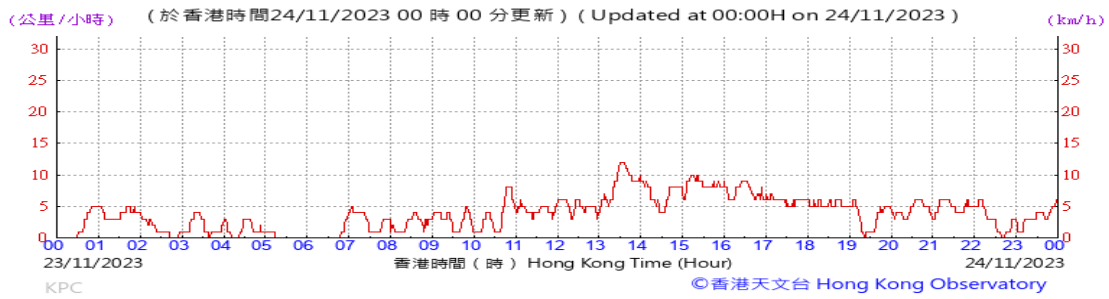

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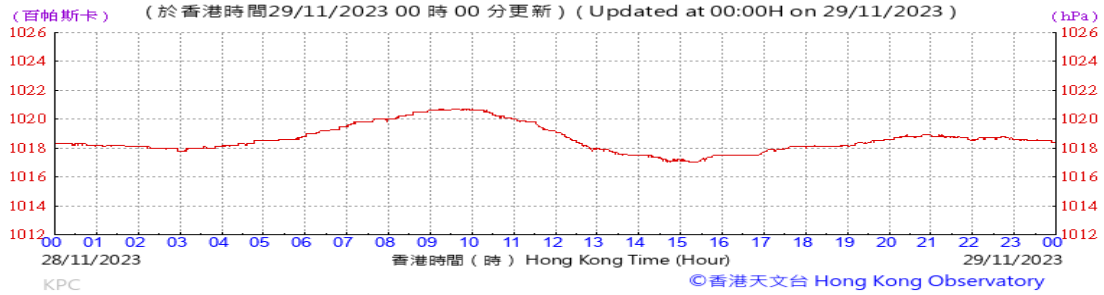

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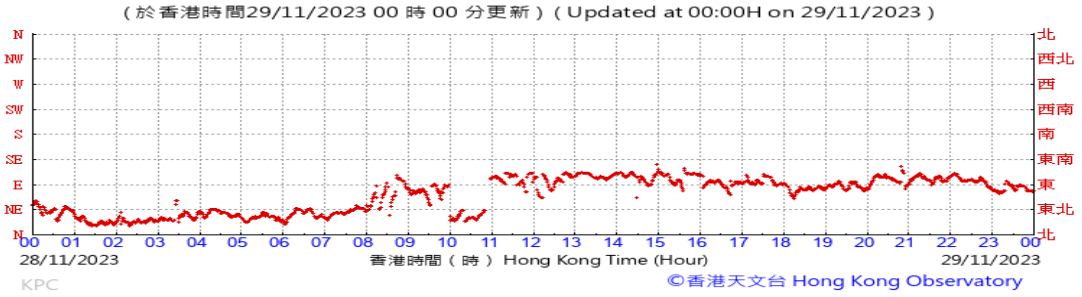

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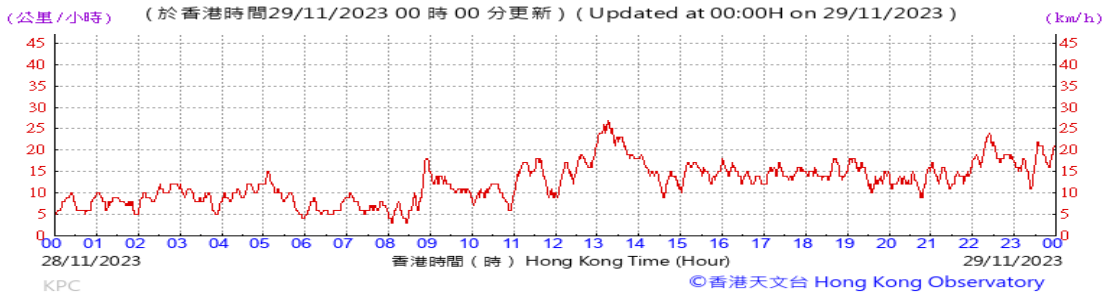

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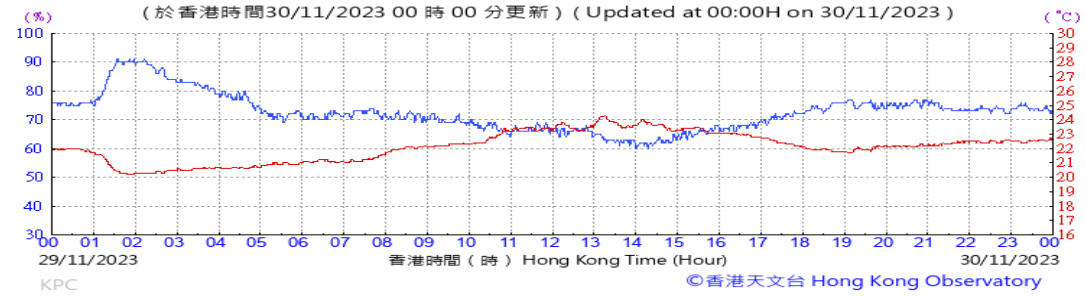

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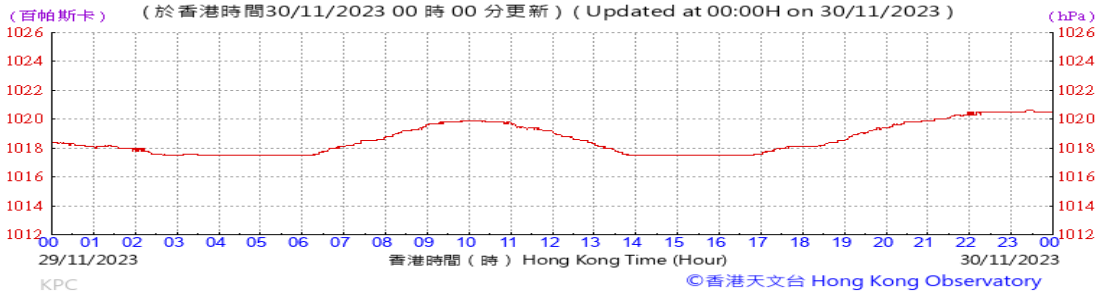

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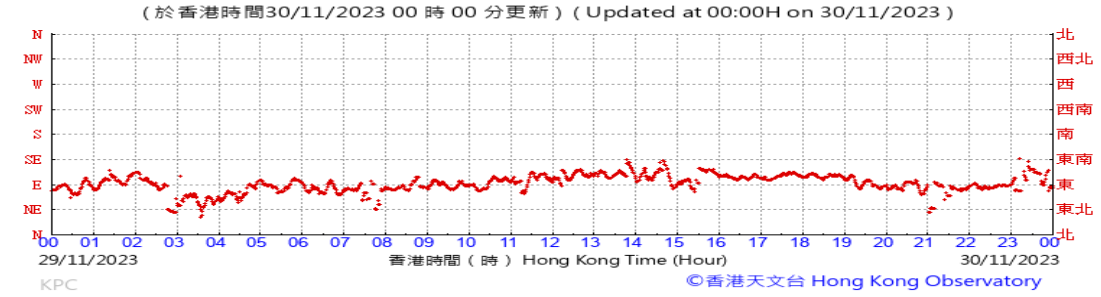

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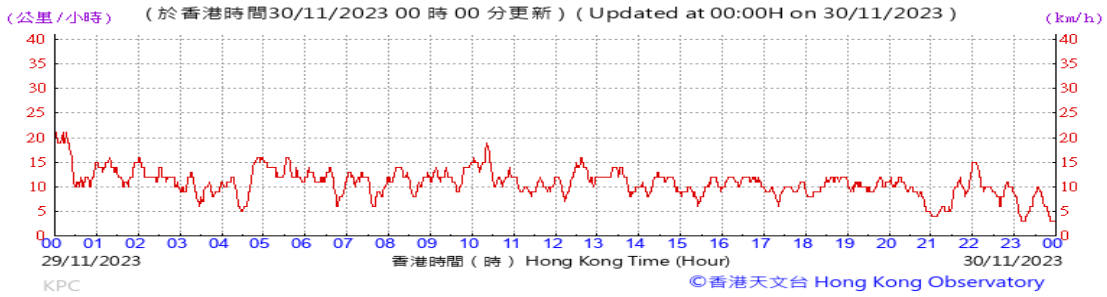

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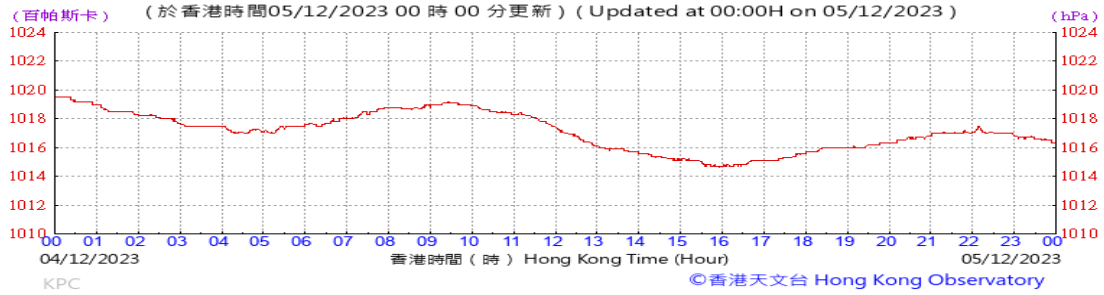

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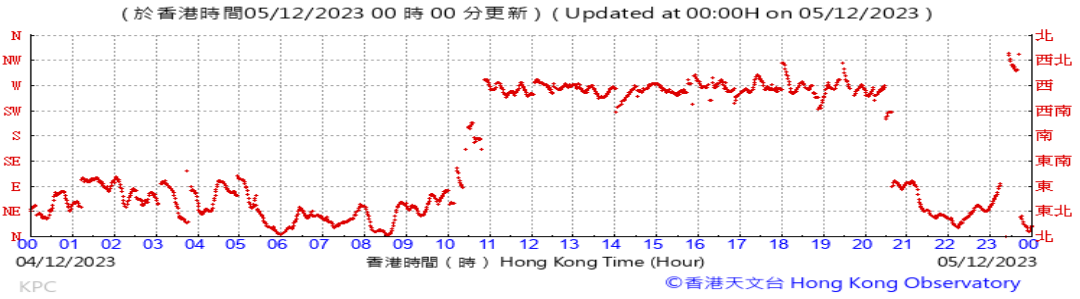

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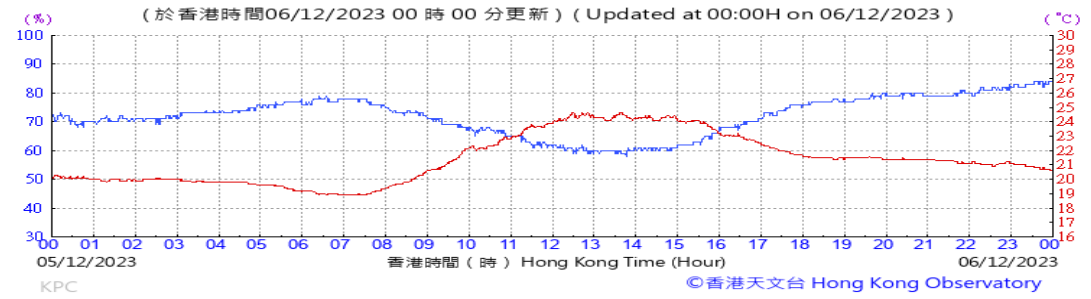

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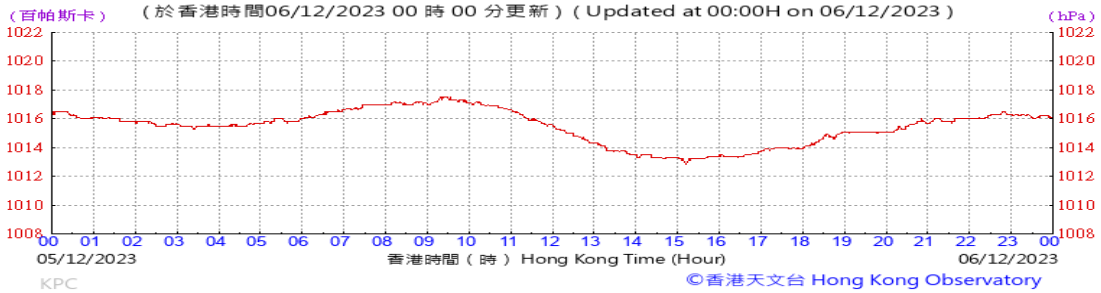

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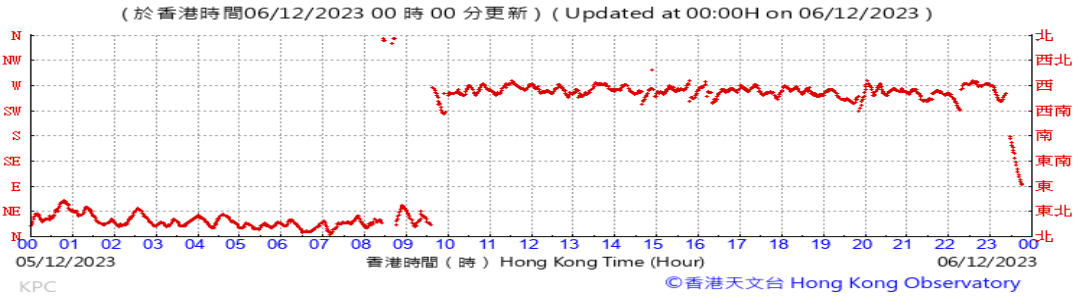

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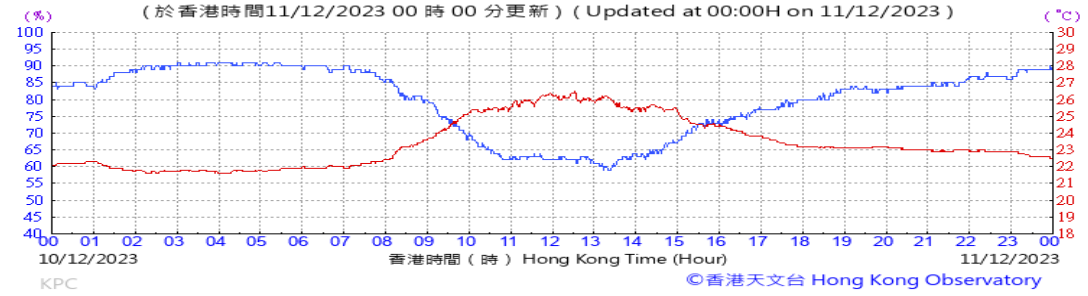

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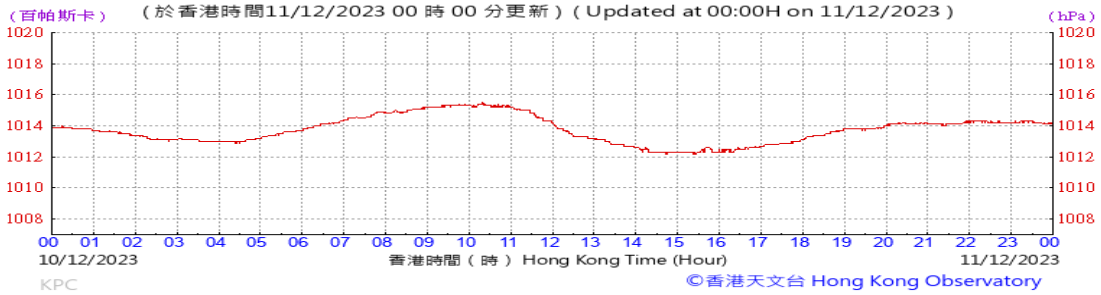

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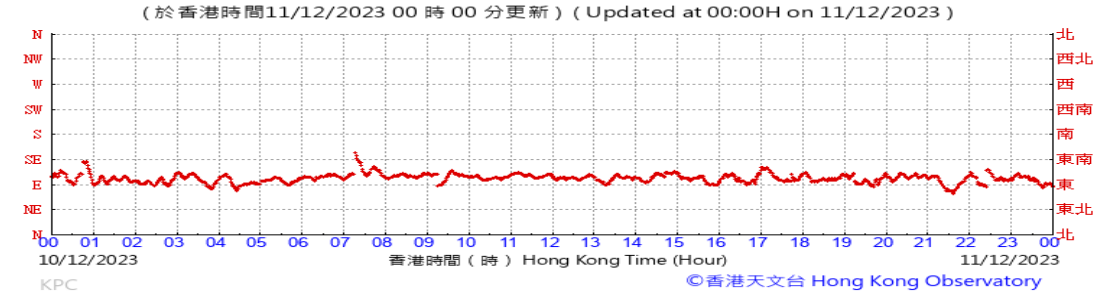

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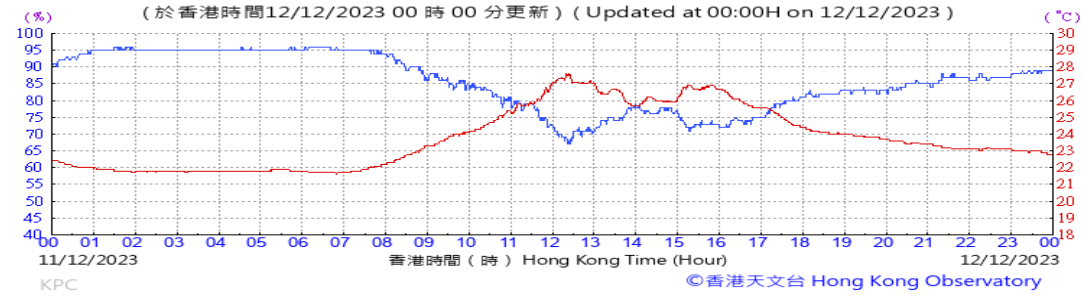

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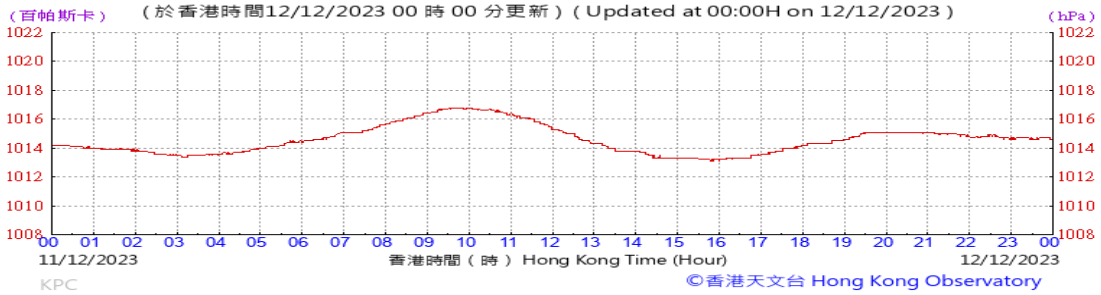

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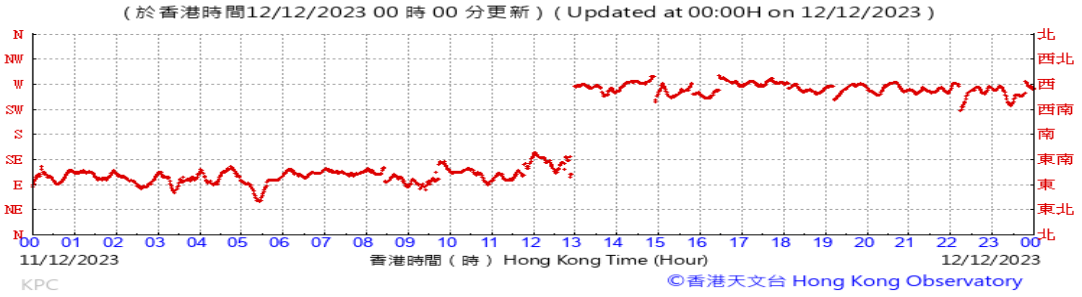

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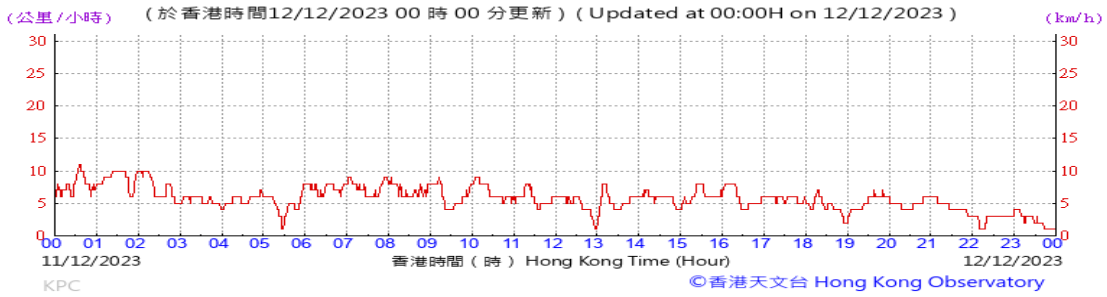

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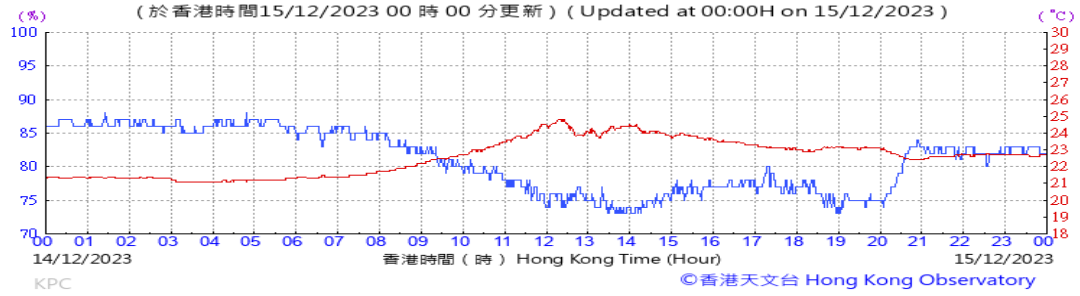

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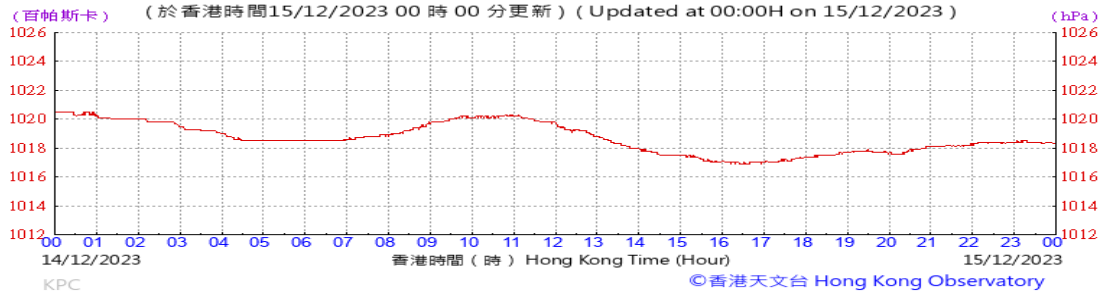

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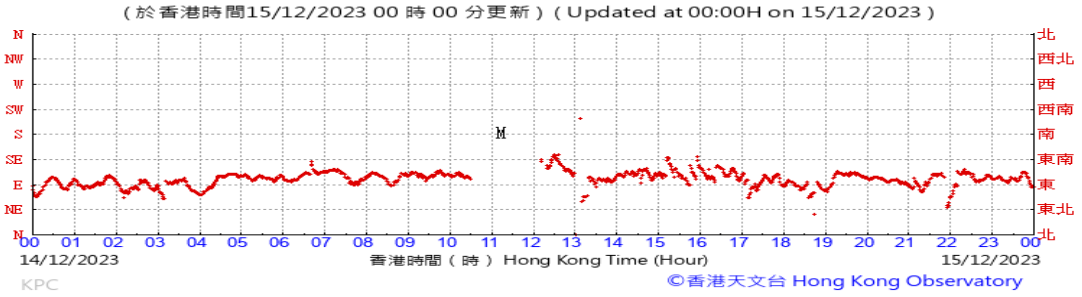

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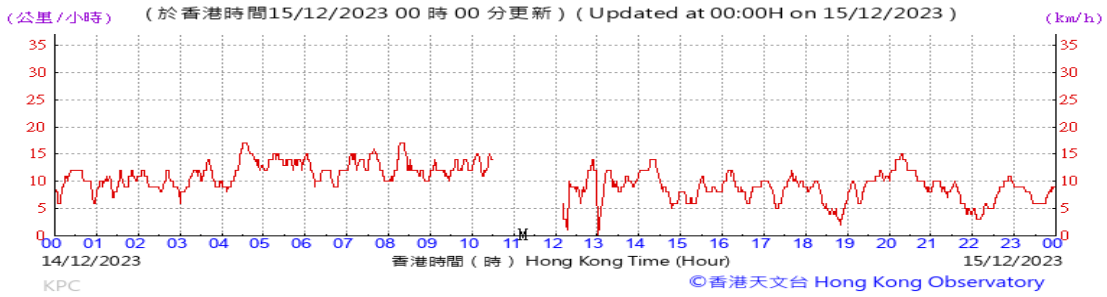

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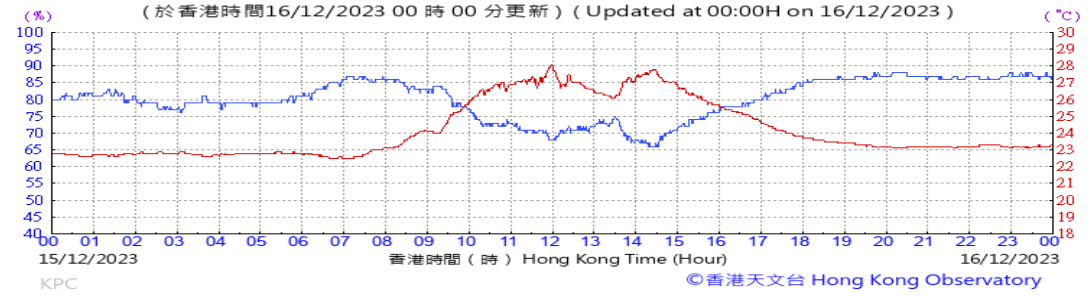

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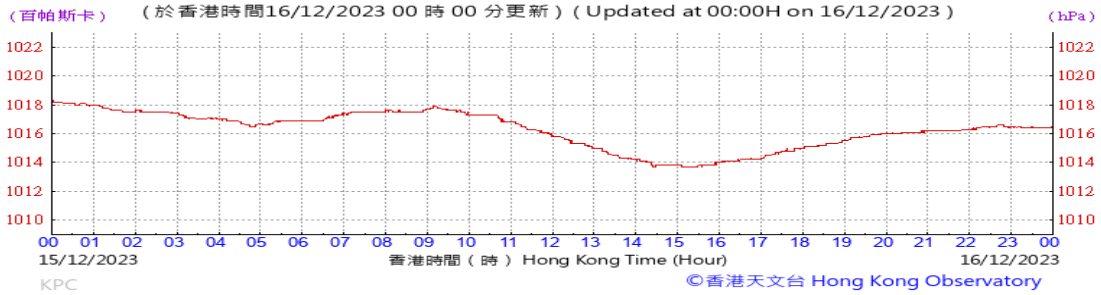

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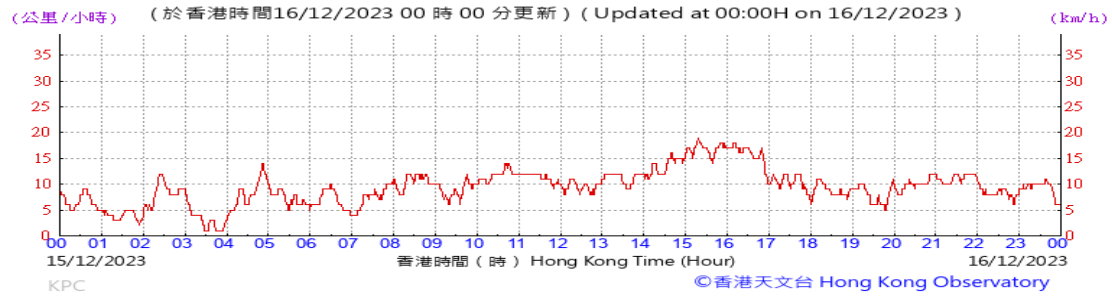

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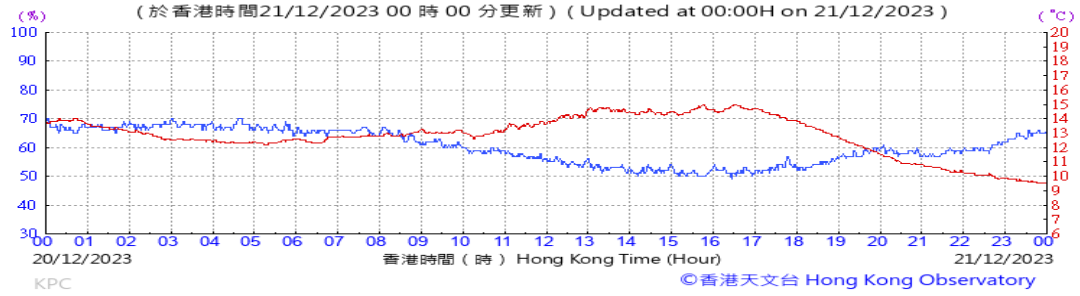

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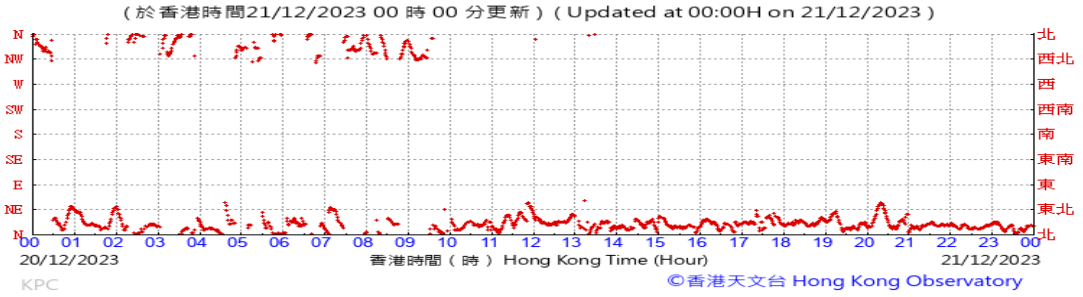

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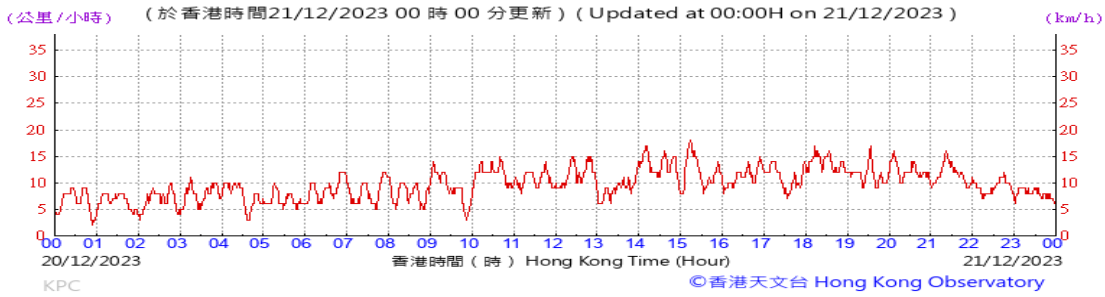

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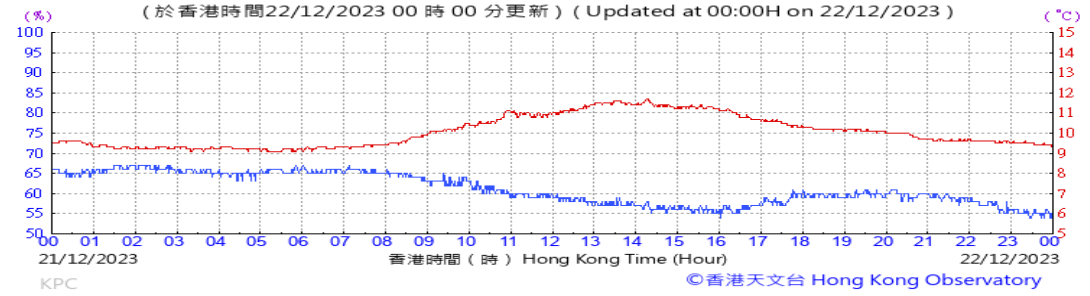

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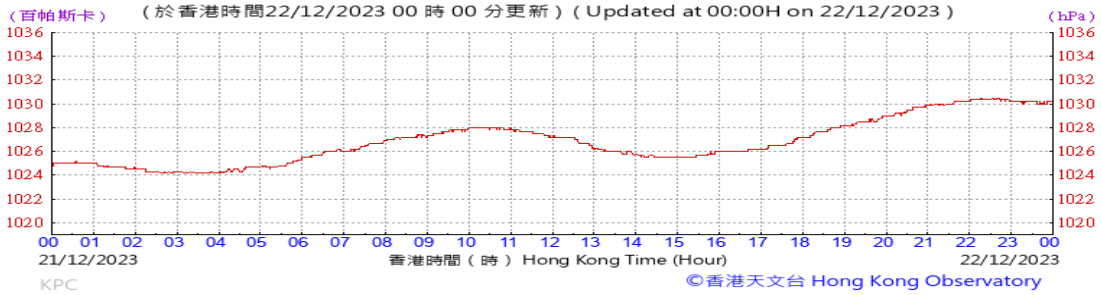

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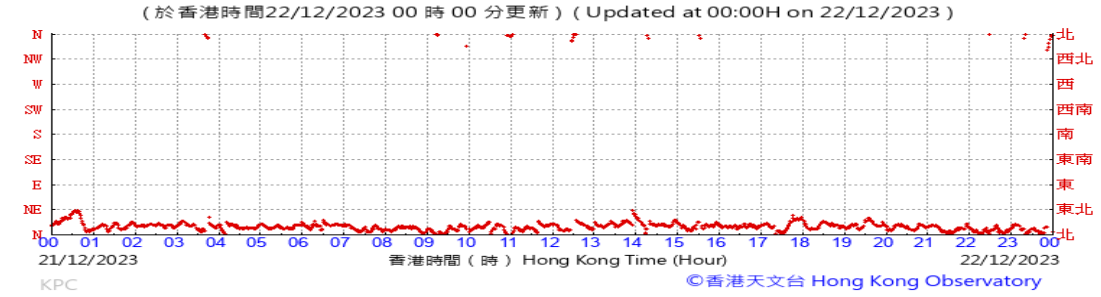

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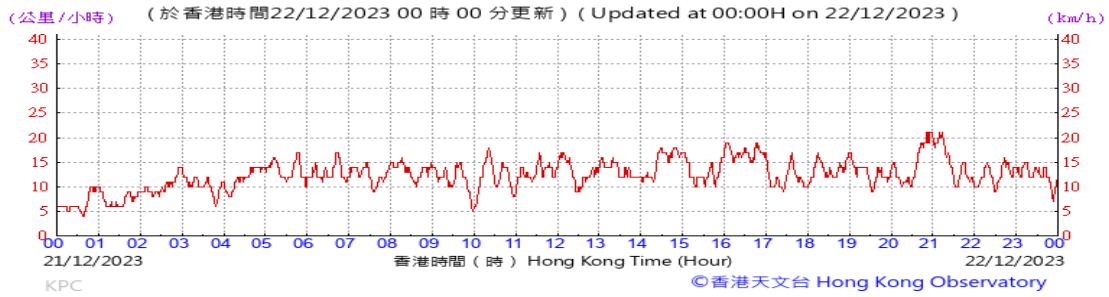

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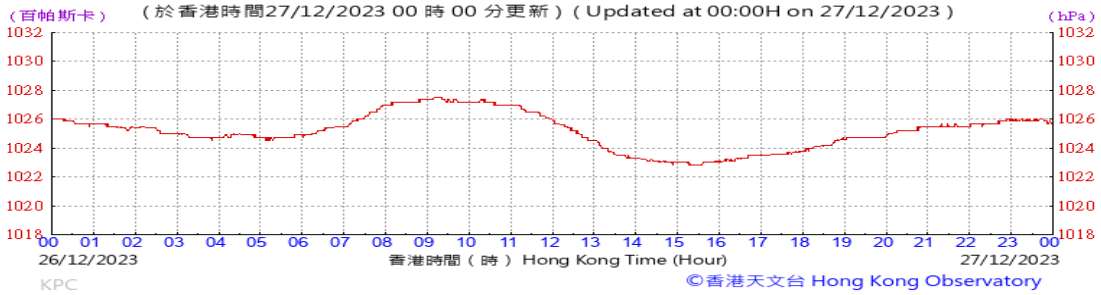

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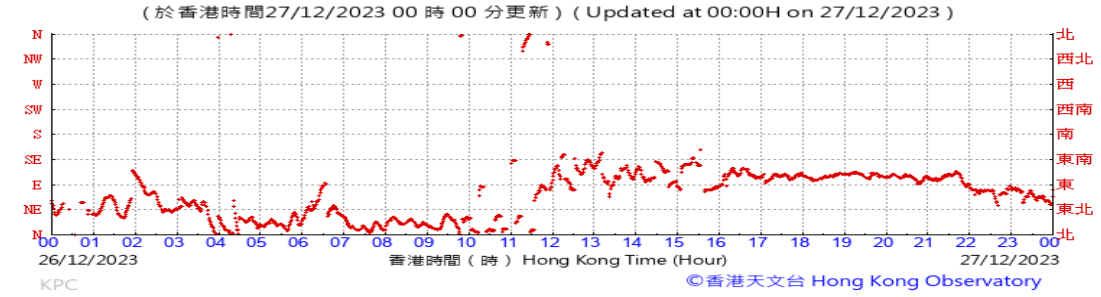

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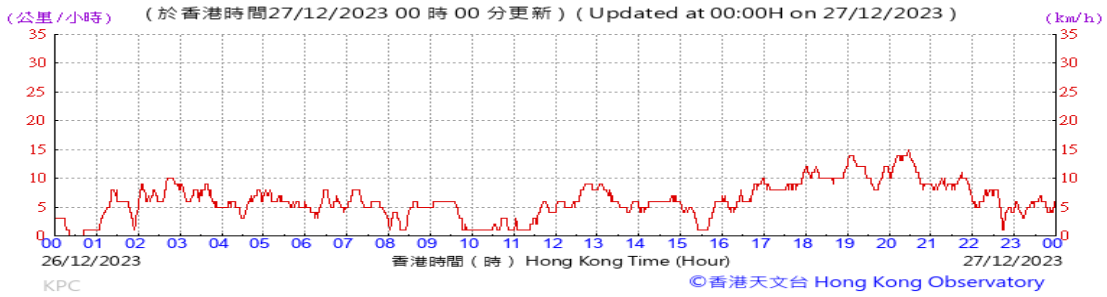

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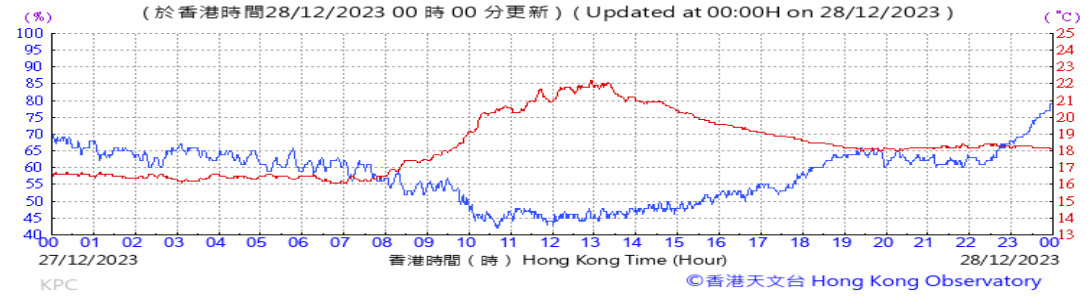

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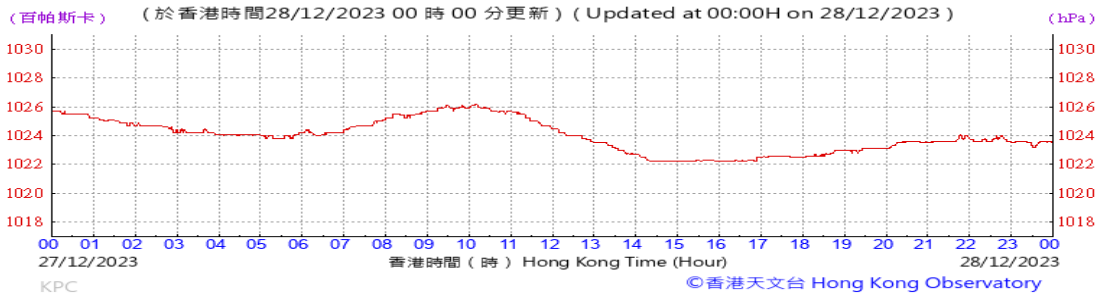

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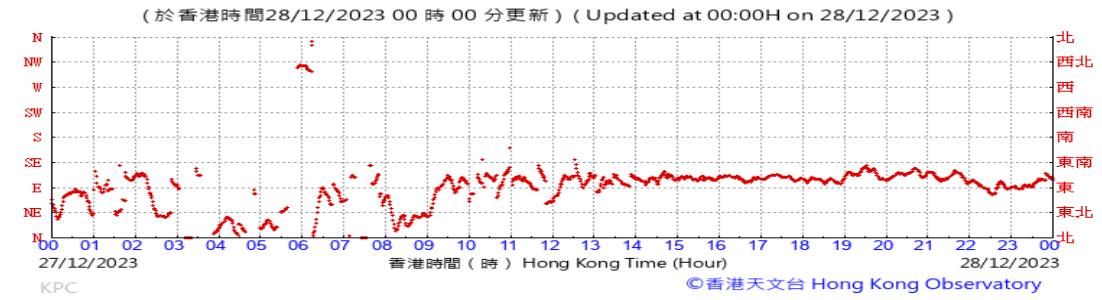

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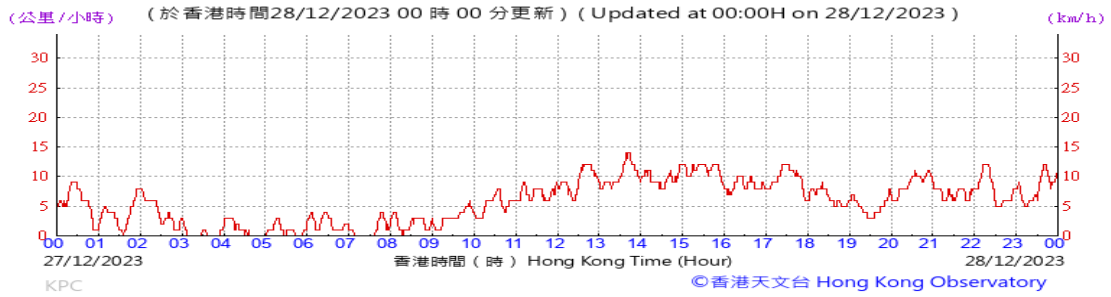
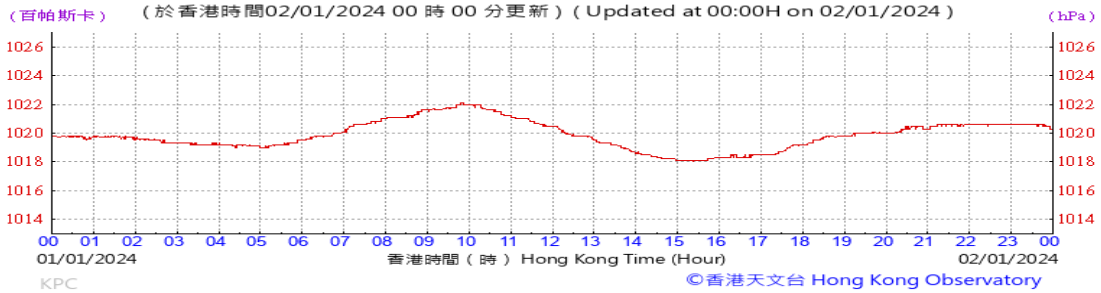


Temperature/Humidity:

Pressure:



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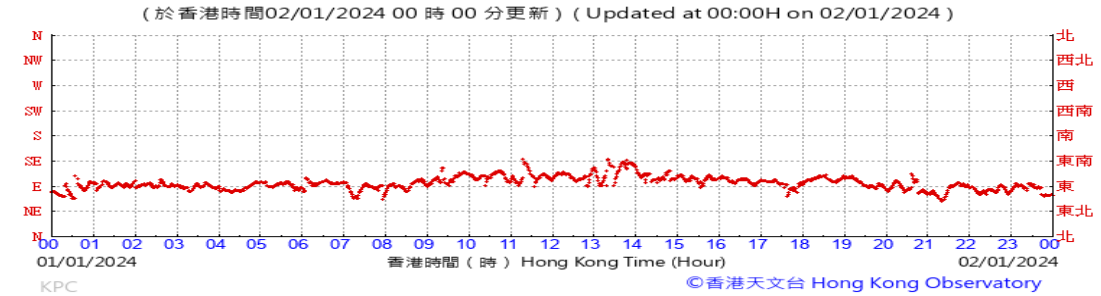

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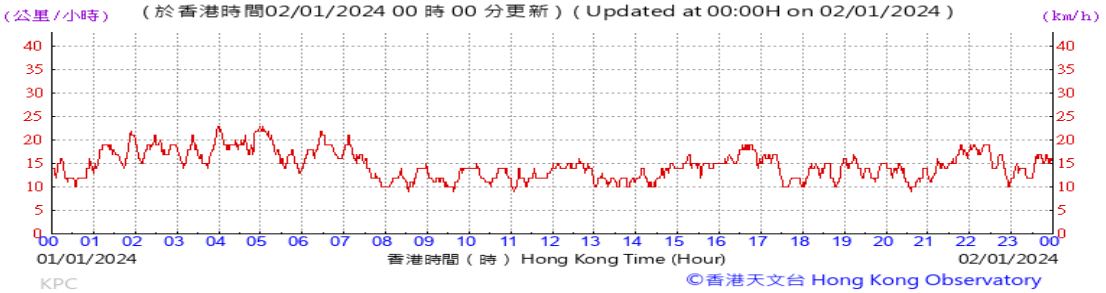

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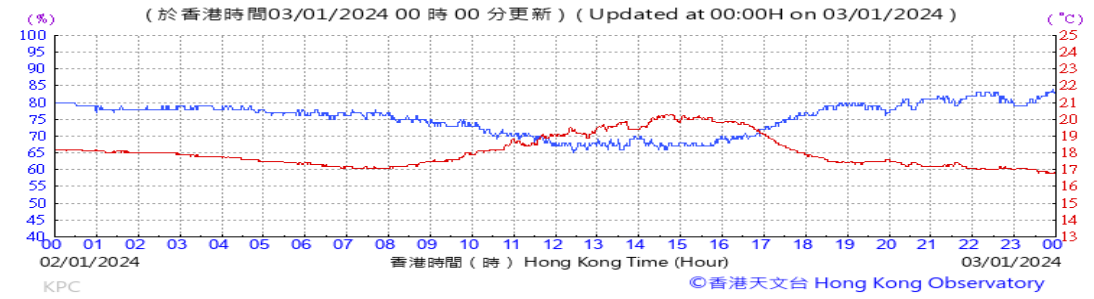

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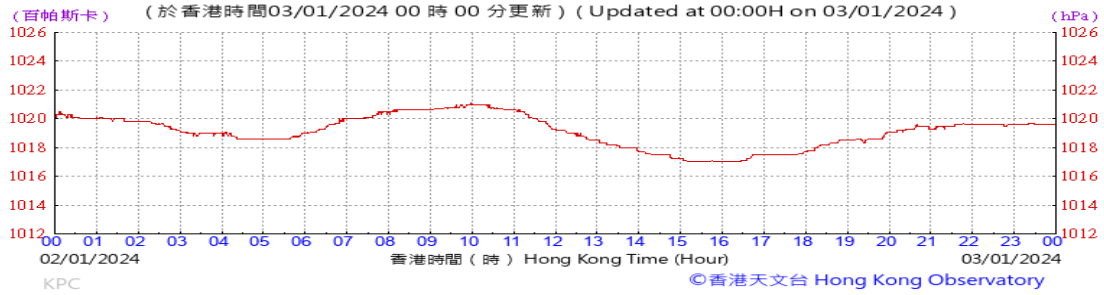

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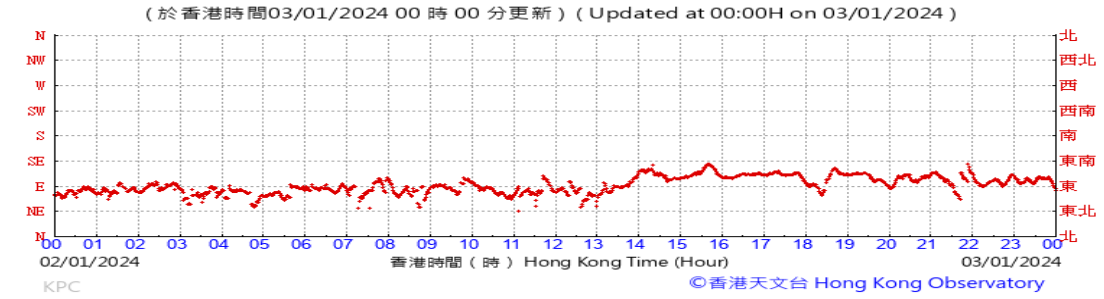
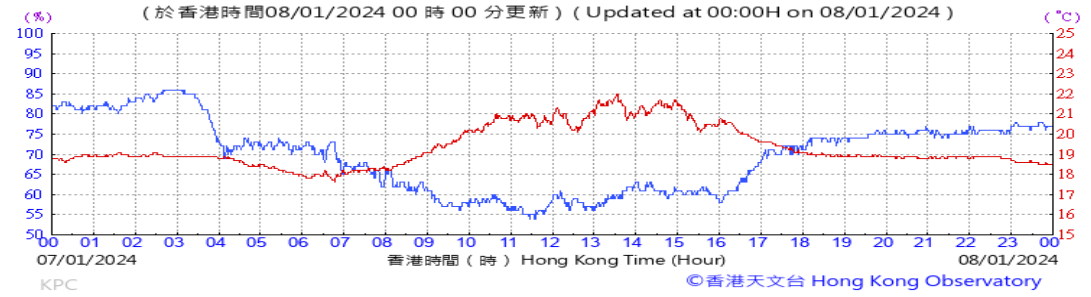


Wind Speed:

Temperature/Humidity:



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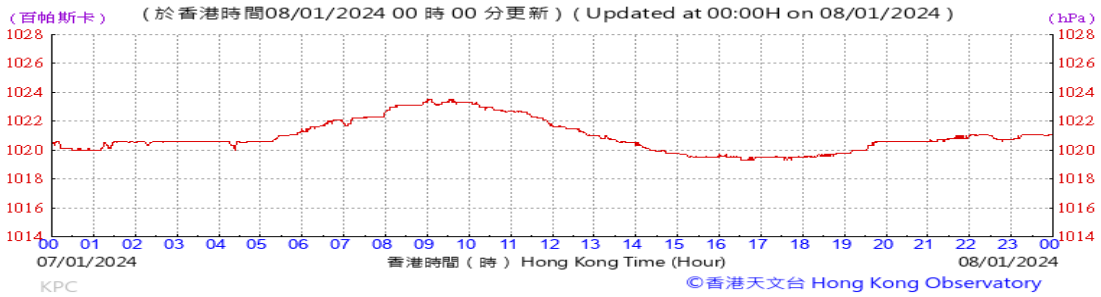

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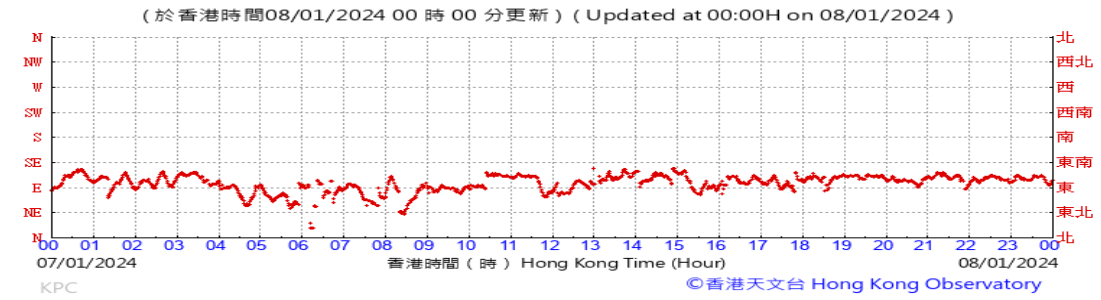
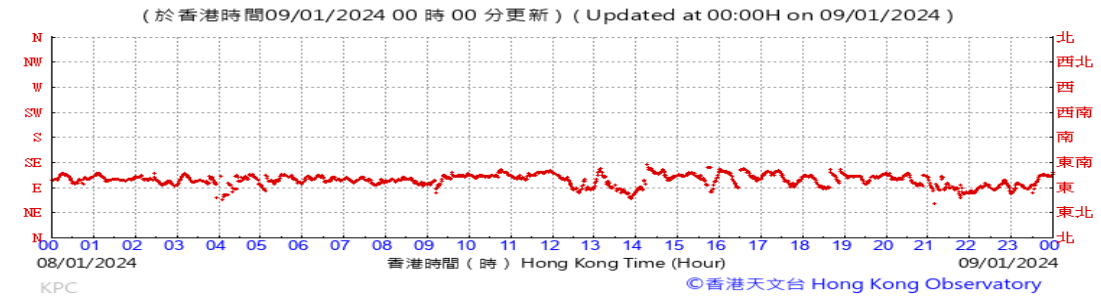


Wind Speed:

Temperature/Humidity:

Pressure:

Wind Direction:



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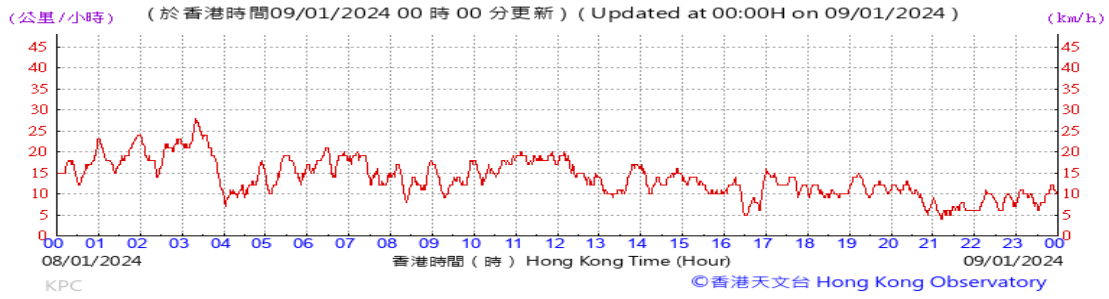

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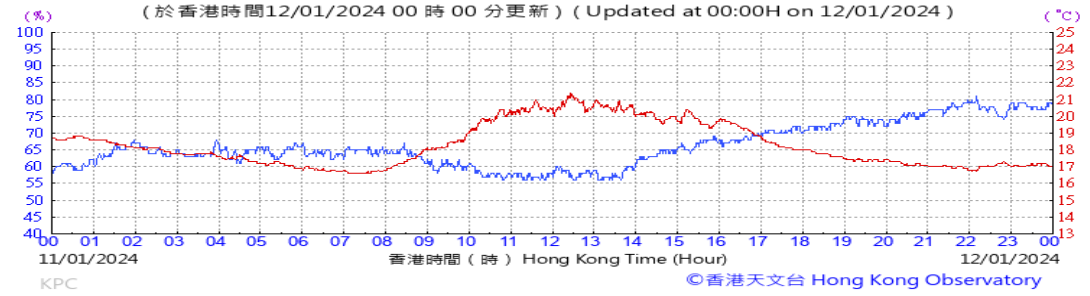

Pressure:

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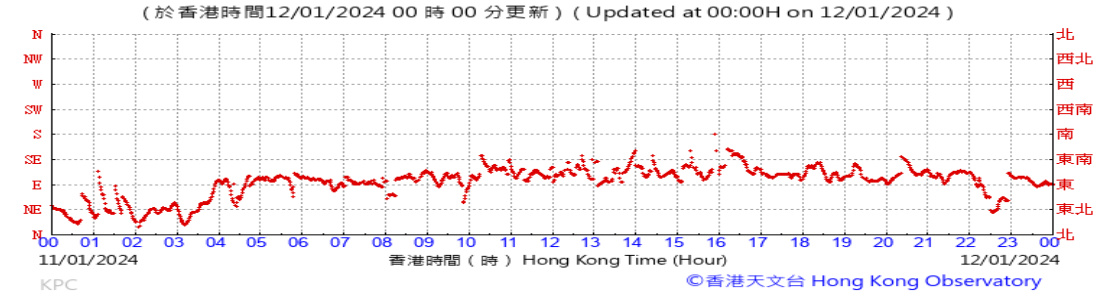

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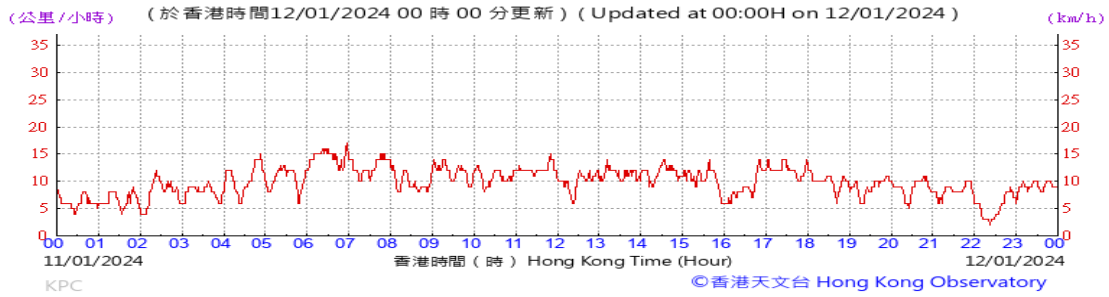
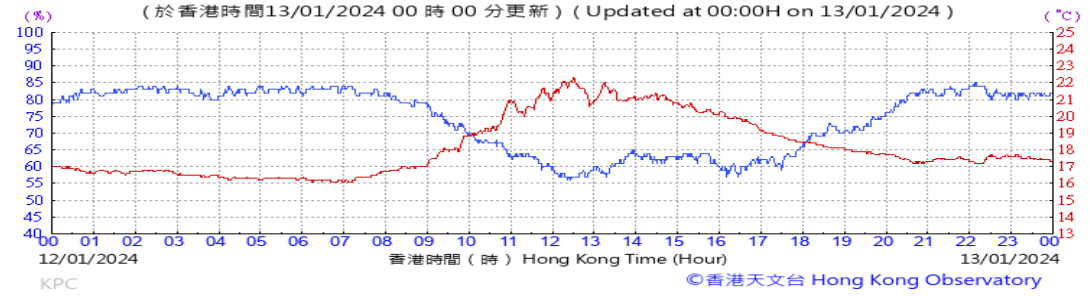


Temperature/Humidity:



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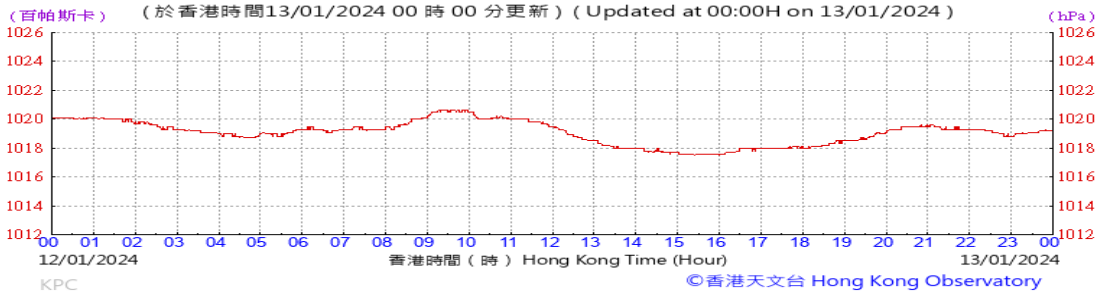
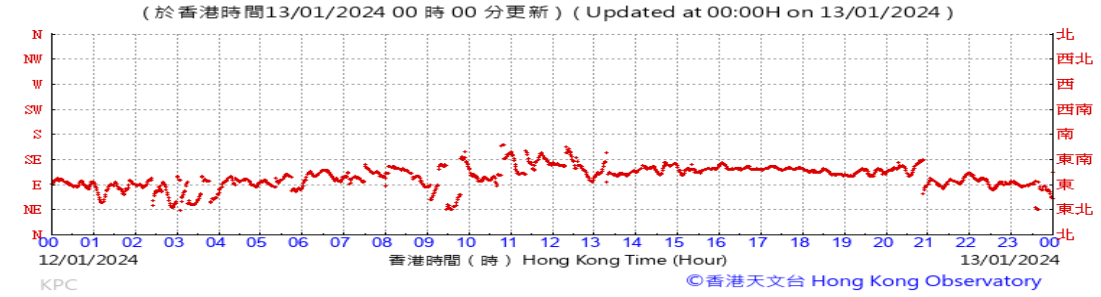
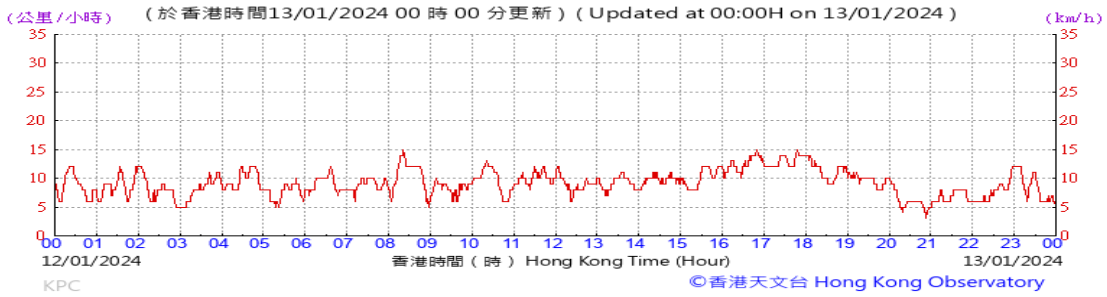


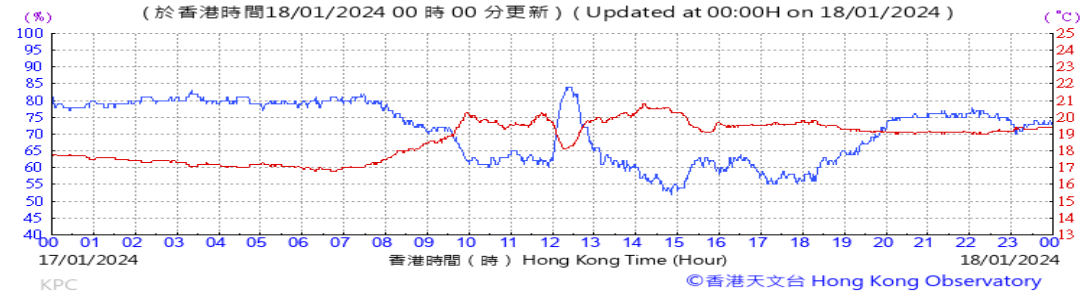
Wind Direction:



Wind Speed:



Temperature/Humidity:



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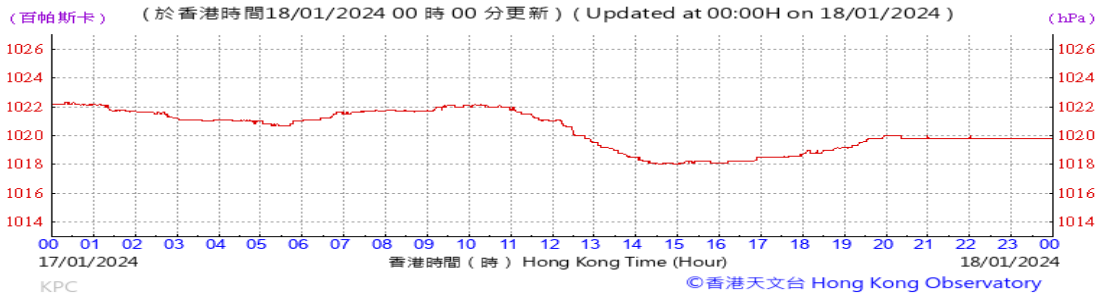

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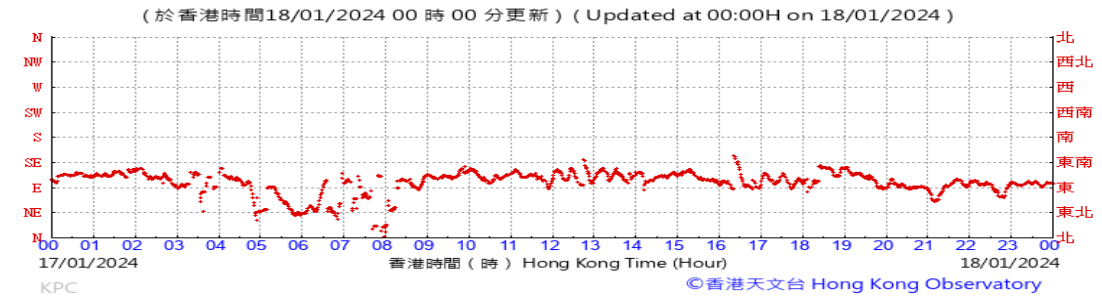
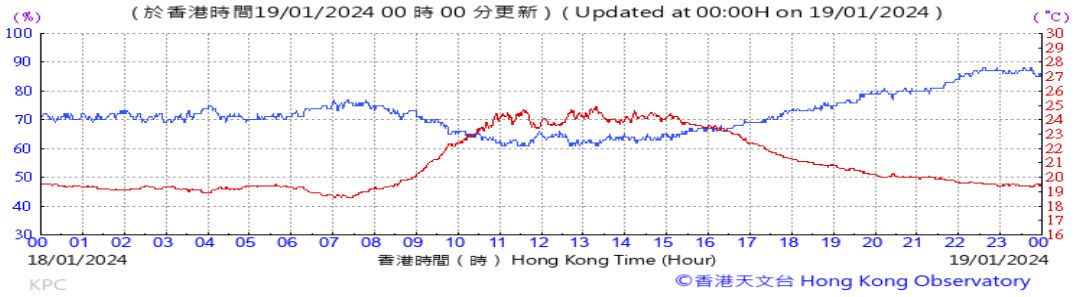


Wind Speed:

Temperature/Humidity:



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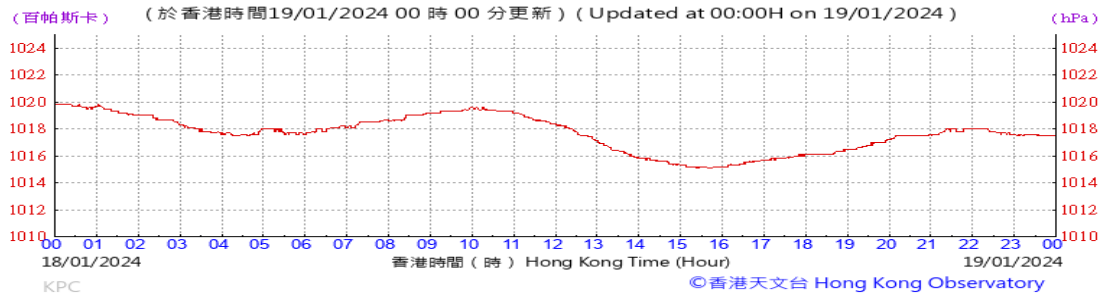

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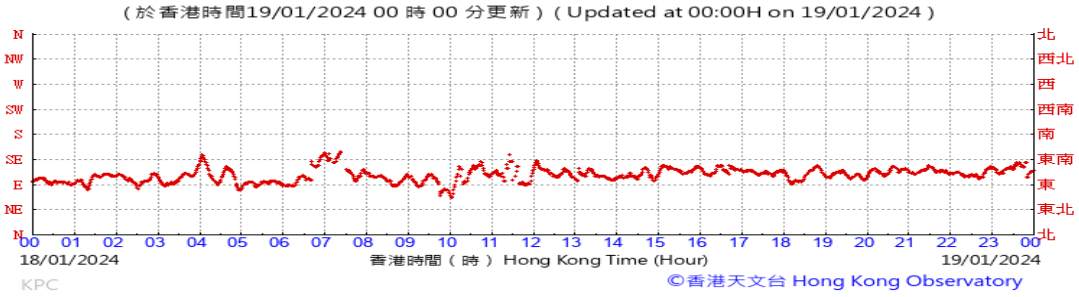
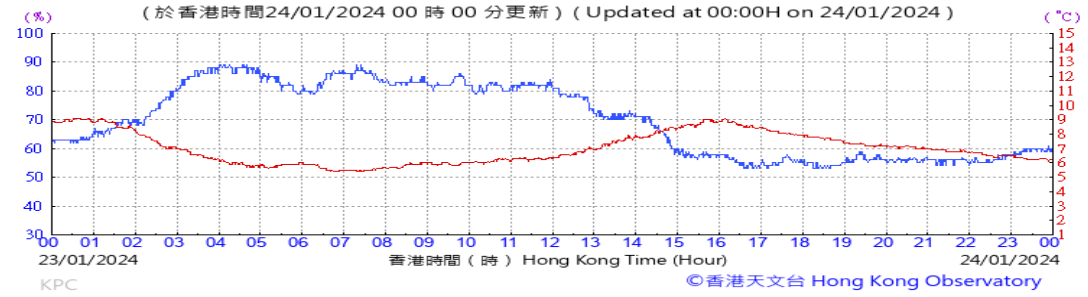


Wind Speed:

Temperature/Humidity:



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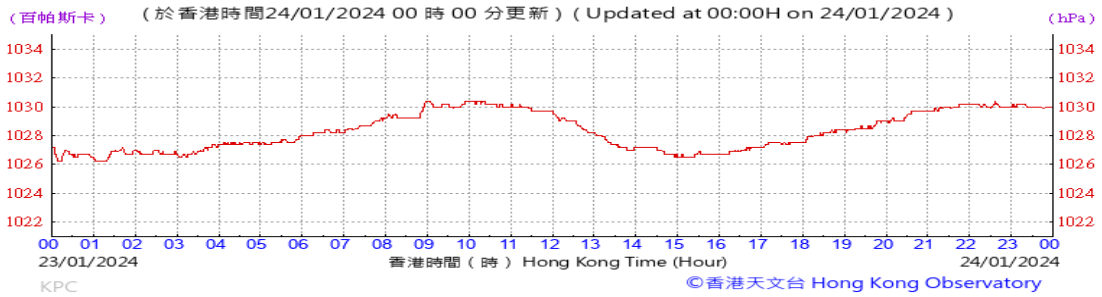

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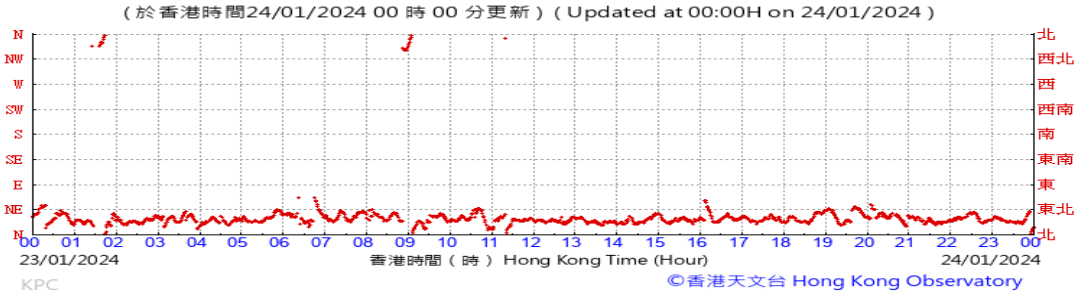
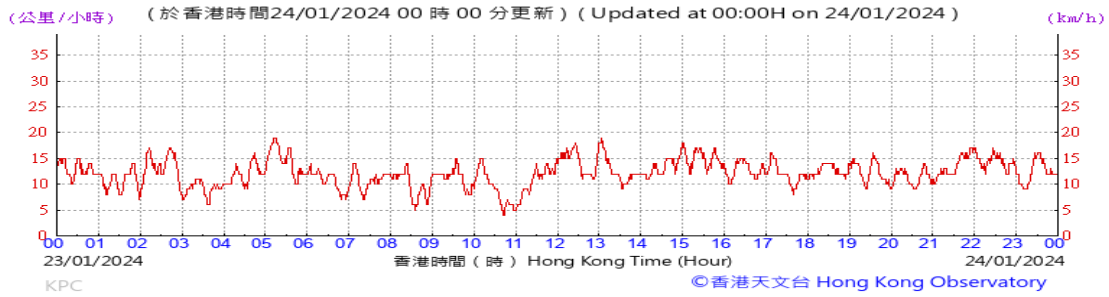
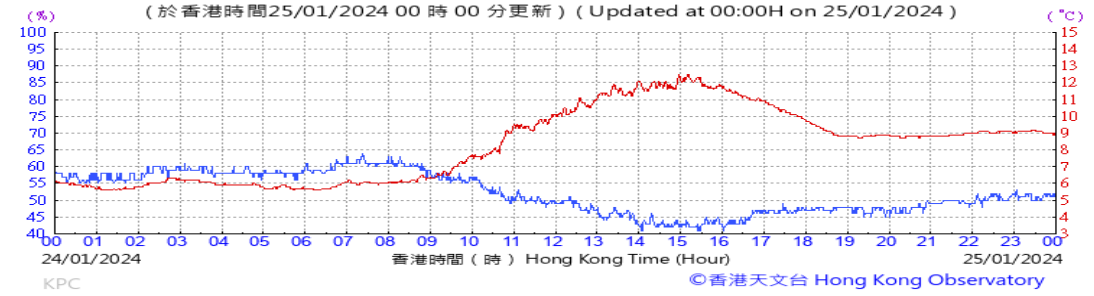


Wind Speed:



Temperature/Humidity:



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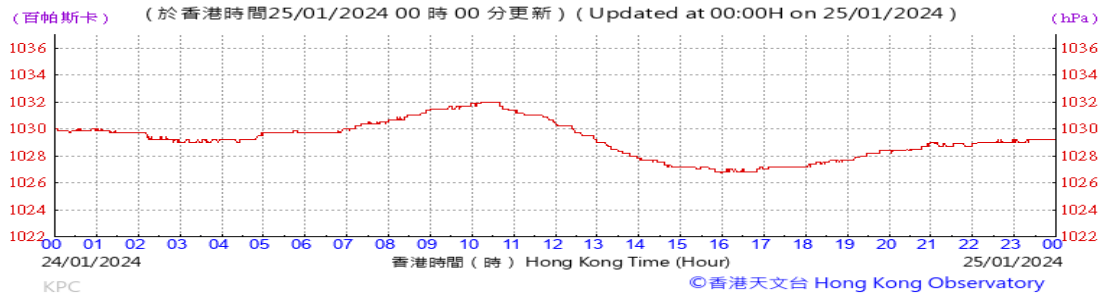

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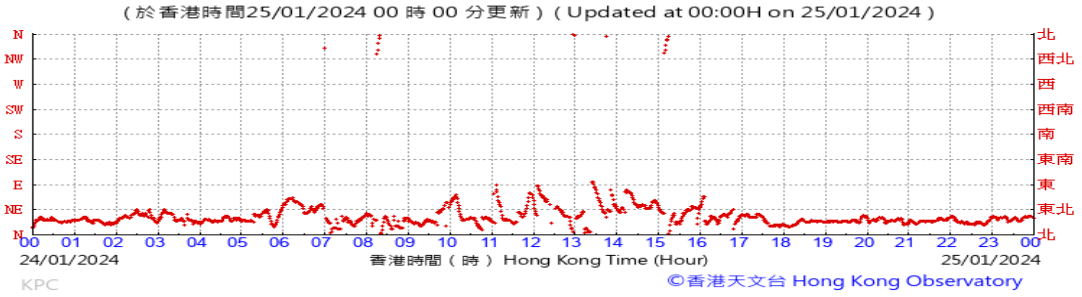

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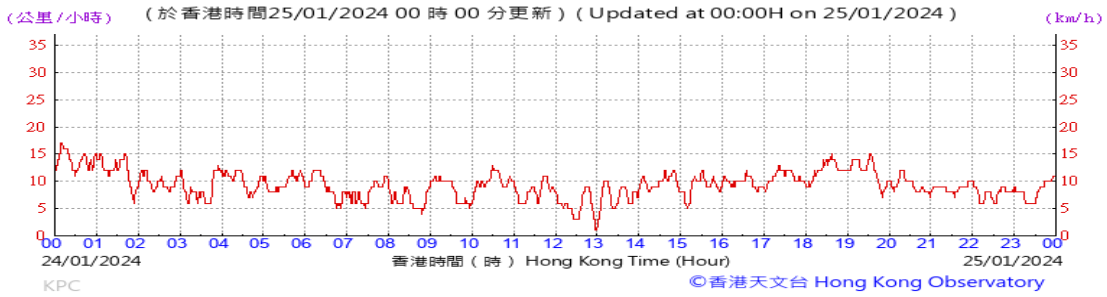

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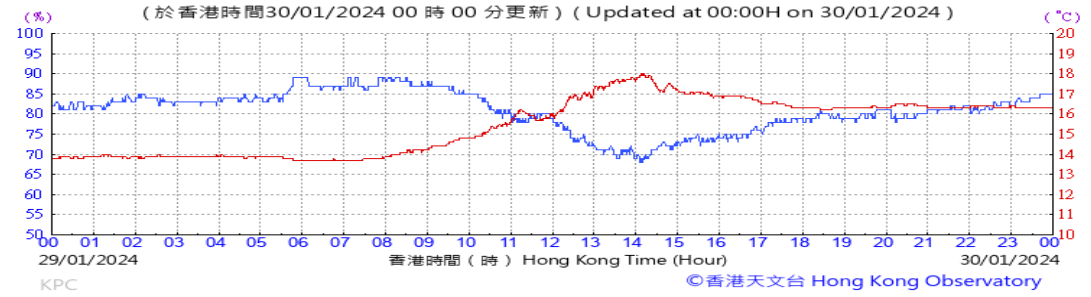

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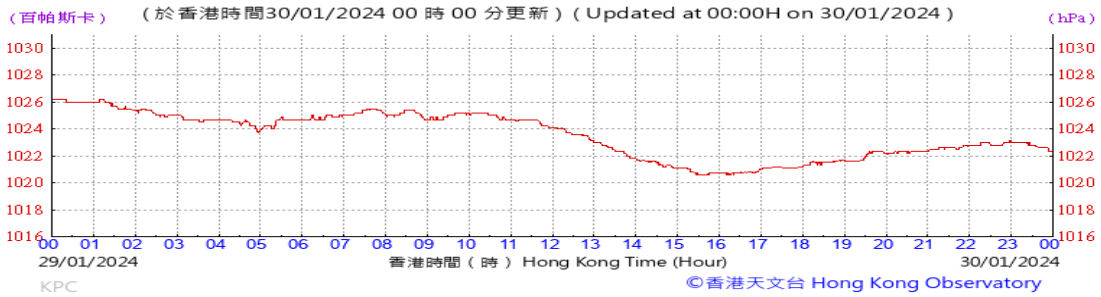

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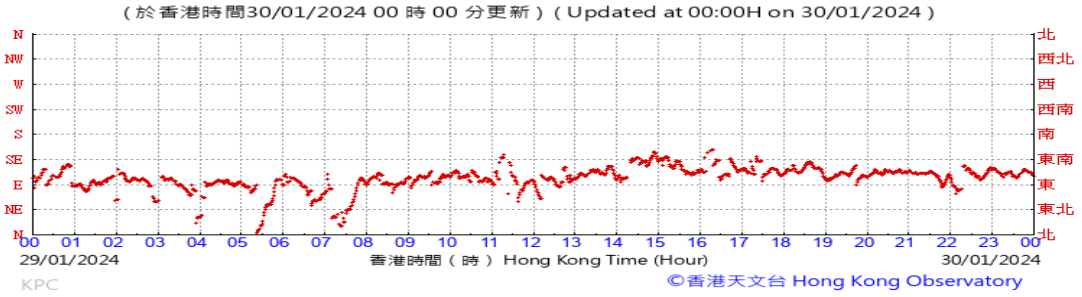

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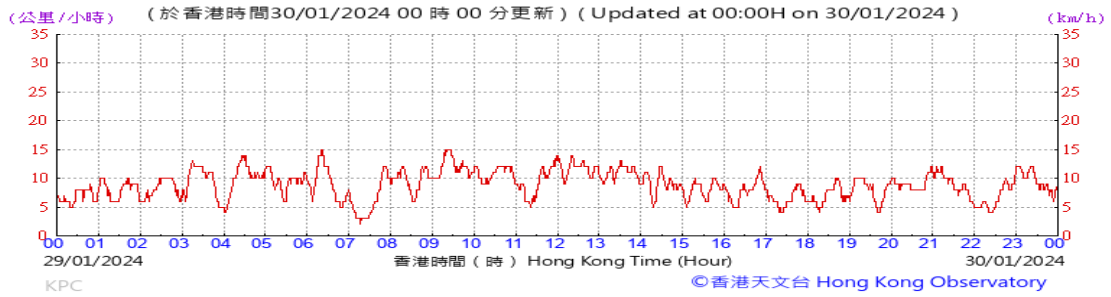
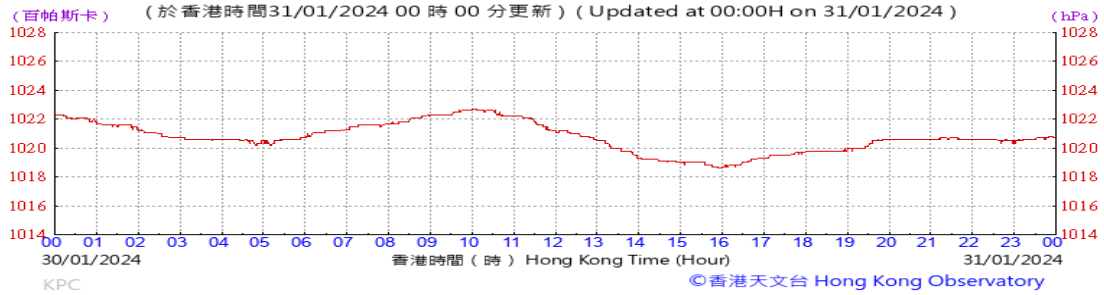


Temperature/Humidity:

Pressure:



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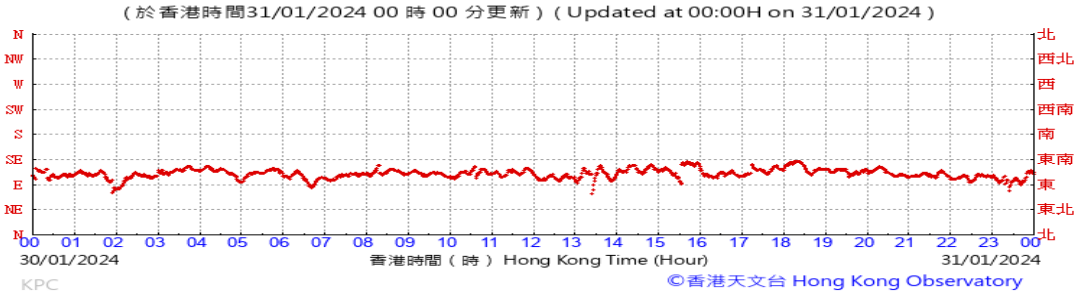

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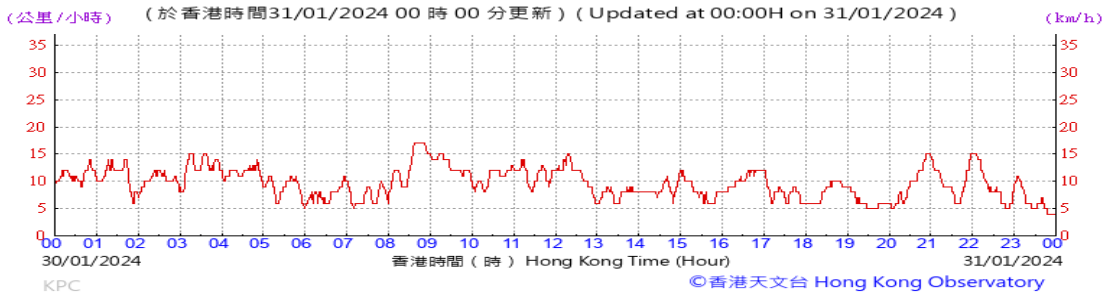
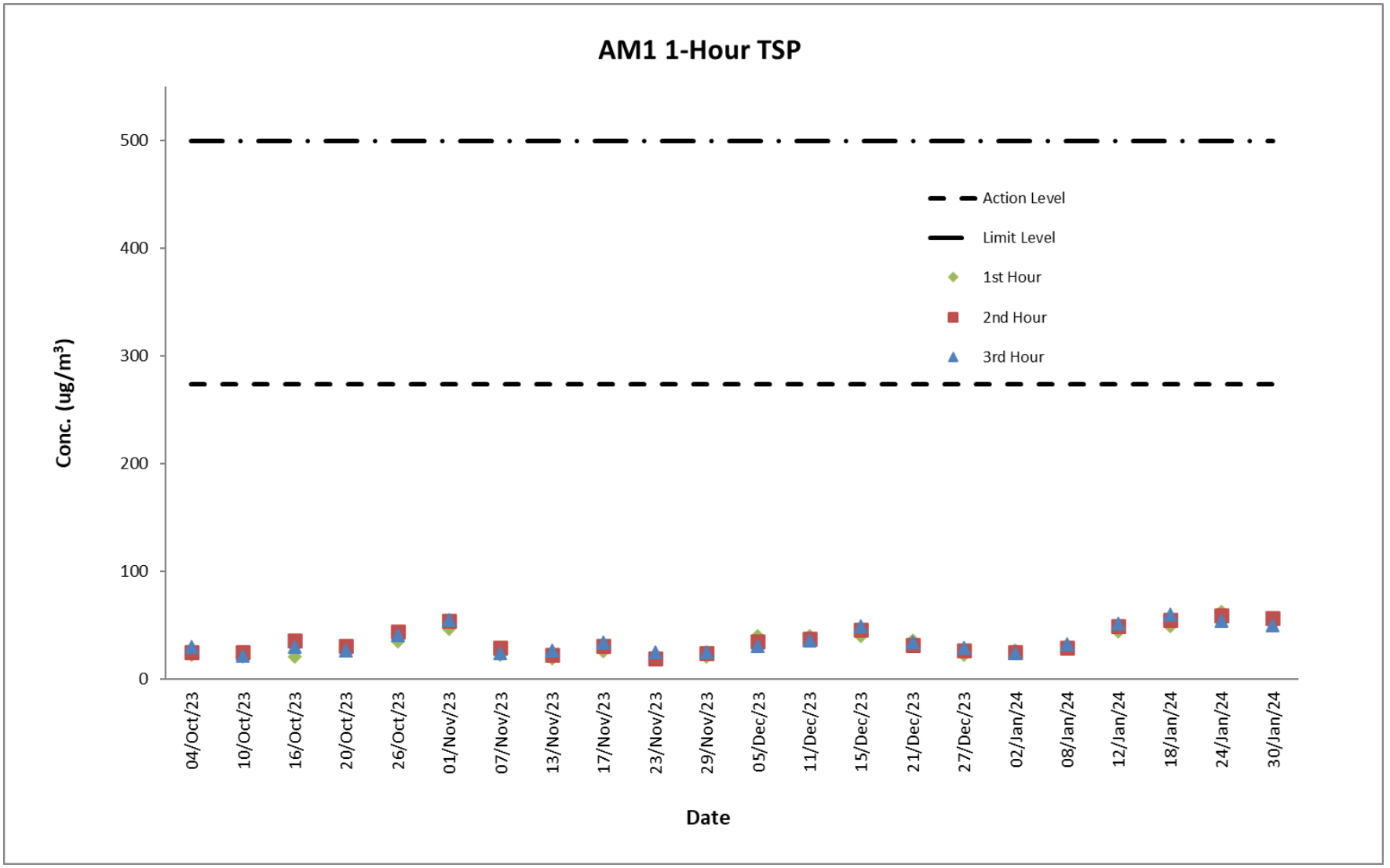


E. Graphical Plots of the Monitoring Results

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		
01-Nov-23	Sunny	8:24 - 11:24	47	54	55	273.7	500
07-Nov-23	Cloudy	8:28 - 11:28	23	29	24	273.7	500
13-Nov-23	Sunny	8:23 - 11:23	19	23	27	273.7	500
17-Nov-23	Sunny	8:23 - 11:23	26	31	34	273.7	500
23-Nov-23	Sunny	8:30 - 11:30	21	19	25	273.7	500
29-Nov-23	Fine	8:20 - 11:20	21	24	25	273.7	500
05-Dec-23	Sunny	8:39 - 11:39	40	35	31	273.7	500
11-Dec-23	Fine	8:31 - 11:31	40	38	36	273.7	500
15-Dec-23	Cloudy	8:33 - 11:33	40	46	49	273.7	500
21-Dec-23	Cloudy	8:33 - 11:33	36	32	34	273.7	500
27-Dec-23	Fine	8:33 - 11:33	23	27	29	273.7	500
02-Jan-24	Cloudy	8:31 - 11:31	27	25	24	273.7	500
08-Jan-24	Fine	8:32 - 11:32	31	29	33	273.7	500
12-Jan-24	Cloudy	8:28 - 11:28	44	49	52	273.7	500
18-Jan-24	Fine	8:33 - 11:33	49	55	60	273.7	500
24-Jan-24	Cloudy	8:23 - 11:23	63	59	54	273.7	500
30-Jan-24	Cloudy	8:28 - 11:28	55	57	50	273.7	500

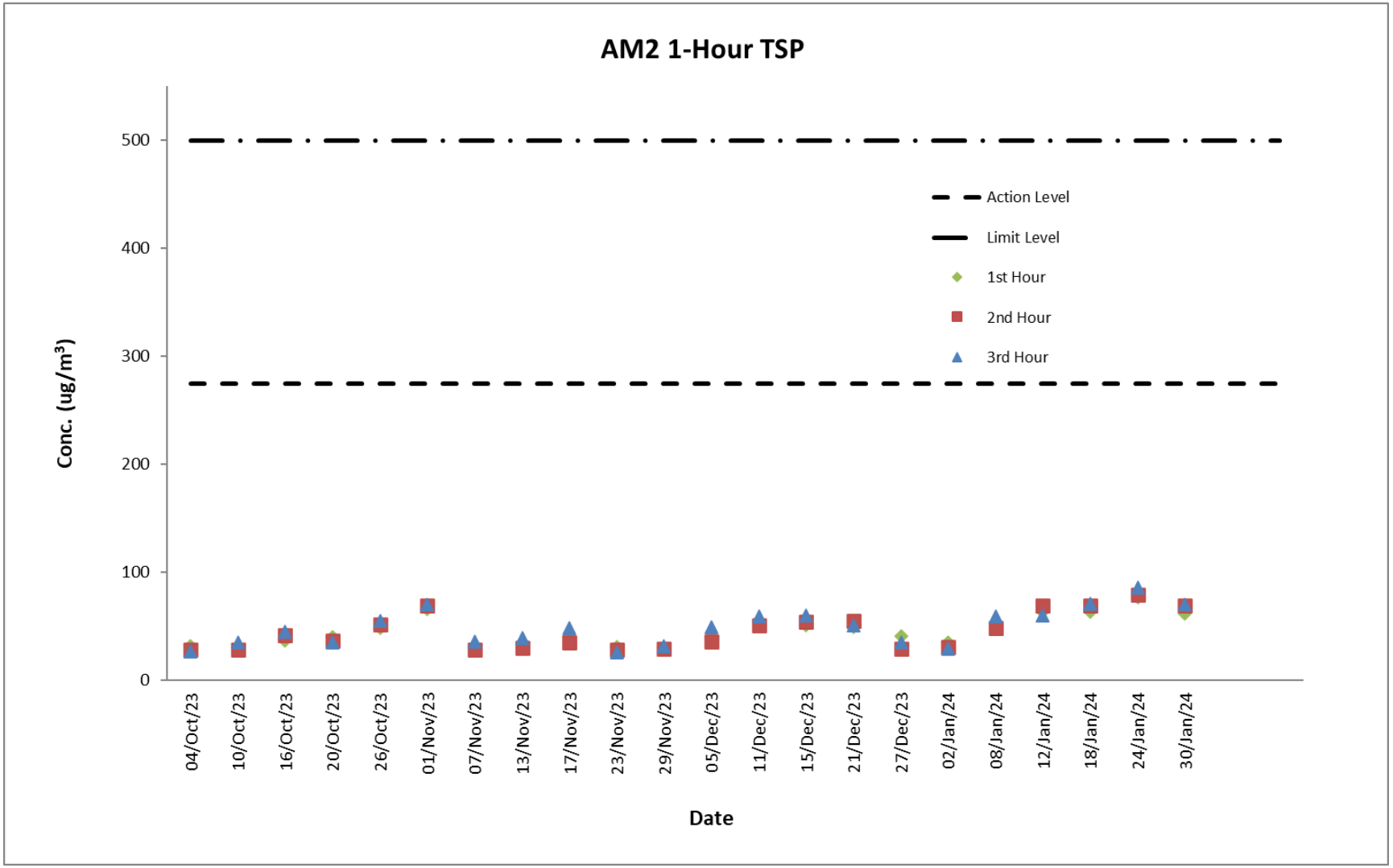
Graphical Presentation of Air Quality Monitoring Result at Station AM1 (1-hour TSP)



Air Quality Monitoring Result at Station AM2 (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		
01-Nov-23	Sunny	8:38 - 11:38	66	69	70	274.2	500
07-Nov-23	Cloudy	8:43 - 11:43	31	28	36	274.2	500
13-Nov-23	Sunny	8:36 - 11:36	35	30	39	274.2	500
17-Nov-23	Sunny	8:37 - 11:37	41	35	48	274.2	500
23-Nov-23	Sunny	8:45 - 11:45	31	28	26	274.2	500
29-Nov-23	Fine	8:34 - 11:34	30	29	32	274.2	500
05-Dec-23	Sunny	8:53 - 11:53	40	36	49	274.2	500
11-Dec-23	Fine	8:45 - 11:45	55	51	59	274.2	500
15-Dec-23	Cloudy	8:45 - 11:45	51	54	60	274.2	500
21-Dec-23	Cloudy	8:47 - 11:47	49	55	51	274.2	500
27-Dec-23	Fine	8:48 - 11:48	41	29	35	274.2	500
02-Jan-24	Cloudy	8:46 - 11:46	35	31	29	274.2	500
08-Jan-24	Fine	8:47 - 11:47	50	48	59	274.2	500
12-Jan-24	Cloudy	8:43 - 11:43	63	69	60	274.2	500
18-Jan-24	Fine	8:48 - 11:48	63	69	71	274.2	500
24-Jan-24	Cloudy	8:38 - 11:38	77	79	86	274.2	500
30-Jan-24	Cloudy	8:43 - 11:43	62	69	70	274.2	500

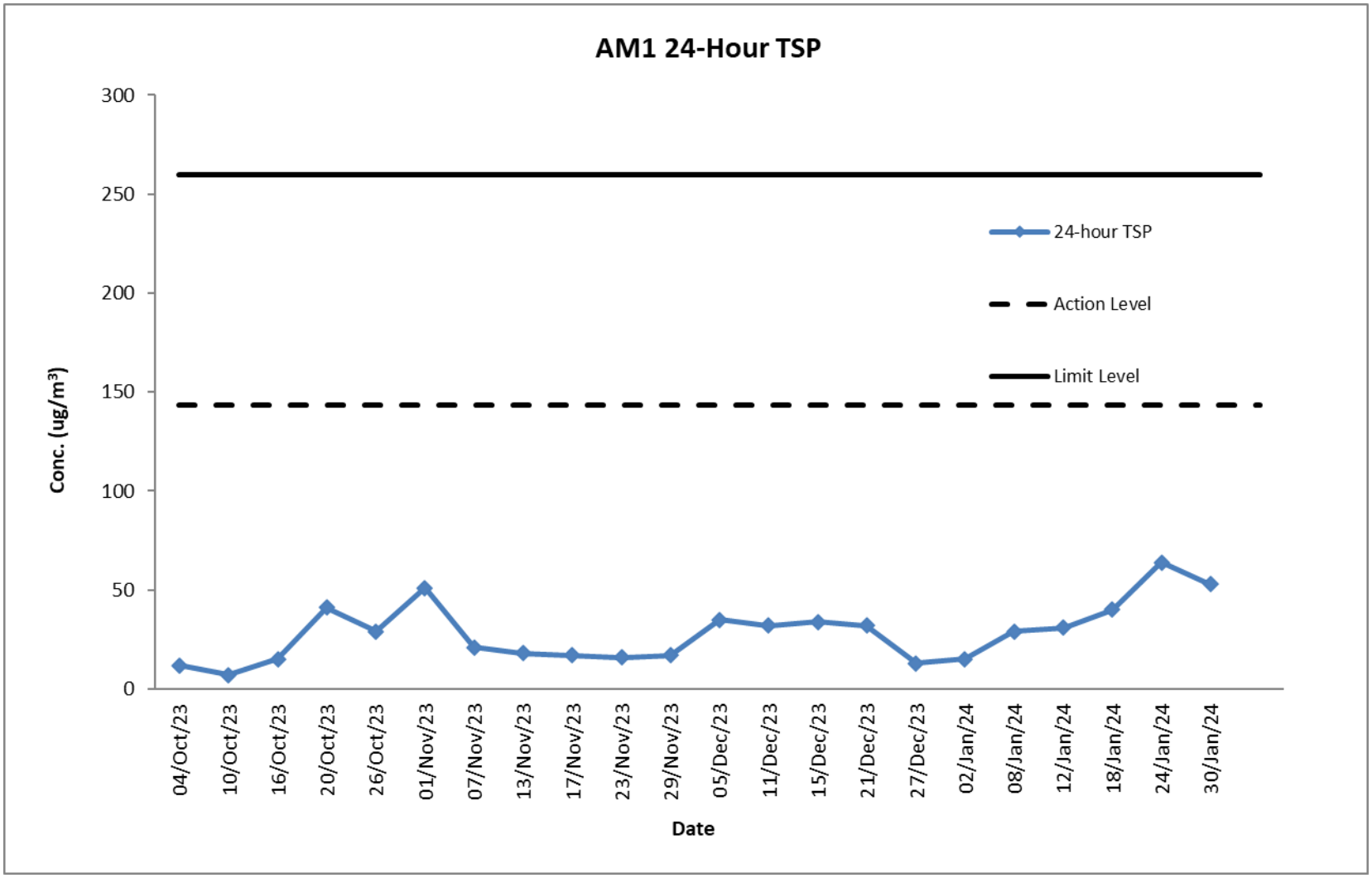
Graphical Presentation of Air Quality Monitoring Result at Station AM2 (1-hour TSP)



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
01-Nov-23	08:21	02-Nov-23	08:21	2.8068	2.8963	27268.38	27292.38	24	1.21	1.21	1.21	51	Sunny	143.6	260
07-Nov-23	08:26	08-Nov-23	08:26	2.8124	2.8483	27292.38	27316.38	24	1.21	1.21	1.21	21	Cloudy	143.6	260
13-Nov-23	08:21	14-Nov-23	08:21	2.8312	2.861	27316.38	27340.38	24	1.16	1.16	1.16	18	Sunny	143.6	260
17-Nov-23	08:20	18-Nov-23	08:20	2.8233	2.8518	27340.38	27364.38	24	1.16	1.16	1.16	17	Sunny	143.6	260
23-Nov-23	08:28	24-Nov-23	08:28	2.8137	2.8402	27364.38	27388.38	24	1.16	1.16	1.16	16	Sunny	143.6	260
29-Nov-23	08:18	30-Nov-23	08:18	2.8326	2.8617	27388.38	27412.38	24	1.16	1.16	1.16	17	Fine	143.6	260
05-Dec-23	08:36	06-Dec-23	08:36	2.8327	2.8915	27412.38	27436.38	24	1.16	1.16	1.16	35	Sunny	143.6	260
11-Dec-23	08:29	12-Dec-23	08:29	2.8206	2.8740	27436.38	27460.38	24	1.16	1.16	1.16	32	Fine	143.6	260
15-Dec-23	08:30	16-Dec-23	08:30	2.8297	2.8866	27460.38	27484.38	24	1.16	1.16	1.16	34	Cloudy	143.6	260
21-Dec-23	08:31	22-Dec-23	08:31	2.8094	2.8626	27484.38	27508.38	24	1.16	1.16	1.16	32	Cloudy	143.6	260
27-Dec-23	08:30	28-Dec-23	08:30	2.8192	2.8414	27508.38	27532.38	24	1.16	1.16	1.16	13	Fine	143.6	260
02-Jan-24	08:29	03-Jan-24	08:29	2.8108	2.8354	27532.38	27556.38	24	1.16	1.16	1.16	15	Cloudy	143.6	260
08-Jan-24	08:30	09-Jan-24	08:30	2.8249	2.8731	27556.38	27580.38	24	1.16	1.16	1.16	29	Fine	143.6	260
12-Jan-24	08:25	13-Jan-24	08:25	2.8106	2.8677	27580.38	27604.38	24	1.26	1.26	1.26	31	Cloudy	143.6	260
18-Jan-24	08:30	19-Jan-24	08:30	2.8136	2.8868	27604.38	27628.38	24	1.26	1.26	1.26	40	Fine	143.6	260
24-Jan-24	08:20	25-Jan-24	08:20	2.8283	2.9451	27628.38	27652.38	24	1.26	1.26	1.26	64	Cloudy	143.6	260
30-Jan-24	08:25	31-Jan-24	08:25	2.8092	2.9060	27652.38	27676.38	24	1.26	1.26	1.26	53	Cloudy	143.6	260

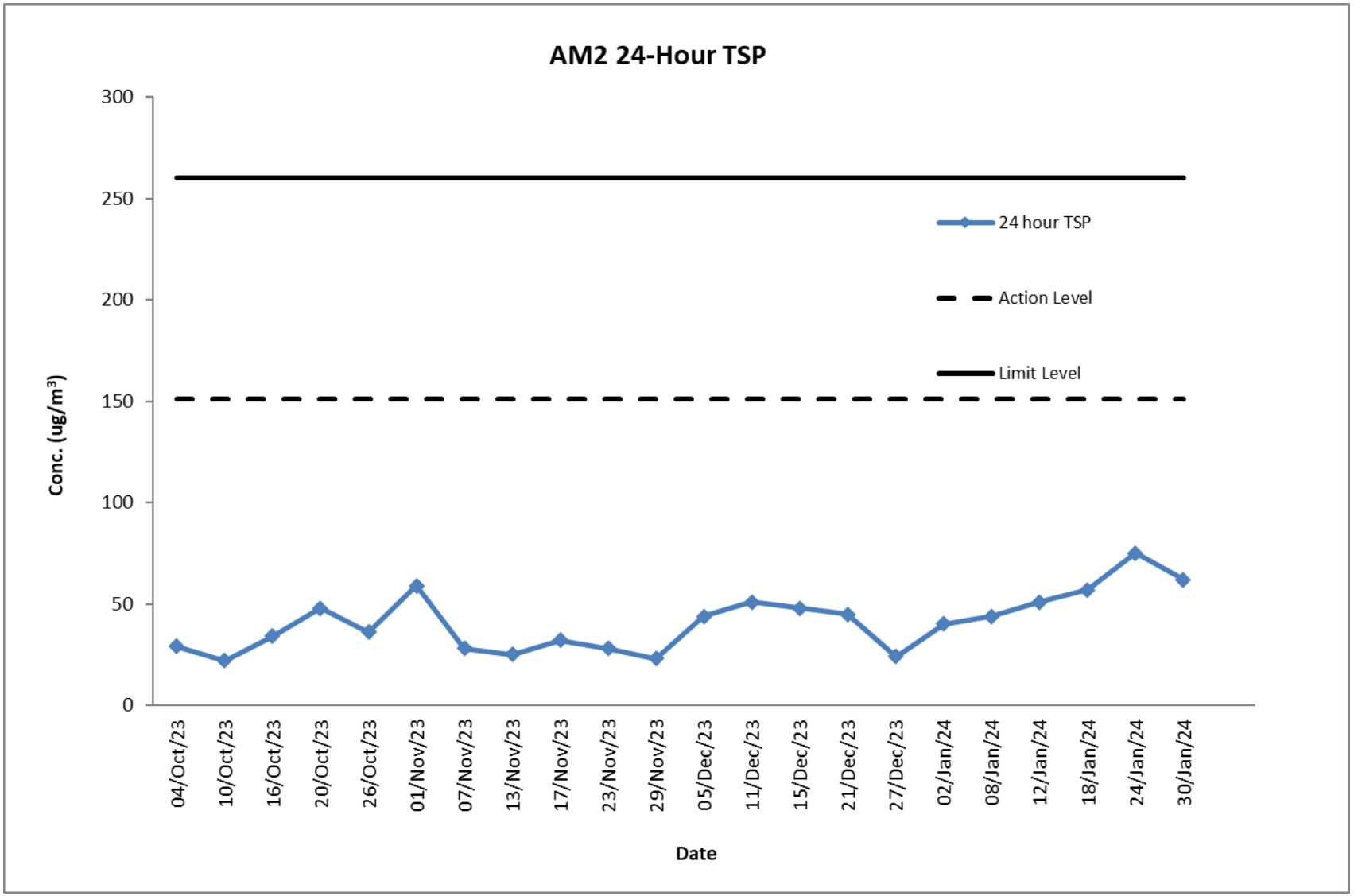
Graphical Presentation of Air Quality Monitoring Result at Station AM1 (24-hour TSP)



Air Quality Monitoring Result at Station AM2 (24-hour TSP)

Start		Finish		Sampling Time (hrs)	Conc. (μg/m^3)	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time					
01-Nov-23	08:36	02-Nov-23	08:36	24	59	Sunny	151.1	260
07-Nov-23	08:40	08-Nov-23	08:40	24	28	Cloudy	151.1	260
13-Nov-23	08:34	14-Nov-23	08:34	24	25	Sunny	151.1	260
17-Nov-23	08:35	18-Nov-23	08:35	24	32	Sunny	151.1	260
23-Nov-23	08:42	24-Nov-23	08:42	24	28	Sunny	151.1	260
29-Nov-23	08:32	30-Nov-23	08:32	24	23	Fine	151.1	260
05-Dec-23	08:50	06-Dec-23	08:50	24	44	Sunny	151.1	260
11-Dec-23	08:42	12-Dec-23	08:42	24	51	Fine	151.1	260
15-Dec-23	08:43	16-Dec-23	08:43	24	48	Cloudy	151.1	260
21-Dec-23	08:45	22-Dec-23	08:45	24	45	Cloudy	151.1	260
27-Dec-23	08:45	28-Dec-23	08:45	24	24	Fine	151.1	260
02-Jan-24	08:43	03-Jan-24	08:43	24	40	Cloudy	151.1	260
08-Jan-24	08:44	09-Jan-24	08:44	24	44	Fine	151.1	260
12-Jan-24	08:40	13-Jan-24	08:40	24	51	Cloudy	151.1	260
18-Jan-24	08:45	19-Jan-24	08:45	24	57	Fine	151.1	260
24-Jan-24	08:35	25-Jan-24	08:35	24	75	Cloudy	151.1	260
30-Jan-24	08:40	31-Jan-24	08:40	24	62	Cloudy	151.1	260

Graphical Presentation of Air Quality Monitoring Result at Station AM2 (24-hour TSP)



Noise Monitoring Result at Station NM1A

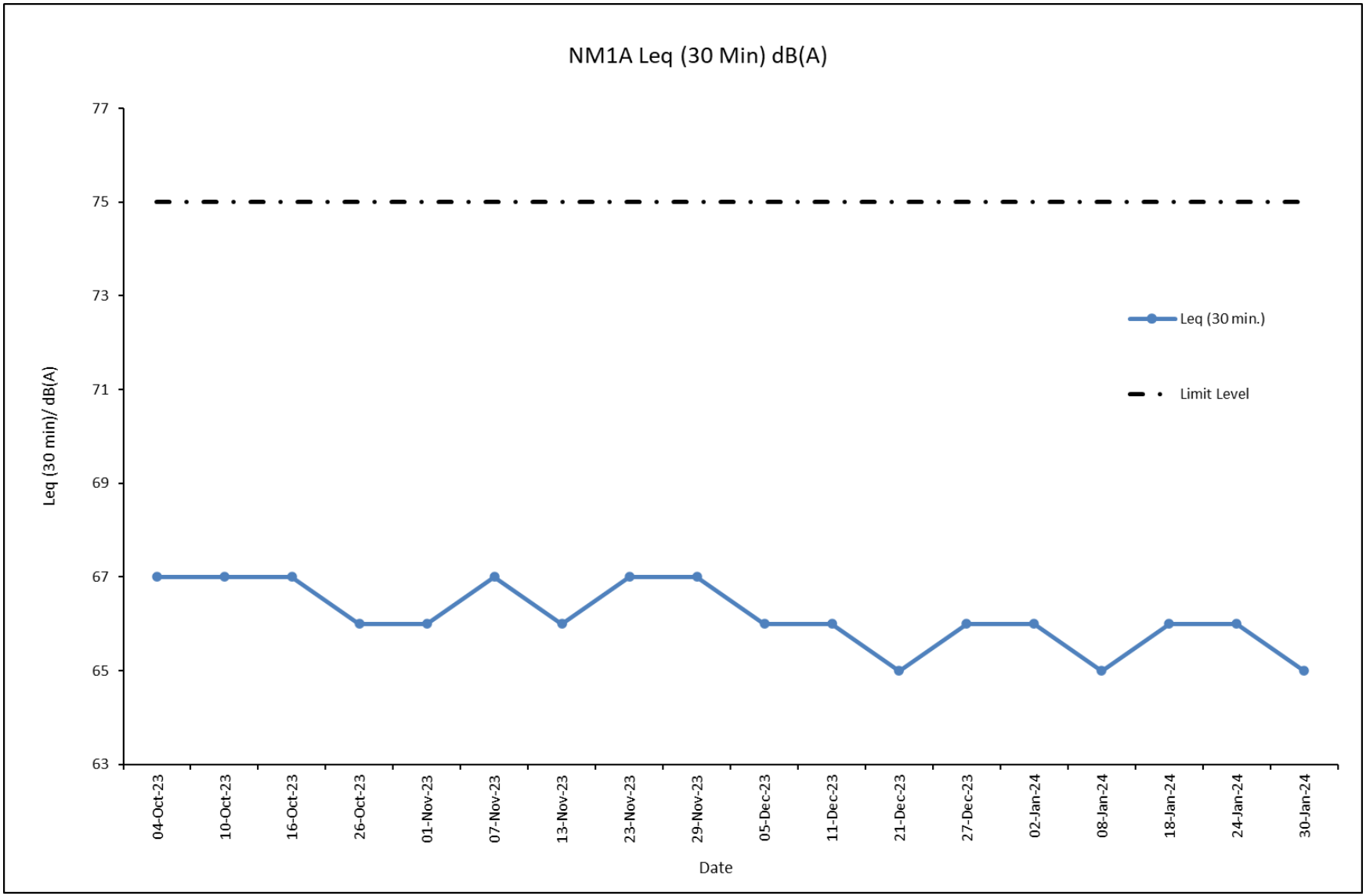
Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
01-Nov-23	09:20	65.8	61.9	66
01-Nov-23	09:25	66.4	62.5	
01-Nov-23	09:30	64.3	60.7	
01-Nov-23	09:35	65.4	61.6	
01-Nov-23	09:40	65.0	61.2	
01-Nov-23	09:45	65.6	61.0	
07-Nov-23	09:25	66.6	62.7	67
07-Nov-23	09:30	67.4	63.9	
07-Nov-23	09:35	65.8	61.4	
07-Nov-23	09:40	65.2	61.1	
07-Nov-23	09:45	66.0	62.6	
07-Nov-23	09:50	67.5	63.0	
13-Nov-23	09:20	64.4	60.5	66
13-Nov-23	09:25	65.6	61.9	
13-Nov-23	09:30	65.2	61.7	
13-Nov-23	09:35	64.8	60.2	
13-Nov-23	09:40	65.0	61.0	
13-Nov-23	09:45	66.5	62.6	
23-Nov-23	09:27	65.6	61.5	67
23-Nov-23	09:32	66.4	62.8	
23-Nov-23	09:37	66.9	62.6	
23-Nov-23	09:42	65.2	61.0	
23-Nov-23	09:47	65.0	61.4	
23-Nov-23	09:52	66.7	62.2	
29-Nov-23	09:16	65.8	61.9	67
29-Nov-23	09:21	64.4	60.5	
29-Nov-23	09:26	66.6	62.7	
29-Nov-23	09:31	65.2	61.1	
29-Nov-23	09:36	65.0	61.2	
29-Nov-23	09:41	66.4	62.4	
05-Dec-23	09:35	65.7	61.8	66
05-Dec-23	09:40	65.5	61.4	
05-Dec-23	09:45	64.3	60.7	
05-Dec-23	09:50	66.2	62.1	
05-Dec-23	09:55	65.0	61.0	
05-Dec-23	10:00	64.9	60.2	
11-Dec-23	09:28	64.8	60.9	66
11-Dec-23	09:33	64.5	60.4	
11-Dec-23	09:38	65.3	61.7	
11-Dec-23	09:43	64.7	60.4	
11-Dec-23	09:48	64.0	60.1	
11-Dec-23	09:53	65.2	61.0	
21-Dec-23	09:31	65.6	61.5	65
21-Dec-23	09:36	64.4	60.8	
21-Dec-23	09:41	64.9	60.5	
21-Dec-23	09:46	63.2	59.4	
21-Dec-23	09:51	64.0	60.2	
21-Dec-23	09:56	64.7	60.0	
27-Dec-23	09:31	64.5	60.9	66
27-Dec-23	09:36	65.8	61.6	
27-Dec-23	09:41	66.4	62.7	
27-Dec-23	09:46	64.2	60.4	
27-Dec-23	09:51	64.0	60.3	
27-Dec-23	09:56	65.7	61.1	

02-Jan-24	09:30	65.7	61.8	66
02-Jan-24	09:35	64.5	60.4	
02-Jan-24	09:40	65.3	61.7	
02-Jan-24	09:45	64.2	60.5	
02-Jan-24	09:50	64.0	60.4	
02-Jan-24	09:55	64.9	60.0	
08-Jan-24	09:30	64.9	60.9	65
08-Jan-24	09:35	63.7	59.6	
08-Jan-24	09:40	64.4	60.5	
08-Jan-24	09:45	65.2	61.4	
08-Jan-24	09:50	63.0	59.3	
08-Jan-24	09:55	64.4	60.0	
18-Jan-24	09:31	65.7	61.8	66
18-Jan-24	09:36	64.9	60.7	
18-Jan-24	09:41	64.4	60.3	
18-Jan-24	09:46	65.2	61.5	
18-Jan-24	09:51	64.0	60.4	
18-Jan-24	09:56	64.6	60.0	
24-Jan-24	09:21	64.8	60.9	66
24-Jan-24	09:26	65.6	61.5	
24-Jan-24	09:31	64.4	60.7	
24-Jan-24	09:36	64.2	60.2	
24-Jan-24	09:41	63.0	59.4	
24-Jan-24	09:46	64.7	60.0	
30-Jan-24	09:26	64.6	60.5	65
30-Jan-24	09:31	63.4	59.8	
30-Jan-24	09:36	64.8	58.9	
30-Jan-24	09:41	62.2	58.6	
30-Jan-24	09:46	63.0	59.4	
30-Jan-24	09:51	64.7	60.0	

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

Table F-1: 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

Table F-1: 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)
2018													
Jan	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
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	1.5
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	4924.3	0.0	0.0	4641.2	196.1	87.0	174.6	40.0	0.0	0.0	0.0	0.0	179.2
Oct	19099.9	0.0	0.0	11301.0	7642.8	156.1	0.0	106.3	0.4	0.0	0.0	0.0	528.5
Nov	104168.0	0.0	0.0	79811.6	24351.0	5.3	0.0	54.5	0.0	0.6	0.0	0.0	31.5
Dec	62989.9	0.0	0.0	51284.4	11699.9	5.6	0.0	95.1	0.0	0.6	0.0	0.0	65.9
Sub-total (2018)	449702.6	0.0	0.0	368984.8	80463.7	254.0	553.9	669.7	0.5	2.4	0.0	0.5	943.7
2019													
Jan	74479.1	0.0	0.0	69249.5	5229.7	0.0	318.0	326.7	0.2	0.0	0.0	0.0	76.3
Feb	21969.9	0.0	0.0	17723.9	4246.0	0.0	16.5	55.2	0.0	0.0	0.0	0.0	26.7
Mar	19311.9	0.0	0.0	8569.9	10742.0	0.0	337.8	61.5	0.0	0.0	0.0	0.0	36.3
Apr	28559.9	0.0	0.0	21280.3	7279.6	0.0	0.0	32.6	0.0	0.8	0.0	0.0	24.9
May	45418.0	0.0	0.0	11200.6	34217.4	0.0	0.0	27.4	0.2	0.5	0.0	0.0	33.7
Jun	66633.4	0.0	0.0	23874.5	42748.0	10.9	59.2	11.9	0.0	0.9	0.0	0.0	35.3
Jul	36619.6	0.0	0.0	1632.7	34960.9	26.0	64.4	120.7	0.0	0.0	0.0	0.0	57.9
Aug	2526.8	0.0	0.0	0.0	2499.0	27.8	31.9	40.2	0.0	0.8	0.0	0.0	66.3
Sep	4117.6	0.0	0.0	0.0	4088.7	28.9	95.2	19.0	0.0	0.6	0.0	0.0	127.4
Oct	6974.2	0.0	0.0	0.0	6948.1	26.1	15.9	11.4	0.2	1.0	0.0	0.6	223.6
Nov	5334.4	0.0	0.0	0.0	5304.1	30.3	0.0	8.9	0.0	0.0	0.0	0.0	151.6
Dec	6236.8	0.0	0.0	0.0	6236.8	0.0	0.0	70.6	0.0	0.0	0.0	0.0	98.9
Sub-total (2019)	318181.6	0.0	0.0	153531.3	164500.1	150.1	938.9	785.8	0.6	4.6	0.0	0.6	959.0

Table F-1: 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)
2020													
Jan	7089.9	0.0	0.0	0.0	7089.9	0.0	0.0	10.6	0.2	0.0	0.0	0.0	65.7
Feb	16822.3	0.0	0.0	0.0	16822.3	0.0	0.0	232.2	0.1	0.0	0.0	0.0	66.3
Mar	6559.0	0.0	0.0	0.0	6559.0	0.0	110.4	63.1	0.0	0.9	0.0	0.0	138.3
Apr	4997.9	0.0	0.0	1615.7	3382.2	0.0	159.2	1123.9	1.9	0.0	0.0	0.0	113.2
May	2236.0	0.0	0.0	452.3	1783.6	0.0	0.0	406.5	0.0	0.0	0.0	0.0	188.8
Jun	1134.3	0.0	0.0	0.0	1134.3	0.0	31.5	262.6	0.2	0.6	0.0	0.0	210.6
Jul	148.8	0.0	0.0	0.0	148.8	0.0	31.5	458.5	0.5	0.0	0.0	0.0	220.0
Aug	540.7	0.0	0.0	0.0	540.7	0.0	0.0	340.8	0.0	0.0	0.0	0.0	238.3
Sep	1432.3	0.0	0.0	0.0	1432.3	0.0	0.0	750.7	0.2	0.0	0.0	0.0	291.9
Oct	1381.5	0.0	0.0	0.0	1381.5	0.0	0.0	717.9	0.2	0.0	0.0	0.0	400.2
Nov	1444.1	0.0	0.0	0.0	1437.4	6.7	475.8	473.6	0.2	0.5	0.0	0.0	377.8
Dec	793.8	0.0	0.0	0.0	793.8	0.0	0.0	478.3	0.2	0.0	0.0	0.0	435.8
Sub-total (2020)	44580.6	0.0	0.0	2068.1	42505.8	6.7	808.3	5318.7	3.7	2.0	0.0	0.0	2746.8
2021													
Jan	881.4	0.0	0.0	0.0	881.4	0.0	0.0	835.1	0.4	0.0	0.0	0.0	497.0
Feb	544.7	0.0	0.0	0.0	544.7	0.0	0.0	100.5	0.3	0.0	0.0	0.0	504.7
Mar	406.1	0.0	0.0	0.0	406.1	0.0	0.0	455.8	0.3	0.0	0.0	0.0	881.7
Apr	633.0	0.0	0.0	0.0	633.0	0.0	0.0	429.9	0.7	0.0	0.0	0.0	613.0
May	1125.8	0.0	0.0	0.0	1125.8	0.0	0.0	355.1	0.2	0.1	0.0	0.0	355.2
Jun	877.3	0.0	0.0	0.0	877.3	0.0	0.0	98.4	0.2	0.0	0.0	0.4	420.3
Jul	8.9	0.0	0.0	0.0	0.0	8.9	0.0	43.9	2.0	0.0	0.0	0.0	278.2
Aug	1296.2	0.0	0.0	0.0	1296.2	0.0	0.0	161.5	0.0	0.0	0.0	0.0	459.1
Sep	1040.5	0.0	0.0	0.0	490.9	549.6	0.0	62.9	0.0	0.0	0.0	0.0	620.8
Oct	311.0	0.0	0.0	0.0	311.0	0.0	0.0	85.9	0.3	0.0	0.0	0.0	485.6
Nov	203.9	0.0	0.0	0.0	203.9	0.0	0.0	65.9	0.0	0.0	0.0	0.0	609.6
Dec	576.6	0.0	0.0	0.0	576.6	0.0	0.0	13.4	0.0	0.0	0.0	0.0	590.6
Sub-total (2021)	7905.3	0.0	0.0	0.0	7346.9	558.5	0.0	2708.2	4.4	0.1	0.0	0.4	6315.9

Table F-1: 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)
2022													
Jan	579.3	0.0	0.0	0.0	579.3	0.0	0.0	23.5	0.4	0.0	0.0	0.0	565.5
Feb	58.9	0.0	0.0	0.0	58.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	172.2
Mar	412.8	0.0	0.0	0.0	412.8	0.0	0.0	12.4	0.3	0.0	0.0	0.0	339.8
Apr	390.2	0.0	0.0	0.0	390.2	0.0	0.0	24.8	0.0	0.0	0.0	0.0	390.9
May	350.1	0.0	0.0	0.0	342.9	7.2	0.0	44.3	0.3	0.1	0.0	0.0	401.9
Jun	200.4	0.0	0.0	0.0	200.4	0.0	0.0	21.1	0.0	0.0	0.0	1.1	447.8
Jul	166.8	0.0	0.0	0.0	166.8	0.0	0.0	6.3	0.3	0.0	0.0	0.7	343.9
Aug	150.9	0.0	0.0	0.0	150.9	0.0	0.0	9.6	0.4	0.2	0.0	0.0	410.6
Sep	437.6	0.0	0.0	0.0	437.6	0.0	0.0	11.5	0.3	0.0	0.0	0.0	348.3
Oct	708.0	0.0	0.0	0.0	708.0	0.0	0.0	13.8	0.0	0.0	0.0	0.0	353.0
Nov	244.1	0.0	0.0	0.0	244.1	0.0	0.0	47.3	0.3	0.0	0.0	0.0	427.4
Dec	337.4	0.0	0.0	0.0	337.4	0.0	0.0	28.1	0.0	0.0	0.0	0.0	385.3
Sub-total (2022)	4036.4	0.0	0.0	0.0	4029.3	7.2	0.0	242.7	2.3	0.3	0.0	1.8	4586.6
2023													
Jan	307.0	0.0	0.0	0.0	307.0	0.0	0.0	44.5	0.0	0.0	0.0	0.0	415.1
Feb	1087.8	0.0	0.0	0.0	1087.8	0.0	0.0	22.9	0.4	0.0	0.0	0.0	411.4
Mar	1944.0	0.0	0.0	0.0	1944.0	0.0	0.0	37.7	0.0	0.0	0.0	0.0	469.6
Apr	819.5	0.0	0.0	0.0	819.5	0.0	0.0	218.7	0.0	0.0	0.0	0.0	320.5
May	842.1	0.0	0.0	0.0	842.1	0.0	0.0	35.6	0.3	0.0	0.0	0.0	439.4
Jun	952.1	0.0	0.0	0.0	952.1	0.0	0.0	22.9	0.2	0.0	0.0	0.0	399.3
Jul	583.1	0.0	0.0	0.0	583.1	0.0	0.0	38.3	0.0	0.0	0.0	0.0	421.6
Aug	778.2	0.0	0.0	0.0	778.2	0.0	0.0	28.5	0.0	0.0	0.0	0.0	427.9
Sep	316.4	0.0	0.0	0.0	316.4	0.0	0.0	14.8	0.1	0.0	0.0	0.0	344.3
Oct	1253.3	0.0	0.0	0.0	1253.3	0.0	0.0	17.9	0.0	0.0	0.0	0.0	353.9
Nov	862.7	0.0	0.0	0.0	862.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	436.4
Dec	337.8	0.0	0.0	0.0	337.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	374.0
Sub-total (2023)	10084.0	0.0	0.0	0.0	10084.0	0.0	0.0	481.8	1.0	0.0	0.0	0.0	4813.3

Table F-1: 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)
2024													
Jan	249.3	0.0	0.0	0.0	249.3	0.0	0.0	11.1	0.0	0.0	0.0	0.0	389.3
Sub-total (2024)	249.3	0.0	0.0	0.0	249.3	0.0	0.0	11.1	0.0	0.0	0.0	0.0	389.3
Total	**1008971.6**	**0.0**	**0.0**	**543635.2**	**464336.4**	**999.9**	**2301.1**	**10739.4**	**13.6**	**10.8**	**0.0**	**14.7**	**21083.4**

Note:

(1) 1113.74, 336.04 and 0 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.

(2) The values in the table are rounded off to 1 decimal place.

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 to the end of the reporting quarter are summarized in **Table G-1** below.

Table G-1: 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 (Nov 23 – Jan 24)	0	0	0
From 1 March 2016 to end of the reporting quarter	59	0	0

END OF PART-1

Part-2: EM&A for Foundation Works in Zone 2B & 2C

Foundation Works in Zone 2B & 2C

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Contents

Executive summary

This Quarterly EM&A Report presents the monitoring works conducted at Zone 2B & 2C from 1 November 2023 to 31 January 2024. The construction work for Zone 2A (Contract No.: GW/2020/05/073) was completed and handover to WKCDA on 31 March 2023. No construction work and only maintenance work is carried out by Zone 2B & 2C Contractor at Zone 2A.

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

There was no breach of Action or 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 above-mentioned weekly site inspections during the reporting quarter. No adverse comment on landscape and visual aspects were made during these inspections.

Record of Complaints

No environmental complaint was received during the reporting quarter.

Record of Notifications of Summons and Successful Prosecutions

No notifications of summons and successful prosecutions were recorded in the reporting quarter.

1 Introduction

1.1 Background

Apex Testing & Certification Limited (Apex) was commissioned to undertake the Environmental Team (ET) services (including environmental monitoring and audit (EM&A)) for the construction activities in Zone 2A, consisting of Foundation, Excavation and Lateral Support Works for Integrated Basement and Underground Road (Contract No.: GW/2020/05/073) ; and Zone 2B & 2C consisting of Piling Works for Integrated Basement and Underground Road (Contract No.: CC/2020/2B/088) at WKCD. The major construction works and EM&A programme for Zone 2A and Zone 2B & 2C commenced on 3 October 2020 and 30 September 2021 respectively. The major construction work for Zone 2A (Contract No.: GW/2020/05/073) was completed and handover to WKCDA on 31 March 2023. No construction work and only maintenance work is carried out by Zone 2B & 2C Contractor at Zone 2A.

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 1 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 falls under this same category.

The purpose of the development in Zone 2A and Zone 2B & 2C is to reserve for Integrated Basement (IB) and Underground Road (UR). The Zone 2A construction activities involve the foundation, excavation and lateral support (ELS) works, road works, drainage diversion works, and temporary car parking. The Zone 2B & 2C construction activities involve the piling works.

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 at Zone 2B & 2C from 1 November 2023 to 31 January 2024. 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 Zone 2B & 2C undertaken include:

- Site Maintenance
- Backfilling of Testing Pipes
- Pile Testing

- Full Core Drilling

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 and Mitigation Measures

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	AM3 - The Victoria Towers Tower 1	At least once every 6 days	152.4 μg/m^3	260 μg/m^3
	1-Hour TSP	AM3 - The Victoria Towers Tower 1	At least 3 times every 6 days	280.4 μg/m^3	500 μg/m^3
	24-Hour TSP	AM4 - Canton Road Government Primary School	At least once every 6 days	152.6 μg/m^3	260 μg/m^3
	1-Hour TSP	AM4 - Canton Road Government Primary School	At least 3 times every 6 days	278.5 μg/m^3	500 μg/m^3
	24-Hour TSP	AM5 - Topside Developments at West Kowloon Terminus Site	At least once every 6 days	141.1 μg/m^3	260 μg/m^3
	1-Hour TSP	AM5 - Topside Developments at West Kowloon Terminus Site	At least 3 times every 6 days	275.4 μg/m^3	500 μg/m^3
Noise	Leq, 30 minutes	NM2 - The Arch, Sun Tower	Weekly	When one documented complaint is received from any one of the sensitive receivers	75 dB(A)
	Leq, 30 minutes	NM3 - The Victoria Towers Tower 1	Weekly	When one documented complaint is received from any one of the sensitive receivers	75 dB(A)
	Leq, 30 minutes	NM4 - Canton Road Government Primary School	Weekly	When one documented complaint is received from any one of the sensitive receivers	70/65 dB(A)^
	Leq, 30 minutes	NM5 -Development next to Austin Station	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

Note:
^70 dB(A) for schools and 65 dB(A) during school examination periods.

The EM&A programme for the Project require 5 air monitoring stations and 5 noise quality monitoring stations located closest to the Project area. With regard to the monitoring activities at M+ Museum and the Lyric Complex, three monitoring stations had been considered, including AM1, AM2 for air monitoring, and NM1 for noise monitoring. In the context of the construction activities in Zone 2A and Zone 2B & 2C, all other monitoring locations including AM3, AM4, and AM5 for air monitoring; and NM2, NM3, NM4 and NM5 for noise monitoring, have been taken into account. However, access to all these originally designated monitoring stations was declined. Therefore, alternative monitoring stations was identified and proposed.

With regard to air monitoring, alternative monitoring locations (AM3A, AM4A, and AM5A) were identified at ground floor at the Northeast corner of West Kowloon Station's station box, at ground floor at the Southeast corner of West Kowloon Station's station box, and at ground floor at the North of West Kowloon Station's station box respectively. AM3A, AM4A, and AM5A were set in same direction to the area of major construction site activities in Zone 2A. These alternative air monitoring locations (AM3A, AM4A, and AM5A) were approved by EPD on 29 September 2020.

For noise monitoring, alternative noise monitoring location (NM2A) was identified at the ground floor in front of The Arch - Sun Tower, which is at the same location as stated in the EM&A Manual for consistency. This alternative noise monitoring location was approved by EPD on 29 September 2020. Other alternative noise monitoring locations (NM3A, NM4A, and NM5A) were identified at the ground floor in front of the Xiqu Centre, at the ground floor next to Tsim Sha Tsui Fire Station, and at the Pedestrian road (ground floor) outside West Kowloon Station respectively. NM3A, NM4A and NM5A were set closer to the construction site boundary with more direct line sight to the major site activities and higher exposure to the construction noise with no disturbance to the premises' occupants during noise monitoring activities. These alternative noise monitoring locations (NM3A, NM4A, and NM5A) were approved by EPD on 29 September 2020.

Therefore, 3 air quality monitoring stations and 4 noise impact monitoring station were confirmed for the impact monitoring for construction activities in Zone 2A and Zone 2B & 2C.

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 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	AM3A	41	86	65
1 hour TSP	AM4A	42	90	65
1 hour TSP	AM5A	44	89	66
24 hour TSP	AM3A	44	79	62
24 hour TSP	AM4A	45	83	62
24 hour TSP	AM5A	44	84	63
Construction Noise				
Leq(30min)	NM2A	61	62	61
Leq(30min)	NM3A	60	61	61
Leq(30min)	NM4A	58	59	58
Leq(30min)	NM5A	63	64	64

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				
AM3A	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
AM4A	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
AM5A	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
Construction Noise				
NM2A	Leq(30min)	0	0	N/A
NM3A	Leq(30min)	0	0	N/A
NM4A	Leq(30min)	0	0	N/A
NM5A	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 of 1-hour TSP for Air Quality was recorded.

3.2.2 24-hour TSP Monitoring

All 24-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance of 24-hour TSP for Air Quality was recorded.

3.2.3 Construction Noise Monitoring

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

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 were recorded.

4 Waste Management

4.1 Zone 2B & 2C

As advised by the Zone 2B & 2C Contractor, 5740.69 tonnes and 1431.14 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137 and Tuen Mun Area 38 respectively in the reporting quarter, while 73.06 tonnes of general refuse were disposed of at SENT landfill. 0.0 tonne of metals, 0.0 tonne of paper/cardboard packaging, 0.0 tonne of plastics and 0.0 tonne of timber was collected by recycling contractors in the reporting quarter. 0.0 tonne of inert C&D material were reused on site. 0.0 tonne of inert C&D material was imported for reuse at site and 0.0 tonne of inert C&D material were reused in other projects. 0.0 tonne of inert C&D material was disposed to sorting facility and 0.0 tonne of chemical waste 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 Zone 2B & 2C in the reporting quarter are shown in **Appendix F**.

5 Environmental Non-conformance

There was no breach of Action or Limit Levels for Air Quality (1-hour TSP and 24-hour TSP) and Noise in the reporting quarter.

No complaint was received in the reporting quarter. No notifications of summons and successful prosecutions were received in the reporting quarter.

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 construction noise were recorded in the reporting quarter.

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

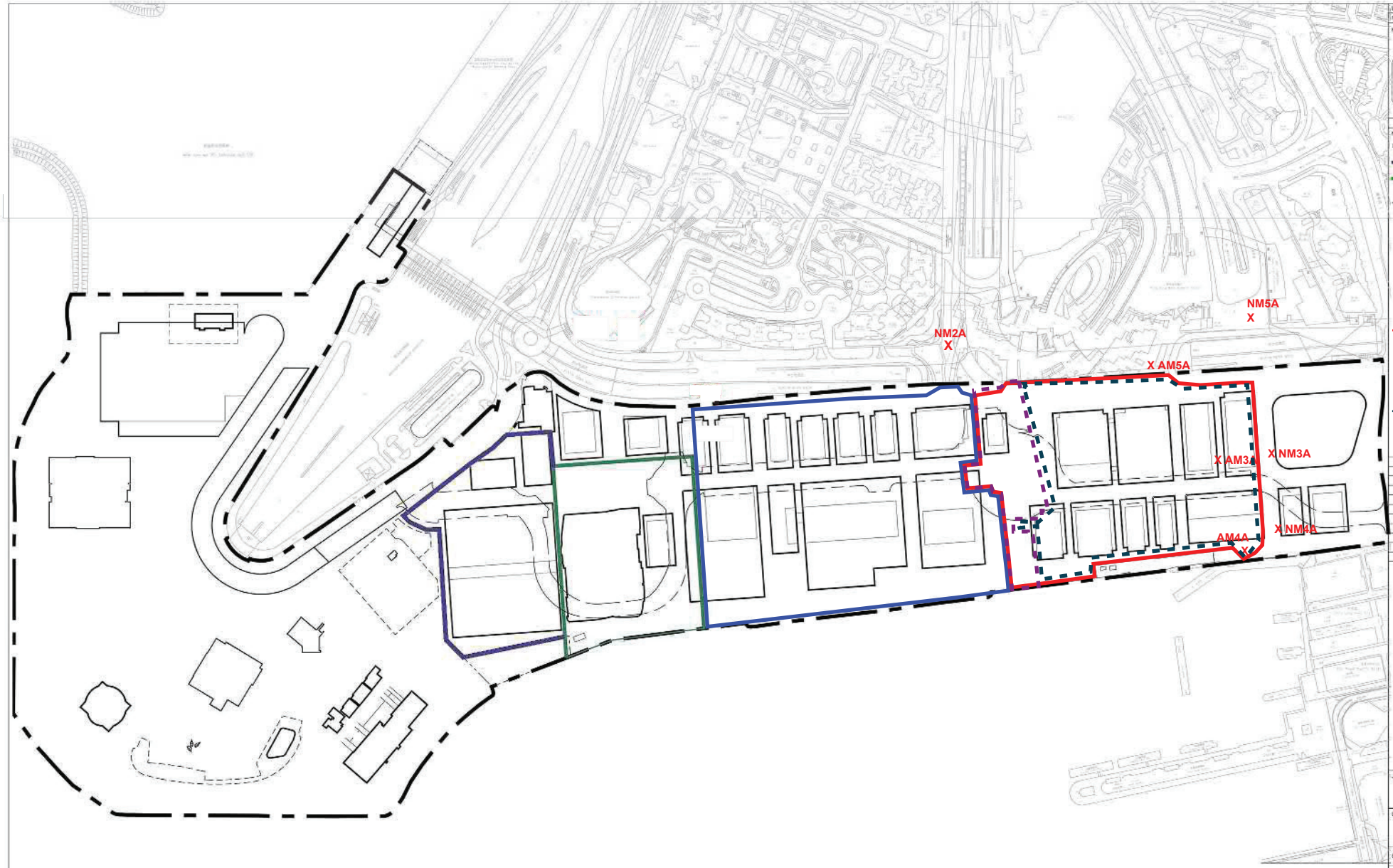
The EM&A programme as recommended in the EM&A Manual has been undertaken since the construction works of Zone 2A and Zone 2B & 2C commenced on 3 October 2020 and 30 September 2021 respectively. The construction work for Zone 2A (Contract No.: GW/2020/05/073) was completed and handover to WKCDA on 31 March 2023. No construction work and only maintenance work is carried out by Zone 2B & 2C Contractor at Zone 2A.

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

No complaint was received in the reporting quarter. No notifications of summons and successful prosecutions 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:

H.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

REMARKS:
THE AIR MONITORING STATION AM2A HAS BEEN RELOCATED TO THE ALTERNATIVE MONITORING STATION AM2B AT 1ST FLOOR OF GAMMON'S SITE OFFICE ON 26 FEBRUARY 2019.

Zone 2A Boundary

Zone 2B & 2C Boundary

Under Management by Zone 2B & 2C Contractor Starting from 20 Dec 2022

No Construction Work and Only Maintenance Work is Carried Out by Zone 2B & 2C Contractor Starting from 01 April 2023

REV.	DATE	DESCRIPTION	INITIAL

JOB TITLE: **DEVELOPMENT AT WEST KOWLOON CULTURAL DISTRICT**

DRAWING TITLE: **SITE LAYOUT PLAN AND MONITORING STATIONS**

SCALE:	1:100	PRINTED:	A1
CHECKED:		DATE:	
APPROVED:		DATE:	
DRAWN:	TY	DATE:	05-05-2015

CONTRACT NO.: -

DRAWING NO.: **FIGURE 1**

REV.: XX

CAD REF NAME: XXXXX-AUT-PMS DWG-P60-L080-0080-XXX.dwg

AUTHORITY:

westKowloon
西九文化區

A1 (841mm x 594mm) Sheet Size

Appendices

A. Project Organisation
B. Construction Programme
C. Environmental Mitigation Measures – Implementation Status
D. Meteorological Data Extracted from Hong Kong Observatory
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

Project Organization

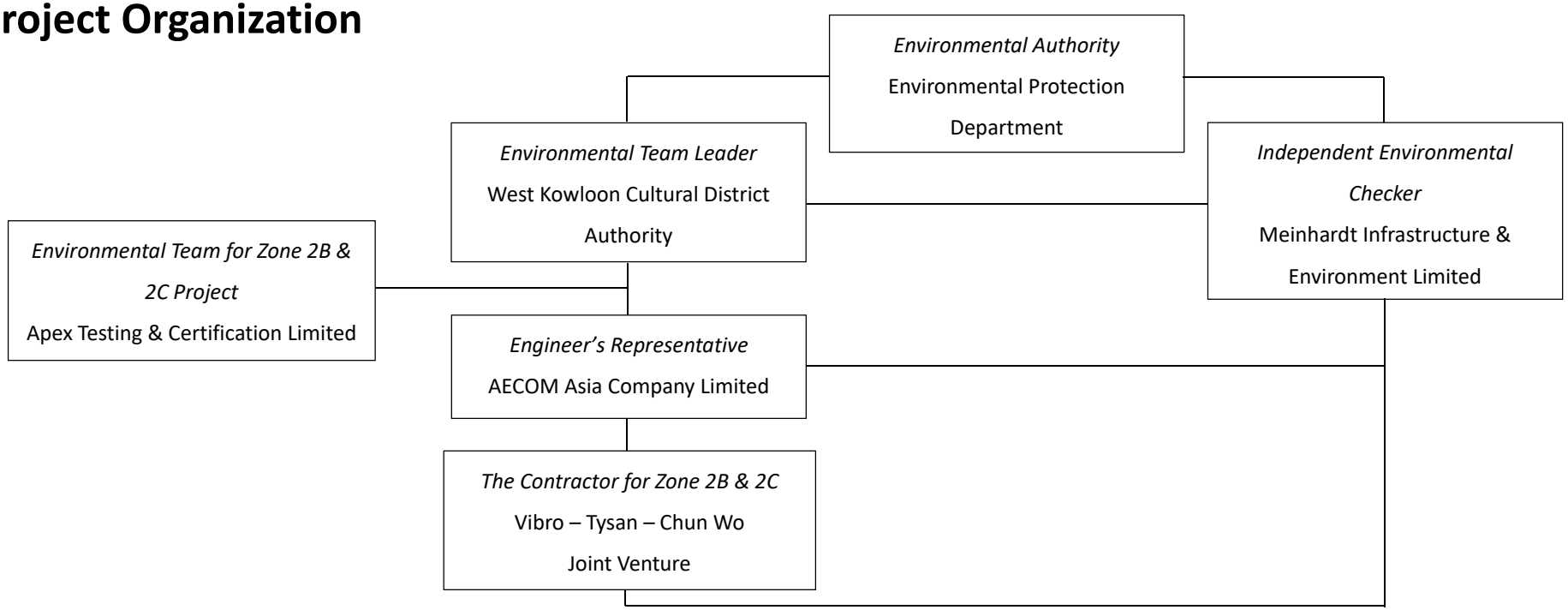


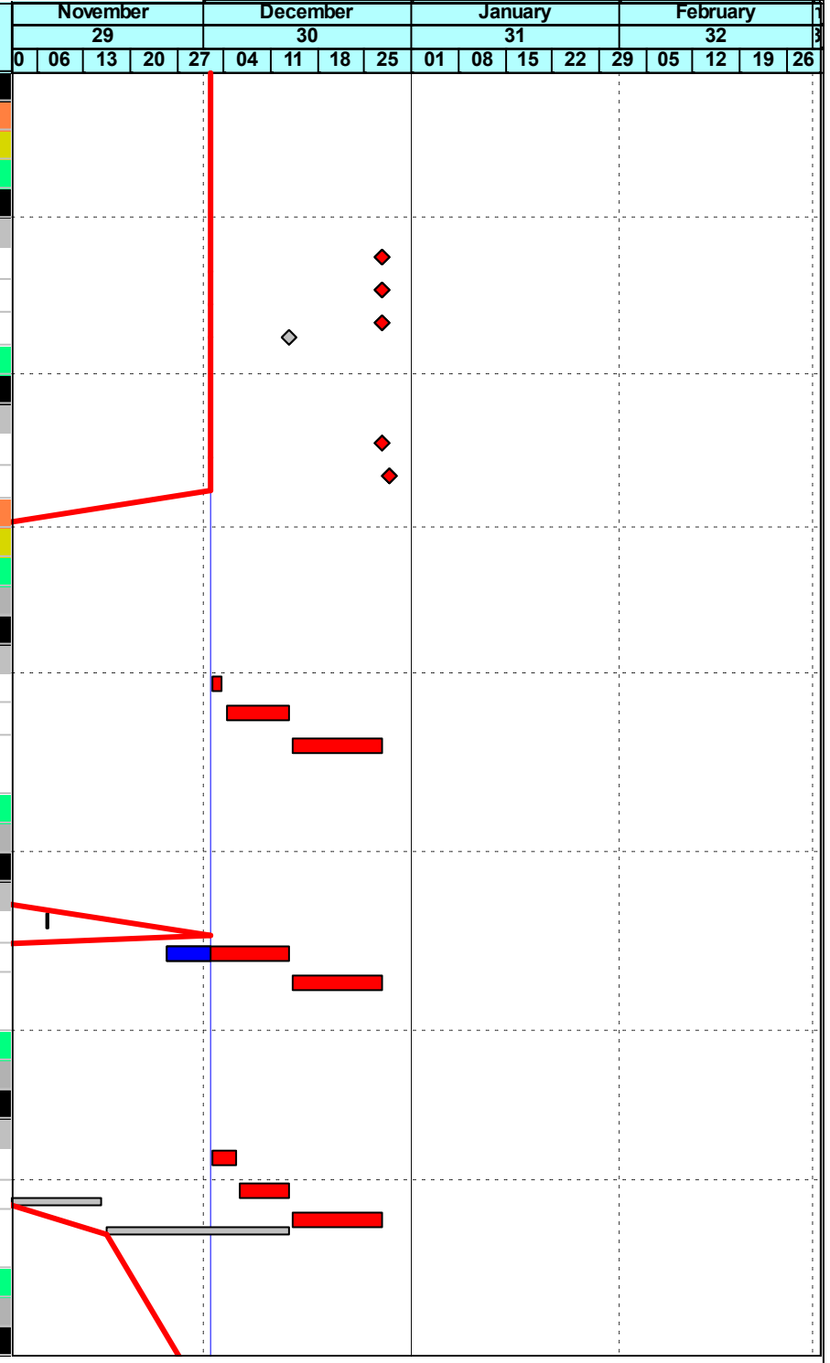
Table A-1: Contract Information

Company Name	Role	Name	Telephone	Email
West Kowloon Cultural District Authority	WKCDA Representative & Project ETL	Mr. C.K. WU	5506 9178	ck.wu@wkcda.hk
Meinhardt Infrastructure & Environment Limited	Independent Environmental Checker	Ms. Claudine LEE	2859 5409	caludinelee@meinhardt.com.hk
AECOM Asia Company Limited	Resident Engineer (Zone 2B & 2C)	Ms. Carmen CHAN	6892 9271	carmen.chan@aecom.com
Vibro – Tysan – Chun Wo Joint Venture	Environmental Sustainability Manager	Mr. Tony YAM	2137 5586	tony_yam@vibro.com.hk
Apex Testing & Certification Limited	Contractor's Environmental Team Leader	Mr. Calvin LUI	9629 9718	calvinlui@apextestcert.com

B. Construction Programme

Zone 2B & 2C

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float
Piling for Integrated Basement and U/G Road in Zone 2B & 2C							
Contract Dates							
Key Dates							
KD for Zone 2B							
KD05	KD05 (Section 1) - 03 Jan 2023		13-Jul-23	0		27-Dec-23*	-358
KD06	KD06 (Section 2) - 12 Jun 2023		13-Sep-23	0		27-Dec-23*	-198
KD07	KD07 (Section 3) - 30 Sep 2023		13-Dec-23	0		27-Dec-23*	-88
KD for Zone 2C							
KD08	KD08 (Section 4) - 23 May 2023		13-Aug-23	0		27-Dec-23*	-218
KD09	KD09 (Section 5) - 12 Jun 2023		14-Oct-23	0		28-Dec-23*	-199
Construction Stage							
Pile Test							
KD05 (Section 1) (incl. BP for KD01 (Stage1-1))							
BP							
KD05.TS.1040	Selection of Full Core by BD	19-May-23	01-Jun-23	2	02-Dec-23	03-Dec-23	-358
KD05.TS.1060	Full Core to Proof Drill	02-Jun-23	15-Jun-23	10	04-Dec-23	13-Dec-23	-358
KD05.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	16-Jun-23	13-Jul-23	14	14-Dec-23	27-Dec-23	-358
KD06 (Section 2)							
BP							
KD06.TS.1040	Selection of Full Core by BD	20-Jul-23	02-Aug-23	1	07-Nov-23 A	07-Nov-23 A	
KD06.TS.1060	Full Core to Proof Drill	03-Aug-23	16-Aug-23	19	25-Nov-23 A	13-Dec-23	-198
KD06.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	17-Aug-23	13-Sep-23	14	14-Dec-23	27-Dec-23	-198
KD07 (Section 3) (incl. BP for KD03) (Stage 3-1)							
BP							
KD07.TS.1040	Selection of Full Core by BD	19-Oct-23	01-Nov-23	4	02-Dec-23	05-Dec-23	-88
KD07.TS.1060	Full Core to Proof Drill	02-Nov-23	15-Nov-23	8	06-Dec-23	13-Dec-23	-88
KD07.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	16-Nov-23	13-Dec-23	14	14-Dec-23	27-Dec-23	-88
KD08 (Section 4) (incl. BP for KD04 (Stage 4-1) & SSHP in KD09 (Section 5))							
BP							



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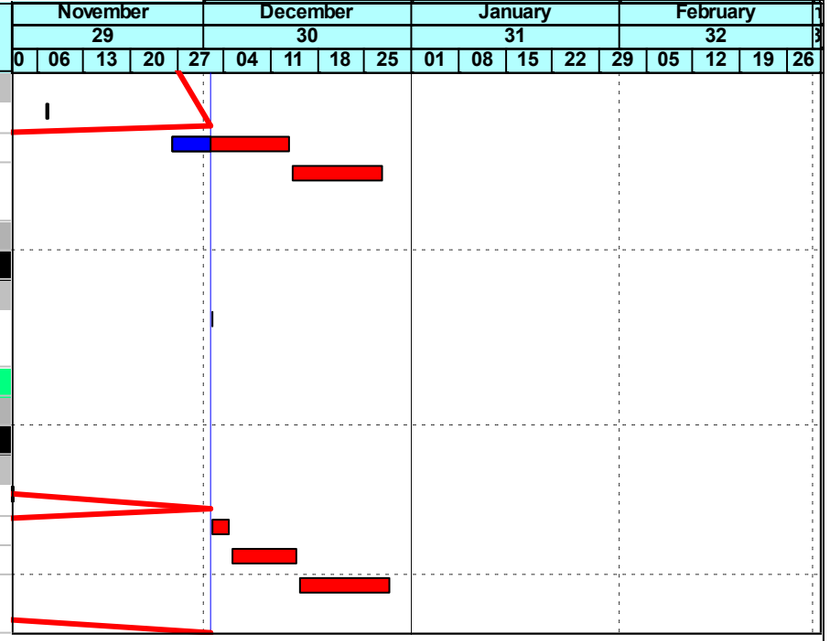
West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 1 December 2023
Based on CMWP Rev.0 (3rd Draft)

Date	Revision	Checked	Approved
04-Mar-22	R0	KL	B
02-Dec-22	R03D	KL	C

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float
KD08.TS.1040	Selection of Full Core by BD	19-Jun-23	02-Jul-23	1	07-Nov-23 A	07-Nov-23 A	
KD08.TS.1060	Full Core to Proof Drill	03-Jul-23	16-Jul-23	18	26-Nov-23 A	13-Dec-23	-218
KD08.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	17-Jul-23	13-Aug-23	14	14-Dec-23	27-Dec-23	-218
SSHP							
KD08.TS.1180	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	20-Dec-22	16-Jan-23	0	02-Dec-23	02-Dec-23	-193
KD09 (Section 5) (incl. BP for KD02 (Stage 5-1))							
BP							
KD09.TS.1020	Submit BA14	13-Aug-23	19-Aug-23	1	02-Nov-23 A	02-Nov-23 A	
KD09.TS.1040	Selection of Full Core by BD	20-Aug-23	02-Sep-23	3	02-Dec-23	04-Dec-23	-199
KD09.TS.1060	Full Core to Proof Drill	03-Sep-23	16-Sep-23	10	05-Dec-23	14-Dec-23	-199
KD09.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	17-Sep-23	14-Oct-23	14	15-Dec-23	28-Dec-23	-199



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West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 1 December 2023
Based on CMWP Rev.0 (3rd Draft)

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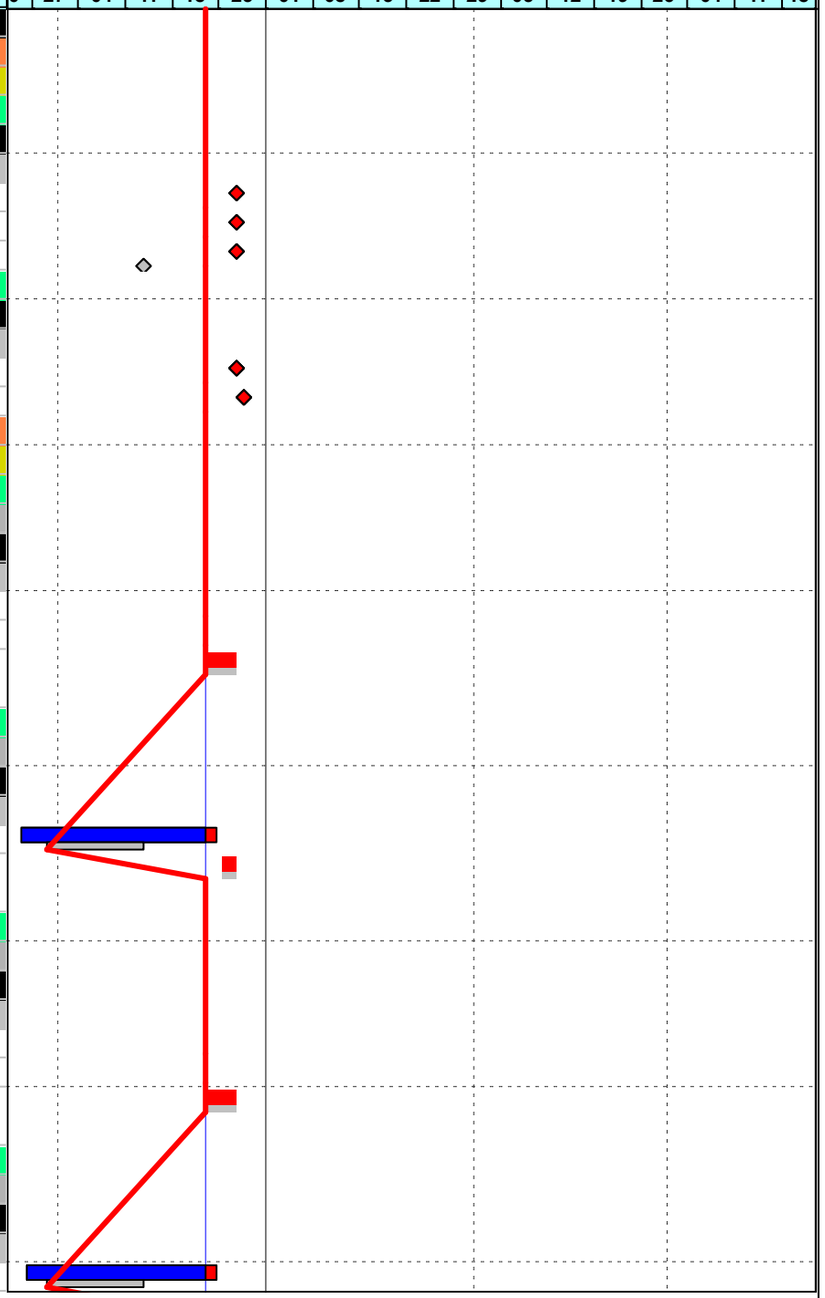
04-Mar-22	R0	KL	B
02-Dec-22	R03D	KL	C

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float
Piling for Integrated Basement and U/G Road in Zone 2B & 2C							
Contract Dates							
Key Dates							
KD for Zone 2B							
KD05	KD05 (Section 1) - 03 Jan 2023		13-Jul-23	0		27-Dec-23*	-358
KD06	KD06 (Section 2) - 12 Jun 2023		13-Sep-23	0		27-Dec-23*	-198
KD07	KD07 (Section 3) - 30 Sep 2023		13-Dec-23	0		27-Dec-23*	-88
KD for Zone 2C							
KD08	KD08 (Section 4) - 23 May 2023		13-Aug-23	0		27-Dec-23*	-218
KD09	KD09 (Section 5) - 12 Jun 2023		14-Oct-23	0		28-Dec-23*	-199
Construction Stage							
Pile Test							
KD05 (Section 1) (incl. BP for KD01 (Stage1-1))							
BP							
KD05.TS.1040	Selection of Full Core by BD	19-May-23	01-Jun-23	0	23-Dec-23	23-Dec-23	-358
KD05.TS.1060	Full Core to Proof Drill	02-Jun-23	15-Jun-23	0	23-Dec-23	23-Dec-23	-358
KD05.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	16-Jun-23	13-Jul-23	5	23-Dec-23	27-Dec-23	-358
KD06 (Section 2)							
BP							
KD06.TS.1060	Full Core to Proof Drill	03-Aug-23	16-Aug-23	30	25-Nov-23 A	24-Dec-23	-198
KD06.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	17-Aug-23	13-Sep-23	3	25-Dec-23	27-Dec-23	-198
KD07 (Section 3) (incl. BP for KD03) (Stage 3-1)							
BP							
KD07.TS.1040	Selection of Full Core by BD	19-Oct-23	01-Nov-23	0	23-Dec-23	23-Dec-23	-88
KD07.TS.1060	Full Core to Proof Drill	02-Nov-23	15-Nov-23	0	23-Dec-23	23-Dec-23	-88
KD07.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	16-Nov-23	13-Dec-23	5	23-Dec-23	27-Dec-23	-88
KD08 (Section 4) (incl. BP for KD04 (Stage 4-1) & SSHP in KD09 (Section 5))							
BP							
KD08.TS.1060	Full Core to Proof Drill	03-Jul-23	16-Jul-23	29	26-Nov-23 A	24-Dec-23	-218



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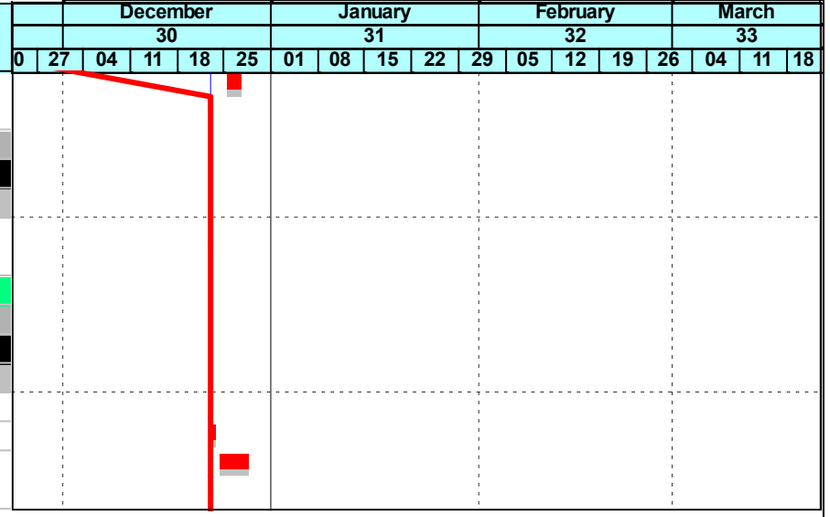
West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 22 December 2023
Based on CMWP Rev.0 (3rd Draft)

Date	Revision	Checked	Approved
04-Mar-22	R0	KL	B
02-Dec-22	R03D	KL	C

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float
KD08.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	17-Jul-23	13-Aug-23	3	25-Dec-23	27-Dec-23	-218
SSHP							
KD08.TS.1180	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	20-Dec-22	16-Jan-23	0	23-Dec-23	23-Dec-23	-214
KD09 (Section 5) (incl. BP for KD02 (Stage 5-1))							
BP							
KD09.TS.1040	Selection of Full Core by BD	20-Aug-23	02-Sep-23	0	23-Dec-23	23-Dec-23	-199
KD09.TS.1060	Full Core to Proof Drill	03-Sep-23	16-Sep-23	1	23-Dec-23	23-Dec-23	-199
KD09.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	17-Sep-23	14-Oct-23	5	24-Dec-23	28-Dec-23	-199



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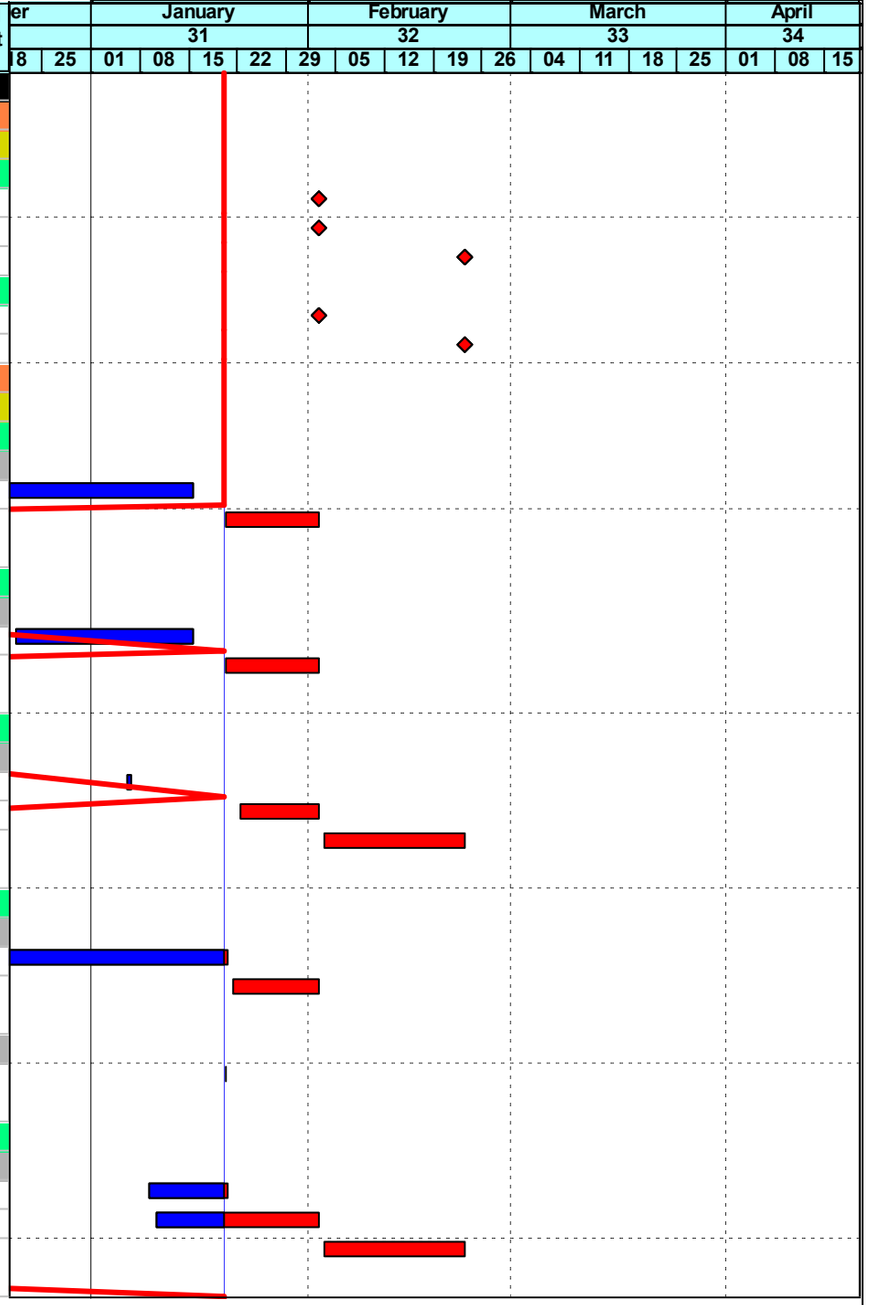
West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 22 December 2023
Based on CMWP Rev.0 (3rd Draft)

Date	Revision	Checked	Approved
04-Mar-22	R0	KL	B
02-Dec-22	R03D	KL	C

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float
Piling for Integrated Basement and U/G Road in Zone 2B & 2C							
Contract Dates							
Key Dates							
KD for Zone 2B							
KD05	KD05 (Section 1) - 03 Jan 2023		13-Jul-23	0		02-Feb-24*	-395
KD06	KD06 (Section 2) - 12 Jun 2023		13-Sep-23	0		02-Feb-24*	-235
KD07	KD07 (Section 3) - 30 Sep 2023		13-Dec-23	0		23-Feb-24*	-146
KD for Zone 2C							
KD08	KD08 (Section 4) - 23 May 2023		13-Aug-23	0		02-Feb-24*	-255
KD09	KD09 (Section 5) - 12 Jun 2023		14-Oct-23	0		23-Feb-24*	-256
Construction Stage							
Pile Test							
KD05 (Section 1) (incl. BP for KD01 (Stage1-1))							
BP							
KD05.TS.1060	Full Core to Proof Drill	02-Jun-23	15-Jun-23	32	15-Dec-23 A	15-Jan-24 A	
KD05.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	16-Jun-23	13-Jul-23	14	20-Jan-24	02-Feb-24	-395
KD06 (Section 2)							
BP							
KD06.TS.1060	Full Core to Proof Drill	03-Aug-23	16-Aug-23	26	21-Dec-23 A	15-Jan-24 A	
KD06.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	17-Aug-23	13-Sep-23	14	20-Jan-24	02-Feb-24	-235
KD07 (Section 3) (incl. BP for KD03) (Stage 3-1)							
BP							
KD07.TS.1040	Selection of Full Core by BD	19-Oct-23	01-Nov-23	1	06-Jan-24 A	06-Jan-24 A	
KD07.TS.1060	Full Core to Proof Drill	02-Nov-23	15-Nov-23	12	22-Jan-24 A	02-Feb-24	-146
KD07.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	16-Nov-23	13-Dec-23	21	03-Feb-24	23-Feb-24	-146
KD08 (Section 4) (incl. BP for KD04 (Stage 4-1) & SSHP in KD09 (Section 5))							
BP							
KD08.TS.1060	Full Core to Proof Drill	03-Jul-23	16-Jul-23	58	24-Nov-23 A	20-Jan-24	-255
KD08.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	17-Jul-23	13-Aug-23	13	21-Jan-24	02-Feb-24	-255
SSHP							
KD08.TS.1180	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	20-Dec-22	16-Jan-23	0	20-Jan-24	20-Jan-24	-242
KD09 (Section 5) (incl. BP for KD02 (Stage 5-1))							
BP							
KD09.TS.1040	Selection of Full Core by BD	20-Aug-23	02-Sep-23	12	09-Jan-24 A	20-Jan-24	-256
KD09.TS.1060	Full Core to Proof Drill	03-Sep-23	16-Sep-23	24	10-Jan-24 A	02-Feb-24	-256
KD09.TS.1080	Obtain BA14 Acknowledgement / Satisfaction of CA, Completion As-built Drawings, Reports & Records	17-Sep-23	14-Oct-23	21	03-Feb-24	23-Feb-24	-256



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West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 19 January 2024
Based on CMWP Rev.0 (3rd Draft)

Date	Revision	Checked	Approved
04-Mar-22	R0	KL	B
02-Dec-22	R03D	KL	C

C. Environmental Mitigation Measures – Implementation Status

Table C-1: Environmental Mitigation Measures Implementation Status

EM&A Ref.	Recommendation Measures	Implementation Stage Zone 2B & 2C Nov 2023	Dec 2023	Jan 2024
Air Quality Impact (Construction)				
2.1	**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)	✓	✓	✓
2.1	**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. *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	✓ ✓	✓ ✓	✓ ✓

EM&A Ref.	Recommendation Measures	Implementation Stage Zone 2B & 2C Nov 2023	Dec 2023	Jan 2024
	• Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.	Obs	✓	Obs
	Exposed Earth	N/A	N/A	N/A
	• 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.			
	Loading, Unloading or Transfer of Dusty Materials	✓	✓	✓
	• 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.			
	• Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped.	N/A	N/A	N/A
	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.			
	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.			

EM&A Ref.	Recommendation Measures	Implementation Stage Zone 2B & 2C Nov 2023	Dec 2023	Jan 2024
	• 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	**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*	N/A	N/A	N/A
	• 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	N/A	N/A	N/A
	• All emissions to air, other than steam or water vapour, shall be colourless and free from persistent mist or smoke			

EM&A Ref.	Recommendation Measures	Implementation Stage Zone 2B & 2C Nov 2023	Dec 2023	Jan 2024
	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	N/A	N/A	N/A
	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	**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.	✓	✓	✓

		Implementation Stage		
		Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2023	Dec 2023	Jan 2024
3.1	**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 be noted that the silenced PME selected for assessment can be found in Hong Kong.	✓	✓	✓
3.1	**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.	✓	✓	✓
3.1	**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.	✓	✓	✓
3.1	**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.	✓	✓	✓
3.1	**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.	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage Zone 2B & 2C Nov 2023	Dec 2023	Jan 2024
Water Quality Impact (Construction)				
4.1	**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;	✓	✓	✓
	• 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 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.	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage Zone 2B & 2C Nov 2023	Dec 2023	Jan 2024
	• 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 onsite 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.	Obs	✓	✓
	• 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.	✓	✓	✓
	• 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.	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage Zone 2B & 2C Nov 2023	Dec 2023	Jan 2024
	• 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
4.1	**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 propeller wash;	N/A	N/A	N/A
	• 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
	• 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
	• 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
4.1	**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	**General construction activities**			

EM&A Ref.	Recommendation Measures	Implementation Stage Zone 2B & 2C Nov 2023	Dec 2023	Jan 2024
	• 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	Obs	✓
Waste Management Implications (Construction)				
6.1	**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	✓	Obs	Obs
	• Training of site personnel in proper waste management and chemical handling procedures	✓	✓	✓
	• Provision of sufficient waste disposal points and regular collection of waste	✓	✓	✓
	• Appropriate measures to minimise windblown litter and dust/odour during transportation of waste by either covering trucks or by transporting wastes in enclosed containers	✓	✓	✓
	• Provision of wheel washing facilities before the trucks leaving the works area so as to minimise dust introduction to public roads	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage Zone 2B & 2C Nov 2023	Dec 2023	Jan 2024
	• 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	**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	✓	Obs	✓
	• 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 wastes	✓	✓	✓
6.1	**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.	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage Zone 2B & 2C Nov 2023	Dec 2023	Jan 2024
	• 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 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	**Chemical Waste**			

		Implementation Stage		
		Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2023	Dec 2023	Jan 2024
	• 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.	✓	✓	✓
	• 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	**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.	✓	Obs	Obs
Land Contamination (Construction)				

EM&A Ref.	Recommendation Measures	Implementation Stage Zone 2B & 2C Nov 2023	Dec 2023	Jan 2024
7.1	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
	• 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
	• Stockpiling of contaminated excavated materials on site should be avoided as far as possible;	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
	• 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
	• Truck bodies and tailgates should be sealed to stop any discharge;	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

EM&A Ref.	Recommendation Measures	Implementation Stage Zone 2B & 2C Nov 2023	Dec 2023	Jan 2024
	• Speed control for trucks carrying contaminated materials should be exercised;	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
	• Maintain records of waste generation and disposal quantities and disposal arrangements.	N/A	N/A	N/A
Ecological Impact (Construction)				
	No mitigation measure is required.			
Landscape and Visual Impact (Construction)				
Table 9.1 (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.	✓	✓	✓
Table 9.1 (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
Table 9.1 (CM3)	Buffer trees for screening purposes to soften the hard architectural and engineering structures and facilities.	N/A	N/A	N/A
Table 9.1 (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
Table 9.1 (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

		Implementation Stage		
		Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	Nov 2023	Dec 2023	Jan 2024
Table 9.1 (CM6)	Sensitive streetscape design should be incorporated along all new roads and streets.	N/A	N/A	N/A
Table 9.1 (CM7)	Structure, ornamental planting shall be provided along amenity strips to enhance the landscape quality.	N/A	N/A	N/A
Table 9.1 (CM8)	Landscape design shall be incorporated to architectural and engineering structures in order to provide aesthetically pleasing designs.	N/A	N/A	N/A
Table 9.1 (CM9)	Minimize the structure of marine facilities to be built on the seabed and foreshore in order to minimize the affected extent to the waterbody	N/A	N/A	N/A
Table 9.2 (MCP1)	Use of decorative screen hoarding/boards	✓	✓	✓
Table 9.2 (MCP2)	Early introduction of landscape treatments	N/A	N/A	N/A
Table 9.2 (MCP3)	Adoption of light colour for the temporary ventilation shafts for the basement during the transition period.	N/A	N/A	N/A
Table 9.2 (MCP4)	Control of night time lighting	✓	✓	✓
Table 9.2 (MCP5)	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 - Not Applicable

✓ - Implemented

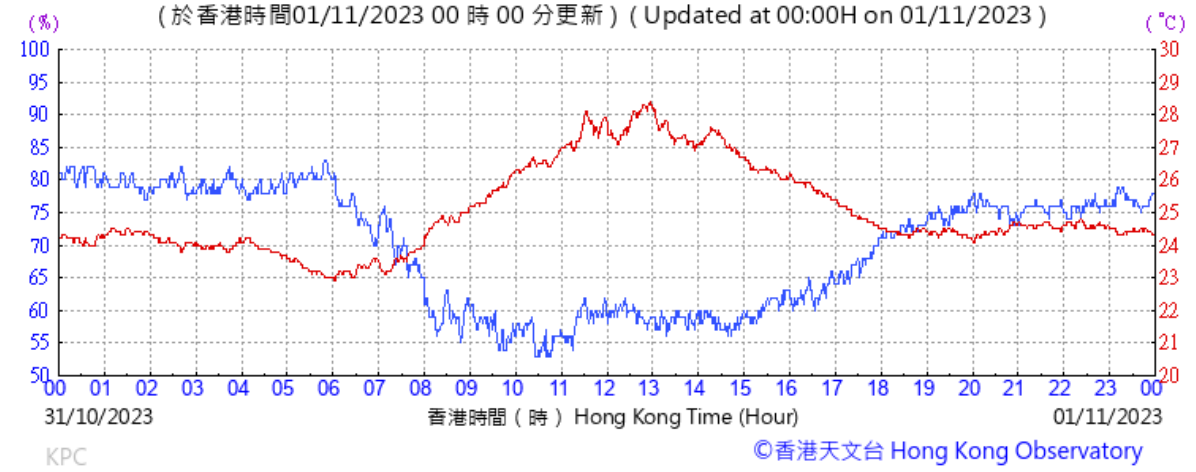
Obs - Observed

Rem - Reminder

D. Meteorological Data Extracted from Hong Kong Observatory

Extract of Meteorological Observations for King's Park Automatic Weather Station, November, 2023

Tempearture/Humidity:



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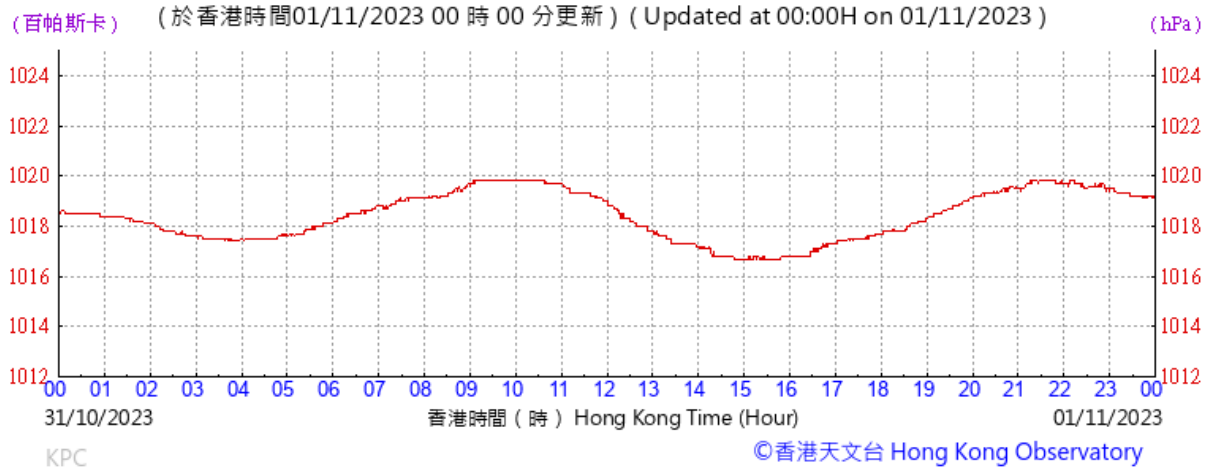

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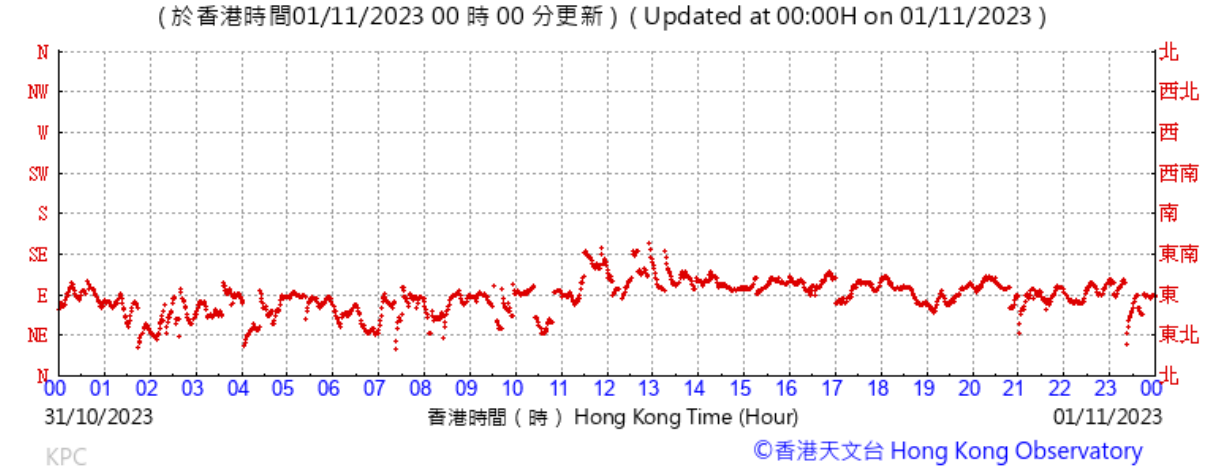

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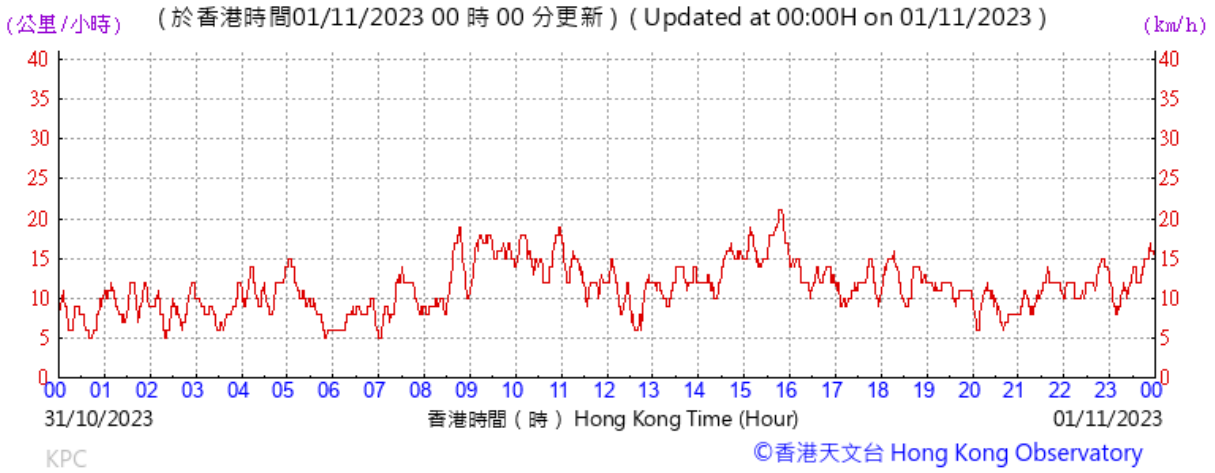

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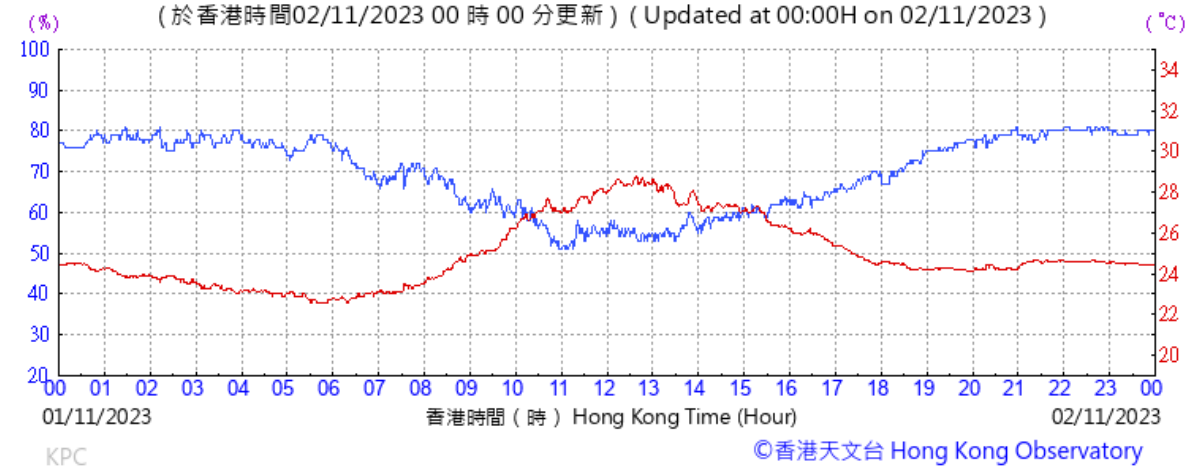

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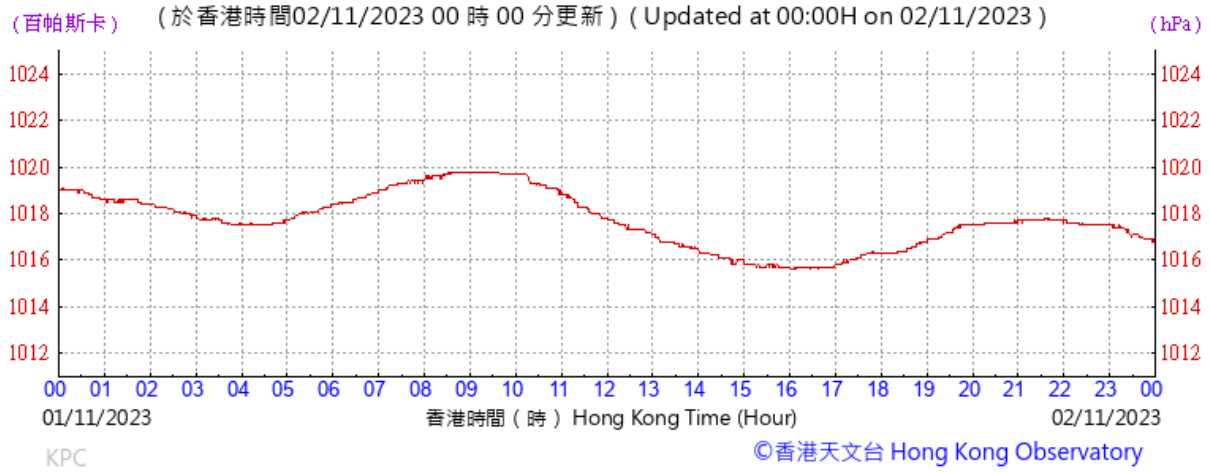

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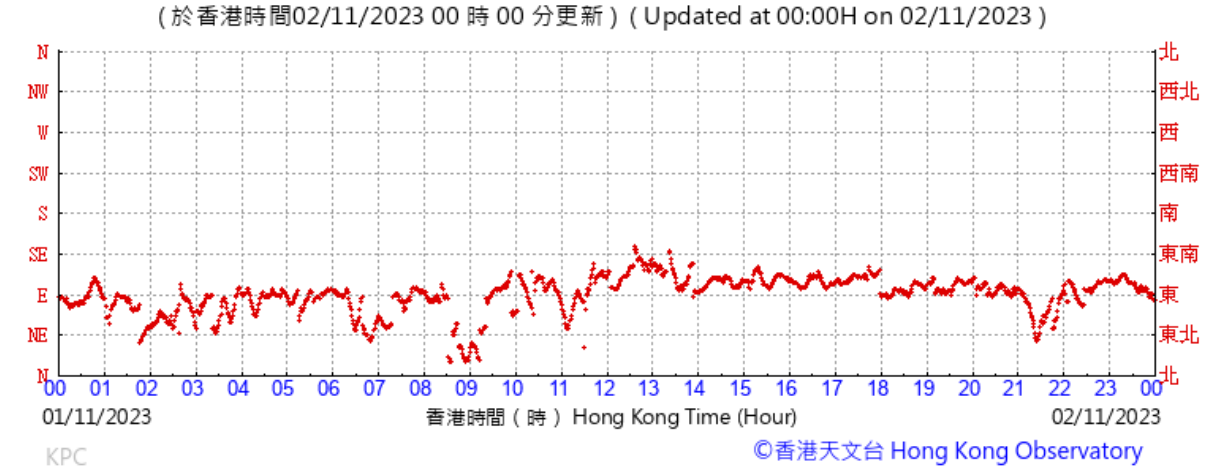

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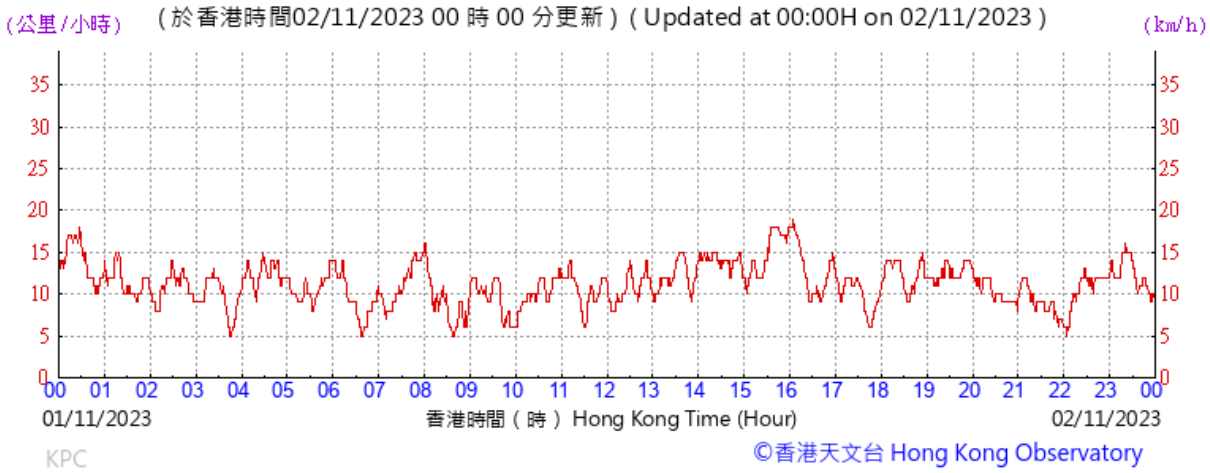

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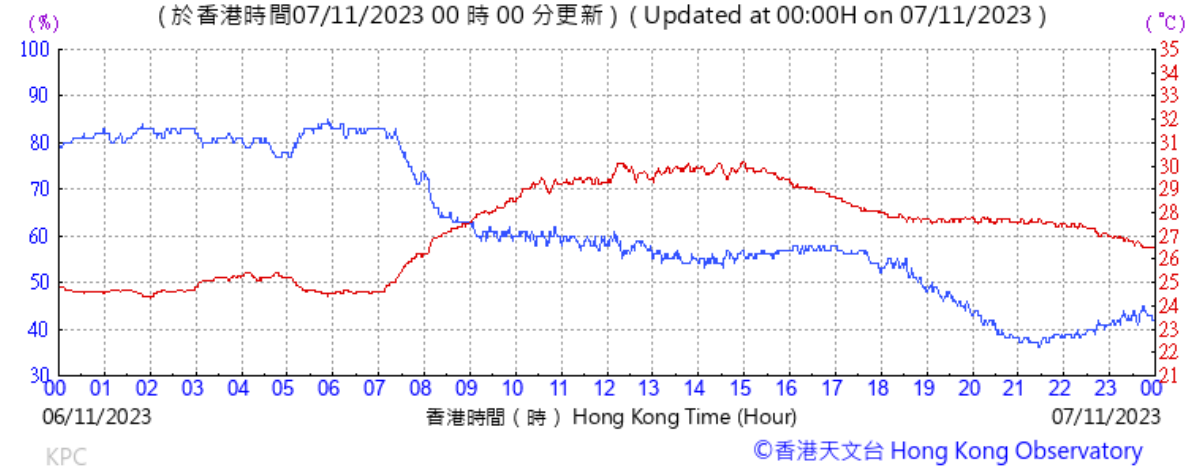

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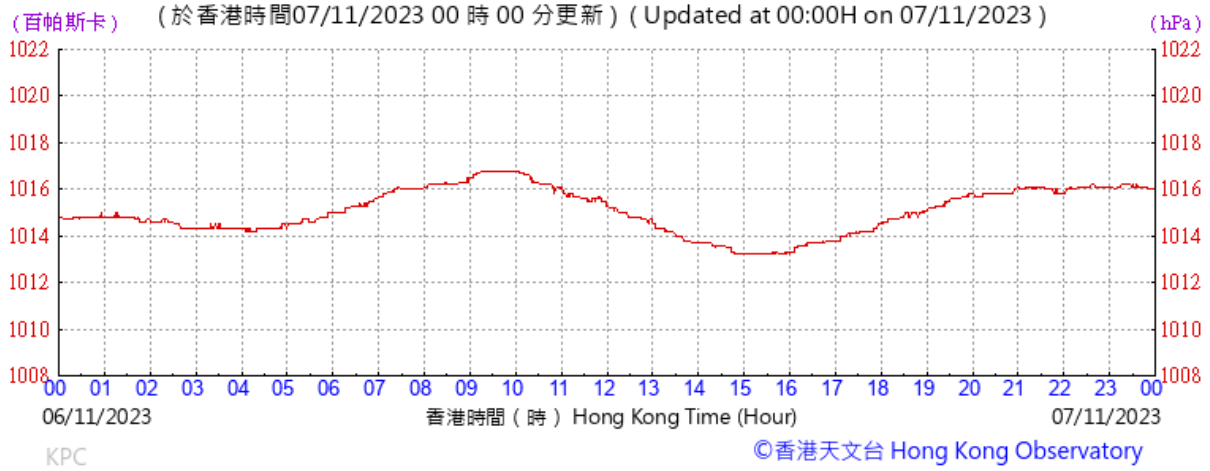

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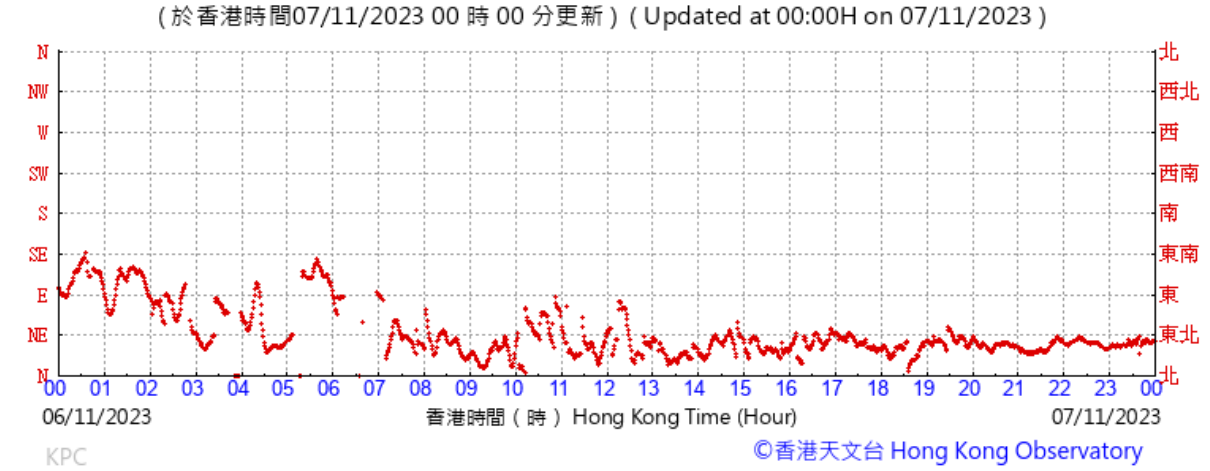

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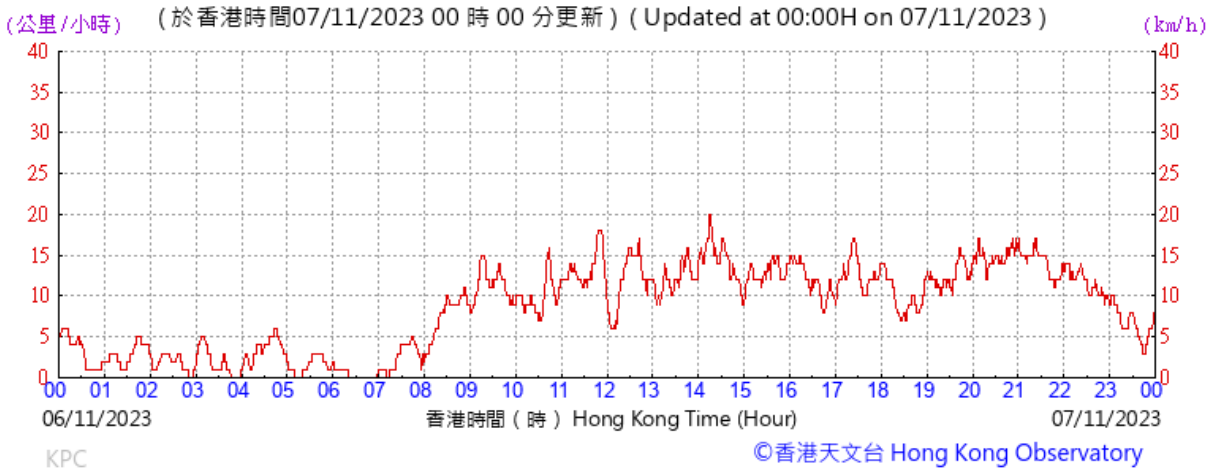

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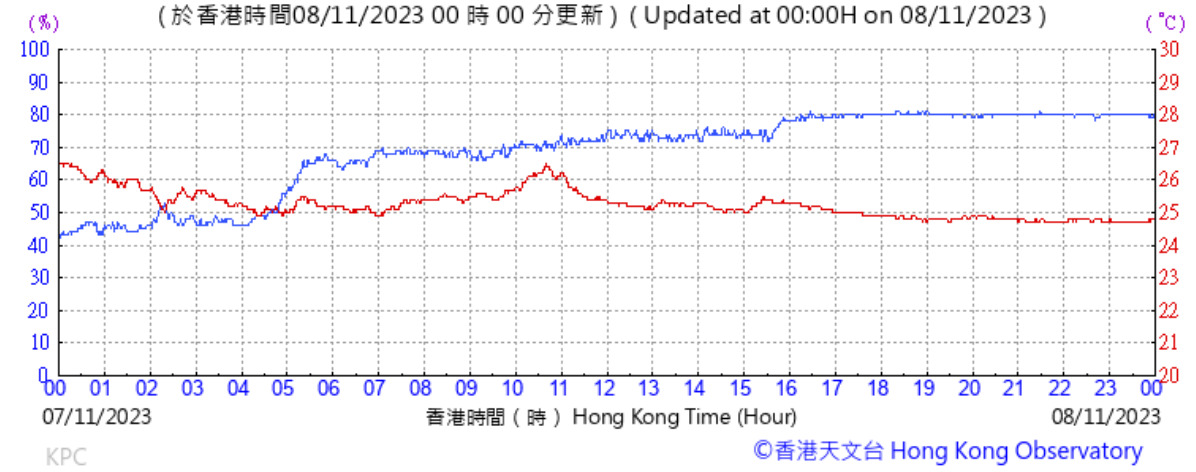

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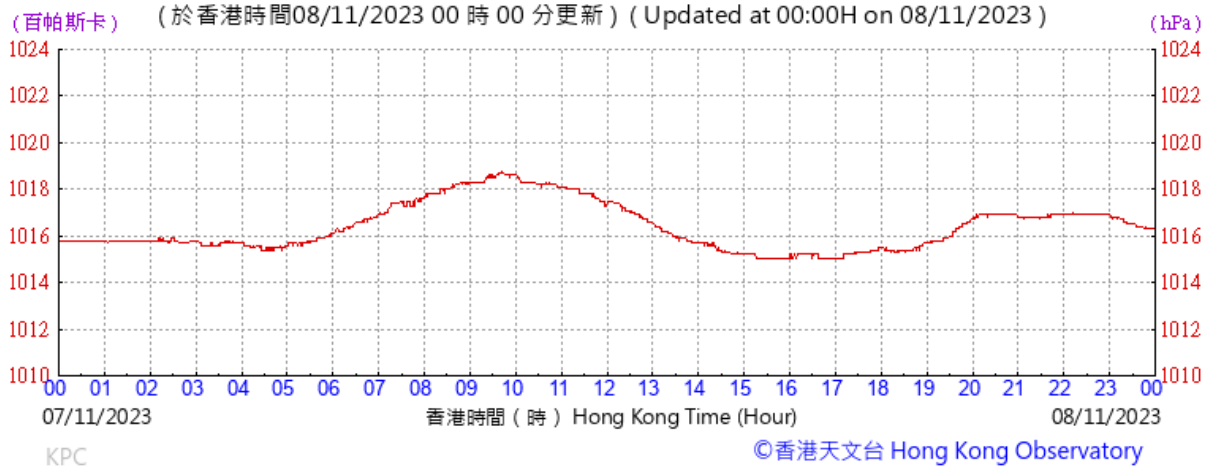

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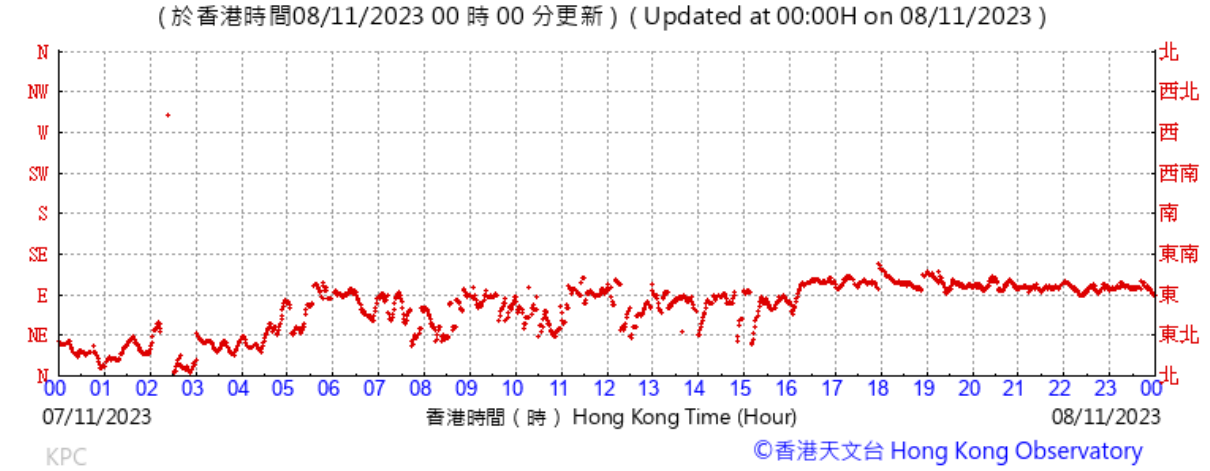

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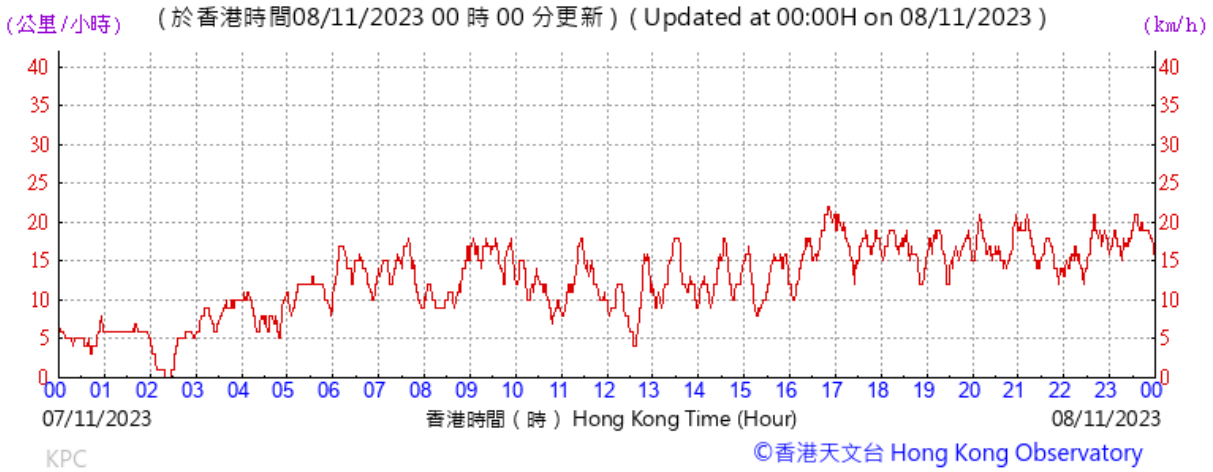

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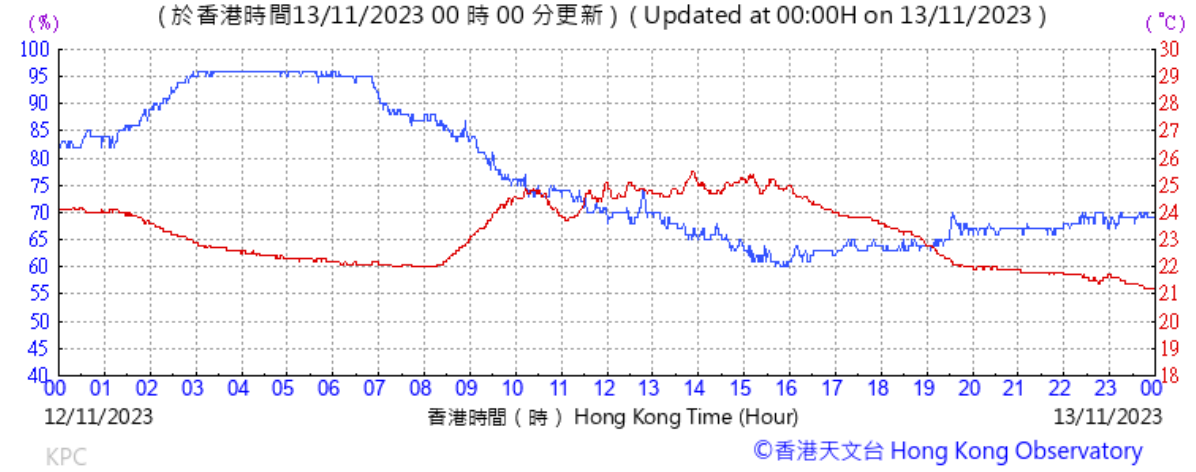

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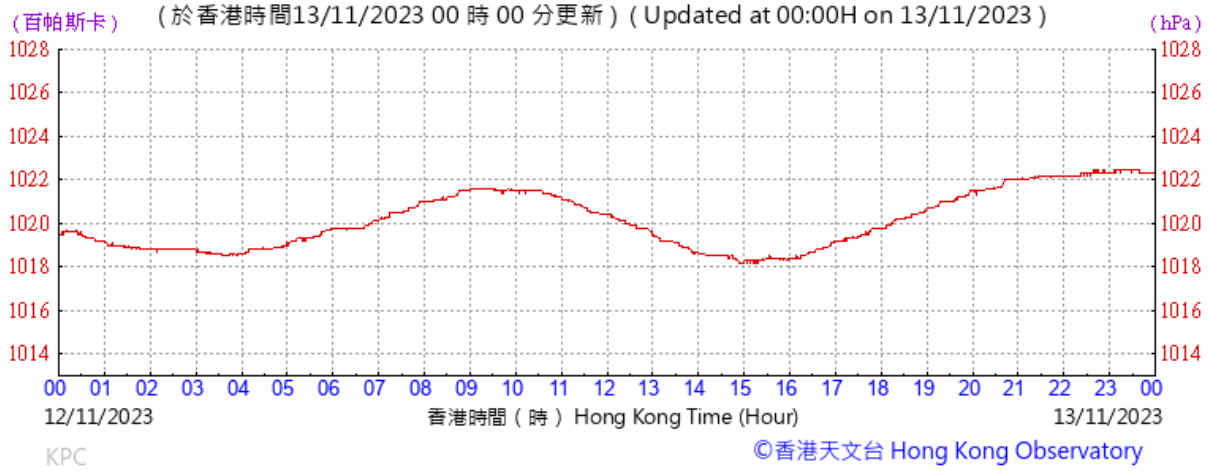

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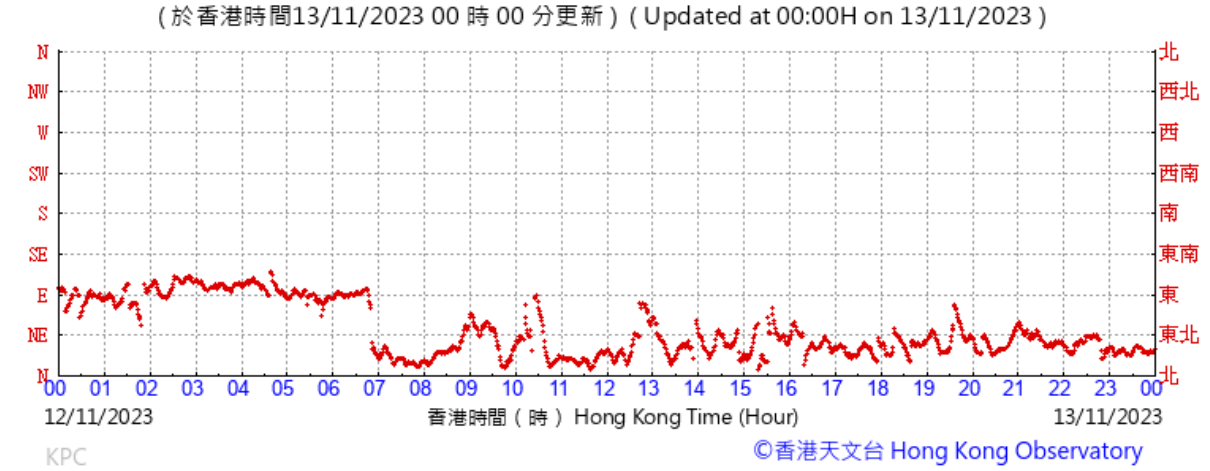

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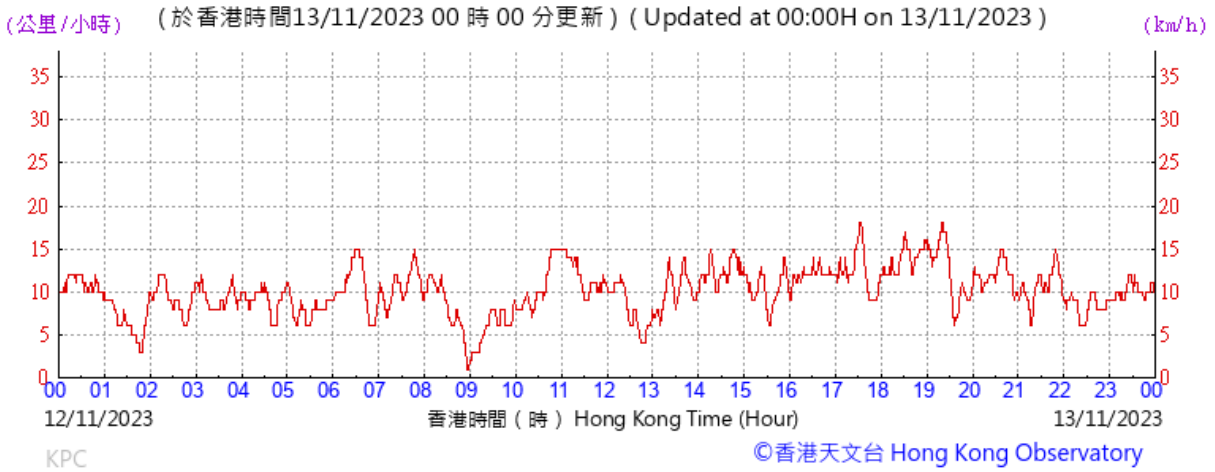

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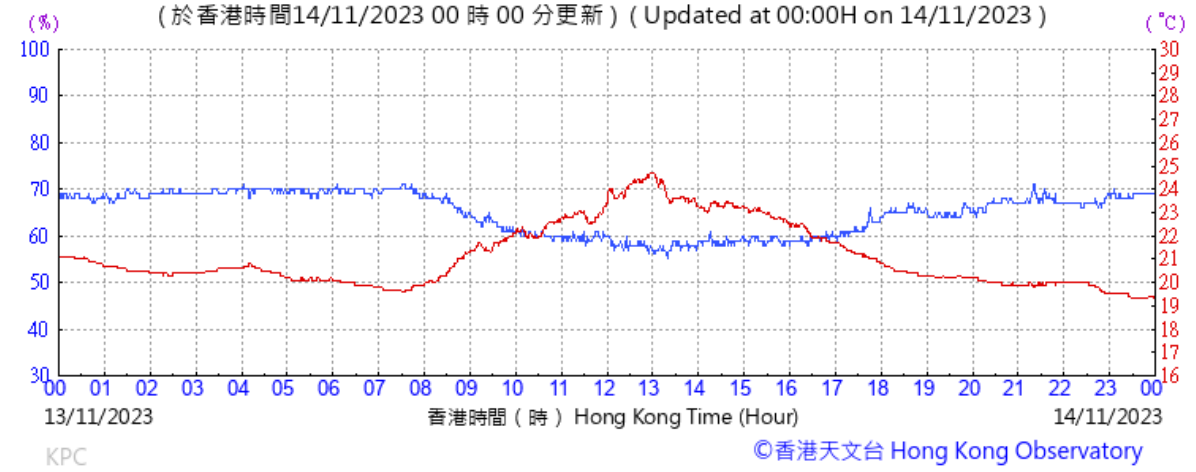

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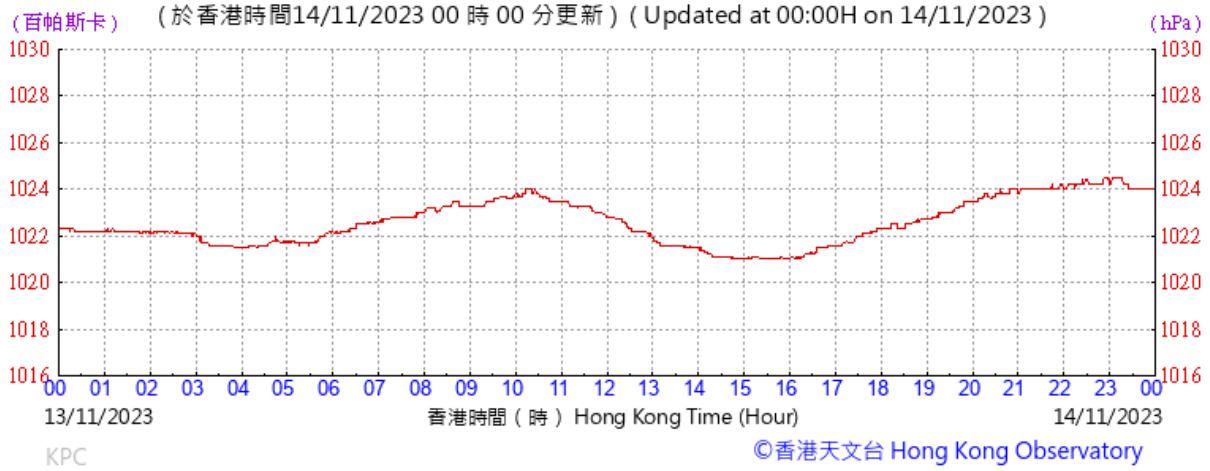

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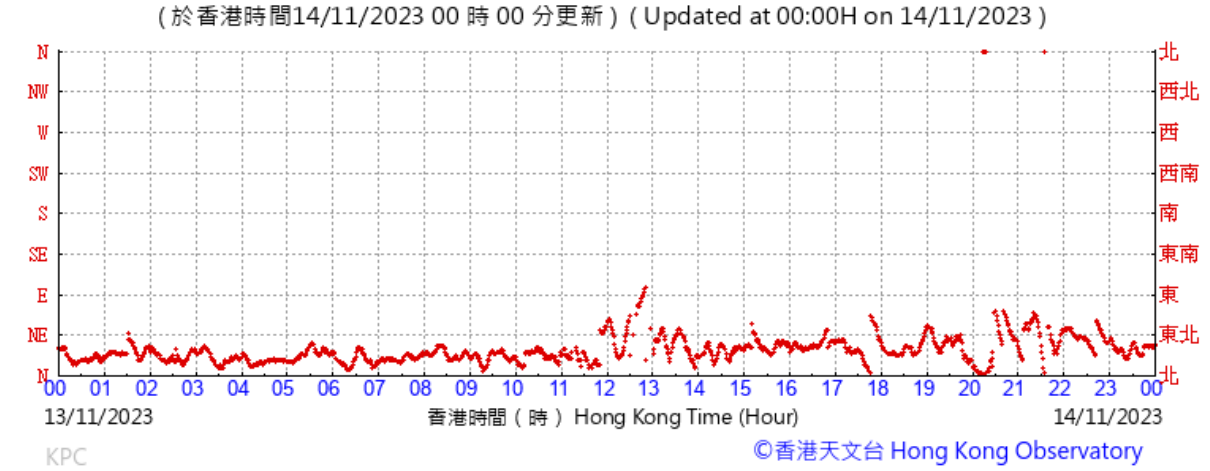

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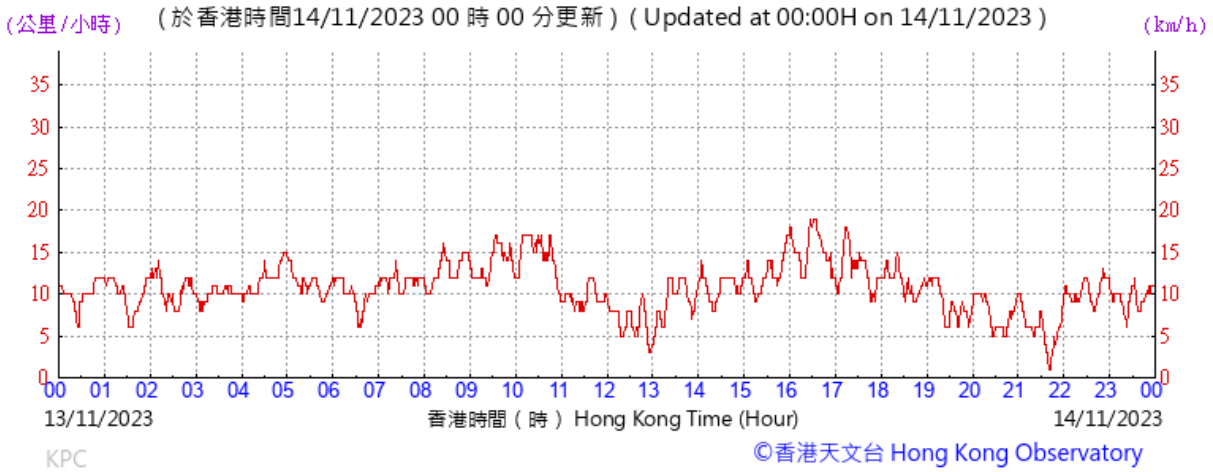

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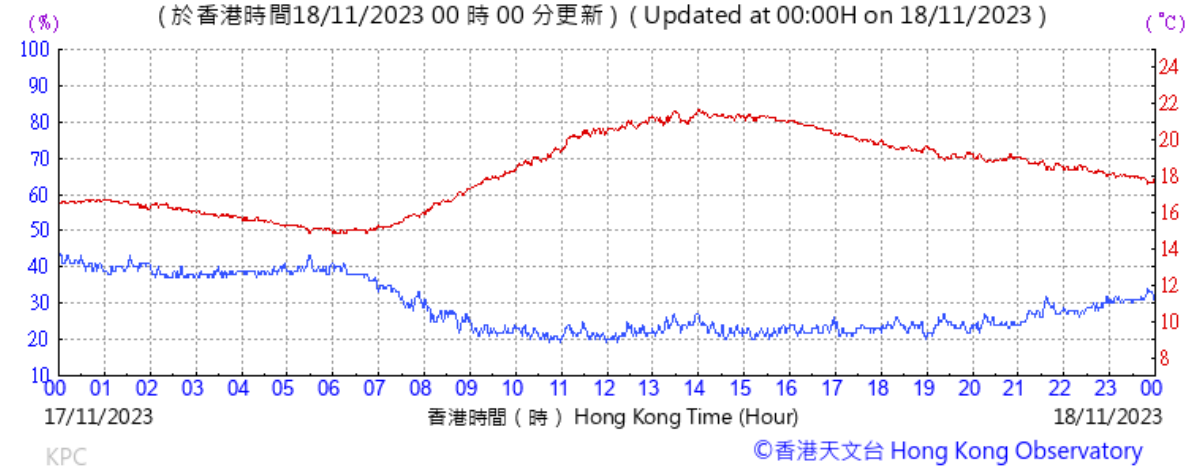

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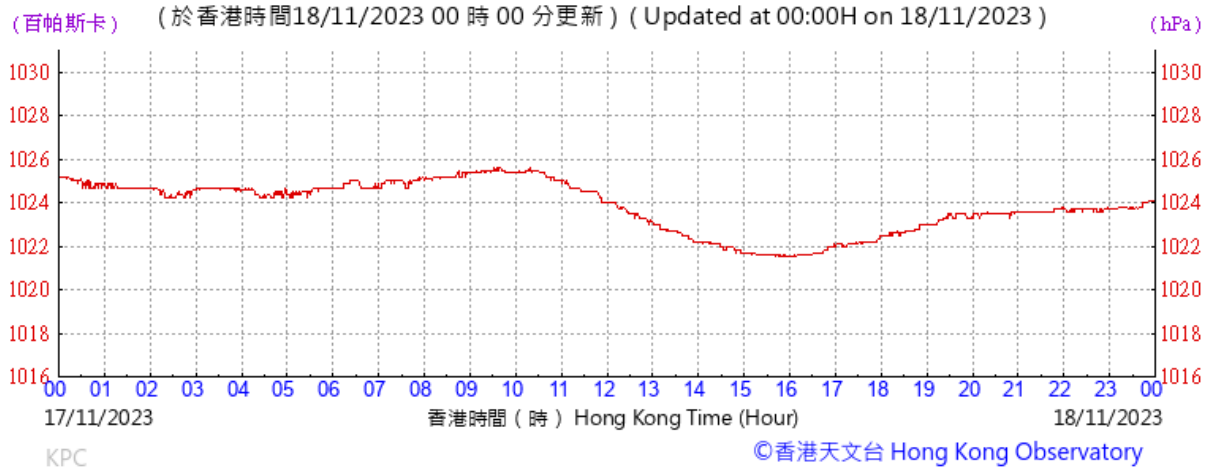

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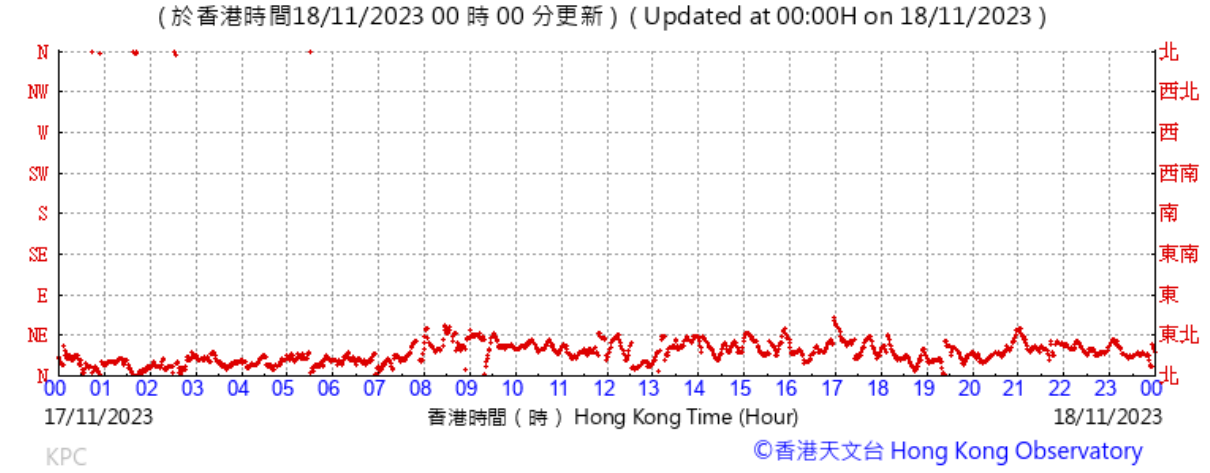

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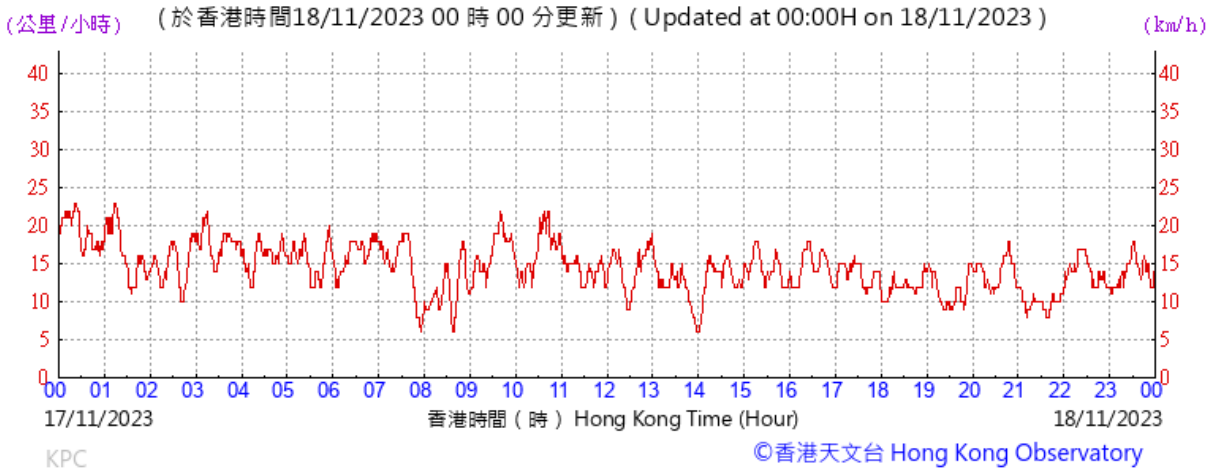

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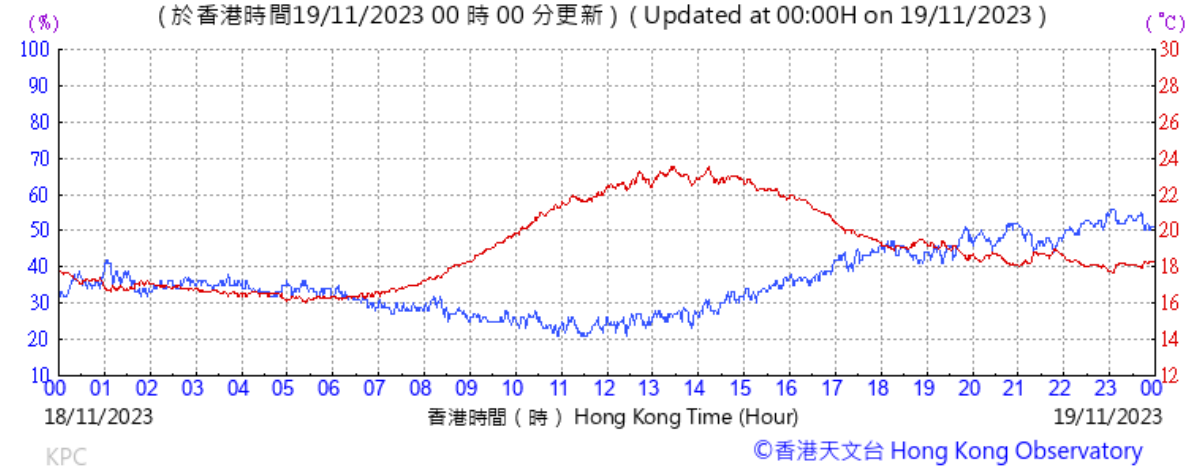

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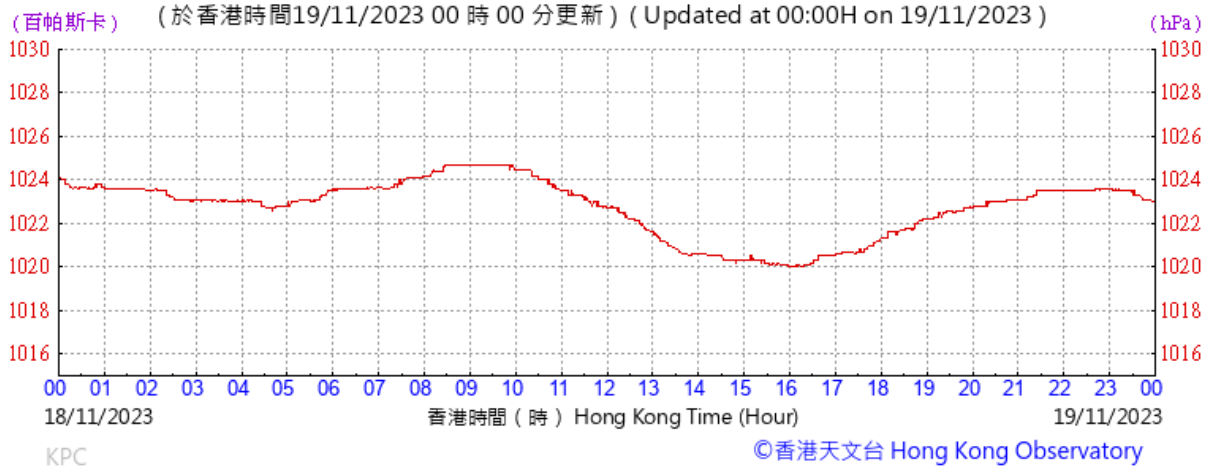

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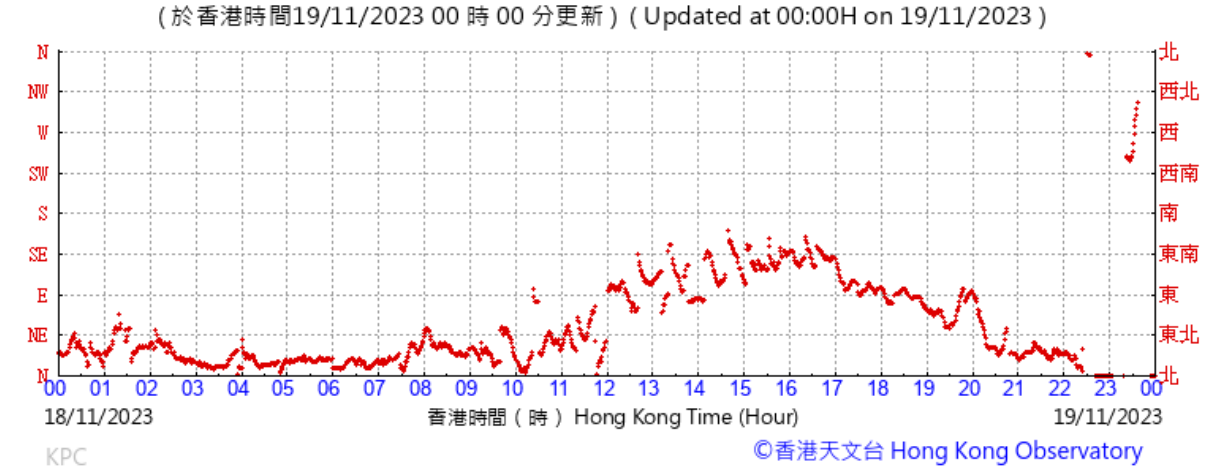
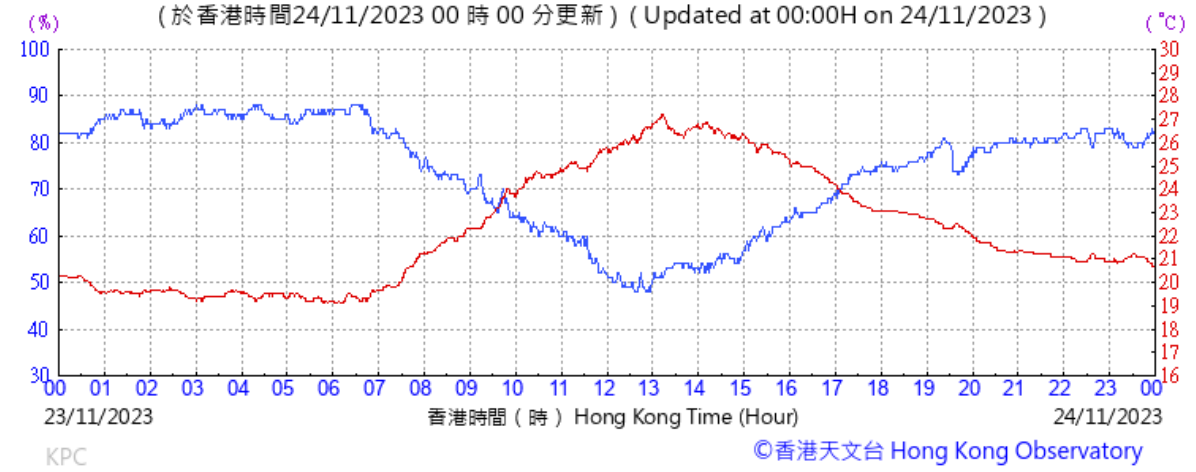


Wind Speed:

Tempearture/Humidity:



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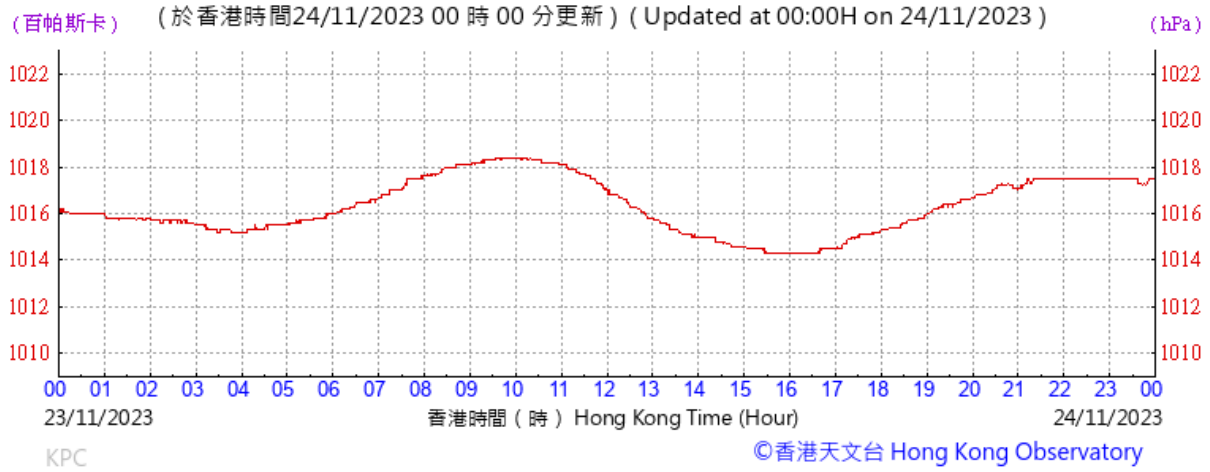

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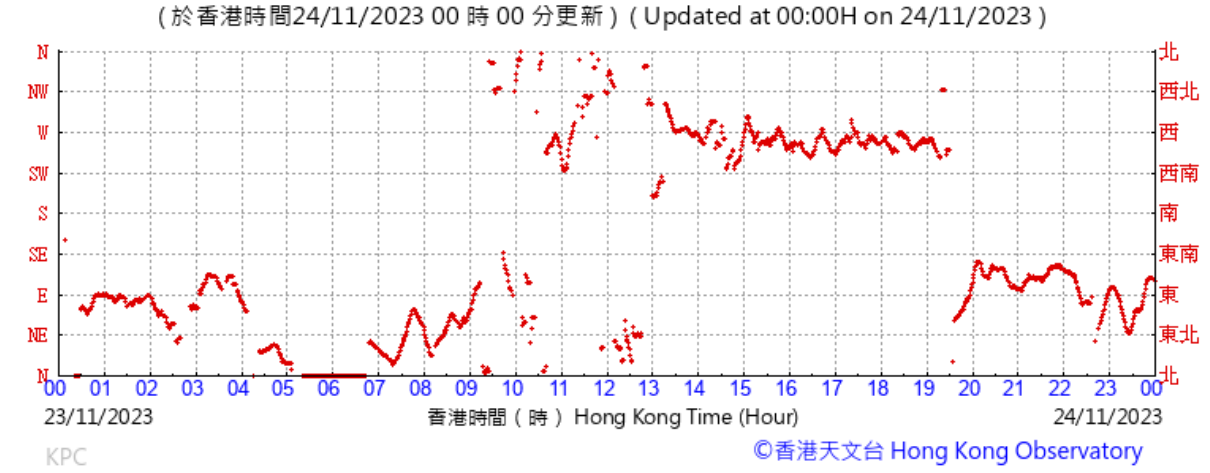

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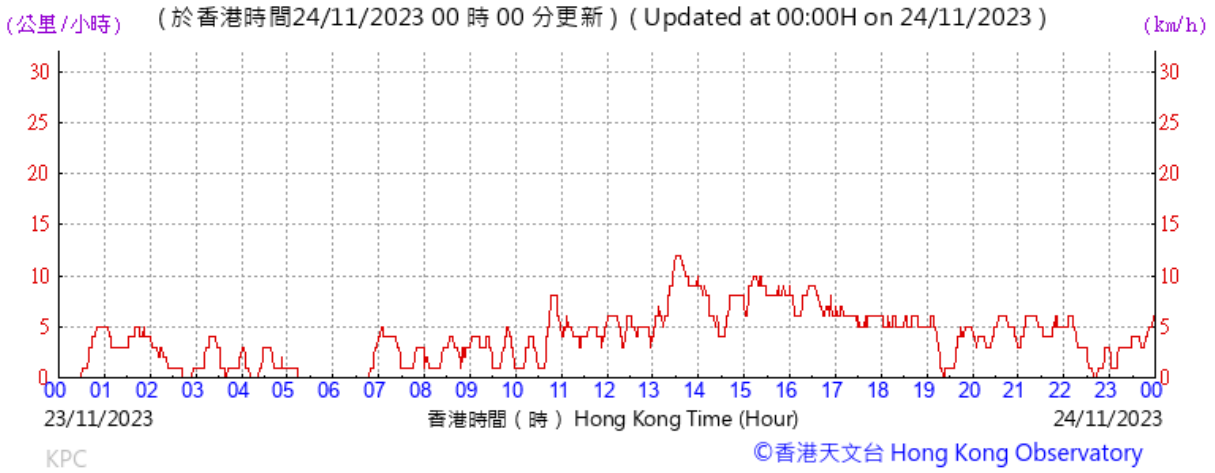

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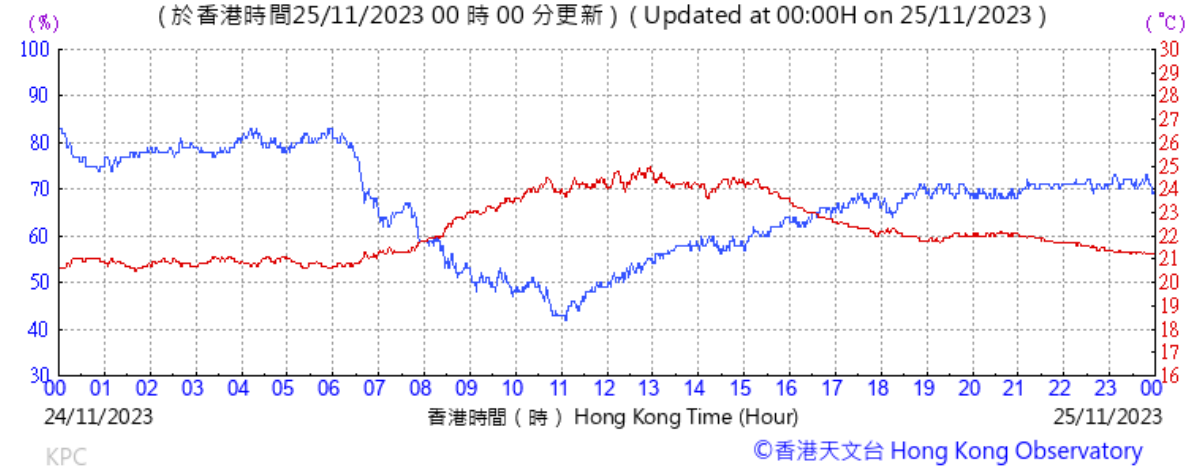

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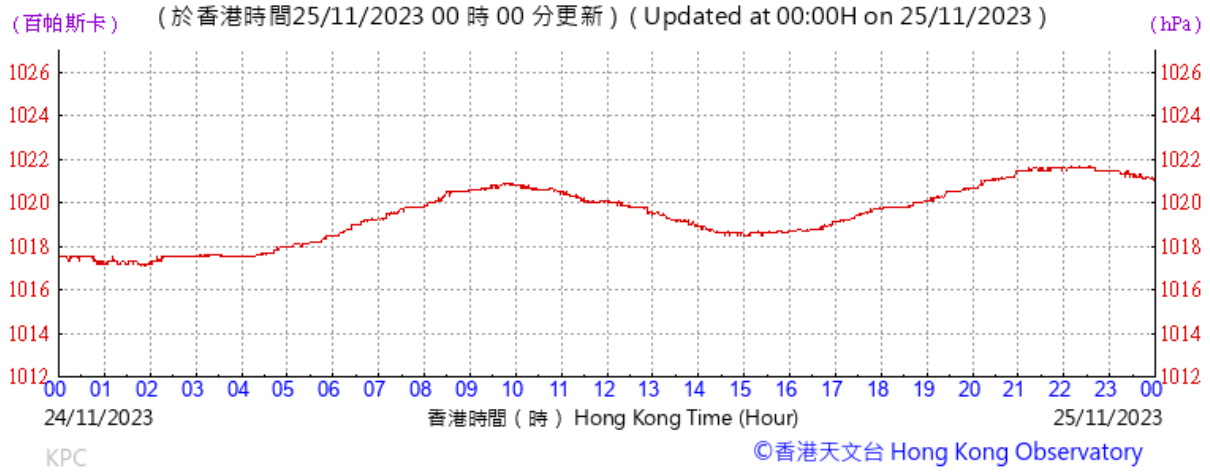

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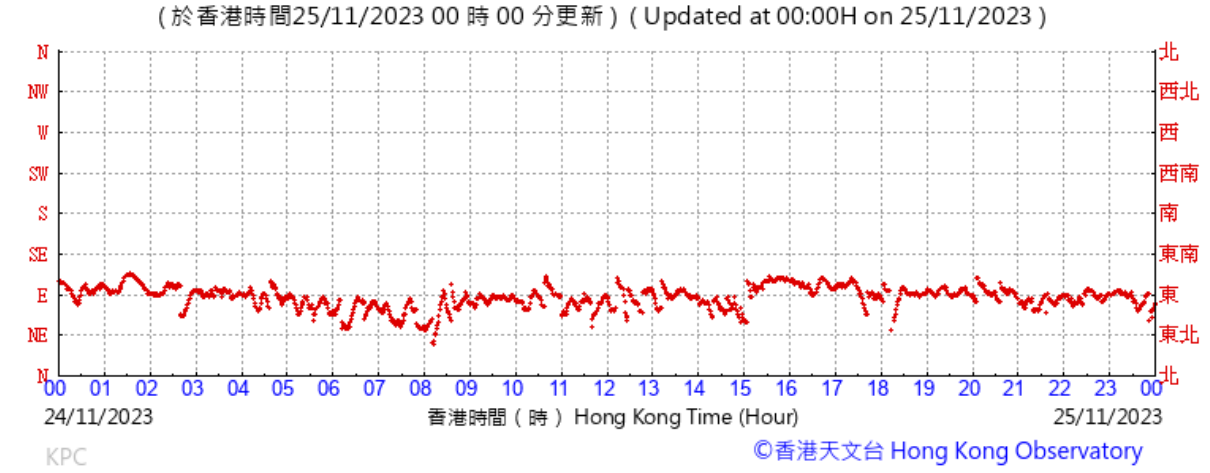

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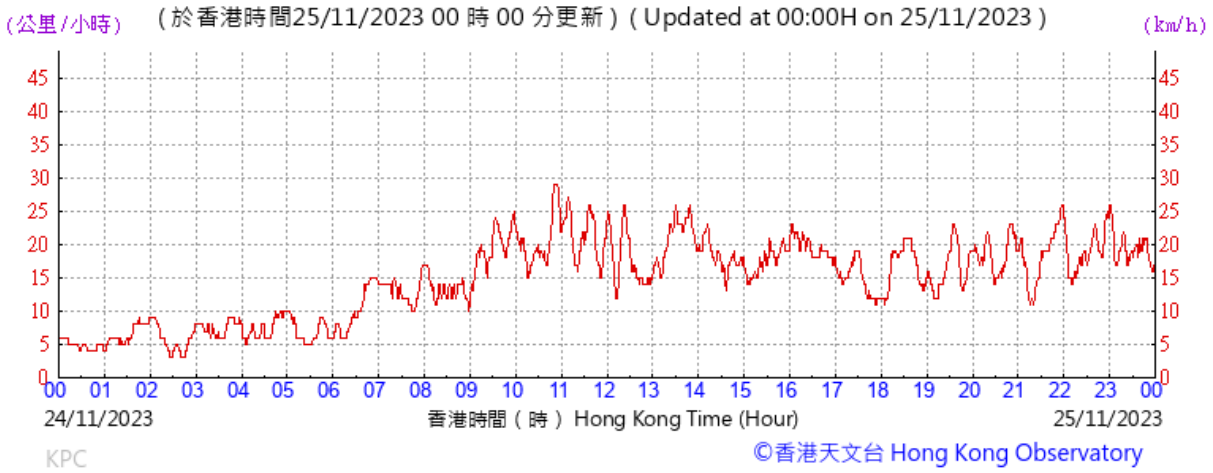
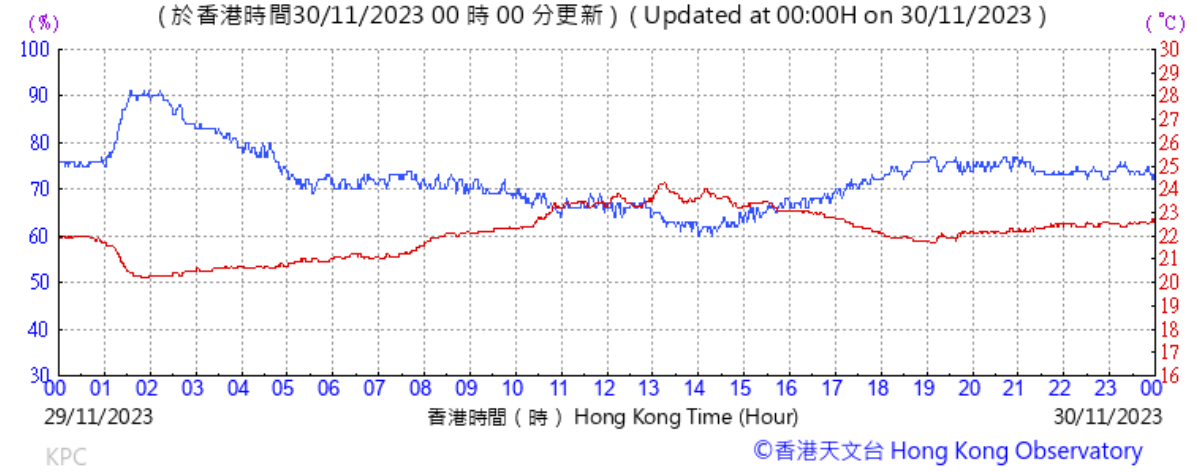


Tempearture/Humidity:



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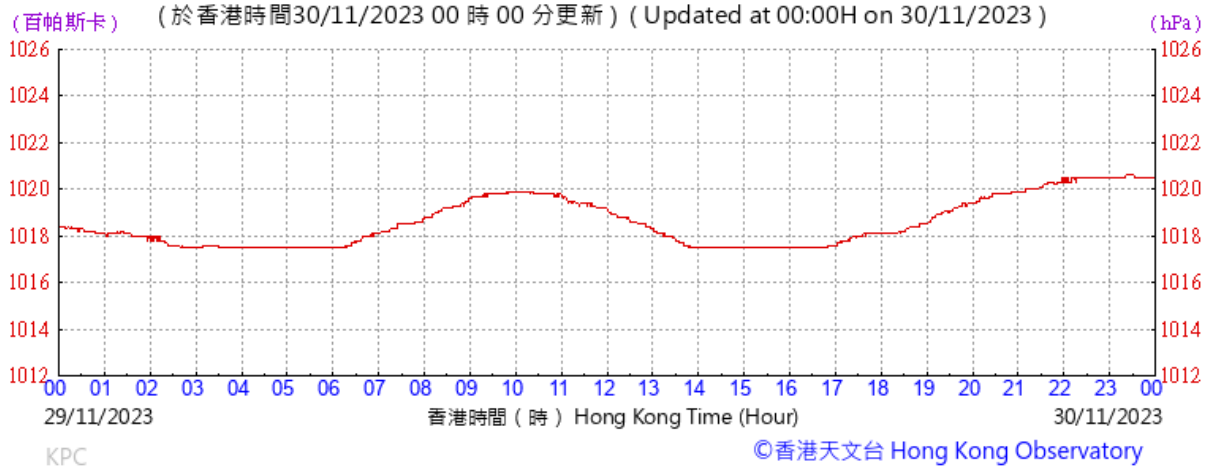

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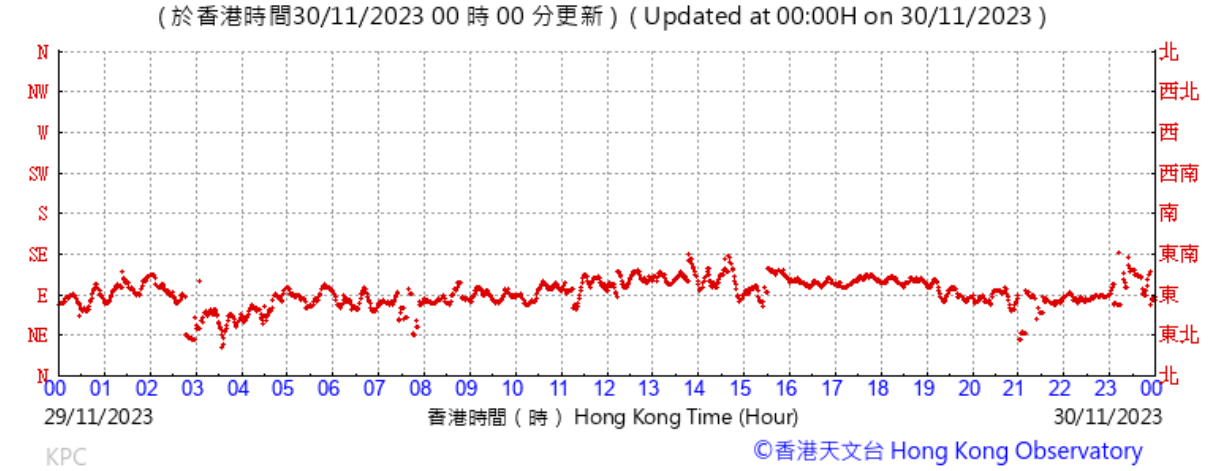

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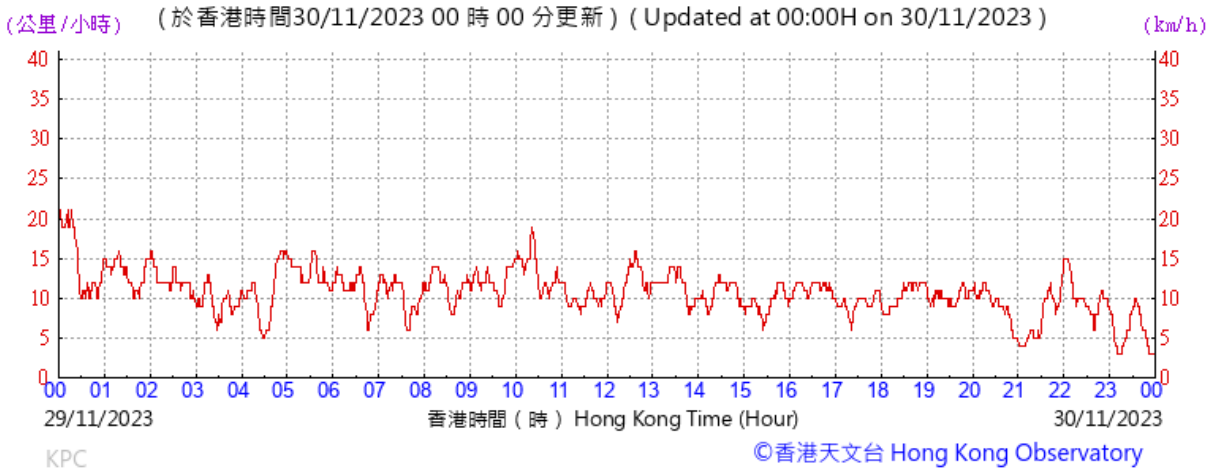
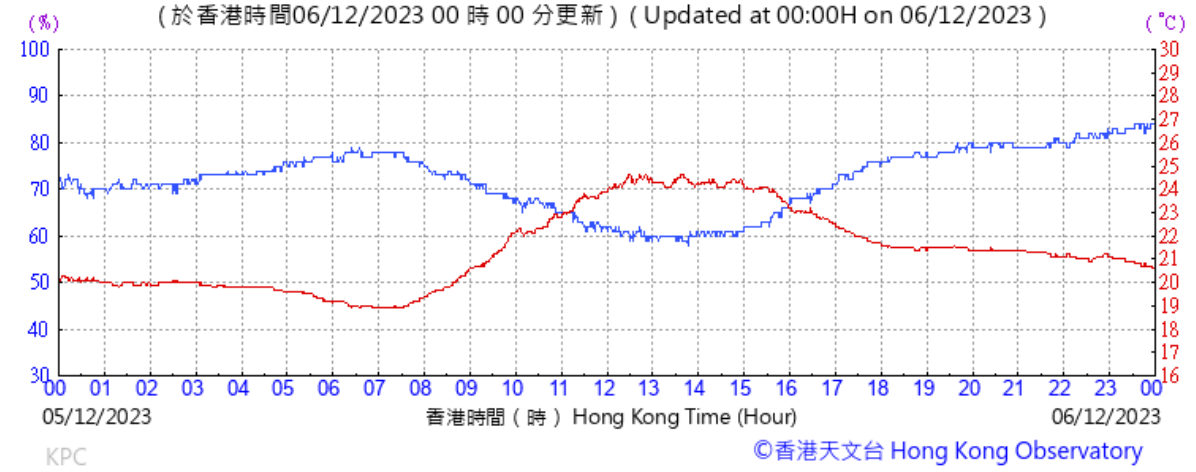


Extract of Meteorological Observations for King's Park Automatic Weather Station, December, 2023

Tempearture/Humidity:



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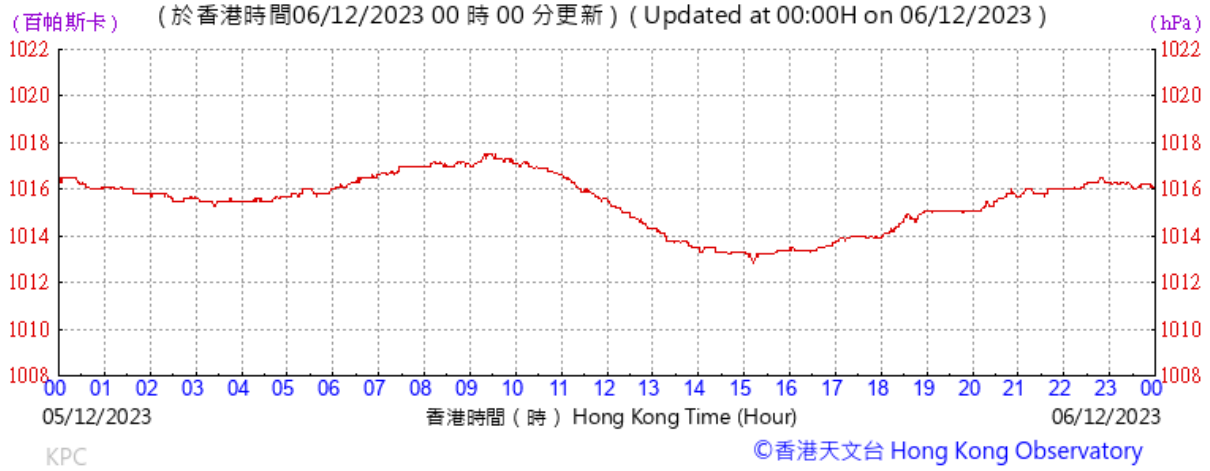

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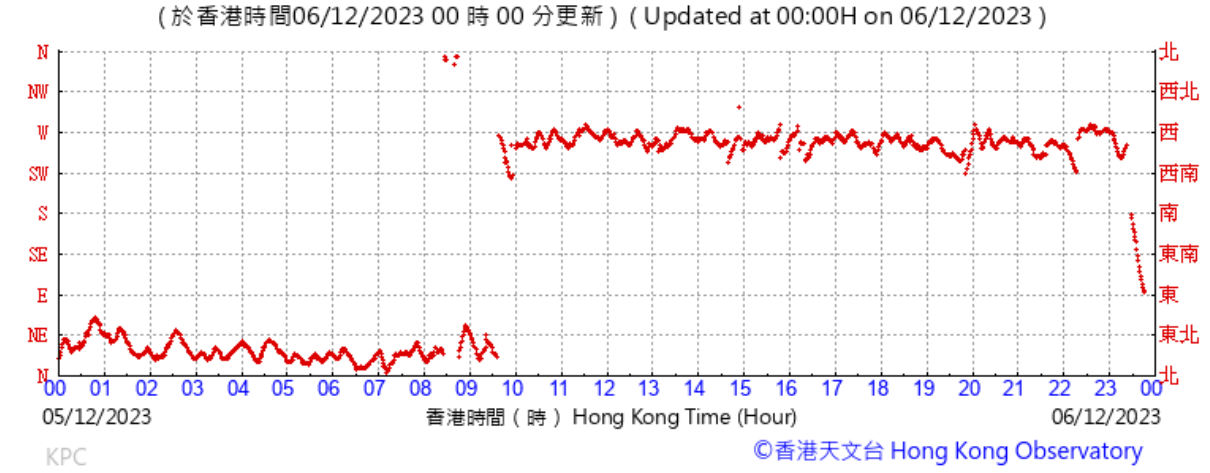

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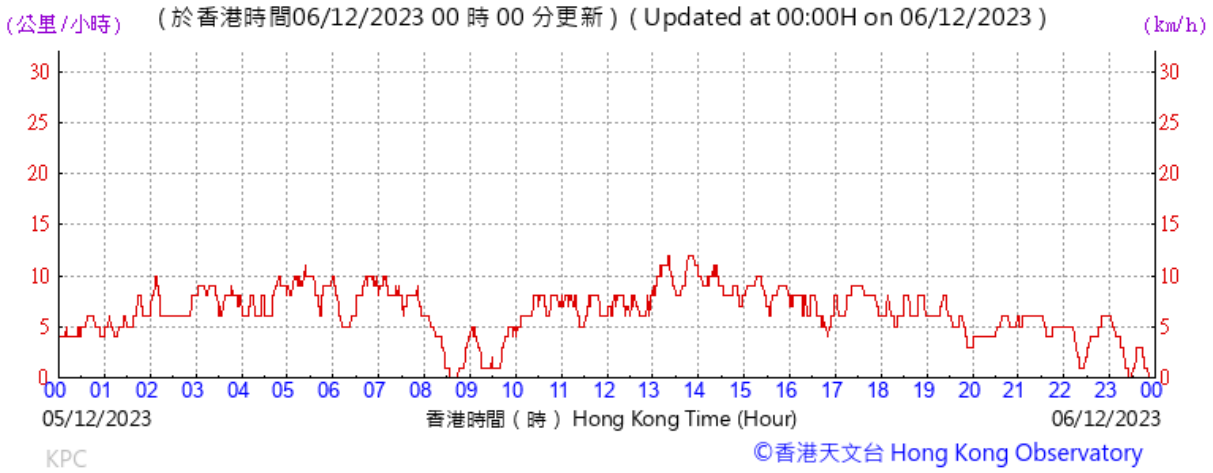

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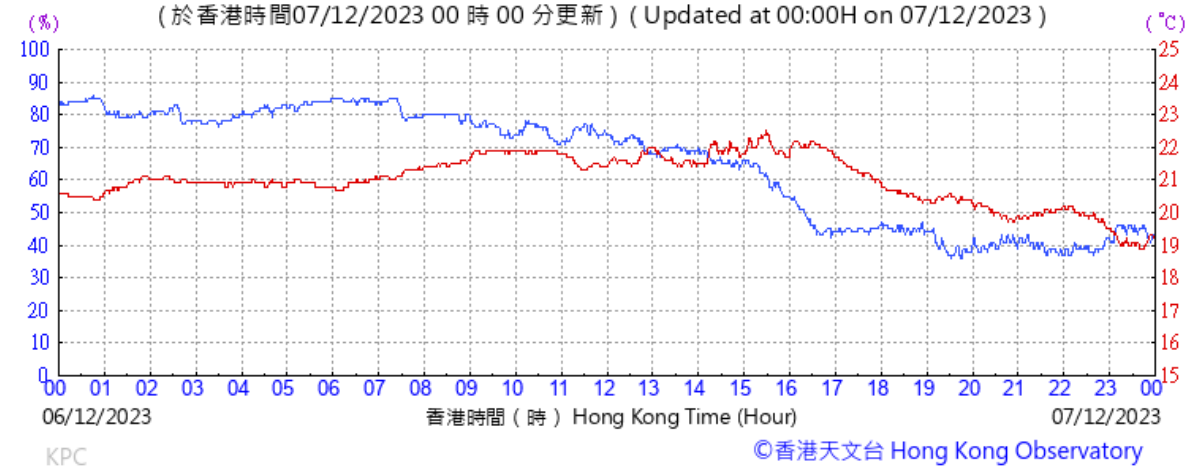

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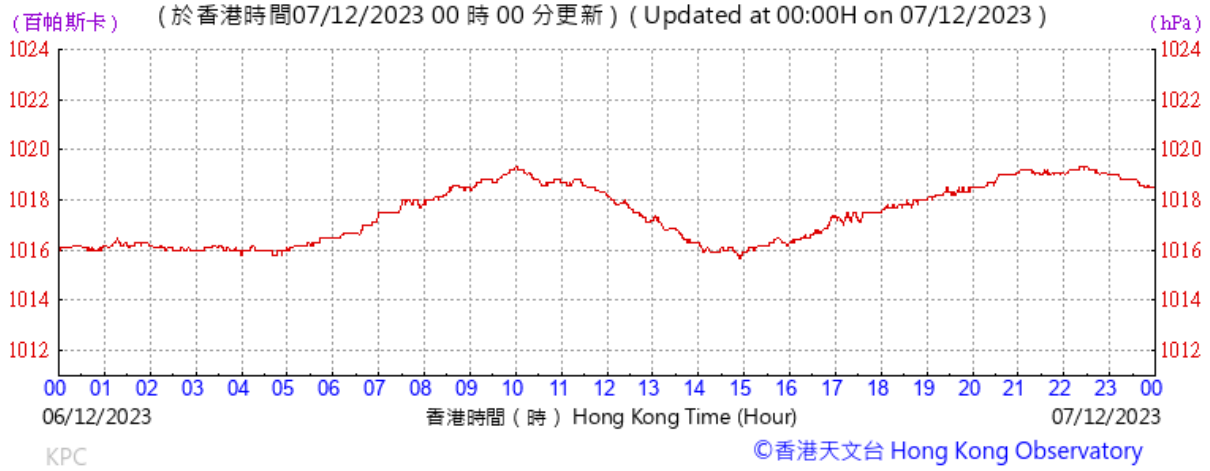

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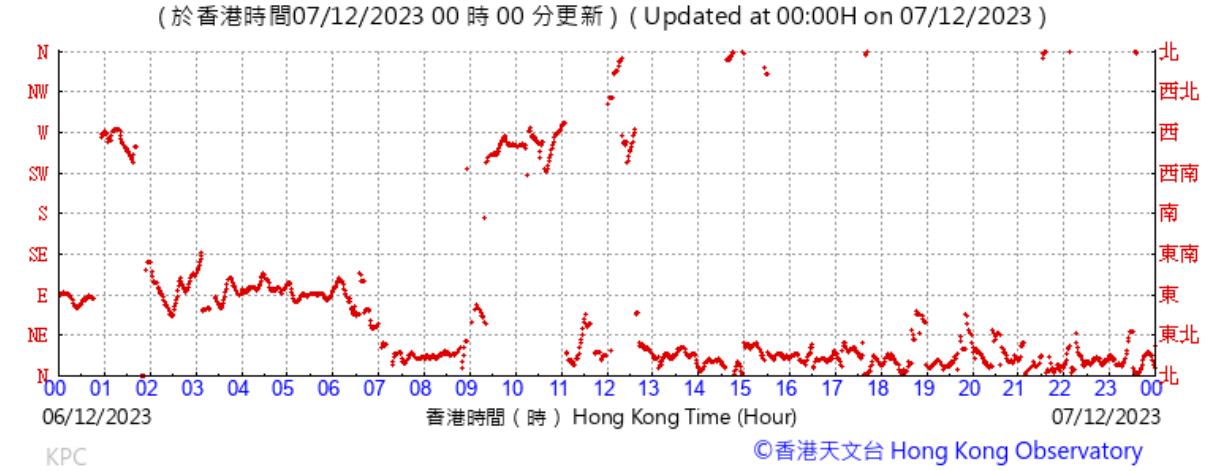

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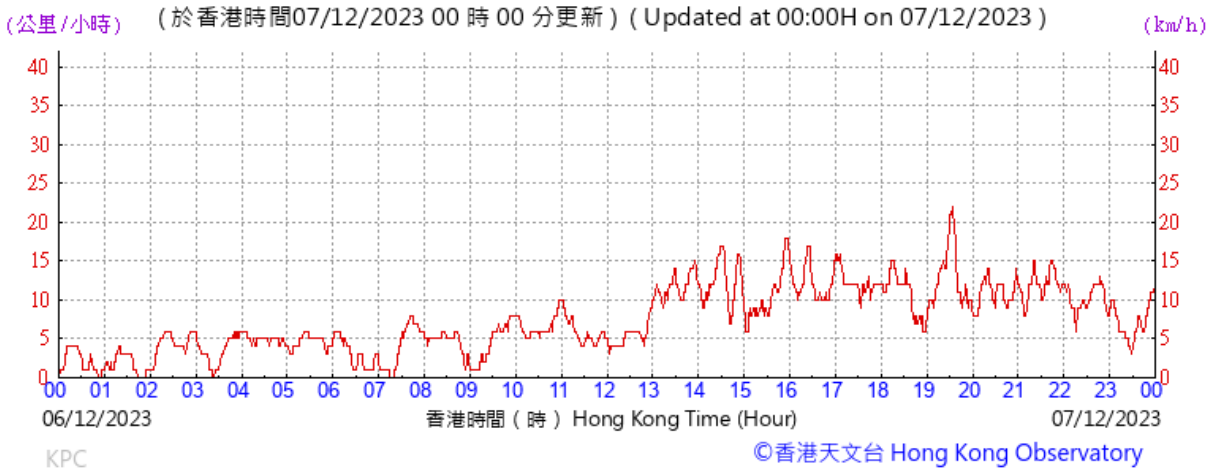

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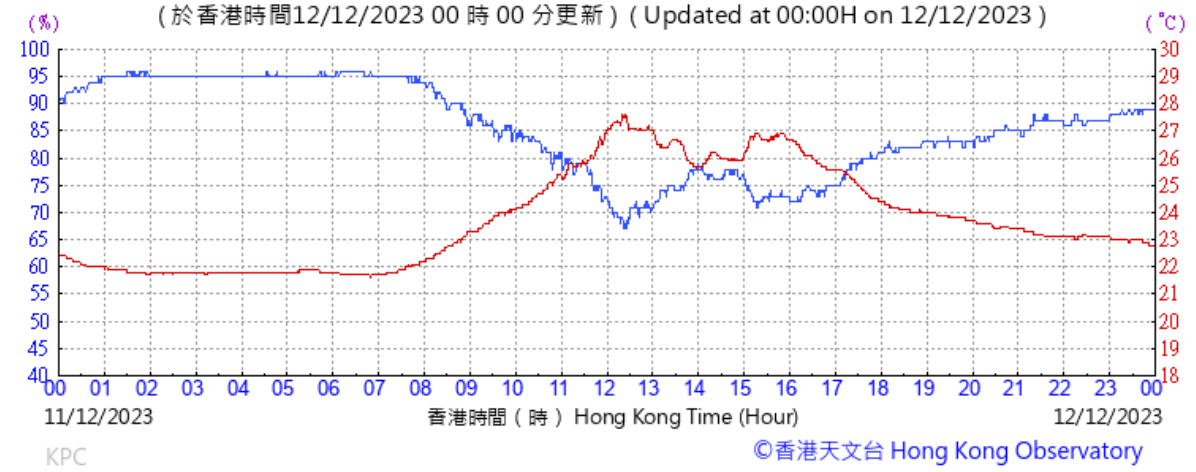

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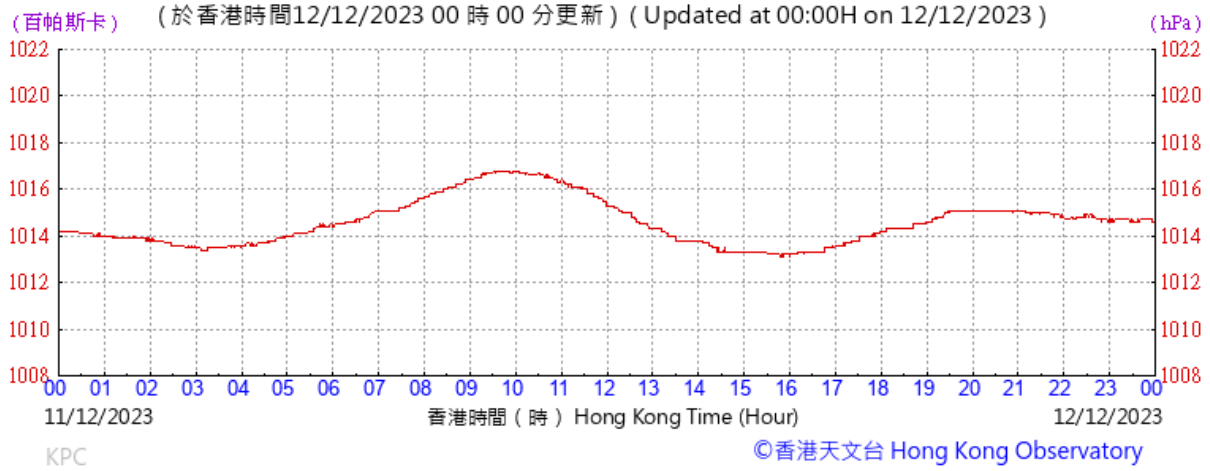

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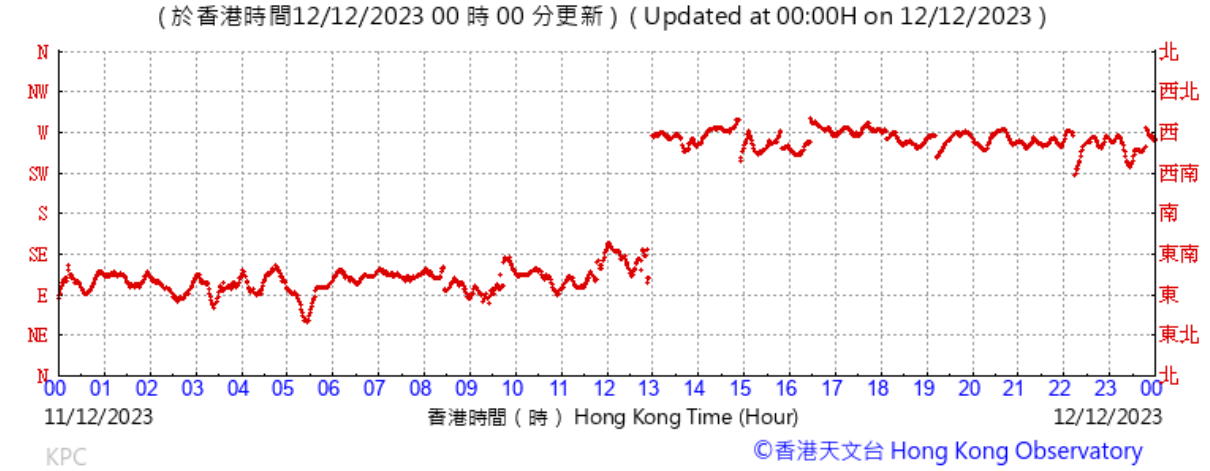

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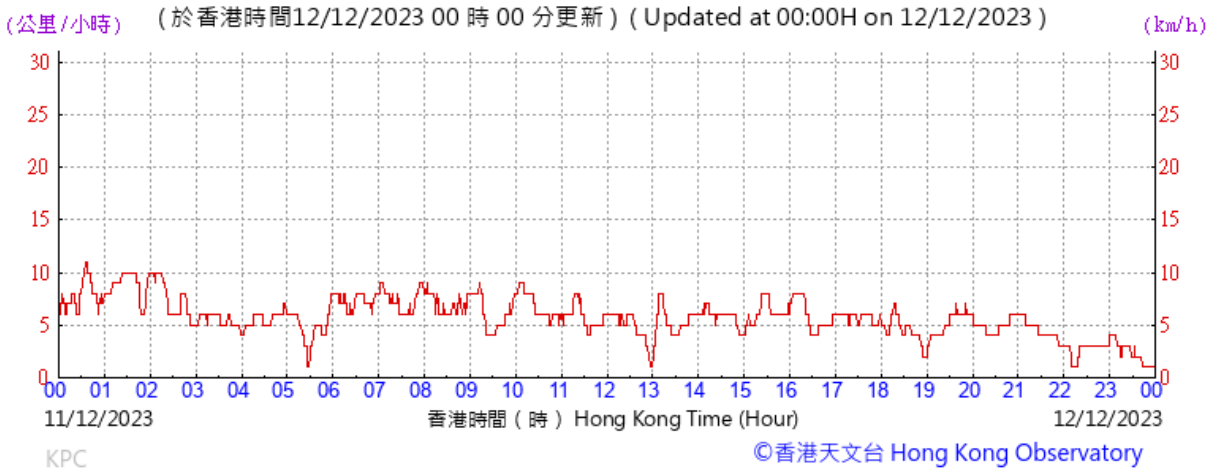

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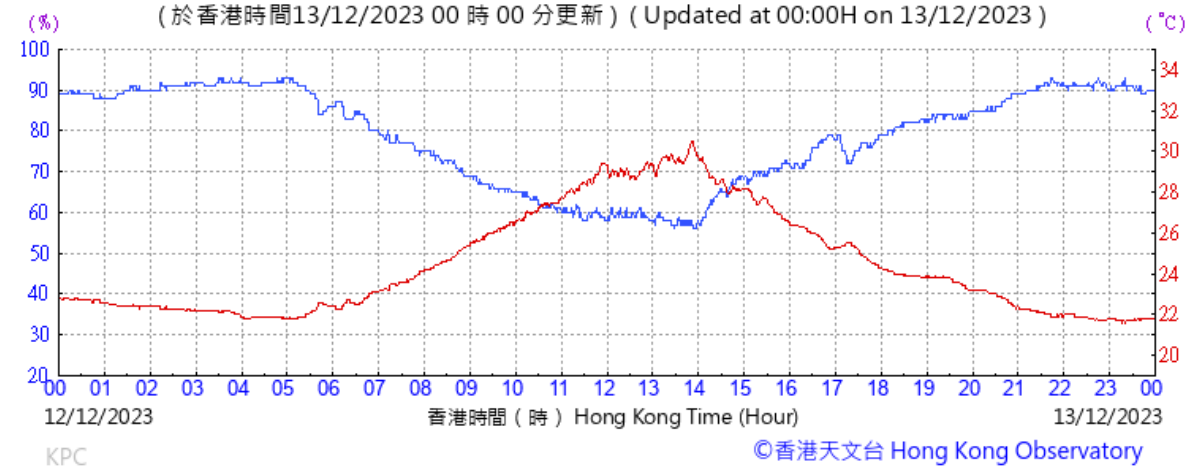

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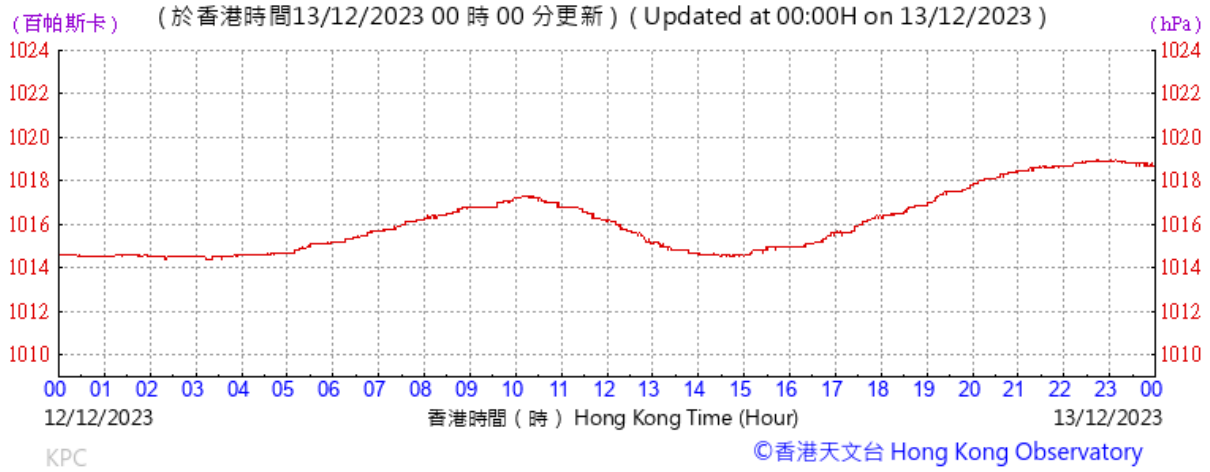

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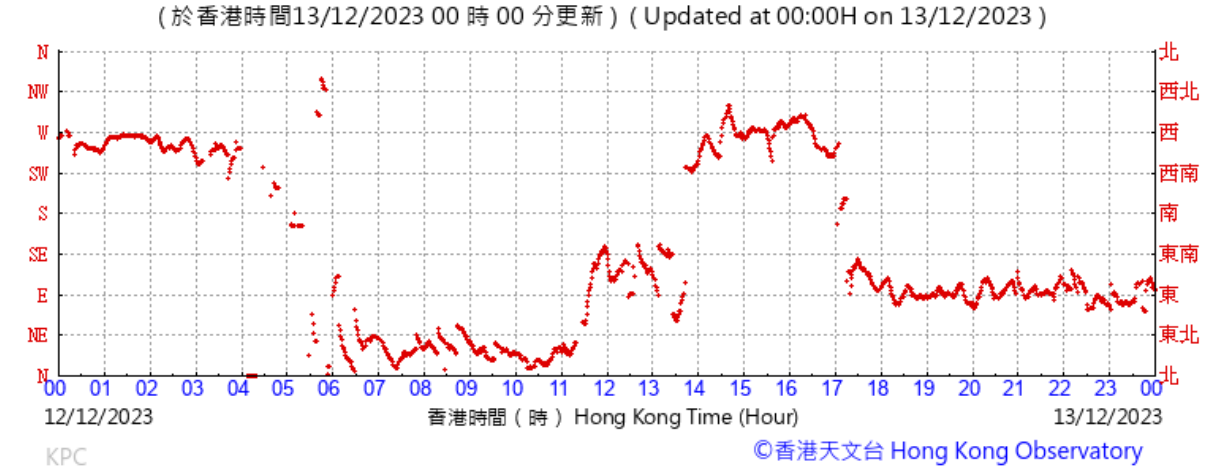

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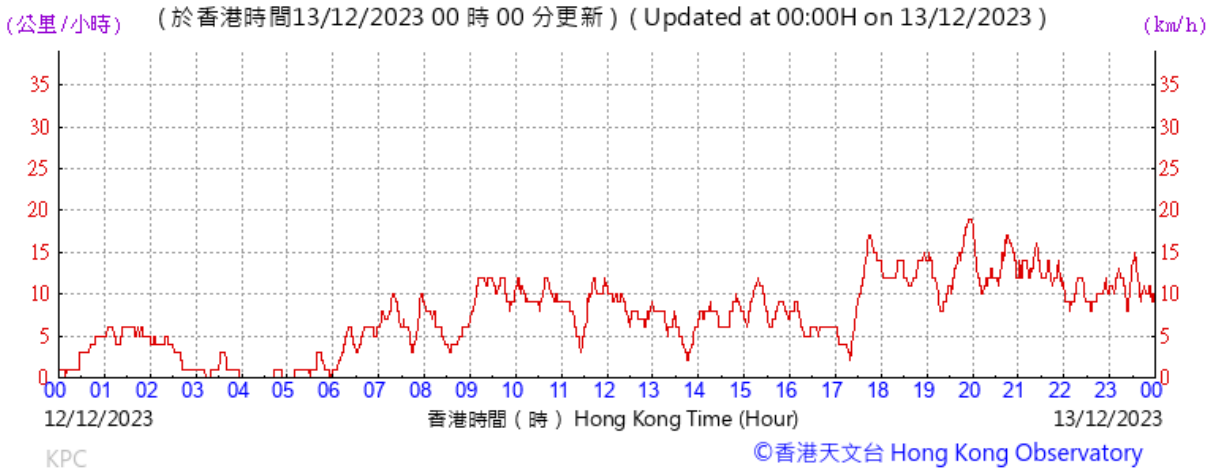

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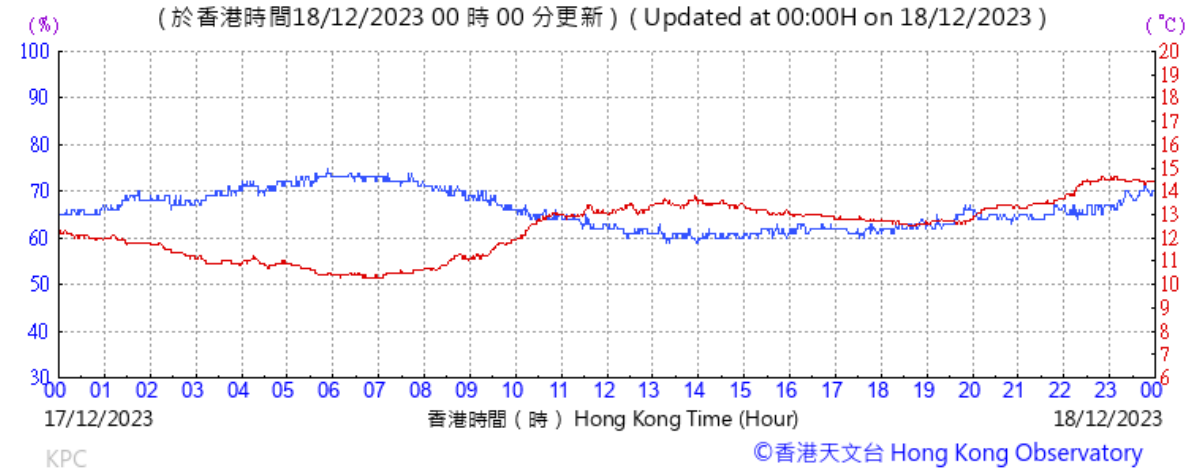

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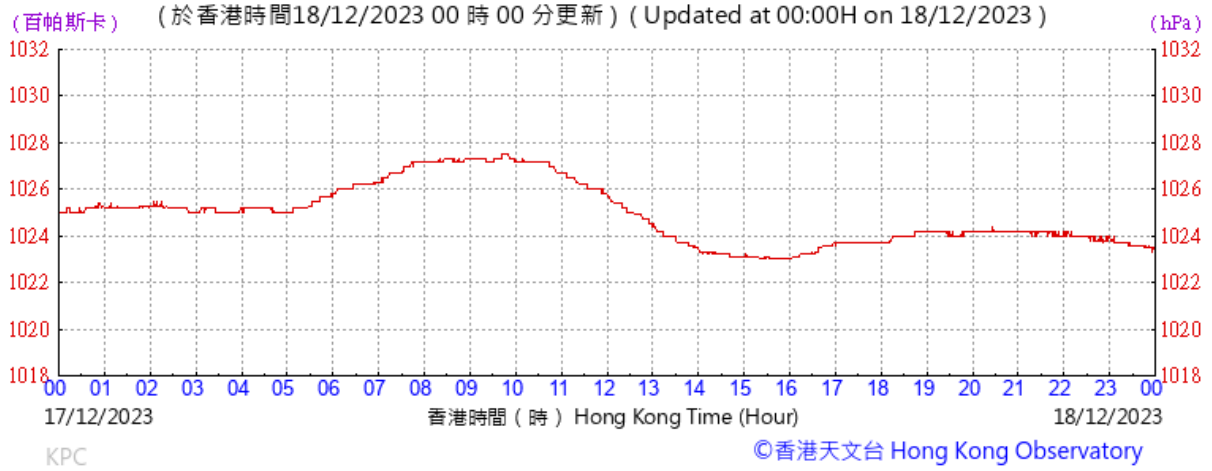

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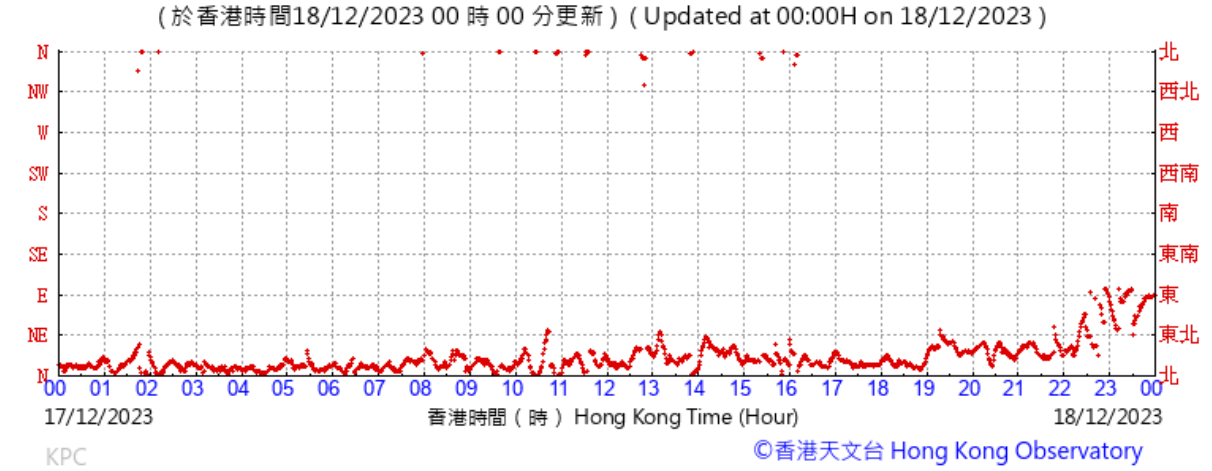

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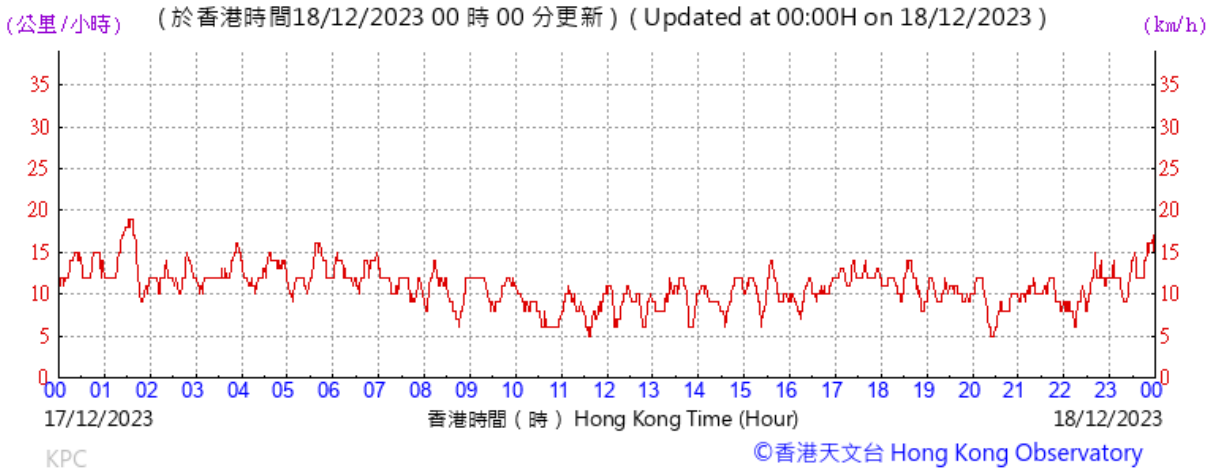

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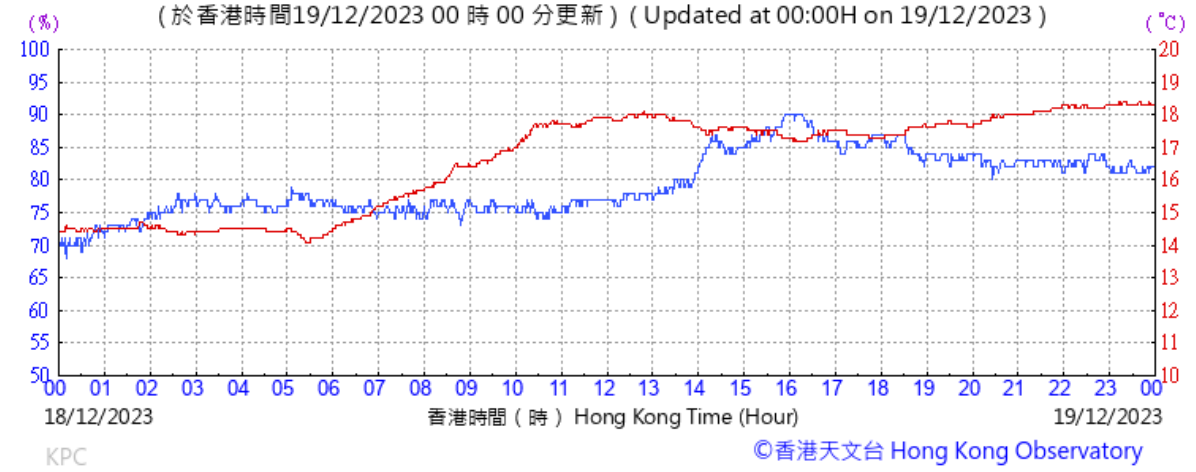

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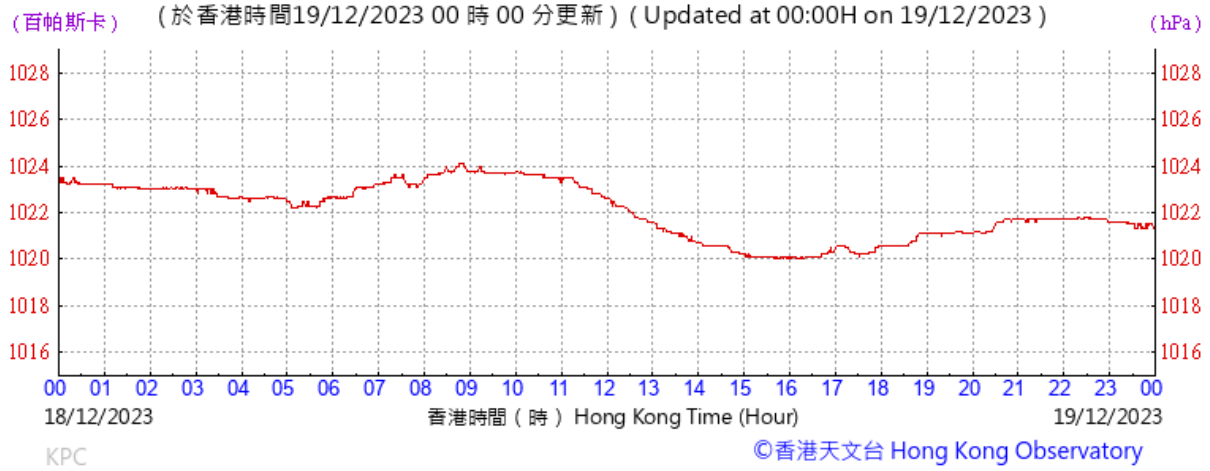

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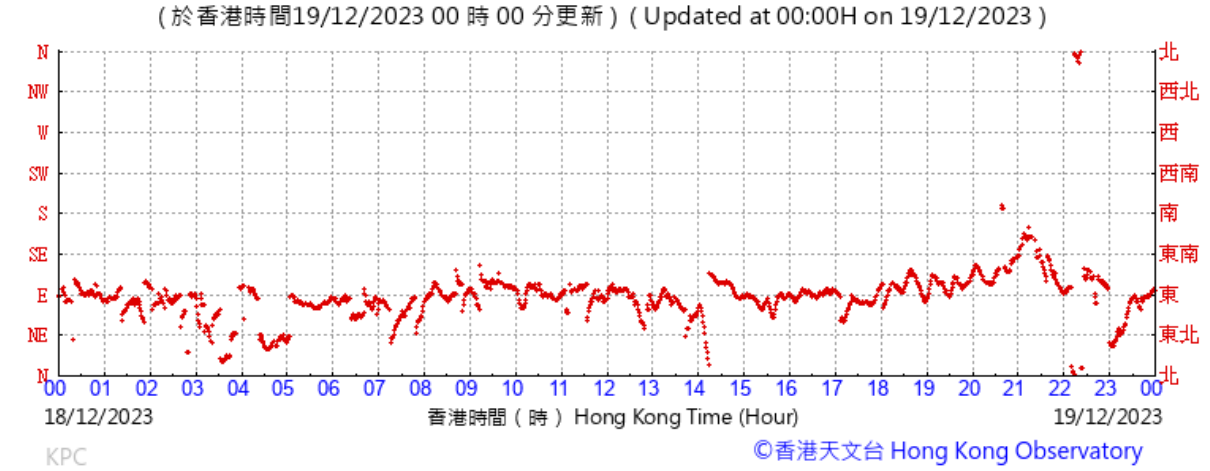

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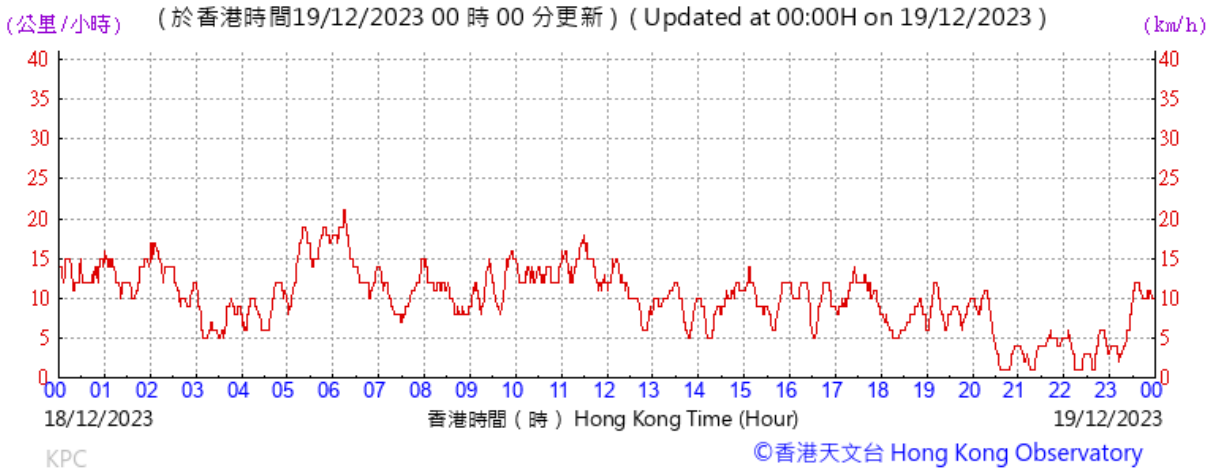

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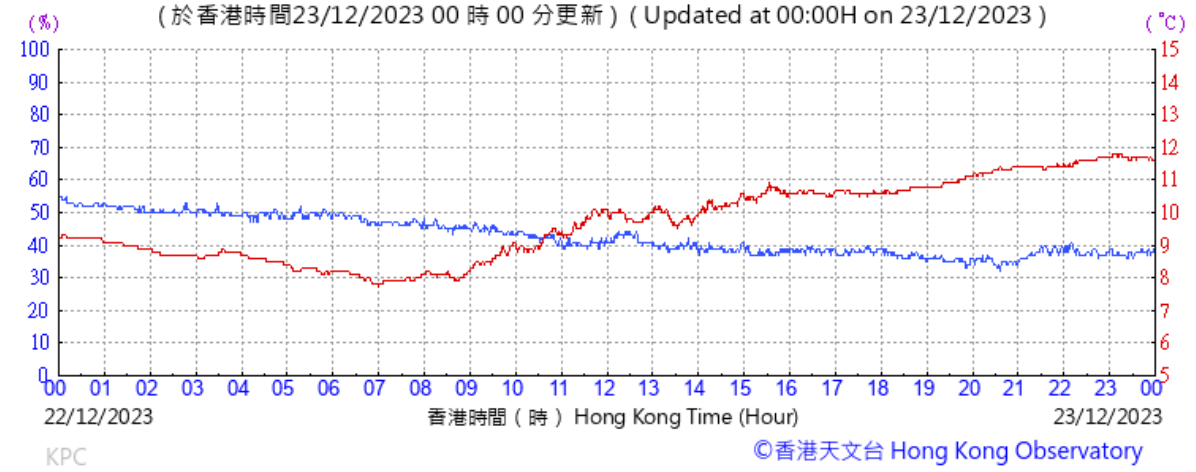

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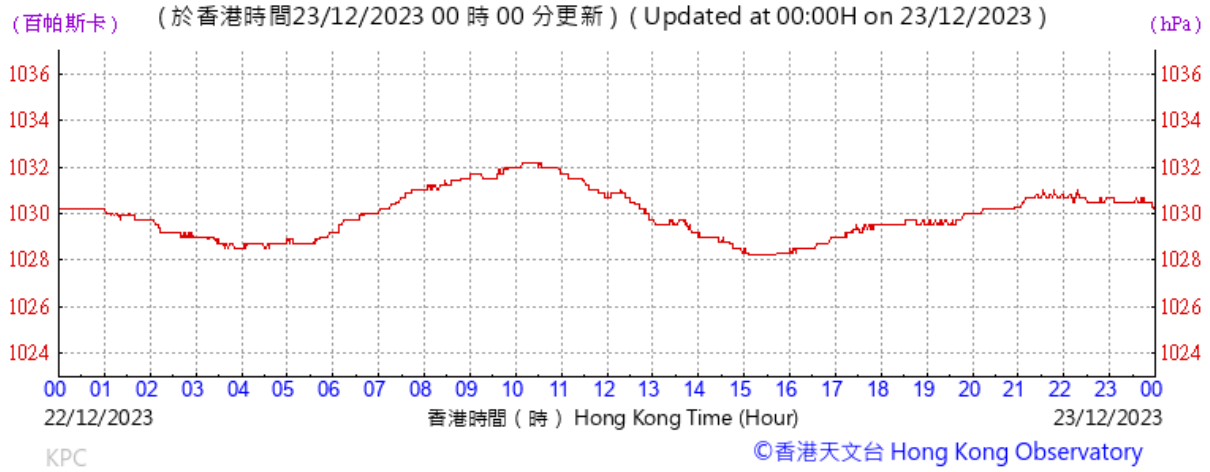

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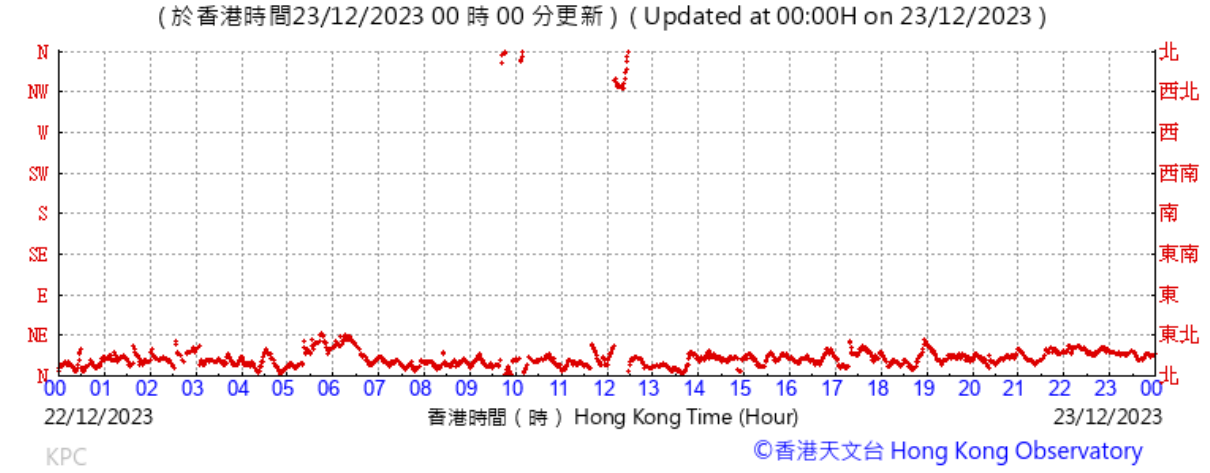

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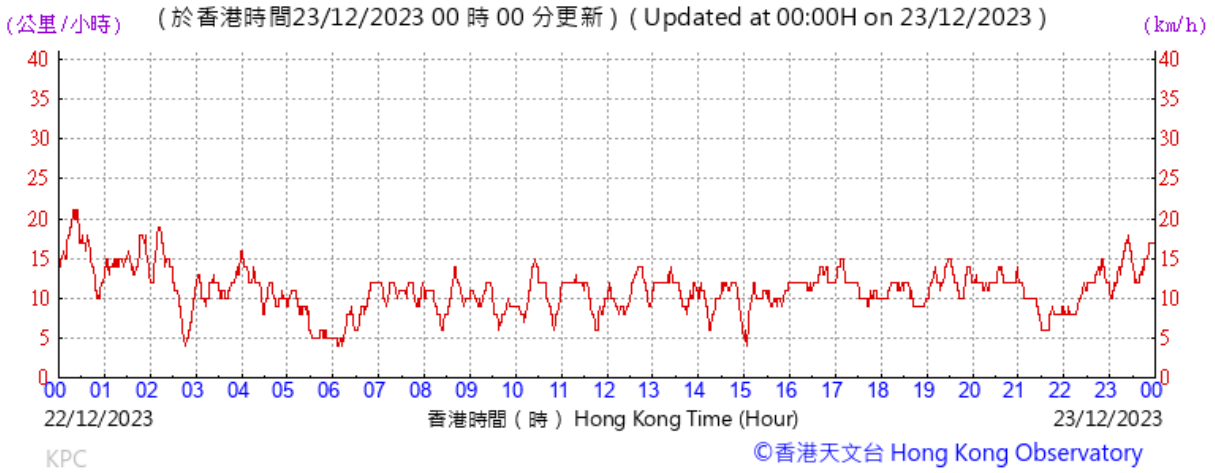

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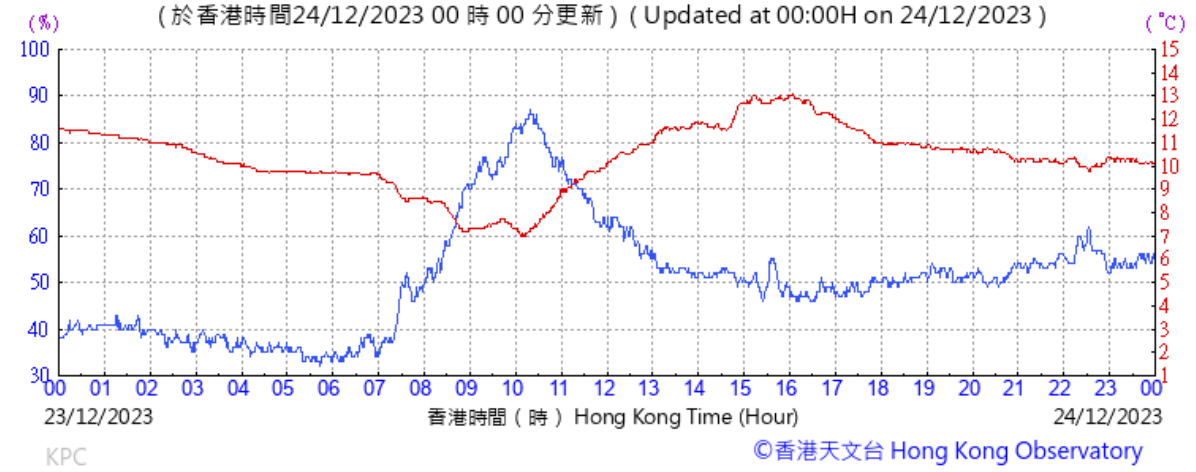

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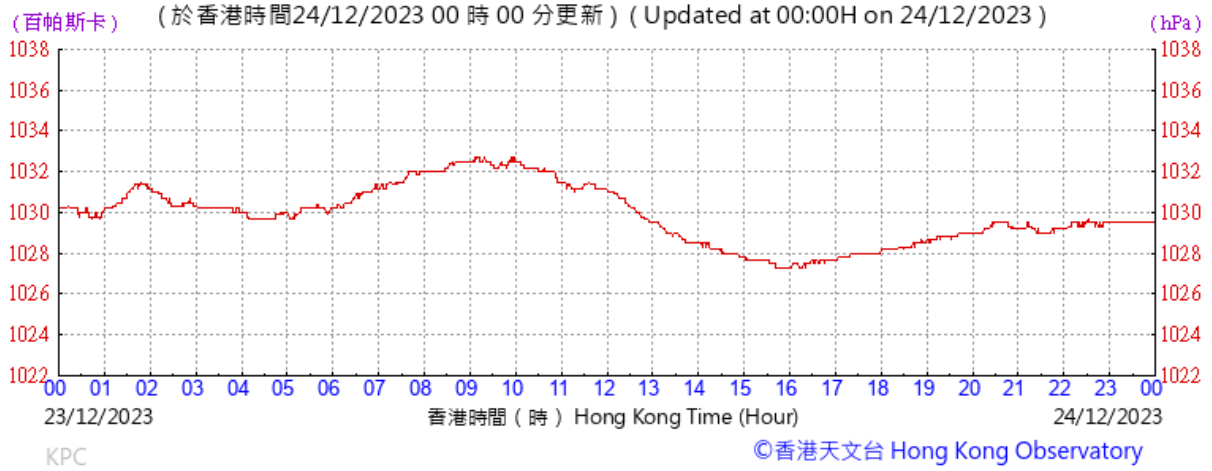

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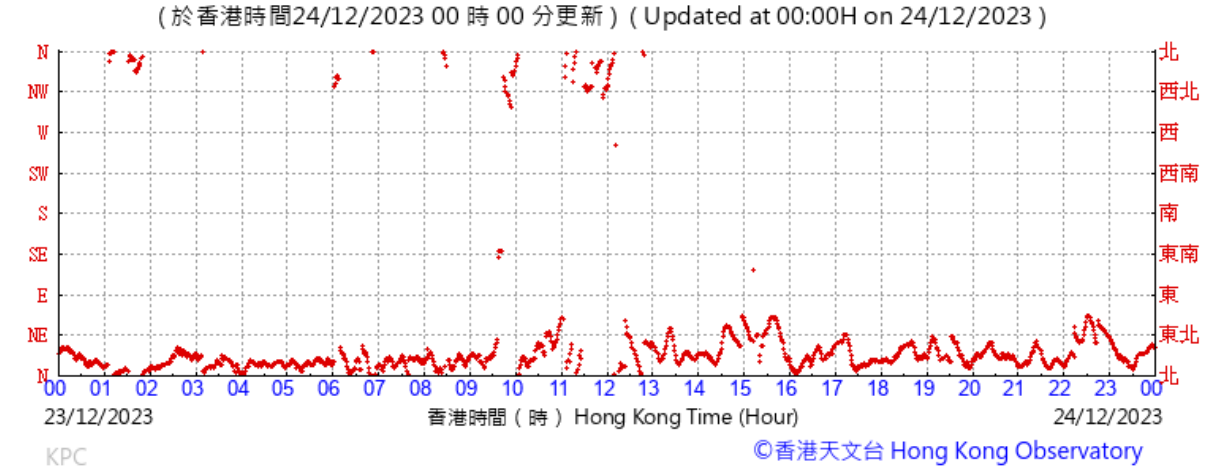
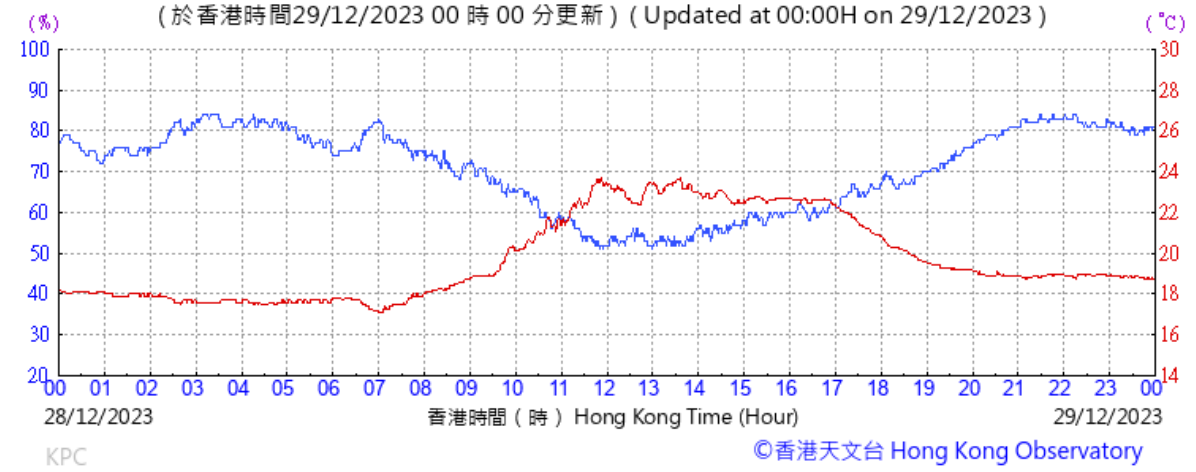


Wind Speed:

Tempearture/Humidity:



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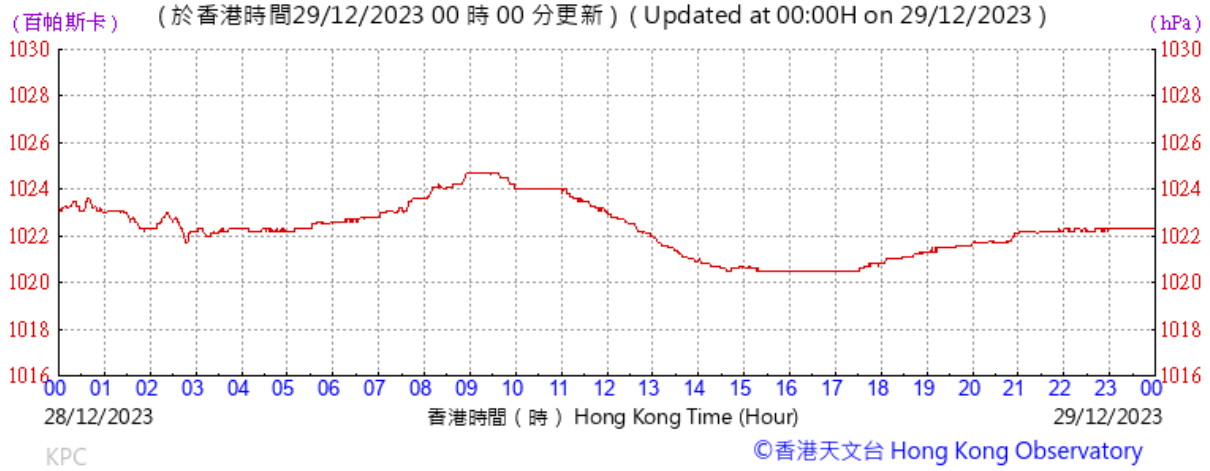

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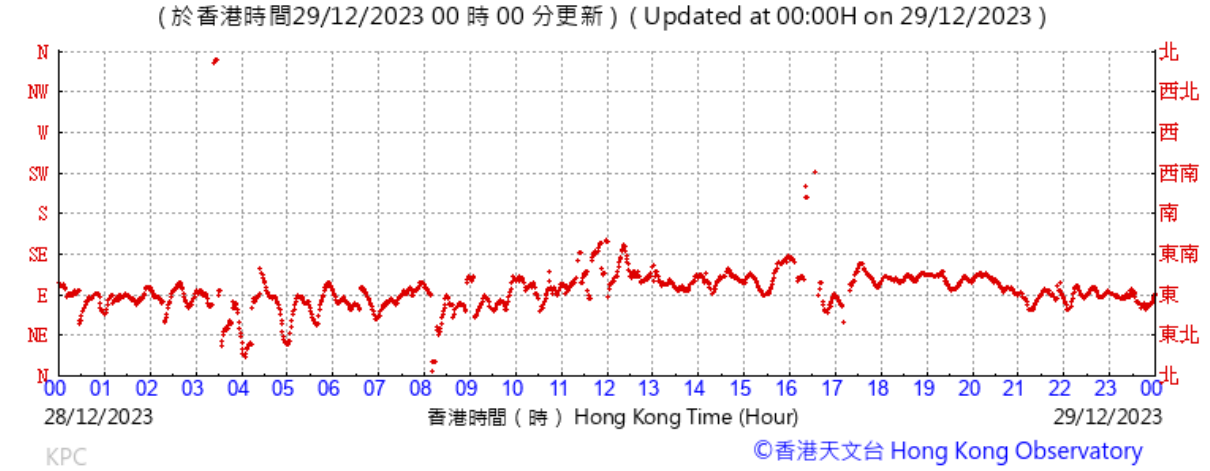

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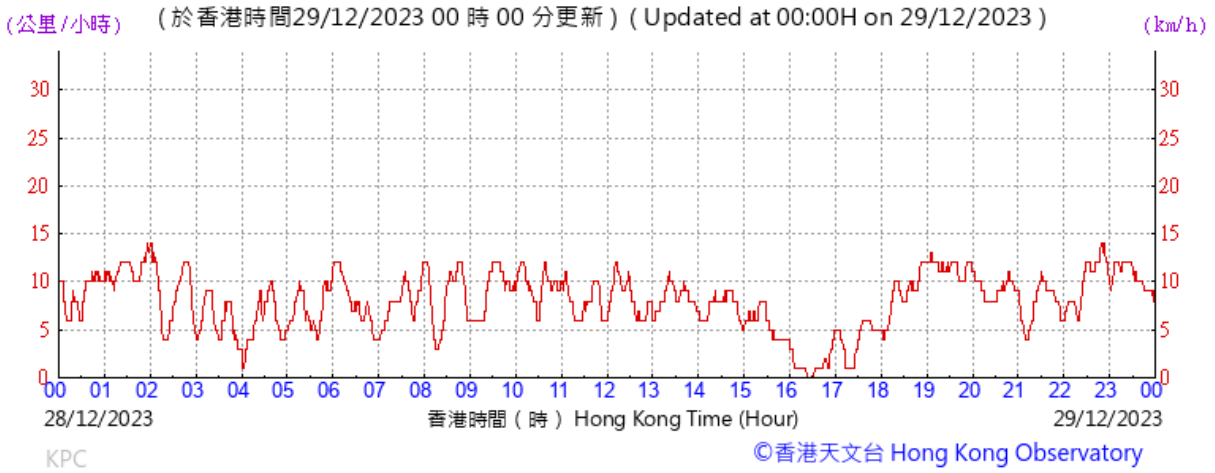

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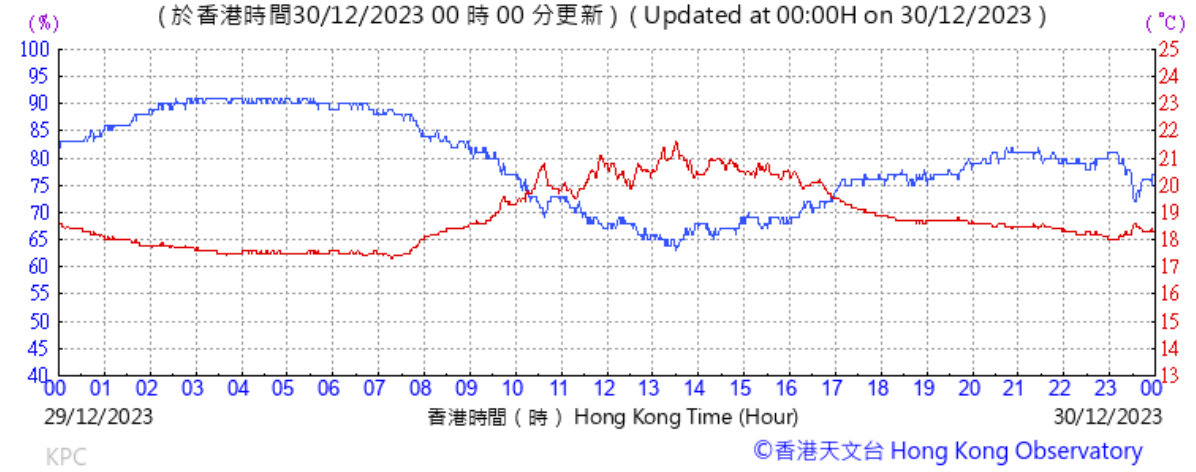

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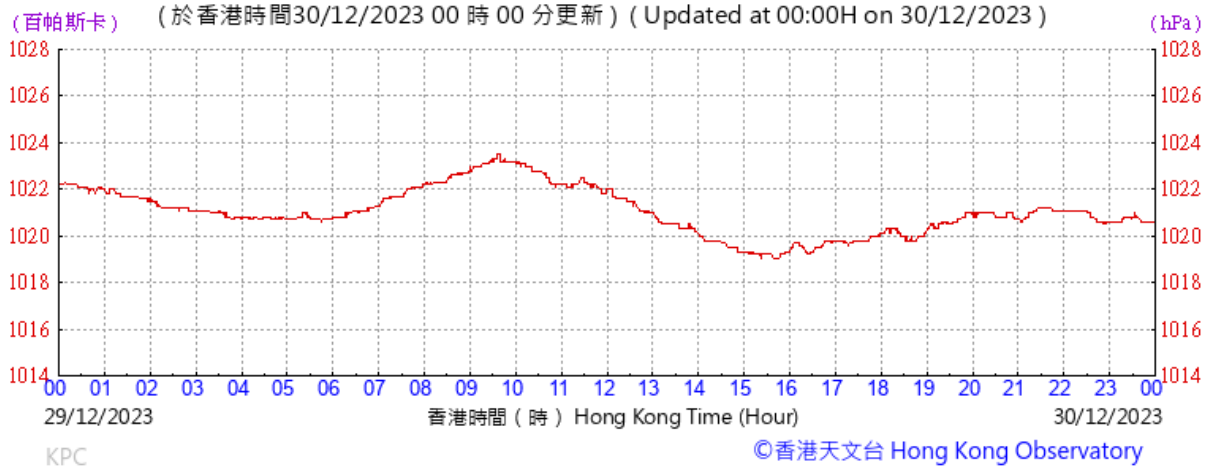

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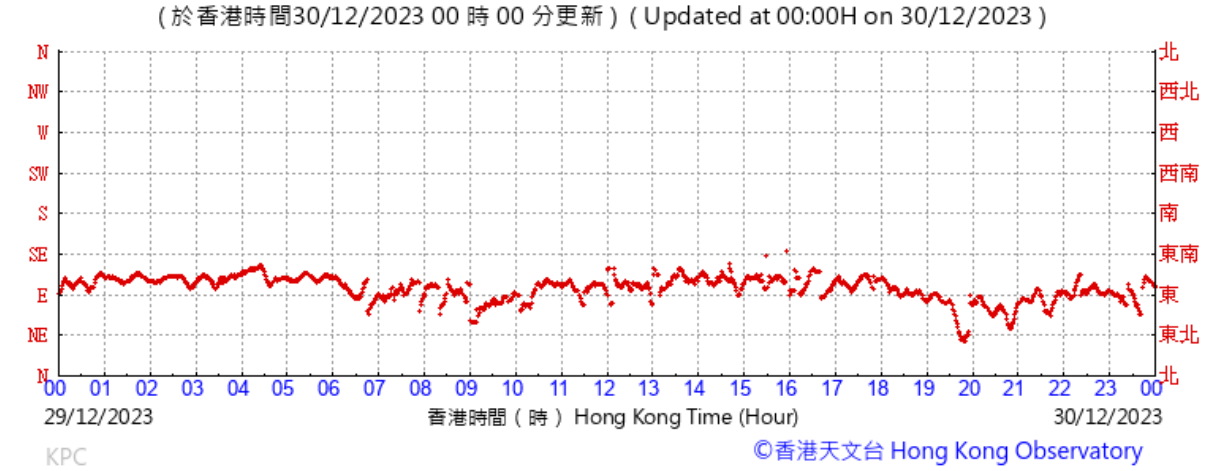

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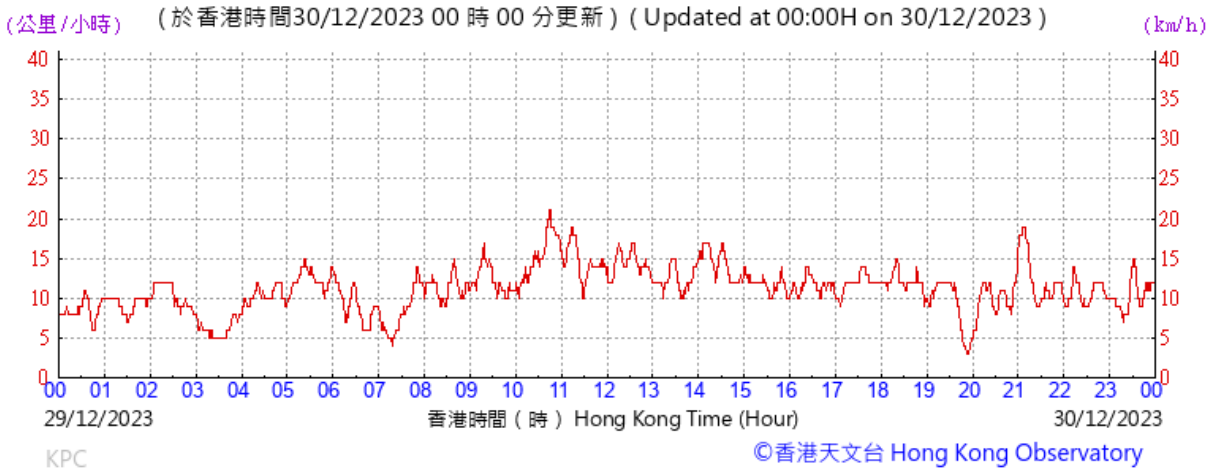
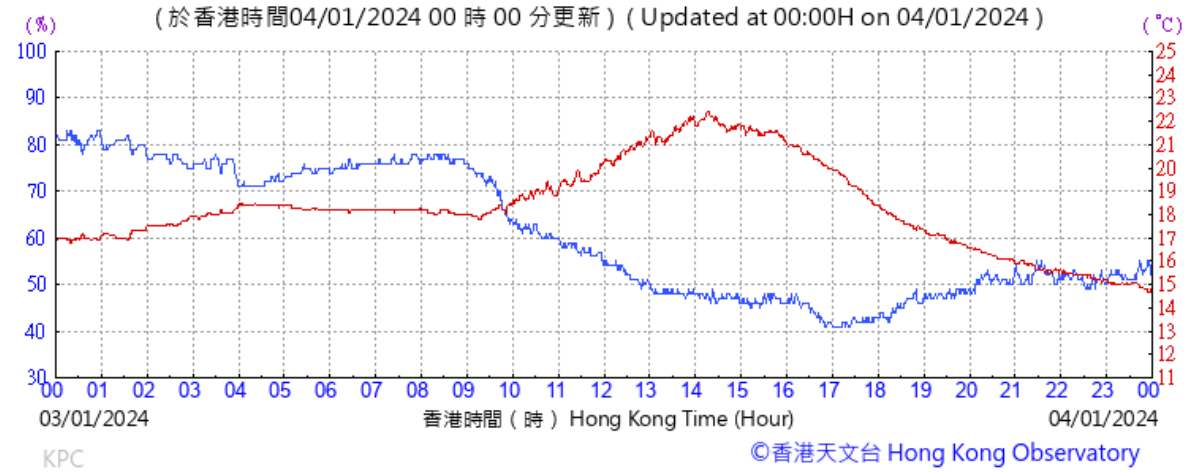


Extract of Meteorological Observations for King's Park Automatic Weather Station, January, 2024

Tempearture/Humidity:



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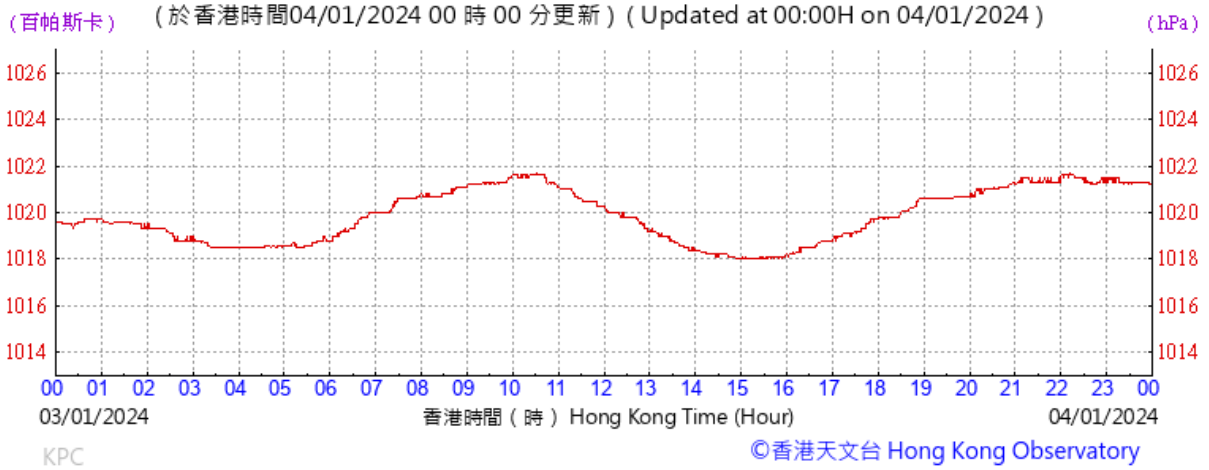

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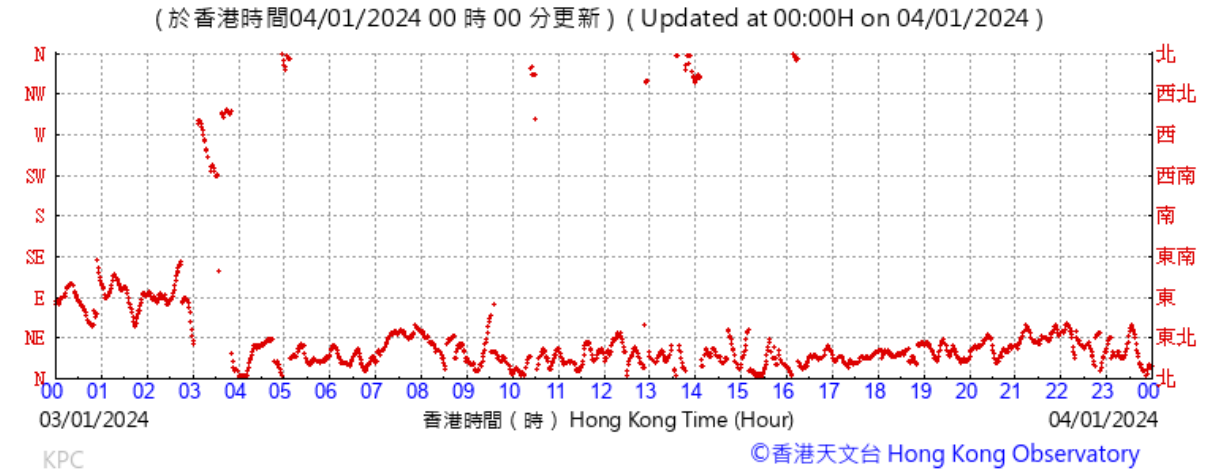

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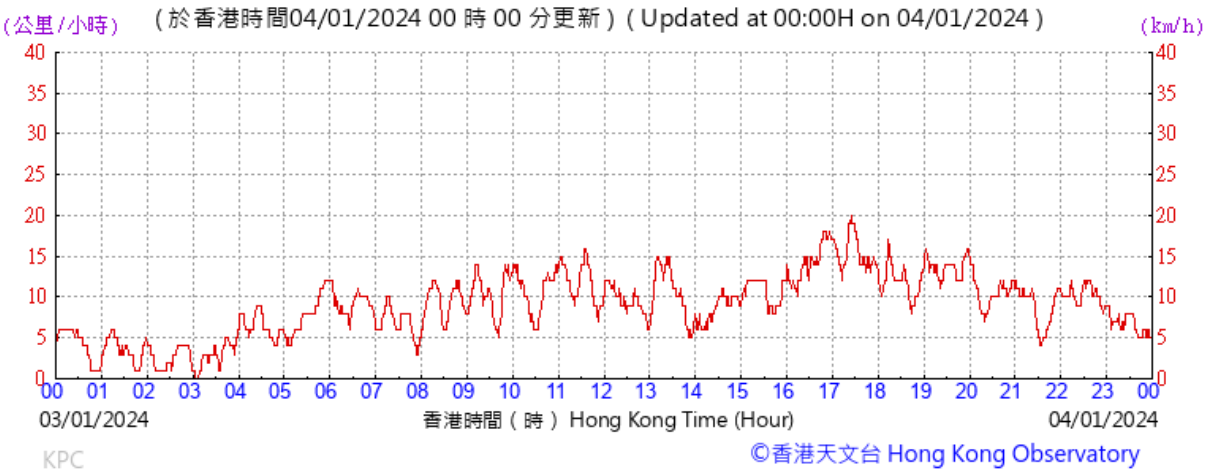

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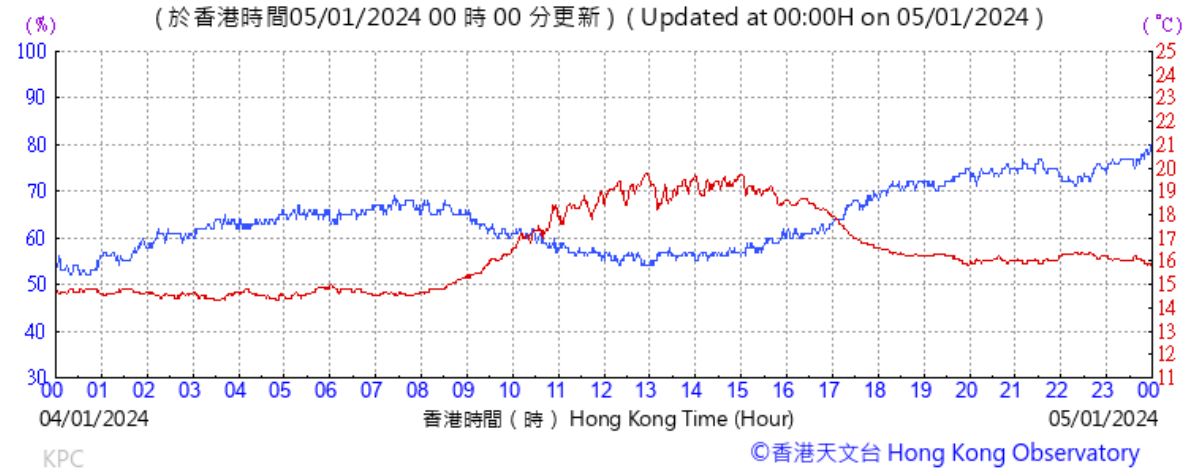

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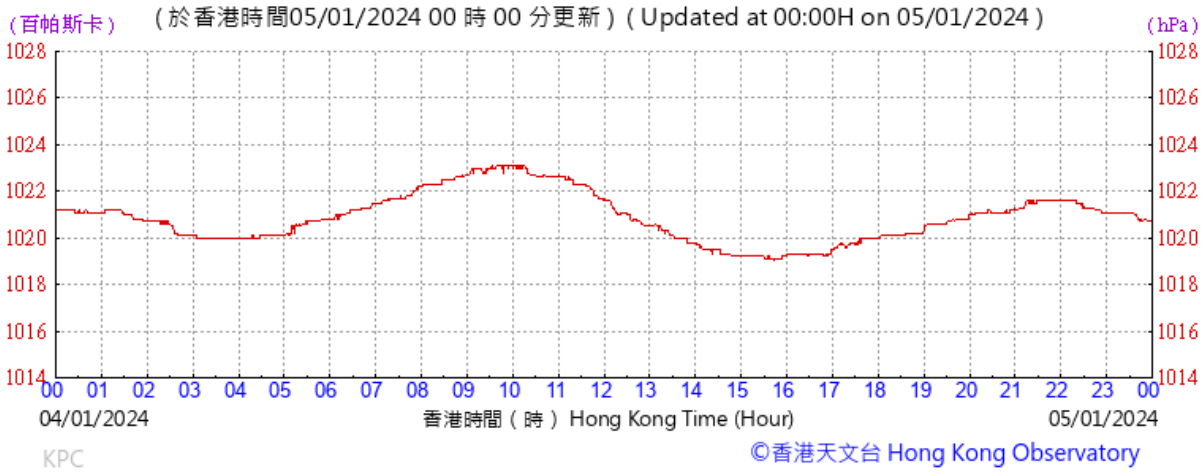

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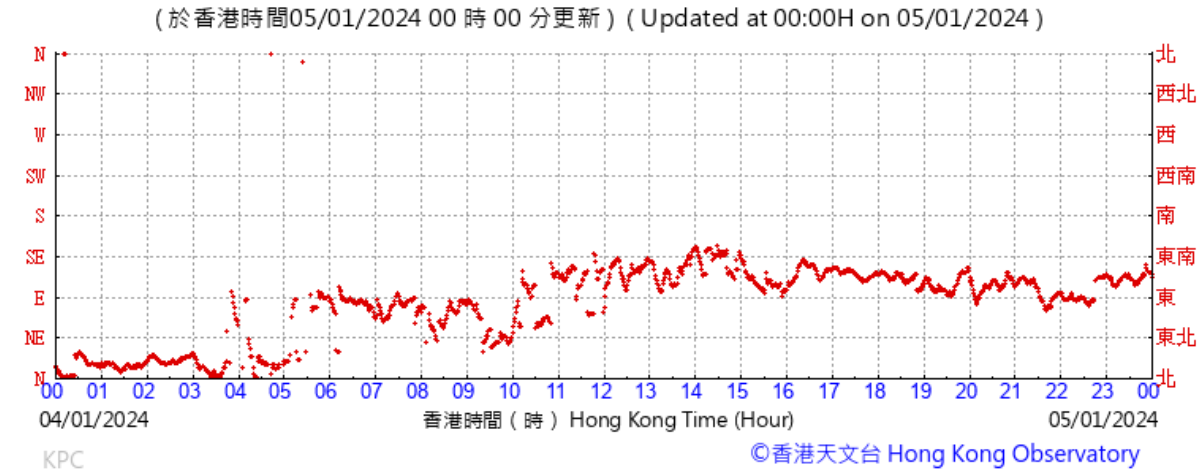

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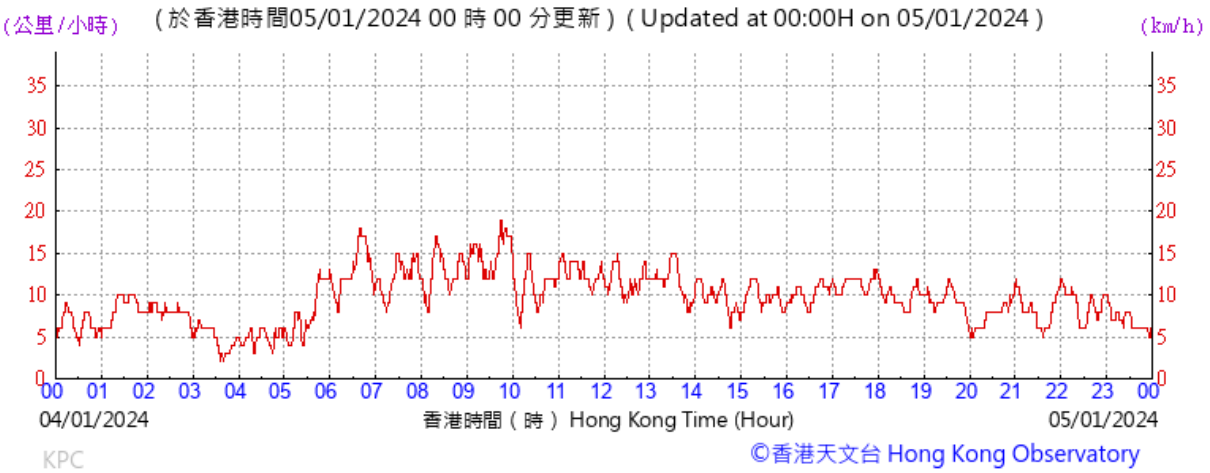

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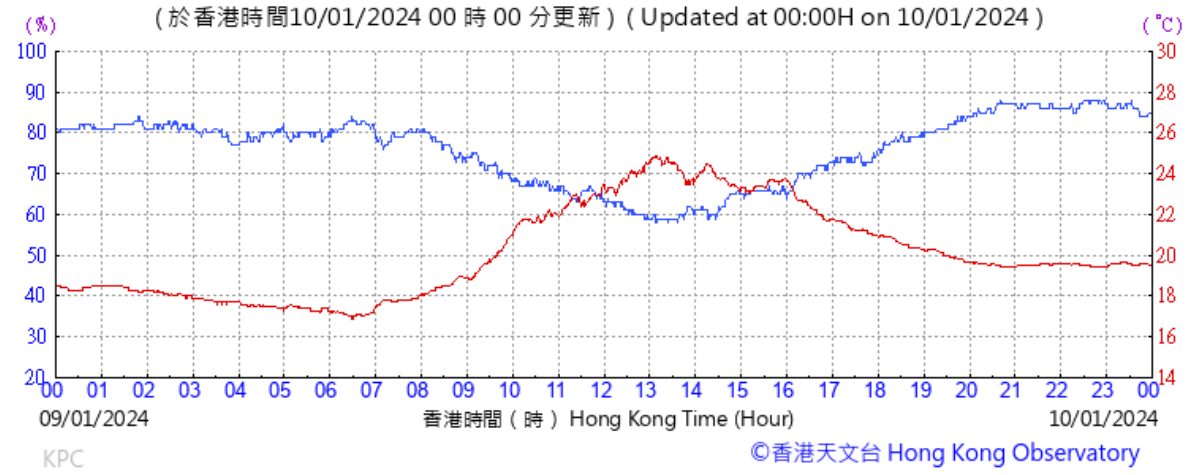

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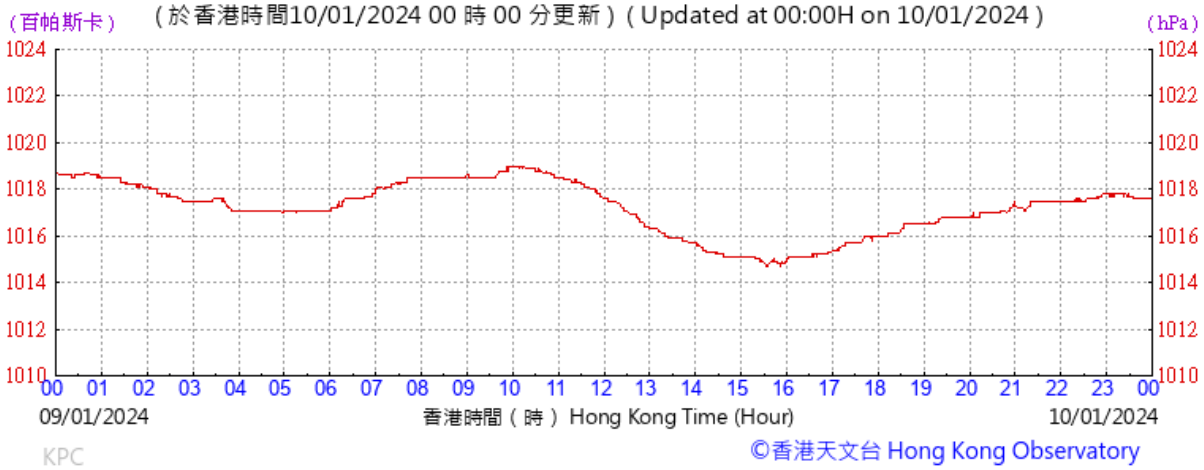

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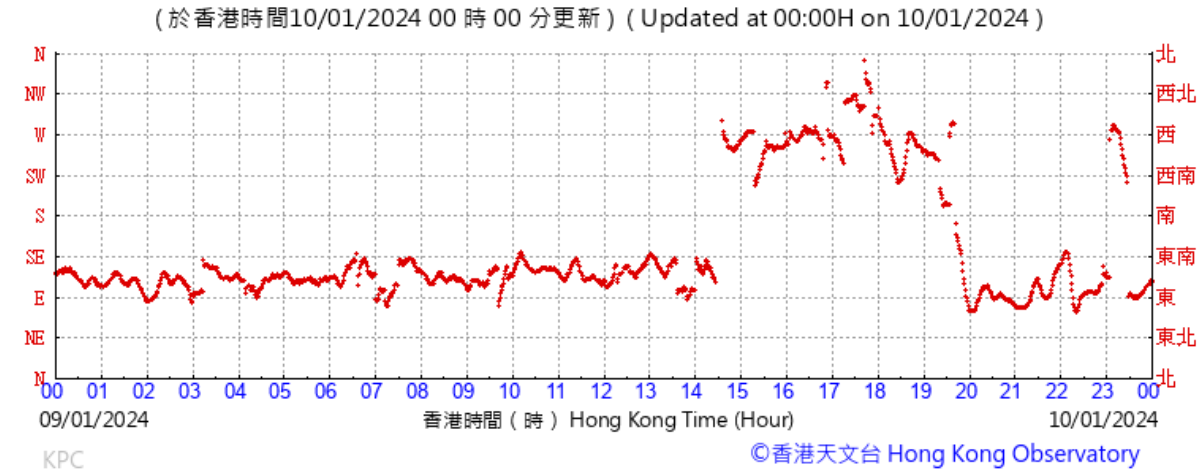
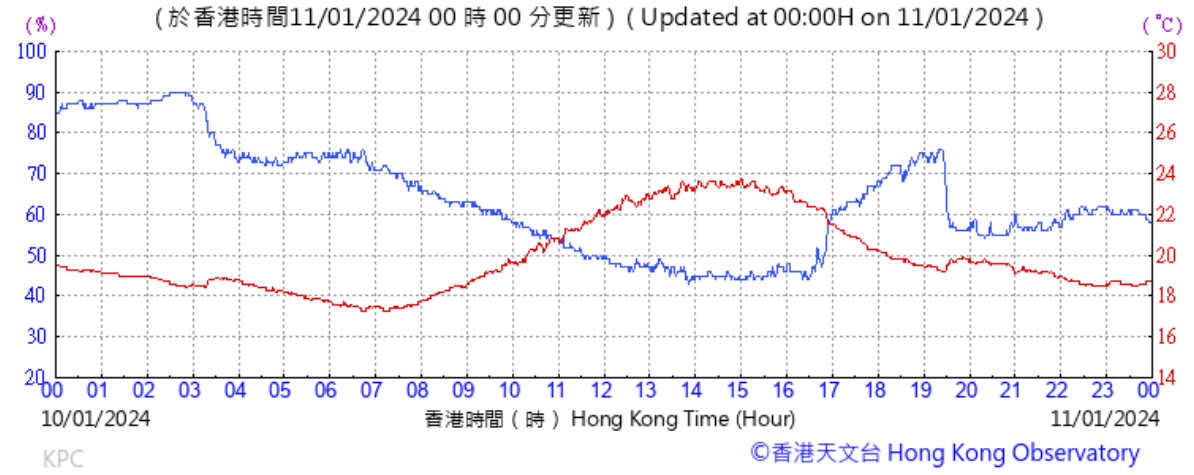


Wind Speed:

Tempearture/Humidity:



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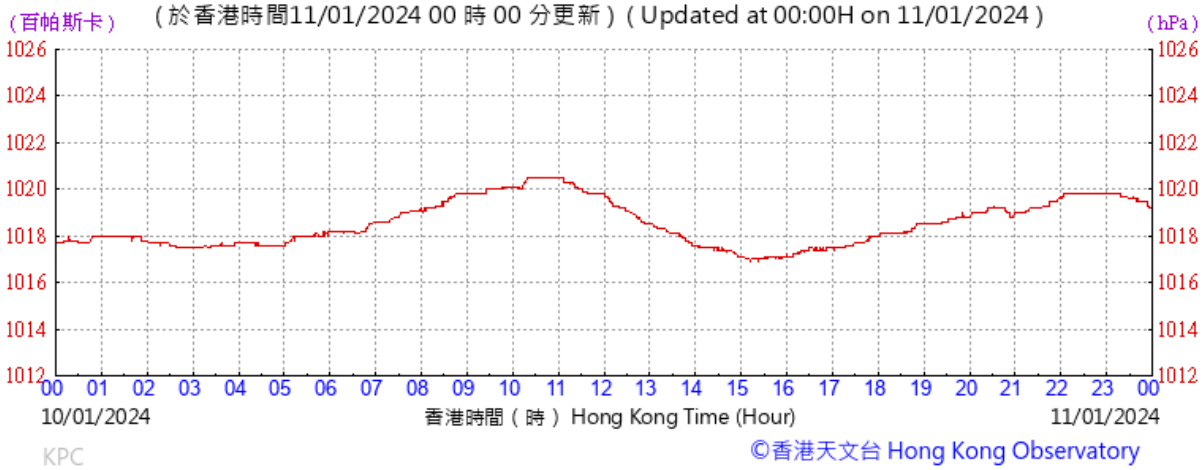

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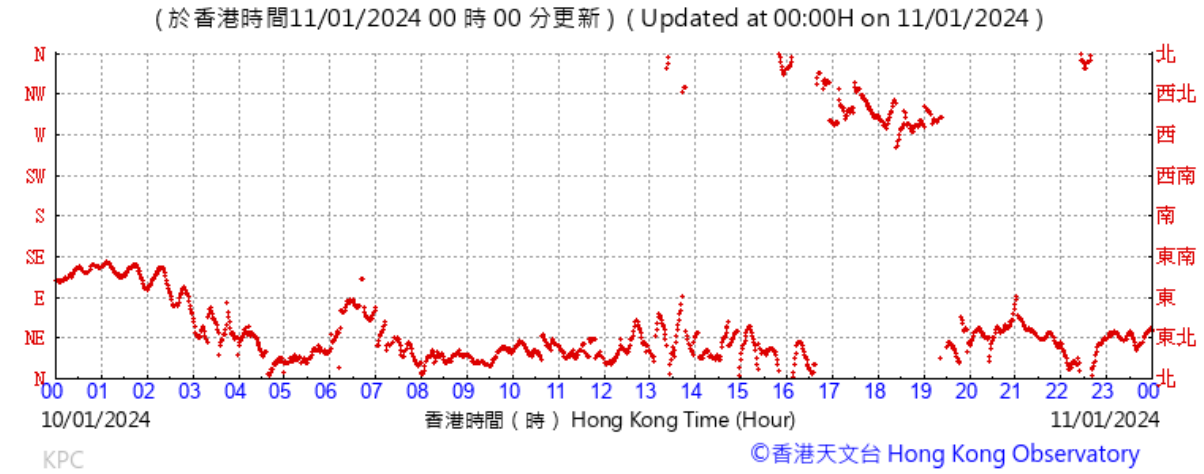

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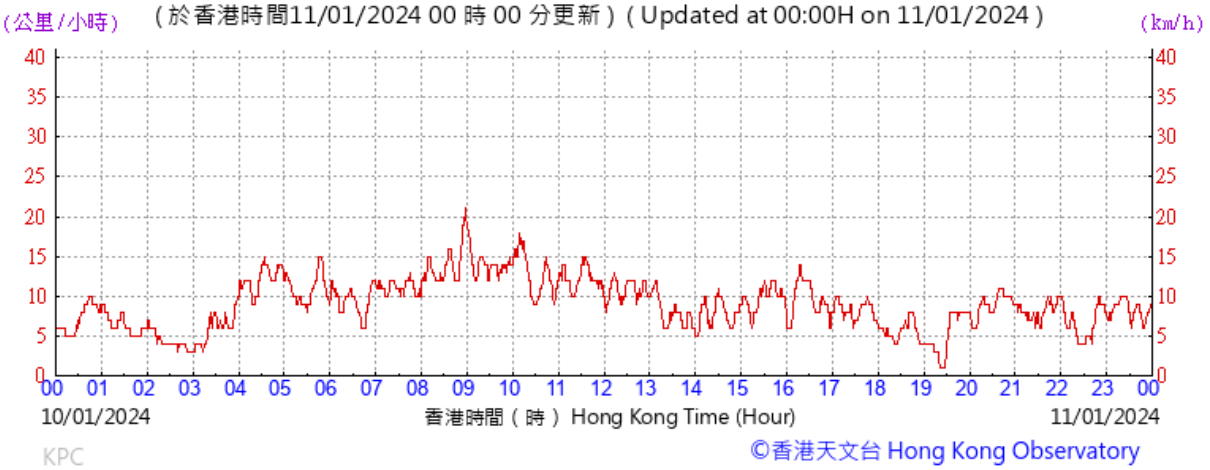
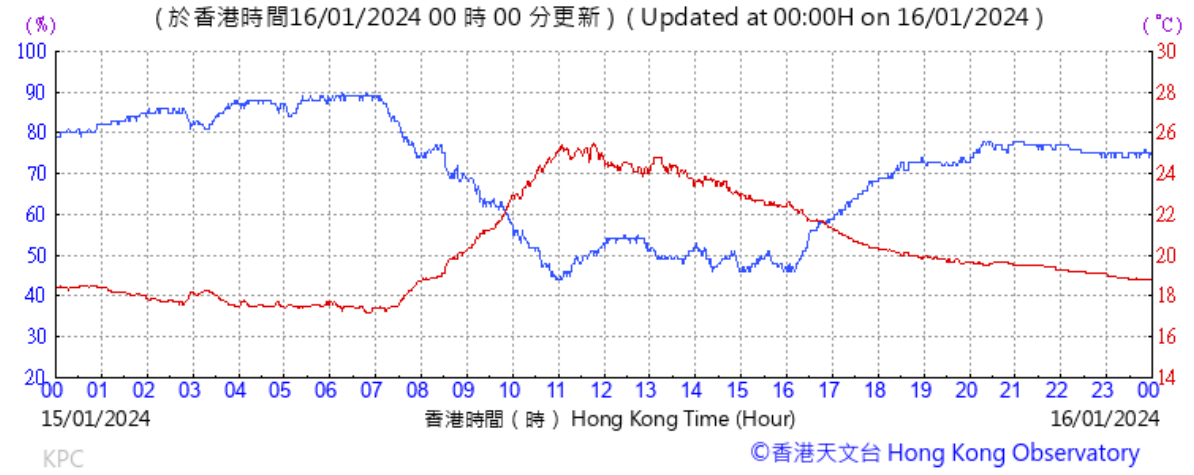


Tempearture/Humidity:



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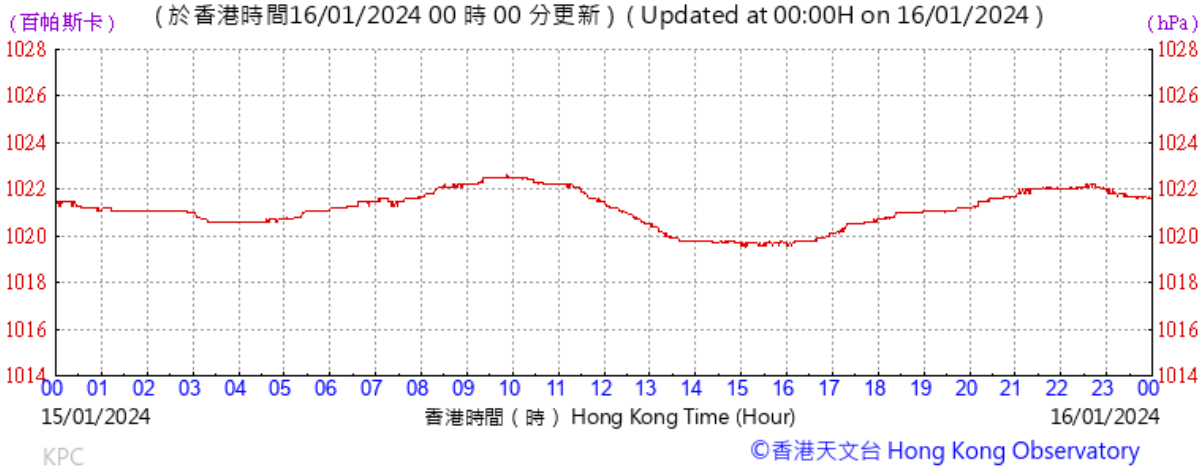

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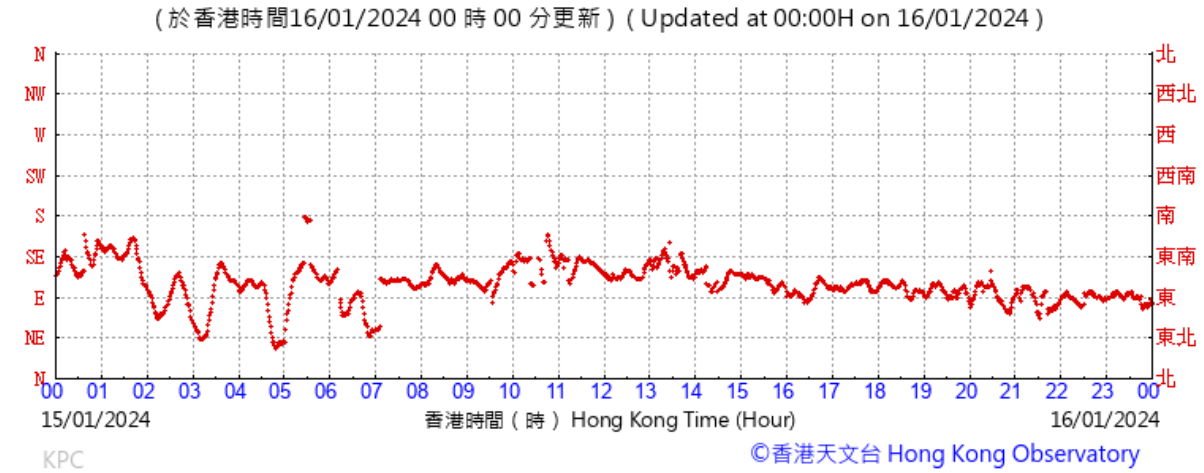

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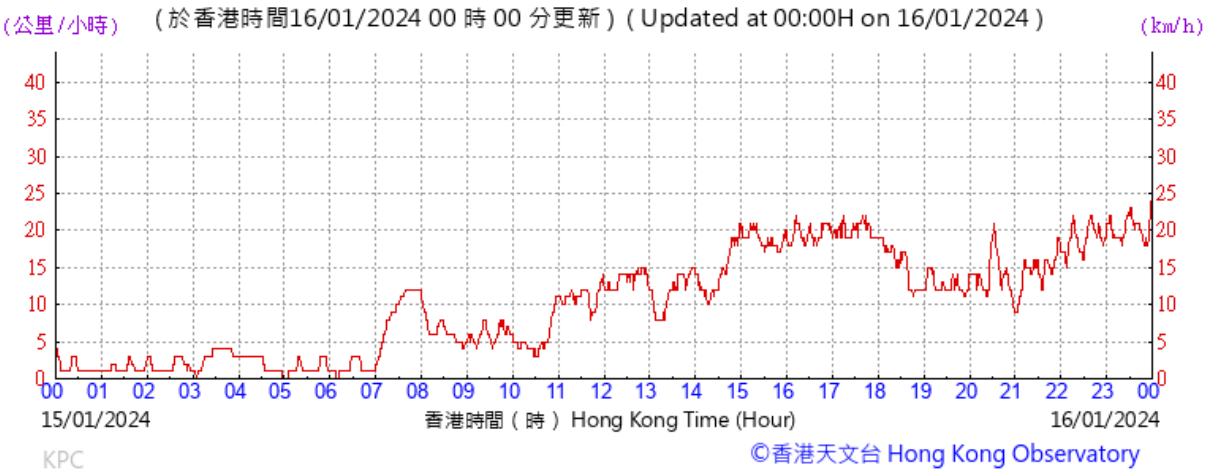

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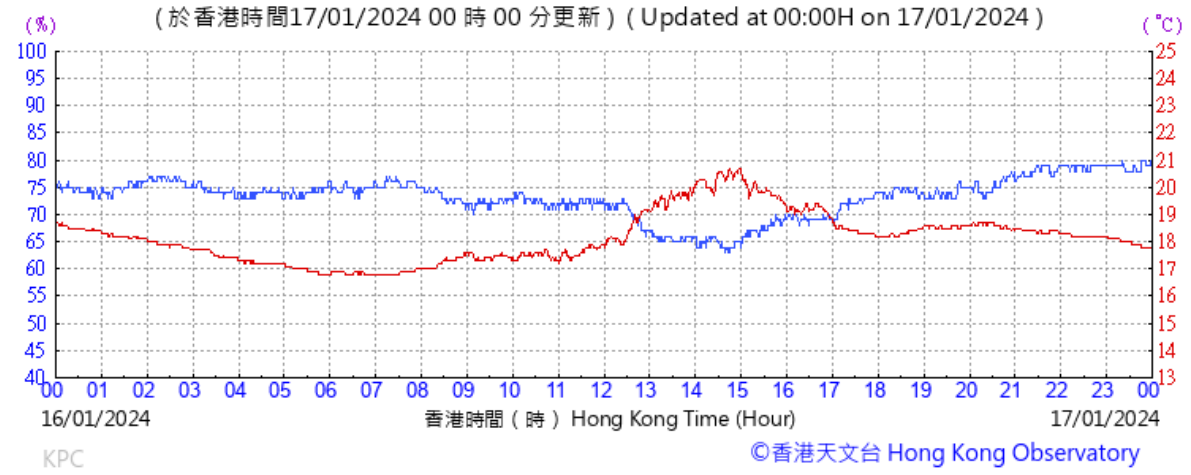

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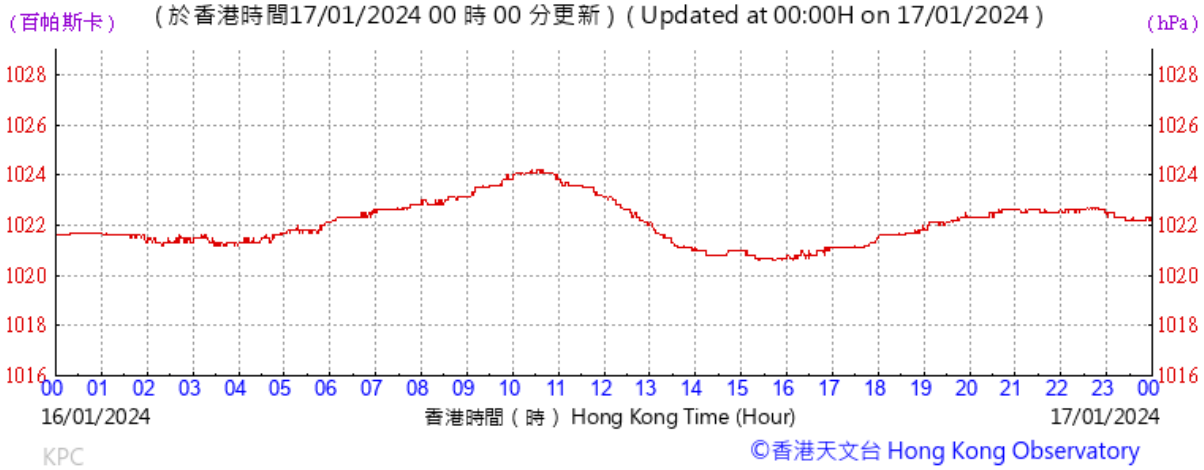

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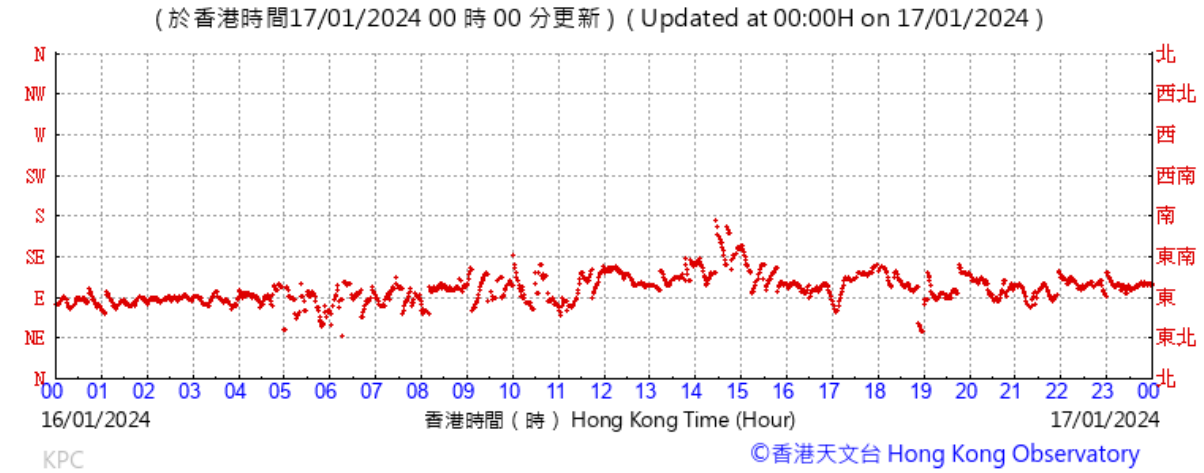
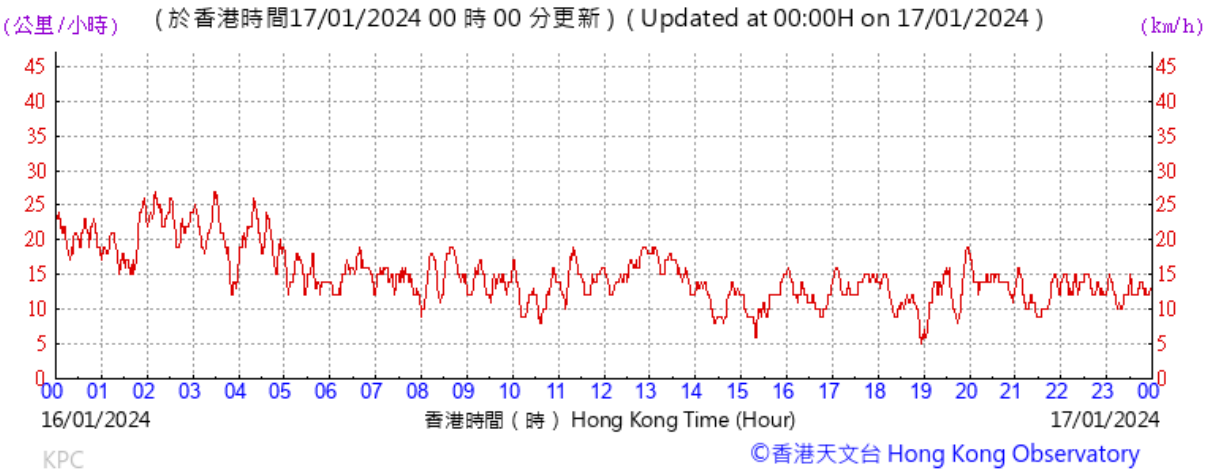


Wind Speed:



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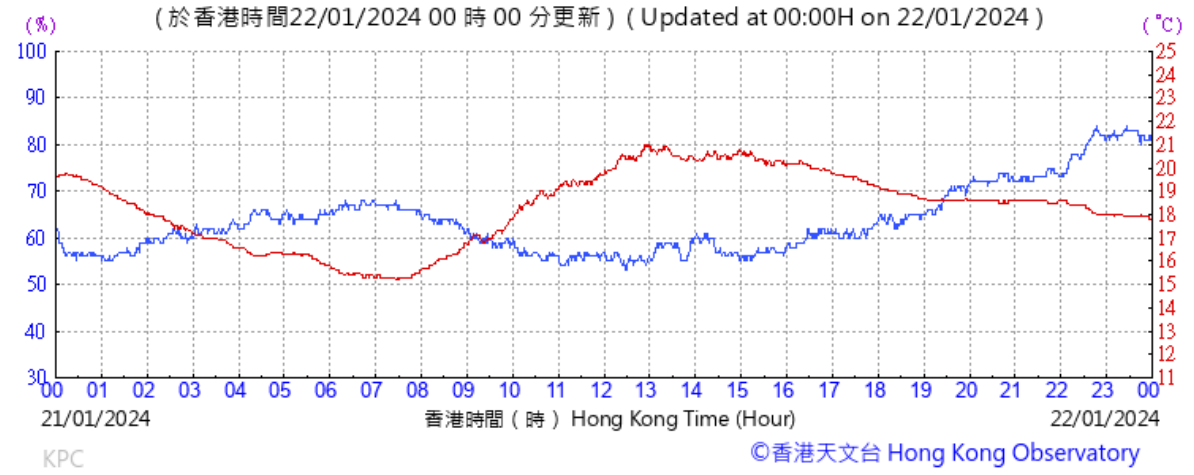

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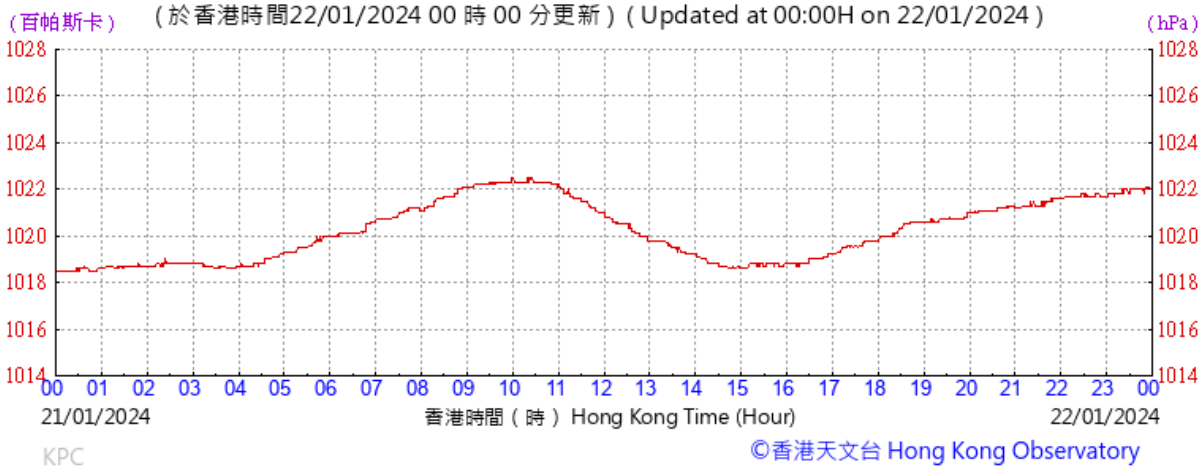
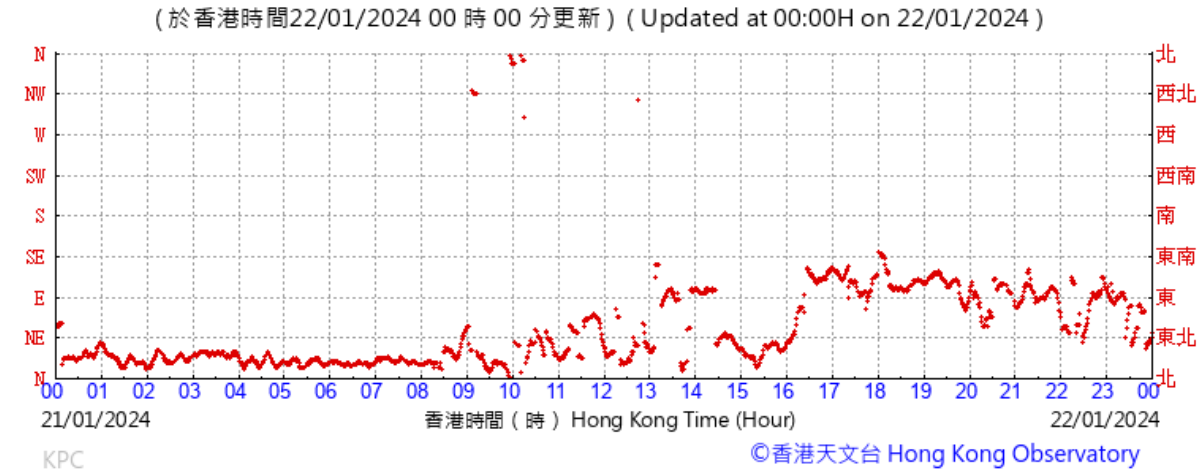
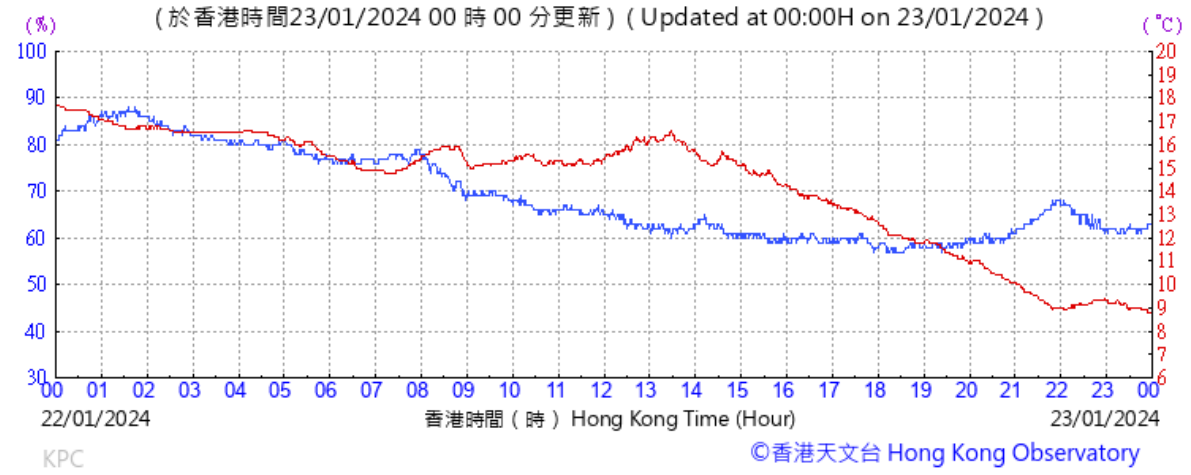


Wind Direction:



Wind Speed:

Tempearture/Humidity:



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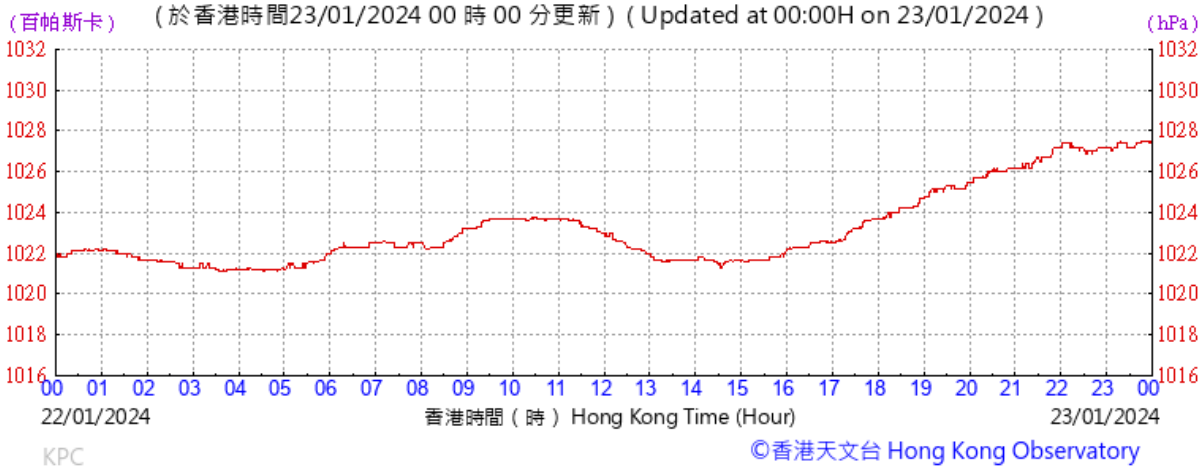

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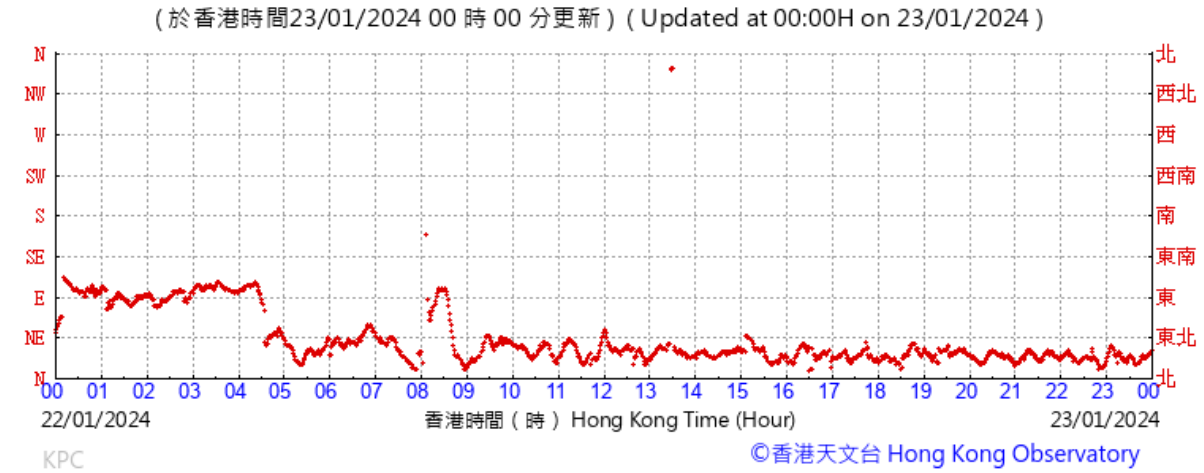

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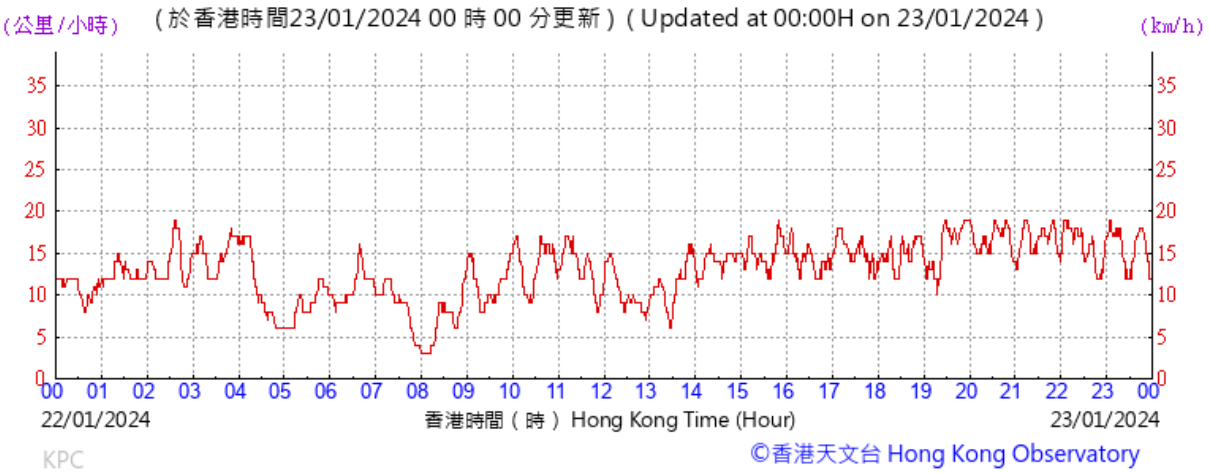

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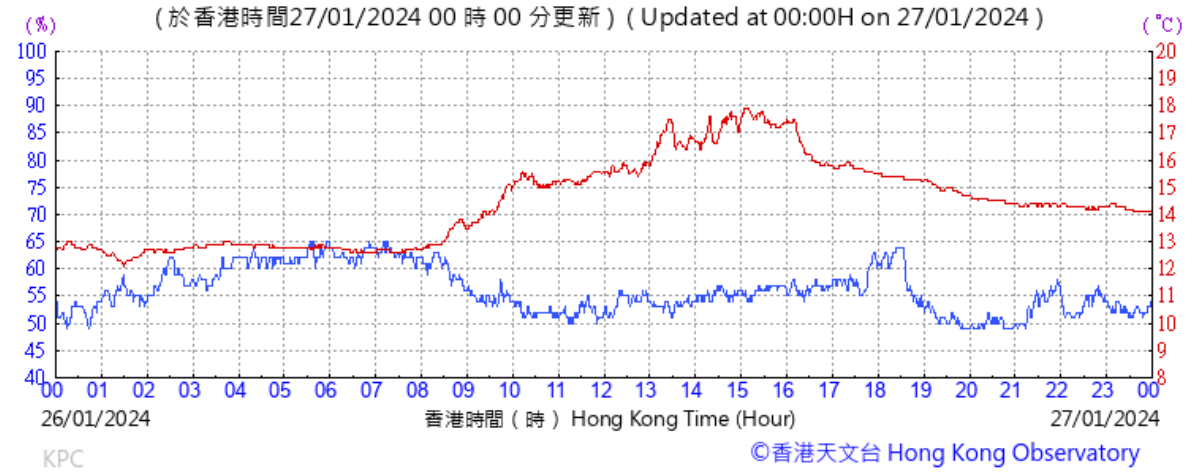

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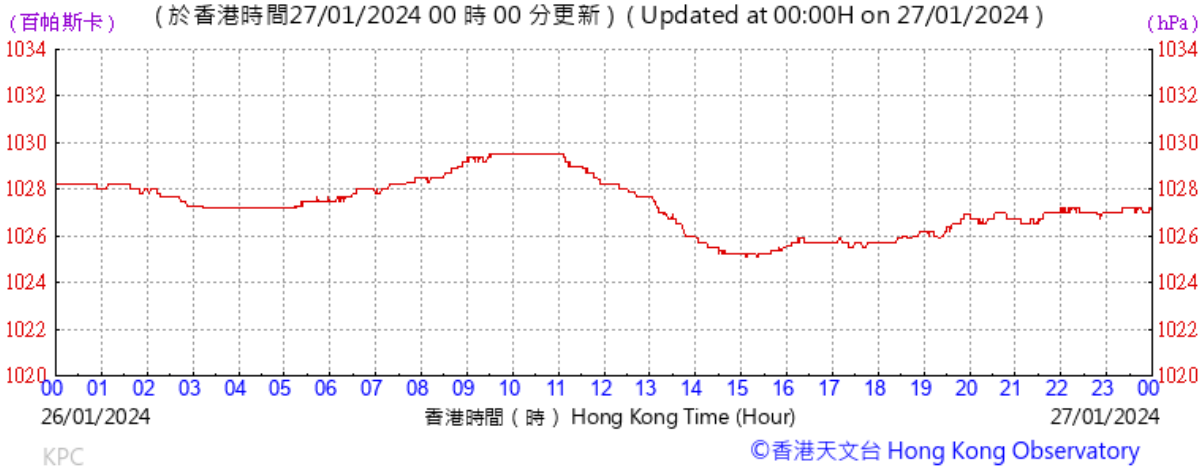

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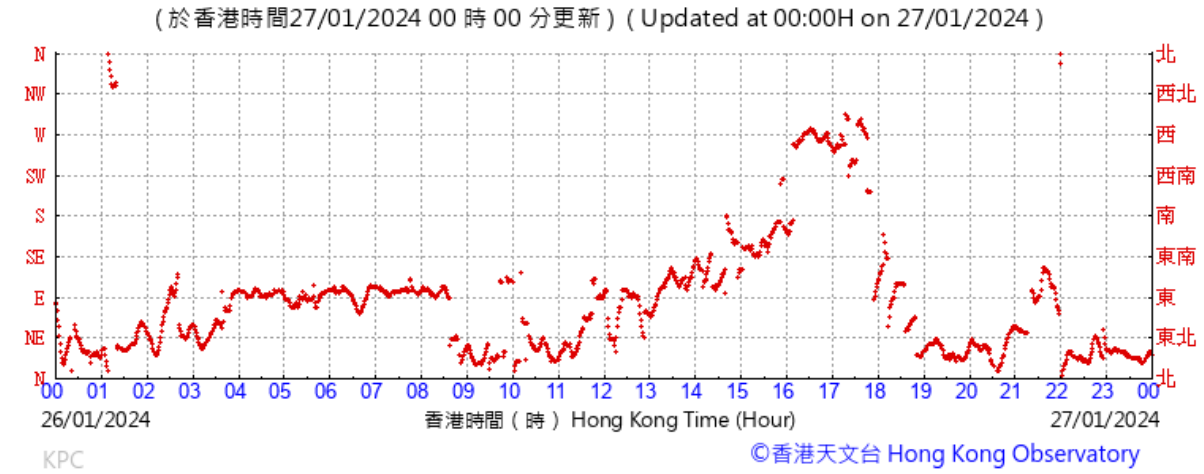
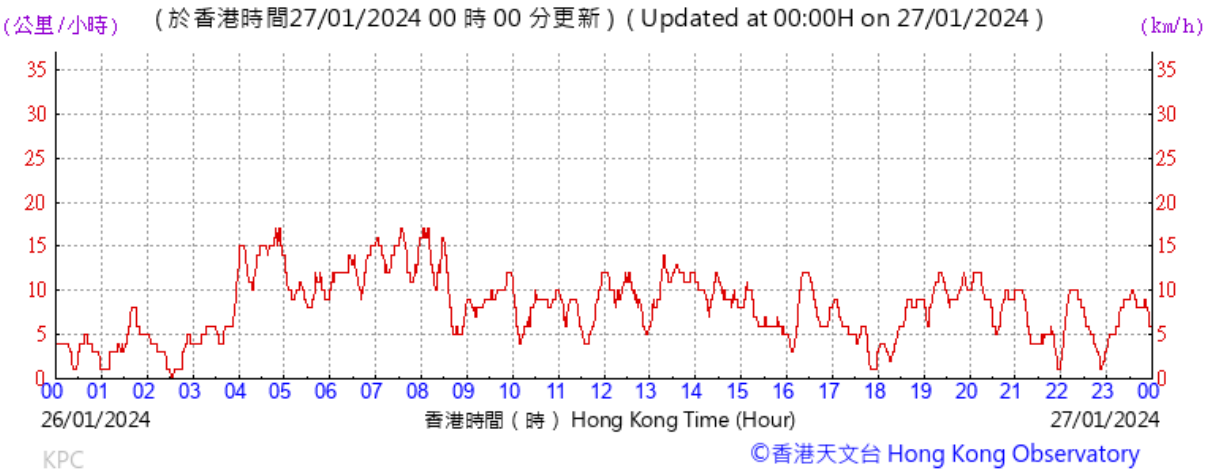


Wind Speed:



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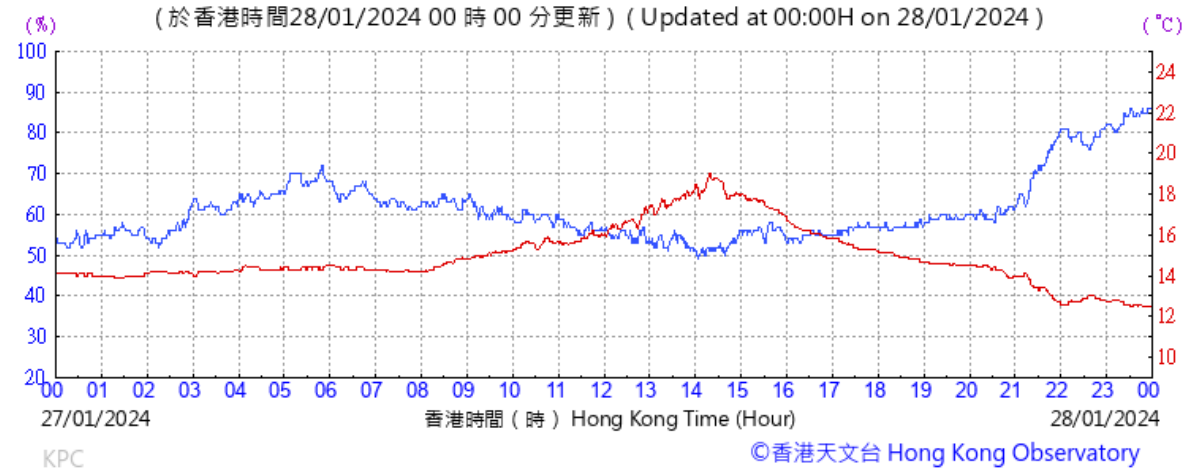

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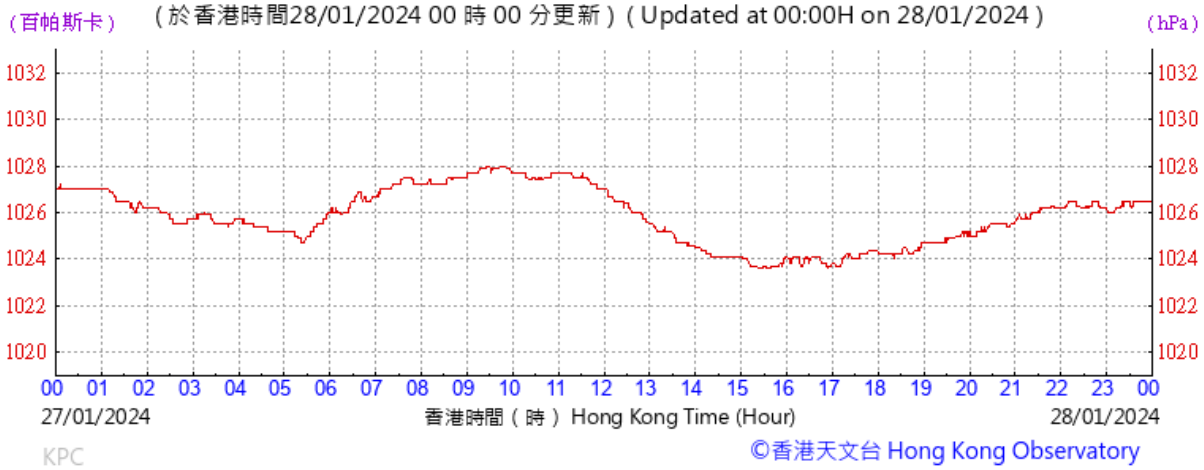

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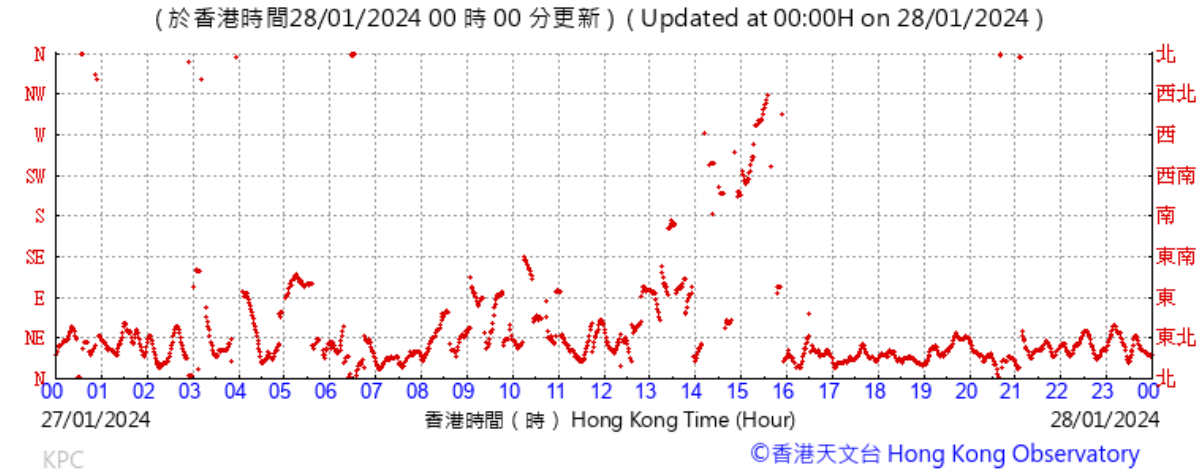
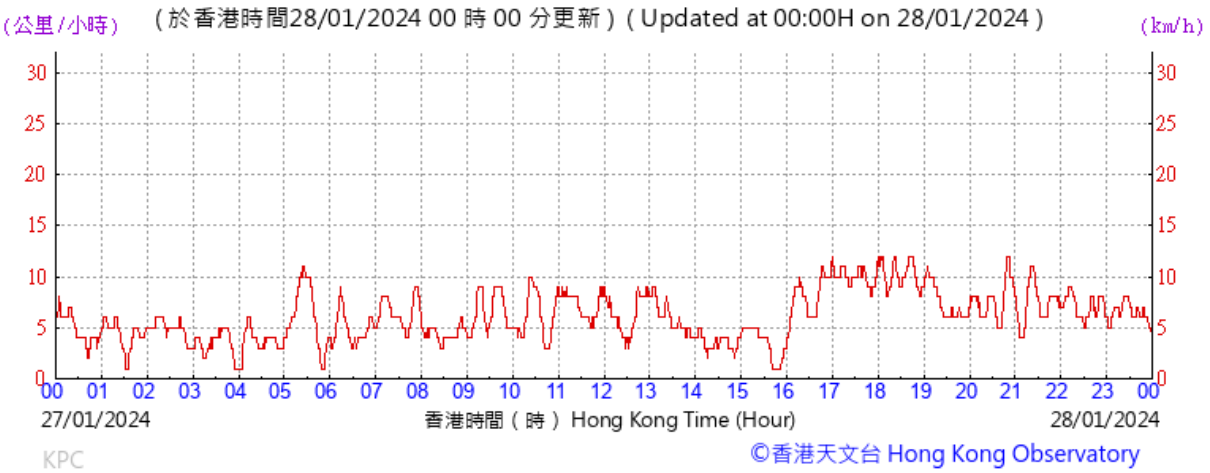


Wind Speed:

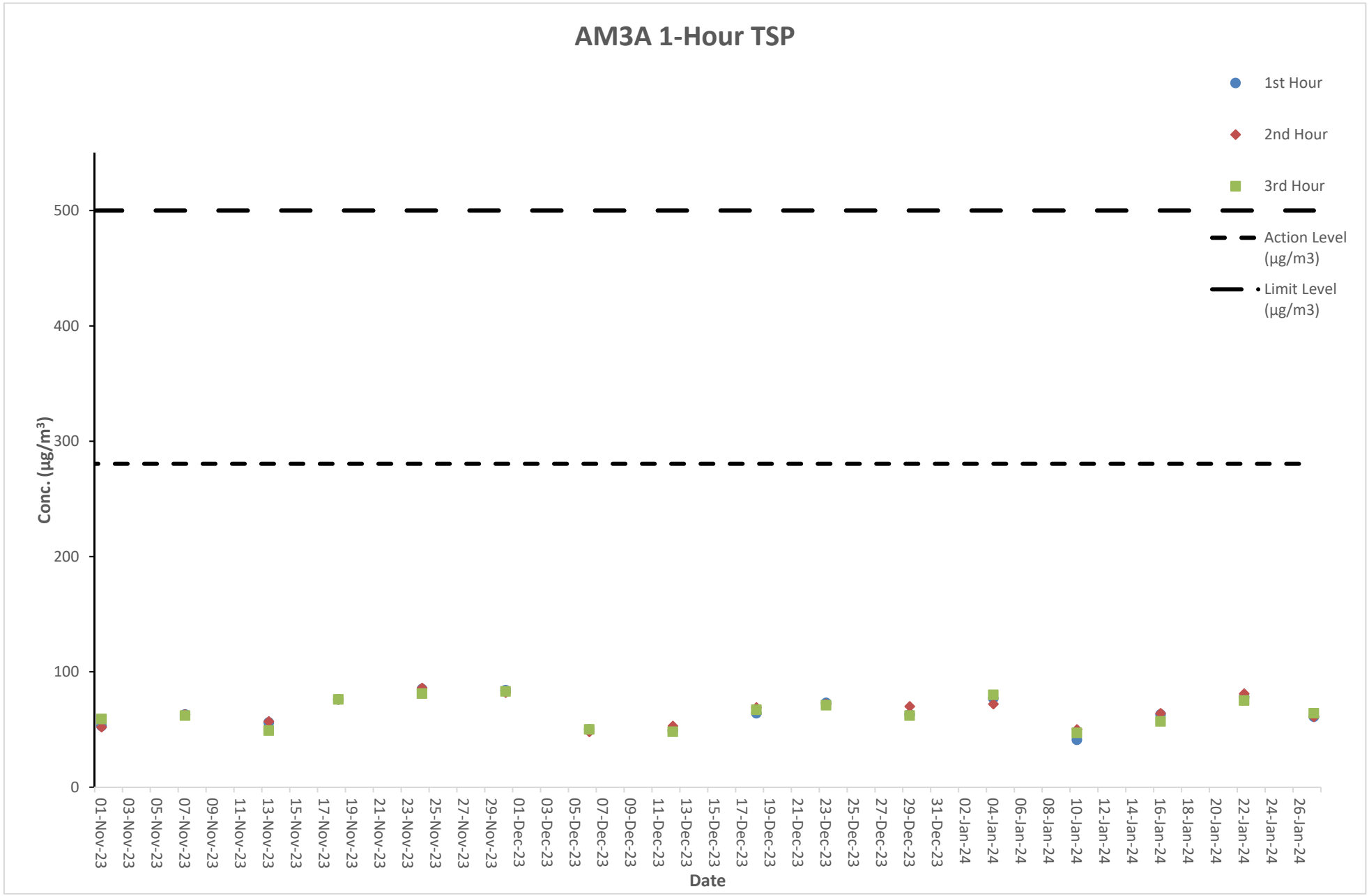


E. Graphical Plots of the Monitoring Results

Air Quality Monitoring Result at Station AM3A (1-hour TSP)

Date	Weather Condition	Time	Conc. (μg/m^3)			Action Level (μg/m^3)	Limit Level (μg/m^3)
			1st Hour	2nd Hour	3rd Hour		
01-Nov-23	Fine	14:09 - 17:09	53	52	59	280.4	500
07-Nov-23	Fine	8:04 - 11:04	63	63	62	280.4	500
13-Nov-23	Fine	14:05 - 17:05	56	57	49	280.4	500
18-Nov-23	Fine	8:00 - 11:00	76	76	76	280.4	500
24-Nov-23	Fine	14:07 - 17:07	85	86	81	280.4	500
30-Nov-23	Fine	8:08 - 11:08	84	82	83	280.4	500
06-Dec-23	Fine	8:03 - 11:03	50	48	50	280.4	500
12-Dec-23	Fine	14:06 - 17:06	49	53	48	280.4	500
18-Dec-23	Fine	8:07 - 11:07	64	69	67	280.4	500
23-Dec-23	Fine	14:02 - 17:02	73	72	71	280.4	500
29-Dec-23	Fine	8:08 - 11:08	63	70	62	280.4	500
04-Jan-24	Fine	14:09 - 17:09	77	72	80	280.4	500
10-Jan-24	Fine	8:01 - 11:01	41	50	47	280.4	500
16-Jan-24	Fine	14:06 - 17:06	63	64	57	280.4	500
22-Jan-24	Cloudy	8:03 - 11:03	78	81	75	280.4	500
27-Jan-24	Cloudy	14:01 - 17:01	61	61	64	280.4	500

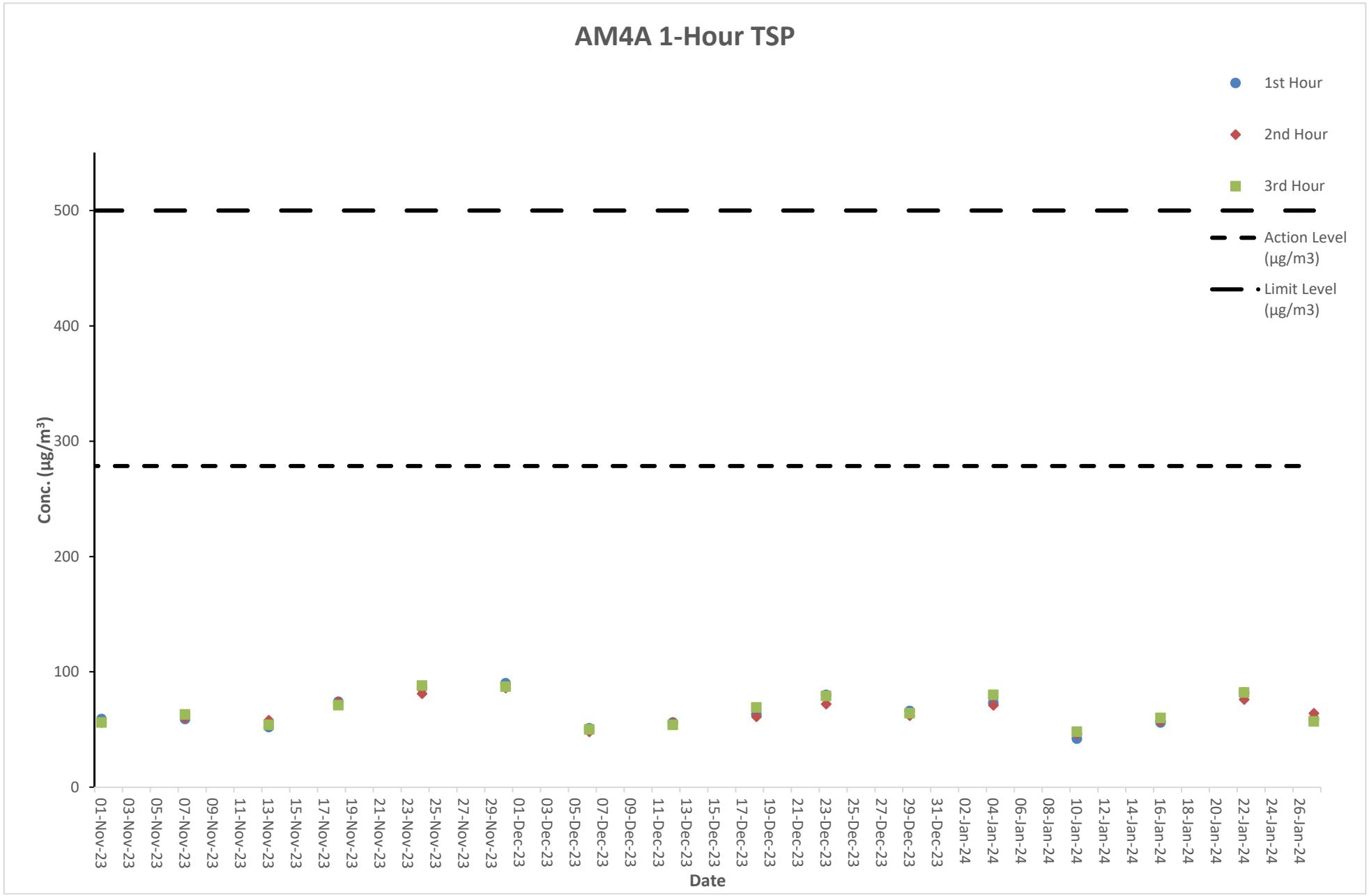
Graphical Presentation of Air Quality Monitoring Result at Station AM3A (1-hour TSP)



Air Quality Monitoring Result at Station AM4A (1-hour TSP)

Date	Weather Condition	Time	Conc. (μg/m^3)			Action Level (μg/m^3)	Limit Level (μg/m^3)
			1st Hour	2nd Hour	3rd Hour		
01-Nov-23	Fine	14:17 - 17:17	59	56	56	278.5	500
07-Nov-23	Fine	8:12 - 11:12	59	60	63	278.5	500
13-Nov-23	Fine	14:13 - 17:13	52	58	54	278.5	500
18-Nov-23	Fine	8:08 - 11:08	74	74	71	278.5	500
24-Nov-23	Fine	14:15 - 17:15	86	81	88	278.5	500
30-Nov-23	Fine	8:16 - 11:16	90	86	87	278.5	500
06-Dec-23	Fine	8:11 - 11:11	51	48	50	278.5	500
12-Dec-23	Fine	14:14 - 17:14	56	56	54	278.5	500
18-Dec-23	Fine	8:15 - 11:15	63	61	69	278.5	500
23-Dec-23	Fine	14:10 - 17:10	80	72	79	278.5	500
29-Dec-23	Fine	8:16 - 11:16	66	62	64	278.5	500
04-Jan-24	Fine	14:17 - 17:17	73	71	80	278.5	500
10-Jan-24	Fine	8:09 - 11:09	42	46	48	278.5	500
16-Jan-24	Fine	14:14 - 17:14	56	57	60	278.5	500
22-Jan-24	Cloudy	8:11 - 11:11	82	76	82	278.5	500
27-Jan-24	Cloudy	14:09 - 17:09	59	64	57	278.5	500

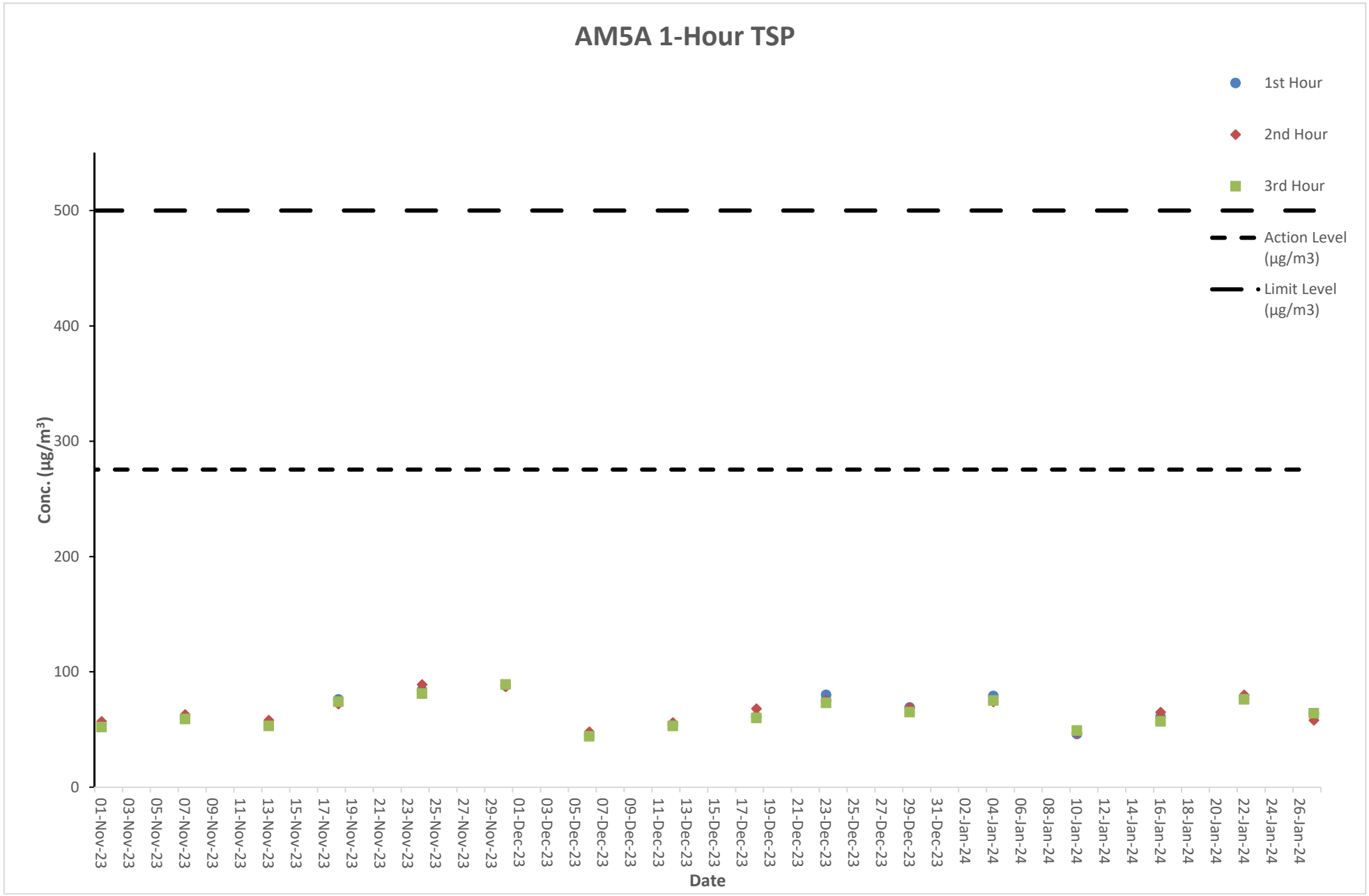
Graphical Presentation of Air Quality Monitoring Result at Station AM4A (1-hour TSP)



Air Quality Monitoring Result at Station AM5A (1-hour TSP)

Date	Weather Condition	Time	Conc. (μg/m^3)			Action Level (μg/m^3)	Limit Level (μg/m^3)
			1st Hour	2nd Hour	3rd Hour		
01-Nov-23	Fine	14:32 - 17:32	55	57	52	275.4	500
07-Nov-23	Fine	8:29 - 11:29	61	63	59	275.4	500
13-Nov-23	Fine	14:28 - 17:28	55	58	53	275.4	500
18-Nov-23	Fine	8:25 - 11:25	76	72	74	275.4	500
24-Nov-23	Fine	14:30 - 17:30	84	89	81	275.4	500
30-Nov-23	Fine	8:33 - 11:33	88	87	89	275.4	500
06-Dec-23	Fine	8:26 - 11:26	45	48	44	275.4	500
12-Dec-23	Fine	14:31 - 17:31	54	56	53	275.4	500
18-Dec-23	Fine	8:30 - 11:30	61	68	60	275.4	500
23-Dec-23	Fine	14:27 - 17:27	80	75	73	275.4	500
29-Dec-23	Fine	8:31 - 11:31	69	69	65	275.4	500
04-Jan-24	Fine	14:32 - 17:32	79	74	75	275.4	500
10-Jan-24	Fine	8:26 - 11:26	46	47	49	275.4	500
16-Jan-24	Fine	14:29 - 17:29	61	65	57	275.4	500
22-Jan-24	Cloudy	8:28 - 11:28	77	80	76	275.4	500
27-Jan-24	Cloudy	14:24 - 17:24	64	58	64	275.4	500

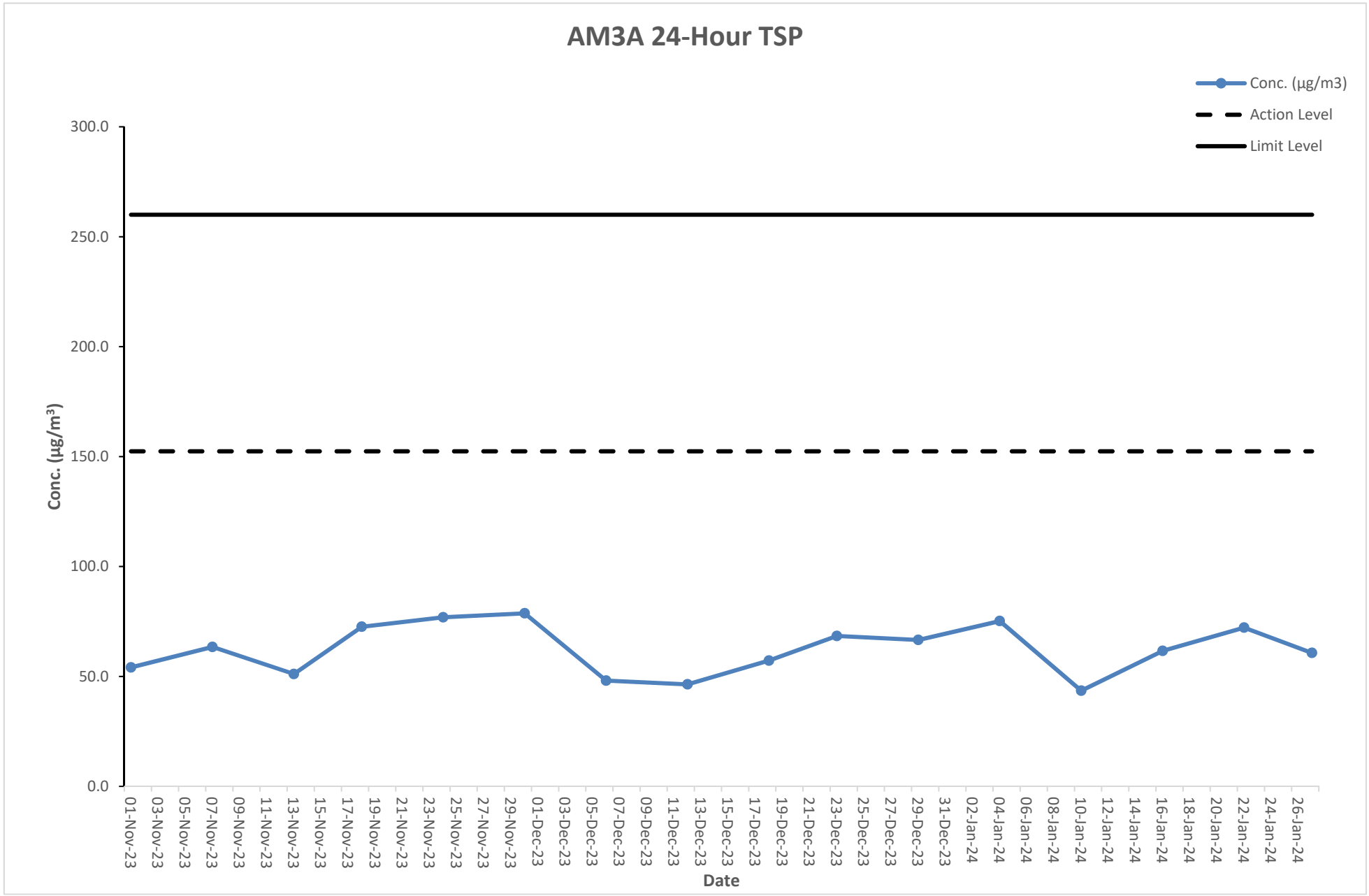
Graphical Presentation of Air Quality Monitoring Result at Station AM5A (1-hour TSP)



Air Quality Monitoring Result at Station AM3A (24-hour TSP)

Start		Finish		Filter Weight (g)		Elapsed Time Reading		Sampling Time (hrs)	Flow Rate (m^3/min)			Conc. ($\mu g/m^3$)	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
01-Nov-23	10:00	02-Nov-23	10:00	2.8027	2.8898	5915.8	5939.8	24	1.12	1.12	1.12	54.1	Sunny	152.4	260
07-Nov-23	10:00	08-Nov-23	10:00	2.8028	2.9048	5939.8	5963.8	24	1.12	1.12	1.12	63.4	Sunny	152.4	260
13-Nov-23	10:00	14-Nov-23	10:00	2.8015	2.8837	5963.8	5987.8	24	1.12	1.12	1.12	51.1	Sunny	152.4	260
18-Nov-23	10:00	19-Nov-23	10:00	2.8037	2.9206	5987.8	6011.8	24	1.12	1.12	1.12	72.6	Sunny	152.4	260
24-Nov-23	10:00	25-Nov-23	10:00	2.8018	2.9256	6011.8	6035.8	24	1.12	1.12	1.12	76.9	Sunny	152.4	260
30-Nov-23	10:00	01-Dec-23	10:00	2.8050	2.9317	6035.8	6059.8	24	1.12	1.12	1.12	78.7	Sunny	152.4	260
06-Dec-23	10:00	07-Dec-23	10:00	2.8089	2.8863	6060.8	6084.8	24	1.12	1.12	1.12	48.1	Sunny	152.4	260
12-Dec-23	10:00	13-Dec-23	10:00	2.8032	2.8780	6084.8	6108.8	24	1.12	1.12	1.12	46.4	Cloudy	152.4	260
18-Dec-23	10:00	19-Dec-23	10:00	2.8019	2.8938	6108.8	6132.8	24	1.12	1.12	1.12	57.2	Sunny	152.4	260
23-Dec-23	10:00	24-Dec-23	10:00	2.8038	2.9139	6132.8	6156.8	24	1.12	1.12	1.12	68.4	Cloudy	152.4	260
29-Dec-23	10:00	30-Dec-23	10:00	2.8020	2.9091	6156.8	6180.8	24	1.12	1.12	1.12	66.6	Sunny	152.4	260
04-Jan-24	10:00	05-Jan-24	10:00	2.8012	2.9223	6180.8	6204.8	24	1.12	1.12	1.12	75.2	Sunny	152.4	260
10-Jan-24	10:00	11-Jan-24	10:00	2.8027	2.8728	6204.8	6228.8	24	1.12	1.12	1.12	43.5	Sunny	152.4	260
16-Jan-24	10:00	17-Jan-24	10:00	2.8013	2.9004	6228.8	6252.8	24	1.12	1.12	1.12	61.6	Cloudy	152.4	260
22-Jan-24	10:00	23-Jan-24	10:00	2.8042	2.9205	6252.8	6276.8	24	1.12	1.12	1.12	72.2	Rainy	152.4	260
27-Jan-24	10:00	28-Jan-24	10:00	2.8027	2.9004	6276.8	6300.8	24	1.12	1.12	1.12	60.7	Rainy	152.4	260

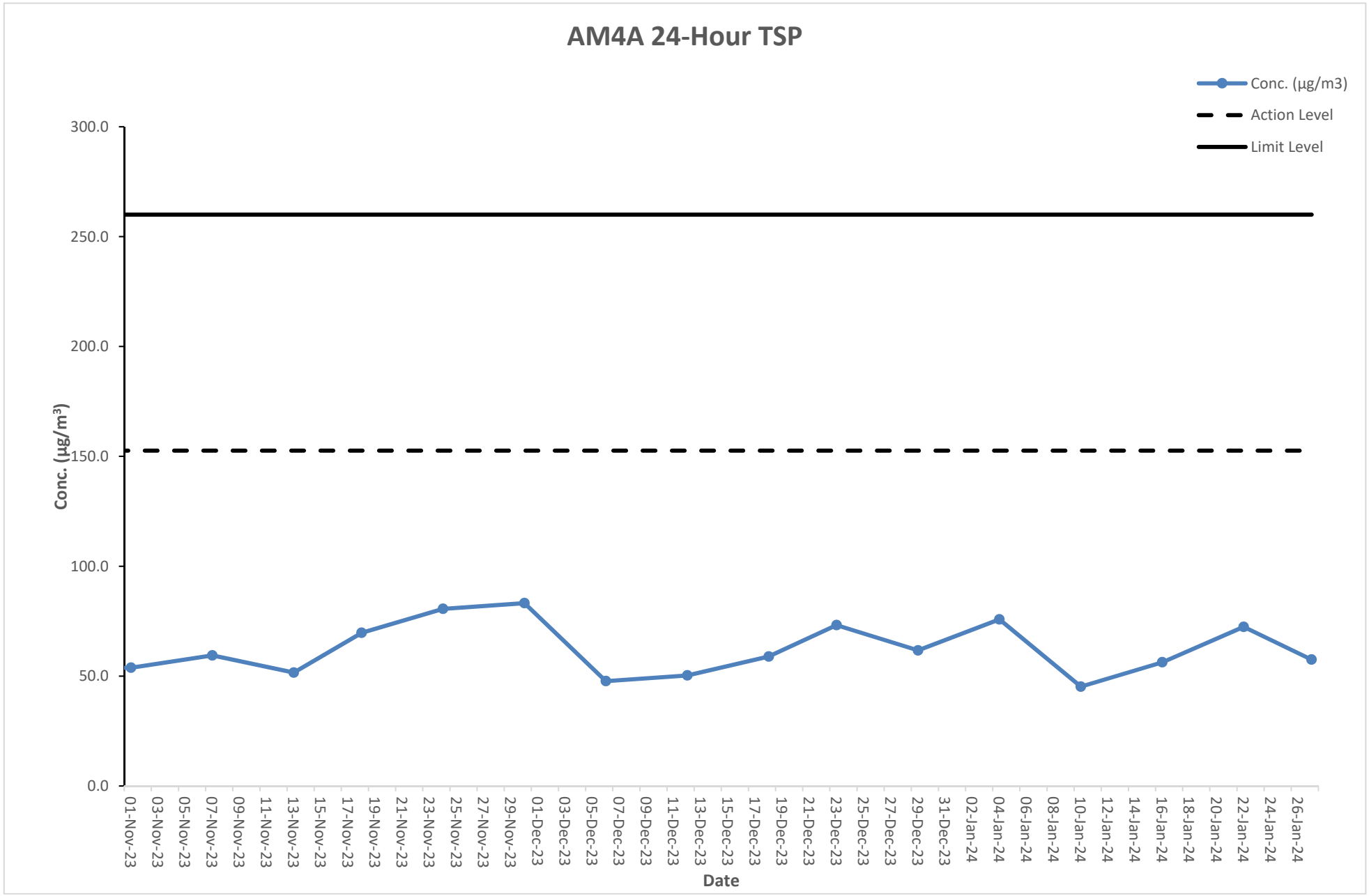
Graphical Presentation of Air Quality Monitoring Result at Station AM3A (24-hour TSP)



Air Quality Monitoring Result at Station AM4A (24-hour TSP)

Start		Finish		Filter Weight (g)		Elapsed Time Reading		Sampling Time (hrs)	Flow Rate (m^3/min)			Conc. ($\mu g/m^3$)	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
01-Nov-23	10:00	02-Nov-23	10:00	2.8081	2.8946	6335.4	6359.4	24	1.12	1.12	1.12	53.8	Sunny	152.6	260
07-Nov-23	10:00	08-Nov-23	10:00	2.8031	2.8988	6359.4	6383.4	24	1.12	1.12	1.12	59.4	Sunny	152.6	260
13-Nov-23	10:00	14-Nov-23	10:00	2.8017	2.8848	6383.4	6407.4	24	1.12	1.12	1.12	51.6	Sunny	152.6	260
18-Nov-23	10:00	19-Nov-23	10:00	2.8038	2.9160	6407.4	6431.4	24	1.12	1.12	1.12	69.7	Sunny	152.6	260
24-Nov-23	10:00	25-Nov-23	10:00	2.8060	2.9358	6431.4	6455.4	24	1.12	1.12	1.12	80.6	Sunny	152.6	260
30-Nov-23	10:00	01-Dec-23	10:00	2.8074	2.9413	6455.4	6479.4	24	1.12	1.12	1.12	83.2	Sunny	152.6	260
06-Dec-23	10:00	07-Dec-23	10:00	2.8075	2.8844	6480.4	6504.4	24	1.12	1.12	1.12	47.7	Sunny	152.6	260
12-Dec-23	10:00	13-Dec-23	10:00	2.8027	2.8837	6504.4	6528.4	24	1.12	1.12	1.12	50.3	Cloudy	152.6	260
18-Dec-23	10:00	19-Dec-23	10:00	2.8031	2.8979	6528.4	6552.4	24	1.12	1.12	1.12	58.9	Sunny	152.6	260
23-Dec-23	10:00	24-Dec-23	10:00	2.8031	2.9209	6552.4	6576.4	24	1.12	1.12	1.12	73.2	Cloudy	152.6	260
29-Dec-23	10:00	30-Dec-23	10:00	2.8034	2.9028	6576.4	6600.4	24	1.12	1.12	1.12	61.7	Sunny	152.6	260
04-Jan-24	10:00	05-Jan-24	10:00	2.8012	2.9233	6600.4	6624.4	24	1.12	1.12	1.12	75.8	Sunny	152.6	260
10-Jan-24	10:00	11-Jan-24	10:00	2.8028	2.8756	6624.4	6648.4	24	1.12	1.12	1.12	45.2	Sunny	152.6	260
16-Jan-24	10:00	17-Jan-24	10:00	2.8060	2.8965	6648.4	6672.4	24	1.12	1.12	1.12	56.3	Cloudy	152.6	260
22-Jan-24	10:00	23-Jan-24	10:00	2.8081	2.9246	6672.4	6696.4	24	1.12	1.12	1.12	72.4	Rainy	152.6	260
27-Jan-24	10:00	28-Jan-24	10:00	2.8034	2.8959	6696.4	6720.4	24	1.12	1.12	1.12	57.5	Rainy	152.6	260

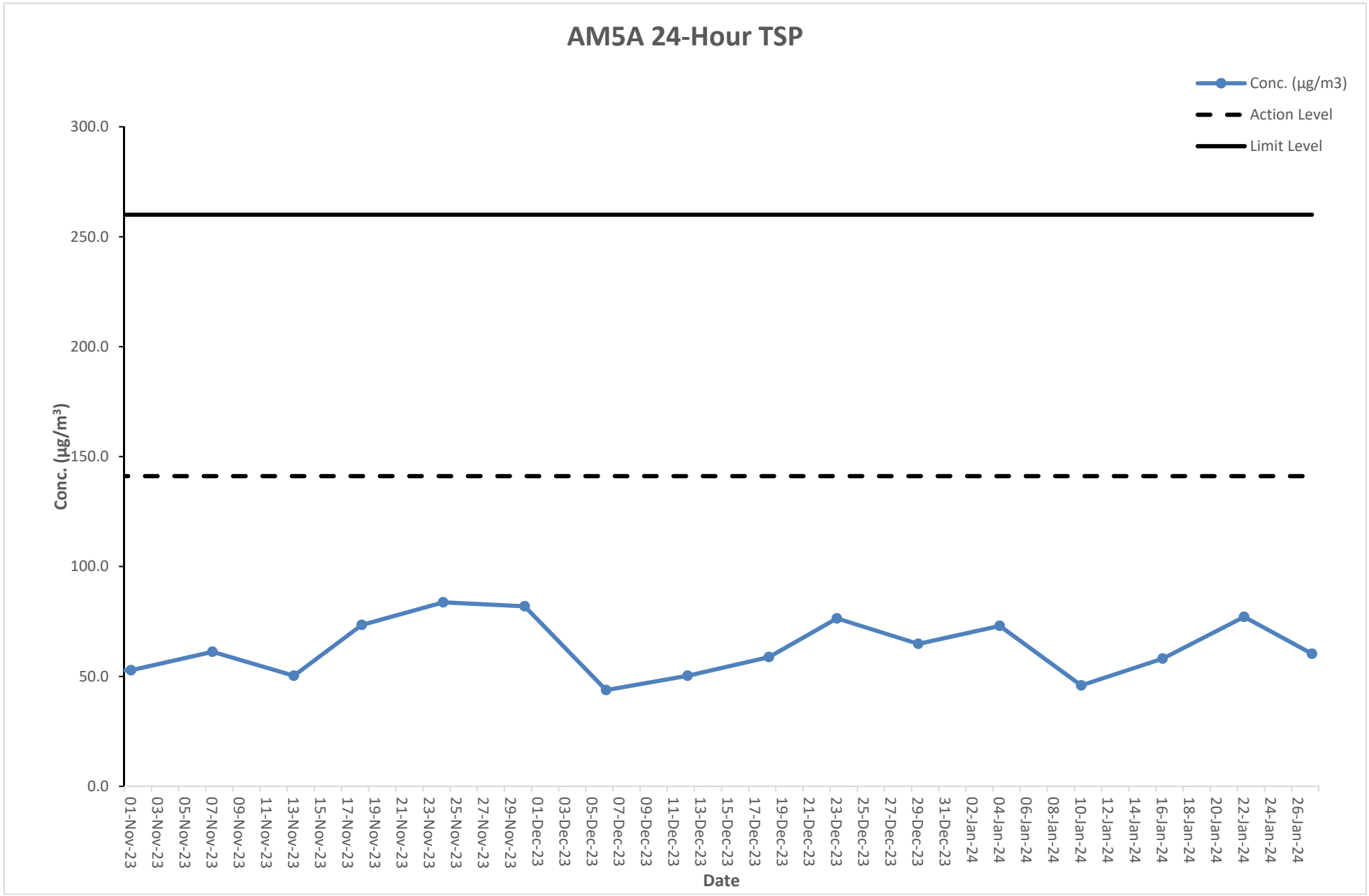
Graphical Presentation of Air Quality Monitoring Result at Station AM4A (24-hour TSP)



Air Quality Monitoring Result at Station AM5A (24-hour TSP)

Start		Finish		Filter Weight (g)		Elapsed Time Reading		Sampling Time (hrs)	Flow Rate (m^3/min)			Conc. ($\mu g/m^3$)	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
01-Nov-23	10:00	02-Nov-23	10:00	2.8013	2.8863	6473.6	6497.6	24	1.12	1.12	1.12	52.8	Sunny	141.1	260
07-Nov-23	10:00	08-Nov-23	10:00	2.8038	2.9023	6497.6	6521.6	24	1.12	1.12	1.12	61.2	Sunny	141.1	260
13-Nov-23	10:00	14-Nov-23	10:00	2.8028	2.8838	6521.6	6545.6	24	1.12	1.12	1.12	50.3	Sunny	141.1	260
18-Nov-23	10:00	19-Nov-23	10:00	2.8059	2.9239	6545.6	6569.6	24	1.12	1.12	1.12	73.4	Sunny	141.1	260
24-Nov-23	10:00	25-Nov-23	10:00	2.8033	2.9381	6569.6	6593.6	24	1.12	1.12	1.12	83.7	Sunny	141.1	260
30-Nov-23	10:00	01-Dec-23	10:00	2.8023	2.9341	6593.6	6617.6	24	1.12	1.12	1.12	81.9	Sunny	141.1	260
06-Dec-23	10:00	07-Dec-23	10:00	2.8025	2.8729	6618.6	6642.6	24	1.12	1.12	1.12	43.8	Sunny	141.1	260
12-Dec-23	10:00	13-Dec-23	10:00	2.8073	2.8883	6642.6	6666.6	24	1.12	1.12	1.12	50.3	Cloudy	141.1	260
18-Dec-23	10:00	19-Dec-23	10:00	2.8071	2.9017	6666.6	6690.6	24	1.12	1.12	1.12	58.8	Sunny	141.1	260
23-Dec-23	10:00	24-Dec-23	10:00	2.8021	2.9250	6690.6	6714.6	24	1.12	1.12	1.12	76.4	Cloudy	141.1	260
29-Dec-23	10:00	30-Dec-23	10:00	2.8055	2.9098	6714.6	6738.6	24	1.12	1.12	1.12	64.8	Sunny	141.1	260
04-Jan-24	10:00	05-Jan-24	10:00	2.8076	2.9250	6738.6	6762.6	24	1.12	1.12	1.12	73.0	Sunny	141.1	260
10-Jan-24	10:00	11-Jan-24	10:00	2.8020	2.8758	6762.6	6786.6	24	1.12	1.12	1.12	45.9	Sunny	141.1	260
16-Jan-24	10:00	17-Jan-24	10:00	2.8017	2.8952	6786.6	6810.6	24	1.12	1.12	1.12	58.1	Cloudy	141.1	260
22-Jan-24	10:00	23-Jan-24	10:00	2.8065	2.9306	6810.6	6834.6	24	1.12	1.12	1.12	77.1	Rainy	141.1	260
27-Jan-24	10:00	28-Jan-24	10:00	2.8069	2.9040	6834.6	6858.6	24	1.12	1.12	1.12	60.3	Rainy	141.1	260

Graphical Presentation of Air Quality Monitoring Result at Station AM5A (24-hour TSP)



Noise Monitoring Result at Station NM2A

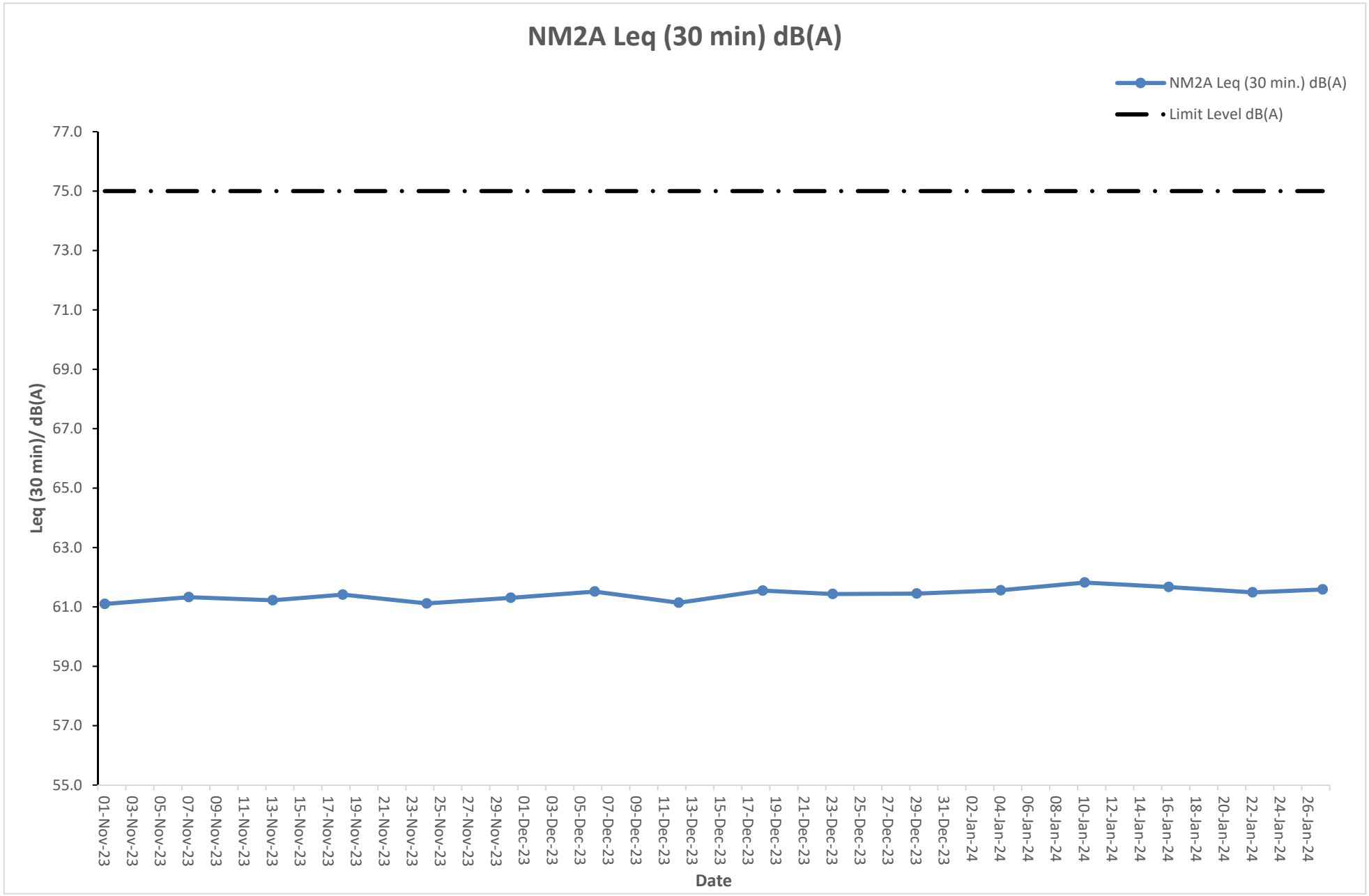
Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
01-Nov-23	14:39	62.4	59.1	61.1
01-Nov-23	14:44	62.5	59.1	
01-Nov-23	14:49	62.3	58.8	
01-Nov-23	14:54	63.1	58.9	
01-Nov-23	14:59	63.0	59.8	
01-Nov-23	15:04	62.6	59.0	
07-Nov-23	8:34	62.1	58.7	61.3
07-Nov-23	8:39	63.4	59.4	
07-Nov-23	8:44	63.5	58.9	
07-Nov-23	8:49	63.0	58.8	
07-Nov-23	8:54	62.9	60.0	
07-Nov-23	8:59	63.0	58.8	
13-Nov-23	14:35	63.2	59.5	61.2
13-Nov-23	14:40	63.0	59.4	
13-Nov-23	14:45	62.2	60.1	
13-Nov-23	14:50	62.4	58.8	
13-Nov-23	14:55	63.4	58.7	
13-Nov-23	15:00	62.2	59.8	
18-Nov-23	8:30	62.8	59.1	61.4
18-Nov-23	8:35	63.1	59.8	
18-Nov-23	8:40	62.6	58.7	
18-Nov-23	8:45	63.5	60.1	
18-Nov-23	8:50	62.9	58.9	
18-Nov-23	8:55	63.2	59.2	
24-Nov-23	14:37	62.3	59.4	61.1
24-Nov-23	14:42	63.0	59.7	
24-Nov-23	14:47	62.9	59.8	
24-Nov-23	14:52	63.3	59.2	
24-Nov-23	14:57	62.1	59.3	
24-Nov-23	15:02	63.3	60.1	
30-Nov-23	8:38	62.9	59.1	61.3
30-Nov-23	8:43	63.1	60.0	
30-Nov-23	8:48	62.8	59.1	
30-Nov-23	8:53	63.3	59.0	
30-Nov-23	8:58	63.5	58.7	
30-Nov-23	9:03	62.1	59.7	
06-Dec-23	8:33	63.2	59.0	61.5
06-Dec-23	8:38	62.7	58.8	
06-Dec-23	8:43	62.6	59.6	
06-Dec-23	8:48	62.1	58.8	
06-Dec-23	8:53	62.4	60.1	
06-Dec-23	8:58	62.8	58.7	
12-Dec-23	14:36	62.9	60.1	61.1
12-Dec-23	14:41	63.2	59.9	
12-Dec-23	14:46	63.3	59.6	
12-Dec-23	14:51	62.9	59.9	
12-Dec-23	14:56	62.7	58.9	
12-Dec-23	15:01	62.6	60.1	
18-Dec-23	8:37	63.2	59.9	61.5
18-Dec-23	8:42	63.4	59.1	
18-Dec-23	8:47	63.3	58.8	
18-Dec-23	8:52	62.8	58.7	
18-Dec-23	8:57	63.0	60.0	
18-Dec-23	9:02	63.5	59.8	
23-Dec-23	14:32	62.8	59.6	61.4
23-Dec-23	14:37	62.4	59.4	
23-Dec-23	14:42	62.3	60.1	
23-Dec-23	14:47	62.1	58.8	
23-Dec-23	14:52	62.7	58.8	
23-Dec-23	14:57	62.3	59.2	

Noise Monitoring Result at Station NM2A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
29-Dec-23	8:38	62.1	59.8	61.4
29-Dec-23	8:43	62.2	59.0	
29-Dec-23	8:48	63.4	59.4	
29-Dec-23	8:53	63.0	59.8	
29-Dec-23	8:58	62.6	60.0	
29-Dec-23	9:03	62.3	58.7	
04-Jan-24	14:39	62.6	60.1	61.6
04-Jan-24	14:44	62.8	59.4	
04-Jan-24	14:49	62.8	59.4	
04-Jan-24	14:54	63.5	60.1	
04-Jan-24	14:59	63.2	59.5	
04-Jan-24	15:04	62.8	60.2	
10-Jan-24	8:31	63.7	59.6	61.8
10-Jan-24	8:36	63.2	59.3	
10-Jan-24	8:41	63.5	60.0	
10-Jan-24	8:46	62.6	60.0	
10-Jan-24	8:51	63.6	59.4	
10-Jan-24	8:56	63.5	59.7	
16-Jan-24	14:36	62.7	60.6	61.7
16-Jan-24	14:41	64.0	60.2	
16-Jan-24	14:46	62.7	60.2	
16-Jan-24	14:51	63.1	59.9	
16-Jan-24	14:56	63.1	60.2	
16-Jan-24	15:01	63.1	59.8	
22-Jan-24	8:33	63.0	59.6	61.5
22-Jan-24	8:38	62.6	60.4	
22-Jan-24	8:43	63.8	59.2	
22-Jan-24	8:48	63.3	60.2	
22-Jan-24	8:53	63.0	60.2	
22-Jan-24	8:58	63.2	60.6	
27-Jan-24	14:31	62.7	59.4	61.6
27-Jan-24	14:36	62.8	60.0	
27-Jan-24	14:41	63.2	59.4	
27-Jan-24	14:46	64.0	59.4	
27-Jan-24	14:51	63.4	59.3	
27-Jan-24	14:56	64.0	60.3	


The station set-up of a façade measurement at station NM2A.

Graphical Presentation of Noise Monitoring Result at Station NM2A



Noise Monitoring Result at Station NM3A

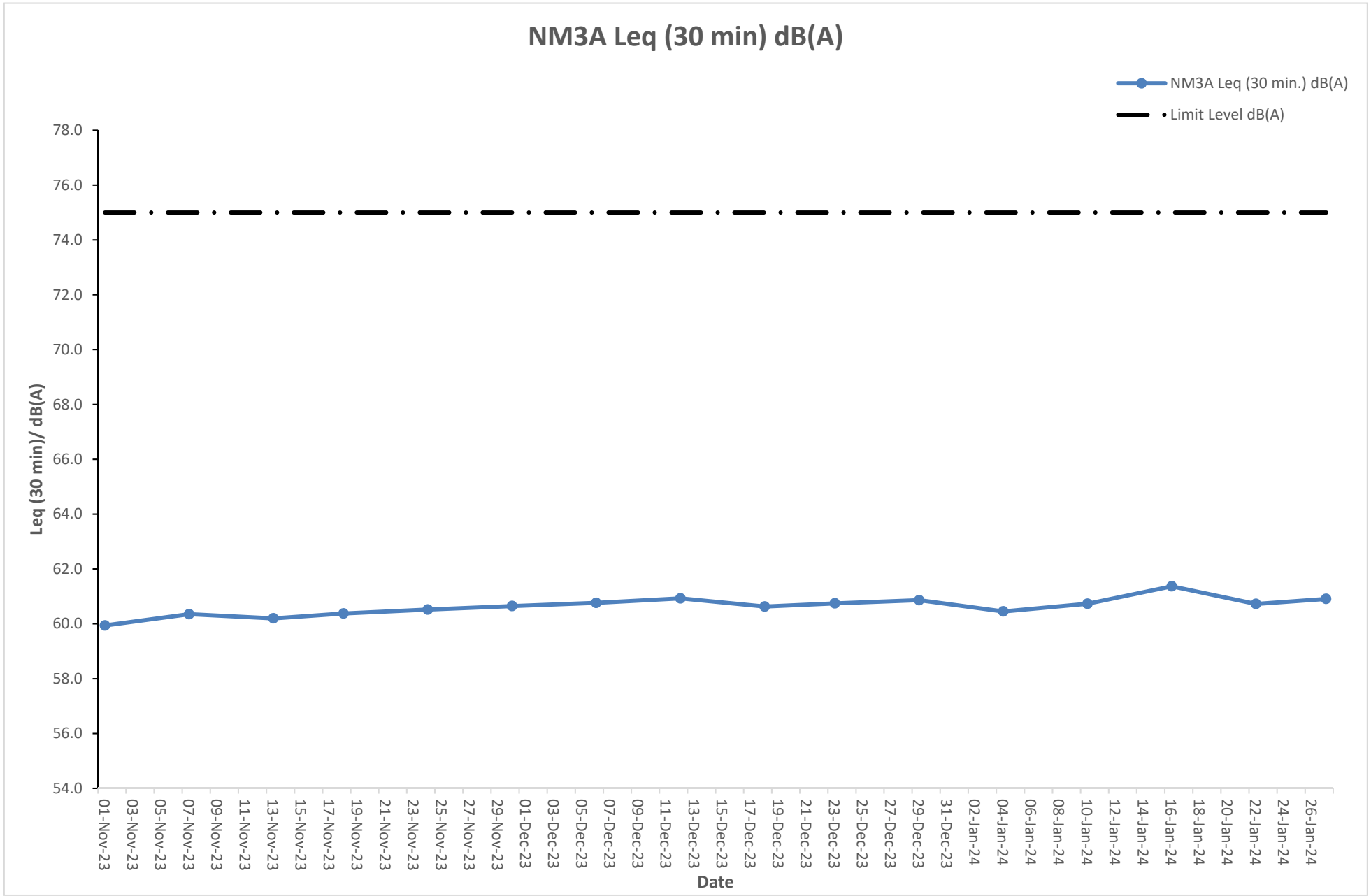
Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
01-Nov-23	16:09	63.1	56.3	59.9
01-Nov-23	16:14	61.5	57.3	
01-Nov-23	16:19	61.6	57.0	
01-Nov-23	16:24	61.8	56.0	
01-Nov-23	16:29	62.2	55.6	
01-Nov-23	16:34	61.6	57.2	
07-Nov-23	10:07	61.6	55.5	60.4
07-Nov-23	10:12	62.5	55.7	
07-Nov-23	10:17	62.4	57.1	
07-Nov-23	10:22	62.0	56.6	
07-Nov-23	10:27	63.2	56.3	
07-Nov-23	10:32	61.6	57.2	
13-Nov-23	16:05	63.3	55.5	60.2
13-Nov-23	16:10	62.8	57.2	
13-Nov-23	16:15	61.8	56.4	
13-Nov-23	16:20	62.5	56.1	
13-Nov-23	16:25	62.5	55.4	
13-Nov-23	16:30	61.9	56.6	
18-Nov-23	10:03	63.0	56.5	60.4
18-Nov-23	10:08	62.2	56.7	
18-Nov-23	10:13	61.5	55.7	
18-Nov-23	10:18	61.5	56.0	
18-Nov-23	10:23	63.3	56.3	
18-Nov-23	10:28	63.0	57.3	
24-Nov-23	16:07	62.0	55.7	60.5
24-Nov-23	16:12	63.3	55.6	
24-Nov-23	16:17	62.6	56.4	
24-Nov-23	16:22	62.1	56.3	
24-Nov-23	16:27	62.4	56.2	
24-Nov-23	16:32	62.7	55.5	
30-Nov-23	10:20	61.5	55.8	60.6
30-Nov-23	10:25	61.5	57.0	
30-Nov-23	10:30	61.7	57.0	
30-Nov-23	10:35	62.5	56.9	
30-Nov-23	10:40	62.1	55.8	
30-Nov-23	10:45	61.4	55.8	
06-Dec-23	10:03	63.7	56.1	60.8
06-Dec-23	10:08	61.9	57.2	
06-Dec-23	10:13	62.4	57.8	
06-Dec-23	10:18	62.4	56.1	
06-Dec-23	10:23	62.2	56.4	
06-Dec-23	10:28	63.0	57.6	
12-Dec-23	16:09	63.5	56.9	60.9
12-Dec-23	16:14	63.3	57.3	
12-Dec-23	16:19	62.9	57.6	
12-Dec-23	16:24	63.4	56.6	
12-Dec-23	16:29	62.1	56.5	
12-Dec-23	16:34	63.3	55.9	
18-Dec-23	10:07	62.3	56.1	60.6
18-Dec-23	10:12	62.0	57.3	
18-Dec-23	10:17	62.3	57.5	
18-Dec-23	10:22	61.9	57.2	
18-Dec-23	10:27	63.5	57.4	
18-Dec-23	10:32	63.7	56.2	
23-Dec-23	16:05	62.9	56.4	60.7
23-Dec-23	16:10	62.7	57.5	
23-Dec-23	16:15	63.0	57.6	
23-Dec-23	16:20	63.3	56.6	
23-Dec-23	16:25	62.5	57.5	
23-Dec-23	16:30	62.5	56.9	

Noise Monitoring Result at Station NM3A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
29-Dec-23	10:08	62.2	56.6	60.9
29-Dec-23	10:13	62.3	57.3	
29-Dec-23	10:18	61.9	56.1	
29-Dec-23	10:23	62.9	57.3	
29-Dec-23	10:28	62.7	57.0	
29-Dec-23	10:33	63.4	57.1	
04-Jan-24	16:09	62.2	57.8	60.5
04-Jan-24	16:14	62.5	56.3	
04-Jan-24	16:19	62.5	56.7	
04-Jan-24	16:24	62.8	56.6	
04-Jan-24	16:29	63.4	55.9	
04-Jan-24	16:34	61.9	56.1	
10-Jan-24	10:04	63.5	56.1	60.7
10-Jan-24	10:09	62.8	56.2	
10-Jan-24	10:14	62.6	57.2	
10-Jan-24	10:19	63.2	56.8	
10-Jan-24	10:24	61.9	55.9	
10-Jan-24	10:29	63.8	57.5	
16-Jan-24	16:06	63.8	57.2	61.4
16-Jan-24	16:11	63.7	56.5	
16-Jan-24	16:16	63.2	56.9	
16-Jan-24	16:21	63.7	57.8	
16-Jan-24	16:26	62.0	57.0	
16-Jan-24	16:31	63.4	56.1	
22-Jan-24	10:06	62.3	56.3	60.7
22-Jan-24	10:11	63.7	56.6	
22-Jan-24	10:16	63.6	57.5	
22-Jan-24	10:21	63.6	55.9	
22-Jan-24	10:26	62.3	56.4	
22-Jan-24	10:31	63.7	56.7	
27-Jan-24	16:01	63.0	57.1	60.9
27-Jan-24	16:06	62.6	57.6	
27-Jan-24	16:11	62.8	57.7	
27-Jan-24	16:16	62.1	56.0	
27-Jan-24	16:21	63.6	56.9	
27-Jan-24	16:26	62.6	57.0	


The station set-up of a façade measurement at station NM3A.

Graphical Presentation of Noise Monitoring Result at Station NM3A



Noise Monitoring Result at Station NM4A

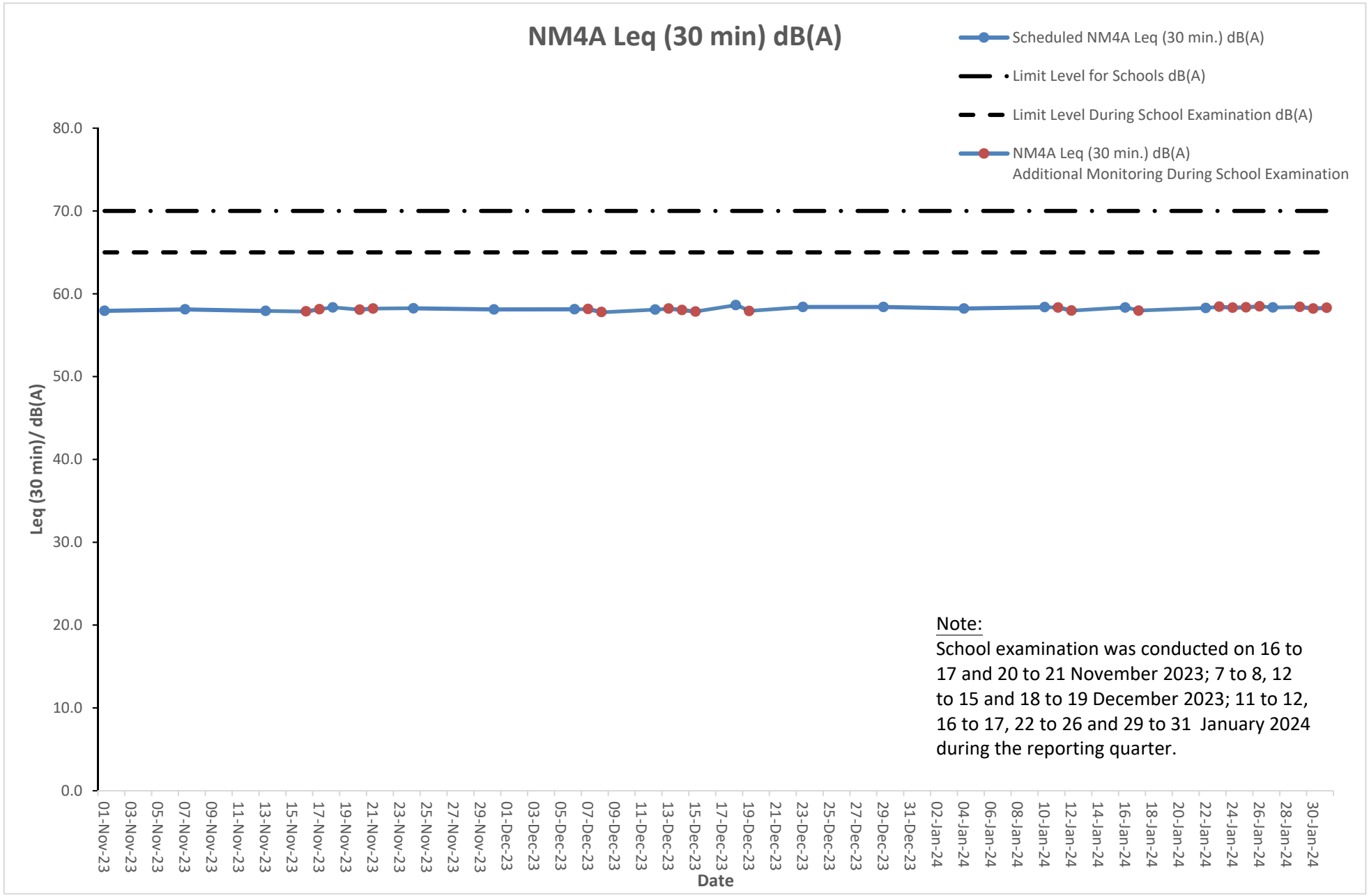
Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
01-Nov-23	16:44	59.4	55.9	57.9
01-Nov-23	16:49	60.3	56.7	
01-Nov-23	16:54	60.1	56.3	
01-Nov-23	16:59	60.6	56.1	
01-Nov-23	17:04	60.0	57.1	
01-Nov-23	17:09	59.4	56.0	
07-Nov-23	10:42	60.6	56.7	58.1
07-Nov-23	10:47	59.2	56.8	
07-Nov-23	10:52	59.8	56.2	
07-Nov-23	10:57	60.6	55.7	
07-Nov-23	11:02	60.2	56.7	
07-Nov-23	11:07	60.2	56.4	
13-Nov-23	16:40	60.6	55.7	57.9
13-Nov-23	16:45	60.6	56.8	
13-Nov-23	16:50	60.2	56.8	
13-Nov-23	16:55	59.2	57.1	
13-Nov-23	17:00	60.1	56.9	
13-Nov-23	17:05	59.8	55.7	
18-Nov-23	10:38	60.4	55.9	58.3
18-Nov-23	10:43	60.5	55.9	
18-Nov-23	10:48	60.2	56.9	
18-Nov-23	10:53	60.5	56.1	
18-Nov-23	10:58	60.6	56.3	
18-Nov-23	11:03	59.4	55.9	
24-Nov-23	16:42	59.2	55.7	58.2
24-Nov-23	16:47	60.3	56.8	
24-Nov-23	16:52	59.5	56.6	
24-Nov-23	16:57	60.0	56.7	
24-Nov-23	17:02	59.6	56.1	
24-Nov-23	17:07	59.2	56.2	
30-Nov-23	10:55	60.6	56.7	58.1
30-Nov-23	11:00	60.0	56.4	
30-Nov-23	11:05	59.5	56.7	
30-Nov-23	11:10	59.4	57.1	
30-Nov-23	11:15	60.0	56.3	
30-Nov-23	11:20	59.7	56.7	
06-Dec-23	10:38	60.6	55.7	58.1
06-Dec-23	10:43	59.2	55.7	
06-Dec-23	10:48	59.5	56.1	
06-Dec-23	10:53	60.5	56.3	
06-Dec-23	10:58	59.7	56.5	
06-Dec-23	11:03	60.4	56.0	
12-Dec-23	16:44	60.1	56.7	58.1
12-Dec-23	16:49	59.2	56.9	
12-Dec-23	16:54	59.7	55.7	
12-Dec-23	16:59	59.7	57.0	
12-Dec-23	17:04	59.7	56.4	
12-Dec-23	17:09	59.6	56.2	
18-Dec-23	10:42	60.3	56.2	58.6
18-Dec-23	10:47	60.6	56.4	
18-Dec-23	10:52	59.7	55.9	
18-Dec-23	10:57	60.1	56.3	
18-Dec-23	11:02	60.2	56.2	
18-Dec-23	11:07	59.6	56.5	
23-Dec-23	16:40	60.4	56.8	58.4
23-Dec-23	16:45	59.4	55.8	
23-Dec-23	16:50	60.3	56.0	
23-Dec-23	16:55	60.3	55.8	
23-Dec-23	17:00	59.2	56.3	
23-Dec-23	17:05	59.7	56.8	

Noise Monitoring Result at Station NM4A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
29-Dec-23	10:43	60.2	55.8	58.4
29-Dec-23	10:48	59.9	56.9	
29-Dec-23	10:53	60.6	55.7	
29-Dec-23	10:58	60.5	56.1	
29-Dec-23	11:03	60.6	55.7	
29-Dec-23	11:08	60.2	56.3	
04-Jan-24	16:44	59.9	55.8	58.2
04-Jan-24	16:49	59.5	56.1	
04-Jan-24	16:54	59.9	56.4	
04-Jan-24	16:59	59.5	56.8	
04-Jan-24	17:04	59.4	55.7	
04-Jan-24	17:09	60.1	56.0	
10-Jan-24	10:39	60.0	57.1	58.4
10-Jan-24	10:44	59.2	57.0	
10-Jan-24	10:49	60.6	55.7	
10-Jan-24	10:54	59.7	57.0	
10-Jan-24	10:59	59.6	56.5	
10-Jan-24	11:04	59.2	56.0	
16-Jan-24	16:41	59.2	55.7	58.3
16-Jan-24	16:46	59.7	56.3	
16-Jan-24	16:51	60.5	56.7	
16-Jan-24	16:56	60.6	56.0	
16-Jan-24	17:01	60.6	56.3	
16-Jan-24	17:06	59.2	57.1	
22-Jan-24	10:41	59.5	56.6	58.3
22-Jan-24	10:46	59.8	56.4	
22-Jan-24	10:51	59.8	56.8	
22-Jan-24	10:56	60.6	56.4	
22-Jan-24	11:01	60.3	57.1	
22-Jan-24	11:06	59.3	57.1	
27-Jan-24	16:36	59.7	56.0	58.3
27-Jan-24	16:41	59.6	55.8	
27-Jan-24	16:46	59.4	56.1	
27-Jan-24	16:51	59.3	55.9	
27-Jan-24	16:56	59.9	55.7	
27-Jan-24	17:01	59.9	56.0	


The station set-up of a façade measurement at station NM4A.

Graphical Presentation of Noise Monitoring Result at Station NM4A



Noise Monitoring Result at Station NM5A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)	Leq (30 min.) +3 dB(A)
01-Nov-23	15:29	62.2	58.6	60.7	63.7
01-Nov-23	15:34	61.7	57.5		
01-Nov-23	15:39	62.3	58.5		
01-Nov-23	15:44	61.6	57.5		
01-Nov-23	15:49	62.6	57.9		
01-Nov-23	15:54	62.6	58.3		
07-Nov-23	9:26	62.3	57.8	60.6	63.6
07-Nov-23	9:31	61.4	57.9		
07-Nov-23	9:36	62.0	57.9		
07-Nov-23	9:41	62.6	57.7		
07-Nov-23	9:46	62.3	58.7		
07-Nov-23	9:51	62.4	57.5		
13-Nov-23	15:25	62.4	57.6	60.4	63.4
13-Nov-23	15:30	62.7	57.5		
13-Nov-23	15:35	62.4	57.7		
13-Nov-23	15:40	61.6	58.4		
13-Nov-23	15:45	61.5	58.8		
13-Nov-23	15:50	62.5	59.0		
18-Nov-23	9:22	61.5	58.5	60.3	63.3
18-Nov-23	9:27	61.9	58.9		
18-Nov-23	9:32	62.5	57.7		
18-Nov-23	9:37	61.6	59.3		
18-Nov-23	9:42	62.2	59.2		
18-Nov-23	9:47	61.8	58.6		
24-Nov-23	15:27	62.5	58.2	60.6	63.6
24-Nov-23	15:32	61.9	58.0		
24-Nov-23	15:37	61.9	58.6		
24-Nov-23	15:42	61.9	59.0		
24-Nov-23	15:47	61.7	57.6		
24-Nov-23	15:52	62.1	58.7		
30-Nov-23	9:39	61.8	58.9	60.3	63.3
30-Nov-23	9:44	61.9	58.8		
30-Nov-23	9:49	61.5	58.0		
30-Nov-23	9:54	61.6	57.4		
30-Nov-23	9:59	62.2	59.0		
30-Nov-23	10:04	62.8	58.8		
06-Dec-23	9:23	62.5	57.6	60.6	63.6
06-Dec-23	9:28	62.7	57.7		
06-Dec-23	9:33	62.7	58.1		
06-Dec-23	9:38	61.7	59.2		
06-Dec-23	9:43	61.9	57.6		
06-Dec-23	9:48	62.0	57.4		
12-Dec-23	15:28	62.8	57.9	60.4	63.4
12-Dec-23	15:33	62.7	59.1		
12-Dec-23	15:38	62.0	58.8		
12-Dec-23	15:43	61.5	59.1		
12-Dec-23	15:48	61.8	58.5		
12-Dec-23	15:53	62.1	58.5		
18-Dec-23	9:27	62.8	58.7	60.7	63.7
18-Dec-23	9:32	62.1	59.0		
18-Dec-23	9:37	61.9	58.6		
18-Dec-23	9:42	62.4	58.8		
18-Dec-23	9:47	62.5	59.2		
18-Dec-23	9:52	62.5	58.5		
23-Dec-23	15:24	62.3	57.8	60.7	63.7
23-Dec-23	15:29	62.5	59.0		
23-Dec-23	15:34	62.1	58.1		
23-Dec-23	15:39	62.1	59.1		
23-Dec-23	15:44	61.4	57.9		
23-Dec-23	15:49	62.5	59.1		

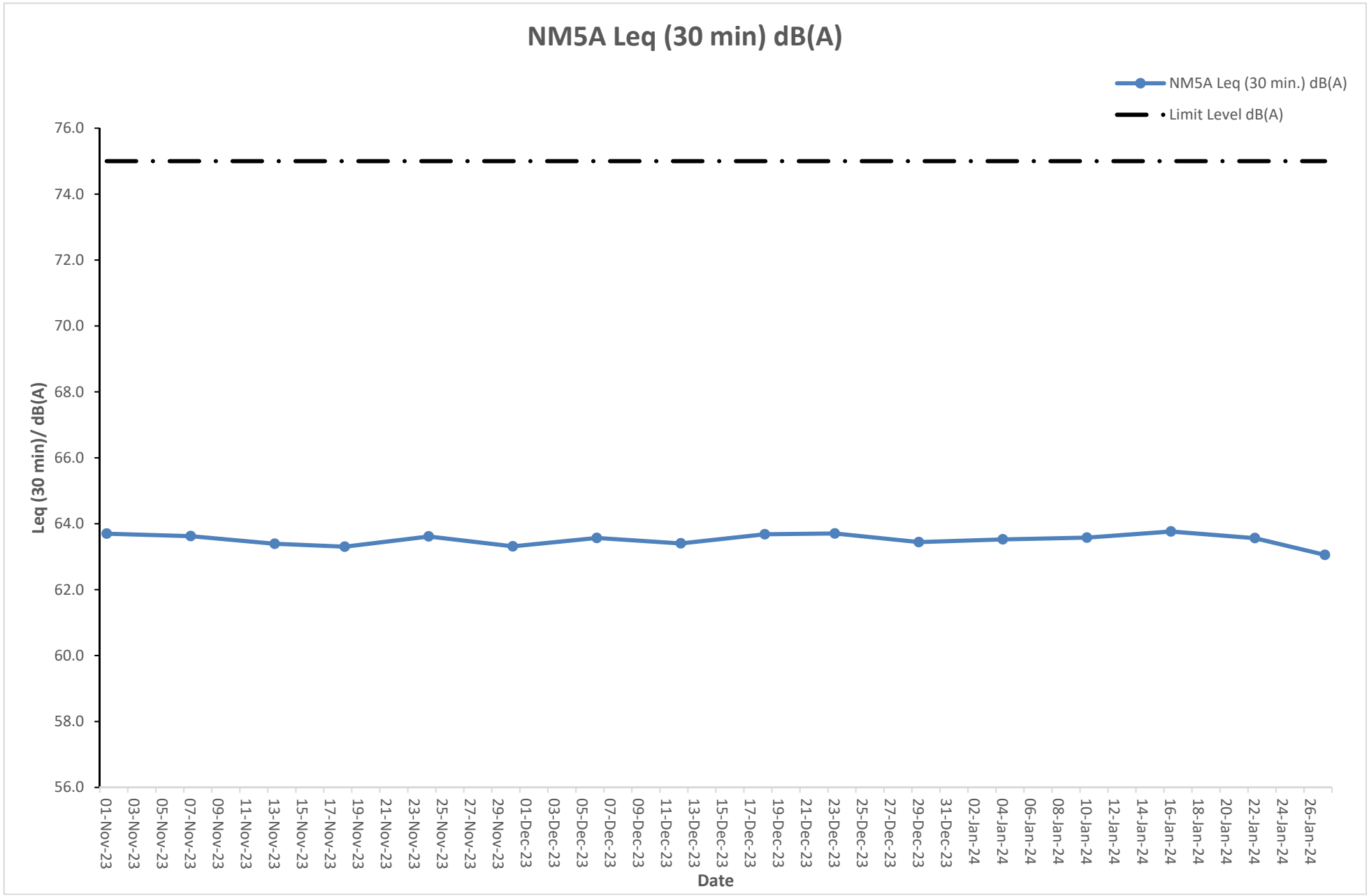
Noise Monitoring Result at Station NM5A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)	Leq (30 min.) +3 dB(A)
29-Dec-23	9:28	62.7	58.5	60.4	63.4
29-Dec-23	9:33	61.7	57.7		
29-Dec-23	9:38	62.2	57.8		
29-Dec-23	9:43	61.4	58.6		
29-Dec-23	9:48	62.7	58.2		
29-Dec-23	9:53	61.7	58.7		
04-Jan-24	15:29	61.7	57.8	60.5	63.5
04-Jan-24	15:34	62.8	58.5		
04-Jan-24	15:39	61.4	59.1		
04-Jan-24	15:44	61.5	58.5		
04-Jan-24	15:49	61.7	57.5		
04-Jan-24	15:54	62.6	59.2		
10-Jan-24	9:23	61.7	58.6	60.6	63.6
10-Jan-24	9:28	62.1	58.0		
10-Jan-24	9:33	62.7	58.3		
10-Jan-24	9:38	61.5	58.5		
10-Jan-24	9:43	61.9	58.5		
10-Jan-24	9:48	62.5	58.6		
16-Jan-24	15:26	61.4	58.8	60.8	63.8
16-Jan-24	15:31	61.5	57.4		
16-Jan-24	15:36	61.4	58.7		
16-Jan-24	15:41	62.1	58.1		
16-Jan-24	15:46	62.1	58.8		
16-Jan-24	15:51	62.2	57.7		
22-Jan-24	9:25	62.2	57.4	60.6	63.6
22-Jan-24	9:30	62.2	57.4		
22-Jan-24	9:35	62.4	57.5		
22-Jan-24	9:40	62.8	58.2		
22-Jan-24	9:45	62.6	59.1		
22-Jan-24	9:50	61.6	58.3		
27-Jan-24	15:21	61.8	59.2	60.1	63.1
27-Jan-24	15:26	62.6	58.5		
27-Jan-24	15:31	62.7	58.6		
27-Jan-24	15:36	62.4	58.6		
27-Jan-24	15:41	62.6	59.1		
27-Jan-24	15:46	61.5	57.9		

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


The station set-up of a free-field measurement at station NM5A.

Graphical Presentation of Noise Monitoring Result at Station NM5A



F. Waste Flow table

Zone 2B & 2C

Table F-1: Monthly Waste Flow Table for Zone 2B & 2C

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Materials 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 Sroting 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)
2021													
Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oct	22.58	22.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.19
Nov	9265.04	10.45	125.93	0.00	9128.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.12
Dec	13462.30	62.94	1041.17	0.00	12358.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.62
Sub-total (2021)	22749.92	95.97	1167.10	0.00	21486.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.93
2022													
Jan	17427.64	0.00	2091.32	100.04	15236.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60
Feb	18230.98	0.00	991.53	1719.99	15519.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.90
Mar	24777.12	0.00	2176.32	11721.21	10879.59	0.00	0.00	0.00	0.00	0.00	0.00	1.40	16.15
Apr	32749.58	0.00	2409.00	22393.87	7946.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.79
May	31115.05	0.00	3141.32	15121.57	12852.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.31
Jun	30747.96	0.00	3120.62	14645.87	12981.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84
Jul	34017.48	0.00	3444.43	10214.91	20358.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.43
Aug	38065.92	0.00	3272.46	3610.61	31182.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.99
Sep	38896.62	0.00	3664.45	2790.24	32441.93	0.00	0.00	15.80	0.00	0.00	0.00	0.00	29.88
Oct	41174.38	0.00	4340.02	2447.22	34387.14	0.00	0.00	86.63	0.00	0.00	0.00	0.00	28.50
Nov	40031.63	0.00	4149.91	1021.06	34860.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.54
Dec	42615.90	0.00	4242.02	1655.36	36718.52	0.00	0.00	10.23	0.00	0.00	0.00	0.00	36.04
Sub-total (2022)	389850.25	0.00	37043.39	87441.95	265364.91	0.00	0.00	112.66	0.00	0.00	0.00	1.40	254.97

2023													
Jan	35248.24	0.00	2711.85	1182.55	31353.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.92
Feb	39553.32	0.00	4737.76	3184.34	31631.22	0.00	0.00	0.00	0.00	0.00	0.00	1.40	35.95
Mar	42528.10	0.00	4710.97	2381.39	35435.74	0.00	0.00	24.21	0.00	0.00	0.00	1.80	36.38
Apr	29352.63	0.00	3136.52	1211.00	25005.11	0.00	0.00	23.79	0.00	0.00	0.00	1.60	33.30
May	33842.57	0.00	3742.02	1113.13	28987.42	0.00	0.00	33.86	0.00	0.00	0.00	0.00	34.16
Jun	26638.62	0.00	3926.07	708.34	22004.21	0.00	0.00	90.36	0.00	0.00	0.00	0.40	40.29
Jul	16946.46	0.00	2228.35	30.63	14687.48	0.00	0.00	23.77	0.00	0.00	0.00	1.20	53.51
Aug	14143.71	0.00	2356.05	76.03	11711.63	0.00	0.00	14.84	0.00	0.00	0.00	1.40	44.35
Sep	7142.10	0.00	1423.05	0.00	5719.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.20
Oct	2847.84	0.00	0.00	0.00	2833.79	14.05	0.00	0.00	0.00	0.00	0.00	0.00	27.58
Nov	4052.81	0.00	0.00	0.00	*4052.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	*42.50
Dec	3119.02	0.00	0.00	0.00	3119.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.77
Sub-total (2023)	255415.42	0.00	28972.64	9887.41	216541.32	14.05	0.00	210.83	0.00	0.00	0.00	7.80	417.91
2024													
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.79
Sub-total (2024)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.79
Total	**668015.59**	**95.97**	**67183.13**	**97329.36**	**503393.08**	**14.05**	**0.00**	**323.49**	**0.00**	**0.00**	**0.00**	**9.20**	**725.60**

Note:

-5740.69 tonnes and 1431.14 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137 Public Fill and Tuen Mun Area 38 respectively in the reporting quarter.

* Due to data delay in Oct-2023, 280.81 tonnes(disposed as Public Fill) of inert C&D materials and 9.85 tonnes(disposed to Landfill) of non-inert C&D materials were included in Nov-2023.

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 work to the end of the reporting quarter and are summarized in the **Table G-1** below.

Table G-1: Statistics for complaints, notifications of summons and successful prosecutions for Zone 2B & 2C

Reporting Period	Cumulative Statistics		
	Complaints	**Notifications of summons**	**Successful prosecutions**
This reporting quarter (Nov 23 – Jan 24)	0	0	0
From 30 September 2021 to end of the reporting quarter	31	0	0

END OF THE REPORT